

Buildable Lands Report 2022

Whatcom County Review and Evaluation
Program

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ACKNOWLEDGEMENTS

Project Manager

- Matt Aamot, Whatcom County

Technical Committee

- Greg Aucutt, City of Bellingham
- Chris Behee, City of Bellingham
- Jori Burnett, City of Ferndale (former member)
- Michael, Cerbone, City of Ferndale
- Heidi Gudde, City of Lynden
- Eric Guida, Washington State Department of Commerce (former member)
- Rollin Harper, Cities of Everson, Nooksack, and Sumas
- Haylie Miller, City of Ferndale (former member)
- Mark Personius, Whatcom County
- Stacie Pratschner, City of Blaine
- Valerie Smith, Washington State Department of Commerce
- Dave Timmer, City of Lynden
- Jennifer Noveck, Port of Bellingham

Consultant Team

Community Attributes, Inc.

- Cassie Byerly
- Kristina Gallant, AICP
- Tyler Coyle
- Michaela Jellicoe
- Bryan Lobel
- Chris Mefford
- Ethan Schmidt
- Elliot Weiss, AICP

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EXECUTIVE SUMMARY

The *Whatcom County Buildable Lands Report 2022* is the first report completed by the County and cities consistent with the requirements of the Review and Evaluation Program within Washington State's Growth Management Act (*RCW 36.70A.215*). The purpose of this report is to assess how recent development in the cities and urban growth areas (UGAs) has compared with planning assumptions, targets, and objectives in adopted Countywide Planning Policies and comprehensive plans, and whether there are inconsistencies for the County and cities to address. The report assesses how much land is available to serve future growth, and whether it is sufficient to accommodate expected growth. Finally, the report provides basic information relating to development on rural and resource lands (areas outside UGAs).

Population & Employment Growth

From 2016-2021, new residential construction in Whatcom County and the cities accommodated an estimated 24% of the projected 20-year population growth for the planning period (2016 through 2036). The County and cities will need to accommodate another 46,069 persons for the remaining period 2021 through 2036. From 2016 to 2021, new commercial and industrial construction in Whatcom County and the cities accommodated an estimated 17% of the projected employment growth for the 20-year planning period, and will need to accommodate another 26,640 jobs by 2036.

- Whatcom County contains 10 urban growth areas (UGAs). Seven UGAs represent future annexation areas for corresponding incorporated cities. Three are standalone UGAs, not associated with a city.
- Whatcom County is projected to have 275,450 residents and 120,284 employees by 2036 with projected growth allocations of 60,565 for population and 32,219 for employment between 2016 and 2036.
- New construction in Whatcom County and the cities accommodated an estimated 14,496 people (84% within UGAs) and 5,539 employees (94% within UGAs) from 2016-2021.
- Whatcom County has an estimated 46,069 population growth and 26,640 employment growth remaining to accommodate between 2021 and 2036.

Development Activity

From 2016-2021, Whatcom County and the cities permitted 6,729 new housing units, averaging 1,346 per year. This average will need to increase to accommodate remaining projected population growth. Achieved densities in incorporated city UGA areas are exceeding planned densities, while achieved

commercial and industrial densities are lagging in some areas. The Jurisdiction Profiles section of this report contains UGA-level details on achieved densities for the period 2016-2021.

- Whatcom County and the cities permitted a total of 6,729 housing units countywide between 2016 and 2021 (84% within the UGAs, 16% outside the UGAs).
- On average countywide, the number of net new housing units permitted and built was 1,346 per year from 2016-2021. The jurisdictions will need to increase the average annual housing production to 1,474 units per year from 2021-2036 to accommodate remaining projected population growth.
- Densities ranging from 4.4 to 11.5 dwelling units per acre were achieved for residential uses in incorporated areas and one dwelling unit per 3.7 acres for Non-UGA areas.
- Achieved residential densities in cities exceeded planned densities, while three unincorporated city UGAs had achieved densities that were lower than ultimate planned densities (as city water and sewer are typically not extended to new development outside city limits). Achieved commercial and industrial densities are lagging planned densities in several small cities.
- For non-city UGAs, residential development in the Columbia Valley UGA exceeded the planned density while residential development in the Birch Bay UGA did not.

Land Suitable for Development

For the inaugural Review and Evaluation Period, it is estimated that Whatcom County UGAs have over 6,102 acres of net developable (vacant, partially-used, and underutilized) land to accommodate remaining projected population and employment growth from 2021-2036. The Jurisdiction Profiles section of this report contains UGA-level details on developable land and deductions. Appendices A through C document annexations, UGA changes, and zoning map changes for the period 2016-2021.

- Whatcom County UGAs, which include cities, have estimated net land capacity for remaining population growth of 73,075 for the remainder of the 20-year planning period from 2021 to 2036, indicating an estimated population capacity surplus of 34,385.
- Whatcom County UGAs, which include cities, have estimated net land capacity for remaining employment growth of 41,057 for the remainder of the 20-year planning period from 2021 to 2036, indicating an estimated employment capacity surplus of 16,841.

Inconsistencies and Reasonable Measures

On a county-wide basis, surplus capacity exists to accommodate both remaining projected population and employment growth for the rest of the 20-year planning period through 2036. In addition, planned residential densities in the cities are being achieved.

When planned densities are not being achieved, there is not sufficient capacity to accommodate remaining projected population or employment growth, or development patterns are not occurring as planned, Whatcom County and the cities will work together to determine if reasonable measures are necessary to address the issue, with the jurisdiction making the final decision on reasonable measures.

A list of potential reasonable measures that jurisdictions may consider, if needed, are documented in the *Whatcom County Review and Evaluation Program Methodology (February 10, 2022), Appendix A*. The Jurisdiction Profiles address whether reasonable measures may be needed for individual UGAs.

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 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, the State calls on the jurisdictions to implement “reasonable measures” in the next comprehensive plan updates to maintain consistency with GMA requirements (*RCW 36.70A.215(1)*). Under the GMA, the deadline for the next comprehensive plan updates is June 30, 2025.

The GMA’s Review and Evaluation 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, when the State Legislature passed Engrossed Second Substitute Bill (E2SSB) 5254. As part of this revision, Whatcom County was added as the seventh Buildable Lands county.

The *Buildable Lands Report 2022* is the County and cities first report responding to the review and evaluation requirements of GMA. The report reviews development data from 2016-2021, and evaluates capacity to serve remaining growth through 2036, the planning horizon from the most recently adopted comprehensive plan.

The report summarizes development data at the city, UGA and County level to answer the following questions:

- What is the actual density and type of housing (single family and multifamily) that has been built in Whatcom County’s UGAs? Approximately how much population does it support? Are urban densities being achieved?
- How much land has been developed for commercial and industrial uses? Approximately how much employment does it support?
- How does this development activity compare with growth and development assumptions, targets, and objectives in the comprehensive plans?
- How much population and employment growth remains to be accommodated by 2036? Is there sufficient land and densities in UGAs to accommodate planned growth?

Whatcom County and the cities have updated the inventory of vacant, partially-used, and underutilized land in accordance with the *Whatcom County Review and Evaluation Program Methodology*. This is the supply of land available to serve future growth. Using recent achieved densities and other data as a guide, the report estimates how much population and employment this land can support. This analysis is used to answer the following question: is there enough suitable land to accommodate population and employment growth through 2036?

Where inconsistencies are identified, the report will discuss whether “reasonable measures” may be needed to address inconsistencies in the upcoming comprehensive plan update cycle. Ultimately, the County and each city will individually determine whether reasonable measures are required for their jurisdiction.

Methods

The methods for this analysis were developed based on the Department of Commerce’s 2018 *Buildable Lands Guidelines* and the *Whatcom County Review and Evaluation Program Methodology*. A technical committee with representatives of the County and each city (City/County Planner Group) met regularly to discuss and establish key elements of the program. Program methods are summarized in the “Methods” section, with full detail provided in the *Whatcom County Review and Evaluation Program Methodology*.

Organization of Report

This report is organized into the following sections:

- **Policy Framework.** Explains key Whatcom County policies relevant to the program, including Countywide Planning Policies and growth allocations.
- **Methods.** Explains how data was gathered and analyzed for this report, key assumptions, and how these methods were developed.
- **Countywide Findings.** Summarizes the ability of UGAs and other areas to accommodate adopted population and employment allocations through 2036. Seven of the ten UGAs correspond to cities.
- **Jurisdiction Profiles.** Provides detailed findings for recent development activity and land suitable for development at the UGA and zoning designation level.

POLICY FRAMEWORK

Countywide Planning Policies

The County and cities worked together to develop Countywide Planning Policies to establish and guide the Review and Evaluation Program, as required by RCW 36.70A.215. In summary, Countywide Planning Policies Q.1 - Q.8:

- Indicate that the County and cities will cooperate to implement and maintain the Review and Evaluation Program;
- Set forth the purposes of the program;
- Address the Review and Evaluation Program Methodology; and
- Indicate that the County and cities will prepare a Buildable Lands Report, collect and analyze development data, and discuss potential reasonable measures if there are inconsistencies between actual development patterns and assumptions contained in the County or city comprehensive plans.

The County and cities also developed Countywide Planning Policies R.1 – R.4 relating to Dispute Resolution Procedures.

Population and Employment Growth Allocations

A key outcome of the Review and Evaluation Program is estimating population and employment growth and determining if population and employment capacity are consistent with adopted growth targets. Whatcom County has adopted population projections by UGA and for areas outside of UGAs (Non-UGAs) through 2036 in the *Whatcom County Comprehensive Plan, Chapter 1 (page 1-7)*. Total Whatcom County population is projected at 275,450 by 2036. The Comprehensive Plan also adopts employment projections for 2036 (page 1-8), totaling 120,284 by 2036.

For the purposes of the Review and Evaluation Program analysis, population and employment growth projections have been pro-rated to the 2016-2036 timeframe to fit the Review and Evaluation period (**Exhibit 1** and **Exhibit 2**).

Population and employment growth estimates for 2016-2021 are subtracted from total projected growth by UGA for 2016-2036 to estimate the remaining population and employment growth to be accommodated during the review period (2021-2036). This remaining growth to be accommodated is then compared to estimated population and employment capacity to understand if there are sufficient land and densities to accommodate planned growth.

**Exhibit 1. Whatcom County Comprehensive Plan Population (2013-2036)
and Pro-Rated Population Growth (2016-2036)**

UGA	2013 Population	2036 Population Allocation	2016-2036 Population Growth
Bellingham	92,660	123,710	27,000
Birch Bay	7,540	12,822	4,593
Blaine	5,171	9,585	3,838
Columbia Valley	3,103	4,448	1,170
Everson	2,665	3,907	1,080
Ferndale	12,758	19,591	5,942
Lynden	12,872	19,275	5,568
Nooksack	1,435	2,425	861
Sumas	1,449	2,323	760
UGA Total	139,696	198,129	50,811
Non-UGA	66,104	77,321	9,754
County Total	205,800	275,450	60,565

*Sources: Whatcom County Comprehensive Plan (Chapter 1, page 1-7); Whatcom County, 2021.
Notes: The Cherry Point UGA is excluded from this table as no population growth is projected for the UGA.*

**Exhibit 2. Whatcom County Comprehensive Plan Employment (2013-2036)
and Pro-Rated Employment Growth (2016-2036)**

UGA	2013 Employment	2036 Employment Allocation	2016-2036 Employment Growth
Bellingham	52,359	75,000	19,688
Birch Bay	595	1,140	474
Blaine	3,062	5,159	1,823
Cherry Point	1,993	2,883	774
Columbia Valley	85	444	312
Everson	710	1,312	523
Ferndale	5,372	9,372	3,478
Lynden	4,946	7,103	1,876
Nooksack	254	369	100
Sumas	700	1,145	387
UGA Total	70,076	103,927	29,436
Non-UGA	13,156	16,357	2,783
County Total	83,232	120,284	32,219

Sources: Whatcom County Comprehensive Plan (Chapter 1, page 1-8); Whatcom County, 2021.

METHODS

This section summarizes the principal methods, data sources, and key assumptions developed for Whatcom County's *Buildable Lands Report 2022*. The complete methodology is documented in the *Whatcom County Review and Evaluation Program Methodology*.

Data Sources

Whatcom County and the cities collected key data on development in their jurisdiction between 2016 and 2021. Each jurisdiction submitted data and analysis to Whatcom County, who facilitated the overall Buildable Lands process. Whatcom County gathered data for unincorporated UGAs and Non-UGAs (rural areas and resource lands). Jurisdictions collected the following data for this Review and Evaluation Program:

1. **Development activity**, sourced primarily from city and County building permitting and platting data.
2. **Land use and zoning changes**, from local ordinances relating to annexations, changes to UGAs and zoning map changes.
3. **Changes to development and environmental regulations**, from city and County ordinances relating to zoning, development codes and critical areas regulation.
4. **Parcel data**, from County Assessor's real property and parcel files and related extracts, to tabulate and classify types of land available for future development.
5. **Other documentation**, such as changes to planned capital facilities and any adopted reasonable measures that could impact land capacity.

Data Collection and Evaluation (2016-2021)

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). The County and cities entered data into spreadsheet-based Data Reporting Tools for each jurisdiction to capture all required data between April 1, 2016 and March 31, 2021. City data is maintained separately from unincorporated UGA data as building permit records for unincorporated UGAs are maintained and administered by the County and urban development is not generally anticipated to occur in unincorporated city UGAs until they are annexed.

The Data Reporting Tools facilitate the collection, organization, and analysis of permitting, platting, and other data from each city and the County. The data are used to calculate and compare actual achieved densities for the reporting period (2016-2021) with planned densities. The Data Reporting

Tools estimate population and employment growth between 2016- 2021 and estimate population and employment growth for the remainder of the 20-year planning period of the current County Comprehensive Plan (2021-2036).

In looking forward to subsequent updates, additional information on planned future capital facilities, regulatory updates, and any previously adopted reasonable measures will be collected to facilitate tracking by the County and cities. Countywide annexations, UGA changes, and zoning map changes are also inventoried for the reporting period (**Appendix A through C**). Data should be collected annually for subsequent Review and Evaluation Periods.

Review and Evaluation of Land Suitable for Development (2021-2036)

The GMA requires Whatcom County and cities to identify land suitable for development or redevelopment and determine whether there is sufficient suitable land to accommodate future growth. This section outlines the steps and methods used to complete this Buildable Lands analysis. The basic steps for cities and UGAs are as follows:

1. **Review Assumptions and Achieved Densities**
2. **Assemble Net Developable Land Inventory**
3. **Estimate Population and Employment Capacity**
4. **Evaluate Land Capacity Sufficiency**

The County and cities entered data and assumptions into spreadsheet-based Suitable Land Tools for each UGA to estimate population and employment capacity, compare that capacity to growth allocations, and evaluate whether land capacity is sufficient to accommodate growth over the remaining portion of the planning period (2021-2036).

If the analysis identifies shortfalls in land capacity, or if recent development has diverged from planning assumptions, targets, and objectives there is an additional requirement to determine if **reasonable measures** are required to improve consistency.

Review Assumptions and Achieved Densities

Several key components of the Buildable Lands analysis rely on developing assumptions and calculating the achieved net density of new residential, commercial, and industrial development in cities and UGAs during the reporting period (2016-2021). Two primary steps in the process are:

- Developing assumptions for occupancy rates and average household sizes (for residential development) and occupancy and square feet per employee rates (for commercial / industrial development).

- Determining achieved densities for residential, commercial, and industrial development completed during the reporting period.

Three technical memos developed for Whatcom County’s Review and Evaluation Program document methods used to determine the assumptions used in the analysis. *Technical Memo Comparing Whatcom County Occupancy and Persons Per Household Rates by Housing Type and Owner/Renter Tenure* (City of Bellingham, February 2022) examines the differences between occupancy and persons per household rates for single family and multifamily housing types and for renter-occupied and owner-occupied households. *Whatcom County Review and Evaluation Program Birch Bay Occupancy & Persons per Household Rates* (CAI, June 29, 2021) provides alternative assumptions for the Birch Bay UGA. The City of Bellingham developed a *Technical Memo Estimating Square Feet Per Job for Commercial and Industrial Lands in Whatcom County* (October 20, 2020) that evaluates local space utilization patterns for all UGAs throughout the County. Resulting figures 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. Based on this analysis, each city and Whatcom County selected the appropriate assumed square feet per employee for commercial and industrial development types. **Exhibit 3** summarizes the assumptions by development type and jurisdiction.

Exhibit 3. Commercial and Industrial Employment Density Estimates in Square Feet per Employee

UGA	Commercial	Industrial
Bellingham	440	660
Birch Bay	532	812
Blaine	531	739
Cherry Point	205	1,779
Columbia Valley	532	812
Everson	800	1,501
Ferndale	580	1,129
Lynden	721	1,037
Nooksack	605	795
Sumas	669	890

Source: Technical Memo Estimating Square Feet Per Job for Commercial and Industrial Lands in Whatcom County, City of Bellingham, October 20, 2020. Whatcom County and cities’ Suitable Land Tools.

Once population and employment assumptions have been selected, the next step is to determine the actual density of residential and employment development that occurred during the reporting period (2016-2021) in terms of dwelling units per net acre for residential development and floor area ratios (FAR) for commercial and industrial development. Later, achieved net density data and other planning assumptions are used to convert developable land into future population and employment capacity for UGAs in the Suitable Land Tools.

Assemble Net Developable Land Inventory

The Net Developable Land Inventory for UGAs consists of all land which, as of April 1, 2021, was considered **vacant, partially-used, or underutilized** and which is expected to be available for development and served by infrastructure during the current planning period. **Exhibit 4** details the criteria underlying each of these categories.

Exhibit 4. 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 be 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 > 93 rd 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

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. . .” (page 34).

Category	Parcel Zoning	Criteria for Classification
		Jurisdictions can identify existing development, such as gas stations or uses that preclude significant development on the site, 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.

The net developable land inventory process for the Review and Evaluation Period included the following steps, described in greater detail in the *Whatcom County Review and Evaluation Program Methodology*:

- **Compile Gross Developable Land Inventory:** Identify parcels zoned for residential and employment development which are considered vacant, partially-used, or underutilized.
- **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 reduce or prevent urban density development on vacant, partially-used, and underutilized lands over the remainder of the planning period. Remove land not likely to be served with the capital facilities needed to support urban density development.
- **Deduct Land for Future Infrastructure and Quasi-Public Uses:** Apply percentage reductions to deduct assumed portions of developable land that will be dedicated to future infrastructure and quasi-public

uses. Future infrastructure deductions are informed by the analysis of 2016-2021 permit data for each jurisdiction.

- **Deduct Market Factor:** Apply a reasonable market factor to account for lands that are not likely to be available for development because of landowner preferences or other reasons not accounted in the previous deduction steps. For the Review and Evaluation Period, Whatcom County and the cities have developed a framework, documented in the *Whatcom County Review and Evaluation Program Methodology* to guide development of suitable market factors specific to the UGAs and land uses by development status. Market factors applied by development type and parcel status, as well as the overall average market factor for each UGA are presented in **Exhibit 5**.

Exhibit 5. Market Factors by UGA, Land Use Category, and Development Status

UGA	Single Family			Multifamily			Commercial			Industrial			Combined
	Vacant	PU	UU	Vacant	PU	UU	Vacant	PU	UU	Vacant	PU	UU	
Bellingham	22%	26%	30%	20%	25%	30%	20%	25%	30%	20%	25%	30%	24%
Birch Bay	17%	27%	27%	15%	27%	27%	17%	27%	27%	N/A	N/A	N/A	20%
Blaine	15%	25%	25%	15%	25%	25%	15%	25%	25%	15%	25%	25%	19%
Cherry Point	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	23%	33%	33%	23%
Columbia Valley	24%	30%	N/A	24%	N/A	30%	24%	N/A	30%	24%	N/A	N/A	24%
Everson	15%	25%	N/A	15%	25%	N/A	15%	25%	25%	15%	25%	25%	19%
Ferndale	15%	25%	25%	15%	25%	25%	15%	25%	25%	15%	25%	25%	20%
Lynden	15%	25%	N/A	15%	25%	25%	15%	25%	25%	15%	25%	25%	20%
Nooksack	15%	25%	N/A	N/A	N/A	N/A	15%	25%	25%	15%	N/A	25%	21%
Sumas	15%	25%	N/A	15%	25%	N/A	15%	N/A	25%	15%	25%	25%	19%

Sources: *Whatcom County and Cities’ Suitable Land Tools, 2022*.

Note: PU refers to partially-used land. UU refers to underutilized land. N/A’s indicate a category that has no assumed future development or no developable land capacity within the jurisdiction.

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.

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 *Whatcom County Review and Evaluation Program Methodology*:

- **Determine Assumed Future Densities:** Use achieved densities, when available, as the baseline assumed densities for future

development in the UGA over the remaining portion of the current 20- year planning period.

- **Determine Population Capacity:** Apply residential development assumptions, including assumed density, occupancy rate and persons per household to the residential Net Developable Land Inventory to estimate current capacity for new residential development in UGAs.
- **Determine Employment Capacity:** Apply employment development assumptions, including assumed density (FAR), occupancy rate, and employees per square foot to the commercial and industrial net developable land inventory to estimate current capacity for new commercial and industrial development.

Evaluate Land Capacity Sufficiency

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

COUNTYWIDE FINDINGS

Whatcom County contains ten urban growth areas (UGAs). Seven UGAs represent future annexation areas for corresponding cities and three are standalone, non-city UGAs (Cherry Point, Columbia Valley, and Birch Bay). Whatcom County as a whole is projected to have 275,450 residents and 120,284 employees by 2036. Whatcom County UGAs have projected growth allocations of 50,811 for population and 29,436 for employment between 2016 and 2036 (**Exhibit 1** and **Exhibit 2**).

Based on data collected by the cities and the County in the Data Reporting Tools for building permits that received final approval between April 1, 2016 and April 1, 2021 and occupancy, persons per household and square feet per employee assumptions, new construction in Whatcom County and the cities accommodated an estimated 14,496 people (84% within UGAs) and 5,539 employees (94% within UGAs) in this five year period (**Exhibit 6** and **Exhibit 7**).

The Washington State Office of Financial Management (OFM) estimates that Whatcom County population grew by 13,631 between April 1, 2016 and April 1, 2021. This total would have been higher if not for the COVID 19 pandemic, which resulted in out-of-county higher education students returning home to engage in on-line classes. OFM estimates that changes in housing occupancy rates and household size in existing 2016 housing stock account for 14% of total growth in countywide household population between 2016 and 2021.

The *Buildable Lands Report 2022* uses the 2036 population projections that were adopted in the 2016 city and County comprehensive plans. The estimated growth from building permits, as compiled in the Data Reporting Tools by the cities and the County, is similar to the growth estimated by OFM (2016-2021) as shown below.

	County-wide Population Growth (2016-2021)	County-wide Pro-rated Population Growth (2016-2036)	Growth to Accommodate (2021-2036)
Based on information from the Data Reporting Tools	14,496	60,565	46,069

Based upon OFM estimates	13,631	60,565	46,934
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This Buildable Lands Report uses the population growth estimate (2016-2021) from the Data Reporting Tools, which means that Whatcom County and the cities have an estimated 46,069 more people and 26,640 more employees to accommodate between 2021 and 2036 (**Exhibit 6** and **Exhibit 7**).

For the Review and Evaluation Period of 2016-2021, Whatcom County and the cities permitted a total of 6,729 net new housing units (**Exhibit 8**). Of these, 84% were permitted within the UGAs, and 16% were outside the UGAs. On average, the number of net new housing units permitted and built was 1,346 per year for the County as a whole. With 22,1161 additional housing units needed to accommodate projected population growth from 2021 through 2036, and based on UGA-specific occupancy and density assumptions, the cities and County will need to increase the average annual housing production to 1,474 units per year from 2021-2036 (**Exhibit 9**). This represents an increase of around 9.5% over the 2016-2021 production rate.

From 2016-2021 Whatcom County and the cities also developed a total of 4.0 million square feet of built area on 1,303 commercial and industrial acres supporting an estimated 5,539 jobs (**Exhibit 7** and **Exhibit 10**). UGAs accommodated 95% of the built square footage and 94% of the estimated jobs on 39% of the developed acres. Non-UGA areas accommodated 5% of the built square footage and 6% of the estimated jobs on 61% of the developed acres. Commercial development comprised 84% of this developed acreage for the period 2016-2021, with industrial development comprising 16%. When considering these numbers, it should be noted that some commercial building in the Non-UGAs occurs on rather large parcels where large areas of the lot remain undeveloped. On a countywide basis, commercial development averaged 0.05 floor-area ratio (FAR - a ratio of built square footage to net parcel land area), while industrial development averaged 0.07 FAR.

Between 2016 and 2021, the cities and the Columbia Valley UGA have achieved densities greater than planned for residential uses, while the Birch Bay UGA has not (**Exhibit 11**). These achieved densities ranged from 4.4 to 11.5 dwelling units per net acre for residential uses in incorporated areas and averaged one dwelling unit per 3.7 acres for Non-UGA areas. The unincorporated portions of city UGAs generally lag planned urban densities for their corresponding cities or did not experience residential development during the five-year review period. This is likely due to these as-yet unannexed areas lacking urban zoning and/or infrastructure. These

unincorporated areas serve as urban growth potential for future growth after annexation, when city zoning is adopted and public water and sewer provided.

Four cities have planned densities for commercial development within their incorporated UGAs – Blaine, Everson, Nooksack, and Sumas (**Exhibit 11**). Blaine and Nooksack have achieved densities that are lagging the planned densities for the 2016-2021 period. Everson exceeded its planned commercial density, while Sumas did not have any commercial development in the five-year review period. Whatcom County has not adopted planned densities for commercial uses in its city UGAs, non-city UGAs, nor its Non-UGA areas.

The same four cities also have planned densities for industrial development within their incorporated UGAs (**Exhibit 11**). Blaine is lagging the planned densities for the 2016-2021 period. Sumas has exceeded its planned industrial density, while Everson and Nooksack did not have any industrial development in the five-year review period. Whatcom County has not adopted planned densities for industrial uses in its city-UGAs, non-city UGAs, nor its Non-UGA areas.

The UGAs in Whatcom County have estimated net land capacity for population growth of 73,075 for the remainder of the 20-year planning period from 2021 to 2036, indicating an estimated population capacity surplus of 34,385 (**Exhibit 12**).

The UGAs in Whatcom County have estimated net land capacity for employment growth of 41,057 for the remainder of the 20-year planning period from 2021 to 2036, indicating an estimated employment capacity surplus of 16,841 (**Exhibit 13**).

On a countywide basis, surplus capacity exists to accommodate both remaining projected population and employment growth for the rest of the 20-year planning period through 2036. In addition, planned residential densities in the cities are being achieved.

Population & Employment Growth

Data collected for the Review and Evaluation Period from 2016-2021 indicate that new construction in Whatcom County and the cities accommodated 14,496 people, or about 24% of its 2016-2036 growth projection of 60,565 for the 20-year planning period (**Exhibit 6**). About 43% of this growth occurred in the City of Bellingham and almost 84% occurred within the urban growth areas (UGAs) of the County.

The remaining projected population growth for the County from 2021-2036 is 46,069. Of this, the Bellingham UGA is allocated 45%, the Ferndale UGA,

8%, the Lynden UGA, 8%; and the Blaine UGA, 7%. Approximately 16% of remaining projected population growth is to be accommodated in non UGA-areas of the County for the remainder of the 20-year planning period.

Exhibit 6. Population Growth Estimates and Projected Growth, 2016-2036

UGA	2016-2021 Population Growth Estimate			2016-2036 Population Growth Projection	2021-2036 Remaining Population Growth to Accommodate
	City	County	Total		
Bellingham	6,202	78	6,280	27,000	20,720
Birch Bay	N/A	389	389	4,593	4,204
Blaine	501	50	551	3,838	3,287
Cherry Point	N/A	0	0	0	0
Columbia Valley	N/A	271	271	1,170	899
Everson	317	0	317	1,080	763
Ferndale	2,273	8	2,281	5,942	3,661
Lynden	1,665	3	1,668	5,568	3,900
Nooksack	174	0	174	861	687
Sumas	190	0	190	760	570
UGA Total	11,322	799	12,121	50,812	38,690
Non-UGA	N/A	2,375	2,375	9,754	7,379
Total	11,322	3,174	14,496	60,566	46,069

Sources: Whatcom County and Cities' Data Reporting Tools, 2022; Community Attributes, Inc., 2021.

Data collected for the 2016-2021 Review and Evaluation Period indicate that new construction in Whatcom County and the cities accommodated 5,539 jobs, or about 17% of its 2016-2036 growth projection of 32,179 for the 20-year planning period (**Exhibit 7**). Approximately 56% of this growth occurred within the Bellingham UGA, while most of the remaining employment growth occurred in the Ferndale, Lynden, and Blaine UGAs. Almost 94% occurred within the UGAs.

The remaining projected employment growth for the County from 2021-2036 is 26,640. Of this, the Bellingham UGA is allocated 62%; the Ferndale UGA, 9%, the Blaine UGA, 6%, and the Lynden UGA, 5%. Approximately 9% of remaining projected employment growth is to be accommodated in Non-UGA areas of the County for the remainder of the 20-year planning period.

Exhibit 7. Employment Growth Estimates and Projected Growth, 2016-2036

UGA	2016-2021 Employment Growth Estimate			2016-2036 Employment Growth Projection	2021-2036 Remaining Employment Growth to Accommodate
	City	County	Total		
Bellingham	2,613	495	3,108	19,688	16,580
Birch Bay	N/A	55	55	474	419
Blaine	245	0	245	1,823	1,578
Cherry Point*	N/A	(141)	(141)	735	876
Columbia Valley	N/A	11	11	312	301
Everson	13	3	16	523	507
Ferndale	1,132	59	1,191	3,478	2,287
Lynden	622	0	622	1,876	1,254
Nooksack	8	0	8	100	92
Sumas	65	0	65	387	322
UGA Total	4,698	482	5,180	29,396	24,216
Non-UGA	N/A	359	359	2,783	2,424
Total	4,698	841	5,539	32,179	26,640

Sources: Whatcom County and Cities' Data Reporting Tools, 2022; Community Attributes, Inc., 2021.

* Employment for Cherry Point is estimated through supplemental analysis provided to Whatcom County by Western Washington University (Employment at Cherry Point, June 2021), as permit data for this UGA do not accurately reflect employment growth trends. Cherry Point UGA employment declined between 2016 and 2021 because of job losses associated with the Alcoa (Intalco) shutdown.

Development Activity

The Review and Evaluation Program tracks both residential and nonresidential development, as well as the distribution of development between urban and rural areas. This analysis tracks housing production to compare against planned growth and the necessary growth rates in terms of housing units to achieve those targets. It also tracks commercial and industrial land developed, building square footage, and development expressed as a floor-to-area ratio (FAR - a ratio of built square footage to net parcel land area).

Residential Development

For the Review and Evaluation Period of April 1, 2016 through March 31, 2021, the cities and the County permitted a total of 6,729 housing units inside and outside its UGAs (**Exhibit 8**). Of these units, 84% were permitted within the UGAs, and 16% were permitted outside the UGAs.

Exhibit 8. Net Housing Units Permitted, Rural and Urban Areas Countywide, 2016-2021

	2016*	2017	2018	2019	2020	2021**	Total
UGAs	851	1,074	946	1,041	1,140	531	5,686
Area Outside UGAs	135	198	215	238	215	42	1,043
Total	986	1,272	1,161	1,279	1,355	573	6,729
UGA Share	86%	84%	81%	81%	84%	93%	84%
Outside UGAs Share	14%	16%	19%	19%	16%	7%	16%

Sources: Whatcom County and Cities, 2022; Community Attributes, Inc., 2021.

* 2016 captures net housing units permitted between April 1, 2016 and December 31, 2016.

** 2021 captures net housing units permitted between January 1, 2021 and March 31, 2021.

Of these new units, almost 48% were permitted and built in the Bellingham UGA (3,219 from 2016-2021), while almost 37% were permitted and built in all other UGAs combined (2,467 units from 2016-2021). The remaining 1,043 units were constructed outside UGAs (**Exhibit 9**).

On average, the number of net new housing units permitted and built was 1,346 per year for the County as a whole (UGA plus Non-UGA areas) for the 2016-2021 Review and Evaluation Period. With 22,116 additional housing units needed to accommodate projected population growth through 2036, and based on the current distribution of single family and multifamily development and UGA specific occupancy and density assumptions, the cities and the County will need to increase average annual housing production to 1,474 units per year from 2021-2036. This represents an increase of around 9.5% over the 2016-2021 production rate.

