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Economic & Planning Systems

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EL DORADO COUNTY LAND USE FORECASTS FOR DRAFT GENERAL PLAN

Prepared for:

El Dorado County

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I. OVERVIEW

BACKGROUND

On January 23, 1996, El Dorado County adopted a comprehensive El Dorado County General Plan. On February 5, 1999, the Superior Court, County of Sacramento, in the matter of *the El Dorado County Taxpayers from Quality Growth, et al. v. El Dorado County Board of Supervisors and El Dorado County*, ruled that in certain respects the County failed to comply with the California Environmental Quality Act (CEQA) in the adoption of its General Plan in 1996. Consequently, certification of the General Plan Environmental Impact Report (EIR) and adoption of the General Plan were set aside.

In response to the Judgement and the Writ of Mandate (the "Writ"), El Dorado County is proposing to adopt a new General Plan and conduct a full environmental review of the General Plan, pursuant to CEQA and prior to General Plan adoption.

As part of the EIR process, EPS has been retained to develop several land use forecasts for the County at the year 2025 and at buildout. These forecasts will be used in the General Plan EIR to identify impacts and mitigation requirements due to new growth.

While the land use forecasts included in this document are based on the best available information in regard to future growth, they are essentially a prediction of the future under a specified set of assumptions and should be treated accordingly. The intent of this document is to clearly document the underlying assumptions and approach EPS used to develop the land use forecasts.

The land use forecasts described in this document are not directly comparable to past EPS work products in El Dorado County due to certain assumptions and data sets used in the current report. For example, to present a maximum development buildout scenario for the purposes of environmental review, the current report calculates total capacity assuming development at the maximum permitted densities (with certain limited adjustments), rather than at estimated average development densities as assumed previously.

This chapter of the report outlines the general approach to forecasts and provides a summary of the key findings of the report. Details regarding the forecast methodology and findings are provided in remaining chapters.

LAND USE ALTERNATIVES

The EIR analysis will examine five land use alternatives. For this initial report, EPS was asked to develop land use forecasts for three of the five alternatives: the 2001 Project, the

No Project, and the 1996 General Plan. All of the alternatives assume the development of "existing commitments," i.e., parcels for which certain development entitlements were approved prior to the issuance of the Writ. The additional development potential for each is defined by the land uses permitted under each alternative, which are based on the following:

- **The Proposed Project**: The Proposed Project (2001 Project) Alternative is based on the General Plan 2001 Project Description for the Environmental Impact Report (EIR) as described in the Notice of Preparation (NOP) adopted in July 2001.
- **The No Project Alternative**: The No Project Alternative is based on the 1996 General Plan, but assumes that the Writ governs land use decisions through 2025 and beyond. The Writ generally prohibits new discretionary approvals of residential development until the County adopts a new general plan, with the exception of parcels for which a development agreement was entered into prior to the issuance of the Writ. Accordingly, where discretionary development is restricted by the Writ, single family residential parcels were assumed to have a maximum development capacity of one unit (which does not require discretionary approval). Also, a limited exception in the Writ allows discretionary approval of up to 4 units on parcels designated multi-family under certain circumstances. Accordingly, multi-family parcels were generally assumed to have a maximum development capacity of 4 units per parcel.
- **The 1996 General Plan Alternative**: This alternative is based on the 1996 General Plan Land Use designations. The main difference between this alternative and the No Project Alternative is that the Writ is not assumed to apply. In other words, where discretionary approvals would be required, there is no limiting assumption of one unit per parcel for single family parcels or a maximum of 4 units per parcel for multi-family parcels as under the No Project Alternative.

For each alternative the likely land uses were forecast under two scenarios—(1) theoretical full buildout and (2) forecast 2025 conditions. These forecast scenarios provide a projection of development at a level that can serve as the foundation of the traffic analysis to be prepared for the EIR.

In addition to the three land use alternatives described above, two additional alternatives discussed in the NOP – the Environmental Constraints Alternative and the Road Constraints Alternative – will also be prepared later in the environmental review process. These alternatives are variants of the three mentioned above and EPS did not prepare a land use forecast for them as part of this report.

NO INITIAL CONSIDERATION OF GENERAL PLAN POLICIES

It is important to note that the forecasts in this report are based solely on the land use designations and associated densities for each alternative. At this stage, the potential effects of General Plan and other policies have not been considered. Some of these policies may have an effect on the cost, extent, or location of future development. Measure Y, for example, contains policies placing fee requirements and other restrictions on new development affecting traffic level of service. Other General Plan policies restrict development in sensitive habitats. These effects can be considered in the EIR once additional information (such as the preliminary traffic analysis) is developed.

SUMMARY OF FINDINGS

This Land Use Forecast Report combines a detailed accounting of available land supply based on 1999 conditions with a forecast and allocation of future housing and employment demand for each of the alternatives. This analysis considers both conditions at buildout, an undetermined point in time when all land use capacity is utilized, and conditions in 2025, the horizon year for the General Plan and for which regional forecasts are available.

Table 1 provides a summary of the total capacity and 2025 demand of housing units for the proposed 2001 Project Alternative, the No Project Alternative, and the 1996 General Plan Alternative. **Table 2** provides a summary of the non-residential buildout capacity and the projected 2025 demand for non-residential development (in terms of employees) for each alternative. The analysis and assumptions that underpin these data are the subject of this report.

The major findings of this report are summarized below. Detailed information regarding these findings and the methodology used in preparing the report are presented in the remaining chapters of the report.

Table 1
El Dorado County Land Use Forecasts
Summary of Projected Dwelling Units for each Alternative [1]

	Projected Dwelling Units [2]					
	2001 Project		No Project		1996 General Plan	
	Projected 2025 Demand	Total Capacity (Buildout)	Projected 2025 Demand	Total Capacity (Buildout)	Projected 2025 Demand	Total Capacity (Buildout)
Existing Commitments						
Issued Permit (IP)	699	699	699	699	699	699
Tentative Parcel Map (PM)	146	146	146	146	146	146
Specific Plan / Development Agreement (SP)	10,639	10,639	10,639	10,639	10,639	10,639
Tentative Subdivision Map (TM)	3,081	3,081	3,081	3,081	3,081	3,081
Subtotal Existing Commitments	**14,565**	**14,565**	**14,565**	**14,565**	**14,565**	**14,565**
Remaining Capacity [3]	**17,593**	**59,249**	**6,869**	**14,955**	**17,926**	**64,127**
Existing Commitments + Remaining Capacity	**32,158**	**73,814**	**21,434**	**29,520**	**32,491**	**78,692**
Total New Dwelling Units (1999 to 2025 or Buildout)	**32,158**	**73,814**	**21,434**	**29,520**	**32,491**	**78,692**
1999 Existing Dwelling Units	**44,708**	**44,708**	**44,708**	**44,708**	**44,708**	**44,708**
Total Dwelling Units (2025 or Buildout)	**76,866**	**118,522**	**66,142**	**74,228**	**77,199**	**123,400**

"scenario_summary"

[1] Excludes Tahoe Basin.
[2] Totals may not exactly match those in other tables due to rounding.
[3] Remaining capacity includes under-utilized parcels as well as second units and vacant land (No Project Alternative excludes under-utilized parcels).

Source: El Dorado County and Economic & Planning Systems

Table 2
El Dorado County Land Use Forecasts
Summary of Non-Residential Forecasts by Market Area [1]

Market #	Market Area	2001 Project New Jobs 2025	2001 Project New Jobs Buildout	No Project New Jobs 2025	No Project New Jobs Buildout	1996 General Plan 2025 as % of Buildout	1996 General Plan New Jobs 2025
# 01	El Dorado Hills	25,323	32,376	25,255	35,740	26,093	35,847
# 02	Cameron Park/Shingle Springs/Rescue	6,714	15,320	3,861	20,097	5,979	20,423
# 03	Diamond Springs	4,021	7,889	1,020	7,069	4,198	7,510
# 04	Placerville	4,002	10,300	3,077	9,403	3,796	9,844
# 05	Coloma / Gold Hill	46	57	108	1,932	151	1,932
# 06	Pollock Pines	320	1,142	186	1,066	363	1,066
# 07	Pleasant Valley	239	576	194	448	263	448
# 08	Latrobe	176	3,041	80	3,572	170	3,572
# 09	Somerset	140	676	177	1,298	167	1,298
# 10	Cool / Pilot Hill	537	2,644	208	2,150	622	2,419
# 11	Georgetown / Garden Valley	163	2,326	135	4,035	221	4,603
# 13	American River	24	145	26	173	26	173
# 14	Mosquito	175	344	87	215	153	215
Total New Jobs (1999 to 2025 or Buildout)		**41,880**	**76,836**	**34,414**	**87,198**	**42,202**	**89,350**
1999 Existing Jobs		**30,434**	**30,434**	**30,434**	**30,434**	**30,434**	**30,434**
Total Jobs (2025 or Buildout)		**72,314**	**107,270**	**64,848**	**117,632**	**72,636**	**119,784**

"jobs_sum1"

[1] Excludes Tahoe Basin.

Source: El Dorado County and EPS

LAND USE SUPPLY

- **Under the 2001 Project and 1996 General Plan there is total capacity for approximately 74,000 and 79,000 new dwelling units, respectively**.

- **Under the No Project, given the limitations on development imposed by the Writ, total new residential development capacity falls to approximately 30,000 dwelling units**.

- **Under all three alternatives, "existing commitments" account for approximately 15,000 dwelling Units.** Additional capacity exists in the large number of residential parcels designated throughout the County where houses can be constructed. At least one unit per residential parcel would be permitted under all of the alternatives. Additional units would be permitted on many parcels under the 2001 Project and the 1996 General Plan Alternative, depending on the size and land use designation of the parcels.

- **Depending on the alternative, the total new capacity for non-residential uses is based upon land use designations covering some 6,900 to 8,500 acres.** At typical development densities for non-residential uses (i.e., commercial, industrial, public facility, and research and development), some 32 to 37 million square feet of development could be accommodated at buildout depending on the alternative, employing some 77,000 to 89,000 people.

- **Chapter III** provides a detailed explanation of the analysis of land use supply.

LAND USE DEMAND

- **There is demand for approximately 32,000 new housing units over the next 25 years.** This forecast is based on historical growth patterns for the County and market research conducted by EPS.

- **Non-Residential development, including retail development, industrial and service uses, and office development, will continue to occur in the County generally in locations designated for such uses.** Demand for these uses will be derived from existing residents who currently shop or work outside the County, new residents, and by increasing recreational visitors. Additionally, employment sites in the western part of the County, principally the El Dorado Hills Business Park, will continue to grow as major regional employment centers.

- **Under the 2001 Project and 1996 General Plan Alternatives, the development forecast indicates that approximately 42,000 employees will locate in the County through the year 2025, which will consume roughly 47 to 55 percent of land available for such uses.** The number of new households projected for the 2001

Project and the 1996 General Plan Alternatives are essentially equivalent. Therefore, the projected new jobs are also essentially the same between the two alternatives at approximately 42,000 new employees.

- **Under the No Project Alternative, the 2025 demand projection is for approximately 34,000 new jobs.** This is less than the other two alternatives and is the result of fewer households due to Writ constraints.

Table 3 provides a summary of the projected new jobs by 2025, and at buildout, by sector.

- **Chapter IV** provides a detailed explanation of the report's analysis of land use demand.

Table 3
El Dorado County Land Use Forecasts
Summary of Estimated New Employees by 2025 and at Buildout
for Each Alternative [1] [3]

	New Jobs by 2025				New Job Capacity At Buildout	2025 Jobs As % of Buildout
	Retail	Service	Other	Total [3]		
2001 Project	11,000	19,000	13,000	42,000	77,000	55%
No Project [2]	8,000	16,000	11,000	34,000	87,000	39%
1996 General Plan	11,000	19,000	13,000	42,000	89,000	47%

NOTES
[1] Excludes Tahoe Basin.
[2] Assumes the Writ limits approval of non-residential development on parcels with split residential/non-residential designations.
[3] Numbers may not add to totals due to rounding.
Source: El Dorado County and EPS

SUPPLY VS. DEMAND

- **Neither the proposed 2001 Project, nor the 1996 General Plan Alternatives—are "capacity constrained"**. There is sufficient capacity to absorb the projected demand of 32,000 new housing units by 2025.

- **Under the No Project Alternative, demand for new housing units is capacity constrained.** At buildout, approximately 30,000 new housing units are projected under the No Project. This figure is lower than the forecasted Countywide 2025 demand projection of 32,000 units.
- **Existing commitments account for approximately 15,000 housing units countywide**. This represents approximately 47 percent of the total estimated housing demand through 2025. Under the No Project Alternative, existing commitments represent about 49 percent of total available supply and about 70 percent of demand projected to be absorbed by 2025.
- These issues are discussed in more detail in **Chapters III** and **IV**.

ALLOCATION / ABSORPTION OF NEW DEVELOPMENT

- **Under all three alternatives, new residential development is concentrated in Market Areas in the western parts of El Dorado County.** Approximately 85 to 87 percent of forecasted new residential growth through 2025 is anticipated to occur in the El Dorado Hills, Cameron Park/Shingle Springs/Rescue, Diamond Springs, Placerville/Camino, and Coloma / Gold Hill Market Areas under all three alternatives.
- **Because supply is constrained under the No Project Alternative by the Writ, 2025 absorption under the No Project Alternative is projected to be absorbed more slowly than under the other two alternatives.** Once the existing commitments are absorbed, development is likely to slow as a result of Writ limitations imposed on new residential development. Capacity constraints will drive up housing prices and limit the availability of desirable and easily accessible housing sites. It is assumed that some households will locate elsewhere in the region and that absorption of supply by 2025 will occur at a slower rate under the No Project as compared to the other two alternatives. Of the 30,000 dwelling units of supply, approximately 21,000 new units are projected to be absorbed by 2025 under this alternative.
- **Non-residential development under all three alternatives is concentrated in Market Areas in the western parts of El Dorado County where additional household growth is driving growth in employment.** Approximately 95 to 97 percent (depending on Alternative) of non-residential development is concentrated in Market Areas 1 through 5 throughout all three alternatives.
- **Chapter V** discusses the methodology used to allocate projected absorption through 2025.

REPORT ORGANIZATION

The intent of this report is to provide the reader with a clear understanding of the approach used by EPS and the assumptions made in the land use forecast analysis. Following this introductory chapter, **Chapter II** provides a general overview of the approach used by EPS to calculate supply and forecast demand for residential and non-residential land uses within the County. **Chapter III** and **Chapter IV** provide more in depth explanations as to how supply and demand were determined. **Chapter V** details the process used to allocate the 2025 housing demand to Traffic Analysis Zones within the County.

