



## *Assessing the Region Via Indicators*

M A Y 1 9 9 9

# THE STATE OF THE GREAT CENTRAL VALLEY OF CALIFORNIA

*Supporting the economic, social, and environmental  
well being of California's Great Central Valley*

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## Introduction July, 1999

The Indicators Report, called THE STATE OF THE GREAT CENTRAL VALLEY, provides a statistical overview of this vast and complex region. In forty-six categories, the report illustrates important ways in which the region is very different from other parts of California. The report also highlights differences between the sub-regions of the Great Valley. When evaluating the data, it is important to look broadly at trends. Data from such a large area provides broad insights but can be misleading when applied too narrowly.

Overall, the indices suggest five strategies needed to move the region toward greater prosperity.

**Prepare for Growth** — A growing population strains natural resources.

Population is increasing faster than in the rest of the state, creating demand for housing and urban infrastructure. New building valuation has steadily increased, accelerating at a faster rate in the last five years. Even though there is concern about urbanization and the loss of farmland, relatively few private agricultural land preservation efforts are noted in the Central Valley.

The number of days of bad air quality, due primarily to automobiles, is a significant concern.

**Encourage Higher Expectations and Improved Performance for the Region** — Education needs improvement. Wealth indicators are slow.

Too few students in the region benefit from higher education or even aspire to a university education. This is demonstrated by the low number of young people taking the SAT (Scholastic Aptitude Test).

Household incomes are low; housing prices are low on average and new jobs in services, construction and agriculture are generally low-skilled and low-wage jobs subject to seasonal fluctuations.

**Strengthen and Diversify the Economy** — Regional economy concentrates low-wage, unskilled jobs that are subject to seasonal fluctuation.

Unemployment consistently exceeds state and national rates by as much as 10 percent. In terms of new jobs, the services and agricultural industries have experienced

the most growth. In real job growth, the construction industry accounts for the largest increase. In many Central Valley counties, the major employer is government. Of the 33 private sector businesses with 400 employees or more located in the Central Valley, 18 are headquartered locally.

**Provide Resources** — The region is underserved by the public and private sectors.

While crime has decreased in the state, the rate of decline was less in the Central Valley.

The region has fewer physicians per 100,000 than the rest of the state. While the number of non-profit organizations per capita is comparable to California as a whole, the organizations have received far fewer grants of \$10,000 or more from philanthropic organizations and foundations.

**Improve Civic and Cultural Assimilation** — Demographic changes impact communities.

During the last ten years, population growth in the Central Valley has resulted in changes in composition of Valley communities with increased numbers of Hispanics and Asians, primarily due to immigration. Relatively high percentages of residents 65 years of age and older, and in the 0-16 age group point to changing needs.

Voter participation rates are low, especially in the San Joaquin Valley.

For all its importance as a snapshot of the present, THE STATE OF THE GREAT CENTRAL VALLEY is also a predictor of the future. It is a call to action for those in positions to shape the outcome of this growing, changing region. In many important ways, the data indicate that parts of the region are not healthy. There are significant challenges if the Central Valley is to grow and prosper, maintain its leadership in agriculture, protect its unique natural resources and provide opportunity and a good quality of life for its people.

Special credit and thanks are due to Dr. Tapan Munroe, Senior Fellow-Economics at the Great Valley Center, and his assistant, Dr. Bill Jackman, who researched and authored THE STATE OF THE GREAT CENTRAL VALLEY.

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# THE STATE OF THE GREAT CENTRAL VALLEY OF CALIFORNIA—ASSESSING THE REGION VIA INDICATORS

## What Are Indicators?

Indicators are presentations of valuable data that show changes over time. Community regions as indicators include social, physical, environmental, economic and political dimensions. Those used in this report cover all of the dimensions of the Great Central Valley.

Indicators help to answer important questions such as how well the economy is functioning or how the schools, etc. are doing. Evaluating the quality of life indicators tells us how we are doing as a region. These measurements not only help us monitor changes but can also help us achieve the quality of life goals of our region or community. This report establishes baseline information for monitoring and measurements in the region called the Great Central Valley.

## What Are Good Indicators?

A good indicator has several characteristics:

1. It reflects the fundamentals of long term regional or community well being;
2. It is clear, understandable and acceptable;
3. The data can be tracked, statistically measured at regular intervals, and comes from a reliable source;
4. It is easy to communicate in concept as well as in terms of its value and its importance to the region.
5. It indicates an outcome rather than an input.

## About This Report:

This report assesses the 19-county Central Valley's changing economic, demographic, social and political conditions as the millennium ends and we look to the 21st century. The Central Valley is a vast region—some 450 miles long, averaging 50 miles wide. It is bound by mountain ranges—to the east and north are the snow-capped Sierra Nevada and the Cascades, and to the west are the Coast Ranges, a barrier against the moister and milder climate of the Pacific Coast. The Tehachapis separate the Central Valley from the metropolitan areas to the south. The Valley's fertile soil is the result of centuries of alluvial deposits as floodwaters coursed out of the mountains onto the Valley floor. Immensely productive, the Valley is an important agricultural resource.

In this report, we have divided the large region into three sub-regions: North Valley (7 Counties—Shasta, Tehama, Glenn, Colusa, Butte, Yuba, and Sutter); Sacramento Region (4

Counties—Yolo, Sacramento, Placer, and El Dorado), and the San Joaquin Region (8 Counties—San Joaquin, Stanislaus, Merced, Madera, Fresno, Kings, Tulare and Kern). Of the three, the North Valley is less intensively farmed, is much less urbanized, has more water, more space and less development. The Sacramento Region has experienced the most economic development as a result of its linkage to the San Francisco Bay Area, as well as its own commercial and industrial development. The San Joaquin Valley is noted for large-scale agriculture, oil and gas resources, as well as expanding metropolitan areas, with some linkages to the Los Angeles region.

This report utilizes 46 indicators in 7 categories that include: Economic (10), Demographic (5), Social and Political (7), Education (5), Infrastructure (5), Agriculture (8), and Environment (6). The table of contents provides a summary list of these indicators.

## How to Use the Report:

1. The report can be used as a benchmark for assessing the progress of the Valley (and its three sub-groups) in critical areas that include economic, social, political and environment consideration.
2. It can be used to identify and monitor critical issues and challenges that need to be addressed by the civic leaders and stakeholders of the region.
3. Based on the information, analysis and structure provided in this report, individual communities may develop specific indicators based on their own concerns. This is recommended as this report covers a vast region (19 counties), and cannot provide data for all cities and communities of the Valley. This report can serve as a guide as well as a model for developing an indicator-based assessment of smaller communities (or cities).
4. Community specific indicators can help clarify key issues and challenges and can point toward initiatives and policy changes that may improve the health of the region. The impact of policies implemented or modified will then be reflected in the indicators themselves over time.

## I. Economic Indicators

1. Job growth in the Central Valley has lagged labor force growth since 1990. Although the Valley economy was not hit as hard as the state economy during the recession of 1990-93, the regions have not experienced the strong rebound that the state has. Between 1996 and 1997, the state job growth rate was nearly twice that of the Valley. The Sacramento Region was hit harder than the other two regions of the Valley because of its aerospace connection. However, its recovery from the recession has been stronger as a result of a more diversified economy that includes a solid high-tech base.
2. In terms of the sheer number of jobs created in the Valley, services ranked first and agriculture second in 1996-97. However, in terms of employment growth the construction industry is the leader followed by services and agriculture. Although agriculture remains a vital part of the Valley economy, these trends are consistent with increased urbanization of the region.
3. Unemployment has remained persistently higher in the Central Valley relative to the state—typically by 3% in the 1988-1997 period. This is mainly attributable to the region's large share of agriculture related jobs which have significant seasonal fluctuations. In this connection it is important to note that unemployment in the Sacramento region is markedly lower than the rest of the Valley as well as the state. This is to a great extent because of the diversified economy of the Sacramento region.
4. In the last decade household income in the Central Valley has averaged approximately 20% lower than in the state as a whole. This again is a reflection of the structure of the Valley economy—lack of diversification into higher value added industries and jobs. Not surprisingly, Sacramento region household incomes are considerably higher than those in the North Valley and San Joaquin regions reflecting a higher wage economy.
5. Housing stock and the number of households in the Central Valley have grown at a faster rate than in the state reflecting faster growth of population in the Valley. Most of California's population will be accommodated in the Valley and it is important to have growth in housing commensurate with the growth in population. But, in the last decade housing growth has not kept up with household growth. This is a long term economic and quality of life issue for the Valley.
6. The Central Valley as well as the state was impacted adversely by the crash in residential home building in the late 1980's and early 1990's, although the crash was more severe on a statewide basis. Housing permit growth in the Valley has not kept pace with state levels.
7. Affordable housing has been one of the key competitive advantages of the Central Valley for decades. In the period 1990-97 housing was 20% to 30% more affordable in the Valley than the state as a whole. The affordability gap has increased further in the last few years reflecting the hot real estate markets in coastal California regions.
8. Having corporate headquarters in a region is important from the perspective of enhancing the quality of an area's civic life. With 18 corporate headquarters (with over 400 employees), the San Joaquin region leads the Sacramento region which has 15. But on a per capita basis the ranking is reversed as the Sacramento region has fewer people.

# I. ECONOMIC INDICATORS

## 1. JOB GROWTH AND LABOR FORCE GROWTH

### *Job Growth Lagging Labor Force Growth in the Central Valley (CV)*

#### WHY IS THIS IMPORTANT?

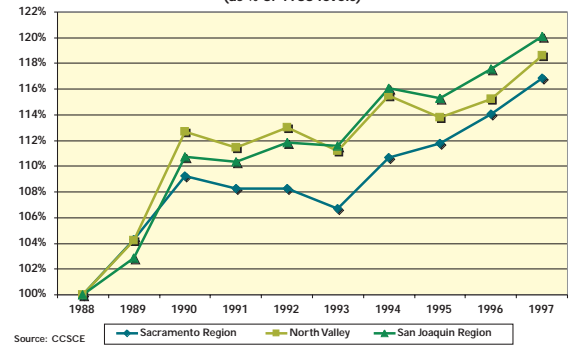
For most working-age people and their families, wages and benefits earned from jobs are their major source of income. Clearly job growth must stay apace with growth of the labor force so that those who depend on wages for their livelihood can find employment.

Growth of the labor force is related to but is not identical to population growth. For example, if a large number of full-time homemakers seek employment outside the home, the labor force will grow faster than the population.

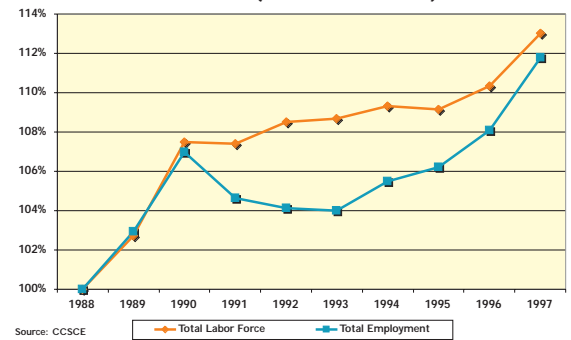
#### HOW ARE WE DOING?

Because the labor force is growing faster in the Central Valley (CV) than in the state, job growth must also be faster in the CV. It has been faster but not fast enough to narrow the gap between labor force growth and employment growth as much as has occurred in the state. During the years 1988-97, the labor force grew 21% in the CV versus 13% in the state. While employment grew 19% in the CV versus 12% in the state, it was not enough to prevent the gap between labor force growth and employment growth from being twice as large in the CV as in the state. It is noteworthy that the CV has not experienced the strong rebound in job creation during the recovery that the state has. For example, between 1996 and 1997, the rate of job growth in the state was nearly twice that of the CV.

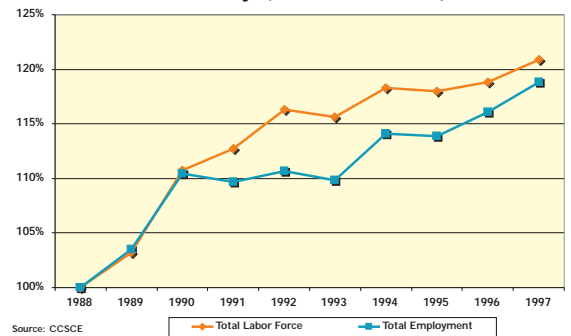
Job Growth in Central Valley Subregions  
(as % of 1988 levels)



Employment and Labor Force Growth in California (as % of 1988 levels)



Employment and Labor Force Growth in the Central Valley (as % of 1988 levels)



# I. ECONOMIC INDICATORS

## 2. JOB GROWTH BY SECTOR

*Services Leads All Sectors in Job Creation in the Central Valley (CV)*

### WHY IS THIS IMPORTANT?

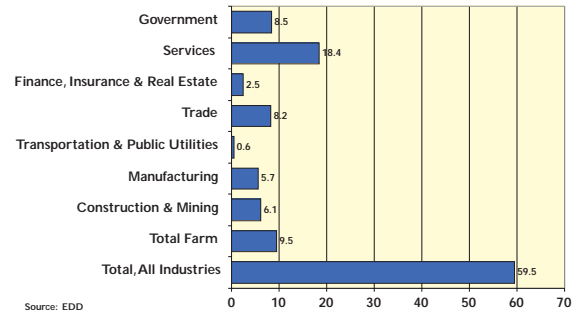
Job growth is critical to the economic health of regions with growing populations, and it is important for business and government planning to understand which sectors are the major generators of jobs and which sectors are growing.

### HOW ARE WE DOING?

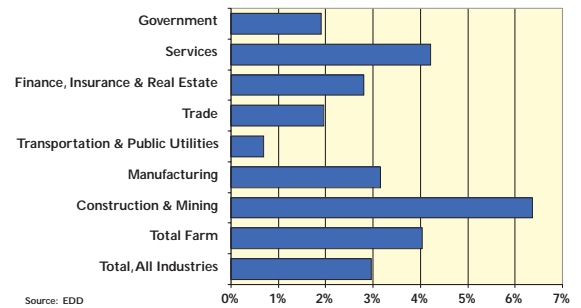
In terms of jobs created, the service sector was way out in front in 1996-97, creating almost twice as many jobs as the farm sector. Service jobs, including both health and business services, have historically been more common in urban than rural areas. This strong growth of service jobs in the CV is consistent with its increasing urbanization.

In percentage job growth, the construction and mining sector—mainly construction—was the decisive leader in the CV and the state. The biggest difference between the CV and the state occurred in the transportation and public utilities sector. Public utilities such as PG&E, historically major employers in the CV, have substantially cut back on hiring, mainly as a result of competitive and financial pressures stemming from deregulation.

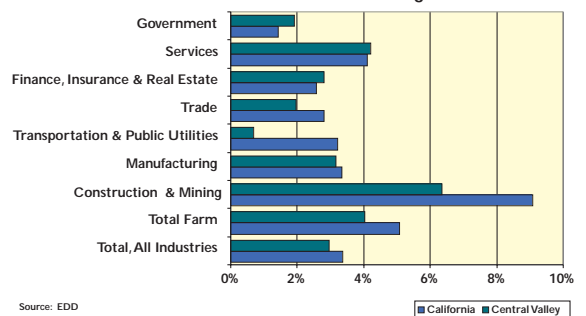
Job Changes by Sector in the Central Valley  
1996-97 Year-Over-Year Changes  
(Thousands of Jobs)



Percentage Job Changes by Sector  
in the Central Valley  
1996-97 Year-Over-Year Changes



Percentage Job Changes by Sector  
in the Central Valley and the State  
1996-97 Year-Over-Year Changes



## 3. UNEMPLOYMENT RATE

### *Persistently High Unemployment in the Central Valley*

#### WHY IS THIS IMPORTANT?

Workers who can't find suitable employment are unable to utilize their skills and don't receive a paycheck. Moreover, unemployment can cause personal and family problems.

Our economy loses the contribution unemployed workers could have made, and economic output is less than it could have been. Support services for the unemployed can be costly for society at large.

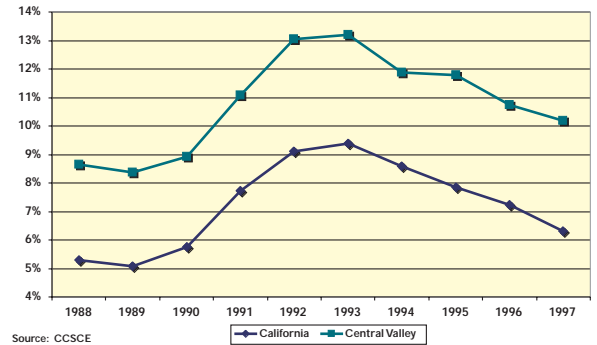
#### HOW ARE WE DOING?

Unemployment rates have persistently been higher in the CV than in the state, typically by at least 3 percentage points. This is mainly attributable to the CV's large share of jobs in agriculture, construction and other sectors that have marked seasonal fluctuations.

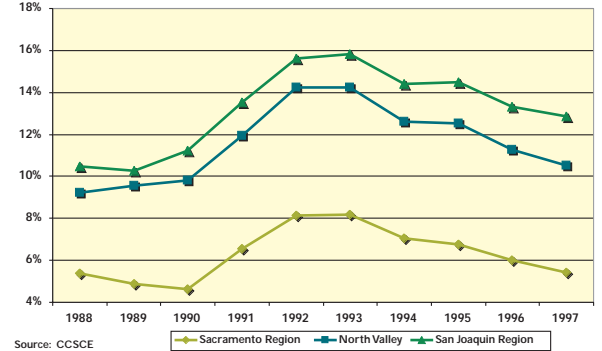
In 1997, the CV unemployment rate rose to almost 4 percentage points above the state's. The main reason for this was that the rate of job growth in the state in the period 1996-97 was almost twice that of the CV.

Unemployment rates in the Sacramento Region are markedly lower than in the San Joaquin Region and North Valley and are even decidedly lower than those of the state. The San Joaquin Region, with its large-scale, intensive agriculture, consistently has the highest unemployment rate of the CV's three subregions.

Unemployment Rates in California and the Central Valley



Unemployment Rates in Central Valley Subregions





# I. ECONOMIC INDICATORS

## 4. AVERAGE HOUSEHOLD INCOME

### *Average Household Income Slipping*

#### WHY IS THIS IMPORTANT?

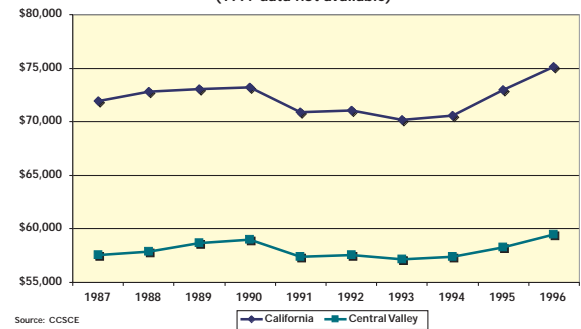
Household income is a major determinant of standard of living. It is possible for a region to have high average household income, but a low quality of life due, for example, to a polluted environment. In general, however, regions with higher average household incomes also tend to have higher quality of life. For businesses, household income is the major determinant of the level of local economic activity. At the national level, consumption (a by-product of household income) consistently accounts for about two-thirds of Gross Domestic Product.

#### HOW ARE WE DOING?

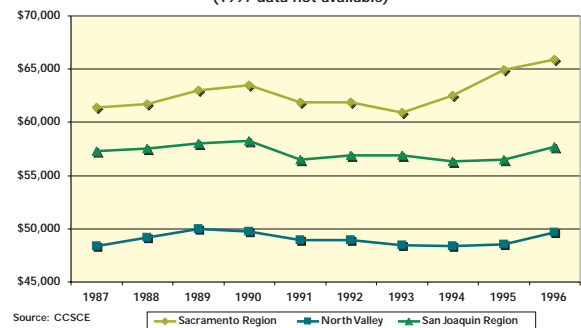
During the past 10 years, average household income in the Central Valley has averaged approximately 20% lower than in the state as a whole. Although it did not decline as much in the CV as in the state during the recession years of 1991-93, it has not increased as rapidly during the recovery years of 1994-96. Between 1994 and 1996, average household income increased 6.4% in the state versus 3.6% in the CV. Accordingly, average CV household income fell from 81.3% of its state counterpart in 1994 to 79.1% in 1996.

There is considerable variation in average household income between the Central Valley subregions. Average household income in the Sacramento Region, the San Joaquin Region, and North Valley was 88%, 77%, and 66%, respectively, of that for the state in 1996.

Average Household Income in California and the Central Valley  
(1997 data not available)



Average Household Income in Central Valley Subregions  
(1997 data not available)



## 5. GROWTH OF HOUSEHOLDS AND HOUSING STOCK

### *Households and Housing Stock Growing Faster in the Central Valley*

#### WHY IS THIS IMPORTANT?

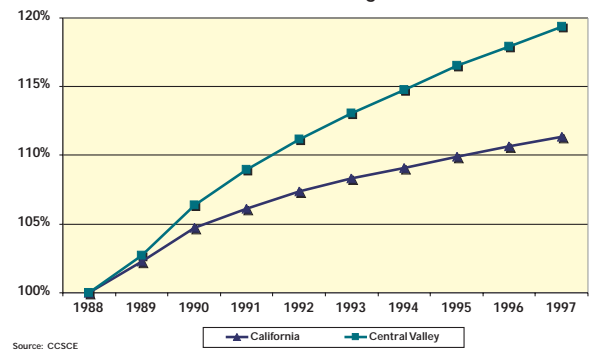
Food and shelter are basic human necessities. The supply of housing units needs to keep up with the number of households. Insufficient housing not only causes human discomfort, it also impedes economic growth. A shortage of housing drives up the price of available housing, making it hard for companies to attract new employees to the region.

