### King County Buildable Lands Evaluation Report

### **EXECUTIVE SUMMARY**

In 1997, the Washington State legislature adopted the Buildable Lands amendment to the Growth Management Act, (RCW 36.70A.215). The amendment requires six Washington counties and their cities to determine the amount of land suitable for urban development, and evaluate its capacity for growth, based upon measurement of five years of actual development activity. King County and the other five counties must report to the State by September 1, 2002 and every five years thereafter.

Major elements of the Buildable Lands program include:

- annual data collection to determine the amount and density of new development;
- updated inventories of the supply of land suitable for development;
- assessment of the capacity of each jurisdiction and the entire Urban Growth Area to accommodate expected growth;
- preparation of a Five-Year Evaluation Report; and (later)
- adoption of remedial measures where necessary to address density and capacity shortfalls.

The data gathering and analysis to prepare this Evaluation Report was performed by all 40 jurisdictions in King County, under the auspices of the Countywide Planning Policies (CPPs) adopted in 1992 and amended in 1994 and 1999. This Report is our combined response to both the Buildable Lands amendment and the direction provided in the CPPs. Further, each jurisdiction is examining its data in light of its own comprehensive plan.

### **Key Questions and Conclusions**

The Buildable Lands Program strives to answer four main questions:

- What is the amount and actual density of growth in recent years?
- Is the capacity of the land supply adequate to accommodate current growth targets?
- Has development occurred at densities consistent with planning assumptions and targets?
- Are urban densities being achieved within the Urban Growth Area?

The answers to these questions are detailed in the body of the report. In brief, the report concludes that

- King County has achieved 38% of its household target in 40% of the twenty-year planning period (i.e. the first 8 years of the 1993-2012 period).
- King County has housed more than 50% of the population forecast for that period.

- King County has capacity for 263,000 more housing units more than twice the capacity needed to accommodate the remaining household growth target.
- King County has the capacity for over 600,000 more jobs several times the remaining target of 110,000 jobs.
- Densities being achieved in four urban sub-areas are sufficient to accommodate targeted growth. Overall residential urban densities exceed 7 dwelling units per acre.

### Limits to Scope of Report

The scope of the work mandated by the Buildable Lands amendment does not include all the factors that determine the pace or cost of development. This report does not analyze infrastructure availability or capacity; housing affordability; market feasibility or current market availability of land; or the actual rate of future development or which specific parcels will develop.

The Buildable Lands report is intended to inform each jurisdiction and the County collectively of the effectiveness of the CPPs and comprehensive plans. King County and its cities are using the results of this analysis in allocating new growth targets. Each jurisdiction can use the report to help evaluate and update its comprehensive plan.

The geographic scope of this report is the Urban Growth Area (UGA) of King County. The UGA includes all 39 cities and the Urban-designated portions of unincorporated King County. The UGA is divided into four sub-areas: Sea-Shore, East, South, and Rural Cities. It does not include Rural or Resource designated areas. Unless otherwise specified, the term "King County" in this report usually refers to the UGA. See page 10 for a note on issues in Rural areas.

### **Methodology**

The methodology for this analysis stems from King County's complex jurisdictional configuration of 39 cities and unincorporated areas. The bulk of measurement work under Buildable Lands was undertaken by individual jurisdictions; this report is a compilation of those measurements. The flowchart below illustrates major elements of the Buildable Lands Methodology. See Chapter 1 for a detailed description of the methodology.

The methodology is based on the State Buildable Lands Program Guidelines (CTED, 2000) and the findings of the Land Capacity Task Force (King County, 1997). There are four main sources of data:

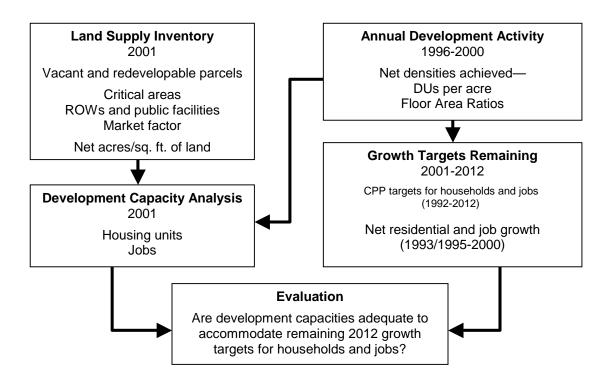
- Household and job growth targets adopted in 1994 for the period 1992 2012.
- Development records from each jurisdiction for actual development for two periods: from 1996 2000, and from 1993 1995.
- An updated measurement of lands suitable for development as of January 1, 2001.
- Data on employment change from 1995 2000.

The flowchart below illustrates major elements of the Buildable Lands methodology and the analytical relationships between them.

First, data on development activity were collected for each year of the 5-year review period. These data describe growth trends since the implementation of GMA locally, including the amount, type, location, and especially the density of residential, commercial, and industrial projects. This permit history contributed to measures of progress toward household growth targets for the 1992-2012 planning period, as well as measured residential and non-residential densities.

Second, a land supply inventory provided an estimate of potentially developable vacant and redevelopable acreage within the UGA. The supply analysis addressed the need to deduct, where appropriate, land encumbered by critical areas, future land needs for public infrastructure, and a proportion of land assumed to be unavailable during the planning period. Third, the development potential of the land supply – capacity – was estimated using data from the first two elements. Densities achieved during the review period provided the basis for assumptions about future residential and employment yields on developable land.

Finally, residual growth targets for the remaining portion of the 20-year period were compared with the capacity for housing units and jobs. If a shortfall of capacity was found to exist in any jurisdiction, or within the UGA as a whole, then remedial actions are required by the Buildable Lands statute to more fully accommodate targeted growth. Chapter 1 describes in more detail each of the elements of the methodology.



### **Residential Target Achievement**

King County gained nearly 75,000 housing units during the first eight years of the Growth Management period. This represents 38% of the Countywide target, and 36% of the Urban-area growth target.

In terms of housing units, the Eastside has achieved the highest percentage of its target – 53% in eight years, while Sea-Shore and South County are at 28% and 31% respectively.

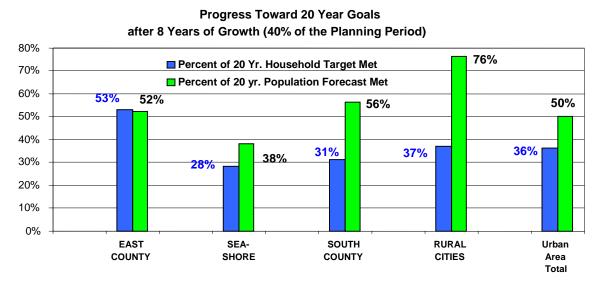
### **Population and Housing**

However, when one considers population accommodated in these households, the County and each of the sub-areas have done much better than permit data would indicate. Household population grew by about 160,000 from 1993 - 2000, more than 50% of the population forecast for the twenty years from 1993 – 2012.

The original targets were predicated on an assumption that household size would continue its historic decline (from about 2.40 in 1990 to 2.20 in 2012 countywide) during the planning period. They also assumed the same household size throughout the County. The 2000 Census revealed trends that differ from these assumptions. During the 1990s, household size declined only .01 persons per household, to 2.39 for the county as a whole. In the sub-areas, there is considerable difference in household size. Household size declined on the Eastside, remained about the same in Sea-Shore and the Rural Cities, and actually increased in South King County.

As a result, about 50% of the 1993 – 2012 population forecast was accommodated during the first eight years. Sea-Shore accommodated 38% of its population target, while all the other sub-areas accommodated well over 50% of the 20 year population forecast.

In South King County, only 31% of the household target was met, but 56% of the population forecast for that subarea of the County was accommodated. The same relationship occurred in the Rural Cities. Only on the Eastside, with a shrinking household size, were the percent of housing target met and the percent of population forecast met roughly equivalent.



### **Residential Development Activity**

Jurisdictions calculated achieved densities zone by zone for the five-year period. The sub-area averages were calculated by dividing the total net land acres that were developed by the total net number of units permitted.

Single family densities averaged 3.8 dwelling units per acre (du/acre) in the Urban Growth Area (UGA). Multifamily densities averaged 22 du/acre in the UGA.

SeaShore had the highest average densities, 52.2 du/acre in its multifamily zones, and 6.6 du / acre in its single family zones.

In all zones combined, development in Urban King County achieved a density of 7.3 du/acre. In the three urban sub-areas, the average density for all zones ranged from 6.4 on the Eastside to 20.0 in SeaShore. The 1985 King County Comprehensive Plan called for a Countywide density in the 7-8 du / acre range and that is being achieved.

	1996 - 2000 Residential Permit Activity					
	Single Family Zones	MultiFamily and Mixed Use				
Sub-Area	Avg. SF Permit Density	Avg. MF Permit Density				
	(D.U. / Acre)	(D.U. / Acre)				
EAST COUNTY	3.4	20.4				
SEA-SHORE	6.6	52.2				
SOUTH COUNTY	4.2	17.4				
RURAL CITIES	1.8	8.8				
TOTALS FOR COUNTY URBAN AREA	3.8	22.0				

### **Land Supply**

The King County UGA contains almost 27,000 acres of vacant or potentially redevelopable residential land. Almost 43% of this land is in South King County (11,500 acres).

The chart below shows how reductions for critical areas, rights of way, public purposes, and a market factor reduced the gross land supply in the UGA by almost half.

Additional observations about the land supply are in the body of this report. For example, vacant land accounts for 43% of the land supply in Urban King County while 57% of the land supply is redevelopable land. More than 84% of the residential *land supply* is in single family zones, but more than two-thirds of the *capacity* on residential land is in mixed use and multifamily zones.

	Residential Land Supply as of January 1, 2001									
		Dec	ductions							
Sub-Area	Gross Acres	Critical Areas	ROWs / Public Purposes / Other Discount	Net Acres	Market Factor	Adjusted Net Acre				
	Acres	Acres				Acres				
EAST COUNTY	15,366	4,279	13%	9,613	23%	7,333				
	Acres	Acres				Acres				
SEA-SHORE	7,876	1,041	4%	6,539	5%	6,216				
	Acres	Acres				Acres				
SOUTH COUNTY	23,352	5,063	14%	15,797	25%	11,532				
	Acres	Acres				Acres				
RURAL CITIES	3,525	864	15%	2,254	21%	1,788				
Totals within Urban Growth Area	50,119	11,247	12%	34,203	20%	26,869				

### **Residential Capacity**

The land supply has the capacity to accommodate almost 263,000 new residential units. The capacity includes potential for 80,000 single-family homes and 165,000 units in multifamily and mixed use zones. A significant share of the UGA's residential capacity is in mixed or multiple use zones - about 103,000 units.

Almost half of this housing capacity is in the Sea-Shore sub-area, which can accommodate more than 122,000 units.

### Residential Capacity in Relation to Household Growth Targets

The table below summarizes both recent achievement of residential growth and future capacity for that growth.

By permitting nearly 75,000 units during the first eight years of the 20 year planning period, King County jurisdictions together accommodated about 38% of the Countywide household target. There is a remaining target of 121,000 units to be accommodated by 2012. Urban King County has capacity for about 263,000 more units.

Thus there is a surplus capacity of 143,000 housing units within the UGA, beyond what is needed to meet the 2012 target. Each sub-area also has a surplus of capacity beyond the 2012 target.

