DRAFT

Whatcom County Review and Evaluation Program

Methodology

November 12, 2021

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Whatcom County

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1. INTRODUCTION

Background and Purpose

The Review and Evaluation Program, which is also known as the Buildable Lands program, is part of Washington State's Growth Management Act (GMA). The program requires that certain counties and cities review the growth and development that has occurred within their jurisdictions in the years since the last updates to their State mandated Comprehensive Plans. Past growth is compared with the growth and development assumptions, targets, and objectives that are contained in the current plans. Where actual growth diverges from growth and development assumptions adopted in the countywide planning policies or comprehensive plan, the State calls on the jurisdiction to implement "reasonable measures" in the next comprehensive plan update to maintain consistency with GMA requirements (RCW 36.70A.215(1)).

The GMA's Buildable Lands program was established in 1997 and originally applied to all jurisdictions within six counties. The first major revision to the program was completed in 2017, in accordance with E2SSB 5254. As part of this revision, Whatcom County was added as the seventh Buildable Lands county. The County contracted with Community Attributes Inc. (CAI) to assist developing methods for completing its new Buildable Lands program. Whatcom County's first Buildable Lands Report (BLR) will be due in June 2022. This report outlines recommended methods to be used by the County and cities in meeting state requirements for its Buildable Lands analysis and program.

Methods

The recommended methods in this report were informed by the following sources:

- **State Guidelines:** The Department of Commerce's 2018 Buildable Lands Guidelines provided guidance on key program elements, including incorporating the 2017 updates to State law (RCW 36.70A.215).
- **Existing Land Capacity Analysis Methodology:** Whatcom County has a Land Capacity Analysis (LCA) Methodology that was used in the 2016 Comprehensive Plan updates. While the BLR and LCA have separate purposes, they have many analysis steps in common.
- **Key Issues Research:** CAI conducted research on topics with important implications for the buildable lands report, including local

regulations, infrastructure, housing affordability, and growth trends. This included reviewing relevant portions of the Revised Code of Washington and Washington Administrative Code. This information was compiled in a *Background Information and Key Issues Report* (CAI, June 2019).

- **Stakeholder Input:** CAI held interviews with representatives of each jurisdiction and several key community stakeholders. These interviews provided context on priorities for the methodology and staff capacity available to support the analysis. This information was compiled in a *Stakeholder Interview Summary* (CAI, May 2019). Additionally, stakeholders reviewed and provided comments on preliminary draft versions of this Methodology in 2021.
- **Technical Committee:** A technical committee with representatives of the County and each city met in 2019-2021 to discuss key elements of the program. The committee also reviewed all project deliverables.
- **Review of Other Counties:** CAI reviewed other Buildable Lands counties' methods and worked with the Technical Committee to select methods most appropriate for Whatcom County.
- **Public Hearing:** The Whatcom County Planning Commission held a public hearing on the draft Methodology on October 28, 2021. Notice of the hearing was published in the newspaper, posted on the County's website, sent to the County's e-mail list, and sent to stakeholders.

Organization of this Report

This report includes the following sections:

- **State Requirements:** Outlines the key requirements for a Buildable Lands program under state law and where Whatcom County's and the cities' approach to meeting the requirements is documented.
- **Data Collection:** A recommended approach to annually gathering all required and necessary data for the Buildable Lands Report.
- **Review and Evaluation of Land Suitable for Development:** Recommended analysis methods to complete the Buildable Lands evaluation.
- **Reports and Implementation:** Structure of the Buildable Lands Report and implementation steps, including reasonable measures. This section also references the methods for resolving disputes between jurisdictions.
- **Land Capacity Analysis:** Describes the relationship between Land Capacity Analysis and the Buildable Lands Report.
- **Definitions:** Defines important terms used in this report.

2. State Requirements

2.1. Program Purpose

The Review and Evaluation Program, also referenced as the Buildable Lands Program, is intended to evaluate the performance of the current comprehensive plans and identify important issues to be addressed in the next plan updates. This purpose is described in *RCW 36.70A.215 (1)* as follows:

> *(a) Determine whether a county and its cities are achieving urban densities within urban growth areas by comparing growth and development assumptions, targets, and objectives contained in the countywide planning policies and the county and city comprehensive plans with actual growth and development that has occurred in the county and its cities; and*
>
> *(b) Identify reasonable measures, other than adjusting urban growth areas, that will be taken to comply with the requirements of this chapter. Reasonable measures are those actions necessary to reduce the differences between growth and development assumptions and targets contained in the countywide planning policies and the county and city comprehensive plans with actual development patterns. The reasonable measures process in subsection (3) of this section shall be used as part of the next comprehensive plan update to reconcile inconsistencies.*

2.2. Required Elements

State law allows for flexibility in individual county Buildable Lands methodologies, provided that major requirements are met and counties and cities document the rationale for their choices. This section describes the most critical requirements under state law, and identifies where Whatcom County's and the cities' approach to meeting each requirement can be found.

Countywide Planning Policies

Counties must adopt countywide planning policies to establish the Review and Evaluation, or Buildable Lands, Program *(RCW 36.70A.215(1))*. This is fulfilled by Whatcom County Countywide Planning Policy Q: *Review and Evaluation Program*.

Annual Data Collection

The program must provide for annual collection of data on "urban and rural land uses, development, zoning and development standards, environmental regulations including but not limited to critical areas, stormwater, shoreline, and tree retention requirements; and capital facilities to determine the quantity and type of land suitable for development, both for residential and employment-based activities" *(RCW 36.70A.215 (2)(a))*. The approach to

collecting and sharing data between the County and cities is outlined in this report in **Section 3**.

Review Achieved Densities

The evaluation must review densities achieved by development in the County and its cities since the adoption of the comprehensive plan or since the last buildable lands report. Achieved densities are compared to growth and development assumptions contained in the countywide planning policies and County and city comprehensive plans (*RCW 36.70A.215 (1)(a), 36.70A.215 (3)(d)).* Whatcom County's and the cities' approach to this analysis is outlined in this report in **Section 4.1**.

Evaluate Impact to Developable Land

Counties and cities must update the inventory of land available for development during the current 20-year planning period, and determine how much projected population and employment growth still remains to be accommodated during the current planning period. Counties and cities must also estimate how much land will be required to serve remaining projected population and employment growth, based on achieved development densities (see "Review Achieved Densities"). The updated developable land inventory is then compared to the land required to serve growth to determine if there is sufficient developable land to serve that growth *(RCW 36.70A.215(3)).* Whatcom County's and the cities' approach to this evaluation is described in **Sections 4.2-4.4**.

Methods to Resolve Disputes

Counties must provide for methods to resolve disputes between jurisdictions and to resolve inconsistencies in data collection and analysis *(RCW 36.70A.215 (2)(c)).* This is addressed in Whatcom Countywide Planning Policies Q.7 and R.

Reasonable Measures

In the event that there are inconsistencies between actual development patterns & growth and development assumptions & targets adopted in the countywide planning policies or comprehensive plan, the County and the cities must determine if reasonable measures are required to increase consistency. If necessary, reasonable measures must be adopted into the countywide planning policies, County and city comprehensive plans, and/or development regulations, as appropriate, during the next scheduled update *(RCW 36.70A.215 (2)(d)).* Whatcom County's and the cities' approach to reasonable measures is addressed in **Section 5.3**, and examples of reasonable measures that have been adopted in other jurisdictions is provided in **Appendix A**.

2.3. Relationship to Land Capacity Analysis

While only select Washington counties and cities are subject to the Buildable Lands requirements, all counties and cities that are required or choose to plan under the Growth Management Act must complete a Land Capacity Analysis (LCA) as part of any periodic Comprehensive Plan update (*RCW 36.70A.115*). The purpose of an LCA is to determine if there is sufficient capacity for development within Urban Growth Areas (UGAs) during the 20-year planning period in the next comprehensive plan update. The purpose of the BLR is to evaluate the growth and development assumptions adopted in the existing countywide planning policies and comprehensive plans and compare them against actual growth. The BLR also includes an estimate of land capacity in the remaining portion of the existing 20-year planning period.

The methods used for the BLR are similar to those used for the LCA, but the planning horizons are different. The existing comprehensive plan planning horizon (for the BLR) is through the year 2036. The next comprehensive plan horizon (for the LCA) will extend through the year 2045. Additionally, the BLR uses achieved densities to determine the amount of land needed for the remaining portion of the 20-year planning period in the most recently adopted comprehensive plans (RCW 36.70A.215(3)(e)). In contrast, the LCA may use assumed densities (WAC 365-196-210(6) and WAC 365-196-300(2) and (3)). This report addresses the relationship between the Buildable Lands Report and the Land Capacity Analysis in **Section 6**.

3. Data Collection

3.1. Review and Evaluation Period

For the first Buildable Lands Report due in June 2022, Whatcom County and the cities will assess data from the years following the adoption of the most recent comprehensive plan update, which was completed in 2016. The first Report will review development data from April 1, 2016 to March 31, 2021.

For subsequent Buildable Lands Reports, the Review and Evaluation Period will include the years since the adoption of the latest comprehensive plan or the previous Buildable Lands analysis (RCW 36.70A.215(3)(d)). Each report is due no later than three years prior to the deadline for the next comprehensive plan, resulting in an eight-year Buildable Lands cycle. For any year selected as a base or end point for study, Whatcom County and the cities have selected April 1 as the breaking point in order to align with the Washington State Office of Financial Management's (OFM) population estimates.

3.2. Study Area Boundaries

The Buildable Lands Analysis includes the portion of Whatcom County located west of the National Forest with a particular focus on UGAs, including land within city limits.

3.3. Annual Data

Data Collection and Evaluation Overview

Each Whatcom County jurisdiction will be responsible for collecting key data on development in their jurisdiction during the Review and Evaluation Period. These data will be inserted in Data Reporting Tools, which are spreadsheets intended to facilitate consistency across the jurisdictions. The Data Reporting Tools will be shared with Whatcom County, which will lead the evaluation. Whatcom County will also gather data for unincorporated UGAs and rural areas.

The County and the cities will work together to complete the evaluation. The County and cities will engage at key points to review work in progress. The County and cities may need to formalize arrangements for data sharing responsibilities through memorandums of understanding (MOUs), interlocal agreements, or other contracts. Alternatively, informal cooperative data sharing may continue without formal agreements, as in the past.

Types of Data to Collect

While the following types of data should be collected annually, data collection is only required to the extent necessary to determine compliance with RCW

36.70A.215 (including achieved densities and the remaining quantity and types of land available for development during the current planning period). On an annual basis, jurisdictions should collect following types of data:

1. **Development activity** and other land use changes, including:
    - Building permits and plats
    - Renovations, if adding capacity
    - New construction – new units, new industrial space, new commercial space, and quantities of land developed
    - Demolition data – units and space removed
    - Annexations
    - Changes to UGAs
    - Changes to the amount of land zoned for residential, commercial, and industrial development
2. Changes to **zoning and development standards** which could impact future land capacity
3. Changes to **environmental regulations** which could impact future land capacity
4. Changes to **planned capital facilities** which could impact future land capacity
5. **Adopted reasonable measures**

3.4. Data Reporting Tools

With the assistance of CAI, the County and cities have developed spreadsheet-based Data Reporting Tools for the jurisdictions to use to capture all required data between April 1, 2016 and March 31, 2021. Detailed guidance on how to use the tools is provided on the "Instructions" documents associated with the spreadsheets. Four separate Data Reporting Tools have been developed:

- City of Bellingham;
- Small Cities and UGAs (identical to City of Bellingham spreadsheet, except with fewer columns for data);
- Non-UGAs (simplified spreadsheet for rural and resource lands); and
- Countywide (addresses annexations, UGA expansions, and zoning map changes).

Each jurisdiction will fill out a Data Report Tool. The city data will be maintained separately from the unincorporated UGA data (relating to development in the UGA, but outside city limits). This is because urban

density development is anticipated within city limits, where public water and sewer are typically available. However, the cities in Whatcom County generally do not extend public water and sewer for new developments prior to annexation. Therefore, urban residential development will generally not occur in the unincorporated UGAs associated with cities until annexation (except on existing platted lots). In fact, the County zoning typically limits new subdivisions in UGAs to a density of one dwelling/ten acres in urban residential zoning districts until public water and sewer are available.

The City of Bellingham and the Small Cities/UGA tools include the following sections:

1. **Buildable Lands Summary:** UGA-level summary of new development during the Review and Evaluation Period and remaining growth to accommodate. Calculates achieved densities by city or UGA for comparison with planned densities in the comprehensive plan, which will considered by each jurisdiction when evaluating compliance with RCW 36.70A.215(1)(a).
2. **Planned v. Achieved:** Comparison of planned and achieved densities by use and zoning designation, which will result in useful information that may be considered by local jurisdictions in their next comprehensive plan update.
3. **Land Development Summary:** Development totals by use and zoning designation in terms of land developed and built area developed (Commercial/industrial square footage and residential units).
4. **Land Development Detail:** Detailed calculations for net area developed, achieved densities, and portion of developable area devoted to rights-of-way and other infrastructure by use and zoning designation.
5. **Building Permit Data:** Information on building permits that received a final inspection (i.e. construction has been completed) by development type (single family, multifamily, commercial, industrial, or mixed use).
6. **Plat Data:** Information on short plat, long plat, and binding site plan activity by development type (single family, multifamily, commercial, industrial, or mixed use).
7. **Planned Densities:** Planned densities by use for relevant zoning designations to provide a comparison against achieved densities. If planned densities have not been adopted for a certain area, this field may be left blank (or "N/A" may be inserted).
8. **Planned Capital Facilities:** Planned future capital facilities.

9. **Regulatory Updates:** Information on regulatory changes with potential to impact future land capacity. The regulatory update information for the unincorporated portion of city UGAs will be based upon (reference) the changes to city regulations, since these unincorporated areas will primarily be developed with urban land uses when city water and sewer become available after annexation.
10. **Reasonable Measures:** Tracks any adopted reasonable measures.

4. Review and Evaluation of Land Suitable for Development

The GMA requires counties and cities to identify land suitable for development or redevelopment and determine whether there is sufficient suitable land to accommodate future growth (RCW 36.70A.215(3)). This section outlines necessary steps and recommended methods to complete a Buildable Lands analysis. The basic steps for cities and UGAs are as follows:

1. **Review Achieved Densities:** using the Data Reporting Tools, calculate the net residential and employment density of development that occurred during the review and evaluation period and compare to growth and development assumptions adopted in the countywide planning policies or comprehensive plans.
2. **Assemble Net Developable Land Inventory:** update the supply of vacant, partially used, and under-utilized land which will be available for development during the remainder of the current planning period.
3. **Estimate Population and Employment Capacity:** using the Suitable Land Tools, which are spreadsheets intended to facilitate consistency across the jurisdictions, determine the population and employment capacity of the current developable land inventory, based on achieved densities.
4. **Evaluate Land Capacity:** using the Suitable Land Tools, compare population and employment growth projections to current capacity determined in previous step and identify the potential capacity surplus or deficit.

If the analysis identifies deficits in land capacity, or if recent development has diverged from growth and developments assumptions adopted in the countywide planning policies or comprehensive plan, there is an additional requirement to determine if **reasonable measures** are required to improve consistency (See **Section 5.3**).

4.1. Review Assumptions and Achieved Densities

Several key components of the Buildable Lands analysis rely on calculating the achieved net density of new residential, commercial, and industrial development in cities and UGAs during the Review and Evaluation Period (2016-2021). Final calculations for these factors are expressed in terms of dwelling units per net acre for residential development, and floor area ratios (FARs) for commercial and industrial development.