#### HOW ARE WE DOING?

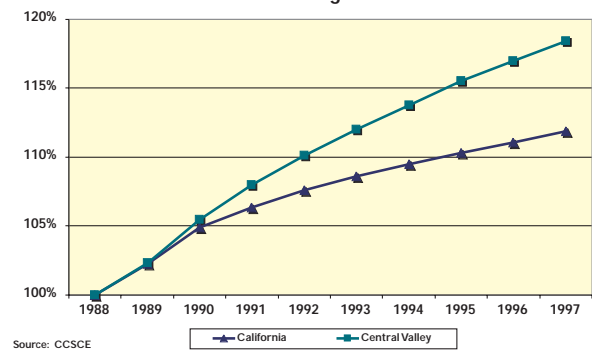
In both the CV and the state, the housing stock has grown commensurately with growth in the number of households. (The housing stock equals the number of single and multi-family residential units. A household is defined as one or more persons occupying a housing unit.) The number of households in the CV grew 70% faster than in the state as a whole, and its housing stock grew 55% faster.

On a percentage basis, the number of households in the Central Valley grew faster than the number of CV housing units during the period 1988-97 -19.4% vs. 18.4%. Thus, the line for the former is above that of the latter in the bottom chart. However, in absolute terms, some 10,000 more housing units were added than households in the CV during this period. Also, some new households occupied vacant housing; in 1997, 7% of the CV's housing units were vacant, down from 8% in 1988. Seven percent of the state's housing units were also vacant in 1997.

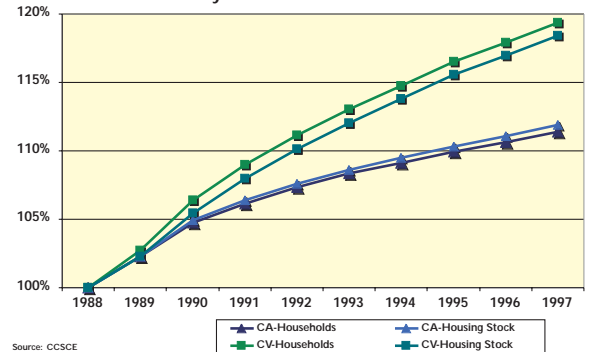
Number of Households in the Central Valley and the State As a Percentage of 1988 Levels



Total Housing Stock in the Central Valley and the State As a Percentage of 1988 Levels



Total Housing Stock and Number of Households in Central Valley and State As a % of 1988 levels



# I. ECONOMIC INDICATORS

## 6. RESIDENTIAL BUILDING PERMITS

*Building Permits: Rising in the State, Steady in the Central Valley*

### WHY IS THIS IMPORTANT?

Building permits for residential housing units are an accurate leading indicator of housing starts. New housing is necessary for a growing population and economy. Steady additions to the housing stock are preferable to erratic growth. In a boom-bust construction economy, builders who lose badly during busts tend to wait too long before returning to building more housing. Those seeking housing are negatively affected by this lag in new construction.

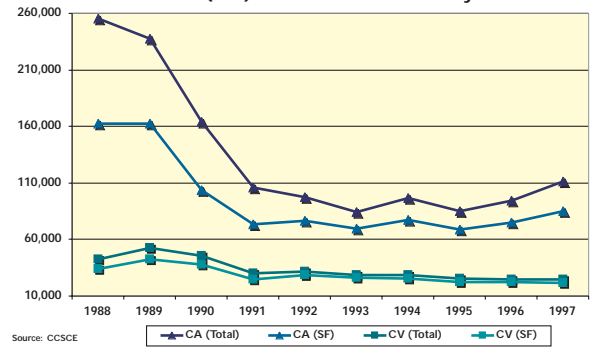
### HOW ARE WE DOING?

Both the state and the CV were impacted by the crash in residential home building in the late eighties and early nineties, although the crash was more severe in the state. State housing permits in 1993 were only 33% of what they were in 1988; CV housing permits in 1993 were 54% of what they were in 1989, the year they peaked.

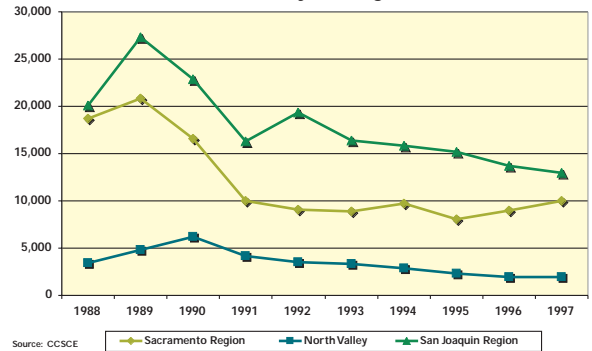
Since reaching a nadir in 1993, housing permits in the state have risen 32% to 111,716 in 1997. Housing permits in the CV in 1997 were 5% lower than they were in 1993; however, they have been relatively steady, not erratic.

Single-family homes are significantly more common in the CV than in the state. In 1997, 88% of total building permits in the CV were for single-family homes compared to 76% for the state.

Total and Single-Family (SF) Building Permits in California (CA) and the Central Valley



Total Building Permits in Central Valley Subregions



## 7. HOUSING AFFORDABILITY

### *Affordable Housing: An Attraction of the Central Valley*

#### WHY IS THIS IMPORTANT?

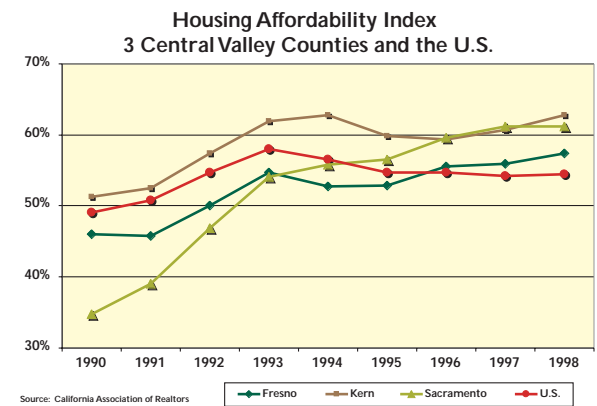
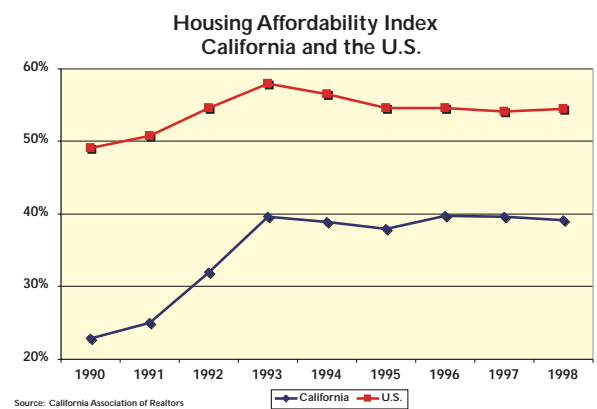
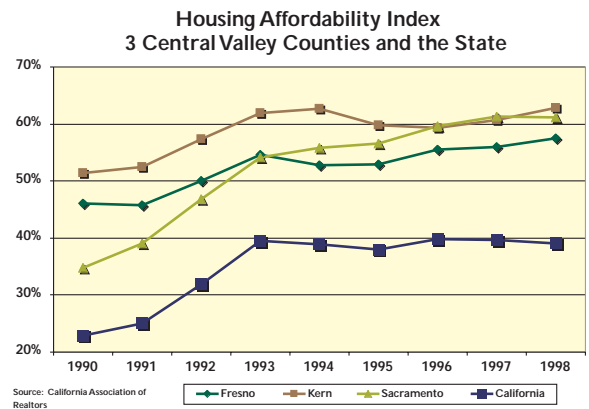
Housing affordability is a measure of the percentage of households who can afford a median-priced home in their region. When people own their homes, they have more stake in the community. Economic stability the United States has enjoyed over the years has been largely attributable to its strong middle class and a high rate of home ownership.

#### HOW ARE WE DOING?

Affordable housing has been one of the major attractions of the CV for several decades. Three representative CV counties\* illustrate that housing was 20% to 30% more affordable in the CV than in the state during the period 1990-97. The gap between the CV and the state grew in the recent years, mainly because of the state's hot real estate market, particularly in coastal areas.

Not only has housing in the CV been more affordable than in other areas of the state, but also more affordable than in the nation. Housing has been notoriously less affordable in the state than in the nation. Since 1996 however, housing was more affordable in all three representative CV counties than in the nation.

\* The California Association of Realtors, the source of housing affordability data, has this data for only six CV counties, none to the north of Sacramento County. Although CAR sells this data as part of their County Economic Profiles, they provided data for three CV representative counties gratis to the Great Valley Center.



# I. ECONOMIC INDICATORS

## 8. NEW BUILDING CONSTRUCTION VALUATION: RESIDENTIAL, COMMERCIAL AND INDUSTRIAL

*New Building Construction—Steady in the Central Valley*

### WHY IS THIS IMPORTANT?

Every region needs a mix of non-residential and residential construction. Otherwise, its residents will be faced with long inter-regional commutes to jobs. Steady construction activity is preferable to boom-bust cycles.

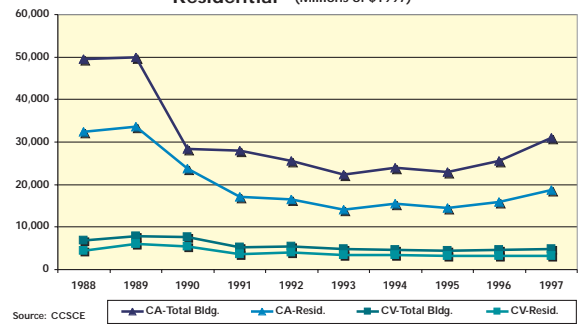
### HOW ARE WE DOING?

During the period 1988-97, non-residential building construction in the CV averaged about 30% of total building construction, lower than the 35% for the state. This difference is consistent with the large amount of interregional commuting out of the CV for employment - e.g., commuting from Manteca to Fremont, or Vacaville to Alameda County.

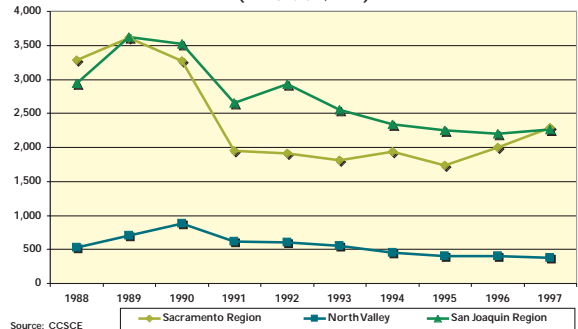
New building construction in the CV during the period 1988-1997 was considerably steadier and freer from boom-bust patterns than in the state. For example, new building construction valuation for the state in 1993, the year the recession ended in the state, dropped to just 45% of its constant-dollar value in 1988; for the CV, it declined only to 73 percent. However, construction activity has accelerated much faster in the state than in the CV during the recent economic expansion. Between 1995 and 1997, new building construction valuation jumped 35% in the state compared to 12% in the CV.

The Sacramento Region, the most urbanized of the three CV subregions, resembles the state in its boom-bust construction activity patterns. New building construction valuation in the Sacramento Region in 1993 was only half what it was in 1989. However, between 1995 and 1997, it rose 32 percent.

Annual New Building Construction Valuation in California and the Central Valley - Total and Residential (Millions of \$1997)



Total Annual New Building Construction Valuation in Central Valley Subregions (Millions of \$1997)



## 9. NET NEW BUSINESS FORMATION

*Only the Sacramento Region Shows Net Gain in Number of Businesses During 1991 - 1998*

### WHY IS THIS IMPORTANT?

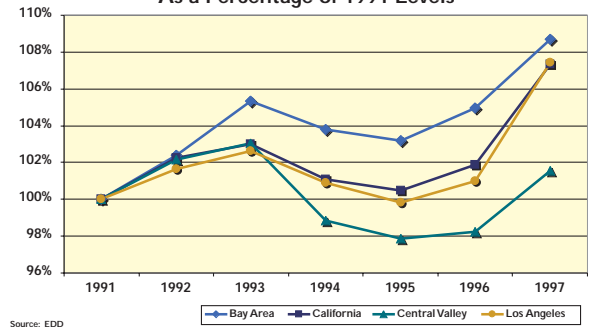
Business formation is a critical component of economic vitality. In high-tech companies, for examples, talented employees may perceive niches in the marketplace that offer untapped growth potential. These employees often opt to become entrepreneurs, opening small, fast-moving firms that typically are in the forefront of technology. Small companies are an important source of new jobs.

### HOW ARE WE DOING?

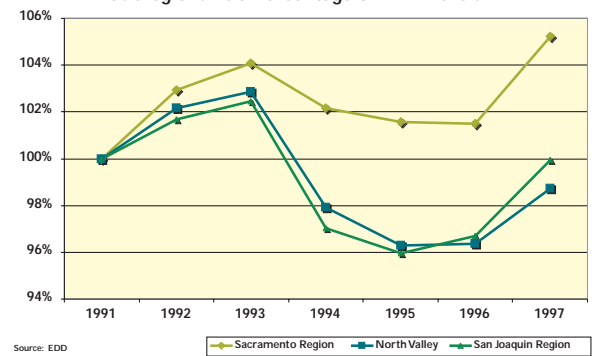
During the recession years of 1991-1993, the number of businesses in the state and its regions rose. Unemployment was high, and many who had lost their jobs chose to go into business. As the economy and the job market picked up, however, some of these entrepreneurs closed up shop and went to work for someone else (1993-95). When California's strong economic expansion continued, entrepreneurs began to find niches with moneymaking potential (1995-97). These were people who had jobs, but opted to pursue other opportunities.

By 1997, there were 9%, 7%, 7%, and 2% more companies in the Bay Area, the state, the Los Angeles region, and the Central Valley, respectively than there were in 1991; within the CV however, there was growth (5%) only in the Sacramento Region. New business formation remained unchanged in the other parts of the CV.

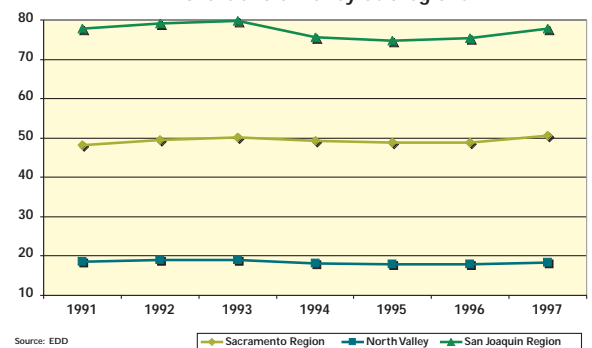
Total Number of Businesses in California and Its Major Economic Regions As a Percentage of 1991 Levels



Total Number of Businesses in the Central Valley Subregions As a Percentage of 1991 Levels



Total Number of Business (in thousands) in the Central Valley Subregions



# I. ECONOMIC INDICATORS

## 10. CORPORATE HEADQUARTERS

*The San Joaquin Region Leads in the number of Corporate Headquarters\*, but not on a per capita basis (\*With over 400 employees)*

### WHY IS THIS IMPORTANT?

Having corporate headquarters in a city has been considered important to the city's health. San Francisco, for example, has been concerned about erosion of its reputation as a premier business city due to losses of corporate headquarters such as Bank of America (acquired by NationsBank of Charlotte, N.C.) and Wells Fargo (acquired by Norwest of Minneapolis).

From a strictly business point of view, such concern is probably unwarranted because companies pay close attention to the business needs of their major components whether they are located close to corporate headquarters or not. This is more necessary today than ever as a record number of mergers has brought with it many relocations of corporate headquarters—to other states, and not infrequently to other countries. Mergers in the U.S. hit an all-time high in 1998, with 7,700 deals worth \$1.2 trillion.

A corporate presence may include a company's civic role and contributions to charitable and civic organizations in the community. It is generally easier to develop corporate support from a locally based company. Senior executives have visibility in the community in which they live, and they know the needs of that community better than those of distant cities where the company has operations. When their company has a tradition of contributing to the local community, senior executives tend to continue it.

Historically, many companies have devoted a disproportionate share of their philanthropy to their headquarters' hometown.

### HOW ARE WE DOING?

With 18 corporate headquarters (companies with more than 400 employees), the San Joaquin Region leads the CV subregions, followed by the Sacramento Region with 15. However, the population of the former is almost twice that of the latter, so on a per capita basis the Sacramento Region is on top, with 9.0 headquarters per one million people versus 5.7 for the San Joaquin Region. The companies are more diverse in the Sacramento Region than in the San Joaquin. As might be expected, agriculturally oriented companies are dominant as the corporate headquarters in the San Joaquin Region.

### CORPORATE HEADQUARTERS WITH OVER 400 EMPLOYEES IN THE CENTRAL VALLEY SUBREGIONS

<b>North Valley Total</b>	0
<b>Sacramento Region Total</b>	15
<b>San Joaquin Region Total</b>	18
<b>Central Valley Total</b>	33

### II. Demographic Indicators

1. The Central Valley has been one of the fastest growing areas in California during the last few decades. This trend is likely to continue. Within the Valley, the San Joaquin Region is dominant with twice the population of the Sacramento Region and five times that of the North Valley.
2. During the second half of this century, California has been a magnet for people from other states. Since the 1980's, many of these newcomers, along with people from other parts of California, have relocated to the Central Valley. The prolonged recession of the early 1990's caused domestic migration into the Valley to turn negative in 1993. It did not turn positive again until 1997. Foreign migration into both the Valley and the state remained steady and has been the key factor responsible for keeping net migration positive.

3. In the period 1990-96, the changing ethnic composition of the Central Valley mirrored that of California—a declining relative share of whites, with a rising share of Hispanics and Asians. The share of African Americans remained constant.
4. Population continues to get older in the Central Valley as well as the state reflecting the aging of baby boomers. The Central Valley had higher percentages than the state in only two age categories in 1997—age 0-15 and over 65 years. In the age category 16-24, the state moved ahead of the Central Valley while the gap also widened in the age 25-44 category. A plausible explanation for this shift is that young adults are opting to attend college and later work in the state—out side the Central Valley.

#### 1. POPULATION GROWTH

##### *Rapid Population Growth in the Central Valley*

##### WHY IS THIS IMPORTANT?

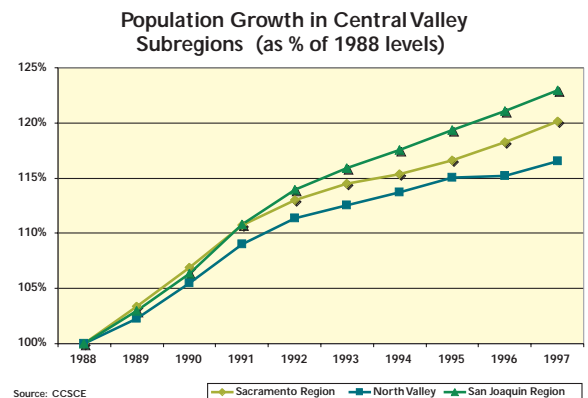
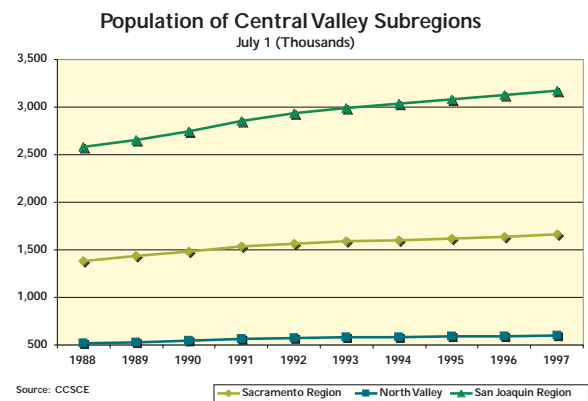
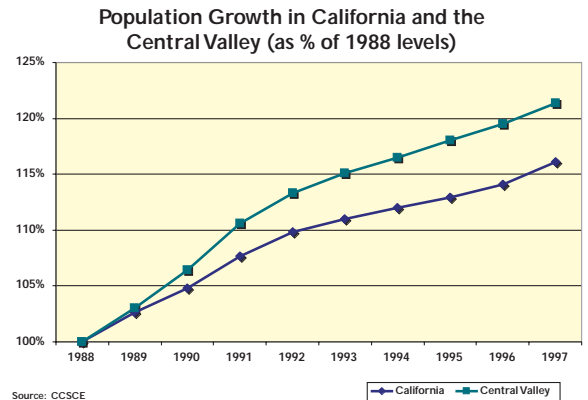
While a growing population usually raises the level of economic activity (e.g., gross regional product), it also puts stresses on the infrastructure and the environment. For example, the need for more housing to accommodate a growing population can conflict with desires for farmland preservation, habitat preservation, and open space for recreation. When new housing is built in a low-density, sprawling manner, this can result in longer commutes that worsen traffic congestion and air pollution, diminishing the quality of life.

Sound planning for population growth is critical to the Central Valley's economic, social, and environmental well being.

