bae urban economics

Draft Memorandum

To: Natalie Porter, El Dorado County

From: Matt Kowta, MCP, Managing Principal

Date: February 13, 2020

El Dorado Countywide Housing and Employment Projections, 2018-2040 Re:

Introduction

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 cover the western slope of El Dorado County for the period 2018 to 2040.

Base Year Housing and Employment Estimates

It is necessary to establish a starting-point for the projections exercise. Currently, the projections cover only the western slope of the county (hereafter, "West Slope") comprising the area outside the Lake Tahoe Basin, which is under the jurisdiction of the Tahoe Regional Planning Agency. Two sources of estimates for 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. Other sources only provide estimates for the unincorporated area as a whole (DOF) or for the county as a whole (Caltrans).

SACOG estimates 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 County estimates that the West Slope included 54,921 housing units and 37,319 jobs as of 2018. There is a discrepancy between the SACOG and County estimates. For purposes of this analysis, BAE has chosen to use the County estimates, as they are the most localized estimates available; whereas the SACOG estimates are derived from a set of regional estimates that cover the six-county SACOG region and thus may be less attuned to local conditions than County estimates.

The 2010 to 2018 estimates of West Slope housing units and jobs are summarized in Appendix A.

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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 the DOF for the 2000 to 2018 period and by the County for the 2010 to 2018 period through 2040. 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 2018 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 county, is indicative of the potential West Slope growth rate.

As shown in the Population/Housing section of Table 1, the resulting 2018 to 2040 growth rates imply a range of residential growth for the county. While four out of the five projections yield average annual growth rates for the 2018 to 2040 period ranging between, 0.52 and 0.93 percent, the growth based on trending the 2010 to 2018 DOF housing unit estimates out to 2040 yields an average annual growth rate of 1.56 percent. This growth rate is an outlier and is the only figure among the group directly influenced by growth rates leading up to the 2008 housing crash, BAE believes the DOF growth rate should be discounted for the purposes of this analysis.

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 2018 employment growth estimates out through 2040, and a fourth growth rate that is based on trending the County's estimated 2010 to 2018 job growth out through 2040. 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.

As with the residential projections, the 2018 to 2040 employment growth rate based on the 2000 to 2018 growth trend (Caltrans) is the anomaly among the group, yielding the only average annual growth rate higher than one percent, while the other employment growth projections range between 0.45 and 0.84 percent per year. BAE also advises that the Caltrans growth rate based on the 2000 to 2018 growth should be discounted as an outlier among the other employment growth rates.

Housing Unit Projections 2018 to 2040

The Housing Units section of Table 2 shows housing unit projections for the West Slope from 2018 to 2040, using the County's 2018 estimate of 54,921 housing units. Then, the Housing Units section of Table 2 applies residential growth rates from Table 1 to the base year figures to project housing unit growth for 2020, 2025, 2030, 2035, and 2040, excluding the outlier residential growth rate from Table 1 derived from the DOF 2000 to 2018 trend. As shown in the Housing Units section of Table 2, the resulting projections range from 61,598 housing units based on SACOG's projected growth rate through 2040 to 67,253 housing units in 2040 (based on Caltrans projected growth rate through 2040). 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 64,095 total residential units in the West Slope area by 2040, representing a 0.70 percent annual average residential growth rate, which is slightly higher than the growth rate derived from the County's 2010 through 2018 growth estimates and the SACOG 2040 projections, but less drastic than those suggested by the DOF and Caltrans.

Employment Projections 2018 to 2040

The Employment section of Table 2 shows a series of employment projections for the 2018 to 2040 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. From the County's estimated 2018 jobs base of 37,319, the different employment projections yield 2040 job totals ranging from 41,220 jobs, using the 2010 to 2018 trend from the County estimates, to 44,820 jobs, using the SACOG employment growth rate. Again, this series of projections excludes the potential growth rate from Table 1 which was derived from estimated 2000 to 2018 Caltrans employment growth estimates.

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 2040 period, which yields an average annual employment growth rate of 0.67 percent and a 2040 job total of 43,252.