The three appendices, **Appendix A**, **Appendix B**, and **Appendix C**, provide detailed summary tables of the land use forecasts for each alternative – the 2001 Project, the No Project, and the 1996 General Plan. **Appendix D** provides a Glossary of Terms used in this report.

II. SUMMARY OF APPROACH

A conceptual explanation of the approach employed by EPS in developing the land use forecasts is provided in this chapter. The three following chapters describe in greater detail the assumptions and approach used to forecast land use supply (buildout and adjusted supply) and land use demand at 2025, as well as the allocation of housing demand to Traffic Analysis Zones.

GEOGRAPHIC COVERAGE OF LAND USE FORECASTS

For purposes of the land use forecast analysis, fourteen sub-regions or Market Areas were defined based on established socio-economic trends. **Table 4** lists the Market Areas and **Figure 1** shows the boundaries of these areas graphically.

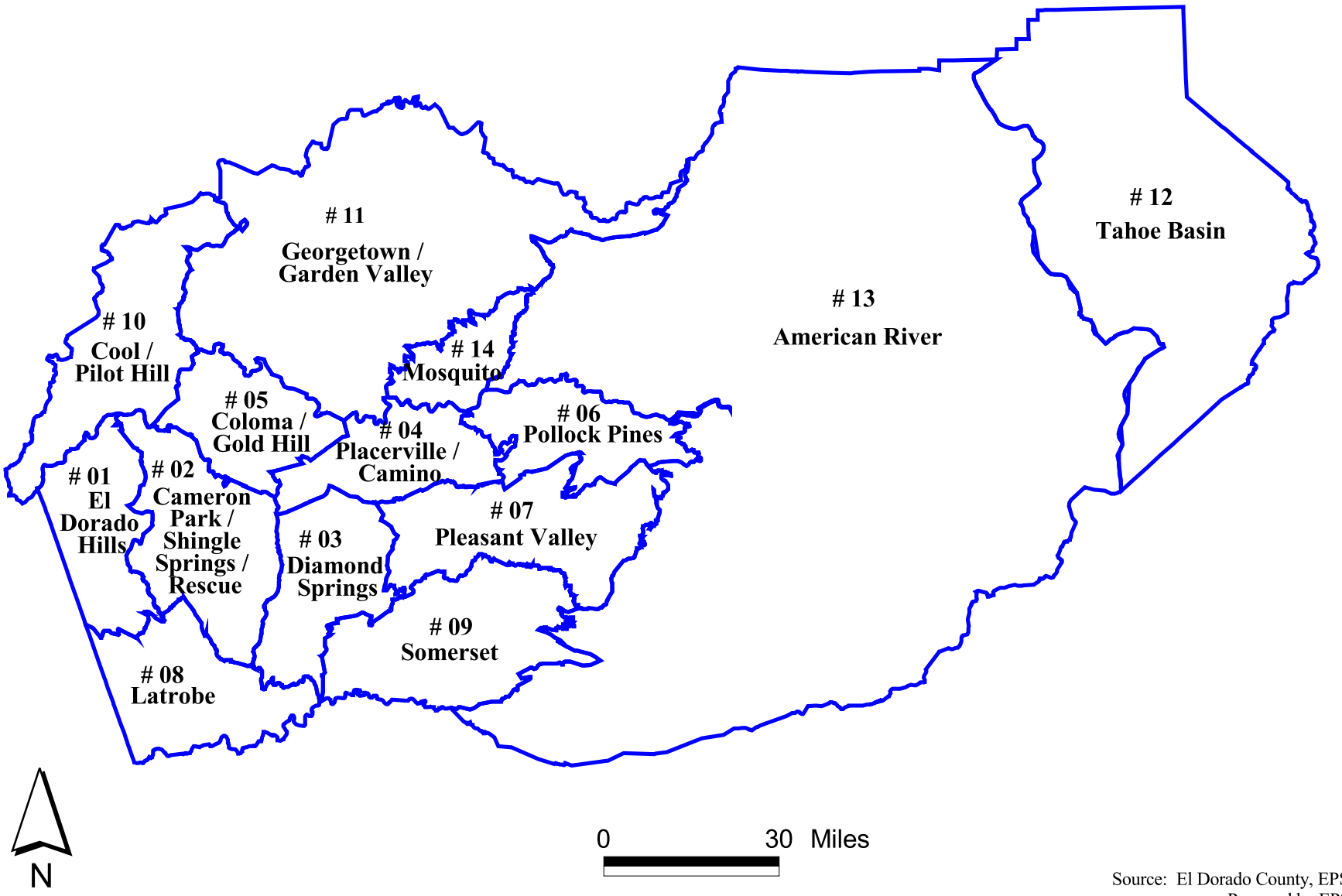
Table 4
El Dorado County Land Use Forecasts
Market Areas

Market Area Number	Market Area Name
# 01	El Dorado Hills
# 02	Cameron Park/Shingle Springs/Rescue
# 03	Diamond Springs
# 04	Placerville/Camino
# 05	Coloma/Gold Hill
# 06	Pollock Pines
# 07	Pleasant Valley
# 08	Latrobe
# 09	Somerset
# 10	Cool /Pilot Hill
# 11	Georgetown/Garden Valley
# 12	Tahoe
# 13	American River
# 14	Mosquito

EXCLUSION OF THE TAHOE BASIN

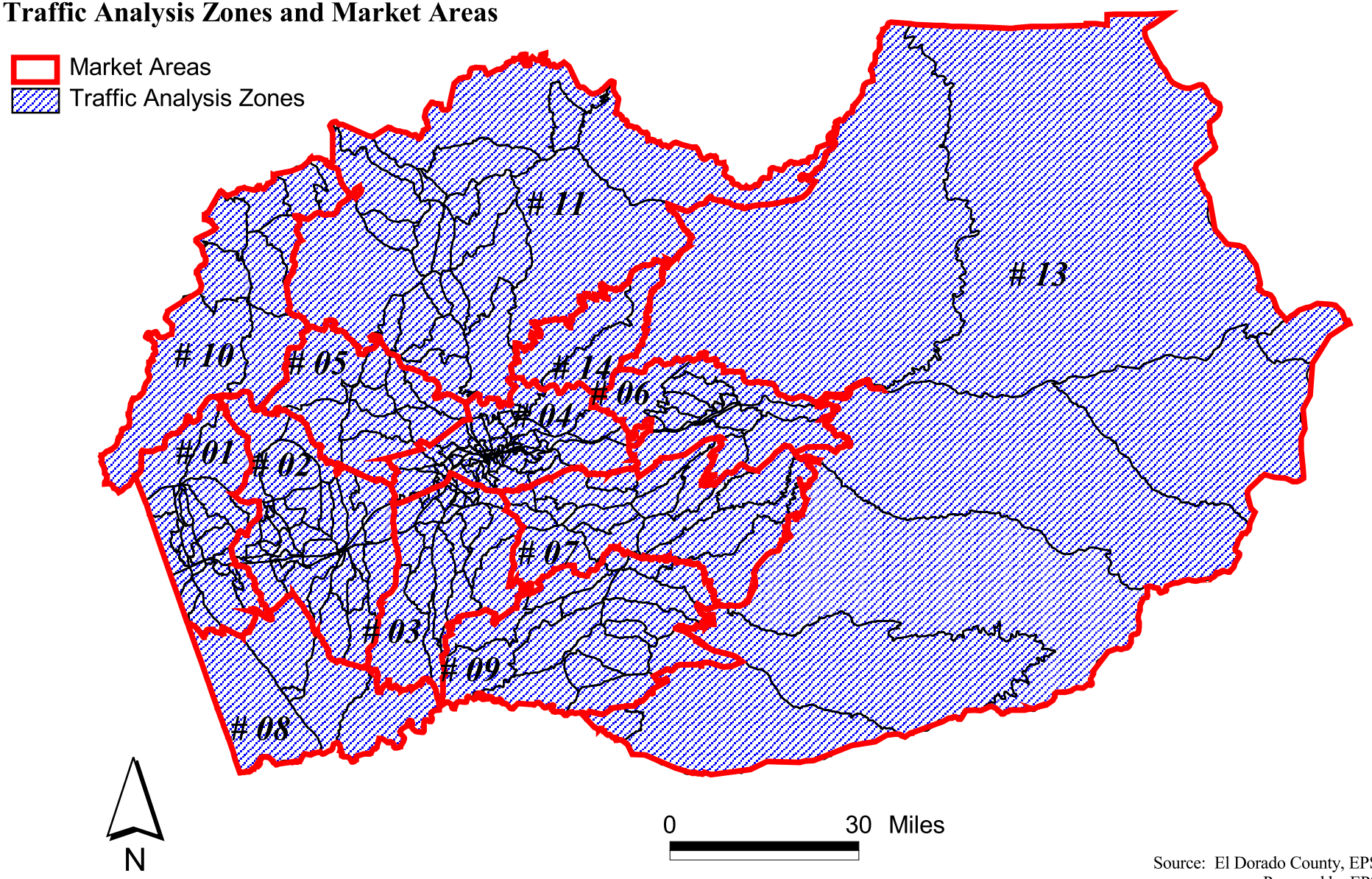
The County's General Plan update, EIR process, and ongoing transportation studies involve primarily the Market Areas in the West Slope regions, all of which are outside the Tahoe Basin area, shown in the easternmost Market Area in **Figure 1**. This

Figure 1
El Dorado County Land Use Forecasts
Market Areas



Source: El Dorado County, EPS
Prepared by EPS

Figure 2
El Dorado County Land Use Forecasts
Traffic Analysis Zones and Market Areas



Source: El Dorado County, EPS
Prepared by EPS

convention is consistent with the practices of the Sacramento Area Council of Governments (SACOG), which also excludes the Tahoe Basin in its forecasts of growth for El Dorado County. The Tahoe Basin is subject to multi-agency authority and planning, including El Dorado County, the Tahoe Regional Planning Agency, and other jurisdictions in the Basin. As such, planning in the Basin generally occurs independent from other planning in the County. The land use forecast approach described in this report and all of the figures and tables presented herein represent the County's West Slope and its sub-regions only, and exclude the Tahoe Basin.

TRAFFIC ANALYSIS ZONES

A degree of complexity is added to the land use forecast process with the need to forecast development at the Traffic Analysis Zone (TAZ) level. TAZs refer to geographic areas within Market Areas that reflect homogenous traffic behavior and patterns. **Figure 2** shows the TAZs in the study area. The forecast of new development down to the TAZ level is necessary, as the land use forecasts will be one of the primary inputs for the Traffic Analysis to be prepared in the EIR that will assess traffic impacts related to new development in the County. EPS and County staff reviewed the TAZ-level data and forecast results and made minor refinements where necessary to ensure the assumptions used in the report reflect known on-the-ground conditions to the greatest extent feasible. It is important to note, however, that the projections and allocations in this Report reflect a general level of analysis appropriate for a General Plan and would not necessarily be appropriate for use in a project-specific analysis.

DEFINITION OF LAND USE CATEGORIES

All parcels within the County generally fall within the following three categories:

- ***Developed Parcels***: all parcels that were recorded as developed as of January 1999.
- ***Existing Commitments***: refers to parcels that, as of 1999, had an approved project falling into one of the following four categories:
  - Issued Permit (IP) - Parcel for which a building permit has been issued but construction is not complete (and therefore not reflected on the assessors data as a developed parcel).
  - Tentative Parcel Map (PM) - Parcels for which a tentative parcel map (minor subdivision of four or fewer parcels) has been approved, but the map has not been recorded.
  - Tentative Subdivision Map (TM) - Parcels for which a tentative map consisting of five or more parcels has been approved but the map has not been recorded.

- Specific Plan/Development Agreement (SP) - Parcels that are part of a specific plan and that are subject to a development agreement between the County and the property owner that commits the property to a specified land use or density. Projects included in this category could actually be in any of the three stages listed above, i.e., building permit or have a tentative parcel or subdivision map. Because this is a static analysis, and for the sake of simplicity, such development projects were coded as "SP" for tracking purposes.

  Parcels in the Existing Commitment category received discretionary development approvals granting certain entitlements prior to the issuance of the Writ in 1999 and therefore have been grandfathered in under the Writ.

- ***Remaining Capacity***: Includes parcels that are currently identified as vacant or undeveloped and which are not included in the existing commitments category. While each residential parcel in remaining capacity is generally entitled to at least one unit as of right, in many cases additional units may be allowable. Accordingly, remaining capacity is calculated based on the maximum number of units that could be permitted on each parcel given its size and density designation (except under the No Project Alternative, where the number of allowable units is limited due to restrictions on residential development imposed by the Writ).

  Remaining capacity also includes units that could be built on already developed but under-utilized parcels as well as potential second units or "Granny Flats." These terms are defined as follows:

  - Under-utilized parcels: Refers to those parcels which are considered to be developed, but are not developed to their maximum extent. These parcels could be subdivided such that additional units could be built to the maximum allowable density. Additional units from under-utilized parcels are included in the Project and 1996 General Plan Alternatives. They are not counted in the No Project Alternative due to the Writ constraints.
  - Second units: Residential parcels with one dwelling unit can build second units without any discretionary planning approvals. Historically, second units have represented an average of 3.6 percent of the total single-family housing units developed annually countywide. Thus in each alternative, second units were included in the total capacity estimate by assuming they will total 3.6 percent of the single-family estimate of housing units.

The total capacity for new residential development under each alternative was determined by adding together existing commitments and remaining capacity.

BASE YEAR AND FORECAST PERIOD

For this series of land use projections, the beginning of calendar year 1999 was chosen as the Base Year for estimating "existing conditions" or existing development in the study region. Land use forecasts, therefore include projections of new development from January 1999 to 2025 or Buildout, depending on the scenario.

The selection of 1999 as the base year is grounded in the following assumptions and conditions:

- ***Existing Conditions for 1999 Compiled by EPS Previously***: The calibration of the current Countywide Traffic Model used a set of inputs created by EPS in August 1999, initially targeted to estimate mid-year 1998 conditions. However, subsequent revisions to the EPS existing conditions dataset and comparisons to State Department of Finance (DOF) and Employment Development Department (EDD) data were made to reflect existing conditions as of January 1999. The EPS estimate of residential units, which aggregates data at the TAZ level, differs from DOF (for which data is only at the County level) by less than 400 households countywide. In the context of land use buildout estimates, this was determined to be sufficiently accurate for purposes of the General Plan analysis and Land Use Forecasts. EPS also developed a substantial employment database in 1999 using commercial business listings, large employer directories, and information gathered from El Dorado County developers, local governments, and economic development agencies. Because this data reflects 1999 conditions, a base year of 1999 was necessary.