##### HOW ARE WE DOING?

The Central Valley has been one of the state's fastest growing areas during the last few decades. During the last ten years (1988-97), percentage population growth in the CV was a third faster than that of the state - 21% versus 16%. As of July 1, 1997, the CV had 17% of the state's population.

Within the CV, the ranking of the three subregions by population levels is the same as by percentage growth rates. With 3.2 million residents, the San Joaquin Region has almost twice the population of the Sacramento Region and over five times that of North Valley. The percentage growth rates of San Joaquin Region, the Sacramento Region, and North Valley are 23%, 20%, and 17%, respectively.





## II. DEMOGRAPHIC INDICATORS

### 2. IMMIGRATION (NET IN/OUT MIGRATION)

#### *Domestic Migration to the Central Valley Turns Positive Again*

##### WHY IS THIS IMPORTANT?

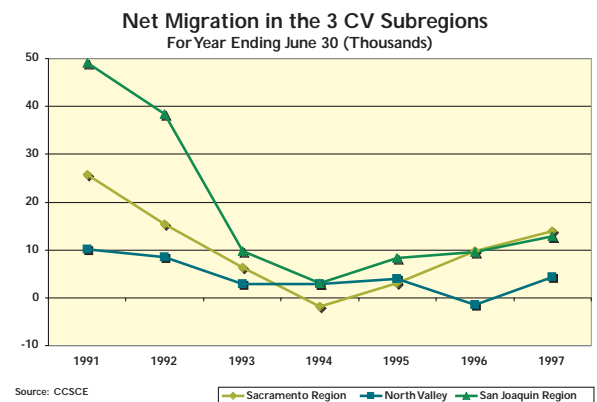
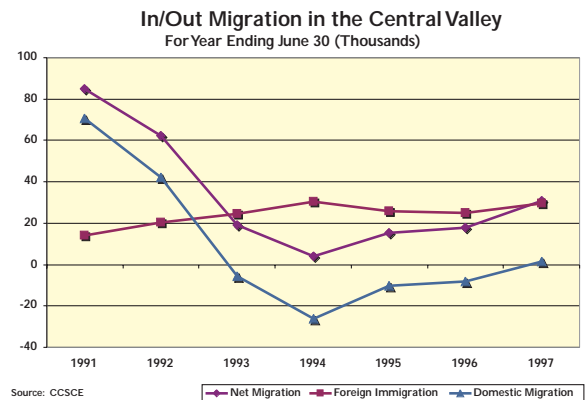
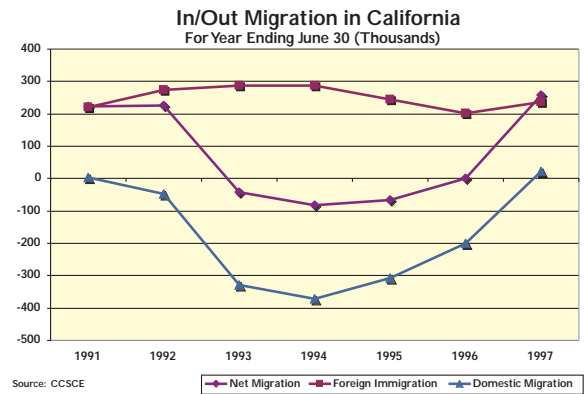
The rapid population growth that the CV has experienced since the 1980s is expected to continue into the next century, according to the California Department of Finance. It is critical for the Valley to plan for this population growth. Effective planning entails knowing the components of population growth since the needs of foreign immigrants often are different from those of domestic migrants—e.g., English instruction, cultural assimilation, etc.

##### HOW ARE WE DOING?

During the second half of this century, California has been a magnet to people in other states. Since the 1980s, many of these newcomers along with people from other parts of California have relocated in the Central Valley. Due to effects of the 1990-93 recession, domestic migration turned negative in the CV in 1993—some two years after it did in the state—and did not become positive again until 1997.

Foreign immigration to California and particularly to the Central Valley has remained relatively constant during this decade. Foreign immigration to the Central Valley was substantial enough that it prevented net migration from turning negative as it did for the state between 1993 and 1996, when domestic migration out of the state exceeded foreign immigration into it.

Net migration did turn negative for the Sacramento Region in 1994, the nadir for out migration from both California and the CV. It turned negative for North Valley in 1996 when it was rising for the state and the Central Valley overall.



## II. DEMOGRAPHIC INDICATORS

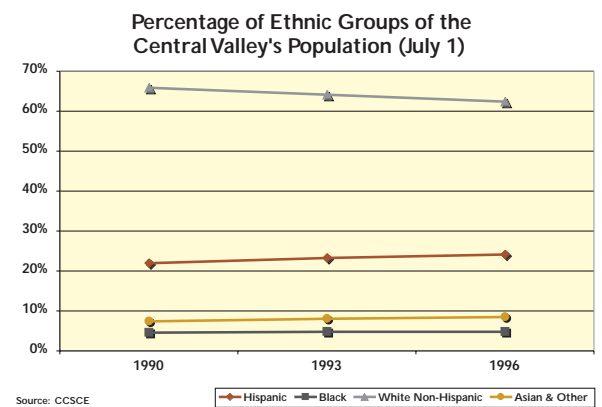
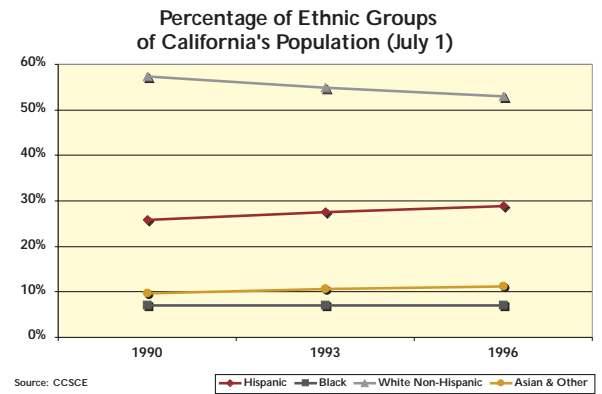
### 3. POPULATION DISTRIBUTION BY ETHNICITY *Percentages of Hispanics and Asians Rising in the Central Valley and the State*

#### WHY IS THIS IMPORTANT?

California is increasingly a state made up of minorities. It is important for government and business to understand these trends because these various ethnic groups have differing needs and sensitivities. In particular, the changing ethnic makeup of the state has major implications for political parties.

#### HOW ARE WE DOING?

Over the period 1990-1996, the trends in the Central Valley mirrored those in the state. While the relative percentage of whites in the population declined and that of blacks remained constant, those of Hispanics and Asians rose. The higher percentage of Hispanics in the state than in the Central Valley comes from the large concentrations of Hispanics in urban areas like Los Angeles. Also, the counts of Hispanics in the Central Valley may be low since undocumented agricultural workers are usually reluctant to participate in government reporting activities.



## II. DEMOGRAPHIC INDICATORS

### 4. POPULATION AGE TRENDS

#### *Population Getting Older in the Central Valley and the State*

##### WHY IS THIS IMPORTANT?

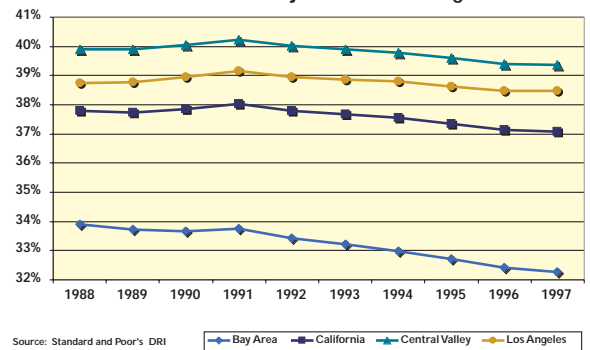
An older population usually needs more medical care than a younger one. Also, there are important economic and political ramifications when the retiree population is growing faster than the working population that is contributing to Social Security.

##### HOW ARE WE DOING?

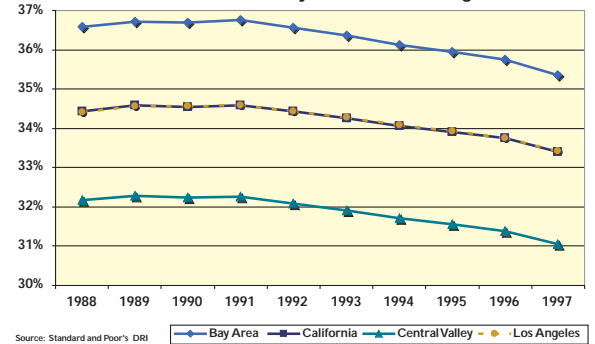
In the state and its major regions, the percentage of the population in ages 0-24 and 25-44 has been declining, while that of the 45-64 category has been increasing markedly. This undoubtedly reflects the aging of the baby boomers, who are now turning 50 at the rate of one every 10 seconds. The percentage age 65 and over also rose in all regions except Los Angeles where it dipped slightly.



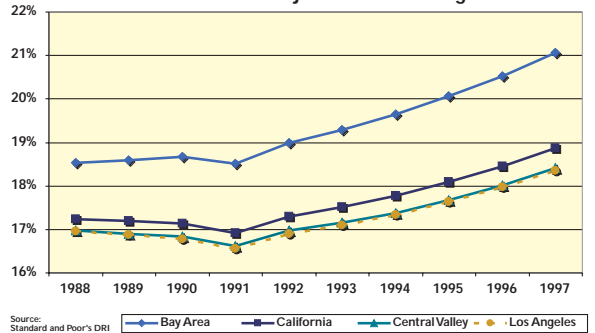
Percentage of Population Age 0 Thru 24 in California and Its Major Economic Regions



Percentage of Population Age 25 Thru 44 in the State and Its Major Economic Regions



Percentage of Population Age 45 Thru 64 in the State and Its Major Economic Regions



## II. DEMOGRAPHIC INDICATORS

### 5. PERCENTAGE UNDER 16 AND OVER 64

*Higher Percentage Under 16 and Over 64 in the Central Valley*

#### WHY IS THIS IMPORTANT?

Regions with higher than average percentages of young people age 0-15 and older people age 65 and over have to make higher than average investments in K-12 education and in medical and retirement facilities. Both the public and private sectors need to be aware of these population trends to plan appropriately.

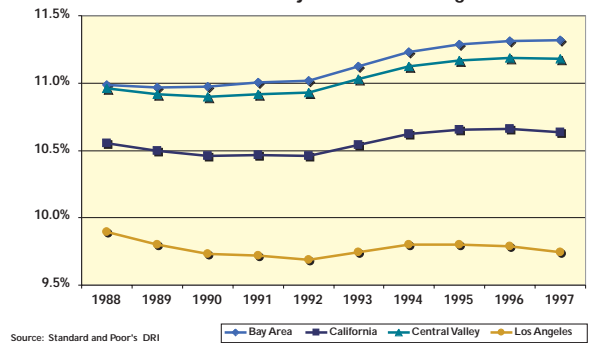
#### HOW ARE WE DOING?

The Central Valley had higher percentages than the state in only two age categories in 1997: Age 0-15 and Age 65 and Older. In the age category 16-24 the state moved ahead of the Central Valley, while the gap also widened in the age 25-44 category. A plausible explanation for this shift is that young adults are opting to attend college, and later work in the state—outside the Central Valley.

Within the Central Valley, the Sacramento Region exhibits a pattern like that of the state, particularly in the prime working year's category of 25-44. The Sacramento Metro Area offers many job opportunities comparable to those of coastal urban areas.

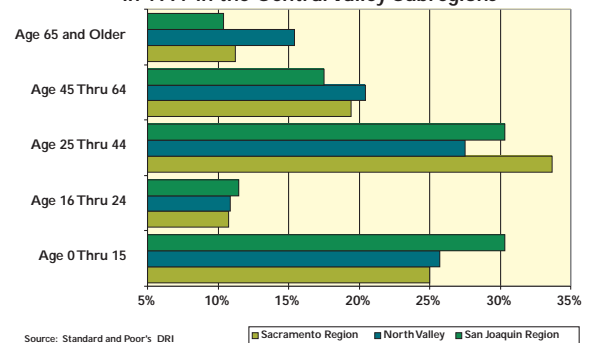
In the age 45-64 category, in which retirement begins to occur, and in the age 65 and older category, North Valley has higher percentages than the other two CV subregions. This is undoubtedly attributable in large part to North Valley's status as a favored retirement area. Its lead in the age 45-64 category is also consistent with national retirement trends. Despite predictions about how people are going to work longer than they used to, workers are retiring earlier, according to the Labor Department. The average retirement age in the U.S. was 62.2 for men and 62.7 for women between 1990 and 1995. That was down from 64.1 and 65.3, respectively, from 1965 through 1970.

Percentage of Population Age 65 and Over in California and Its Major Economic Regions



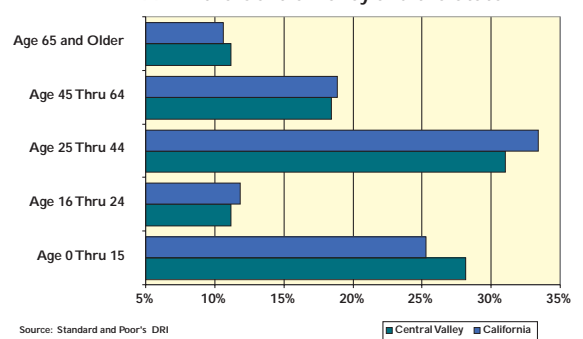
Source: Standard and Poor's DRI

Age Group Percentages of Total Population in 1997 in the Central Valley Subregions



Source: Standard and Poor's DRI

Age Group Percentages of Total Population in 1997 in the Central Valley and the State



Source: Standard and Poor's DRI

### III. Social And Political Indicators

1. Families have continued to move off of welfare rolls in California as well as the Central Valley since 1995. Between 1995 and 1998 total monthly AFDC (Aid to Families with Dependent Children) caseloads have declined by 22% in the Valley compared to nearly 27% for the state and 60% for the San Francisco Bay Area. These significant changes reflect strong economic recoveries in the state and its regions as well as the effects of the 1996 welfare reform bill.
2. Crime has been declining in the state and in the nation for the past several years. Explanations underlying this trend include greater number of law enforcement personnel, stricter sentencing, and an aging population. Between 1991 and 1997, violent and property-related crimes in the state fell by 32%, while they fell only 13% in the Central Valley. Within the Central Valley, between 1988 and 1991, violent and property crimes declined by 26% in the North Valley, while they rose by 7% and 8% in the Sacramento and San Joaquin regions respectively.
3. In general, the supply of physicians relative to California's population has been rising for the past several years. Thus for the state, the ratio of persons per physician declined by 3% between 1988 and 1996. For the Central Valley this ratio declined by almost 13%—a significant improvement. However, the Valley still has a lot of catching up to do. In 1996, the ratio for the Valley was 556 persons to a physician compared to 420 for the state and 320 for the San Francisco Bay Area.
4. Civic engagement is vital for a region as well as its communities, and non-profit organizations are a key conduit for facilitating it. Civic engagement, measured by the number of non-profit organizations in the region per 100,000 persons, appears to be respectable for the Central Valley—203 versus 200 for the Los Angeles region, and 270 for the Bay Area. Within the Valley, civic engagement is the highest in the Sacramento region (240) and lowest in the San Joaquin Region (152). This is not surprising in light of the differences in the level of economic development of these two distinct areas of the Central Valley. While the Central Valley as a whole shows a relatively respectable level of civic engagement, the region has not been successful in obtaining grants from philanthropic organizations for activities that enhance community health as well as quality of life.
5. Voting remains the fundamental avenue for citizens to express their political will and is the bedrock of the foundation of our democracy. Citizens who wish to vote need only to register. Voting participation peaks every four years during presidential elections. Comparing the percent eligible who voted in 1990, 1992, 1994, and 1996 ('92 and '96 were presidential election years), we find a rising trend for the state as well as its regions between 1990 and 1996. This bodes well for the Republic. However, the Central Valley is showing some signs of slippage between 1994 and 1996 relative to the state and the Los Angeles region. Within the Central Valley voter participation remains the highest in the Sacramento region and the North Valley is not far behind. However, the San Joaquin region lags significantly behind the rest.

### III. SOCIAL AND POLITICAL INDICATORS

#### 1. CHILDREN LIVING IN POVERTY (AFDC)

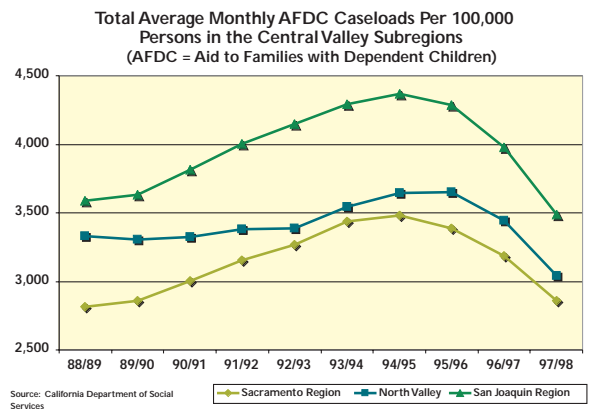
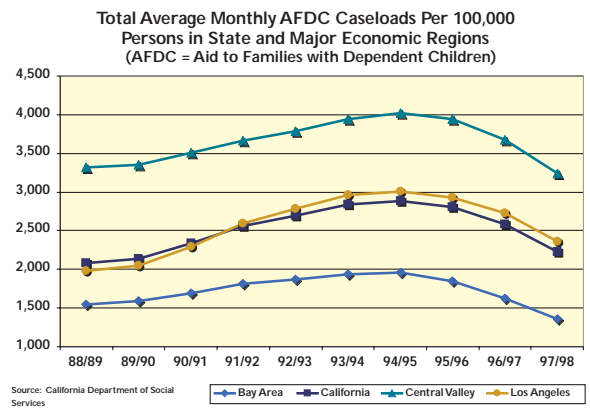
*Families Are Moving from Welfare to Work in the State and the Central Valley*

##### WHY IS THIS IMPORTANT?

Programs such as Aid to Families with Dependent Children (AFDC) were conceived to provide short-term help to families experiencing economic difficulties, not to support a “culture of welfare” where parents in effect withdraw from the workforce. When that occurs, it hurts the parents who miss out on the opportunity to develop their work skills. It hurts the economy which loses the contributions these workers could make.

##### HOW ARE WE DOING?

Since the passage of a tough welfare overhaul bill in 1996, 28% of adults who had been on welfare rolls nationally were working in fiscal year 1997-1998—a figure above the goal of 25%. (California did not quite meet this goal; but because it had reduced its welfare rolls earlier, it was not required to.) The national goal for 2002 is to have 50% of welfare recipients working. Even if the economy stays strong, this will be difficult to reach since those who could be moved most easily from welfare to work have already made the move. As recipients of AFDC move into jobs, they no longer qualify for AFDC: thus, the line graphs for all regions declined between 1996 and 1998 (see charts). Since helping children in poverty has been a major goal of AFDC, care must be taken that children are cared for as their parents transition from welfare to work.



### III. SOCIAL AND POLITICAL INDICATORS

#### 2. CRIME (CALIFORNIA CRIME INDEX: VIOLENT AND PROPERTY CRIME)

*Crime Down in the State, But Not As Much in the Central Valley*

##### WHY IS THIS IMPORTANT?

A safe, low-crime environment is a major determinant of our quality of life. High incomes do not necessarily bring a high quality of life if one is afraid to go out of the house.

##### HOW ARE WE DOING?

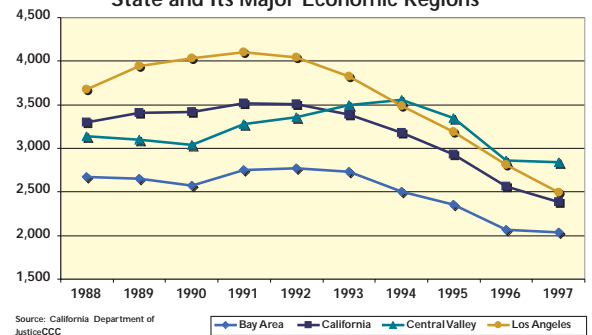
Crime has been declining in both the nation and the state. The causes given for these declines include more law enforcement personnel, tougher sentencing laws, and the aging of the population—i.e., fewer young men in the crime-prone ages of late teens, twenties, and early thirties.

The California Crime Index, which consists of violent and property crimes\* fell by 32%, 39%, and 26% in the state, the Los Angeles region, and the Bay Area, respectively, between 1991 and 1997. In the Central Valley, however, crime decreased by only 13% during this period. Between 1996 and 1997, crime fell by less than 1% in the CV, while it fell by 7% and 11% in the state and the Los Angeles Region, respectively.

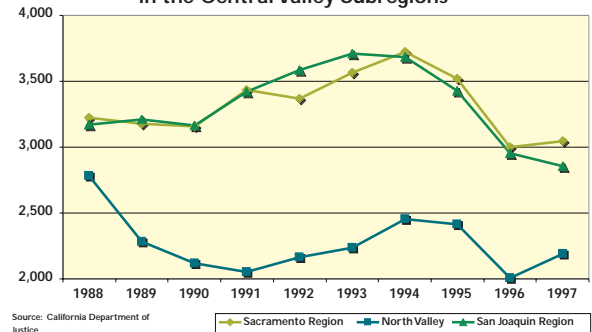
Within the CV, the Sacramento and San Joaquin regions had very similar incidences of crime (see line graphs). Between 1996 and 1997, however, crime rose 2% in the former while it declined 3% in the latter. North Valley has not only had the lowest crime per capita of the three subregions, but its trend in incidence of crime has been distinctive from those of the other two subregions (see line graphs). Between 1988 and 1991, crime declined 26% there while it rose 7% and 8% in the Sacramento and San Joaquin regions, respectively. Between 1996 and 1997, however, crime increased 10% in North Valley.

