bae urban economics

Memorandum

To: Zachary Oates, El Dorado County

From: Matt Kowta, MCP, Managing Principal

Date: November 21, 2023

Re: El Dorado County 2045 Housing and Employment Projections

Introduction

In 2019, the County of El Dorado commissioned BAE Urban Economics, Inc. (BAE) to prepare updated housing and employment growth projections to assist the County in the preparation of an updated Travel Demand Model for the Major Update to the Traffic Impact Mitigation (TIM) Fee Program and to inform the 2016 – 2020 Five-Year General Plan review and the 2021 – 2029 Housing Element Update. The updated growth projections covered the western slope of El Dorado County for the period 2018 to 2040. For the current assignment, El Dorado County requested that BAE extend the growth projections to 2045 to support another fee program update, for what is now called the Traffic Impact Fee (TIF) Program.

This memo presents the countywide growth projections, extended to 2045, for review and confirmation by the El Dorado County Board of Supervisors. Upon confirmation by the Board of Supervisors of the annual housing unit and employment growth rates to use for the projection period, BAE will then prepare sub-county growth allocations (by Community Region) for review and confirmation by the Board of Supervisors, before the County incorporates the growth projections into the TIF Program update.

Please note that the projections at this time utilize a 2018 base year. Work is currently under way to develop current year baseline estimates of housing units and employees for El Dorado's West Slope. BAE will incorporate the updated base-year estimates into refined 2045 growth projections and sub-county growth allocations that will be reviewed with the Planning Commission and Board of Supervisors before completion of this project. While the starting point for the projections will move up from 2018 to 2023, the average annual rates of housing unit and employment growth are not expected to change significantly.

Base Year Housing and Employment Estimates

At this time, the extended growth projections utilize the same 2018 base year housing and employment estimates as those used in the 2019 growth projections. As before, these growth projections cover only the western slope of the county (hereafter, "West Slope") comprising the area outside the Lake Tahoe Basin that is under the jurisdiction of the Tahoe Regional

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Planning Agency. Two sources of estimates for the existing housing and jobs in the West Slope specifically are the Sacramento Area Council of Governments (SACOG), and estimates compiled on behalf of El Dorado County (County) by Kimley-Horn Associates (KHA) based on the County's Geographic Information System (GIS) mapping data for the 2019 growth projections. Other sources only provide estimates for the unincorporated area as a whole (CA state Department of Finance, "DOF" housing unit estimates) or for the county as a whole (Caltrans population, housing, and employment estimates).

SACOG estimated for the 2016 baseline year, from the June 2019 Draft 2020 Metropolitan Transportation Plan/Sustainable Communities Strategy (MTP/SCS) land use forecast, that Traffic Analysis Zones (TAZ) covering the West Slope included 59,230 housing units and 39,360 jobs. The KHA estimates prepared for the County for the 2019 growth projections estimated that the West Slope included 54,921 housing units and 37,319 jobs as of 2018. Given the discrepancy between the SACOG and County estimates, BAE has chosen, for the 2019 growth projections, to use the County estimates, as they were the most localized estimates available; whereas the SACOG estimates were derived from a set of regional estimates that cover the six-county SACOG region and thus may have been less attuned to local conditions than County estimates.

As of the writing of this memo, the 2019 KHA estimates remain the most recent estimates available for West Slope housing units and jobs; thus, they serve as the baseline estimate for the current set of housing and employment growth projections. The 2010 to 2018 estimates of West Slope housing units and jobs produced by KHA for the 2019 projections report are summarized in Appendix A. KHA is currently developing updated baseline estimates of existing West Slope housing units and employment. For our next work product, BAE will incorporate the updated baseline estimates into a refined set of West Slope housing unit and employment growth projections, using the annual growth rates to be confirmed by the Board of Supervisors on December 5, 2023, and will also include sub-county growth allocations. These refined projections will be reviewed with the Planning Commission and Board of Supervisors in early 2024.

Potential Residential Growth Rates

The Population/Housing section of Table 1 calculates potential residential growth rates for El Dorado County as a whole and for the West Slope, from the California State Department of Finance (DOF), SACOG, and Caltrans. This section also presents two additional growth rate scenarios which are based on trending historic growth rates calculated from estimates by DOF for the 2000 to 2023 period and by the County for the 2010 to 2018 period, through 2045. It should be noted that the DOF growth rates are for population; however, for the purposes of this analysis, the population growth rates are used as a proxy for potential housing unit growth rates. The Caltrans growth rates are for households, which are also used as a proxy for potential housing unit growth. In these cases, the implicit assumption is that average household sizes and housing unit vacancy rates will not vary substantially from current levels.

