

# SKAGIT POPULATION, EMPLOYMENT AND HOUSING GROWTH MONITORING PROGRAM

## METHODOLOGY

Prepared: December 6, 2017

Revised: October 31, 2024

This methodology guides the preparation of the annual report for the Skagit Growth Monitoring Program. The first annual report under this program – the Baseline Report – was completed in 2017 and included baseline conditions. Included in each annual report are summaries of estimated population and employment growth for each of the county’s urban growth areas (UGAs), as well as rural, unincorporated areas that are not part of any UGA. Historical housing unit estimates are also provided along with historical annual average change in housing units and forecasts of annual average housing unit change needed to meet adopted population forecasts. Results from future year analyses will be additive to past growth monitoring report information. Population, employment and housing growth trends will become evident in future years as series of temporal data are collected, analyzed and compared with past years.

The methodology includes seven sections:

- 1. Background**
- 2. Key Findings and Trends**
- 3. Five-county Growth**
- 4. Population Growth**
- 5. Employment Growth**
- 6. Housing Growth**
- 7. Affordable Housing**

The methodology is designed to be replicable every year for the creation of population, employment and housing growth monitoring reports. If desirable, the methodology can be adjusted in future years.

One area not included in the current methodology is a uniform method of tracking land consumption countywide. Local jurisdictions conduct land capacity analyses for urban growth areas to inform periodic comprehensive plan updates, but there is currently no countywide mechanism to track land consumption associated with population and employment growth on an annual basis. If a uniform method of collection by jurisdictions and distribution of land consumption information to SCOG is created, a future methodology can incorporate these data – coupling estimated population and employment growth with associated land consumption.

Sections 2–7 each note the data sources and data analysis steps used as well as products for the Annual Report.

## 1. BACKGROUND

The Board of Skagit County Commissioners adopted changes to Skagit County Countywide Planning Policy (CPP) 1 on June 30, 2016<sup>1</sup>. The CPP amendment updated the 2036 population and employment allocations for urban growth areas in Skagit County, including those of all cities and towns, as well as the two non-municipal UGAs – Bayview Ridge and Swinomish. Population and employment growth was also allocated for unincorporated areas outside of UGAs, which are referred to as “Rural” areas. The allocations continued the countywide policy of allocating 80% of all forecast population growth into UGAs, with the remaining 20% allocated into unincorporated Rural area. **Attachment A** includes CPP 1 as adopted on June 30, 2016.

The adopted population and employment forecasts to 2036 are included in the following table.

Urban Growth Areas	2015 – 2036 Forecast Population Growth	Total 2036 Population	2015 – 2036 Forecast Employment Growth	Total 2036 Employment
Anacortes	5,895	22,293	2,076	10,480
Burlington	3,808	14,272	3,516	13,412
Mount Vernon	12,434	47,403	4,785	21,288
Sedro-Woolley	4,555	17,069	4,427	9,179
Concrete	320	1,193	109	467
Hamilton	114	427	66	288
La Conner	329	1,226	329	1,420
Lyman	162	605	9	38
Bayview Ridge	72	1,883	1,799	3,455
Swinomish	912	3,416	290	1,247
<b>UGA Subtotal</b>	<b>28,601</b>	<b>109,787</b>	<b>17,406</b>	<b>61,274</b>
Rural (outside UGAs)	7,150	45,665	1,447	9,343
<b>Grand Total</b>	<b>35,751</b>	<b>155,452</b>	<b>18,853</b>	<b>70,617</b>

The amendment to CPP 1 was consistent with the recommendation made by the Growth Management Act Steering Committee (GMASC), which is made up of elected representatives from Skagit County local governments, to adopt these population and growth allocations for these Skagit County areas. The GMASC leads the Growth Management Act coordination process in Skagit County with the Skagit Council of Governments (SCOG) providing staff support for this planning function. A staff committee

<sup>1</sup> More information regarding the amendment to CPP 1 can be found on [Skagit County’s webpage associated with their 2016 comprehensive plan update](#). Several of the materials under the Proposed Amendment to CPP 1.1 and Related Documents headings provide context for projecting growth in Skagit County to 2036 and the new program to monitor growth during that timeframe that is being implemented through this project.

composed of planners from local jurisdictions, the Growth Management Act Technical Advisory Committee (Planners Committee), supports the work of the GMASC.

The [2002 Framework Agreement](#) provides the basis for developing CPPs, as well as population and employment allocations, and other coordination activities in Skagit County. All the cities and towns in Skagit County are party to the agreement, along with Skagit County. SCOG provides staff support for these planning activities through an [interlocal agreement](#) executed by all parties to the 2002 Framework Agreement and SCOG's Board of Directors.

Along with the growth allocations, CPP 1 includes a new process for ongoing monitoring of population and employment growth in Skagit County. The long term monitoring process calls for consistent land capacity analysis methods and determination of needed undeveloped buildable urban land. The inventory is to be maintained by Skagit County government in a regional GIS database. A method to monitor urban development and the rate of population and employment growth is to be developed by the Planners Committee and annual monitoring reports are to be prepared and presented to the Growth Management Act Steering Committee.

SCOG, acting as the administrator of the Growth Management Act countywide process in Skagit County, assists with preparing the growth monitoring process methodology and annual monitoring reports. The methodology was prepared in 2017 and revised in 2018, and again in 2023. A scope of work for this process was developed in June 2017.

## 2. KEY FINDINGS AND TRENDS

This section of the Growth Monitoring Report compares growth in population, housing and employment from the 2017 Baseline Growth Monitoring Report to the present year. Data used for these growth comparisons begins with the 2017 Baseline Growth Monitoring Report data for each area. This section also includes a narrative paragraph highlighting key takeaways from the trends analysis.