- ***2000 Census Data Not Yet Fully Available:*** Ideally, the year 2000 would have been the base year for the Land Use Forecasts given the most recent US Census was taken for that year. Unlike DOF data, Census data is made available at a geographic level that compares with the Traffic Analysis Zones and therefore, would be more accurate than the 1999 existing conditions dataset compiled by EPS. However, the actual housing and employment counts and characteristics reports from the 2000 Census needed for this analysis are not all available, and therefore could not be used for this report. The data developed by EPS for 1999 conditions is the most thorough and accurate data available.

After establishing the Base Year at 1999, certain adjustments to the data were made to account for changes to development potential in existing commitments that have occurred since then. For example, to the extent possible, EPS used updated data to identify parcels with approved tentative maps that had since expired or been placed on hold (i.e., maps for which an extension application was submitted), which were then removed from the existing commitments category and treated as remaining capacity. Similarly, a number of parcels formerly within the Bass Lake Hills specific plan area were shifted to remaining capacity to reflect the fact that development agreements had not been signed for those parcels. EPS also reviewed data contained in the 2001 parcel

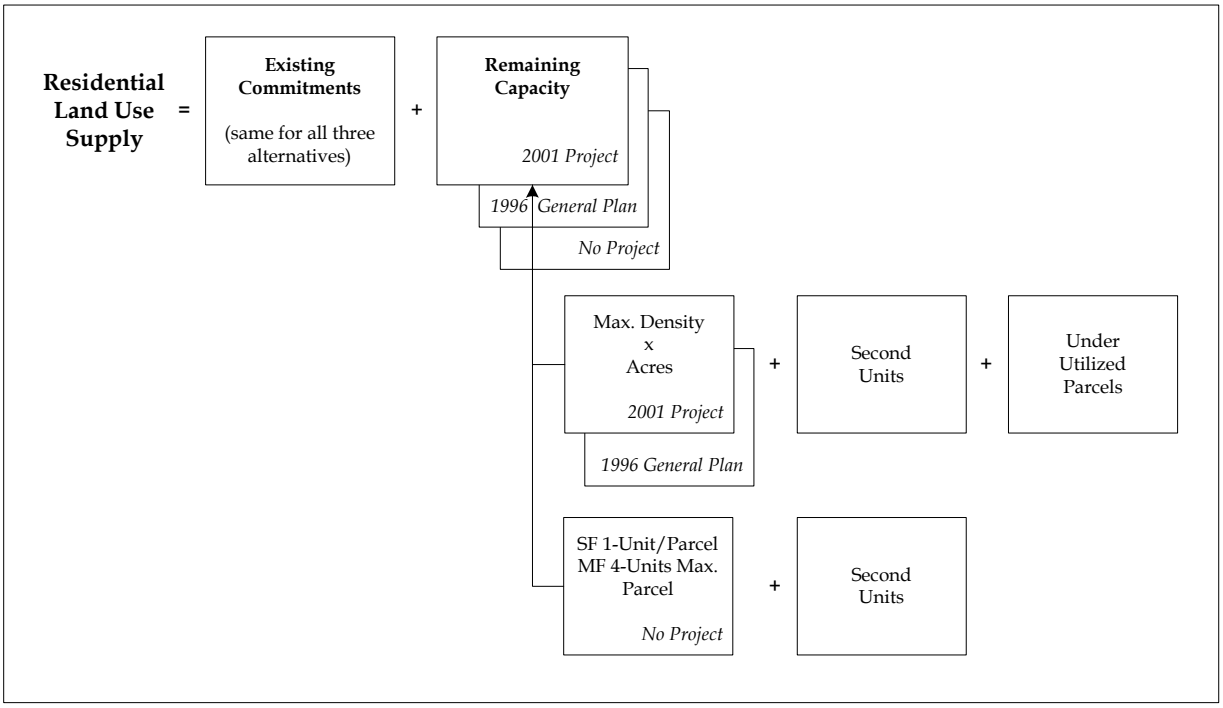
database and updated information on active/previously proposed/approved development projects from County Planning staff and developers. This data was used to check and adjust as necessary location coding for parcels.

OVERVIEW OF LAND USE FORECAST APPROACH

Figure 3 summarizes the approach EPS used to determine the land use forecasts. There were, in general terms, three steps followed to compute the Land Use Forecasts:

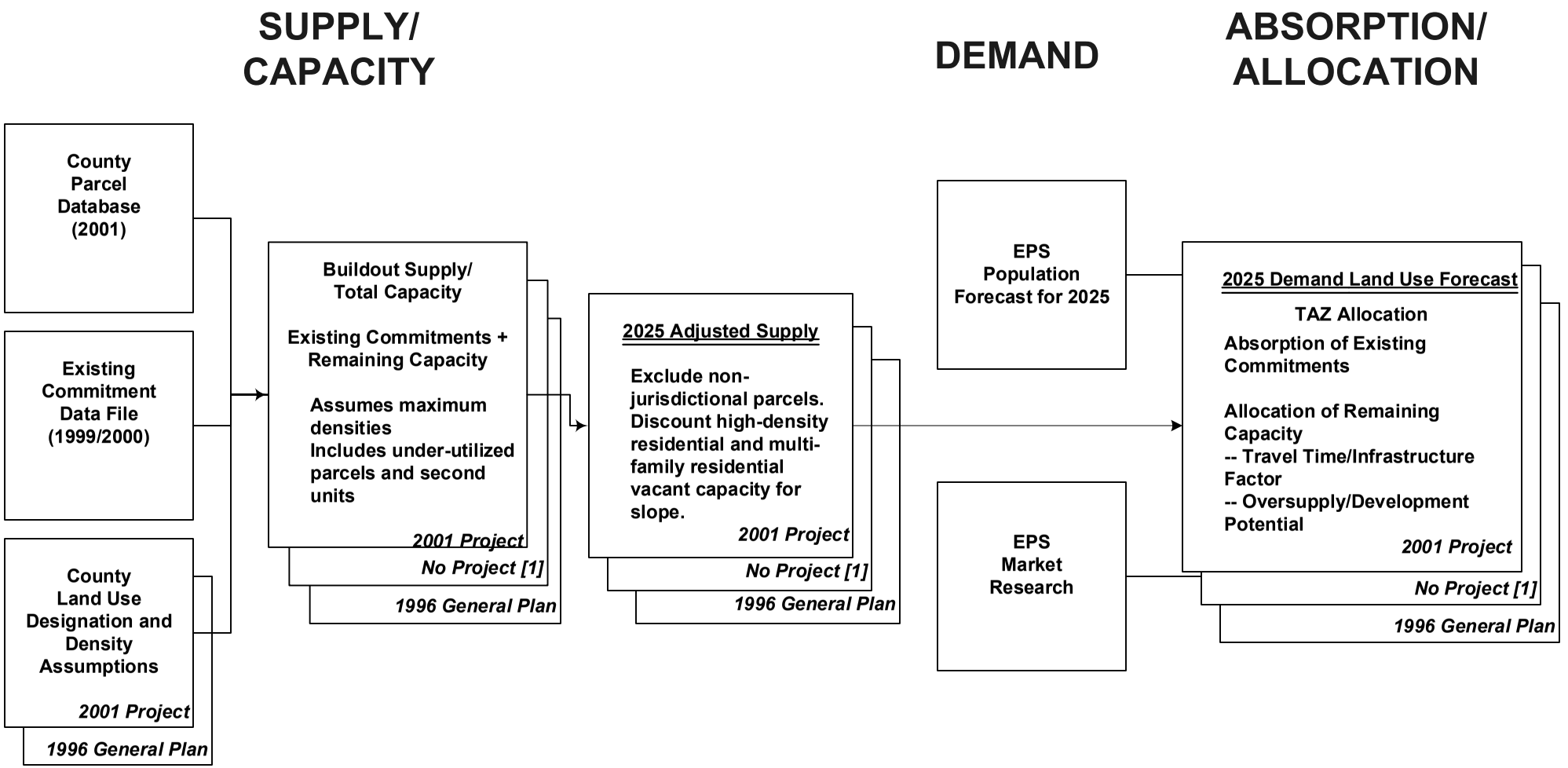
1. **Supply/Capacity**: Calculation of Land Use Supply at buildout, also referred to as total development capacity for each alternative.

    - *Residential Buildout Capacity*: Development capacity includes the buildout of vacant, developable land, (including under-utilized parcels and second units) as shown below. The method for determining residential land use capacity, and the distinction between existing commitments and remaining capacity, are discussed in detail in **Chapter III**.



- *Non-Residential Buildout Capacity*: Non-residential buildout capacity was computed based on the total acreage with designations for commercial, research & development, industrial, and public facility. Acreages for these land use designations were translated into building square feet using standard floor-area ratios (FARs).

Figure 3
El Dorado County
Overview of Land Use Forecast



[1] Under the No Project alternative, the number of allowable dwelling units is limited due to restrictions on residential development imposed by the Writ.

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2. **Demand:** Subsequent to estimating supply, EPS estimated the total demand for new housing units and commercial/industrial/office land uses through 2025. The demand for jobs and housing was predicated on a forecast of County population to be reached by 2025. EPS estimated a total population projection of 200,000 people by 2025 (assuming no capacity constraints). Greater detail on how EPS arrived at this population projection is provided in **Chapter IV**.

   This population projection translates into housing units as follows:

2025 Total Population Projection (EPS)	200,000	Persons
Base Year Population Estimate (1999) [1]	121,000	Persons
New Population to 2025	79,000	Persons
Average Household Size (2000 Census)	*2.63*	*Persons*
Total New Households – 2025 (rounded)	30,000	Households
Vacancy Factor	*5.00*	*Percent*
Total New Housing Units- 2025 (rounded)	**32,000**	**Units**

[1] Source: California Department of Finance.

   In terms of non-residential development, the forecasted demand for jobs by 2025 was based directly on the demand for new households. A jobs-to-housing ratio calculated based on data provided by the Sacramento Area Council of Governments (SACOG), allowed EPS to estimate the demand for jobs by Market Area.

3. **Allocation/Absorption of 2025 Demand**: The 2025 demand projection of 32,000 units countywide was allocated to Market Areas and TAZs based on several factors for residential and non-residential land uses. The process for residential and non-residential allocation and absorption is described in **Chapter V** and summarized as follows:

   - *Residential Allocation/Absorption*: The allocation process for residential development was analyzed in two parts as follows:

     (1) Existing commitments: There are approximately 14,000 units accounted for in existing commitments. It was assumed that all existing commitments would be absorbed by 2025.

     (2) Remaining capacity: Two factors ("travel time/infrastructure "factor and "oversupply/development potential" factor) served as the basis for allocating the remaining capacity. These factors are discussed in **Chapter V**.

- *Non-Residential Allocation/Absorption*: The number of jobs absorbed by 2025 was based on the households forecasted for each Market Area. The jobs were then allocated to TAZs based on each TAZs proportional share of capacity within each Market Area. This allocation process is also discussed in **Chapter V**.

SUPPLY VS. DEMAND

Neither the 2001 Project nor the 1996 General Plan Alternatives are capacity constrained. In other words, under both alternatives, there is sufficient potential supply to accommodate 2025 demand for housing units as well as demand beyond 2025.

Under the No Project Alternative, however, residential supply for new housing in El Dorado County is capacity constrained. The buildout estimate of approximately 30,000 new units is less than the projected unconstrained demand of 32,000 units Countywide by 2025.

If the demand for housing in El Dorado County were perfectly inelastic, or in other words, if the motivation to live in the County continued to exist regardless of new home price increases, then it would be reasonable under the No Project Alternative to assume the absorption of all 30,000 units by 2025. However, this is unlikely to be the case. Consumers are more likely to be sensitive to price, and as the supply of new housing units diminishes, demand will push prices up. In addition, once existing commitments are absorbed, the remaining capacity in the No Project Alternative is limited to a single unit on each of the remaining existing parcels throughout the County (or up to four units on multifamily parcels), which substantially restricts the number of units that are available in more desirable locations, i.e., closer to employment centers and existing infrastructure. As a result, many consumers are expected to choose locations elsewhere in the region, slowing the rate of absorption in the County.

The buildout scenario for the No Project Alternative assumes the absorption of all 30,000 units, but EPS has forecasted a reduced absorption of 21,000 units by 2025. This figure represents approximately 73 percent of available supply under the No Project, and approximately 67 percent of Countywide demand for new units by 2025. **Chapter V** provides a more detailed discussion of how development was allocated throughout the County under each of the alternatives.

III. LAND USE SUPPLY ASSUMPTIONS & APPROACH

To provide the EIR Project Team with data on the maximum potential buildout for each project alternative, EPS prepared an estimate of the development potential for the County, including under-utilized parcels (for the 2001 Project and 1996 General Plan alternatives) and second units for residential parcels.

The buildout estimate essentially represents the total development capacity or land use supply for the County under each alternative. A specific year in which buildout would be achieved is not specified.

The buildout scenarios in this report estimate the level of development that could occur by multiplying the size of each parcel by the maximum allowable density for that parcel (as constrained by the Writ for the No Project Alternative). However, considerations such as financial feasibility, consumer demand for lower density development, site planning requirements such as setbacks and design standards, and traffic impacts limit the extent to which development actually occurs at its maximum buildout potential. Nonetheless, an analysis of a buildout scenario can be a useful calculation in bracketing the total development potential of the project and each alternative. The buildout scenario will assist in the environmental analysis of the project and provide a tool for project planning.

DETERMINATION OF BUILDOUT CAPACITY

A parcel database with information on every parcel in the County was provided by County Staff and used as a starting point for calculating total buildout supply, also referred to as total capacity in this report .[1] Total supply of residential land is expressed in terms of housing units and total supply of non-residential land is expressed in terms of both employees and building square feet. Developed parcels were not counted in this process.

As a starting point, a parcel database was obtained from the El Dorado County Planning Department (which in turn was generated based on the County Assessor's database). This database included approximately 96,500 tax parcel records, and provided information on each parcel such as size and use type (e.g., vacant, developed, agricultural preserve, etc.).

