

Unleashing the Power

unity . oneness . partnerships



*Power is like a verb; it happens through us.
Joann Macy*

Stanislaus County Community Health Assessment

2002

Acknowledgments

There were many individuals and agencies involved in the planning and preparation of this document. Without each individual's effort and input, this health assessment's value would be diminished.

As in any endeavor, the ultimate responsibility falls to certain individuals in order to meet deadlines and make executive decisions. In this case this duty fell to the Stanislaus County Health Services Agency and the individuals listed below.

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Stanislaus County Sheriff's Department

Turlock City Schools

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Introduction

“Unleashing the Power”, represents the culmination of many months of collaboration and an enormous amount of work by the Stanislaus County Health Services Agency’s “Epi Team” (the group of epidemiologists).

Various aspects of health, from crime and motor vehicle collisions to births, deaths, and diseases, have been analyzed at different times and from many agencies, but this Community Health Assessment represents the most comprehensive analysis of the **total health** of Stanislaus County, utilizing **secondary data**.

This secondary data analysis is the first part of a two-phase process where the Health Services Agency and its many partners work to amass a complete picture of the health of Stanislaus County residents, assess assets/resources and determine the gaps in an effort to foster stronger collaborations and leverage resources to improve the health and safety of all residents.

It has become more evident than ever before that the problems leading to poverty, rising crime, increasing health concerns, and school drop-outs cannot be addressed by individuals or individual systems/organizations. Only through laying aside turf issues and establishing comprehensive, community-driven, integrated systems can these concerns be addressed.

As much as data, this project is about **partnership** and the enormous “power” that it represents. Every effort undertaken from thinking through the process, researching data, proof reading and or providing other resources, has contributed to the finalization of this phase of the Community Health Assessment.

The second phase of this Assessment will incorporate input from community residents, as a review of **primary data** is ascertained. Research has shown the importance of families and neighborhoods in influencing individual behavior and improving their own lives and that of communities.

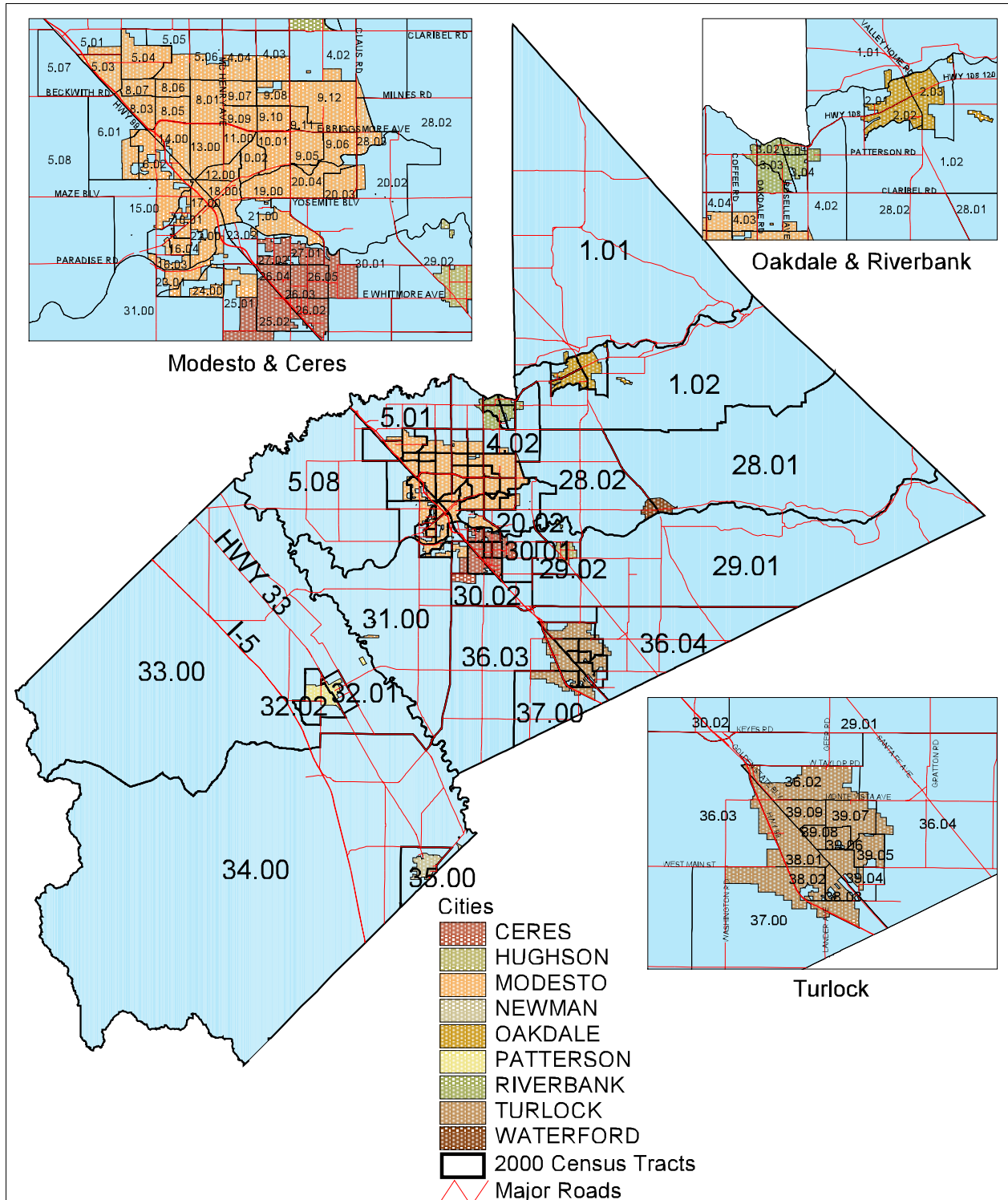
Power comes from the knowledge of a community’s strengths, challenges/weakness, opportunities/resources and threats/turf. The final piece that is needed is an abiding faith that “together we can unleash the power within our government, community, businesses, faith based and private and public organizations to improve the lives of all residents in Stanislaus County”.

In order for the reader to get the most out of this publication, there is a reference map located on the following page. Some health indicators are shown by census tract within Stanislaus County. The maps in the publication have numbers which label the census tract. The map located here in the introduction also labels some

Introduction

major roads and shows the incorporated city boundaries for reference as well.

Figure A: Stanislaus County with Cities, Census Tracts and Major Roads



* The numbers on the map are the Census Tract labels. The rate or percent is indicated by the color on the map.

Social Environment

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Age and Gender

Figure 1: Age and Gender of Stanislaus County Residents, 1980

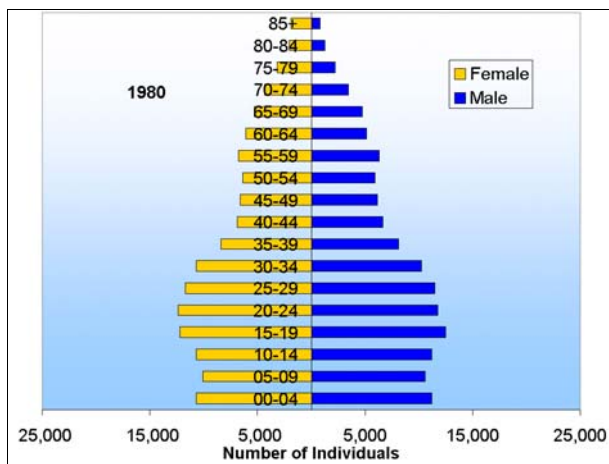


Figure 2: Age and Gender of Stanislaus County Residents, 1990

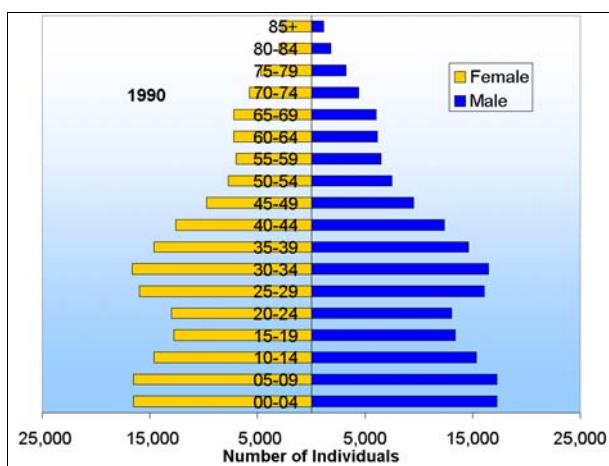
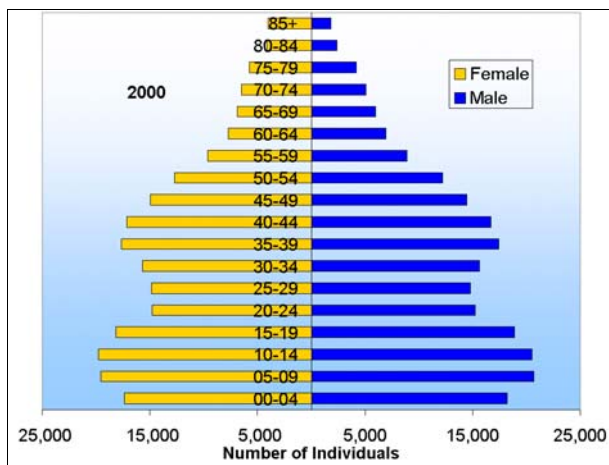


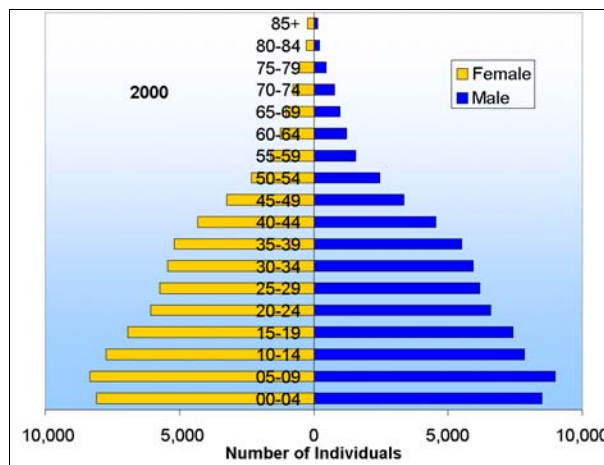
Figure 3: Age and Gender of Stanislaus County Residents, 2000



The demographics of Stanislaus County have changed considerably over the past 20 years. The population has grown larger, older and ethnically diverse. Figures 1 – 3 show the age and gender breakdown of Stanislaus County of the last three censuses in 1980, 1990 and 2000. One can see the different generation sizes moving up the age axis. The 20-24 year olds, the beginning of the “baby boomer” generation, were the largest age group in 1980. They became 30-34 year olds in 1990 and 40-44 year olds in 2000, still a very large group, but overtaken by other groups due to competing demographic factors. By comparing the three graphs, one can see that the older age groups are becoming larger as well. Since 1980, the average age in Stanislaus has increased from 29.2 years to 31.7 years of age in 2000. In addition, there is a larger number of women living to the age of 70. In 2000, the average age of women was almost 33 years old, whereas the average age of males was 30.5 years old.

There are significant differences within our population when comparing race/ethnicity. The average age of the white population in 2000 was 38.2 years of age, which was almost 16 years older than the Latino population’s average of 22.8. More than 45% of the Latino population in Stanislaus County was under the age of 20 years old in 2000. The average age of all Stanislaus County residents in 2000 was 31.7 years while California’s average was 33.3 years. This can be seen by comparing the graph of age and gender

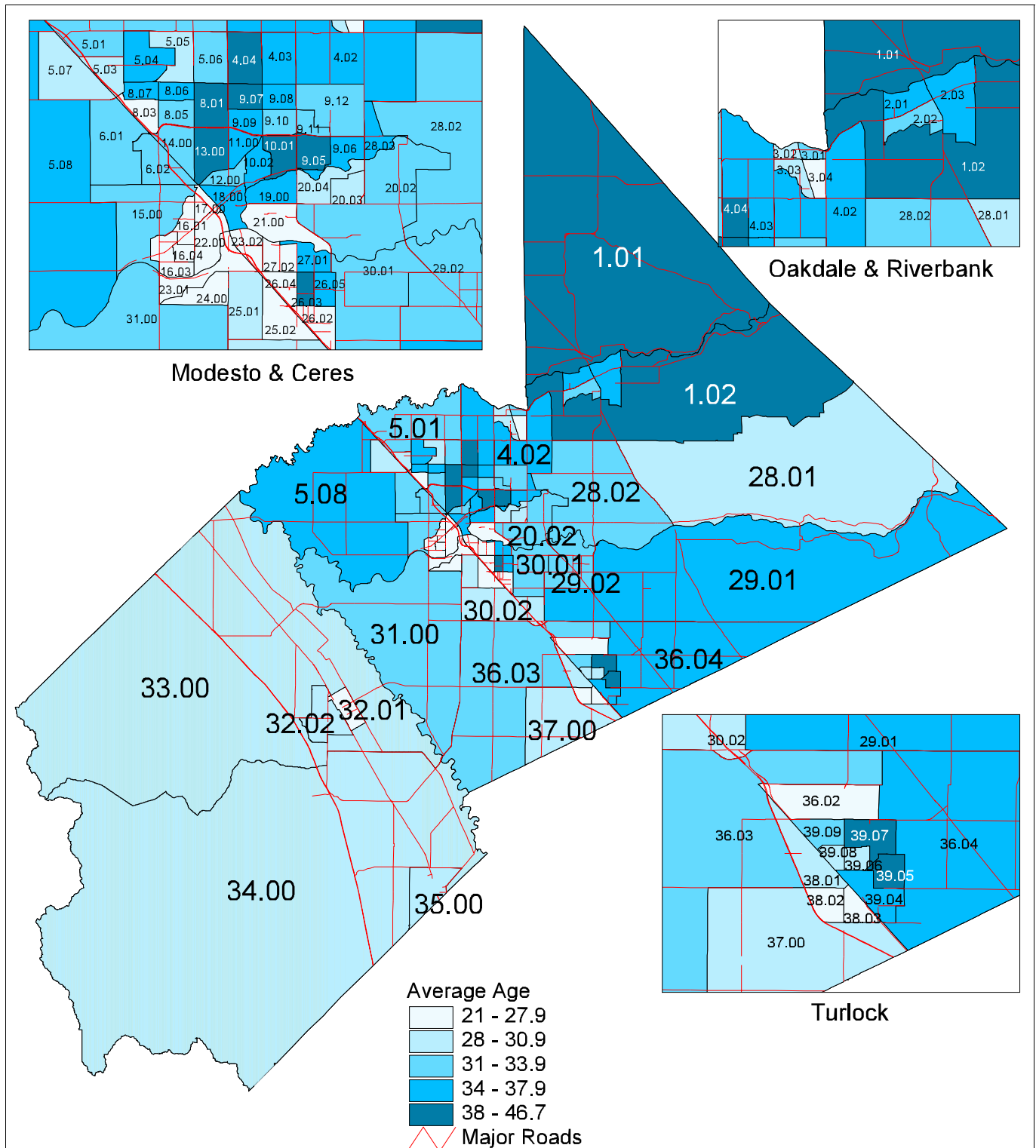
Figure 4: Age and Gender of Latino Stanislaus County Residents, 2000



Source: US Census Bureau, 2000 (16), 1990 (26) & 1980 (27)

Median Age

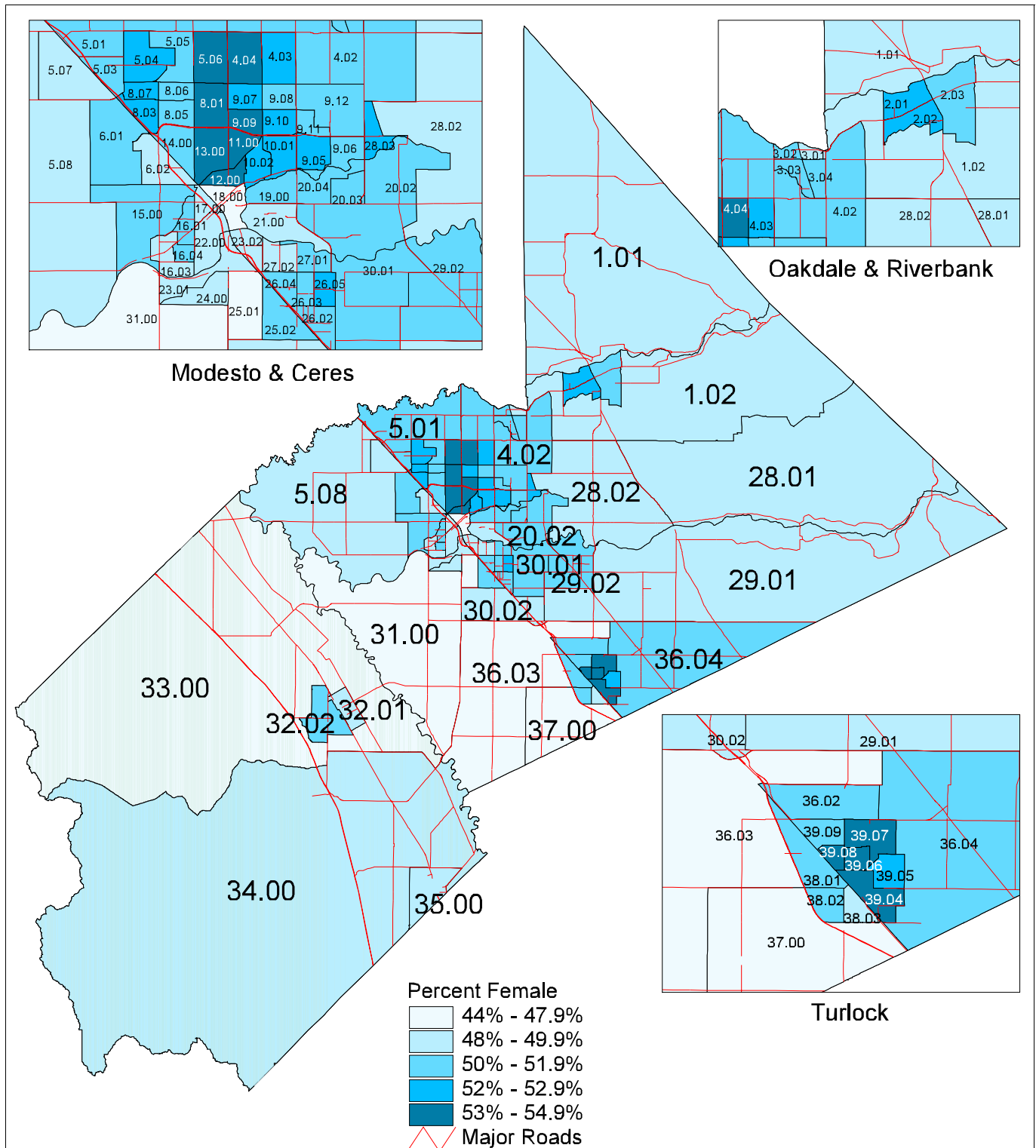
Figure 5: Median Age of Residents by Census Tract*, Stanislaus County, 2000



* The numbers on the map are the Census Tract labels. The age group is indicated by the color on the map.
 Source: US Census Bureau, 2000 (16)

Gender

Figure 6: Percent of Female Residents by Census Tract*, Stanislaus County, 2000



* The numbers on the map are the Census Tract labels. The rate or percent is indicated by the color on the map.
 Source: US Census Bureau, 2000 (16)

Ethnicity

for Latinos in 2000 (Figure 4) to one for the whole county (Figure 3). There are virtually no elderly Latinos in the county while a large proportion of the population is under 20 years old. The young Latino adults are more likely to immigrate to California in search of establishing a home compared to the older Latino adults. Over the next 30 years, the Latino population should have a demographic similar to the rest of the county if there is no significant emigration.

Figure 7: Racial and Ethnic Distribution of Stanislaus County Residents, 1980

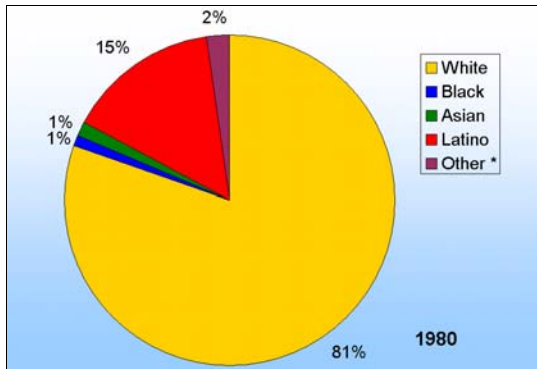


Figure 8: Racial and Ethnic Distribution of Stanislaus County Residents, 1990

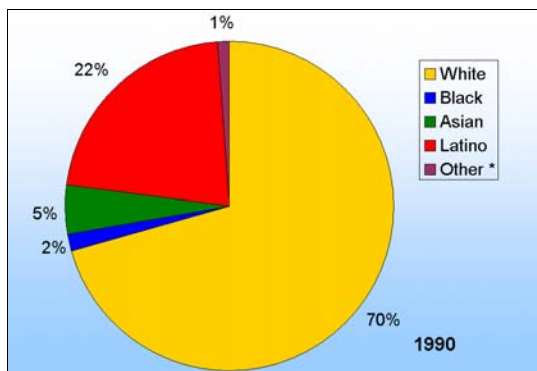
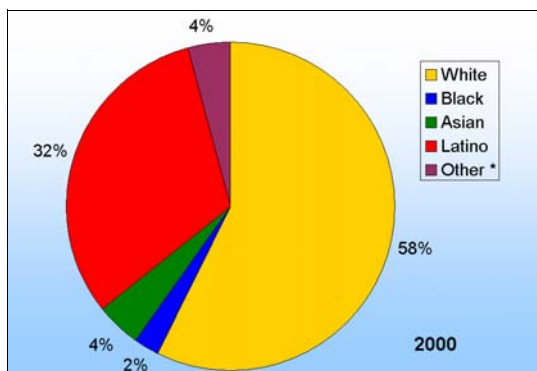


Figure 9: Racial and Ethnic Distribution of Stanislaus County Residents, 2000



* Other includes American Indian; in 2000, it also includes Multiracial individuals.

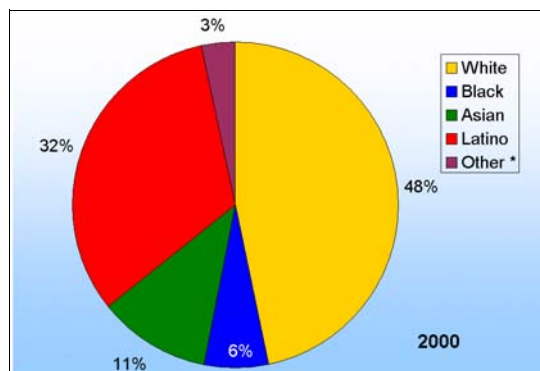
Source: US Census Bureau, 2000 (16), 1990 (26) & 1980 (27)

Figure 5 shows the average age of the county within each census tract. The population in the north and east regions of the county are older than the south and west portions. A comparison of this map with the map of ethnicity (Figure 11), shows that the younger census tracts also have the higher proportion of nonwhites or minorities.

Urban census tracts have a higher proportion of women than rural areas (Figure 6). Single women with children tend to live in urban residential areas where services are more convenient (Figure 14).

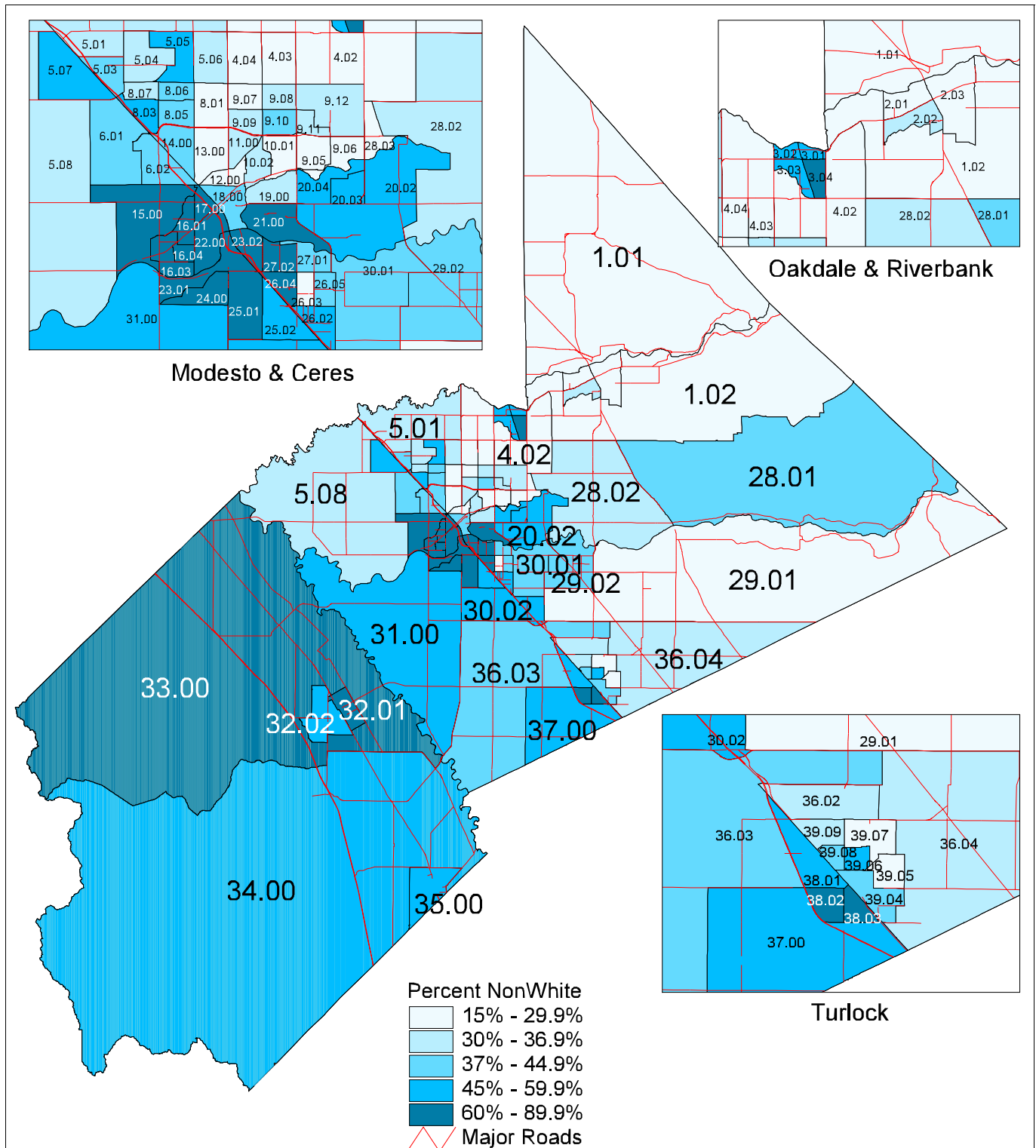
Stanislaus County has become more ethnically diverse in the past 20 years as figures 7 – 9 illustrate. The proportion of Latinos has grown from 15% in 1980 to more than 30% in 2000, while the white population has a proportional decrease. The other groups have grown numerically, but not proportionally. Stanislaus County enumerated 3,035 African-Americans in 1980 and 10,621 in 2000. The number of Asian and Pacific Islanders has grown from 3,775 to 19,588 in those 20 years as well. The Asian population experienced a significant increase between 1980 (3,775) and 1990 (18,146). The civil unrest in Southeast Asia in the late 1970's and 1980's contributed to this population change. Stanislaus County's ethnic diversity is similar to that of California's, except for two areas. California

Figure 10: Racial and Ethnic Distribution in California, 2000



Ethnicity

Figure 11: Percent of Non-White Residents by Census Tract, Stanislaus County, 2000



* The numbers on the map are the Census Tract labels. The rate or percent is indicated by the color on the map.
 Source: US Census Bureau, 2000 (16)

Family Structure

(Figure 11) has a greater proportion of African Americans (6.4%) and Asians (11.1%). Figure 11 shows the proportion of population in each census tract that consists of nonwhite residents. Higher proportions of minority residents reside on the west side of Highway 99 in both Modesto and Turlock as well as in the western part of the county in general.

Figures 12 – 14 show the composition of households in Stanislaus County from 1980 to 2000. The proportion of family households (not including Single Householder or Non-family household) has remained constant at 75%; however, small shifts in the make-up within the family households have occurred. The proportion of single female headed families has grown from 10% in 1980 to 14% in 2000, while the single male headed families has also grown from 3% to 6%. California has slightly higher proportions of single householders with families and slightly lower married households.

Figures 15 and 16 illustrate family or household structure maps of Stanislaus County. Figure 15 shows the percentage of families (excluding the non family households) with married couples while Figure 16 shows the proportion of households that have children less than 18 years of age and headed by a single parent.

Large differences exist in the size of families by geography, which is illustrated in Figure 17. A comparison of Figures 15 and 17 demonstrate that those census tracts with higher proportions of unmarried families also have higher average family sizes. The need for services is greatest in areas with single parents and larger families (Unmarried families are not necessarily large families).