### **DATA SOURCES\***

1. Skagit Council of Governments, *2017 Baseline Growth Monitoring Report*, Version: December 20, 2017
2. Skagit Council of Governments, *2018 Growth Monitoring Report*, Version: December 19, 2018
3. Skagit Council of Governments, *2019 Growth Monitoring Report*, Version: December 18, 2019
4. Skagit Council of Governments, *2020 Growth Monitoring Report*, Version: June 16, 2021
5. Skagit Council of Governments, *2021 Growth Monitoring Report*, Revised: December 21, 2022
6. Skagit Council of Governments, *2022 Growth Monitoring Report*, Version: December 21, 2022
7. Skagit Council of Governments, *2023 Growth Monitoring Report*, Version: December 20, 2023

8. Washington State Office of Financial Management (OFM), Small Area Estimates Program (SAEP), Estimates of Total Population for Census 2020 Urban Growth Areas, 2010-2024, SAEP Version: September 19, 2024
9. Washington State Office of Financial Management, Small Area Estimates Program, Estimates of Total Population for the Unincorporated Portion of Urban Growth Areas, 2010-2024, SAEP Version: September 23, 2024
10. Washington State Office of Financial Management, Forecasting and Research Division, April 1, 2024 Population of Cities, Towns and Counties, 2020-2024, Version: June 28, 2024
11. Skagit County, 2036 Population Allocations from adopted Countywide Planning Policy 1, Adopted: June 30, 2016
12. Washington State Employment Security Department, Quarterly Census of Employment and Wages, Skagit County, April 1, 2023 – March 31, 2024, Prepared: September 6, 2024
13. Skagit County GIS, Incorporated and Unincorporated Urban Growth Areas, November 2023
14. Skagit County GIS, Road Centerlines with Address Ranges, November 2023
15. ESRI, USA Zip Code Areas, Version: April 10, 2018
16. Washington State Office of Financial Management, Forecasting and Research Division, Postcensal Estimates of Housing Units, April 1, 2020 to April 1, 2024, Last Modified: June 28, 2024
17. Skagit County Planning and Development Services, Housing Unit Change in Unincorporated UGAs, April 1, 2023 – March 31, 2024, Prepared: October 4, 2024

\*Data Notes for these data sources are included in the population, employment, and housing sections of the 2024 Growth Monitoring Report.

Following is a brief summary of the data processing steps, after the data has been acquired.

## **DATA ANALYSIS STEPS**

### **1. *Collecting Data from Growth Monitoring Reports***

Select summary data from current and previous growth monitoring reports for population, housing and employment. Create trends analysis worksheets for population, housing and employment.

### **2. *Creating Implied Housing Target and Housing Units Needed to Meet Population Target***

Create housing forecast worksheet and include housing growth forecast data from 2017 baseline growth monitoring report. Add 2036 target population. Calculate 2036 target population as occupied households, and calculate the total change in households to determine implied housing targets. For the unincorporated county area, assume that the average household size, population in occupied housing rate, total housing multiplier, and vacancy rate are the same as the average of the incorporated areas.

### **3. *Creating Year to Year Changes and Average Annual Growth Rate***

Bring summary data from growth monitoring reports into each worksheet for population, employment, and housing. Calculate total change between baseline year and present year, and average annual growth rate among the years of the report.

### **4. *Creating Forecast Growth Rate and Difference in Observed and Forecast Growth Rates***

Calculate the forecast growth rate for population, employment, and housing. Calculate the difference between this forecast growth rate and the actual observed growth rate. For housing, calculate the forecast growth rate by using the total housing units needed to meet the population target as a proxy for a housing forecast growth.

### PRODUCTS FOR GROWTH MONITORING REPORT

The table on the following page displays an example trends analysis table.

Urban Growth Areas	2016-2017 Base Year* Population	2022-2023* Population	Base Year to Present	Observed Average Growth Rate	2015-2036 Forecast Population Growth	2015-2036 Forecast Average Growth Rate	Difference in Observed and Forecast Rates	Total 2036 Population
Anacortes	16,867	18,123	1,256	1.2%	5,895	1.3%	-0.1%	22,293
Burlington	10,714	12,215	1,501	2.3%	3,808	1.3%	1.0%	14,272
Mount Vernon	36,383	37,771	1,388	0.6%	12,434	1.3%	-0.7%	47,403
Sedro-Woolley	12,308	14,400	2,092	2.8%	4,555	1.3%	1.5%	17,069
Concrete	910	949	39	0.7%	320	1.3%	-0.6%	1,193
Hamilton	307	301	-6	-0.3%	114	1.3%	-1.6%	427
La Conner	925	990	65	1.2%	329	1.3%	-0.1%	1,226
Lyman	455	425	-30	-1.1%	162	1.3%	-2.4%	605
Bayview Ridge	1,890	1,696	-194	-1.7%	72	0.2%	-1.9%	1,883
Swinomish	2,634	2,570	-64	-0.4%	912	1.3%	-1.7%	3,416
<b>UGA Subtotal</b>	<b>83,394</b>	<b>89,440</b>	<b>6,046</b>	<b>1.2%</b>	<b>28,601</b>	<b>1.3%</b>	<b>-0.1%</b>	<b>109,787</b>
Rural (outside UGAs)	40,706	42,560	1,854	0.8%	7,150	0.8%	0.0%	45,665
<b>Grand Total</b>	<b>124,100</b>	<b>132,000</b>	<b>7,900</b>	<b>1.1%</b>	<b>35,751</b>	<b>1.1%</b>	<b>0.0%</b>	<b>155,452</b>

### ILLUSTRATIVE EXAMPLE – NOT ACTUAL FIGURES

## 3. FIVE-COUNTY GROWTH

This section of the Annual Report compares growth in population, housing and employment across five counties: (1) Skagit; (2) Island; (3) Whatcom; (4) Snohomish; and (5) King. Data used for these growth comparisons go back to 1990 for population and housing, and 2000 for employment.

#### Data Sources

- Washington State Office of Financial Management, Forecasting and Research Division, *Postcensal Estimates of April 1 Population and Housing, 1960 to Present*, Version: June 28, 2024

- Washington State Office of Financial Management, Forecasting and Research Division, *Postcensal Estimates of April 1 Housing Units, 1980, 1990 to Present*, Version: June 28, 2024
- Washington State Office of Financial Management, Forecasting and Research Division, *Postcensal Estimates of Housing Units, April 1, 2020 to April 1, 2024*, Version: June 28, 2024
- Washington State Office of Financial Management, Forecasting and Research Division, *April 1, 2024 Population of Cities, Towns and Counties*, Version: June 28, 2024
- Washington State Employment Security Department, *Historical Current Employment Statistics, not seasonally adjusted, 2000 – 2024 Annual Averages by County*, Date: September 20, 2024

Following is a brief summary of the data processing steps, after the data has been acquired.

### **Data Analysis Steps**

#### **5. Isolating Data for Skagit County Jurisdictions**

Filter out estimates for Skagit County jurisdictions from different data sources for population, housing and employment. Create worksheets for population, housing and employment.