Relatively small increases in production rates will be needed for the Bellingham, Nooksack, and Columbia Valley UGAs. The Birch Bay and Blaine UGAs will have to substantially increase their housing production rates to meet their population allocation targets. Specifically, housing production in the Birch Bay UGA will need to increase from an average of 46 new units per year in 2016-2021 to 164 units per year for the remainder of the planning period 2021-2036. Housing production in the Blaine UGA will need to increase from 53 to 105 for the remainder of the planning period 2021-2036.

**Exhibit 9. Annual Housing Production Necessary to Accommodate Growth
Allocations by UGA and Non-UGA Areas, 2021-2036**

UGA	Net New Units (2016-2021)	Average Net New Units Per Year (2016-2021)	Additional Housing Units Needed by 2036	Average Net New Units per Year Needed (2021-2036)
Bellingham	3,219	644	10,620	708
Birch Bay	228	46	2,462	164
Blaine	263	53	1,569	105
Cherry Point	0	0	0	0
Columbia Valley	106	21	352	23
Everson	108	22	260	17
Ferndale	893	179	1,433	96
Lynden	730	146	1,707	114
Nooksack	58	12	230	15
Sumas	81	16	242	16
UGA Total	5,686	1,137	18,875	1,258
Non-UGA	1,043	209	3,241	216
County Total	6,729	1,346	22,116	1,474

Sources: Whatcom County and Cities, 2022; Community Attributes, Inc., 2022.

Commercial & Industrial Development

For the Review and Evaluation Period (April 1, 2016 through March 31, 2021), a total of 4.0 million square feet was constructed on 1,303 commercial and industrial acres supporting an estimated 5,539 jobs inside and outside its urban growth areas (**Exhibit 7** and **Exhibit 10**). UGAs accommodated almost 95%% of the built square footage and 94% of the estimated jobs on approximately 39% of the developed acres. Non-UGA areas accommodated approximately 5% of the built square footage and 6% of the jobs on 61% of the acres. When considering these numbers, it should be noted that some commercial building in the Non-UGAs occurred on rather large parcels where large areas of the lot remain undeveloped.

On a countywide basis, commercial development comprised 84% of this developed acreage for the period 2016-2021, with industrial development comprising 16%. Overall, commercial development averaged 0.05 FAR, while industrial development averaged 0.07 FAR. Within UGAs, commercial development averaged 0.16 FAR, while industrial development averaged 0.17 FAR.

Exhibit 10. Countywide Nonresidential Development by UGA, 2016-2021

UGA	Commercial			Industrial			Total		
	Net Acres	Building Sq Ft	FAR	Net Acres	Building Sq Ft	FAR	Net Acres	Building Sq Ft	FAR
Bellingham									
City	110.8	1,174,506	0.24	43.8	466,871	0.24	154.6	1,641,377	0.24
County	16.6	184,246	0.26	5.3	67,200	0.29	21.8	251,446	0.26
UGA Total	127.4	1,358,752	0.24	49.0	534,071	0.25	176.4	1,892,823	0.25
Birch Bay	11.9	30,628	0.06	0.0	0	0.00	11.9	30,628	0.06
Blaine									
City	6.6	116,580	0.41	0.0	0	0.00	6.6	116,580	0.41
County	0.0	0	0.00	0.0	0	0.00	0.0	0	0.00
UGA Total	6.6	116,580	0.41	0.0	0	0.00	6.6	116,580	0.41
Cherry Point	0.0	0	0.00	16.8	80,551	0.11	16.8	80,551	0.11
Columbia Valley	2.7	6,364	0.05	0.0	0	0.00	2.7	6,364	0.05
Everson									
City	0.9	10,825	0.26	0.0	0	0.00	0.9	10,825	0.26
County	0.0	0	0.00	16.1	5,400	0.01	16.1	5,400	0.01
UGA Total	0.9	10,825	0.26	16.1	5,400	0.01	17.0	16,225	0.02
Ferndale									
City	130.5	531,565	0.09	47.9	413,301	0.20	178.4	944,866	0.12
County	0.0	0	0.00	7.6	70,214	0.21	7.6	70,214	0.21
UGA Total	130.5	531,565	0.09	55.5	483,515	0.20	186.0	1,015,081	0.13
Lynden									
City	37.3	190,276	0.12	35.4	405,818	0.26	72.8	596,094	0.19
County	0.0	0	0.00	0.0	0	0.00	0.0	0	0.00
UGA Total	37.3	190,276	0.12	35.4	405,818	0.26	72.8	596,094	0.19
Nooksack									
City	0.8	4,925	0.14	0.0	0	0.00	0.8	4,925	0.14
County	0.0	0	0.00	0.0	0	0.00	0.0	0	0.00
UGA Total	0.8	4,925	0.14	0.0	0	0.00	0.8	4,925	0.14
Sumas									
City	0.0	0	0.00	11.2	60,549	0.12	11.2	60,549	0.12
County	0.0	0	0.00	0.0	0	0.00	0.0	0	0.00
UGA Total	0.0	0	0.00	11.2	60,549	0.12	11.2	60,549	0.12
UGA Total	318.2	2,249,915	0.16	183.9	1,569,904	0.20	502.1	3,819,820	0.17
Non-UGA*	777.9	201,601	0.01	23.1	16,920	0.02	801.0	218,521	0.01
County Total	1,096.1	2,451,517	0.05	207.0	1,586,824	0.18	1,303.1	4,038,341	0.07

Sources: Whatcom County and Cities' Data Reporting Tools, 2022; Community Attributes, Inc., 2021.

* Non-UGA acreage is gross acres, rather than net acres.

Planned and Achieved Densities

The jurisdictions entered permit information into their respective Data Reporting Tools, which calculated the achieved densities (2016-2021). The cities all achieved greater-than-planned residential densities as articulated in their planning and zoning policies and regulations. The cities of Bellingham, Ferndale, Lynden, and Sumas significantly outperformed their planned residential densities for the period.

In the corresponding unincorporated portions of UGAs of Bellingham, Ferndale and Lynden achieved residential densities generally lag planned densities. The unincorporated portions of the Everson, Nooksack, and Sumas UGAs did not experience any residential development between 2016 and 2021. This is largely because these as-yet unannexed areas lack urban zoning and/or infrastructure. The unincorporated areas serve as urban growth potential for future growth after annexation, when city zoning is adopted and public water and sewer provided. For non-city UGAs, residential development in the Columbia Valley UGA exceeded the planned density while residential development in the Birch Bay UGA did not.

Many cities in Whatcom County do not yet have planned commercial or industrial densities. However, several cities have such planned densities. Blaine and Nooksack achieved densities lagged planned densities. Development in Everson and Sumas exceeded planned densities between 2016 and 2021.

Exhibit 11. Planned and Achieved Densities by Jurisdiction

UGA	Residential			Commercial			Industrial		
	Planned Density (units/ac)	Achieved Density 2016-2021 (units/ac)	Difference	Planned Density (FAR)	Achieved Density 2016-2021 (FAR)	Difference	Planned Density (FAR)	Achieved Density 2016-2021 (FAR)	Difference
Bellingham									
City	7.2	11.5	4.3	N/A	0.22	N/A	N/A	0.24	N/A
County	6.0	1.3	(4.7)	N/A	0.26	N/A	N/A	0.29	N/A
Birch Bay	5.0	4.5	(0.5)	N/A	0.06	N/A	N/A	0.00	N/A
Blaine									
City	4.3	4.4	0.2	0.80	0.31	(0.49)	0.89	0.30	(0.59)
County	4.0	4.7	0.7	N/A	0.00	N/A	N/A	0.00	N/A
Cherry Point	N/A	0.0	N/A	N/A	0.00	N/A	N/A	0.11	N/A
Columbia Valley	4.0	4.9	0.9	N/A	0.05	N/A	N/A	0.00	N/A
Everson									
City	4.0	4.8	0.8	0.20	0.26	0.06	0.30	0.00	N/A
County	4.0	0.0	N/A	N/A	0.00	N/A	N/A	0.01	N/A
Ferndale									
City	4.0	6.4	2.4	N/A	0.09	N/A	N/A	0.20	N/A
County	6.0	0.3	(5.7)	N/A	0.00	N/A	N/A	0.21	N/A
Lynden									
City	5.0	7.1	2.1	NA	0.12	N/A	NA	0.26	N/A
County	6.0	1.7	(4.3)	N/A	0.00	N/A	N/A	0.00	N/A
Nooksack									
City	4.4	5.1	0.7	0.25	0.14	(0.11)	0.10	0.00	N/A
County	4.0	0.0	N/A	N/A	0.00	N/A	N/A	0.00	N/A
Sumas									
City	4.9	7.5	2.7	0.22	0.00	N/A	0.11	0.12	0.01
County	4.0	0.0	N/A	N/A	0.00	N/A	N/A	0.00	N/A
Non-UGA Areas	N/A	3.7	N/A	N/A	0.01	N/A	N/A	0.02	N/A

Sources: Whatcom County and Cities' Data Reporting Tools, 2022; Community Attributes, Inc., 2022.

Note: An N/A in the Planned Density columns indicates that the jurisdiction does not have an adopted planned density for the specific development type. An N/A in the Difference columns indicates that the difference between planned and achieved densities cannot be calculated because no planned density is available. The achieved density for the Non-UGA Areas is acres per dwelling unit.

Land Suitable for Development

An analysis of the developable lands inventory by UGA, deducting critical areas, future public uses, quasi-public uses, infrastructure gaps, and an assumed market factor, provides an estimate of land capacity for population and employment growth. Applying densities, occupancy rates, and other population and employment assumptions, the developable lands inventory results in an estimate of population and employment capacity to compare to the remaining population to accommodate.

Development data show that UGAs accommodated population growth of approximately 12,121 persons for the Review and Evaluation Period of 2016-

2021. The remaining forecast population growth to be accommodated for the rest of the 20-year planning period ending in 2036 is 38,690 for all UGAs (**Exhibit 6**). Based on an analysis of developable residential land capacity for the UGAs, additional population (housing) growth capacity exists to accommodate 73,075 for the period – a surplus of 34,385, or 17% beyond what is necessary (**Exhibit 12**).

While individual UGA population growth capacity surpluses range from 9% in Bellingham to 84% in Blaine, Birch Bay has a 10% deficit in capacity.

Exhibit 12. Whatcom County Population Growth Capacity and Allocations by UGA, 2021-2036

UGA	2016-2036 Population Growth Allocation	2036 Total Population Allocation	2036 Population Allocation Share	2016-2021 Population Growth Estimate	2021-2036 Remaining Population Growth	2021-2036 Population Capacity	Surplus (Deficit)	Surplus Percent
Bellingham	27,000	123,710	45%	6,280	20,720	31,392	10,672	9%
Birch Bay	4,593	12,822	5%	389	4,204	2,950	(1,254)	(10%)
Blaine	3,838	9,585	3%	551	3,287	11,324	8,037	84%
Cherry Point	0	43	0%	0	0	0	0	0%
Columbia Valley	1,170	4,448	2%	271	899	2,167	1,268	29%
Everson	1,080	3,907	1%	317	763	3,634	2,871	73%
Ferndale	5,942	19,591	7%	2,281	3,661	10,786	7,125	36%
Lynden	5,568	19,275	7%	1,668	3,900	8,467	4,567	24%
Nooksack	861	2,425	1%	174	687	1,283	596	25%
Sumas	760	2,323	1%	190	570	1,073	503	22%
UGA Total	50,812	198,129	72%	12,121	38,690	73,075	34,385	17%

Sources: Whatcom County and Cities, 2022; Community Attributes, Inc., 2021.

For Non-UGAs (areas outside UGAs), the *Whatcom County Comprehensive Plan's* pro-rated population growth allocation for 2016-2036 equates to 9,754 more people (**Exhibit 1**). Based upon building permits and assumptions in the Data Reporting Tool, it is estimated that new development in the Non-UGAs accommodated about 2,375 people between 2016 and 2021. Therefore, these areas would need to accommodate about 7,379 more people over the remainder of the planning period from 2021-2036 (**Exhibit 6**). The County estimates that land outside UGAs can accommodate in excess of 14,000 additional dwelling units. This is more than enough capacity to accommodate population growth in these areas.

Both UGAs, which include cities, and Non-UGAs have sufficient capacity to accommodate projected population growth over the remaining portion of the planning period through the year 2036. Therefore, there is sufficient suitable land capacity to accommodate the countywide population projection set forth in the *Whatcom County Comprehensive Plan*.

UGAs accommodated estimated employment growth of approximately 5,180 jobs from 2016-2021. The remaining forecast employment growth to be accommodated for the rest of the 20-year planning period ending in 2036 is 24,216 for all UGAs (**Exhibit 7**). Based on an analysis of developable commercial and industrial land capacity for UGAs, additional employment growth capacity exists to accommodate 41,057 more jobs for the period – a surplus of 16,841, or 16% beyond what is necessary (**Exhibit 13**).

Individual UGA employment growth surpluses ranged from 3% in Bellingham to 136% in Blaine. No UGA has a deficit in capacity to accommodate employment growth for the remainder of the planning period (2021-2036).

Exhibit 13. Whatcom County Employment Growth Capacity and Allocations by UGA, 2021-2036

UGA	2016-2036 Employment Growth Allocation	2036 Total Employment Allocation	2036 Employment Allocation Share	2016-2021 Employment Growth Estimate	2021-2036 Remaining Employment Growth	2021-2036 Employment Capacity	Surplus (Deficit)	Surplus Percent
Bellingham	19,688	75,000	62%	3,108	16,580	18,671	2,090	3%
Birch Bay	474	1,140	1%	55	419	573	154	13%
Blaine	1,823	5,159	4%	245	1,578	8,570	6,992	136%
Cherry Point*	735	2,883	2%	(141)	876	2,613	1,737	60%
Columbia Valley	312	444	0%	11	301	420	119	27%
Everson	523	1,312	1%	16	507	1,575	1,068	81%
Ferndale	3,478	9,372	8%	1,191	2,287	3,484	1,197	13%
Lynden	1,876	7,103	6%	622	1,254	4,038	2,785	39%
Nooksack	100	369	0%	8	92	355	263	71%
Sumas	387	1,145	1%	65	322	758	436	38%
UGA Total	29,396	103,927	86%	5,180	24,216	41,057	16,841	16%

Sources: Whatcom County and Cities, 2022; Community Attributes, Inc., 2021.

*Cherry Point UGA employment estimates were developed by Western Washington University (Employment at Cherry Point, June 2021). The timeframe for the estimated employment growth, and employment growth allocation for Cherry Point is 2017-2021 and 2017-2036 to coordinate with the timeframe for the employment growth estimate. Complete data was not available for 2016 for the Cherry Point UGA.

Inconsistencies and Reasonable Measures

On a countywide basis, **surplus capacity exists to accommodate both remaining projected population and employment growth for the rest of the 20-year planning period through 2036**. In addition, planned residential densities in the cities are being achieved.

When planned densities are not being achieved, there is not sufficient capacity to accommodate remaining projected population or employment growth, or development patterns are not occurring as planned, Whatcom County and the cities will need to determine if reasonable measures are necessary to address the issue.

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. Once selected, reasonable measures must be adopted, as applicable, into individual County and city comprehensive plans and/or implementing regulations.

A list of potential reasonable measures that jurisdictions may consider, if needed, are documented in the *Whatcom County Review and Evaluation Program Methodology, Appendix A*. The Jurisdiction Profiles address whether reasonable measures may be needed for individual UGAs.

JURISDICTION PROFILES

This section provides detailed data and analysis on achieved and assumed future densities, as well as summaries of developable land capacity and growth capacity, by jurisdiction. Whatcom County contains ten UGAs – seven city UGAs, and three non-City UGAs (Birch Bay, Cherry Point, and Columbia Valley) – that are described in this section.

In accordance with RCW 36.70A.215(3)(e) and the *Whatcom County Review and Evaluation Program Methodology*, the Buildable Lands Report will typically use achieved densities (as measured for the Review and Evaluation period, 2016-2021) as a basis for the assumed densities for future development in the UGA over the remaining portion of the current 20-year planning period (2021-2036). 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, the local jurisdiction has developed assumptions for future development densities in the UGA.

1. Bellingham UGA

The Bellingham Urban Growth Area is the largest in Whatcom County, projected to encompass 123,710 residents and 75,000 employees by 2036. The UGA has growth allocations of 27,000 new residents and 19,688 new jobs between 2016 and 2036 (**Exhibit 1** and **Exhibit 2**).

Achieved Growth 2016-2021

Based on permit data collected between 2016 and 2021 and occupancy, persons per household, and square feet per employee assumptions, new construction in the Bellingham UGA accommodated an estimated 6,278 new residents (99% within the City of Bellingham) and 3,108 new jobs (84% within the City of Bellingham) (**Exhibit 6** and **Exhibit 7**).

Bellingham's residential growth over the past five years has occurred at higher-than-expected densities achieving an overall density of 11.5 units per acre. The *Whatcom County Land Capacity Analysis Report* referenced in the *2016 City of Bellingham Comprehensive plan* (Land Use Chapter page 31) assumed future residential growth would average 7.2 units per acre. The achieved density within the incorporated portions of the UGA falls within the planned densities of 6.0 to 24.0

units per acre adopted in the *Whatcom County Comprehensive Plan* for the City of Bellingham (**Exhibit 11**).

Development in the unincorporated portions of the Bellingham UGA achieved a residential density of 1.3 units per acre (**Exhibit 11**). This density lags planned urban densities for the City of Bellingham and is likely due to these as-yet unannexed areas lacking city zoning and complete infrastructure; instead, the unincorporated areas serve as urban growth potential for future growth after annexation, when city zoning is adopted and public water and sewer provided.

Neither the City of Bellingham or Whatcom County have adopted planned densities for commercial or industrial uses. Between 2016 and 2021, incorporated areas of the UGA achieved a commercial Floor-Area-Ratio (FAR) of 0.22, and an industrial FAR of 0.24. The unincorporated areas within the Bellingham UGA achieved slightly higher FARs of 0.26 and 0.29 for commercial and industrial uses respectively (**Exhibit 11**).

Population Capacity 2021-2036

Based on achieved densities and regulatory changes adopted since 2016, the forward-looking evaluation of land suitable for development that estimates the growth capacity on remaining buildable lands is assuming an overall residential density of 11.2 units per acre on vacant, partially used, and underutilized lands. This aligns well with the 11.5 units per acre overall achieved density for residential development from 2016 to 2021.

City of Bellingham planners are assuming future densities ranging between 0.2 units per acre and 14.5 units per acre for single-family zones, depending on the specific zone (Zones in Bellingham's unincorporated UGA with a density of 0.2 units per acre or one dwelling per five acres are located within the Lake Whatcom Watershed and were adopted by Whatcom County for the purpose of water quality protection). Future density assumptions range between 4.0 and 69.7 units per acre for zones allowing multifamily uses (**Exhibit 14**).

The results of the analysis show the Bellingham UGA has estimated net land capacity for residential development (population growth) of 752.98 acres (**Exhibit 15**). When combined with pending projects in the development pipeline and in approved

master plans these buildable lands have a total estimated occupied unit capacity of 15,531 dwelling units. Based on persons per household assumptions, these dwelling units can accommodate an estimated 31,392 new residents indicating an estimated population capacity surplus of 10,672 people (**Exhibit 16**).

Housing Needs by Type

The Whatcom County Comprehensive Plan (Chapter 3- Housing, Chart 3 – Estimated Dwelling Units Needed, page 3-8) indicates Bellingham has a need for 5,171 single-family, 9,507 multi-family, and 1,410 other (group housing) new dwelling units during the 2013-2036 planning period.

- During the period April 1, 2013 to March 31, 2016 Bellingham completed final inspections on permits for 372 single-family and 797 multi-family housing units.
- During the period April 1, 2016 to March 31, 2021 Bellingham completed final inspections on permits for 794 new single-family and 2,393 new multi-family housing units (including 537 student housing and memory-care group housing units that would fall under the “other” category in the County housing needs chart).

- The forward-looking evaluation of land suitable for development component of Bellingham’s Buildable Lands Analysis shows that the City and unincorporated UGA have an estimated 2021-2036 capacity for an additional 4,200 single-family and 11,863 multi-family housing units (**Exhibit 16**).

Combining the 2013-2016 and 2016-2021 built totals with the estimated 2021-2036 capacity results in an overall capacity of 5,366 single-family and 15,053 multi-family housing units plus 537 completed units in the “other” category. The combined single-family totals exceed the estimated need by 4% or 195 housing units (5,366 – 5,171). The combined multi-family totals exceed the estimated need by 58% or 5,546 housing units (15,053 – 9,507). And the combined overall total (single-family, multi-family, and other) exceeds the estimated need by 30% or 4,868 housing units (20,956 – 16,088). These capacities are sufficient to accommodate the dwelling units needed in the planning period as established in the *Whatcom County Comprehensive Plan* (Chapter 3- Housing, Chart 3).

Employment Capacity 2021-2036

Based on achieved densities and regulatory changes adopted since 2016, City of Bellingham planners are assuming future commercial FARs ranging between 0.25 and 3.50, depending on the specific zone. Assumed future industrial FARs range between 0.25 and 0.40 (**Exhibit 17**).

The results of the evaluation of land suitable for development show the Bellingham UGA has estimated net land capacity for employment growth of 377.6 acres (**Exhibit 18**). When combined with pending projects in the development pipeline and in approved master plans these buildable lands have a total estimated occupied commercial and industrial capacity of 9.8 million square feet. Based on square feet per employee assumptions, this employment space can accommodate an estimated 18,671 jobs indicating an estimated employment capacity surplus of 2,091 jobs (**Exhibit 19**).

Analysis of Comprehensive Plan Objectives and Reasonable Measures

Over the past five years Bellingham has worked hard to implement the goals adopted in the 2016 Comprehensive Plan. As described below in the Regulatory Changes section, new development rules for land division, multi-family housing, and infill toolkit (middle) housing have expanded capacity significantly. And as documented in this report Bellingham is meeting or exceeding the development assumptions in the county-wide planning policies and the comprehensive plan. To that end, and as stated in section 5.2 of the *Whatcom County Review and Evaluation Program Methodology*, no reasonable measures are required. There is still much work to do though around housing. Like other communities in Washington and across the nation the supply of housing that is affordable to most households is small and getting smaller. Through the Home Fund Bellingham is investing over \$60 million to build new and preserve existing affordable housing (over 700 units 2012-2022). The City also spends over \$2 million annually in federal grant dollars to provide housing, services, and rental assistance to our community's most vulnerable members. Current work program initiatives like the manufactured home park overlay zone and funding to study inclusionary zoning also

aim to preserve and expand the supply of affordable housing. Work on the 2025 Comprehensive Plan will begin in 2023 and will include a community-wide conversation around housing affordability. These efforts will be guided by the Department of Commerce recommendations for compliance with House Bill 1220 instructing local governments to “plan and accommodate” housing affordable to all income levels. Through this plan update the City will work to further develop goals and policies for preserving existing affordable housing and to carefully manage the remaining buildable land supply to prioritize housing that is affordable to the full range of Bellingham's residents.

Analysis by Zoning Category

The following section provides details for each of Bellingham's general zoning categories of the residential densities assumed in 2016, those achieved 2016 to 2021, and those used in the forward-looking evaluation of land suitable for development that estimates the growth capacity on remaining buildable lands from 2021 to 2036.

Single family residential zones in Bellingham accommodated 566 single family and 321 multi family units for a total of 886 units and an overall achieved density of 5.3 units per acre compared to an assumed density of 4.7 units

per acre. There are 19 unique single family zones, of which 15 had growth over the past five years. Nine experienced higher than expected levels of development accommodating 160% of the growth assumed for them. Six zones fell short accommodating about 90% of assumed growth. Overall single family zones accommodated 114% of assumed growth.

Multi family residential zones accommodated 748 multi family and 149 single family units for a total of 897 units and an overall achieved density of 22.9 units per acre compared to an assumed density of 17.7 units per acre. There are 34 unique multi family zones, of which 17 had growth over the past five years. Nine experienced higher than expected levels of development accommodating 263% of the growth assumed for them. Eight zones fell short accommodating about 91% of assumed growth. Overall multi family zones accommodated 130% of assumed growth.

Commercial zones allowing and encouraging residential uses accommodated 671 multi family units for an achieved density of 20.7 units per acre compared to an assumed density of 17.8 units per acre. There are seven unique commercial zones, of which two had residential growth over the past five years. Both zones experienced higher than expected levels of development accommodating 116% of the growth assumed for them. For commercial

zones allowing and encouraging residential uses the analysis continues the use of 2,500 square feet per multi family unit (Municipal Code does not specify a density) as a realistic value given the densities achieved in recent projects in these zones.

Commercial/Industrial/Residential Multi zones accommodated 154 single family and 93 multi family units for an overall achieved density of 13.1 units per acre compared to an assumed density of 7.5 units per acre. There are two unique Com/Ind/RM zones, one of which experienced residential growth over the past five years. This zone experienced higher than expected levels of development accommodating 176% of the growth assumed for it.

Urban Village zones accommodated 5 single family and 524 multi family units for an overall achieved density of 58.9 units per acre compared to an assumed density of 41.4 units per acre. There are 13 unique urban village zones, 11 of which experienced residential growth over the past five years. Ten experienced higher than expected levels of development accommodating 175% of the growth assumed for them. One zone fell short accommodating 89% of assumed growth. Overall urban village zones accommodated 142% of assumed growth. For urban village zones the analysis uses density values keyed to the floor area ratios (FARs) specified in the

Municipal Code for each urban village land use area. A table included in the evaluation of land suitable for development worksheet documents the assumptions that model allocation of building square footage to non-residential uses, parking, hallway/mechanical spaces, and residential units to translate each FAR value into a specific units per acre density. These model assumptions are based on densities achieved by recent projects in each of the urban villages.

Background Details

The following section highlights details specific to Bellingham’s application of the *Whatcom County Review and Evaluation Program Methodology* in the analysis of buildable lands. It includes the rates used to estimate population and employment, discussions of regulatory changes since 2016 that affect development capacity, infrastructure and future public uses, environmental constraints, market factors, and lands in Washington State ownership excluded from the capacity analysis.

Population and Employment Assumptions

The housing occupancy rate and persons per household assumptions for the Bellingham UGA are based on current values from the Washington State Office of Financial

Management (OFM) and are specific to Bellingham. The employment occupancy rate and jobs per square foot assumptions are based on Washington State Employment Security and Whatcom County Assessor’s data as explained in Section 4.1 of the *Whatcom County Review and Evaluation Program Methodology*. The values are as follows:

- 97.5% Single Family occupancy rate
- 96.4% Multifamily occupancy rate
- 95.0% Commercial and Industrial occupancy rate
- 2.499 persons per Single Family household
- 1.850 persons per Multifamily household
- 440 and 660 respectively Commercial and Industrial square feet per employee

The Bellingham UGA has an estimated 20,720 population and 16,580 employment growth remaining to accommodate between 2021 and 2036 (**Exhibit 6** and **Exhibit 7**).

Regulatory Changes

Since adoption of the 2016 Comprehensive Plan Bellingham has approved many

regulatory changes that impact either the amount of land available for development, or the densities and mix of uses allowed on buildable lands. These changes are documented in detail in the Data Reporting Tool worksheet. The most significant changes include a rezone for Cordata Park removing 20 acres of mixed-use land from the buildable land supply (estimated capacity of 150 jobs and 100 housing units); approval of two annexations activating development of infrastructure and allowing development on 249 acres; approval of Title 23 (subdivision ordinance) streamlining the plat process and allowing a 50% density bonus for single-family cluster zones when at least 50% of units are Infill Toolkit forms; approval of an Accessory Dwelling Unit (ADU) ordinance allowing and encouraging ADUs in Bellingham's neighborhoods; approval of an updated residential multi-family (RM) development code establishing a simplified tiered density system and minimum densities (increasing Bellingham's overall development capacity by an estimated 20%); and Phase I of an update to the Infill Toolkit regulations streamlining and clarifying the development of missing-middle housing forms.

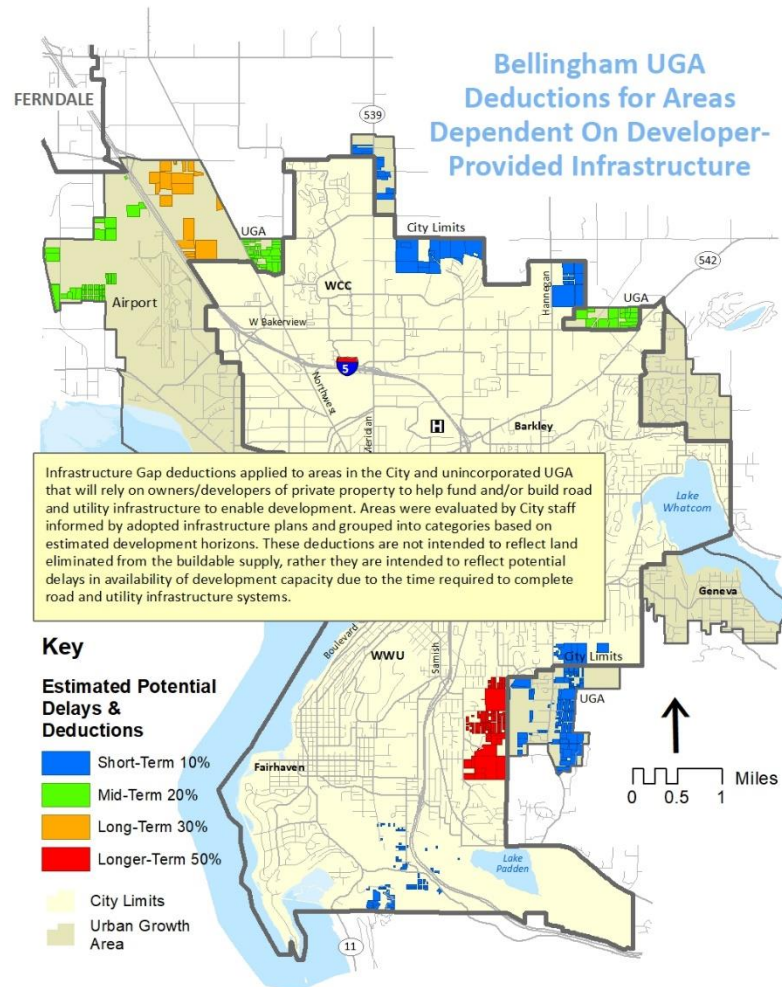
Infrastructure and Future Public Uses

Bellingham has identified areas within the City and unincorporated UGA that are within

the service area for urban sewer utilities but may not achieve full buildout until after 2036 due to reliance upon developer-provided portions of these future utility systems. The areas identified based on mapping from the 2016 Bellingham Wastewater Conveyance Plan were also determined to be areas where development of other related infrastructure like roads and municipal water would likely depend on some level of developer participation. These areas were assigned estimated near-term, mid-term, long-term, or longer-term time frames and received associated percentage deductions of their developable area. The deductions total approximately 112 acres and do not preclude all development but acknowledge that full buildout may not occur until after 2036. This jurisdiction profile includes a map of the Bellingham UGA illustrating the land areas associated with these deductions.

Deductions of buildable land related to roads, and water, sewer, and storm utilities are accounted for in the methodology through an infrastructure deduction on vacant, partially-used, and underutilized land of between 5% and 24%. The recent 17-acre land acquisition by the Bellingham School District for a future elementary school is also removed from the buildable land supply. Future development on the three college campuses in Bellingham is

accounted for in the “master planned” category of buildable land based on the adopted Institutional Master Plan (IMP) for each institution. Deductions for future public uses were made from the developable land supply based primarily on land acquisition needs identified in the Bellingham 2020 Park, Recreation, and Open Space (PRO) Plan. A total of 104 acres was deducted from developable vacant land for these purposes (see 2020 PRO Plan, Table 4.6.1 “Proposed Park System Additions – City & UGA”).



Environmental Constraints

Deductions for environmental constraints (critical areas) were made to all developable land including ALL residential, commercial, and industrial zones. Deductions were based on the best-available data in the City's GIS system following criteria set out in Bellingham Municipal Code (BMC) Chapter 16.55.

Wetlands were buffered with 150-foot buffers based on a composite of all mapped wetland delineations, and wetland reconnaissance inventories from 2015, 2003, and 1992 (NWI data from the 1980's was not used due to the relatively complete coverage by more recent/accurate studies). In addition, a staff-generated potential wetlands layer was created from color-infrared imagery and LiDAR data to fill gaps across properties where access limitations prevent on-the-ground mapping of wetland systems. Other critical areas layers used include steep slopes, FEMA floodways and floodplains (2019 data), and regulated shorelines and stream/riparian corridors. Shorelines were buffered using adopted Shoreline Master Program (SMP) development setbacks designated for each reach. Stream/riparian buffers were based on distances specified for each reach in BMC Table 16.55.500(A).