Figure 12: Household Composition, Stanislaus County, 1980

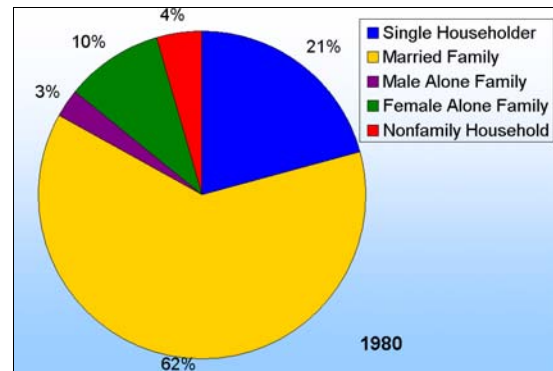


Figure 13: Household Composition, Stanislaus County, 1990

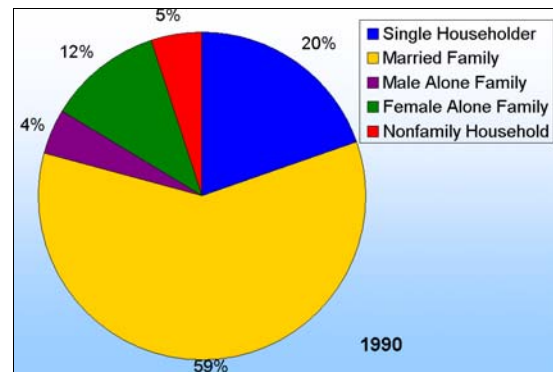
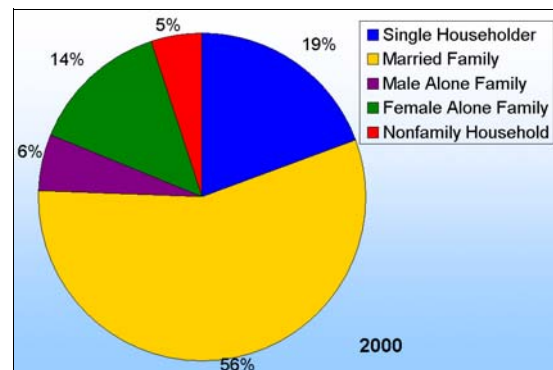


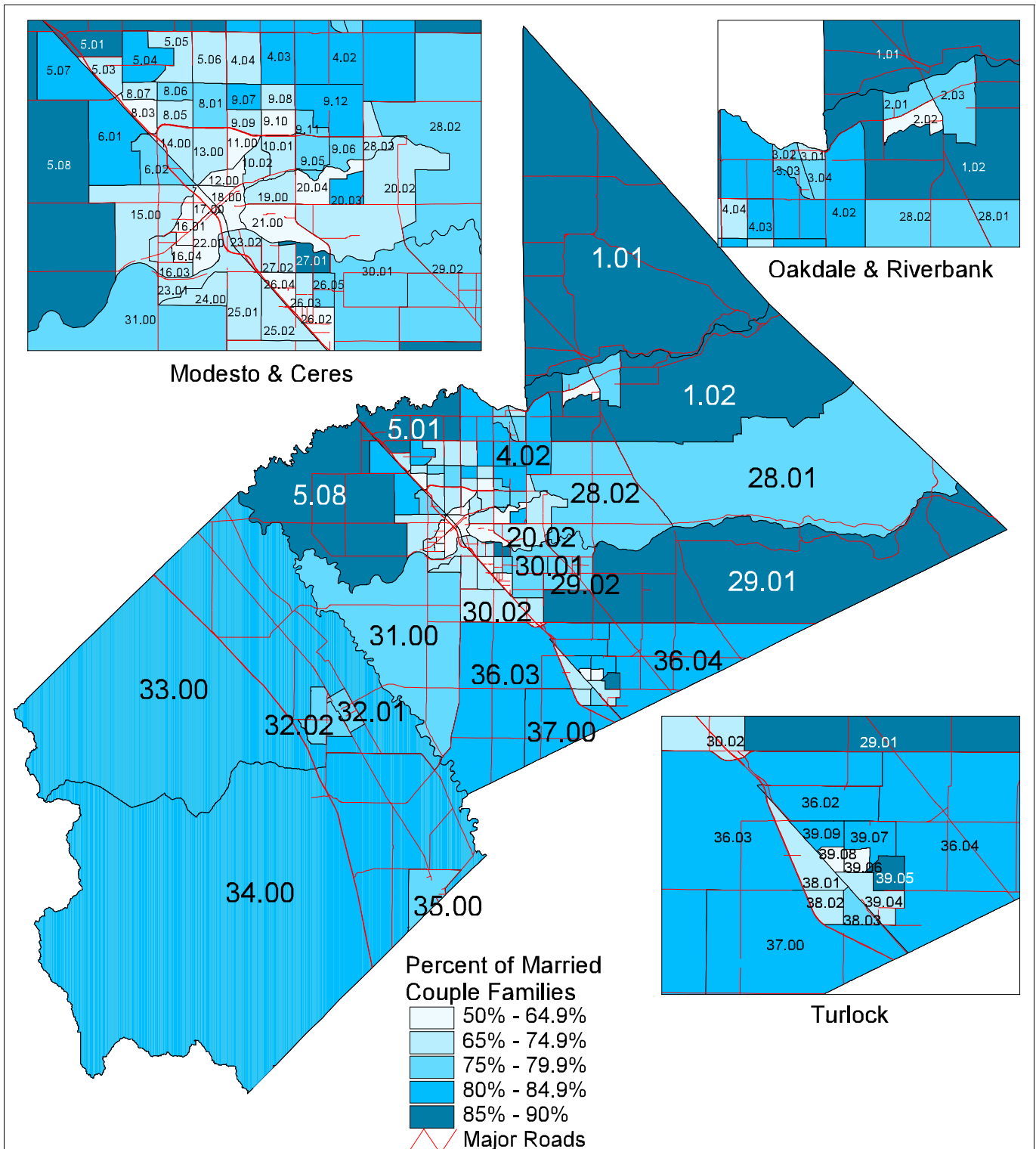
Figure 14: Household Composition, Stanislaus County, 2000



Source: US Census Bureau, 2000 (16), 1990 (26) & 1980 (27)

Family Structure

Figure 15: Percent of Families* with Married Couples by Census Tract**, Stanislaus County, 2000

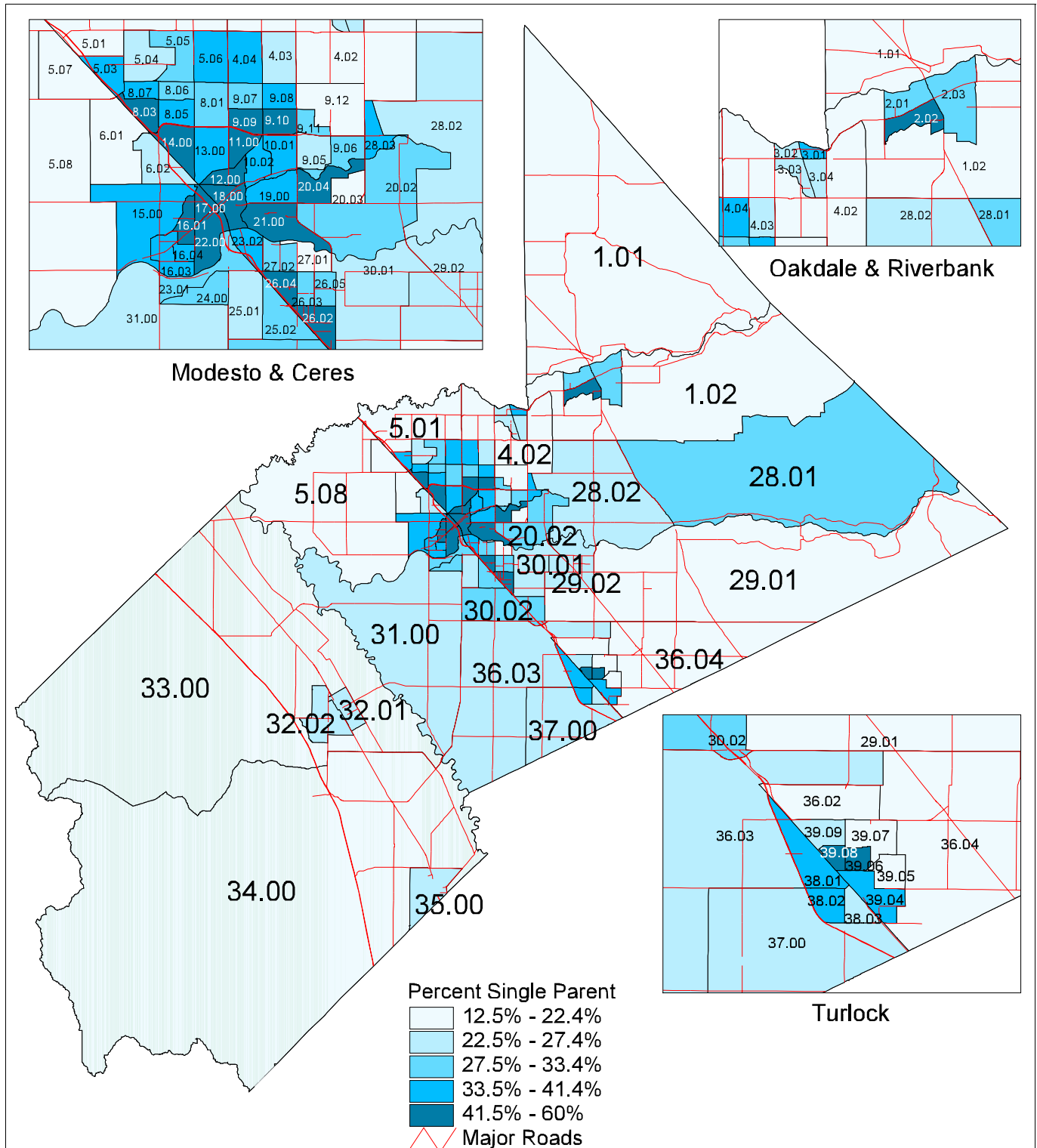


* See Appendix C, the Census Data Section for a definition of Family.
Source: US Census Bureau, 2000 (16)

** The numbers on the map are the Census Tract labels.
The percent is indicated by the colors on the map.

Family Structure

Figure 16: Percent of Households with Children* That Have Single Parents by Census Tract**, Stanislaus County, 2000

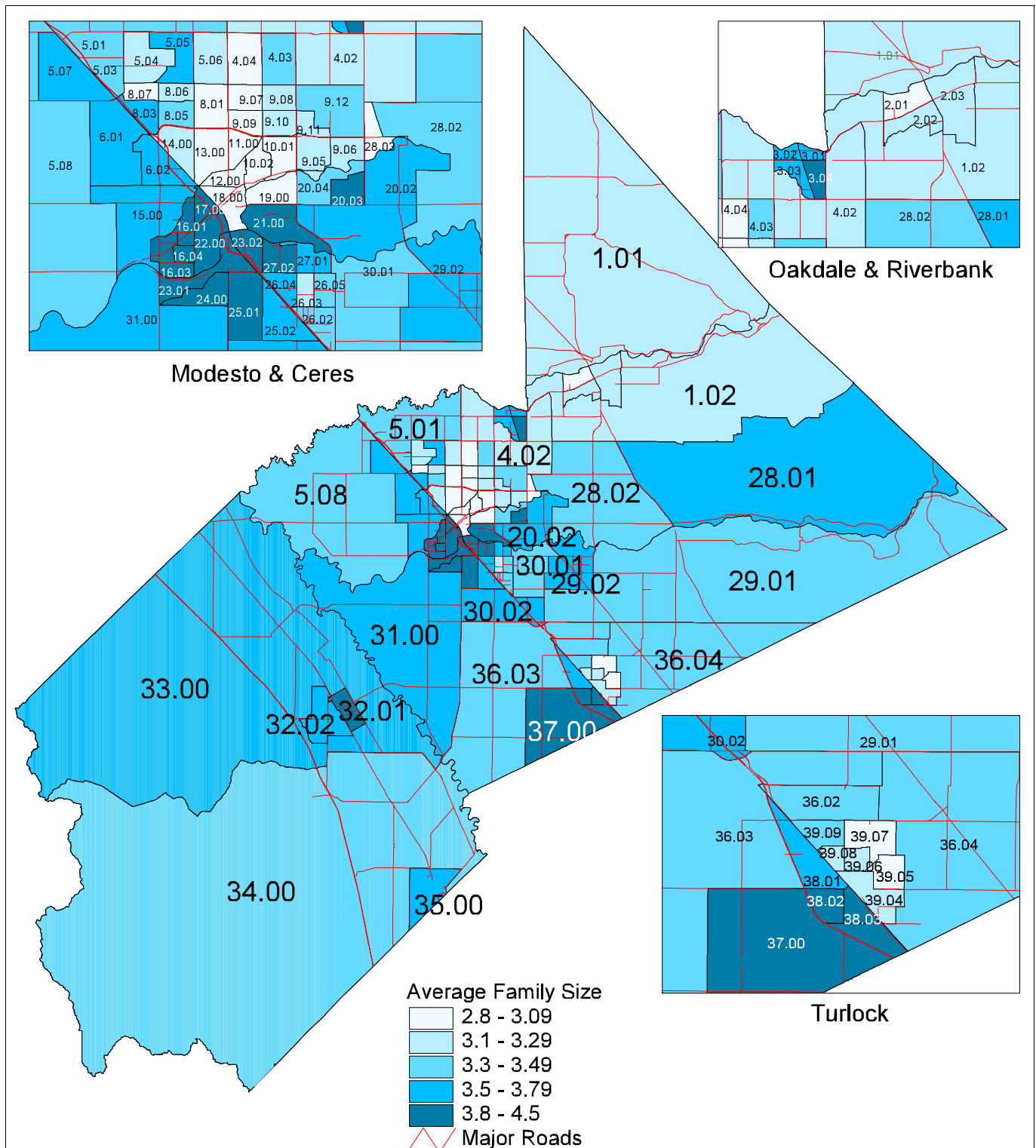


* A child is considered to be less than 18 years of age.
Source: US Census Bureau, 2000 (16)

** The numbers on the map are the Census Tract labels.
The percent is indicated by the colors on the map.

Family Size

Figure 17: Average Family Size* by Census Tract**, Stanislaus County, 2000



* See Appendix C, the Census Data Section for a definition.
 Source: US Census Bureau, 2000 (16)

** The numbers on the map are the Census Tract labels.

Housing

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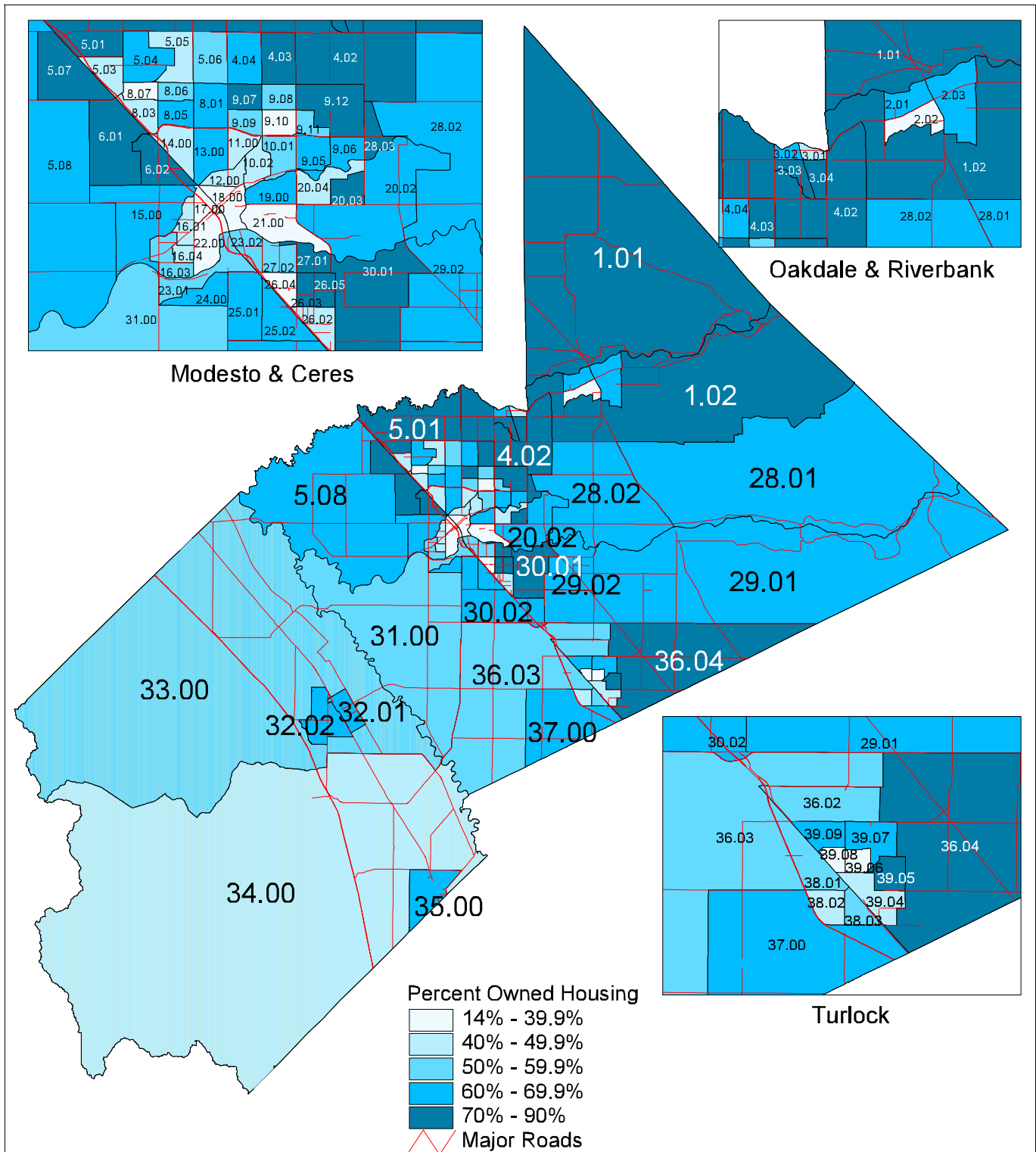
Home ownership has long been considered one of the pillars of the “American Dream”. Building equity in a home is generally considered a good method of acquiring wealth and maintaining a hedge against inflation. The higher the proportion of owned homes, the closer the residents’ wages are to the cost of living. Indeed, home ownership is considered an indicator of the wealth and well-being of a community. The percentage of homes that are owner occupied in each census tract is shown in Figure 1. In general, the east part of the county has a higher percentage of owner occupation than the western section. The owner occupied percentage of housing units in Stanislaus County stands approximately 5% higher than California for the past 20 years and both have risen significantly since 1980. Stanislaus County home ownership has risen from almost 50% in 1980 to almost 60% in the 2000 census. Similarly, the percentage of owner occupied homes in California has increased from 44% to 54% in the same period.

Figure 2 shows the percentage of vacant housing units by census tract in April of 2000. This market is in constant flux and in the subsequent two years, all indications are that housing has become much more scarce and expensive.

Figure 3 shows the average household size by census tract. This figure shows that the west section of Turlock, Modesto, and Patterson have higher average household sizes when compared to the whole county.

Ownership Percentage

Figure 1: Percent of Home Ownership by Census Tract*, Stanislaus County, 2000

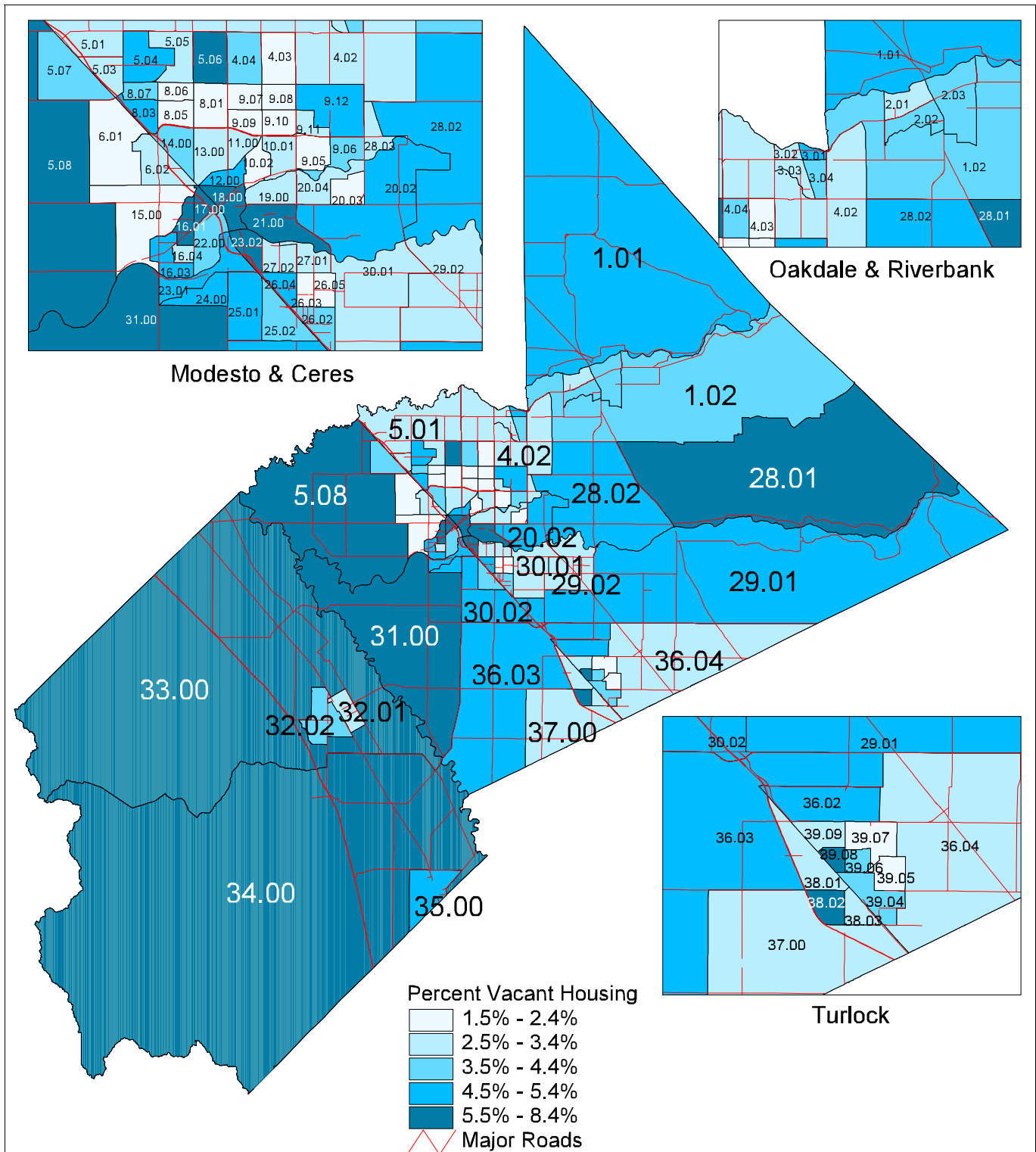


*The numbers on the map are Census Tract labels. The percent is indicated by the color on the map.

Source: US Census Bureau, 2000 (16)

Housing Vacancy Percentage

Figure 2: Percent of Housing Units that Were Vacant by Census Tract*, Stanislaus County, 2000

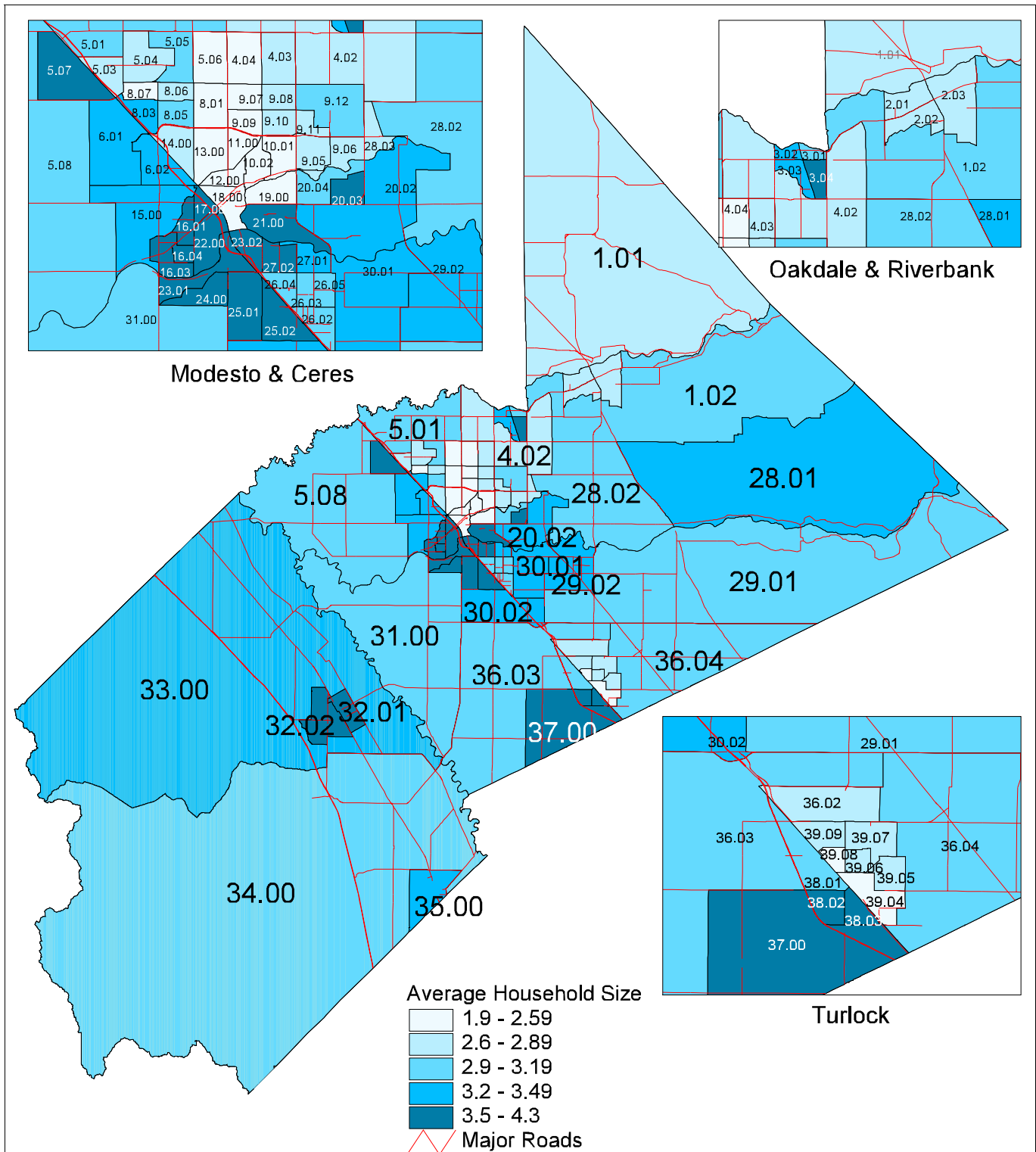


*The numbers on the map are Census Tract labels. The percent is indicated by the color on the map.

Source: US Census Bureau, 2000 (16)

Household Size

Figure 3: Average Household* Size by Census Tract**, Stanislaus County, 2000



* See Appendix C, the Census Data Section for a definition.

**The numbers on the map are Census Tract labels. The household size is indicated by the color on the map.

Source: US Census Bureau, 2000 (16)

Lead Poisoning

In 1991, the Childhood Lead Poisoning Prevention Act established a comprehensive secondary prevention program requiring evaluation, screening, and medically necessary follow-up services to find and treat children who have ingested lead. Fees and fines were imposed on industries based on historical and/or current market share responsibility for environmental lead contamination. The goal of the screening and treatment along with the enforcement of regulation is to eliminate childhood lead poisoning.

Figure 4 shows the rate of elevated blood lead levels* has been decreasing among both genders since 1994. Although the rate is decreasing, there is still much work to be done to ensure that all children under the age of 6 years, who are on publicly funded programs, are screened for lead poisoning.

The largest number of elevated blood lead level cases has been among the Latino population (Figure 5). This could be due to several reasons. First, there are various candies and cooking implements sold in Mexico that contain high levels of lead. Second, it is well documented that immigrants, low income families, families living in homes built prior to 1978, or those on publicly funded programs (WIC, CHDP, Healthy Families, Medi-Cal) are at increased risk of lead poisoning.

The number of reported cases of lead poisoning is highest at the age of two years (Figure 6). This is due to hand to mouth behavior, which normally occurs as small children begin exploring their environment no matter what the gender. As hand to mouth behavior diminishes, so does the incidence of lead poisoning.

The minimum standard of practice for health care providers of children on publicly funded programs is to screen for lead in the blood at the ages of 1 **and** 2 years, **or** by age 6 if a prior screening was not done.

Figure 4: Rate of Elevated Blood Lead Levels* by Gender, Stanislaus County

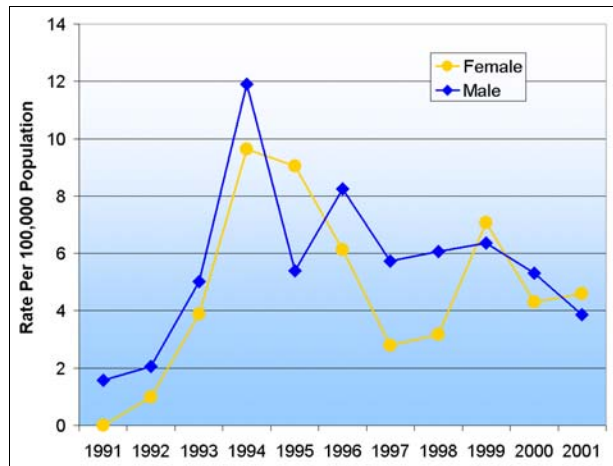


Figure 5: Elevated Blood Lead Levels* by Race/Ethnicity, Stanislaus County

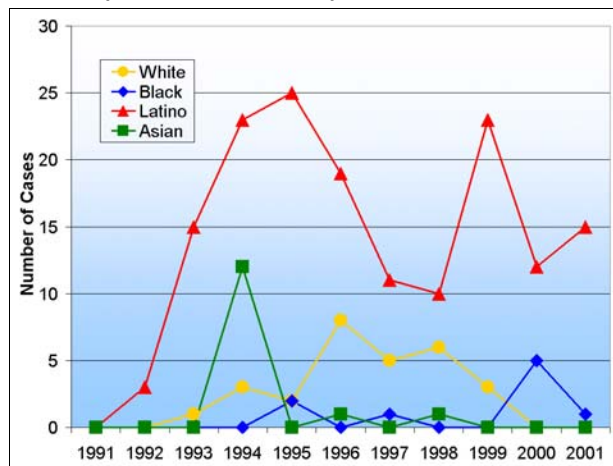
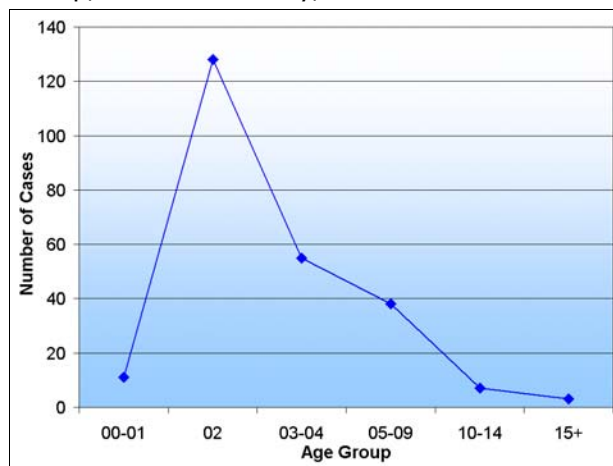


Figure 6: Elevated Blood Lead Levels* by Age Group, Stanislaus County, 1991-2001



* Elevated is defined as greater than 10 micrograms (ug) of lead per deciliter (dL) of blood.
Source: Stanislaus County, Health Services Agency, Lead Program (22)

Discrimination

In 1968, the federal government passed the Fair Housing Act which prohibits landlords, real estate agents, home sellers, and banks from discriminating against individuals based on race/ethnicity, gender, age, and sexual preference. California has a parallel law entitled the Fair Employment and Housing Act.