	Res	Residential Capacity in Relation to Target									
Sub-Area	Net New Units: 1993 - 2000	20 Year Housing Target	Percent Achieved	Remaining Target	Current Residential Capacity						
EAST COUNTY	25,665	48,348	53%	22,683	62,771						
SEA-SHORE	16,375	57,905	28%	41,530	122,340						
SOUTH COUNTY	22,957	73,387	31%	50,430	68,991						
RURAL CITIES	3,265	8,828	37%	5,563	9,178						
Urban Area Total	68,262	188,468	36%	120,206	263,280						
Rural UKC	6,303	7,000	90%	697	NA						
King County Total	74,565	195,468	38%	120,903	NA						

<sup>\*</sup> See Rural areas note on page 10.

### **Commercial and Industrial Growth**

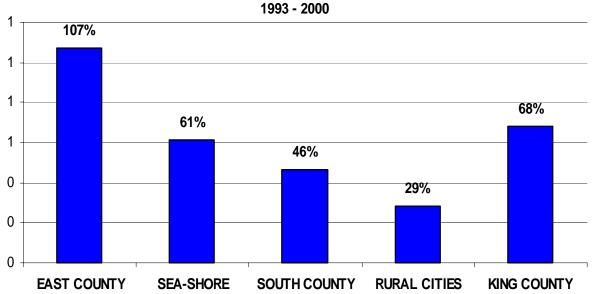
King County gained 230,000 jobs during the 1993 - 2000 period, more than two-thirds of the 20-year growth target. The highest employment growth was in the East County, which gained 107% of its target - or a total of 96,000 jobs. At the city level, reliable data were available only for 1995 and 2000, so these years are reported in the city profiles. King County jurisdictions gained 210,000 jobs between 1995 and 2000 – the vast majority of the 8-year Countywide growth, and 60% of the 20-year job growth target.

### **Employment Capacity**

Commercial and Mixed-Use zones have capacity for about 478,000 new jobs, while industrial zones can accommodate another 102,600 jobs. An additional 22,400 jobs are projected for urban planned developments, for which land has already been set aside.

With more than 7,800 acres of commercial and industrial land remaining, King County jurisdictions have the capacity for 603,000 more jobs within the UGA. About half of this capacity is vacant and half is redevelopable.

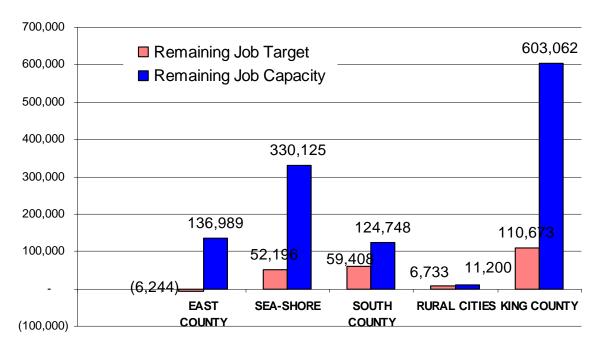
### Percent of 20 Year Job Target Achieved in 8 Years (40% of the Planning Period):



### **Employment Capacity in Relation to Targets**

Only 112,000 more jobs are needed to meet the 2012 job target. When this is compared to the capacity for 603,000 more jobs, the result is a surplus capacity of 490,000 jobs. This leaves ample room for employment growth in the next planning period .

### **Employment Capacity in Relation to Remaining Job Target for 2012**



### **Conclusions**

King County has been successful in accommodating strong population and employment growth from 1993 - 2000.

- King County has well over the capacity needed to accommodate the growth that is expected to occur by 2012.
- Sufficient capacity exists to accommodate further growth beyond the 2012 planning horizon.
- However, the supply of vacant land is limited, especially of large parcels for single family development. The remaining supply must be used efficiently.
- Densities of recent residential and commercial / industrial projects indicate efficient use of the land supply.
- All the sub-areas of King County show adequate capacity for the target period through 2012, and beyond. A few individual cities have a potential shortfall with respect to their target.
- The remedy phase of Buildable Lands is not addressed by this report. Capacity issues at the city level are being addressed in part by the targets review now underway.
- Density issues will be addressed by jurisdictions individually.

### Caveats

This work is not a market feasibility study. While it includes an inventory of "buildable lands", it does not answer the question of what land is "available" for development, either now or in the future. Availability depends on many market factors and individual decisions that are beyond public control, and difficult to predict a decade ahead.

Nor is this study an infrastructure capacity analysis. There may be a need for further work on the adequacy of current infrastructure, including transportation and utilities, to support future growth, and on plans to provide that infrastructure, but those topics are not addressed in this report

Although the Buildable Lands program provides data on remaining residential land supply, it does not answer questions about housing affordability. Land supply is one factor on the cost side of housing. There are many other factors, on both the supply side and the demand side that affect the cost of housing.

Related to that is the cautionary note that Buildable Lands is not a prediction of the economic climate over the next 12 to 20 years. When the economic climate is positive,

and when jobs and income are plentiful, demand for urban land – both residential and commercial / industrial - will be high, and the cost of that land will rise proportionately. In that case, many current owners may be ready to sell their land. When economic conditions are slow, less of the land is likely to come onto the market until demand and prices rise. Calculations of land supply, and capacity on that land, demonstrate how much land *could* be developed, given moderately strong market conditions over the next 20 years. It does not predict how much or which land actually will be developed.

### Note on Rural Designated Areas

The Growth Management Act requires the Buildable Lands program in order to determine the densities and capacity within Urban Growth Areas. Rural and Resource lands lie outside the UGA and are not subject to Buildable Lands evaluation. Therefore, this report covers the Urban Growth Area of King County. All tables and conclusions refer to the County's 39 cities plus Urban designated areas of unincorporated King County. The report demonstrates that King County's UGA has sufficient land capacity to accommodate the Urban-area growth targets, 96% of the target for the entire County. Rural and Resource designated areas have additional capacity, but that has not been measured precisely for this report.

In 1992, King County Rural areas had a population of about 122,000 or eight percent of the County's total population, in approximately 52,000 housing units. During the eight years 1993 to 2000, about 6,300 new residential units were permitted in Rural areas of unincorporated King County. These new units are not included in the tables in this report, except as a reference number in Table 9. Some of this construction took place on platted lots which had been subdivided before the Countywide Planning Policies and Comprehensive Plan took effect. The Rural growth comprises 90% of the 20-year forecast of about 7,000 new households in Rural areas.

Rural densities were also not measured for this report, because density goals are different in Rural areas. Average residential densities have probably decreased over time as development has shifted from old, relatively small platted lots to larger parcels meeting 5-acre minumums.

Remaining residential capacity substantially exceeds the 700 households remaining to meet the 2012 forecast, but has not been measured precisely. At the end of 2000, Rural areas contained about 58,000 housing units with a population of about 135,000 persons.

### King County Buildable Lands Evaluation Report

**Chapter One: Introduction and Methodology** 

### **BACKGROUND**

In 1997, the Washington State legislature adopted the Buildable Lands amendment to the Growth Management Act. The amendment requires six Washington counties and their cities to determine the amount of land suitable for urban development, and evaluate its capacity for growth, based upon measurement of five years of actual development activity. King County and the other five counties must report to the State by September 1, 2002 and every five years thereafter on the capacity to accommodate growth during the 20-year planning period.

Major elements of the Buildable Lands program include annual data collection to measure the amount and density of new development; updated inventories of land suitable for development; assessment of the ability of each jurisdiction and the entire Urban Growth Area to accommodate expected growth; preparation of a five-year Evaluation Report; and (later) analysis of remedial measures where necessary.

This first five-year report describes land development activity in King County's 40 jurisdictions during the five years 1996 through 2000. The analysis includes both residential and commercial-industrial development. This report also contains a new, reliable inventory of land supply (in acres) and land capacity (in housing units, building square feet and jobs) to accommodate targeted growth through 2012.

The Buildable Lands program addresses several questions:

- What is the amount and actual density of growth in recent years?
- Is the capacity of the land supply adequate to accommodate current growth targets?
- Has development occurred at densities consistent with planning assumptions and targets?
- Are urban densities being achieved within the Urban Growth Area?

This report provides detailed information to respond to these questions.

It should be noted, however, that some additional questions are *outside* the scope of this report. These include questions such as:

- Is there adequate infrastructure in place to support development on all of the identified land supply?
- At what rate will the regional economy grow?
- Which parcels will actually be on the market or develop?
- How do supply factors such as location, zoning, and existing use relate to demand?
- What areas of the county are most likely to develop? Are sufficient amenities in place to make development feasible in areas with a more abundant land supply?
- What can local jurisdictions do to make development more feasible and attractive?

#### REPORT ORGANIZATION

The organization of this report recognizes the large number of jurisdictions in King County and their differences. It focuses on individual jurisdictions, and groups them into four large subareas. The body of the report is in two main sections. Chapter Two summarizes the findings of this analysis at the countywide and subarea level. Chapter Three covers each jurisdiction.

The urban area of the County has been divided into four subareas, shown on the map on the inside front cover. These are:

East County: The 15 cities east of Lake Washington, including Beaux Arts Village,

Bellevue, Bothell (King County portion), Clyde Hill, Hunts Point, Issaquah,

Kenmore, Kirkland, Medina, Mercer Island, Newcastle, Redmond, Sammamish, Woodinville, Yarrow Point and Eastside unincorporated

areas within the Urban Growth Area (UGA).

Sea-Shore: Seattle, Shoreline, Lake Forest Park and Unincorporated North Highline /

White Center.

South County: The 15 South King County cities, including Algona, Auburn, Black

Diamond, Burien, Covington, Des Moines, Federal Way, Kent, Maple Valley, Milton (King County portion), Normandy Park, Pacific, Renton, SeaTac, Tukwila and South unincorporated areas within the UGA.

Rural Cities: Skykomish, Duvall, Carnation, North Bend, Snoqualmie, and Enumclaw,

including their Rural UGA's but not including Rural-designated

unincorporated areas.

Chapter Three consists of a profile for each city, and for the Urban unincorporated areas in each sub-area. The cities are arranged alphabetically within each sub-area. These profiles provide the basic data for each jurisdiction, and they include notes explaining methods or circumstances particular to that jurisdiction. For more specific information, the reader is referred to each city and to King County's Office of Regional Policy and Planning.

In Chapter Two, and in each Chapter Three profile, the organization is as follows:

- I. Residential Data
  - Net New Housing Units
  - Development Activity: Permit and Plat Densities Achieved
  - Residential Land Supply
  - Residential Capacity
  - Analysis of Capacity in Relationship to 1992 -2012 Household Targets The emphasis in the residential section is on achievement of growth targets, density in housing units per acre, land supply in acres, and capacity for single family and multifamily housing units.
- II. Commercial and Industrial Data
  - Net New Jobs
  - Development Activity: Floor Area Ratios Achieved
  - Commercial and Industrial Land Supply
  - Employment Capacity on Commercial and Industrial Land
  - Analysis of Capacity in Relationship to 1992 -2012 Job Targets.

The emphasis in the commercial-industrial section is on densities measured in Floor Area Ratio (F.A.R.), land supply in acres, and capacity to accommodate commercial and industrial jobs.