For each alternative, EPS combined the land use designation overlay, as provided by County Planning, with the parcel database. Three separate land use databases were created in this process, one for each alternative. Depending on the alternative, these

[1] Throughout this report the terms total supply and total capacity are used synonymously.

databases include anywhere from 98,500 to 101,500 separate records. The difference in the number of records comes as a result of some parcel areas being "split" by jurisdictional or study boundaries or land use designations. For example, one parcel could be in two TAZs, if the boundaries of the TAZ overlap the parcel. To avoid double counting of parcels, the data were reviewed to eliminate any duplication. These data serve as the primary building block for the land use forecasts.

The buildout capacity analysis generally conformed to the following process for each alternative:

1) **Data Geo-coding and Sorting**

   The raw parcel data obtained from the County was sorted and geo-coded as follows:

   a) All parcels were assigned to one or more Traffic Analysis Zones (101 through 509) and to one Market Area (1-14) based on their geographic location.

   b) All parcels were categorized as either Jurisdictional or Non-Jurisdictional (i.e., subject to or not subject to El Dorado County land use regulation).

   c) All parcels were categorized by their existing development status or "use type." The following represent the use type, based on the El Dorado County Assessor's data:

      i) Developed (excluded from forecast, with infill potential analyzed separately)
      ii) Vacant
      iii) Unassigned
      iv) Agricultural Preserve (AGP)
      v) Restricted Land Use (RLU)
      vi) Interest Tax Parcels (INT)
      vii) Public Utility (UTL)
      viii) Timber Preserve (TPZ)

   Only the vacant and the unassigned use types with a taxable parcel designation were included in the buildout supply analysis. An explanation of why the others were not included is described below under "Excluded Parcels or Acres".

2) Land Use Designation Overlay

   All parcels were overlaid with a land use designation from either the 2001 Project Description or the 1996 General Plan depending on which alternative was being analyzed (the No Project Alternative uses the 1996 General Plan designations). It is important to note that parcels can have more than one land use designation or overlay. For example, a parcel can have a residential land use designation for a

portion of the parcel and a non-residential land use designation for the remaining portion. In another example, a parcel could be designated as a rural residential density parcel with an agricultural overlay.

Under the No Project Alternative, in the circumstance that a parcel has more than one land use designation, only the portion of the parcel with the largest land use designation (covers the greatest area) was counted for capacity. As a result, the No Project database has fewer records than the 1996 General Plan Alternative.

The possible land use designation codes were as follows:

a) Residential

   i) Natural Resources (NR)
   ii) Rural Residential Low Density (RRL)
   iii) Rural Residential (RR)
   iv) Agricultural Overlay (RRA and LDA)
   v) Low Density Residential (LDR)
   vi) Medium Density Residential (MDR)
   vii) High Density Residential (HDR)
   viii) Multi-Family Residential (MFR)

b) Non-Residential

   i) Commercial (C)
   ii) Industrial (I)
   iii) Research & Development (RD)
   iv) Public Facilities (PF)
   v) Tourist Recreation (TR)

c) Other Land Use Designations

   i) Open Space (OS)

3) Determination of Existing Commitments

An existing commitments database was created to reflect conditions as of January 1999. Existing commitments, also referred to as approved projects, are considered as such if a building permit has been issued, a tentative parcel or subdivision map approved, or there exists an approved development agreement. The codes used in the existing commitments database are listed below:

   i) Issued Permit (IP)
   ii) Tentative Parcel Map (PM)
   iii) Tentative Subdivision Map (TM)
   iv) Specific Plan/Development Agreement (SP)

The January 1999 existing commitments database was used to append the August 2001 parcel database in order to reflect existing commitments as of January 1999. However, before this occurred, parcels coded in the August 2001 parcel database as existing commitments were excluded in order to preclude double counting.

Non-residential projects in the pipeline were identified as part of the forecast of employment and building square feet for El Dorado County.

4) Excluded Parcels or Acres:

a) *Developed Parcels*: Parcels with a developed land use status were excluded from the buildout capacity analysis. Infill potential on developed parcels was analyzed separately.

b) *Residential Parcels Less than 1,815 Square feet (sqft)*: The defined Multi-Family Residential land use, with an upper limit of 24 dwelling units per acre, is the highest density of residential land use anticipated in currently proposed County General Plan policies. Twenty-four units per acre is equivalent to one unit per 1,815 sqft of gross land area. Residential parcels smaller than 1,815 sqft were assumed to be too small to be developed and were therefore excluded from the buildout capacity analysis.

c) *Residential Parcels with other than a "00" APN Status Code:* For residential parcels, only those with an APN Status Code of "00" are considered to be taxable. Parcels with any code other than "00" were excluded from the buildout calculation. The majority of non-jurisdictional parcels are not taxable and were excluded as a result of this assumption. APN Status Codes other than "00" reflect land uses including greenbelts, mineral rights, public or utility-owned property, cemeteries, and privately owned roads. These land uses are not subject to development.

d) *Excluded Land Use Designations*: For parcels that included the following land use types, the acreage associated with these use types was excluded from the buildout capacity analysis for all three alternatives because these parcels are not subject to development:

i) Timber Preserve (TPZ) – State law severely restricts residential development on lands within a timber preserve.

ii) Agricultural Preserve (AGP) – Only one residence is permitted per Williamson Act contract, regardless of the number of parcels contained within the agricultural preserve. Most preserves already have an existing unit.

iii) Restricted Land Use (RLU) – Lands with an enforceable government restriction for protecting environmentally sensitive land.

iv) Interest Tax Parcels (INT) – Assessors parcel numbers that are not land but components such as time share, water rights, etc.

v) Public Utility (UTL) – Parcels owned and operated for the purpose of providing and maintaining a public utility.

5) Buildout Capacity Calculation

For all remaining parcels and acreage (i.e., parcels not excluded in Step 4, above), the residential buildout capacity was computed for lands with residential and non-residential land use designations as follows:

A. Residential

1) *Approved Project Parcels (Existing Commitments)*: In 1999 EPS and County Staff developed a detailed approved project inventory (see step 3 above). The buildout capacity for parcels with an approved project (also referred to as "existing commitments") is based on the maximum number of units authorized by each approval.

2) *Vacant and Unassigned Parcels (Remaining Capacity)*: Under the 2001 Project and the 1996 General Plan Alternatives, potential new housing units were estimated by multiplying the maximum density by the number of acres for each vacant or unassigned residential parcel that was not included in existing commitments.

Under the No Project Alternative, the potential development of new housing units was constrained by the residential development restrictions imposed by the Writ. Because the Writ prohibits discretionary approvals of residential development (e.g. subdivisions), parcels designated for single family residential were assumed to develop at no more than one unit per parcel.

With respect to multi-family units, an exception in the Writ allows for discretionary approval on multi-family parcels of up to four units per parcel under certain circumstances. Accordingly, multi-family units were estimated assuming a maximum of four units per parcel (except for parcels on which minimum lot size requirements would preclude four units, in which case the number of units was reduced to the maximum number permitted consistent with those requirements).

A particular multi-family designated parcel may be subject to a maximum density that is either a higher (where no discretionary review is required) or lower (where the Writ exception does not apply) than four units, depending on the applicable zoning regulations and other factors. However, due to the small number and canceling effect of these variations, application of the four-unit-per-parcel assumption yields a reasonable estimate of total number of multi-family units that could be developed under the Writ.

2) *Residential Under-Utilized Parcels & Second Units:* Under the 2001 Project and the 1996 General Plan Alternatives, additional units are added to the total supply/capacity figure to account for under-utilized parcels as well as second units. In the No Project Alternative, only second units were included in the total supply / capacity figure. More detailed information is provided later in this chapter on how under-utilized parcels and second units were calculated.

B. Non-Residential

Total capacity for non-residential development, in terms of building square feet, was estimated by applying a floor-to-area ratio ("FAR") to the total acreage designated for non-residential uses under each alternative, assuming a 0.2 FAR for commercial, industrial, and public facility land uses and assuming a 0.3 FAR for research and development land uses. These FAR factors fall within industry standards for these types of land uses. The higher FAR used for the research and development land use is based on information provided to EPS by the developer of the El Dorado Hills Business Park as to projected building square feet for the project. The El Dorado Hills Business Park contains the only existing research and development in the County.

The building sqft estimates were converted to jobs based on the following factors:

- Commercial – 400 sqft/employee
- Industrial - 600 sqft/employee
- Public Facilities – 500 sqft/employee
- Research & Development – 330 sqft/employee

These factors were based on industry standards for these employment categories. However, the assumption of 600 square feet per employee under industrial land uses was reduced from the typical industry standard of 1,000 square feet per employee to reflect expected employees per square feet for light industrial development, which is the type of industrial development most likely to occur in El Dorado County.

LAND USE DESIGNATION OVERLAYS

For residential parcels, there are two sets of density assumptions or overlays that correspond to the 2001 Project and 1996 General Plan land use designations. For purposes of determining total residential buildout supply, maximum densities were assumed for residential parcels under the 2001 Project and the 1996 General Plan Alternatives. The maximum and minimum densities are shown in **Table 5** for the 2001 Project and 1996 General Plan Alternatives.

The No Project Alternative uses the same land use designations as the 1996 General Plan Alternative, but instead of using the 1996 General Plan density assumptions, the No Project assumes only one unit per parcel for single family and a maximum of four units per parcel for multi-family.

Table 5
El Dorado County Land Use Forecasts
Minimum and Maximum Density Assumptions by Residential Land Use

Land Use Designation	2001 Project Dwelling Units per Acre		1996 General Plan Dwelling Units per Acre	
	Min	Max	Min	Max
Natural Resources (40-160 Acres/DU)	0.006	0.025	0.006	0.025
Rural Residential Low Density (40-160 Acres/DU)	0.006	0.025	NA	NA
Rural Residential (10-160 Acres/DU) 1996 Plan	NA	NA	0.006	0.100
(20-160 Acres/DU) 2001 Project.	0.025	0.050	NA	NA
Low Density Residential (5-10 Acres/DU) 1996 Plan	NA	NA	0.100	0.200
(5-20 Acres/DU) 2001 Project.	0.050	0.200	NA	NA
Agricultural District Overlay (20 Acre Minimum) [1]	NA	0.050	NA	0.050
Medium Density Residential (1-5 Acres/DU)	0.200	1.000	0.200	1.000
High Density Residential (0.2-1 Acres/DU)	1.000	5.00	1.000	5.000
Multi-Family Residential (0.04-0.2 Acres/DU)	5.000	24.000	5.000	24.000

NOTES

[1] The Agricultural District Overlay may apply to parcels in either the Rural Residential or Low Density Residential designations. It affects the minimum parcel size (maximum density) only.

RESIDENTIAL UNDER-UTILIZED PARCELS & SECOND UNITS

The projection of total capacity would not be complete without an analysis of the potential for under-utilized parcel development as well as the construction of second units. The following discussion describes how these elements were calculated.

Under-Utilized Parcels

Some of the developed single family residential parcels in the County are considered under-utilized for purposes of assessing the County's total development capacity. These

parcels have single family land use designations and are greater than one acre in size. It is assumed that there is one existing dwelling unit on each of these parcels. The additional dwelling unit capacity that could be accommodated by the under-utilized parcels is calculated by applying various density factors explained below depending on the land use designation, then subtracting the existing dwelling units. The density factors used are shown below.

Table 6
El Dorado County Land Use Forecasts
Density Factors for Under-Utilized Parcels

Land Use	Parcel Size	Maximum Potential Density	Assumed Density
Low Density Residential	Greater than 10 acres	0.2 units per acre	0.2 units per acre
Medium Density Residential	Greater than 5 acre	1 unit per acre	1 unit per acre
High Density Residential	1 to 5 acres 5 to 10 acres Greater than 10 acres	5 units per acre	1 unit per acre 3 units per acre 5 units per acre

An existing residence limits the flexibility on smaller parcels to maximize the number of units that could be developed on smaller lots for high-density projects. This limitation diminishes as parcel size increases, since the increased flexibility of larger parcels makes them easier to subdivide even with an existing structure. The assumptions used for estimating the development potential of under-utilized parcels are based on the County's past experience with large developed parcels.

Additional dwelling unit capacity for under-utilized parcels was estimated only for developed parcels with the land uses shown above. Additional capacity was not included for existing commitments or for parcels with other single family land use designations such as rural residential. In addition, under-utilized parcel capacity was not included in the No Project land use alternative since any further development would require discretionary approval, which is prohibited under the Writ.

Second Units

According to El Dorado County building permit records, new second units as a percent of total new single family units have averaged 3.6 percent since 1995. This trend is

illustrated in the **Table 7** presented below. To estimate the number of new second units at buildout, EPS applied the historic 3.6 percent rate to the total single family buildout supply for each alternative.

Table 7
El Dorado County Land Use Forecasts
Historical Data on Second Units for El Dorado County

Year	New 2nd Units	New Single Family Units [1]	Total New Units	New 2nd Units as a Percent of New Single Family Units
	(A)	(B)	(C=A+B)	(D=A / B)
1995	53	795	848	6.7%
1996	26	1,014	1,040	2.6%
1997	42	978	1,020	4.3%
1998	24	856	880	2.8%
1999	39	1,095	1,134	3.6%
2000	40	1,291	1,331	3.1%
2001 [2]	27	889	916	3.0%
Total	251	6,918	7,169	3.6%

"second_units"

NOTES
[1] Includes new construction and manufactured homes
[2] 1/1/01 through 7/31/01
Source: El Dorado County

2025 ADJUSTED SUPPLY - RESIDENTIAL

The buildout capacity is intended to represent the total potential development supply for the County under the three alternatives. This total capacity represents a calculation of theoretical supply. There are many reasons why it is unlikely to be achieved. For example, the buildout capacity includes parcels that the County does not currently have jurisdiction over. Given past and current development trends in the County and region, it is also unlikely that all future development will develop to its maximum allowable density. Actual buildout is more than likely to be something less than the calculated buildout capacity.

The extent to which buildout capacity is actually developed is potentially affected both by constraints on supply and by the extent and absorption rate of demand (the role of demand in the land use forecast is discussed in **Chapters IV** and **V** below). Constraints on supply are reflected in an "adjusted supply" number for each alternative. As

described in more detail below, adjustments were made to the residential buildout capacity to achieve the 2025 adjusted supply by excluding certain non-jurisdictional parcels and assuming buildout of less than the maximum density for multi-family parcels on steep slopes. The adjustments were made to residential land uses only; no adjustment was made to the non-residential land use supply.