\* Violent Crimes consist of Willful Homicide, Forcible Rape, Robbery, and Aggravated Assault. Property Crimes consist of Burglary and Motor Vehicle Theft.

California Crime Index (Violent and Property Crimes) Per 100,000 Residents in the State and Its Major Economic Regions



California Crime Index (Violent and Property Crimes) Per 100,000 Residents in the Central Valley Subregions



### III. SOCIAL AND POLITICAL INDICATORS

#### 3. LAW ENFORCEMENT PER CAPITA

##### *More Full-time Criminal Justice Personnel Per Capita in the Central Valley*

###### WHY IS THIS IMPORTANT?

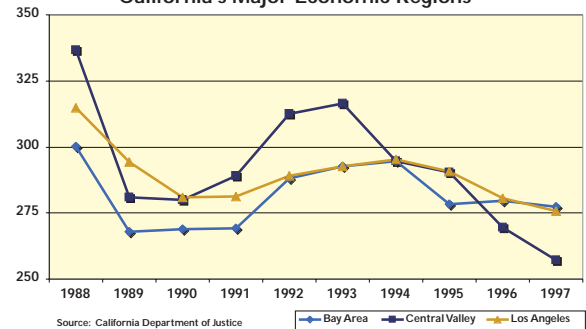
More full-time criminal justice personnel\* is a major reason given for the decline in crime in recent years in the state and the nation. Insufficient personnel hinders the apprehension, prosecution, and rehabilitation of criminals.

###### HOW ARE WE DOING?

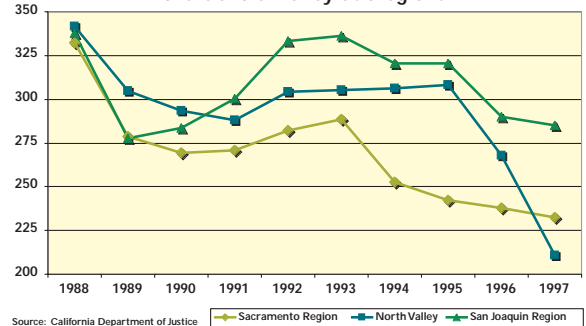
In 1997, there were 257 persons per full-time criminal justice personnel\*\* in the Central Valley, compared to 276 and 277 in the Los Angeles region and Bay Area, respectively. Although the ratios fluctuated considerably over the period 1988-1997, the number of persons per full-time criminal justice personnel declined the most in the Central Valley—by 24% compared to 12% and 8% in the Los Angeles region and Bay Area, respectively. It is striking that while the CV had more criminal justice coverage than these other two regions in 1997, it had a higher crime rate than the state.

Within the CV in 1997, there were 211 persons per full-time criminal justice personnel in North Valley, compared to 232 and 285 in the Sacramento and San Joaquin regions, respectively. This ratio also improved the most for North Valley during the period 1988-1997, and declined by 38%, compared to 30% and 16% for the Sacramento and San Joaquin regions, respectively. This ratio decreased sharply for North Valley between 1996 and 1997, dropping from 268 to 211 persons per full-time criminal justice personnel, a 21 percent decline. Remarkably, crime increased by 10% there during that same period.

Number of Persons per Full-time Criminal Justice Personnel in California's Major Economic Regions



Number of Persons per Full-time Criminal Justice Personnel in the Central Valley Subregions



\* Criminal Justice personnel include Law Enforcement (e.g., police departments), Prosecution (e.g., the courts), and Custody/Supervision (e.g., probation departments). Not included in this analysis are state employees such as the Highway Patrol, Youth Authority, and Department of Corrections (e.g., guards at state prisons), who cannot be assigned to a county.

\*\* This statistic can be reported as the number of full-time criminal justice personnel per 100,000 persons or the number of persons per full-time criminal justice personnel. The latter measure is easier for most people to visualize.



### III. SOCIAL AND POLITICAL INDICATORS

#### 4. NUMBER OF PERSONS PER PHYSICIAN

##### *Ratio of Persons Per Physician Declines in State and the Central Valley*

###### WHY IS THIS IMPORTANT?

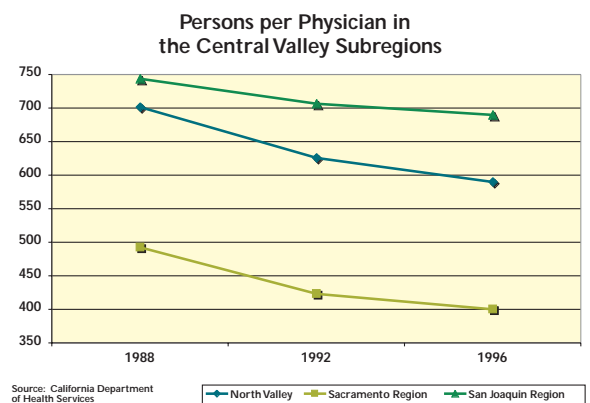
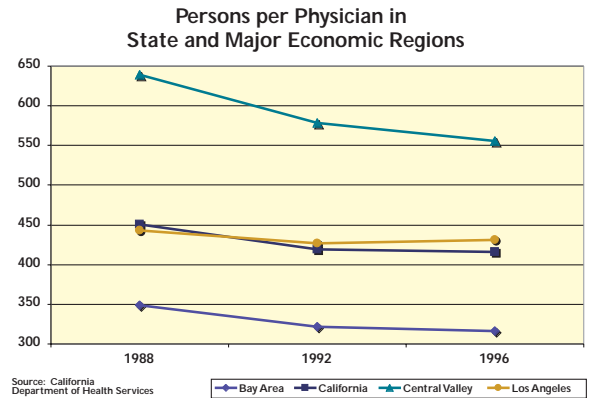
Health care is a necessity of life, and people need to have reasonable access to physicians and to spend as much time with them as required. Fewer persons per physician usually means increased access and/or more individual care from physicians. Beyond a certain point, however, this trend could indicate the supply of physicians is becoming excessive.

###### HOW ARE WE DOING?

Despite California's rapid population growth, the supply of physicians has been growing relatively faster, with the result that the ratio of persons per physician fell between 1988 and 1996 in the state and its major economic regions. It declined the most in the Central Valley—by 13%—followed by drops of 9%, 8%, and 3% in the Bay Area, the state, and the Los Angeles region, respectively. Despite showing the biggest decrease during this period, the CV's ratio of 556 persons per physician in 1996 was still 34% higher than 415 persons for the state and 75% higher than 317 persons for the Bay Area.

The ratios declined only slightly in the state (just 1%) and its regions between 1992 and 1996, and it actually rose in the Los Angeles region by 1 percent. In the CV, the declines in persons per physician between 1988 and 1996 of 19% in the Sacramento Region and 16% in North Valley were twice that of the 7% drop in the San Joaquin Region.

In 1996, the ratio of 399 persons per physician for the Sacramento Region, the most urbanized of the CV's three subregions, was 4% lower than the state average of 415. In contrast, the San Joaquin Region's ratio of 690 persons and North Valley's ratio of 589 were 66% and 42% higher, respectively, than the state average.



### III. SOCIAL AND POLITICAL INDICATORS

#### 5. NUMBER OF NON-PROFIT ORGANIZATIONS AND GRANTS PER CAPITA

*Civic Engagement Strong in the Central Valley, But Grant Money Going Elsewhere*

##### WHY IS THIS IMPORTANT?

Non-profit organizations provide a means for citizens to be involved in social, political, environmental and scientific matters. Civic engagement is vital to a nation “of the people, for the people, and by the people.” The non-profit sector is often considered along with the public and private sectors in assessing civic health. Non-profit organizations can be more effective if these organizations are fiscally healthy, and supported by grants and philanthropic organizations and foundations.

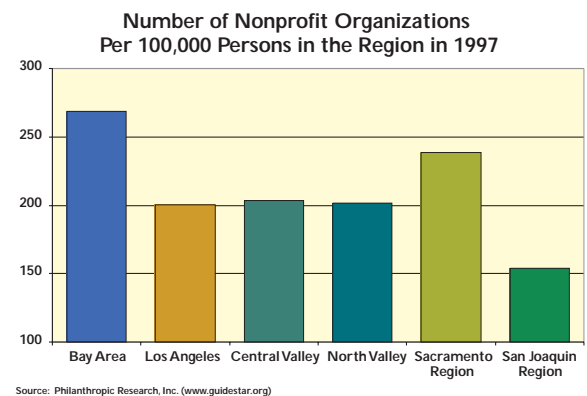
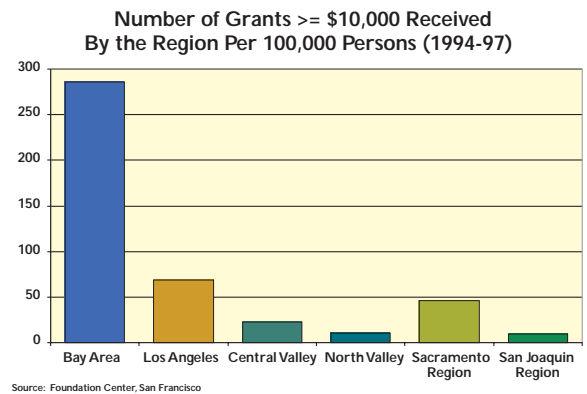
##### HOW ARE WE DOING?

Civic engagement, expressed as the number of non-profit organizations in the region per 100,000 people in 1997, is strong in the Central Valley. Its value of 203 is slightly greater than that of Los Angeles and is only 25 percent less than that of the Bay Area, a region noted for citizen involvement in political, social and environmental causes.

Within the CV, civic engagement is highest in the Sacramento Region. Its value of 238 non-profit organizations per 100,000 is only 9% less than that of the Bay Area. It is noteworthy that this region has similarities with the Bay Area in terms of degree of urbanization and involvement in political, social, and environmental activities.

While the CV as a whole shows a high degree of civic engagement, the region has not been successful in obtaining grants from philanthropic organizations for social, political, artistic and scientific activities.

During the period 1994-1997, the CV received only 8% as many grants per 100,000 people as the Bay Area and only one-third as many as Los Angeles. Even the civically-active Sacramento Region didn't fare well for grants, obtaining only 16% as many grants per 100,000 people as the Bay Area and only two-thirds as many as Los Angeles.



### III. SOCIAL AND POLITICAL INDICATORS

#### 6. NUMBER OF LOW BIRTHWEIGHT INFANTS PER CAPITA

*Percentage of Low Birthweight Infants Down in the Central Valley, But Marked Variations Within Subregions*

##### WHY IS THIS IMPORTANT?

A compassionate and wise society ensures that the mothers of our children have adequate nutrition and medical care. Poor nutrition while in the womb is the major cause of low birthweight infants. Other contributing factors are lack of prenatal care, low income, and poor health habits, especially smoking and drug use.

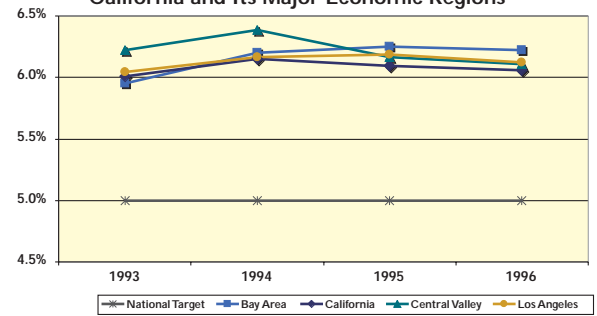
Low birthweight is the single most important cause of preventable infant deaths. Low birthweight infants are also at risk for childhood neurological and respiratory problems, which require special medical treatment. For every occurrence of low birthweight avoided through early or comprehensive prenatal care, there is a savings of \$14,000 to \$30,000 in hospitalization and long-term healthcare costs, according to the U.S. Office of Technology Assessment.

##### HOW ARE WE DOING?

Five percent of births is the national target for low birthweights set by the U. S. Public Health Service. This target has not yet been achieved in the state or in its major economic regions. It is troubling that, during the period 1993-1996, when California was experiencing a strong recovery from the recession of 1990-1993, the percentage of low birthweight babies rose in the state, the Bay Area and Los Angeles. On a positive note, the percentage declined by 2% in the CV during this time. In 1993, the percentage in the CV was 5%, 4%, and 3% higher than those of the Bay Area, the state, and the Los Angeles region, respectively. In 1996, however, the CV's percentage was 2% lower than the Bay Area's, less than 1% higher than the state's, and slightly lower than that of the Los Angeles region.

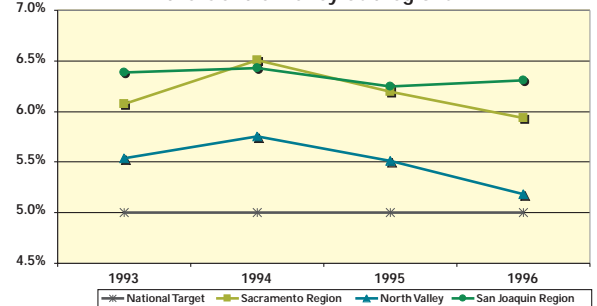
Within the CV, the percentage dropped sharply in North Valley and the Sacramento Region between 1994 and 1996 - by 10% and 8%, respectively; however, it fell by only 2% in the San Joaquin Region.

Percentage of Low BirthWeight Infants (Less than 2500 grams) in California and Its Major Economic Regions



Source: California Department of Health Services

Percentage of Low Birthweight Infants (Less Than 2500 Grams) in the Central Valley Subregions



Source: California Department of Health Services

### III. SOCIAL AND POLITICAL INDICATORS

#### 7. VOTER PARTICIPATION (% ELIGIBLE TO REGISTER VERSUS % WHO VOTED)

*Central Valley Voting Participation Lowest Among State and Major Economic Regions Since 1994*

##### WHY IS THIS IMPORTANT?

Some 225 years ago, our nation was the vanguard in a movement toward democracy in the world. Our founders promulgated the then-radical notion that the right to govern comes not from heredity, but from the consent of those governed. Voting is the main avenue citizens have for expressing their political will and is at the bedrock of the foundations of this nation. Citizens who wish to vote need only to register.

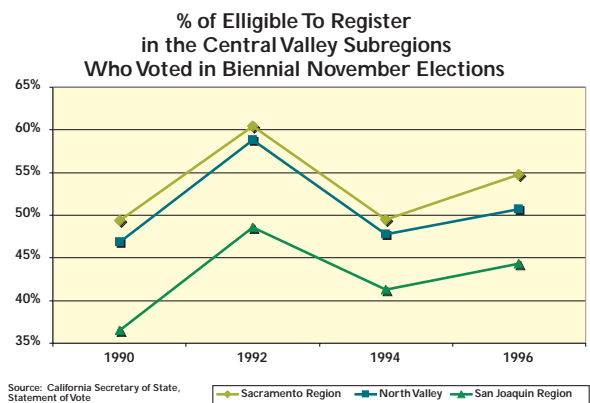
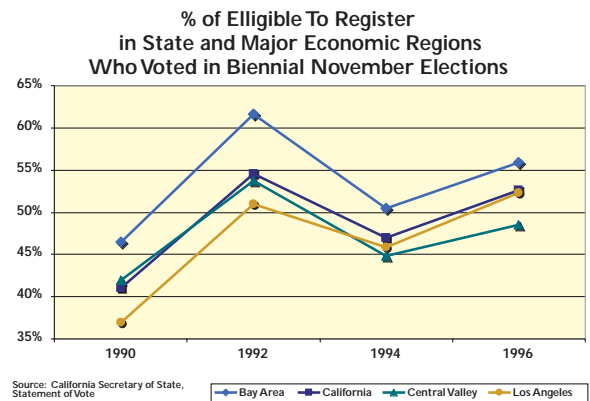
##### HOW ARE WE DOING?

Participation in voting peaks every four years during presidential elections, e.g., 1992 and 1996. Hence, it is appropriate to compare 1990 to 1994 and 1992 to 1996. The percentage of those eligible to register who voted rose in the state and all regions between 1990 and 1994. However, it declined in all regions between 1992 and 1996 except Los Angeles where it rose from 51.0% to 52.2%.

Although the percentage has been up-trending in the CV, it has slipped behind the state and the Los Angeles region. In 1990, the CV's percentage of 42% was ahead of the 41% and 37% for the state and the Los Angeles region, respectively. In 1996 however, the CV with 49% lagged the state and Los Angeles with 53% and 52%, respectively.

Within the CV, voting participation has been highest in the Sacramento Region and North Valley, with the latter's percentage only slightly less than that of the former. In 1996 however, this difference widened noticeably.

During the entire period 1990-1996, the percentage of those eligible to register who voted was markedly lower in the San Joaquin Region than in the other two subregions. In 1996 for example, it was 19% lower in the San Joaquin Region than in the Sacramento Region: 44.3% vs. 54.7%.



### IV. Education Indicators

1. The Scholastic Assessment Test (SAT) is the primary college entrance examination in the U.S. Between the late 1980's and 1994 average SAT scores for the Central Valley and California declined. However, since 1994, we have seen a rise in SAT scores in the state. The Central Valley's average scores have been lagging behind the statewide averages since 1992. This is mostly due to significantly lower scores in the San Joaquin Region even as Sacramento and North Valley Region scores have been consistently higher than state levels in the entire ten-year period of 1988 to 1997.

2. There is a much greater gap in the percentage of grade 12 students who take the SAT between the Central Valley and the state than the gap between the two in SAT scores. This gap has averaged 10% in the period 1988 and 1997. Within the Central Valley, although the Sacramento region has a lower SAT participation rate than the state, it has a significantly higher percentage of students taking the SAT than the remaining two regions of the Valley.
3. The Central Valley of California is the most under represented region in the state in terms of freshman attending one of the campuses of the prestigious University of California system.

#### 1. SAT AVERAGE SCORE PERFORMANCE

##### *Marked Differences in SAT Average Scores in Central Valley Subregions*

##### WHY IS THIS IMPORTANT?

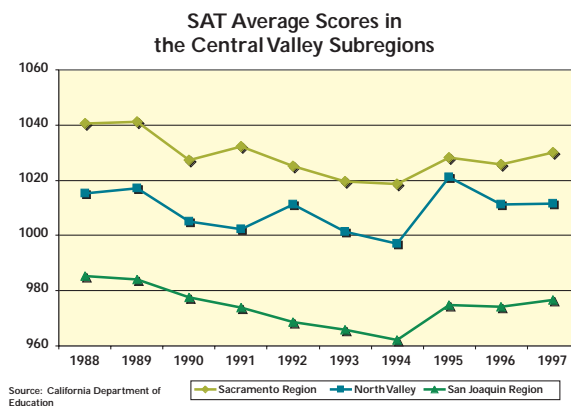
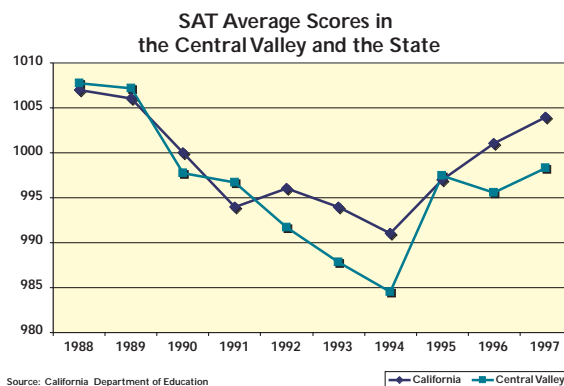
The SAT (Scholastic Assessment Test) and ACT (American College Testing) are the two major college entrance exams given in the United States, with the SAT dominant on both coasts. Students wanting to enter the University of California or California State University must take this exam, and a high score is a major factor in the criteria for admission.

The comparative advantage of California and the U.S. today lies in knowledge-based, high technology industries. Young people with a good college education will do better in this environment than those without this background. Moreover, our nation will do better with a well-educated workforce.

##### HOW ARE WE DOING?

From the late eighties through 1994, average SAT scores for both the CV and the state declined, but have risen since then. (Education officials say that SAT scores historically have exhibited trends of peaks and troughs. They attribute the rise nationwide, and particularly in California, since 1994 to firm new standards in place and improved accountability in schools.)

Since 1992, the CV has been lagging the state somewhat; in 1997, the CV score was 998 compared to 1,004 for the state. However, only one subregion, the San Joaquin Region, has been lagging the state. The Sacramento Region and North Valley had higher scores than the state average for all ten years of data, 1988-97, shown in the



chart, with the Sacramento Region always on top. The San Joaquin Region, in contrast, lagged the state for the ten years shown; its 1997 score was 977. Because 56% of the 16,795 Central Valley SAT test takers in 1997 were from the San Joaquin Region, that subregion's lower score pulled the overall CV average below that of the state.

# THE STATE OF THE GREAT CENTRAL VALLEY OF CALIFORNIA

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## What Does This Mean to Me?

This indicators study combines information for the broad region that runs from Mt. Shasta to the Tehachapis. Your community profile may differ from the region in some areas.

This worksheet will help you gather specific data for your community. Remember, the best solutions are often forged at the local level, in the city or community in which you live, and where coalitions and partnerships can most easily be built. Let's begin.