### **Buildable Lands Methodology**

The Buildable Lands statute (RCW 36.70A.215) requires six counties and cities within them to establish a review and evaluation program. The statute requires data collection annually, as well as analysis and evaluation every five years. The first evaluation report is due to the State by September 1, 2002. The remainder of this chapter describes the methodology developed to meet these requirements in King County

Buildable Lands Program implementation in King County entailed several interrelated elements of data collection and analysis. The elements included 1) collection and analysis of data on development activity, 2) a land supply inventory, 3) a development capacity analysis, 4) an update of growth targets, and 5) an evaluation of capacity to accommodate growth targets. The flowchart below shows the elements as distinct technical exercises, lists the major outputs of each exercise, and illustrates the analytical connections between them. Subsections of this chapter will describe the elements in greater detail.

### **Annual Development Activity** Land Supply Inventory 1996-2000 2001 Vacant and redevelopable parcels Net densities achieved— DUs per acre Critical areas Floor Area Ratios ROWs and public facilities Market factor Net acres/sq. ft. of land **Growth Targets Remaining** 2001-2012 CPP targets for households and jobs **Development Capacity Analysis** (1992-2012)2001 Net residential and job growth Housing units (1993/1995-2000) Jobs **Evaluation** Are development capacities adequate to accommodate remaining 2012 growth targets for households and jobs?

Elements of Buildable Lands Analysis and Evaluation

Technical work for Buildable Lands was neither centralized nor uniform among the county's jurisdictions. Rather, semi-independent efforts in each jurisdiction were coordinated within a common methodological framework agreed upon by all of the cities and the county. Several interagency staff working groups met periodically to achieve consensus on methods and to resolve disagreements among jurisdictions. Technical staff from throughout the county met regularly for orientation to the program tasks and discussion of methods and data. The Buildable Lands and Targets Committee, consisting of senior planning staff from throughout the county, provided "big picture" direction on both methodology and application of the Buildable Lands data to regional policy issues. Finally, a core group of staff from the Suburban Cities

Association (SCA), Seattle, Bellevue, and King County met at several key junctures in the process to review and approve methods and reporting documents.

Framework documents provided the basis for technical coordination among the separate efforts of 40 jurisdictions in the county. State Buildable Lands Program Guidelines (CTED, 2000) provided an overview of technical requirements of the statute. Findings and Recommendations of the King County Land Capacity Task Force (LCTF) (King County, 1995) established a common methodology for the cities and county in estimating capacity at the start of the growth management planning period. This methodology was subsequently expanded and revised for Buildable Lands. New technical materials were produced and disseminated to local jurisdiction staff. They included the following:

- Worksheets to collect annual data on development activity (King County ORPP)
- Reference Guide I: Annual Data Collection (SCA)
- Reference Guide II: Land Supply Inventory (SCA)
- Template for Local Government Reports and Addendum (SCA)

The framework established in these documents allowed enough flexibility to respond to local variation in data resources, land use regulations, land base, and market conditions, while ensuring that Buildable Lands results would be reliable and comparable across the entire county. The sections below describe, in brief, the data, calculations, and assumptions that comprise the countywide methodology.

### **Development Activity: Achieved Densities (1996-2000)**

Jurisdictions collected and analyzed data on development activity for a 5-year review period (1996-2000). These data describe, in detail, growth trends since the implementation of GMA locally, particularly the amount, type, and location of new development, and, most importantly, the densities of residential, commercial, and industrial projects. Research on development densities is central to the Buildable Lands analysis, as it provides the basis for assumptions about future development yield on vacant and redevelopable land.

The density research encompassed many hundreds of building permits and subdivision plats, and relied on both automated permit tracking systems, which are available in many jurisdictions, as well as paper records, such as plat maps and site plans. Densities of residential projects were measured in dwelling units (DUs) per acre. The intensity of non-residential development was measured in terms of a floor-area-ratio (FAR), calculated as the sq. ft. of building divided by the sq. ft. of the site. In all cases, densities were calculated against the net site area—excluding critical areas, ROW dedications, and on-site public uses (primarily drainage facilities). The table below summarizes by type of development permit, 1) formulas for calculating densities, and 2) land within the gross site area that was not included in the net site area. For both analytical and reporting purposes, the projects were classified by zoning or land use plan designation.

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<sup>&</sup>lt;sup>1</sup> Complete materials are available upon request from Chandler Felt, King County, at (206) 205-0712, or from Michael Hubner, Suburban Cities Association, at (253) 856-5443.

Density Measures by Development and Permit Type

Permit type	Calculation of Density	Land Excluded from Net Site Area
SF	# Lots / Net Plat Area	-ROWs (including public and private roads and access tracts)
Subdivision		-Public Purposes (e.g., drainage tracts, parks, open space)
Plats		-Critical Areas (primarily sensitive areas tracts)
SF Building	# Units / Lot Area	NA
Permits		
MF Building	# Units / Net Site Area	-ROWs (public dedications)
Permits		-Public Purposes (e.g., drainage facilities, parks, open space)
		-Critical Areas and buffers
Commercial /	Floor Area / Net Site	-ROWs (public dedications)
Industrial	Area	-Public Purposes (e.g., drainage facilities, parks, open space)
Bldg. Pmts.		-Critical Areas and buffers
Mixed-Use	# Units / Net Residential	-ROWs (public dedications)
Bldg. Pmts.	Portion of Site	-Public Purposes (e.g., drainage facilities, parks, open space)
(DUs/Ac)		-Critical Areas and buffers
Mixed-Use	Commercial Floor Area	-ROWs (public dedications)
Bldg. Pmts.	/ Net Commercial	-Public Purposes (e.g., drainage facilities, parks, open space)
(FAR)	Portion of Site	-Critical Areas and buffers

More complex development types, such as mixed-use and multiple structure projects, posed special challenges to measuring achieved densities. Mixed-use projects, as defined for this analysis, were those that included both residential and commercial space. For each mixed-use project, both DUs/acre and an FAR were measured, based on analytical apportioning of the site area to residential and commercial uses, respectively. Permits for phased or multiple structure projects were analyzed with care to ensure that the resulting density measures reflected the intensity of each project in its entirety at full buildout.

Additional data were collected annually on permits for accessory dwelling units (ADUs), permits to place manufactured housing in parks and on platted lots, permits for demolitions of dwelling units, and residential building permits that constituted one-for-one replacement of demolished dwelling units. In most cases, none of these permit types contributed to the density measures for Buildable Lands.

### Land Supply Inventory (2001)

Buildable Lands further requires that local governments "determine the quantity and type of land suitable for development, both for residential and employment-based activities." Buildable Lands Program Guidelines define such land as: "All vacant, partially-used, and under-utilized parcels that are: (a) designated for commercial, industrial, or residential use; (b) not intended for public use: and (c) not constrained by critical areas in a way that limits development potential and makes new construction on a parcel unfeasible." The King County methodology is consistent with this definition.

The land supply inventory in Urban King County—a composite of inventories conducted by each jurisdiction—represents a snapshot of approximately January 2001, the end of the 5-year review period. Most cities and the county produced new inventories expressly for the purposes of Buildable Lands. Some cities utilized data from recent lands analyses that had been carried out for other purposes, such as comprehensive plan development and infrastructure demand analysis. All of the land supply inventories were based on parcel data, in most cases generated with Geographic Information Systems (GIS) that were used to map and analyze the data. The following factors were considered in preparing each inventory:

- Exclusion of land deemed not available for development due to ownership or use. Categorical exclusions from the supply of developable land included public facilities, utility and railroad ROWs, golf courses, cemeteries, schools, landfills and quarries, and many churches and other institutional uses.
- Vacant land. The Buildable Lands Program Guidelines define vacant land as "parcels of land that have no structures or have buildings with very little value." In King County, vacant land was identified primarily based on Assessor land use classifications and improvement values. Appendix A summarizes the specific definitions for vacant land used in each jurisdiction.
- Redevelopable land zoned for single-family residential uses. The Buildable Lands Program Guidelines refer to such lands as "partially utilized," and define them as parcels that are "occupied by a use, but which contain enough land to be further subdivided without need for rezoning." Parcels that met this definition were identified primarily based on comparisons of current and potential densities or lot sizes. This would include, for example, a single house on a 1-acre parcel where the zoning allows 4 DUs/acre. The ratio of existing-to-allowed density that indicated redevelopability varied by jurisdiction. Appendix A summarizes the technical approaches and definitions used in each jurisdiction.
- Redevelopable land zoned for multifamily residential, commercial, industrial, and mixed uses. The Buildable Lands Program Guidelines refer to such lands as "underutilized." and define them as follows:
  - "All parcels of land zoned for more intensive use than that which currently occupies the property. For instance, a single-family home on multifamily-zoned land will generally be considered under-utilized. This classification also includes redevelopable land, i.e., land on which development has already occurred but on which, due to present or expected market forces, there exists the strong likelihood that existing development will be converted to more intensive uses during the planning period."
  - Parcels zoned for multifamily residential uses that met this definition were identified primarily based on comparisons of current and potential densities and uses. Parcels zoned for commercial, industrial, or mixed uses were identified primarily using the ratio of improvement to land value as determined by the Assessor. The most common threshold for redevelopability was a ratio of < 0.5. Alternatively, several cities used a measured gap between existing development densities and maximum-zoned densities as a primary indicator of redevelopment potential. Appendix A summarizes the technical approaches and definitions used in each jurisdiction.
- Deductions of land encumbered by critical areas (environmentally sensitive areas)— e.g., wetlands, steep slopes and slide prone areas, flood hazard areas, and stream corridors and shorelines. In many cases, accurate GIS data were available to estimate critical areas through digital overlay analysis. Such analysis entailed superimposing environmental features (and associated buffers within which development is limited) over selected vacant and redevelopable parcels as a means of calculating the area to be deducted. In the absence of adequate GIS resources, hard copy maps were reviewed in detail by local staff, and used for guidance in determining percentage discounts for critical areas and critical area buffers on vacant and redevelopable land in each zone. The precise definitions guiding critical areas deductions varied across the county, depending on the provisions of local critical areas ordinances, local environmental features, and development practices. These definitions are likely to change in the future

- with the adoption of new and revised land use and environmental regulations.<sup>2</sup> Appendix B summarizes the types of critical areas considered, data sources, and technical methodology employed in each jurisdiction.
- Deductions of land needed for future rights-of-way (ROWs). Discounts for ROWs were based upon the LCTF recommended discount of 10%, as well as upon the measured percentages of land dedicated to ROWs in recent projects (primarily subdivisions). The percentage of land deducted for ROWs varied jurisdiction-by-jurisdiction and, in many cases, zone-by-zone. Reasons for this variation include average size of developable parcels (smaller parcels are typically more accessible from existing ROWs) and land use types (e.g., multifamily and commercially zoned land requires less land for ROWs than does land zoned for single-family uses). Appendix B summarizes the ROW discounts used in each jurisdiction.
- Deductions of land needed for future public purposes. These would include both onsite and off-site commitment of land that is potentially developable for drainage facilities, parks, schools, and other public facilities. Discounts for public purposes were based upon the LCTF recommended discount of 5%, as well as upon the percentage of land dedicated to public purposes in recent projects (primarily subdivisions). The percentage of land deducted for public purposes varied jurisdiction-by-jurisdiction and, in many cases, zone-by-zone. Reasons for this variation include existing level of provision of public services, local stormwater requirements, and land use types. Appendix B summarizes the public purpose discounts used in each jurisdiction.
- Deduction of a percentage of the remaining land assumed not to be available for development during the planning period. In even the most urbanized settings, a portion of the net land supply will always be withheld from development or redevelopment due to several factors. These factors include personal use, investment or speculative holding, land banking for future business expansion, and other considerations that serve to hold land off the market. This adjustment to the land supply is referred to as a "market factor." Consistent with LCTF recommendations, market factors ranged generally from 5% to 20%, with redevelopable land discounted more heavily than vacant land. Variations within and outside of the recommended range reflect local land ownership and market conditions, as well as knowledge about proposed projects. Appendix B summarizes the market factor discounts used in each jurisdiction.
- A number of **projects in the development pipeline**<sup>3</sup> were identified as warranting separate treatment in the Buildable Lands analysis. The acreages of such "pipeline" project sites were not included in the land supply inventory. (See note in next section.)