NON-JURISDICTIONAL PARCELS

Non-jurisdictional parcels represent those parcels for which the County currently has no jurisdictional control over development approvals. Non-jurisdictional parcels are typically those owned by the Federal or State government, such as national forest or public lands. Although these parcels are given land use designations and theoretically could develop consistent with those designations in the event the lands were transferred into private ownership, it would be speculative to predict the extent to which such transfers may occur by 2025. In addition, such lands are typically transferred in the context of a land exchange, which would eliminate the development potential on any lands transferred into state or federal ownership. Accordingly, it was determined that non-jurisdictional parcels are unlikely to materially contribute to the overall development potential of the County by the year 2025.

Land in the incorporated community of Placerville is also considered non-jurisdictional with respect to El Dorado County. However, because of development potential and approved projects, forecasted demand to 2025 for Placerville was included in the overall El Dorado County projection.

SLOPE ADJUSTMENT

Based on past experience in the County and elsewhere in the region, slope constitutes a substantial physical constraint to development for high density residential and multi-family residential development if the slope is greater than 25 percent. Therefore, slope, in this circumstance, was considered as a constraint on total capacity and an adjustment was made for these land uses for the adjusted supply forecast. A number of other potential constraints on development (including wetlands, endangered species, distance from infrastructure, slope on single-family parcels) were also considered, but it was determined that, assuming sufficient demand, these constraints could be overcome by engineering, site design, or infrastructure construction and thus did not present absolute barriers to buildout over the long term.

To adjust for slope constraints, EPS was provided with a slope coverage factor for each TAZ that had either HDR or MFR land use designations. The coverage factor was calculated by estimating the number of acres within each of these land uses with a greater than 25 percent slope, relative to the total acres for these land uses.

For the 2001 Project and 1996 General Plan Alternative, EPS applied the coverage factor to the estimated units for these land uses within each TAZ. Rather than assume the maximum density units for this portion of the TAZ (determined by the coverage factor), EPS assumed the minimum density units. For example, if a parcel was a hundred acres, zoned for high density residential land use, and there was slope of greater than 25 percent on one third of these acres, then the HDR units on the 33 acres are assumed to developed to their minimum density rather than their maximum density.
The slope adjustment did not affect the No Project Alternative. Under the No Project Alternative, a maximum of 4 units per par parcel was assumed for multi-family land uses under the Writ. No slope adjustment was necessary for the No Project Alternative because the multi-family density levels, under this alternative, would generally be low enough to allow building in areas with slope constraints.

SUMMARY OF RESIDENTIAL BUILDOUT SUPPLY

Table 9 summarizes the buildout estimate of housing units for each alternative. The buildout estimates are roughly equivalent for the 2001 Project and the 1996 General Plan Alternatives. The buildout supply is significantly reduced for the No Project Alternatives, reflecting the Writ constraints on residential development.

SUMMARY OF NON-RESIDENTIAL SUPPLY

Non-residential development capacity was measured in terms of building square feet for commercial, industrial, public facilities, and research and development land uses. The total building square feet is summarized below for each alternative.

Table 8
El Dorado County
Total Non-Residential Capacity [1]

Alternative	Non-Residential Building Sqft
2001 Project	32,100,000 sqft
No Project	36,500,000 sqft
1996 General Plan	37,400,000 sqft

[1] Excludes Tahoe Basin

It should be noted that because residential development is restricted under the Writ but non-residential development is not, the non-residential buildout under the No Project Alternative depicts what is possible given 1996 General Plan land use designations, but not necessarily what is likely. Under the 1996 General Plan, there is the capacity for 79,000 new housing units and approximately 89,000 new employees at buildout. In comparison, under the No Project Alternative, residential buildout capacity is approximately 30,000 units due to Writ constraints, but there is capacity for approximately 87,000 new employees at buildout, close to the same figure as under the 1996 General Plan Alternative. Unless the County were to begin importing employees (the County is currently a net exporter of employees), the population under the No Project Alternative would not support a sufficient number of employees to fill the available capacity for non-residential development, even under full residential buildout. However, in order to present a maximum development scenario, the No Project Alternative buildout estimate includes full non-residential buildout.

Table 9
El Dorado County Land Use Forecasts
Summary of Total Residential Capacity for Each Alternative [1]

	Total Buildout Supply/Capacity Dwelling Units [2]		
	2001 Project	**No Project**	**1996 General Plan**
Existing Commitments			
Issued Permit (IP)	699	699	699
Tentative Parcel Map (PM)	146	146	146
Specific Plan / Development Agreement (SP)	10,639	10,639	10,639
Tentative Subdivision Map (TM)	3,081	3,081	3,081
Subtotal Existing Commitments	**14,565**	**14,565**	**14,565**
Remaining Capacity [3]	**59,249**	**14,955**	**64,127**
Existing Commitments + Remaining Capacity	**73,814**	**29,520**	**78,692**
Total New Dwelling Units (1999 to 2025 or Buildout)	**73,814**	**29,520**	**78,692**
1999 Existing Dwelling Units	**44,708**	**44,708**	**44,708**
Total Dwelling Units (2025 or Buildout)	**118,522**	**74,228**	**123,400**

"scenario_summary2"

[1] Excludes Tahoe Basin.
[2] Totals may not exactly match those in other tables due to rounding.
[3] Remaining capacity includes under-utilized parcels as well as second units and vacant land (No Project Alternative excludes under-utilized parcels).

Source: El Dorado County and Economic & Planning Systems

IV. LAND USE DEMAND (2025)

The 2025 land use forecast is intended to represent market demand for housing and non-residential square feet by 2025. In relation to supply, it is how much of the total or adjusted capacity will be absorbed by 2025. The following chapter describes the approach used by EPS to estimate demand and puts forth the assumptions made that underlie the analysis.

RESIDENTIAL LAND USE DEMAND

Residential land use demand directly relates to population growth. As new people move into a region, demand for housing and subsequently residentially zoned land increases. As a result, EPS began the land use demand forecast by projecting population.

All population, household, and housing unit projections throughout this report are for El Dorado County, excluding the Tahoe Basin, as discussed in **Chapter 1**. This is the case for EPS projections as well as the Sacramento Area Council of Governments (SACOG) and the California Department of Finance (DOF) projections, unless otherwise noted. For convenience, this report uses the term El Dorado County to describe the study area.

There were five steps taken to arrive at a population forecast for El Dorado County.

- First, EPS drew on, and augmented, existing real estate market research on El Dorado County in order to understand the larger economic trends impacting growth in the County. Understanding the broader market forces set the stage for quantifying anticipated growth within the County.

- Second, EPS examined historical population growth rates in El Dorado County in order to define the parameters within which future growth should be forecasted.

- Third, EPS integrated information on historical population growth patterns and market research to derive a population forecast for 2025.

- Fourth, EPS compared its population projection with those of SACOG and DOF as a test of validity.

- Finally, the EPS population forecast was translated into a projection of demand for future housing units.

The following section describes EPS's methodology and the resulting land use demand forecast.

EL DORADO COUNTY MARKET RESEARCH

EPS researched the El Dorado County region in terms of real estate trends and related pricing and its impact on population growth and housing demand. EPS began this research in the mid-1990s and has expanded this research for the present effort.

Over the past decade El Dorado County, and particularly El Dorado Hills, has become one of the most desirable areas to live in the Sacramento Metropolitan Region. El Dorado County has also been steadily attracting people from the Bay Area. Within the Sacramento region, however, Western El Dorado County home prices tend to be higher than other communities. According to a recent market assessment prepared by the Gregory Group for the Promontory project in El Dorado Hills, both the average home size and price exceed the average for other competing Market Areas in the Sacramento Metropolitan Region based on data surveyed for the first quarter of 2001. These most recent pricing trends for new homes are summarized in **Table 10** below:

Table 10
El Dorado County Land Use Forecasts
Regional Housing Market Trends, First Quarter 2001

Area	Average Sqft	Average Price	Average Price per Sqft
El Dorado County (El Dorado Hills and Cameron Park)	3,042	$415,367	$137.34
City of Folsom	2,523	$321,810	$129.26
Sacramento County	2,449	$278,322	$115.28
Greater Sacramento Region (including El Dorado, Placer, Sacramento, and Yolo Counties)	2,534	$299,821	$119.58

Source: "The Promontory Market Assessment", July 2001, the Gregory Group

The information prepared by the Gregory Group focuses on the El Dorado Hills (Market Area 1) and Cameron Park/Shingle Springs (Market Area 2). As such, the pricing information may not be representative of trends in other Market Areas. Nevertheless, the trends remain significant for the County, as approximately 50 to 60 percent (depending on the alternative) of the total development capacity is concentrated

between these two Market Areas. For example, these two market areas represent 37,000 potential new housing units under the 2001 Project Alternative at buildout, of which approximately 22,000 units are projected to be absorbed by 2025 (out of total demand of 32,000 units countywide). Of the 22,000 projected housing units in Market Areas 1 and 2, approximately 65 percent (15,000 units) fall in the existing commitment category.

The trend towards higher pricing can be explained in a number of ways including the County's desirable topography and natural environment, the higher cost of development, and historical development patterns. Based on the additional market research conducted by EPS to date, there is no apparent evidence that this trend is likely to change going forward. In fact, it is likely to become more distinct as the Region continues to grow and the available land supply decreases resulting in price increases for housing Countywide.

Additionally, the trend toward higher priced housing in El Dorado County is reflected in the type of product coming through the development pipeline. New master planned communities such as Promontory and Serrano are targeting product toward higher income households. Thus, it is expected that El Dorado County will continue to attract a disproportional share of the Region's higher income households who can afford the more expensive housing.

This trend to higher cost housing has been apparent, shows no apparent sign of changing, and is unlikely to be significantly affected by the variations in land supply reflected in the General Plan 2001 Project or the 1996 General Plan Alternatives. This is largely because, in the short term, supply is already accounted for with existing commitments. While the current economic recession may slow development in the short run, there is no indication at this time that it will be a protracted economic downturn. Neither is there any indication that developers are rethinking their housing product mix. The Promontory development project, which has recently begun construction on Phase 1 of the project, is currently targeting production home prices between $350,000 and $500,000 per unit and custom homes at $700,000 and above per unit.

Under the No Project Alternative, there is potential for housing prices to increase more steeply because supply is constrained and is in fact exceeded by projected 2025 demand. The limited supply of desirable parcels for new development will drive up the price of those parcels.

HISTORICAL POPULATION TRENDS

Table 11 highlights the population growth that has occurred over the last 20 years in El Dorado County. Overall, El Dorado County grew by 70,487 people between 1980 and 2000. This translates into an average annual growth rate of 3.2 percent during that period.

Table 11
El Dorado County Land Use Forecast
Historical Population Trends [1]

	1980	1990	2000
El Dorado County Total Population	66,00	96,000	122,000
Additional Population from Previous Period	N/A	30,000	26,000
Average Annual Growth Rate from Previous Period	N/A	3.9%	2.4%

[1] Excludes Tahoe Basin
Source: U.S. Census and EPS

While El Dorado County has grown during the past two decades, growth during the 1980s outpaced the 1990s by about 5,000 people with a higher average annual growth rate of 3.9 percent versus 2.4 percent in the 1990s.

The slowdown during the 1990s is largely attributed to the recession in the early 1990s that influenced the level of growth throughout California. Nonetheless, while the early 1990s recession may have been the primary factor behind a slower growth rate for El Dorado County, the tendency will be for future growth in El Dorado County in the long-term to occur at a slower rate as well. This is expected because as the population base increases in a particular region, the growth rate decreases as the equivalent numbers of people are added to that region.

Current estimates indicate that approximately 14,000 new units are in the development pipeline, having already received discretionary approvals and are allowable under the Writ. Because these approvals have a limited life span, developers will be eager to build those units that are approved in the short-term. As such, it is reasonable to assume that all existing commitments will be absorbed by 2015.

Assuming an average household size of 2.63[2] and an absorption timeline of 2015, El Dorado County can expect approximately 37,000 additional people by 2015 as a result of housing units already approved. **Table 12** shows the EPS forecast for 2010, 2020, and 2025.

[2] From the 2000 Census for El Dorado County

EPS POPULATION FORECAST

Based on market research and historical growth patterns, EPS derived a population projection of 200,000 by 2025 for El Dorado County. **Table 12** shows the EPS population projection.

In addition to historical growth patterns and market research, the EPS population projection is informed by the approximately 15,000 new housing units committed to be built in El Dorado County from 1999 into the near future. As stated above, these new units translate into approximately 37,000 new people moving to the County from 1999 into the near-term. The population growth derived from the development of existing commitments results in a higher increase in population, measured in terms of new persons, during the first 15 years of the forecast horizon as compared to the 1990s. The increase in population translates into a relatively constant average annual growth rate during the first 15 years of the forecast as compared to the 1990s. This occurs as more people are added to an expanded population base. In later periods during the forecast horizon, a declining average annual growth rate is assumed.

Table 12
El Dorado County Land Use Forecast
Population Forecast: El Dorado County [1]

	2000	2010	2020	2025 [2]
El Dorado County	122,000	153,000	185,000	200,000
Additional Population from Previous Period	26,000	31,000	32,000	15,000
Average Annual Growth Rate from Previous Period	2.4%	2.3%	1.9%	1.6%

[1] Excludes Tahoe Basin
[2] Half-decade
Source: U.S. Census and EPS

ALTERNATIVE POPULATION PROJECTIONS

As a test of validity, EPS compared its population projection of 200,000 with other available projections. Two primary sources of population forecasts for El Dorado County are DOF and SACOG. The SACOG forecasts have not yet been re-benchmarked to take into consideration the 2000 Census data, as not all of the Census data has been released.

These two population forecasts differ from each other in terms of total population by 2025. SACOG currently estimates that there will be 194,000 people by 2025, while DOF estimates there will be approximately 219,000 people by 2020.

Table 13
El Dorado County
DOF and SACOG Projections of Total Population [1]

							Avg. Annual Growth	
	2000	2005	2010	2015	2020	2025	2000-2020	2000-2025
2000 Census	122,000							
DOF Population Projection [2]	124,000	153,000	178,000	200,000	219,000		2.9%	
SACOG Population Projection [3]	125,000	140,000	158,000	175,000	186,000	194,000		1.8%

[1] Excludes Tahoe Basin
[2] As of June 2001.
[3] As of May 2001.

SACOG's population projection assumes that both the Writ and Measure Y will affect the growth rate in the County, and as a result their population forecast is significantly lower than DOF. **Figure 4** compares the DOF, SACOG, and EPS projections.