#### **6. Transposing Data and Creating Year to Year Changes**

Bring raw data into each worksheet and calculate year to year changes for population, housing and employment. Calculate percentage change by five-year increments for population, employment and housing going back to 1990 – the most recent time series may not have the full five years of data.

#### **7. Creating Line Charts**

Create line charts for population, housing and employment. Use a consistent line color for each county for the three comparison charts.

### **Products for Annual Report**

The chart on the following page displays an example five-county growth chart.



**ILLUSTRATIVE EXAMPLE – NOT ACTUAL FIGURES**

## 4. POPULATION GROWTH

This section of the Annual Report includes historical estimates of population growth by urban growth area going back to 2000 and forecasts going forward to 2036, the horizon year for local comprehensive plans. Population estimates are generated for Skagit County and each of its ten UGAs. The Annual Report also tracks annexed population for all cities and towns.

### Data Sources

- Washington State Office of Financial Management (OFM), Small Area Estimates Program (SAEP), *Estimates of Total Population for Census 2020 Urban Growth Areas, 2010 – 2024*, SAEP Version: September 19, 2024
- Washington State Office of Financial Management, Small Area Estimates Program (SAEP), *Estimates of Total Population for the Unincorporated Portion of Urban Growth Areas, 2010 – 2024*, SAEP Version: September 23, 2024
- Washington State Office of Financial Management, Forecasting and Research Division, *April 1, 2024 Population of Cities, Towns and Counties, 2020 – 2024*, Version: June 28, 2024

- Washington State Office of Financial Management, Forecasting and Research Division, *Postcensal Estimates of April 1 Population, 1960 to Present, 1960 – 2024*, Version: June 28, 2024
- Skagit County, 2036 Population Allocations from adopted *Countywide Planning Policy 1*, Adopted: June 30, 2016
- Skagit County, 2025 Population Allocations from adopted *Countywide Planning Policy 1*, Adopted: September 10, 2007
- Skagit County, 2015 Population Allocations from adopted *Countywide Planning Policy 1*, Adopted: July 24, 2000

The Small Area Estimates Program uses an April – March timeframe for each year of estimates, these are not estimates for the calendar year. For example, 2018 estimates are for April 1, 2017 – March 31, 2018. Estimates for 2017 were selected for the Baseline Report due to their consistency with the timeframes most local governments were required to adopt their local GMA comprehensive plans by – June 30, 2016.

Following is a brief summary of the data processing steps, after the data has been acquired.

### **Data Analysis Steps**

#### **1. *Creating New Excel Workbooks for Each UGA***

Record and process each UGA and Rural area population estimate in a separate Excel file. The Excel workbook downloaded from OFM's website has multiple tabs; filter the Total Population tab to find estimates for each different UGA. In each new and separate UGA workbook, the first tab should be devoted to recording the raw data from the OFM workbook. The raw data is copied from the OFM workbook and pasted into each UGA workbook, and includes estimates for each UGA's total population. Each of the steps that follow will be repeated in the workbook for each UGA.

#### **2. *Estimating Incorporated and Unincorporated and Population for Each UGA***

Using data from the Small Area Estimates Program, estimate historical population for incorporated and unincorporated areas from 2000 – 2017. Subtract estimates of unincorporated population from total UGA population for each city and town. For the two non-municipal UGAs, use the total UGA population estimate as these UGAs will not have any incorporated areas.

#### **3. *Estimating Rural Population outside of All UGAs.*** Using data from the Small Area Estimates Program and the Postcensal Estimates of April 1 Population to estimate historical Rural population outside of all UGAs. Postcensal estimates are used only for county population totals by year. Combined UGA population estimates are then subtracted from the postcensal estimates of total county population to estimate Rural population.

#### **4. *Recording Adopted Forecasts & Calculating Constant Future Growth Trendline***

Record the adopted 2036 total population forecast for each UGA and Rural area into their corresponding workbooks. Determine a constant rate of population growth that will lead to the total forecasted population at the end of the planning period by dividing the amount of forecasted

growth by the 20-year planning period. This will result in an estimate that represents the amount of annual population growth that will equate to the population forecast at the end of the planning period. Add that figure to the adopted baseline population for the baseline year (2017) then repeat each year in the planning period to generate a new data series that estimates population for each future year in the planning period.

**5. Recording Past Adopted Forecasts & Comparing with Population Estimates**

Record population allocations adopted previously in Skagit County for the 2000 – 2015 and 2007 – 2025 timeframes. Determine a constant rate of population growth for the planning period as in Step 3 above. This will result in an estimate of annual population growth from the first year in each historical forecast to the last.

**6. Creating Charts and Tables**

Use the collected and calculated data to generate clear, understandable charts and tables that display the information and trends relevant to the Baseline Report. Similar colors, fonts, and graph features should be used in each graph and table.