<sup>&</sup>lt;sup>2</sup> Future updates to the land supply inventory may need to re-analyze the impact of critical areas in response to several potential updates to the regulatory regime. They include updates to critical areas ordinances (based on "best available science"), updates to shorelines programs (in accordance with newly revised Shoreline Management Act guidelines), and implementation of measures to protect fish species habitat under the Endangered Species Act. Development restrictions associated with these designations will have an impact on the developable land supply, and further work likely will be necessary to identify the extent to which they further encumber potentially developable parcels of land.

<sup>&</sup>lt;sup>3</sup> There was no attempt to systematically account for all development in the pipeline. The projects in question—mostly (but not all) in Urban Planned Developments, such as Issaquah Highlands and Snoqualmie Ridge—represent only a portion of the overall amount of development pending, but not yet permitted, countywide as of January 2001.

The land supply analysis generated acreage figures for vacant and redevelopable land—unconstrained by critical areas, not needed for future ROWs or public purposes, and potentially available for development—for each zoning or land use plan designation within each Urban jurisdiction in King County.

### Development Capacity (2001)

The development capacity analysis for Buildable Lands combined the findings of the achieved density research and the land supply inventory in order to estimate the potential additional dwelling units and jobs that can be accommodated in each jurisdiction. Residential and non-residential yields on developable acres were based on *assumed* future densities, which were, in turn, based on densities *achieved* during the review period.<sup>4</sup> Capacity estimates were calculated as follows:

**Residential Capacity** = Acres of Land x Assumed Future DUs per Acre – Existing DUs on Redevelopable Parcels

**Job Capacity** = (Sq. Ft. of Land x Assumed Future FAR – Existing Non-Residential Floor Area on Redevelopable Parcels) ÷ Assumed Floor Area per Employee

Buildable Lands Program Guidelines direct jurisdictions to base assumptions about future densities primarily on achieved densities, but also to take into consideration factors that influence the long-term outlook for the type and density of development. In many jurisdictions in King County, achieved densities for the 5-year review period were assumed to continue for the remainder of the planning period. However, the development data did not always yield a valid measure of density to project into the future. For example, some large projects that had a significant impact on the average achieved density measures were considered to be anomalous, unlikely to be repeated in future development. Further, many zoning designations saw little or no recent development activity.

For these reasons, additional factors were considered in order to establish an assumed future density for many land designations. These factors included 1) the density of development projects in the pipeline, 2) densities achieved on similar land in comparable jurisdictions, 3) density trends over time, 4) projected market demand for new development types, 5) recent changes in zoning and development regulations, and 6) current planned uses and densities. Tables in each jurisdiction summary (Chapter 3) of this report show the achieved and assumed future DUs per acre and FARs for each land designation, as well as notes documenting the basis for assumptions about the future achievable densities.

In addition to the density assumptions, the capacity analysis methodology incorporated several other important factors, including the following:

- Existing development on redevelopable parcels—DUs and non-residential floor area—was subtracted from the gross capacity estimates, leaving a residual of additional net DUs and net floor area that can be accommodated, above and beyond existing built space.
- The conversion of the supply of land for commercial, industrial, and office uses into estimates of potential jobs involved two sets of assumptions. Assumed future FARs,

<sup>&</sup>lt;sup>4</sup> For single family residential uses, densities achieved in plats were the preferred basis for assumptions about future densities. In cases where few or no plats were recorded during the review period, permtis provided an alternate density measure.

described above, were used to convert land area into potential floor area. Floor area capacity was then converted to job capacity based on assumed **floor-area-per-employee multipliers**. The specific multipliers used were derived from a number of factors, including anticipated use mix, local markets, and research on national, regional, and local measures of employment density within structures. See Appendix C for the range of floor-area-per-employee assumptions used by each jurisdiction.

- Zones or land use designations that allow both residential and non-residential uses were treated as "mixed-use" land, regardless of whether they allowed or required mixed uses within the same project or building. Net developable acres in mixed-use and multiple use zones were allocated to residential and commercial capacity models respectively, based on an assumed split between future residential and commercial development. These assumptions reflect recent and planned development patterns as well as the professional judgment of local planners about future markets for residential and non-residential space.
- Several cities considered future capacity for accessory dwelling units (ADUs). In most
  cases, the future capacity for additional ADUs was estimated by extending annual rates of
  ADU permitting during the review period over the remainder of the planning period.
- A number of **projects in the development pipeline** warranted separate treatment in the Buildable Lands analysis. Estimates of the development capacity for these projects were not based on assumed densities. Rather, the 2001 capacity of each "pipeline" project was calculated as the total project size (i.e., DUs and commercial floor area) minus project space permitted prior to 2001. The resulting capacity figures were then added to the capacity totals for other land in a jurisdiction.

### Remaining Household and Employment Targets (2001-2012)

The Buildable Lands statute requires an evaluation of development capacity estimates in comparison with future growth needs for the "remaining portion of the twenty-year planning period used in the most recently adopted comprehensive plan." The Countywide Planning Policies (CPPs) provide a common timeline and framework for quantifying future growth needs for all jurisdictions in King County. Household and employment growth targets for the 1992-2012 planning period represent the assumed growth needs of each jurisdiction.

In order to reflect annexations and new incorporations that occurred after the target baseline year (1992), portions of the original targets for the unincorporated areas were transferred from unincorporated King County to cities. Household and employment targets were adjusted separately. Household targets were adjusted as official revisions to the target tables in the CPPs. Cities increased their household targets in proportion to land area annexed. Employment targets were adjusted solely for the purposes of evaluating employment capacity for Buildable Lands. In most cases, cities increased their job targets proportionally with equal regard to two factors: jobs in annexed areas in 2000 and job growth from 1995-2000 in areas annexed.

Household targets for the remaining years of the planning period (2001-2012) were calculated by subtracting net growth in DUs for 1993-2000 from the 20-year targets. This analysis drew upon three sources of permit data: annual Buildable Lands data collection (for years 1996-2000), Puget Sound Regional Council residential building permits database (for years 1993-1995), and King County permit tracking database (all years, for unincorporated areas of the UGA, including areas recently annexed to cities). Permits for demolition of DUs were included, as well, in order to calculate the net increase in housing for each jurisdiction.

Calculation of employment targets for the remaining years of the planning period was done using a mixed approach utilizing best available data. Estimates of "covered" employment were available from the PSRC for three points in time: 1992, 1995, and 2000. The 1992 data proved to be unreliable as a baseline for estimating 8-year job growth for small areas, such as individual cities. For this reason, at the jurisdiction level, estimated employment change for only 5 years (1995-2000) is used as a proxy for job growth for the full 8-year target period. At the subarea and UGA level, however, estimates of the full 8-year employment change are reported, giving a more complete picture of job target progress countywide.

Finally, tallies of both housing units and jobs added in each jurisdiction represent cumulative totals for all new development that occurred within current (2000) city boundaries, including all areas annexed or incorporated after 1992.

To summarize, future growth needs were calculated as follows:

**Residential Growth Needs** = Household Growth Target for 1992-2012, Adjusted (CPPs) – Net Units Permitted (1993-2000)

**Employment Growth Needs** = Employment Growth Target for 1992-2000 (CPPs) +/- Adjustment Factor<sup>6</sup> – Net New Jobs (1993/1995-2000)

### **Evaluation of Capacity vs. Targets**

As a final step, the results of the elements outlined above were carried forward to answer the main evaluation question posed by Buildable Lands:

Are development capacities adequate to accommodate remaining 2012 growth targets for households and jobs?

This question was answered for several levels of geography. The first level was the countywide Urban Growth Area. The second subarea level included four jurisdictional groupings: Sea-Shore, East County, South County, and Rural Cities. Finally, the adequacy of capacity in each jurisdiction was evaluated.

Those cases where capacity estimates fell below the level of remaining growth targets will be addressed in the next phase of Buildable Lands—remedial measures, to be adopted either countywide or locally with the objective of closing the gap between development capacity and anticipated growth needs. The statute requires annual monitoring of the effectiveness of any measures adopted, with adaptive changes made to them as necessary.

<sup>&</sup>lt;sup>5</sup> PSRC estimated employment in 1992 for cities (1992 boundaries) and for census tracts. In 2002, PSRC utilized newly geocoded employment data to estimate employment for the years 1995 and 2000 for cities (2000 boundaries) and for unincorporated areas within subareas. PSRC employment estimates are derived from a State Employment Security Department database of employers with employees who are covered by unemployment insurance.

<sup>&</sup>lt;sup>6</sup> The adjustment factor for annexations and new incorporations was applied only at the jurisdiction level. Jurisdiction summaries indicate where and by how much original employment targets were adjusted.

<sup>&</sup>lt;sup>7</sup> The Buildable Lands statute requires evaluation and remedial action only at the UGA and jurisdiction levels. No action is required to address problems identified at the subarea level. However, development capacities in the subareas was considered as an essential criterion for allocating new growth targets for the planning period extended to 2022.

# Chapter Two: Countywide and Subarea Summary RESIDENTIAL

### **Net New Housing Units**

The main purpose of the Buildable Lands Program is to evaluate the capacity to absorb anticipated growth. Growth targets established in the Countywide Planning Policies (CPPs) for the 1993-2012 planning period form the basis for assumed growth needs in this evaluation. This analysis uses data on progress toward those targets during the first eight years of the 20-year period to estimate remaining growth needs through 2012.

Nearly 75,000 net new housing units were built in King County during the eight years from 1993 to 2000. The term "net" refers to completed new housing units, i.e., addition to the housing stock, approximated by subtracting demolitions from permitted new units. Measuring net new housing units provides the best estimate of how much growth the County is accommodating on a year to year basis, particularly during intercensal years.

Table 1 is broken down into development that occurred from 1993 to 1995, and development from 1996 to 2000. The later period corresponds to the first five years of the Buildable Lands program. More extensive information on permit and plat activity has been collected for these five years. However, since the King County Countywide Planning Policies set housing and job targets for the 20 year period from 1993 to 2012, an accurate accounting of development during the earlier period is needed to evaluate how well the County is achieving those targets.