Develop Population and Employment Assumptions

Calculating future population capacity requires assumptions about occupancy rates and average household size. Calculating future employment capacity requires assumptions about occupancy rates and building square feet per employee. These assumptions are used to translate built commercial and industrial building area into an estimate of the number of employees that can be accommodated in that area. Separate building square feet per employee assumptions should be developed for commercial and industrial land uses.

The City of Bellingham has an existing data sharing agreement with the Washington State Employment Security Department (ESD) that provides the City with access to countywide employment data. Additionally, the Assessor's Office has provided commercial and industrial square footage statistics by parcel. Using this information, the City of Bellingham conducted an analysis and issued a *Technical Memo Estimating Square Feet Per Job for Commercial and Industrial Land*s *in Whatcom County* (October 20, 2020), which produced the following estimates:

Exhibit 1.A. 2020 Whatcom County Sq Ft Per Job Summary by Individual Jurisdiction

Analysis Area	Record Count (tax parcels)	Adjusted Mean Commercial Sq Ft/Job	Adjusted Mean Industrial Sq Ft/Job	Adjusted Median Commercial Sq Ft/Job	Adjusted Median Industrial Sq Ft/Job
Bellingham UGA	1,116	583	974	436	661
Birch Bay UGA	21	992	884	952	884
Blaine UGA	98	587	1,099	531	739
Cherry Point UGA	9	205	1,779	205	1,689
Columbia Valley UGA *	2	-	-	-	-
Everson UGA	35	800	1,501	751	1,202
Ferndale UGA	186	580	1,129	498	825
Lynden UGA	164	721	1,037	531	807
Nooksack UGA	12	605	795	468	621
Sumas UGA	30	669	890	473	563

Rural Areas	228	691	1,039	500	717
All Whatcom County	1,901	616	1,036	462	717

** The terms stipulated in the data access contract by ESD restrict sharing statistics that may violate employer confidentiality. Specifically, the "3/80" rule must be adhered to. This rule states that any statistical summary category must have no fewer than three employers, and that no single employer can represent more than 80% of the jobs in a category. The summary categories for this analysis met these criteria with the exception of the individual breakout for the Columbia Valley UGA.*

Exhibit 1.B. 2020 Whatcom County Sq Ft Per Job Summary by Grouped Areas

Analysis Area	Record Count (tax parcels)	Adjusted Mean Commercial Sq Ft/Job	Adjusted Mean Industrial Sq Ft/Job	Adjusted Median Commercial Sq Ft/Job	Adjusted Median Industrial Sq Ft/Job
Bellingham UGA	1,116	583	974	436	661
Small City UGAs	525	652	1,097	531	795
Non-City UGAs *	32	899	1,513	772	1,326
Small City & Non-City UGAs	557	665	1,118	532	812
All UGA Areas	1,673	607	1,035	460	718
Rural Areas	228	691	1,039	500	717
All Whatcom County	4,131	616	1,036	462	717

** Non-city UGAs include Birch Bay, Cherry Point, and Columbia Valley.*

Data sources: 4th Quarter 2019 WA State Employment Security data and August 2020 W.C. Assessor's Bldg Details data. Note: building sq ft for Cherry Point UGA - BP and Philips 66 refineries and Intalco aluminum plant calculated from 2019 aerial imagery (missing from Bldg Details data).

The County and cities can use these statistics when developing employment density (square footage per employee) assumptions for commercial and industrial development.

Once employment density assumptions have been selected, the next step is to determine achieved densities.

Determine Achieved Densities

The purpose of this step is to determine the actual density of residential and employment development that occurred during the Review and Evaluation Period. Final calculations are expressed in terms of dwelling units per net acre for residential development and floor area ratios for commercial and industrial development. In **Section 4.3**, achieved net density data is used to convert developable land into future population and employment capacity for cities and UGAs.

Data Needed

- **Output from previous step:** Population and employment assumptions.
- All development activity in each UGA during the Review and Evaluation Period (gathered with Data Reporting Tool, described in **Section 3.4**).

Steps

1. Each jurisdiction is responsible for gathering data on its development activity, as described in **Section 3** of this report.
2. The County will gather updated Data Reporting Tools from all jurisdictions. The Data Reporting Tools employ the following steps to arrive at achieved densities:
    2.1. Jurisdictions input parcel- and plat-level data on individual developments that occurred during the Review and Evaluation Period. The following details are required for each permit or plat record in order to calculate achieved densities:
        - Zoning designation and jurisdiction
        - Development type (single family, multifamily, commercial, industrial, or mixed use)
        - Gross site area
        - Portions of sites to be removed from buildable area in cities and UGAs (critical areas, rights-of-way, other infrastructure, and other land for public purposes)
        - New residential units
        - Total building square footage for commercial, industrial, and mixed use development
        - Year built
    2.2. The tool calculates the net area on sites that have been developed in each zoning designation by use in cities and UGAs. This requires adding the gross area, in acres, and subtracting acreage dedicated to critical areas, rights-of-way, other infrastructure, and public purposes.
    2.3. The tool adds the amount of development (units for residential uses or floor area for commercial and industrial uses) in each zoning designation by use.

2.4. Finally, achieved densities by use are calculated for each zoning designation using the calculations shown in **Exhibit 2.** Achieved densities are also calculated for each UGA.

Exhibit 2. Basic Achieved Density Calculations by Development Type

Development Type	Achieved Density Calculation
Residential - Single Family and Multifamily	Units / Net Acre (cities and UGAs Units / Gross Acre (non-UGAs)
Commercial and Industrial	Floor Area / Net Site Area (cities and UGAs) Floor Area / Gross Site Area (non-UGAs)

Note: For mixed-use development, the site area is apportioned between residential and commercial uses based on the share of building square footage dedicated to each use.

3. The tool also calculates the portion of land dedicated to rights-of-way and infrastructure in cities and UGAs, to be applied in **Section 4.2.**, "Deductions for Future Infrastructure".

4.2. Assemble Net Developable Land Inventory

The Net Developable Land Inventory for UGAs (including land within city limits) and UGA Reserves consists of all land which, as of April 1, 2021, is considered vacant, partially used, or under-utilized and which is expected to be available for development and served by infrastructure during the current planning period. This process includes the following steps, described in detail in the following sections:

- **Compile Gross Developable Land Inventory:** Identify parcels zoned for residential and employment development which are considered vacant, partially used, or under-utilized.
- **Deduct Critical Areas and Other Areas with Reduced Development Potential:** Remove the parcels and portions of parcels which are impacted by critical areas or other issues that, it is assumed, will not be developable during the planning period.

- **Deduct Land for Future Public Uses:** Remove any land already planned for future capital facilities and quasi-public uses.
- **Infrastructure Gaps:** Determine if there are infrastructure gaps that would prevent urban density development on vacant, partially used, and/or under-utilized lands over the remainder of the planning period.
- **Deduct Land for Future Infrastructure:** Remove any land required for future infrastructure.
- **Local Jurisdiction Review:** Work with jurisdictions to review and adjust the developable land inventory.
- **Deduct Market Factor:** Apply a reasonable market factor to account for lands that are not likely to be available for development because of land owner preferences or other reasons not accounted in the previous deduction steps.
- **Calculate Net Developable Land:** The result once the market factor has been applied.

Compile Gross Developable Land Inventory

The purpose of this step is to identify all lands within UGAs, including lands within city limits, that are considered vacant, partially used, or under-utilized. These lands comprise the Gross Developable Land Inventory.

Data Needed

- GIS shapefile of Whatcom County Assessor's Office countywide parcel data. Shapefile must include the following attributes for each parcel:
    - Assessed improvement value
    - Assessed land value
    - GIS acreage per parcel
- GIS shapefiles from cities and the County including:
    - Boundaries for all UGAs and incorporated cities
    - Zoning for all jurisdictions (and city future zoning or land use designations for UGAs).
    - Critical areas deduction acreage per parcel
    - Dividing of split-zoned and split-jurisdiction parcels
- Compiled recent plat and permit activity data (gathered per **Section 3**).

Steps

1. Identify and remove parcels not classified for residential, commercial, or industrial uses.
2. Identify and remove parcels less than 2,400 square feet in size, unless specifically identified by the jurisdiction as developable land.
3. Identify and code parcels as vacant, partially used, or under-utilized. Use GIS processes and database queries to apply the definitional thresholds listed in **Exhibit 3**.

Exhibit 3. Criteria for Classifying Developable Land

Category	Parcel Zoning	Criteria for Classification
Vacant	All Residential, Commercial, Industrial	Improvement value less than $10,000
Partially Used	Single Family	Parcel size greater than three (3) times minimum allowed under zoning.[1] This may to lowered to between two (2) and three (3) times the minimum allowed under zoning at the discretion of the jurisdiction. Jurisdictions may propose to exclude parcels with current assessed improvement value > 93rd percentile[2] of jurisdiction improvement values if the parcel size is less than five acres
	Multifamily, Commercial, Industrial	Ratio between improvement value and land value less than 1.0[3] Jurisdictions can identify existing development, such as gas stations or uses that preclude significant development on the site,

[1] This threshold accounts for parcels less than three times the minimum size that due to parcel configuration, location of existing development on the site, or other factors are not likely to be divided to their maximum potential.

[2] The option to exclude parcels with high improvement values is meant to account for large single family parcels with high-end homes that are unlikely to be subdivided. The 93rd percentile threshold was determined by analyzing the distribution of housing values in the County and selecting a reasonable value that could be applied across all jurisdictions.

[3] The Department of Commerce's Buildable Lands Guidelines (2018) state ". . . When the value of the land is near or higher than the value of the improvement on the land, the property is generally going to be more favorable for redevelopment. . ." (p. 34).

Category	Parcel Zoning	Criteria for Classification
		as fully developed when the ratio of improvement value to land value is less than 1.0. If identified as fully developed, the parcel will be subtracted from the inventory.
Under-Utilized	Single Family	N/A
	Multifamily	Parcels occupied by nonconforming single-family residential uses
	Commercial and Industrial	Parcels occupied by nonconforming residential uses or other nonconforming uses.

4. Cross-reference parcels classified as vacant, partially used, or under-utilized with local permit and plat data. Identify any parcels with multifamily permits, commercial/industrial permits and binding site plans, and preliminary and final plats that have not yet been constructed. This includes master planned projects that have not been completely built out but have received approval, as determined by the applicable jurisdiction, for a certain number of dwelling units or commercial/industrial square footage. Only projects that have received preliminary approval will be included in this list. These parcels should be set aside and classified as "pending", but not included in the gross developable land inventory. Pending capacity will be added to the final land capacity total in **Section 4.3**.
5. Make adjustments for mobile homes. The primary concern is that some mobile home parks may show up as vacant if the mobile home value is not captured in the Assessor's improvement value data. Staff will use aerial imagery to truth check developable parcel designations in their respective jurisdictions against known areas with mobile home developments. If mischaracterized mobile home parks are identified, manually adjust the developable category designation in the land inventory database.
6. Partially used parcels in commercial and industrial zones may be split into fully developed and vacant portions for purposes of land capacity analysis.
7. Following this process, the remaining parcels classified as vacant, partially used, or under-utilized constitute the Gross Developable Land Inventory.

Deduct Critical Areas and Other Areas with Reduced Development Potential

In the next step of the process, subtract all critical areas and other lands with reduced development potential from the Gross Developable Land Inventory. Each city will be responsible for determining and making spatial deductions from the developable land supply within their city limits and the associated UGA (the County may provide assistance for those jurisdictions that do not have in-house GIS capabilities). The County will be responsible for determining and making spatial deductions from the developable land supply within non-city UGAs.

Data Needed

- **Output from previous step:** Shapefile of parcels in Gross Developable Land Inventory.
- Critical areas GIS data relating to wetlands, rivers, streams, steep slopes, geologically hazardous areas, floodplains.
- Local critical area and shoreline buffers, identifying areas to be removed from buildable capacity.
- Information relating to naturally occurring asbestos.

Steps

1. Each jurisdiction will include the following types of critical areas in the analysis:

   Wetlands
   The County and cities will use wetland inventories and buffers from their respective jurisdictions, as described below.

   Streams and Rivers
   The County and cities will use stream inventories and buffers from their respective jurisdictions, as described below.

   Steep Slopes and Hazard Areas
   The County and cities will subtract all areas with slopes greater than 35% or a percentage consistent with the jurisdiction's critical areas ordinance. Land impacted by alluvial fan hazard areas, where regulations restrict land division, will also be subtracted. For city UGAs, other hazard areas identified by the city may be subtracted. For non-city UGAs, other hazard areas identified by the County may be subtracted.

   Floodplain
   All land in the floodway will be removed from the inventory. All lands within 100-year floodplains of non-city UGAs will also be removed

from the inventory. All lands within floodplains of city UGAs will be removed from the inventory where regulations would prohibit or significantly limit development, as determined by the applicable City.

Naturally Occurring Asbestos
Land with documented naturally occurring asbestos will be removed from the inventory.

Other Undevelopable Areas
Deduct other areas, such as mitigations sites and old dump sites, that are not available or suited to development.

2. Deduct critical areas and other areas with reduced development potential for residential parcels. Critical area buffers will be deducted from the residential land supply unless the jurisdiction, based upon their knowledge of local codes and circumstances, determines that some of the buffers should be included in the residential land supply. For city UGAs, buffer distances will be based on city critical area regulations. For non-city UGAs, buffer distances will be based on County critical area regulations.
3. Deduct critical areas, critical area buffers, land use buffers and other areas with reduced development potential for commercial and industrial parcels. For city UGAs, buffer distances will be based on city critical area regulations. For non-city UGAs, buffer distances will be based on County critical area regulations.
4. The resulting selection of developable parcels unconstrained by these areas will be used as the land base to calculate deductions for future public uses, future infrastructure and market factors.

Deduct Land for Future Public Uses

Next, parcels that are intended for public uses should be deducted from the developable land totals, including schools, police and fire stations, recreation facilities and open space.

Data Needed

- **Output from previous step:** Shapefile of parcels in Gross Developable Land Inventory with critical areas removed.
- "Planned Capital Facilities" sections from Data Reporting Tools.
- Capital facilities plans for public facilities (water, sewer, stormwater, parks, schools) and public services (police, fire), particularly if they include plans for land usage and property acquisition.

Steps

1. Review "Planned Capital Facilities" from the jurisdiction's capital facility plans and Data Reporting Tool. Remove parcels identified for future capital facilities from the inventory. This should include any property already owned by public entities and designated for future expansion as well as any known public uses in master planned areas.
2. Identify any additional acreage for future capital facility purposes that should be deducted from the inventory that is not yet associated with specific parcels. Deduct these acreage totals manually from the inventory if within a jurisdiction's or special purpose district's proposed or approved capital facilities plan.
3. If appropriate, analyze ownership information for parcels in the developable land inventory and exclude those owned by public entities that will not likely accommodate housing or employment. This step may not be necessary if future public use parcels were already excluded when the first residential, commercial, and industrial parcels were selected.
4. In order to account for other future quasi-public uses (e.g. community centers, daycare centers, churches, etc.) apply a five percent (5%) deduction on developable land. The deduction should be applied to the Developable Land Inventory after critical areas are removed but before any other deductions for infrastructure or market factors.
5. During the local jurisdiction review process, adjustments to the 5% other quasi-public uses deduction may be considered to account for local conditions and data availability.

Infrastructure Gaps

Assessment of land suitable for development must include identification of infrastructure gaps (including transportation, water, sewer, and stormwater) that could prevent assigned densities from being achieved. Local jurisdictions should be able to rely on adopted capital facility plans when completing their assessment of land suitable for development (*State Buildable Lands Guidelines*, 2018, p. 31).