Housing discrimination includes discrimination based on race, gender, age, family status, disability and marital status (e.g., refusing to rent or sell, requiring higher qualifications, or imposing different rules because of race, etc.).

The data presented here includes 147 cases of housing discrimination reported to Project Sentinel in Stanislaus County during 2000 & 2001. Project Sentinel is a non-profit organization serving Northern California with an office in Modesto that services the cities of Modesto and Turlock. Their mission is to educate and counsel housing consumers as well as the housing industry on their rights and responsibilities; offer alternative dispute resolution service; and investigate allegations of housing discrimination.

The housing discrimination cases involving females accounted for 75% of all cases (Figure 7). Thirty five percent of all reported cases of housing discrimination were based on race. Discrimination based on race was the most common type of case reported by Latinos, Asians, and African-Americans (Figure 8). Whites reported more cases of discrimination due to disability.

Figure 7: Type of Housing Discrimination by Gender, Stanislaus County, 2000-2001

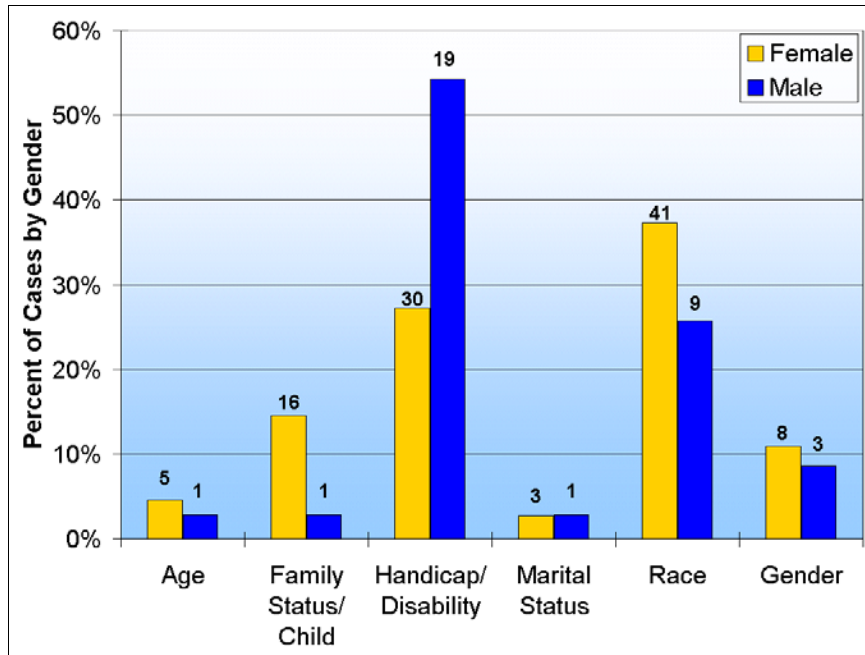
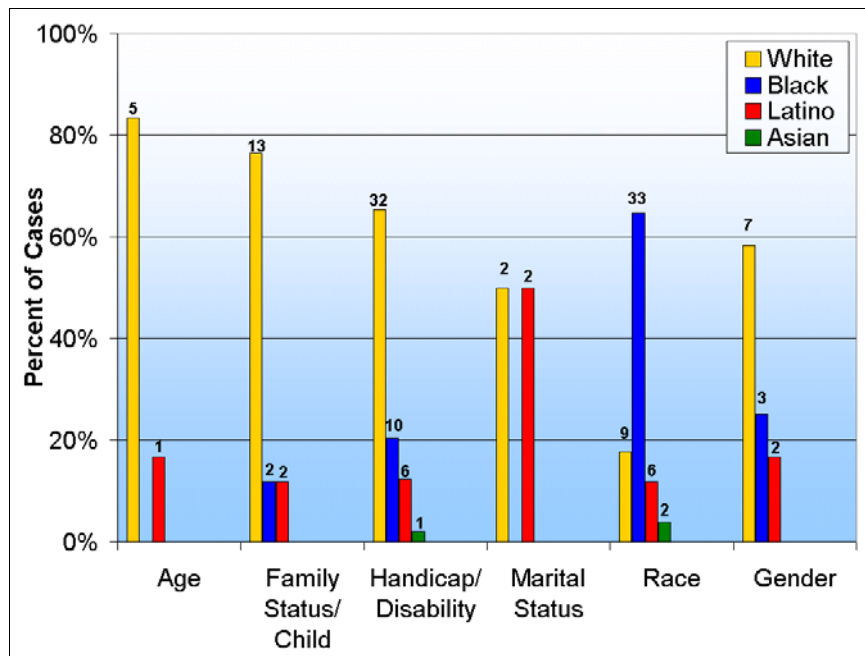


Figure 8: Type of Housing Discrimination by Race/Ethnicity, Stanislaus County, 2000-2001



Source: Project Sentinel (21)

Natural Environment

Topic

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Air Quality C2-3

Air Quality

Air pollution is a concern to those that live in Stanislaus County in particular and the San Joaquin Valley in general. Two types of air pollution are prevalent: ozone and particulate matter under 2.5 microns in diameter (PM-2.5). Ozone and PM-2.5 are both created in the air by chemical reactions. Chemicals involved in these reactions are released into the air by various human activities, such as industrial activity, driving, burning firewood, and cooking. Children, the elderly, athletes, and those with respiratory diseases such as asthma are affected by high concentrations of ozone. In addition to impacting these sensitive groups, PM-2.5 increases mortality of those that have heart or lung disease.

Annual days over the national eight-hour ozone standard have been trending downward for a number of years. High concentrations of ozone are generally found 5-10 miles downwind of urban areas. Peak concentrations are generally in July and August when temperatures are high and there is little to no wind.

The monthly distribution of days that are classified as "Unhealthy for Sensitive Groups" and "Unhealthy" shows both the summertime ozone problem and the fall/winter problem (Figure 1). Ozone concentrations are the highest in the summer and as they start going down in the fall, PM-2.5 levels increase and is the dominant type of air pollution during winter.

Figure 1: Percent of Days by Month Greater than 100 Air Quality Index*, Stanislaus County, 1999 and 2000

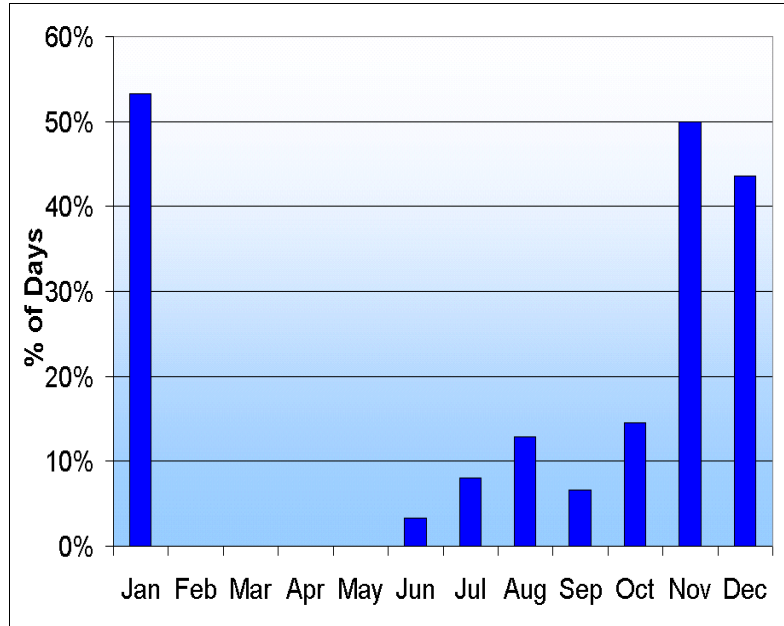
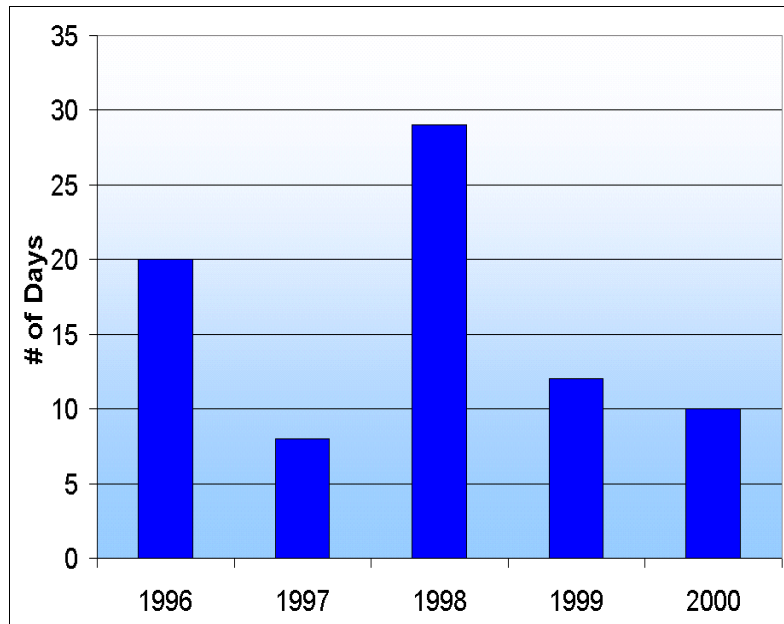


Figure 2: Number of Days by Year Greater than 100 Air Quality Index*, Stanislaus County



* See Appendix C for a definition.

Source: San Joaquin Valley Unified Air Pollution Control District (14)

Air Quality

Figure 3: Sources of Pollution in Stanislaus County, 1990 and 2000

In order to reduce air pollution, one must know how much pollutants is discharged into the air. There are three main pollutants: volatile organic compounds (VOC) or ROG*, nitrogen oxides (NO_x*), and particulate matter under 10 micrometers per cubic meter in diameter (PM-10*). Figure 3 shows the fluctuation in emission levels for stationary sources (generally industrial or commercial sources), area-wide sources (generally sources that are widespread like consumer products), and mobile sources (anything that is mobile such as cars, planes, and trucks) in 1990 and 2000.

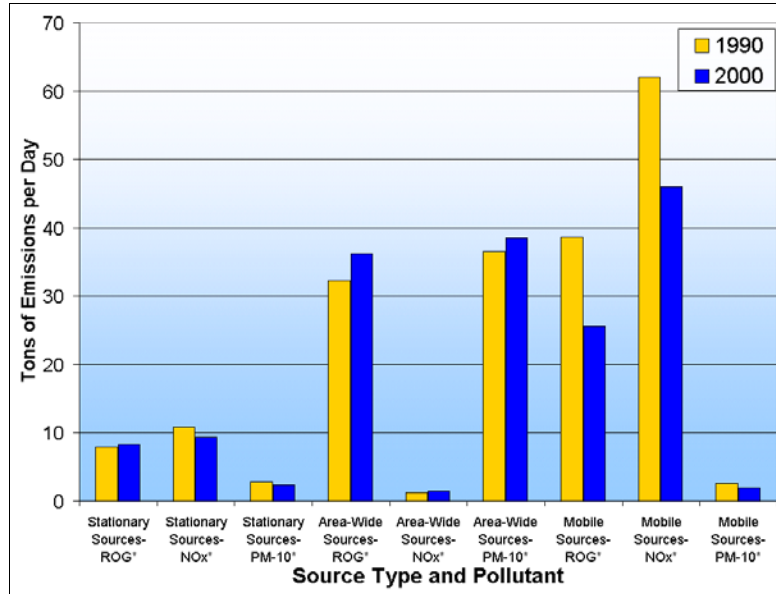
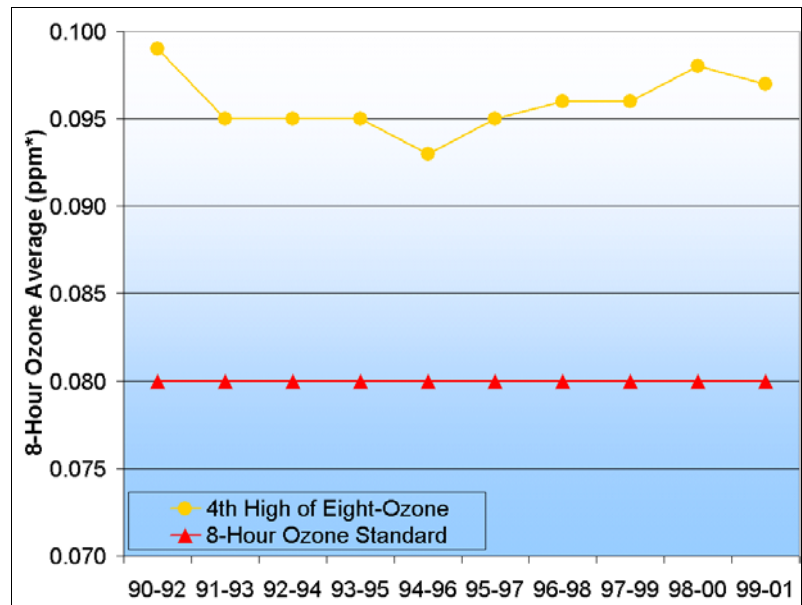


Figure 4: Fourth High of 8-Hour Ozone* for Stanislaus County, 1990-2001

A standard way to measure air pollution is to compare the fourth highest value of 8-hour ozone measured over three years. The purpose of choosing the fourth highest is to remove much of the meteorological variability. The data on Figure 4 shows air pollution levels have decreased in the early and mid nineties and began to increase throughout the remainder of the decade. All of the measured values are well above the Federal Standard for ozone.



* See Appendix C for a definition.

Source: San Joaquin Valley Unified Air Pollution Control District (14)

Education

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Enrollment & Vocational Grads

Student enrollment in Stanislaus County high schools reflects the ethnic diversity of our population. Over the past decade there has been a considerable increase in the enrollment of Latino students in high schools. The number increased from 5,072 (27.5%) Latino students in 1991-1992, to 10,072 (35.1%) in 2000-2001. The percent of White students enrolled has declined over the same period. Since 1991, African-American students have the lowest enrollment percentage of all racial or ethnic groups.

Vocational graduation rate is the percentage of twelfth-grade graduates who also completed vocational coursework. The graduation rate for all the race/ethnic groups in Stanislaus County was high in 1995-1996 but has since drastically declined. Asians had the highest percent of vocational graduates in 1995-1996; however, they had the lowest rate in 2000-2001. The drop in the percentage of vocational graduates could be because students are being counseled to take academic and college preparation courses. The Carl D. Perkins Vocational and Technical Education Act of 1998 (P.L. 105-332) was signed into law on October 31, 1998 and became effective on July 1, 1999. Its purpose is to improve vocational and technical education programs. The primary focus is to develop challenging academic standards while promoting activities that integrate academics with vocational and technical instruction.

*See Appendix C for definition.
Source: CA, Department of Education (17)

Figure 1: Percent of Enrolled High School Students by Race/Ethnicity, Stanislaus County

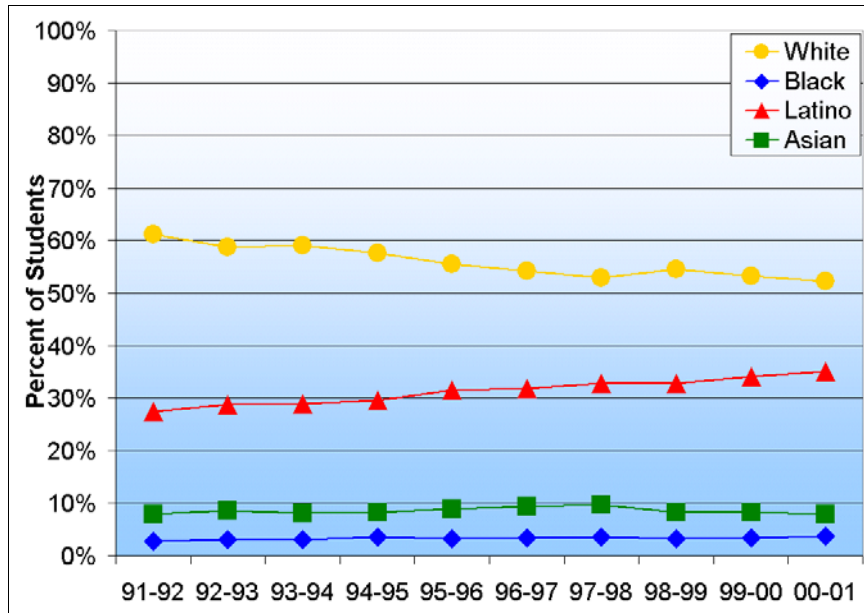
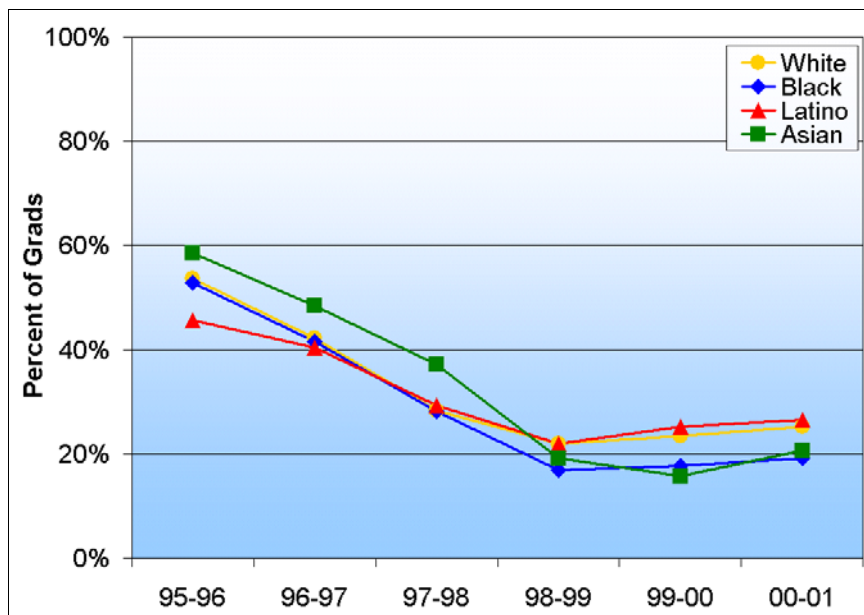


Figure 2: Percent of High School Vocational* Graduates Rate by Race/Ethnicity, Stanislaus County



Class Size & Technology

The pupil-teacher ratio is one of the factors indicative of the quality of education and is the most common statistic for comparing information across the states. The pupil-teacher ratio is the student enrollment divided by the number of certified full-time equivalent (FTE) teachers in the school districts. The pupil-teacher ratio for California has fallen from 24.1 in 1995-96 to 21.6 in 1997-98, mostly because of the statewide initiative to reduce class size.

Stanislaus County has a higher pupil-teacher ratio when compared to the state. The elementary school districts in the county and state have a lower ratio than the high school districts (Figure 3).

Computers and the Internet are vital to information access/sharing and have become an integral part of education. Knowledge of computers and Internet access are imperative to a comprehensive educational environment. Figure 4 compares the number of students per computer between California and Stanislaus County schools. The ratio has decreased from around 10 students per computer in 1997 to about 7 students per computer in 2001 for both the county and state.

The school wide average class size is calculated by dividing enrollment by the number of classes with 1-50 students, excluding special education and a few other minor categories. The average class size is always larger than pupil-teacher ratio, sometimes substantially so, because some teachers have special assignments outside the regular classroom. The schools in Stanislaus County have larger class sizes when compared to the whole state (Figure 5). California's K-3 class size reduction program was established in 1996. The school districts could apply under this program for funds to decrease class size to twenty pupils or less for up to three classes grades K-3 per school. The Morgan-Hart Class Size Reduction Act was implemented to reduce high school class size. These programs helped decrease the average class size in the county and state.

Figure 3: Pupil-Teacher Ratio*, Stanislaus County and California

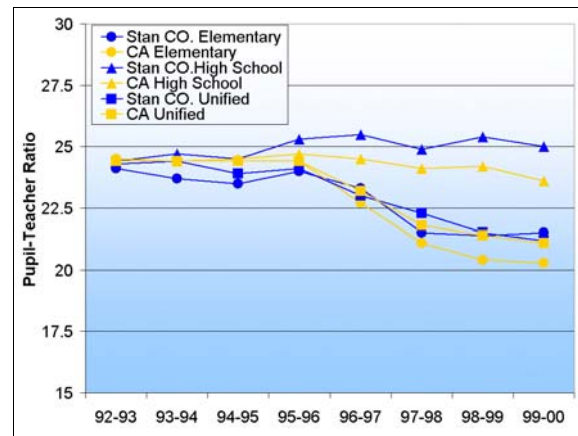


Figure 4: Student Computer Ratio, Stanislaus County and California

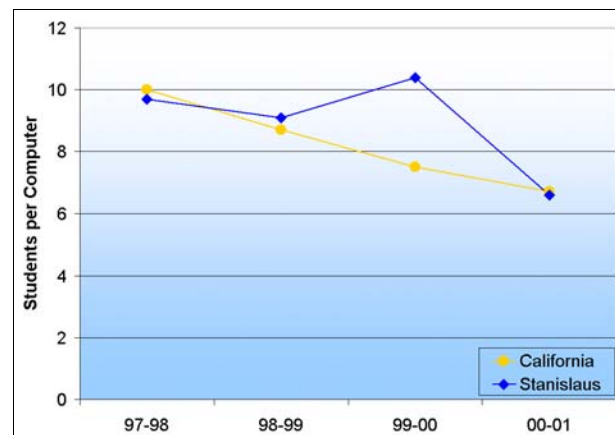
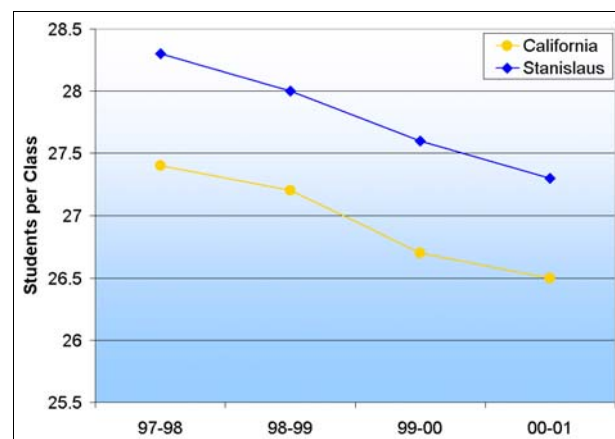


Figure 5: Average Class Size*, Stanislaus County and California

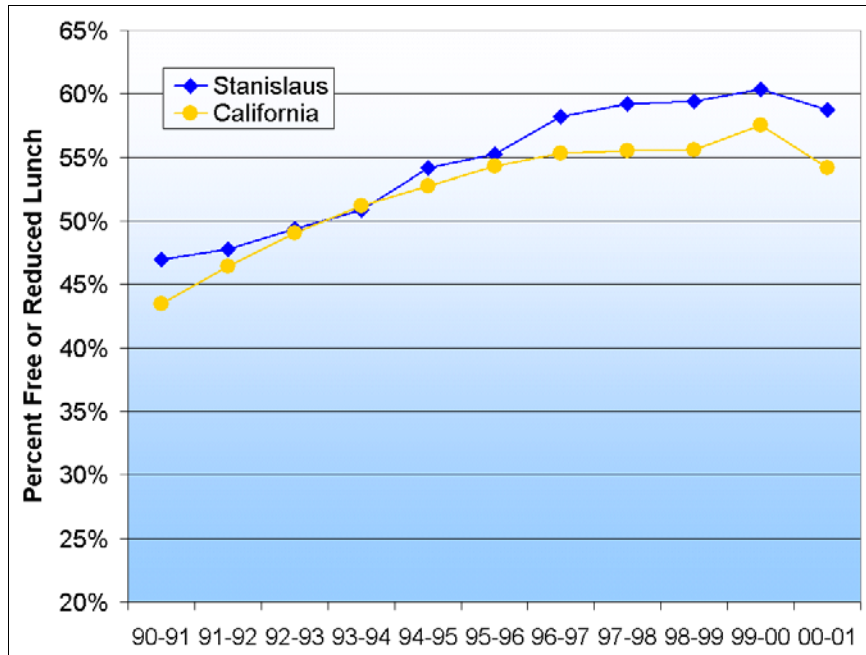


*See Appendix C for definition.
Source: CA, Department of Education (17)

Socio Economic & Language

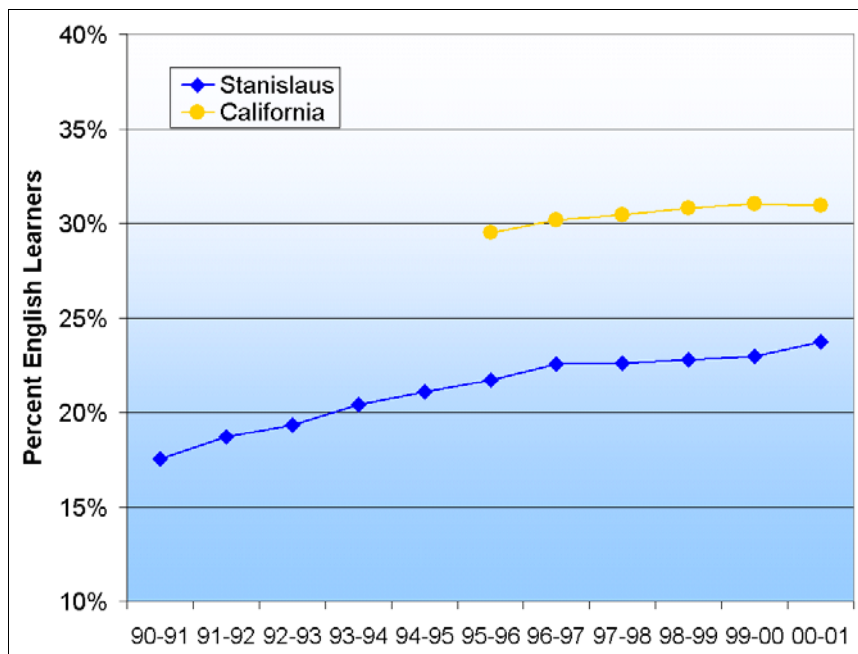
The free and reduced price meals program provides food for students from low-income families. The basic eligibility guidelines for receiving a free or reduced price meal is based on the family’s annual income. The percentage of students receiving free or reduced lunch has increased in both California and Stanislaus County. The percent receiving free or reduced lunches in Stanislaus County is slightly higher than the state (Figure 6). In 2000-2001 nearly 35 schools in the county had 70% or more of students receiving free or reduced lunch. The percentage of students receiving free or reduced price lunches at each school is shown in Figure 8.

Figure 6: Percentage of Students Receiving Free or Reduced School Lunches* in Elementary Schools, Stanislaus County and California**



The percentage of English learners (EL) in elementary schools in Stanislaus County increased from 18% in 1990-1991 to 24% in 2000-2001 (Figure 7). There are nearly 40 different language groups in Stanislaus County schools. In the 2000-2001 school year, about 84% of all the EL students in the county schools spoke Spanish as their primary language. Roughly 3.9% spoke Cambodian and 2.2% spoke Assyrian. The percent of EL students in Stanislaus County is notably lower than California. This could be due to a higher immigration rate in Southern California counties. The percentage of English learners at each school is shown in Figure 9.