Table 1: New Housing Units<sup>8</sup>

		1996 - 2000			1993-1995	TOTAL
Sub-Area	Gross Permitted Units	Any Other New Units (ADUs, Conversions, etc.)*	Demo- litions	Net New Units '96-2000	Net New Units 1993 - 1995	Net New Units: 1993 - 2000
EAST COUNTY	18,012	1,381	(660)	18,733	6,932	25,665
SEA-SHORE	12,511	576	(2,123)	10,952	5,423	16,375
SOUTH COUNTY	16,260	409	(683)	15,986	6,971	22,957
		(Permits in Cities' UGAs)				
RURAL CITIES	2,238	99	(23)	2,314	951	3,265
URBAN AREA TOTAL	49,021	2,465	(3,489)	47,985	20,277	68,262
Rural UKC	3,795			3,795	2508	6,303
King County Total	52,816	2,465	(3,489)	51,780	22,785	74,565

<sup>&</sup>lt;sup>8</sup> Unincorporated areas within the Urban Growth Boundary are included in each sub-regional total. This includes the rural cities' expansion areas.

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The largest number of new housing units – 25,665 – was permitted in the East County sub-area, followed by nearly 23,000 units in South King County. The Sea-Shore sub-area shows a growth of 16,375 units.<sup>9</sup>

Judging from permit data, it appears that in the earlier years of the decade, construction levels were similar in the East and the South County – each area gained about 7,000 housing units. In the last half of the decade, however, the Eastside sustained the largest amount of growth.

Of the 75,000 net new units, more than 68,000 were built within the Urban Growth Area – almost 92% of the County total.

### **Accommodating Population in Housing Units**

With a vacancy rate in the 4% range, 75,000 dwelling units would contain about 72,000 households. The number of people in these households depends on household size, which varies over time and from one location to another. In King County, the average household size remained almost steady from 1990 to the 2000, falling from 2.40 to 2.39, or less than .01 persons per household.

This steadiness of household size in King County from 1990 to 2000 represented a departure from past trends. Household size had declined regularly over the past three census periods, and was expected to decline to about 2.30 persons per household by 2000, and 2.20 by 2012. The forecast of housing needs for the planning period was based on this lower household size assumption. This means that the actual number of new households that were needed to accommodate the population growth was less than the household target established in 1993.

The result of this constant household size is that in eight years, (40% of the 1993 to 2012 planning period), the actual population increase was approximately 160,000 persons – considerably more than would have been expected based on assumptions. This amounts to more than 50% of the population growth forecast of 314,000 persons for the twenty-year period.

The steadiness in the average household size countywide can be misleading. There is wide variation in household size by sub-area, and those sub-areas have shown different trends. On the Eastside the household size declined substantially, in Sea-Shore it declined very slightly, while in South King County and the Rural Cities, it increased between 1990 and 2000.

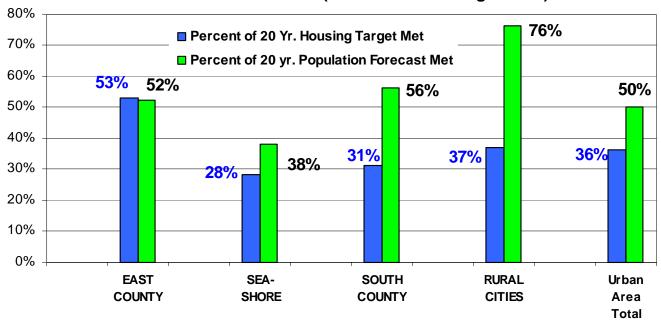
Figure 2 shows the differences in each of the sub-areas in how they have achieved household targets compared to how they have accommodated population growth.

growth.

<sup>&</sup>lt;sup>9</sup> Seattle, which represents the great majority of units in Sea-Shore, reports completed units rather than permitted units. If Seattle had reported net permitted units, Sea-Shore's housing unit increase would be about 23,600 – comparable to the other Urban sub-areas. Seattle issued permits for more than 11,000 new housing units in 1999-2000, but few of those counted as completed by December 2000. By the end of 2002, many will have been completed. Thus, the number of completed units should bring Sea-Shore closer to the other subareas in terms of housing unit

Figure 2: Housing Units and Population

## Progress Toward 20 Year Goals after 8 Years of Growth (40% of the Planning Period)



### **Development Activity**

Data on residential development activity was collected for the five-year period from 1996 to 2000. In addition to monitoring progress toward housing targets, the purpose of collecting detailed permit and plat information was to determine what densities were being achieved in new developments, and how these compared to planned densities.

Jurisdictions collected permit and plat data, and calculated average densities on a zone by zone basis. For instance, in a single family zone, which was intended to accommodate six dwelling units per acre, the total net acreage was divided by the total net new units to yield the number of dwelling units per acre that had actually been permitted during the five-year period. This achieved density was then expressed as the number of dwelling units (DU) per acre. The Buildable Lands legislation mandates that calculations of future capacity on the remaining land supply make use of this development history to determine realistic densities for future development.

### **Achieved Densities from Permit Data**

Overall, King County achieved an average permit (net) density of 3.8 du / acre in single-family zones and an average density of 22 du / acre in multifamily or mixed-use zones. Single family zones are defined as zones planned for densities of approximately 8 du / acre or less, while multifamily zones are planned for densities over 8 du /acre.

Table 3: Average Achieved Densities: Permit Activity

	1996 - 2000 Residential Permit Activity								
	Sii	ngle Family Z	ones	MultiFam	nily and Mixed	d Use Zones			
Sub-Area	Net Acres Permitted Total Number of Units Avg. SF Permit Density		Net Acres Permitted	Total Number of Units*	Avg. MF Permit Density				
			(D.U. / Acre)			(D.U. / Acre)			
EAST COUNTY	2221	7,592	3.4	473	9,677	20.4			
SEA-SHORE	371	2,434	6.6	156	8,115	52.2			
SOUTH COUNTY	1963	8,321	4.2	455	7,938	17.4			
RURAL CITIES	621	1119	1.8	142	1255	8.8			
TOTALS FOR COUNTY URBAN AREA	5176	19,466	3.8	1226	26,985	22.0			

When single family and multifamily development is aggregated, the resulting countywide density is 7.3 du / acre for all development from 1996 to 2000.

The highest achieved densities were in the SeaShore sub-area, with an average permit density of 6.6 du /acre in single-family zones and 52.2 du / acre in multifamily and mixed-use zones. The latter average density reflects a strong market for high-density development in Seattle's urban centers, particularly downtown Seattle.

Average achieved densities in multifamily zones were somewhat higher on the Eastside (20.4 du / acre) than in the South County (17.4 du / acre). High-density development in downtown Bellevue accounts for a significant portion of this difference.

Average achieved densities in single-family zones were higher in the South Sub-area (4.2 du / acre) than on the Eastside (3.4 du / acre). The same is true of densities in plats (see Table 4): 5.4 in the South in contrast to 3.9 on the Eastside.

The relatively high single family densities in South King County are encouraging, because the South had the largest numbers of platted lots and single family permits. Similarly, the highest multifamily densities in the suburbs were on the Eastside, whose jurisdictions issued the largest number of multifamily permits. In short, areas outside Seattle with the largest volume of construction are achieving the highest densities.

The distribution of single-family and multifamily units shows a similar pattern: the South Subarea added more single-family houses (8,300) than the Eastside (7,600), while the Eastside had more new multifamily units (9,700) than South King County (7,900).

### **Achieved Densities in Plats**

King County jurisdictions measured densities in new subdivisions recorded between 1996 and 2000. Where available, these plat densities are preferred over permit densities for calculating future Buildable Land capacity on vacant land. Densities achieved in new recorded plats are a good indicator of the effect of the most recent zoning regulations on single-family densities. The fact that they are higher on the average than single-family permit densities may indicate that more recent single-family land use policies are increasing densities through design of new subdivisions.

Table 4: Average Achieved Densities: Plat Activity

	Residential Plat Activity								
Sub-Area	Net Acres Platted	Total Number of Lots	Avg. Plat Density						
EAST COUNTY	1,391	5,461	3.9						
SEA-SHORE	139	834	6.0						
SOUTH COUNTY	1,037	5,651	5.4						
RURAL CITIES	419	1,849	4.4						
TOTALS FOR COUNTY URBAN AREA	2,986	13,795	4.6						

Plat densities average 4.6 du / acre in all residential and mixed use zones in urban King County.

The South sub-area of King County created more than 40% of the new lots during the five year period, and achieved a net density of 5.4 du / acre in new plats. This relatively high density can confidently be applied to net single family land supply in order to calculate future capacity. Eastside jurisdictions platted almost as many lots, but achieved an average density of less than 4 du / acre. The Sea-Shore platted lot numbers are low because Seattle reported few plats. The density achieved in Rural City plats, 4.4 du / acre, contrasts with the low permit density of 1.8 du / acre. Permit densities were lowered by development on large lots in the UGAs around some of the Rural cities, but plats were all within city limits and achieved higher densities.

### **Residential Land Supply**

Land supply refers to acreage of potentially developable land. Overall, urban King County has nearly 27,000 net acres of vacant and redevelopable residential land, after deducting constraints and making an average 20% adjustment for market factors.

Table 5: Residential Land Supply \*

	Residential Land Supply as of January 1, 2001										
		Dec	ductions								
Jurisdiction	Gross Acres	Critical Areas	ROWs / Public Purposes / Other Discount	Net Acres	Market Factor	Adjusted Net Acres	Adjusted Net Acre				
	Acres	Acres				Acres	Acres				
EAST COUNTY	15,366	4,279	13%	9,613	23%	7,412	7,333				
SEA-SHORE	7,876	1,041	4%	6,539	5%	6,219	6,216				
SOUTH COUNTY	23,352	5,063	14%	15,797	25%	11,819	11,532				
			%		%						
RURAL CITIES	3,525	864	15%	2,254	21%	1,788	1,788				
Totals within Urban Growth Area	50,119	11,247	12%	34,203	20%	27,238	26,869				

<sup>\*</sup> Notes on Table 5:

In mixed use zones, only land that is expected to be dedicated to residential development was included in the residential land supply. See pages 34-35 for treatment of commercial uses in mixed use zones. In unincorporated urban areas, a portion of parcels with existing units on them was deducted from the land supply, rather than deducting the existing units as part of land capacity calculations as was done in the cities.

The use of a market factor is intended to allow for parcels of land which are unlikely to reach the market by 2012 due to

- owner preference
- speculative holding of land
- the nature of the existing use.

There is no certainty that the remaining land will, in fact, be developed, but it has the potential to be developed if demand is sufficient. Market factors vary by jurisdictions within a range, based on Countywide guidelines. Using the guidelines, each jurisdiction determined appropriate market factors for their city, often on a zone by zone basis. This meant that market factor determinations were based on local knowledge of an area's marketability.

The largest amount of residential land supply in acres is in the South County sub-area with 11,500 acres, after a 25% average market factor adjustment. The South County has about 43% of King County's net land supply.

There is a significant difference between gross vacant or potentially redevelopable land supply and net land supply. Reductions for critical areas, rights of way, public purpose lands, and a market factor reduced the gross land supply by about half in the UGA as a whole, and in each sub-area except Sea-Shore, where deductions were lower.

