A STATISTICAL TOUR OF CALIFORNIA’S GREAT CENTRAL VALLEY

By

Kenneth W. Umbach, Ph.D.

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This report looks at the eighteen counties of California’s Great Central Valley. The presentation combines description and discussion with graphs and charts encompassing a selection of statistics on land, population, and social and economic indicators.

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What is the Central Valley?

California's great Central Valley stretches from Shasta County to Kern County--some 450 miles long and typically 40 to 60 miles wide. It encompasses 18 counties with a total of over five million people and over 42,000 square miles--one-sixth of the population and more than two-fifths of the land area of the state.

Not all of the Central Valley is encompassed in these counties. The list omits Solano County (which is south of Yolo and west of Sacramento), although much of Solano’s land...
area falls within the valley geographically. Because Solano touches on the San Francisco Bay, the county is included in the Bay Area, not the Central Valley, for planning and statistical purposes.

Portions of some of the 18 counties fall outside the valley. Some counties reach into the Sierra foothills and beyond, and much of Shasta County is north of the valley. Placer County reaches well into the Sierra, although the county’s population is predominantly in the valley and facing issues of growth, development, and conservation typical of Central Valley communities. All in all, these 18 counties are clearly separate from the urban centers of San Francisco, Los Angeles, Riverside-San Bernardino, and San Diego and from the coastal, mountain, and desert regions of the state.

To many urban Californians, the Central Valley is "flyover country," the area one flies over or drives through to reach places of greater interest, or simply a source of agricultural goods as diverse as cotton, tomatoes, and rice--nearly $14 billion worth of production value in 1995--to the extent they think about it at all. To increasing numbers, however, at least parts of the Valley are home, as San Francisco Bay Area workers discover the less costly real estate of Modesto, Ripon, Stockton, and Vacaville.

The Central Valley is indeed centered on agriculture. Eight of California's 15 top producing agricultural counties are in the Central Valley, and of the top seven, only one (Monterey) is not encompassed in the area from San Joaquin to Kern. This area is not only the most productive in California, it is widely considered the most productive in the world. This productivity has not come easily, as it has required the combined efforts of laborers, land-owners, agricultural researchers, hydraulic engineers, and many others over generations. It also reflects a range of growing conditions (soils and local climates) conducive to specific crops.

Much of the economic activity of the Central Valley that is not directly agricultural is at least associated with agriculture: packing, shipping, processing, and the myriad specialties needed to support agricultural enterprises, from irrigation systems to pesticide research. Some observers attribute as much as 30 percent of the Central Valley’s total economy to agriculture, considering indirect “multiplier” effects. Rapid and accelerating population growth in the Valley, however, does not simply reflect burgeoning agriculture, nor can long-term prosperity rest exclusively on the products of the land.

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The Central Valley is a large and diverse area

Although the term “the Central Valley” refers to an area stretching from Shasta to Kern, that area does not constitute a single community in any sense of the term. The length of the valley, about 450 miles, is about the distance from Chicago, Illinois, to Pittsburgh, Pennsylvania, localities with distinct local identities, media outlets, and labor pools. It would take about 8 hours to drive from Redding, at the north end of the valley, to Bakersfield, at the south end, which suggests that direct interaction across the length of
the valley is essentially nonexistent. Even Fresno, in the heart of the valley, is a three to four hour drive from Sacramento and two hours or more from Bakersfield.

No print or broadcast media serve the entire valley, or even a preponderance of it. Separate media markets exist for many communities within the Central Valley, including Bakersfield, Fresno, Merced, Modesto, Stockton, Sacramento, Chico, Red Bluff, and Redding. Stockton and Sacramento do share a television market, but have different local newspapers and radio stations. Other cities and towns throughout the valley also have local newspapers and radio stations.

Although agriculture is widespread throughout the valley, crops vary, and there is not even a unified “agricultural community” encompassing the entire area. Instead, there are many agricultural interests with different concerns and whose common concerns (water and environmental issues, for example) are not unique to the valley.