**Products for Annual Report**

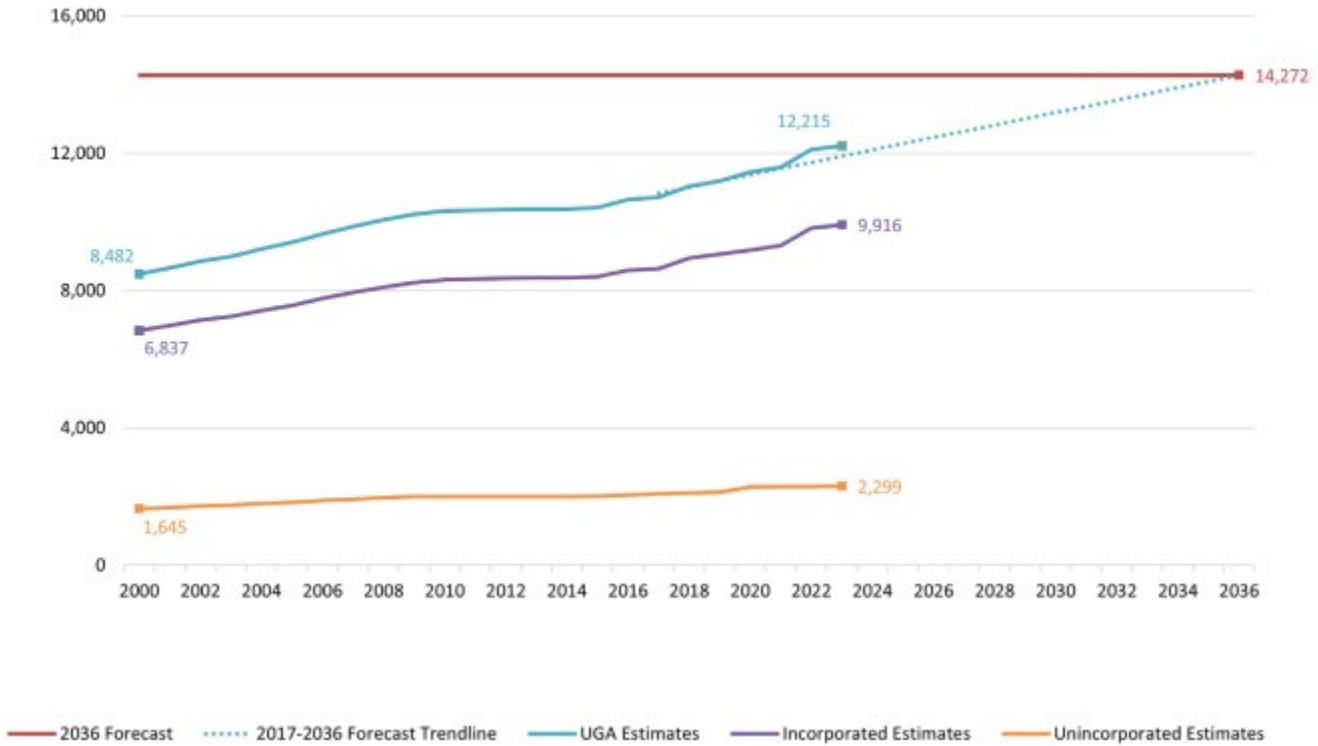
The table below shows final tabular results for all UGAs. Figures in the methodology are for illustrative purposes only and are not based on actual population estimates by UGA or Rural area. Final results are included in the Annual Report.

Urban Growth Area	2022 Incorporated Population	2022 Unincorporated Population	2022 Total Population	2036 Forecast Population
Anacortes	18,022	101	18,123	22,293
Burlington	9,916	2,299	12,215	14,272
Mount Vernon	35,602	2,169	37,771	47,403
Sedro-Woolley	12,909	1,491	14,400	17,069
Concrete	810	139	949	1,193
Hamilton	296	5	301	427
La Conner	990	0	990	1,226
Lyman	425	0	425	605
Bayview Ridge	0	1,696	1,696	1,883
Swinomish	0	2,570	2,570	3,416
<b>UGA Subtotal</b>	<b>78,970</b>	<b>10,470</b>	<b>89,440</b>	<b>109,787</b>
Rural (outside UGAs)	0	42,560	42,560	45,665
<b>Grand Total</b>	<b>78,970</b>	<b>53,030</b>	<b>132,000</b>	<b>155,452</b>

**ILLUSTRATIVE EXAMPLE – NOT ACTUAL FIGURES**

The primary graph created for each UGA displays historical population estimates from 2000 – 2024, an estimate for 2018 and adopted population forecast to 2036.

A solid red horizontal line is used to express the total population forecast in 2036. The baseline population estimate is included as the blue square on the chart. The constant rate of annual growth, determined by the forecast population growth, appears as the dotted line on the chart. Below is an example of a UGA population growth chart.



**ILLUSTRATIVE EXAMPLE – NOT ACTUAL FIGURES**

Data tables for each UGA and the Rural area are included in the Annual Report. The main table for each displays the most recent year’s population estimates and the 2036 population forecast.

Tabular population data displayed in the Annual Report resembles the example presented below.

2023 Incorporated Population	2023 Unincorporated Population	2023 Total Population	2036 Forecast Population
9,916	2,299	12,215	14,272

**ILLUSTRATIVE EXAMPLE – NOT ACTUAL FIGURES**

**5. EMPLOYMENT GROWTH**

The best available source of data on numbers of employees and their locations in Skagit County are included in administrative records maintained by Washington state’s Employment Security Department (ESD). These records are generated from quarterly reports by employers to ESD on numbers of

employees, total wages and industry classification of the employer. These records are part of the state's unemployment insurance program and only those employees who have unemployment insurance are included in the data and considered "covered" – a term describing their unemployment insurance coverage. The methodology accounts for all employees, even those that are not covered by unemployment insurance, and the process of applying a multiplier for doing so ("covered employment" to "total employment") is included later in the methodology.

Every year, SCOG processes these ESD records for employment in Skagit County and uses the results to inform annual estimates of employment included in the Annual Report.

### **Data Sources**

- Washington Employment Security Department, *Quarterly Census of Employment and Wages*, Skagit County, April 1, 2023 – March 31, 2024, Prepared: September 6, 2024
- Skagit County GIS, *Incorporated and Unincorporated Urban Growth Areas*, November 2023
- Skagit County GIS, *Road Centerlines with Address Ranges*, November 2023
- ESRI, *USA Zip Code Areas*, Version: April 10, 2018

SCOG maintains a user guide to process the ESD data, utilizing the urban growth area shapefile from Skagit County GIS to determine employment by incorporated and unincorporated areas within UGAs and outside of all UGAs. A road centerline shapefile is used to create address points from the ESD data – which does not have geographic locations but does have address numbers, streets, city and zip code data by employer.

Following is a brief summary of the data processing steps, after the data has been acquired.

### **Data Analysis Steps**

#### **1. Cleaning Employment Data**

Combine data from different years from ESD so that the timeframe of the employment data covers the same timeframe as the OFM estimates (April 1 – March 31). Remove any employers known to be outside of Skagit County that are mistakenly included in the data from ESD. Identify known employers with more than one worksite in Skagit County that are only reporting one worksite to ESD and allocate to all known worksites – these will mostly be local governments and school district employees reported out of one location instead of by facility. Review streets provided with ESD data and match to road centerline file data, modifying roadway names and correcting zip codes where necessary to improve results processing addresses in the next step. Isolate employers with latitude and longitude coordinates into a separate tab of the spreadsheet.

#### **2. Geocoding Employment Data**

Use the "Convert XY Table to Point" tool in ArcGIS to convert the table of employers with latitude and longitude coordinates into a point feature class. Merge this table with the finished geocoded results at the end of the geocoding process. Use the street centerline shapefile to create an address locator in ArcGIS. Use the address locator to "geocode" address in ArcGIS – a process that uses the addressing information from ESD that was cleaned in the previous step and

assigns a point to the address location with X-Y coordinates along the street network. Review geocoding results and export data to Excel for the next step.