Market Factors

The Review and Evaluation Program Methodology includes a market factor deduction to account for land not likely to develop during the remainder of the 2021 to 2036 planning period. The criteria considered while developing the market factor(s) for Bellingham's buildable lands analysis include examination of improvement to total value ratios, transaction and conversion history, a property owner survey, targeted outreach to specific owners and developers, and comparative studies of market factors from other buildable lands jurisdictions. The market factors developed for Bellingham's analysis are arranged in a tiered system corresponding to the complexities involved in development and the relative return or benefit to property owners and developers. Vacant land usually presents the fewest challenges to development, partially-utilized land is typically more complex to develop due to existing ongoing uses on the property during development, and underutilized land is often the most-complex due to the requisite relocation or change of non-conforming uses accompanying redevelopment. The relative return or benefit to property owners and developers is closely related to the zoned density or intensity of developable land. Land zoned for higher density or intensity uses will

usually provide a bigger return or benefit to owners and developers making it more likely they will develop sooner. And land zoned for lower density or intensity uses will usually provide a lower return or benefit to owners making it less likely to develop sooner. The market factors assigned to each tier are as follows: vacant higher density/intensity = 20%, vacant lower density/intensity = 25%, partially-utilized higher density/intensity = 25%, partially-utilized lower density/intensity = 30%, underutilized higher density/intensity = 30%, underutilized lower density/intensity = 35%. A technical memo explaining the details of Bellingham's market factor analysis can be found here

https://maps.cob.org/resources/images/pcd/BellinghamMarketFactor_TechnicalMemo_Sept10th2021.pdf

State-Owned Lands

The 2016 Bellingham Comprehensive Plan Land Capacity Analysis included some development capacity on approximately 266 acres of land owned by Washington State. This land located in one block west of Bellingham International Airport, and in three blocks lying north of and parallel to the Mt Baker Highway has been excluded from the developable land supply in this analysis.

Residential Development

Exhibit 14. Residential Development, Achieved and Assumed Densities, City of Bellingham, 2016 -2021

Zoning Category	Development Type	Acres Developed	Dwelling Units	Achieved Density (Units/Acre)	Density Assumed (Units/Acre)	
					Min	Max
Single Family	Single Family	138.2	586	4.24	0.20	14.52
	Multifamily	29.9	321	10.74	7.26	7.26
Multifamily	Single Family	20.1	149	7.40	N/A	N/A
	Multifamily	32.2	748	23.25	4.04	43.56
Mixed-Use	Single Family	28.5	169	5.93	6.00	6.00
	Multifamily	3.3	93	28.24	6.00	17.42
Urban Village	Single Family	0.5	5	9.96	8.71	8.71
	Multifamily	8.7	524	59.93	8.71	69.70
Commercial	Multifamily	20.6	671	32.55	12.10	48.40
Institutional	Multifamily	1.5	76	50.97	N/A	N/A
Industrial	Multifamily	0.2	1	6.19	N/A	N/A

Sources: City of Bellingham, 2022; Community Attributes Inc., 2021.

Note: "Density Assumed" is the assumed density for evaluation of land suitable for development by zone. City of Bellingham zoning districts are grouped into seven collapsed, generalized categories.

Exhibit 15. Residential Land Supply, Bellingham UGA, 2021 -2036

	UGA Total	Single Family	Multifamily	Mixed-Use	Urban Village	Commercial	Institutional	Industrial	Public	Airport Operations
Vacant Land										
Gross Acres	1,291.19	802.97	322.52	119.16	2.94	41.41	2.19	0.00	0.00	0.00
Critical Areas	688.47	426.50	183.11	48.51	0.52	27.81	2.02	0.00	0.00	0.00
Future Public Uses	63.66	39.59	15.90	5.87	0.14	2.04	0.11	0.00	0.00	0.00
Infrastructure Gaps	55.48	41.84	8.74	4.89	0.00	0.00	0.00	0.00	0.00	0.00
Quasi-Public Use Deduction	24.18	14.75	5.74	2.99	0.11	0.58	0.00	0.00	0.00	0.00
Infrastructure Deduction	97.79	70.81	11.48	14.22	0.11	1.16	0.01	0.00	0.00	0.00
Market Factor	75.72	45.29	19.51	8.53	0.41	1.96	0.01	0.00	0.00	0.00
Net Acres	285.91	164.20	78.04	34.14	1.64	7.86	0.05	0.00	0.00	0.00
Partially-Used Land										
Gross Acres	1,378.76	845.05	141.46	321.62	53.25	17.39	0.00	0.00	0.00	0.00
Critical Areas	567.27	421.40	49.59	84.38	4.89	7.00	0.00	0.00	0.00	0.00
Future Public Uses	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Infrastructure Gaps	23.84	8.42	0.40	15.01	0.00	0.00	0.00	0.00	0.00	0.00
Quasi-Public Use Deduction	39.38	20.76	4.57	11.11	2.42	0.52	0.00	0.00	0.00	0.00
Infrastructure Deduction	165.59	99.65	9.15	53.34	2.42	1.04	0.00	0.00	0.00	0.00
Market Factor	149.18	77.22	19.44	39.45	10.88	2.21	0.00	0.00	0.00	0.00
Net Acres	433.50	217.59	58.31	118.34	32.64	6.62	0.00	0.00	0.00	0.00
Underutilized Land										
Gross Acres	69.84	0.00	25.64	1.15	29.40	9.92	3.72	0.00	0.00	0.00
Critical Areas	14.96	0.00	8.29	0.02	0.81	2.65	3.18	0.00	0.00	0.00
Future Public Uses	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Infrastructure Gaps	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Quasi-Public Use Deduction	2.72	0.00	0.87	0.06	1.43	0.36	0.00	0.00	0.00	0.00
Infrastructure Deduction	4.22	0.00	1.73	0.27	1.43	0.73	0.05	0.00	0.00	0.00
Market Factor	14.38	0.00	4.42	0.24	7.72	1.85	0.15	0.00	0.00	0.00
Net Acres	33.56	0.00	10.32	0.56	18.01	4.32	0.34	0.00	0.00	0.00

Sources: City of Bellingham, 2022; Whatcom County, 2021; Community Attributes Inc., 2021.

Note: City of Bellingham zoning districts are grouped into nine collapsed, generalized categories.

Exhibit 16. Developable Residential Land Capacity, Bellingham UGA, 2021-2036

	UGA	Multi-family	Single-family	Mixed-Use	Urban Village	Commercial	Institutional	Industrial	Public	Airport Operations
Net Developable Residential Acres (Vacant, PU, UU)	752.98	381.79	146.67	153.03	52.29	18.80	0.39	0.00	0.00	0.00
Single Family Developable Acres	485.56	374.47	-	110.00	1.09	-	-	-	-	-
Assumed Single Family Density (units/acre)										
Subtotal Single Family Unit Capacity	2,994	2,325	-	660	9	-	-	-	-	-
Existing Single Family Units	1,646	419	370	314	366	28	1	146	-	2
Pending Single Family Units	1,872	1,164	505	123	14	65	-	-	1	-
Master Planned Single Family Units	75	-	-	58	-	-	-	17	-	-
Subtotal: Net Single Family Unit Capacity	4,200	3,070	505	527	15	65	-	17	1	-
Potential Occupied Single Family Units	4,095	2,993	492	514	15	63	-	16	1	-
Single Family Population Capacity	10,233	7,480	1,230	1,285	37	158	-	41	2	-
Multifamily Developable Acres	267.42	7.32	146.67	43.03	51.20	18.80	0.39	-	-	-
Assumed Multifamily Density (units/acre)										
Subtotal Multifamily Unit Capacity	5,544	65	2,791	420	1,842	411	15	-	-	-
Existing Multifamily Units	122	27	25	20	20	10	-	20	-	-
Pending Multifamily Units	4,903	124	927	758	1,477	1,617	-	-	-	-
Master Planned Multifamily Units	1,492	-	-	413	760	-	200	119	-	-
Subtotal: Net Multifamily Unit Capacity	11,863	189	3,693	1,571	4,059	2,018	215	119	-	-
Potential Occupied Multifamily Units	11,436	182	3,560	1,514	3,913	1,945	207	115	-	-
Multifamily Population Capacity	21,159	338	6,586	2,801	7,239	3,599	384	212	-	-
Net Dwelling Unit Capacity	16,063	3,259	4,198	2,098	4,074	2,083	215	135	1	-
Potential Occupied Dwelling Units	15,531	3,175	4,052	2,028	3,928	2,009	207	131	1	-
Population Capacity	31,392	7,818	7,816	4,086	7,276	3,757	384	253	2	-
Remaining Population Growth to Accommodate (2021-2036)	20,720									
Population Capacity Surplus (Deficit)	10,672									

Sources: City of Bellingham, 2022; Whatcom County, 2021; Community Attributes Inc., 2021.

Note: Bellingham UGA zoning districts are grouped into nine collapsed, generalized categories.

Commercial and Industrial Development

Exhibit 17. Nonresidential Development, Achieved and Assumed Densities, City of Bellingham, 2016-2021

Zoning Designation	Development Type	Acres Developed	Built Square Feet	Achieved Density (FAR)	Assumed Density (FAR)	
					Min	Max
Single Family	Commercial	7.6	22,776	0.07	N/A	N/A
Multifamily	Commercial	1.4	17,966	0.28	N/A	N/A
Mixed-Use	Commercial	21.7	230,519	0.24	0.40	0.40
	Industrial	0.0	0	0.00	0.40	0.40
Urban Village	Commercial	3.1	81,619	0.61	0.40	3.50
	Industrial	2.4	58,710	0.57	0.40	0.40
Commercial	Commercial	10.8	189,313	0.40	0.40	2.50
Institutional	Commercial	12.3	188,774	0.35	0.40	0.40
Industrial	Commercial	12.0	155,697	0.30	N/A	N/A
	Industrial	45.2	466,052	0.24	0.25	0.25
Public	Commercial	50.2	323,042	0.15	0.40	0.40
	Industrial	1.4	9,309	0.15	N/A	N/A
Airport Operations	Commercial	8.2	149,046	0.42	0.25	0.25
	Industrial	0.0	0	0.00	0.25	0.25

Sources: City of Bellingham, 2022; Community Attributes Inc., 2021.

Note: Assumed Density is the assumed density for evaluation of land suitable for development by zone. Bellingham UGA zoning districts are grouped into nine collapsed, generalized categories.

Exhibit 18. Developable Nonresidential Land Supply, Bellingham UGA, 2021 -2036

	UGA Total	Single Family	Multifamily	Mixed-Use	Urban Village	Commercial	Institutional	Industrial	Public	Airport Operations
Vacant Land										
Gross Acres	819.40	0.00	0.07	24.40	3.38	41.61	6.58	743.27	0.08	0.00
Critical Areas	562.80	0.00	0.05	10.32	0.23	27.81	6.07	518.24	0.08	0.00
Future Public Uses	40.40	0.00	0.00	1.20	0.17	2.05	0.32	36.64	0.00	0.00
Infrastructure Gaps	22.55	0.00	0.00	0.54	0.00	0.00	0.00	22.01	0.00	0.00
Quasi-Public Use Deduction	1.35	0.00	0.00	0.62	0.15	0.59	0.00	0.00	0.00	0.00
Infrastructure Deduction	20.13	0.00	0.00	2.15	0.15	1.18	0.02	16.64	0.00	0.00
Market Factor	34.43	0.00	0.00	1.91	0.54	2.00	0.03	29.95	0.00	0.00
Net Acres	137.73	0.00	0.01	7.66	2.15	7.99	0.14	119.79	0.00	0.00
Partially-Used Land										
Gross Acres	359.15	0.00	0.24	35.74	25.13	17.52	0.00	279.05	0.00	1.48
Critical Areas	146.67	0.00	0.09	9.38	2.92	7.00	0.00	126.77	0.00	0.52
Future Public Uses	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Infrastructure Gaps	10.20	0.00	0.00	1.67	0.00	0.00	0.00	8.53	0.00	0.00
Quasi-Public Use Deduction	2.88	0.00	0.01	1.23	1.11	0.53	0.00	0.00	0.00	0.00
Infrastructure Deduction	22.57	0.00	0.02	5.93	1.11	1.05	0.00	14.38	0.00	0.10
Market Factor	44.21	0.00	0.03	4.38	5.00	2.23	0.00	32.34	0.00	0.22
Net Acres	132.62	0.00	0.10	13.15	14.99	6.70	0.00	97.03	0.00	0.65
Underutilized Land										
Gross Acres	444.57	0.00	0.03	0.13	3.74	10.70	3.72	426.24	0.00	0.00
Critical Areas	273.85	0.00	0.00	0.00	0.13	2.65	3.18	267.88	0.00	0.00
Future Public Uses	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Infrastructure Gaps	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Quasi-Public Use Deduction	0.59	0.00	0.00	0.01	0.18	0.40	0.00	0.00	0.00	0.00
Infrastructure Deduction	16.91	0.00	0.00	0.03	0.18	0.81	0.05	15.84	0.00	0.00
Market Factor	45.97	0.00	0.01	0.03	0.97	2.05	0.15	42.76	0.00	0.00
Net Acres	107.25	0.00	0.02	0.06	2.27	4.79	0.34	99.77	0.00	0.00

Sources: City of Bellingham, 2022; Whatcom County, 2021; Community Attributes Inc., 2021.

Note: Bellingham UGA zoning districts are grouped into nine collapsed, generalized categories.

Exhibit 19. Developable Nonresidential Land Capacity, Bellingham UGA, 2021-2036

	UGA	Multi-family	Single-family	Mixed-Use	Urban Village	Commercial	Institutional	Industrial	Public	Airport Operations
Net Developable Employment Acres (Vacant, PU, UU)	377.60	0.00	0.13	20.87	19.41	19.48	0.48	316.59	0.00	0.65
Commercial Developable Acres	54.06	-	0.13	18.89	14.75	19.48	0.48	-	-	0.32
Subtotal: Commercial Capacity (SF)	2,330,253	-	2,203	329,224	1,400,226	586,709	8,373	-	-	3,518
Existing Commercial Space (SF)	716,719	4,287	5,423	-	422,903	224,113	-	59,993	-	-
Pending Commercial Space (SF)	1,095,040	78,100	6,933	26,239	140,669	268,607	11,813	463,912	98,767	-
Master Planned Commercial Space (SF)	2,528,209	-	-	210,603	617,200	-	1,294,730	39,397	266,279	100,000
Subtotal: Net Commercial Capacity (SF)	5,346,344	78,100	9,136	566,066	1,775,050	631,203	1,314,916	503,309	365,046	103,518
Potential Occupied Commercial Space (SF)	5,079,027	74,195	8,679	537,763	1,686,297	599,643	1,249,170	478,144	346,793	98,342
Commercial Employment Capacity	11,542	168	20	1,222	3,832	1,362	2,839	1,087	788	224
Industrial Developable Acres	323.54	-	-	1.97	4.66	-	-	316.59	-	0.32
Subtotal: Industrial Capacity (SF)	3,566,662	-	-	34,347	81,132	-	-	3,447,665	-	3,518
Existing Industrial Space (SF)	871,274	79,196	26,762	5,496	135,082	81,437	-	543,301	-	-
Pending Industrial Space (SF)	1,016,738	-	-	-	28,382	45,000	-	912,841	30,515	-
Master Planned Industrial Space (SF)	981,055	-	-	77,213	376,000	-	-	172,841	-	355,000
Subtotal: Net Industrial Capacity (SF)	4,952,113	-	-	111,560	416,473	45,000	-	3,990,046	30,515	358,518
Potential Occupied Industrial Space (SF)	4,704,507	-	-	105,982	395,649	42,750	-	3,790,544	28,989	340,592
Industrial Employment Capacity	7,129	-	-	161	599	65	-	5,743	44	516
Net Commercial & Industrial Capacity (SF)	10,298,457	78,100	9,136	677,626	2,191,523	676,203	1,314,916	4,493,355	395,561	462,036
Potential Occupied Commercial & Industrial Capacity (SF)	9,783,534	74,195	8,679	643,745	2,081,947	642,393	1,249,170	4,268,688	375,783	438,934
Employment Capacity	18,671	168	20	1,383	4,431	1,427	2,839	6,830	832	740
Remaining Employment Growth to Accommodate (2021-2036)	16,580									
Employment Capacity Surplus (Deficit)	2,091									

Sources: City of Bellingham, 2022; Whatcom County, 2021; Community Attributes Inc., 2021.

Note: Bellingham UGA zoning districts are grouped into nine collapsed, generalized categories.

2. Birch Bay UGA

The Birch Bay Urban Growth Area is one of three Non-City UGAs in Whatcom County. The UGA has a projected total allocation of 12,822 residents and 1,140 jobs by 2036. The UGA has a projected growth allocation of 4,593 new residents and 474 new jobs between 2016 and 2036 (**Exhibit 1** and **Exhibit 2**).

Achieved Growth 2016-2021

Based on permit data collected between 2016 and 2021, occupancy, persons per household and square feet per employee assumptions, new construction in the Birch Bay UGA accommodated an estimated 389 new residents and 55 new jobs over this five-year period (**Exhibit 6** and **Exhibit 7**).

The Birch Bay UGA achieved an overall residential density of 4.5 units per net acre between 2016 and 2021. This is below the 5.0 to 10.0 units per net acre planned in the *Whatcom County Comprehensive Plan* (**Exhibit 11**).

The *Whatcom County Comprehensive Plan* does not have adopted planned densities for commercial or industrial uses. Between 2016 and 2021, the UGA has achieved a commercial FAR of 0.06. The Commercial FAR is based upon a limited number of commercial building

permits (eight) issued between April 1, 2016 and March 31, 2021. Six of the eight building permits were in commercial zones (the other two were in residential zones). Five of the six permits in commercial zones were for commercial storage buildings (the other was for a covered patio). The UGA did not have industrial development between 2016 and 2021 (**Exhibit 11**).

Population and Employment Assumptions

Occupancy rate and population and employment assumptions for estimating future growth capacity in the Birch Bay UGA are:

- 75.0% Single Family occupancy rate
- 51.0% Multifamily occupancy rate
- 95.0% Commercial and Industrial occupancy rate
- 2.38 Single Family persons per household
- 2.22 Multifamily persons per household
- 532 Commercial square feet per employee

The Birch Bay UGA is characterized by a mix of single family and multifamily residences, as well as historically high seasonal housing. There are also a number of businesses in the UGA.

Population Capacity 2021-2036

The Birch Bay UGA will need to accommodate 4,204 more residents and 419 more jobs between 2021 and 2036 under current planning assumptions (**Exhibit 6** and **Exhibit 7**).

Based on achieved densities between 2016 and 2021 and other planning assumptions, Whatcom County is assuming future densities ranging between 4.4 units per acre and 10.0 units per acre for single family development, depending on the specific zone. Future density assumptions range between 5.9 and 17.0 units per acre for multifamily development (**Exhibit 20**). Density assumptions for the Suitable Land Tool, which estimates future development capacity, are further described below (achieved density is based on building permits issued between 2016 and 2021):

Urban Residential (UR4) – The achieved net density from the Data Reporting Tool for the UR4 zone is 4.4 units/acre for single family development. This net density is used in the Suitable Land Tool to estimate capacity to accommodate development in the future.

Urban Residential Medium Density (URM6) – For single family, the achieved net density from the Data Reporting Tool for the URM6 zone is 3.3 units/acre. However, this is likely

not reflective of future development. While there is currently not a minimum density in the URM6, the County Comp Plan encourages development at 5-10 units per acre in the Birch Bay UGA. For multi-family, the achieved net density from the Data Reporting Tool for the URM6 zone is 5.9 units/acre. This density is used in the Suitable Land Tool for both single family and multi-family land.

Urban Residential Medium Density (URM24) – The URM24 zone did not experience any residential development from 2016-2021 (see Data Reporting Tool). The URM24 zone has a minimum net density of 10 dwelling units/acre and a maximum gross density of 24 dwellings/acre (WCC 20.22.252). A density of 10 units per net acre is used for single family land and 17 units per net acre for multi-family land in the Suitable Land Tool.

Resort Commercial (RC) –For single family, the achieved net density from the Data Reporting Tool for the RC zone is 8.3 units/acre. This density is used in the Suitable Land Tool for future single family development. The RC zone did not experience any multi-family residential development from 2016-2021 (see Data Reporting Tool). The RC zone allows multi-family zoning at a maximum gross density of 22 units per acre (WCC 20.64.262). A density of 17 units per net acre

for multi-family development is used in the Suitable Land Tool (same as the URM24 zone).

General Commercial (GC) - The GC zone did not experience any residential development from 2016-2021 (see Data Reporting Tool). Therefore, the achieved density for the RC zone (8.3 units/net acre) is used in the Suitable Land Tool for single family land in the GC zone. The GC zone allows multi-family zoning at a maximum density of 18 units per acre (WCC 20.62.066). A density of 17 units per net acre is used for multi-family development in the Suitable Land Tool (same as URM24 and RC zones).

The Birch Bay UGA has estimated net land capacity for population growth of about 297 acres (**Exhibit 21**), with a total estimated potential occupied unit capacity of 1,257 dwelling units. Based on persons per household assumptions, the Birch Bay UGA has an estimated population capacity of 2,950, indicating an estimated population capacity deficit of 1,254 for the 2021-2036 time period (**Exhibit 22**).

Housing Needs by Type

The *Whatcom County Comprehensive Plan* (Chapter 3- Housing, Chart 3 – Estimated Dwelling Units Needed, page 3-8) indicates that the Birch Bay UGA has a need for 3,106

new single-family dwelling units during the 2013-2036 planning period (the Comprehensive Plan does not estimate multifamily housing needs for Birch Bay). The calculation for Chart 3 in the *Whatcom County Comprehensive Plan* included building activity from 2013. Therefore, the analysis below includes permit data from April 1, 2013, even though the planning period for this Buildable Lands Report is from 2016.

- Between April 1, 2013 and March 31, 2021, Whatcom County performed final inspections on 304 single-family and 39 multi-family units in the Birch Bay UGA. Comparing units built and the needs indicated on Chart 3, the Birch Bay UGA needs an additional 2,802 single-family units between 2021 and 2036.
- The Birch Bay UGA has an estimated 2021-2036 capacity for 1,333 single-family and 504 multi-family housing units (**Exhibit 22**).

The capacity to accommodate single family residential housing in the Birch Bay UGA is not sufficient to accommodate the single family dwelling units needed in the planning period as established in the *Whatcom County Comprehensive Plan* (Chapter 3- Housing, Chart 3).

Employment Capacity 2021-2036

Whatcom County is using an average of the small city FARs for future commercial development, since there are limited data on achieved densities in the Birch Bay UGA (**Exhibit 23**).

The Birch Bay UGA has estimated net land capacity for employment growth of 44.3 acres (**Exhibit 24**), with a total estimated potential occupied commercial capacity of 305,008 square feet. Based on square feet per employee assumptions, the Birch Bay UGA has an estimated employment capacity of 573, indicating an estimated employment capacity surplus of 154 for the 2021-2036 time period (**Exhibit 25**).

Regulatory Changes

The County has evaluated development regulations adopted in the review period (April 1, 2016 – March 31, 2021). Only Ordinance 2019-005 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). In an e-mail of October 6, 2021, a representative of the Whatcom County Public Works River & Flood Division stated:

. . . the 2019 revisions were done mainly to reflect updated flood study and the most recent just adopted in 2021 was for compliance with building freeboard required for CRS [Community Rating System] credit, nothing to do with 'supply of land'. That being said, the flood study did change the Base Flood Elevations and floodplain boundaries in those areas and the FEMA Biological Opinion does restrict density in the floodplain. . ."

A September 30, 2021 River & Flood Division memo attached to the e-mail states that the Special Flood Hazard Area is:

. . . designated Critical Area and/or Habitat Conservation Area (HCA) per WCC Title-16. As such, creating additional 'buildable' lots within a Critical Area or HCA may be prohibited. For further information reference WCC 16.16.420 – Frequently Flooded Areas. . .

Pursuant to the *Whatcom County Review and Evaluation Program Methodology*, Whatcom County deducted floodplains from the buildable land supply.

Infrastructure Gaps

Whatcom County has reviewed capital facility plans and/or consulted with service providers. Based upon these actions, the County has not identified any infrastructure gaps that would prevent service providers from supplying planned capital facilities to developable land in the Birch Bay UGA within the planning period (2021-2036).

Analysis of Comprehensive Plan Objectives and Reasonable Measures

Residential development in the Birch Bay UGA between 2016 and 2021 has occurred at an overall net density less than anticipated in the *Whatcom County Comprehensive Plan*. Additionally, there is not enough capacity in the Birch Bay UGA, with current density assumptions, to accommodate the projected residential growth in the remaining portion of the planning period (between 2021 and 2036). The single family unit capacity in the Birch Bay UGA is insufficient to accommodate the estimated dwelling units needed between 2021 and 2036. Therefore, reasonable measures are appropriate.

Whatcom County Comprehensive Plan Goal 2P states:

. . . The County should approve new residential developments at overall average net densities as shown below, while respecting unique characteristics of each community:

- Birch Bay – five to ten units per net acre. . .

The overall achieved residential density in the Birch Bay UGA was 4.5 units per net acre during the review period (2016-2021). Lots in the Birch Bay UGA have historically been created at densities that the land owner or developer chose. The UR4 zone has a minimum net density of 4 dwelling units/acre, but this is below the Comprehensive Plan goal of five to ten units per net acre. Several other zones in the UGA do not have minimum density requirements. Increasing residential density, including density in zones that allow single family dwellings, would provide additional capacity for growth within the UGA. Therefore, adjustments to the zoning code are appropriate to better implement the Comprehensive Plan.

The Growth Management Act indicates that one of the purposes of the review and evaluation program is to:

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. . . (RCW 36.70A.215(1)(b)).

The Whatcom County Review and Evaluation Program Methodology (February 10, 2022) identifies minimum density requirements and maximum lot sizes as potential reasonable measures (Appendix A). Specifically, the Methodology states:

Zoning ordinances can establish minimum and maximum densities in each zone to ensure that development occurs as envisioned for the community (page 46).

The State Department of Commerce Housing Memorandum: Issues Affecting Housing Availability and Affordability (June 2019) identifies “Reasonable Measures as Tools for Increasing Housing Availability and Affordability” including:

Allow or require small lots (5,000 square feet or less) for single-family neighborhoods within UGAs. Small lots limit sprawl, contribute to the more efficient use of land, and promote densities that can support transit. Small lots also provide expanded housing ownership opportunities to broader income ranges and provide additional variety to available housing types (page 116).

In October 2021, Whatcom County adopted a reasonable measure increasing the allowed density in the UR4 zone in the Birch Bay UGA, if public water and sewer are available and density credits are purchased, from 4 dwellings/acre to 5 dwellings per acre (Ordinance 2021-059). This ordinance also reduced the conventional minimum lot size for residential development in the UR4 zone in the Birch Bay UGA from 8,000 square feet to 4,500 square feet when public water and sewer are available. In November 2017, Whatcom County adopted an ordinance allowing increased density for single family development in the RC zone through the planned unit development process, if density credits are purchased (Ordinance 2017-062). Other potential reasonable measures the County may consider for the Birch Bay UGA include:

- Increasing the minimum net residential density and/or adopting maximum lot size in the UR4 zone (WCC 20.20);
- Adopting minimum net residential density requirements and/or maximum lot size in the URM6 zone (WCC 20.22);
- Adopting minimum net residential density requirements and/or maximum lot size in the GC zone (WCC 20.62); and/or
- Adopting minimum net residential density requirements and/or maximum lot size in the RC zone (WCC 20.64).

The UR4, URM6, GC, and RC zones all allow single family dwelling units.

Residential Development

Exhibit 20. Residential Development, Achieved and Assumed Densities, Birch Bay UGA, 2016-2021

Zoning Designation	Development Type	Acres Developed	Dwelling Units	Achieved Density (Units/Acre)	Density Assumed (Units/Acre)
UR4	Single Family	38.3	168	4.39	4.39
URM6	Single Family	7.6	25	3.31	5.89
	Multifamily	4.6	27	5.89	5.89
URM24	Single Family	N/A	N/A	N/A	10.00
	Multifamily	N/A	N/A	N/A	17.00
RC	Single Family	1.4	12	8.32	8.32
	Multifamily	N/A	N/A	N/A	17.00
GC	Single Family	N/A	N/A	N/A	8.32
	Multifamily	N/A	N/A	N/A	17.00

Sources: Whatcom County, 2022; Community Attributes Inc., 2021.

Note: "Density Assumed" is the assumed density for evaluation of land suitable for development by zone.

Exhibit 21. Residential Land Supply, Birch Bay UGA, 2021-2036

	UGA Total	UR4	URM6	URM24	RC	GC	NC
Vacant Land							
Gross Acres	816.99	471.94	146.62	98.96	62.65	36.82	0.00
Critical Areas	450.86	277.61	43.69	69.51	37.86	22.19	0.00
Future Public Uses	15.80	14.00	0.00	0.00	0.00	1.80	0.00
Infrastructure Gaps	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Quasi-Public Use Deduction	17.52	9.02	5.15	1.47	1.24	0.64	0.00
Infrastructure Deduction	74.76	41.48	22.13	5.30	4.26	1.59	0.00
Market Factor	43.87	22.07	12.86	3.85	3.28	1.80	0.00
Net Acres	214.18	107.77	62.79	18.82	16.01	8.80	0.00
Partially-Used Land							
Gross Acres	232.69	109.12	64.66	0.00	52.63	6.28	0.00
Critical Areas	84.62	48.97	14.24	0.00	20.73	0.69	0.00
Future Public Uses	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Infrastructure Gaps	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Quasi-Public Use Deduction	7.40	3.01	2.52	0.00	1.59	0.28	0.00
Infrastructure Deduction	30.86	13.84	10.84	0.00	5.49	0.69	0.00
Market Factor	29.65	11.69	10.01	0.00	6.70	1.25	0.00
Net Acres	80.16	31.62	27.06	0.00	18.11	3.37	0.00
Underutilized Land							
Gross Acres	4.16	0.00	0.00	0.00	0.00	4.16	0.00
Critical Areas	0.28	0.00	0.00	0.00	0.00	0.28	0.00
Future Public Uses	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Infrastructure Gaps	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Quasi-Public Use Deduction	0.19	0.00	0.00	0.00	0.00	0.19	0.00
Infrastructure Deduction	0.48	0.00	0.00	0.00	0.00	0.48	0.00
Market Factor	0.87	0.00	0.00	0.00	0.00	0.87	0.00
Net Acres	2.34	0.00	0.00	0.00	0.00	2.34	0.00

Sources: Whatcom County, 2022; Community Attributes Inc., 2021.

Exhibit 22. Developable Residential Land Capacity, Birch Bay UGA, 2021-2036

	UGA	UR4	URM6	URM24	RC	GC	NC
Net Developable Residential Acres (Vacant, PU, UU)	296.68	139.39	89.85	18.82	34.12	14.51	0.00
Single Family Developable Acres	249.48	139.39	76.37	9.41	17.06	7.25	-
Assumed Single Family Density (units/acre)		4	6	10	8	8	
Subtotal Single Family Unit Capacity	1,358	612	450	94	142	60	-
Existing Single Family Units	188	67	95	-	4	4	18
Pending Single Family Units	145	-	145	-	-	-	-
Master Planned Single Family Units	-	-	-	-	-	-	-
Subtotal: Net Single Family Unit Capacity	1,333	545	500	94	138	56	-
Potential Occupied Single Family Units	1,000	409	375	71	104	42	-
Single Family Population Capacity	2,380	973	893	168	246	100	-
Multifamily Developable Acres	47.20	-	13.48	9.41	17.06	7.25	-
Assumed Multifamily Density (units/acre)			6	17	17	17	
Subtotal Multifamily Unit Capacity	652	-	79	160	290	123	-
Existing Multifamily Units	148	-	35	-	113	-	-
Pending Multifamily Units	-	-	-	-	-	-	-
Master Planned Multifamily Units	-	-	-	-	-	-	-
Subtotal: Net Multifamily Unit Capacity	504	-	44	160	177	123	-
Potential Occupied Multifamily Units	257	-	22	82	90	63	-
Multifamily Population Capacity	570	-	50	181	200	139	-
Net Dwelling Unit Capacity	1,837	545	544	254	315	179	-
Potential Occupied Dwelling Units	1,257	409	397	152	194	105	-
Population Capacity	2,950	973	943	349	446	239	-
Remaining Population Growth to Accommodate (2021-2036)	4,204						
Population Capacity Surplus (Deficit)	(1,254)						

Sources: Whatcom County, 2022; Community Attributes Inc., 2021.