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:

				Avg. Annual	Avg. Annual
			Estimated	2018-2040	2000-2018
	2018	2040	Growth	Growth Rate	Growth Rate ¹
Housing	54,921	64,095	9,174	0.70%	0.55%
Units			housing units		
Jobs	37,319	43,252	5,933 jobs	0.67%	0.45%

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 outlier projections based on 2000 to 2018 DOF residential growth rates and 2000 to 2018 Caltrans employment growth rates. Further, the recommended housing unit and employment growth rates suggest the County will produce new housing at a rate that will correspond with the rate of new employment growth, meaning that the growth pattern would be balanced and the County's jobs/housing balance would not deteriorate over time.

Board of Supervisors Review

BAE and County staff presented the Draft West Slope housing unit and employment growth projections for review and discussion with the El Dorado County Board of Supervisors at their meeting on November 19, 2019. At that meeting, the Board indicated that it was satisfied with the Countywide housing unit and employment growth projections detailed above.

Sub-County Growth Allocations

After the November 19, 2019, Board of Supervisors meeting, BAE proceeded with the subcounty growth allocations, with input and assistance from County staff and Kimley-Horn. BAE first summarized the 2010 to 2018 growth patterns documented in Appendix A in Table 3a. As shown in Table 3a, El Dorado Hills captured the vast majority (85.5 percent) of the West Slope's residential growth, and most (79.5 percent) of the West Slope's job growth occurred in the areas of the West Slope outside of Community Regions. The residential growth pattern is not surprising given much of El Dorado's housing demand is from people who commute west to jobs in Sacramento County suburbs such as Folsom and Rancho Cordova and other locations and El Dorado Hills represents a convenient residential location for these commuters. The concentration of job growth outside of the Community Regions was counterintuitive, until Kimley-Horn's examination of the 2010 to 2018 job growth revealed that 936 new jobs were created with the opening of the Red Hawk Casino, which lies just outside the Cameron Park and Shingle Springs Community Regions.

In preparing to allocate El Dorado's 2018 to 2040 employment and population growth to subareas within the West Slope, BAE considered these growth patterns as well as the existing

 $^{^{\}rm 1}$ Based on 2000 to 2018 growth rates based on County GIS data. See Table 1.

In preparing to allocate El Dorado's 2018 to 2040 employment and population growth to subareas within the West Slope, BAE considered these growth patterns as well as the existing concentrations of housing and jobs. Specifically, because the casino development was an anomaly (i.e., it is a major job center that could only be developed due to a unique set of regulatory and economic circumstances that placed it outside of the County's developed urban areas), BAE adjusted Table 3a to remove the casino jobs and create a job growth pattern that may be considered more typical of the historic pattern in the unincorporated areas of El Dorado County's West Slope. The adjusted growth pattern is shown in Table 3b, and shows that after removing the casino jobs, a more typical 30.3 percent of the County's job growth between 2010 and 2018 occurred in the Balance of the West Slope areas, with the other 69.7 percent distributed across the Community Regions.

Next, BAE also considered the existing 2018 distribution of housing units and jobs as also likely to be a strong indicator of how growth may proceed between 2018 and 2040, based on the logic that the relative concentrations of housing and jobs throughout the Community Regions and the Balance of the West Slope are indicative of locational characteristics that will tend to attract more new development to those locations that have historically been attractive for development. The share of existing housing units and jobs located in each Community Region and the Balance of the West Slope as of 2018 is shown in Table 4, alongside the share of adjusted 2010 to 2018 growth in each of these areas. For new housing development BAE then weighted each of these factors by 50 percent, to calculate housing "Composite Growth Shares", to use to allocate the projected overall West Slope 2018 to 2040 growth in housing to specific Community Regions and the Balance of the West Slope. For jobs growth, BAE considered a third factor, which is the pattern of new residential growth. Job growth and housing growth tend to be closely linked, with new housing following growth in job opportunities, and jobs growing in areas with housing growth due to expanding consumer demand to support commercial activity and the accompanying jobs. After allocating housing growth to county sub-areas (see discussion below) BAE calculated the percentage distribution of new housing by sub-area to create "Housing Growth Factors", as shown in Table 4. BAE then weighted the 2010 to 2018 job growth pattern, the 2018 jobs base, and the housing growth factors by 25 percent, 25 percent, and 50 percent, respectively, to develop a composite jobs growth factor to use to allocate 2018 to 2040 job growth.

