Long-Term Regional Growth Forecasts 2022 – 2045

Prepared by:
Butte County Association of Governments
March 2023



Chico, CA 95928 Phone: 530-809-4616 FAX: 530-879-2444 www.bcag.org

This document is available online at www.bcag.org. Please direct any questions or comments to Mr. Brian Lasagna, BCAG Regional Analyst by phone or email at blasagna@bcag.org.

TABLE OF CONTENTS

INTRODUCTION	
APPROACH	1
REGIONAL FORECASTS	2
Housing Forecasts	
Population Forecasts	4
Employment Forecasts	5
FORECAST METHODOLOGY	6
Housing	6
Population	
Employment	7
INDEX OF TABLES	
Table 1: Housing Forecasts 2022-2045	3
Table 2: Population Forecasts 2022-2045	
Table 3: Employment Forecasts 2022-2045	
Table 4: Jobs to Housing Unit Ratios 2022-2045	
APPENDICE	

Appendix A: Housing, Population, and Employment Assumptions

INTRODUCTION

Approximately every four years, the Butte County Association of Governments (BCAG) prepares long-term regional growth forecasts of housing, population, and employment for the Butte County area. Once prepared, the forecasts are utilized in developing BCAG's Regional Transportation Plan (RTP), Sustainable Communities Strategy (SCS), Air Quality Conformity Determination, and Regional Housing Needs Plan and provides data support for BCAG's regional Travel Demand Model. Local land use planning agencies may also elect to utilize the forecasts for preparing district plans or city and county long range plans.

As in the past, the forecasts have been developed by BCAG in consultation with its Planning Directors Group which consists of representatives from each of BCAG's local jurisdiction members and the Butte Local Agency Formation Commission. Each of the local jurisdictions provided valuable input regarding anticipated development and related growth within their respective planning areas.

A low, medium, and high scenario has been developed for each forecast of housing, population, and employment. The use of these scenarios provides for increased flexibility when utilizing the forecast for long-term planning and alleviates some of the uncertainty inherent in long range projections.

APPROACH

The growth forecasts presented in this document represent an update of the 2020-2045 Post Camp Fire Regional Growth Forecasts prepared in January 2021¹ and is intended to incorporate the latest estimates and projections from the State and impacts of the North Complex Fire. This update includes incorporation of the latest available California Department of Finance (DOF) population projections and estimates, and California Employment Development Department (EDD) job estimates. As presented, the forecasts meet both state and federal transportation planning requirements.

¹ Post Camp Fire Regional Growth Forecasts, January 2021. http://www.bcag.org/documents/Camp%20Fire/Post-Camp-Fire-Study-Appendix-A.pdf

REGIONAL FORECASTS

In comparison to the regional forecast prepared by BCAG in 2021, for the Post Camp Fire Study, the 2022 forecasts show a marginal change (-0.12%) in the population's compound annual growth for the period following the Camp Fire². This change is based on new projections developed by DOF³ and updated estimates of the current population.

One significant change, since the Post Camp Fire Study, is the decrease in base year population. The 2021 forecasts included a base year 2020 population of 210,291 persons. The latest DOF forecasts⁴ estimate the year 2022 population of Butte County to be 201,608. This is likely due to several factors including the Camp Fire, North Complex Fire, and declining enrollment at California State University, Chico.

As observed in BCAG's past forecast, the City of Chico is expected to see the greatest growth in population and housing units, followed by the unincorporated areas of Butte County, the Town of Paradise, and City of Oroville.

Employment has fallen behind forecasts prepared in 2021 with a job to housing unit ratio of 0.84 achieved for 2022, compared to the 0.88 - 0.92 projected. However, the jobs rate has been increasing since the height of the COVID-19 pandemic.

² The Post Camp Fire Study showed a compound annual growth rate of 1.05% for the 2020-2045 period.

³ California Department of Finance. Demographic Research Unit. Report P-2A: Total Population Projections, California Counties, 2010-2060 (Baseline 2019 Population Projections; Vintage 2020 Release). Sacramento: California. July 2021.

⁴ State of California, Department of Finance, *E-5 Population and Housing Estimates for Cities, Counties and the State — January 1, 2021-2022.* Sacramento, California, May 2022.