Data Needed

- **Output from previous step:** Shapefile of parcels in Gross Developable Land Inventory with previous deductions.
- Capital facility plans.

Steps

1. Each jurisdiction will review capital facilities plans to determine whether developable land in the UGA will likely be served by existing or planned infrastructure (including transportation, water, sewer, and stormwater facilities) within the remaining portion of the planning period. In conducting this review, the jurisdiction will consider whether significant delays, funding lapses, or difficulties acquiring sufficient land for capital facilities will prevent the service provider from supplying planned capital facilities to developable land within the planning period.
2. If the jurisdiction determines that no infrastructure gaps exist because there likely will be adequate infrastructure to serve the developable land in the UGA within the planning period, this finding will be documented in the Buildable Lands Report.
3. If the jurisdiction determines that infrastructure gaps exist because there will not likely be adequate infrastructure to serve certain developable parcels in the UGA, the jurisdiction will:
    a. Document the infrastructure gaps, including a map showing the area(s) with the infrastructure gaps. This documentation will be incorporated into the Buildable Lands Report.
    b. Identify the capital facility plans that need to be updated to address the infrastructure gaps and the timeline for updating these capital facility plans; and
    c. Identify areas already in capital facility plans that are waiting on developer infrastructure improvements and differentiate from gaps in publically provided infrastructure; and
    d. Determine if the planned capacity of the land subject to infrastructure gaps should be reduced while the infrastructure gaps are being addressed. Determine, as appropriate, how much the planned capacity should be reduced for the remainder of the planning period (2021-2036).

Deduct Land for Future Infrastructure (Rights-of-Way and Other Development Requirements)

Deductions for future infrastructure, including rights-of-way (ROW) and other development requirements, will be based on the percentage of land dedicated to infrastructure in recent plats, permits, and developments. This percentage is calculated in the Data Reporting Tool, and is calculated after critical areas and land for future public uses are removed.

If there is insufficient data to calculate deduction for infrastructure, then standard deductions based on reasonable assumptions may be used.

Data Needed

- **Output from previous step:** Shapefile of parcels in Gross Developable Land Inventory with critical areas and future public uses removed.
- Results from recent development activity analysis – percentage of developable area (minus critical areas, associated open space and public uses) devoted to ROWs and other infrastructure.

Steps

1. Summarize acreage of developable land minus critical area and public use deductions by zoning designation for each UGA.
2. Analyze recent development activity to determine infrastructure percentage deduction factors by UGA (see **Section 4.1**).
3. Apply these deduction factors to the inventory of developable land unconstrained by critical areas to calculate the acreage deduction for infrastructure. The infrastructure deduction may be applied by UGA or by specific zoning designation depending on the quantity and quality of recent development activity data.

Local Jurisdiction Review

Local jurisdictions will review developable parcel designations and other deductions through communications and/or meetings, if necessary, between County and City staff. The number of communications and/or meetings will depend on the complexity of the jurisdiction's land supply issues.

Data Needed

- **Output from previous step:** Shapefile of parcels in Gross Developable Land Inventory with critical areas, future public uses, and future infrastructure removed.
- All other geospatial data used up to this point.

Steps

1. The County will prepare maps for each UGA showing vacant, partially used, and under-utilized parcels overlaid on aerial imagery. Some larger UGAs may need to be presented in multiple maps.
2. The maps, along with tabular parcel data underlying the maps will be sent to each city for review. If appropriate, County staff will meet with city staff to discuss issues such as any adjustments to developable land classification, critical areas, infrastructure deductions, public use deductions, assumed density assumptions, market factor assumptions, and other jurisdiction-specific assumptions described elsewhere in this methodology.

The range of additional issues that can be considered during the local jurisdiction review process include but are not limited to the following:

- Critical areas not identified through GIS analysis
- Known interest in development or redevelopment of particular parcels/areas
- Parking and outdoor storage associated with adjacent uses
- Other associated/related uses spanning multiple parcels
- Irregular parcel shapes making development unlikely

Deduct Market Factor

The market factor is a final deduction to account for lands assumed not to be available for development during the remainder of the planning period. It is expected that over the remaining 20-year planning period some lands will be kept off the market due to speculative holding, land banking, and personal use, among other reasons.

The market factor assumptions referenced below were used in the *Whatcom County Land Capacity Analysis Detailed Methodology* (2015). Whatcom County and the cities are undertaking additional analysis to develop more refined local market factors, as described in **Appendix B**. Market factors used by other buildable land counties in the past are set forth in the State's 2018 *Buildable Lands Guidelines* (p. 49).

Data Required

- **Output from previous step:** Shapefile of parcels in Gross Developable Land Inventory with critical areas, future public uses, and future infrastructure removed, as reviewed and approved by all jurisdictions.
- Market factor assumptions.

Steps

1. Summarize acreage in the Developable Land Inventory by zoning designation, by land use (residential and commercial/industrial) and developable land designation (vacant, partially used, and under-utilized). This acreage should represent developable land after critical areas, infrastructure, and public uses have been deducted.
2. The base market factors listed below are consistent with those used in the 2016 UGA Review LCA, and accepted practice elsewhere in western Washington. During the local jurisdiction review process, the base market factors may be adjusted to account for local conditions

and future plans. If market factors are adjusted, the final overall average market factor for a UGA should not exceed 25%, except where the jurisdiction has well-documented support for why a larger market factor is appropriate.

Start with the following default deduction factors to the developable acreage for each zoning designation:

- For vacant residential and commercial/industrial zones: 15% market factor
- For partially used and under-utilized residential and commercial/industrial zones: 25% market factor

3. Use the "Analysis Method" steps in Appendix B (p. 74) to determine whether to use the default market factors or adjust these market factors.
4. As a reference point, the overall average market factor for all developable land should be calculated for each UGA (total acres deducted based on market factor percentage divided by total acres in the Developable Land Inventory after critical areas, infrastructure, and public uses have been deducted).
5. A market factor may be applied to master planned projects by the jurisdiction.

Calculate Net Developable Land

After applying the market factor, the final acreage totals by zoning designation and UGA represent the updated Net Developable Land Inventory – the land expected to be available to accommodate future population and employment over the remaining planning period.

4.3. Estimate Population and Employment Capacity

In this step, Net Developable Land Inventory is converted into population and employment capacity. The final product is an estimate of the number of people and employees that can be accommodated in each UGA on developable land. This process includes the following steps, described in detail in the following sections:

- **Determine Assumed Future Densities**: Use achieved densities (**Section 4.1**) as the baseline assumed densities for future development in the UGA over the remaining portion of the current 20-year planning period. If there is little or no data on achieved densities,

or the achieved densities are clearly not reflective of future development that is anticipated in the UGA then, based on a review of achieved densities in comparable areas and other analysis, develop assumptions for future development densities by UGA and land use.

- **Determine Population Capacity:** Apply residential density assumptions to the residential Net Developable Land Inventory to estimate current capacity for new residential development in UGAs and UGA Reserves.
- **Determine Employment Capacity:** Apply employment development density assumptions to the commercial and industrial Net Developable Land Inventory to estimate current capacity for new commercial and industrial development. Based on employee densities developed in **Section 4.1**, translate capacity for physical space into capacity for employees.

Determine Assumed Future Densities

The purpose of this step is to select appropriate assumed densities that are supported by analysis as being representative of how development might occur during the remainder of the planning period. Per *RCW 36.70A.215(3)(a)*, "zoned capacity of land alone is not a sufficient standard to deem land suitable for development or redevelopment within the 20-year period".

RCW 36.70A.215(3) requires local jurisdictions to determine actual densities and use these densities to determine the amount of land needed for growth over the remaining portion of the 20-year planning period used in the most recently adopted comprehensive plan. For Whatcom County, the 20-year planning period in the adopted comprehensive plan extends through the year 2036. Achieved densities, as calculated in **Section 4.1**, serve as the basis for future densities and should be used for assumed future densities unless there is a justifiable reason why they are not appropriate. If there is insufficient data for a specific area, the jurisdiction may use achieved densities from comparable areas, as indicated below:

- Within city limits, the city will determine assumed densities;
- Within a city UGA, the city and County will collaboratively determine assumed densities; and
- Within a non-city UGA, the County will determine assumed densities.

If alternate future densities are used, the rationale for deviating from achieved densities must be clearly stated in the Buildable Lands Report (see *State Buildable Lands Guidelines*, 2018, p. 40).

Determine Population Capacity

This section describes how to derive future population growth capacity from the Net Developable Land Inventory in residential zones and the residential portion of mixed-used zones.

Data Needed

- The Net Developable Land Inventory of residential and the residential portion of mixed-use zones calculated under **Section 4.2.**
- Assumed future densities for residential and mixed-use zones.
- Whatcom County Assessor's Office data on numbers of dwelling units on partially used and under-utilized parcels.
- Parcels with pending residential capacity identified in **Section 4.2.**
- Data from the Washington State Office of Financial Management (OFM) and/or the US Census on occupancy rates and average household sizes.

Steps

Determine Total Dwelling Unit Capacity by Zoning Designation

1. Multiply residential acres from the Net Developable Land Inventory in each zoning designation by the assumed density (dwelling units/net acre) for each zoning designation. Only the residential portion of the mixed use acres will be included in this calculation. The result is the total dwelling unit capacity available in each zone before accounting for existing development on partially used and under-utilized parcels.
2. Remove existing units on partially used and under-utilized parcels by zoning designation from the totals from the previous step so that existing units are not counted as part of partially used or under-utilized parcel capacity.
3. In **Section 4.2**, parcels with pending developments were set aside. These parcels included preliminary or final plats, permits, and binding site plans for developments that have received preliminary approval but have not yet been constructed. Master planned projects that have not been completely built out but have received approval for a certain number of dwelling units are also included.

   The estimated capacity in these developments is more accurate than calculated theoretical capacity. Summarize total dwelling units in these pending developments by zone. Add these units to subtotal dwelling units from Step 2. The output will be total dwelling units of capacity available in each zone.

Calculate Total Occupied Dwelling Unit Capacity by Zoning Designation

1. Select occupancy rate assumptions for each UGA by using data from OFM and/or the US Census.[4]
2. Multiply the total dwelling units of capacity in each zoning designation by selected occupancy rate assumptions. The output will be total potential occupied dwelling units in each zone.

Calculate Total Population Capacity by UGA

1. Select average household size assumptions for each UGA by using data from OFM and/or the US Census.
2. The local jurisdiction will categorize each zoning designation as either a single family zone or multifamily zone. The distinction between single family and multifamily zones is important because there are different occupancy rates and average household sizes for single family and multifamily development.
3. Multiply total occupied dwelling units in the single family and multifamily categories in each zone by average household size assumptions for these categories. Separately calculate the single family population capacity and the multifamily population capacity. Combine the single family and multifamily population capacities to obtain the total population capacity within each UGA.

Determine Employment Capacity

This section describes how capacity to accommodate future employment growth is derived from the Net Developable Land Inventory for commercial and industrial zones and the commercial portion of mixed-used zones.

Data Needed

- The Net Developable Land Inventory of commercial, industrial, and mixed-use zones (see **Section 4.2).**
- Assumed Floor Area Ratio (FAR) values for future development in commercial, industrial, and mixed-use zones.
- Assumed square feet per employee (FTE) for commercial or industrial space (employment density).
- Whatcom County Assessor's Office data for partially used and under-utilized parcels.

[4] Seasonal housing is considered vacant according to Census definitions. These housing units are not included in the occupied housing unit category and are not folded into Census calculations of average household size.

- Parcels with pending commercial or industrial capacity identified in **Section 4.2.**

Steps

Determine Total Building Square Footage Capacity by Zone

1. Multiply commercial and industrial acres from the Net Developable Land Inventory in each zone (converted to square feet) by the assumed FAR for each zone. Only the commercial and industrial portions of the mixed use acres will be included in this calculation. The output will be the total building square footage capacity available in each zone before accounting for existing development on partially used and under-utilized parcels.
2. Summarize total existing commercial and industrial building square footage on partially used and under-utilized parcels by zone. Subtract this square footage from the totals from the previous step so that existing buildings are not counted as part of partially used or under-utilized parcel capacity.
3. In **Section 4.2**, parcels with pending developments were set aside. These parcels included commercial and industrial permits or binding site plans for developments that have received preliminary approval but have not yet been constructed. Master planned projects that have not been completely built out but have received approval for a certain amount of commercial/industrial square footage are also included. The estimated capacity in these developments is more accurate than calculated theoretical capacity. Summarize total commercial and industrial building square footage in these pending developments by zone. Add this square footage to the totals from Step 2. The output will be total commercial and industrial square footage capacity available in each zone.

Determine Total Occupied Square Footage by Zone

1. Multiply the total square footage capacity in each zone by a 95% occupancy rate assumption. The occupancy rate assumption can be adjusted based on current and accurate data provided by local jurisdictions (e.g. real estate market reports). The output will be total potential occupied commercial and industrial square footage in each zone.

Determine Total Employment Capacity by UGA

1. Aggregate the occupied commercial and industrial square footage capacity by zone into the two categories used in the future

employment allocation process: Commercial and Industrial. **Exhibit 3** in **Section 7** provides definitions for each category by North American Industry Classification System (NAICS) code.

2. Determine employment density (square footage of floor-space per employee) assumptions for future commercial and industrial development. Employment density will be based upon one of the following:
    a. The employment density recommended by the local jurisdiction, provided that their recommendation is based upon achieved employment densities or other relevant data.
    b. Employment densities derived from the City of Bellingham's *Technical Memo Estimating Square Feet Per Job for Commercial and Industrial Land*s *in Whatcom County* (October 20, 2020), which are shown in Exhibits 1.A and 1.B.
3. Divide the total occupied commercial and industrial square footage in each category by the employment density assumptions. The final output will be total employment capacity within each UGA.

4.4. Evaluate Land Capacity

The final step is to evaluate whether there is currently enough land capacity in UGAs to accommodate projected growth through the remainder of the current 20-year planning period (2021-2036). This includes the following steps:

- **Compare Population Capacity to Remaining Projected Growth:** Compare the population growth capacity estimated in **Section 4.3** to the remaining projected population growth. Identify any inconsistencies.
- **Compare Employment Capacity to Remaining Projected Growth:** Compare the employment growth capacity estimated in **Section 4.3** to remaining projected growth in employees. Identify any inconsistencies.

Compare Population Capacity to Remaining Projected Growth

This section describes how to determine if there is sufficient capacity in each UGA to accommodate remaining population growth in the current 20-year planning period.

Data Needed

- Population growth estimates by UGA from 2016-2021 calculated based upon building permits.
- Current 20-year population projections by UGA.
- Current population capacity by UGA, as calculated in **Section 4.3.**

Steps

1. Subtract the population growth estimates (2016-2021) by UGA from the current 20-year population growth projections to determine remaining growth to be accommodated in each UGA (2021-2036). The Data Reporting Tool performs this calculation.
2. Compare remaining projected population growth to be accommodated (from Data Reporting Tool) to current population growth capacity for each UGA. This calculation is accomplished in the Suitable Land Tool.
3. If remaining projected growth is greater than current capacity, determine if reasonable measures are required. This process is described in **Section 5.2**.

Compare Employment Capacity to Remaining Projected Growth

This section describes how to determine if there is sufficient capacity in each UGA to accommodate remaining employment growth in the current 20-year planning period.