In Seattle, nearly all land is platted, and roads and other public uses are in place, so development will not need to set aside land for these purposes. Critical areas in Seattle are not treated as barriers to development. Thus, no further deductions are taken from the "gross" acres to arrive at the "net" acres. This produces considerably lower average deductions in Sea-Shore. Similarly, Sea-Shore's market factor is also small because the City of Seattle did not apply a market factor after calculating capacity, but instead accounted for market demand during the land supply inventory.

### **Residential Capacity**

Capacity refers to the number of additional housing units that can be accommodated on vacant and redevelopable land. Land capacity was calculated by each jurisdiction on a zone by zone basis. Each jurisdiction studied its recent development history, and determined the densities likely to be achieved in each zone classification in the future. The net land supply in that zone was multiplied by the density in order to arrive at the capacity for that land. For example:

Net remaining land supply in R-6 zone x Expected Density = Resulting Capacity

10 acres x 4.8 du /acre = 48 units

In most cases, the density that was applied to the land supply was the same as the achieved density in that zone over the last few years. However, where local knowledge could determine and document that future development would most likely take place at a different average density, then an "assumed" density was used. <sup>10</sup> When there was little or no development activity in a zone, similar zones in that jurisdiction or in neighboring jurisdictions were used to guide future density assumptions.

Altogether the Urban Growth Area of King County has the capacity for more than 263,000 additional residential units. King County jurisdictions have the capacity for 79,700 new units in single-family zones, 63,000 new units in multifamily residential zones, and another 102,000 units in mixed-use or multiple use zones.

The not yet completed portions of urban planned developments (UPDs) constitute another 12,500 units of capacity. The land for the UPDs is not included in Table 5 above since it has already been effectively removed from the land supply. There are an additional 5,800 units of capacity in the Rural Cities' Urban Growth Areas. This land is included in the land supply in Table 5.

<sup>&</sup>lt;sup>10</sup> Each jurisdiction's individual report supplies details of the achieved and/or assumed densities that were used in residential capacity calculations. If the assumed density differed from athe achieved density, reasons for this departure were documented. For more detail on density assumptions, see the methodology section in Chapter 1 and the jurisdiction summary profiles in Chapter 3.

**Table 6: Residential Capacity in Housing Units** 

Total Residential Capacity									
Sub-Area	Single Family Capacity	Multifamily / Mixed Use Capacity		Urban Planned Developments or Rural UGA's		Total Capacity			
EAST COUNTY	19,201	34,231		9,340		62,772			
SEA-SHORE	17,191	105,149		-		122,340			
SOUTH COUNTY	40,919	24,855		3,216		68,991			
RURAL CITIES	2,433	908		5,835		9,175			
TOTAL URBAN AREA	79,743	165,144		18,391		263,277			

Mixed-use zones and zones allowing multiple uses have a significant share of total capacity in Sea-Shore, where they comprise a majority of total capacity, and on the Eastside, where they have 39% of residential capacity. In the South County sub-area, mixed and multiple use is a smaller share of total capacity, about 18 percent.

Of the nearly 80,000 single family units that can be accommodated, just over half the single-family capacity is in the South sub-area.

Table 7: Single Family and Multifamily Capacity by Zone

Sub-Area	Single Family Capacity			Multifamily Capacity (in housing units)					Mixed and Multi-use Zones			
	0-2 du / acre	2 - 4 du / acre	4 - 6 du / acre	6 - 8 du / acre	Total Capacity in SF Zones	8 - 12 du / acre	12 - 18 du / acre	18 - 30 du / acre	30 - 48 du / acre	48+ du / acre	Total Capacity in MF Zones	Mixed-Use Zones
EAST COUNTY	1,428	8,341	7,481	1,818	19,201	3,085	2,883	2,501	800	457	9,726	24,505
SEA-SHORE	17	1,568	5,540	10,065	17,191	2,193	5,548	6,598	16,390	9,164	39,894	65,255
SOUTH COUNTY	1,360	12,535	17,652	9,328	40,919	2,439	4,133	3,766	322	1,940	12,601	12,255
RURAL CITIES	21	597	1,636	196	2,433	243	457	-	-	•	700	208
			·									
TOTAL URBAN AREA	2,827	23,041	32,309	21,407	79,743	7,961	13,021	12,864	17,512	11,561	62,921	102,223

### **Single Family Capacity**

Residential zone categories with the greatest capacity differ by sub-area. On the Eastside, the greatest single family capacity is in zones planned for 2 to 4 dwelling units per acre (du / acre), while in Sea-Shore it is in zones planned for 6 to 8 du / acre. In the South, the zones designated for 4 to 6 du / acre have the most capacity. The South has more than twice the single-family capacity of either the Eastside or SeaShore. About one third of the UGA's total residential capacity is in single family zones.

### **Multifamily Capacity**

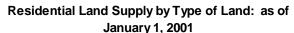
The Sea-Shore sub-area has, by far, the most multifamily capacity. Approximately 62% of its multifamily capacity is in mixed-use zones, and another 24% is in the highest density multifamily zones (30+ du / acre). The Eastside also has much of its multifamily residential capacity in mixed-use zones. The South County's multifamily capacity is in the low to mid-range multifamily zones, and in mixed use and multiple use zones.

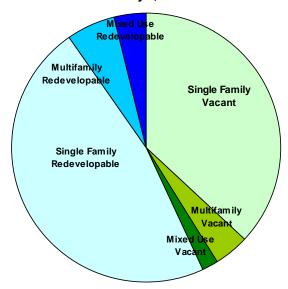
### Proportion of Vacant and Redevelopable Land Supply and Capacity

Vacant land accounts for 43% of the residential land supply in King County, while 57% of the land supply is potentially redevelopable land.

Redevelopable land usually (but not always) requires the removal of an existing building, and may have other associated costs. Vacant land is often perceived as easier to develop. Table 8a below demonstrates that there are more than 11,000 acres of vacant land, but the vacant land supply is clearly limited. It is probable that a larger share of future development will have to be accommodated through redevelopment than in the past. More than 84% of the residential land supply is in single-family zones and less than 16% is in multifamily and mixed-use zones. As Tables 6 and 7 above indicate, however, far more of the capacity in housing units is in multifamily and mixed-use zones, because much higher densities are achieved in those zones.

Table 8a: Vacant and Redevelopable Land Supply

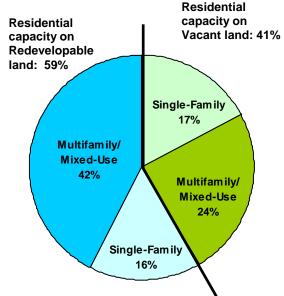




Countywide Residential Land Supply							
	Acres	Percent of All					
Single Family Vacant	9,947	37%					
Multifamily Vacant	1,108	4%					
Mixed Use Vacant	480	2%					
Total Residential Vacant	11,535	43%					
Single Family Redevelopable	12,728	47%					
Multifamily Redevelopable	1,579	6%					
Mixed Use Redevelopable	1,026	4%					
Total Residential Redevelopable	15,334	57%					
All Residential Land Supply	26,869	100%					

Table 8b shows the proportions of development capacity on vacant and redevelopable land in single-family and multifamily or mixed-use zones respectively. Overall, three fifths of the residential potential in the UGA is on redevelopable land. In single-family zones, shares of vacant vs. redevelopable capacity are nearly equal. Capacity in multifamily and mixed-use zones is significantly dependent on redevelopment, with nearly two-thirds of the potential units expected on currently under-utilized parcels.

Table 8b: Capacity on Vacant and Redevelopable Land\*



Countywide Residential Development Capacity							
Units Perconf T							
Capacity on Vacant Land							
Single-Family	43,982	17%					
Multifamily/Mixed-Use	62,058	24%					
All Unit Types	106,040	41%					
Capacity on Redevelopable Land							
Single-Family	41,810	16%					
Multifamily/Mixed-Use	108,681	42%					
All Unit Types	150,491	59%					
Total Capacity in UGA	256,531	100%					

<sup>\*</sup>Capacity totals exclude housing units in the pipeline.

### Analysis of Residential Capacity in Relation to 2012 Target

A primary objective of the buildable lands program is to determine if the current land supply, and the existing capacity on that land supply (i.e. the number of housing units that could be built on it), is sufficient to meet the County's household growth targets. On a countywide basis, and in each sub-area, there is more than sufficient capacity to meet the 2012 household target. In addition, the results of the Buildable Lands program show a significant surplus of capacity, over and above the 2012 target, that will still be available in the period following 2012.

### **Current and Surplus Capacity in Relation to Target**

King County jurisdictions have permitted more than 68,000 housing units in Urban areas in the first eight years of the planning period. That amount is 36% of the Urban growth target of 188,000 households. As both Table 6 and Table 9 show, the King County UGA has 263,000 units of residential capacity in 2001. This is more than twice the capacity needed to accommodate the remaining 2012 housing target of 120,000 units. There is a surplus of 143,000 units of capacity over and above the units needed to accommodate the 2012 target.

### Remaining Capacity by Subarea

Capacity in King County is somewhat unevenly distributed among sub-areas, with Sea-Shore having the largest share (over 122,000 units). The capacity in Sea-Shore is the result of a fairly limited amount of land that is zoned for high multifamily densities. The development history of

the sub-area indicates that it can achieve high densities in the future, even with the smallest land supply of the three urban sub-areas.

Although the South County has more housing capacity numerically than the Eastside, the Eastside has a larger surplus of capacity over its current 2012 target. The South County has more of its current target still to achieve, and thus less surplus capacity (18,200) beyond that target. Again, sub-area differences in household size play a role here. Although the South County achieved less of its housing target, it has accommodated much more than its share of population growth, because it is housing more people per housing unit. The original target allocation did not take this differential into consideration.

### **Remaining Capacity by Jurisdiction**

There are five individual cities which do not have sufficient capacity to meet their existing 2012 residential target. Four of these cities, Federal Way, Pacific, SeaTac and Tukwila, are in the South County sub-area. The other city, Carnation, is a Rural City. There are several other cities where capacity is not much more than the remaining target. See jurisdiction summaries in Chapter 3 for city details.

Inconsistencies between planning targets and the capacity for further growth identified in this Buildable Lands evaluation are addressed in two ways. First, on the land supply side, some cities are making changes to their comprehensive plans and development regulations, and taking other remedial measures to increase the amount, densities, and range of types of housing. Second, on the demand side, assumptions about future household growth are being revised under the framework established to allocate additional population growth through the 2022 planning horizon. The new proposed targets effectively reduce anticipated household growth for a handful of jurisdictions to levels below what had been assumed for 2012. These new targets are the product of a multi-jurisdictional effort that incorporated the best available information on demographic and employment trends as well as the Buildable Lands data.