With the overall West Slope housing and job growth projections from Table 2 as the starting point, BAE then used the composite residential and jobs growth shares shown in Table 4 to make an initial sub-county allocation of housing and job growth for the years 2020, 2025, 2030, 2035, and 2040. BAE then cross-checked the initial sub-areas allocations against data regarding the remaining development capacity in each of the sub-areas. Residential development capacity came from Kimley-Horn's assessment of the "achievable densities" on land designated for residential development within the West Slope area. BAE estimated non-residential (i.e., jobs) capacity based on the 2016 Commercial Land Inventory that BAE completed for El Dorado County, updated with information on new non-residential

developments permitted in the West Slope since completion of the 2016 study. The crosschecking indicated that the Balance of the West Slope area would run out of capacity to accommodate its initial residential growth allocation based on the composite growth shares in the 2025 to 2030 time period. BAE then re-allocated the excess Balance of West Slope residential growth to the Community Regions in proportion to their anticipated growth as indicated by the composite residential growth shares. This process then resulted in El Dorado Hills running out of capacity to accommodate its increased residential growth allocation (i.e., initial growth allocation plus spillover from Balance of West Slope) in the 2035 to 2040 time period. BAE then allocated that secondary excess from El Dorado Hills into the Cameron Park (2/3 of excess) and Shingle Springs (1/3 of excess), based on the assumption that development demand that otherwise would have been captured in El Dorado Hills would likely spill over to the two nearest Community Regions and that Cameron Park would capture the greatest share because it is a more established community (i.e., larger), closer to El Dorado Hills, and closer to commuting destinations to the west. The results of these residential subarea allocations and re-allocations are shown in the upper part of Table 5.

BAE followed a similar procedure in allocating the job growth using the composite growth shares calculated on Table 4 for jobs; however, BAE found that all of the projected job growth could be accommodated within the respective Community Regions and the Balance of the West Slope with no need to re-allocate job growth among areas. In each Community Region and in the Balance of the West Slope, a cursory comparison between the job allocations and the available non-residential land in each respective Community Region and the Balance of West Slope indicated that there is adequate land in each area to accommodate the job allocations. For example, at a typical floor area ratio of 0.25, and one employee per 500 square feet of building space, a retail development would have an employment density of about 20 employees per acre. Employment densities for services uses would be similar, and employment density for office uses would likely be higher. While employment densities for light industrial uses and warehousing and distribution uses could be lower, the densities would have an average new employment density of more than 3.4 employees per acre, if all available non-residential land were developed to accommodate the anticipated job growth.

Table 5 also provides a breakout of the allocated residential unit growth to single-family and multifamily units. This breakout is based on the availability of land for single-family residential development versus multifamily residential development in each Community Region and the Balance of the West Slope, recognizing that El Dorado County generally has a limited supply of multifamily housing units relative to the total housing stock and demand will likely be strong for multifamily units as a more affordable alternative to detached single-family housing in the coming years. Here again, it is assumed that unmet demand for multifamily housing in a location like El Dorado Hills, which has a very small multifamily development capacity relative to its single-family development capacity will spill over into other nearby Community Regions where there are services and amenities to support multifamily residential

developments and that fewer multifamily units will go into Diamonds Springs and Placerville (unincorporated) and none are expected in the Balance of the West Slope where infrastructure to support higher density multifamily development is limited.

Next Steps

BAE will review and discuss the growth projections and growth allocations contained in this memo with the Planning Commission and the Board of Supervisors to solicit input before finalizing the projections for the County's use.