Data Needed

- Employment growth estimates by UGA from 2016-2021 calculated based upon building permits.
- Current 20-year employment projections by UGA.
- Current employment capacity by UGA, as calculated in **Section 4.3.**

Steps

1. Subtract the employment growth estimates (2016-2021) by UGA from the current 20-year employment growth projection to determine remaining growth to be accommodated in each UGA (2021-2036). The Data Reporting Tool performs this calculation.
2. Compare remaining projected employment growth to be accommodated (from Data Reporting Tool) to current employment growth capacity for each UGA. This calculation is accomplished in the Suitable Land Tool.
3. If remaining projected growth is greater than current capacity, determine if reasonable measures are required. This process is described in **Section 5.2**.

5. Reports and Implementation

5.1. Dispute Resolution Methods

Whatcom County's procedures for resolving disputes between jurisdictions are provided in Countywide Planning Policies Q.7 and R. These methods are intended to address resolving any dispute related to implementing the Countywide Planning Policies, including disputes related to data collection and analysis for the Buildable Lands Program.

5.2. Reasonable Measures

When Reasonable Measures are Required

The State's Buildable Lands Guidelines (2018) includes a section entitled "When Are Reasonable Measures Necessary?" This section states:

> *The RCW and the WAC do not provide specifics regarding when reasonable measures are required . . . RCW 36.70A.215(1)(b) describes reasonable measures as actions to reduce differences between planned and realized growth. This implies that an analysis to determine whether reasonable measures are needed is required when:*
>
> - *Planned densities are not being achieved;*
> - *There is insufficient capacity to accommodate the remaining portion of the planning period; and/or*
> - *Actual development patterns are inconsistent with growth and development assumptions in the county-wide planning policies and/or comprehensive plan (p. 43).*

If planned densities are not being achieved, there is not sufficient capacity to accommodate remaining projected population and/or employment growth, or development patterns are not occurring as planned, the County and relevant jurisdictions should work together to determine if reasonable measures are necessary to address the issue.

First, the County and cities should consider why the issue has occurred. This includes reviewing County and/or city development assumptions, targets, and objectives contained in the Countywide Planning Policies, County Comprehensive Plan, and/or city comprehensive plans *(RCW 36.70A.215(1)(b))*. There are cases where reasonable measures are not required, such as when an economic recession occurs during the evaluation period, or if planned infrastructure development will make up for identified shortfalls in the future (*State Buildable Lands Guidelines*, 2018, p. 42). The County and cities should work together to establish processes for

determining when reasonable measures are required. Ultimately, each jurisdiction will individually perform the analysis and determine whether reasonable measures are required.

If this analysis results in a decision that reasonable measures are necessary, the County and cities should work together to identify possible actions, other than expanding UGAs, to reduce the difference between planned and achieved growth. Where appropriate, discussion regarding such actions (possible reasonable measures) may be incorporated into the Buildable Lands Report. The reasons why reasonable measures were deemed necessary or not necessary, and the process used to make these decisions, should be clearly documented in the County and city resolutions/ordinances adopting the Buildable Lands Report.

Selecting Reasonable Measures

Reasonable measures should, if necessary, be selected by the jurisdiction based on the nature of the inconsistency that has occurred. The measures should be reasonably likely to increase consistency during the succeeding review and evaluation period.

Adopting Reasonable Measures

Reasonable measures must be adopted, as applicable, into individual County and city comprehensive plans and implementing regulations.

Tracking Performance

Jurisdictions should track the performance of adopted reasonable measures and share this information with the County as part of the data reporting process. The County and cities will collaborate to determine appropriate methods for tracking performance, and document results in future Buildable Lands Reports.

5.3. Buildable Lands Report Structure

The Buildable Lands Report should include the following content:

- **Executive Summary:** High level overview of remaining projected growth to be accommodated and results from analysis.
- **Introduction:** Introduction to the document's purpose and content, with background on regulatory framework and local process.
- **Policy Framework:** Overview of Countywide Planning Policies, population allocations, and employment allocations.

- **Methods:** Overview of the analysis process and major assumptions, with reference to this Methodology for full detail.
- **Countywide Findings:** Summarize population & employment growth, development activity, planned and achieved densities, and land suitable for development.
- **Jurisdictional Profiles:** Provide detailed information relating to achieved densities, assumed densities, land supply, and land capacity for the 10 UGAs.
- **Infrastructure Gaps:** Each jurisdiction will document any infrastructure gaps in the UGA, including a map showing the area(s) with the infrastructure gaps. If there are infrastructure gaps, the jurisdiction will:
    - Identify the capital facility plans that need to be updated to address the infrastructure gaps and the timeline for updating these capital facility plans; and
    - Identify areas already in capital facility plans that are waiting on developer infrastructure improvements and differentiate from gaps in publically provided infrastructure; and
    - Determine if the planned capacity of the land subject to infrastructure gaps should be reduced while the infrastructure gaps are being addressed.
    - Determine, as appropriate, how much the planned capacity should be reduced for the remainder of the planning period (2021-2036).
- **Development Regulations:** Each jurisdiction will evaluate development regulations adopted in the review period (2016-2021) that could prevent assigned densities from being achieved or impact the quantity of land suitable for development in the remainder of the 20-year planning period (2021-2036).
- **Reasonable Measures:** If necessary, this section should identify potential reasonable measures that may be taken based on findings from this report. The County and city resolutions/ordinances adopting the BLR will document each respective jurisdiction's determination of whether or not reasonable measures are required. Reasonable measures, if required, must be adopted by the jurisdiction by the June 2025 deadline for adopting comprehensive plan and development regulation updates (RCW 36.70A.215(2)(d)). In future Buildable Lands Reports, this section should also report on the performance of any measures implemented previously.

6. Land Capacity Analysis

6.1. Relationship Between BLR and LCA

The Buildable Lands Report (BLR) **looks back** to compare adopted development assumptions against actual development, and based on a review of the achieved densities and the amount of development that has taken place, determines if there is still sufficient capacity to accommodate growth through the remainder of the current planning period (through the year 2036). This analysis is performed between comprehensive plan updates, and is intended to evaluate the performance of the current comprehensive plans and surface any capacity issues that may need to be addressed in the next comprehensive plan updates.

The Land Capacity Analysis (LCA) **looks forward** to determine if there is sufficient capacity to accommodate new 20-year growth projections (through the year 2045) in advance of the next comprehensive plan updates. Under state law, the LCA is used to inform updates of County and city comprehensive land use plans and development regulations required by *RCW 36.70A.130(1)* and the review of Urban Growth Areas required by *RCW 36.70A.130(3)*.

While the BLR and LCA serve different statutory purposes and use different planning horizons, the methods and data sources required are very similar.

7. DEFINITIONS

Land Use Categories

Mixed-use: Developments incorporating both residential and non-residential uses.

Residential: Includes single-family and multifamily development.

Commercial: Includes the commercial and retail uses listed in **Exhibit 3** below.

Industrial: Includes the industrial uses listed in **Exhibit 3** below.

Exhibit 3. Suggested Industry Classifications for Employment Allocation Process

Commercial	Industrial
Accommodations (NAICS 721)	Construction (NAICS 23)
Administrative and Support and Waste Management and Remediation Services (NAICS 56)	Manufacturing (NAICS 31-33)
Arts, Entertainment, and Recreation (NAICS 71)	Transportation and Warehousing (NAICS 48-49)
Educational Services (NAICS 61)	Utilities (NAICS 22)
Finance and Insurance (NAICS 52)	
Information (NAICS 51)	
Healthcare and Social Assistance (NAICS 62)	
Management of Companies and Enterprises (NAICS 55)	
Other Services (NAICS 81)	
Professional, Scientific, and Technical Services (NAICS 54)	
Public Administration (NAICS 92)	
Real Estate and Rental and Leasing (NAICS 53)	
Food Service and Drinking Places (NAICS 722)	
Retail Trade (NAICS 44-45)	

Note: NAICS stands for North American Industry Classification System.

Development Status Categories

Vacant: Property with little or no building improvements (see **Exhibit 3** for detailed criteria).

Under-Utilized: Property zoned for a more intensive use than that which currently occupies it, such as a single-family home on commercially zoned land (see **Exhibit 3** for detailed criteria).

Partially Used: Property occupied by a use consistent with zoning but containing enough land to be further subdivided or developed without need of rezoning, such as a single-family home on a very large lot (see **Exhibit 3** for detailed criteria).

Fully Developed: Property that is assumed to have no further development capacity during the current planning period.

Other Terms

Achieved Density: Density of residential development (dwelling units per net acre for UGAs) and commercial/industrial development (net FAR for UGAs) achieved during the Review and Evaluation Period.

Assumed Density: Assumption of residential density (dwelling units per net acre) and commercial/industrial development (net FAR) expected on developable land over the remainder of the 20-year planning period.

Average Household Size: The average number of people per occupied housing unit (this is the same definition used by the U.S. Census).

City UGA: Land within a city and the associated unincorporated UGA.

Data Reporting Tool: Spreadsheet jurisdictions use to report development data required for the Buildable Lands analysis, calculate growth to be accommodated in the remaining portion of the 20-year planning period, and calculate achieved densities. Described in **Section 3.4.**

Developable Parcels or Developable Land: All parcels that are classified as vacant, partially used, or under-utilized.

Employment Density: The average amount of floor-space required to accommodate an employee. For the purposes of this study, expressed as square feet per employee.

Floor Area Ratio (FAR): Total building square footage divided by lot square footage.

Gross Developable Land Inventory: Total area of developable parcels before deductions for critical areas, infrastructure, public uses, and market factors are taken.

Market Factor: The estimated portion of developable land which will not be available for development or redevelopment during the current 20-year planning period. The market factor recognizes that not all developable land will be put to its maximum use because of owner preference, cost, stability, quality, and location.

Net Density: The density of development, expressed as either residential units per acre or commercial/industrial floor area ratio, calculated based on Net Developable Land Inventory.

Net Developable Land Inventory: Total area of developable parcels after deductions for critical areas, infrastructure, public uses, and market factors are taken into account.

Net Plat Area: Total area of plats after deductions for critical areas, infrastructure, and public uses are taken into account.

Net Site Area: Total area of commercial, industrial and multifamily development sites after deductions for critical areas, infrastructure, and public uses are taken into account. Site area will sometimes not be equal to parcel area (e.g. when multiple buildings are on one parcel).

Non-City UGAs: The Birch Bay, Columbia Valley, and Cherry Point UGAs.

Review and Evaluation Period: The period of time during which development activity will be reviewed for the Buildable Lands Report.

Suitable Land Tool: Spreadsheet jurisdictions use to determine the population and employment capacity of the current developable land inventory and compare this capacity to population and employment growth projections.

Unincorporated UGA: Any UGA or portion of a UGA that is not within city limits. Unincorporated UGAs are under the County's jurisdiction, but may be annexed by the adjacent city or incorporate in the future.

APPENDIX A. POTENTIAL REASONABLE MEASURES

The following table compiles examples of actual reasonable measures that have been utilized in other Buildable Lands counties and were referenced in the 2018 *Washington State Buildable Lands Guidelines*. This list is intended to provide context and does not represent every possible appropriate reasonable measure. Individual jurisdictions will determine what reasonable measure(s) to apply, depending on the specific circumstances of the jurisdiction and the issues it is experiencing.

Exhibit 1. Examples of Reasonable Measures Used in Buildable Lands Counties

Reasonable Measure	Explanation
Create Annexation Plans	In an Annexation Plan, cities identify outlying areas that are likely to be eligible for annexation. The Plan identifies probable timing of annexation, needed urban services, effects of annexation on current service providers, and other likely impacts of annexation.
Encourage Transportation- Efficient Land Use	Review and amend comprehensive plans to encourage patterns of land development that encourage pedestrian, bike, and transit travel. This policy is typically implemented at the development review level.
Environmental Review and Mitigation Built into the Sub area Planning Process	Building environmental review and mitigation into the sub area planning process can address key land use concerns at a broader geographic scale, streamlining review and approval of individual developments.
Urban Growth Area Management Agreements	Urban Growth Area Management Agreements define lead responsibility for planning, zoning, and urban service extension within these areas. The agreements exist between various government jurisdictions and specify jurisdiction over land use decisions, infrastructure provision, and other elements of urban growth.
Capital Facilities Investments	Give priority to capital facility projects (e.g., regional storm water facilities and sanitary sewers) that most support urban growth at urban densities. Provide urban services to help reduce sprawl development and maintain the edge of the urban growth boundary.

Economic Development Strategy	Include strategy for sustainable economic development in local comprehensive plan. This strategy could include: downtown revitalization program; incentives for development that meet local goals; transit and transportation system upgrades; enhancement of the natural resource base; an industrial needs assessment.
Phasing/tiering Urban Growth	Incorporate strategies in comprehensive plans and capital facilities plans to phase urban growth as a way to provide for orderly development and encourage infill ahead of "urban fringe" development.
Downtown Revitalization	Develop a strategy to encourage downtown vitality. Include techniques such as promoting mixed residential and commercial uses, reuse of existing buildings rather than tearing down and rebuilding, and alternative urban landscaping and infrastructure that encourage pedestrian use.
Multifamily Housing and Tax Credits	Provide tax incentives (e.g., property tax exemption program) for multiple-unit housing for targeted areas in urban centers.
Transfer/ Purchase of Development Rights	Develop a program to encourage the purchase or transfer of development authority in order to increase urban densities and decrease non-urban densities within UGAs.
Implement a program to identify and redevelop vacant and abandoned buildings	Many buildings sit vacant for years before the market facilitates redevelopment. This policy encourages demolition and would clear sites, making them more attractive to developers and would facilitate redevelopment.
Creative use of Impact Fees	Adjust impact fees so that lower fees are required in the UGAs than in rural areas, while still contributing to the cost of development within the urban area.
Develop or strengthen local brownfields programs	Local jurisdictions provide policies or incentives to encourage the redevelopment of underused industrial sites, known as brownfields. Incentives for redevelopment of brownfields such as expedited permitting, reduced fees or targeted public investments can be implemented through local zoning ordinances.

Require Adequate Public Facilities	Local jurisdictions require developers to provide adequate levels of public services, such as roads, sewer, water, drainage, schools, and parks, as a condition of development. (Requirement by Growth Management Act)
Promote Vertical Growth	Allow modifications to the building height restrictions in the Urban Growth Areas.
Accessory Dwelling Units	Accessory dwelling units provide another housing option by allowing a second residential unit on a tax lot.
Clustering	Clustering allows developers to increase density on portions of a site, while preserving other areas of the site. Clustering is a tool most commonly used to preserve natural areas or avoid natural hazards during development. Clustering can also be used in conjunction with increased density to preserve the aesthetic of less dense development while increasing actual density. It uses characteristics of the site and adjacent uses as a primary consideration in determining building footprints, access, etc.
Duplexes, Town homes, and Condominiums	Permit duplexes, town homes, and condominiums in both mixed-use and residential districts of UGAs.
Density Bonuses	Some communities allow bonus densities in certain areas as an incentive for achieving other community values such as affordable housing, mixed-use developments, infill, rehabilitating existing structures and open space preservation.
Higher Allowable Densities	Where appropriate (and supported by companion planning techniques), allow more housing units per acre.
Industrial Zones	Limit non-industrial uses in industrial zones. For example, require that any commercial use be sized to primarily serve the industrial needs in the zone. Preclude residential use unless it is accessory to the industrial use.