Figure 7: Percent of Students that are English Learners* in Elementary Schools, Stanislaus County and California**



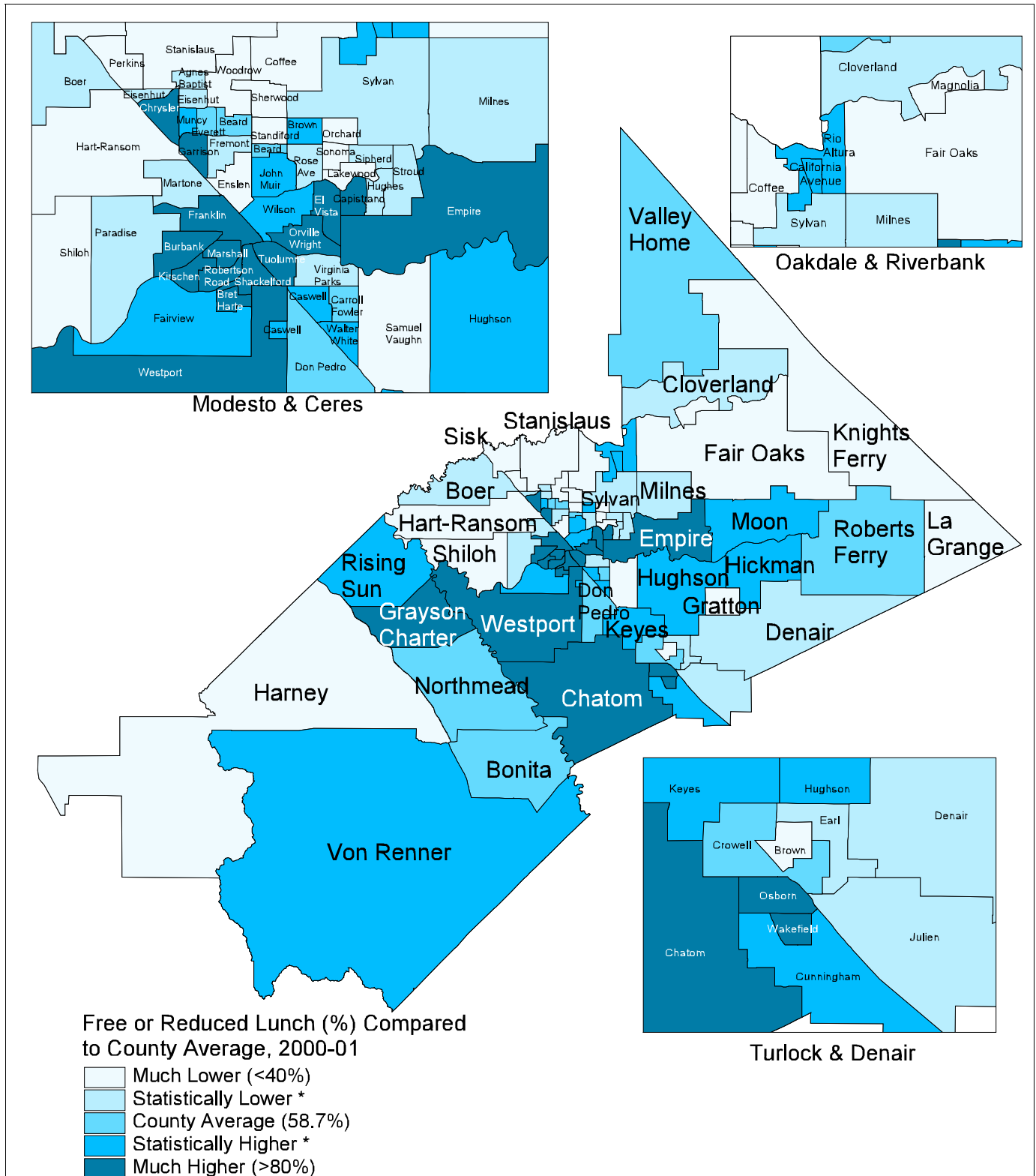
* See Appendix C for definition.

** Some schools have more than elementary grades (K-8 or K-12) included. These could not be separated in this analysis.

Source: CA, Department of Education (17)

Socio Economic & Language

Figure 8: Percentage of Students Receiving Free or Reduced Lunches** in Stanislaus County Elementary Schools, 2000-01



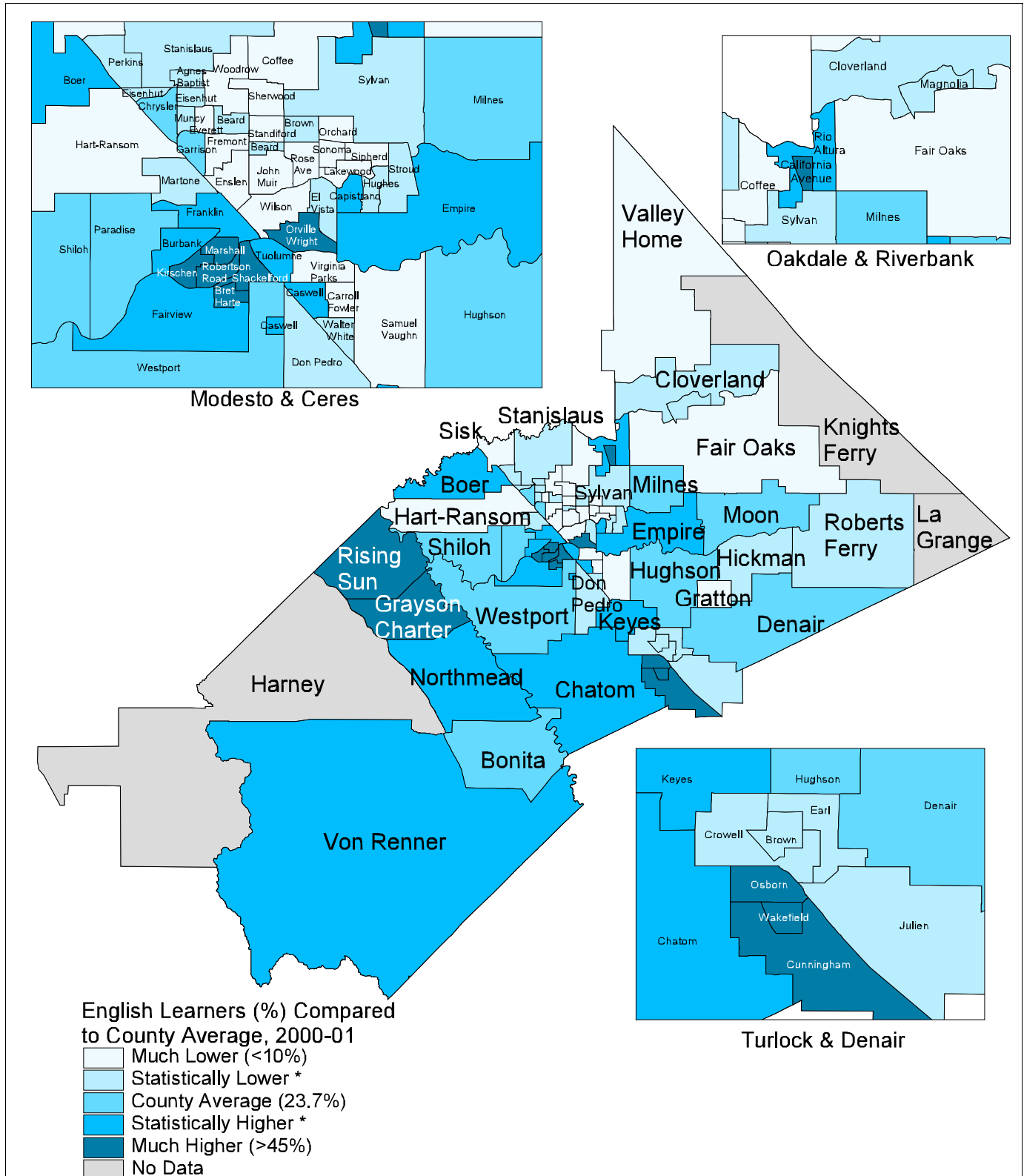
* 95% Confident

** See Appendix C for Definition.

Source: CA, Department of Education (17)

Socio Economic & Language

Figure 9: Percentage of English Learners** in Stanislaus County Elementary Schools, 2000-01



* 95% Confident

** See Appendix C for definition.

Source: CA, Department of Education (17)

Standardized Testing and Reporting Program (STAR) Scores

The Standardized Testing and Reporting Program (STAR) is mandated for grades 2 through 11. It consists of a standardized national test (SAT-9) with augmented questions based on California curriculum standards and a test for Spanish-speakers who have been in a California district for a year or less (Spanish Assessment of Basic Education, Second Edition; SABE/2). Beginning in 1999, questions in English/language arts and mathematics were added to the SAT-9.

SAT-9 tests for grades 2 through 8 cover reading, mathematics, language, and spelling. Writing was included in the SAT-9 for grades 4 and 7 in 2001. For the last four years, Stanislaus County's 4th graders performed similarly to the state in language, math, and reading when compared to the nation's 50th percentile. The percentages of 4th graders at or above the nation's 50th percentile have increased progressively for both California and Stanislaus County since 1998. However, the percent of 4th graders scoring above the 50th percentile for reading remains low for both the county and state (Figure 10).

SAT-9 scores for 8th graders show that the percent scoring at or above the 50th percentile for math and reading is greater in Stanislaus County than in California. The trend for 8th graders mimics the four year increase among the 4th graders. The percentage of Stanislaus County's 8th graders who have scored above the 50th percentile nationally on the reading test; however, have been above 50% for the last two years (Figure 11).

SAT-9 for grades 9 through 11 cover reading, mathematics, language, science, and social science. Beginning in 2001, the SAT-9 also covered history and science in grades 9 through 11. In general, the 11th graders for both California and the county performed poorly compared to the 4th and 8th graders, especially in reading. Less than 50% of the 11th grade students in the county and the state reach scores over the nation's 50th percentile (Figure 12).

Overall, the results reveal that the student's test scores for California and Stanislaus County have improved over the past 4 years. In addition, Stanislaus County's scores are currently much lower in 11th grade than they are in 8th grade.

Source: CA, Department of Education (17)

Figure 10: Percent of 4th Graders At or Above 50th Percentile Nationally for the SAT-9 Reading, Math & Language Test, Stanislaus County & California

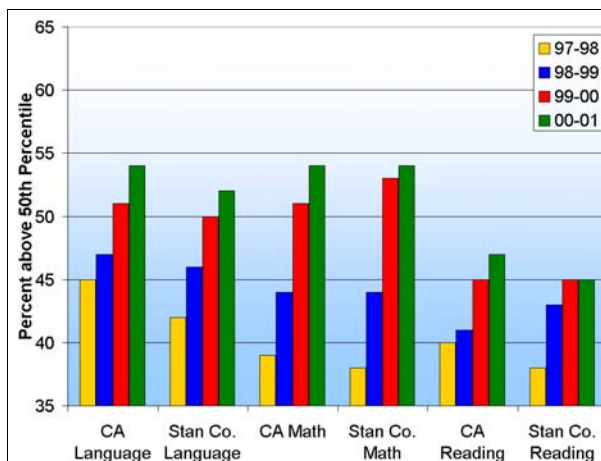


Figure 11: Percent of 8th Graders At or Above 50th Percentile Nationally for the SAT-9 Reading, Math & Language Test, Stanislaus County & California

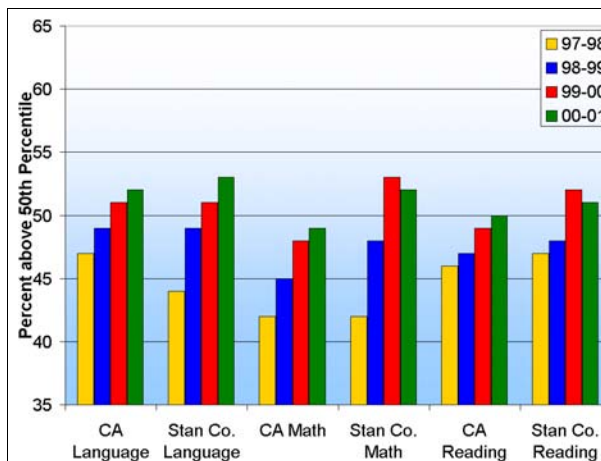
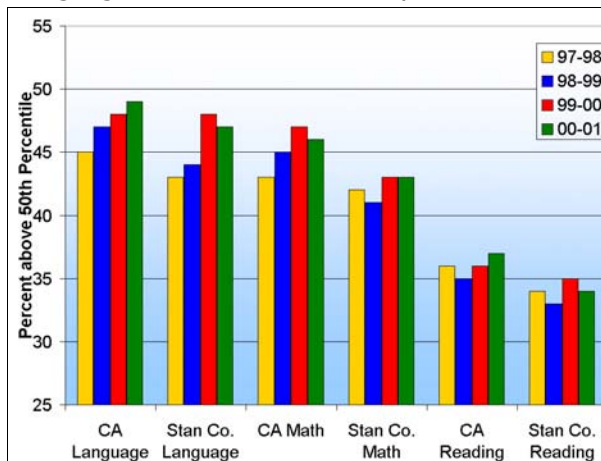


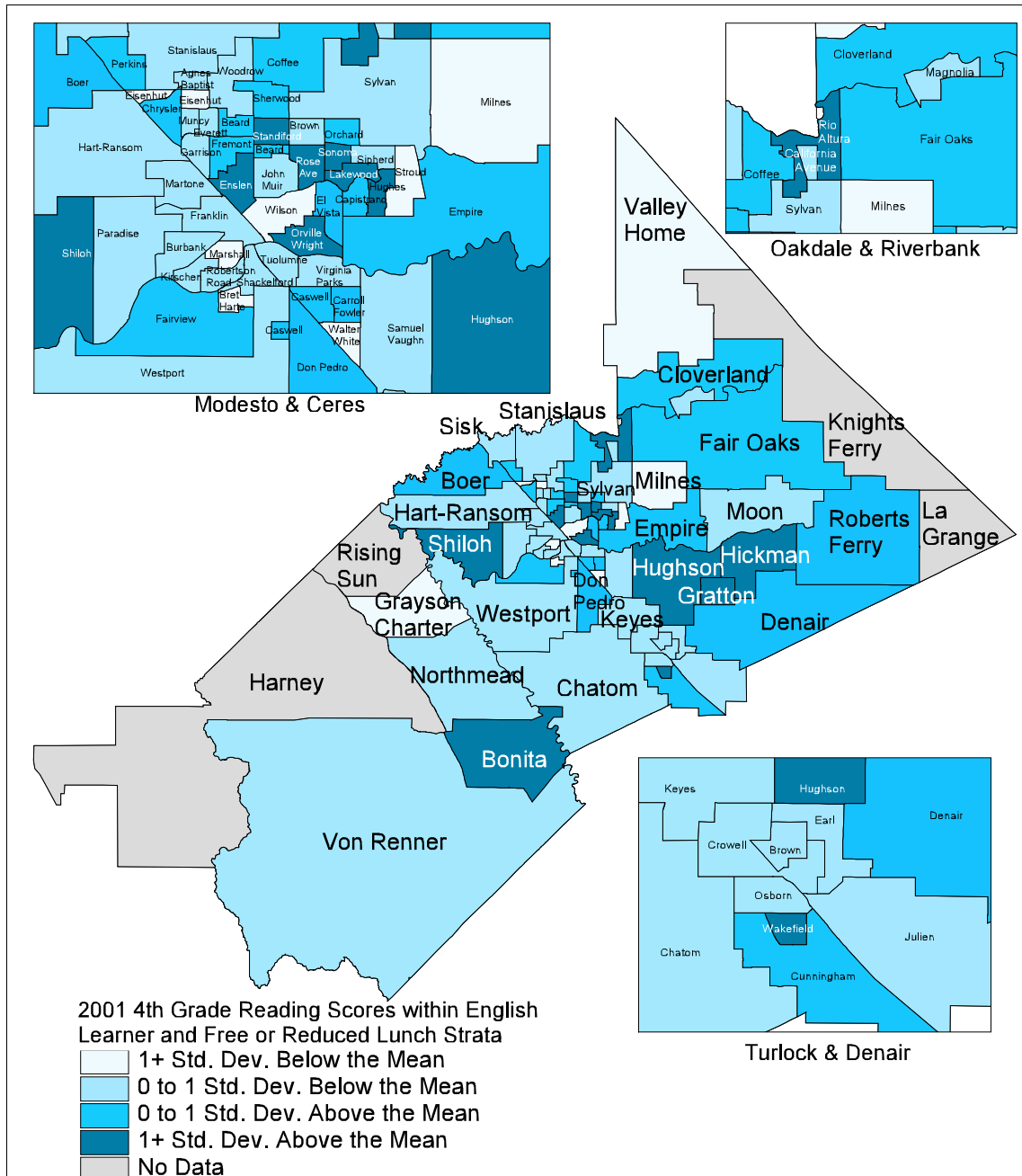
Figure 12: Percent of 11th Graders At or Above 50th Percentile Nationally for the SAT-9 Reading, Math & Language Test, Stanislaus County & California



Standardized Testing and Reporting Program (STAR) Scores

In order to take into consideration the fact that each school has unique characteristics that are significant factors in determining success on these standardized tests, the elementary schools in Stanislaus County were categorized into three groups. Each group's SAT-9 test scores were then only compared to the other schools in the group. The first group was those schools that had statistically higher percentages of English learners and free or reduced lunches. The second group was those schools that had statistically lower percentages in both categories, while the third group was the schools that fell in between the first two groups. Figure 13 shows the Reading scores and Figure 14 shows the

Figure 13: 2001 4th Grade SAT-9 Reading Scores Compared to the Group Mean*, Stanislaus County

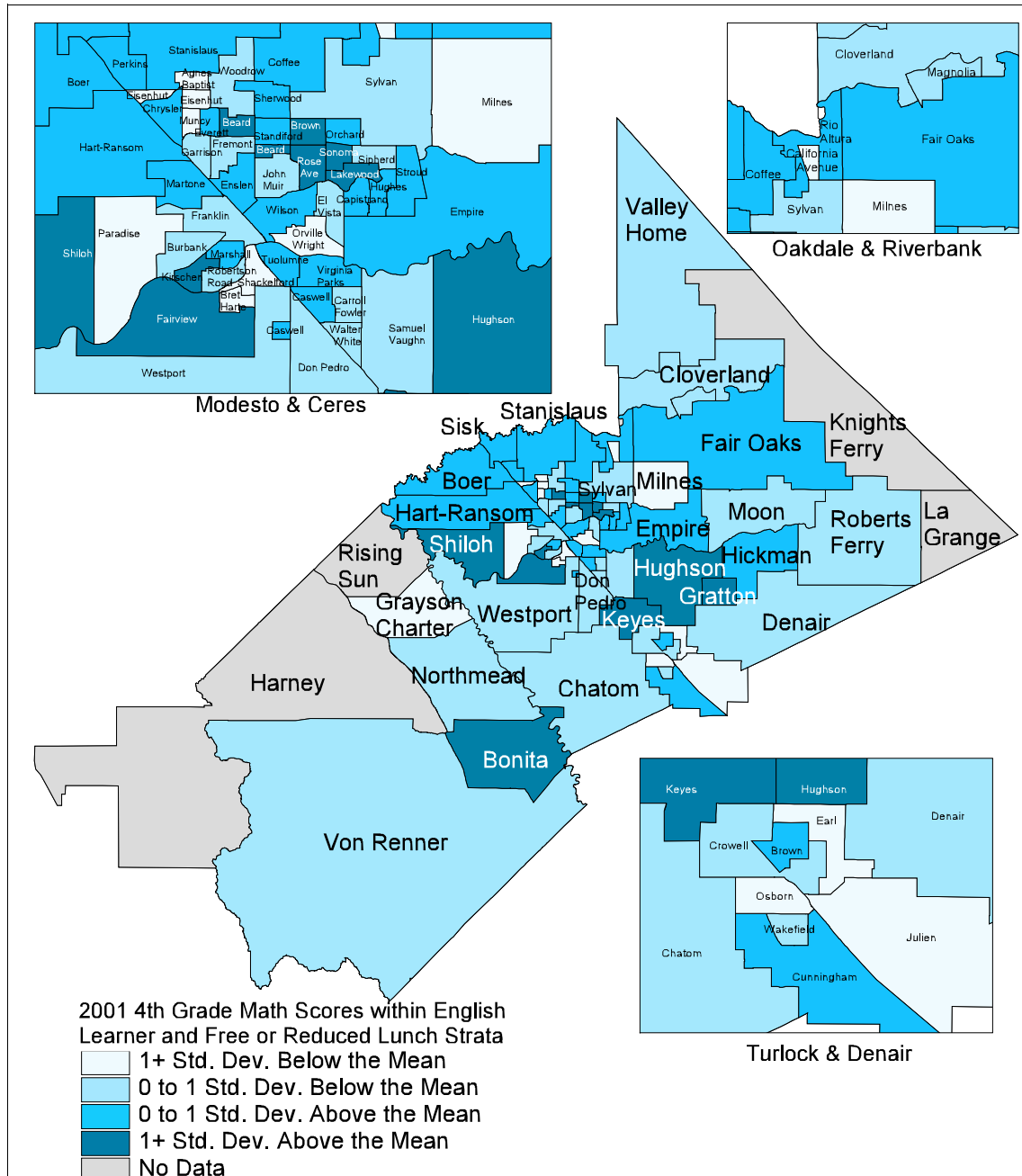


*The method of grouping the elementary schools is described in the methods section, Appendix B.
 Source: CA, Department of Education (17)

Standardized Testing and Reporting Program (STAR) Scores

Math scores using this methodology. The standardized test scores within these three strata help to compare the schools that are similar to one another with respect to the proportion of English learners and those that receive free and reduced school lunches. The schools with high percentages of English learners and free and reduced school lunches averaged 41% and 28% of their students scoring above the 50th percentile nationally in the math and reading sections while the schools with low percentages in both categories averaged 64% and 60%.

Figure 14: 2001 4th Grade SAT-9 Math Scores Compared to the Group Mean*, Stanislaus County

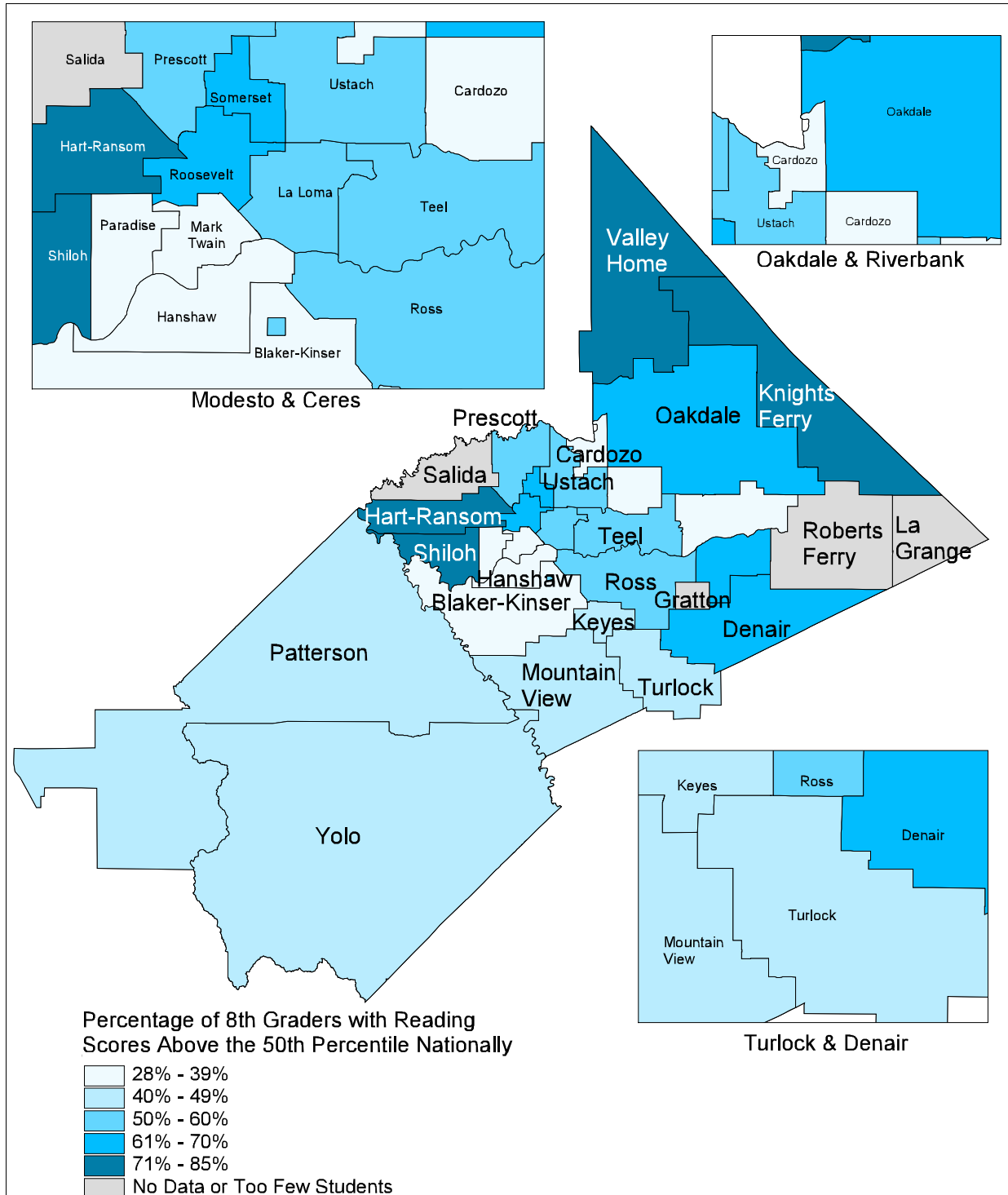


*The method of grouping the elementary schools is described in the methods section, Appendix B.
 Source: CA, Department of Education (17)

Standardized Testing and Reporting Program (STAR) Scores

The 8th grade Reading and Math standardized test scores for each school in 2001 are shown in Figures 15 and 16. The same scores for 11th grade are shown in Figures 17 and 18.

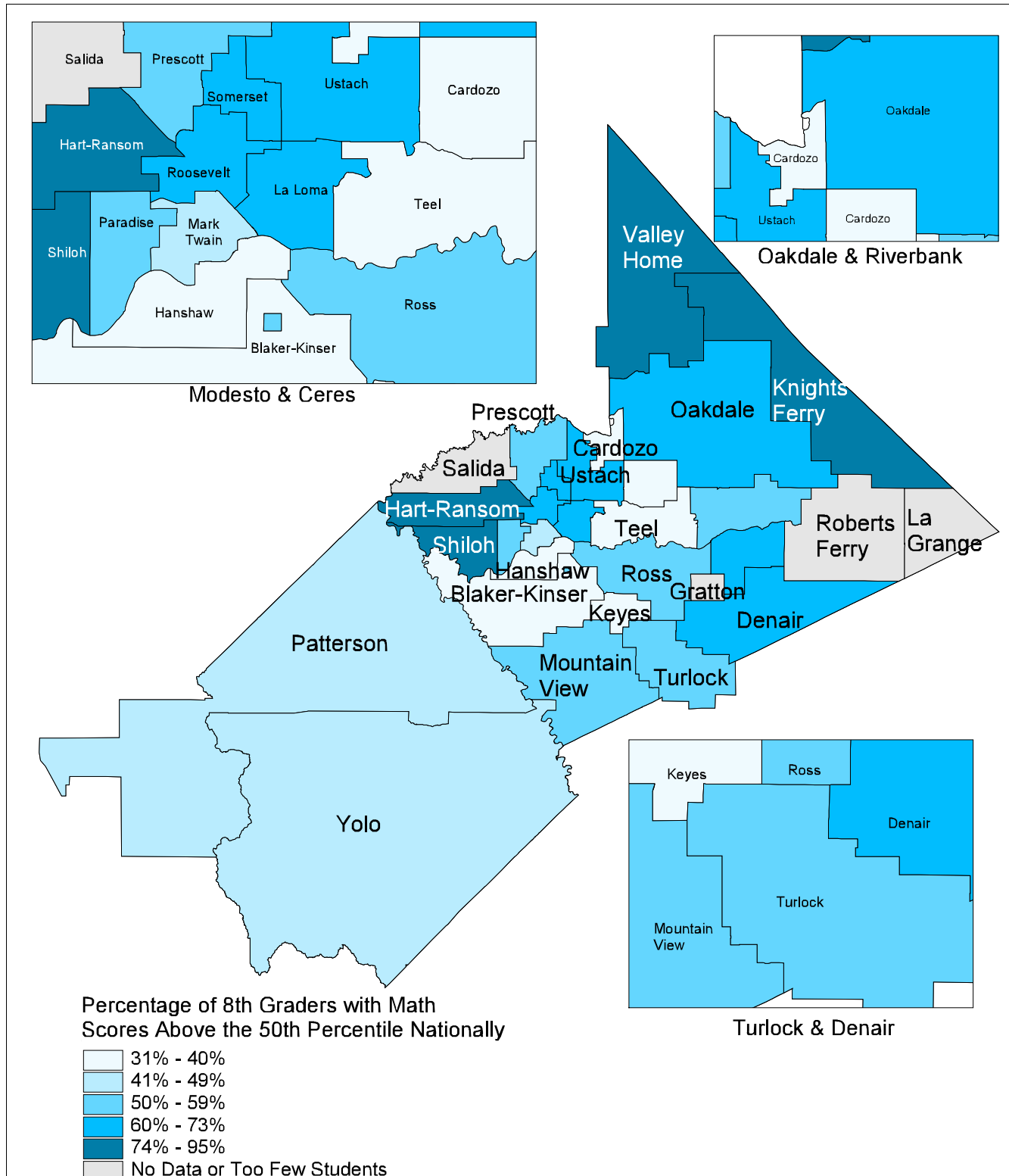
Figure 15: 2001 8th Grade SAT-9 Reading Scores. Percent of Students that Scored At or Above the 50th Percentile Nationally, Stanislaus County



Source: CA, Department of Education (17)

Standardized Testing and Reporting Program (STAR) Scores

Figure 16: 2001 8th Grade SAT-9 Math Scores. Percent of Students that Scored At or Above the 50th Percentile Nationally, Stanislaus County



Source: CA, Department of Education (17)

Standardized Testing and Reporting Program (STAR) Scores

Figure 17: 2001 11th Grade SAT-9 Reading Scores. Percent of Students that Scored At or Above the 50th Percentile Nationally, Stanislaus County