Commercial and Industrial Development

Exhibit 23. Nonresidential Development, Achieved and Assumed Densities, Birch Bay UGA, 2016-2021

Zoning Designation	Development Type	Acres Developed	Built Square Feet	Achieved Density (FAR)	Assumed Density (FAR)
UR4	Commercial	7.1	3,780	0.01	N/A
RC	Commercial	0.6	368	0.01	0.18
GC	Commercial	4.1	26,480	0.15	0.18
NC	Commercial	N/A	N/A	N/A	0.18

Sources: Whatcom County, 2022; Community Attributes Inc., 2021.

Note: Assumed Density is the assumed density for evaluation of land suitable for development by zone.

Exhibit 24. Developable Nonresidential Land Supply, Birch Bay UGA, 2021-2036

	UGA Total	UR4	URM6	URM24	RC	GC	NC
Vacant Land							
Gross Acres	103.67	0.00	0.00	0.00	6.96	85.91	10.80
Critical Areas	64.19	0.00	0.00	0.00	4.21	51.77	8.21
Future Public Uses	4.20	0.00	0.00	0.00	0.00	4.20	0.00
Infrastructure Gaps	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Quasi-Public Use Deduction	1.76	0.00	0.00	0.00	0.14	1.50	0.13
Infrastructure Deduction	4.44	0.00	0.00	0.00	0.47	3.71	0.26
Market Factor	4.94	0.00	0.00	0.00	0.36	4.20	0.37
Net Acres	24.13	0.00	0.00	0.00	1.78	20.52	1.82
Partially-Used Land							
Gross Acres	20.50	0.00	0.00	0.00	5.85	14.65	0.00
Critical Areas	3.91	0.00	0.00	0.00	2.30	1.60	0.00
Future Public Uses	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Infrastructure Gaps	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Quasi-Public Use Deduction	0.83	0.00	0.00	0.00	0.18	0.65	0.00
Infrastructure Deduction	2.23	0.00	0.00	0.00	0.61	1.62	0.00
Market Factor	3.65	0.00	0.00	0.00	0.74	2.91	0.00
Net Acres	9.88	0.00	0.00	0.00	2.01	7.87	0.00
Underutilized Land							
Gross Acres	17.52	0.00	0.00	0.00	0.00	9.70	7.82
Critical Areas	0.64	0.00	0.00	0.00	0.00	0.64	0.00
Future Public Uses	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Infrastructure Gaps	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Quasi-Public Use Deduction	0.84	0.00	0.00	0.00	0.00	0.45	0.39
Infrastructure Deduction	1.91	0.00	0.00	0.00	0.00	1.12	0.78
Market Factor	3.81	0.00	0.00	0.00	0.00	2.02	1.79
Net Acres	10.31	0.00	0.00	0.00	0.00	5.46	4.85

Sources: Whatcom County, 2022; Community Attributes Inc., 2021.

Exhibit 25. Developable Nonresidential Land Capacity, Birch Bay UGA, 2021-2036

	UGA	UR4	URM6	URM24	RC	GC	NC
Net Developable Employment Acres (Vacant, PU, UU)	44.32	0.00	0.00	0.00	3.79	33.85	6.68
Commercial Developable Acres	44.32	-	-	-	3.79	33.85	6.68
Assumed Commercial Density (FAR)					0.2	0.2	0.2
Subtotal: Commercial Capacity (SF)	355,214	-	-	-	30,387	271,322	53,505
Existing Commercial Space (SF)	70,779	3,848	7,663	-	35,726	21,742	1,800
Pending Commercial Space (SF)	19,776	-	-	-	-	19,776	-
Master Planned Commercial Space (SF)	-	-	-	-	-	-	-
Subtotal: Net Commercial Capacity (SF)	321,061	-	-	-	-	269,356	51,705
Potential Occupied Commercial Space (SF)	305,008	-	-	-	-	255,888	49,120
Commercial Employment Capacity	573	-	-	-	-	481	92
Industrial Developable Acres	-	-	-	-	-	-	-
Assumed Industrial Density (FAR)							
Subtotal: Industrial Capacity (SF)	-	-	-	-	-	-	-
Existing Industrial Space (SF)	43,012	2,402	6,768	-	756	33,086	-
Pending Industrial Space (SF)	-	-	-	-	-	-	-
Master Planned Industrial Space (SF)	-	-	-	-	-	-	-
Subtotal: Net Industrial Capacity (SF)	-	-	-	-	-	-	-
Potential Occupied Industrial Space (SF)	-	-	-	-	-	-	-
Industrial Employment Capacity	-	-	-	-	-	-	-
Net Commercial & Industrial Capacity (SF)	321,061	-	-	-	-	269,356	51,705
Potential Occupied Commercial & Industrial Employment Capacity	305,008	-	-	-	-	255,888	49,120
	573	-	-	-	-	481	92
Remaining Employment Growth to Accommodate (2021-2036)	419						
Employment Capacity Surplus (Deficit)	154						

Sources: Whatcom County, 2022; Community Attributes Inc., 2021.

3. Blaine UGA

The Blaine Urban Growth Area is projected to encompass 9,585 residents and 5,159 employees by 2036. The UGA has a projected growth allocation of 3,838 population and 1,823 employment between 2016 and 2036 (**Exhibit 1** and **Exhibit 2**).

Achieved Growth 2016-2021

Based on permit data collected between 2016 and 2021 and occupancy and persons per household and square feet per employee assumptions, the Blaine UGA grew by an estimated 551 population (91% within the City of Blaine) and 245 employment (100% within the City of Blaine) (**Exhibit 6** and **Exhibit 7**).

Between 2016 and 2021, the City of Blaine achieved densities greater than planned for residential uses, 4.4 units per acre achieved compared to 4.25 average across single family residential zones adopted by the City of Blaine. The achieved density within the incorporated portions of the UGA also fall within the planned densities of 4.0 to 6.0 units per acre adopted in the *Whatcom County Comprehensive Plan* for the City of Blaine (**Exhibit 11**).

The unincorporated portions of the Blaine UGA have an achieved residential density of 4.7 units per acre, matching the densities achieved within incorporated portions of the UGA (**Exhibit 11**).

The City of Blaine has not adopted FARs. However, for purposes of the Data Reporting Tool, Blaine developed FARs based on the bulk, dimensional, and performance standards defined in municipal code for non-residential zones. The City of Blaine developed planned FARs for commercial zones averaging 0.80. Across all commercial development between 2016-2021, the achieved FAR is 0.31. No commercial development occurred during the period in unincorporated areas of the UGA. The average planned FAR for industrial zones is 0.89 for the City of Blaine. Between 2016 and 2021, the achieved FAR is 0.30. No industrial development occurred in the unincorporated portions of the UGA. Whatcom County has not adopted planned densities for commercial or industrial development (**Exhibit 11**).

Population and Employment Assumptions

Specific occupancy rate and population and employment density assumptions for the Blaine UGA are:

- 87.8% Single Family occupancy rate
- 86.9% Multifamily occupancy rate
- 95.0% Commercial and Industrial occupancy rate
- 2.479 Single Family persons per household
- 2.009 Multifamily persons per household
- 531 and 739 respectively Commercial and Industrial square feet per employee

The Blaine UGA has an estimated 3,287 population and 1,578 employment growth remaining to accommodate between 2021 and 2036 (**Exhibit 6** and **Exhibit 7**).

Population Capacity 2021-2036

Based on achieved densities between 2016 and 2021 and planning assumptions, City of Blaine planners are assuming future densities ranging between 3.0 units per acre and 20.0 units per acre for single family residential,

depending on the specific zone. Future density assumptions range between 4.0 and 24.0 units per acre for multifamily zones (**Exhibit 26**).

The Blaine UGA has estimated net land capacity for population growth of 684.97 acres (**Exhibit 27**), with a total estimated potential occupied unit capacity of 4,857 dwelling units. Based on persons per household assumptions, the Blaine UGA has an estimated population capacity of 11,324, indicating an estimated population capacity surplus of 8,037 (**Exhibit 28**).

Housing Needs by Type

The *Whatcom County Comprehensive Plan* (Chapter 3- Housing, Chart 3 – Estimated Dwelling Units Needed, page 3-8) indicates that Blaine has a need for 1,548 single-family and 678 multi-family new dwelling units during the 2013-2036 planning period. The calculation for Chart 3 in the *Whatcom County Comprehensive Plan* included building activity from 2013. Therefore, the analysis below includes permit data from April 1, 2013, even though the planning period for this Buildable Lands Report is from 2016.

- Between April 1, 2013 and March 31, 2021, Blaine issued building permits for 343 single-family/mobile home units, 5 accessory dwelling units, and multi-family

units 179 (this includes duplexes). Comparing units built and the needs indicated on Chart 3, Blaine needs an additional 1,205 single-family/mobile home units and 499 multi-family units between 2021 and 2036.

- The City and unincorporated UGA have an estimated 2021-2036 net capacity for 3,794 single-family and 1,756 multi-family housing units.

These capacities are sufficient to accommodate the dwelling unit types needed in the planning period as established in the Whatcom County Comprehensive Plan (Chapter 3- Housing, Chart 3).

Employment Capacity 2021-2036

Based on achieved densities between 2016 and 2021 and planning assumptions, City of Blaine planners are assuming future commercial FARs ranging between 0.60 and 1.00, depending on the specific zone. Assumed future industrial FARs range between 0.75 and 1.00 (**Exhibit 29**).

The Blaine UGA has estimated net land capacity for employment growth of 165.76 acres (**Exhibit 30**), with a total estimated potential occupied commercial and industrial capacity of 5.38 million square feet. Based on

square feet per employee assumptions, the Blaine UGA has an estimated employment capacity of 8,570, indicating an estimated employment capacity surplus of 6,992 (**Exhibit 31**).

Regulatory Changes

Subsequent to the adoption of the 2016 Comprehensive Plan and through April of 2021, the City of Blaine adopted regulatory changes that either impacted the amount of land available for development or modified the densities and mix of uses allowed on buildable lands. These changes are listed in the Data Reporting Tool worksheet. In summary, those updates include the following:

- Updates to the City's Central Business District zoning designation that allow it to function as an urban village. Examples include zero-lot line setbacks, multi-use and multi-family development, and higher allowable impervious surfaces.
- Adoption of a multi-family tax exemption (MFTE) to encourage the construction of affordable, multi-family housing.
- Updates to the Wharf District Master Plan to permit additional space for

marine commercial and industrial development.

As of the issuance of this report, the City has additionally adopted updates to allow work/live units in the Manufacturing zone, and modified the Highway Commercial “C” zone to permit a greater range of land uses.

The City in early 2022 also adopted legislation to identify the Hearing Examiner as the hearing body for quasi-judicial decisions, ensuring a more predictable and legally sound process for land use decisions. The City will be updating the Critical Areas Ordinance in 2023.

Infrastructure Gaps

Blaine has identified a lack of capacity for sewer service in East Blaine, however the City of Blaine Capital Improvement Plan for Wastewater Utility: 2022-2027 anticipates needed capacity being restored pursuant to the funded “G Street Sewer Improvement – East Blaine Pipe Capacity” project. Subsequent to the improvements being completed in 2022, the City will be able to supply this planned wastewater capital facilities to developable land in the eastern Blaine UGA within the planning period (2021-2036). Additional sewer upgrades under I-5 are identified in the 2022-2027 CIP. The City of Blaine has identified

potential constraints to water availability and capacity. The City has contracted with a consultant to both identify existing capacity and propose recommendations to increase that capacity. As of the writing of this report, the City has determined that if needed, it will consider updates to the 2021 Comprehensive Water System Plan and Capital Facilities Plan to plan and budget for the increased capacity, and therefore the planned densities in the City’s Comprehensive Plan will be realized.

Analysis of Comprehensive Plan Objectives and Reasonable Measures

The City of Blaine has determined that growth targets and assumptions for residential development are being met. Therefore, an analysis of comprehensive plan residential development targets, assumptions, and objectives is not deemed necessary during the reporting cycle.

No inconsistencies between planned and actual residential growth have been identified in the Blaine UGA. Therefore, reasonable measures are not required under RCW 36.70A.215.

The City of Blaine has identified that there are inconsistencies between planned and actual commercial, industrial, and manufacturing growth in the Blaine UGA.

Potential reasonable measures may include the following:

- Updates to the Binding Site Plans requirements. Blaine should consider adopting updates that require the installation of public and private infrastructure as a condition of final binding site plan approval. Binding site plan expiration dates should be modified to align with the timelines for plats.
- Updates the allowed uses in the Manufacturing zoning districts. Blaine should consider adopting updates that would expand allowed uses in the manufacturing zone, subject to appropriate performance standards.

Residential Development

Exhibit 26. Residential Development, Achieved and Assumed Densities, City of Blaine, 2016-2021

Zoning Designation	Development Type	Acres Developed	Dwelling Units	Achieved Density (Units/Acre)	Density Assumed (Units/Acre)
PR	Single Family	3.3	17	5.09	4.00
	Multifamily	N/A	N/A	N/A	4.00
RL	Single Family	9.6	54	5.62	6.00
SF-1	Single Family	1.0	4	4.09	6.00
SF-2	Single Family	2.3	14	6.19	6.00
PC	Single Family	0.2	1	5.42	N/A
RH	Single Family	N/A	N/A	N/A	20.00
	Multifamily	0.5	2	3.72	24.00
RM	Single Family	2.4	14	5.82	6.00
	Multifamily	2.6	28	10.61	12.00
R/O	Single Family	N/A	N/A	N/A	6.00
	Multifamily	N/A	N/A	N/A	24.00
RPR	Single Family	21.0	72	3.42	3.00
CB G-36	Multifamily	N/A	N/A	N/A	20.00
CB G-48	Multifamily	N/A	N/A	N/A	20.00
CB-M	Multifamily	N/A	N/A	N/A	20.00
CB M-48	Multifamily	N/A	N/A	N/A	20.00
CB M-60	Multifamily	N/A	N/A	N/A	20.00
CB-T	Multifamily	N/A	N/A	N/A	20.00
CB TP-60	Multifamily	N/A	N/A	N/A	20.00
CB WV-36	Multifamily	N/A	N/A	N/A	20.00
HCA	Multifamily	N/A	N/A	N/A	20.00
HCb	Multifamily	N/A	N/A	N/A	N/A
HCc	Multifamily	N/A	N/A	N/A	20.00
HCd	Multifamily	N/A	N/A	N/A	20.00
Mpr	Single Family	6.4	36	5.60	5.00
	Multifamily	3.3	18	5.40	12.00

Sources: City of Blaine, 2022; Community Attributes Inc., 2021.

Note: "Density Assumed" is the assumed density for evaluation of land suitable for development by zone. NOTE Assumed densities differ from achieved density

Exhibit 27. Residential Land Supply, Blaine UGA, 2021-2036

	UGA Total	CB-M	CB-T	HCA	Ma	Mb	Mpr	PC	PR	RL	RM	R/O	RPR	SF-1	SF-2	CB TP-60	CB M-60	CB M-48	CB G-36	CB WV-36	HCc	HCd	RH	CB G-48
Vacant Land																								
Gross Acres	818.01	0.00	0.00	0.00	0.00	0.00	0.00	7.74	368.53	109.17	38.43	54.74	216.18	5.18	3.77	2.21	0.31	0.97	2.13	6.00	1.43	0.63	0.52	0.07
Critical Areas	229.19	0.00	0.00	0.00	0.00	0.00	0.00	5.65	48.30	47.05	20.83	49.74	49.74	0.52	0.30	0.68	0.27	0.23	0.10	5.26	0.00	0.00	0.52	0.00
Future Public Uses	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Infrastructure Gaps	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Quasi-Public Use Deduction	29.44	0.00	0.00	0.00	0.00	0.00	0.00	0.10	16.01	3.11	0.88	0.25	8.32	0.23	0.17	0.08	0.00	0.04	0.10	0.04	0.07	0.03	0.00	0.00
Infrastructure Deduction	29.44	0.00	0.00	0.00	0.00	0.00	0.00	0.10	16.01	3.11	0.88	0.25	8.32	0.23	0.17	0.08	0.00	0.04	0.10	0.04	0.07	0.03	0.00	0.00
Market Factor	79.49	0.00	0.00	0.00	0.00	0.00	0.00	0.28	43.23	8.39	2.38	0.68	22.47	0.63	0.47	0.21	0.01	0.10	0.27	0.10	0.19	0.08	0.00	0.01
Net Acres	450.45	0.00	0.00	0.00	0.00	0.00	0.00	1.60	244.98	47.52	13.47	3.83	127.33	3.56	2.65	1.17	0.03	0.57	1.55	0.56	1.09	0.48	0.00	0.05
Partially-Used Land																								
Gross Acres	428.70	0.00	0.00	0.00	0.00	0.00	0.00	3.80	181.35	213.60	9.27	1.40	9.68	0.48	5.18	0.45	0.00	0.71	0.48	0.36	1.01	0.09	0.34	0.49
Critical Areas	86.61	0.00	0.00	0.00	0.00	0.00	0.00	0.58	14.41	68.67	2.33	0.00	0.03	0.00	0.00	0.31	0.00	0.03	0.00	0.01	0.00	0.00	0.24	0.00
Future Public Uses	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Infrastructure Gaps	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Quasi-Public Use Deduction	17.10	0.00	0.00	0.00	0.00	0.00	0.00	0.16	8.35	7.25	0.35	0.07	0.48	0.02	0.26	0.01	0.00	0.03	0.02	0.02	0.05	0.00	0.01	0.02
Infrastructure Deduction	17.10	0.00	0.00	0.00	0.00	0.00	0.00	0.16	8.35	7.25	0.35	0.07	0.48	0.02	0.26	0.01	0.00	0.03	0.02	0.02	0.05	0.00	0.01	0.02
Market Factor	76.97	0.00	0.00	0.00	0.00	0.00	0.00	0.72	37.56	32.61	1.56	0.32	2.17	0.11	1.16	0.03	0.00	0.15	0.11	0.08	0.23	0.02	0.02	0.11
Net Acres	230.91	0.00	0.00	0.00	0.00	0.00	0.00	2.17	112.68	97.83	4.69	0.95	6.51	0.33	3.49	0.09	0.00	0.46	0.32	0.23	0.68	0.06	0.07	0.33
Underutilized Land																								
Gross Acres	5.57	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.40	2.55	0.00	0.00	0.00	0.21	0.16	0.42	0.00	0.00	0.68	0.56	0.00	0.59
Critical Areas	0.21	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.16	0.00	0.00	0.00	0.06	0.00	0.00	0.00
Future Public Uses	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Infrastructure Gaps	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Quasi-Public Use Deduction	0.27	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.02	0.13	0.00	0.00	0.00	0.01	0.00	0.02	0.00	0.00	0.03	0.03	0.00	0.03
Infrastructure Deduction	0.27	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.02	0.13	0.00	0.00	0.00	0.01	0.00	0.02	0.00	0.00	0.03	0.03	0.00	0.03
Market Factor	1.20	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.09	0.57	0.00	0.00	0.00	0.05	0.00	0.09	0.00	0.00	0.14	0.13	0.00	0.13
Net Acres	3.61	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.27	1.72	0.00	0.00	0.00	0.14	0.00	0.28	0.00	0.00	0.42	0.38	0.00	0.40

Sources: City of Blaine, 2022; Whatcom County, 2021; Community Attributes Inc., 2021.

Exhibit 28. Developable Residential Land Capacity, Blaine UGA, 2021 -2036

	UGA	CB-M	CB-T	HCA	Ma	Mb	Mpr	PC	PR	RL	RM	R/O	RPR	SF-1	SF-2	CB TP- 60	CB M- 60	CB M- 48	CB G- 36	CB WV- 36	HCc	HCd	RH	CB G- 48
Net Developable Residential Acres (Vacant, PU, UU)	684.97	0.00	0.00	0.00	0.00	0.00	0.00	3.77	357.66	145.36	18.42	6.49	133.84	3.89	6.15	1.41	0.04	1.31	1.87	0.80	2.19	0.92	0.07	0.79
Single Family Developable Acres	546.67	-	-	-	-	-	-	-	282.37	145.36	-	3.25	105.66	3.89	6.15	-	-	-	-	-	-	-	0.00	-
Assumed Single Family Density (units/acre)								5	4	6	6	6	3	6	6								20	
Subtotal Single Family Unit Capacity	2,397	-	-	-	-	-	-	-	1,129	872	-	19	317	23	37	-	-	-	-	-	-	-	-	-
Existing Single Family Units	232	-	-	28	2	11	-	-	58	74	11	5	-	5	13	1	-	-	3	-	8	3	2	4
Pending Single Family Units	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Master Planned Single Family Units	1,552	-	-	-	-	-	-	-	1,177	-	-	-	375	-	-	-	-	-	-	-	-	-	-	-
Subtotal: Net Single Family Unit Capacity	3,794	-	-	-	-	-	-	-	2,248	798	-	14	692	18	24	-	-	-	-	-	-	-	-	-
Potential Occupied Single Family Units	3,331	-	-	-	-	-	-	-	1,974	701	-	12	608	16	21	-	-	-	-	-	-	-	-	-
Single Family Population Capacity	8,258	-	-	-	-	-	-	-	4,893	1,737	-	30	1,506	39	52	-	-	-	-	-	-	-	-	-
Multifamily Developable Acres	138.30	-	-	-	-	-	-	3.77	75.30	-	18.42	3.25	28.18	-	-	1.41	0.04	1.31	1.87	0.80	2.19	0.92	0.07	0.79
Assumed Multifamily Density (units/acre)		20	20	20				12	18	4	12	24	12			20	20	20	20	20	20	20	24	20
Subtotal Multifamily Unit Capacity	1,194	-	-	-	-	-	-	68	301	-	221	78	338	-	-	28	1	26	37	16	44	18	2	16
Existing Multifamily Units	27	-	-	-	-	-	-	-	3	2	-	8	-	-	4	-	-	2	8	-	-	-	-	-
Pending Multifamily Units	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Master Planned Multifamily Units	583	-	-	-	-	-	220	-	212	-	-	-	151	-	-	-	-	-	-	-	-	-	-	-
Subtotal: Net Multifamily Unit Capacity	1,756	-	-	-	-	-	220	68	510	-	221	70	489	-	-	28	1	24	29	16	44	18	2	16
Potential Occupied Multifamily Units	1,526	-	-	-	-	-	191	59	443	-	192	61	425	-	-	24	1	21	25	14	38	16	2	14
Multifamily Population Capacity	3,066	-	-	-	-	-	384	119	890	-	386	122	854	-	-	49	2	42	51	28	77	31	3	28
Net Dwelling Unit Capacity	5,550	-	-	-	-	-	220	68	2,758	798	221	84	1,181	18	24	28	1	24	29	16	44	18	2	16
Potential Occupied Dwelling Units	4,857	-	-	-	-	-	191	59	2,417	701	192	73	1,033	16	21	24	1	21	25	14	38	16	2	14
Population Capacity	11,324	-	-	-	-	-	384	119	5,783	1,737	386	152	2,360	39	52	49	2	42	51	28	77	31	3	28
Remaining Population Growth to Accommodate (2021-2036)	3,287																							
Population Capacity Surplus (Deficit)	8,037																							

Sources: City of Blaine, 2022; Whatcom County, 2021; Community Attributes Inc., 2021.

Commercial and Industrial Development

Exhibit 29. Nonresidential Development, Achieved and Assumed Densities, City of Blaine, 2016-2021

Zoning Designation	Development Type	Acres Developed	Built Square Feet	Achieved Density (FAR)	Assumed Density (FAR)
PR	Commercial	N/A	N/A	N/A	0.60
PC	Commercial	N/A	N/A	N/A	0.80
R/O	Commercial	N/A	N/A	N/A	0.70
RPR	Commercial	0.5	6,955	0.31	0.70
CB G-36	Commercial	N/A	N/A	N/A	0.85
CB G-48	Commercial	N/A	N/A	N/A	0.85
CB-M	Commercial	0.9	19,644	0.51	1.00
CB M-48	Commercial	N/A	N/A	N/A	1.00
CB M-60	Commercial	N/A	N/A	N/A	1.00
CB-T	Commercial	N/A	N/A	N/A	1.00
CB TP-60	Commercial	N/A	N/A	N/A	1.00
CB WV-36	Commercial	N/A	N/A	N/A	1.00
CB-W	Commercial	3.7	62,296	0.39	1.00
	Industrial	N/A	N/A	N/A	1.00
GW	Commercial	N/A	N/A	N/A	0.90
	Industrial	2.3	22,873	0.23	0.90
HCA	Commercial	1.5	27,685	0.41	0.85
HCb	Commercial	N/A	N/A	N/A	0.85
HCc	Commercial	N/A	N/A	N/A	0.85
HCd	Commercial	N/A	N/A	N/A	0.85
M	Industrial	N/A	N/A	N/A	0.75
Ma	Commercial	N/A	N/A	N/A	0.75
	Industrial	N/A	N/A	N/A	0.75
Mb	Commercial	N/A	N/A	N/A	0.75
	Industrial	N/A	N/A	N/A	0.75
Mc	Commercial	N/A	N/A	N/A	0.75
	Industrial	2.9	43,600	0.35	0.75
Mpr	Commercial	N/A	N/A	N/A	0.70

Sources: City of Blaine, 2022; Community Attributes Inc., 2021.

Note: Assumed Density is the assumed density for evaluation of land suitable for development by zone.

Exhibit 30. Developable Nonresidential Land Supply, Blaine UGA, 2021-2036

	UGA Total	GW	HCA	Ma	Mb	Mc	Mpr	PC	PR	RL	R/O	RPR	CB TP- 60	CB M- 60	CB M- 48	CB G- 36	CB WV- 36	HCb	HCc	HCd	CB G- 48
Vacant Land																					
Gross Acres	262.01	9.05	41.03	15.07	122.02	9.23	0.00	2.58	19.40	0.00	13.69	11.38	0.25	0.08	0.32	0.53	3.01	2.59	1.43	0.63	0.02
Critical Areas	105.40	0.00	24.34	1.83	55.65	0.73	0.00	1.88	2.54	0.00	12.44	2.62	0.08	0.07	0.08	0.03	2.64	0.00	0.00	0.00	0.00
Future Public Uses	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Infrastructure Gaps	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Quasi-Public Use Deduction	7.83	0.45	0.83	0.66	3.32	0.43	0.00	0.03	0.84	0.00	0.06	0.44	0.01	0.00	0.01	0.03	0.02	0.13	0.07	0.03	0.00
Infrastructure Deduction	7.83	0.45	0.83	0.66	3.32	0.43	0.00	0.03	0.84	0.00	0.06	0.44	0.01	0.00	0.01	0.03	0.02	0.13	0.07	0.03	0.00
Market Factor	21.14	1.22	2.25	1.79	8.96	1.15	0.00	0.09	2.28	0.00	0.17	1.18	0.02	0.00	0.03	0.07	0.05	0.35	0.19	0.08	0.00
Net Acres	119.80	6.93	12.76	10.13	50.77	6.50	0.00	0.53	12.89	0.00	0.96	6.70	0.13	0.01	0.19	0.39	0.28	1.98	1.09	0.48	0.01
Partially-Used Land																					
Gross Acres	43.68	15.80	2.93	0.00	4.87	2.76	0.00	1.27	9.54	0.00	0.35	0.51	0.05	0.00	0.24	0.12	0.18	1.63	1.01	0.09	0.12
Critical Areas	10.97	4.58	1.59	0.00	0.71	0.15	0.00	0.19	0.76	0.00	0.00	0.00	0.03	0.00	0.01	0.00	0.01	0.71	0.00	0.00	0.00
Future Public Uses	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Infrastructure Gaps	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Quasi-Public Use Deduction	1.64	0.56	0.07	0.00	0.21	0.13	0.00	0.05	0.44	0.00	0.02	0.03	0.00	0.00	0.01	0.01	0.01	0.05	0.05	0.00	0.01
Infrastructure Deduction	1.64	0.56	0.07	0.00	0.21	0.13	0.00	0.05	0.44	0.00	0.02	0.03	0.00	0.00	0.01	0.01	0.01	0.05	0.05	0.00	0.01
Market Factor	7.36	2.52	0.30	0.00	0.94	0.59	0.00	0.24	1.98	0.00	0.08	0.11	0.00	0.00	0.05	0.03	0.04	0.21	0.23	0.02	0.03
Net Acres	22.08	7.57	0.90	0.00	2.81	1.76	0.00	0.72	5.93	0.00	0.24	0.34	0.01	0.00	0.15	0.08	0.12	0.62	0.68	0.06	0.08
Underutilized Land																					
Gross Acres	64.54	0.30	6.19	13.03	42.07	0.00	0.00	0.00	0.00	0.00	0.64	0.00	0.02	0.04	0.14	0.00	0.00	0.72	0.68	0.56	0.15
Critical Areas	29.17	0.00	2.10	4.45	22.52	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.04	0.00	0.00	0.00	0.00	0.06	0.00	0.00
Future Public Uses	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Infrastructure Gaps	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Quasi-Public Use Deduction	1.77	0.01	0.20	0.43	0.98	0.00	0.00	0.00	0.00	0.00	0.03	0.00	0.00	0.00	0.01	0.00	0.00	0.04	0.03	0.03	0.01
Infrastructure Deduction	1.77	0.01	0.20	0.43	0.98	0.00	0.00	0.00	0.00	0.00	0.03	0.00	0.00	0.00	0.01	0.00	0.00	0.04	0.03	0.03	0.01
Market Factor	7.96	0.07	0.92	1.93	4.40	0.00	0.00	0.00	0.00	0.00	0.14	0.00	0.01	0.00	0.03	0.00	0.00	0.16	0.14	0.13	0.03
Net Acres	23.87	0.20	2.76	5.79	13.20	0.00	0.00	0.00	0.00	0.00	0.43	0.00	0.02	0.00	0.09	0.00	0.00	0.49	0.42	0.38	0.10

Sources: City of Blaine, 2022; Whatcom County, 2021; Community Attributes Inc., 2021.

Exhibit 31. Developable Nonresidential Land Capacity, Blaine UGA, 2021-2036

	UGA	GW	HCA	Ma	Mb	Mc	Mpr	PC	PR	RL	R/O	RPR	CB TP- 60	CB M- 60	CB M- 48	CB G- 36	CB WV- 36	HCb	HCc	HCd	CB G- 48
Net Developable Employment Acres (Vacant, PU, UU)	165.76	14.70	16.42	15.92	66.78	8.27	0.00	1.26	18.82	0.00	1.62	7.04	0.16	0.01	0.44	0.47	0.40	3.08	2.19	0.92	0.20
Commercial Developable Acres	71.97	14.70	16.42	-	-	-	-	1.26	18.82	-	1.62	7.04	0.16	0.01	0.44	0.47	0.40	3.08	2.19	0.92	0.20
Assumed Commercial Density (FAR)		0.9	0.9	0.8	0.8	0.8	0.7	0.8	0.6		0.7	0.7	1.0	1.0	1.0	0.9	1.0	0.9	0.9	0.9	0.9
Subtotal: Commercial Capacity (SF)	2,466,577	576,235	608,115	-	-	-	-	43,790	491,993	-	49,505	214,792	6,825	413	19,010	17,314	17,396	114,111	81,215	33,946	7,290
Existing Commercial Space (SF)	143,180	45,286	13,682	-	-	-	-	17,773	-	160	11,177	-	1,223	2,472	18,393	1,494	2,182	5,640	3,848	2,352	5,945
Pending Commercial Space (SF)	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Master Planned Commercial Space (SF)	225,000	37,000	-	-	-	-	71,000	-	72,000	-	-	45,000	-	-	-	-	-	-	-	-	-
Subtotal: Net Commercial Capacity (SF)	2,558,953	567,949	594,433	-	-	-	71,000	26,017	563,993	-	38,328	259,792	5,602	-	617	15,820	15,214	108,471	77,367	31,594	1,345
Potential Occupied Commercial Space (SF)	2,431,006	539,552	564,711	-	-	-	67,450	24,716	535,793	-	36,412	246,802	5,322	-	586	15,029	14,453	103,047	73,499	30,014	1,278
Commercial Employment Capacity	4,578	1,016	1,063	-	-	-	127	47	1,009	-	69	465	10	-	1	28	27	194	138	57	2
Industrial Developable Acres	93.79	-	-	15.92	66.78	8.27	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Assumed Industrial Density (FAR)		0.9		0.8	0.8	0.8															
Subtotal: Industrial Capacity (SF)	3,094,830	-	-	520,064	2,181,559	270,122	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Existing Industrial Space (SF)	19,761	-	1,044	-	-	200	-	-	-	4,864	-	-	-	-	-	-	2,000	-	6,253	-	-
Pending Industrial Space (SF)	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Master Planned Industrial Space (SF)	10,208	10,208	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Subtotal: Net Industrial Capacity (SF)	3,104,838	10,208	-	520,064	2,181,559	269,922	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Potential Occupied Industrial Space (SF)	2,949,596	9,698	-	494,061	2,072,481	256,426	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Industrial Employment Capacity	3,992	13	-	669	2,804	347	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Net Commercial & Industrial Capacity (SF)	5,663,791	578,157	594,433	520,064	2,181,559	269,922	71,000	26,017	563,993	-	38,328	259,792	5,602	-	617	15,820	15,214	108,471	77,367	31,594	1,345
Potential Occupied Commercial & Industrial Employment Capacity	5,380,602	549,249	564,711	494,061	2,072,481	256,426	67,450	24,716	535,793	-	36,412	246,802	5,322	-	586	15,029	14,453	103,047	73,499	30,014	1,278
Employment Capacity Surplus (Deficit)	8,570	1,029	1,063	669	2,804	347	127	47	1,009	-	69	465	10	-	1	28	27	194	138	57	2
Remaining Employment Growth to Accommodate (2021-2036)	1,578																				
Employment Capacity Surplus (Deficit)	6,992																				

Sources: City of Blaine, 2022; Whatcom County, 2021; Community Attributes Inc., 2021.