3. *Further Cleaning Employment Data*

Review addresses that could not be assigned an address point by geocoding. Attempt to correct addresses of employers with 10 or more employees using other data sources to verify address location. Conduct another round of geocoding with new addresses; continue to review addresses and geocode again if necessary. Not all employers can be matched with addresses due to reporting errors to ESD and some will be considered “non-located employees” that do not receive address points.

4. *Processing Urban Growth Area Data*

Review urban growth area data from Skagit GIS. Combine GIS polygons as necessary into each UGA or isolate polygons for each UGA (e.g. all of the Anacortes UGA is consolidated into one polygon or Anacortes UGA polygons are identified and kept together).

5. *Identifying Employment by Urban Growth Area, Unincorporated and Incorporated Areas*

Isolate all addresses that are within each urban growth area. Record employment for each UGA and also review addresses that are outside of any UGA – these are considered “Rural” in the Growth Monitoring Program. Distinguish between when addresses are within incorporated UGAs and unincorporated UGAs where applicable.

6. *Allocating Non-located Employees*

After recording initial employment results for each urban growth area and Rural area, allocate non-located employees to employment areas based on share of employment. For example, if the Anacortes UGA received 10% of employment for the county, allocate 10% of the non-located employment to this UGA. This method provides for consistency in maintaining countywide employment numbers when all addresses cannot be determined.

7. *Estimating Number of Employees Excluded from Employment Data*

As noted previously, ESD data only account for employees that are “covered” by unemployment insurance. ESD data excludes proprietors, self-employed, unpaid family or volunteer works, farm workers and domestic workers. To provide an estimate for these “non-covered” workers, apply a multiplier to employment by urban growth area and Rural area. Use 7.6% as the multiplier for consistency with adopted population and employment forecasts developed in Skagit County. As an example of using the multiplier, if an UGA had 1,000 “covered” employees with unemployment insurance, applying this multiplier would add an additional 76, for a total employment estimate of 1,076.

8. *Estimating Total Employment by Urban Growth Area*

Estimates of total employment by urban growth area and Rural area are a combination of “covered” ESD employment, “non-located employee” allocations, and “covered employment” to “total employment” multiplier.

9. *Recording Adopted Forecasts & Calculating Constant Future Growth Trendline*

Record the adopted 2036 employment forecast for each UGA and Rural area into their corresponding workbooks. Determine a constant rate of employment growth that will lead to the total forecasted population at the end of the planning period by dividing the amount of forecasted

growth by the 20-year planning period. This will result in an estimate that represents the amount of annual employment growth that will equate to the employment forecast at the end of the planning period. Add that figure to the adopted baseline employment for the baseline year (2017) then repeat each year in the planning period to generate a new data series that estimates employment for each future year in the planning period.

**10. Creating Charts and Tables**

Use the collected and calculated data to generate clear, understandable charts and tables that display the information and trends relevant to the Annual Report. Similar colors, fonts, and graph features should be used in each graph and table.

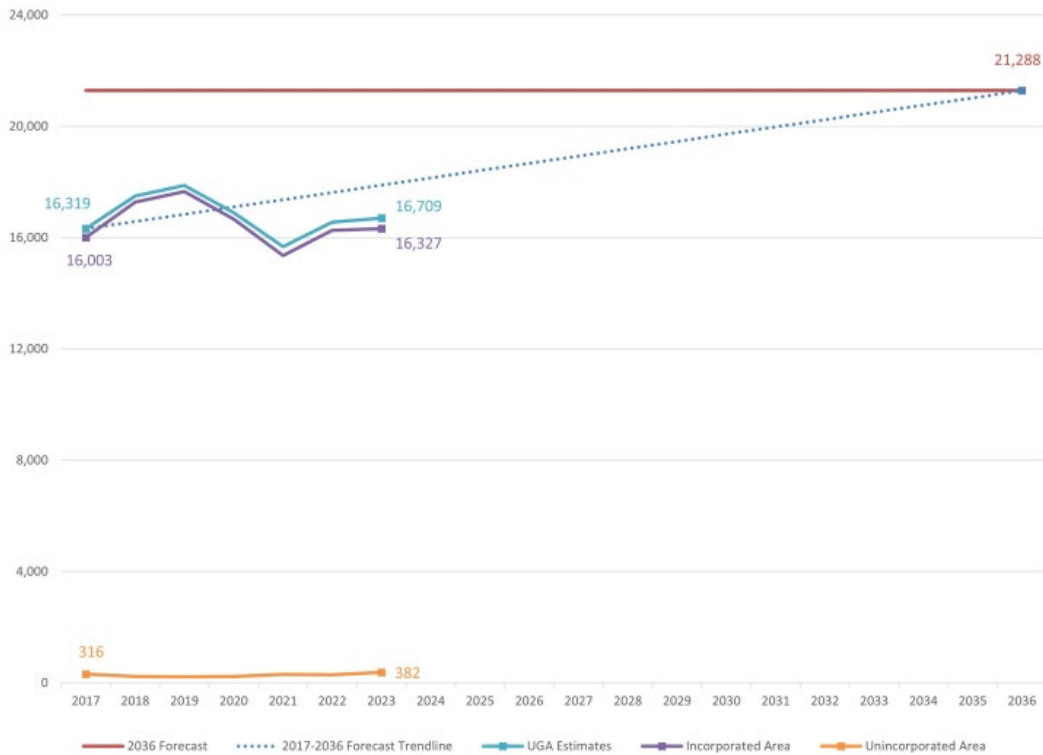
**Products for Annual Report**

The table below shows final tabular results for all UGAs and Rural area. Figures are for illustrative purposes only and are not based on actual geocoded employer locations. Final results are included in the Annual Report.

	2023 Incorporated Employment	2023 Unincorporated Employment	2023 Total Employment	2036 Forecast Employment
Urban Growth Area				
Anacortes	7,817	856	8,673	10,480
Burlington	10,507	89	10,596	13,412
Mount Vernon	16,327	382	16,709	21,288
Sedro-Woolley	4,106	20	4,126	9,179
Concrete	293	27	320	467
Hamilton	(suppressed)	(suppressed)	(suppressed)	288
La Conner	1,005	0	1,005	1,420
Lyman	(suppressed)	(suppressed)	(suppressed)	38
Bayview Ridge	0	2,703	2,703	3,455
Swinomish	0	1,047	1,047	1,247
<b>UGA Subtotal</b>	<b>40,524</b>	<b>5,124</b>	<b>45,648</b>	<b>61,274</b>
Rural (outside UGAs)	0	8,306	8,306	9,343
<b>Grand Total</b>	<b>40,525</b>	<b>13,429</b>	<b>53,954</b>	<b>70,617</b>

**ILLUSTRATIVE EXAMPLE – NOT ACTUAL FIGURES**

A chart for each UGA and Rural area shows forecast 2036 employment (red line) and a dotted blue forecast trend line between the 2018 and 2036 totals. Employment figures for incorporated areas, unincorporated areas and both combined are shown on each chart. Estimated employment is plotted annually on each chart. An example of an employment chart is provided below.