Table 1: Housing Forecasts 2022-2045

Low Scenario

LOW SCENATIO									
Jurisdiction^	2022*	2025	2030	2035	2040	2045	Total Increase 2022-2045	Percent Increase 2022-2045	Compound Annual Growth Rate (CAGR) 2022-2045
Biggs	677	690	730	775	789	798	121	18%	0.72%
Chico	45,793	46,948	49,371	51,880	52,590	53,096	7,303	16%	0.65%
Gridley	2,606	2,675	2,868	3,076	3,139	3,183	577	22%	0.87%
Oroville	7,783	7,889	8,211	8,561	8,668	8,743	960	12%	0.51%
Paradise	3,702	4,926	5,785	6,424	6,511	6,572	2,870	78%	2.53%
Unincorporated^^	30,988	31,688	33,296	34,989	35,478	35,827	4,839	16%	0.63%
Total County	91,549	94,816	100,261	105,705	107,173	108,220	16,671	18%	0.73%

Medium Scenario

Medium Scena	110								
Jurisdiction^	2022*	2025	2030	2035	2040		Increase	Percent Increase 2022-2045	Compound Annual Growth Rate (CAGR) 2022-2045
Biggs	677	694	746	805	823	835	158	23%	0.92%
Chico	45,793	47,299	50,457	53,726	54,652	55,311	9,518	21%	0.82%
Gridley	2,606	2,696	2,947	3,219	3,300	3,358	752	29%	1.11%
Oroville	7,783	7,921	8,340	8,798	8,936	9,034	1,251	16%	0.65%
Paradise	3,702	5,297	6,417	7,249	7,362	7,443	3,741	101%	3.08%
Unincorporated^^	30,988	31,900	33,996	36,202	36,840	37,295	6,307	20%	0.81%
Total County	91,549	95,807	102,903	110,000	111,913	113,277	21,728	24%	0.93%

High Scenario

Jurisdiction [^]	2022*	2025	2030	2035	2040		Increase	Percent Increase 2022-2045	Compound Annual Growth Rate (CAGR) 2022-2045
Biggs	677	698	763	836	858	873	196	29%	1.11%
Chico	45,793	47,664	51,588	55,651	56,801	57,620	11,827	26%	1.00%
Gridley	2,606	2,718	3,030	3,368	3,469	3,541	935	36%	1.34%
Oroville	7,783	7,954	8,475	9,044	9,215	9,338	1,555	20%	0.80%
Paradise	3,702	5,684	7,076	8,110	8,250	8,351	4,649	126%	3.60%
Unincorporated^^	30,988	32,122	34,725	37,467	38,260	38,825	7,837	25%	0.99%
Total County	91,549	96,840	105,658	114,476	116,853	118,548	26,999	29%	1.13%

^{*} Source: State of California, Department of Finance, E-5 Population and Housing Estimates for Cities, Counties and the State, January 1, 2021-2022. Sacramento, California, May 2022.

Notes:

[^] Jurisdictional figures reflect anticipated new growth within the anticipated boundaries of each jurisdiction and do not reflect future annexation of existing units or as-yet-unbuilt new units in unincorporated areas to the respective cities. Assumptions about future boundaries are not intended by BCAG to be interpreted as factors limiting such jurisdictions' future boundaries.

[^] Unincorporated Butte County figures exclude forecasted growth identified in the Butte County General Plan 2030 - Environmental Impact Report as Doe Mill/Honey Run Specific Plan, Thermolito Afterbay, Biggs Area, and Gridley Area.

Table 2: Population Forecasts 2022-2045

Low Scenario

LOW GOOMAND									
Jurisdiction^	2022*	2025	2030	2035	2040		Increase	Percent Increase 2022-2045	Compound Annual Growth Rate (CAGR) 2022-2045
Biggs	1,939	1,976	2,091	2,220	2,259	2,286	347	18%	0.72%
Chico	102,892	105,488	110,932	116,569	118,164	119,301	16,409	16%	0.65%
Gridley	7,205	7,396	7,928	8,506	8,678	8,801	1,596	22%	0.87%
Oroville	18,863	19,119	19,899	20,750	21,007	21,190	2,327	12%	0.51%
Paradise	7,705	10,252	12,041	13,370	13,550	13,679	5,974	78%	2.53%
Unincorporated^^	63,004	64,427	67,696	71,138	72,133	72,843	9,839	16%	0.63%
Total County	201,608	208,658	220,588	232,552	235,790	238,099	36,491	18%	0.73%

Medium Scenario

Mcdidili Occii									
Jurisdiction^	2022*	2025	2030	2035	2040		Increase	Percent Increase 2022-2045	Compound Annual Growth Rate (CAGR) 2022-2045
Biggs	1,939	1,988	2,137	2,306	2,356	2,392	453	23%	0.92%
Chico	102,892	106,276	113,371	120,717	122,796	124,278	21,386	21%	0.82%
Gridley	7,205	7,454	8,148	8,900	9,124	9,285	2,080	29%	1.11%
Oroville	18,863	19,196	20,214	21,322	21,657	21,896	3,033	16%	0.65%
Paradise	7,705	11,024	13,356	15,088	15,324	15,491	7,786	101%	3.08%
Unincorporated^^	63,004	64,859	69,119	73,605	74,903	75,827	12,823	20%	0.81%
Total County	201,608	210,797	226,345	241,939	246,160	249,169	47,561	24%	0.93%