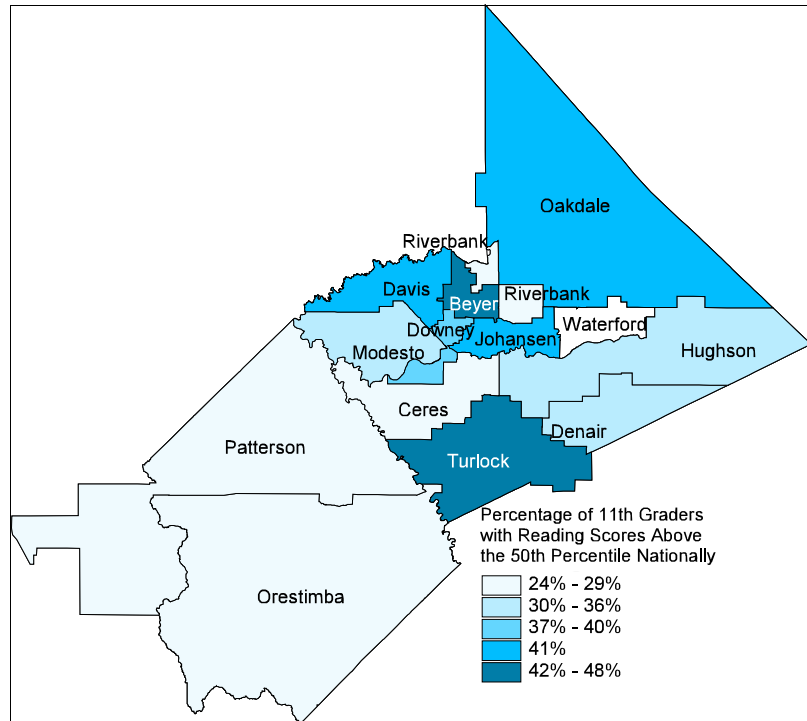
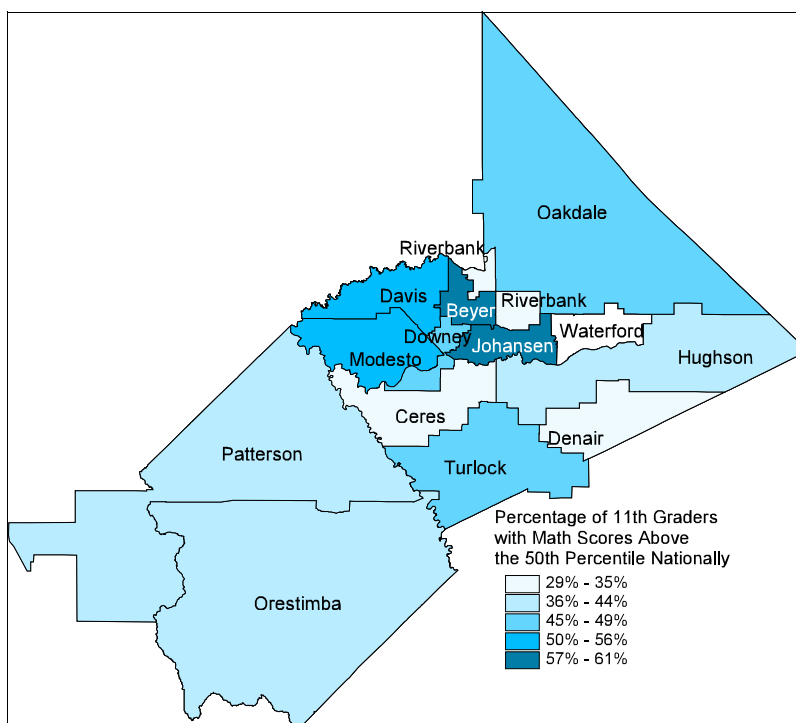


Figure 18: 2001 11th Grade SAT-9 Math Scores. Percent of Students that Scored At or Above the 50th Percentile Nationally, Stanislaus County

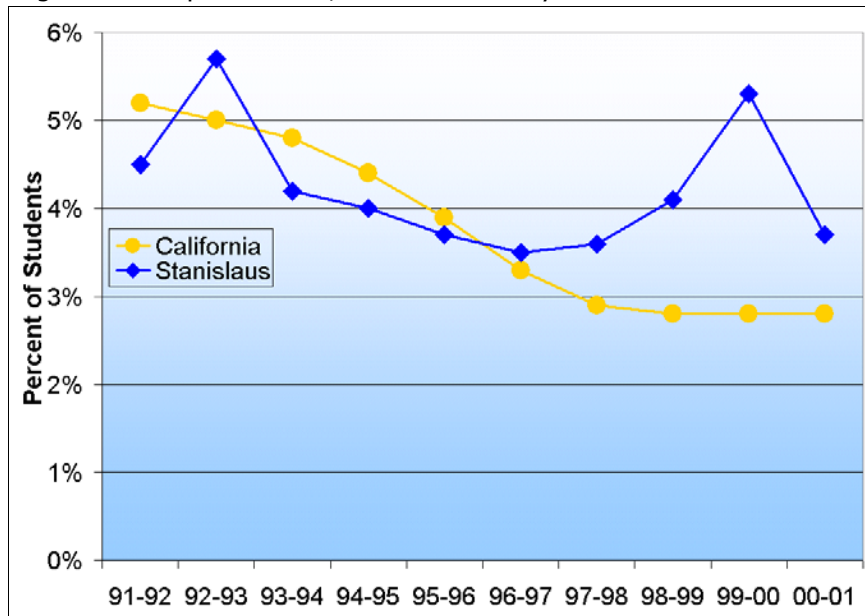


Source: CA, Department of Education (17)

High School Dropout Rates

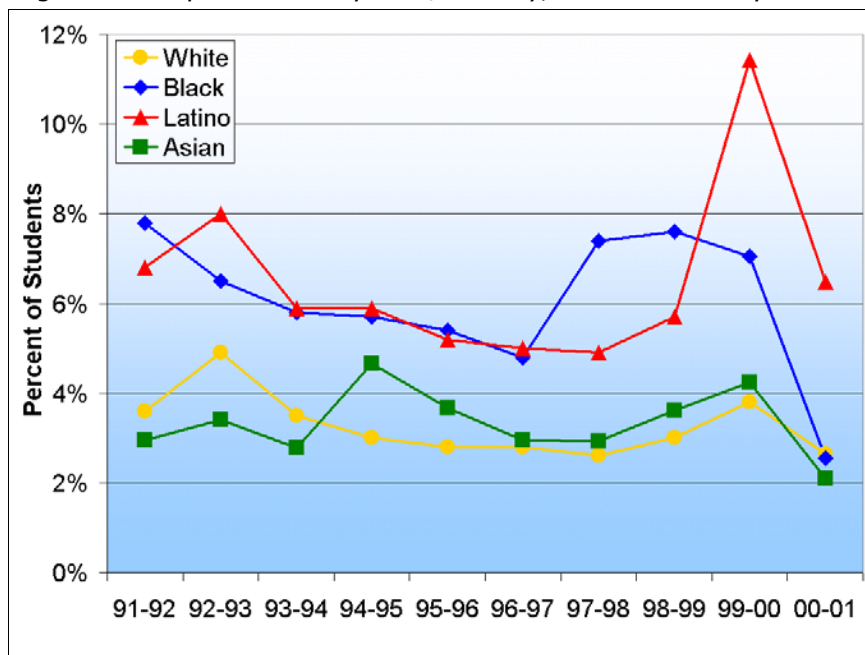
The 1-year dropout rate is the percent of dropouts in a single year. It is also called the "annual" or "event" rate and it is the dropout rate used by the National Center for Education Statistics to compare states and school districts. Stanislaus County dropout rates were comparable to the state from 1991 to 1997, mirroring the state trend of decreasing rates. However, since 1997 the state rates have continued to fall while the county rates have increased until 2000. The dropout rate notably decreased in 2000-2001 (Figure 19).

Figure 19: Drop Out Rate*, Stanislaus County and California



The trends in the dropout rates in the various race/ethnic groups parallel the trend seen in the overall county dropout rates showing a three year increase after 1997. The Latinos and African-Americans have a high dropout rate when compared to Whites and Asians. The reason for the disparity among the race/ethnic groups could be attributed to differences in socio-economic factors (Figure 20).

Figure 20: Drop Out Rate* by Race/Ethnicity, Stanislaus County

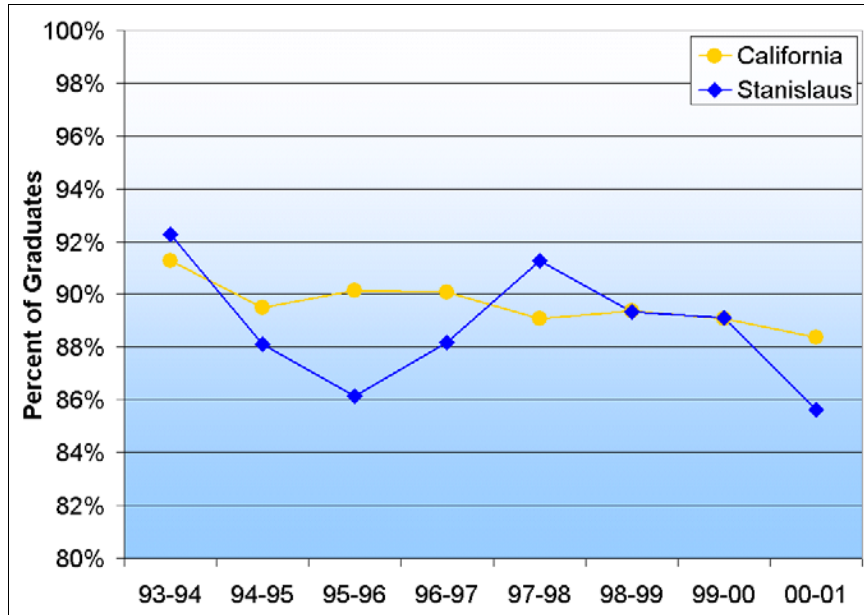


*See Appendix C for Definition.
Source: CA, Department of Education (17)

High School Graduation Rates

Graduation rates in Stanislaus County were lower than California for four out of the last eight school years. For a three year period between 1997-2000, the county rates were either higher or equal to the state but have dropped during the past year. There is no apparent trend in the graduation rates for the county, but the state shows a decline in rate over the past 8 years (Figure 21).

Figure 21: Graduation Rate*, Stanislaus County and California



Whites tend to have a higher graduation rate when compared to the other race/ethnic groups. Nearly 88% of the White students enrolled in grade 12 graduate at the end of the year. Asians had higher graduation rates than Whites from 1993 to 1996 but since then have had lower rates. African-American students have the lowest rates in the county (Figure 22).

Figure 22: Graduation Rate* by Race/Ethnicity, Stanislaus County

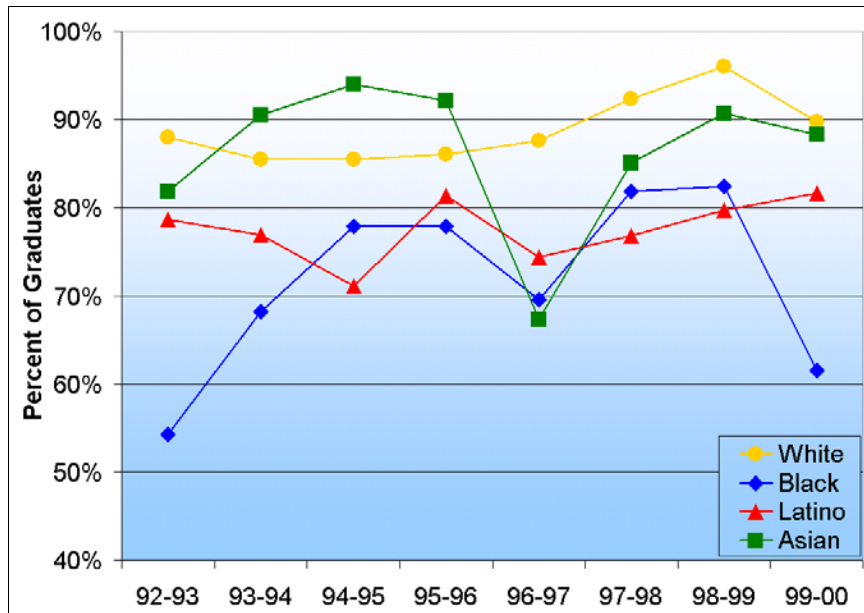


Figure 25 shows the four year graduation percentage at each high school in Stanislaus County for the three year period from 1999-2001.

* One (1) year graduation rate. See Appendix C for definition.

Source: CA, Department of Education (17)

High School Graduates with UC/CSU Required Courses

Figure 23 compares the percentage of twelfth-grade graduates completing all the courses required for University of California (UC) and/or California State University (CSU) entrance with a grade of "C" or better.

The percent of all high school graduates completing UC/CSU required courses from Stanislaus County has been considerably less than the percent for all of California for several years (Figure 23).

Figure 23: Percentage of Graduates with UC/CSU Required Courses, Stanislaus County and California

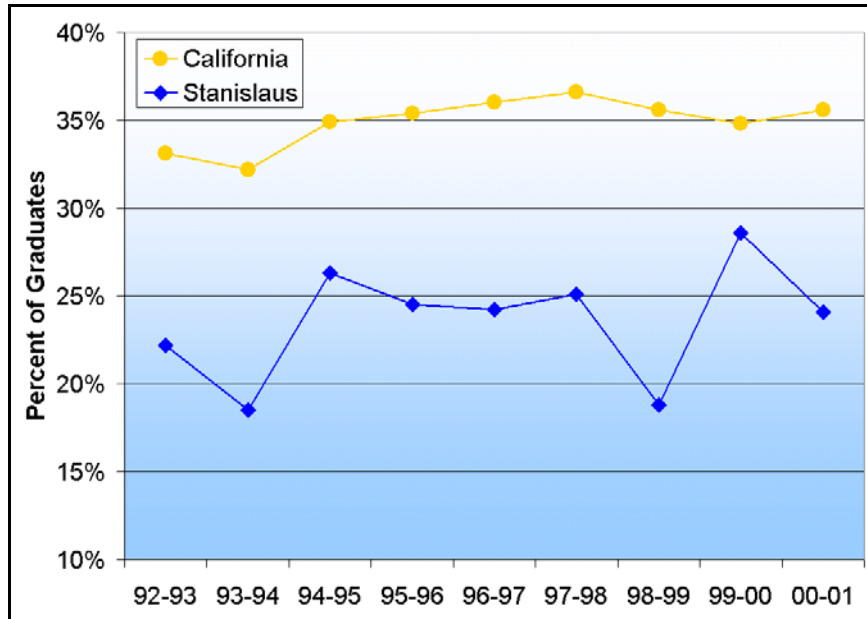
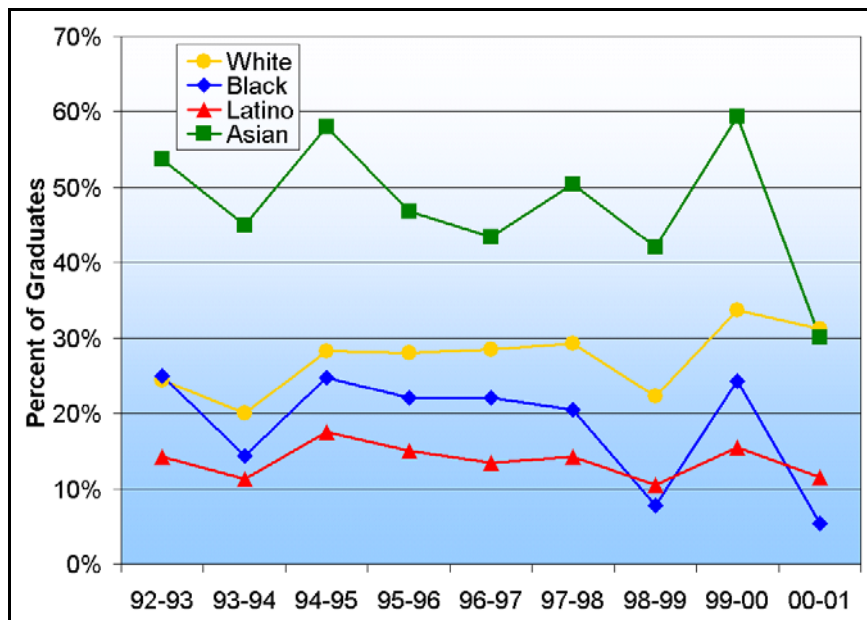


Figure 24 compares the percent of all high school graduates completing UC/CSU required courses by race and ethnicity in Stanislaus County.

Asians have the highest percentage of graduates passing all UC/CSU requirements followed by Whites. Latinos generally have the lowest percentage of graduates completing the courses required for entrance into UC and CSU schools.

Figure 26 shows the percent of graduates that have passed the required UC and CSU courses at each high school.

Figure 24: Percentage of Graduates with UC/CSU Required Courses by Race/Ethnicity, Stanislaus County



Source: CA, Department of Education (17)

Graduation & Graduates with Required UC/CSU Courses

Figure 25: Average Four Year Graduation Percent, 1999-2001

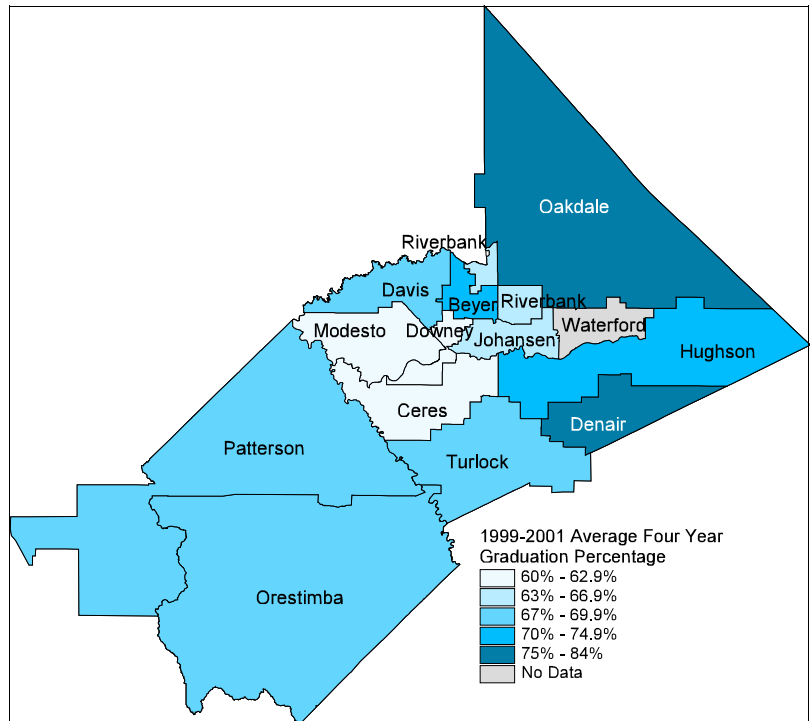
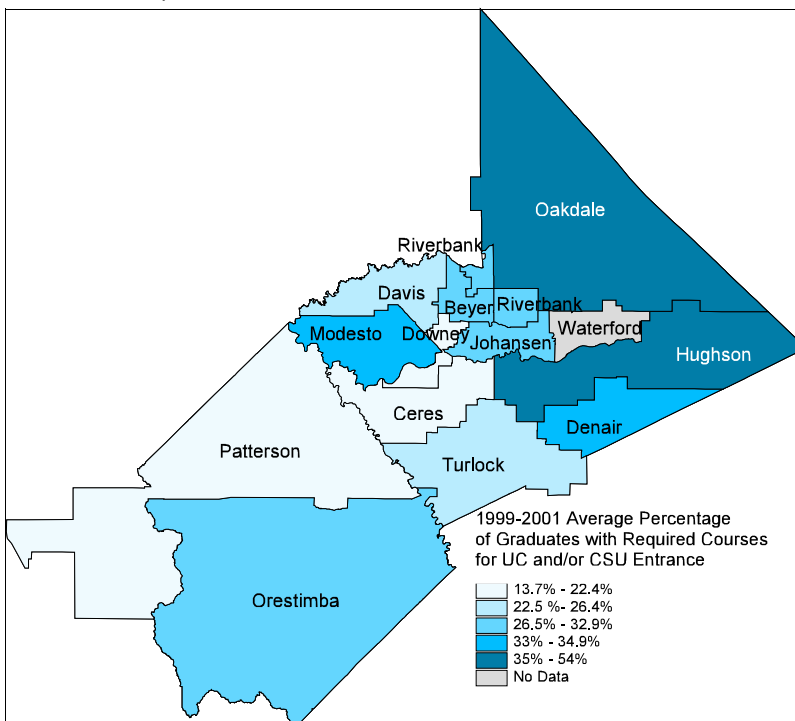


Figure 26: Percent of High School Graduates with Required UC/CSU Courses, 1999-2001



Source: CA, Department of Education (17)

Educational Attainment

In 2000, 63% of people 25 years or older had at least graduated from high school in Stanislaus County compared to 78% for California. Fourteen percent of people 25 years and over in the county had a bachelor's degree or higher in contrast to 28% for the state. Stanislaus County has more students dropping out of high school while the state has a higher percentage of students receiving college degrees (Figure 27).

Figure 27: Educational Attainment for the Population 25 Years or Older, Stanislaus County and California, 2000

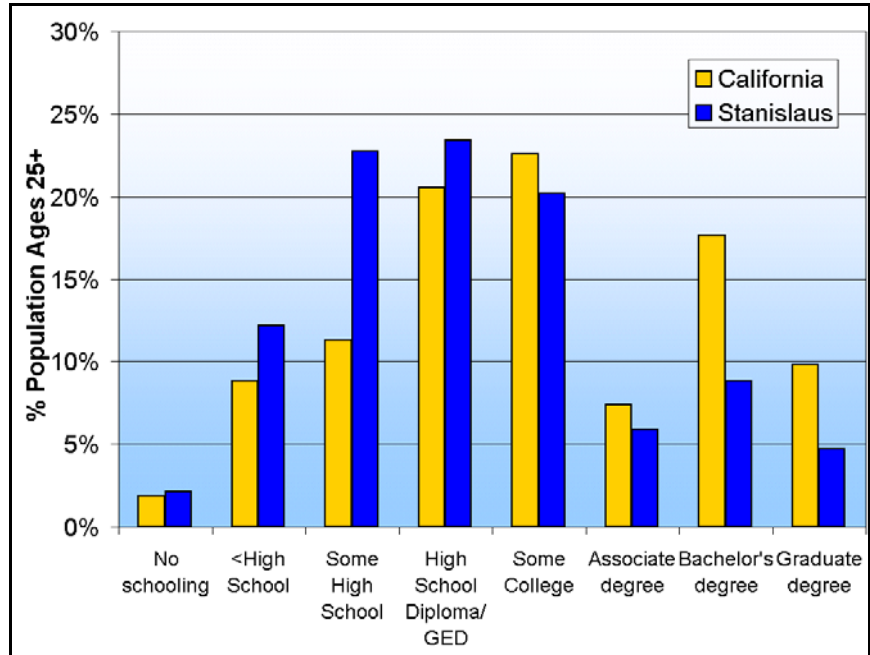
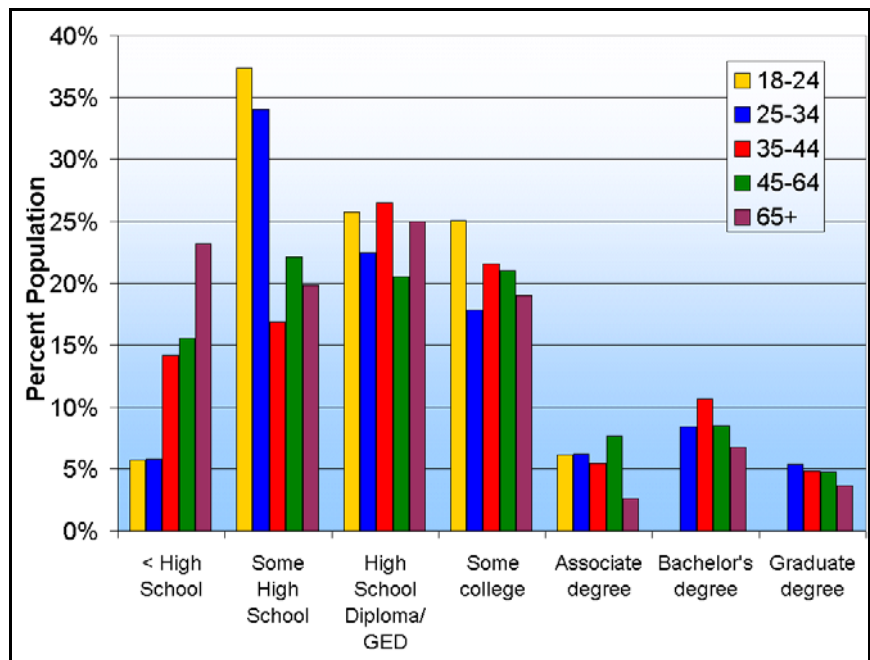


Figure 28: Educational Attainment by Age Group, Stanislaus County, 2000

Figure 28 compares the educational attainment of the different age groups in Stanislaus County, in the year 2000. The 25-34 and 35-44 age groups have a higher percentage of people with a bachelor's degree or higher. The 45-64 and 65+ age groups have a high percentage (23.2%) of people who have completed less than the 9th grade. A stronger emphasis on education for the future generations might help them to achieve higher degrees compared to the previous generation.



Source: US Census Bureau, 2000 (16)

Economy

Topic

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Unemployment E2

Unemployment

Stanislaus County's annual average unemployment rate has substantially decreased since 1993 when 16% of the labor force was unemployed. It has reached an all time low of slightly over 10% for 2001. This six percentage point decrease indicates that there has been an increase in employment opportunities in the county. California and the nation have experienced the same continual downward trend in unemployment rates since 1993 (Figure 1).

The continual rise in the stock market from 1991 to 1999 correlates with the decrease in unemployment rates. As new technology industries were launched, new jobs were created. Computer, Internet, and biotechnology companies have assisted in increasing the number of new opportunities and lowering the unemployment rates at all three levels (county, state, and national). Since 2000, the downturn of the stock market and many Internet companies has caused the state and national unemployment rate to slightly increase.

Stanislaus County, on the other hand, does not rely heavily on the technology industry and showed little unemployment change in the last two years. Although the unemployment rate is not declining at the same rate as from 1994 to 1999, Stanislaus County is continuing to show a decrease in unemployment, unlike the state and nation. Even with this decline, Stanislaus has twice the unemployment rate as the overall nation. The county's higher unemployment rate may stem from the existence of a large proportion of seasonal agricultural industries. When the unemployment rate is separated by cities/towns, most of the rural communities have higher unemployment rates than the more urban settings, such as Modesto (Figure 2).

Figure 1: Unemployment Rate, Stanislaus County, California, and the United States

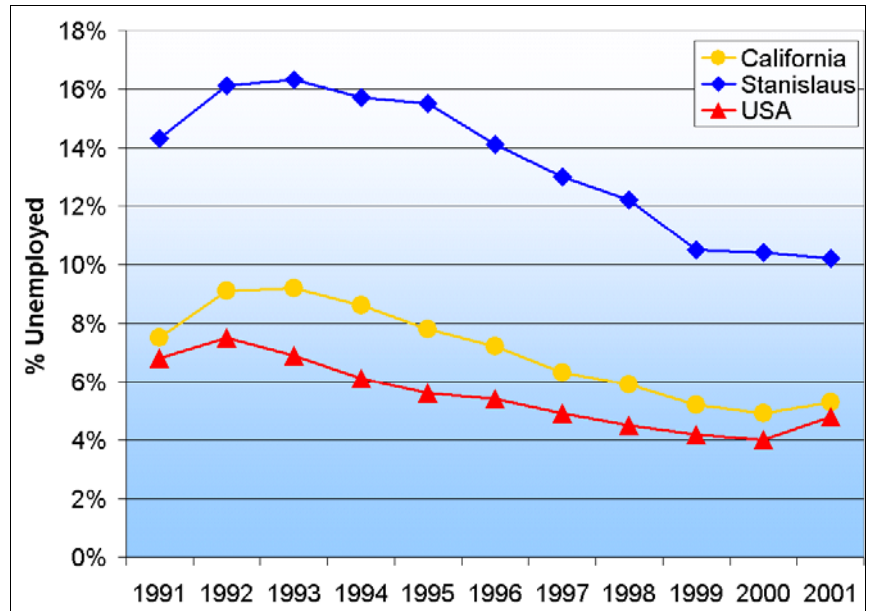
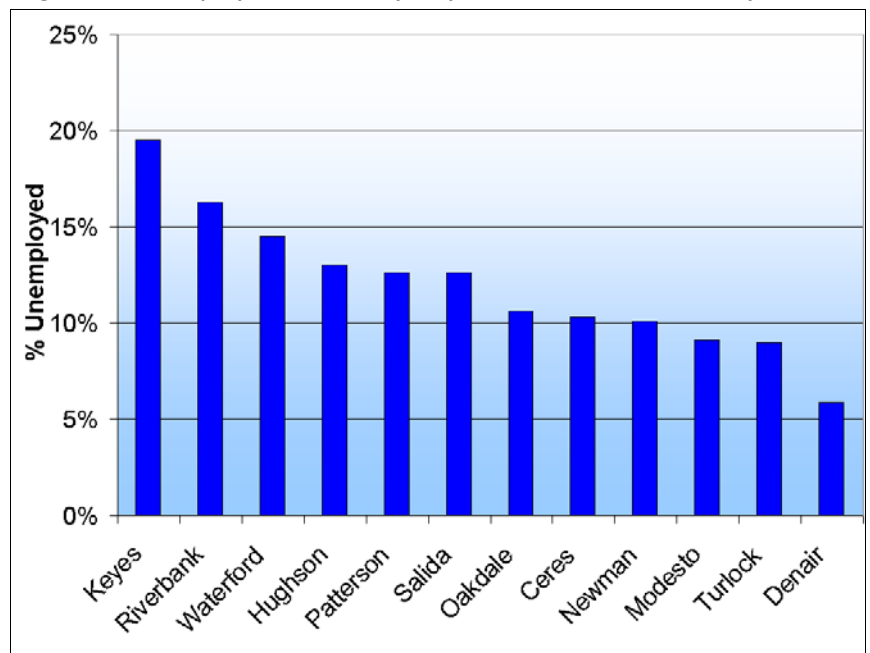


Figure 2: Unemployment Rate by City/Town, Stanislaus County, 2001



Source: State of California, Employment Development Department (23)

Community Safety

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Crime Index

Figure 1 shows that out of all the counties in California, Stanislaus County has the third highest crime rate when using the FBI crime index. The FBI crime index includes homicide, forcible rape, robbery, aggravated assault, burglary, larceny-theft, motor vehicle theft, and arson. Although Stanislaus County has a higher crime rate than Los Angeles, Alameda, San Joaquin, and Merced County, this might not reflect a true comparison for the overall crime situation. Stanislaus, as well as a few other counties including Fresno, reports negative corpus arson, any fire in which the origin cannot be determined. Other law enforcement agencies only report arson where the elements of arson can be proven. Our index for arson crimes is two to five times the rate reported in most other counties and drastically changes the overall FBI crime index. Since the counties report differently, it is best to look at the trends reported in the index for Stanislaus County over the last ten year period. In the last six years, Stanislaus County's FBI index has steadily decreased from a rate of 7,600 to 5,300. This shows that there has been a decrease in arrest rates for the eight crimes used for the FBI index (Figure 3).