## ASSESSING YOUR COMMUNITY'S PROFILE INVOLVES SEVERAL STEPS.

### I. Choosing the Topics of Concern

#### Decide on a few general local issues.

There are literally hundreds - maybe thousands - of statistical measures, tables and data sets available. Processing a lot of information can be confusing and can dilute the focus on solutions. Before you start gathering information, be clear about what local issue(s) you want to research.

Monitor news items, letters to the editor and television, and look for repetitive stories or themes.

Major concerns to be monitored might include: job growth/unemployment; traffic; crime; civic participation; housing; recreation; air quality; education; healthcare/wellness; environment; growth; youth activities; or water use.

Define your community as it makes sense to you. It could be a neighborhood, a city, a county or a region.

Talk and exchange ideas with others:

- Friends and Co-Workers
- Neighborhood Organizations
- Church Groups
- Chambers of Commerce
- Service Clubs
- Anyone else who will listen!
- Parent Groups
- City Council Members
- Labor Unions
- Senior Citizens
- Bowling Leagues

Don't expect unanimity as there are many different needs and wants in every area.

Look for general themes and related ideas, and develop a sense of a major priorities and concerns.

## II. Asking The Right Questions

### Narrow down your priorities and concerns

Once you have identified the general areas of concern, be specific about what issue(s) within the broader category you are targeting.

For example, if you are interested in housing, what specifically are you most concerned about?

Is it the affordability of houses? Average lot size? Number of houses built each year? Average cost of housing? Location? Fees? Number of rental units?

If you are interested in the environment, is it the number of days of non-attainment air quality that concern you? Number of endangered species? Protection of wetlands? Toxic waste? Watershed protection? Or is it regulation's affects on business?

### Frame your questions clearly

You must be clear in your inquiries in order to ensure the information you receive will be the most efficient and useful.

### Do a test run

You might find it easier and more manageable to look at a few areas and test them out to see whether or not the information you seek is readily available, before you take on a complete community assessment.

Priority areas of concern:

(1) \_\_\_\_\_

(2) \_\_\_\_\_

(3) \_\_\_\_\_

Want to know:

(1) \_\_\_\_\_

(2) \_\_\_\_\_

(3) \_\_\_\_\_

Looking for:

(1) \_\_\_\_\_

(2) \_\_\_\_\_

(3) \_\_\_\_\_

Need information on:

(1) \_\_\_\_\_

(2) \_\_\_\_\_

(3) \_\_\_\_\_

### III. Finding The Data

#### Do the research and gather information

For every indicator in this report, a data source is identified in the Appendix.

Information can be obtained on the Internet, or it can be requested from a variety of government offices and agencies.

Ask the public library for assistance.

Go to City Hall or call your County Supervisor. If you don't know who your elected representatives are, find out.

#### My City

City Hall \_\_\_\_\_

Mayor \_\_\_\_\_

City Council \_\_\_\_\_

#### My County

County Administrator \_\_\_\_\_

County Supervisor \_\_\_\_\_

Assemblyman/woman \_\_\_\_\_

State Senator \_\_\_\_\_

Member of Congress \_\_\_\_\_

In almost every case, your elected representative or his/her staff may be able to help you get access to the data you want, if it is available.

### IV. Checking the Numbers

#### Test the data once you have gathered it.

Answer the following questions:

- How reliable is the data?
- How trustworthy is the source?
- To what extent can the information be verified?
- To what extent can it be measured over time — in the past and into the future?
- How consistent is the data with your general impressions? Does it seem illogical or counterintuitive?

Get information for the past five or 10 years, and figure out how you will add to the data in the future.

Remember, any specific data point is only a small piece of the story. It is the movement of the trend line over time that tells the real story, so be sure you are prepared to keep tracking your indicator.



## V. Creating a Basis for Action

### Target resources and take action

Once you have a sense of community concerns and priorities, and what the community trend looks like for the issue (Is it getting better or worse or remaining unchanged?) you can begin to work for improvement where necessary.

Take the information back to colleagues and associates, and to policy makers.

Ask for commitment to actions that will improve the numbers and reverse any negative trends.

By building working relationships and coalitions between concerned stakeholders, you will make better progress at reversing negative trends into positive ones. When your actions make positive change, celebrate!

**Note:** Many groups and organizations, from United Way, Latino advocacy groups and local governments, to citizen alliances and regional organizations, have used indicators to measure current conditions, set goals and benchmark progress. In many cases, they have galvanized community resources around specific local priorities and really had an impact in their communities. See what you can do in yours!

For more information and assistance, contact

**Redefining Progress**  
One Kearney Street, 4th Floor,  
San Francisco, CA 94108  
phone 415.781.1191

**The Great Valley Center**  
911 13th Street  
Modesto, CA 95354  
phone 209.522.5103

## IV. EDUCATION INDICATORS

### 2. SAT AVERAGE SCORE PERFORMANCE BY ETHNIC GROUP

*Some Ethnic Groups Had Higher SAT Scores in the Central Valley in 1997 Than in the State*

#### WHY IS THIS IMPORTANT?

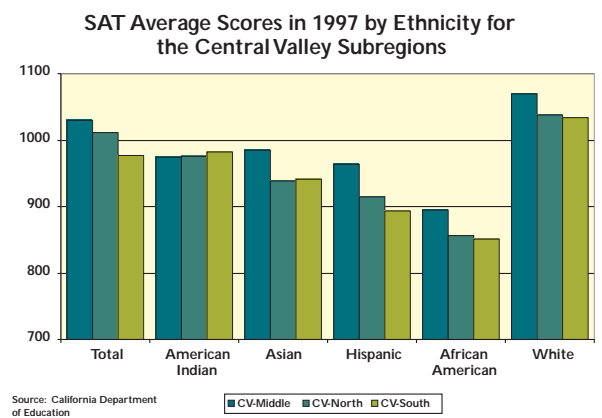
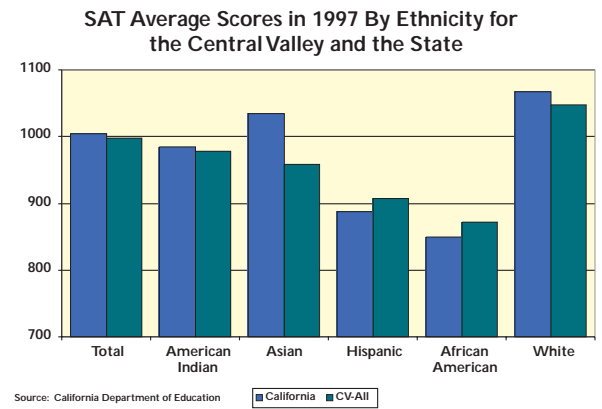
Our nation is committed to equal opportunity for students regardless of race, ethnicity, or country of origin. If an ethnic group did well on SAT scores in the state overall but poorly in the Central Valley, it might indicate that the group had different cultural backgrounds or family patterns.

#### HOW ARE WE DOING?

Two ethnic groups that tend to have low SAT actually did better in the Central Valley than in the state in 1997. The average score of 871 for African Americans in the CV was almost 3% higher than in the state, and the score of 907 for Hispanics was over 2% higher. Despite this positive news, the scores for both groups were the lowest in the CV and the state. The scores of Central Valley African Americans and Hispanics were 13% and 9% lower, respectively, than the total average CV score of 998.

The biggest difference in average SAT score for an ethnic group between the CV and the state occurred for Asians, whose score in the CV was 7% lower than in the state. Some of the difference can be explained by different immigration patterns. Urban coastal areas such as the Bay Area are home to many Asian-American families who have lived in the U.S. for several generations. In contrast, a large percentage of the rapidly growing Asian population in the Central Valley is composed of Southeast Asian refugees, some of whom had little educational background in their countries of origin.

Among the CV subregions, the Sacramento Region, the most urban of the three subregions, stands out as having the highest average SAT scores, in total and for all ethnic groups except American Indians. (The 276 American Indians who took the SAT in the CV in 1997 constituted 1.6% of the 16,795 CV test takers.)



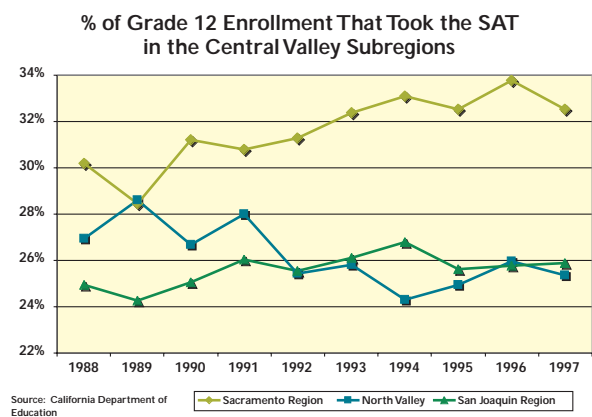
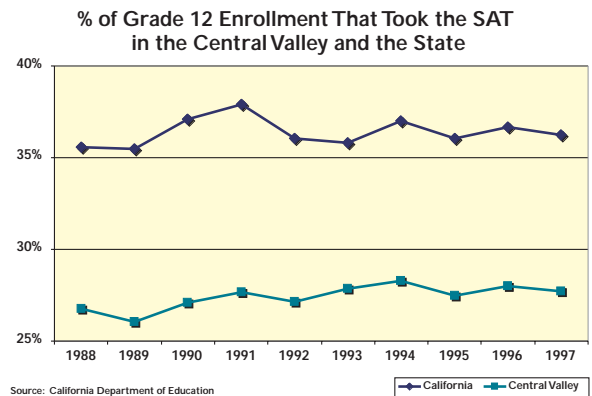
## IV. EDUCATION INDICATORS

### 3. PERCENTAGE OF GRADE 12 ENROLLMENT THAT TAKE THE SAT

*A Lower Percentage of Central Valley Students Take the SAT*

#### WHY IS THIS IMPORTANT?

A basic principle of this nation is that young people should have the same educational opportunity, regardless of what region or family situation they are from. Taking the SAT is an important factor in students' post-secondary educational opportunities. The number of high school graduates taking the SAT measures educational aspiration as well as achievement.



#### HOW ARE WE DOING?

There is a much greater gap in the percentage of grade 12 students who take the SAT between the CV and the state than there is in SAT scores. This gap averaged approximately 10 percentage points from 1988 through 1997.

Although all three CV subregions have lower percentages of test takers than the state, the Sacramento Region has a markedly higher percentage than North Valley and the San Joaquin Region. It is noteworthy that the Sacramento Region and North Valley both had higher average SAT scores than the state for all ten years of data, 1988-97. This shows that some students from these regions are doing well. However, the low percentages who are taking the test, particularly in North Valley, indicate that too many students are missing out on an important step toward their future careers.

## IV. EDUCATION INDICATORS

### 4. PERCENTAGE OF GRADE 12 ENROLLMENT THAT TAKE THE SAT BY ETHNIC GROUP

*Lower Percentages of All Ethnic Groups Took the SAT in the Central Valley in 1997; Lowest Percentages in North Valley.*

#### WHY IS THIS IMPORTANT?

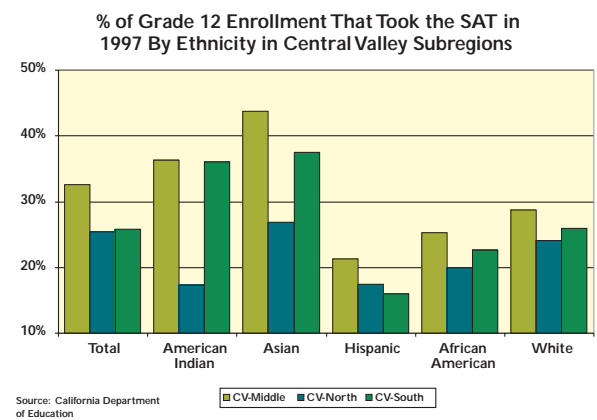
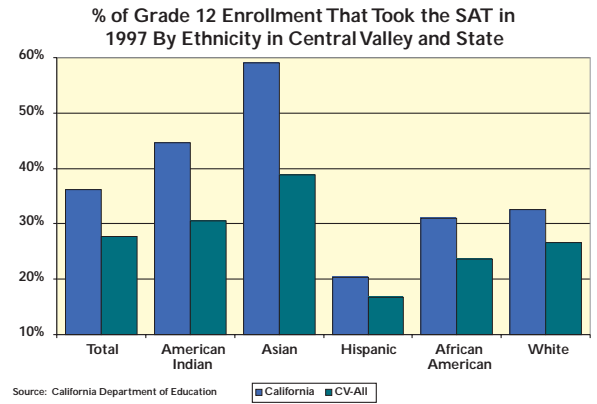
Our nation is committed to equal opportunity for students regardless of race, ethnicity, or country of origin. Taking the SAT is an important factor in students' post-secondary educational opportunities, and the percentages of students taking the test should not vary substantially across ethnic groups.

#### HOW ARE WE DOING?

In 1997, lower percentages of all ethnic groups took the SAT in the Central Valley than in the state. The difference in the percentage taking the test was greatest for Asians; their percentage of 39% in the CV was a third lower than their 59% for the state. Despite this difference, Asians still had the highest test-taking rate in the CV: 39% compared to 28% overall for the CV.

It is noteworthy that the only two ethnic groups that had higher SAT scores in the CV than in the state - Hispanics and African Americans - had markedly lower participation rates in the CV. This suggests that young people from these two groups may not feel that a college education is attainable for them.

North Valley stands out as the region with the lowest test-taking rates for all ethnic groups except Hispanics; their test-taking rate of 17% there was slightly higher than their 16% rate in the San Joaquin Region. As noted earlier, North Valley had higher average SAT scores than the state during the period 1988-97. However, the low percentages of students who are taking the SAT there indicate students do not understand the importance of a college education or do not think it is attainable for a variety of reasons.



## IV. EDUCATION INDICATORS

### 5. CENTRAL VALLEY REPRESENTATION AT THE UNIVERSITY OF CALIFORNIA

*The Central Valley Is Under Represented at the University of California*

#### WHY IS THIS IMPORTANT?

The University of California system\* occupies the top tier of the state's three systems of post-secondary education. It accepts only the top high school graduates, and currently only 11.1 percent of California's high school graduates are eligible to attend it. Students at the University of California not only have the benefit of an excellent education in a stimulating and competitive environment, they also get on the "fast track" for admission to top graduate and professional schools. They are able to develop relations with students who will be among tomorrow's leaders in business, government, and science and technology fields.

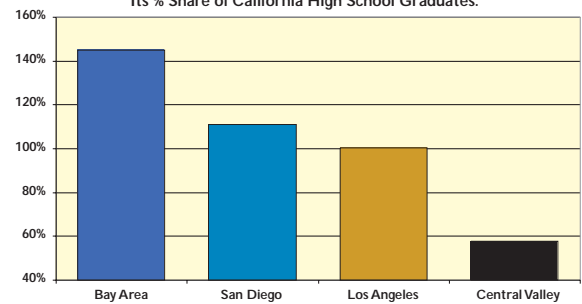
#### HOW ARE WE DOING?

If educational opportunity was equally distributed, one would expect the percentage of first-time freshmen at the University of California from a region of California would roughly be the same as that region's percentage of all California high school graduates in the preceding academic year. Thus, the former percentage divided by the latter should be close to one—or, expressed as a percentage, 100 percent. In 1997 for example, 48.6% of first-time freshmen from California high schools at the University of California were from the Los Angeles region, and 48.3% of all California high school graduates were from that region. Thus, the region's representation ratio is 101 percent. The Bay Area and the San Diego regions, in contrast, were proportionately over-represented with ratios of 145% and 111%, respectively.

The Central Valley was the most under-represented region in the state with an overall ratio of only 58 percent. A newly-approved plan to make the top 4 percent of students in each of the state's high schools eligible to attend the University of California should be a major step toward eliminating disparities in regional representation at the University of California.

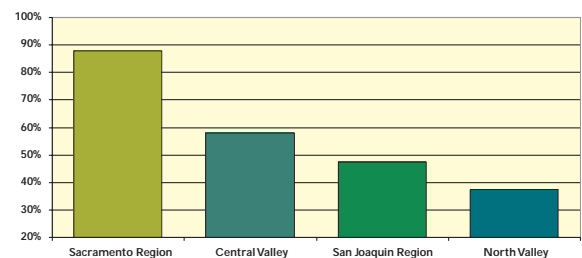
\* The University of California is adding a new campus at Merced that will improve access for students within the region.

First-Time Freshmen From California High Schools at the University of California in 1997 By Region.  
100% Indicates That the Region's Representation at UC Equals Its % Share of California High School Graduates.



Source: California Postsecondary Education Commission

First-Time Freshmen From Central Valley High Schools at the University of California in 1997 By Subregion.  
100% Indicates That the Region's Representation at UC Equals Its % Share of California High School Graduates.



Source: California Postsecondary Education Commission

### V. Infrastructure Indicators

1. Use of public transit is a multi-dimensional benefit for our communities: Less traffic congestion, less pollution, less stress for commuters and drivers. Between 1988 and 1997, bus ridership increased 33% in the Central Valley compared to only 8% for the state. This is remarkable in view of lower population densities in most of the Valley relative to the highly developed coastal metro areas of California.
2. Passenger trains such as AMTRAK's San Joaquin provide benefits similar to those of public bus systems. In the last two decades, train ridership has continued to increase on AMTRAK's San Joaquin. It has actually quadrupled between 1980 and 1993. This is a very positive trend for the Valley.

3. Good commercial air service is essential for the economic vitality of regions. Between 1985 and 1997, passenger traffic at the eight major commercial service airports in the Central Valley increased 100% compared to 71% for the state. The Sacramento airport is the dominant air transportation center for the Valley with 83% of the passenger traffic.
4. Long-term economic vitality and quality of life depend on reliable, clean and affordable sources of water. Population growth will continue to dominate the Valley's demand for water. Average-year water shortages will grow by nearly 50% in the state, while average-water shortages in the Central Valley will decrease by 28%. Urban use will increase at 57% in the Central Valley, but the reallocation of water from agriculture to urban uses will make up the difference.

#### 1. PUBLIC TRANSPORTATION USAGE: LOCAL BUS RIDERSHIP

##### *Bus Ridership Up Substantially in the Central Valley*

##### WHY IS THIS IMPORTANT?

When people use public buses rather than single occupant vehicles, there are many benefits. Congestion is greatly reduced — e.g., 50 people in a bus rather than 50 automobiles — and there is less need to build more roads. Also, pollution is reduced, and, our international balance of payments improves because we import less petroleum.

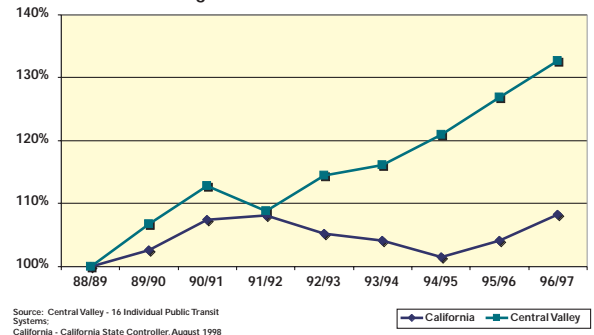
##### HOW ARE WE DOING?

From fiscal year 1988-89 through 1996-97, annual bus ridership of public transit systems increased 33% in the CV compared to 8% for the state. This is remarkable given that the CV is less densely populated than the state's crowded coastal urban areas and hence perceived to be less suited for public transportation.

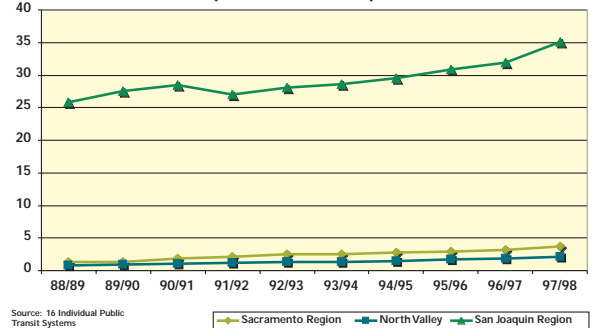
Within the CV, the increases in bus ridership in the Sacramento Region and North Valley were astonishing, rising 192% and 154%, respectively, from 1988-89 through 1997-98. Bus ridership rose 36% in the San Joaquin Region during this period. Some of the increase may be attributable to the expansion of county and municipal systems in growing areas.

This analysis was based on 16 major public bus systems in the CV, 3 in North Valley, 4 in the Sacramento Region, and 9 in the San Joaquin Region. Based on this data, the San Joaquin Region dominates total bus ridership in the CV. In 1998, bus ridership in the latter was 35,039,184 compared to 3,705,610 and 2,080,103 in the Sacramento region and North Valley, respectively.

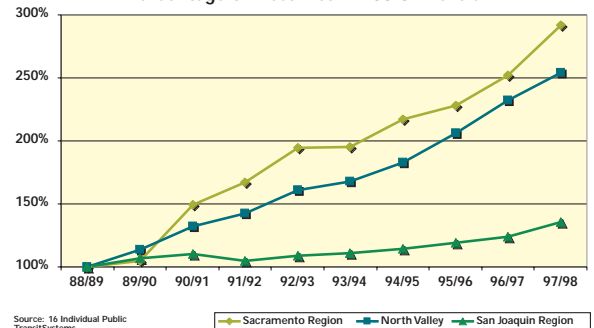
Annual Bus Ridership of Public Transit Systems in California and the Central Valley As a Percentage of Fiscal Year 1988-89 Levels



Annual Bus Ridership of 16 Major Public Transit Systems in the Central Valley Subregions (Millions of Riders)



Annual Bus Ridership of Public Transit Systems in the Central Valley Subregions As a Percentage of Fiscal Year 1988-89 Levels



## V. INFRASTRUCTURE INDICATORS

### 2. PUBLIC TRANSPORTATION USAGE: AMTRAK RIDERSHIP

#### *AMTRAK's San Joaquin Route Gaining in Popularity*

##### **WHY IS THIS IMPORTANT?**

Trains such as AMTRAK's San Joaquin Route (Route 39) provide benefits similar to those of public bus systems. Congestion is greatly reduced — e.g., 500 people in one train rather than 500 automobiles — and there is less need to build more roads. Pollution is reduced, and our international balance of payments improves because we import less oil.