## ILLUSTRATIVE EXAMPLE – NOT ACTUAL FIGURES

Tabular employment data to be displayed in the Baseline Report will resemble the example shown in the following table.

2023 Incorporated Employment	2023 Unincorporated Employment	2023 Total Employment	2036 Total Employment Forecast
16,327	382	16,709	21,288

## ILLUSTRATIVE EXAMPLE – NOT ACTUAL FIGURES

### 6. HOUSING GROWTH

Housing units completed every year are reported to the Office of Financial Management by all cities, towns and Skagit County. These jurisdictions also report housing that has been removed from the housing stock, such as demolitions. OFM produces a report every year utilizing these components of housing unit change for every city, town and for unincorporated Skagit County.

Unlike the primary Population Growth Monitoring and Employment Growth Monitoring data sources, Housing Growth Monitoring is not tracked for urban growth areas as housing counts by type (e.g. single-family, multi-family) for these geographies are not available. For cities and towns, housing data is reported by the jurisdictions within incorporated areas. For Skagit County, data is for all unincorporated

areas, which includes municipal urban growth areas contiguous to cities and towns and the two non-municipal UGAs in Skagit County – Bayview Ridge and Swinomish.

Forecasts of housing growth are not part of the Growth Management Act coordination process, unlike population and employment forecasts. Housing growth forecasts are provided in the Annual Report as annual averages and will be included in future annual reports to provide a common measure across jurisdictions to track annual average change in housing units vs. a housing forecast that is tethered to the population forecast. These are not housing forecasts adopted by any jurisdiction and are intended to provide a regional supplement, not to replace or create inconsistencies with the work of local governments in forecasting future housing in their own community. Interested parties should contact local jurisdictions' planning departments with any question about any official housing forecast for that jurisdiction.

This methodology uses the most recent data available for average household size and occupancy-vacancy calculations, which is the most recent, but not the most accurate data. For example, data from the Small Area Estimates Program from the Office of Financial Management can be used to estimate average household size (population in occupied housing units/total housing units) and occupancy-vacancy rates (occupied housing units/total housing units). Local jurisdictions may use other data sources, such as data from the 2020 Decennial Census, which typically provides more accurate data that is less recent.

### **Data Sources**

- Washington State Office of Financial Management, Forecasting and Research Division, *Postcensal Estimates of Housing Units*, April 1, 2020 to April 1, 2024, Last Modified: June 28, 2024
- OFM, Small Area Estimates Program, *Estimates of Total Population, Household Population, Total Housing Units and Occupied Housing Units for Census 2020 Urban Growth Areas, 2010 – 2024*, SAEP Version: September 19, 2024
- OFM, *Custom Data Extract for Skagit Council of Governments*, April 1, 2000 to April 1, 2017, Prepared: October 4, 2017
- Skagit County Planning and Development Services, *Housing Unit Change in Unincorporated UGAs*, April 1, 2023 – March 31, 2024, Prepared: October 4, 2024
- Local Jurisdictions, *Housing Unit and Population Survey Forms*, April 1, 2017 – March 31, 2018, Preparation Dates Vary

The Office of Financial Management estimates for these data sources do not follow the calendar year. Data are from April 1 of one year to March 31 of the next year (e.g. April 1, 2023 – March 31, 2024 is the “2024” estimate, but only includes one quarter of calendar year 2024).

OFM only provides housing unit data by type within city limits and total unincorporated area – they do not collect housing counts for unincorporated UGAs. Therefore, data for housing counts in unincorporated UGAs are not available from OFM. A data request is submitted to Skagit County

Planning and Development Services every year to supplement the OFM housing data with housing completions for unincorporated UGAs.

Housing Unit and Population Survey forms that jurisdictions submit every year to OFM are requested by SCOG to cross reference the data provided by OFM with what jurisdictions are submitting. This addition to the methodology is in response to feedback about potential inconsistencies between what OFM reports and what local jurisdictions provide.

Following is a brief summary of the data processing steps, after the data has been acquired.

### **Data Analysis Steps**

#### **1. *Isolating Data for Skagit County Jurisdictions***

Filter out estimates for all Skagit County jurisdictions and create a separate worksheet for each. Also create worksheets for Skagit County total, incorporated areas only and unincorporated areas only.

#### **2. *Transposing Data and Create Year to Year Changes***

Bring the raw data into each worksheet and calculate year to year changes for total housing units, single-family housing units, multi-family housing units and manufactured and other housing units. OFM uses different naming conventions for these housing categories.

#### **3. *Calculating Total Change for Housing Units***

For the entire range of years for each area, calculate the total change in housing units and indicate the share of single-family, multi-family, and manufactured and other.

#### **4. *Estimating Historical Annual Change in Housing Units***

Calculate the average change in housing units for each jurisdiction by year, using OFM estimates.

#### **5. *Using Housing Estimates to Calculate Vacancy Rates and Average Household Size***

Use the additional housing tabs in the downloaded OFM workbooks to record information about the total number of housing units as well as the number of occupied housing units for each jurisdiction. Subtract the most recent number of occupied housing units from the most recent number of total units to determine the number of vacant units. Divide the resulting number of vacant units by the amount of total units in the UGA to calculate the UGA's vacancy rate. Divide the estimated household population by the estimated number of occupied housing units to calculate an estimate of the average household size for each UGA.

#### **6. *Forecasting Future Annual Change in Housing Units***

Estimate the average annual number of housing units that would need to be created by area to meet the 2036 population forecasts from countywide planning policies, using vacancy rates and average household size calculated from OFM data in the previous step. Estimate how many occupied housing units will be necessary to meet the population forecast by jurisdiction then apply a multiplier to account for vacant housing units (occupied + vacant housing units = total housing units). Recalculate average household size and vacancy rates every year from OFM data, using the latest estimates available. Plot the line on a chart for each area and track housing unit changes over time by area. The forecast line may change from year to year, but should provide a useful benchmark to compare with annual housing estimates plotted on the chart.