The 2010 to 2023 DOF growth trend is for the whole county, less the cities of South Lake Tahoe and Placerville. The implicit assumption is that the growth of this slightly larger area, which includes the Tahoe Basin portion of the unincorporated county, is indicative of the potential West Slope growth rate.

As shown in the Population/Housing section of Table 1, the resulting 2018 to 2045 growth rates imply a range of residential growth for the county, ranging between -0.28 percent and 0.73 percent annually. The countywide population growth projection from the State Department of Finance (DOF) is the anomaly within this group of projections. Although DOF's long-term population project for El Dorado County is not inconsistent with DOF's statewide population projections, which indicate a slightly declining population through 2045 and later, the projection for El Dorado County is counter to the other four projections which suggest modest growth in housing units. It is possible that in El Dorado County, there could in fact be a slightly declining population, but that the growth in housing units would continue to grow. This could occur when the average number of residents per household declines faster than the count of housing units is increasing. For example, the average number of persons per housing unit could decline with an aging population and declining proportion of households with children present and/or if there is an increasing proportion of housing units that are being used as vacation homes/short-term rentals – either of which could plausibly occur in El Dorado County over the next 20 to 25 years.

Based on the above information, BAE recommends that the outlier DOF growth rate should be discounted for the purposes of estimating the County's likely long-term housing unit growth rate.

Potential Employment Growth Rates

The Employment section of Table 1 presents employment growth rates from SACOG and Caltrans. The Employment section of Table 1 also includes a third growth rate that is based on trending Caltrans' 2000 to 2023 employment growth estimates out through 2045, and a fourth growth rate that is based on trending the County's estimated 2010 to 2018 job growth out through 2045. The two Caltrans-derived growth rates are based on countywide jobs, with the implicit assumption being that the countywide growth rates are indicative of the West Slope growth rates.

The 2018 to 2045 employment growth rate based on the 2010 to 2023 growth trend (Caltrans) is the anomaly among the group, yielding an average annual growth rate for the 2018-2045 time period that is more than twice the next highest employment growth rate. BAE recommends that this outlier growth rate should be discounted for the purposes of estimating the County's likely employment growth rate.

Housing Unit Projections 2018 to 2045

The Housing Units section of Table 2 shows housing unit projections for the West Slope from 2018 to 2045, using the County's 2018 estimate of 54,921 housing units as the starting point. Then, the Housing Units section of Table 2 applies residential growth rates from Table 1, excluding the DOF projection, to the base year figures to project housing unit growth for 2025, 2030, 2035, 2040, and 2045. As shown in the Housing Units section of Table 2, the resulting projections range from 63,355 housing units based on SACOG's projected growth rate through 2045 to 66,779 housing units in 2045 (based on Caltrans' projected countywide population growth rate through 2045). For planning purposes, BAE suggests the County consider a growth projection reflecting the average of the residential projections shown in the Housing Units section of Table 2. This would yield 64,917 total residential units in the West Slope area by 2045, representing a 0.62 percent annual average residential growth rate through 2045.

Employment Projections 2018 to 2045

The Employment section of Table 2 shows a series of employment projections for the 2018 to 2045 period, drawing from the potential employment growth rates from the Jobs section of Table 1 and applying them to the County's estimated 2018 West Slope base year jobs estimate, excluding the outlier growth rate that was projected by extending the 2010 to 2023 Caltrans employment growth estimates. From the County's estimated 2018 jobs base of 37,319, the different employment projections yield 2045 job totals ranging from 42,162 jobs, using the 2010 to 2018 trend from the County estimates, to 46,774 jobs, using the SACOG employment growth rate from 2016 to 2040, extended to 2045.

As with the residential growth projections, BAE suggests the County use an average of the projections shown in the Employment section of Table 2 to project West Slope job growth for the 2018 to 2045 period, which yields an average annual employment growth rate of 0.62 percent and a 2045 job total of 44,095. Coincidentally, this is the same rate of growth as estimated for housing units.

Summary

Based on the data and methodology described above BAE recommends the County use the following West Slope housing unit and employment growth assumptions for planning purposes:

	2018	2045	Estimated Growth	Avg. Annual 2018-2045 Growth Rate
Housing Units	54,921	64,917	9,996 housing units	0.62%
Jobs	37,319	44,095	6,776 jobs	0.62%

These figures provide the County with growth assumptions that fall within the middle range of the growth projections available from various sources (DOF, Caltrans, SACOG) and the County's own GIS data available for this study, after discounting the outlier projections based on the DOF population projection and the 2010 to 2023 Caltrans historical employment growth rates. Further, the recommended housing unit and employment growth rates suggest the County will produce new housing at a rate that will roughly correspond with the rate of new employment growth, meaning that the growth pattern would be reasonably balanced between residential and non-residential development, and the County's jobs/housing balance would be relatively stable over the next 22 years.