High Scenario

Jurisdiction [^]	2022*	2025	2030	2035	2040		Increase	Percent Increase 2022-2045	Compound Annual Growth Rate (CAGR) 2022-2045
Biggs	1,939	2,000	2,185	2,395	2,457	2,501	562	29%	1.11%
Chico	102,892	107,097	115,913	125,041	127,625	129,466	26,574	26%	1.00%
Gridley	7,205	7,514	8,376	9,312	9,590	9,789	2,584	36%	1.34%
Oroville	18,863	19,277	20,541	21,919	22,335	22,632	3,769	20%	0.80%
Paradise	7,705	11,830	14,727	16,879	17,172	17,380	9,675	126%	3.60%
Unincorporated^^	63,004	65,309	70,603	76,177	77,789	78,938	15,934	25%	0.99%
Total County	201,608	213,026	232,346	251,723	256,967	260,707	59,099	29%	1.12%

^{*} Source: State of California, Department of Finance, E-5 Population and Housing Estimates for Cities, Counties and the State, January 1, 2021-2022. Sacramento, California, May 2022.

Notes:

^Jurisdictional figures reflect anticipated new growth within the anticipated boundaries of each jurisdiction and do not reflect future annexation of existing units or as-yet-unbuilt new units in unincorporated areas to the respective cities. Assumptions about future boundaries are not intended by BCAG to be interpreted as factors limiting such jurisdictions' future boundaries.

[^] Unincorporated Butte County figures exclude forecasted growth identified in the Butte County General Plan 2030 - Environmental Impact Report as Doe Mill/Honey Run Specific Plan, Thermolito Afterbay, Biggs Area, and Gridley Area.

Table 3: Employment Forecasts 2022-2045

Low Scenario

Jurisdiction	2022*	2025	2030	2035	2040		Increase	Percent Increase 2022-2045
Butte County	77,000	81,542	86,224	88,793	88,954	88,740	11,740	15%

Medium Scenario

Jurisdiction	2022*	2025	2030	2035	2040		Increase	Percent Increase 2022-2045
Butte County	77,000	82,394	88,497	92,400	92,888	92,887	15,887	21%

High Scenario

Jurisdiction	2022*	2025	2030	2035	2040		Increase	Percent Increase 2022-2045
Butte County	77,000	83,282	90,866	96,160	96,988	97,209	20,209	26%

Table 4: Jobs (Non-Farm) to Housing Unit Ratios 2022-2045

Factor	2022*	2025	2030	2035	2040	2045
Jobs/Housing Unit	0.84	0.86	0.86	0.84	0.83	0.82

^{*} Source: State of California, Department of Finance, E-5 Population and Housing Estimates for Cities, Counties and the State, January 1, 2021-2022. Sacramento, California, May 2022. California Employment Development Department, Industry Employment & Labor Force - by Annual Average, March 2021 Benchmark, for Butte County (Chico MSA).

FORECAST METHODOLOGY

BCAG has prepared the forecasts using professionally accepted methodologies for long-range forecasting. Long-term projections prepared by the DOF were consulted for Butte County and used to re-establish control totals for the region. Additionally, new base year information was incorporated from the latest available DOF estimates. As an update of the projections prepared for the Post Camp Fire Study, the share of regional growth was carried over to maintain each jurisdiction's portion of allocated growth. The allocation of growth into five-year increments has been maintained along with the horizon year of 2045. Lastly, low, medium, and high scenarios were prepared for each forecasted category.

HOUSING

The latest DOF long range projections, as of July 2021, were analyzed for the period 2022-2045 for the Butte County region. These projections estimate that the Butte County region will add ~21,700 new housing units over the next 23 years. This information was used to establish the control total for BCAG's medium forecast scenario.

BCAG then prepared an update of the 2020-2045 Post Camp Fire Study growth forecasts utilizing updated 2022 base line data and the long-range forecasts from DOF. Housing units were then allocated at the jurisdictional level based on each jurisdiction's share of regional growth contained in the 2020-2045 forecasts for each 5-year growth period. Appendix A provides the assumptions utilized in preparing the housing forecasts.