Table 1: Alternative Growth Rates Through 2040, Unadjusted 2018 Base Year									
Population/Housing Units/Households	2010	2016	2018	2020	2025	2030	2035	2040	2018 to 2040 Avg. Annual Growth Rate
California Department of Finance Projection to 2040 (Countywide Population) (a)		184,335	188,993	191,581	199,521	208,457	217,619	225,419	0.80%
SACOG Projection to 2040 (West Slope Housing Units, Less Placerville) (b)		59,230	59,951	60,682	62,547	64,469	66,450	67,250	0.52%
Caltrans Projection to 2040 (Countywide Households) (c)	70,221	69,864	70,497	71,531	75,140	79,128	82,965	86,327	0.93%
2000 to 2018 Dept. of Finance Growth Trended to 2040 (Countywide Housing Units, Less Placerville and South Lake Tahoe) (d	68,637	75,313	77,680	80,121	86,565	93,528	101,050	109,177	1.56%
2010 to 2018 County Growth Trended to 2040 (West Slope Housing Units, Less Placerville) (e)	52,548	53,920	54,921	55,531	57,085	58,683	60,325	62,014	0.55%
Employment									
SACOG Projection to 2040 (West Slope Jobs, Less Placerville)		39,360	40,059	40,770	42,603	44,518	46,520	48,110	0.84%
Caltrans Projection to 2040 (Countywide Jobs) (c)	47,550	53,970	57,996	57,996	60,783	63,697	65,975	67,939	0.72%
2000 to 2018 Caltrans Growth Trended to 2040 (Countywide Jobs)	47,550	51,508	52,900	54,328	58,072	62,073	66,350	70,922	1.34%
2010 to 2018 County Growth Trended to 2040 (West Slope Jobs, Less Placerville) (e)	35,994	37,278	37,319	37,658	38,518	39,399	40,299	41,220	0.45%

Notes:

(a) CA Department of Finance, Demographic Research Unit, file P2.

(b) SACOG Draft 2020 Land Use Projections, Preferred MTP/SCS Scenario

(c) Caltrans

(d) Based on CA Dept. of Finance 2000 and 2018 countywide population estimates

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

Sources: California Department of Finance, SACOG, Caltrans, El Dorado County, Kimley-Horn, BAE, 2019

Table 2: Projected Growth Countywide Housing and Job Growth Through 2040

HOUSING UNITS	2018 to 2040 Avg. Annual Growth Rate	2018	2020	2025	2030	2035	2040
California Department of Finance Population Growth Rate Projection to 2040	0.80% (a)	54,921 (c)	55,808	58,089	60,463	62,934	65,506
SACOG Housing Unit Growth Rate Projection to 2040	0.52% (a)	54,921 (c)	55,498	56,966	58,473	60,019	61,607
Caltrans Household Growth Rate Projection to 2040	0.93% (a)	54,921 (c)	55,942	58,577	61,337	64,227	67,253
2010 to 2018 County Growth Trended to 2040 (West Slope Housing Units, Less Placerville)	0.55% (a)	54,921 (c)	55,531	57,085	58,683	60,325	62,014
Average Projection (d)	0.70% (b)	54,921	55,695	57,679	59,739	61,877	64,095
EMPLOYMENT							
SACOG Employment Growth Rate Projection to 2040 (West Slope Jobs, Less Placerville)	0.84% (a)	37,319 (c)	37,946	39,558	41,240	42,992	44,820
Caltrans Employment Growth Rate Projection to 2040 (Countywide Employment)	0.72% (a)	37,319 (c)	37,860	39,246	40,683	42,173	43,717
2010 to 2018 County Growth Trended to 2040 (West Slope Jobs, Less Placerville)	0.45% (a)	37,319 (c)	37,658	38,518	39,399	40,299	41,220
Average Projection (d)	0.67% (b)	37,319	37,821	39,108	40,440	41,821	43,252

Notes:

(a) From Table 1.

(b) Growth rate calculated from average projected growth for 2018 to 2040.

(c) 2018 base year data for all projection scenarios is County 2018 estimate for West Slope less Placerville, as compiled by Kimley-Horn.