**7. Creating Stacked Bar Charts and Tables**

Create a stacked bar chart showing the change in single-family, multi-family, manufactured and other housing units over time. In some cases, these may be negative numbers if more housing units were removed from the housing stock than created (e.g. demolishing 10 single-family units while completing 5 single-family units equates to -5 single-family units). Display the information and trends relevant to the Annual Report. Similar colors, fonts, and graph features should be used in each graph and table.

**8. Estimate Housing Unit Change in Unincorporated UGA**

Use Skagit County Planning and Development Services permit tracking data to estimate the housing unit change in unincorporated UGAs, which are not accounted for in OFM estimates. Beginning with April 1, 2016 – March 30, 2017 timeframe, report housing unit change by unincorporated UGA in tabular form.

**Products for Annual Report**

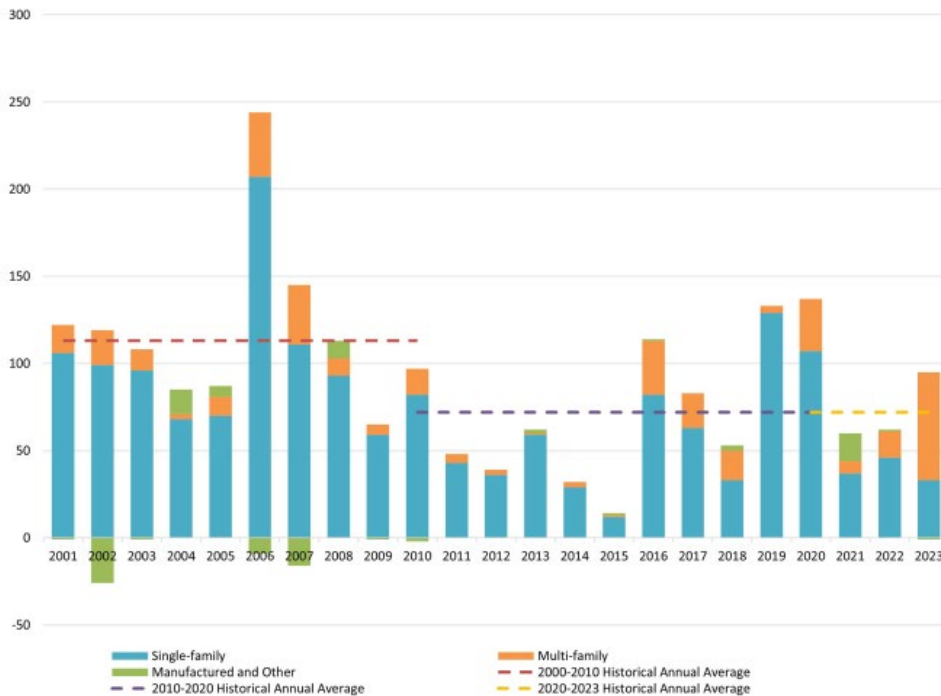
The following summary table shows data for housing units added during the reporting year. The rows are for UGAs and Rural (outside UGAs). The columns are separated by housing type, for example yellow is for single-family units, and single-family in turn is divided into Incorporated and Unincorporated columns. Unincorporated housing unit data comes from the Skagit Planning and Development Services *Housing Change in Unincorporated UGAs* dataset.

Urban Growth Area	2023									
	Incorporated Single-family	Unincorporated Single-family	Single-family Subtotal	Incorporated Multi-family	Unincorporated Multi-family	Multi-family Subtotal	Incorporated Manufactured and Other	Unincorporated Manufactured and Other	Manufactured and Other Subtotal	Grand Total
Anacortes	33	0	33	62	0	62	-1	0	-1	94
Burlington	9	0	9	36	0	36	0	1	1	46
Mount Vernon	15	1	16	40	1	41	0	0	0	57
Sedro-Woolley	34	0	34	115	0	115	4	0	4	153
Concrete	0	0	0	0	0	0	0	0	0	0
Hamilton	0	0	0	0	0	0	-1	0	-1	-1
La Conner	5	0	5	0	0	0	0	0	0	5
Lyman	0	0	0	0	0	0	0	0	0	0
Bayview Ridge	NA	1	1	NA	0	0	NA	0	0	1
Swinomish	NA	1	1	NA	0	0	NA	0	0	1
<b>UGA Subtotal</b>	<b>96</b>	<b>3</b>	<b>99</b>	<b>253</b>	<b>1</b>	<b>254</b>	<b>2</b>	<b>1</b>	<b>3</b>	<b>356</b>
Rural (outside UGAs)	NA	51	51	NA	9	9	NA	3	3	63
<b>Grand Total</b>	<b>96</b>	<b>54</b>	<b>150</b>	<b>253</b>	<b>10</b>	<b>263</b>	<b>2</b>	<b>4</b>	<b>6</b>	<b>419</b>

**ILLUSTRATIVE EXAMPLE – NOT ACTUAL FIGURES**

The following chart displays an example of final results for an example city. The stacked colored bars represent the change in housing units per year reported by jurisdictions to OFM. The red dashed line shows the annual average change in housing units for the jurisdiction over the 2000 – 2020 period, which is +113 in this example. The purple dashed line, which is +72 in this example, shows the annual

average change in housing units from 2010 – 2020. The yellow dashed line, which is +72 in this example, shows the annual average change in housing units from 2020-2023.



**ILLUSTRATIVE EXAMPLE – NOT ACTUAL FIGURES**

The forecast of housing units needed per year to meet the 2036 population forecast are for the UGAs but the housing unit change per year published by OFM does not include the unincorporated UGAs. Tabular housing data to be displayed in the Annual Report will resemble the example shown in the following table.

2000-2023							2023		2023-2036
Total Housing Unit Change	Single-family Change	Multi-family Change	Manufactured and Other Change	2000-2010 Annual Average Change in Housing Units	2010-2020 Annual Average Change in Housing Units	2020-2023 Annual Average Change in Housing Units	Average Household Size UGA Estimate	Vacancy Rate UGA Estimate	Forecast Annual Average Change in Housing Units
+2,060	+1,700	+363	-3	+113	+72	+72	2.25	7.25%	+153

**ILLUSTRATIVE EXAMPLE – NOT ACTUAL FIGURES**

## 7. AFFORDABLE HOUSING

This section of the Annual Report monitors the availability of housing across multiple income levels. Using Census data to determine Area Median Income and data about households and housing units from the U.S. Department of Housing and Urban Development (HUD), this analysis combines income and housing data into one metric to track housing affordability. The housing gap tables produced for each town, city, and Skagit County display estimates of the number of households per income level and the number of housing units in their price range.