Geographically, the Central Valley may be subdivided into northern and southern portions. The northern part, the Sacramento Valley, encompasses 10 counties, and the southern, or San Joaquin Valley, encompasses eight. Even these two sub-regions are large and internally diverse.

The entire area, as a valley, constitutes a single vast air basin, although specific issues do vary with local terrain, climate, agriculture, population, and industry. For planning purposes, the Central Valley is divided into the Sacramento Valley Air Basin and the San Joaquin Valley Air Basin. Those basins generally correspond to the groups of counties used in this paper.

In terms of watersheds, the Central Valley is encompassed by the Sacramento River watershed, the San Joaquin River watershed, and the Tulare Lake watershed. The Sacramento River watershed stretches from roughly the northeast corner of California to Sacramento County. The San Joaquin Valley watershed encompasses the area from Sacramento County (including the southeast corner of the county itself) to Madera County (and portions of Fresno County). The Tulare Lake watershed includes most of Fresno County, all of Kings and Tulare counties, and all but the eastern fifth or so of Kern County.

Figures 1 and 2, below, show populations for the Central Valley counties for 1940 and 1995. Notice the wide and continuing variations among county populations.
Any consideration of population growth rates from 1940 to now should bear in mind the large initial differences among the counties. A high growth rate in a sparsely populated county does not add many people, while a high growth rate in a large county does. All of the Central Valley counties have of course long been eclipsed in population by the urban centers of the state, especially Los Angeles and San Francisco. After decades of brisk growth, Sacramento County still has less than half the population now that Los Angeles County had in 1940. The section entitled “Population Growth,” takes a closer look at growth rates.
We now turn to individual county profiles, generally in order from north to south. Population figures and other data cited in the county profiles below are Department of Finance estimates for January 1, 1996, as published in California County Profiles, February 1997. (County totals do not necessarily correspond exactly to city plus unincorporated figures because of rounding.)

Notice the transition in farm products as we move south in our overview of the counties. Lumber is especially important in the north, moving then into rice country, then to a predominance of fruit and nut crops and tomatoes, and grapes, and in the south of the valley, finally, cotton becomes a major crop, but alongside large crops of grapes, citrus, and other products (but very little lumber). Varied microclimates and differing soil and water conditions, however, offer opportunities for multiple important crops in most counties.

**Shasta**

Shasta County reaches into forested areas to the north of the valley. Its county seat, Redding, adjacent to the Sacramento River, could be considered the northern terminus of the Central Valley. The city of Redding, population 76,700, encompasses nearly half of the county’s 161,600 population. The next largest city is Shasta Lake, 9,200 population, followed by Anderson, 8,650. The county’s leading industry is lumber and wood products. About 42 percent of the land area in Shasta County is government-owned.¹ This is the highest percentage among all of the Central Valley counties except for Tulare (52 percent), but only slightly over Madera and Fresno, all of which extend well to the east of the valley proper.

**Tehama**

Immediately south of Shasta County, Tehama County is lightly populated. The county has three incorporated cities, Red Bluff (population 13,500), Corning (6,150), and Tehama (430). The remaining 34,800 of the county’s 54,400 population are in unincorporated areas. The county’s leading industries are agriculture and wood and wood products. Western and eastern portions of the counties are in national forest land. As of 1992, more than half (53.8 percent) of the county’s land area was in farms producing walnuts, prunes, almonds, cattle and calves, pasturage, olives,

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¹ Land ownership figures reflect BLM data for 1987, as reproduced in the *California Almanac*, 3rd Edition.
Tehama is bordered on the south by the counties of Glenn and Butte.

**Glenn**

Glenn County is among the least populous in California. Its 26,600 people are divided among the cities of Willows (6,350) and Orland (5,625) and unincorporated areas (14,600). The county’s leading industry is farming (“food and kindred products”), especially rice, dairy products, prunes, alfalfa hay, and cattle and calves. Rice is by far the dominant product. The western portion of the county is in the Mendocino National Forest. More than half of the county’s land area (56.3 percent) was in farms as of 1992.