Based on a 0.2 percent incremental change of the medium scenarios compound annual growth rate (CAGR), a low and high housing scenario were developed using a CAGR of 0.73% and 1.13%. This incremental change is identical to that included with the 2014 and 2018 forecasts. No additional scenarios were included with the Post Camp Fire Study.

POPULATION

Population forecasts were prepared by applying the 2022 average persons per housing unit to the housing unit forecasts. This method allows for the capture of variations in household size for each jurisdiction. Unlike past regional growth forecasts, the persons per housing unit was maintained throughout each forecast year. Recent figures published by DOF show that person per housing unit numbers have varied greatly in the period following the Camp Fire.

EMPLOYMENT

Employment forecasts were prepared at the regional/county level only and are based on a ratio of jobs per housing unit.

Base year 2022 and historical employment data was obtained from the California Employment Development Department (EDD) for the years 2013-2022. The EDD data provides an annual average total of all non-farm jobs for the region. This information was then used in conjunction with DOF housing unit estimates to calculate a ratio of 0.84 jobs per housing unit for the year 2022 and a ratio of 0.82 10-year (2013-2022) historical average.

The 10-year historical ratio was applied to the year 2045 based on the long-term historical average. The years 2025 (0.86) and 2030 (0.86) show a minimal rise in the jobs rate which coincides with the increased housing production and population increases for those periods. The years 2035 (0.84), 2040 (0.83), and 2045 (0.82) represent a linear reduction to the historical average.

Lastly, the jobs to housing unit ratio developed for each 5-year period was applied to all scenarios.



Appendix A

Housing Assumptions

Share of Regional Growth by 5-Year Period

Jurisdiction	Share of Regional Growth (SRG) 2022-2025	Share of Regional Growth (SRG) 2025-2030	Share of Regional Growth (SRG) 2030-2035	Share of Regional Growth (SRG) 2035-2040	Share of Regional Growth (SRG) 2040-2045
Biggs	0.4%	0.7%	0.8%	0.9%	0.9%
Chico	35.4%	44.5%	46.1%	48.4%	48.3%
Gridley	2.1%	3.5%	3.8%	4.2%	4.3%
Oroville	3.2%	5.9%	6.4%	7.2%	7.2%
Paradise	37.5%	15.8%	11.7%	5.9%	5.9%
Unincorporated	21.4%	29.5%	31.1%	33.3%	33.3%
Total County	100.0%	100.0%	100.0%	100.0%	100.0%

Population Assumptions

Persons Per Housing Unit by Year

Jurisdiction	2022 (DOF)	2025	2030	2035	2040	2045	
Biggs	2.86	2.86	2.86	2.86	2.86	2.86	
Chico	2.25	2.25	2.25	2.25	2.25	2.25	
Gridley	2.76	2.76	2.76	2.76	2.76	2.76	
Oroville	2.42	2.42	2.42	2.42	2.42	2.42	
Paradise	2.08	2.08	2.08	2.08	2.08	2.08	
Unincorporated	2.03	2.03	2.03	2.03	2.03	2.03	
Total County	2.20	2.20	2.20	2.20	2.20	2.20	

Countywide Population Forecast Comparison to DOF Estimates

	Α	В	С
		BCAG	Meets State
Year	DOF	(Scenario A)	Requirement
2025	230,691	210,797	NO
2030	236,874	226,345	NO
2035	242,240	241,939	YES
2040	246,453	246,160	YES
2045	249,457	249,169	YES

- A. Population projections prepared by Demographic Research Unit, California Department of Finance, July 2021
- B. BCAG Provisional Long-Term Regional Growth Forecasts 2022-2045 (Medium Scenario)
- C. California regulations (CA Code §65584.01) require that population forecasts used in preparing the RTP/SCS must be within +/- 1.5% of DOF numbers.

Employment Assumptions

Historical Jobs to Housing Unit Ratios

											10 - Year
Factor	2013	2014	2015	2016	2017	2018	2019	2020	2021	2022	Average
Jobs (Total Nonfarm) ^	74,100	76,000	77,900	79,800	81,500	82,500	80,600	73,800	75,200	77,000	
Housing Units M	96,884	97,379	97,772	98,263	98,871	99,353	85,447	90,133	90,021	91,549	
Jobs Per Housing Unit	0.76	0.78	0.80	0.81	0.82	0.83	0.94	0.82	0.84	0.84	0.82
Source:											

^California Employment Development Department, Industry Employment & Labor Force - by Annual Average, March 2021 Benchmark, for Butte County (Chico MSA)
^^California Department of Finance E-5 City/County/State Population and Housing Estimates