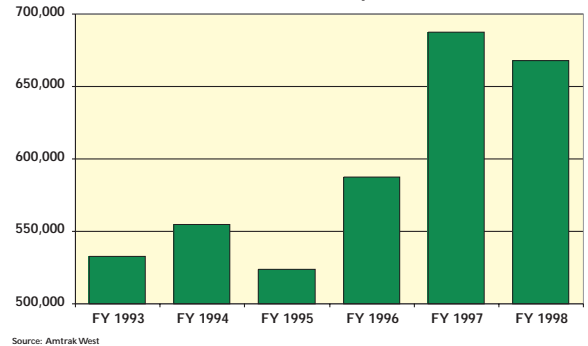
AMTRAK complements the CV's bus services, providing comfortable public transportation over longer distances — e.g., between Stockton and Bakersfield. Additionally, AMTRAK's San Joaquin Route offers an alternative to flying for those traveling between the Bay Area and cities such as Fresno or Bakersfield. (The San Joaquin Route presently extends 312 rail miles between Oakland and Bakersfield with 12 intermediate stops.)

##### **HOW ARE WE DOING?**

During the past 20 years, ridership (total passengers per year) has continued to increase on AMTRAK's San Joaquin Route. From fiscal year (FY) 1980 through FY 1993, ridership nearly quadrupled. From FY 1993 through FY 1998, ridership on Route 39 grew by 25 percent, from 532,499 to 668,036 passengers (see chart). The major reason for the 17% jump in ridership in FY1997 was a new policy that children rode free with adults seven days a week. This policy was revised the following year to apply on weekends only; this change was largely responsible for the 3 percent decline in passengers in FY1998.

Until February 1998, four trains ran daily between Oakland and Bakersfield. In February, a fifth train was added that runs from Sacramento to Bakersfield. The San Joaquin's service is reliable — especially in the winter, when tule fog makes other forms of travel hazardous. In January of this year, air flights were delayed and highway driving was precarious. But the trains, operating with the aid of a carefully controlled signal system, did not slow down. The expense of the trains is high, however. Fares on the San Joaquin are kept low — a round-trip from the Bay Area to Fresno is \$58 — but the fares pay only 41 percent of the cost of operation.

Total Annual Ridership on Amtrak's  
Route 39 - The San Joaquin Route



3. PASSENGER TRAFFIC AT COMMERCIAL SERVICE AIRPORTS

*Passenger Traffic at Sacramento Airport Soars*

**WHY IS THIS IMPORTANT?**

Good commercial air service is essential to the economic vitality of regions. In today's fast-paced world, time is money, and business and government officials depend on air travel to get them where they need to be as fast as possible. Also, mergers are increasingly common today, meaning corporate headquarters are likely to be distant from regional offices and facilities. Regions without good air connections risk economic isolation. Increased passenger traffic at commercial service airports is an indicator of economic vitality.

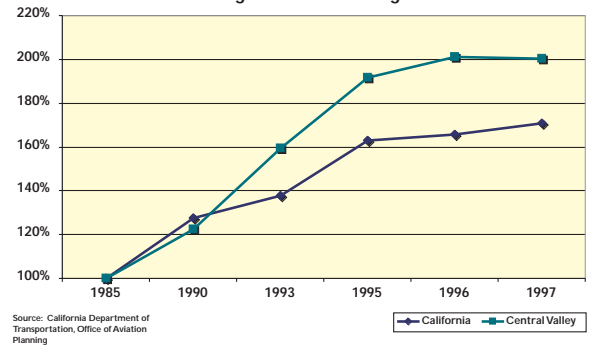
**HOW ARE WE DOING?**

Between 1985 and 1997, passenger traffic (enplanements and deplanements) at the eight major commercial service airports in the CV\* increased 100% compared to 71% for the state. Between 1996 and 1997 however, passenger traffic decreased slightly in the CV while it rose by 3% in the state, reflecting stronger economic activity outside of the CV.

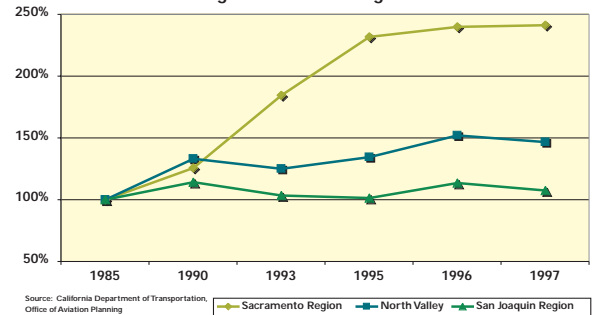
In 1997, Sacramento Airport accounted for 83% of passenger traffic in the Central Valley. Passenger traffic there soared after Southwest Airlines began direct service there in the early nineties.

\* This data for this analysis comes from one airport in the Sacramento Region, two in North Valley, and five in the San Joaquin Region.

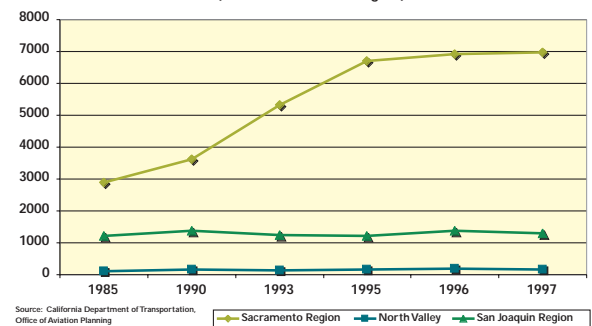
Passenger Traffic at Commercial Service Airports in the Central Valley and the State As a Percentage of 1985 Passenger Loads



Passenger Traffic at Commercial Service Airports in the Central Valley Subregions As a Percentage of 1985 Passenger Loads



Passenger Traffic at Commercial Service Airports in the Central Valley Subregions (Thousands of Passengers)





4. WATER USAGE PROJECTION

*1995-2020: Urban Water Use Up, Agricultural Water Use Down, Environmental Water Use Almost the Same*

**WHY IS THIS IMPORTANT?**

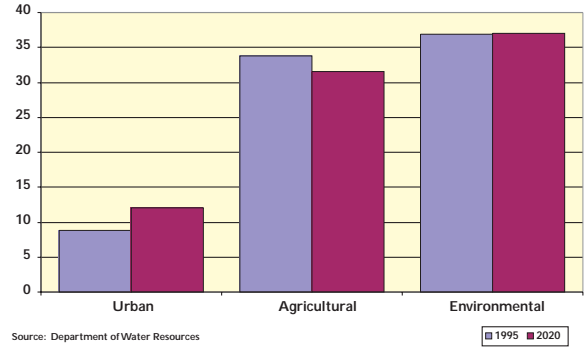
The well being of Californians is vitally dependent on a reliable source of clean, fresh water. The economic vitality of business and industry, and particularly agriculture, is also totally dependent on a reliable supply of fresh water. Also, the state’s natural environment, which is highly valued by a large majority of Californians, needs water to be healthy and beautiful.

**HOW ARE WE DOING?**

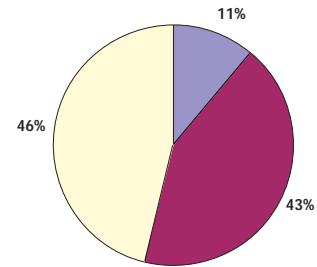
Population growth is expected to be the dominant factor in the state’s increased water demands. During the period 1995-2020, California is forecasted to grow from 32.1 million to 47.5 people, a 48% increase. This addition of 15.4 million people is equal to the 1995 population of eight neighboring states: Arizona, Nevada, Oregon, Idaho, Montana, Wyoming, New Mexico, and Utah. (The Department of Water Resources uses population forecasts from the Department of Finance.)

Urban water use is expected to grow by 3.2 million acre-feet (maf) by 2020, and it is planned that 72% of this additional demand will be satisfied with water re-allocated from agricultural use. As a result, urban users’ share of the state’s applied water will rise by 4%, while agricultural users’ share will decline by the same percentage. Water allocated to the environment will rise slightly from 36.9 to 37.0 maf, with its share staying at 46 percent.

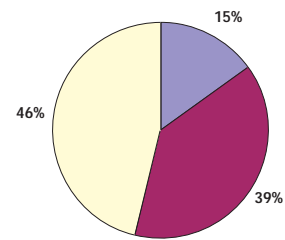
Water Use in California in 1995 and 2020  
(Average Year, Million Acre-feet)



Percentage Shares of Water Use in 1995



Percentage Shares of Water Use in 2020



## 5. BALANCING WATER DEMAND AND SUPPLY

*Average-Year Water Shortages to Rise by 50% by 2020 in the State, But Decline by 28% in the Central Valley\**

### WHY IS THIS IMPORTANT?

As discussed, water is vital to humans, the economy, and the environment. Clearly, there must be ample supply to meet demand.

### HOW ARE WE DOING?

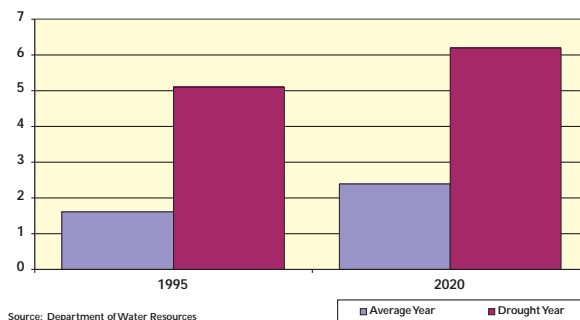
California's population is expected to grow by 48% (15.4 million more people) by 2020. However, the Central Valley's\* population is expected to grow by 78% (4.4 million more people). As a result of this population growth, average-year water shortages in the state are forecasted to grow from 1.6 to 2.4 million acre-feet (maf), a 50% increase (with existing facilities and programs). However, average-year shortages in the CV are expected to decline from 1,220 to 880 thousand acre-feet (taf), a 28% decrease.

How can water shortages decrease in the CV and increase in the state, when average-year urban water use is expected to grow by 57% in the CV by 2020 compared to 37% in the state? The answer is a re-allocation of CV water supplies. The additional 1,162 taf needed by CV urban users will come from a reduction of 1,316 taf to CV agricultural users (a 5% reduction). 10,926 taf will be allocated to the CV environment in 2020, almost unchanged from 1995.

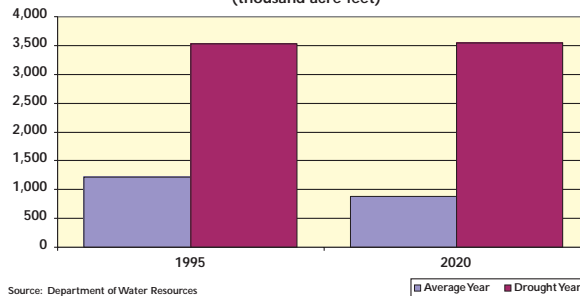
Irrigated land area in the CV will shrink by 280,000 acres between 1995 and 2020, with the CV accounting for a little more than two-thirds of the loss of 433,000 acres of irrigated land area in the state during this period.

\* The 19-county Central Valley is approximated by the Sacramento River, San Joaquin River, and Tulare Lake Hydrologic Regions. The sum of these three contiguous areas is somewhat larger than the Central Valley. In particular, it encompasses some Sierra Nevada counties, and the Sacramento River Hydrologic Region touches the Oregon border.

Water Shortages in California with Existing Facilities and Programs (million acre-feet) 1995 and 2020 Average and Drought Years



Water Shortages in the Central Valley\* with Existing Facilities and Programs (thousand acre-feet) 1995 and 2020 Average and Drought Years



\* The Central Valley is approximated by the Sacramento River, San Joaquin River, and Tulare Lake Hydrologic Regions.

### VI. Agricultural Indicators

1. Farming is an important renewable resource to California, and as many areas in the state's coastal areas continue to urbanize, the Central Valley has become increasingly important. Agriculture accounts for 8.5% of the state's income and 9% of its jobs. The Central Valley increased output by 13% between 1988 and 1997, while the state saw an 8% increase. The San Joaquin Region accounted for 87% of the agricultural output of the Central Valley in 1997.
2. California's agricultural production is still the highest in the nation, even as California's population has grown faster than the nation as a whole. The state's 1997 total farm cash receipts and income was \$26.8 billion, up 6% from 1996.
3. The Central Valley constitutes less than 1% of U.S. farmland but it produces 8% of total agricultural output. The Central Valley also has a large diversity of crops that allows it to export to the world.
4. Farm jobs in the Central Valley only constitute 12% of the total jobs in the regions. Farm-related industries are extremely important to the region creating another 28% of its jobs. It will be important for the Central Valley to capture farm-related economic activity and not lose it to neighboring states or countries.
5. Farm workers, often with little education and/or formal job skill training, are on the entry level of the economic ladder. Wages in Bakersfield, Modesto, and Fresno MCI's were \$5.05, \$5.23, and \$5.53, respectively. Much of the work is performed by workers piecing together a series of jobs, interspersed with periods of no work. The Central Valley lags behind the state as a whole, which has an average wage of \$7.75 per hour.
6. It is in the strategic interest of any area not to be dependent on foreign labor for a vital economic function. Migrant workers from Mexico send \$5 billion every year to their homeland, which constitutes that country's third largest source of foreign capital. Immigrant populations make it difficult for a county to stabilize its population size and make it less necessary for it to live within its carrying capacity. Experts say that over 95% of California crop workers are foreign born.



7. Agriculture will be of great economic importance as the supply of good farmland decreases and the world's population grows from 5.9 billion today to 9.4 billion in 2050. There is, however, a steady conversion of important farmland, over half in the Central Valley, to urban and built-up land.
8. Annexation is often the first step to converting farmland to urban and built-up land. The Central Valley saw a 141% increase in acres annexed in 1998 over 1997. Between 1988 and 1998, 142,682 acres were annexed in the Central Valley by cities. The San Joaquin region accounted for 80% of that total.
9. The Central Valley produces over 350 different crops and commodities, including 11 grown exclusively in California. In the competitive global economy, few areas can compete with the agricultural production of the Central Valley. Yet within the last 25 years, of the 23 agriculturally-related land trusts created in California, only 6 have been in the Central Valley, a strikingly low figure.

# VI. AGRICULTURAL INDICATORS

## 1. ANNUAL DOLLAR VALUE OF PRODUCTION OF THE REGION'S FARMS

*The Central Valley Contribution to California's Agricultural Output Increasing.*

### WHY IS THIS IMPORTANT?

Agriculture is an important part of California's economy. California farms generate over 8.5 percent of the state's annual income and support nearly 9 percent of its jobs. Farming creates income from a resource that is renewed each year.

As agricultural land has been converted to other uses in the state's coastal urban areas - e.g., the Santa Clara Valley, the Central Valley has boosted its share of California's agricultural output.

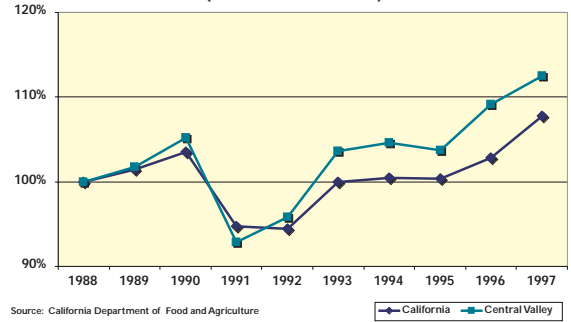
### HOW ARE WE DOING?

From 1988 through 1997, the value of agricultural output (in constant 1997 dollars) from the Central Valley increased by 13% compared to 8% for the state as a whole.\* During this same period, the CV's contribution to the value of the state's agricultural output rose from 57% to 60 percent.

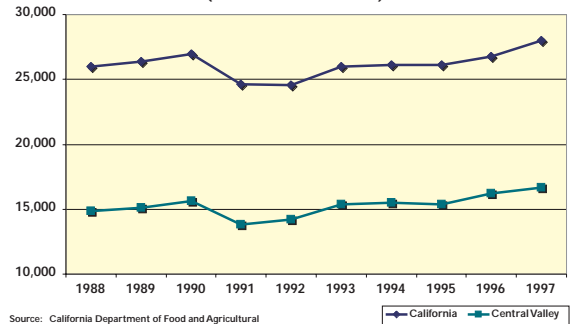
Within the Central Valley, the San Joaquin Region is the dominant agricultural subregion. It produced 87% of the CV's agricultural output in 1997, compared to 9% for the North Valley and 4% for the Sacramento Region.

\* The pronounced drop in agricultural output in 1991-92 resulted from the combined effects of a freeze and drought.

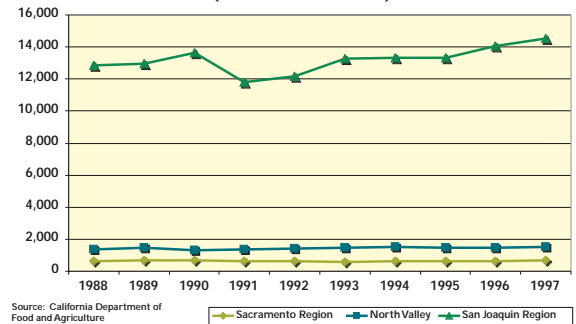
Value of Agricultural Output As Percentage of 1988 Levels in the Central Valley and the State (in constant 1997 dollars)



Value of Agricultural Output (Dollars in Millions) in the Central Valley and the State (in constant 1997 dollars)



Value of Agricultural Output (Dollars in Millions) in the Central Valley Subregions (in constant 1997 dollars)



## VI. AGRICULTURAL INDICATORS

### 2. CALIFORNIA'S AND THE CENTRAL VALLEY'S RANKING IN AGRICULTURAL OUTPUT

*California Retains Its Ranking as #1 in Agriculture in the Nation. The Central Valley has 6 out of the 7 Top Ag Producing Counties in the State*

#### WHY IS THIS IMPORTANT?

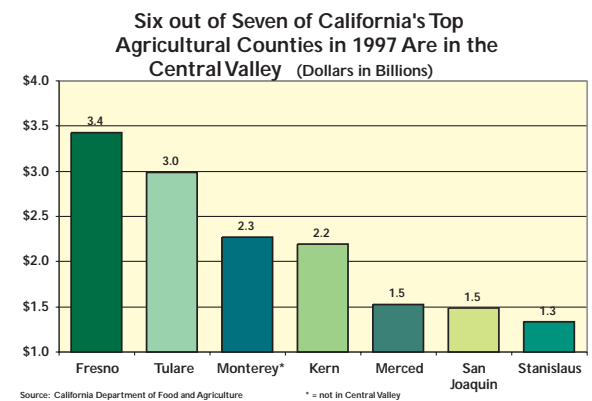
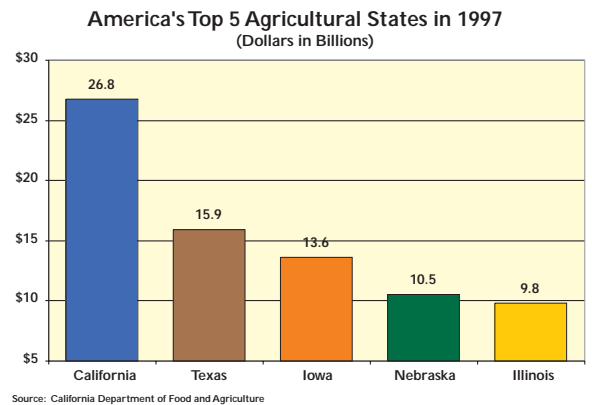
California's population has been growing faster than that of the nation as a whole, and it is expected to grow from 32.1 million people in 1995 to 47.5 million in 2020, a 48% increase. Much of this growth will occur in the Central Valley.

California's and the Central Valley's ability to retain its rankings in agricultural production in spite of pressures from population growth and urbanization means that farmers and ranchers will need to continue to achieve high levels of productivity.

#### HOW ARE WE DOING?

At least so far, California and the CV have been able not just to maintain, but to increase their levels of productivity. In 1997, California celebrated more than 50 consecutive years as the #1 food and agricultural producer in the United States. California's cash farm receipts and income for 1997 totaled a record \$26.8 billion, up 6% from 1996.

Sixty percent of this output was from the Central Valley. Six of the top seven agricultural counties in the state in 1997 were in the CV. The top seven (in order of production value) were Fresno, Tulare, Monterey, Kern, Merced, San Joaquin, and Stanislaus. Fresno County, the # 1 agricultural county in the nation, produced \$3.4 billion worth of agricultural output in 1997. Its leading commodities were grapes, cotton and poultry.