**Table 9: Housing Unit Capacity in Relationship to Targets** 

Sub-Area	Net New Units: 1993 - 2000	20 Year Housing Target	Percent Achieved	Remaining Target	Current Residential Capacity	Surplus Over Remaining Target			
EAST COUNTY	25,665	48,348	53%	22,683	62,771	40,088			
SEA-SHORE	16,375	57,905	28%	41,530	122,340	80,810			
SOUTH COUNTY	22,957	73,387	31%	50,430	68,991	18,561			
RURAL CITIES	3,265	8,828	37%	5,563	9,178	3,615			
Urban Area Total	68,262	188,468	36%	120,206	263,280	143,074			
Rural UKC	6,303	7,000	90%	697	NA	NA			
King County Total	74,565	195,468	38%	120,903	NA	NA			

### **COMMERCIAL - INDUSTRIAL**

### **Net New Jobs**

King County gained nearly 237,000 net new jobs from 1993 – 2000. In 8 years (or 40% of the target period) it has achieved 68% of its twenty-year employment target. Almost 89% of this increase occurred from 1995 to 2000 – the years reported for each city.<sup>11</sup>

The second half of the 1990s was a time of unusually high economic growth for King County. It was preceded by slower job growth in the early 1990s, and followed by a downturn in economic growth, with relatively high unemployment, from 2000 - 2002. Since 2000, about 50,000 jobs have been lost in King County. Employment change data for the 8-year period covered in this report should be interpreted as providing a partial picture of long-term economic trends that include short-term boom and bust cycles every decade or so.

Table 10: Net New Jobs

Sub-Area	1992 Employment	2000 Employment	Net New Jobs	
	Employment	Linployment	0003	
EAST COUNTY	193,248	289,201	95,953	
SEA-SHORE	443,681	525,585	81,904	
SOUTH COUNTY	255,160	306,302	51,142	
RURAL CITIES	5,817	8,460	2,643	
Urban Growth Area	897,906	1,129,548	231,642	
Rural UKC	16,430	21,650	5,220	
King County Total	914,336	1,151,198	236,862	

Job growth was very high in both the East County and Sea-Shore. While job growth was also well above target in South King County, it was not as high as in the other sub-areas. This may have somewhat dampened housing growth in that sub-area.

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<sup>&</sup>lt;sup>11</sup> Employment data is based on Washington State Employment Security Department (ESD) records of covered jobs in King County. Puget Sound Regional Council uses the ESD data to estimate employment by jurisdiction. Job estimates for 1992 were deemed too unreliable at the city level to report job change for the 8-year period. However, the 1992 estimates were used to report 8-year growth at the County and sub-area level. Reliable 1995 and 2000 job data are available at all geographic levels and are reported by city in Chapter 3.

### **Commercial and Industrial Development Activity**

Development activity on commercial, industrial and mixed-use land was tracked from 1996 to 2000 to determine the ratio of commercial or industrial floor space to net site area for each building site. This floor area ratio (F.A.R.) is a measure of how intensively commercial and industrial land is being used. Generally speaking, the more floors in a building, the higher the F.A.R., so areas zoned for multi-story buildings (e.g. downtown office buildings) are likely to achieve much higher F.A.R.'s than industrial areas with warehouses, or commercial areas with single-story buildings and large parking lots.

**Table 11: Commercial and Industrial Development Activity** 

Sub-Area	Commercial and Industrial Development: 1996 - 2000									
		Gross Site Area	Constraints	Net Site Area	Net Site Area	Floor Area	Achieved F.A.R.			
EAST COUNTY		Acres	Acres	Acres	Sq. Ft.	Sq. Ft.	Floor Area / Net Site Area in Sq. Ft.			
	Commercial	476	74	402	17,509,058	8,219,806	0.47			
Totals	Industrial	394	68	327	14,229,408	6,847,022	0.48			
	Total C & I Development	870	142	728	31,738,466	15,066,828	0.47			
SEA-SHORE		Acres	Acres	Acres	Sq. Ft.	Sq. Ft.	Floor Area / Net Site Area in Sq. Ft.			
	Commercial	115	2	113	4,918,382	5,011,795	1.02			
Totals	Industrial	69	8	61	2,660,580	1,352,260	0.51			
	Total C & I Development	184	10	174	7,578,962	6,364,055	0.84			
SOUTH COUNTY		Acres	Acres	Acres	Sq. Ft.	Sq. Ft.	Floor Area / Net Site Area in Sq. Ft.			
	Commercial	472	44	427	18,601,829	6,405,237	0.34			
Totals	Industrial	735	123	613	26,689,073	11,927,822	0.45			
	Total C & I Development	1,207	167	1,040	45,821,027	18,449,126	0.40			
RURAL CITIES		Acres	Acres	Acres	Sq. Ft.	Sq. Ft.	Floor Area / Net Site Area in Sq. Ft.			
Totals for Rural Cities	Commercial	49	2	47	2,068,353	598,670	0.29			
& their UGAs	Industrial	15	0	15	654,112	228,210	0.35			
	Total C & I Development	64	2	62	2,722,466	826,880	0.30			
TOTAL URBAN		Acres	Acres	Acres	Sq. Ft.	Sq. Ft.	Floor Area / Net Site Area in Sq. Ft.			
	Commercial	1,111	122	989	43,097,623	20,235,508	0.47			
Totals for Urban Area	Industrial	1,214	199	1,015	44,233,173	20,355,314	0.46			
	Total C & I Development	2,326	321	2,005	87,860,921	40,706,889	0.46			

The F.A.R. that is currently being achieved in a particular zone or type of use can then inform a measure of expected future F.A.R. Table 11 shows cumulative development activity data along with achieved F.A.R.s in each sub-area. This allows calculation of how much commercial and industrial space can be created on that land, and to determine an approximate employment capacity for the land supply.

### Countywide and Sub-area F.A.R.'s

The average floor area ratio achieved in all of Urban King County was 0.47 for commercial and mixed-use zones, and 0.46 for industrial zones. In other words, on an average throughout the county, the actual floor space created is about half the net acreage of the site.

Average F.A.R.'s for commercial zones differ considerably by sub-area. Sea-Shore has the highest average F.A.R. at 1.02 for commercial development.

The Eastside's average F.A.R. for commercial zones was exactly at the County average, while the South County has somewhat lower commercial F.A.R's. The Rural Cities have the lowest commercial F.A.R. at an average of 0.29.

There is more uniformity in industrial F.A.R.'s throughout Urban King County, with a range of 0.35 to 0.51.

### **Commercial and Industrial Land Supply**

The next step in determining commercial and industrial capacity is the inventory of land supply. As with residential land, the net acres of vacant and redevelopable land is determined by subtracting critical areas from the gross acreage, and then deducting a percentage for rights of way (R.O.W.) and public purposes. This net acreage is further adjusted with a market factor, applied on a zone by zone basis.

The average market factor applied to commercial, industrial and mixed-use land for all of urban King County is 13%. In Sea-Shore the market factor is smaller because the City of Seattle did not apply a market factor after calculating capacity, but instead accounted for market demand in its land supply inventory.

### **Countywide Land Supply**

There is a total of 7,846 acres of urban land available for commercial and industrial development. More than 40% of the land supply is in industrial zones, and the remaining 58% is in commercial or mixed use zones.

Roughly half of this land is vacant, and half is redevelopable. In mixed use zones, only land that is expected to develop for commercial (as opposed to residential) purposes is counted in the commercial / industrial land supply.

### **Subarea Land Supply**

The South sub-area has the largest supply of industrial-zoned land – over 1,750 acres (45% of its commercial / industrial supply). On the Eastside, 752 acres (40%) of its commercial/industrial land supply are in industrial zones. Just over 500 acres in Sea-Shore are in industrial zones, but a larger proportion of the industrial land supply is vacant than in the other sub-areas.

In the South sub-area, about 59% of the commercial / industrial land supply is vacant, while 41% is redevelopable land. In SeaShore 54% is vacant and 46% is redevelopable. On the

Eastside, about 25% of the commercial / industrial land is vacant and 75% is redevelopable. About 85% of the supply in the rural cities is vacant, while 15% is redevelopable.

Table 12: Commercial, Industrial and Mixed Use Land Supply\*

	Comme	rcial & Ind	ustrial La	nd Supp	ly: Janua	ry 1, 2001		
			Deductions					Adhesis d Net
Jurisdiction		Gross Acres	Critical Areas	ROWs	Public Purposes	Net Acres	Market Factor	Adjusted Net Acres
	0				201			1
	Commercial Vacant	259	30		9%	209	9%	190
	Commercial Redevelopable	632	24		<u>8%</u>	574	18%	473
EAST	Industrial Vacant	281	67	7%		199	8%	183
COUNTY TOTALS	Industrial Redevelopable	756	32	4%		694	18%	569
	Mixed Use Vacant	84		uctions taken before residential / commercial split		84 375	0%	84
	Mixed Use Redevelopable	375		-	ommerciai spiit		5%	355
	Total C & I Land	2,387	153		l%	2,135	13%	1,854
	Commercial Vacant	47	4	15	.0%	37	10%	33
	Commercial Redevelopable	283	39	14	.4%	209	16%	177
	Industrial Vacant	477	0	1.	8%	469	1%	464
SEA-SHORE TOTALS	Industrial Redevelopable	67	15	11	.2%	46	19%	38
1017420	Seattle Mixed UseVacant	357	Deductions taken before residential / commercial split		residential /	357	0%	357
	Seattle Mixed Use Redev.	508			508	0%	508	
	Total C & I Land	1,739	57	3.3%		1,626	3%	1,576
								•
	Commercial Vacant	1,047	161		3%	771	14%	666
	Commercial Redevelopable	566	34	1	0%	477	19%	387
SOUTH	Industrial Vacant	2,002	581	1.	2%	1,247	19%	1,010
COUNTY TOTALS	Industrial Redevelopable	1,210	137	1	0%	964	22%	750
TOTALS	Mixed Use Vacant	672	Deductions taken before residential /		651	2%	641	
	Mixed Use Redevelopable	496		commercial split		496	0%	496
	Total C & I Land	5,993	912 9%		4,606	14%	3,951	
	Commercial Vacant	225	46	1	1%	159.25	120/	139
	Commercial Redevelopable	45	6		1% 1%	35.35	13%	30
	Industrial Vacant	608	171		8%	356.96	15% 32%	244
RURAL CITIES	Industrial Redevelopable	42	3		<u>0%</u> 7%	36.06	30%	25
TOTALS	Mixed Use Vacant	27	-		<u> </u>	19.84	25%	15
	Mixed Use Redevelopable	12			)%	12.37	0%	12
	Total C & I Land	959	225		5%	620	25%	465
	Total O & I Land	909	223	<u>'</u>	J /0	020	25/6	403
	Commercial Vacant	1,579	241	1	2%	1,176	13%	1,028
	Commercial Redevelopable	1,527	102		9%	1,296	18%	1,067
URBAN TOTAL	Industrial Vacant	3,368	819		1%	2,271	16%	1,901
	Industrial Redevelopable	2,075	186		3%	1,741	21%	1,382
IOIAL	Mixed Use* Vacant	1,140		taken before residential /		1,112	1%	1,097
	Mixed Use* Redevelopable	1,391	commercial split			1,391	1%	1,371
	Total C & I Land	11,079	1,348	۶	3%	8.987	13%	7,846

\*Includes only that proportion of mixed use land supply that is expected to develop with a commercial / industrial use.

#### \* NOTE for Table 12:

Acreage figures for the land supply in mixed use zones are prorated to include only that portion of the supply assumed to take commercial uses through future development or re-development. (Total acres in mixed use zones would also include future residential uses.) In most cases of mixed use, deductions for ROWs, critical areas, public lands and market factor were made before the apportionment into commercial vs residential components. For this reason, gross acres and net acres reported in mixed use zones signifi-cantly under-represent the actual gross and net acreage. Therefore, the reported deductions are far below actual deductions applied to vacant and redevelopable land in mixed use zones. Actual deductions are in fact comparable to those applied in other commercial zones in each sub-area.