**Butte**

In terms of population, Butte County is the largest in the Central Valley north of the Sacramento metropolitan area (although Shasta is only about 30,000 behind). The county’s population of 197,000 encompasses several cities. Chico, at 47,200 is the largest, followed by Paradise (25,900), Oroville (12,400), Gridley (4,780), and Biggs (1,640). The majority of the county’s population (105,000), however, is in unincorporated areas. The county hosts a campus of California State University at Chico. Leading industries include food and kindred products, lumber and wood products, and printing and publishing. More than two-fifths (43.1%) of the county’s land area was in farms as of 1992, with rice and almonds being the leading products, followed by walnuts, prunes, and several other products.

**Colusa**

One of California’s least populous counties, Colusa is south of Glenn and west of Sutter. The county’s population of 17,950 is distributed among the cities of Colusa (5,275), Williams (3,020) and unincorporated areas (9,650). Some 61.1 percent of the county’s land area is in farms (1992 data), producing rice, tomatoes, and almonds, followed by wheat, rice seed, and several other products. The western portion of the county is in the Mendocino National Forest. Colusa’s population growth rate has been modest since 1940 by comparison with most of the Central Valley, but was more typical during the period 1980-95.

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2 Additional land in counties with forests and rangelands is used at least in part for grazing, an agricultural use, but not included in “farms.”
**Sutter**

North of Sacramento County, Sutter County has a population of 74,100, divided among Yuba City (33,900), Live Oak (5,275), and unincorporated areas (34,900). The county is predominantly agricultural, with more than four-fifths (82.5 percent) of its land area in farms (1992 data), and food and kindred products as its leading industry. Prominent crops include rice and rice seed, prunes, tomatoes, walnuts, peaches, melons, and nursery products. Yuba City is adjacent to neighboring Yuba County’s Marysville, and separated from the latter by the Feather River.

**Yuba**

North of Placer County and east of Sutter County, Yuba County has a population of 62,200. The county has two cities, Marysville (population 12,550, constrained by the Feather and Yuba rivers) and Wheatland (1,960), with the large majority of the population (47,700) in unincorporated areas, including Olivehurst and Linda. Yuba County is predominantly agricultural, with nearly three-fifths (58.2 percent) of its land area in farms (1992 data). Leading industries include lumber and wood products as well as food and kindred products. Crops include rice, prunes, walnuts, peaches, cattle and calves, milk, and kiwifruit.

**Placer**

Geographically, most of Placer County is in the Sierra Nevada mountain range, not in the valley. Most of Placer’s population of 206,000, however, is centered in and near Roseville (59,700), north of Sacramento County and of course within the Central Valley. Other cities in the county include Rocklin (26,900), Auburn (11,450), Lincoln (7,950), Loomis (6,025), and Colfax (1,450). The county’s population is growing rapidly and its economic base is developing, with emphasis on electronics and other electrical equipment, now the county’s leading industry, followed by lumber and wood products. Although about 15 percent of the county’s land area is in farms (1992 data), agriculture is of relatively minor importance to the county’s economy now.

**Yolo**

Geographically, Yolo County falls into the Sacramento Valley, as the county is to the north and west of Sacramento County. However, the county also has an association with the San Joaquin Valley by way of the University of California at Davis, in Yolo County, closely involved with San Joaquin Valley agriculture. Yolo county is somewhat unique in any event, however, as home to the only UC campus in the Central Valley.
(Another Central Valley UC campus is being planned for Merced County.) Yolo County’s residents tend to be more affluent and better educated than most of the Central Valley counties because of the presence of the University of California campus there.