# VI. AGRICULTURAL INDICATORS

## 3. PRODUCTIVITY AND DIVERSITY OF CALIFORNIA AGRICULTURE

### Central Valley Agriculture: High Productivity and Diversity

#### WHY IS THIS IMPORTANT?

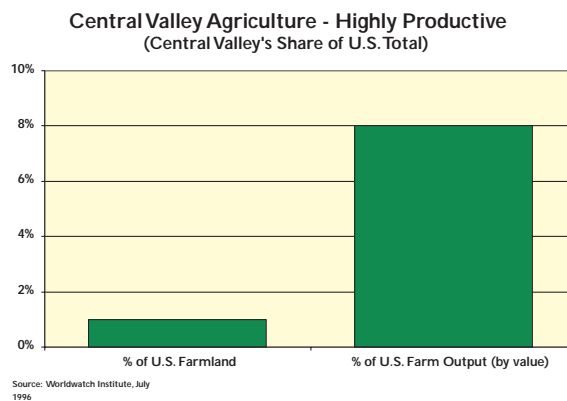
Compared to many agricultural regions, the Central Valley is not large. Some 400 miles long and averaging only 50 miles in width, it contains less than 1 percent of U.S. farmland. Thus, what it lacks in size, it must make up for in productivity. High levels of productivity will be especially critical as urban development continues in the Central Valley, bringing with it the conversion of important farmland to urban and built-up land.

The Central Valley and California are a vital source of food and fiber not only for the U.S., but for the rest of the world. Diversity of output means that the state is not dependent on a small number of crops (e.g., wheat or soybeans) whose prices may drop precipitously in any year due to temporary over-supply. Diversity of output also makes it more feasible to sell to a variety of foreign markets. In this way, California farmers are less likely to be devastated by economic problems in one part of the world.

#### HOW ARE WE DOING?

The Central Valley is an immensely productive agricultural area. On less than one percent of U.S. farmland, it supplies 8 percent of U.S. agricultural output (by value).

In spite of an ongoing loss in total cropland to urbanization, California's farmers have continued to increase the value of the state's agricultural output. The value of



output in 1997 was 6% higher than a year before, and that of 1996 was 7% higher than that of 1995. (Sixty percent of this output was from the Central Valley in 1997.) California farmers have been able to raise the value of output on less total cropland by shifting from “extensive” crops such as barley, oats, and sugar beets to higher-value fruits, nuts, vegetables and ornamental horticultural crops.

The diversity of California's agricultural output and of its foreign markets is shown on pages 41 and 42. It is noteworthy that three out of the four most popular agricultural products sold in Europe — almonds, prunes, and raisins — are grown exclusively (99% or more) in California. Exports constitute about 20% of California's agricultural output. (Note: In addition to exports to other nations, California “exports” heavily to other states of the United States, e.g., lettuce to Ohio.)

## CALIFORNIA: AN AGRICULTURAL CORNUCOPIA

### CALIFORNIA'S TOP 10 EXPORT MARKETS

(VALUE OF PRINCIPAL EXPORTS<sup>1</sup>; DOLLARS IN MILLIONS)

Rank	Country	1997	1996	Leading Exports
1.	Japan	\$1,307	\$1,396	Cotton, Cattle & Calves, Hay
2.	Canada	\$964	\$857	Table Grapes, Oranges, Lettuce
3.	Hong Kong	\$358	\$265	Table Grapes, Oranges, Pistachios
4.	South Korea	\$365	\$262	Cotton, Cattle & Calves, Dairy
5.	Germany	\$297	\$340	Almonds, Wine, Prunes
6.	United Kingdom	\$240	\$228	Wine, Almonds, Raisins
7.	Taiwan	\$207	\$186	Cotton, Peaches/Nectarines, Plums
8.	China	\$188	\$189	Cotton, Tomatoes (Processed), Dairy
9.	Indonesia	\$124	\$142	Cotton, Dairy, Table Grapes
10.	Mexico	\$118	\$81	Table Grapes, Dairy, Peaches/Nectarines

Source: California Department of Food and Agriculture

<sup>1</sup> Reflects the principal commodities; the dollar values do not include all exports to these markets.

## VI. AGRICULTURAL INDICATORS

### CALIFORNIA'S TOP 20 FARM PRODUCTS FOR 1997 (DOLLARS IN MILLIONS)

Rank	Commodity	1997	1996	1995
<i>Total Production and Income</i>		<i>\$26.8 billion</i>	<i>\$25.3 billion</i>	<i>\$23.6 billion</i>
1.	Milk and Cream	\$3,626	\$3,714	\$3,080
2.	Grapes	\$2,819	\$2,192	\$1,862
3.	Nursery Products	\$1,758	\$1,661	\$1,485
4.	Cattle and Calves	\$1,323	\$1,118	\$1,290
5.	Lettuce	\$1,251	\$1,040	\$1,454
6.	Almonds	\$1,127	\$1,018	\$881
7.	Hay	\$1,037	\$841	\$780
8.	Cotton Lint	\$984	\$1,070	\$1,047
9.	Tomatoes	\$870	\$924	\$853
10.	Flowers & Foliage	\$729	\$652	\$673
11.	Strawberries	\$686	\$585	\$611
12.	Oranges	\$587	\$489	\$473
13.	Chickens	\$473	\$458	\$384
14.	Broccoli	\$449	\$382	\$366
15.	Walnuts	\$352	\$327	\$328
16.	Rice	\$347	\$296	\$311
17.	Carrots	\$345	\$278	\$274
18.	Eggs, Chicken	\$345	\$367	\$288
19.	Lemons	\$266	\$210	\$226
20.	Garlic	\$262	\$196	\$141

Source: California Department of Food and Agriculture

### CALIFORNIA'S PRINCIPAL AGRICULTURAL EXPORTS FOR 1997 (DOLLARS IN MILLIONS)

Rank	Commodity	1997	1996	1995
1.	Cotton, Lint	\$931.3	\$1,078.5	\$974.6
2.	Almonds	\$818.3	\$1,015.9	\$780.5
3.	Wine	\$374.9	\$286.9	\$209.9
4.	Table Grapes	\$330.8	\$289.2	\$264.6
5.	Oranges	\$307.4	\$267.9	\$291.5
6.	Cattle & Calves	\$262.0	\$278.8	\$334.7
7.	Tomatoes, Processing	\$226.3	\$202.8	\$196.4
8.	Dairy	\$212.6	\$135.1	\$127.8
9.	Raisins	\$199.8	\$208.6	\$197.6
10.	Walnuts	\$153.0	\$201.4	\$177.2
11.	Rice	\$144.4	\$145.9	\$146.1
12.	Hay	\$141.2	\$109.0	\$112.4
13.	Prunes	\$139.2	\$139.1	\$139.3
14.	Lettuce	\$120.8	\$109.7	\$122.5
15.	Strawberries	\$116.5	\$110.6	\$111.8
16.	Pistachios	\$113.4	\$85.6	\$86.6
17.	Lemons	\$110.1	\$110.2	\$116.9
18.	Peaches/Nectarines	\$103.3	\$89.8	\$55.7
19.	Broccoli	\$87.9	\$79.8	\$82.3
20.	Plums	\$55.6	\$55.8	\$40.4

Source: California Department of Food and Agriculture



1. California produces 350 different crops and commodities. Products exclusively (99% or more) grown in California include: almonds, artichokes, dates, figs, kiwifruit, olives, persimmons, pistachios, prunes, raisins, and walnuts. Additionally, the state accounts for 90 percent or more of all the U.S. apricots, grapes, and avocados.
2. California produces more than half the nation's fruits, nuts, and vegetables including three-quarters of the lettuce crop. In 1997, California produced nearly 39 million tons of fruits, nuts, and vegetables.
3. California agriculture is among the most diversified in the world, with no one crop dominating. Only two products exceed 10% of the total value of the state's agricultural output.

## VI. AGRICULTURAL INDICATORS

### 4. AGRICULTURE'S CONTRIBUTION TO JOBS AND INCOME IN THE STATE AND THE CENTRAL VALLEY

*More Than Just Farm Jobs Depend on Agriculture*

#### WHY IS THIS IMPORTANT?

Agriculture plays a major role in the economy of the Central Valley. However, while farm jobs constituted 12% of total jobs in the Central Valley in 1997—compared to 3% for the state—they alone do not provide sufficient employment opportunities for Valley residents.

In addition, there are many farm-related jobs such as sales of farm vehicles, irrigation systems, fertilizers, chemicals, driving trucks, working in processing plants, and providing other farm-related services as well as jobs in finance, construction and packaging.

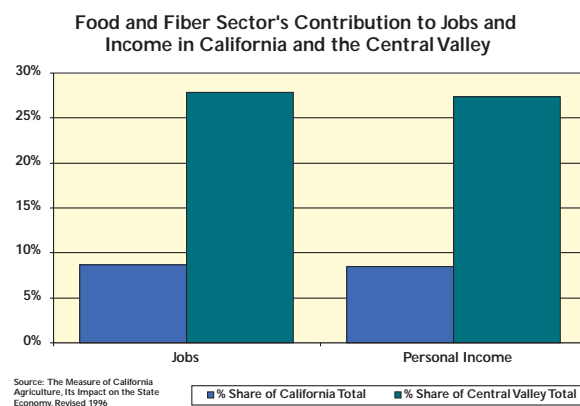
It is important that the Central Valley and California capture this farm-related economic activity and not lose it to neighboring states or countries.

#### HOW ARE WE DOING?

The Central Valley and the state are capturing much of the “downstream” economic activity dependent on farm output. In the Central Valley, farming and farm-related industries directly and indirectly create nearly 28% of all jobs, generate 27% of personal income, and account for 25% of total value-added in the region.\*

On the state level, farming and farm-related industries generate 8.7 percent of jobs, 8.5 percent of personal income, and 7.9 percent of Gross State Product.

\* These results are from an analysis performed by the Department of Agricultural and Resource Economics at the University of California, Berkeley using 1994 data. Employing an input-output model, the study included analyses of direct and indirect economic linkages and multiplier effects.





## VI. AGRICULTURAL INDICATORS

### 5. AVERAGE HOURLY WAGES FOR FARM WORKERS COMPARED TO OTHER WORKERS

*Wages for Farm Workers Low in the Central Valley*

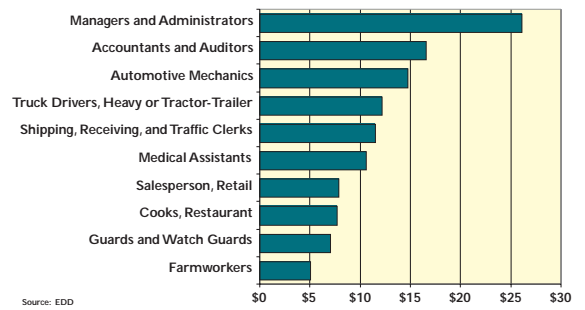
#### WHY IS THIS IMPORTANT?

The wages paid for economic services reflect the value the economy places on these services. For example, if businesses want more truck drivers or accountants, they will tend to bid up wages for these services in the labor marketplace, making these jobs relatively more attractive. As a result, there will be eventual reallocation of workers from other activities to these jobs. Since truck drivers and accountants require training, such reallocations will occur with a lag.

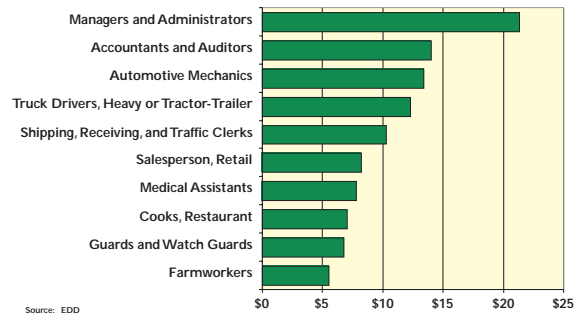
#### HOW ARE WE DOING?

Based on the most recent Employment Development Department Occupational Employment Statistics (4th Quarter, 1996) from three representative Central Valley Metropolitan Statistical Areas (MSA), farm workers (Food and Fiber Crops, EDD OES code 79856) are near the bottom of the economic order. They earned \$5.05, \$5.23, and \$5.53 in the Bakersfield, Modesto, and Fresno MSAs, respectively. Moreover, most agricultural work — some ninety percent — is performed by workers who piece together a series of jobs, usually interspersed with periods of no work.

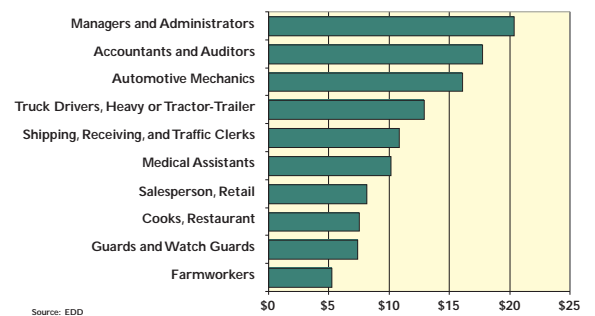
Occupational Wage Data (Average \$ per hour) for the Bakersfield MSA (Kern County) 4th Quarter



Occupational Wage Data (Average \$ per hour) for the Fresno MSA (Fresno & Madera Counties) 4th Quarter



Occupational Wage Data (Average \$ per hour) for the Modesto MSA (Stanislaus County) 4th Quarter



## VI. AGRICULTURAL INDICATORS

### 6. IMPORTANT FARM LAND ACREAGE CONVERTED FROM AGRICULTURAL USE

#### *Ongoing Conversion of Important Farmland to Urban and Built-up Land*

##### WHY IS THIS IMPORTANT?

Agriculture is of great economic importance to the Central Valley and California. It is sure to grow in importance as world population grows from 5.9 billion today to 9.4 billion in 2050\* and the supply of good farmland continues to decrease.

Once important farmland is converted to urban and built-up land, it is difficult to reverse the process. When prime farmland is converted, the fertile topsoil is usually lost. Although soil forms from eroding bedrock and surface material, the rate of formation — between 200 and 1,000 years to form one inch of topsoil — is so slow that the resource is essentially non-renewable in human life spans.

\* This is the medium-level figure from the latest United Nations population projections. There are also high-level and low-level projections.

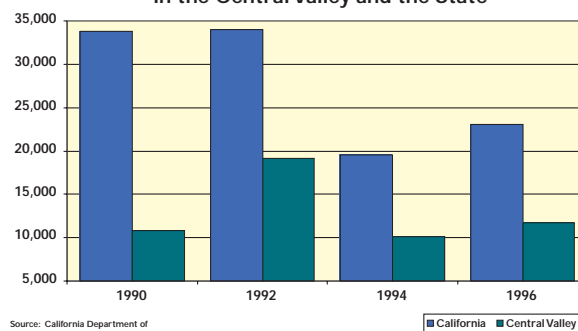
##### HOW ARE WE DOING?

There has been a steady conversion of important farmland to urban and built-up land in the CV and the state\*\*. Since 1992, over half of this conversion has occurred in the CV.

Within the CV, most of the conversion has been occurring in the San Joaquin Region. During the periods 1992-94 and 1994-96, 75% of the conversion occurred there.

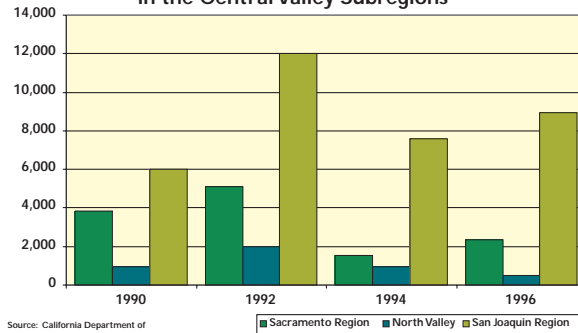
\*\* The loss of important farmland has been somewhat offset in the state by the re-categorization of some grazing land to farmland. For example, during the period 1994-96, 450,041 acres of Grazing Land in Siskiyou County was re-categorized as Farmland of Local Importance. Such a conversion entails, of course, a decrease in Grazing Land.

Important Farmland Converted to Urban and Built-Up in the Central Valley and the State



Source: California Department of Conservation

Important Farmland (Acres) Converted to Urban and Built-Up Land in the Central Valley Subregions



Source: California Department of Conservation

## VI. AGRICULTURAL INDICATORS

### 7. CITY ANNEXATIONS

*City Annexations (acres) in the Central Valley Jump 141% in 1998*

#### WHY IS THIS IMPORTANT?

Often the first step in the conversion of important farmland to urban and built-up land is the annexation of farm acres by expanding cities. Thus, city annexations can be considered a leading indicator of farmland conversions.

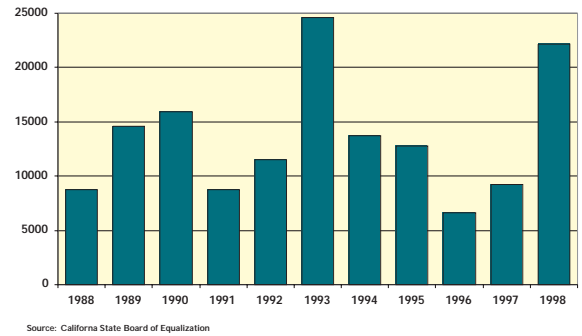
#### HOW ARE WE DOING?

During the period 1988-1998, 148,682 acres were annexed by cities in the Central Valley. The average was 13,517 acres per year, with considerable yearly fluctuation. On a percentage basis, the biggest year-to-year increase occurred from 1997 to 1998. The 22,187 acres annexed in 1998 were 141% (or 13,000 acres) greater than those in 1997. The next largest year-to-year increase occurred from 1992 to 1993, a 114% jump.

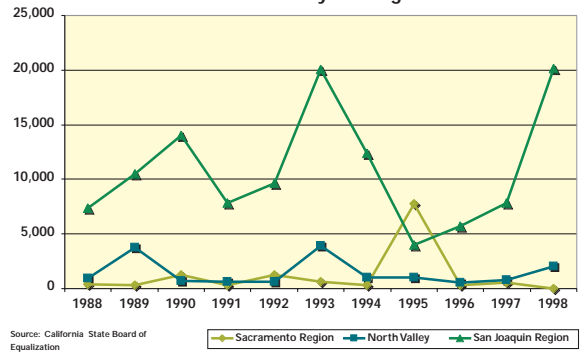
The San Joaquin Region was largely responsible for the 141% increase in annexations in the CV in 1998, with annexations in the former 160% higher than in 1997. Annexations rose sharply in that subregion since 1995, and by 1998 were 400% greater than in 1995.

During the period 1988-1998, cities in the San Joaquin Region annexed 80% of the total 148,682 acres annexed in the Central Valley. North Valley and the Sacramento Region accounted for 11% and 9%, respectively, of the annexations.

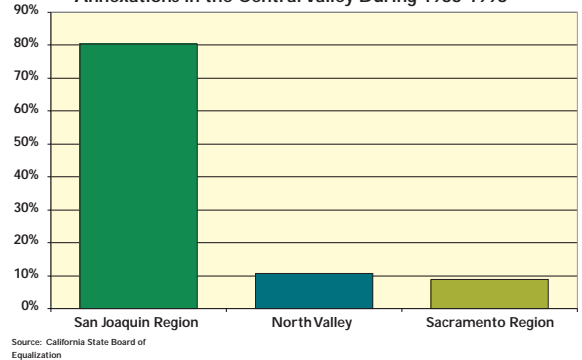
Annual City Annexations (in Acres) in the Central Valley



Annual City Annexations (In Acres) in the Central Valley Subregions



Subregion Shares of the 148,682 Total Acres of City Annexations in the Central Valley During 1988-1998



## VI. AGRICULTURAL INDICATORS

### 8. PRIVATE AGRICULTURAL LAND PRESERVATION EFFORTS IN CALIFORNIA

*The Central Valley - A Leader In Agricultural Output, But Not In Agricultural Land Preservation Efforts*

#### WHY IS THIS IMPORTANT?

First, the Valley is a vital food source for the nation and the world. Few places on earth are endowed with its ideal combination of soil, water and sun. The Valley produces 350 different crops and commodities, including 11 grown exclusively (99% or more) in California. It produces a quarter of the nation's food.

Farmers are greatly affected by short-term developments. For example, grain prices are at some of their lowest levels in years, due largely to the collapse in demand for grain in Southeast Asia. However, as world population grows from 5.9 billion today to 9.4 in 2050 (United Nations moderate projection) and more farmland is converted to non-agricultural uses, food shortages are likely to arise, giving prominence to the issue of food security and making prime farmland more valuable.

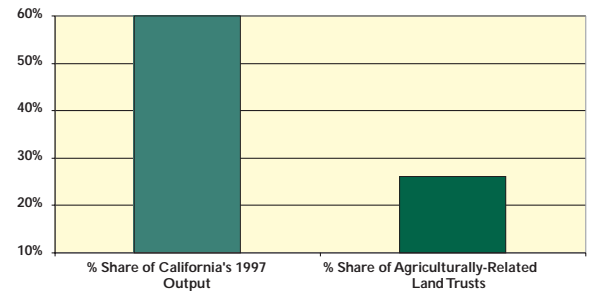
Second, agriculture is a major source of jobs and income in the Central Valley, accounting for 28% and 27%, respectively. And agriculture is a renewable economic activity, creating jobs and income from a resource that is replenished each year. The CV's agricultural endowment gives it a competitive advantage in today's highly competitive global economy. While many countries can compete to attract a consumer electronics plant or a semiconductor (chip) plant, they cannot be competitive in agriculture without fertile soil, favorable climate, and ample water supplies.

A private agricultural land trust is an organization dedicated to the preservation of farmland. Often locally supported and community oriented, these private, non-profit, tax-exempt organizations seek to preserve agricultural resources through the acquisition or acceptance of legal interest in the land.