Land supply in acres was converted to development capacity in jobs, in a two-step methodology. First, acres in each zone were converted to square feet of potential commercial or industrial floor area based on F.A.R.s achieved during the review period. Second, floor area capacity was converted to job capacity based on assumed multipliers of floor area per employee. These multipliers, which reflect anticipated land use mix, local markets and documented measures of employment density, represent reasonable estimates of employment yield in zones which accommodate diverse economic sectors.

Note that this analysis uses zoning classification, not land use sector; therefore the square feet per employee multipliers are necessarily broad averages. The number of jobs, or employees, that can be housed in a given space differs considerably depending on the type of use. For instance, industrial plants or warehouses typically require about 750 – 1000 sq. feet per employee, while office buildings may need just 200 – 350 sq. feet per employee.

Table 13 shows the aggregated results of those calculations by type of zone, for each sub-area.

Empl. Capacity in **Empl. Capacity Employment** UPD, Pipeline or Jurisdiction Commercial in Mixed Use Capacity in **Rural UGA Total Capacity** Zones Zones Industrial Zones Capacity **EAST COUNTY** 26,673 78,875 25,395 6,046 136,989 SEA-SHORE 197,301 86,660 46,165 330,125 **SOUTH COUNTY** 32,432 51,682 27,174 13,460 124,748 **RURAL CITIES** 4,085 372 3,838 2,906 11,200 Total Urban Area 260,492 217,589 102,572 22.412 603.063

**Table 13: Commercial and Industrial Employment Capacity** 

At the end of 2000, with over 7,800 acres of adjusted net land in commercial and industrial zones, there was sufficient commercial and industrial land in King County to accommodate 603,000 new jobs. Commercial and mixed-use zones have capacity for about 478,000 new jobs, while industrial zones could accommodate another 103,000 jobs.

An additional 22,400 jobs are projected for urban planned developments (UPDs) or in the Rural UGA's. Land for the UPDs has already been set aside so it is not included in the land supply in Table 12.

It is worth noting that a comparison of job growth to commercial / industrial land developed during the 1996 – 2000 period shows that more jobs were accommodated than land use calculations would predict. This is because many jobs are created by more efficient use of existing buildings, by filling vacant space, and by other mechanisms such as double-shifts in existing buildings. Land capacity calculations are, at best, a rough guide to how much employment can be accommodated, and may tend to underestimate job capacity.

### **Subarea Capacity**

Over half of the combined commercial and industrial job capacity for the County is in the Sea-Shore sub-area – capacity for 330,000 new employees out of the total of 603,000. Combined job capacity in the East sub-area is slightly higher than in the South sub-area.

About 23% of the South's job capacity is in industrial zones, while about 19% of the Eastside capacity is on industrial land. Sea-Shore has the highest amount of industrial capacity (46,000 jobs), but that constitutes just 14% of its total job capacity of 330,000 jobs.

### **Analysis of Employment Capacity in Relation to 2012 Employment Targets**

Table 14 compares the eight-year job growth to 20-year job targets. The first column shows the net new jobs created in King County from 1993 to 2000. The second column shows the job target for 1993 – 2012, and the third column calculates the percentage of that target that was achieved in the first eight years of the 20 year planning period. When the net new jobs are subtracted from the 20 year job target, the result is the fourth column - the "remaining job target." <sup>12</sup>

Net New Jobs: 1	993 - 2000	Job Capacity in Relation to Target						
	Net New Jobs	20 yr. Job Target	Percent of Target Achieved in 8 Yrs.	Remaining Job Target	Remaining Job Capacity	Surplus or Deficit in Relation to Remaining Target		
5405 004W5W	05.050	00.700	4070/	(0.044)	426.000	440,000		
EAST COUNTY	95,953	89,709	107%	(6,244)	136,989	143,233		
SEA-SHORE	81,904	134,100	61%	52,196	330,125	277,929		
SOUTH COUNTY	51,142	110,550	46%	59,408	124,748	65,340		
RURAL CITIES	2,643	9,250	29%	6,733	11,200	4,467		
TOTALS FOR COUNTY URBAN AREA	231,642	343,609	67%	112,093	603,062	490,969		
Rural UKC	5,220	3,800	137%	(1,420)	NA	NA		
Grand Total with Rural	236,862	347,409	68%	110,673	NA	NA		

**Table 14: Job Capacity in Relation to Target** 

The second to last column of Table 14 shows the existing capacity (as of January 2001) for new employment on the remaining land supply. The last column calculates the surplus of capacity that will exist after the 2012 target is met.

### **Job Target Achievement**

Overall, King County achieved 68% of its targeted job growth during the first eight years, or 40% of the planning period. Employment growth was particularly strong on the Eastside, which achieved 107% of its twenty-year job target in just eight years. SeaShore also had strong job growth, achieving 61% of its employment target in eight years. The Rural Cities gained 29% of the 20-year job target during the first eight years.

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<sup>&</sup>lt;sup>12</sup> A negative number in the "remaining target" column means that the subarea has achieved that amount MORE than its 2012 target. If it were to lose that many jobs (as some areas may have done in the 2000 – 2002 period), it would still have met its target. This excess contributes to the surplus over the target, because if some of those jobs were lost, the commercial or industrial space would still exist to accommodate businesses and employees. The "job capacity" number refers to the number of employees that could be accommodated on land that had not yet been built or redeveloped on January 1, 2001.

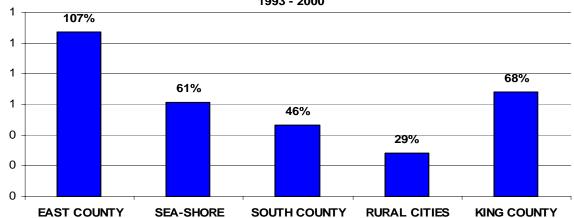
The long-range perspective of this report makes the shorter cycles of job decline and job growth less relevant. However, in the short run it is important to bear in mind that rapid job growth (as in the late 1990s) is often followed by a lull in growth, or even a decline in the number of jobs. This has clearly been occurring in the early years of this decade. It is likely that at the time of the writing of this report, net job growth since 1993 is less than that shown here, and therefore a lower proportion of the target has actually been achieved. However, the long-term trend in the region has been in the direction of healthy economic growth over each decade.

Figure 15: Job Target Achievement

Percent of 20 Year Job Target Achieved in 8 Years

(40% of the Planning Period):

1993 - 2000



### **Job Capacity in Relation to Target**

King County jurisdictions have gained 237,000 jobs or 68% of the 2012 target of 347,400 net new jobs. This leaves less than 111,000 jobs remaining to meet the twenty-year target. Given its current capacity to accommodate 603,000 new jobs, King County still will have capacity for approximately 491,000 more jobs once its 2012 target has been met.

Figure 16 shows the relationship of the remaining target to the existing capacity. All the subareas have sufficient capacity to meet their target. The Eastside sub-area and Sea-Shore have a large surplus of capacity once their target is achieved. The South and Rural Cities still have some capacity, but less of a cushion than the Eastside and Sea-Shore.

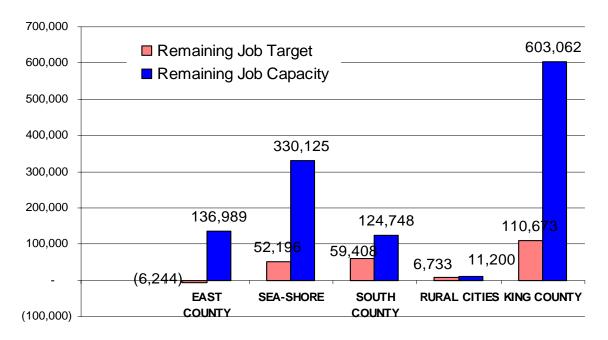
As with residential capacity, there are a number of cities which lost jobs during the eight-year period, or whose job growth was weak compared to their targets. Four cities – Des Moines, Lake Forest Park, Snoqualmie and Tukwila, do not currently have enough capacity to meet their 2012 target. Others have very little surplus for the future beyond 2012. See jurisdiction summaries in Chapter 3 for city detail.

Inconsistencies between planning targets and the capacity for further job growth identified in this Buildable Lands evaluation are addressed in two ways. First, on the land supply side, some cities are making changes to their comprehensive plans and development regulations, and taking other remedial measures to increase the potential to accommodate new commercial and industrial space. Second, on the demand side, assumptions about future job growth are being revised under the framework established to allocate additional employment growth through the 2022 planning horizon. The new proposed targets effectively reduce anticipated job growth for a handful of jurisdictions to levels below what had been assumed for 2012. These new targets

are the product of a multi-jurisdictional effort that incorporated the best available information on demographic and employment trends as well as the Buildable Lands data.

Figure 16: Remaining Target and Remaining Capacity

Employment Capacity in Relation to Remaining Job Target for 2012



Chapter Three provides profiles for each city and unincorporated subarea with local details of the data that has been aggregated by sub-area in this chapter.

# CHAPTER 3 Buildable Lands Profiles by Jurisdiction

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### Chapter Three: Buildable Lands Profiles for King County Jurisdictions

### INTRODUCTION

The Buildable Lands Program in King County has benefited from a great deal of effort and collaboration on the part of its 40 jurisdictions. In 1997, cities began collecting and aggregating data for their development activity during the 1996 – 1998 period. Worksheets and guidelines for this data collection were supplied by the County and Suburban Cities Association staff. When the first three years of data were submitted, refinements were made to the methodology for data collection in subsequent years. Every effort was made to assure consistency among the cities in their methodology, while at the same time, respecting genuine differences in the nature of the jurisdictions and in local conditions. The jurisdictions collected 1999 and 2000 data using revised worksheets.

In 2000 – 2001, cities completed land supply inventories, again using worksheets and guidelines prepared for countywide use. The jurisdictions then undertook the major task of preparing a full Buildable Lands five-year report. These reports included

- details of development activity for the five year period spanning 1996 2000,
- the results of the land supply inventory on a zone by zone basis, and
- land capacity calculations on a zone by zone basis.

Data on development activity, land supply, and capacity for both residential and commercial-industrial uses were included in the city reports.

Finally, the data from the individual jurisdictions' reports were compiled, factual or mathematical discrepancies were investigated and worked out, and inconsistencies among jurisdictions were reduced wherever possible. The profiles of each jurisdiction were then reviewed by local staff for accuracy.

In the profiles which follow, new residential development is reported for 1993 through 2000, the first eight years or 40% of the 20-year Growth Management planning period. This entailed extra effort beyond the five years of analysis required by Buildable Lands. For commercial and industrial development and jobs, reliable data were not available before 1995, so the profiles report five years of non-residential activity and job growth. Little development or job growth took place between 1992 and 1995, however, so the five years 1996 through 2000 do provide adequate information to evaluate current progress against job targets.

Because the cities and unincorporated urban areas differ greatly in size, in the nature of their development, and in their degree of urbanization, there are inevitably considerable differences in how they carried out their work. The profiles which follow make note of local decisions in their calculations and in the reporting of their data, as comprehensively as possible. Further details of methodology, which could not be fully documented in a few pages, are summarized in Appendices A to C or are available from the cities individually, upon request. For more detailed questions, individual jurisdictions should be consulted.