4. Cherry Point UGA

The Cherry Point Urban Growth Area is characterized by and planned for industrial uses. This UGA does not have residential zoning or allocated population growth. The UGA has an employment growth allocation of 774 between 2016 and 2036 (**Exhibit 2**).

Achieved Growth 2016-2021

Permit data for the Cherry Point UGA is not a sufficient data source to estimate past employment growth. This is because a major employer in the UGA shutdown in 2020. Additionally, the Cherry Point Urban Growth Area is unique in that many of the building permits are not for the more traditional enclosed industrial buildings that have been permitted in other cities and UGAs (building permits at Cherry Point include equipment, pipe supports, platforms, etc.). Therefore, Whatcom County contracted with Western Washington University to provide an employment growth estimate for the review period (*Employment at Cherry Point, June 2021*). Employment data for 2016 was limited. Therefore, the employment estimate represents growth between 2017 and 2021. Based on these estimates, the Cherry Point UGA declined in employment by 141 (**Exhibit 7**). Cherry Point UGA employment declined between 2016 and 2021 because of job losses

associated with the Alcoa Intalco shutdown in 2020.

Employment Assumptions

Occupancy rate and employment density assumptions for estimating future growth capacity in the Cherry Point UGA are:

- 95.0% Industrial occupancy rate
- 1,779 Industrial square feet per employee

The Cherry Point UGA will need to accommodate 876 more jobs between 2021 and 2036 under current planning assumptions (**Exhibit 7**).

Employment Capacity 2021-2036

The *Whatcom County Comprehensive Plan* does not have adopted industrial planned densities. Between 2016 and 2021 the Cherry Point UGA has seen an overall achieved industrial FAR of 0.11 (**Exhibit 11**).

Based on achieved densities between 2016 and 2021, Whatcom County is assuming future FARs of 0.10 for the HII zone and 0.12 for the LII zone (**Exhibit 32**).

The Cherry Point UGA has estimated net land capacity for employment growth of 1,152 acres (**Exhibit 33**), with a total estimated potential occupied industrial capacity of over 4.6 million square feet. Based on square feet per employee assumptions, the Cherry Point UGA has an estimated future employment capacity of 2,613, indicating an estimated employment capacity surplus of 1,737 (**Exhibit 34**).

Regulatory Changes

The County has evaluated development regulations adopted in the review period (April 1, 2016 - March 31, 2021). Only Ordinance 2019-005 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). In an e-mail of October 6, 2021, a representative of the Whatcom County Public Works River & Flood Division stated:

. . . the 2019 revisions were done mainly to reflect updated flood study and the most recent just adopted in 2021 was for compliance with building freeboard required for CRS [Community Rating System] credit, nothing to do with 'supply of land'. That being said, the flood study did change the Base Flood Elevations and floodplain boundaries in those areas and

the FEMA Biological Opinion does restrict density in the floodplain. . .

A September 30, 2021 River & Flood Division memo attached to the e-mail states that the Special Flood Hazard Area is:

. . . designated Critical Area and/or Habitat Conservation Area (HCA) per WCC Title-16. As such, creating additional 'buildable' lots within a Critical Area or HCA may be prohibited. For further information reference WCC 16.16.420 – Frequently Flooded Areas. . .

Pursuant to the *Whatcom County Review and Evaluation Program Methodology*, Whatcom County deducted floodplains from the buildable land supply.

After the end of the review period, the County Council adopted Ordinance 2021-046 prohibiting certain uses and requiring a conditional use permit for certain uses in the Cherry Point UGA. This ordinance also included greenhouse gas provisions in SEPA.

Infrastructure Gaps

Whatcom County has reviewed capital facility plans and/or consulted with service providers. Based upon these actions, the County has not identified any infrastructure gaps that would

prevent service providers from supplying planned capital facilities to developable land in the Cherry Point UGA within the remaining portion of the planning period (2021-2036).

Analysis of Comprehensive Plan Objectives and Reasonable Measures

The Cherry Point UGA experienced negative job growth in the review period because of the Alcoa Intalco shutdown, which resulted in the loss of approximately 662 jobs at this plant (*Employment at Cherry Point, June 2021, page 8*). The shutdown was a business decision by a large corporation based upon a number of factors, including the global business environment. If not for this shutdown, employment growth in the UGA would have outpaced the growth allocated in the Whatcom County Comprehensive Plan.

Whatcom County Comprehensive Plan Policy 7B-1 states:

The Port of Bellingham, serving as the ADO [Associate Development Organization], will work with the cities, the County, Chambers of Commerce, educational institutions, and other groups to assist retention and expansion of existing local businesses and to attract appropriate businesses to Whatcom County. . .

The Port of Bellingham is actively working to recruit a business for the Alcoa Intalco property. A reasonable measure is for the Port of Bellingham to continue the recruitment process until a new tenant is found, in order to facilitate job growth as envisioned in the *Whatcom County Comprehensive Plan* and implement Comprehensive Plan Policy 7B-1.

Commercial and Industrial Development

Exhibit 32. Nonresidential Development, Achieved and Assumed Densities, Cherry Point UGA, 2016-2021

Zoning Designation	Development Type	Acres Developed	Built Square Feet	Achieved Density (FAR)	Assumed Density (FAR)
HII	Industrial	8.8	39,560	0.10	0.10
LII	Industrial	8.0	40,991	0.12	0.12

Sources: Whatcom County, 2022; Community Attributes Inc., 2021.

Note: Assumed Density is the assumed density for evaluation of land suitable for development by zone.

Exhibit 33. Developable Nonresidential Land Supply, Cherry Point UGA, 2021 -2036

	UGA Total	HII	LII
Vacant Land			
Gross Acres	3,834.69	3,765.09	69.60
Critical Areas	2,188.05	2,132.12	55.93
Future Public Uses	10.00	10.00	0.00
Infrastructure Gaps	0.00	0.00	0.00
Quasi-Public Use Deduction	81.83	81.15	0.68
Infrastructure Deduction	163.66	162.30	1.37
Market Factor	313.01	310.39	2.62
Net Acres	1,078.14	1,069.13	9.01
Partially-Used Land			
Gross Acres	148.42	148.42	0.00
Critical Areas	109.30	109.30	0.00
Future Public Uses	0.00	0.00	0.00
Infrastructure Gaps	0.00	0.00	0.00
Quasi-Public Use Deduction	1.96	1.96	0.00
Infrastructure Deduction	3.91	3.91	0.00
Market Factor	10.81	10.81	0.00
Net Acres	22.45	22.45	0.00
Underutilized Land			
Gross Acres	223.24	218.47	4.77
Critical Areas	133.21	130.42	2.79
Future Public Uses	0.00	0.00	0.00
Infrastructure Gaps	0.00	0.00	0.00
Quasi-Public Use Deduction	4.50	4.40	0.10
Infrastructure Deduction	9.00	8.80	0.20
Market Factor	24.87	24.32	0.55
Net Acres	51.65	50.52	1.14

Sources: Whatcom County, 2022; Community Attributes Inc., 2021.

Exhibit 34. Developable Nonresidential Land Capacity, Cherry Point UGA, 2021 -2036

	UGA	HII	LII
Net Developable Employment Acres (Vacant, PU, UU)	1,152.24	1,142.09	10.15
Commercial Developable Acres	-	-	-
Assumed Commercial Density (FAR)			
Subtotal: Commercial Capacity (SF)	-	-	-
Existing Commercial Space (SF)	11,328	11,328	-
Pending Commercial Space (SF)	-	-	-
Master Planned Commercial Space (SF)	-	-	-
Subtotal: Net Commercial Capacity (SF)	-	-	-
Potential Occupied Commercial Space (SF)	-	-	-
Commercial Employment Capacity	-	-	-
Industrial Developable Acres	1152.24	1142.09	10.15
Assumed Industrial Density (FAR)		0.1	0.1
Subtotal: Industrial Capacity (SF)	5,027,995	4,974,958	53,037
Existing Industrial Space (SF)	134,000	134,000	-
Pending Industrial Space (SF)	-	-	-
Master Planned Industrial Space (SF)	-	-	-
Subtotal: Net Industrial Capacity (SF)	4,893,995	4,840,958	53,037
Potential Occupied Industrial Space (SF)	4,649,295	4,598,910	50,385
Industrial Employment Capacity	2,613	2,585	28
Net Commercial & Industrial Capacity (SF)	4,893,995	4,840,958	53,037
Potential Occupied Commercial & Industrial Employment Capacity	4,649,295	4,598,910	50,385
	2,613	2,585	28
Remaining Employment Growth to Accommodate (2021-2036)	876		
Employment Capacity Surplus (Deficit)	1,737		

Sources: Whatcom County, 2022; Community Attributes Inc., 2021.

5. Columbia Valley UGA

The Columbia Valley Urban Growth Area, one of three Non-City UGAs, is projected to reach 4,448 total population and 444 employees by 2036. The UGA has projected growth allocations of 1,170 new residents and 312 new jobs between 2016 and 2036 (**Exhibit 1** and **Exhibit 2**).

Achieved Growth 2016-2021

Based on permit data collected between 2016 and 2021, occupancy, persons per household and square feet per employee assumptions, new construction in the Columbia Valley UGA accommodated an estimated 271 new residents and 11 new jobs over this five-year period (**Exhibit 6** and **Exhibit 7**).

The Columbia Valley UGA achieved an overall residential density of 4.9 units per net acre between 2016 and 2021. This is within the range of 4.0 to 6.0 units per net acre planned in the *Whatcom County Comprehensive Plan* (**Exhibit 11**).

Whatcom County has not adopted planned densities for commercial or industrial uses. Between 2016 and 2021, the UGA achieved a commercial FAR of 0.05, and did not have industrial development during the period (**Exhibit 11**). The commercial FAR is based

upon a limited number of commercial building permits (2) issued between April 1, 2016 and March 31, 2021. One of the 2 building permits was in a commercial zone (the other was in a residential zone). The permit in commercial zone was for a new food bank.

Population and Employment Assumptions

Occupancy rate and population and employment assumptions for estimating future growth capacity in the Columbia Valley UGA are:

- 88.0% residential occupancy rate
- 95.0% Commercial and Industrial occupancy rate
- 2.90 persons per household
- 532 and 812 respectively Commercial and Industrial square feet per employee

Population Capacity 2021-2036

The Columbia Valley UGA will need to accommodate 899 more residents and 301 more jobs between 2021 and 2036 under current planning assumptions (**Exhibit 6** and **Exhibit 7**).

Based on achieved densities between 2016 and 2021, Whatcom County is assuming future residential densities of 4.9 units per acre for

both single family and multifamily development (**Exhibit 35**).

The Columbia Valley UGA has estimated net land capacity for population growth of 178.4 acres (**Exhibit 36**), with a total estimated potential occupied unit capacity of 747 dwelling units. Based on persons per household assumptions, the Columbia Valley UGA has an estimated population capacity of 2,167, indicating an estimated population capacity surplus of 1,268 (**Exhibit 37**).

Housing Needs by Type

The *Whatcom County Comprehensive Plan* (Chapter 3- Housing, Chart 3 – Estimated Dwelling Units Needed, page 3-8) indicates that the Columbia Valley UGA has a need for 613 new single-family dwelling units during the 2013-2036 planning period (the Comprehensive Plan does not estimate multifamily housing needs for Columbia Valley). The calculation for Chart 3 in the *Whatcom County Comprehensive Plan* included building activity from 2013. Therefore, the analysis below includes permit data from April 1, 2013, even though the planning period for this Buildable Lands Report is from 2016.

- Between April 1, 2013 and March 31, 2021, Whatcom County performed final inspections on 120 single-family and 0

multi-family units in the Columbia UGA. Comparing units built and the needs indicated on Chart 3, the Columbia Valley UGA needs an additional 493 single-family units between 2021 and 2036.

- The Columbia Valley UGA has an estimated 2021-2036 capacity for 840 single-family and 9 multi-family housing units (**Exhibit 37**).

The capacity to accommodate single family residential housing in the Columbia Valley UGA is sufficient to accommodate the single family dwelling units needed in the planning period as established in the *Whatcom County Comprehensive Plan* (Chapter 3- Housing, Chart 3).

Employment Capacity 2021-2036

Whatcom County is using an average of the small city FARs for future commercial and industrial development, since there is little or no data on achieved densities in the Columbia Valley UGA (**Exhibit 38**).

The Columbia Valley UGA has estimated net land capacity for employment growth of 33.1 acres (**Exhibit 39**), with a total estimated potential occupied commercial and industrial capacity of 278,205 square feet. Based on square feet per employee assumptions, the

UGA has an estimated employment capacity of 420, indicating an estimated employment capacity surplus of 119 (**Exhibit 40**).

Regulatory Changes

The County has evaluated development regulations adopted in the review period (April 1, 2016 – March 31, 2021). No ordinances adopted during the review period have been identified that would 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).

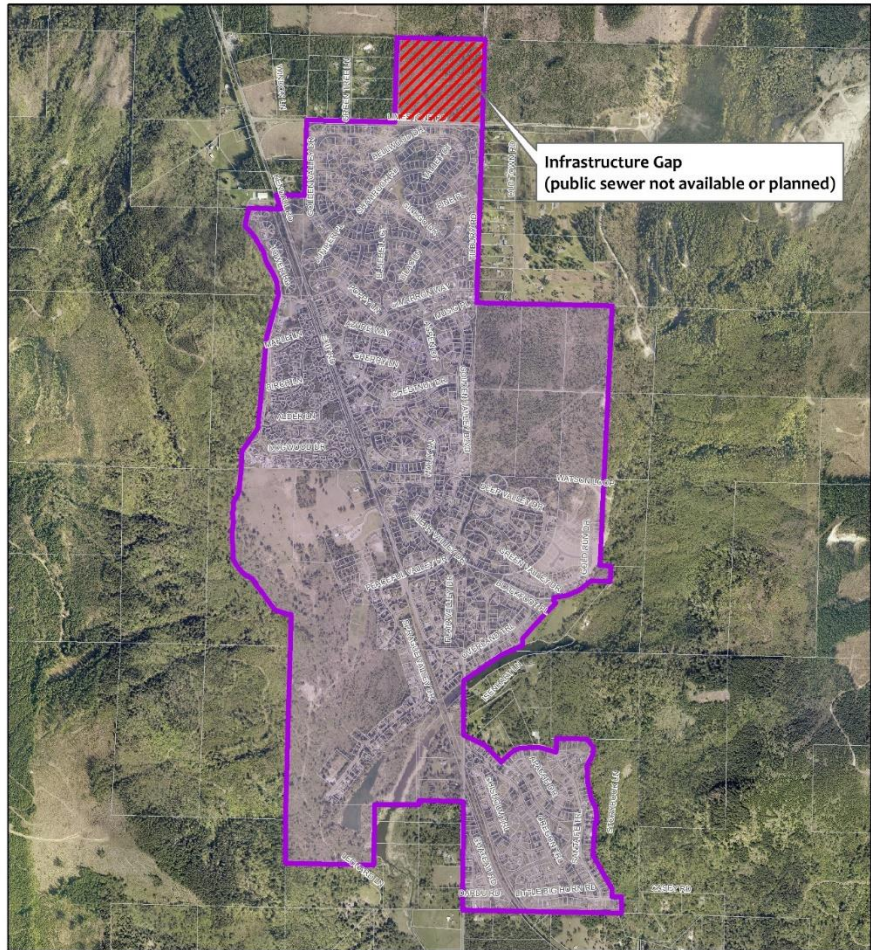
Infrastructure Gaps

Whatcom County has reviewed capital facility plans and/or consulted with service providers. Based upon these actions, the County has the following comments on infrastructure gaps that would prevent service providers from supplying planned capital facilities to developable land in the Columbia Valley UGA within the planning period (2021-2036).

Water District 13 is the only sewer purveyor in the UGA. There is no public sewer in parts of the UGA outside of District 13, including the Planned Industrial area north of Limestone Rd. On-site sewage systems may be used in areas with no sewer, which will


especially affect the Planned Light Impact Industrial Area. A 30% deduction will be taken from the land in the Planned Light Impact Industrial Area to account for the lack of public sewer. A map of the Columbia Valley UGA showing the land area associated with this deduction is provide below. Residential areas located outside District 13 are platted already and have developed with on-site sewage systems.

Additionally, the Water District 13 Sewer Plan will need to be updated to serve planned growth within its boundaries, as the existing Sewer System Plan only plans for projected population and sewer connections through the year 2029.



Columbia Valley UGA - Infrastructure Gaps

Legend

 Columbia Valley UGA

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March 2022
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**Analysis of Comprehensive Plan
Objectives and Reasonable Measures**

The Columbia Valley UGA has experienced slow employment growth between 2016 and 2021. The *Whatcom County Comprehensive Plan* employment projection would suggest that about 78 jobs should be created in the Columbia Valley UGA over a given five-year period (Chapter 1, page 1-8). However, the Data Reporting Tool estimates that only 11 jobs were created in the UGA between 2016 and 2021.

The County rezoned land in the UGA from Urban Residential to General Commercial in 2009 to provide land for business within the UGA. There is also a Planned Light Impact Industrial designation in the northern portion of the UGA, but this site has not yet been rezoned to accommodate industry. Therefore, it is not able to accommodate intensive employment growth at this time. A potential reasonable measure the County could consider is rezoning the Planned Light Impact Industrial area for industrial uses as set forth in the *Foothills Subarea Plan* (pages 2-12, 12-4, 12-5, and 12-10).

Residential Development

Exhibit 35. Residential Development, Achieved and Assumed Densities, Columbia Valley UGA, 2016-2021

Zoning Designation	Development Type	Acres Developed	Dwelling Units	Achieved Density (Units/Acre)	Density Assumed (Units/Acre)
UR4	Single Family	22.2	109	4.91	4.91
GC	Multifamily	N/A	N/A	N/A	4.91

Sources: Whatcom County, 2022; Community Attributes Inc., 2021.

Note: "Density Assumed" is the assumed density for evaluation of land suitable for development by zone.

Exhibit 36. Residential Land Supply, Columbia Valley UGA, 2021-2036

	UGA Total	UR4	GC	RF
Vacant Land				
Gross Acres	408.37	406.02	2.35	0.00
Critical Areas	101.05	100.94	0.11	0.00
Future Public Uses	3.00	3.00	0.00	0.00
Infrastructure Gaps	0.00	0.00	0.00	0.00
Quasi-Public Use Deduction	15.22	15.10	0.11	0.00
Infrastructure Deduction	69.70	69.48	0.22	0.00
Market Factor	52.66	52.20	0.46	0.00
Net Acres	166.74	165.29	1.45	0.00
Partially-Used Land				
Gross Acres	29.17	29.17	0.00	0.00
Critical Areas	6.53	6.53	0.00	0.00
Future Public Uses	0.00	0.00	0.00	0.00
Infrastructure Gaps	0.00	0.00	0.00	0.00
Quasi-Public Use Deduction	1.13	1.13	0.00	0.00
Infrastructure Deduction	5.21	5.21	0.00	0.00
Market Factor	4.89	4.89	0.00	0.00
Net Acres	11.41	11.41	0.00	0.00
Underutilized Land				
Gross Acres	0.49	0.00	0.49	0.00
Critical Areas	0.00	0.00	0.00	0.00
Future Public Uses	0.00	0.00	0.00	0.00
Infrastructure Gaps	0.00	0.00	0.00	0.00
Quasi-Public Use Deduction	0.02	0.00	0.02	0.00
Infrastructure Deduction	0.05	0.00	0.05	0.00
Market Factor	0.13	0.00	0.13	0.00
Net Acres	0.29	0.00	0.29	0.00

Sources: Whatcom County, 2022; Community Attributes Inc., 2021.

Exhibit 37. Developable Residential Land Capacity, Columbia Valley UGA, 2021 -2036

	UGA	UR4	GC	RF
Net Developable Residential Acres (Vacant, PU, UU)	178.45	176.71	1.74	0.00
Single Family Developable Acres	176.71	176.71	-	-
Assumed Single Family Density (units/acre)		5		
Subtotal Single Family Unit Capacity	868	868	-	-
Existing Single Family Units	87	86	1	-
Pending Single Family Units	58	58	-	-
Master Planned Single Family Units	-	-	-	-
Subtotal: Net Single Family Unit Capacity	840	840	-	-
Potential Occupied Single Family Units	739	739	-	-
Single Family Population Capacity	2,144	2,144	-	-
Multifamily Developable Acres	1.74	-	1.74	-
Assumed Multifamily Density (units/acre)			5	
Subtotal Multifamily Unit Capacity	9	-	9	-
Existing Multifamily Units	-	-	-	-
Pending Multifamily Units	-	-	-	-
Master Planned Multifamily Units	-	-	-	-
Subtotal: Net Multifamily Unit Capacity	9	-	9	-
Potential Occupied Multifamily Units	8	-	8	-
Multifamily Population Capacity	23	-	23	-
Net Dwelling Unit Capacity	849	840	9	-
Potential Occupied Dwelling Units	747	739	8	-
Population Capacity	2,167	2,144	23	-
Remaining Population Growth to Accommodate (2021-2036)	899			
Population Capacity Surplus (Deficit)	1,268			

Sources: Whatcom County, 2022; Community Attributes Inc., 2021.

Commercial and Industrial Development

Exhibit 38. Nonresidential Development, Achieved and Assumed Densities, Columbia Valley UGA, 2016-2021

Zoning Designation	Development Type	Acres Developed	Built Square Feet	Achieved Density (FAR)	Assumed Density (FAR)
UR4	Commercial	0.1	864	0.27	N/A
GC	Commercial	2.6	5,500	0.05	0.18
RF	Industrial	N/A	N/A	N/A	0.22

Sources: Whatcom County, 2022; Community Attributes Inc., 2021.

Note: Assumed Density is the assumed density for evaluation of land suitable for development by zone.

Exhibit 39. Developable Nonresidential Land Supply, Columbia Valley UGA, 2021 -2036

	UGA Total	UR4	GC	RF
Vacant Land				
Gross Acres	59.74	0.00	21.16	38.58
Critical Areas	0.97	0.00	0.97	0.00
Future Public Uses	0.00	0.00	0.00	0.00
Infrastructure Gaps	11.57	0.00	0.00	11.57
Quasi-Public Use Deduction	2.36	0.00	1.01	1.35
Infrastructure Deduction	4.72	0.00	2.02	2.70
Market Factor	9.63	0.00	4.12	5.51
Net Acres	30.49	0.00	13.04	17.45
Partially-Used Land				
Gross Acres	0.00	0.00	0.00	0.00
Critical Areas	0.00	0.00	0.00	0.00
Future Public Uses	0.00	0.00	0.00	0.00
Infrastructure Gaps	0.00	0.00	0.00	0.00
Quasi-Public Use Deduction	0.00	0.00	0.00	0.00
Infrastructure Deduction	0.00	0.00	0.00	0.00
Market Factor	0.00	0.00	0.00	0.00
Net Acres	0.00	0.00	0.00	0.00
Underutilized Land				
Gross Acres	4.43	0.00	4.43	0.00
Critical Areas	0.00	0.00	0.00	0.00
Future Public Uses	0.00	0.00	0.00	0.00
Infrastructure Gaps	0.00	0.00	0.00	0.00
Quasi-Public Use Deduction	0.22	0.00	0.22	0.00
Infrastructure Deduction	0.44	0.00	0.44	0.00
Market Factor	1.13	0.00	1.13	0.00
Net Acres	2.64	0.00	2.64	0.00

Sources: Whatcom County, 2022; Community Attributes Inc., 2021.

Exhibit 40. Developable Nonresidential Land Capacity, Columbia Valley UGA, 2021-2036

	UGA	UR4	GC	RF
Net Developable Employment Acres (Vacant, PU, UU)	33.12	0.00	15.68	17.45
Commercial Developable Acres	15.68	-	15.68	-
Assumed Commercial Density (FAR)			0.2	
Subtotal: Commercial Capacity (SF)	125,658	-	125,658	-
Existing Commercial Space (SF)	-	-	-	-
Pending Commercial Space (SF)	-	-	-	-
Master Planned Commercial Space (SF)	-	-	-	-
Subtotal: Net Commercial Capacity (SF)	125,658	-	125,658	-
Potential Occupied Commercial Space (SF)	119,375	-	119,375	-
Commercial Employment Capacity	224	-	224	-
Industrial Developable Acres	17.45	-	-	17.45
Assumed Industrial Density (FAR)				0.2
Subtotal: Industrial Capacity (SF)	167,189	-	-	167,189
Existing Industrial Space (SF)	-	-	-	-
Pending Industrial Space (SF)	-	-	-	-
Master Planned Industrial Space (SF)	-	-	-	-
Subtotal: Net Industrial Capacity (SF)	167,189	-	-	167,189
Potential Occupied Industrial Space (SF)	158,830	-	-	158,830
Industrial Employment Capacity	196	-	-	196
Net Commercial & Industrial Capacity (SF)	292,847	-	125,658	167,189
Potential Occupied Commercial & Industrial Employment Capacity	278,205	-	119,375	158,830
	420	-	224	196
Remaining Employment Growth to Accommodate (2021-2036)	301			
Employment Capacity Surplus (Deficit)	119			

Sources: Whatcom County, 2022; Community Attributes Inc., 2021.

6. Everson UGA

The Everson Urban Growth Area is projected to reach a total population and employment of 3,907 and 1,312 respectively by 2036. The UGA has projected growth allocation of 1,080 for population and 523 for employment between 2016 and 2036 (**Exhibit 1** and **Exhibit 2**).

Achieved Growth 2016-2021

Based on permit data collected between 2016 and 2021 and occupancy and persons per household and square feet per employee assumptions, the Everson UGA grew by an estimated 317 population (100% within the City of Everson) and 16 employment (79% within the City of Everson) (**Exhibit 6** and **Exhibit 7**).

Between 2016 and 2021, the City of Everson achieved densities greater than planned for residential uses, 4.8 units per acre achieved compared to 4.0 planned based in the *Whatcom County Land Capacity Analysis Report* referenced in the *2016 City of Everson Comprehensive Plan*. This achieved residential density also falls within the planned density range of 4.0 to 6.0 units per acre adopted in the *Whatcom County Comprehensive Plan* for the City of Everson. The unincorporated portions of the Everson UGA have seen no

residential or commercial development between 2016 and 2021 (**Exhibit 11**).

The City of Everson, in the Comprehensive Plan, references commercial and industrial planned densities based on the *Whatcom County Land Capacity Analysis*. Whatcom County has not adopted planned densities for commercial or industrial uses. Planned commercial and industrial FAR for the Everson UGA are 0.20 and 0.30, respectively. Between 2016 and 2021, incorporated areas of the UGA have achieved a commercial FAR of 0.26, exceeding the adopted FAR. No industrial developed has occurred in the City of Everson between 2016 and 2021. Limited industrial development in the unincorporated portion of the UGA achieved a 0.01 FAR (**Exhibit 11**).

Population and Employment Assumptions

Specific occupancy rate and population and employment density assumptions for estimating future growth capacity in the Everson UGA are:

- 97.0% Single Family occupancy rate
- 92.8% Multifamily occupancy rate
- 95.0% Commercial and Industrial occupancy rate

- 3.066 Single Family persons per household
- 2.901 Multifamily persons per household
- 800 and 1,501 respectively Commercial and Industrial square feet per employee

The Everson UGA has an estimated 763 population and 507 employment growth remaining to accommodate between 2021 and 2036 (**Exhibit 6** and **Exhibit 7**).

Population Capacity 2021-2036

The City of Everson is utilizing achieved densities when estimating future residential land capacity. Based on achieved densities between 2016 and 2021 and planning assumptions, City of Everson planners are assuming future single family density of 4.4 units per acre, and 8.5 units per acre for multifamily zones (**Exhibit 41**).

The Everson UGA has estimated net land capacity for population growth of 248.4 acres (**Exhibit 42**), with a total estimated potential occupied unit capacity of 1,203 dwelling units. Based on persons per household assumptions, the UGA has an estimated population capacity of 3,634, indicating an estimated population capacity surplus of 2,871 (**Exhibit 43**).

Housing Needs by Type

The *Whatcom County Comprehensive Plan* (Chapter 3- Housing, Chart 3 – Estimated Dwelling Units Needed, page 3-8) indicates that Everson has a need for 277 single-family, 129 multi-family, and 28 other (“group housing”) new dwelling units during the 2013-2036 planning period. The calculation for Chart 3 in the *Whatcom County Comprehensive Plan* included building activity from 2013. Therefore, the analysis below includes permit data from April 1, 2013, even though the planning period for this Buildable Lands Report is from 2016.

- Between April 1, 2013 and March 31, 2021, Everson issued building permits for 117 single-family and 20 multi-family units. No group housing has been built during this time. Comparing units built and the needs indicated on Chart 3, Everson needs an additional 160 single-family units, 109 multi-family units, and 28 group housing units between 2021 and 2036.
- The City and unincorporated UGA have an estimated 2021-2036 capacity for 904 single-family and 351 multi-family housing units (**Exhibit 43**). The multi-family capacity includes group housing.

These capacities are sufficient to accommodate the dwelling unit types needed in the planning period as established in the Whatcom County Comprehensive Plan (Chapter 3- Housing, Chart 3).

Employment Capacity 2021-2036

The City of Everson is utilizing achieved densities (when available) when estimating future land capacity for employment. Based on achieved densities between 2016 and 2021 and planning assumptions, City of Everson planners are assuming a future commercial FAR of 0.26 and an industrial FAR of 0.30 (**Exhibit 44**).

The Everson UGA has estimated net land capacity for employment growth of 179.4 acres (**Exhibit 45**), with a total estimated potential occupied commercial and industrial capacity of 2.1 million square feet. Based on square feet per employee assumptions, the Everson UGA has an estimated employment capacity of 1,575, indicating an estimated employment capacity surplus of 1,065 (**Exhibit 46**).

Regulatory Changes

The City of Everson has not identified any regulatory changes that would prevent assigned densities from being achieved or impact the quantity of land suitable for

development during the remainder of the planning period.

Infrastructure Gaps

The City of Everson has not identified any infrastructure gaps that would prevent assigned densities from being achieved or impact the quantity of land suitable for development during the remainder of the planning period (2021 to 2036).

Analysis of Comprehensive Plan Objectives and Reasonable Measures

The City of Everson has determined that growth targets and assumptions are being met to a reasonable degree; therefore, an analysis of comprehensive plan development targets, assumptions and objectives is not deemed necessary.

Based on the results presented in the Buildable Land Report, implementation of reasonable measures is not deemed necessary. If in the future it is determined that Reasonable Measures are appropriate, then the following measures could be considered for implementation:

- Increase residential densities by reducing minimum lot sizes in the Residential District above the increases likely to result from

establishment of the Residential-7500
Subzone.

- Increase opportunities for construction of accessory dwelling units (ADUs).