(d) Average figures for 2020 through 2040 are the numberic average for a given year for the different projection scenarios.

Sources: California Department of Finance, SACOG, Caltrans, El Dorado County, Kimley-Horn, BAE, 2019.

Table 3a: Su	ub-Area Growt	h, 2010 to 201:	8 (Non-Adjust	ted)						
	FI Do	rado County (\	Nest Slone Le	ss City of Place	rville)					
Year	Single Family (Homes)			Total	Retail (Jobs)	Non-Retail (Jobs)	Total Jobs			
2010	46,579	842	5,127		15,458	20,536				
2018	48,778	972	5,171	54,921	15,532	21,787	37,319			
Change #	2,199	130	44	2,373	74	1,251	1,325			
	r		Hills - Commu		r	r				
Year	Single Family (Homes)	Multifamily (Duplexes)	Multifamily (Apartments)	Total Housing	Retail (Jobs)	Non-Retail (Jobs)	Total Jobs			
2010	12,030	31	1,104		4,065	8,994				
2018	13,950	139	1,104	15,193	4,083	9,030	13,113			
Change #	1,920	108	0	2,028	18	36	54			
Change % of W. Slope	87.3%	83.1%	0.0%	85.5%	24.3%	2.9%	4.1%			
Cameron Park - Community Region										
Year	Single Family			Total	Retail (Jobs)	Non-Retail	Total Jobs			
	(Homes)	(Duplexes)	(Apartments)			(Jobs)				
2010	6,059	108	1,399		1,891	1,467				
2018	6,120	108	1,399	7,627	1,931	1,488	3,419			
Change #	61	0	0	61	40	21	61			
Change % of W. Slope	2.8%	0.0%	0.0%	2.6%	54.1%	1.7%	4.6%			
w.sope		Shingle Sn	rings - Commu	nity Region			1			
Year	Single Family (Homes)			Total	Retail (Jobs)	Non-Retail (Jobs)	Total Jobs			
2010	725	23	168		1,474	1,124				
2018	728	26	212	966	1,490	1,139	2,629			
Change #	3	3	44	50	16	15	31			
Change % of W. Slope	0.1%	2.3%	100.0%	2.1%	21.6%	1.2%	2.3%			
			orings - Comm	unity Region						
Year	Single Family (Homes)	Multifamily (Duplexes)	Multifamily (Apartments)	Total Housing	Retail (Jobs)	Non-Retail (Jobs)	Total Jobs			
2010	2 72/	100	1 0/17		2 766	2 0 2 0				

2010	2,734	182	1,047		2,766	3,928	
2018	2,746	182	1,047	3,975	2,766	4,053	6,819
Change #	12	0	0	12	0	125	125
Change % of W. Slope	0.5%	0.0%	0.0%	0.5%	0.0%	10.0%	9.4%

	Placerville - Community Region Less City of Placerville											
	Single Family (Homes)		Multifamily (Apartments)	Total Housing	Retail (Jobs)	Non-Retail (Jobs)	Total Jobs					
2010	1,453	158	472		1,092	867						
2018	1,462	158	472	2,092	1,092	867	1,959					
Change #	9	0	0	9	0	0	0					
Change % of W. Slope	0.4%	0.0%	0.0%	0.4%	0.0%	0.0%	0.0%					

	Ba	lance of West	Slope (Non-Co	mmunity Regio	ons)		
	Single Family (Homes)		Multifamily (Apartments)	Total Housing	Retail (Jobs)	Non-Retail (Jobs)	Total Jobs
2010	23,578	340	937		4,170	4,156	
2018	23,772	359	937	25,068	4,170	5,210	9,380
Change #	194	19	0	213	0	1,054	1,054
Change % of W. Slope	8.8%	14.6%	0.0%	9.0%	0.0%	84.3%	79.5%

Table 3b: Sub-Area Growth, 2010 to 2018 (Adjusted)