California Crime Index (CCI) uses the same indicators as the FBI Crime Index, except for larceny-theft and arson. Because the state changed the larceny-theft amount from \$200 to \$400 in 1983, they exclude these arrests in their crime index. Arson was added in 1979 after the index was created, but California did not add this to the state index. Stanislaus County has the 6th highest crime rate when using the CCI. The CCI is lower than the FBI index for Stanislaus County because the higher reported arson rate is not used as a measure for the CCI. Fresno and San Francisco have higher crime rates while Los Angeles, Alameda, and Merced have lower crime rates when using the CCI (Figure 2). When looking at the ten year period trend for the CCI, Stanislaus County's CCI has decreased from 3,200 to 2,200 in the last six years, nearly a third (Figure 3). Although both crime indexes have decreased, the best gauge of successful law enforcement is how safe people feel in their

Figure 1: FBI Crime Index* for California Counties, 2000

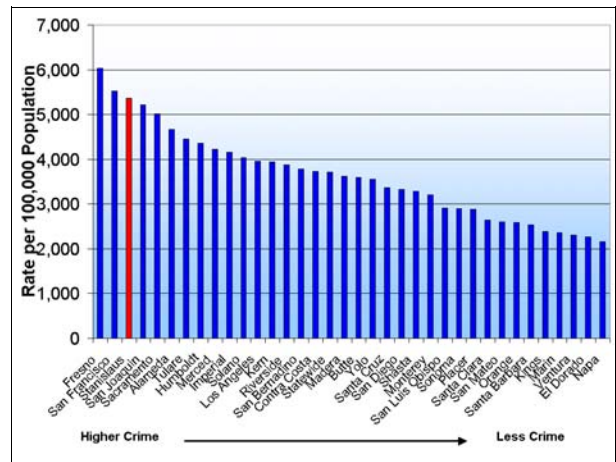


Figure 2: California Crime Index* for California Counties, 2000

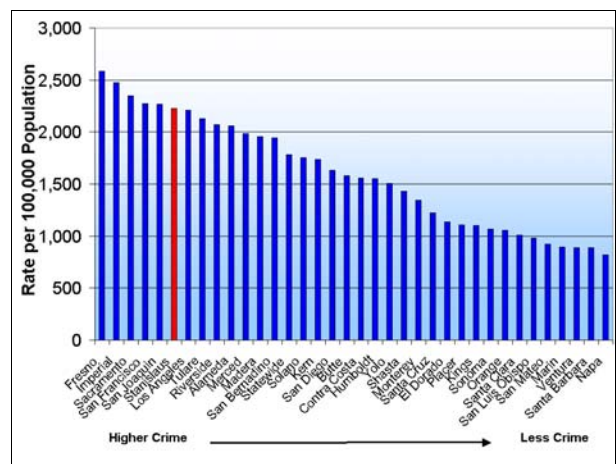
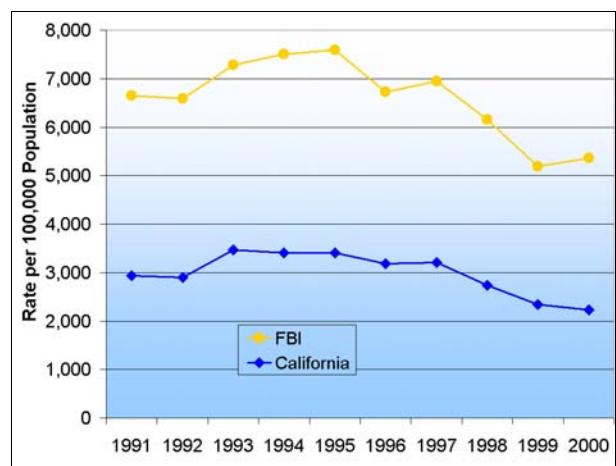


Figure 3: FBI and California Crime Index*, Stanislaus County



* See Appendix B, under Community Safety for a description of this calculation. Source: CA, DOJ, Office of Attorney General (12)

Adult Felonies

From 1991 to 1995, all categories of offenses increased in arrest rates for adult felonies. After reaching a peak in 1995, the arrest rates for violent, property, and other offenses decreased over the next five years. While violent, property, and other crime rates were falling, drug rates were rising. Since 1991, the drug offense rate has nearly doubled and has been the main form of felony offense for the last three years. Approximately 1,200 additional drug arrests were made in 2000 compared to 1991, bringing the total number of drug arrests to over 2,200 arrests in one year. Since only the most serious offenses are reported, the total number of drug offenses excludes drug arrests that occur in connection with violent or property offenses (unless, in a rare case, the drug offense has a higher consequence than the violent or property offense).

During the last ten years, the difference in gender for adult felony arrests has remained relatively the same. Males consist of approximately 80% of all adult felony arrests while females comprise 20% of the total.

Figure 4: Arrest Rates by Type of Offense*, Stanislaus County

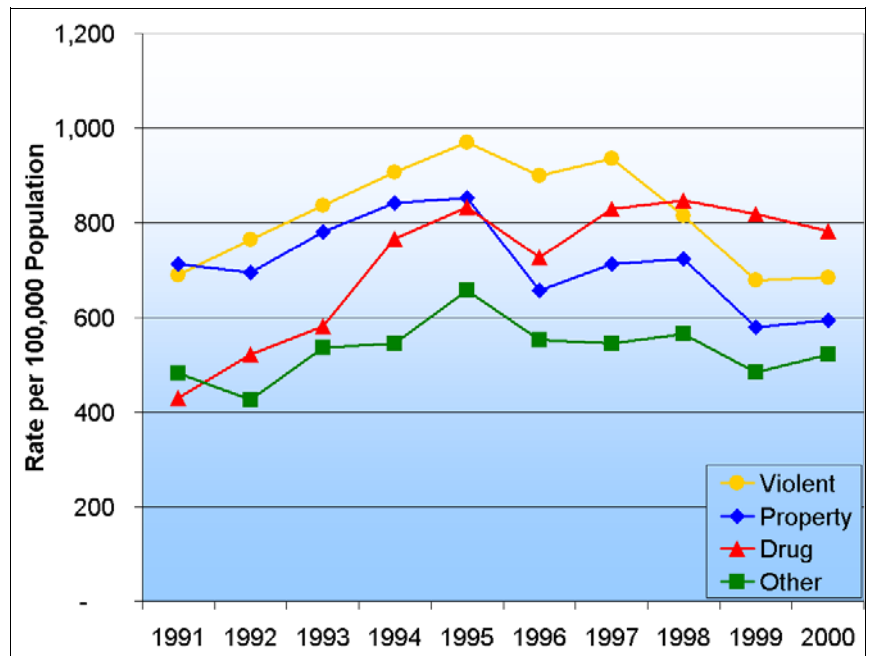
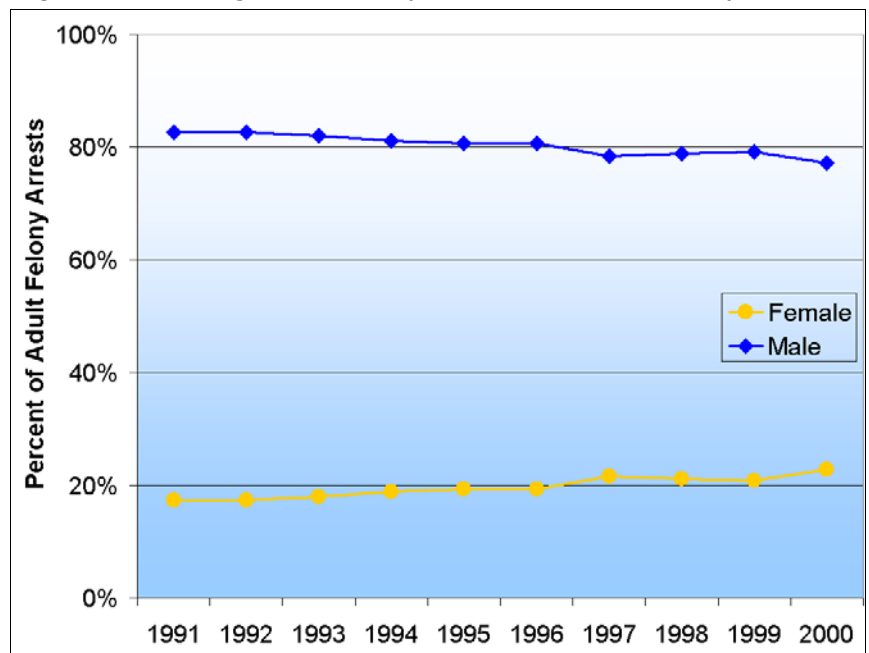


Figure 5: Percentage of Arrests by Gender, Stanislaus County



* See Appendix C for a definition of these offenses.
 Source: CA, DOJ, Office of Attorney General (12)

Juvenile Felonies

Juvenile felonies are serious crimes committed by someone under the age of 18. Like adult felonies, the main types of offenses are violent, property, drugs, and other. Unlike the adult drug offense rate, which is the highest offense, the juvenile's drug offense rate is the lowest of all offenses for the past ten years. Although the media highlights teens' high usage of drugs, more arrests are made for drug offenses in people 18 years or older. Violent, drug, and other offenses have stayed at similar arrest rates during the last decade.

The major offense for juveniles is property offenses, which include burglary, theft, motor vehicle theft, check/account forgery, and arson. The rate for property offenses was very high in 1991, but has drastically declined over the years; the rate fell from 2,240 to 1,170, which is nearly halved. Although this rate has considerably decreased, it is above any adult felony offense rates. The rate of arrests for juveniles is higher than the adults because the adult population includes a wider age group population (ages 18 to 69) while the juvenile population only includes the age group of 10-17.

Similar to the adult felony arrests, the number of male felony arrests is much higher than the number of female felony arrests. Males comprise approximately 85% of all juvenile felony arrests and have only slightly decreased in 2000, yet they are still near 80%.

Figure 6: Arrest Rates by Type of Offense*, Stanislaus County

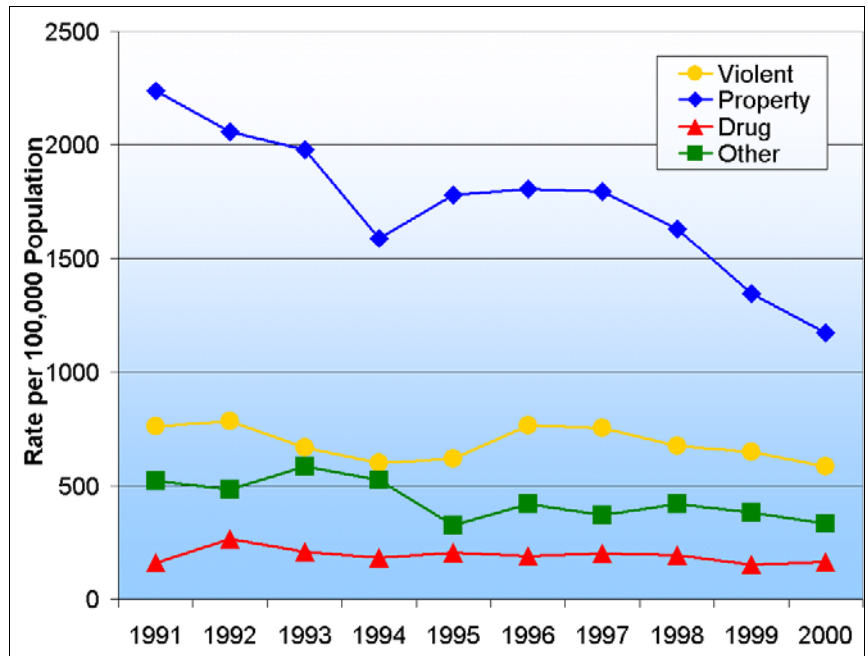
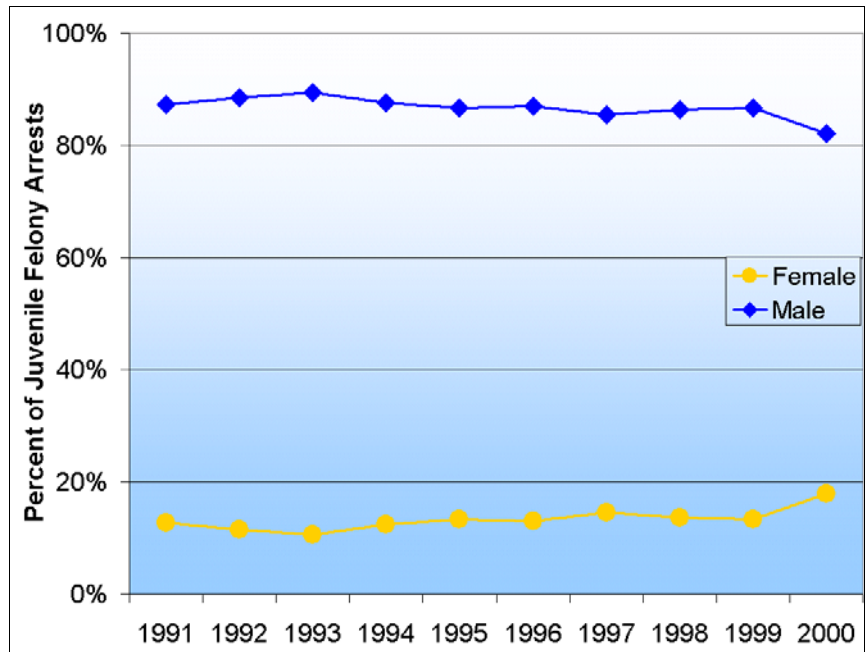


Figure 7: Percentage of Arrests by Gender, Stanislaus County



* See Appendix C for a definition of these offenses.
Source: CA, DOJ, Office of Attorney General (12)

Misdemeanors

Misdemeanors are minor crimes that are punishable by imprisonment in a county jail for up to one year. Like felony arrest rates, Stanislaus County's misdemeanor arrest rates are notably higher than the state rates. Both the state and Stanislaus have decreased arrest rates for misdemeanors. Over the years, the difference in misdemeanor arrest rates between the state and Stanislaus has diminished, showing that Stanislaus is decreasing at a faster rate than the state. This is most likely due to lack of jail space. Most misdemeanor crimes are cited or managed in other forums. With the limited jail space available, only felons and criminals presenting a serious threat to society are housed in jails. The misdemeanor rates are approximately two and a half times greater than the total felony rates. There are over 12,000 more misdemeanor arrests per year than the total number of felony arrests.

Between 1991 and 1994, adult and juvenile arrest rates for misdemeanors were almost identical. In 1995, the juvenile arrest rate was approximately 1,200 higher than the adult rate. This higher rate of juvenile arrest remains higher than the adults from 1995 through 2000. Although the age groups follow similar patterns, juveniles have narrowed the difference in age between themselves and adults.

Figure 8: Arrest Rates for Misdemeanors*, Stanislaus County and California

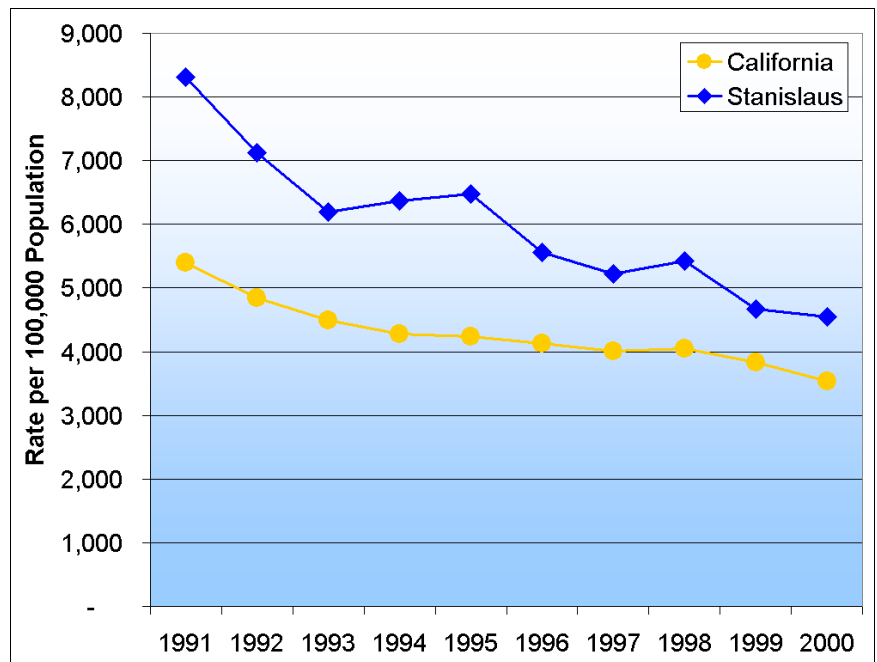
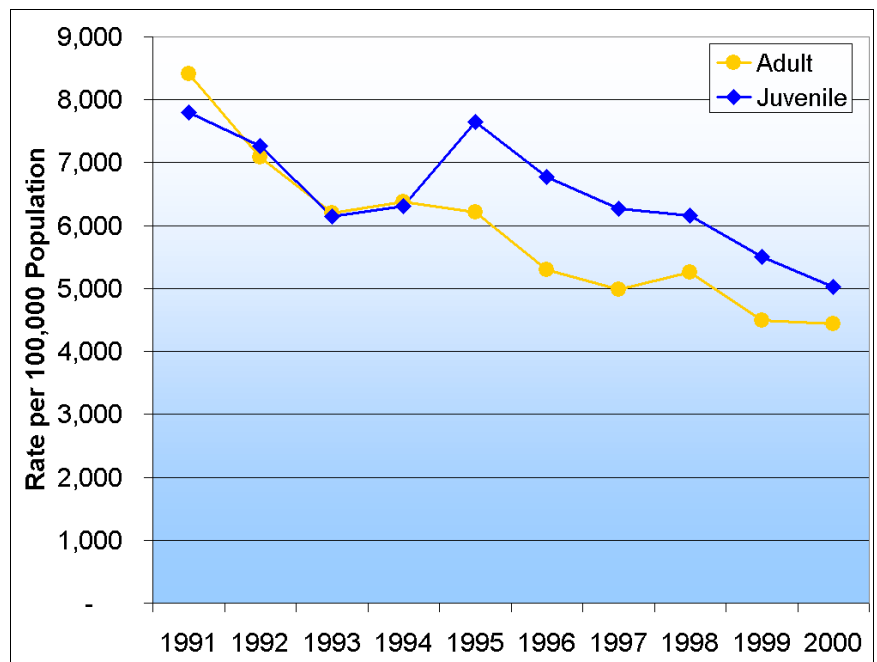


Figure 9: Arrest Rates for Misdemeanors* by Age Group, Stanislaus County

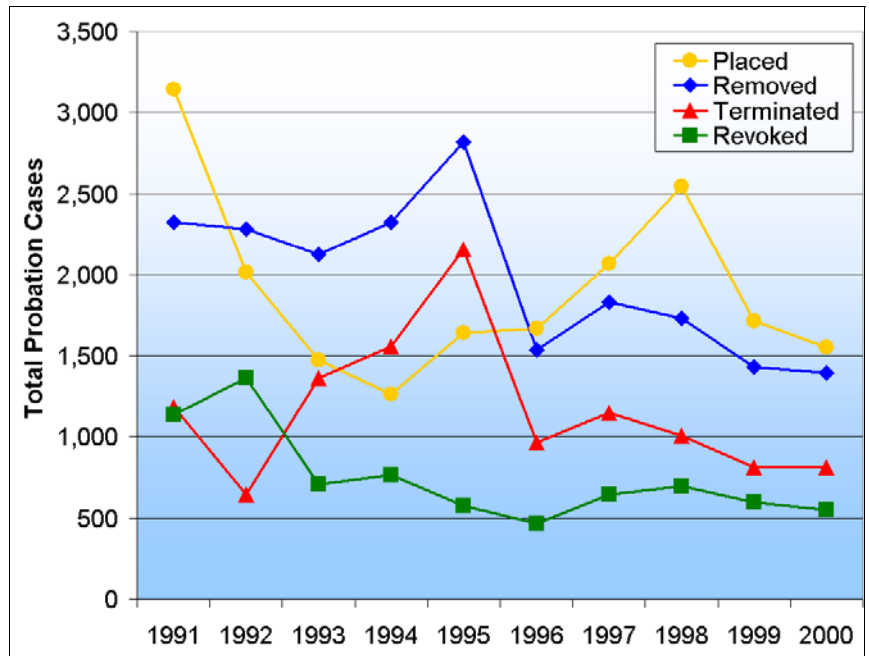


* See Appendix C for a definition of these terms.
Source: CA, DOJ, Office of Attorney General (12)

Probation

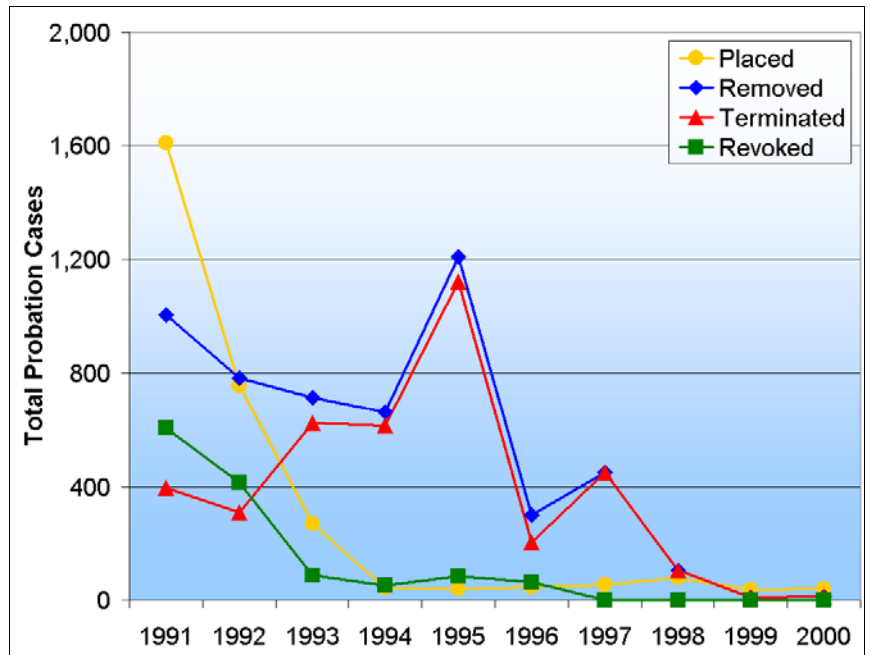
Probation is a judicial requirement that a person fulfill certain conditions of behavior in lieu of a sentence to confinement. The number of people placed on probation greatly decreased until 1994, when it began increasing and reached 2,500 cases in 1998. The number of people finishing their full probation (terminated) increased until 1995, then decreased by half to around 1,000 cases. This same trend was seen with those removed from probation (Figure 10).

Figure 10: Total Adult Probation Actions*, Stanislaus County



In 1991, there were over 1,600 people placed on probation for misdemeanors; by 1994, there were almost zero. These adults put on probation in the early nineties eventually were removed or finished their probation by 1998. For the last three years, very few adult probation cases are left for misdemeanors (Figure 11). Fewer people on probation for misdemeanors caused the total probation caseload to reflect mainly felons placed on probation.

Figure 11: Adult Probation Actions* for Misdemeanors, Stanislaus County



* See Appendix C for a definition of these terms.
Source: CA, DOJ, Office of Attorney General (12)

Domestic Violence

Many factors are involved in domestic violence calls in Stanislaus County. Domestic violence may be caused by elevated unemployment rates that may create tension in the home. High substance abuse could also play a part in domestic violence.

Stanislaus County has a higher domestic violence 911 call rate than the state. While the state rate has been decreasing over five years, Stanislaus' rate of domestic violence calls has been fluctuating. Figure 12 shows a steep increase from 1994 until 1997 followed by a sharp two year decrease, dropping the rate down to the original rate by 1999. There was an increase of 911 domestic violence calls in Stanislaus County from 1999 to 2000, which is the largest increase in any one year since 1994 (Figure 12). Although there was an increase in domestic violence call rates, there has been a significant drop in the amount of reported domestic violence activity in Stanislaus County from 1994 to 2000.

Figure 13 shows that Stanislaus has the highest domestic violence rate compared to selected other counties in 2000. Although some counties experienced similar patterns of increase after a three year steady decrease, their rates are less than Stanislaus. The state rates of domestic violence calls are almost half of Stanislaus County's rates, showing that Stanislaus has one of the highest domestic violence call rates in the state.

When examining the areas within Stanislaus County in Figure 14, the highest rate of domestic violence calls is in Riverbank followed by Newman. These two rural areas are considerably higher than other areas. Ceres, Modesto, Oakdale, and Patterson follow the overall county's rising trend after three years of declination. In 2000, Ceres, Hughson, Modesto, and Turlock had similar rates of around 0.9. Oakdale, Patterson, and Waterford have lower rates and have similar rates to the state's.

Figure 12: Rate of Domestic Violence 911 Calls, Stanislaus County and California

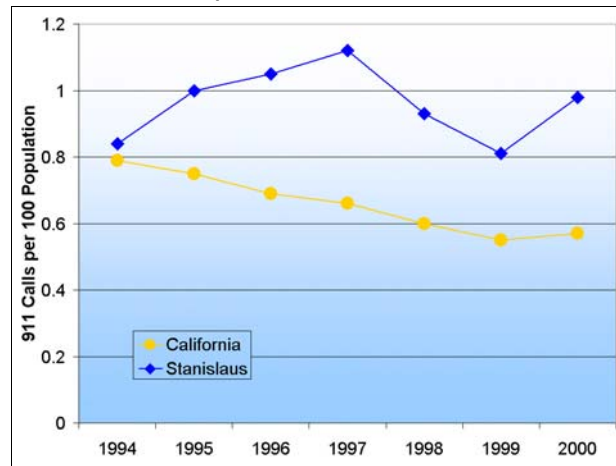


Figure 13: Rate of Domestic Violence 911 Calls in Selected Counties in California

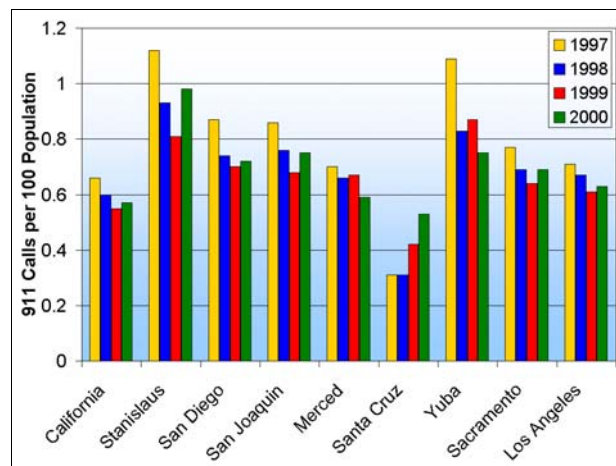
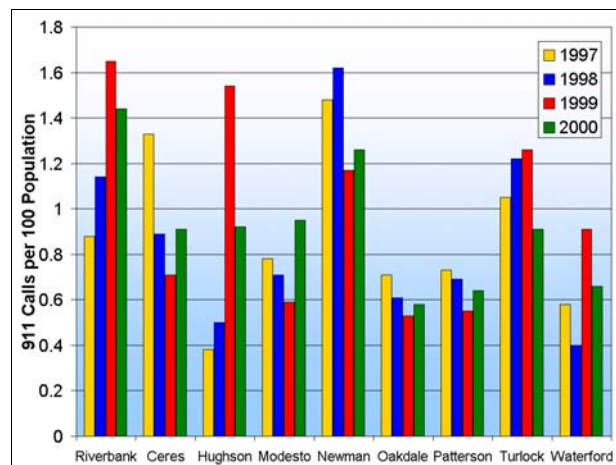


Figure 14: Rate of Domestic Violence 911 Calls by City, Stanislaus County



Source: Stanislaus County Office of Education & Domestic Violence Coordinating Council (13)

Child and Adult Protective Services

Child Protective Services receives referrals from the public concerning child abuse and neglect. Families who need services have access to a wide range of programs. Some programs are designed to work with families at their home to keep them together. Other programs are designed to work with families while their children are in and out of home care. Out-of-home care can range from staying with a relative, in a foster home, or with a foster family agency or group home. The goal of Child Protective Services is to keep families together in a safe and healthy environment whenever possible.

Figure 15 shows that Child Protective Services generally responds in 10 days or immediately. The graph shows a consistency of a greater than 2 to 1 ratio in favor of 10-day responses compared to immediate response. Generally, immediate responses are those of physical abuse, sexual abuse, and severe neglect situations where the child is in immediate danger of repeated abuse. Ten-day responses are normally general neglect referrals where the child is not in immediate danger; however, his/her current living conditions may pose a threat to the child's health and well being.

Figure 16 depicts the majority of responses made by Child Protective Services over the four-year period. Whites had over a 50% response for child abuse followed by approximately 30% for Latinos, 8% for African Americans, and nearly 4% for Asians. This is fairly close to the demographic make-up of Stanislaus County as reported in the 2000 census.

Statistics uncover a frightening picture of elder abuse in California. This year, one of every 20 elderly people will be a victim of the four types of abuse: neglect, physical, psychological, or financial abuse. By the year 2020, the number of elderly in California is expected to double to 6.6 million. There are currently 4.8 million Californians over 60 years of age. As the population continues to increase, so will the number of abuse cases. In the last decade, the number of reported cases has exponentially increased in Stanislaus County ranging from 400 reported cases to almost 1,400 reported cases. These numbers continue to escalate and no sign of decrease is present.