Residential Development

Exhibit 41. Residential Development, Achieved and Assumed Densities, City of Everson, 2016 -2021

Zoning Designation	Development Type	Acres Developed	Dwelling Units	Achieved Density (Units/Acre)	Density Assumed (Units/Acre)
RES	Single Family	20.3	89	4.38	4.38
	Multifamily	0.3	2	7.14	N/A
RES-7500	Single Family	N/A	N/A	N/A	4.38
RMU	Single Family	0.4	3	7.33	N/A
	Multifamily	1.6	14	8.50	8.50

Sources: City of Everson, 2022; Community Attributes Inc., 2021.

Note: "Density Assumed" is the assumed density for evaluation of land suitable for development by zone.

Exhibit 42. Residential Land Supply, Everson UGA, 2021-2036

	UGA Total	RES	RES-7500	RMU	COM	LI
Vacant Land						
Gross Acres	201.31	161.60	0.64	39.07	0.00	0.00
Critical Areas	20.18	20.18	0.00	0.00	0.00	0.00
Future Public Uses	0.00	0.00	0.00	0.00	0.00	0.00
Infrastructure Gaps	0.00	0.00	0.00	0.00	0.00	0.00
Quasi-Public Use Deduction	9.06	7.07	0.03	1.95	0.00	0.00
Infrastructure Deduction	9.06	7.07	0.03	1.95	0.00	0.00
Market Factor	24.45	19.09	0.09	5.27	0.00	0.00
Net Acres	138.57	108.19	0.49	29.89	0.00	0.00
Partially-Used Land						
Gross Acres	214.57	201.09	0.00	13.48	0.00	0.00
Critical Areas	51.84	50.37	0.00	1.48	0.00	0.00
Future Public Uses	0.00	0.00	0.00	0.00	0.00	0.00
Infrastructure Gaps	0.00	0.00	0.00	0.00	0.00	0.00
Quasi-Public Use Deduction	8.14	7.54	0.00	0.60	0.00	0.00
Infrastructure Deduction	8.14	7.54	0.00	0.60	0.00	0.00
Market Factor	36.61	33.91	0.00	2.70	0.00	0.00
Net Acres	109.84	101.74	0.00	8.10	0.00	0.00
Underutilized Land						
Gross Acres	0.00	0.00	0.00	0.00	0.00	0.00
Critical Areas	0.00	0.00	0.00	0.00	0.00	0.00
Future Public Uses	0.00	0.00	0.00	0.00	0.00	0.00
Infrastructure Gaps	0.00	0.00	0.00	0.00	0.00	0.00
Quasi-Public Use Deduction	0.00	0.00	0.00	0.00	0.00	0.00
Infrastructure Deduction	0.00	0.00	0.00	0.00	0.00	0.00
Market Factor	0.00	0.00	0.00	0.00	0.00	0.00
Net Acres	0.00	0.00	0.00	0.00	0.00	0.00

Sources: City of Everson, 2022; Whatcom County, 2021; Community Attributes Inc., 2021.

Exhibit 43. Developable Residential Land Capacity, Everson UGA, 2021-2036

	UGA	RES	RES-7500	RMU	COM	LI
Net Developable Residential Acres (Vacant, PU, UU)	248.41	209.93	0.49	37.99	0.00	0.00
Single Family Developable Acres	210.42	209.93	0.49	-	-	-
Assumed Single Family Density (units/acre)		4	4			
Subtotal Single Family Unit Capacity	921	919	2	-	-	-
Existing Single Family Units	63	37	-	5	16	5
Pending Single Family Units	20	20	-	-	-	-
Master Planned Single Family Units	-	-	-	-	-	-
Subtotal: Net Single Family Unit Capacity	904	902	2	-	-	-
Potential Occupied Single Family Units	877	875	2	-	-	-
Single Family Population Capacity	2,689	2,683	6	-	-	-
Multifamily Developable Acres	37.99	-	-	37.99	-	-
Assumed Multifamily Density (units/acre)				9		
Subtotal Multifamily Unit Capacity	323	-	-	323	-	-
Existing Multifamily Units	-	-	-	-	-	-
Pending Multifamily Units	28	-	-	28	-	-
Master Planned Multifamily Units	-	-	-	-	-	-
Subtotal: Net Multifamily Unit Capacity	351	-	-	351	-	-
Potential Occupied Multifamily Units	326	-	-	326	-	-
Multifamily Population Capacity	945	-	-	945	-	-
Net Dwelling Unit Capacity	1,255	902	2	351	-	-
Potential Occupied Dwelling Units	1,203	875	2	326	-	-
Population Capacity	3,634	2,683	6	945	-	-
Remaining Population Growth to Accommodate (2021-2036)	763					
Population Capacity Surplus (Deficit)	2,871					

Sources: City of Everson, 2022; Whatcom County, 2021; Community Attributes Inc., 2021.

Commercial and Industrial Development

Exhibit 44. Nonresidential Development, Achieved and Assumed Densities, City of Everson, 2016 -2021

Zoning Designation	Development Type	Acres Developed	Built Square Feet	Achieved Density (FAR)	Assumed Density (FAR)
COM	Commercial	0.9	10,825	0.26	0.26
LI	Industrial	N/A	N/A	N/A	0.30

Sources: City of Everson, 2022; Community Attributes Inc., 2021.

Note: Assumed Density is the assumed density for evaluation of land suitable for development by zone.

Exhibit 45. Developable Nonresidential Land Supply, Everson UGA, 2021 -2036

	UGA Total	RES	RES-7500	RMU	COM	LI
Vacant Land						
Gross Acres	175.15	0.00	0.00	0.00	9.89	165.25
Critical Areas	2.52	0.00	0.00	0.00	0.19	2.33
Future Public Uses	0.00	0.00	0.00	0.00	0.00	0.00
Infrastructure Gaps	0.00	0.00	0.00	0.00	0.00	0.00
Quasi-Public Use Deduction	8.63	0.00	0.00	0.00	0.48	8.15
Infrastructure Deduction	8.63	0.00	0.00	0.00	0.48	8.15
Market Factor	23.30	0.00	0.00	0.00	1.31	22.00
Net Acres	132.06	0.00	0.00	0.00	7.42	124.64
Partially-Used Land						
Gross Acres	6.20	0.00	0.00	0.00	3.52	2.68
Critical Areas	0.00	0.00	0.00	0.00	0.00	0.00
Future Public Uses	0.00	0.00	0.00	0.00	0.00	0.00
Infrastructure Gaps	0.00	0.00	0.00	0.00	0.00	0.00
Quasi-Public Use Deduction	0.31	0.00	0.00	0.00	0.18	0.13
Infrastructure Deduction	0.31	0.00	0.00	0.00	0.18	0.13
Market Factor	1.40	0.00	0.00	0.00	0.79	0.60
Net Acres	4.19	0.00	0.00	0.00	2.38	1.81
Underutilized Land						
Gross Acres	79.02	0.00	0.00	0.00	26.46	52.55
Critical Areas	15.01	0.00	0.00	0.00	0.00	15.01
Future Public Uses	0.00	0.00	0.00	0.00	0.00	0.00
Infrastructure Gaps	0.00	0.00	0.00	0.00	0.00	0.00
Quasi-Public Use Deduction	3.20	0.00	0.00	0.00	1.32	1.88
Infrastructure Deduction	3.20	0.00	0.00	0.00	1.32	1.88
Market Factor	14.40	0.00	0.00	0.00	5.95	8.45
Net Acres	43.20	0.00	0.00	0.00	17.86	25.34

Sources: City of Everson, 2022; Whatcom County, 2021; Community Attributes Inc., 2021.

Exhibit 46. Developable Nonresidential Land Capacity, Everson UGA, 2021-2036

	UGA	RES	RES-7500	RMU	COM	LI
Net Developable Employment Acres (Vacant, PU, UU)	179.45	0.00	0.00	0.00	27.66	151.79
Commercial Developable Acres	27.66	-	-	-	27.66	-
Assumed Commercial Density (FAR)					0.3	
Subtotal: Commercial Capacity (SF)	313,283	-	-	-	313,283	-
Existing Commercial Space (SF)	4,592	-	-	-	4,592	-
Pending Commercial Space (SF)	-	-	-	-	-	-
Master Planned Commercial Space (SF)	-	-	-	-	-	-
Subtotal: Net Commercial Capacity (SF)	308,691	-	-	-	308,691	-
Potential Occupied Commercial Space (SF)	293,256	-	-	-	293,256	-
Commercial Employment Capacity	367	-	-	-	367	-
Industrial Developable Acres	151.79	-	-	-	-	151.79
Assumed Industrial Density (FAR)						0.3
Subtotal: Industrial Capacity (SF)	1,983,592	-	-	-	-	1,983,592
Existing Industrial Space (SF)	84,096	-	-	-	9,626	74,470
Pending Industrial Space (SF)	-	-	-	-	-	-
Master Planned Industrial Space (SF)	-	-	-	-	-	-
Subtotal: Net Industrial Capacity (SF)	1,909,122	-	-	-	-	1,909,122
Potential Occupied Industrial Space (SF)	1,813,666	-	-	-	-	1,813,666
Industrial Employment Capacity	1,208	-	-	-	-	1,208
Net Commercial & Industrial Capacity (SF)	2,217,813	-	-	-	308,691	1,909,122
Potential Occupied Commercial & Industrial	2,106,922	-	-	-	293,256	1,813,666
Employment Capacity	1,575	-	-	-	367	1,208
Remaining Employment Growth to Accommodate (2021-2036)	510					
Employment Capacity Surplus (Deficit)	1,065					

Sources: City of Everson, 2022; Whatcom County, 2021; Community Attributes Inc., 2021.

7. Ferndale UGA

The Ferndale Urban Growth Area is the second largest in the County and is projected to reach a total population and employment of 19,591 and 9,372 respectively by 2036. The UGA has projected growth allocation of 5,942 for population and 3,478 for employment between 2016 and 2036 (**Exhibit 1** and **Exhibit 2**).

Achieved Growth 2016-2021

Based on permit data collected between 2016 and 2021 and occupancy and persons per household and square feet per employee assumptions, the Ferndale UGA grew by an estimated 2,287 population (99% within the City) and 1,191 employment (95% within the City) (**Exhibit 6** and **Exhibit 7**).

The City of Ferndale has achieved residential densities of 6.4 units per net acre, a commercial FAR of 0.09, and an industrial FAR of 0.20 between 2016 and 2021. Achieved residential densities are greater than the planned densities for residential within the *Whatcom County Comprehensive Plan* of between 6.0 and 10.0 units per net acre. The City of Ferndale has not adopted commercial or industrial planned densities (**Exhibit 11**).

The unincorporated portions of the Ferndale UGA have an achieved residential density of 0.3 units per acre, based on construction of three dwelling units in the 2016-2021 time period (**Exhibit 11**). Densities within the City limits are consistent with county planned urban densities for the City. The unincorporated areas serve as urban growth potential for future growth after annexation, when city zoning is adopted and public water and sewer provided.

Population and Employment Assumptions

Occupancy rate and population and employment density assumptions for the Ferndale UGA are:

- 96.4% Single Family occupancy rate
- 95.1% Multifamily occupancy rate
- 95.0% Commercial and Industrial occupancy rate
- 2.850 Single Family persons per household
- 2.310 Multifamily persons per household
- 580 and 1,129 respectively Commercial and Industrial square feet per employee

The Ferndale UGA has an estimated 3,661 population and 2,287 employment growth remaining to accommodate between 2021 and 2036 (**Exhibit 6** and **Exhibit 7**).

Population Capacity 2021-2036

Based on achieved densities between 2016 and 2021 and planning assumptions, City of Ferndale planners are assuming future single family density between 5.0 and 7.0 units per acre depending on the zone, and between 7.0 and 15.0 units per acre for multifamily zones (**Exhibit 47**).

The Ferndale UGA has estimated net land capacity for population growth of 561.94 acres (**Exhibit 48**), with a total estimated potential occupied unit capacity of 4,310 dwelling units. Based on persons per household assumptions, the UGA has an estimated population capacity of 10,786, indicating an estimated population capacity surplus of 7,125 (**Exhibit 49**).

Housing Needs by Type

The *Whatcom County Comprehensive Plan* (Chapter 3- Housing, Chart 3 – Estimated Dwelling Units Needed, page 3-8) indicates that Ferndale has a need for 2,024 single-family, 456 multi-family, and 125 other (“group housing”) new dwelling units during the 2013-2036 planning period. The

calculation for Chart 3 in the *Whatcom County Comprehensive Plan* included building activity from 2013. Therefore, the analysis below includes permit data from April 1, 2013, even though the planning period for this Buildable Lands Report is from 2016.

- Between April 1, 2013 and March 31, 2021, Ferndale issued building permits for 938 single-family and 585 multi-family units. No group housing, which in Ferndale are assisted living facilities, has been built during this time. Comparing units built and the needs indicated on Chart 3, Ferndale needs to accommodate an additional 1,086 single-family units and 125 group housing units between 2021 and 2036.
- The City and unincorporated UGA have an estimated 2021-2036 capacity for 2,392 single-family and 1,918 multi-family housing units (**Exhibit 49**). The multi-family capacity includes group housing.

These capacities are sufficient to accommodate the dwelling unit types anticipated in the planning period as established in the *Whatcom County Comprehensive Plan* (Chapter 3- Housing, Chart 3).

Employment Capacity 2021-2036

Based on achieved densities between 2016 and 2021 and planning assumptions, City of Ferndale planners are assuming a future commercial FAR of 0.09 to 0.20 and an industrial FAR of 0.20 (**Exhibit 50**).

The Ferndale UGA has estimated net land capacity for employment growth of 273.49 acres (**Exhibit 51**), with a total estimated potential occupied commercial and industrial capacity of approximately 2.5 million square feet. Based on square feet per employee assumptions, the Ferndale UGA has an estimated employment capacity of 3,484, indicating an estimated employment capacity surplus of 1,197 (**Exhibit 52**).

Regulatory Changes

The City has evaluated development regulations adopted in the review period (April 1, 2016 – March 31, 2021). Only Ordinances 1969 and 1976 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). Both ordinances adopted new regulations for stormwater treatment within the City, these regulations may impact the ability to meet densities in the City's

multifamily zones that have minimum gross densities.

During this period of time the City of Ferndale adopted several ordinances that would assist with realizing increased density within the UGA. Ordinance 1995 allowed for the establishment of Accessory Dwelling Units (ADUs) in all of the City's single family zones. Ordinance 2174 further reduced barriers to the establishment of ADUs by eliminating off-street parking and owner occupancy requirements.

The City of Ferndale created new multifamily zones through the adoption of ordinances 2026 and 2098. Ordinance 2026 established the Residential Multifamily Medium Density zone with a minimum density of 10 dwelling units and a maximum density of 30 dwelling units per gross acre. Ordinance 2098 established the Residential Multifamily High Density Zone with a minimum density of 15 dwelling units per gross acre and no maximum density.

The City of Ferndale also adopted ordinance 2173 which allows duplex and single-family attached duplexes in single family residential zones which the City believes will assist infill development with attaining densities at or near the maximum permitted.

Infrastructure Gaps

The City of Ferndale has reviewed capital facility plans and/or consulted with service providers. Based upon these actions, the City has not identified any infrastructure gaps that would prevent service providers from supplying planned capital facilities to developable land in the Ferndale UGA.

Analysis of Comprehensive Plan Objectives and Reasonable Measures

The City of Ferndale has determined that growth targets and assumptions are being met. Therefore, an analysis of comprehensive plan development assumptions, targets, and objectives is not necessary. The City is realizing efficient development of the land within the UGA. The achieved density in the UGA is in part a result of the City establishing minimum densities in all of its residential zones. No inconsistencies between planned and actual growth have been identified in the Ferndale UGA. Therefore, reasonable measures are not required under RCW 36.70A.215.

Residential Development

Exhibit 47. Residential Development, Achieved and Assumed Densities, City of Ferndale, 2016-2021

Zoning Designation	Development Type	Acres Developed	Dwelling Units	Achieved Density (Units/Acre)	Density Assumed (Units/Acre)
RS High	Single Family	N/A	N/A	N/A	7.00
RS Medium	Single Family	N/A	N/A	N/A	6.00
RS Low	Single Family	N/A	N/A	N/A	5.00
MXD	Single Family	N/A	N/A	N/A	7.00
	Multifamily	N/A	N/A	N/A	7.00
RMH	Multifamily	0.4	8	22.22	15.00
RMM	Single Family	3.9	2	0.51	N/A
	Multifamily	6.0	55	9.15	10.00
RO	Multifamily	5.5	38	6.85	7.00
GB	Single Family	2.6	N/A	0.00	N/A
UR	Single Family	0.5	N/A	0.00	N/A
	Multifamily	0.7	12	17.91	15.00
CC	Multifamily	0.3	5	15.36	12.00
RR	Multifamily	N/A	N/A	N/A	15.00

Sources: City of Ferndale, 2022; Community Attributes Inc., 2021.

Note: "Density Assumed" is the assumed density for evaluation of land suitable for development by zone.

Exhibit 48. Residential Land Supply, Ferndale UGA, 2021 -2036

	UGA Total	CC	GB	LI	M	MXD	RMH	RMM	RO	RR	RS High	RS Low	RS Medium	UR
Vacant Land														
Gross Acres	626.73	0.00	0.00	0.00	0.00	159.88	12.31	59.41	12.95	0.00	50.45	219.47	99.91	12.33
Critical Areas	262.06	0.00	0.00	0.00	0.00	69.41	9.78	28.40	9.04	0.00	30.52	67.45	37.60	9.85
Future Public Uses	13.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	10.00	3.00	0.00
Infrastructure Gaps	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Quasi-Public Use Deduction	17.08	0.00	0.00	0.00	0.00	4.52	0.13	1.55	0.20	0.00	1.00	6.60	2.97	0.12
Infrastructure Deduction	17.08	0.00	0.00	0.00	0.00	4.52	0.13	1.55	0.20	0.00	1.00	6.60	2.97	0.12
Market Factor	46.13	0.00	0.00	0.00	0.00	12.21	0.34	4.19	0.53	0.00	2.69	17.82	8.01	0.34
Net Acres	261.39	0.00	0.00	0.00	0.00	69.21	1.94	23.72	2.99	0.00	15.25	101.01	45.38	1.90
Partially-Used Land														
Gross Acres	664.19	0.00	0.00	0.00	0.00	6.06	0.00	6.73	0.44	0.00	40.29	462.56	148.12	0.00
Critical Areas	219.43	0.00	0.00	0.00	0.00	0.97	0.00	0.49	0.00	0.00	24.27	133.83	59.87	0.00
Future Public Uses	5.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	5.00	0.00	0.00
Infrastructure Gaps	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Quasi-Public Use Deduction	19.40	0.00	0.00	0.00	0.00	0.25	0.00	0.31	0.02	0.00	0.80	13.60	4.41	0.00
Infrastructure Deduction	19.40	0.00	0.00	0.00	0.00	0.25	0.00	0.31	0.02	0.00	0.80	13.60	4.41	0.00
Market Factor	87.30	0.00	0.00	0.00	0.00	1.14	0.00	1.40	0.10	0.00	3.60	61.19	19.86	0.00
Net Acres	261.89	0.00	0.00	0.00	0.00	3.43	0.00	4.21	0.30	0.00	10.81	183.58	59.57	0.00
Underutilized Land														
Gross Acres	76.26	0.00	0.00	0.00	0.00	32.61	5.77	27.11	0.00	0.00	0.00	0.00	0.00	10.77
Critical Areas	18.99	0.00	0.00	0.00	0.00	9.25	0.07	5.83	0.00	0.00	0.00	0.00	0.00	3.84
Future Public Uses	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Infrastructure Gaps	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Quasi-Public Use Deduction	2.86	0.00	0.00	0.00	0.00	1.17	0.28	1.06	0.00	0.00	0.00	0.00	0.00	0.35
Infrastructure Deduction	2.86	0.00	0.00	0.00	0.00	1.17	0.28	1.06	0.00	0.00	0.00	0.00	0.00	0.35
Market Factor	12.89	0.00	0.00	0.00	0.00	5.26	1.28	4.79	0.00	0.00	0.00	0.00	0.00	1.56
Net Acres	38.66	0.00	0.00	0.00	0.00	15.77	3.85	14.36	0.00	0.00	0.00	0.00	0.00	4.68

Sources: City of Ferndale, 2022; Whatcom County, 2021; Community Attributes Inc., 2021.

Exhibit 49. Developable Residential Land Capacity, Ferndale UGA, 2021 -2036

	UGA	CC	GB	LI	M	MXD	RMH	RMM	RO	RR	RS High	RS Low	RS Medium	UR
Net Developable Residential Acres (Vacant, PU, UU)	561.94	0.00	0.00	0.00	0.00	88.41	5.78	42.29	3.29	0.00	26.06	284.58	104.95	6.58
Single Family Developable Acres	428.22	-	-	-	-	12.63	-	-	-	-	26.06	284.58	104.95	-
Assumed Single Family Density (units/acre)						7					7	5	6	
Subtotal Single Family Unit Capacity	2,323	-	-	-	-	88	-	-	-	-	182	1,423	630	-
Existing Single Family Units	363	13	51	4	4	19	24	30	1	2	12	80	82	41
Pending Single Family Units	262	3	3	-	-	150	-	-	-	-	6	82	18	-
Master Planned Single Family Units	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Subtotal: Net Single Family Unit Capacity	2,392	3	3	-	-	219	-	-	-	-	176	1,425	566	-
Potential Occupied Single Family Units	2,306	3	3	-	-	211	-	-	-	-	170	1,374	546	-
Single Family Population Capacity	6,572	8	8	-	-	602	-	-	-	-	484	3,915	1,555	-
Multifamily Developable Acres	133.72	-	-	-	-	75.78	5.78	42.29	3.29	-	-	-	-	6.58
Assumed Multifamily Density (units/acre)		12				7	15	10	7	15				15
Subtotal Multifamily Unit Capacity	1,162	-	-	-	-	530	87	423	23	-	-	-	-	99
Existing Multifamily Units	180	4	16	-	-	5	7	131	-	-	-	-	-	17
Pending Multifamily Units	916	149	-	-	-	416	116	190	-	-	-	-	-	45
Master Planned Multifamily Units	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Subtotal: Net Multifamily Unit Capacity	1,918	149	-	-	-	941	196	482	23	-	-	-	-	127
Potential Occupied Multifamily Units	1,824	142	-	-	-	895	186	458	22	-	-	-	-	121
Multifamily Population Capacity	4,214	327	-	-	-	2,067	431	1,059	51	-	-	-	-	279
Net Dwelling Unit Capacity	4,310	152	3	-	-	1,160	196	482	23	-	176	1,425	566	127
Potential Occupied Dwelling Units	4,130	145	3	-	-	1,106	186	458	22	-	170	1,374	546	121
Population Capacity	10,786	335	8	-	-	2,669	431	1,059	51	-	484	3,915	1,555	279
Remaining Population Growth to Accommodate (2021-2036)	3,661													
Population Capacity Surplus (Deficit)	7,125													

Sources: City of Ferndale, 2022; Whatcom County, 2021; Community Attributes Inc., 2021.

Commercial and Industrial Development

Exhibit 50. Nonresidential Development, Achieved and Assumed Densities, City of Ferndale, 2016 -2021

Zoning Designation	Development Type	Acres Developed	Built Square Feet	Achieved Density (FAR)	Assumed Density (FAR)
MXD	Commercial	N/A	N/A	N/A	0.09
RO	Commercial	N/A	N/A	N/A	0.09
GB	Commercial	90.7	307,415	0.08	0.09
	Industrial	39.4	269,619	0.16	0.15
M	Commercial	N/A	N/A	N/A	N/A
	Industrial	N/A	N/A	N/A	0.20
LI	Industrial	5.5	103,994	0.44	0.20
UR	Commercial	0.3	7,061	0.49	0.09
CC	Commercial	0.1	156	0.03	0.50
RR	Commercial	N/A	N/A	N/A	0.15
	Industrial	N/A	N/A	N/A	0.15

Sources: City of Ferndale, 2022; Community Attributes Inc., 2021.

Note: Assumed Density is the assumed density for evaluation of land suitable for development by zone.

Exhibit 51. Developable Nonresidential Land Supply, Ferndale UGA, 2021-2036

	UGA Total	CC	GB	LI	M	MXD	Pub	RMH	RMM	RO	RR	RS Low	RS Medium	UR
Vacant Land														
Gross Acres	609.33	2.61	265.11	47.23	130.31	68.52	8.20	0.00	0.00	3.24	82.73	0.00	0.00	1.37
Critical Areas	279.58	1.72	100.25	31.28	91.63	29.75	1.58	0.00	0.00	2.26	20.01	0.00	0.00	1.09
Future Public Uses	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Infrastructure Gaps	77.98	0.00	77.98	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Quasi-Public Use Deduction	12.59	0.04	4.34	0.80	1.93	1.94	0.33	0.00	0.00	0.05	3.14	0.00	0.00	0.01
Infrastructure Deduction	12.59	0.04	4.34	0.80	1.93	1.94	0.33	0.00	0.00	0.05	3.14	0.00	0.00	0.01
Market Factor	33.99	0.12	11.73	2.15	5.22	5.23	0.89	0.00	0.00	0.13	8.47	0.00	0.00	0.04
Net Acres	192.61	0.68	66.46	12.20	29.59	29.66	5.06	0.00	0.00	0.75	47.98	0.00	0.00	0.21
Partially-Used Land														
Gross Acres	141.41	0.00	105.28	9.19	24.24	2.60	0.00	0.00	0.00	0.11	0.00	0.00	0.00	0.00
Critical Areas	53.74	0.00	38.18	7.02	8.13	0.42	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Future Public Uses	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Infrastructure Gaps	36.18	0.00	36.18	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Quasi-Public Use Deduction	2.57	0.00	1.55	0.11	0.81	0.11	0.00	0.00	0.00	0.01	0.00	0.00	0.00	0.00
Infrastructure Deduction	2.57	0.00	1.55	0.11	0.81	0.11	0.00	0.00	0.00	0.01	0.00	0.00	0.00	0.00
Market Factor	11.58	0.00	6.96	0.49	3.62	0.49	0.00	0.00	0.00	0.02	0.00	0.00	0.00	0.00
Net Acres	34.75	0.00	20.87	1.46	10.87	1.47	0.00	0.00	0.00	0.07	0.00	0.00	0.00	0.00
Underutilized Land														
Gross Acres	213.28	2.29	124.32	39.76	9.30	13.98	0.00	0.00	0.00	0.00	22.45	0.00	0.00	1.20
Critical Areas	68.38	0.23	44.30	16.15	2.77	3.96	0.00	0.00	0.00	0.00	0.55	0.00	0.00	0.43
Future Public Uses	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Infrastructure Gaps	76.56	0.00	76.56	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Quasi-Public Use Deduction	3.42	0.10	0.17	1.18	0.33	0.50	0.00	0.00	0.00	0.00	1.10	0.00	0.00	0.04
Infrastructure Deduction	3.42	0.10	0.17	1.18	0.33	0.50	0.00	0.00	0.00	0.00	1.10	0.00	0.00	0.04
Market Factor	15.38	0.46	0.78	5.31	1.47	2.25	0.00	0.00	0.00	0.00	4.93	0.00	0.00	0.17
Net Acres	46.13	1.39	2.34	15.94	4.41	6.76	0.00	0.00	0.00	0.00	14.78	0.00	0.00	0.52

Sources: City of Ferndale, 2022; Whatcom County, 2021; Community Attributes Inc., 2021.

Exhibit 52. Developable Nonresidential Land Capacity, Ferndale UGA, 2021-2036

	UGA	CC	GB	LI	M	MXD	Pub	RMH	RMM	RO	RR	RS Low	RS Medium	UR
Net Developable Employment Acres (Vacant, PU, UU)	273.49	2.07	89.67	29.60	44.87	37.89	5.06	0.00	0.00	0.82	62.77	0.00	0.00	0.73
Commercial Developable Acres	199.01	2.07	89.67	-	-	37.89	5.06	-	-	0.82	62.77	-	-	0.73
Assumed Commercial Density (FAR)		0.5	0.1			0.1	0.1			0.1	0.2			0.1
Subtotal: Commercial Capacity (SF)	981,204	45,050	351,548	-	-	148,545	19,847	-	-	3,220	410,128	-	-	2,866
Existing Commercial Space (SF)	48,652	9,518	9,839	-	1,700	17,523	-	-	4,610	-	-	-	1,200	4,262
Pending Commercial Space (SF)	742,332	5,000	674,886	-	-	54,446	-	-	-	-	-	-	-	8,000
Master Planned Commercial Space (SF)	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Subtotal: Net Commercial Capacity (SF)	1,683,790	40,532	1,016,595	-	-	185,468	19,847	-	-	3,220	410,128	-	-	8,000
Potential Occupied Commercial Space (SF)	1,599,601	38,505	965,766	-	-	176,195	18,855	-	-	3,059	389,622	-	-	7,600
Commercial Employment Capacity	2,758	66	1,665	-	-	304	33	-	-	5	672	-	-	13
Industrial Developable Acres	74.48	-	-	29.60	44.87	-	-	-	-	-	-	-	-	-
Assumed Industrial Density (FAR)			0.2	0.2	0.2						0.2			
Subtotal: Industrial Capacity (SF)	648,830	-	-	257,902	390,928	-	-	-	-	-	-	-	-	-
Existing Industrial Space (SF)	123,676	-	24,919	4,000	29,076	60,939	-	1,984	-	-	-	1,200	-	1,558
Pending Industrial Space (SF)	246,662	-	215,806	-	30,856	-	-	-	-	-	-	-	-	-
Master Planned Industrial Space (SF)	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Subtotal: Net Industrial Capacity (SF)	862,416	-	215,806	253,902	392,708	-	-	-	-	-	-	-	-	-
Potential Occupied Industrial Space (SF)	819,295	-	205,016	241,207	373,073	-	-	-	-	-	-	-	-	-
Industrial Employment Capacity	726	-	182	214	330	-	-	-	-	-	-	-	-	-
Net Commercial & Industrial Capacity (SF)	2,546,206	40,532	1,232,401	253,902	392,708	185,468	19,847	-	-	3,220	410,128	-	-	8,000
Potential Occupied Commercial & Industrial Employment Capacity	2,418,896	38,505	1,170,781	241,207	373,073	176,195	18,855	-	-	3,059	389,622	-	-	7,600
	3,484	66	1,847	214	330	304	33	-	-	5	672	-	-	13
Remaining Employment Growth to Accommodate (2021-2036)	2,287													
Employment Capacity Surplus (Deficit)	1,197													

Sources: City of Ferndale, 2022; Whatcom County, 2021; Community Attributes Inc., 2021.

8. Lynden UGA

The Lynden Urban Growth Area is projected to reach a total population and employment of 19,275 and 7,103 respectively by 2036. The UGA has projected allocation of 5,568 for population growth and 1,876 for employment growth between 2016 and 2036 (**Exhibit 1** and **Exhibit 2**).

Achieved Growth 2016-2021

Based on permit data collected between 2016 and 2021 and occupancy and persons per household and square feet per employee assumptions, the Lynden UGA grew by an estimated 1,668 people (nearly 100% within the City of Lynden) and 622 jobs (100% within the City) (**Exhibit 6** and **Exhibit 7**).

The City of Lynden has an overall achieved residential density of 7.1 units per acre between 2016 and 2021. Lynden's single-family zones have built out at 4.3 units per acre, its multi-family zones achieved 13.3 units per acre. The overall achieved residential density of 7.1 units per net acre is greater than the adopted planned density of 5.0 units per acre in the *2016 City of Lynden Comprehensive Plan*. The overall achieved residential density also falls within the adopted planned residential density for the City of Lynden of 6.0 to 10.0 units per net acre

in the *Whatcom County Comprehensive Plan* (**Exhibit 11**).

The unincorporated portions of the Lynden UGA have an achieved residential density of 1.7 units per acre (**Exhibit 11**). This density, which is based on construction of one dwelling unit in the 2016-2021 time period, lags county planned urban densities for the City. Land in the UGA, outside of City limits, is currently zoned for Agriculture or urban residential uses. The Agriculture zone does not allow urban densities. This land would need to be rezoned for urban land uses and served with public water and sewer, which typically occurs upon annexation. The urban residential zones in the unincorporated portion of the UGA do not allow urban densities until public water and sewer are available, which typically occurs upon annexation. These unincorporated areas serve as future urban growth potential. Until annexation, they do not have access to City infrastructure or urban densities.

Neither the City of Lynden nor Whatcom County have adopted planned densities for commercial or industrial development. Between 2016 and 2021, commercial development in the City of Lynden achieved an overall FAR of 0.12. Totals for commercial development are skewed by one project – the

construction of the new Lynden Middle School on a 30-acre vacant parcel. That one project accounted for 60% of the built commercial square footage during this time. Industrial development saw an overall FAR of 0.26. This was largely driven by construction associated with Lynden Door, Inc expansion and the new cold storage plants built to store agricultural products. More than 400,000 square feet of new industrial space was built in the city limits during this time. The unincorporated areas of the Lynden UGA did not see any commercial or industrial development (**Exhibit 11**).