Next Steps

These Draft West Slope housing (units) and employment (jobs) growth projections will be reviewed and discussed with the El Dorado County Board of Supervisors on December 5, 2023. Based on input from the Board and direction from County staff, BAE will make any necessary refinements (including incorporation of current baseline housing unit and jobs estimates to replace the 2018 baseline figures presented in this memo) and finalize the West Slope growth projections. BAE will then analyze the pattern of growth and development capacity within the West Slope and allocate the housing unit and jobs growth through 2045 among the four Community Regions (El Dorado Hills, Cameron Park, Diamond Springs/El Dorado, and Shingle Springs) and the balance of the West Slope area. Lastly, BAE will review and discuss the refined projections and growth allocations with the Planning Commission and the Board to solicit input before finalizing the projections for the County's future land use and transportation planning purposes.

Table 1: 2010 to 2045 Growth Rates, Housing Units, Households, and Employment

Population/Housing Units/Households California Department of Finance Projection to 2045 (Countywide Population) (a)	2010 181,058	2016 183,586	2018 187,940	2020 191,032	2023 188,131	2025 186,186	2030 185,434	2035 183,477	2040 179,456	2045 174,271	2018 to 2045 Avg. Annual Growth Rate -0.28%
SACOG Projection to 2040 trended to 2045 (West Slope Housing Units, Less Placerville) (b)		59,230	59,860	60,497	61,465	62,119	63,784	66,450	67,250	69,053	0.53%
Caltrans Projection to 2045 (Countywide Households) (c)	70,221	72,227	74,454	75,383	77,199	78,050	80,873	84,153	87,438	90,530	0.73%
2010 to 2023 Dept. of Finance Growth Trended to 2045 (Countywide Housing Units, Less Placerville and South Lake Tahoe) (d)	68,531	69,924	71,270	72,657	74,357	75,296	77,697	80,174	82,729	85,367	0.67%
2010 to 2018 County Growth Trended to 2045 (West Slope Housing Units, Less Placerville) (e)	52,548	53,920	54,921	55,531	56,458	57,085	58,683	60,325	62,014	63,750	0.55%
Employment SACOG Projection to 2040, trended to 2045 (West Slope Jobs, Less Placerville) (b)		39,360	40,024	40,699	41,733	42,437	44,250	46,520	48,110	50,165	0.84%
Caltrans Projection to 2045 (Countywide Jobs) (c)	47,550	54,192	58,642	54,683	61,450	62,798	64,647	65,922	67,053	68,117	0.56%
2010 to 2023 Caltrans Growth Trended to 2045 (Countywide Jobs)	47,550	54,192	58,642	54,683	61,450	63,923	70,550	77,863	85,935	94,843	1.80%
2010 to 2018 County Growth Trended to 2045 (West Slope Jobs, Less Placerville) (e)	35,994	37,278	37,319	37,658	38,172	38,518	39,399	40,299	41,220	42,162	0.45%

Notes

Sources: California Department of Finance, 2023; SACOG, 2019; Caltrans, 2022; Kimley-Horn, 2019; BAE, 2023.

⁽a) CA Department of Finance, Demographic Research Unit, 2010-2018, File E-4; 2020-2045, File P2A

⁽b) SACOG Draft 2020 Land Use Projections, Preferred MTP/SCS Scenario. Numbers in italics are interpolations of SACOG's projection figures.

⁽c) Caltrans Long-Term Socioeconomic Forecasts, 2022.

⁽d) Based on CA Dept. of Finance 2010 and 2023 housing unit estimates for county minus SLT and Placerville.

⁽e) Based on West Slope growth as compiled by Kimley-Horn for El Dorado County.