Figure 15: Child Abuse Referrals by Response Time, Stanislaus County

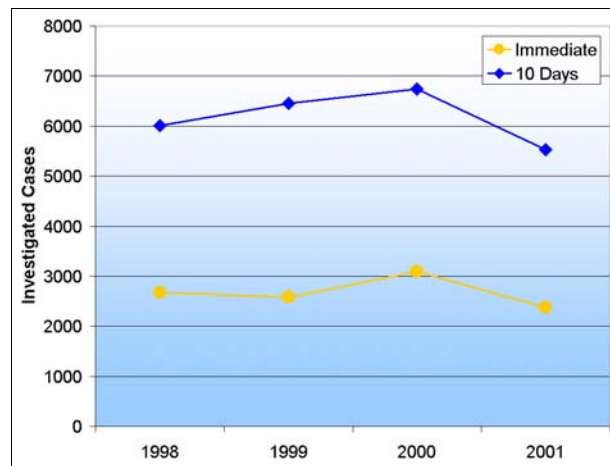


Figure 16: Child Abuse Referrals by Reported Race/Ethnicity, Stanislaus County

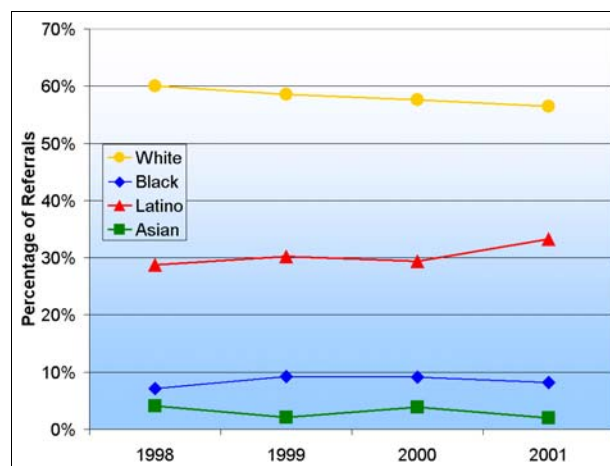


Figure 17: Number of Reported Adult/Elderly Abuse Cases, Stanislaus County



Source: Stanislaus County Child Protective Services Referral Reports & Adult Protective Services Statistical Report (24) (25)

Motor Vehicle Injuries

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Motor Vehicle Injuries All Collisions

Motor vehicles are a ubiquitous aspect of life in most developed countries but are perhaps viewed as more important in the United States compared to other countries. Ignoring any environmental damage, vehicles have the ability to cause tremendous injury because of the enormous amount of energy and momentum they have when in motion.

Engineering and other improvements during the past century have greatly decreased the rate of injuries and fatalities even as the number of miles driven has continued to increase (Figure 1). Some of these improvements include:

- Environmental factors: better roads, lighting, safety rails, and road signs;
- Vehicle or Agent factors: antilock brakes, airbags, crumple zones, and daytime running lights;
- Personal or Host factors: seat belt and alcohol limit laws, and drivers' training.

One of the main sources of motor-vehicle collision data comes from the incident reports that law enforcement officials fill out for each collision that results in an injury. Although these reports contain valuable information, they are not for the purposes of injury surveillance, so there are significant limitations. The information in this section is from the data recorded by the California Highway Patrol (15).

The vast majority of motor vehicle collisions is between two motor vehicles (Figure 2). The second most common collision type is between a motor vehicle and a fixed object (telephone pole, tree, etc.). There are approximately 200 collisions each year between vehicles and pedestrians and an additional 200 collisions with bicyclists.

Motor vehicles making a right-of-way violation and those traveling at unsafe speeds for current conditions are involved in the largest number of collisions which result in injuries each year (Figure 3). Figure 3 also notes that the total number of these collisions has been steadily increasing for a decade. Not all violation categories are included in this graph, but it is worth noting that there has been an average of 300 injury collisions each year

Figure 1: Fatality Rate per Mile Traveled and Number of Miles Traveled, California, 1942-2000

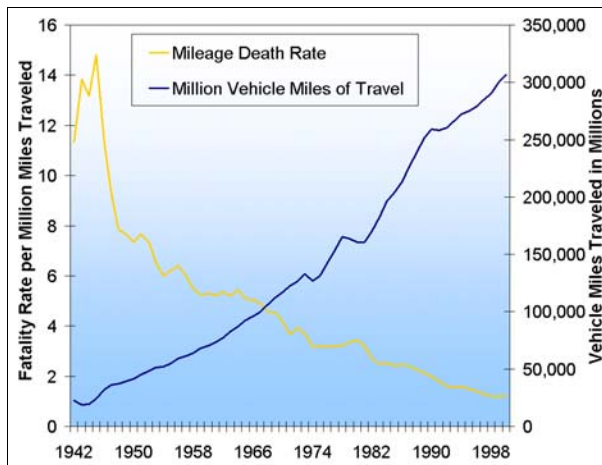


Figure 2: Collisions* by Object Collided With, Stanislaus County

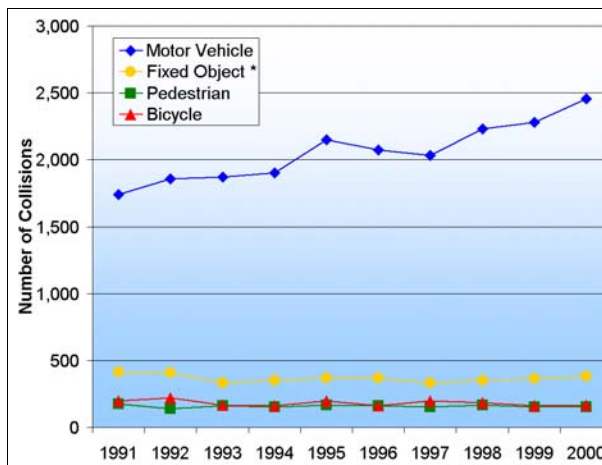
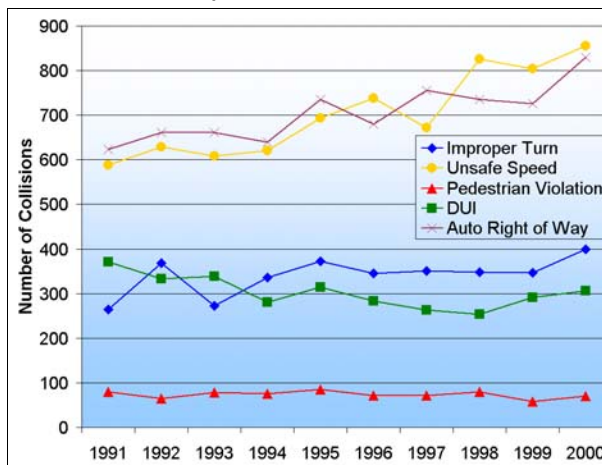


Figure 3: Collisions* by Selected Violation Category, Stanislaus County



Source: CHP, SWITRS (15)

* Only motor vehicle collisions which resulted in injuries are included.

Motor Vehicle Injuries All Collisions

where a driver was under the influence. An annual average of 73 collisions was noted where the pedestrian had violated the right-of-way.

Passenger restraint systems are one of the safety features that have saved many lives over the years. Figure 4 shows the type of injury sustained in a collision in which an injury occurred by whether or not the passenger was wearing a seat belt. Those passengers who did not wear seat belts had a much higher percent of fatal and physical injuries than the passengers who wore their seat belts. Over 50% of the passengers who wore seat belts walked away from the collision complaining only of pain (C/O Pain).

Male drivers at all ages have a higher rate of injury collisions than females (Figure 5). The difference is most pronounced at the younger (16-24 year olds) end than the older (51+ years) end of the spectrum. These rates are calculated by using the total estimated number of individuals in each age group. These rates are skewed somewhat since the denominator is the estimated population in each group and not the total number of licensed drivers or the number of miles that are driven within each age and gender category. It is possible that males drive more than females, therefore, increasing their rate of motor vehicle injuries.

As expected, the rate of injury collision decreases as the age of individuals increases. This is one reason why there are advocates for modifying the driver's license age limit.

The rate of being involved in an injury motor vehicle collision in any manner (driver, passenger, pedestrian, bicyclist) is highest among teens followed closely by the 21-30 year olds (Figure 6). Interestingly, females have a higher rate of injury collisions after the age of 31. The sharp increase in the teen years may be due to several factors. Children in this age group are independently mobile through walking, the use of bicycles, and razor scooters. As such, they are at much greater risk than the very young. In addition, as Figure 5 points out, drivers in this age group also have a high rate of injury collisions.

Figure 4: Percent of Injuries* by Usage of Seat Belts, Stanislaus County, 1991-2000

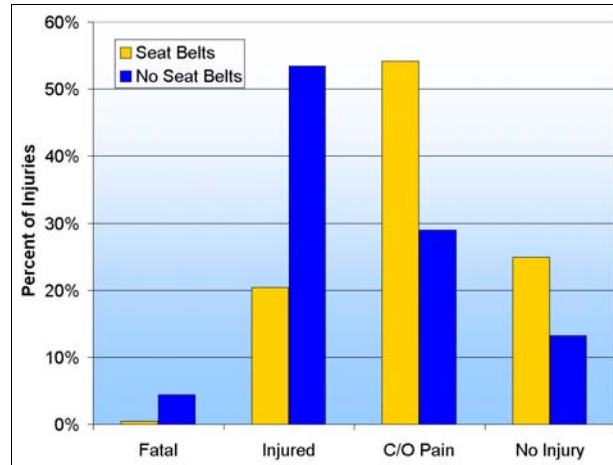


Figure 5: Rate of Vehicle Drivers in Collisions* by Age and Gender, Stanislaus County, 1991-2000

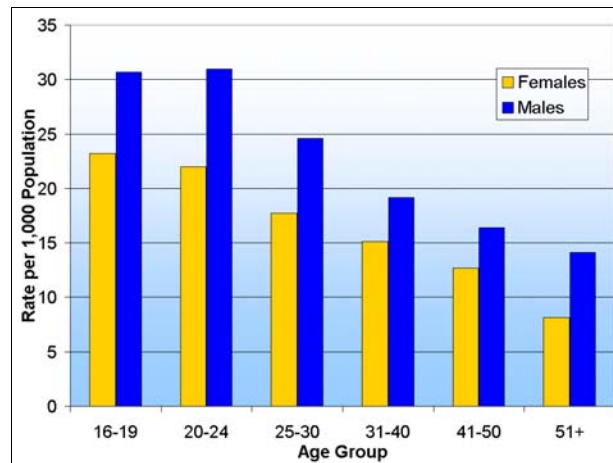
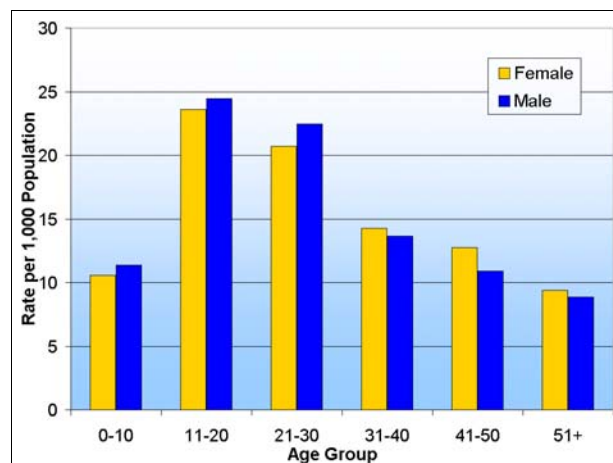


Figure 6: Rate of Victims in Collisions* by Age and Gender, Stanislaus County, 1991-2000



Source: CHP, SWITRS (15) & CA, Department of Finance (2) * Only motor vehicle collisions which resulted in injuries are included.

Motor Vehicle Injuries Bicycle & Pedestrians Victims

The relative number of both pedestrian and bicycle injury collisions with motor vehicles is shown in Figure 2. Figure 7 clearly shows that males are much more likely to be involved in an injury collision on a bicycle with a motor vehicle than females. In addition, the 11-20 year olds have a much higher bicycle collision rate than any other age group. These rates were calculated with population estimates so they are skewed somewhat because the proportion of bicycle riders is different in each age group and by gender as well.

In a ten-year average, 11% of bicyclists involved with injury motor vehicle collisions wore helmets. The percent of bicyclists wearing helmets has clearly increased due to the 1994 state law*** (requiring children under the age of 18 to wear a helmet); however, in Stanislaus County, an average of 52% of bicyclists were not wearing their helmets when they were in a collision (Figure 8). The percentage of bicyclists wearing helmets when they were involved in an injury collision with a motor vehicle is highest among the youngest population. Even among that group, it has decreased significantly immediately following the implementation of the new law in 1994.

Child pedestrians have always been a concern of the community and Figure 9 illustrates the significantly higher injury rate that adolescents and the very young face. Males have a higher rate of pedestrian collision than females at all ages even though the female collision rate peaks at the ages of 11-20 while the males peak at the youngest ages (0-11). There is a slight increase in the rate of collisions as age increases to 51+ years. The rate of pedestrian collisions among the very young has been declining for the past five years.

Figure 7: Rate of Bicyclists in Collisions* by Age and Gender, Stanislaus County, 1991-2000

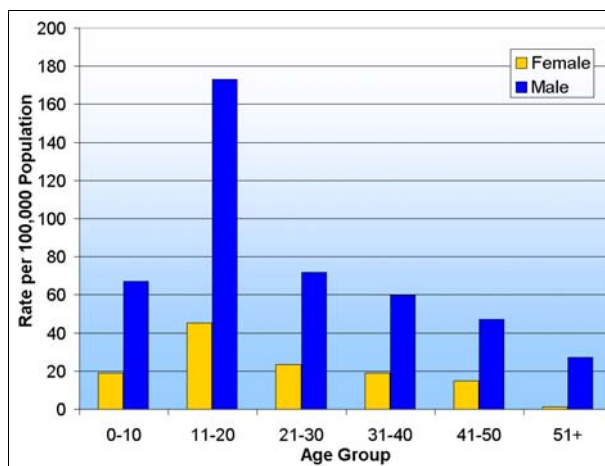


Figure 8: Bicyclists* Use of Helmets, Stanislaus County**

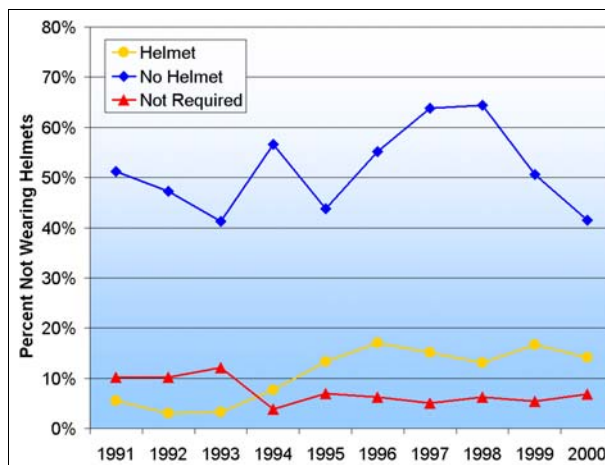
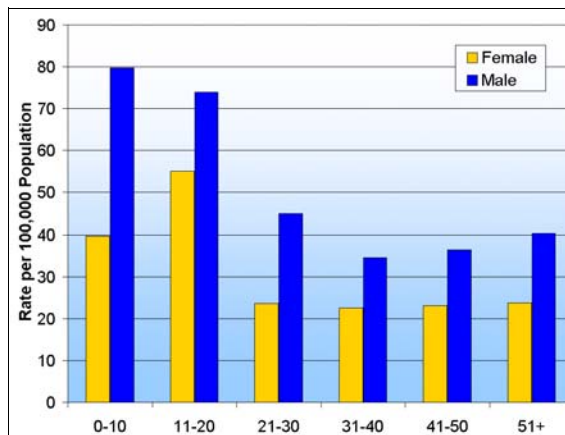


Figure 9: Rate of Pedestrians in Collisions* by Age and Gender, Stanislaus County, 1991-2000



* Only motor vehicle collisions which resulted in injuries are included. ** Does not add up to 100%
 Source: CHP, SWITRS (15) & CA, Department of Finance (2) ***<http://www.bhsi.org/mandator.htm>

Motor Vehicle Injuries Children & Teens

Seat belts and air bags are not designed for young children because of their small size. Child safety seats are designed to protect small children (under the age of 6) from injuries during motor vehicle collisions. When used properly, child seats can be very effective. There is a large portion of the population that does not use the seats correctly. Figure 10 summarizes the percent of children under the age of six wearing a child safety seat in a motor vehicle collision where an injury occurred. Since 1991, the usage of child seats has increased from about 25% to 40%. The large percent of incorrectly used car seats illustrates the confusion about these seats and the need for continued parental education. The percentage of children who are not in a car seat at the time of an injury collision has steadily declined to less than 5%.

In the past decade, there has been an average of 680 injury collisions each year involving a driver between the ages of 16 and 19 years old. In the last ten years, 116 teens were killed and over 411 have been severely injured. Each year, 11 teens die and 41 are severely injured from a motor vehicle collision. Teen males (16-19) have a higher rate of injury collisions than females (Figure 11). The rates of collision for both genders have been fairly steady for the past decade. These injury collision rates show that about 2% of teen females and 3% of teen males have injury collisions each year. These rates are calculated by using estimated populations and not licensed drivers. If the proportion of licensed drivers differs by gender, these rates could be slightly skewed.

There is a larger discrepancy between males and females in the rate of injury collisions in which the driver had been drinking (this rate is also calculated by using the estimated teen population). Teen males have a much higher rate than females (Figure 12). It appears that this rate of collision while drinking might have a slight downward trend.

Driving a motor vehicle while intoxicated or drinking alcohol while driving is considered one of the most irresponsible social behaviors that an individual can engage in because one's judgment

Figure 10: Use of Child Safety Seats*, Ages 0-5, Stanislaus County

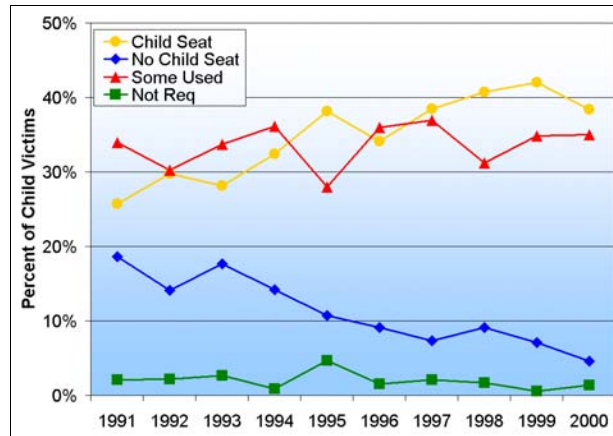


Figure 11: Collision Rate* for Teens (16-19), Stanislaus County

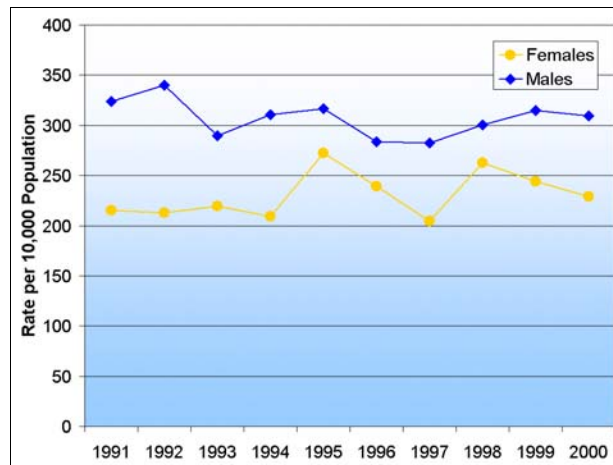
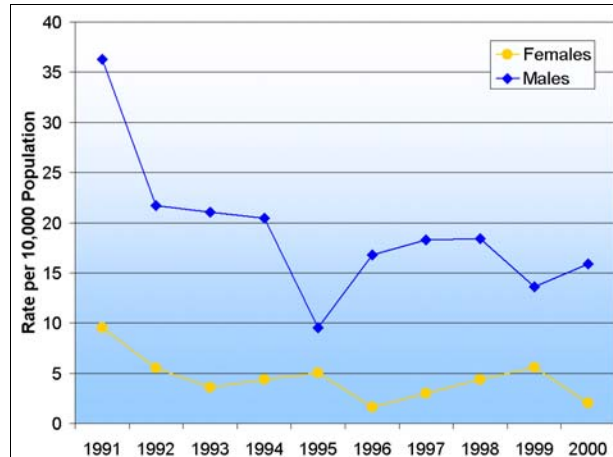


Figure 12: Collision Rate* for Teens (16-19) that Had Been Drinking, Stanislaus County



Source: CHP, SWITRS (15) & CA, Department of Finance (2) * Only motor vehicle collisions which resulted in injuries are included.

Motor Vehicle Injuries Driving Under the Influence

and response time is greatly impaired. Collisions in which a driver had been drinking accounted for 35% of all fatalities in Stanislaus County from 1991-2000, but they only accounted for 12% of all collisions. Collisions in which the driver was legally intoxicated (driving under the influence) were responsible for 27% of fatalities and 23% of severe injuries; however, only 9% of all collisions fell into this category in the last decade. An average of 3.7% (a low of 2.6% and a high of 5.2%) of all victims in a collision in which a driver was legally intoxicated were killed, while only 0.7% (a low of 0.4% and a high of 1.0%) of victims were killed in collisions in which a driver was not drinking at all. The disproportionate share of fatalities and severe injuries that occur during a collision in which a driver has been drinking or is drunk clearly illustrates the devastating results of this dangerous activity.

It is worth pointing out that there have been 57 intoxicated bicyclists and 121 intoxicated pedestrians involved in motor vehicle collisions between 1990 and 2000. Ten drinking pedestrians and one drunk bicyclist were killed by motor vehicles in separate incidents in 1996 alone.

Males have a much higher rate of injury collision than females at all ages (Figure 13). The rate decreases for both genders after peaking in the 21-30 year age range. It is notable that the 16-20 year olds have a rate as high as the 31-40 year olds even though they are not legally allowed to drink. The rate among males has been decreasing throughout the decade of the 1990's (Figure 14).

Figure 15 shows that among drivers who have been in an injury collision, those who have been drinking use seat belts less frequently than those that have not been drinking. This shows once again the impaired abilities of the drinking drivers.

Figure 13: Rate of Collisions* in which the Driver Had Been Drinking by Gender and Age, Stanislaus County, 1991-2000

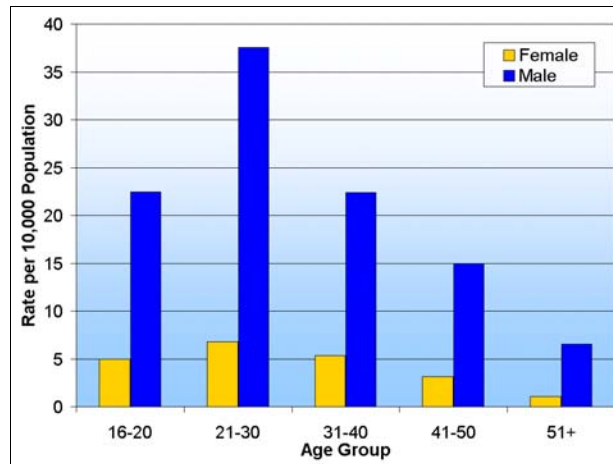


Figure 14: Rate of Collisions* in which the Driver Had Been Drinking by Gender, Stanislaus County

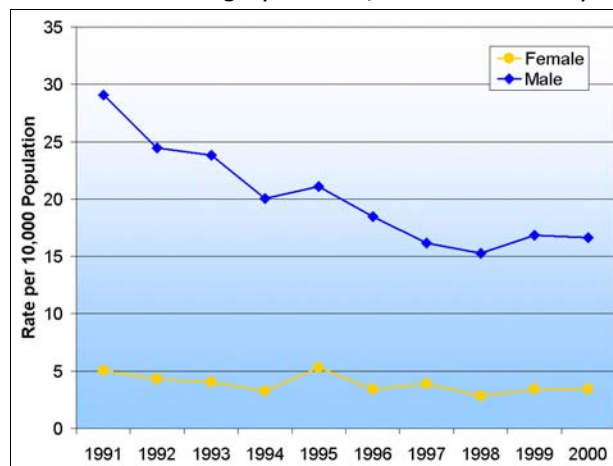
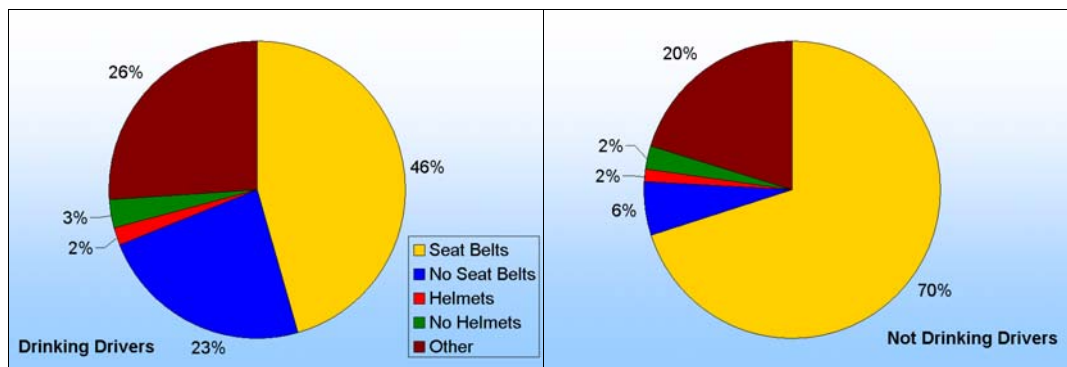


Figure 15: Drinking and Not Drinking Drivers' Usage of Safety Equipment, Stanislaus County, 1991-2000



Source: CHP, SWITRS (15)

* Only motor vehicle collisions which resulted in injuries are included.

Motor Vehicle Injuries Mortality

Stanislaus County's death rates due to motor vehicle collisions have decreased in the last four years (Figure 16). Although this trend is in the correct direction, the rate of the county is still substantially higher than the state. The state's rate has also declined over the last five years and has almost reached the national objective (HP2010). Between 1992 and 1996, there was a rise in deaths from motor vehicle collisions in Stanislaus County, which was not seen in the state's death rates. By 1996, Stanislaus County's rate was more than 1.5 times higher than the state's death rate.

Figure 16: Age-Adjusted Death Rates**, Stanislaus County and California

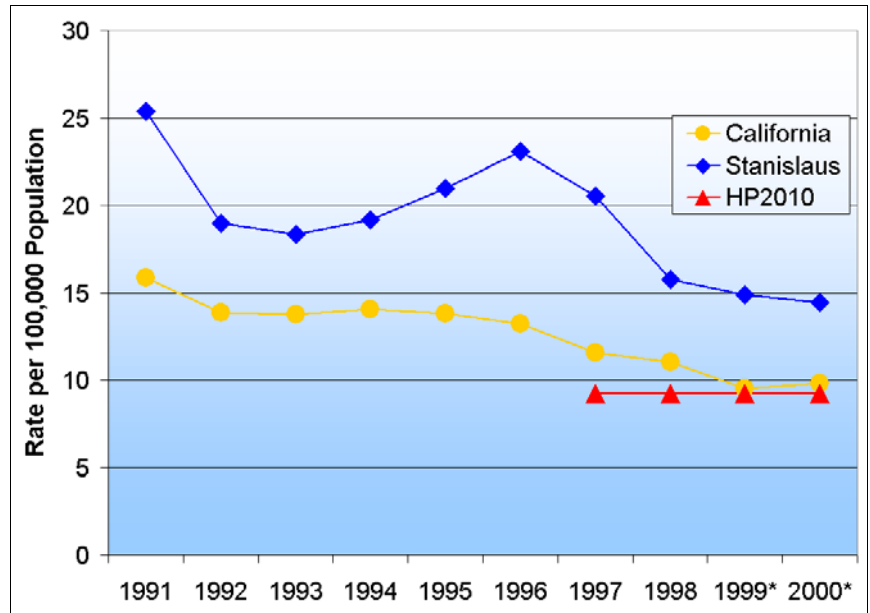
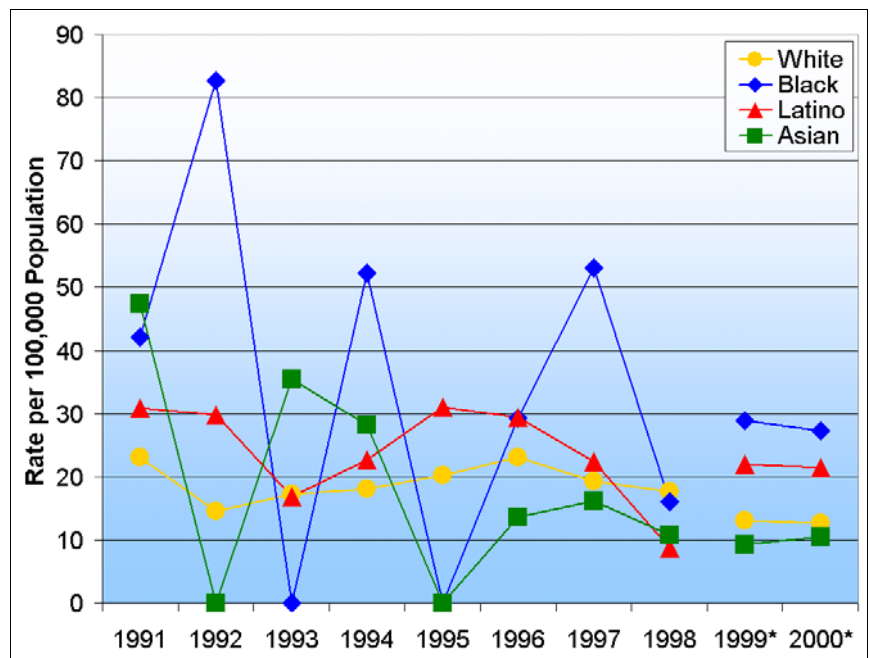


Figure 17: Age-Adjusted Death Rate** by Race/Ethnicity, Stanislaus County

African-Americans have a higher death rate from motor vehicle collisions than any other racial or ethnic group (Figure 17). Latino motor vehicle death rates have decreased from 30 in 1995 to 10 in 1998. Whites have consistently had around 20 deaths per 100,000 population due to motor vehicle collisions in the last decade. In the early nineties, Asians had a high motor vehicle death rate, at times even higher than African-Americans. After 1995, Asians have remained at a low motor vehicle death rate and have had one of the lowest rates for the last six years (Figure 17).