Population and Employment Assumptions

Specific occupancy rate and population and employment density assumptions for estimating future growth capacity in the Lynden UGA are:

- 98.0% Single Family occupancy rate
- 95.0% Multifamily occupancy rate
- 95.0% Commercial and Industrial occupancy rate
- 2.88 Single Family persons per household
- 1.70 Multifamily persons per household

- 721 and 1,037 respectively Commercial and Industrial square feet per employee

Based on estimated growth since 2016 and population and employment projections adopted in the *Whatcom County Comprehensive Plan*, the Lynden UGA is expected to accommodate another 3,900 people and 1,254 jobs between 2021 and 2036 (**Exhibit 6** and **Exhibit 7**).

Population Capacity 2021-2036

Based on achieved densities between 2016 and 2021 and planning assumptions, City of Lynden planners are assuming future single family density of 4.0 and 8.0 units per acre depending on the zone. Assumed multifamily densities range between 8.0 and 24.0 units per acre (**Exhibit 53**).

The Lynden UGA has an estimated net land capacity for population growth of 459.5 acres (**Exhibit 54**), with a total estimated potential occupied unit capacity of 3,481 dwelling units. Based on persons per household assumptions, the UGA has an estimated population capacity of 8,467, indicating an estimated population capacity surplus of 4,567 (**Exhibit 55**).

Housing Needs by Type

The *Whatcom County Comprehensive Plan* (Chapter 3- Housing, Chart 3 – Estimated Dwelling Units Needed, page 3-8) indicates that Lynden has a need for 1,887 single-family, 627 multi-family, and 97 other (“group housing”) new dwelling units during the 2013-2036 planning period. The calculation for Chart 3 in the *Whatcom County Comprehensive Plan* included building activity from 2013. Therefore, the analysis below includes permit data from April 1, 2013, even though the planning period for this Buildable Lands Report is from 2016.

- Between April 1, 2013 and March 31, 2021, Lynden issued building permits for 652 single-family and 539 multi-family units. No group housing, which in Lynden are assisted living facilities, has been built during this time. Comparing units built and the needs indicated on Chart 3, Lynden needs an additional 1,235 single-family units, 88 multi-family units, and 97 group housing units between 2021 and 2036.
- The City and unincorporated UGA have an estimated 2021-2036 capacity for 2,204 single-family and 1,391 multi-family housing units (**Exhibit 55**). The multi-family capacity includes group housing.

These capacities are sufficient to accommodate the dwelling unit types needed in the planning period as established in the Whatcom County Comprehensive Plan (Chapter 3- Housing, Chart 3).

Employment Capacity 2021-2036

Looking forward, Lynden is assuming a FAR of 0.184 for future commercial development. This number (0.184) is the average achieved commercial FAR for all the small cities in the County between 2016-2021. Lynden is using this assumption, which is different than its achieved commercial FAR of 0.12 because Lynden’s achieved commercial development data during this time was skewed by the Lynden Middle School project. Additionally, Lynden is assuming a FAR of 0.26 for future industrial development. This is what was achieved for industrial development between 2016-2021 (**Exhibit 56**).

The Lynden UGA has an estimated net land capacity for employment growth of 388.4 acres (**Exhibit 57**), with a total estimated potential occupied commercial and industrial capacity of 4.0 million square feet. Based on square feet per employee assumptions, the Lynden UGA has an estimated employment capacity of 4,038, indicating an estimated employment capacity surplus of 2,784 (**Exhibit 58**).

Regulatory Changes

Since 2016, the City of Lynden has approved several regulatory changes that impact either the amount of land available for development, or the densities and types of development allowed on buildable lands. These regulatory changes are documented in the Data Reporting Tool worksheet.

Three annexations brought more than 90 acres of unincorporated UGA into the City, the largest (80 acres) of which is in the Pepin Creek Subarea, the area expected to house the majority of incoming residents during the remainder of the planning period.

Subsequently, the City adopted the Pepin Creek Subarea Plan which established zoning designations (including the RM-PC zone which is a new multifamily zone), development densities (including minimum density requirements), transportation routes, and recreational and open space opportunities within this 460-acre subarea.

Multiple rezones and Comprehensive Plan Amendments have been approved that are adapting to employment growth needs (i.e. increasing Industrial lands) and, in general, trend toward rezoning land to increase residential densities.

The City updated its Critical Areas Ordinance and Shoreline Master Program, which regulate potential impacts to environmental resources. These regulations restrict development in protected locations, as they establish buffers, setbacks, and the regulatory process for protecting these resources. The City has considered known critical areas and their buffers in its evaluation of population and employment growth and determined that the land supply can still accommodate projected growth during the remainder of the planning period.

Finally, other regulatory updates expanded the allowed types of commercial uses in commercial zones and business parks, incentivized low impact development techniques, and eased restrictions for making an accessory dwelling unit legal on residential properties.

Infrastructure Gaps

The City of Lynden has reviewed capital facility plans and/or consulted with service providers that will provide service for future growth. Based on this review, Lynden has not identified infrastructure gaps that would prevent service providers from supplying planned capital facilities to developable land in the Lynden UGA within the planning period (2021-2036).

**Analysis of Comprehensive Plan
Objectives and Reasonable Measures**

The City of Lynden has determined that growth targets and assumptions are being met. Therefore, an analysis of comprehensive plan development assumptions, targets, and objectives is not necessary. No inconsistencies between planned and actual growth have been identified in the Lynden UGA. Therefore, reasonable measures are not required under RCW 36.70A.215.

Residential Development

Exhibit 53. Residential Development, Achieved and Assumed Densities, City of Lynden, 2016-2021

Zoning Designation	Development Type	Acres Developed	Dwelling Units	Achieved Density (Units/Acre)	Density Assumed (Units/Acre)
RS-100	Single Family	25.9	93	3.59	4.00
	Multifamily	0.4	4	8.97	N/A
RS-84	Single Family	0.4	2	4.82	4.50
RS-72	Single Family	41.8	236	5.65	5.00
RMD	Single Family	8.7	16	1.84	8.00
	Multifamily	0.7	9	12.42	N/A
MH	Single Family	N/A	1	N/A	N/A
RM-1	Single Family	0.5	5	10.90	N/A
	Multifamily	1.7	14	8.36	8.00
RM-2	Single Family	2.1	11	5.29	N/A
	Multifamily	1.5	17	11.01	12.00
RM-3	Single Family	6.4	49	7.60	N/A
	Multifamily	10.0	144	14.34	16.00
RM-4	Multifamily	0.7	12	16.76	24.00
RM-PC	Multifamily	N/A	N/A	N/A	12.00
CSL	Multifamily	3.3	116	35.23	N/A
HBD	Multifamily	0.2	9	50.01	N/A

Sources: City of Lynden, 2022; Community Attributes Inc., 2021.

Note: "Density Assumed" is the assumed density for evaluation of land suitable for development by zone.

Exhibit 54. Residential Land Supply, Lynden UGA, 2021-2036

	UGA Total	RS-100	RS-84	RS-72	RMD	MH	RM-1	RM-2	RM-3	RM-4	RM-PC	CSR	CSL	ID	IBZ
Vacant Land															
Gross Acres	345.52	49.26	0.00	52.72	140.61	0.00	0.42	22.74	0.27	3.82	75.69	0.00	0.00	0.00	0.00
Critical Areas	69.30	19.58	0.00	3.65	19.06	0.00	0.00	8.65	0.00	0.00	18.37	0.00	0.00	0.00	0.00
Future Public Uses	1.28	0.00	0.00	0.00	0.00	0.00	0.00	1.28	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Infrastructure Gaps	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Quasi-Public Use Deduction	13.75	1.48	0.00	2.45	6.08	0.00	0.02	0.64	0.01	0.19	2.87	0.00	0.00	0.00	0.00
Infrastructure Deduction	13.75	1.48	0.00	2.45	6.08	0.00	0.02	0.64	0.01	0.19	2.87	0.00	0.00	0.00	0.00
Market Factor	37.12	4.01	0.00	6.62	16.41	0.00	0.06	1.73	0.04	0.52	7.74	0.00	0.00	0.00	0.00
Net Acres	210.33	22.71	0.00	37.54	92.98	0.00	0.32	9.80	0.20	2.92	43.86	0.00	0.00	0.00	0.00
Partially-Used Land															
Gross Acres	426.03	81.78	0.00	70.51	161.34	19.21	0.00	58.46	29.62	5.11	0.00	0.00	0.00	0.00	0.00
Critical Areas	68.26	13.28	0.00	7.60	4.58	8.69	0.00	18.96	14.71	0.44	0.00	0.00	0.00	0.00	0.00
Future Public Uses	0.28	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.28	0.00	0.00	0.00	0.00	0.00	0.00
Infrastructure Gaps	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Quasi-Public Use Deduction	17.88	3.43	0.00	3.15	7.84	0.53	0.00	1.97	0.73	0.23	0.00	0.00	0.00	0.00	0.00
Infrastructure Deduction	17.88	3.43	0.00	3.15	7.84	0.53	0.00	1.97	0.73	0.23	0.00	0.00	0.00	0.00	0.00
Market Factor	80.44	15.41	0.00	14.15	35.27	2.37	0.00	8.89	3.29	1.05	0.00	0.00	0.00	0.00	0.00
Net Acres	241.31	46.24	0.00	42.46	105.81	7.10	0.00	26.66	9.88	3.15	0.00	0.00	0.00	0.00	0.00
Underutilized Land															
Gross Acres	11.59	0.00	0.00	0.00	0.00	0.00	0.00	1.20	10.38	0.00	0.00	0.00	0.00	0.00	0.00
Critical Areas	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Future Public Uses	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Infrastructure Gaps	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Quasi-Public Use Deduction	0.58	0.00	0.00	0.00	0.00	0.00	0.00	0.06	0.52	0.00	0.00	0.00	0.00	0.00	0.00
Infrastructure Deduction	0.58	0.00	0.00	0.00	0.00	0.00	0.00	0.06	0.52	0.00	0.00	0.00	0.00	0.00	0.00
Market Factor	2.61	0.00	0.00	0.00	0.00	0.00	0.00	0.27	2.34	0.00	0.00	0.00	0.00	0.00	0.00
Net Acres	7.82	0.00	0.00	0.00	0.00	0.00	0.00	0.81	7.01	0.00	0.00	0.00	0.00	0.00	0.00

Sources: City of Lynden, 2022; Community Attributes Inc., 2021.

Exhibit 55. Developable Residential Land Capacity, Lynden UGA, 2021-2036

	UGA	RS-100	RS-84	RS-72	RMD	MH	RM-1	RM-2	RM-3	RM-4	RM-PC	CSR	CSL	ID	IBZ
Net Developable Residential Acres (Vacant, PU, UU)	459.46	68.95	0.00	80.00	198.80	7.10	0.32	37.28	17.09	6.07	43.86	0.00	0.00	0.00	0.00
Single Family Developable Acres	354.85	68.95	-	80.00	198.80	7.10	-	-	-	-	-	-	-	-	-
Assumed Single Family Density (units/acre)		4	5	5	8										
Subtotal Single Family Unit Capacity	2,266	276	-	400	1,590	-	-	-	-	-	-	-	-	-	-
Existing Single Family Units	167	33	-	24	5	29	-	19	12	-	-	23	20	1	1
Pending Single Family Units	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Master Planned Single Family Units	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Subtotal: Net Single Family Unit Capacity	2,204	243	-	376	1,585	-	-	-	-	-	-	-	-	-	-
Potential Occupied Single Family Units	2,160	238	-	368	1,553	-	-	-	-	-	-	-	-	-	-
Single Family Population Capacity	6,221	686	-	1,061	4,474	-	-	-	-	-	-	-	-	-	-
Multifamily Developable Acres	104.62	-	-	-	-	-	0.32	37.28	17.09	6.07	43.86	-	-	-	-
Assumed Multifamily Density (units/acre)							8	12	16	24	12				
Subtotal Multifamily Unit Capacity	1,395	-	-	-	-	-	3	447	273	146	526	-	-	-	-
Existing Multifamily Units	8	-	-	-	-	-	-	4	-	-	-	-	4	-	-
Pending Multifamily Units	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Master Planned Multifamily Units	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Subtotal: Net Multifamily Unit Capacity	1,391	-	-	-	-	-	3	443	273	146	526	-	-	-	-
Potential Occupied Multifamily Units	1,321	-	-	-	-	-	3	421	259	139	500	-	-	-	-
Multifamily Population Capacity	2,246	-	-	-	-	-	5	715	441	236	849	-	-	-	-
Net Dwelling Unit Capacity	3,595	243	-	376	1,585	-	3	443	273	146	526	-	-	-	-
Potential Occupied Dwelling Units	3,481	238	-	368	1,553	-	3	421	259	139	500	-	-	-	-
Population Capacity	8,467	686	-	1,061	4,474	-	5	715	441	236	849	-	-	-	-
Remaining Population Growth to Accommodate (2021-2036)	3,900														
Population Capacity Surplus (Deficit)	4,567														

Sources: City of Lynden, 2022; Community Attributes Inc., 2021.

Commercial and Industrial Development

Exhibit 56. Nonresidential Development, Achieved and Assumed Densities, City of Lynden, 2016-2021

Zoning Designation	Development Type	Acres Developed	Built Square Feet	Achieved Density (FAR)	Assumed Density (FAR)
RS-72	Commercial	30.6	113,444	0.09	N/A
CSR	Commercial	3.0	31,976	0.25	0.18
CSL	Commercial	2.3	36,744	0.36	0.18
HBD	Commercial	N/A	N/A	N/A	0.18
ID	Industrial	16.1	198,000	0.28	0.26
IBZ	Commercial	1.5	8,112	0.13	N/A
	Industrial	15.5	185,818	0.28	0.26
PU	Industrial	3.9	22,000	0.13	N/A

Sources: City of Lynden, 2022; Community Attributes Inc., 2021.

Note: Assumed Density is the assumed density for evaluation of land suitable for development by zone. RS-72 development was a School.

Exhibit 57. Developable Nonresidential Land Supply, Lynden UGA, 2021-2036

	UGA Total	RS-100	RM-2	RM-3	RM-4	CSR	CSL	HBD	ID	IBZ	PU
Vacant Land											
Gross Acres	299.58	0.00	0.00	0.00	0.00	69.80	17.52	0.00	78.25	134.01	0.00
Critical Areas	16.67	0.00	0.00	0.00	0.00	7.93	5.32	0.00	3.10	0.32	0.00
Future Public Uses	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Infrastructure Gaps	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Quasi-Public Use Deduction	14.15	0.00	0.00	0.00	0.00	3.09	0.61	0.00	3.76	6.68	0.00
Infrastructure Deduction	14.15	0.00	0.00	0.00	0.00	3.09	0.61	0.00	3.76	6.68	0.00
Market Factor	38.19	0.00	0.00	0.00	0.00	8.35	1.65	0.00	10.15	18.05	0.00
Net Acres	216.43	0.00	0.00	0.00	0.00	47.34	9.33	0.00	57.49	102.27	0.00
Partially-Used Land											
Gross Acres	82.26	0.00	0.00	0.00	0.00	39.30	3.66	0.00	31.50	7.80	0.00
Critical Areas	5.75	0.00	0.00	0.00	0.00	4.94	0.00	0.00	0.00	0.81	0.00
Future Public Uses	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Infrastructure Gaps	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Quasi-Public Use Deduction	3.83	0.00	0.00	0.00	0.00	1.72	0.18	0.00	1.57	0.35	0.00
Infrastructure Deduction	3.83	0.00	0.00	0.00	0.00	1.72	0.18	0.00	1.57	0.35	0.00
Market Factor	17.21	0.00	0.00	0.00	0.00	7.73	0.82	0.00	7.09	1.57	0.00
Net Acres	51.64	0.00	0.00	0.00	0.00	23.19	2.47	0.00	21.26	4.72	0.00
Underutilized Land											
Gross Acres	186.70	0.00	0.00	0.00	0.00	82.57	26.22	0.00	62.72	15.19	0.00
Critical Areas	8.51	0.00	0.00	0.00	0.00	7.72	0.79	0.00	0.00	0.00	0.00
Future Public Uses	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Infrastructure Gaps	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Quasi-Public Use Deduction	8.91	0.00	0.00	0.00	0.00	3.74	1.27	0.00	3.14	0.76	0.00
Infrastructure Deduction	8.91	0.00	0.00	0.00	0.00	3.74	1.27	0.00	3.14	0.76	0.00
Market Factor	40.09	0.00	0.00	0.00	0.00	16.84	5.72	0.00	14.11	3.42	0.00
Net Acres	120.28	0.00	0.00	0.00	0.00	50.52	17.17	0.00	42.33	10.25	0.00

Sources: City of Lynden, 2022; Community Attributes Inc., 2021.

Exhibit 58. Developable Nonresidential Land Capacity, Lynden UGA, 2021 -2036

	UGA	RS-100	RM-2	RM-3	RM-4	CSR	CSL	HBD	ID	IBZ	PU
Net Developable Employment Acres (Vacant, PU, UU)	388.35	0.00	0.00	0.00	0.00	121.05	28.97	0.00	121.09	117.24	0.00
Commercial Developable Acres	150.02	-	-	-	-	121.05	28.97	-	-	-	-
Assumed Commercial Density (FAR)						0.2	0.2	0.2			
Subtotal: Commercial Capacity (SF)	1,202,435	-	-	-	-	970,220	232,215	-	-	-	-
Existing Commercial Space (SF)	16,054	-	-	-	-	5,281	1,266	-	-	9,507	-
Pending Commercial Space (SF)	-	-	-	-	-	-	-	-	-	-	-
Master Planned Commercial Space (SF)	-	-	-	-	-	-	-	-	-	-	-
Subtotal: Net Commercial Capacity (SF)	1,195,888	-	-	-	-	964,939	230,949	-	-	-	-
Potential Occupied Commercial Space (SF)	1,136,094	-	-	-	-	916,692	219,402	-	-	-	-
Commercial Employment Capacity	1,575	-	-	-	-	1,271	304	-	-	-	-
Industrial Developable Acres	238.33	-	-	-	-	-	-	-	121.09	117.24	-
Assumed Industrial Density (FAR)									0.3	0.3	
Subtotal: Industrial Capacity (SF)	2,699,209	-	-	-	-	-	-	-	1,371,372	1,327,837	-
Existing Industrial Space (SF)	62,752	14,128	5,568	6,888	6,080	1,200	18,540	-	10,348	-	-
Pending Industrial Space (SF)	-	-	-	-	-	-	-	-	-	-	-
Master Planned Industrial Space (SF)	-	-	-	-	-	-	-	-	-	-	-
Subtotal: Net Industrial Capacity (SF)	2,688,861	-	-	-	-	-	-	-	1,361,024	1,327,837	-
Potential Occupied Industrial Space (SF)	2,554,418	-	-	-	-	-	-	-	1,292,973	1,261,445	-
Industrial Employment Capacity	2,463	-	-	-	-	-	-	-	1,247	1,216	-
Net Commercial & Industrial Capacity (SF)	3,884,749	-	-	-	-	964,939	230,949	-	1,361,024	1,327,837	-
Potential Occupied Commercial & Industrial Employment Capacity	3,690,512	-	-	-	-	916,692	219,402	-	1,292,973	1,261,445	-
	4,038	-	-	-	-	1,271	304	-	1,247	1,216	-
Remaining Employment Growth to Accommodate (2021-2036)	1,254										
Employment Capacity Surplus (Deficit)	2,784										

Sources: City of Lynden, 2022; Community Attributes Inc., 2021.

9. Nooksack UGA

The Nooksack Urban Growth Area is projected to reach a total population and employment of 2,425 and 369 respectively by 2036. The UGA has projected growth allocation of 861 for population and 100 for employment between 2016 and 2036 (**Exhibit 1** and **Exhibit 2**).

Achieved Growth 2016-2021

Based on permit data collected between 2016 and 2021 and occupancy and persons per household and square feet per employee assumptions, the Nooksack UGA grew by an estimated 174 population and 8 employment (100% within the City) (**Exhibit 6** and **Exhibit 7**).

Between 2016 and 2021, the City of Nooksack achieved an overall residential density of 5.1 units per acre. No development occurred within the unincorporated area of the UGA within the period. The *City of Nooksack Comprehensive Plan* has an adopted planned residential density of 4.4 units per acre. The *Whatcom County Comprehensive Plan* has adopted planned residential density of 4.0 to 6.0 units per acre. Achieved residential density within the City of Nooksack exceeded the minimum planned density (**Exhibit 11**).

The City Comprehensive Plan references planned densities for commercial and industrial developed based on the *Whatcom County Land Capacity Analysis*. Whatcom County has not adopted planned densities for commercial or industrial uses. The City achieved a commercial FAR of 0.14, below the planned density of 0.25. The adopted planned industrial FAR is 0.10. No industrial development occurred within the City during the review period (**Exhibit 11**).

Population and Employment Assumptions

Specific occupancy rate and population and employment density assumptions for estimating future growth capacity in the Nooksack UGA are:

- 96.9% Single Family occupancy rate
- 94.5% Multifamily occupancy rate
- 95.0% Commercial and Industrial occupancy rate
- 3.088 Single Family persons per household
- 3.173 Multifamily persons per household
- 605 and 795 respectively Commercial and Industrial square feet per employee

The Nooksack UGA has an estimated 687 population and 92 employment growth

remaining to accommodate between 2021 and 2036 (**Exhibit 6** and **Exhibit 7**).

Population Capacity 2021-2036

The City of Nooksack is utilizing achieved densities (when available) when estimating future residential land capacity. Based on achieved densities between 2016 and 2021 and planning assumptions, City of Nooksack planners are assuming future single family density between 3.9 and 5.9 units per acre for single family residential development. The Nooksack UGA does not include any multifamily zones (**Exhibit 59**).

The Nooksack UGA has estimated net land capacity for population growth of 89.8 acres (**Exhibit 60**), with a total estimated potential occupied unit capacity of 416 dwelling units. Based on persons per household assumptions, the UGA has an estimated population capacity of 1,283, indicating an estimated population capacity surplus of 596 (**Exhibit 61**).

Housing Needs by Type

The *Whatcom County Comprehensive Plan* (Chapter 3- Housing, Chart 3 – Estimated Dwelling Units Needed, page 3-8) indicates that Nooksack has a need for 243 single-family, 48 multi-family, and 49 other (“group housing”) new dwelling units during the 2013-

2036 planning period. The calculation for Chart 3 in the *Whatcom County Comprehensive Plan* included building activity from 2013. Therefore, the analysis below includes permit data from April 1, 2013, even though the planning period for this Buildable Lands Report is from 2016.

- Between April 1, 2013 and March 31, 2021, Nooksack issued building permits for 48 single-family and 10 multi-family units. No group housing has been built during this time. Comparing units built and the needs indicated on Chart 3, Nooksack needs an additional 195 single-family units, 38 multi-family units, and 49 group housing units between 2021 and 2036.
- The City and unincorporated UGA have an estimated 2021-2036 capacity for 425 single-family and 4 multi-family housing units (**Exhibit 61**). The multi-family capacity includes group housing. Given that Nooksack does not have a designated multi-family zoning district and that multi-family development is allowed in the City’s single-family zones, it is anticipated that some of the above single-family capacity will be utilized to accommodate multi-family and group housing needs.

These capacities are sufficient to accommodate the dwelling unit types needed in the planning

period as established in the Whatcom County Comprehensive Plan (Chapter 3- Housing, Chart 3).

Employment Capacity 2021-2036

Based on achieved densities between 2016 and 2021 and planning assumptions, City of Nooksack planners are assuming a future commercial FAR of 0.26 and an industrial FAR of 0.10 (**Exhibit 62**).

The Nooksack UGA has estimated net land capacity for employment growth of 38.5 acres (**Exhibit 63**), with a total estimated potential occupied commercial and industrial capacity of 238,772 square feet. Based on square feet per employee assumptions, the Nooksack UGA has an estimated employment capacity of 355, indicating an estimated employment capacity surplus of 263 (**Exhibit 64**).

Regulatory Changes

The City of Nooksack has not identified any regulatory changes that would prevent assigned densities from being achieved or impact the quantity of land suitable for development during the remainder of the planning period.

Infrastructure Gaps

The City of Nooksack has not identified any infrastructure gaps that would prevent assigned densities from being achieved or impact the quantity of land suitable for development during the remainder of the planning period (2021 to 2036).

Analysis of Comprehensive Plan Objectives and Reasonable Measures

The City of Nooksack has determined that growth targets and assumptions are being met to a reasonable degree; therefore, an analysis of comprehensive plan development targets, assumptions and objectives is not deemed necessary.

Based on the results presented in the Buildable Land Report, implementation of reasonable measures is not deemed necessary. If in the future it is determined that Reasonable Measures are appropriate, then the following measures could be considered for implementation:

- Increase residential densities by reducing minimum lot sizes in the Residential District above the increases likely to result from establishment of the Residential-8600 Subzone.

- Reduce limitations on the placement of multifamily structures in the Residential District.
- Establish a multifamily residential zoning district.
- Increase opportunities for construction of accessory dwelling units (ADUs).

Residential Development

Exhibit 59. Residential Development, Achieved and Assumed Densities, City of Nooksack, 2016 -2021

Zoning Designation	Development Type	Acres Developed	Dwelling Units	Achieved Density (Units/Acre)	Density Assumed (Units/Acre)
RES	Single Family	5.6	22	3.93	3.93
	Multifamily	1.3	10	7.97	N/A
RES-8600	Single Family	4.4	26	5.88	5.88
AG UR	Single Family	N/A	N/A	N/A	4.80

Sources: City of Nooksack, 2022; Community Attributes Inc., 2021.

Note: "Density Assumed" is the assumed density for evaluation of land suitable for development by zone.

Exhibit 60. Residential Land Supply, Nooksack UGA, 2021-2036

	UGA Total	RES	RES-8600	COM	CMD	LI	AG UR
Vacant Land							
Gross Acres	83.36	43.41	9.66	0.00	0.00	0.00	30.29
Critical Areas	28.68	16.68	3.30	0.00	0.00	0.00	8.69
Future Public Uses	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Infrastructure Gaps	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Quasi-Public Use Deduction	2.73	1.34	0.32	0.00	0.00	0.00	1.08
Infrastructure Deduction	2.73	1.34	0.32	0.00	0.00	0.00	1.08
Market Factor	7.38	3.61	0.86	0.00	0.00	0.00	2.92
Net Acres	41.83	20.44	4.87	0.00	0.00	0.00	16.52
Partially-Used Land							
Gross Acres	87.19	86.08	1.10	0.00	0.00	0.00	0.00
Critical Areas	16.08	16.08	0.00	0.00	0.00	0.00	0.00
Future Public Uses	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Infrastructure Gaps	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Quasi-Public Use Deduction	3.56	3.50	0.06	0.00	0.00	0.00	0.00
Infrastructure Deduction	3.56	3.50	0.06	0.00	0.00	0.00	0.00
Market Factor	16.00	15.75	0.25	0.00	0.00	0.00	0.00
Net Acres	48.00	47.25	0.74	0.00	0.00	0.00	0.00
Underutilized Land							
Gross Acres	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Critical Areas	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Future Public Uses	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Infrastructure Gaps	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Quasi-Public Use Deduction	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Infrastructure Deduction	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Market Factor	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Net Acres	0.00	0.00	0.00	0.00	0.00	0.00	0.00

Sources: City of Nooksack, 2022; Whatcom County, 2021; Community Attributes Inc., 2021.

Exhibit 61. Developable Residential Land Capacity, Nooksack UGA, 2021 -2036

	UGA	RES	RES-8600	COM	CMD	LI	AG UR
Net Developable Residential Acres (Vacant, PU, UU)	89.83	67.70	5.61	0.00	0.00	0.00	16.52
Single Family Developable Acres	89.83	67.70	5.61	-	-	-	16.52
Assumed Single Family Density (units/acre)		4	6				5
Subtotal Single Family Unit Capacity	378	266	33	-	-	-	79
Existing Single Family Units	33	21	1	8	2	1	-
Pending Single Family Units	69	8	61	-	-	-	-
Master Planned Single Family Units	-	-	-	-	-	-	-
Subtotal: Net Single Family Unit Capacity	425	253	93	-	-	-	79
Potential Occupied Single Family Units	412	245	90	-	-	-	77
Single Family Population Capacity	1,271	757	278	-	-	-	236
Multifamily Developable Acres	-	-	-	-	-	-	-
Assumed Multifamily Density (units/acre)							
Subtotal Multifamily Unit Capacity	-	-	-	-	-	-	-
Existing Multifamily Units	-	-	-	-	-	-	-
Pending Multifamily Units	4	-	4	-	-	-	-
Master Planned Multifamily Units	-	-	-	-	-	-	-
Subtotal: Net Multifamily Unit Capacity	4	-	4	-	-	-	-
Potential Occupied Multifamily Units	4	-	4	-	-	-	-
Multifamily Population Capacity	12	-	12	-	-	-	-
Net Dwelling Unit Capacity	429	253	97	-	-	-	79
Potential Occupied Dwelling Units	416	245	94	-	-	-	77
Population Capacity	1,283	757	290	-	-	-	236
Remaining Population Growth to Accommodate (2021-2036)	687						
Population Capacity Surplus (Deficit)	596						

Sources: City of Nooksack, 2022; Whatcom County, 2021; Community Attributes Inc., 2021.

Commercial and Industrial Development

Exhibit 62. Nonresidential Development, Achieved and Assumed Densities, City of Nooksack, 2016-2021

Zoning Designation	Development Type	Acres Developed	Built Square Feet	Achieved Density (FAR)	Assumed Density (FAR)
COM	Commercial	0.6	3,765	0.14	0.25
CMD	Commercial	0.2	1,160	0.15	0.25
LI	Industrial	N/A	N/A	N/A	0.10

Sources: City of Nooksack, 2022; Community Attributes Inc., 2021.

Note: Assumed Density is the assumed density for evaluation of land suitable for development by zone.

Exhibit 63. Developable Nonresidential Land Supply, Nooksack UGA, 2021 -2036

	UGA Total	RES	RES-8600	COM	CMD	LI	AG UR
Vacant Land							
Gross Acres	19.96	0.00	0.00	2.10	0.17	17.70	0.00
Critical Areas	0.74	0.00	0.00	0.74	0.00	0.00	0.00
Future Public Uses	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Infrastructure Gaps	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Quasi-Public Use Deduction	0.96	0.00	0.00	0.07	0.01	0.89	0.00
Infrastructure Deduction	0.96	0.00	0.00	0.07	0.01	0.89	0.00
Market Factor	2.60	0.00	0.00	0.18	0.02	2.39	0.00
Net Acres	14.71	0.00	0.00	1.04	0.13	13.54	0.00
Partially-Used Land							
Gross Acres	0.45	0.00	0.00	0.45	0.00	0.00	0.00
Critical Areas	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Future Public Uses	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Infrastructure Gaps	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Quasi-Public Use Deduction	0.02	0.00	0.00	0.02	0.00	0.00	0.00
Infrastructure Deduction	0.02	0.00	0.00	0.02	0.00	0.00	0.00
Market Factor	0.10	0.00	0.00	0.10	0.00	0.00	0.00
Net Acres	0.30	0.00	0.00	0.30	0.00	0.00	0.00
Underutilized Land							
Gross Acres	38.53	0.00	0.00	21.10	0.59	16.83	0.00
Critical Areas	3.73	0.00	0.00	3.73	0.00	0.00	0.00
Future Public Uses	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Infrastructure Gaps	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Quasi-Public Use Deduction	1.74	0.00	0.00	0.87	0.03	0.84	0.00
Infrastructure Deduction	1.74	0.00	0.00	0.87	0.03	0.84	0.00
Market Factor	7.83	0.00	0.00	3.91	0.13	3.79	0.00
Net Acres	23.49	0.00	0.00	11.72	0.40	11.36	0.00

Sources: City of Nooksack, 2022; Whatcom County, 2021; Community Attributes Inc., 2021.