Unlike many Central Valley counties, Yolo County has the large majority (about 86 percent) of its population of 152,100 in incorporated cities. These are Davis (52,600), Woodland (43,250), West Sacramento (30,250), and Winters (5,175). The remaining 20,900 county residents are in unincorporated areas. Yolo’s land area is predominantly (80.1 percent) in farms (1992 data), and its leading industry is food and kindred products. The leading agricultural product in the county (by far) is tomatoes, although the county also produces a variety of other crops, including grapes, rice, almonds, and alfalfa hay. State and local government account for about 23 percent of the employed population.

Sacramento

Sacramento County is unusual in that it is the State Capital, and therefore home to the Legislature, Governor’s Office, and a host of departments and agencies. Nearly one-quarter of the county’s employed residents are employed by state and local government (1994 data). The county is also distinctive among Central Valley counties by virtue of its population, which at 1,123,400 makes it the largest in the valley, and its density of population, which at more than 1,200 per square mile far exceeds any other in the valley. The density figure at first seems improbable for a Central Valley county, but is the arithmetic result of 1.2 million people in a land area of 966 square miles.

Leading industries in the county include food and kindred products, printing and publishing, electronic and other electric equipment, and fabricated metal products. Despite the county’s density of population, a striking 61.3 percent of its land area is in farms (1992 data), producing milk, wine grapes, bartlett pears, field corn, tomatoes, turkeys, and other products.

The county’s population as of January 1, 1996, was encompassed in the cities of Sacramento (384,800), Folsom (41,450), Galt (15,400), Isleton (830) and unincorporated areas (680,900). The incorporation of the City of Citrus Heights, effective in January 1997, shifted some 90,000 of the county’s population out of the unincorporated column, reducing that figure to about 590,000.
The South, or San Joaquin Valley

As above, here are individual county profiles, generally in north to south order.

San Joaquin

Immediately south of Sacramento County, San Joaquin County is in the heart of the agricultural Central Valley, with an astonishing 87.5 percent of its land area in farms (1992 data). What makes this figure surprising is that at the same time the county has a population of over half a million (529,300, January 1, 1996 estimate). Most of the county’s population is in incorporated cities: Stockton (233,600), Lodi (54,500), Manteca (44,950), Tracy (44,900), Ripon (9,110), Lathrop (8,850), and Escalon (5,275). The remaining 128,200 are in unincorporated areas.

San Joaquin County’s leading industry is, not surprisingly, food and kindred products, far outdistancing stone, clay and glass products; lumber and wood products; fabricated metal products; and several others (based on 1992 data). Leading agricultural commodities in the county are grapes and milk, followed at a distance by almonds, tomatoes, walnuts, apples, and others. The county is increasingly serving as a bedroom community for Bay Area and Silicon Valley workers as a result of its less costly homes.

Stanislaus

Immediately south of San Joaquin County, Stanislaus County is also predominantly farmland (79.4 percent, according to 1992 data), but also has a substantial population of 415,300. Cities in the county are Modesto (178,700), Turlock (49,200), Ceres (31,110), Oakdale (14,300), Riverbank (13,350), Patterson (9,600), Waterford (6,375), Newman (5,750), and Hughson (3,530). The remaining 103,400 residents are in unincorporated areas. The leading industry in the county is food and kindred products, far outdistancing paper and allied products, fabricated metal products, and others. The county’s main agricultural products include milk, almonds, chickens, chicken eggs, cattle and calves, turkeys, walnuts, tomatoes, alfalfa, and peaches.

Merced

Another predominantly farmland county (79.2 percent of land in farms, according to 1992 data), Merced County is immediately south of Stanislaus and, like Stanislaus, firmly in the center of the Great Central Valley. The county’s population of 198,500 is distributed among several cities: Merced (61,000), Atwater (20,900), Los Banos (20,100), Livingston (10,450), Dos
Palos (4,360), and Gustine (4,140). The remaining 77,500 residents are in unincorporated areas. As is so typical in the Central Valley counties, Merced’s leading industry is food and kindred products. Chief products include milk (the clear leader), almonds, chickens, cotton, tomatoes, alfalfa hay, cattle, sweet potatoes, turkeys, and eggs. A new University of California campus is being planned for Merced County.