#### HOW ARE WE DOING?

Within the last 25 years, 23 agriculturally-related land trusts have been created in California. However, only six of them (or 26%) are in the Central Valley (two in Yolo County and one in Merced, Placer, San Joaquin, and Sutter counties. See Great Valley Center Report of October 1998, pp. 17-23.). This 26% share is strikingly low given that the CV produces 60% of California's agricultural output.

Central Valley's Shares of State's Agricultural Output (by value) in 1997 and of Agriculturally-Related California Land Trusts 1976-Present



Source: Great Valley Center, October 1998

## VII. Environmental Indicators

1. Clean air is a major factor in quality of life, and quality of life affects the economic prospects of an area. Motor vehicles are the biggest single source of air pollution. Although cars in 1998 were significantly less air polluting than cars from 1988, the increase in sport utility vehicles and the total number of cars on the road counteracts the effects of better technology. The number of bad air days (measured by the amount of pollutants in the air) decreased in 1997 sharply, however, much of this was due to El Niño. The trend since 1993 has been upward, and it will be difficult to maintain even current levels.
2. Residential electricity use raises the cost of living and the pollution level of a region. Natural gas is used heavily in California power plants, but pollution is still generated. Efficiency gains have been made according to the California Energy Commission (CEC), but these gains are being offset by new uses for electricity: e.g., the Internet, video games, more homes that are totally “wired,” etc.
3. Higher per capita gas used also means a higher cost of living. Gas usage across the state has decreased 16% from 1990 to 1997. The CEC also reports that the efficiency gains made in gas usage are not being offset by the incorporation of new gas utilizing appliances into the home, as is the case for electricity.
4. The diversion of solid waste means less extraction of raw materials, less energy used because raw materials require more energy for production than recycled material, and less space devoted to waste disposal. California law required all cities and counties to divert 25% of solid waste by 1995 and 50% by 2000. The California Integrated Waste Management Board is optimistic that the state will reach that goal. Fast growing areas, however, tend to experience a lag in waste diversion.
5. As the state’s population continues to grow, more people are turning to the outdoors to relax. Attendance at state parks grew 700% in 1997 hitting a record 70 million. In 1991-1998, 238 land acquisitions projects were completed in the state in a partnership between the Wildlife Conservation Board (WCB) and local government and non-profit agencies.

The Central Valley wetlands are the most important waterfowl wintering area in the Pacific Flyway, supporting 60% of the goose and duck populations. When populations began to decline in the 1970s due to reductions in the quality and the quantity of their habitat, the Wildlife Conservation Board began a partnership to restore the areas. The Central Valley became the beneficiary of \$14.5 million in projects and investments from these efforts between 1991 and 1998.

## VII. ENVIRONMENTAL INDICATORS

### 1. BAD AIR DAYS

*Air Pollution Down Sharply in 1997,  
But El Niño Played a Big Role*

#### WHY IS THIS IMPORTANT?

Clean air is essential to the health of people and other living things. Clean air is also a major factor in quality of life, and the quality of life of a region affects its economic prospects. For example, high-tech firms seeking technologically-skilled workers know that these employees value a clean environment. Thus, these firms will not locate in a region with persistent air-quality problems.

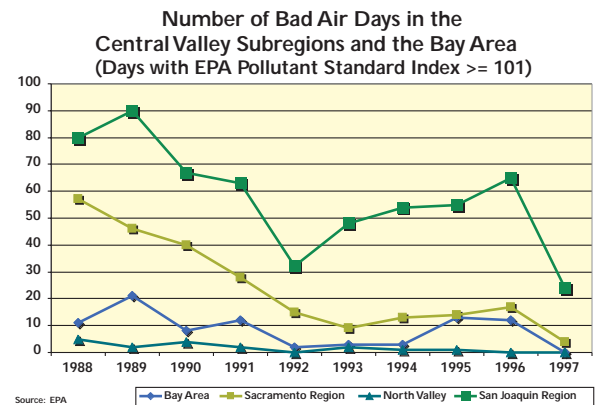
When the EPA Pollution Standard Index (PSI) is over 100, the day this occurs is considered a “bad air day.” The PSI measures five pollutants: carbon monoxide, ozone, sulfur dioxide, nitrogen dioxide, and particulate matter.

#### HOW ARE WE DOING?

Motor vehicles are the biggest single source of air pollution. Unfortunately, successful efforts to decrease air pollution from motor vehicles are being somewhat offset by factors that increase it. On one hand, there has been real progress in producing less-polluting motor vehicles and cleaner-burning gasolines. The EPA cites “fleet turn over” as a major factor in reducing air pollution—e.g., 1998 automobiles are significantly less polluting than those of 1988. On the other hand, there are more drivers on the road, they are driving farther, and tending to drive bigger, less fuel-efficient vehicles. (Sport utility vehicles now constitute 50 percent of all new passenger vehicle sales.)

Due to topography and interregional airflow patterns, the San Joaquin Region has serious air pollution problems. In spite of this, between 1989 and 1992, the number of bad air days decreased by 64% (from 90 days to 32 days). By 1996, however, they rose to 65, over a 100% jump. In 1997, they decreased sharply as they did in the Sacramento Region and the Bay Area. However, El Niño played a big role in this reduction in air pollution. Among other effects, it caused much cooler weather in the CV, and this helped keep down ozone concentrations, the major cause of bad air days in the San Joaquin Region.

Since the trend in bad air days had been upwards in the San Joaquin and Sacramento regions during 1993-96, it will be a challenge for them to maintain 1997 levels in 1998.



## VII. ENVIRONMENTAL INDICATORS

### 2. RESIDENTIAL ELECTRICITY USAGE

*Residential Electricity Usage Per Capita Higher in the Central Valley Than in the State*

#### WHY IS THIS IMPORTANT?

Higher per capita residential electricity usage means a higher cost of living. Money that could have been spent for other activities, such as going to the movies, goes to pay electricity bills.

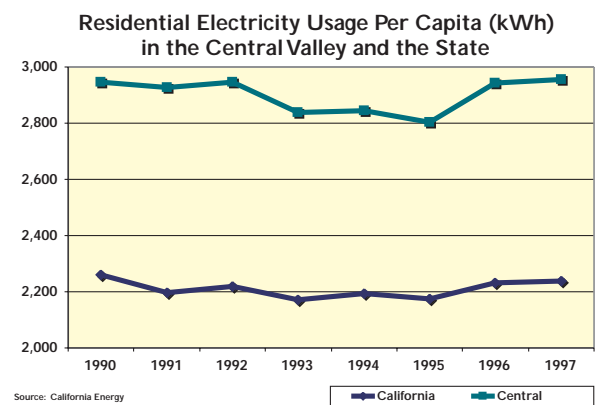
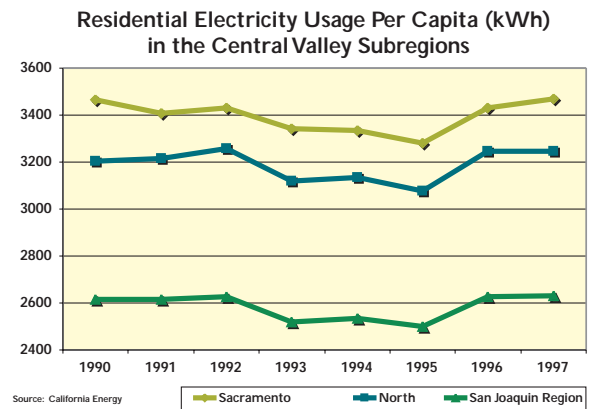
There are also environmental costs of using electricity. More than half of the electricity used in California is generated by burning fossil fuels. Power plants in California burn natural gas, which is less polluting than oil or coal, but which pollutes nevertheless. Also, the carbon dioxide emitted contributes to global warming.

The purchase of natural gas to burn in California's fossil fuel power plants means that money is flowing out of the state. Less than one-tenth of the natural gas burned in California to generate electricity is extracted in the state. Over half comes from Canada, and the balance from the southwestern U.S.

#### HOW ARE WE DOING?

Residential electricity usage per capita in the CV has consistently been about a third higher than in the state. Reasons for this include: higher air-conditioning loads in the summer, colder winters, and less access in some counties to natural gas as a substitute for electricity (e.g., Shasta, Tehama, Glenn, and El Dorado counties.) Better access to gas partly explains the lower per capita electricity usage of the San Joaquin Region compared to the two other CV subregions, according to the California Energy Commission (CEC).

It is noteworthy that in both the CV and the state, per capita residential electricity usage in 1997 was approximately what it was in 1990. According to the CEC, there have been gains in efficiency, but they have been offset by new uses for electricity: e.g., the Internet, video games, more homes that are totally "wired," etc.



## VII. ENVIRONMENTAL INDICATORS

### 3. RESIDENTIAL GAS USAGE

*Residential Gas Usage\* Per Capita Trending Down in the Central Valley and in the State*

#### WHY IS THIS IMPORTANT?

The reasons why this indicator is important are similar to those for residential electricity usage.

Higher per capita residential gas usage means a higher cost of living. Money that could have been spent for other activities, such as going out to dinner, goes to pay gas bills. If the same standard of living can be attained with less gas — e.g., maintaining a well-insulated home at a desired temperature, then more money will be available for these other activities.

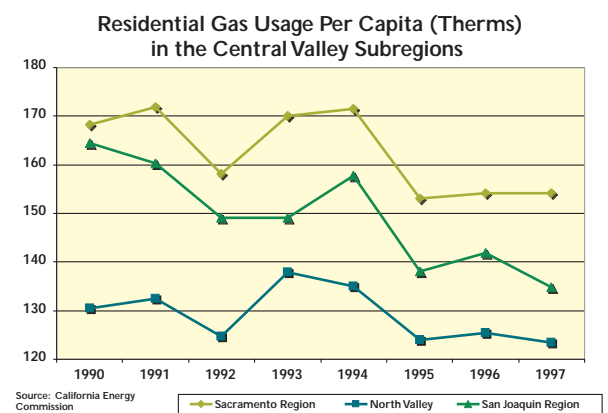
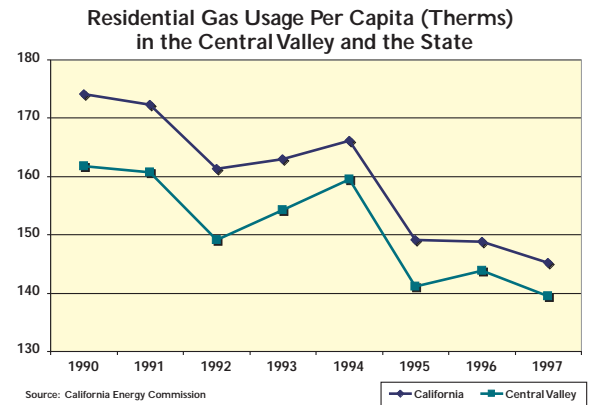
There are also environmental costs of using gas. The extraction process invariably causes damage to the surrounding environment, and the long pipelines that transport the gas transform the environment through which they pass.

#### HOW ARE WE DOING?

Residential gas usage per capita was lower in the CV than in the state during the period 1990-97. However, the gap narrowed by about half over the period: per capita gas usage in the CV was 8% lower than the state in 1990, but only 4% lower in 1997. A major reason for this gap, according to the California Energy Commission (CEC), is that there is less access to gas in the CV than in the state as a whole (e.g., Shasta, Tehama, Glenn, and El Dorado counties.) Among the CV subregions, only the Sacramento Region, the most urbanized of the CV subregions, had higher per capita residential gas usage than the state as a whole. This has been true since 1993.

Gas usage in both the state and CV has been trending down and was 16% and 14% lower, respectively, in 1997 than in 1990. According to the CEC, efficiency gains in gas usage have not been offset by new appliances that use gas as has happened for electricity.

\* Residential gas usage refers to natural gas used in the home for heating, cooking, etc. It does not refer to gasoline, an extract of petroleum, used by motor vehicles





## VII. ENVIRONMENTAL INDICATORS

### 4. SOLID WASTE GENERATED AND RECYCLED

*The Central Valley Has Met the 25% Diversion Goal for Solid Waste; the 50% Goal for the Year 2000 Will Be a Challenge.*

#### WHY IS THIS IMPORTANT?

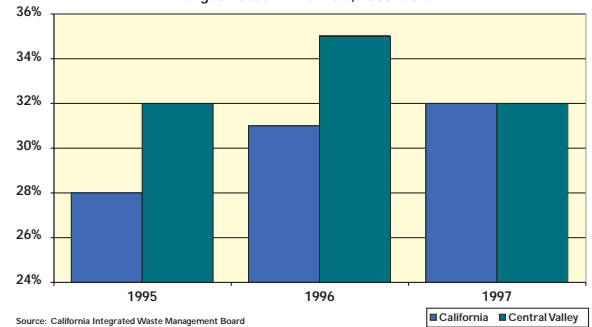
The diversion rate for solid waste is defined as the difference between waste generated and waste disposed. Diversion of solid waste includes source reduction and composting as well as recycling.

There are several benefits from the diversion of solid waste. First, less extraction of the raw material is necessary, meaning that less of the natural environment has to be defaced to get at the raw material. Secondly, for most materials the energy requirements to manufacture a product from recycled material - e.g., aluminum cans— is significantly lower than when it is made from virgin materials. Thirdly, more waste diverted means less land needed for waste disposal (i.e., landfill).

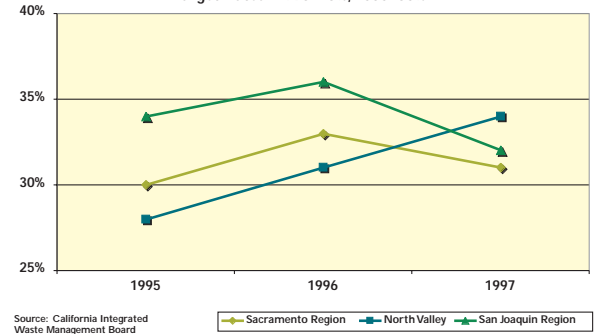
#### HOW ARE WE DOING?

A law passed in 1989 (AB 939) requires that every California city and county meet a diversion goal of 25% in 1995 and 50% in 2000. In the three years for which data is available (1995 - 1997), the Central Valley and all its three subregions easily met the diversion goal of 25 percent. In 1997, diversion rates dipped somewhat in the San Joaquin and Sacramento regions, resulting in a decline for the Central Valley as a whole. However, according the California Integrated Waste Management Board (CIWMB), these downward fluctuations are not significant given limitations of data collection. They point out that disposal is measured only one week per quarter. Also, in fast-growing areas, establishment of effective waste diversion programs tends to lag population growth. Raising its diversion rate from 32% in 1997 to 50% in 2000 will be a challenge for the CV. However, the CIWMB is optimistic that both the CV and the state will reach the target.

Diversion Rates of Solid Waste in the Central Valley and the State.  
Target Rates: 1995 25%, 2000 50%



Diversion Rates of Solid Waste in the Central Valley Subregions.  
Target Rates: 1995 25%, 2000 50%



## VII. ENVIRONMENTAL INDICATORS

### 5. ACQUISITION OF LANDS FOR RECREATION AND WILDLIFE HABITAT

*The Central Valley Has Been a Major Recipient of the Wildlife Conservation Board's Acquisition Projects*

#### WHY IS THIS IMPORTANT?

Perhaps because the pace of life in California has gotten so fast and the state so increasingly crowded, more and more Californians are turning to the outdoors to relax and revive themselves. Over the last three decades, for example, California's population grew by 72%, but attendance at the state's 264 state parks grew by 700%, hitting a record 70 million in 1997.

With California's population expected to grow by more than 12 million to some 45 million by 2020 and with development rapidly occupying open space, it is important to present and future generations to preserve areas that provide outdoor recreation for humans and habitat for other species.

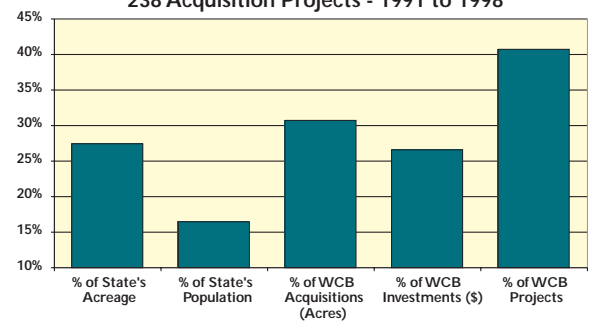
#### HOW ARE WE DOING?

The Wildlife Conservation Board is a separate and independent Board within the Department of Fish and Game. The WCB's primary responsibilities are "to select, authorize, and allocate funds for the purchase of land and waters suitable for recreation purposes and the preservation, protection, and restoration of wildlife habitat."

During the period 1991-1998, the WCB completed 238 acquisition projects in the state. It provided 55% of the approximately \$250 million cost of these acquisitions, with the balance coming from other local and state government agencies and non-profit organizations with which the WCB partners; these include the Nature Conservancy, the San Joaquin River Conservancy, and the Department of Parks and Recreation.

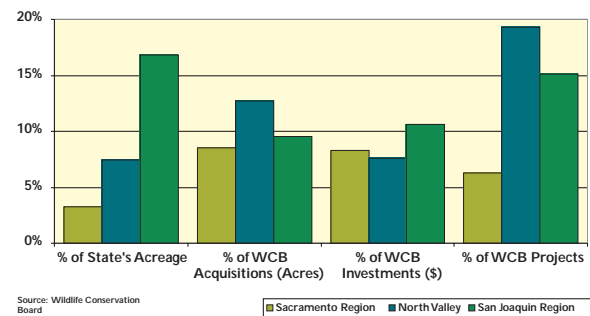
Given the CV's percentage of the state's acreage and population, it fared well in getting its share of the benefits of WCB acquisition projects. North Valley fared particularly well, but the San Joaquin Region not as well.

The Central Valley Has Been Receiving Its Share of the Wildlife Conservation Board's 238 Acquisition Projects - 1991 to 1998



Source: Wildlife Conservation Board, Dept. of Fish and Game

All Three Central Valley Subregions Have Been Prominent Recipients of the Wildlife Conservation Board's 238 Acquisition Projects - 1991 to 1998



Source: Wildlife Conservation Board

## VII. ENVIRONMENTAL INDICATORS

### 6. RESTORATION/ENHANCEMENT OF RIPARIAN HABITAT

#### *Public-Private Partnerships to Restore and Enhance Wetland and Riparian Habitats in the Central Valley*

#### WHY IS THIS IMPORTANT?

In survey after survey, a large majority of Californians across the spectrum of political belief have expressed strong support for the environment and the birds, fish, and animals that live in it. The Central Valley is the most important waterfowl wintering area in the Pacific Flyway, supporting 60% of its total duck and goose population. The Valley's wetlands and adjoining riparian habitat (e.g., riverbanks) provide ideal wintering and breeding habitat for waterfowl and other species. These areas also support much more than migrating waterfowl. Over 55 percent of the threatened and endangered species in California are associated with wetlands and riparian habitat.

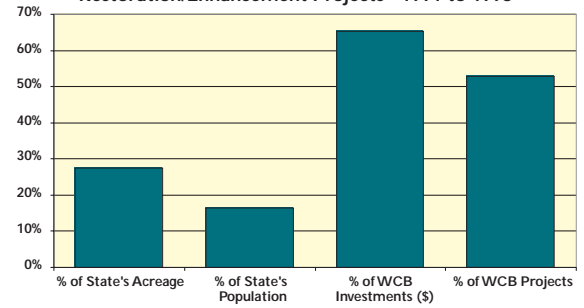
#### HOW ARE WE DOING?

Starting in the late 1970s, duck populations in the Central Valley started to decline significantly. The single biggest cause of this was reduction in quantity and quality of habitat.

To combat this decline, the Wildlife Conservation Board (WCB) of the Department of Fish and Game has partnered with other public and private organizations on projects to restore wetlands and riparian habitat in the state. The latter include the Central Valley Habitat Joint Venture and Ducks Unlimited. The Central Valley received a large share of these projects and investments during the period 1991 to 1998, markedly greater than its share of the state's acreage and population (see charts).

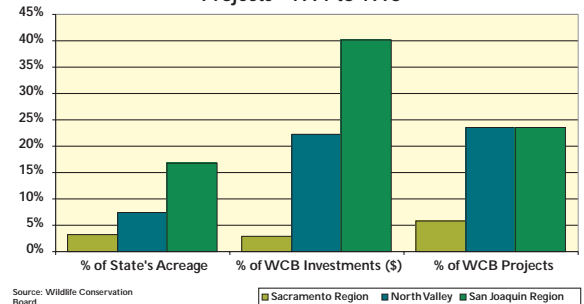
The above program targeted riparian habitat in the entire state. The CV has also been the beneficiary of restoration/enhancement projects specifically for wetlands in the Central Valley. During 1991-98, investments in these projects totaled \$14.5 million, with 39% of the funds coming from the WCB and the balance from other public and private organizations.

The Central Valley Received the Majority of the Wildlife Conservation Board's Riparian Habitat Restoration/Enhancement Projects - 1991 to 1998



Source: Wildlife Conservation Board, Department of Fish and Game

San Joaquin Region and North Valley Were Major Beneficiaries of the Wildlife Conservation Board's Riparian Habitat Restoration/Enhancement Projects - 1991 to 1998



Source: Wildlife Conservation Board

■ Sacramento Region ■ North Valley ■ San Joaquin Region

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