Minimum Density Requirements	Zoning ordinances can establish minimum and maximum densities in each zone to ensure that development occurs as envisioned for the community.
Mixed Use	Allow residential and commercial development to occur in many of the same buildings and areas within UGAs.
Small Lot/Cottage Housing	Allow or require small lots (5,000 square feet or less) for single-family neighborhoods within UGAs.
Allow Small Residential Lots	Allow a range of single-family lot sizes ranging from 3,600 to 9,600 square feet.
Transit- Oriented Development	Encourage convenient, safe and attractive transit-oriented development; including the possibility of reduced off street parking that could encourage more efficient use of urban lands.
Urban Centers and Urban Villages	Use urban centers and urban villages to encourage mixed uses, higher densities, inter- connected neighborhoods, and a variety of housing types that can serve different income levels.
Lot Size Averaging	This technique is similar to clustering. If the zoning ordinance establishes a minimum lot size, the land use designation is calculated based on the average size of all lots proposed for development, within the range required for urban density. Development proposals may create a range of lot sizes both larger and smaller provided the average lot size is within the range consistent with the designation.
Allow Co-Housing	Co-housing communities balance the traditional advantages of home ownership with the benefits of shared common facilities and connections with neighbors.
Encourage Infill and Redevelopment	This policy seeks to maximize use of lands that are fully developed or underdeveloped by making use of existing infrastructure and by identifying and implementing policies that improve market opportunities and reduce impediments to development in areas suitable for infill or redevelopment.

Mandate Maximum Lot Sizes	This policy places an upper bound on lot size and a lower bound on density in single-family zones. For example, a residential zone with a 6,000 sq. ft. minimum lot size might have an 8,000 sq. ft. maximum lot size yielding an effective net density range between 5.4 and 7.3 dwelling units per net acre.
Enact inclusionary zoning ordinance for new housing developments	Inclusionary zoning requires developers to provide a certain amount of affordable housing in developments over a certain size. It is applied during the development review process.
Zone areas by performance or building type, not by use	A local jurisdiction can alter its zoning code so that zones define the physical aspects of allowed buildings, not the uses in those buildings. This zoning approach recognizes that many land uses are compatible and locate in similar building types.
Develop Manufactured Housing	Adopt standards to ensure compatibility between manufactured housing and surrounding housing design standards.
Specific Development Plans	Work with landowners, developers, and neighbors to develop a detailed site plan for development of an area. Allow streamlined approval for projects consistent with the plan. This policy results in a plan for a specific geographic area that is adopted as a supplement or amendment to the jurisdiction's comprehensive plan.
Encourage developers to reduce off-street surface parking	This policy provides incentives to developers to reduce the amount of off-street surface parking through shared parking arrangements, multi-level parking, use of alternative transportation modes, particularly in areas with urban-level transit service.
Implement a process to expedite plan & permit approval in UGAs	Streamlined permitting processes provide incentives to developers. This policy would be implemented at the development review phase.
Narrow Streets / Reduce Street Width	Encourage or require street widths that are the minimum necessary to ensure that transportation and affordable housing goals can be achieved.

Concentrate critical services near homes, jobs, transit	This policy would require critical facilities and services (e.g., fire, police, hospital) be located in areas that are accessible by all people. For example, a hospital could not be located at the urban fringe in a business park.
Urban Amenities for Increased Densities	Identify and provide amenities that will attract urban development in UGAs and enhance the quality of life for urban residents and businesses.
Locate civic buildings in existing communities rather than in Greenfield areas	Local governments, like private builders, are tempted to build on greenfield sites because it is less expensive and easier. However, local governments can "lead by example" by making public investments in desired areas, or redeveloping target sites.
Urban Holding Zones	Use low intensity zoning in certain areas adjacent to or within the UGA where municipal services will not be available within the near future. (For example: Urban Reserve)
Mandate Low Densities in Rural Resource Lands	This policy is intended to limit development in rural areas by mandating large lot sizes. It can also be used to preserve lands targeted for future urban area expansion. Low-density urban development in fringe areas can have negative impacts of future densities and can increase the need for and cost of roads and other infrastructure.
Impose Restrictions on Physically Developable Land	The local jurisdiction places restrictions on the type of development that can occur on vacant land. Restrictions can vary in strictness, from no development to limited development. This policy is implemented through city limit or UGA boundaries.

Allow for alternative sanitary sewer systems in unincorporated UGAs	To ensure urban-level sewer or equivalent wastewater service in all UGAs for the 20-year planning horizon. New proposed policies would allow for alternative systems such as package plants, membrane systems and community drainfields in areas where other sewer provision is not financially feasible, provide significant benefit to aquifer recharge and would enable Kitsap County to monitor and maintain those facilities to ensure their long-term effectiveness.
Remove pre-planning allowances in UGAs	Development regulations have allowed subdivisions to "shadow plat" and show how urban densities can be achieved in the future and how sanitary sewer can be accommodated to serve all lots when fully developed. In the meantime, portions of the "shadow plat" can be developed with on-site septic systems.
Provide for regional stormwater facilities in unincorporated UGAs	To increase development feasibility on small and/or development constrained parcels. New policy would allow for funding and construction of regional stormwater treatment facilities in areas where individual on-site treatment facilities are not financially feasible.
Strengthen and amend policies to promote low impact development	Policies support clustered development with surface water features that allow for minimal site disturbance. This could allow for innovative infrastructure resulting in more efficient use of developable land.
Consolidated comprehensive plan land use designations	Will make it easier to rezone urban parcels in the future without the additional time and expense of a comprehensive plan amendment process.
SEPA Categorical Exemptions for Mixed Use and Infill Development & Increased Thresholds for SEPA Categorical Exemptions	To streamline the development review process and encourage more efficient development within existing UGA boundaries.

Source: Washington State Department of Commerce, Buildable Lands Guidelines, 2018

APPENDIX B. MARKET FACTOR WHITE PAPER

INTRODUCTION

Background and Purpose

Each county planning under Washington's Growth Management Act must, in conjunction with the cities, estimate the capacity of its cities and urban growth areas (UGAs) to accommodate projected population and employment growth over a 20-year period. One major consideration to avoid overestimating capacity is to estimate how much developable land will not actually be available for development due to owner preferences, market support, and other circumstances. This adjustment is referred to as the "Market Factor", and the use of a "reasonable" land market supply factor is a required component of a Review and Evaluation ("Buildable Lands") Program under state law *(RCW 36.70A.215 (3)(b)(ii)).*

Whatcom County and the cities are now required to develop a Buildable Lands Program, including methods for a market factor. In addition, 2017 legislation introduced new considerations for developing a market factor for all Buildable Lands counties *(E2SSB 5254).* While local jurisdictions have been given broad guidance on how to interpret these considerations, they are granted discretion in how they approach their own analysis. The purpose of this white paper is to provide Whatcom County and the cities with recommendations for analysis to develop market factors that meet legal requirements, are consistent with best practices, and can be accomplished with local resources.

Methods

The recommendations in this report were informed by the following sources:

- Review of Growth Management Act, Washington Administrative Code, and the Department of Commerce's 2018 *Review & Evaluation Program Buildable Lands Guidelines* (hereinafter "*Buildable Lands Guidelines*").
- Review of methods used in other Washington Buildable Lands counties.
- Review of applicable data availability in Whatcom County.
- Interviews with staff from the Washington State Department of Commerce and other buildable land counties.

Organization of this Report

This report includes the following sections:

I. **Statutory Requirements and State Guidelines:** Outlines legal requirements for the market factor under state law and potential approaches in the State's *Buildable Lands Guidelines*.

II. **Comparative Approaches:** Describes how other Buildable Lands counties have developed market factors.

III. **Approach to New Market Factor Considerations:** Discusses considerations in establishing market factors. Also clarifies which considerations will be addressed through other components of the Buildable Lands Methodology, as opposed to the market factor itself.

IV. **Local Data Availability:** Identifies data sources required for common analysis methods and reviews coverage for Whatcom County.

V. **Recommended Analysis Methods:** Recommends approach to the market factor, including overview of required resources.

I. STATUTORY REQUIREMENTS AND STATE GUIDELINES

The Review and Evaluation Program, also known as the Buildable Lands Program, was established in 1997 as an amendment to the Growth Management Act (RCW 36.70A.215; WAC 365-196-315). In 2017, the Washington Legislature approved the first major revision to the Buildable Lands Program with the passage of E2SSB 5254. To assist local governments in meeting the requirements of the Review and Evaluation Program, the State's *Buildable Lands Guidelines* were completed in 2018.

The Review and Evaluation Program calculations are intended to determine if a county and its cities are achieving urban densities and the amount of land needed to accommodate growth projections over the remaining portion of the current 20-year planning period. These calculations include a variety of population, employment, and development-related data. One component of this analysis, the Market Supply Factor, estimates the portion of developable land within an urban growth area that is likely to remain unavailable over a 20-year planning period and which should, therefore, be deducted from the final calculation of land area suitable for development and redevelopment. Documenting this calculation in buildable land analysis enables a community to avoid overestimating capacity by considering the unique local conditions that may impact buildable land capacity. The market factor is applied after deductions for critical areas, public uses, and infrastructure.

GMA Guidance on Buildable Lands and the Use of a Market Supply Factor (RCW 36.70A.215; WAC 365-196-315)

The Market Supply Factor adjustment to Buildable Lands has two primary references in the Revised Code of Washington (RCW) and two in Washington Administrative Code (WAC) specifically guiding UGA planning.

1. **RCW 36.70A.215(3)(b)(ii)**. "Use of a reasonable land market supply factor when evaluating land suitable to accommodate new development or redevelopment of land for residential development and employment activities. The reasonable market supply factor identifies reductions in the amount of land suitable for development and redevelopment. . ."
2. **RCW 36.70A.110(2)**. "…An urban growth area determination may include a reasonable land market supply factor and shall permit a range of urban densities and uses. In determining this market factor, cities and counties may consider local circumstances. Cities and counties have discretion in their comprehensive plans to make many choices about accommodating growth. . ."
3. **WAC 365-196-310(2)(e)**. "The urban growth area may not exceed the areas necessary to accommodate the growth management planning

projections, plus a reasonable land market supply factor, or market factor. In determining this market factor, counties and cities may consider local circumstances. Cities and counties have discretion in their comprehensive plans to make many choices about accommodating growth. . ."

4. **WAC 365-196-310(4)(b)(ii)(F)**. "The land capacity analysis may also include a reasonable land market supply factor, also referred to as the 'market factor.' The purpose of the market factor is to account for the estimated percentage of developable acres contained within an urban growth area that, due to fluctuating market forces, is likely to remain undeveloped over the course of the twenty-year planning period. The market factor recognizes that not all developable land will be put to its maximum use because of owner preference, cost, stability, quality, and location. If establishing a market factor, counties and cities should establish an explicit market factor for the purposes of establishing the amount of needed land capacity. Counties and cities may consider local circumstances in determining an appropriate market factor. Counties and cities may also use a number derived from general information if local study data is not available."

The state statute and administrative code authorize use of a market supply factor in calculating buildable land. The State's *Buildable Lands Guidelines* (2018) also say:

1. **Market Supply Factors are appropriate and can be distinct for both new development and redevelopment.** Market Supply Factor is, in effect, a valid consideration for vacant, partially utilized or under-utilized land in UGAs (such as already-developed properties that are identified as appropriate for higher-intensity redevelopment).
2. **Distinct Market Supply Factors are appropriate for employment land and activities.** Market Supply Factor reductions can and should also be made for commercial and industrial land, which typically have different, more income-oriented ownership intent than residential property ownership.
3. **Market Supply Factors can and should be distinct for different counties and cities.** Statute does not intend for there to be uniformity in Market Supply Factor determination by counties and cities statewide. Variation and distinct differences to reflect unique local conditions are expected and protected.
4. **Market Supply Factors can and should be distinct for Urban Growth Areas.** UGA Market Supply Factors should reflect fluctuating market forces that leave different parcels undeveloped for twenty years. More specifically, UGA Market Supply Factors should reflect owner preference, cost, stability, quality, and location as

determinants of unavailability for development that may likely differ from parts of cities and counties that have long been developed.

5. **Urban growth area Market Supply Factors can be based on generally available information**, including Market Supply Factor methodology from other cities and counties, instead of purely local data. Jurisdictions may study local UGA Market Supply Factor determinants or study and potentially utilize UGA Market Supply Factor determination information and methodology from elsewhere in Washington (p. 48).

Senate Bill (E2SSB) 5254: Elaboration on Market Supply Factor

E2SSB-5254 recognized that, while the market supply factors used by buildable lands communities were consistent with past practices, there were likely data collection improvements that could enhance accuracy. RCW 36.70A.217 required the State Department of Commerce to analyze and provide recommendations on the following considerations when developing their guidelines for local governments:

1. Infrastructure costs, including but not limited to transportation, water, sewer, stormwater, and the cost to provide new or upgraded infrastructure if required to serve development.
2. Cost of development.
3. Timelines to permit and develop land.
4. Market availability of land.
5. The nexus between proposed densities, economic conditions needed to achieve those densities, and the impact to housing affordability for home ownership and rental housing.
6. Market demand when evaluating if land is suitable for development or redevelopment.

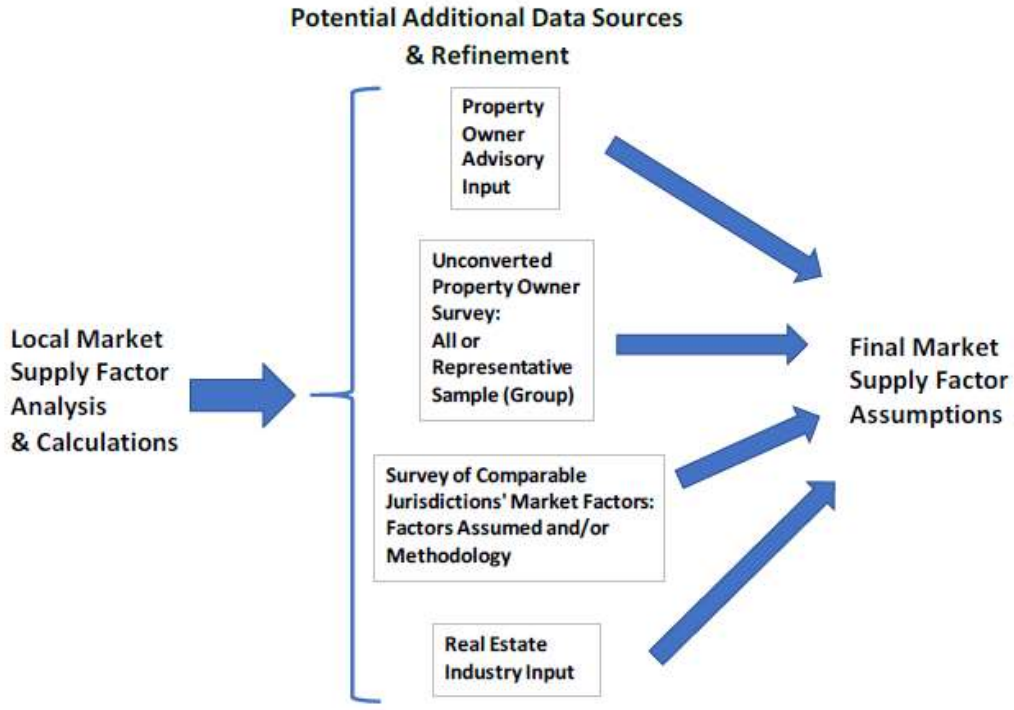
State Buildable Lands Guidelines

The State's *Buildable Lands Guidelines* document (2018) provides direction on how to incorporate these considerations into the market supply factor (pp. 52-58). In addition, the *Buildable Lands Guidelines* provide ideas and examples of how jurisdictions should "show their work" when addressing these various issues and offers sample hypothetical "analysis & calculations" approaches to calculating the Market Supply Factor (pp. 59-60).