	Table 3b: Sub-Area Growth, 2010 to 2018 (Adjusted)										
	El Do	orado County (West Slope, Le	ss City of Place	rville)						
Year		Multifamily	Multifamily	Total	Retail (Jobs)	Non-Retail	Total Jobs				
	(Homes)	(Duplexes)	(Apartments)			(Jobs) (b)					
	,					(*****/(**					
2010	46,579	842	5,127		15,458	20,536					
2018	48,778	972	5,171	54,921	15,532	20,851	36,383				
Change #	2,199	130	44	2,373	74	315	389				
			Hills - Commu								
Year	Single Family	Multifamily	Multifamily	Total	Retail (Jobs)	Non-Retail	Total Jobs				
	(Homes)	(Duplexes)	(Apartments)	Housing		(Jobs)					
2010	12,030	31	1,104		4,065	8,994					
2018	13,950	139	1,104	15,193	4,083	9,030	13,113				
Change #	1,920	108	0	2,028	18	36	54				
Change % of	87.3%	83.1%	0.0%	85.5%	24.3%	11.4%	13.9%				
W. Slope		Comerce	Dark Commun	ity Decion							
Year	Single Family		Park - Commu	Total	Potail (Johc)	Non Potoil	Total Jobs				
rear	(Homes)	Multifamily (Duplexes)	Multifamily (Apartments)		Retail (Jobs)	Non-Retail (Jobs)	Total Jobs				
	(nomes)	(Duplexes)	(Apartments)	Housing		(2005)					
2010	6,059	108	1,399		1,891	1,467					
2010	6,120	108	1,399	7,627	1,891	1,407	3,419				
Change #	61	0	0	61	40	21	61				
Change % of											
W. Slope	2.8%	0.0%	0.0%	2.6%	54.1%	6.7%	15.7%				
		Shingle Sp	orings - Commu	nity Region							
Year	Single Family	Multifamily	Multifamily	Total	Retail (Jobs)	Non-Retail	Total Jobs				
	(Homes)	(Duplexes)	(Apartments)	Housing		(Jobs)					
				_							
2010	725	23	168		1,474	1,124					
2018	728	26	212	966	1,490	1,139	2,629				
Change #	3	3	44	50	16	15	31				
Change % of	0.1%	2.3%	100.0%	2.1%	21.6%	4.8%	8.0%				
W. Slope											
Veer	Cinala Family		prings - Comm		Detail (Joha)	Nen Deteil	Total John				
Year	Single Family	Multifamily	Multifamily	Total	Retail (Jobs)	Non-Retail	Total Jobs				
	(Homes)	(Duplexes)	(Apartments)	Housing		(Jobs)					
2010	2,734	182	1,047		2,766	3,928					
2018	2,746	182	1,047	3,975	2,766	4,053	6,819				
Change #	12	0	0	12	0	125	125				
Change % of											
W. Slope	0.5%	0.0%	0.0%	0.5%	0.0%	39.7%	32.1%				
	Plac	erville - Comm	unity Region Le	ess City of Place	erville						
Year	Single Family	Multifamily	Multifamily	Total	Retail (Jobs)	Non-Retail	Total Jobs				
	(Homes)	(Duplexes)	(Apartments)	Housing		(Jobs)					
2010	1,453	158	472		1,092	867					
2018	1,462	158	472	2,092	1,092	867	1,959				
Change #	9	0	0	9	0	0	0				
Change % of	0.4%	0.0%	0.0%	0.4%	0.0%	0.0%	0.0%				
W. Slope											
Verr	Ba Single Family	Multifamily	Slope (Non-Co Multifamily			Non Data!	Total Jaks				
Year	(Homes)		(Apartments)	Total	Retail (Jobs)	Non-Retail	Total Jobs				
	(Homes)	(Duplexes)	(Apartments)	Housing		(Jobs) (c)					
2010	23,578	340	937		4,170	4,156					
2010	23,772	359	937	25,068	4,170	4,150	8,444				
Change #	194	19	0	23,008	0	118	118				
Change % of											
W. Slope	8.8%	14.6%	0.0%	9.0%	0.0%	37.5%	30.3%				
		1									

Notes: (a) 2018 non-retail jobs total adjusted to remove 936 jobs associated with the casino. See discussion in memo text. (b) 2018 non-retail jobs in Balance of West Slope adjusted to remove 936 jobs associated with the casino. See discussion in memo text.