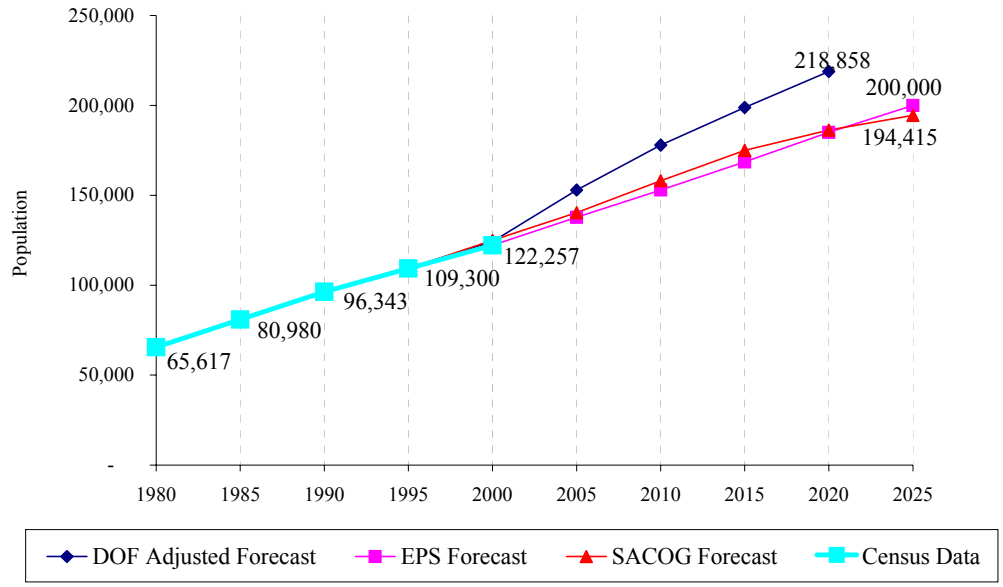
EPS's population forecast comes in slightly higher than SACOGs. If DOF's forecast is extended to 2025 at a declining average annual growth rate, their projection reaches approximately 240,000 people by 2025. EPS's forecast is lower than DOF's by about 40,000 people.

EPS's projection is comparable to SACOG, however, both were arrived at through different methodologies. According to SACOG, demand was constricted during the initial years of the forecast due to the Writ. This assumption is relaxed later in the SACOG forecast as it was expected that a new General Plan would be adopted to replace Writ constraints.[3] The EPS projection assumes, however, that demand would actually be higher during the initial years of the projection forecast due to the absorption of 15,000 units currently in the pipeline. In later phases of the forecast, the EPS projection grows at a slower rate once the existing commitments have been absorbed. While EPS

[3] SACOG, "Projections of Population, Housing, Employment, and Primary and Secondary Students," May 2001. www.sacog.org/demographics/proj2001/pdfs/methodology.pdf

and SACOG differ in terms of their assumptions regarding when growth would be phased in, the two population projections by 2025 are relatively similar, with EPS projecting about 6,000 more people than SACOG.

Figure 4
El Dorado County Land Use Forecasts
Total Population Projections



EPS's projection, as well as SACOG's, is lower than DOF's projection. The DOF projection was arrived at by allocating a Statewide population projection. The Statewide figure was calculated based on a population balancing equation which included births, deaths, and net migration figures. DOF allocated the Statewide projections to the County level based on the their 1998 population projection series as corrected for 2000 DOF population estimates and 2000 Census counts.[4] The difference between DOF's projection and EPS's is attributed to the EPS consideration of additional growth factors, such as historical growth rates, market research, and already approved development projects.

[4] State of California, Department of Finance. "Interim County Population Projections: Estimated July 1, 2000 and Projections for 2005, 2010, 2015, and 2020." June 2001. www.dof.ca.gov/HTML/DEMOGRAP/P1.doc

HOUSING UNIT FORECAST

EPS's population projection of 200,000 persons translates into housing units as follows:

Table 14
El Dorado County Land Use Forecast
EPS Housing Unit Demand Projection

2025 Total Population Projection (EPS)	200,000	Persons
DOF 1999 Baseline Population Estimate [1]	121,000	Persons
New Population	79,000	Persons
Average Household Size (2000 Census)	*2.63*	*Persons*
Total New Households – 2025 Rounded	30,000	Households
Vacancy Factor	*5.00*	*Percent*
Total New Housing Units- 2025 (rounded)	**32,000**	**Housing Units**

[1] The DOF 1999 estimate of population was used to calculate new population by 2025 instead of the 2000 Census in order to maintain consistency with data sources counting units in the development pipeline as of October, 1999.

EPS is projecting that El Dorado County will grow by 32,000 new housing units by 2025. In order to arrive at that number, EPS divided the additional population to be added to the County during the next 25 years by the average household size from the available 2000 Census data for El Dorado County to arrive at a projection of new households.[5]

No distinction was made between single-family and multi-family average household size factors, as data is not currently available from the 2000 Census.

Next, EPS used a standard vacancy factor of 5 percent to inflate the household projections and arrive at a projection of housing units. A 5 percent vacancy rate is recognized as the standard economic equilibrium in real estate markets over time. As a result, it is assumed that over the course of the forecast period, El Dorado County will realize an average vacancy rate of 5 percent resulting in more housing units than actual

[5] It is reasonable to use a constant average household size during the duration of the forecast because this factor has remained fairly constant in El Dorado County during the last decade. In 1990 the average household size was 2.67 compared with the current average household size of 2.63.

households. This vacancy rate includes the vacancies attributed to people moving in and out of homes but may not completely account for the vacancy rate for seasonal units.

The No Project Alternative is capacity constrained, as the forecasted buildout figure of 30,000 new units is less than the Countywide demand projection of 32,000 new units by 2025. EPS further reduced the absorption of housing units by 2025 under the No Project Alternative in order to reflect the likely slowdown in development due to increased pricing pressures and limited development opportunities as a result of Writ constraints and the consumption of desirable and easily developable lots. Once all exiting commitments are absorbed, development is likely to occur at a slower, more incremental pace, i.e., one unit at a time for single family development. As a result, a total of 21,000 new units are forecasted for absorption by 2025 under the No Project Alternative.

In both the 2001 Project Alternative and the 1996 General Plan Alternative, there is sufficient capacity to absorb the 32,000 new housing units by 2025, as well as considerable capacity beyond 2025. The absorption / allocation process for all three alternatives is described in greater detail in **Chapter V**.

NON-RESIDENTIAL LAND USE DEMAND

The 2025 job growth projections are based on the following factors:

- Employment growth within El Dorado County as a result of new residential development.
- Evolving employment growth within El Dorado County as a result of regional economic growth.
- Commute patterns along Highway 50.
- The pipeline supply of already approved projects.

Approximately 42,000 new jobs are projected by 2025 under the 2001 Project and the 1996 General Plan Alternatives. Under the No Project Alternative, approximately 34,000 new jobs are projected Countywide. **Table 16** summarizes the 2025 and buildout job growth for each alternative.

The forecast of new jobs in El Dorado County is derived by Market Area from a jobs-to-household ratio. The jobs-to-household ratio is based on 2001 SACOG ratios of jobs to households through 2025 as shown in **Table 15**.

The relationship between households and employment in El Dorado County is such that household growth generally drives overall growth in employment, except in those areas where employment growth is more the result of regional trends and is less the result of household growth within that Market Area. For example, in the El Dorado, where the regional business park draws employees from outside that Market Area, a relatively

high jobs-to-housing factor of 1.69 was used to forecast future employment (2.03 under the No Project). Additionally, in Placerville a jobs-to-housing factor of 2.14 was used because Placerville serves as a regional shopping destination and source of government employment. A higher jobs-to-housing ratio was used under the No Project Alternative in the El Dorado Hills and Shingle Springs/Cameron Park market areas to account for the expectation that as a result of the El Dorado Hills Business Park and the Shingle Springs Casino projects, job growth will continue regardless of fewer households due to Writ constraints.

Under the No Project Alternative, the land use forecast indicates that there will be approximately 8,000 fewer jobs than in the other two alternatives. This trend is the result of Writ constraints that restrict residential growth under the No Project Alternative and thereby decrease the amount of employment growth throughout the County.

Table 15
El Dorado County Land Use Forecasts
SACOG Jobs to Household Factor by Market Area (2000 to 2025) [1]

Market Area	SACOG New Households 2000 to 2025	SACOG New Jobs 2000 to 2025	Jobs to Household Ratio
El Dorado Hills	8,546	14,446	1.69
Shingle Springs/Cameron Park	4,824	5,290	1.10
Diamond Springs	1,915	2,658	1.39
Placerville	2,783	5,966	2.14
Coloma / Gold Hill	548	149	0.27
Pollock Pines	765	366	0.48
Pleasant Valley	633	284	0.45
Latrobe	2,462	523	0.21
Somerset	474	235	0.50
Cool - Pilot Hill	831	632	0.76
Georgetown / Garden Valley	1,149	495	0.43
American River	331	53	0.16
Mosquito	174	82	0.47

[1] Excludes Tahoe Basin.
Source: SACOG

Table 16
El Dorado County Land Use Forecasts
Summary of Non-Residential Forecasts by Market Area [1]

Market #	Market Area	2001 Project New Jobs 2025	2001 Project New Jobs Buildout	No Project New Jobs 2025	No Project New Jobs Buildout	1996 General Plan 2025 as % of Buildout	1996 General Plan New Jobs 2025
# 01	El Dorado Hills	25,323	32,376	25,255	35,740	26,093	35,847
# 02	Cameron Park/Shingle Springs/Rescue	6,714	15,320	3,861	20,097	5,979	20,423
# 03	Diamond Springs	4,021	7,889	1,020	7,069	4,198	7,510
# 04	Placerville	4,002	10,300	3,077	9,403	3,796	9,844
# 05	Coloma / Gold Hill	46	57	108	1,932	151	1,932
# 06	Pollock Pines	320	1,142	186	1,066	363	1,066
# 07	Pleasant Valley	239	576	194	448	263	448
# 08	Latrobe	176	3,041	80	3,572	170	3,572
# 09	Somerset	140	676	177	1,298	167	1,298
# 10	Cool / Pilot Hill	537	2,644	208	2,150	622	2,419
# 11	Georgetown / Garden Valley	163	2,326	135	4,035	221	4,603
# 13	American River	24	145	26	173	26	173
# 14	Mosquito	175	344	87	215	153	215
Total New Jobs (1999 to 2025 or Buildout)		**41,880**	**76,836**	**34,414**	**87,198**	**42,202**	**89,350**
1999 Existing Jobs		**30,434**	**30,434**	**30,434**	**30,434**	**30,434**	**30,434**
Total Jobs (2025 or Buildout)		**72,314**	**107,270**	**64,848**	**117,632**	**72,636**	**119,784**

"jobs_sum2"

[1] Excludes Tahoe Basin.

Source: El Dorado County and EPS

V. LAND USE ALLOCATION & ABSORPTION

Beyond developing a land use demand forecast for El Dorado County that is derived from Countywide population projections, EPS allocated that growth to the Traffic Analysis Zone level. This was done by estimating the likely absorption rates of new housing units and employees in different areas of the County. The following section describes the methodology used to allocate the housing unit forecast to the TAZ level.

RESIDENTIAL ALLOCATION/ABSORPTION

Once a forecast of new housing units for the County in 2025 was determined, these units were allocated to the TAZ level. The housing unit 2025 allocation is based on the likely absorption of new housing units in various parts of the County. The likely absorption was estimated for two categories—existing commitments and remaining capacity—as described below. The sum of existing commitments absorption and remaining capacity absorption represents the residential allocation or 2025 land use forecast for each TAZ.

EXISTING COMMITMENTS ABSORPTION

This section outlines how existing commitments were counted in all three alternatives and discusses how absorption of demand by existing commitments is projected.

Existing commitments are those units that as of January 1999, were issued a permit approved as a tentative parcel map, or a tentative subdivision map, or included under a development agreement for a specific plan. **Table 17** illustrates the existing commitments under all three alternatives, as they are the same regardless of alternative. There are approximately 15,000 units that have received all discretionary approvals and fall into one of the four categories listed above.

Because existing commitments are comprised of projects that have acquired development approvals and reflect a demonstrated interest by the landowner in development, they are assumed to be the most likely parcels to develop in the County. Accordingly, this forecast assumes that all of the existing commitments will be absorbed by 2025 and more than likely by 2015. As a result, existing commitments are projected to absorb approximately 15,000 units of forecasted 2025 demand under all three alternatives.

Table 17
El Dorado County Land Use Forecasts
Existing Commitments Summary
Projected New Dwelling Units for all 3 Alternatives [1]

Existing Commitments (EC) under all 3 Alternatives					
Market Area	**Issued Permit (IP)**	**Tentative Parcel Map (PM)**	**Development Agreement / Specific Plan (SP) [2]**	**Tentative Subdivision Map (TM)**	**Total Existing Commitments (EC)**
# 01 - El Dorado Hills					
Bass Lake Hills	0	0	315	0	315
Carson Creek	0	0	1,700	0	1,700
Promentary	0	0	1,097	0	1,097
Serrano	0	0	3,860	0	3,860
Valley View	0	0	2,837	0	2,837
Other	200	17	0	1,398	1,615
El Dorado Hills Subtotal	**200**	**17**	**9,809**	**1,398**	**11,424**
#02 - Cameron Park / Shingle Springs / Rescue					
Bass Lake Hills	0	0	710	0	710
Serrano	0	0	120	0	120
Other	198	14	0	1,054	1,266
Cameron Park /Shingle Springs / Rescue Subtotal	**198**	**14**	**830**	**1,054**	**2,096**
#03 - Diamond Springs	37	14	0	76	**127**
#04 - Placerville / Camino	28	58	0	419	**505**
#05 - Coloma / Gold Hill	30	4	0	0	**34**
#06 - Pollock Pines	21	3	0	0	**24**
#07 - Pleasant Valley	33	7	0	0	**40**
#08 - Latrobe	19	2	0	133	**154**
#09 - Somerset	30	3	0	1	**34**
#10 - Cool - Pilot Hill	32	19	0	0	**51**
#11 - Georgetown / Garden Valley	39	5	0	0	**44**
#13 - American River	22	0	0	0	**22**
#14 - Mosquito	10	0	0	0	**10**
Total	**699**	**146**	**10,639**	**3,081**	**14,565**

"ec_summary"

[1] Figures current as of 1999.
Excludes Tahoe Basin

[2] All Specific Plan units are shown in the Specific Plan / Development Agreement column regardless of whether they are in the TM, PM, or IP development stages.