Many data sources are appropriate to help shape robust Market Supply Factor assumptions. In addition to the hypothetical approaches listed in the *Guidelines*, other sources of information that may prove useful include

property owner input, property owner surveys, comparable jurisdictions' Market Supply Factor methodologies and findings, and input from real estate industry experts. Jurisdictions may identify other sources of information or considerations, so long as they document clear rationale for their use. **Exhibit 1** provides a general example of how data and other inputs can inform the final market factor. The three sections of this chart are explained in greater detail in the following text.

Exhibit 1. State Guidance on Market Factor Process



Source: State Buildable Lands Guidelines (2018, p. 61).

Local Market Supply Factor Analysis and Calculations

The *Buildable Lands Guidelines* provide three potential initial analyses for market factors. All three analyses would be performed on parcels in the geographic area and development type subject to a unique market factor.

Option 1: Improvement Value to Total Value

Divide each parcel's total assessed value by the assessed value of its improvements. It is assumed that properties with existing higher value improvements are less likely to convert/re-develop than other properties.

This approach is most useful for residential development. It is least useful for industrial development, where low improvement values are not always correlated with a lack of economic activity. This approach addresses

partially-used and under-utilized parcels, but does not address vacant parcels.

Option 2: Properties Without Transaction Activity
Identify how many parcels in the group have no recorded transactions for a specific period of time. The percentage of non-transacting parcels can be used to inform the market factor selection process.

This approach is useful because it may reflect both owners' willingness to sell and market appetite for land. It also provides objective evidence to weigh against property owner surveys. For this approach to be useful, the time period being studied should be similar to the conditions expected in the future. This approach is also dependent on the quality of property sale data. Additionally, this approach does not address existing land owners' willingness to develop their own properties in the 20-year planning period.

Option 3. Converted Properties
Calculate the percentage of properties that were developed or re-developed in a specific period of time. Use the percentage that did not have any activity to inform the market factor selection process.

This approach assesses development appetite and inherently reflects financial viability and market support. In addition, this approach can be used to assess how development responds to providing new infrastructure, or how a lack of infrastructure impacts development activity. This approach is dependent on having the ability to capture current and historic data for specific parcels, or having reliable historic development data (e.g. permit or Assessor's data).

Potential Additional Data Sources and Refinement
These initial analyses may be considered along with additional data and analysis. Several examples of additional data sources are provided in the State *Buildable Lands Guidelines,* detailed below.

Property Owner Advisory Input
Jurisdictions can identify property owners who own significant buildable lands and reach out to discuss their plans. Property owners' input can directly inform capacity assumptions for their parcels.

Property Owner Survey
Several counties have surveyed vacant and redevelopable property owners to understand their openness to development on their property. This approach is detailed further in **Section V**.

Survey of Comparable Jurisdictions
Jurisdictions may borrow market factors and methods from jurisdictions with similar conditions, provided they document the reasons why they believe the borrowed factors and/or methods are applicable.

Real Estate Industry Input
Experts on the local real estate market can provide additional insight on specific development barriers. This insight can inform the market in general (for example, providing guidance on development types that are not yet supported), and provide feedback on specific parcels (reviewing maps of buildable properties and identifying parcels with known significant issues).

Final Market Supply Factor Assumptions
The final market factors selected should be refined based on the evidence provided by completed analyses. There is no set minimum or maximum standard for analysis required to prepare a market factor. Counties and cities must simply use their best judgement in determining what will be useful in their case and document their rationale. The market factor should be derived with data and other documented evidence.

II. COMPARATIVE APPROACHES

As of May 2021, some of the other Buildable Lands counties have developed market factors and some counties are still in the process of formulating market factors to address RCW 36.70A.215 and the updated 2018 State *Buildable Lands Guidelines*. Thurston County was the first county to complete analysis to support revising its market factor. King, Pierce, and Snohomish have also completed their market factor assumptions. Clark and Kitsap have analysis and work in progress to support market factor assumptions.

Each jurisdiction has a unique approach to their market factors. King County's approach allows each city to select one or more applicable market factors and has identified a range of market factors for distinct product (development) types by different regional geographies. Pierce County reviewed their market factor assumptions and continue to use individual market factors for each jurisdiction. Snohomish County has updated their market factors based on observed market factors and has provided updated residential market factors for both South-West UGA (SWUGA) and non-SWUGA areas. Clark County's analysis confirmed the continued use of a 10% market factor for vacant land and 30% for underutilized land. A property owner survey in Thurston County has resulted in a recommended approach that developed separate market factors for partially developed and vacant residential parcels that vary based on the parcel's zoned development potential.

Exhibit 2. Recommended Market Factors by County

Buildable Lands County	Residential Market Supply Factors				Commercial / Industrial Market Supply Factors			
	Unincorporated UGA		Cities (Range)		Unincorporated UGA		Cities (Range)	
	Vacant	Underutilized	Vacant	Underutlized	Vacant	Underutilized	Vacant	Underutilized
Clark	10%	30%	0-10%	0-30%	20%	50%	0-10%	0-10%
King - Non-Seattle	0-30%	0-30%	1-50%	1-50%	10-35%	10-35%	1-50%	1-50%
King - Seattle	0-50%	0-50%	0-50%	0-50%	3-50%	3-50%	3-50%	3-50%
Kitsap	5-50%	5-50%	5-50%	5-50%	5-50%	5-50%	5-50%	5-50%
Pierce	15%	40%	0-50%	0-50%	20%	50%	0-50%	0-50%
Snohomish - SWUGA	6-11%	10-20%	6-11%	10-20%	15%	30%	15%	30%
Snohomish - Non-SWUGA	12-14%	16-23%	12-14%	16-23%	15%	30%	15%	30%
Thurston	10-20%	10-40%	10-20%	10-40%	10-20%	10-40%	10-20%	10-40%

Sources: Clark County, 2021; King County, 2021; Washington State Department of Commerce, 2021; Snohomish County, 2021; Thurston County, 2021; Kitsap County, 2021; Pierce County, 2021; Community Attributes Inc., 2021. Notes: King County Unincorporated UGA figures in this table are derived from and dependent on the cities with which Potential Annexation Areas (UGAs) are affiliated; residential Unincorporated UGA factors are higher for the highest density zones, while non-residential Unincorporated UGA factors are lower for industrial zones. Regional geography types include Core City, High Capacity Transit, Cities and Towns, and Metropolitan, with low to high market factor ranges for each. The market factor selected from the range for Thurston County depends on the current development status of a parcel, including whether the capacity type is One Unit, Short Plan, Long Plat, or Mixed Use.

King County

In a change from previous methods utilized to inform their 2014 Buildable Lands Report, King County has articulated new guidance for its jurisdictions regarding selection of market factors. Going forward, cities will have the flexibility to select one or more market factors that are applicable to them. For example, some smaller cities may choose a single residential market factor, while a larger city might select multiple market factors to reflect the zones in their city. Based upon consultant analysis, King County has identified a range of low, medium, and high market factors (**Exhibit 3**) for distinct product types by different regional geographies. In order to select within this range, each city must review their specific attributes, assumptions and market conditions and consider whether a higher or lower market factor is appropriate for that given product type.

Exhibit 3. Recommended King County Market Factor Ranges by Product

	Product Typology			
City Typology	Residential		Non-Residential	
Market Factor Alignment	Multifamily/ Mixed-Res	Single Family	Commercial (Office/Retail/Mixed)	Industrial
Core City				
Low	5%-10%	1%-14%	1%-10%	1%-15%
Medium	11%-20%	15%-20%	11%-20%	16%-35%
High	21%-35%	21%-30%	21%-50%	36%-50%
High-Capacity Transit				
Low	5%-10%	1%-9%	1%-14%	1%-19%
Medium	11%-15%	10%-20%	15%-25%	20%-30%
High	16%-30%	21%-35%	26%-50%	31%-50%
Cities and Towns				
Low	10%-24%	1%-10%	1%-10%	1%-15%
Medium	25%-35%	11%-40%	11%-20%	16%-35%
High	36%-50%	41%-50%	21%-50%	36%-50%
Metropolitan				
Low	5%-10%	1%-14%	1%-10%	1%-15%

Source: King County, 2021.

In addition to the ranges above, cities will be provided with "adjustment templates" to further adjust within the given ranges or deviate from them altogether to account for known conditions that impact the development of and availability of land in their jurisdiction. Some of these conditions include:

- Assumption for Vacant versus Redevelopable Lands
- Market Trends
- Single Family Up-zoned Areas
- Restrictive Covenants in Planned Communities
- Fragmented Ownership and Parcel Size
- Access to Transit

Additionally, a separate set of ranges has been developed specifically for Seattle (**Exhibit 4**). These ranges reflect a bit more neighborhood detail, but they are based on the same sources of information.

Exhibit 4. Recommended City of Seattle Market Factor Ranges by Product

	Residential				
	Multifamily/ Mixed-Res	Single Family Attached	Single Family Detached	Commercial (Office/Retail/Mixed)	Industrial
City of Seattle					
Low	4% - 11%	0% - 13%	0% - 9%	5% - 24%	3% - 14%
Medium	12% - 20%	14% - 38%	10% - 26%	25% - 35%	15% - 21%
High	21% - 29%	39% - 50%	27% - 43%	36% - 50%	22% - 27%

Source: King County, 2021.

These recommendations comprise the second phase of a recent analysis to update King County's market factor methodology. The first phase of analysis stratified cities by market characteristics. In the second phase, the County focused on refining the stratified groupings and adding neighborhood types within cities, such as downtowns and mixed-use nodes. The analysis also examined how the supply of land has been absorbed since 2000. That rate or share of land supply absorption has suggested new market factors. King County staff analyzed data sources, including the land supply from older buildable lands and assessor data, resulting in a suggested category and market factor ranges for each type of zone, neighborhood, and city.

Pierce County

Pierce County continues to use the methodology outlined in a 2014 Buildable Lands Report to comply with reporting requirements. The report does not detail the considerations that were addressed in the analysis for the market factor used for the County or its cities. The specific market factors used varied greatly by jurisdiction and land use but were generally higher for underutilized lands than for vacant lands.

In reviewing the new *Buildable Lands Guidelines* as of October 2020, Pierce County found that its existing deduction is adequate but needs more explicit documentation on how it addresses market factor. The County also found the previous methodology may not fully address infrastructure gaps. As such, staff have identified properties that are farther than 300 feet from sewers and intend to apply a further deduction to the portion of parcels according to that distance. Staff have also coordinated with cities and towns to identify other areas with cost-prohibitive infrastructure deficiencies, and they intend to include those parcels in the portion of parcels with further deduction as well.

Snohomish County

The Snohomish County Buildable Lands Reports completed in 2002, 2007, and 2012 assumed market availability factor reductions of 15% for vacant land and 30% for partially used and redevelopable land. These assumptions were based on property owner surveys completed in 1993 (City of Marysville) and 2005 (Snohomish County). In 2019, consultants worked with County staff to update these figures based upon an analysis of sample areas representing different types of markets or geographies. A resulting 2020 technical supplement recommends updated market factors, including assigning different market factors for the South-West UGA (SWUGA) and non-SWUGA lands (**Exhibit 5**). Snohomish County selected market factors ranging between 6% and 14% for vacant single family land uses, and between 10% and 23% for underutilized single family land uses. Snohomish County will likely maintain the market factors documented in the 2012 Buildable Lands Report for vacant and underutilized land in other land use and zoning categories including other multifamily residential, mixed use, commercial and industrial. Data was not available to develop updated market factors for multifamily residential, mixed use, commercial, and industrial land uses, thus the previously established market factors will continue to be used for these land use and zoning categories in both SWUGA and non-SWUGA areas.

Exhibit 5. Recommended Snohomish County Market Availability Reduction Factors (MARFs)

Land Use and Zones		Previous MARF	Observed MARF 2001-2019	
			SWUGA	Non-SWUGA
Urban Low Density Residential Areas	Vacant	15%	6%	12%
Single Family Zoning (SFL)	Underutilized	30%	10%	16%
Urban Medium Density Residential Areas	Vacant	15%	11%	14%
Mix of Single Family & Low Density Multi-Family Zoning (SFM)	Underutilized	30%	20%	23%
All Other Land Uses	Vacant	15%	N/A	N/A
All other Multi-Family Zoning, Commercial and Industrial Zoning	Underutilized	30%	N/A	N/A

Source: Snohomish County, 2021.
Note: Underutilized includes both partially-used and redevelopable parcels. The South-West UGA encompasses nine incorporated cities and their respective municipal UGAs (MUGAs); other cities and MUGAs located outside this area are termed "non-SWUGA".

Recommendations for the updated market factor approach were based on a sample area approach to analyzing development activity across the past 20-years. Sample areas selected represent different types of markets or geographies where development has been focused during the analysis timeframe. Analysis used a 2001 parcel extract of properties identified with additional capacity in the 2002 Buildable Lands Report without development or development proposals as of 2019. The analysis of these parcels in selected sample areas provided observed market factors from 2002-2018 for the Bothell MUGA (located within the larger SWUGA) and the Stanwood/Cedarhome UGA located in the Non-SWUGA area of the County. For single family residential uses, the analysis of the Bothell / SWUGA sample area, for example, found reduced market factors compared to the 2012 assumptions, 6% compared to 15% assumed for vacant land and 10% compared to 30% assumed for underutilized land. Analysis of the Stanwood/Cedarhome in the Non-SWUGA area also found reduced observed market factors compared to assumptions, 12% compared to 15% assumed for vacant land and 16% compared to 30% assumed for underutilized land. In summary, Snohomish County found that analysis of past development suggested that the market factors for certain types of development in Snohomish County, that were informed by land owner surveys and set before the development occurred, were higher than those actually observed.

Snohomish County also hoped to analyze observed market factors for different development types with a sample area approach. However, data

required for the analysis was not available for an analysis of multifamily or mixed-use development types. The June 2020 Technical Supplement recommends future monitoring of market factors for different development types.

Clark County

As of May 2021, Clark County is still in the process of updating its market factors in accordance with the new *Buildable Lands Guideline*s. The updates to methodology are ongoing and the County has not finalized market factor assumptions, however, County representatives have indicated that, at minimum, Clark County will maintain existing market factors of 10% for vacant land and 30% for underutilized land.

Prior analysis compared vacant and underutilized residential land in 2019 and 1996 within the 1996 UGA boundary. The resulting assumptions used in the 2014 Buildable Lands Report were that 90% of vacant land will develop and 70% of underutilized land will develop.

Clark County has been conducting analyses to review these assumptions, as documented in an August 28, 2020 memo addressing Updates to Employment Land Classifications, Redevelopment, Mixed Use, Market Factor, and Infrastructure Set-Aside Topics. In summer of 2020, a consultant team analyzed observed data within a sample location covering 600 acres that have seen a high rate of growth since 2007. Analysis compared the 2007 Vacant Buildable Lands Model baseline to current development, providing a 13-year range to assess observed market factors. Results of the analysis supported a recommendation to continue using current assumptions that 90% of vacant land will develop and 70% of underutilized land will develop (e.g. market factors of 10% and 30% respectively).

The sample area analysis did find evidence for higher deductions for critical areas. The previous methodology assumed that 50% of critical areas will develop and the market factor is applied to the 50% reduced critical area. Analysis in 2020 recommends that the deductions for critical areas should be 62.5% for Residential-Urban Low and 58.8% for Residential Urban-High zones. The recommendations also indicate that the additional market factor of 90% or 70% should not be applied to the critical area deduction.