Comprehensive Housing Affordability Strategy (CHAS) data is developed by HUD to facilitate funding decisions by HUD and local governments. The data is typically utilized to demonstrate the extent of housing problems and housing needs within communities. Household and income information sourced from the United States Census Bureau American Community Survey (ACS) estimates is tabulated to reflect an estimate of low-income housing needs and qualification for HUD programs. Data from the ACS reflects a range or estimates by its nature; it does not reflect exact figures. In areas with smaller geographies, these estimates may have high margins of error, as the data points reflect a small sample size.

### Data Sources

- United States Census Bureau, American FactFinder, *Table S1901: Income in the Past 12 Months (in 2021 Inflation-Adjusted Dollars)*, 2017 – 2021 American Community Survey 5-year Estimates, Retrieved: October 31, 2024
- United States Department of Housing and Urban Development, *Comprehensive Housing Affordability Strategy*, Data Year: 2017 – 2021 ACS 5-year average data, Retrieved: October 31, 2024
  - Skagit County – Geographic Summary Level: Counties

The most recent CHAS data available is based on ACS 5-year averages for 2017 – 2021. Although there is more recent household income data available via the Census, the 2021 version of Table S1901 is used in this analysis to keep the data comparable and consistent.

### Data Analysis Steps

#### 1. Creating New Excel Workbook for the County

Record and process the county data in a new Excel file. Create separate worksheets for rental housing gap, owner-occupied housing gap, and table generation. Raw data is copied into each Excel workbook from multiple tables of the Comprehensive Housing Affordability Strategy and American Community Survey. The data includes income information and household estimates and housing unit estimates, and their margins of error. Each of the steps that follow are repeated in the workbook for each geography.

#### 2. Estimating Number of Renter and Owner Households

Using data from the Comprehensive Housing Affordability Strategy, estimate counts of renter and owner households across income levels using the most recent data available, along with margin of

error. Calculate coefficient of variation for each estimate using its margin of error to determine data reliability.

### 3. *Estimating Rental and Owner-Occupied Housing Stock*

Using the most recent version of CHAS data available, estimate total counts of rental housing units available and vacant and occupied owned housing units available for each geography. Find the total rental units available by adding together estimates of vacant and occupied rental units available at each income level. Calculate the margin of error for this total based on the margins of error for each rental unit estimate, and calculate coefficient of variation for the total.

Find the total owner-occupied housing units available by adding together estimates of owner-occupied homes at each income level with and without mortgages. Find the margin of error and calculate the coefficient of variation for these totals based on margin of error for each estimate. Find total vacant and owner-occupied homes for each income level by adding estimates of vacant units available with total owner-occupied homes. Calculate the margin of error and coefficient of variation for each total.

### 4. *Calculating Housing Gap across Income Levels*

Using CHAS estimates and totals calculated for rental and owner-occupied housing units, subtract total renter households from total rental units available at each income level to calculate rental housing gap. Subtract estimated owner households from total vacant and occupied owner-occupied housing units available to calculate owner-occupied housing gap at each income level.

### 5. *Creating Housing Gap Tables*

Use the collected and calculated data to generate housing gap tables for each geography. Tables should display income ranges, monthly housing budget, household count, and housing unit count across income levels, as well as the calculated housing unit gap. Data estimates should be color-coded in a clear and consistent manner based on coefficients of variation to reflect degrees of data reliability.

Note: Prior to 2023, data for each geography type (county, cities and towns) were processed and analyzed for this section of the report. Due to the low reliability of CHAS data for geographies below the county level, those charts were removed from the Skagit Growth Monitoring Report.

## ***Products for Annual Report***

The tables below are examples of the final tables that result from the rental and homeowner analysis of CHAS data. The first table displays the results of the rental data analysis; the second table displays the results of the homeowner data analysis. Final results are included in the Annual Report.

**RENTER OCCUPIED**

Percentage of Skagit County AMI	Income Ranges		Monthly Housing Budget		Estimated Households	Estimated Units	Gap Over / Under
	Low	High	Low	High			
<i>Under 30%</i>	\$0	\$19,498	\$0	\$487	3,045	1,760	-1,285
<i>30%-50%</i>	\$19,498	\$32,497	\$487	\$812	2,160	2,130	-30
<i>50%-80%</i>	\$32,497	\$51,995	\$812	\$1,300	3,005	7,565	4,560
<i>Over 80%</i>	\$51,995		\$1,300		6,590	3,220	-3,370
<b>Total*</b>					<b>15,240*</b>	<b>15,090*</b>	<b>-150*</b>

**ILLUSTRATIVE EXAMPLE – NOT ACTUAL FIGURES**

**OWNER OCCUPIED**

Percentage of Skagit County AMI	Income Ranges		Monthly Housing Budget		Estimated Households	Estimated Units	Gap Over / Under
	Low	High	Low	High			
<i>Under 30%</i>	\$0	\$19,498	\$0	\$487	1,850	2,710	-1,805
<i>30%-50%</i>	\$19,498	\$32,497	\$487	\$812	2,665	3,975	-700
<i>50%-80%</i>	\$32,497	\$51,995	\$812	\$1,300	4,675	5,260	1,260
<i>80%-100%</i>	\$51,995	\$64,994	\$1,300	\$1,625	4,000	22,760	1,485
<i>100% or Over</i>	\$64,994		\$1,625		21,275	33,550	295
<b>Total*</b>					<b>33,255*</b>	<b>33,550*</b>	<b>295*</b>

**ILLUSTRATIVE EXAMPLE – NOT ACTUAL FIGURES**

**Notes:** \*Due to rounding in CHAS data, grand totals may differ from combined sub-totals. Estimated monthly housing budget is 30% of monthly gross income. Coefficients of Variation calculated to show reliability of estimates.

**Coefficients of Variation (CV)**

Estimates in **Green** are considered reliable (CV < 15%)  
 Estimates in **Orange** should be used with caution (CV 15-30%)  
 Estimates in **Red** are considered unreliable (CV >30%)