Table 2: 2018 to 2045 Growth Projections, 2018 Adjusted Base Housing	Units and Emplo	oyment						
HOUSING UNITS	2018 to 2045 Avg. Annual Growth Rate	2018	2020	2025	2030	2035	2040	2045
SACOG Housing Projection Extended to 2045 (West Slope, Less Placerville)	0.53% (a)	54,921 (c)	55,505	56,993	58,521	60,090	61,701	63,355
Caltrans Household Growth Rate Projection to 2045 (Countywide)	0.73% (a)	54,921 (c)	55,722	57,776	59,906	62,115	64,405	66,779
2010 to 2023 Dept. of Finance Growth Trended to 2045 (Countywide Housing Units, Less Placerville and South Lake Tahoe)	0.67% (a)	54,921 (c)	55,660	57,552	59,508	61,530	63,622	65,784
2010 to 2018 County Housing Growth Trended to 2045 (West Slope, Less Placerville)	0.55% (a)	54,921 (c)	55,531	57,085	58,683	60,325	62,014	63,750
Average Projection (d)	0.62% (b)	54,921	55,605	57,352	59,155	61,015	62,935	64,917
EMPLOYMENT								
SACOG Exmployment Projection Extended to 2045 (West Slope Jobs, Less Placerville)	0.84% (a)	37,319 (c)	37,949	39,569	41,259	43,021	44,859	46,774
Caltrans Employment Projection to 2045 (Countywide Jobs)	0.56% (a)	37,319 (c)	37,735	38,797	39,888	41,010	42,163	43,349
2010 to 2018 County Employment Growth Trended to 2045 (West Slope Jobs, Less Placerville	0.45% (a)	37,319 (c)	37,658	38,518	39,399	40,299	41,220	42,162
Average Projection (d)	0.62 % (b)	37,319	37,781	38,961	40,182	41,443	42,747	44,095

Notes:

- (a) From Table 1.
- (b) Growth rate calculated from average projected growth for 2018 to 2045.
- (c) 2018 base year data for all projection scenarios is County 2018 estimate for West Slope less Placerville, as compiled by Kimley-Horn in 2019.
- (d) Average figures for 2020 through 2045 are the numberic average for a given year for the different projection scenarios.

Sources: California Department of Finance, 2023; SACOG, 2019; Caltrans, 2022; Kimley-Horn, 2019; BAE, 2023.

Appendix A: 2010 to 2018 Residential and Employment Growth

El Dorado County (West Slope, Less City of Placerville)											
Year	Single Family	Multifamily	Multifamily	Retail (Jobs)	Non-Retail (Jobs)						
	(Homes)	(Duplexes)	(Apartments)								
2010	46,579	842	5,127	15,458	20,536						
2016	47,784	965	5,171	15,532	21,746						
2018	48,778	972	5,171	15,532	21,787						
	El Dorado Hills - Community Region										
Year	Single Family	Multifamily	Multifamily	Retail (Jobs)	Non-Retail (Jobs)						
	(Homes)	(Duplexes)	(Apartments)								
2010	12,030	31	1,104	4,065	8,994						
2016	13,152	137	1,104	4,083	9,018						
2018	13,950	139	1,104	4,083	9,030						
	Cameron Park - Community Region										
Year	Single Family	Multifamily	Multifamily	Retail (Jobs)	Non-Retail (Jobs)						
	(Homes)	(Duplexes)	(Apartments)	ì	` '						
2010	6,059	108	1,399	1,891	1,467						
2016	6,091	108	1,399	1,931	1,488						
2018	6,120	108	1,399	1,931	1,488						
			Dorado - Community Re	•							
Year	Single Family	Multifamily	Multifamily	Retail (Jobs)	Non-Retail (Jobs)						
	(Homes)	(Duplexes)	(Apartments)	(0000)	(**************************************						
2010	2,734	182	1,047	2,766	3,928						
2015	2,739	182	1,047	2,766	4,018						
2016	2,740	182	1,047	2,766	4,036						
2018	2,746	182	1,047	2,766	4,053						
	<u> </u>		s - Community Region	· · · · · ·	,						
Year	Single Family	Multifamily	Multifamily	Retail (Jobs)	Non-Retail (Jobs)						
	(Homes)	(Duplexes)	(Apartments)	ì	` '						
2010	725	23	168	1,474	1,124						
2015	727	23	208	1,490	1,138						
2016	727	25	212	1,490	1,139						
2018	728	26	212	1,490	1,139						
	Place	erville - Community	Region Less City of Pla								
Year	Single Family	Multifamily	Multifamily	Retail (Jobs)	Non-Retail (Jobs)						
	(Homes)	(Duplexes)	(Apartments)								
2010	1,453	158	472	1,092	867						
2015	n.a.	n.a.	n.a.	n.a.	n.a.						
2016	1,416	158	472	1,092	867						
2018	1,462	158	472	1,092	867						
			nity Regions, Rural Cer								
Year	Single Family	Multifamily	Multifamily	Retail (Jobs)	Non-Retail (Jobs)						
	(Homes)	(Duplexes)	(Apartments)	,	, , ,						
2010	23,578	340	937	5,262	4,156						
2015	,			-,	,						
2016	23,658	355	937	4,170	5,198						
2018	23,772	359	937	4,170	5,210						
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Sources: El Dorado County, Kimley-Horn, 2019; BAE, 2019.