Thurston County

In 2019, Thurston County conducted a property owner survey to develop updated residential market factors. The survey was mailed to all owners of developable parcels. It was also mailed to owners of parcels on the margins of being considered partially-developed to help test the County's assumptions. Based on these survey results, Thurston County developed separate market

factors for partially developed and vacant residential parcels that vary based on the parcel's zoned development potential. The more a lot can be subdivided based on zoning, the lower the market factor assumption. A separate market factor was also developed for mixed use residential parcels (**Exhibit 6**).

Exhibit 6. Thurston County Market Factors, 2019

	Market Factor by Current Development Status	
Capacity Type	**Partially Developed**	**Vacant**
One Unit (Cannot be subdivided further)	40%	20%
Short Plat	30%	15%
Long Plat	20%	10%
Mixed Use	10%	10%

Source: Thurston Regional Planning Council, 2019

The County received responses from 25% of mailed surveys and used the results to develop its market factors. The survey was modeled closely after Snohomish County's past survey, which was completed over the phone. Thurston County found that using multiple time periods to estimate when development could occur was confusing for some respondents to the written survey. A large portion of respondents did not provide answers for every time period, so more interpretation was required. For future mailed surveys, Thurston County indicated that simply asking if the property may be available for development within 20 years could allow for greater consistency in responses.

Key findings from the survey included:

- **Significant variation by UGA.** The share of respondents stating that development was "very unlikely" ranged from 14% to 84% by UGA, with an average of 30%. Bucoda, the UGA on the high end of this range, has significant flood hazards which impact this number. Grand Mound was another outlier at 61%, but the summary report did not suggest a potential explanation.
- **Vacant land owners are more open to development compared to partially developed land owners.** 28% of owners of a vacant lot which could accommodate one unit stated that development was very unlikely, compared to 41% of partially developed lots which could only accommodate one unit.
- **The difference between vacant and partially developed property owners' preferences decreases as zoned**

redevelopment potential increases. Owners of both vacant and partially developed land were more open to redevelopment if their property could be subdivided into more lots. Similarly, openness to development across all properties increases as zoned capacity increases.

- **When the property owner currently lives on the parcel, they are much less likely to be open to development.** 41% of property owners living on the parcel in question stated that development was very unlikely compared to 11% of property owners living elsewhere.
- **Permitting, impact, and utility hookup fees cited as development barriers.** 28% of respondents cited fees as barriers toward developing their property.

Kitsap County

Kitsap County is currently working with local jurisdictions and a consultant on a new Buildable Lands Report. The report will examine market factors and several other options in a framework to reflect geographical, product, and market typologies in the County. Kitsap County is still working through market factor-specific guidance with its consultant team and anticipates completion of guidance for the residential and employment land capacity analysis will continue through early summer 2021. However, Kitsap County has released preliminary figures as of May 2021 that are currently under review. Based upon consultant analysis, Kitsap has identified a range of market factors (**Exhibit 7**) for distinct product types by different regional geographies. In order to select within this range, each city must review their specific attributes, assumptions and market conditions and consider whether a higher or lower market factor is appropriate for that given product type. Market factor ranges run from 5% minimum up to 50% maximum for residential and non-residential typologies. Ranges for each type and geography were determined by the consultants and County based on a projection of what percentage of planned capacity will be absorbed over the coming years.

Exhibit 7. Kitsap County Preliminary Market Factors, May 2021

		Product Typology			
Geography		Residential		Non-Residential	
Market Factor Range		Multifamily/ Mixed-Res	Single Family	Commercial (Office/Retail/Mixed)	Industrial
Bremerton	*City, UGAs*	*Medium (20% - 35%)*	*High (35% - 50%)*	*Medium (20% - 35%)*	*High (35% - 50%)*
Bainbridge	City	*Low (5% - 20%)*	*Low (5% - 20%)*	*Medium (20% - 35%)*	*Medium (20% - 35%)*
Central Kitsap	UGA	*High (35% - 50%)*	*Medium (20% - 35%)*	*Medium (20% - 35%)*	*Low (5% - 20%)*
Silverdale	UGA	*Medium (20% - 35%)*	*Medium (20% - 35%)*	*Medium (20% - 35%)*	*High (35% - 50%)*
Kingston	UGA	*High (35% - 50%)*	*Medium (20% - 35%)*	*Medium (20% - 35%)*	*Low (5% - 20%)*
Port Orchard	City, UGAs	*High (35% - 50%)*	*Medium (20% - 35%)*	*High (35% - 50%)*	*Medium (20% - 35%)*
Poulsbo	City, UTA	*Low (5% - 20%)*	*Low (5% - 20%)*	*Low (5% - 20%)*	*Low (5% - 20%)*

Source: Kitsap County, 2021

Kitsap County has developed a methodology that, like King County's, is partially based on PSRC's regional geography typologies; each city and UGA in the County has been categorized as one of these geographies in order to help inform selection from a range of market factors: Metropolitan Cities (Bremerton and its UGA), Core Cities (Silverdale), High-Capacity Transit Communities (Bainbridge, Poulsbo & UGA, Kingston, and Port Orchard & UGA), and Cities and Towns (none).

Kitsap County's preliminary methodology consists of four steps:

(a) **Assign product types to each zone within each geography.** In this step, the County and Cities identify the predominant product type in each zone of the City/UGA where capacity exists. Product types corresponding to zoning include single-family residential, multifamily residential, commercial, and industrial uses.

(b) **Establish market indicators for each city and product type.** This step consisted of an historic analysis of develop patterns and actual, measure market factors for various Kitsap cities and product types versus planned capacities. Market factors were estimated based on percentages of real estate absorption by product over that time period. Ranges and segmentation were determined:

(i) Lower boundary: 5% To account for the unmeasurable variables.

(ii) Upper boundary: 50%: Upper bound for potential market factors.

(iii) Range Segmentation: This analysis separates the ranges into three segments evenly distributed within the upper and lower bounds (low/medium/high).

(c) **Establish Market Factor Ranges for each geography, and product type.** In this step, cities select from a range of market factors organized by product type.

(d) **Refine and Adjust.** Finally, cities refine and adjust local conditions and based on local analysis. A range for each product-type by each Regional Geography is provided in Step C. In order to select within this range, each city (or UGA) must review their specific attributes, assumptions and market conditions and consider whether a higher or lower Market Factor is appropriate for that given product type (and therefore, applicable zone within the City or UGA). It is important to note that additional factors may need to be considered to account for unique circumstances influencing the market availability of land in any given jurisdiction. Such factors may include:

(i) Vacant versus underutilized lands

(ii) Market Trends

(iii) Single family uses in recently up-zoned areas

(iv) Restrictive Covenants in planned communities

(v) Parcel size and assemblage challenges

(vi) Transit accessibility

(vii) Infrastructure limitations

(viii) Areas designated as Growth Centers

III. Approach to New Market Factor Considerations

This section reviews each market factor consideration set forth in RCW 36.70A.217, shown in italics below, along with information from the State *Buildable Lands Guideline*s, and how Whatcom County and the cities might approach these issues. Several considerations for the market factor may be addressed in other ways through the Buildable Lands Methodology itself (e.g. through reasonable measures).

RCW 36.70A.217 Requirements

1. *Infrastructure costs, including but not limited to transportation, water, sewer, stormwater, and the cost to provide new or upgraded infrastructure if required to serve development*

   Whatcom County's Buildable Lands Methodology utilizes achieved densities (where available) to estimate future capacity in the buildable lands analysis. Achieved densities should reflect market support for development, including in areas where new or upgraded infrastructure are required.

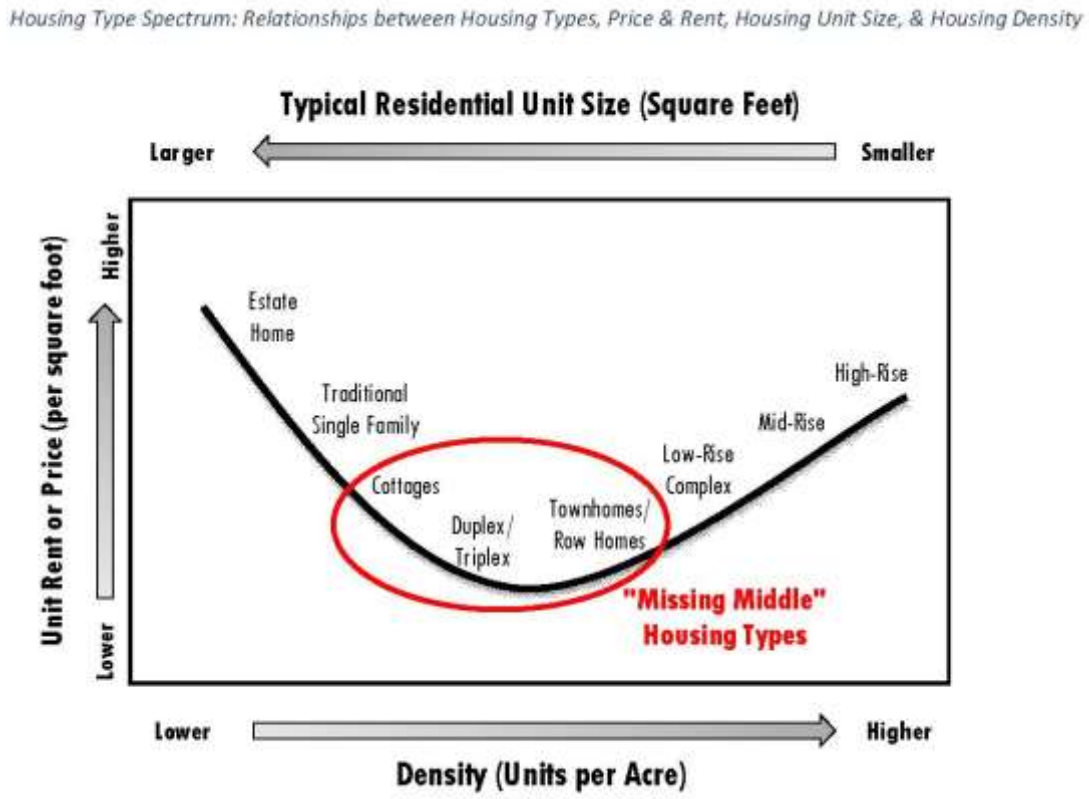
   There may be cases where there is insufficient data on achieved densities to assess future capacity. In these cases, the County and cities should assess potential reasons why development has not occurred, including infrastructure costs and the inability to connect to public water and sewer (e.g. property in a city UGA prior to annexation).

   The jurisdictions should also address how to identify areas which will have limited development potential until certain infrastructure improvements are complete. This could include considering the timing of future capital improvement projects and using this to evaluate the phasing of development capacity in certain areas. It should be noted that the Review and Evaluation Program Methodology addresses "infrastructure gaps" separately from market factor in accordance with RCW 36.70A.215(3)(b). While "gaps" in publicly provided infrastructure are treated separately, market factors are still the appropriate mechanism to account for owner/developer considerations related to on-site infrastructure costs and related delays or limitations to development.

2. *Cost of development*

It is assumed that, generally, the impact of development cost is reflected in achieved densities. The State Department of Commerce's *Housing Memorandum: Issues Affecting Housing Availability and Affordability* (June 2019) indicates that ". . . Typically most affordable housing unit types will tend to be moderate-density units such as cottages, duplexes, triplexes, and rowhouses or townhouses. . ." (p. 87). The State's *Housing Memorandum* also contains the following graphic generally illustrating housing cost dynamics.

Exhibit 8. Housing Type Spectrum: Relationships between Housing Types, Prices & Rent, Housing Unit Size, & Housing Density



Source: State Department of Commerce's Housing Memorandum: Issues Affecting Housing Availability and Affordability (June 2019, p. 85)

Provided there is sufficient data, it is assumed that achieved densities generally reflect construction types that are supported by the market.

However, there are cases where development costs can delay or prevent development and impact the land supply during the planning period. Such cases include:

- **Large Planned Developments.** Large planned developments may have extended buildout periods. Developers may choose to delay portions of such developments that require internal infrastructure investments until earlier phases have been sold and more capital is available.
- **Private Share of Public Infrastructure.** Private infrastructure contributions, including impact fees, increase the cost of development and can limit feasibility in communities with weaker demand for real estate. At the same time, impact fees help provide certainty to new development that adequate infrastructure will be developed. Further, improved infrastructure should increase the property's value over time.
- **Condominium Liability Costs.** In recent decades, condominium developers in Washington State typically incurred higher liability insurance costs compared to other types of development due to the Washington Condominium Act. These insurance costs did not vary widely with the price level. As a result, this was considered one of the most significant reasons why there was a lack of condominium development in Washington, and why the condominiums that have been built are mostly high end. Senate Bill 5334, passed in 2019, has increased the standard for warrantable defects and protects condo association board members from personal liability. This legislation may resolve market barriers to condominium development, but it is still early to assess its full impact. Further, this issue is not likely significant for the market factor in Whatcom County. There is currently strong investor demand for rented apartments and other types of housing. As a result, condominium liability may not impact overall housing unit production if local economics still support other types of housing development. This dynamic could impact the local housing tenure composition, which could diverge from planning assumptions and community needs.
- **Land Development "Inefficiencies".** Local land use regulations, such as tree retention requirements and subdivision limitations on partially developed parcels, can impact the development capacity of a property. Limiting development capacity will in turn limit the financial return possible on the property.

Many of these factors will have a case-by-case impact on specific parcels, rather than being broadly applicable in a market factor. The impact of development costs could be incorporated into jurisdictions' review of their buildable land inventory.

3. *Timelines to permit and develop land*

Development timelines should impact assumptions about when future land capacity will be "unlocked" by new infrastructure. When new infrastructure investments will make development more feasible, the analysis should apply a reasonable lag time to reflect when units will be developed. Master planned developments may have a higher market factor to account for build-out that would occur beyond the 20-year planning period.

Regarding timelines to permit and develop land, the State's *Buildable Lands Guidelines* (2018) indicate:

> This issue is suggested by E2SSB 5254 as potentially requiring Market Supply Factor derivation guidance. However, upon review, for the most part, the issue was found not to have a direct influence on property owner decision to sell or (re)develop land during a 20-year planning period. The issue is, however, potentially significant for discussion of reasonable measures, determining what adjustments might need to be made by the planning agency.
>
> The sole exception would likely be extended timelines for developing large master-planned communities. Over a twenty-year period, several economic cycles may occur that can either accelerate build-out pace or slow it. Therefore, even though a master-planned community development plan includes all portions of future build-out, market forces, financial markets, and both private and public infrastructure costs may deem portions of such a project to not feasibly be built within 20 years. Market Supply Factor deduction for build-out of such projects beyond 20 years would be appropriate (p. 56).

4. *Market availability of land*

One component of market availability is owners' willingness to sell. The State's *Buildable Lands Guidelines* suggest that the following methods may be considered in evaluating the market availability of land:

- Property owner surveys;
- Property owner interviews;
- Advisory committee input;
- Real Estate – Residential and Commercial/Industrial expert input (brokerages, appraisers, etc.); and/or

- Review of County Assessor data to identify property ownership patterns and sales activity (p. 56).

5. *The nexus between proposed densities, economic conditions needed to achieve those densities, and the impact to housing affordability for home ownership and rental housing*

   The State's *Buildable Lands Guidelines* (2018) address this issue by indicating:

   > Although cited in E2SSB 5254 as an issue to study as it may affect Market Supply Factor guidance, this issue was determined to be more appropriate to consideration of Reasonable Measures for dealing with inconsistencies between planned capacity at varying densities and the extent to which such planned capacity may not be economically delivered. The issue is far less of a direct influence on property owner willingness to sell land for development or redevelopment (p. 58).