Exhibit 64. Developable Nonresidential Land Capacity, Nooksack UGA, 2021-2036

	UGA	RES	RES-8600	COM	CMD	LI	AG UR
Net Developable Employment Acres (Vacant, PU, UU)	38.50	0.00	0.00	13.07	0.53	24.90	0.00
Commercial Developable Acres	13.59	-	-	13.07	0.53	-	-
Assumed Commercial Density (FAR)				0.3	0.3		
Subtotal: Commercial Capacity (SF)	148,035	-	-	142,288	5,747	-	-
Existing Commercial Space (SF)	-	-	-	-	-	-	-
Pending Commercial Space (SF)	-	-	-	-	-	-	-
Master Planned Commercial Space (SF)	-	-	-	-	-	-	-
Subtotal: Net Commercial Capacity (SF)	148,035	-	-	142,288	5,747	-	-
Potential Occupied Commercial Space (SF)	140,633	-	-	135,174	5,460	-	-
Commercial Employment Capacity	232	-	-	223	9	-	-
Industrial Developable Acres	24.90	-	-	-	-	24.90	-
Assumed Industrial Density (FAR)						0.1	
Subtotal: Industrial Capacity (SF)	108,486	-	-	-	-	108,486	-
Existing Industrial Space (SF)	8,622	-	-	3,440	-	5,182	-
Pending Industrial Space (SF)	-	-	-	-	-	-	-
Master Planned Industrial Space (SF)	-	-	-	-	-	-	-
Subtotal: Net Industrial Capacity (SF)	103,304	-	-	-	-	103,304	-
Potential Occupied Industrial Space (SF)	98,139	-	-	-	-	98,139	-
Industrial Employment Capacity	123	-	-	-	-	123	-
Net Commercial & Industrial Capacity (SF)	251,339	-	-	142,288	5,747	103,304	-
Potential Occupied Commercial & Industrial Employment Capacity	238,772	-	-	135,174	5,460	98,139	-
	355	-	-	223	9	123	-
Remaining Employment Growth to Accommodate (2021-2036)	92						
Employment Capacity Surplus (Deficit)	263						

Sources: City of Nooksack, 2022; Whatcom County, 2021; Community Attributes Inc., 2021.

10. Sumas UGA

The Sumas Urban Growth Area is projected to reach a total population and employment of 2,323 and 1,145 respectively by 2036. The UGA has projected growth allocation of 760 for population and 387 for employment between 2016 and 2036 (**Exhibit 1** and **Exhibit 2**).

Achieved Growth 2016-2021

Based on permit data collected between 2016 and 2021 and occupancy and persons per household and square feet per employee assumptions, the Sumas UGA grew by an estimated 190 population and 65 employment (100% within the City) (**Exhibit 6** and **Exhibit 7**).

Between 2016 and 2021, the City of Sumas achieved an overall residential density of 7.5 units per acre. No development occurred within the unincorporated area of the UGA within the period. The *City of Sumas Comprehensive Plan* has an adopted planned residential density of 4.9 units per acre. The *Whatcom County Comprehensive Plan* has adopted planned residential density of 4.0 to 6.0 units per acre. Achieved residential density within the City of Sumas exceeded both the City and County planned densities (**Exhibit 11**).

The City Comprehensive Plan references planned densities for commercial and industrial developed based on the *Whatcom County Land Capacity Analysis*. Whatcom County has not adopted planned densities for commercial or industrial uses. No commercial development occurred within the City during the review period. The City achieved an industrial FAR of 0.12, exceeding slightly the planned density of 0.11. The adopted planned commercial FAR is 0.22 (**Exhibit 11**).

Population and Employment Assumptions

Specific occupancy rate and population and employment density assumptions for estimating future growth capacity in the Sumas UGA are:

- 95.8% Single Family occupancy rate
- 82.2% Multifamily occupancy rate
- 95.0% Commercial and Industrial occupancy rate
- 3.008 Single Family persons per household
- 2.199 Multifamily persons per household
- 669 and 890 respectively Commercial and Industrial square feet per employee

The Sumas UGA has an estimated 570 population and 322 employment growth

remaining to accommodate between 2021 and 2036 (**Exhibit 6** and **Exhibit 7**).

Population Capacity 2021-2036

Based on achieved densities between 2016 and 2021 and planning assumptions, City of Sumas planners are assuming future single family density between 2.5 and 4.5 units per acre for single family residential development. Assumed density for future multifamily development is 13.5 units per acre (**Exhibit 65**).

The Sumas UGA has estimated net land capacity for population growth of 65.8 acres (**Exhibit 66**), with a total estimated potential occupied unit capacity of 435 dwelling units. Based on persons per household assumptions, the UGA has an estimated population capacity of 1,073, indicating an estimated population capacity surplus of 503 (**Exhibit 67**).

Housing Needs by Type

The *Whatcom County Comprehensive Plan* (Chapter 3- Housing, Chart 3 – Estimated Dwelling Units Needed, page 3-8) indicates that Sumas has a need for 168 single-family, 146 multi-family, and 47 other (“group housing”) new dwelling units during the 2013-2036 planning period. The calculation for Chart 3 in the *Whatcom County*

Comprehensive Plan included building activity from 2013. Therefore, the analysis below includes permit data from April 1, 2013, even though the planning period for this Buildable Lands Report is from 2016.

- Between April 1, 2013 and March 31, 2021, Sumas issued building permits for 57 single-family and 45 multi-family units. No group housing has been built during this time. Comparing units built and the needs indicated on Chart 3, Sumas needs an additional 111 single-family units, 101 multi-family units, and 47 group housing units between 2021 and 2036.
- The City and unincorporated UGA have an estimated 2021-2036 capacity for 151 single-family and 353 multi-family housing units (**Exhibit 67**). The multi-family capacity includes group housing.

These capacities are sufficient to accommodate the dwelling unit types needed in the planning period as established in the Whatcom County Comprehensive Plan (Chapter 3- Housing, Chart 3).

Employment Capacity 2021-2036

The City of Sumas is utilizing achieved densities (when available) when estimating future land capacity. Based on achieved

densities between 2016 and 2021 and planning assumptions, City of Sumas planners are assuming a future commercial FAR between 0.22 and 0.50 depending on the specific zone and an industrial FAR of 0.12 (**Exhibit 68**).

The Sumas UGA has estimated net land capacity for employment growth of 110.6 acres (**Exhibit 69**), with a total estimated potential occupied commercial and industrial capacity of 601,950 square feet. Based on square feet per employee assumptions, the Sumas UGA has an estimated employment capacity of 758, indicating an estimated employment capacity surplus of 436 (**Exhibit 70**).

Regulatory Changes

The City of Sumas has not identified any regulatory changes that would prevent assigned densities from being achieved or impact the quantity of land suitable for development during the remainder of the planning period.

Infrastructure Gaps

The City of Sumas has not identified any infrastructure gaps that would prevent assigned densities from being achieved or impact the quantity of land suitable for development during the remainder of the planning period (2021 to 2036).

Analysis of Comprehensive Plan Objectives and Reasonable Measures

The City of Sumas has determined that growth targets and assumptions are being met to a reasonable degree; therefore, an analysis of comprehensive plan development targets, assumptions and objectives is not deemed necessary.

Based on the results presented in the Buildable Land Report, implementation of reasonable measures is not deemed necessary. If in the future it is determined that Reasonable Measures are appropriate, then the following measures could be considered for implementation:

- Increase residential densities by reducing minimum lot sizes in the Residential, Low-Density zoning district.
- Reduce conditional use permitting requirements for construction of multifamily structures in the Residential, High-Density zoning district.
- Increase opportunities for construction of accessory dwelling units (ADUs).

Residential Development

Exhibit 65. Residential Development, Achieved and Assumed Densities, City of Sumas, 2016-2021

Zoning Designation	Development Type	Acres Developed	Dwelling Units	Achieved Density (Units/Acre)	Density Assumed (Units/Acre)
RES LOW	Single Family	0.8	2	2.44	2.50
RES MED	Single Family	5.5	27	4.91	4.50
RES HIGH	Single Family	2.5	12	4.77	N/A
	Multifamily	1.8	36	19.54	13.50
BUS GEN	Multifamily	0.1	4	44.44	N/A

Sources: City of Sumas, 2022; Community Attributes Inc., 2021.

Note: "Density Assumed" is the assumed density for evaluation of land suitable for development by zone.

Exhibit 66. Residential Land Supply, Sumas UGA, 2021-2036

	UGA Total	RES LOW	RES MED	RES HIGH	BUS GEN	LI	BUS TO	BUS LOW
Vacant Land								
Gross Acres	69.68	4.36	24.36	40.95	0.00	0.00	0.00	0.00
Critical Areas	27.26	2.80	3.96	20.50	0.00	0.00	0.00	0.00
Future Public Uses	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Infrastructure Gaps	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Quasi-Public Use Deduction	2.12	0.08	1.02	1.02	0.00	0.00	0.00	0.00
Infrastructure Deduction	2.12	0.08	1.02	1.02	0.00	0.00	0.00	0.00
Market Factor	5.73	0.21	2.75	2.76	0.00	0.00	0.00	0.00
Net Acres	32.45	1.19	15.61	15.65	0.00	0.00	0.00	0.00
Partially-Used Land								
Gross Acres	84.72	38.38	25.39	20.94	0.00	0.00	0.00	0.00
Critical Areas	35.27	16.40	13.52	5.35	0.00	0.00	0.00	0.00
Future Public Uses	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Infrastructure Gaps	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Quasi-Public Use Deduction	2.47	1.10	0.59	0.78	0.00	0.00	0.00	0.00
Infrastructure Deduction	2.47	1.10	0.59	0.78	0.00	0.00	0.00	0.00
Market Factor	11.13	4.95	2.67	3.51	0.00	0.00	0.00	0.00
Net Acres	33.38	14.84	8.01	10.52	0.00	0.00	0.00	0.00
Underutilized Land								
Gross Acres	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Critical Areas	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Future Public Uses	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Infrastructure Gaps	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Quasi-Public Use Deduction	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Infrastructure Deduction	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Market Factor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Net Acres	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00

Sources: City of Sumas, 2022; Whatcom County, 2021; Community Attributes Inc., 2021.

Exhibit 67. Developable Residential Land Capacity, Sumas UGA, 2021 -2036

	UGA	RES LOW	RES MED	RES HIGH	BUS GEN	LI	BUS TO	BUS LOW
Net Developable Residential Acres (Vacant, PU, UU)	65.83	16.03	23.63	26.17	0.00	0.00	0.00	0.00
Single Family Developable Acres	39.66	16.03	23.63	-	-	-	-	-
Assumed Single Family Density (units/acre)		3	5					
Subtotal Single Family Unit Capacity	146	40	106	-	-	-	-	-
Existing Single Family Units	38	6	7	9	13	2	-	1
Pending Single Family Units	18	-	18	-	-	-	-	-
Master Planned Single Family Units	-	-	-	-	-	-	-	-
Subtotal: Net Single Family Unit Capacity	151	34	117	-	-	-	-	-
Potential Occupied Single Family Units	145	33	112	-	-	-	-	-
Single Family Population Capacity	435	98	337	-	-	-	-	-
Multifamily Developable Acres	26.17	-	-	26.17	-	-	-	-
Assumed Multifamily Density (units/acre)				14				
Subtotal Multifamily Unit Capacity	353	-	-	353	-	-	-	-
Existing Multifamily Units	4	-	-	-	4	-	-	-
Pending Multifamily Units	-	-	-	-	-	-	-	-
Master Planned Multifamily Units	-	-	-	-	-	-	-	-
Subtotal: Net Multifamily Unit Capacity	353	-	-	353	-	-	-	-
Potential Occupied Multifamily Units	290	-	-	290	-	-	-	-
Multifamily Population Capacity	638	-	-	638	-	-	-	-
Net Dwelling Unit Capacity	504	34	117	353	-	-	-	-
Potential Occupied Dwelling Units	435	33	112	290	-	-	-	-
Population Capacity	1,073	98	337	638	-	-	-	-
Remaining Population Growth to Accommodate (2021-2036)	570							
Population Capacity Surplus (Deficit)	503							

Sources: City of Sumas, 2022; Whatcom County, 2021; Community Attributes Inc., 2021.

Commercial and Industrial Development

Exhibit 68. Nonresidential Development, Achieved and Assumed Densities, City of Sumas, 2016 -2021

Zoning Designation	Development Type	Acres Developed	Built Square Feet	Achieved Density (FAR)	Assumed Density (FAR)
RES LOW	Commercial	N/A	N/A	N/A	0.50
RES MED	Commercial	N/A	N/A	N/A	0.44
RES HIGH	Commercial	N/A	N/A	N/A	0.25
BUS GEN	Commercial	N/A	N/A	N/A	0.22
BUS TO	Commercial	N/A	N/A	N/A	0.22
BUS LOW	Commercial	N/A	N/A	N/A	0.22
LI	Industrial	11.2	60,549	0.12	0.12

Sources: City of Sumas, 2022; Community Attributes Inc., 2021.

Note: Assumed Density is the assumed density for evaluation of land suitable for development by zone.

Exhibit 69. Developable Nonresidential Land Supply, Sumas UGA, 2021 -2036

	UGA Total	RES LOW	RES MED	RES HIGH	BUS GEN	LI	BUS TO	BUS LOW
Vacant Land								
Gross Acres	206.54	0.00	0.00	0.00	5.15	168.29	32.89	0.21
Critical Areas	97.92	0.00	0.00	0.00	2.19	88.44	7.08	0.21
Future Public Uses	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Infrastructure Gaps	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Quasi-Public Use Deduction	5.43	0.00	0.00	0.00	0.15	3.99	1.29	0.00
Infrastructure Deduction	5.43	0.00	0.00	0.00	0.15	3.99	1.29	0.00
Market Factor	14.66	0.00	0.00	0.00	0.40	10.78	3.48	0.00
Net Acres	83.09	0.00	0.00	0.00	2.26	61.08	19.75	0.00
Partially-Used Land								
Gross Acres	13.87	0.00	0.00	0.00	0.00	13.87	0.00	0.00
Critical Areas	6.35	0.00	0.00	0.00	0.00	6.35	0.00	0.00
Future Public Uses	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Infrastructure Gaps	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Quasi-Public Use Deduction	0.38	0.00	0.00	0.00	0.00	0.38	0.00	0.00
Infrastructure Deduction	0.38	0.00	0.00	0.00	0.00	0.38	0.00	0.00
Market Factor	1.69	0.00	0.00	0.00	0.00	1.69	0.00	0.00
Net Acres	5.08	0.00	0.00	0.00	0.00	5.08	0.00	0.00
Underutilized Land								
Gross Acres	50.02	0.00	0.00	0.00	4.11	45.62	0.00	0.29
Critical Areas	16.81	0.00	0.00	0.00	0.98	15.54	0.00	0.29
Future Public Uses	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Infrastructure Gaps	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Quasi-Public Use Deduction	1.66	0.00	0.00	0.00	0.16	1.50	0.00	0.00
Infrastructure Deduction	1.66	0.00	0.00	0.00	0.16	1.50	0.00	0.00
Market Factor	7.47	0.00	0.00	0.00	0.70	6.77	0.00	0.00
Net Acres	22.42	0.00	0.00	0.00	2.11	20.31	0.00	0.00

Sources: City of Sumas, 2022; Whatcom County, 2021; Community Attributes Inc., 2021.

Exhibit 70. Developable Nonresidential Land Capacity, Sumas UGA, 2021-2036

	UGA	RES LOW	RES MED	RES HIGH	BUS GEN	LI	BUS TO	BUS LOW
Net Developable Employment Acres (Vacant, PU, UU)	110.59	0.00	0.00	0.00	4.37	86.47	19.75	0.00
Commercial Developable Acres	24.12	-	-	-	4.37	-	19.75	0.00
Assumed Commercial Density (FAR)		0.5	0.4	0.3	0.2		0.2	0.2
Subtotal: Commercial Capacity (SF)	231,113	-	-	-	41,882	-	189,231	-
Existing Commercial Space (SF)	-	-	-	-	-	-	-	-
Pending Commercial Space (SF)	-	-	-	-	-	-	-	-
Master Planned Commercial Space (SF)	-	-	-	-	-	-	-	-
Subtotal: Net Commercial Capacity (SF)	231,113	-	-	-	41,882	-	189,231	-
Potential Occupied Commercial Space (SF)	219,557	-	-	-	39,788	-	179,769	-
Commercial Employment Capacity	328	-	-	-	59	-	269	-
Industrial Developable Acres	86.47	-	-	-	-	86.47	-	-
Assumed Industrial Density (FAR)						0.1		
Subtotal: Industrial Capacity (SF)	451,991	-	-	-	-	451,991	-	-
Existing Industrial Space (SF)	49,472	-	-	-	-	49,472	-	-
Pending Industrial Space (SF)	-	-	-	-	-	-	-	-
Master Planned Industrial Space (SF)	-	-	-	-	-	-	-	-
Subtotal: Net Industrial Capacity (SF)	402,519	-	-	-	-	402,519	-	-
Potential Occupied Industrial Space (SF)	382,393	-	-	-	-	382,393	-	-
Industrial Employment Capacity	430	-	-	-	-	430	-	-
Net Commercial & Industrial Capacity (SF)	633,632	-	-	-	41,882	402,519	189,231	-
Potential Occupied Commercial & Industrial	601,950	-	-	-	39,788	382,393	179,769	-
Employment Capacity	758	-	-	-	59	430	269	-
Remaining Employment Growth to Accommodate (2021-2036)	322							
Employment Capacity Surplus (Deficit)	436							

Sources: City of Sumas, 2022; Whatcom County, 2021; Community Attributes Inc., 2021.

APPENDIX A: ANNEXATIONS

Between 2016 and 2021, 445 total acres were annexed to cities in Whatcom County. These annexations increased the total incorporated area in Whatcom County to 35,385 acres (**Exhibit 71**). These annexations were adopted by the following city legislative actions:

- City of Bellingham Ordinances 2018-11-027 and 2018-12-033
- City of Lynden Ordinances 1506, 1509, and 1561
- City of Nooksack Ordinance 712

Exhibit 71. Whatcom County Acres Annexed by City, 2016-2021

	Acres 2016	2016	2017	2018	2019	2020	2021	Total Acres Annexed	Acres 2021
Bellingham	19,275	0	0	0	249	0	0	249	19,524
Blaine	5,464	0	0	0	0	0	0	0	5,464
Everson	877	0	0	0	0	0	0	0	877
Ferndale	4,561	0	0	0	0	0	0	0	4,561
Lynden	3,382	82	0	10	0	0	0	92	3,474
Nooksack	446	0	0	0	104	0	0	104	550
Sumas	935	0	0	0	0	0	0	0	935
Total	34,940	82	0	10	353	0	0	445	35,385

Sources: Whatcom County and Cities, 2022 (Countywide Data Reporting Tool).

Notes: Acres 2016 represents acres within city limits as of March 31, 2016. Acres 2021 represents acres within city limits as of March 31, 2021. Numbers have been rounded. For Bellingham, land area excluding Bellingham Bay, Lake Whatcom, and Lake Padden is equal to 18,046 acres.

APPENDIX B: URBAN GROWTH AREA CHANGES

Between 2016 and 2021, 345 acres were added to Whatcom County’s urban growth areas. UGAs include areas within the city limits and unincorporated areas that have been designated for urban growth. UGA changes authorized by Whatcom County Ordinance 2016-034 include a reduction of 20 acres in the Everson UGA, as well as increases in the Ferndale, Lynden, and Nooksack UGAs. Overall, as of March 31, 2021, Whatcom County’s UGAs total 52,029 acres (**Exhibit 72**).

Exhibit 72. Whatcom County Acres Added to Urban Growth Areas, 2016-2021

	Acres 2016	2016	2017	2018	2019	2020	2021	Total Acres Added to UGAs	Acres 2021
Bellingham	23,172	0	0	0	0	0	0	0	23,172
Birch Bay	3,607	0	0	0	0	0	0	0	3,607
Blaine	4,071	0	0	0	0	0	0	0	4,071
Cherry Point	7,035	0	0	0	0	0	0	0	7,035
Columbia Valley	1,157	0	0	0	0	0	0	0	1,157
Everson	1,287	(20)	0	0	0	0	0	(20)	1,267
Ferndale	5,869	117	0	0	0	0	0	117	5,986
Lynden	3,979	193	0	0	0	0	0	193	4,172
Nooksack	548	55	0	0	0	0	0	55	603
Sumas	959	0	0	0	0	0	0	0	959
Total	51,684	345	0	0	0	0	0	345	52,029

Sources: Whatcom County and Cities, 2022 (Countywide Data Reporting Tool).

Notes: Acres 2016 represents acres within each UGA as of March 31, 2016. Acres 2021 represents acres within each UGA as of March 31, 2021.

APPENDIX C: ZONING MAP CHANGES

Zoning map changes documented in **Exhibit 73** and **Exhibit 74** provide a detailed accounting of changes to zoning within each UGA for residential, commercial, industrial, and other types of zones between 2016 and 2021. Many of the general land use categories encompass a number of zoning districts. In 2016, land was added to some UGAs or moved between UGAs. This land has not been rezoned and therefore these changes are reflected in **Exhibit 72**, but not in the zoning map changes.

Ordinances authorizing zoning changes from one land use category to another between April 1, 2016 and March 31, 2021:

- Bellingham UGA
 - City of Bellingham Ordinance 2017-07-018 rezoned 0.51 acres from Residential - Single Family to Commercial.
 - City of Bellingham Ordinance 2017-07-019 rezoned 10 acres from Residential – Single Family to Industrial.
 - City of Bellingham Ordinance 2017-07-020 rezoned 3.6 acres from Industrial to public and 17.7 acres of Commercial / Industrial / Residential Multifamily to Public.
 - City of Bellingham Ordinance 2017-11-025 rezoned 12.7 acres from Commercial to Institutional.

- Everson UGA
 - City of Everson zoning changes in 2016 were part of the 2016 Comprehensive Plan update, adopted through Ordinance 767-16.
 - City of Everson zoning changes in 2019 were adopted through Ordinance 806-19.

- Ferndale UGA
 - Ferndale Ordinance 1957 (2016) – Rezoned 0.75 acres from Residential – Single Family to Residential - Multifamily.
 - Ferndale Ordinance 1977 (2016) – Rezoned 6.78 acres from Residential – Single Family to Commercial.
 - Ferndale Ordinance 2080 (2019) – Rezoned 112 acres from Floodplain to Public (3.9 acres), Residential – Single Family (8.51 acres), Residential – Multifamily (48.62 acres), and Commercial (52.14 acres). Rezoned 18.92 acres from Commercial to Residential – Multifamily and 4.45 acres from Commercial to Residential – Single Family.
 - Ferndale Ordinance 2160 (2020) – Rezoned 2.71 acres from Residential – Single Family to Residential – Multifamily, and 3.8 acres from Residential – Multifamily to Commercial.

- Lynden UGA
 - Lynden Ordinances 1506 and 1509 (2016) - Annexed 82 acres and rezoned to Residential.
 - Lynden Ordinance 1519 (2016) - Rezoned 7 acres from Commercial to Industrial, 1 acre from Residential to Commercial, and 5 acres from Residential to Public Use.
 - Lynden Ordinance 1548 (2017) - Rezoned 27 acres from Commercial to Residential.
 - Lynden Ordinance 1569 (2018) - Rezoned 16 acres from Residential to Commercial (6 acres), Industrial (8 acres), and Public Use (2 acres). This Ordinance also rezoned 9 acres from Commercial to Industrial.
 - Lynden Ordinance 1561 (2018) - Annexed 10 acres and rezoned to Residential.
 - Lynden Ordinance 1597 (2019) - Rezoned 1 acre from Single Family Residential to Multifamily Residential.
 - Lynden Ordinance 1619 (2020)- Rezoned 83 acres from Single Family Residential to Multifamily Residential (80 acres) and Public Use (3 acres) in the Pepin Creek Subarea.

- Nooksack UGA
 - City of Nooksack Ordinance 712 rezoned 31 acres of a 104 acre annexation area from Residential to Public zoning.

- Sumas UGA
 - City of Sumas Ordinance No. 1685 adopted zoning changes from the 2016 Comprehensive Plan update.

- Areas Outside UGAs
 - Whatcom County Ordinance 2016-036 rezoned 2 acres of Rural one dwelling per five acres to Rural-Industrial.

Exhibit 73. Whatcom County Zoning Changes by Urban Growth Area and Land Use, Acres, 2016-2021

UGA	City Zoning 2016	County Zoning 2016	Zoning 2016	2016	2017	2018	2019	2020	2021	Total Zoning Changes	Zoning 2021
Bellingham											
Residential - Single Family	7,868	2,205	10,073	0	(11)	0	0	0	0	(11)	10,062
Residential - Multifamily	3,209	46	3,255	0	0	0	0	0	0	0	3,255
Commercial	1,847	314	2,161	0	(12)	0	0	0	0	(12)	2,149
Industrial	2,434	2,486	4,919	0	6	0	0	0	0	6	4,926
Other	2,444	139	2,583	0	16	0	0	0	0	16	2,600
<i>Subtotal</i>	<i>17,802</i>	<i>5,190</i>	<i>22,992</i>	<i>0</i>	<i>0</i>	<i>0</i>	<i>0</i>	<i>0</i>	<i>0</i>	<i>0</i>	<i>22,992</i>
Birch Bay											
Residential - Single Family	0	1,728	1,728	0	0	0	0	0	0	0	1,728
Residential - Multifamily	0	1,281	1,281	0	0	0	0	0	0	0	1,281
Commercial	0	551	551	0	0	0	0	0	0	0	551
Industrial	0	0	0	0	0	0	0	0	0	0	0
Other	0	0	0	0	0	0	0	0	0	0	0
<i>Subtotal</i>	<i>0</i>	<i>3,560</i>	<i>3,560</i>	<i>0</i>	<i>0</i>	<i>0</i>	<i>0</i>	<i>0</i>	<i>0</i>	<i>0</i>	<i>3,560</i>
Blaine											
Residential - Single Family	2,505	494	2,999	0	0	0	0	0	0	0	2,999
Residential - Multifamily	262	0	262	0	0	0	0	0	0	0	262
Commercial	347	0	347	0	0	0	0	0	0	0	347
Industrial	287	0	287	0	0	0	0	0	0	0	287
Other	144	0	144	0	0	0	0	0	0	0	144
<i>Subtotal</i>	<i>3,545</i>	<i>494</i>	<i>4,039</i>	<i>0</i>	<i>0</i>	<i>0</i>	<i>0</i>	<i>0</i>	<i>0</i>	<i>0</i>	<i>4,039</i>
Cherry Point											
Industrial	0	7,029	7,029	0	0	0	0	0	0	0	7,029
<i>Subtotal</i>	<i>0</i>	<i>7,029</i>	<i>7,029</i>	<i>0</i>	<i>0</i>	<i>0</i>	<i>0</i>	<i>0</i>	<i>0</i>	<i>0</i>	<i>7,029</i>
Columbia Valley											
Residential - Single Family	0	1,065	1,065	0	0	0	0	0	0	0	1,065
Residential - Multifamily	0	0	0	0	0	0	0	0	0	0	0
Commercial	0	40	40	0	0	0	0	0	0	0	40
Industrial	0	0	0	0	0	0	0	0	0	0	0
Other	0	40	40	0	0	0	0	0	0	0	40
<i>Subtotal</i>	<i>0</i>	<i>1,145</i>	<i>1,145</i>	<i>0</i>	<i>0</i>	<i>0</i>	<i>0</i>	<i>0</i>	<i>0</i>	<i>0</i>	<i>1,145</i>
Everson											
Residential - Single Family	421	108	529	(60)	0	0	(1)	0	0	(61)	468
Residential - Multifamily	124	0	124	0	0	0	4	0	0	4	128
Commercial	47	7	54	10	0	0	(1)	0	0	9	63
Industrial	173	42	215	(26)	0	0	0	0	0	(26)	189
Other	116	251	367	76	0	0	(2)	0	0	74	441
<i>Subtotal</i>	<i>881</i>	<i>408</i>	<i>1,289</i>	<i>0</i>	<i>0</i>	<i>0</i>	<i>0</i>	<i>0</i>	<i>0</i>	<i>0</i>	<i>1,289</i>

Sources: Whatcom County and Cities, 2022 (Countywide Data Reporting Tool).

Notes: Acres 2016 represents acres as of March 31, 2016. Acres 2021 represents acres as of March 31, 2021. Numbers may not add up because of rounding.

Exhibit 74. Whatcom County Zoning Changes by Urban Growth Area and Land Use, Acres, 2016-2021

UGA	City Zoning 2016	County Zoning 2016	Zoning 2016	2016	2017	2018	2019	2020	2021	Total Zoning Changes	Zoning 2021
Ferndale											
Residential - Single Family	1,580	1,599	3,179	(8)	0	0	13	(3)	0	3	3,182
Residential - Multifamily	485	0	485	1	0	0	63	(1)	0	63	548
Commercial	1,628	31	1,659	7	0	0	33	4	0	44	1,703
Industrial	516	415	931	0	0	0	0	0	0	0	931
Other	112	89	201	0	0	0	(109)	0	0	(109)	92
<i>Subtotal</i>	<i>4,321</i>	<i>2,134</i>	<i>6,455</i>	<i>0</i>	<i>0</i>	<i>0</i>	<i>0</i>	<i>0</i>	<i>0</i>	<i>0</i>	<i>6,455</i>
Lynden											
Residential - Single Family	1,854	135	1,989	76	7	(6)	(1)	(83)	0	(7)	1,982
Residential - Multifamily	442	23	465	0	20	0	1	80	0	101	566
Commercial	479	0	479	(6)	(27)	(3)	0	0	0	(36)	443
Industrial	337	0	337	7	0	17	0	0	0	24	361
Other	189	446	635	(77)	0	(8)	0	3	0	(82)	553
<i>Subtotal</i>	<i>3,300</i>	<i>604</i>	<i>3,904</i>	<i>0</i>	<i>0</i>	<i>0</i>	<i>0</i>	<i>0</i>	<i>0</i>	<i>0</i>	<i>3,904</i>
Nooksack											
Residential - Single Family	350	95	445	0	0	0	(31)	0	0	(31)	414
Residential - Multifamily	0	0	0	0	0	0	0	0	0	0	0
Commercial	35	0	35	0	0	0	0	0	0	0	35
Industrial	13	0	13	0	0	0	0	0	0	0	13
Other	45	11	56	0	0	0	31	0	0	31	87
<i>Subtotal</i>	<i>443</i>	<i>106</i>	<i>549</i>	<i>0</i>	<i>0</i>	<i>0</i>	<i>0</i>	<i>0</i>	<i>0</i>	<i>0</i>	<i>549</i>
Sumas											
Residential - Single Family	160	0	160	(4)	0	0	0	0	0	(4)	156
Residential - Multifamily	193	0	193	(16)	0	0	0	0	0	(16)	177
Commercial	71	0	71	(1)	0	0	0	0	0	(1)	70
Industrial	376	0	376	8	0	0	0	0	0	8	384
Other	135	26	161	13	0	0	0	0	0	13	174
<i>Subtotal</i>	<i>935</i>	<i>26</i>	<i>961</i>	<i>0</i>	<i>0</i>	<i>0</i>	<i>0</i>	<i>0</i>	<i>0</i>	<i>0</i>	<i>961</i>
Areas Outside UGAs											
Rural one dwelling/two acres	N/A	1,157	1,157	0	0	0	0	0	0	0	1,157
Rural one dwelling/five acres	N/A	90,331	90,331	(2)	0	0	0	0	0	(2)	90,329
Rural one dwelling/ten acres	N/A	30,211	30,211	0	0	0	0	0	0	0	30,211
Rural - Residential (LAMIRD)	N/A	10,634	10,634	0	0	0	0	0	0	0	10,634
Rural - Commercial (LAMIRD)	N/A	1,286	1,286	0	0	0	0	0	0	0	1,286
Rural - Industrial (LAMIRD)	N/A	494	494	2	0	0	0	0	0	2	496
Agriculture	N/A	86,276	86,276	0	0	0	0	0	0	0	86,276
Rural Forestry	N/A	36,208	36,208	0	0	0	0	0	0	0	36,208
Commercial Forestry	N/A	187,311	187,311	0	0	0	0	0	0	0	187,311
Mineral Resource Lands	N/A	0	0	0	0	0	0	0	0	0	0
<i>Subtotal</i>	<i>N/A</i>	<i>443,908</i>	<i>443,908</i>	<i>0</i>	<i>0</i>	<i>0</i>	<i>0</i>	<i>0</i>	<i>0</i>	<i>0</i>	<i>443,908</i>
Total	31,227	464,604	495,831	0	0	0	0	0	0	0	495,831

Sources: Whatcom County and Cities, 2022 (Countywide Data Reporting Tool).

Notes: Acres 2016 represents acres as of March 31, 2016. Acres 2021 represents acres as of March 31, 2021. LAMIRD stands for "limited area of more intensive rural development" (see RCW 36.70A.070(5)(d)).