Madera

Although Madera County falls in the Central Valley, sandwiched in part between Merced and Fresno, it also reaches east, well into the Sierra National Forest and Yosemite National Park. The county’s 108,900 people are distributed among the City of Madera (34,650), City of Chowchilla (6,600), and unincorporated areas (67,600). Leading industries include food and kindred products; stone, clay, and glass products; and industrial machinery and equipment (based on 1992 data). Primary agricultural products include grapes (raisin and wine varieties), almonds, milk, cotton, alfalfa hay, pistachios, cattle and calves, and apples.

Fresno

Large both in land area and population, Fresno County, like Madera, stretches well to the east of the valley and into the Sequoia National Park. About 40 percent of the land in Fresno County, mostly in foothill and mountain areas, is owned by government, predominantly the federal government. (Madera has a comparable percentage, and Tulare an even higher one.) The City of Fresno (400,400) encompasses more than half of the county’s 760,900 population. The rest of the county’s residents are distributed among 14 other incorporated cities (Clovis, at 65,000, by far the largest of them), and unincorporated areas (174,200).

Leading industries include food and kindred products (far in front); industrial machinery and equipment; printing and publishing; and stone, clay, and glass products. Primary agricultural products include cotton, grapes, poultry, tomatoes, milk, head lettuce, almonds, cattle and calves, nectarines, and oranges. (Citrus production has tended in recent decades to move from southern California into the Central Valley, as development in the former has displaced groves.) Fresno is the most productive agricultural county in the state and in the nation.

Kings

Rivaling San Joaquin County in this statistic, Kings County has 87.2 percent of its land area in farms (1992 data). Kings is tucked between Fresno, Tulare, and Kern counties, with a small western border along
coastal Monterey County. The county’s leading industry is, of course, food and kindred products. The dominant agricultural products are cotton/cottonseed and milk, followed distantly by cattle and calves, turkeys, grapes, peaches, and other products. Kings County’s population of 118,900 is distributed among the cities of Hanford (38,450), Lemoore (16,350), Corcoran (14,600), Avenal (12,350), and unincorporated areas (37,050).

Tulare

Tulare County, immediately to the east of Kings, stretches into the Sequoia National Forest and Inyo National Forest. A majority of the county’s land area (52 percent, mostly in foothill and mountain areas) is owned by government, predominantly the federal government, the highest percentage among the Central Valley counties. The county’s population of 351,500 resides in the cities of Visalia (91,300), Tulare (39,750), Porterville (34,550), Dinuba (14,650), Lindsay (8,825), Exeter (8,275), Farmersville (7,125), and Woodlake (6,125), with the other 140,800 in unincorporated areas. The leading industry is food and kindred products, followed distantly by printing and publishing, lumber and wood products, fabricated metal products, and electronic and other electric equipment (1992 data). Agricultural products include milk, oranges, grapes, cattle and calves, cotton lint and seed, and others. Tulare County is one of the most productive agricultural counties in California, in terms of value of production, second only to Fresno.

Kern

At the south end of the Central Valley, Kern County is immediately north of Ventura and Los Angeles counties, and south of Kings and Tulare. Mountain ranges, including the Tehachapi Mountains, mark the southern end of the Central Valley, south and east of Bakersfield. The county’s population of 624,700 resides in the City of Bakersfield (212,700) and ten much smaller cities (Delano being the largest, with 31,450 residents), with 280,500 in unincorporated areas.

Again, food and kindred products constitute the county’s leading industry, followed by chemicals and allied products; rubber and miscellaneous plastics products; and printing and publishing. The county’s large and varied agriculture (fourth among California counties) includes grapes, cotton/cottonseed, citrus, almonds, milk, cattle and calves, and others. More than half of the county’s land area (54.5 percent) is in farms (1992 data). The county is also known for its oil fields.
The City of Bakersfield is about as far from Los Angeles as it is from Fresno, although the trip to Los Angeles goes through mountain ranges and that to Fresno is over flat valley land.