Table 4: Projected Housing and Job Growth by Sub-Area Through 2040

HOUSING	2010 to 2018 Growth Share (a)	2018 Existing Share (b)	Composite Growth Share (c)
West Slope Less City of Placerville (a)	100.0%	100.0%	100.0%
El Dorado Hills CR	85.5%	27.7%	56.6%
Cameron Park CR	2.6%	13.9%	8.2%
Shingle Springs CR	2.1%	1.8%	1.9%
Diamond Springs CR	0.5%	7.2%	3.9%
Placerville CR (Less City of Placerville)	0.4%	3.8%	2.1%
Balance of West Slope	9.0%	45.6%	27.3%

			Housing	
	2010 to 2018	2018	Growth	Composite
JOBS	Growth Share (a)	Existing Share (b)	Factor (d)	Growth Share
West Slope Less City of Placerville (a)	100.0%	100.0%	100%	100.0%
El Dorado Hills CR	13.9%	35.1%	58%	41.2%
Cameron Park CR	15.7%	9.2%	17%	14.7%
Shingle Springs CR	8.0%	7.0%	6%	6.7%
Diamond Springs CR	32.1%	18.3%	5%	14.9%
Placerville CR (Less City of Placerville)	0.0%	5.2%	3%	2.6%
Balance of West Slope	30.3%	25.1%	12%	19.8%

Notes:

(a) From Appendix A.

(b) From Table 3b.

(c) Composite growth share equally weights 2010 to 2018 growth pattern and 2018 existing housing base.

(d) Housing growth factor is based on projected housing growth allocations (Table 5).

(e) Composite jobs growth factor weights 2010 to 2018 growth pattern, 2018 existing jobs base, and housing growth factors 25%, 25%, and 50%, respectively.