Source: El Dorado County & Economic & Planning Systems

REMAINING CAPACITY ABSORPTION

Remaining capacity is the allowable buildout of residential development less the existing commitments.

Under the 2001 Project Alternative and the 1996 General Plan Alternative, El Dorado County is equipped with more remaining capacity than will be absorbed during the next 25 years. The EPS housing unit demand projection for 2025 is 32,000 units. Of these, approximately 15,000 units would be absorbed by existing commitments, leaving an additional 17,000 units in remaining capacity to be absorbed by 2025. Under the 2001 Project Alternative, El Dorado County has approximately 59,000 units of remaining capacity (a total capacity of approximately 74,000 units). Similarly, the 1996 General Plan Alternative has approximately 64,000 units of remaining capacity (a total capacity of approximately 79,000 units). As a result, only a portion of the remaining capacity will be absorbed during the forecast horizon under these two alternatives.

Under the No Project Alternative, there are only 30,000 units of total capacity and once existing commitments have been absorbed, only 15,000 units are left under remaining capacity. While the forecasted demand exceeds the supply under this alternative, the effects of Writ constraints -- increased pricing pressures, limited availability of desirable parcels, limited ability to develop large master-planned communities -- will slow the rate of development once all existing commitments are absorbed. Accordingly, only a portion of the remaining capacity under the No Project Alternative is expected to be absorbed during the forecast horizon, with parcels distant from employment centers and available infrastructure least likely to develop within that timeframe.

Two factors, "travel time/infrastructure factor" and "oversupply/development potential factor," were assigned to TAZs to estimate the likely absorption of the remaining capacity through 2025.

Travel Time/Infrastructure Factor

A travel time/infrastructure factor was assigned based on the TAZ's relative distance to the intersection of Highway 50 and the Western County line. This travel time/infrastructure factor is intended to reflect the relative proximity of each TAZ to jobs, recognizing that a large portion of the population in the County commutes west to Sacramento.

In addition, the travel time/infrastructure factors are also intended to reflect the lower rate at which housing demand is absorbed in more remote or outlying areas due to the lack of adequate backbone infrastructure.

To account for this factor, the County was divided into four areas based on the actual travel time to the County line from the center of each TAZ.[6] The four Areas are shown in **Figure 5**. The Area factors are shown in **Table 18.**

The travel time / infrastructure factors were derived by estimating the percentage of buildout that will be absorbed by 2025 as a result of the traffic zone's relative distance from Highway 50 and the County line. For example, under the 2001 Project Alternative, approximately 70 percent of housing units that fall within Area I traffic zones will be absorbed by 2025, whereas only about 20 percent of the remaining capacity in the American River area, the most eastern Market Area, will be absorbed. **Table 18** details these absorption factors.

Table 18
El Dorado County Land Use Forecasts
Remaining Capacity: "Travel Time / Infrastructure" Absorption Factors [1]

	Percent of Remaining Capacity Absorbed by 2025		
Area	2001 Project	No Project	1996 General Plan
1	70 %	95 %	70 %
2	60 %	95 %	60 %
3	30 %	40 %	30 %
4	20 %	30 %	20 %

[1] Factors are rounded to the nearest ten percent for the 2001 Project and 1996 General Plan.

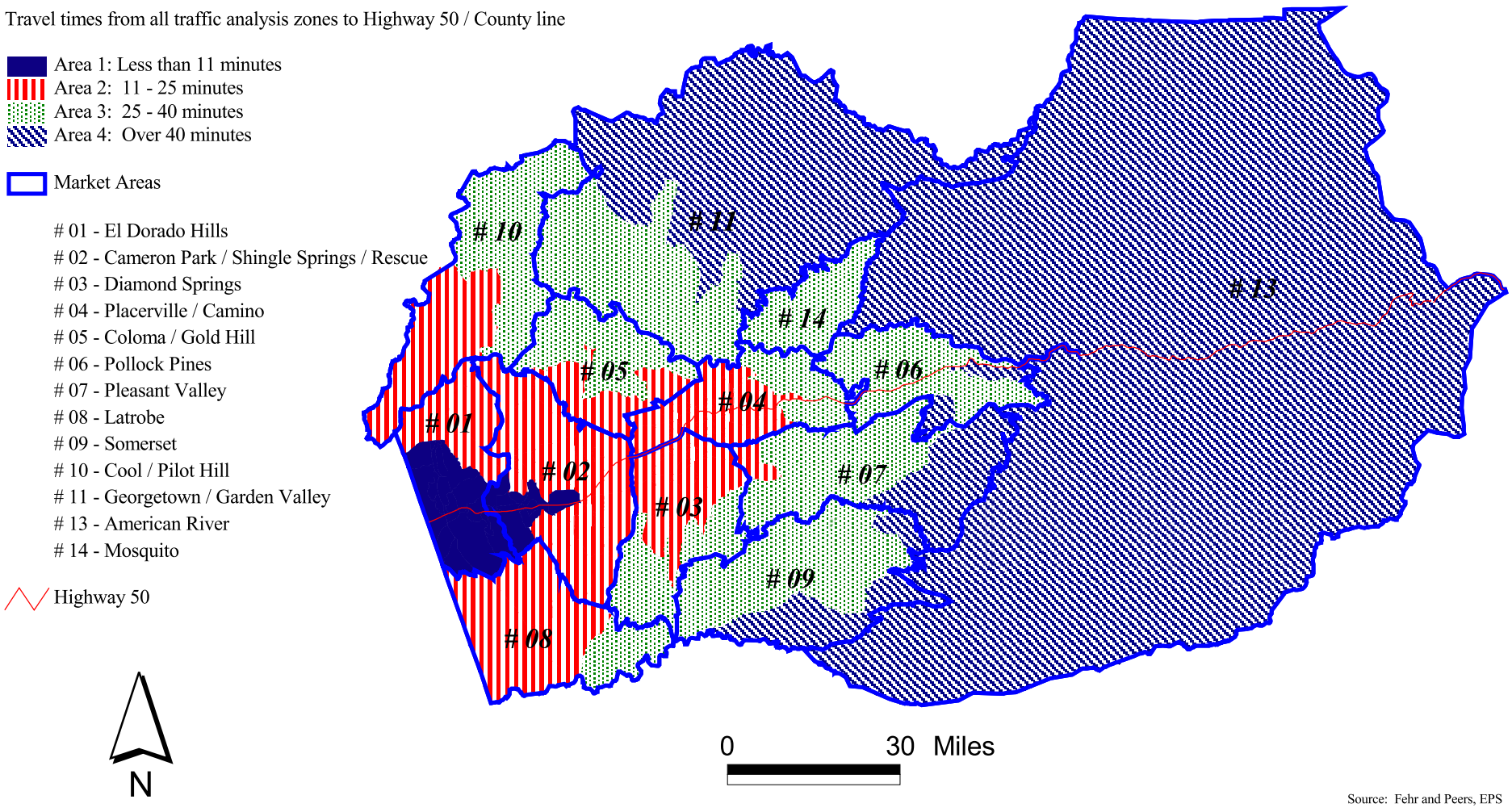
Travel Time / Infrastructure Absorption – No Project

The travel time / infrastructure absorption factors under the No Project differ from those used in the 2001 Project and the 1996 General Plan Alternatives because of Writ constraints. Under the Writ, density levels are significantly reduced. For purposes of this report, it is assumed only one unit per parcel is allowable on single family land uses and up to four units per parcel are allowable on multi-family land uses. Because of these constraints, the buildout forecast for the No Project is estimated to be approximately 30,000 new units, which is lower than the Countywide demand projection of 32,000 new units.

Instead of assuming full buildout by 2025 under the No Project, even though there is demand for all 30,000 units forecasted for buildout, EPS assumed that development

[6] The time to travel from each TAZ to the County line at Highway 50 was calculated by Fehr and Peers.

Figure 5
El Dorado County Land Use Forecasts
Spatial Zones by Traffic Analysis Zones and Market Areas



Source: Fehr and Peers, EPS
Prepared by EPS

would slow once all the existing commitments are absorbed. Given the limitations on subdivision and development imposed by the Writ, large-scale development projects would not be allowable. Development of remaining capacity is likely to occur incrementally and at a much slower pace than under the 2001 Project and the 1996 General Plan Alternatives. The limited supply of housing units will also push housing prices upward and restrict the availability of developable parcels in desirable locations. As a result a portion of the consumer demand for the 32,000 housing units will shift to other areas in the Sacramento region where housing prices are less expensive.

To reflect this slower absorption rate as well as the likely pattern of absorption, EPS applied the travel time / infrastructure factors as shown in **Table 18.**

Consistent with current housing demand patterns, EPS assumed a high degree of absorption in the western portion of the County covered in Areas 1 and 2. In Areas 3 and 4, 40 and 30 percent absorption factors were applied, respectively. While these absorption factors appear higher than in the other two alternatives, the factors are applied to the much lower remaining capacity under the No Project (15,000 units) as compared to the remaining capacity under the 2001 Project and 1996 General Plan, where absorption factors are applied to 59,000 units and 64,000 units respectively (total capacity of 74,000 under the 2001 Project and total capacity of 79,000 under the 1996 General Plan less existing commitments of 15,000 units). Therefore, actual 2025 housing unit absorption under the No Project is less than under the other two alternatives even though the absorption factors are greater.

Oversupply / Development Potential Adjustment Factors

A second factor, titled "oversupply / development potential" was assigned to certain Market Areas on a case-by-case basis. This discount reflects constraint factors or other concerns that would be expected to reduce demand for development in those Market Areas during the planning period. These factors were derived by estimating how many actual housing units would be absorbed by 2025 based on market research and historical evidence.

Five Market Areas were discounted for the oversupply/development potential adjustment factor under all three alternatives. They are as follows:

- Cameron Park / Shingle Springs/Rescue
- Diamond Springs
- Cool / Pilot Hill
- Georgetown / Garden Valley
- American River

In each of these cases solely discounting by the spatial factor did not result in a development scenario consistent with historical trends and market research conducted as a part of the analysis. Essentially, it has been the experience in the County, as well as in other locales around the State and nation, that a high degree of large lot rural

residential parcelization limits the approach to that maximum density. Parcelization refers to land ownership patterns with multiple owners versus patterns where large tracts of land are owned by one entity. In the case of El Dorado County, there is more land designated for low and medium density residential than there will be a demand for these uses during the time the plan is intended to be in effect. Additionally, this land is in the hands of multiple owners making master planned development difficult for developers.

This reasoning becomes more clear when comparing El Dorado Hills (Market Area 1) with Cameron Park/Shingle Springs/Rescue (Market Area 2) and Diamond Springs (Market Area 3). Under the 2001 Project Alternative, El Dorado Hills has a total future development capacity of approximately 19,000 units of which approximately 11,000 units fall in the existing commitment category. These existing commitments are largely accounted for in large tracts of land that are designated master planned communities.

Cameron Park/Shingle Springs/Rescue has a total additional capacity of approximately 18,000 units at buildout of which only 2,000 are accounted for in the existing commitment category. Similarly, Diamond Springs has a total capacity of approximately 11,000 additional units at buildout of which 130 units fall within the existing commitment category. The remaining units for Market Areas 2 and 3 are not included in large tracts of land, but rather are represented by a large number of parcels. As such, it is unlikely that these Market Areas will achieve the same level of development as is projected in Market Area 1. Development is expected to continue to occur on a parcel-by-parcel basis rather than through a master planned community process. Similar reasoning applies to Market Areas 10 and 11, Cool / Pilot Hill and Georgetown/Garden Valley.

The four Market Areas described above (# 2, # 3, # 10, and # 11) have similar characteristics in that much of their land area is designated low and medium density residential and there are a large number of existing undeveloped parcels. A 50 percent absorption factor was applied to these four Market Areas in order to account for the lack of demand for low to medium density parcels that do not lend themselves to large scale master planned development because of the multiple owners involved.

Market Area 13, American River, also has less of a likelihood of developing at the rate dictated by the travel time / infrastructure adjustment factor. Because of its large size and remoteness, as well as the fact that much of the land is private timberland, demand for housing is even further diminished. As a result, a 50 percent discount factor was applied in order to reduce the level of demand absorbed by 2025. **Table 19** shows the actual numbers associated with the discount.

Table 19
El Dorado County Land Use Forecast
Remaining Capacity: "Oversupply / Development Potential Adjustment Factor"
Discount Amounts
2001 Project [1]

Market Area	1999 Existing Development	Total New Capacity	2025 Demand Prior to Oversupply / Development Potential Factor	2025 Demand After to Oversupply / Development Potential Factor
# 02 Cameron Park / Shingle Springs / Rescue	10,606	17,634	8,783	4,382
# 03 Diamond Springs	4,874	10,870	5,896	2,941
# 10 Cool / Pilot Hill	1,604	4,691	1,412	703
# 11 Georgetown / Garden Valley	2,932	3,994	802	396
# 13 American River	561	2,629	363	180

[1] Numbers may not add up due to rounding.

Oversupply / Development Potential Absorption – No Project

The same adjustment factors for oversupply / development potential considerations were used under the No Project alternative as compared to the other two alternatives. It is likely that the oversupply / development potential factors will impact development regardless of Writ constraints. Even though there is potentially enough demand Countywide to fully utilize available supply under the No Project, it is not likely that full buildout out will be achieved under the No Project by 2025. Instead, in addition to constraints on demand attributed to travel time and infrastructure, it is likely that the oversupply / development potential considerations will also slow growth in these five Market Areas. As such, under the No Project Alternative, the five Market Areas were adjusted in a manner consistent with the other two alternatives.

SINGLE FAMILY / MULTI-FAMILY ALLOCATION

In addition to allocating the demand for additional housing units to the TAZ level, allocations were made between single family and multi-family units. This allocation was based on the buildout scenario, in which land use overlays for each of the three alternatives were used to determine where single family and multi-family units were allowed. For existing commitments governed by development agreements allowing a portion of the total number of approved units to be either single family or multi-family, the forecast conservatively assumed that all such units would be single family.

Table 20 below shows the allocation of forecasted housing units for 2025 by single-family and multi-family designations. Under the 2001 Project and 1996 General Plan Alternatives, the housing unit type is split approximately 84 percent single-family and 16 percent multi-family. However, under the No Project Alternative, where Writ constraints apply, land use forecasts indicate that 5 percent of the future new housing stock will be multi-family. This is the result of the Writ constraints that generally allow no more than four units per parcel for multi-family development.