If the San Joaquin Valley were a state . . .

In May of 1996, the California Research Bureau released a report comparing the San Joaquin Valley to other states. Following are a few of the comparisons laid out in that report (reflecting 1990 Census data). Please note that these figures pertain only to the eight counties of the San Joaquin Valley, not to the entire 18-county Great Central Valley we have been looking at here.

- The San Joaquin Valley is larger in area than ten states.
- The San Joaquin Valley ranked 31st in population, exceeding 20 states.
- The San Joaquin Valley ranked ninth in population growth.
- The San Joaquin Valley ranks eighth in population of Asian ancestry (and second, following only California itself, in population of Cambodian, Hmong, and Laotian origin).
- The San Joaquin Valley ranks sixth in Hispanic population (following the states of California, Florida, Illinois, New York, and Texas).
- The San Joaquin Valley ranks third in persons of Mexican origin or descent, after only California and Texas.
- The San Joaquin Valley ranks fortieth in per capita household income, between South Carolina and Alabama.
- The San Joaquin Valley ranks fourth in the number of persons involved in farming, forestry, and fishing, surpassed only by California, Florida, and Texas.

These figures, selective as they may be, help to underline the diverse population and the important role of agriculture in the San Joaquin Valley, factors that apply equally well to the Central Valley as a whole.

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Population Growth

The Central Valley’s population has grown substantially in recent decades. Growth has been more rapid, in percentage terms, in the Central Valley from 1980 to 1995 than in the state as a whole.

World War II and after

The charts below illustrate the patterns for the northern and southern valley counties from 1940 to 1995:

Figure 3

Sacramento Valley counties have grown steadily, 1940-95

c:\data\centval\newer\npoptrend.xlc

Figure 4

San Joaquin Valley counties have grown steadily, 1940-95

c:\data\centval\newer\spoptrend.xlc
Although rates have varied from one county to another, and of course the populations from which each began in 1940 differed widely, the general trend of growth may be seen in every county throughout the entire period after 1940.

### The 1980s and 1990s

Turning to the 1980 to 1995 period:

#### Figure 5

**Placer County has outpaced Sacramento Valley counties in percentage of population growth, 1980 to 1995**

![Figure 5](c:\data\centval\newer\p_popgro.xlc)

Source: Calif. Stat. Abstract 1996 (DOF) and CRB calculations

#### Figure 6

**Most San Joaquin Valley counties grew faster than California 1980 to 1995**

![Figure 6](c:\data\centval\newer\s_popgro.xlc)

Source: Calif. Stat. Abstract (DOF) and CRB calculations
Most of the Central Valley counties, especially in the north, have outpaced the already significant statewide population growth rate in the 1980s and early 1990s.

In summary, patterns of percentage increase for 1940-95 have varied widely among the counties, as shown below for all of the Central Valley counties and the state as a whole, but in all cases there has been growth.

![Figure 7: Percentage increase in population for 1940-95 has varied widely among the California Central Valley counties](source: Calif. Department of Finance data and CRB calculations)
Agriculture-Based Economy

California is known nationally and internationally for the breadth and productivity of its agriculture. Many of the most productive of California’s agricultural counties are in the Central Valley. At the same time, 15 of the valley’s 18 counties are among the 25 most productive of the state’s agricultural counties. (The three not included are Placer, Yuba, and Shasta.)

The Central Valley in California agriculture

Figure 8 shows the prominence of Central Valley counties in California’s agriculture.

Figure 8

Eleven of the top 20 agricultural counties in California are in the Central Valley
(all 8 San Joaquin Valley Counties are among them)

Central Valley counties shown by pattern-filled bars, others are outlined only.

Source: 1996 Calif. Agricultural Resources Directory (CA Dept. of Food and Ag.)