Table 5: Projected Housing and Job Growth by Sub-Area Through 2040

							'18 to '40	Estimated Single-Family Capacity	Estimated Multifamily Capacity	Total Residential Capacity
HOUSING DEMAND	2018	2020	2025	2030	2035	2040	Growth #	(Units) (b)	(Units) (b)	(Units) (b)
West Slope Less City of Placerville (a)	54,921	55,695	57,679	59,739	61,877	64,095	9,174	12,686	5,961	18,647
El Dorado Hills CR	15,193	15,631	16,753	17,918	19,127	20,382	5,189	5,020	299	5,319
Cameron Park CR	7,627	7,691	7,854	8,023	8,199	8,382	755	1,885	998	2,883
Shingle Springs CR	966	981	1,019	1,059	1,100	1,143	177	1,055	1,012	2,067
Diamond Springs CR	3,975	4,005	4,082	4,162	4,244	4,330	355	2,951	3,603	6,554
Placerville CR (Less City of Placerville)	2,092	2,108	2,150	2,193	2,238	2,284	192	680	49	729
Balance of West Slope	25,068	25,279	25,821	26,384	26,968	27,573	2,505	1,095	0	1,095
TOTAL HOUSING ALLOCATION (Cumulative Not	ew Units Si	nce 2018) (e	c)							
West Slope Less City of Placerville (a)		774	2,758	4,818	6,956	9,174				
El Dorado Hills CR		438	1,560	2,897	4,560	5,319				
Cameron Park CR		64	227	421	663	1,559				
Shingle Springs CR		15	53	99	156	537				
Diamond Springs CR		30	107	198	312	430				
Placerville CR (Less City of Placerville)		16	58	107	169	233				
Balance of West Slope		211	753	1,095	1,095	1,095				
SINGLE-FAMILY HOUSING ALLOCATION (Cum	ulative New	/ Units Sind	e 2018)							
West Slope Less City of Placerville (a)		702	2,503	4,345	6,210	7,819				
El Dorado Hills CR		413	1,472	2,734	4,304	5,020				
Cameron Park CR		42	148	276	434	1,019				
Shingle Springs CR		8	27	51	80	274				
Diamond Springs CR		13	48	89	141	194				
Placerville CR (Less City of Placerville)		15	54	100	157	217				
Balance of West Slope		211	753	1,095	1,095	1,095				
MULTIFAMILY HOUSING ALLOCATION (Cumul	ative New L	Inits Since								
West Slope Less City of Placerville (a)		72	255	473	745	1,354				
El Dorado Hills CR		25	88	163	256	299				
Cameron Park CR		22	79	146	230	540				
Shingle Springs CR		7	26	48	76	263				
Diamond Springs CR		16	59	109	172	237				
Placerville CR (Less City of Placerville)		1	4	7	11	16				
Balance of West Slope		0	0	0	0	0				
								Vacant	New Jobs Per	
JOBS DEMAND							'18 to '40 Growth #	Non-Res. Acres (c)	Available Non-Res. Acre	
West Slope Less City of Placerville (a)	37,319	37,821	39,108	40,440	41,821	43,252	5,933	2,285	2.6	
El Dorado Hills CR	13,113	13,320	13,851	14,400	14,970	15,560	2,447	991	2.5	
Cameron Park CR	3,419	3,493	3,682	3,878	4,081	4,292	873	259	3.4	
Shingle Springs CR	2,629	2,663	2,748	2,837	2,930	3,025	396	214	1.8	
Diamond Springs CR	6,819	6,894	7,086	7,286	7,492	7,706	887	636	1.0	
Placerville CR (Less City of Placerville)	1,959	1,972	2,005	2,040	2,075	2,112	153	71	2.1	
Balance of West Slope	9,380	9,480	9,735	9,999	10,273	10,557	1,177	372	3.2	
JOBS ALLOCATION (Cumulative New Jobs Sin	ce 2018) (d									
West Slope Less City of Placerville (a)	55 2010) (u	, 502	1.789	3.121	4.502	5,933				
El Dorado Hills CR		207	738	1,287	1,857	2,447				
Cameron Park CR		74	263	459	662	2,447				
Shingle Springs CR		34	119	208	301	396				
Diamond Springs CR		34 75	267	467	673	887				
Placerville CR (Less City of Placerville)		13	46	81	116	153				
Balance of West Slope		100	355	619	893	1,177				
		100	000	013	000	1,177				

Notes:

(a) From Table 2 average projection.

(b) Based on achievable density estimates prepared by Kimley-Horn.

(c) Balance of West Slope runs out of residential development capacity in the 2025 to 2030 time period. Excess growth from this area is re-allocated to El Dorado Hills. El Dorado Hills runds out of development capacity in the 2035 to 2040 time period. Excess growth from this time period is re-allocated to

Cameron Park (2/3) and Shingle Springs (1/3). (d) Based on typical retail and non-retail employment densities per acre, BAE estimates that there is more than sufficient non-residential acreage to accommodate projected jobs demand in all County sub-areas through 2040.

	El Do	orado County (West	Slope, Less City of Pla	cerville)	
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
			- Community Region		-/
Year	Single Family	Multifamily	Multifamily	Retail (Jobs)	Non-Retail (Jobs)
	(Homes)	(Duplexes)	(Apartments)		. ,
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 R		,
Year	Single Family	Multifamily	Multifamily	Retail (Jobs)	Non-Retail (Jobs)
	(Homes)	(Duplexes)	(Apartments)		
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
			- Community Region		.,
Year	Single Family	Multifamily	Multifamily	Retail (Jobs)	Non-Retail (Jobs)
	(Homes)	(Duplexes)	(Apartments)		
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
			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)	(00.00)	(00.00)
2010	23,578	340	937	5,262	4,156
		0.0			.,
2015					
2015 2016	23,658	355	937	4,170	5,198

Appendix A: El Dorado County West Slope Housing Units and Jobs, 2010 to 2018