   Suggested reasonable measures from the State's *Buildable Lands Guidelines* address housing affordability in a variety of ways. Jurisdictions required to adopt and implement reasonable measures will consider these measures.

6. *Market demand when evaluating if land is suitable for development or redevelopment*

   The State's *Buildable Lands Guidelines* (2018) address market demand by indicating:

   > . . . this issue was determined to be more appropriate to consideration of Reasonable Measures for dealing with inconsistencies between planned capacity at varying densities and the extent to which such planned capacity may not be economically delivered due to appropriate market demand. The issue is far less of a direct influence on property owner willingness and legal/financial decision-making to sell land for development or redevelopment (p. 58).

IV. Local Data Availability

Geospatial Parcel Data

In April 2021, Whatcom County GIS updated its database for parcels in UGAs classified as vacant, partially used, and underutilized (referred to as "developable parcels", when combined).

The parcel data includes the following key attributes for analysis:

- Assessor's parcel # and address
- Owner and owner's mailing address
- Zoning designation
- Current use
- Existing single-family and multi-family housing units
- Existing commercial and industrial building square feet
- Assessed value of land and improvements
- Jurisdiction

Property Sale Data

The Whatcom County Assessor's office has a robust database of property sales. The system was converted to a computerized system in 2010, and the data quality is best following that year. The database includes many attributes, but has several important limitations:

- Parcels change over time (e.g. by land divisions), and sale records may be attached to multiple parcels. When new parcels are created, data on previous sales related to old parcels is not transferred to the new parcel.
- The database is better oriented towards providing up-to-date information rather than looking backward.
- The Assessor's office does not always have the most up-to-date or most detailed data on current property uses. Land use codes in the system are tied to those prescribed by statute and the department of revenue for property taxes.
- It is important to consider the timing of the assessment relative to construction dates. When the assessment takes place before a structure is built, the assessed value of that property may be reflecting its previous use or vacant state.

As a result of all these limitations, data cleaning is a major consideration for any analysis involving the Assessor's property sale data. However, the Assessor's data available are extensive and include the following attributes:

- Assessor's parcel # and address
- Zoning designation
- Sale year
- Value of land and improvements at sale year and current year
- Sale price
- Deed type
- Land use code at sale year and current year
- Seller & Buyer names

Real Estate Market Reports

Data on rents and sale prices for some of Whatcom County's cities is available from commercial sources including Whatcom Prospector, CoStar, Redfin, and Zillow. However, these sources have limited coverage for cities other than Bellingham. Continued partnership with local real estate experts is likely the best strategy for understanding Whatcom County's other communities in more detail.

V. Analysis Methods

Each jurisdiction will use the following approach to develop the market factors for vacant, partially-used, and under-utilized property in cities and UGAs:

1. Start with the default market factors in the *Whatcom County Review and Evaluation Program Methodology* (15% for vacant land and 25% for partially used and under-utilized land).

2. *Analyze Properties Without Transaction History* – Utilize State *Buildable Lands Guidelines* "Example # 2" (pp. 59-60) to inform the market factor discussion.

3. *Analyze Converted/Developed Properties* – Utilize State *Buildable Lands Guidelines* "Example # 3" (p. 60) to inform the market factor discussion.

4. *Conduct a Property Owner Survey* –Mail out a cover letter with an associated questionnaire to inform the market factor discussion.

5. *Interview Selected Land Owners* – Some cities and/or UGAs have property owners that own relatively large blocks of developable land. The jurisdictions have discretion to reach out to these property owners to inform the process.

6. Consider other relevant information, if deemed appropriate, in setting market factors. Any such factors will be clearly documented by the jurisdiction.

7. Determine whether to use the default market factors or adjust these factors based upon a review of steps 2-6 above. The final overall average market factor for a UGA should not exceed 25%, except where the jurisdiction has well-documented support for why a larger market factor is appropriate.

A 20-year time frame will be used for the analyses, as the planning period is 20-years.

Property Owner Survey

The property owner survey is useful in assessing owners' willingness to sell or develop their land. It does not assess the market's appetite to purchase and develop this land. Analytical Examples # 2 and # 3, as detailed in the State *Buildable Lands Guidelines* (and p. 8 of this document), could help provide additional data specific to market support. The portion of survey respondents indicating that their parcel is unlikely or very unlikely to develop in the 20-year period may be used, along with other data, to inform development of the market factor.

The County and cities, with the assistance of Pacific Market Research, surveyed owners of developable parcels to understand if their properties are likely to contribute to land capacity during the 20-year planning period. The following survey methods were used.

Survey

Data Required

- Identified developable properties (vacant, underutilized, and partially-used)
- Property owner mailing addresses for identified properties

Survey Methods

The survey was distributed to owners of vacant, partially-used, and underutilized property in cities and UGAs in the following zoning or future comprehensive plan land use designations:

- Single Family Residential
- Multifamily Residential
- Commercial/Industrial

The survey was sent to all owners of vacant, partially used, and underutilized land in cities and UGAs except for vacant single family residential lots that cannot be further subdivided (i.e. parcel size is less than two times the minimum lot size). It is assumed that vacant single family lots, such as those in a subdivision, would have a low market factor because they are likely to develop within the 20-year planning period.

The vendor, Pacific Market Research, mailed the cover letter and survey to identified participants in May/June 2020.

Cover Letter

The cover letter to property owners is attached.

Survey Questions

The survey questions are attached.

Compiling Survey Results

A total of 4,855 surveys were sent out to land owners. An online survey would have avoided transcription labor, but presents challenges to ensure the parcel in question is recorded accurately and to avoid duplicate responses per parcel. Therefore, the vendor mailed the survey and compiled the results. The survey response rate is shown in **Exhibit 9**.

Exhibit 9. Property Owner Survey Response Rate, 2020

Completed Surveys Returned	Total Mailed	Returned Undeliverable	Total Delivered	Response Rate
1,715	**4,855**	**112**	**4,743**	**36%**

Survey responses were compiled in two reports.

- The first report, entitled *Whatcom County Property Owners Survey* (September 2020), compiled overall results and individual UGA results for how likely or unlikely property is to develop over the next 20 years. It also summarizes the reasons why property is likely or unlikely to develop over a 20-year period.
- The second report is a spreadsheet entitled *Whatcom County Property Owners Survey Data and Codebook* (September 2020). This spreadsheet provides more detail relating to the reasons that property is likely or unlikely to develop over the next 20 years. These reasons were either checked by the property owner from a menu of potential reasons provided on the survey or written in by the property owner. This report "codes" the checked responses and the written responses so they could be grouped and counted with other similar responses (in the first report, cited above). It also provides verbatim written responses to survey questions.

To help facilitate data entry, the Assessor's parcel number, address, and other relevant information was included on the survey and the property owner letter. This allowed matching results to specific parcels.

Analyzing Survey Results

Survey results were cross-tabulated, with analysis specific to the following topic areas:

- Total respondents
- Development Status Category (Vacant, partially-used, or under-utilized)
- Land Use Category (Commercial/Industrial, Single Family, Multifamily)
- Property location (Specific UGA)
- Unlikely and Very Unlikely to Develop
- Likely and Very Likely to Develop
- Unsure respondents

Exhibit 10 provides the overall survey results, aggregating all 1,715 responses from property owners within the 10 UGAs. This data and similar results compiled by individual UGA are included in the report entitled *Whatcom County Property Owners Survey* (September 2020). When interpreting this information, it is important to keep in mind that vacant single family residential lots that cannot be further subdivided (i.e. parcel size is less than two times the minimum lot size) were not included in the

survey. It was assumed that vacant single family lots, such as those in a subdivision, would have a low market factor because they are likely to develop within the 20-year planning period. For purposes of the buildable lands analysis, the City/County Planner Group is using a 5% to 10% market factor, selected at the discretion of the individual jurisdiction, for vacant single family residential lots that cannot be subdivided further.

Exhibit 10. Whatcom County Property Owner Survey – Overall Results

	Likelihood of Development in the Next 20 Years			
	Unlikely/Very Unlikely	Unsure/NA	Likely/Very Likely	Total Responses
All Respondents-Total	655	143	917	1715
	38.2%	8.3%	53.5%	100.0%
Single Family All	371	72	436	879
	42.2%	8.2%	49.6%	100.0%
Vacant	98	28	223	349
	28.1%	8.0%	63.9%	100.0%
Partially Used	273	44	213	530
	51.5%	8.3%	40.2%	100.0%
Multifamily All	111	21	142	274
	40.5%	7.7%	51.8%	100.0%
Vacant	45	10	65	120
	37.5%	8.3%	54.2%	100.0%
Partially Used	9	3	17	29
	31.0%	10.3%	58.6%	100.0%
Underutilized	57	8	60	125
	45.6%	6.4%	48.0%	100.0%
Commercial/ Industrial All	173	50	339	562
	30.8%	8.9%	60.3%	100.0%
Vacant	76	19	202	297
	25.6%	6.4%	68.0%	100.0%
Partially Used	24	3	22	49
	49.0%	6.1%	44.9%	100.0%
Underutilized	73	28	115	216
	33.8%	13.0%	53.2%	100.0%

An analysis was conducted blending the "unlikely/very unlikely" results for vacant single family lots from the survey (that can be further subdivided) with an assumed 5% market factor for the vacant single family residential lots that cannot be further subdivided (October 14, 2020 e-mail). The County sent out the following to the City/County Group (October 15, 2020 e-mail):

- A spreadsheet using the blended analysis method with a 5% deduction (market factor) for vacant single family land that cannot be divided further; and
- A spreadsheet using the blended analysis method with a 10% deduction (market factor) for vacant single family land that cannot be divided further

Using a 5% market factor for vacant single family land that is not subdividable, the blended overall market factor for vacant single family land would be 18.4% (countywide). Using a 10% market factor for vacant single family land that is not subdividable, the blended overall market factor for vacant single family land would be 18.8% (countywide). These countywide figures may be considered by individual jurisdictions as they select market factors for vacant single family land in their communities.

Direct Outreach with Property Owners

In several UGAs, significant shares of developable parcels are held by a small number of property owners. The County and cities identified property owners whose development decisions will have an outsize impact on UGAs' growth potential. The consultant, Community Attributes, reached out to these property owners to discuss the property owner's development plans. The results of these conversations, which are documented in a memo entitled "Findings From Landowner Interviews" (Community Attributes, February 3, 2021) may alter other assumptions for the development potential of those properties.

Setting the Market Factors

The seven steps in the Analysis Method (p. 74) will be used to develop market factors. Separate market factors should be developed for each UGA, land use category and development status (e.g. vacant and partially-used/ under-utilized).

WHATCOM COUNTY
Planning & Development Services
5280 Northwest Drive
Bellingham, WA 98226-9097
360-778-5900, TTY 800-833-6384
360-778-5901 Fax

Mark Personius, AICP
Director

Physical Property Location
Parcel Jurisdiction:
Address
City, State Zip
Parcel #:
Land Use Category:
Development Status:

Whatcom County Property Owner
Mailing Address
City, State, Zip

Dear Whatcom County Property Owner,

Whatcom County and the cities are working together to estimate where new population and employment growth is likely to occur during the next 20 years. To support that work, the County and the cities are trying to determine the capability and likelihood of the county's existing land supply (undeveloped or partially developed) to accommodate additional growth. This information will help the County and cities better plan for future growth.

As part of this process, county and city planners would like to learn about property owner preferences. On the other side of this letter is a short survey asking how likely you believe your property (indicated at the top of this page) is to develop over the next 20 years and related questions. *Your responses will be combined with responses from other property owners. They will not be used by the County or cities for any specific zoning or project decisions concerning your property, and will not be used by the County Assessor to determine your property valuation or taxes.*

Please return the survey in the enclosed postage-paid envelope within the next two weeks. If you own more than one parcel, you may receive an additional survey for each property. Please return each survey with your responses for each individual property. Your responses will be used to improve estimates of when and where growth is likely to occur.

For more information, please visit http://whatcomcounty.us/3052/Review-Evaluation-Program-Buildable-Land . County and city planner contact information is available on this website. If you have any questions about the survey, please contact the County or city planner for your jurisdiction.

Sincerely,

Mark Personius
Whatcom County Planning & Development Services Director

1. In your estimation, how likely is it that this property will be available for new development within the next 20 years?

    - ☐ Very likely
    - ☐ Likely
    - ☐ Unlikely
    - ☐ Very unlikely
    - ☐ Unsure (Please explain):

      _____

2. If applicable, what reasons make it "unlikely" or "very unlikely" that this property will be available for new development? (Check all that may apply)

    - ☐ I do not want to sell the property
    - ☐ There is no room on this property for additional development
    - ☐ Property values are too low or financing is not available
    - ☐ Fees, such as impact fees or sewer hookup fees, are too high
    - ☐ Development and infrastructure costs are too high
    - ☐ The property lacks sewer, septic, water, or other utilities
    - ☐ There is no access to the property (it lacks a driveway or right-of-way)
    - ☐ Environmental constraints, such as wetlands or steep slopes, limit development
    - ☐ An easement or covenant restricts development
    - ☐ I value the privacy and open space the property provides
    - ☐ Other (please describe):

      _____

3. If applicable, what reasons make it "likely" or "very likely" that this property will be available for new development?

    - ☐ I plan to sell the property to a developer
    - ☐ Developers or realtors have expressed interest in the property
    - ☐ I plan to sell the property for retirement
    - ☐ I plan to divide and distribute property to heirs
    - ☐ I would like to build a rental unit
    - ☐ I would like to build additional housing
    - ☐ I would like to develop commercial or industrial uses
    - ☐ Other (please describe):

      _____

4. Please describe any thoughts you have about developing this property over the next 20 years:

APPENDIX C. GIS DATA

Bellingham

Countywide tax parcel boundaries are maintained by Whatcom County Assessor and City of Bellingham. Accuracy codes for linework are assigned for all of Bellingham and its unincorporated UGA – about 63% of linework is "high" accuracy or +/- 1 foot, about 25% is "medium-high" or +/- 5 feet, about 6% is "medium-low" or +/- 10 feet, the remaining 6% is either "low" or "unknown" accuracy. Zoning boundaries are primarily tied to parcel boundaries and reflect their accuracy levels. For Bellingham, utility infrastructure layers (water, sewer, storm) mains and connected facilities are mapped with GPS and are generally accurate to better than 1-foot accuracy. All mapped wetland delineations are digitized from wetland consultant reports or records of survey. Wetland recon surveys are of varying accuracy and typically relate to specific year's aerial imagery. Accuracy can vary +/- 1 foot to _+/- 10 feet with respect to imagery. Just as important for wetland data is the age of the survey – as time passes drainage patterns change. Generally wetland delineations and recon surveys that are 10+ years old should be treated as approximate boundaries at best (Federal NWI wetland data which is 40+ years old and originated with 1:24,000 scale mapping will not be used by Bellingham for Buildable Lands or Land Capacity Analysis work going forward. Slope delineations are based on 2013 LiDAR terrain data which is vertically accurate to +/- 5cm in non-forested areas and +/- 14cm in forested areas. Shoreline and stream data for Bellingham are based on Aerial, LiDAR, and storm utility data and are generally accurate to +/- 3 feet.

Small Cities and Whatcom County

GIS data for zoning is considered accurate across the jurisdictions. The utility infrastructure and environmental layers for the small cities and Whatcom County are of varying levels of accuracy.

Critical area regulations are based on site-specific analysis, often conducted when an application is submitted. GIS wetland layers have a variety of sources with varying degrees of accuracy. Under the Methodology, jurisdictions would identify and map infrastructure gaps.