Table 20
El Dorado County Land Use Forecast
Single Family / Multi-Family Distribution of Forecasted Housing Units by 2025

	Single Family [1]	Multi- Family [2]	Total [2]
2001 Project	27,000	5,000	32,000
Percent of Total	*84%*	*16%*	*100%*
No Project	19,900	1,500	21,000
Percent of Total	*95%*	*5%*	*100%*
1996 General Plan	27,000	5,000	32,000
Percent of Total	*84%*	*16%*	*100%*

NOTES
[1] Includes units on underutilized parcels.
[2] Includes second units.
[3] Numbers may not add to totals due to rounding.

NON-RESIDENTIAL LAND USE ALLOCATION/ABSORPTION

The 2025 demand for jobs was in large part determined based on the 2025 demand for households. Jobs were estimated by Market Area by multiplying the number of households forecasted by the SACOG jobs-to-housing ratio for each Market Area as described in the previous chapter.

Once total jobs were estimated for each Market Area, they were then allocated to each TAZ based on the distribution of capacity for TAZ within each Market Area.

Several adjustments were made to the TAZ absorption/allocation such that the jobs forecasted more directly correspond to the current pipeline of non-residential development as shown in **Table 22**. For example, the Town Center West project is projected to buildout by 2025. As such, adjustments were made to the TAZ allocation to reflect this assumption. The jobs-to-housing ratio is higher for the No Project Alternative than the other two Alternatives for Market Area #1. This is due to the

expectation that the employee growth in this area will continue, even with the limits on residential growth imposed by the Writ, as a result of the El Dorado Hills Business Park project, with more employees originating from outside of the County than under the other alternatives. In other words the assumption that residential development will occur at a slower absorption rate under the No Project Alternative is not expected to impact the development of the El Dorado Hills Business Park.

The jobs-to-housing ratio for Market Area #2 is also higher under the No Project Alternative than the other alternatives due to the jobs expected to be created as a result of the Shingle Springs casino project. It was assumed that the Shingle Springs Casino would buildout by 2025 (as shown on **Table 22**) for all three Alternatives. **Table 21** shows the final jobs-to-housing ratios as used by EPS.

Similarly, the jobs-to-household ratios are higher for Market Areas #3 and #4 under the No Project Alternative due to the planned Missouri Flat development project. Because the Missouri Flat project is expected to draw retail customers from many of the surrounding Market Areas, the projected employment was assumed to grow regardless of limits on residential development.

The jobs within each TAZ were then further allocated to retail, service, and other using the following distribution:

- Retail – 25%
- Service – 45%
- Other – 30%

The above distribution factors are based a re-classification of SACOG employment estimates by sector. The retail, service, other, job allocations were then compared to the already approved projects in the County pipeline as shown in **Table 22.** In the El Dorado Hills Market Area and the core area of Placerville, the standard distributions did not correspond well with the estimated distribution of retail, service, and other jobs in the pipeline list. Therefore, the following adjustments were made:

	Retail	Service	Other
El Dorado Hills	20%	50%	30%
Placerville	60%	10%	30%

Additionally, for the Missouri Flat development area TAZs (Market Areas #3 and #4), the distribution of new employee growth was weighted more heavily to the retail sector for the 2025 projections. The factors listed above are based the SACOG factors but adjusted to reflect estimates of future employment based on pipeline development projects.

Table 21
El Dorado County Land Use Forecasts
Summary of Conversion of New Households into Jobs (2025) [1]

Market #	Market Area	2001 Project New Households	2001 Project Jobs/HH Factor [2]	2001 Project New Jobs [3]	No Project New Households	No Project Jobs/HH Factor	No Project New Jobs [3]	1996 General Plan New Households	1996 General Plan Jobs/HH Factor	1996 General Plan New Jobs [2]
# 01	El Dorado Hills	14,989	1.69	25,323	12,449	2.03	25,255	15,450	1.69	26,093
# 02	Shingle Springs	6,154	1.10	6,714	2,977	1.30	3,861	5,487	1.10	5,979
# 03	Diamond Springs	2,915	1.39	4,021	475	2.15	1,020	3,046	1.39	4,198
# 04	Placerville	1,893	2.14	4,002	1,316	2.34	3,077	1,794	2.14	3,796
# 05	Colma / Gold Hill	499	0.10	46	432	0.27	108	582	0.27	151
# 06	Pollock Pines	703	0.48	320	418	0.48	186	783	0.48	363
# 07	Pleasant Valley	551	0.45	239	456	0.45	194	607	0.45	263
# 08	Latrobe	846	0.21	176	404	0.21	80	828	0.21	170
# 09	Somerset	299	0.50	140	379	0.50	177	361	0.50	167
# 10	Cool - Pilot Hill	716	0.76	537	282	0.76	208	832	0.76	622
# 11	Georgetown / Garden Valley	418	0.43	163	348	0.43	135	549	0.43	221
# 13	American River	192	0.16	24	227	0.16	26	218	0.16	26
# 14	Mosquito	374	0.47	175	200	0.45	87	330	0.47	153
	TOTAL	**30,550**		**41,880**	**20,362**		**34,414**	**30,866**		**42,202**

"job_convert"

[1] Excludes Tahoe Basin.
[2] The jobs to household factor used for Market Area 5 in the 2001 Project alternative differs from the SACOG factor because the estimated total capacity for new jobs for that scenario is less than 60 new jobs. Using the SACOG factor produced more jobs in 2025 than there is projected capacity.
[3] The total new jobs may not exactly equal the households multiplied by the Jobs/HH factor at the market area due to rounding at the TAZ level .

Source: El Dorado County and EPS

Table 22
El Dorado County Land Use Forecasts
Project Inventory Summary

Market Area Number	# 01				# 02				# 03			
Market Area Name	El Dorado Hills				Shingle Springs				Diamond Springs			
Sector	Retail	Service	Other	**Total**	Retail	Service	Other	Total	Retail	Service	Other	Total
Project Inventory (1)												
Town Center												
East	1,178	615		**1,793**				**0**				**0**
West		3,775	250	**4,025**				**0**				**0**
El Dorado Hills Business Park (2)		8,325	4,483	**12,808**				**0**				**0**
Valley View	140			**140**				**0**				**0**
Carson Creek	53	53	1,212	**1,317**				**0**				**0**
Promontory	92	91		**183**				**0**				**0**
New Western Sierra Branch		18		**18**				**0**				**0**
New Western Sierra Bank HQ				**0**		52		**52**				**0**
Shingle Springs Casino				**0**		1,200		**1,200**				**0**
Lutheran Church Social Hall				**0**				**0**				**0**
Faith Episcopal Church				**0**		6		**6**				**0**
Grand Victory Mine Center				**0**				**0**		54		**54**
Missouri Flat				**0**				**0**	523			**523**
Marble Valley Arts Center				**0**				**0**				**0**
County Justice Center				**0**				**0**				**0**
Sheriff's Admin HQ				**0**				**0**				**0**
Placerville Junction				**0**				**0**				**0**
Carter Office Building				**0**				**0**				**0**
Thompson's Auto & Truck Center				**0**				**0**				**0**
EID HQ Expansion				**0**				**0**				**0**
Henningsen Site				**0**				**0**				**0**
Inventory Total	**1,463**	**12,877**	**5,945**	**20,284**	**0**	**1,258**	**0**	**1,258**	**523**	**54**	**0**	**577**
EPS Allocated Jobs -- 2001 Project	**4,425**	**12,648**	**8,250**	**25,323**	**2,058**	**3,101**	**1,555**	**6,714**	**1,537**	**1,432**	**1,052**	**4,021**

Notes:
1. Employment estimates based on sqft of building space, projected absorption by 2025, and employment densities from project descriptions and planning standards.
2. El Dorado Hills Business Park buildout capacity may be as much as 10 million sq. ft. of space; 5.5 million additional sqft have been proposed for development by 2015

Table 22
El Dorado County Land Use Forecasts
Project Inventory Summary

Market Area Number Market Area Name	# 04 Placerville				# 05 Colma / Gold Hill				# 06 Pollock Pines			
Sector	Retail	Service	Other	Total	Retail	Service	Other	Total	Retail	Service	Other	Total
Project Inventory (1)												
Town Center												
East				**0**				**0**				**0**
West				**0**				**0**				**0**
El Dorado Hills Business Park (2)				**0**				**0**				**0**
Valley View				**0**				**0**				**0**
Carson Creek				**0**				**0**				**0**
Promontory				**0**				**0**				**0**
New Western Sierra Branch				**0**				**0**				**0**
New Western Sierra Bank HQ				**0**				**0**				**0**
Shingle Springs Casino				**0**				**0**				**0**
Lutheran Church Social Hall		2		**2**				**0**				**0**
Faith Episcopal Church				**0**				**0**				**0**
Grand Victory Mine Center				**0**				**0**				**0**
Missouri Flat	1,050			**1,050**				**0**				**0**
Marble Valley Arts Center		15		**15**				**0**				**0**
County Justice Center			180	**180**				**0**				**0**
Sheriff's Admin HQ			46	**46**				**0**				**0**
Placerville Junction			2	**2**				**0**				**0**
Carter Office Building			36	**36**				**0**				**0**
Thompson's Auto & Truck Center	50			**50**				**0**				**0**
EID HQ Expansion			84	**84**				**0**				**0**
Henningsen Site	50			**50**				**0**				**0**
Inventory Total	**1,150**	**17**	**348**	**1,515**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**
EPS Allocated Jobs -- 2001 Project	**2,280**	**615**	**1,107**	**4,002**	**11**	**21**	**14**	**46**	**79**	**145**	**96**	**320**

Table 22
El Dorado County Land Use Forecasts
Project Inventory Summary

Market Area Number Market Area Name	# 07 Pleasant Valley				# 08 Latrobe				# 09 Somerset			
Sector	Retail	Service	Other	Total	Retail	Service	Other	Total	Retail	Service	Other	Total
Project Inventory (1)												
Town Center												
East				**0**				**0**				**0**
West				**0**				**0**				**0**
El Dorado Hills Business Park (2)				**0**				**0**				**0**
Valley View				**0**				**0**				**0**
Carson Creek				**0**				**0**				**0**
Promontory				**0**				**0**				**0**
New Western Sierra Branch				**0**				**0**				**0**
New Western Sierra Bank HQ				**0**				**0**				**0**
Shingle Springs Casino				**0**				**0**				**0**
Lutheran Church Social Hall				**0**				**0**				**0**
Faith Episcopal Church				**0**				**0**				**0**
Grand Victory Mine Center				**0**				**0**				**0**
Missouri Flat				**0**				**0**				**0**
Marble Valley Arts Center				**0**				**0**				**0**
County Justice Center				**0**				**0**				**0**
Sheriff's Admin HQ				**0**				**0**				**0**
Placerville Junction				**0**				**0**				**0**
Carter Office Building				**0**				**0**				**0**
Thompson's Auto & Truck Center				**0**				**0**				**0**
EID HQ Expansion				**0**				**0**				**0**
Henningsen Site				**0**				**0**				**0**
Inventory Total	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**
EPS Allocated Jobs -- 2001 Project	**59**	**109**	**71**	**239**	**44**	**80**	**52**	**176**	**35**	**63**	**42**	**140**

Table 22
El Dorado County Land Use Forecasts
Project Inventory Summary

Market Area Number Market Area Name	# 10 Cool - Pilot Hill				# 11 Georgetown / Garden Valley			
Sector	Retail	Service	Other	Total	Retail	Service	Other	Total
Project Inventory (1)								
Town Center								
East				**0**				**0**
West				**0**				**0**
El Dorado Hills Business Park (2)				**0**				**0**
Valley View				**0**				**0**
Carson Creek				**0**				**0**
Promontory				**0**				**0**
New Western Sierra Branch				**0**				**0**
New Western Sierra Bank HQ				**0**				**0**
Shingle Springs Casino				**0**				**0**
Lutheran Church Social Hall				**0**				**0**
Faith Episcopal Church				**0**				**0**
Grand Victory Mine Center				**0**				**0**
Missouri Flat				**0**				**0**
Marble Valley Arts Center				**0**				**0**
County Justice Center				**0**				**0**
Sheriff's Admin HQ				**0**				**0**
Placerville Junction				**0**				**0**
Carter Office Building				**0**				**0**
Thompson's Auto & Truck Center				**0**				**0**
EID HQ Expansion				**0**				**0**
Henningsen Site				**0**				**0**
Inventory Total	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**
EPS Allocated Jobs -- 2001 Project	**134**	**243**	**160**	**537**	**39**	**75**	**49**	**163**

Table 22
El Dorado County Land Use Forecasts
Project Inventory Summary

Market Area Number Market Area Name	# 13 American River				# 14 Mosquito				Total
Sector	Retail	Service	Other	Total	Retail	Service	Other	Total	Employment
Project Inventory (1)									
Town Center									
East				**0**				**0**	**1,793**
West				**0**				**0**	**4,025**
El Dorado Hills Business Park (2)				**0**				**0**	**12,808**
Valley View				**0**				**0**	**140**
Carson Creek				**0**				**0**	**1,317**
Promontory				**0**				**0**	**183**
New Western Sierra Branch				**0**				**0**	**18**
New Western Sierra Bank HQ				**0**				**0**	**52**
Shingle Springs Casino				**0**				**0**	**1,200**
Lutheran Church Social Hall				**0**				**0**	**2**
Faith Episcopal Church				**0**				**0**	**6**
Grand Victory Mine Center				**0**				**0**	**54**
Missouri Flat				**0**				**0**	**1,573**
Marble Valley Arts Center				**0**				**0**	**15**
County Justice Center				**0**				**0**	**180**
Sheriff's Admin HQ				**0**				**0**	**46**
Placerville Junction				**0**				**0**	**2**
Carter Office Building				**0**				**0**	**36**
Thompson's Auto & Truck Center				**0**				**0**	**50**
EID HQ Expansion				**0**				**0**	**84**
Henningsen Site				**0**				**0**	**50**
Inventory Total	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**23,634**
EPS Allocated Jobs -- 2001 Project	**6**	**12**	**6**	**24**	**44**	**79**	**52**	**175**	**41,880**

Economic & Planning Systems

Public Finance
Real Estate Economics
Regional Economics
Land Use Policy

APPENDICES:

- APPENDIX A: 2001 PROJECT ALTERNATIVES
- APPENDIX B: NO PROJECT ALTERNATIVES
- APPENDIX C: 1996 GENERAL PLAN ALTERNATIVES
- APPENDIX D: GLOSSARY OF TERMS