Central Valley agriculture even managed to withstand a six-year drought (1987-92). In 1997, water deliveries from the Central Valley Project are expected to approach full contracted levels in response to early rains, although some areas suffered damage from flooding in December 1996 and January 1997 and some face ongoing problems, such as damage to fruit and nut trees, as a result. Lack of rain after the January deluges reduced what had been very optimistic water-supply forecasts.

The proportion of the workforce in farming and agricultural services varies widely among the Central Valley counties, but in all but two exceeds the state average. Many jobs not in those sectors do, of course, depend indirectly on jobs that are in those sectors, providing

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goods and services to people employed in farming and agricultural services and to their families.

Agricultural employment

Figure 9 shows a rough but interesting statistic comparing agricultural employment among the Central Valley counties and in comparison to the state as a whole.

Overall for the 18 counties, about 12.3 percent of jobs are agriculture related (1994 BEA Series data as shown in chart above). The figure is 16 percent for the counties other than Sacramento, which is both the largest of the 18 and has the lowest proportion of jobs in agriculture.

The total proportion of Central Valley jobs in some way dependent on agriculture is even higher than these figures suggest, as the total figure includes jobs indirectly generated by the agricultural sector (the “multiplier effect”). Those jobs exist to serve the needs of people directly employed in the farm and agricultural services sector.
Much of California (about 49 percent of land area) is owned by government, especially the Federal Government. Federal land is predominantly in national forests, parks, and rangelands. Most Central Valley counties have relatively little government-owned land, although some counties that extend into mountain and forest areas do not follow that pattern. Land on the Valley floor is predominantly farmland and is almost entirely in private ownership. Most of the government-owned land in the Central Valley counties is foothill and mountain areas, and much of it extends into the Sierra Nevada range.

Individual county patterns vary. A glance at the map of the Central Valley counties will show why, as some counties reach far into forest and foothill areas while others are confined almost entirely to the valley proper.
Figure 11

Government land ownership varies widely among Sacramento Valley counties

A broadly similar pattern may be seen in the San Joaquin Valley counties as in the Sacramento Valley counties.

Figure 12

Private land ownership predominates in San Joaquin Valley counties

As in the north, ownership patterns vary among the south valley counties. It is important to note that those counties with relatively high levels of government-owned lands are the counties that extend into the foothills and mountains. The counties that are entirely on the valley floor have little government-owned land.
Figure 13

Government land ownership varies widely among San Joaquin Valley counties

<table>
<thead>
<tr>
<th>County</th>
<th>Percentage of land owned by federal, state, local government, approx. 1986</th>
</tr>
</thead>
<tbody>
<tr>
<td>Fresno</td>
<td>40%</td>
</tr>
<tr>
<td>Kern</td>
<td>25%</td>
</tr>
<tr>
<td>Kings</td>
<td>4%</td>
</tr>
<tr>
<td>Madera</td>
<td>41%</td>
</tr>
<tr>
<td>Merced</td>
<td>7%</td>
</tr>
<tr>
<td>San Joaquin</td>
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<td>Stanislaus</td>
<td>6%</td>
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<tr>
<td>Tulare</td>
<td>52%</td>
</tr>
<tr>
<td>CALIF.</td>
<td>49%</td>
</tr>
</tbody>
</table>

Source: BLM data reported in California Almanac, 3rd Ed. (1987)
Educational Attainment

In general, Central Valley counties show lower educational attainment than does California as a whole. This is reflected in several measures, including high school completion, possession of a bachelor’s degree, rate of taking the Scholastic Aptitude Test (SAT), and enrollment of graduating high school seniors as college freshmen.

High school education

Placer and Sacramento counties have a significantly lower rate of adult population without a high school education than the state as a whole, although Yolo, Shasta and Butte also perform better than the state average. (Bear in mind that on this measure, a lower percentage is better.)

Among the counties in the San Joaquin Valley, none has a lower rate of adults without a high school education than the state average. All of the counties in that group fall above the state average, and generally far above.