* Changed from using ICD-9 to ICD-10 codes, see Appendix C for an explanation of ICD codes.

** See Appendix B for an explanation of Age-Adjusting.

Source: CA, DHS, CHS, Death Stat Master File (3)

Health Care Access

Topic

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Insurance Coverage H2

Health Care Access Insurance Coverage

The rate of Medi-Cal beneficiaries has steadily decreased for five years, but has slightly increased this past year up to the rate in 1999. This trend mimics the unemployment rate, which could cause many to join Medi-Cal. Like the unemployment rate, Stanislaus is above the state's average. Since migrant workers have to find jobs in between harvest seasons, a higher percentage of migrant workers could result in an increase in Medi-Cal beneficiaries. During the five year decrease, the county's rate of beneficiaries was decreasing faster than the state's rate, bringing Stanislaus closer to the state's rate. Even with the decreasing rate, the number of people on Medi-Cal is still high and around 1 out of every 5 people in Stanislaus County is on Medi-Cal.

Figure 2 shows the gender and ages of the Medi-Cal recipients. There are more males on Medi-cal until the ages of 15. At ages 20-25, the male population on Medi-Cal drastically decreases and represents less than one third of the females on Medi-Cal. As age increases, the total number of beneficiaries decreases. This pattern holds true for the females as well. From ages 45-65, the ratio of females to males decreases, but women still have a higher number. When combining ages 65 and over, the female population on Medi-Cal is almost double the male population, which is probably due to the higher life expectancy in females.

Figure 3 shows whether the pregnant women paid for the prenatal care using Medi-cal or private insurance. From 1991 to 1995, the majority of the pregnant women were on Medi-cal. By 1996, the source of payment switched and the majority of the women paid for prenatal care using private insurance.

Figure 1: Medi-Cal Beneficiaries, Stanislaus County and California

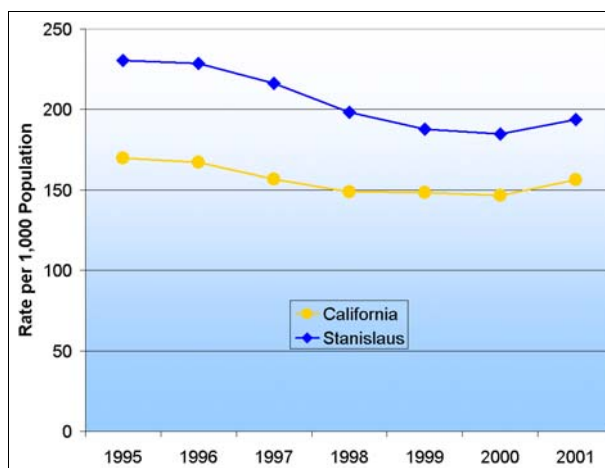


Figure 2: Medi-Cal Beneficiaries by Age and Gender, Stanislaus County, 2001

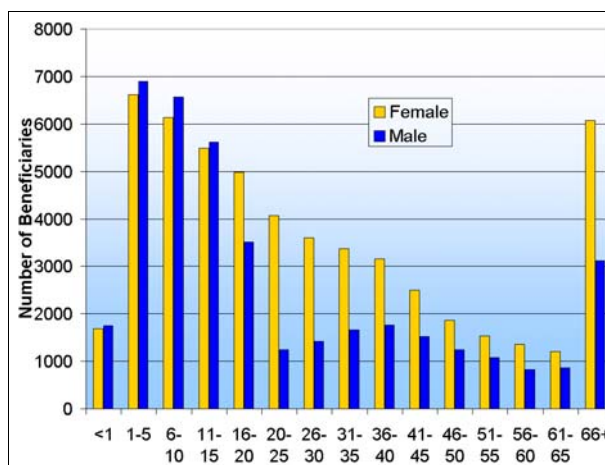
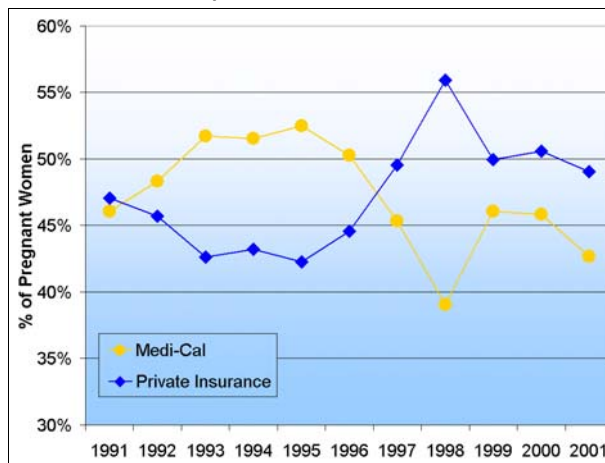


Figure 3: Payment Source for Prenatal Care, Stanislaus County



Source: CA, DHS, Medi-Cal (18)

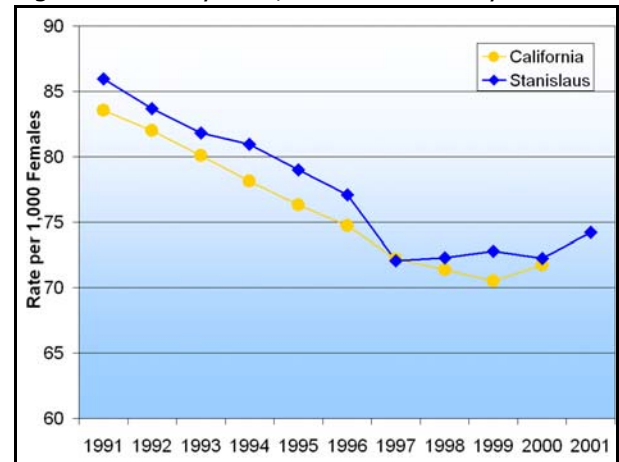
Maternal, Child and Adolescent Health

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Maternal, Child and Adolescent Health Fertility Rate

Women in the United States are having more children today than at any time in almost 30 years. In 2000, the average number of children born to women over a lifetime was 2.1 according to a new CDC report, "Births: Final Data for 2000." Women gave fewer births from the 1970's and 80's with an average birth rate less than two, a rate sufficient to replace the population (2.1 is considered the population's replacement level). In 2000, the United States had a three percent increase in number of births from 1999, representing the third straight increase following nearly a decade of decline from 1990 through 1997. The average number of births to Latina women in the United States is 3.1, which is notably higher than the national average*.

Figure 1: Fertility Rate, Stanislaus County and California



The rate of births has been decreasing for the past decade throughout the state and until 1997 for Stanislaus County (Figure 1). The decrease in birth rates has been most pronounced in the Asian and Pacific Islander race/ethnic group followed by the White population (Figure 2). The birth rate among Asian females has decreased 53 percent in Stanislaus County since 1991. In the past four to five years, Stanislaus County's birth rate trend has leveled off and has begun to rise in the last year (Figure 1). The birth rate for Latina women is approximately three times higher than for White women (Figure 2). In the last two years, the Latina birth rate has increased, causing the county rate to also increase in 2001.

Figure 2: Fertility Rate by Race/Ethnicity, Stanislaus County

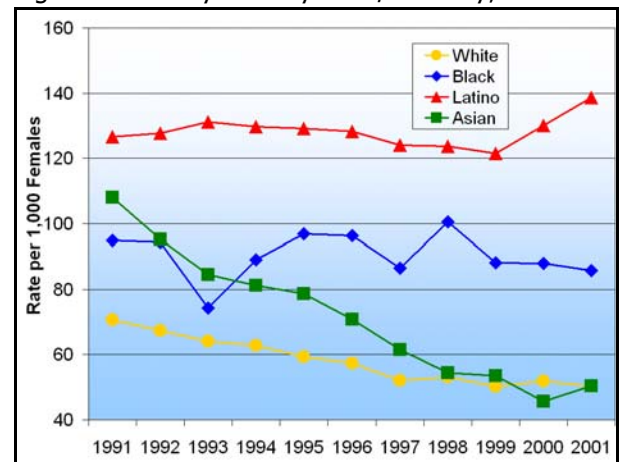
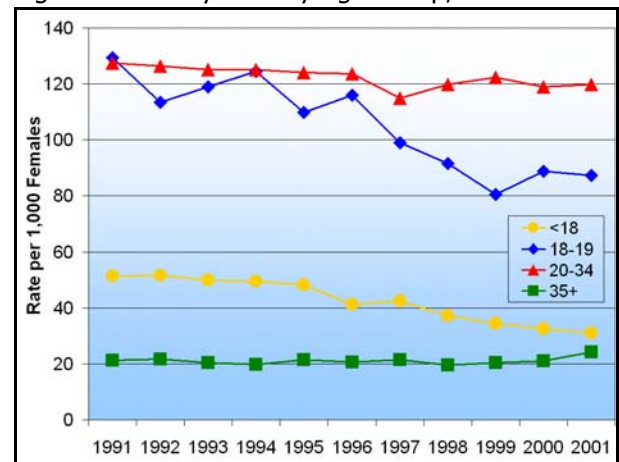


Figure 3 indicates that the lowest rate of birth is among the oldest age group and the highest fertility rate is among the 20-34 year olds. In Stanislaus County, there has not been a substantial increase in the fertility rate among the oldest age group (35+). Given the rise in women delaying childbearing and a corresponding increase in the use of fertility treatments, one would expect to see a larger rise in this age group. The birthing rate among the 18-19 year olds has decreased 33 percent since 1991 while the rate among females less than 18 years of age has decreased by almost 50 percent.

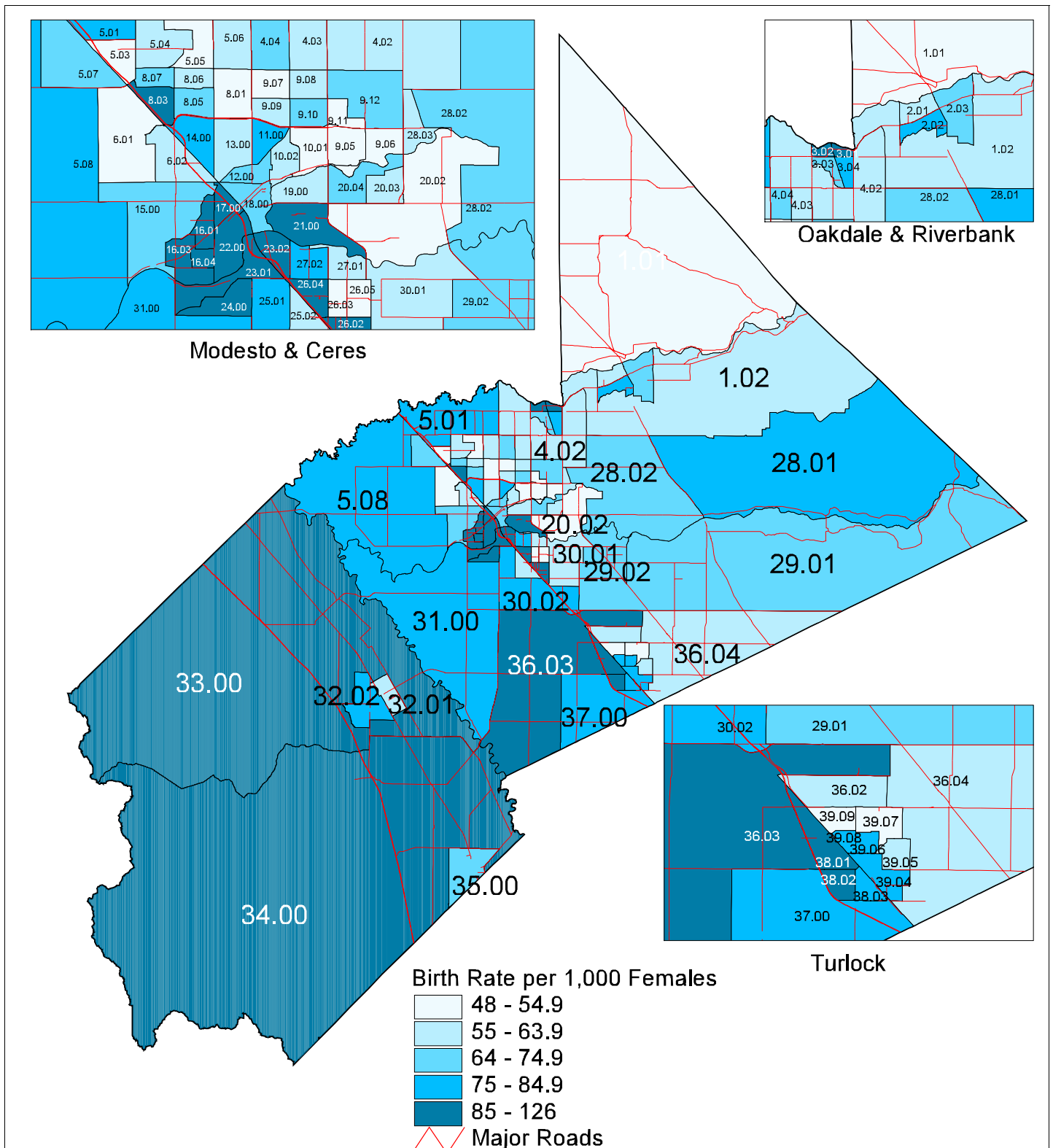
Figure 3: Fertility Rate by Age Group, Stanislaus County



* Centers for Disease Control and Prevention, Health and Human Services Secretary, Tommy Thompson, February 12, 2002
Source: CA, DHS, Center for Health Statistics (1) & CA, Department of Finance (2)

Maternal, Child and Adolescent Health Fertility Rate

Figure 4: Births per 1,000 Females (Fertility Rate) by Census Tract*, Stanislaus County, 1999-2001

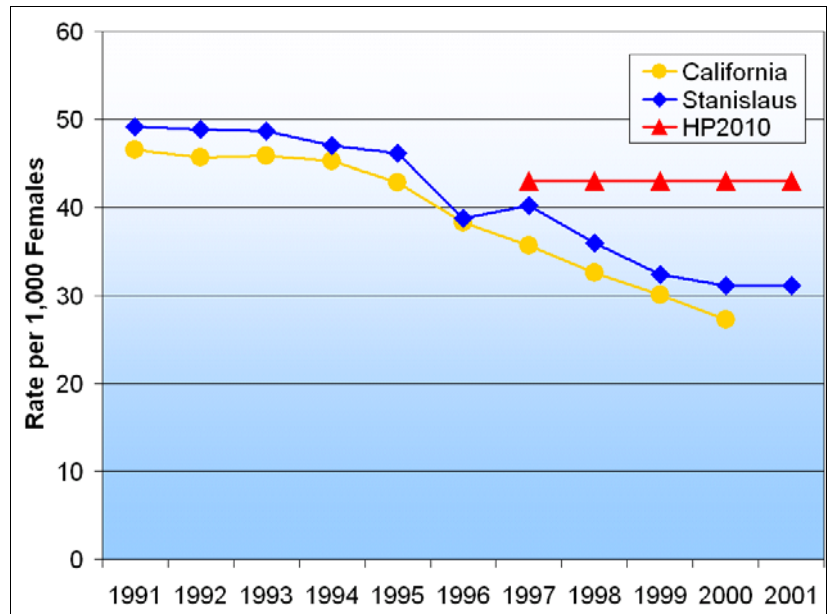


* The numbers on the map are the Census Tract labels. The rate or percent is indicated by the color on the map.
Source: Stanislaus County, HSA, Vital Records (20)

Maternal, Child and Adolescent Health Teen (15-17 Years) Birth Rate

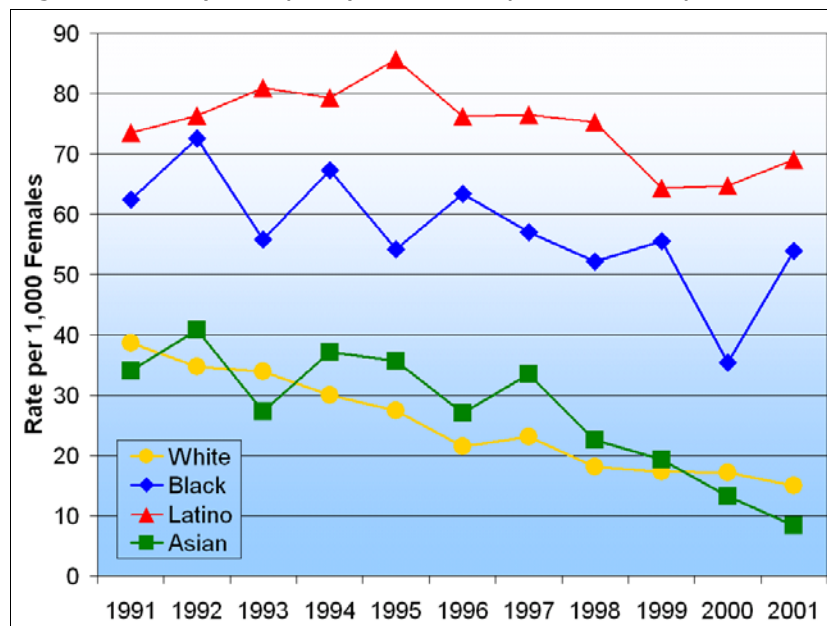
In some cultures, women are married, bear children, and provide a nurturing home for their family in their teens. In western culture, there are many societal problems that arise when teens give birth. First, the phenomenon of teen pregnancy tends to repeat itself. In other words, children of teen parents are more likely themselves to be teen parents. Secondly, teen parents are less likely to finish high school and go to college. This lack of education can put additional financial pressure on the young family. Finally, teen pregnancy places teen mothers at greater risk for pregnancy complications, pre-mature births, and low birth weight infants. These put the health of the infant and the mother at risk.

Figure 5: Teen (15-17 years) Birth Rate, Stanislaus County and California



There has been tremendous effort statewide to decrease the teen birth rate. For more than a decade, the rate has been decreasing. Since 1990, the rate of births to 15-17 year olds has decreased 38% in CA and 40% in Stanislaus County (Figure 5). In Stanislaus County, the rate of teen births has decreased significantly among Asian and White teen women but has not decreased among the Latina teens and only slightly among African American teens (Figure 6). Both the Asian and White teens have a birth rate below the national objective of 43 per 1,000 females.

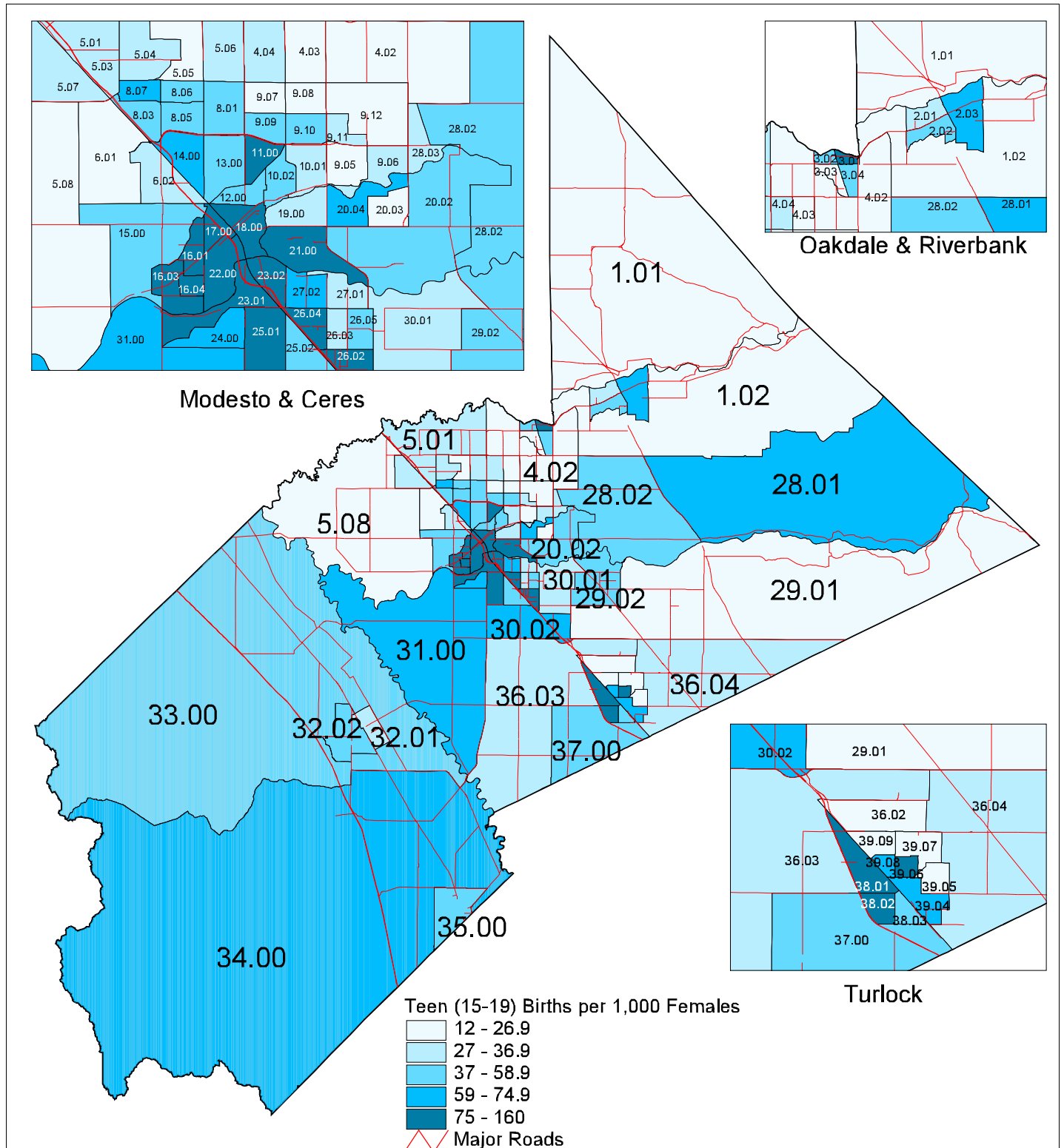
Figure 6: Teen (15-17 years) Birth Rate by Race/Ethnicity, Stanislaus County



Source: CA, DHS, Center for Health Statistics (1) & CA, Department of Finance (2)

Maternal, Child and Adolescent Health Teen (15-19 Years) Birth Rate

Figure 7: Teen Birth Rate (per 1,000 Female Teens) by Census Tract*, Stanislaus County. 1999-2001



* The numbers on the map are the Census Tract labels. The rate or percent is indicated by the color on the map.
Source: Stanislaus County, HSA, Vital Records (20)

Maternal, Child and Adolescent Health Infant Mortality Rate

The rate of infant death is an indicator of how well the community protects the health of children. It is also a reflection of the overall state of maternal health and the availability of quality health care. The rate of infant death in the United States remains among the highest in the industrialized nations.

There is tremendous interest in information that describes the circumstances surrounding infant deaths. The death rate for infants before their first birthday is the highest for any age group until one reaches the 55 and over age group (See Figure 6 in the Mortality Section).

The infant mortality rate in California has been decreasing slightly for the past decade (Figure 8). The national objective for the year 2000 was to achieve an infant mortality rate of 7 deaths per 1,000 live births. California achieved and surpassed this goal, but Stanislaus County leveled off just above this target. There is significant work that must be done in the next decade as the national objective for infant mortality rate (HP2010) is at 4.5 deaths per 1,000 live births.

There is a significant discrepancy in the infant mortality rate when it is calculated by race/ethnicity (Figure 9). The rate of infant mortality among the African American population in Stanislaus County is more than twice as high as other groups.

The post neonatal** infant mortality rate (Figure 10) has decreased throughout the past decade and is beginning to approach the 2010 national objective (HP2010). Contrary to this trend is the neonatal* infant mortality rate, which has gradually increased recently and is more than 50% higher than the 2010 national objective (HP2010).

Figure 8: Infant Mortality Rate, Stanislaus County and California

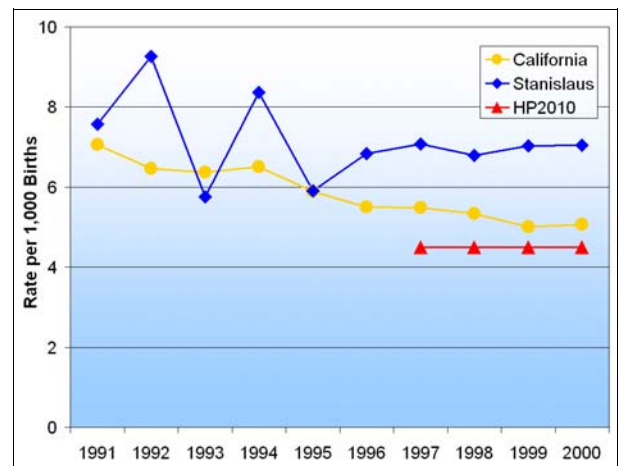


Figure 9: Infant Mortality Rate by Race/Ethnicity, Stanislaus County

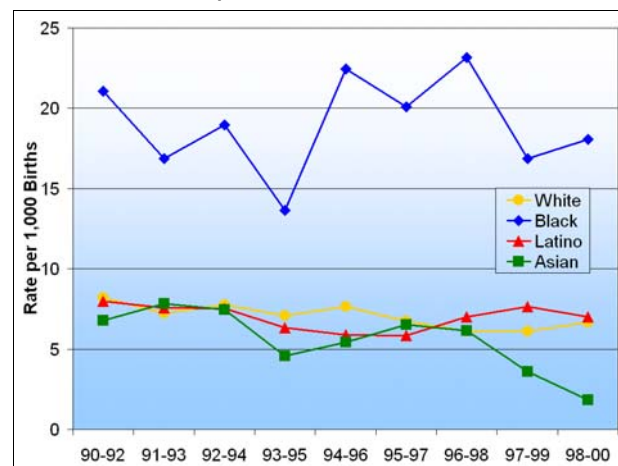
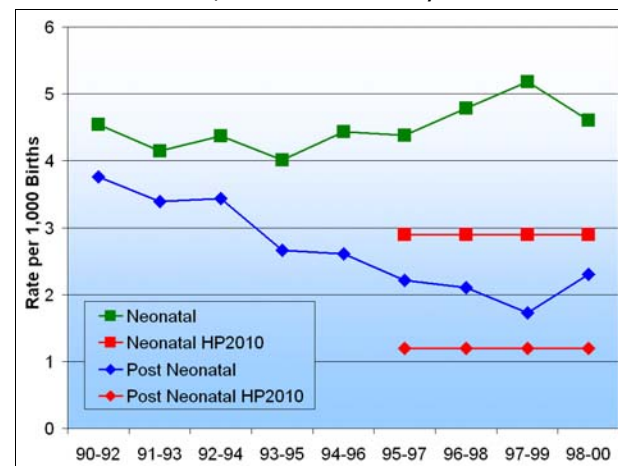


Figure 10: Infant Mortality Rate by Neonatal* and Post Neonatal**, Stanislaus County



*Neonatal Infant Mortality is deaths to infants less than 28 days.

**Post Neonatal Infant Mortality is deaths to infants between 28 days to one day less than 1 year of age.

Source: CA, DHS, Center for Health Statistics (1) & (3)

Maternal, Child and Adolescent Health Low Birth Weight Births*

One of the most significant factors associated with infant mortality is the birth weight of the infant. Infants born weighing less than 2,500 grams (5.5 pounds) are considered to be low birth weight and are at increased risk for many poor birth outcomes.

Figure 11 shows Stanislaus County and California's percentage for low birth weight births. There was a slight incline over the past decade. There is one possible factor at work on this issue. There is better fertility treatment for infertile couples, which has increased the number of multiple births and has resulted in a higher number of low birth weight babies. It is not possible to eliminate all low birth weight births, but the national objective for the year 2010 (HP2010) is to have only 5% of all births weighing less than 2500 grams.

Figure 11: Low Birth Weight Births*, Stanislaus County and California

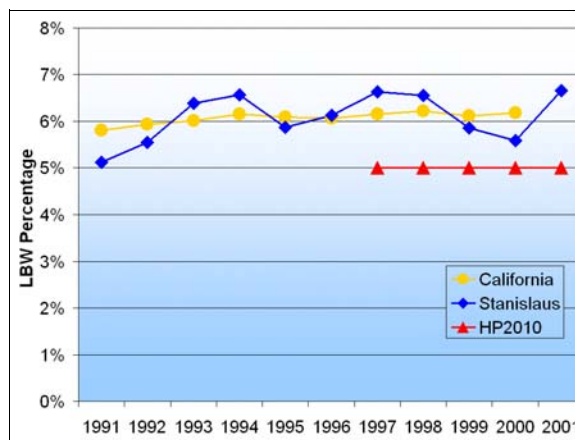


Figure 12: Low Birth Weight Births* by Race/Ethnicity, Stanislaus County

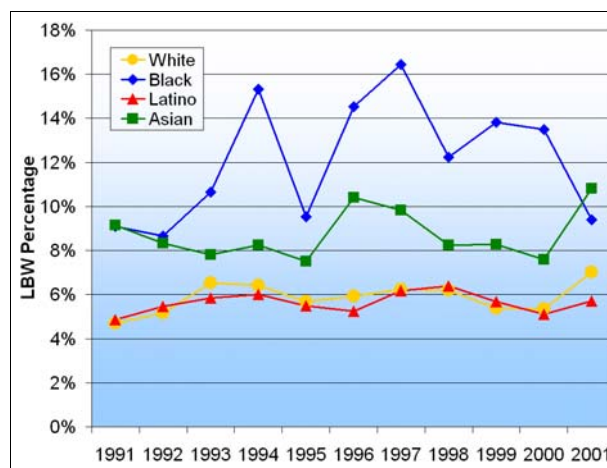
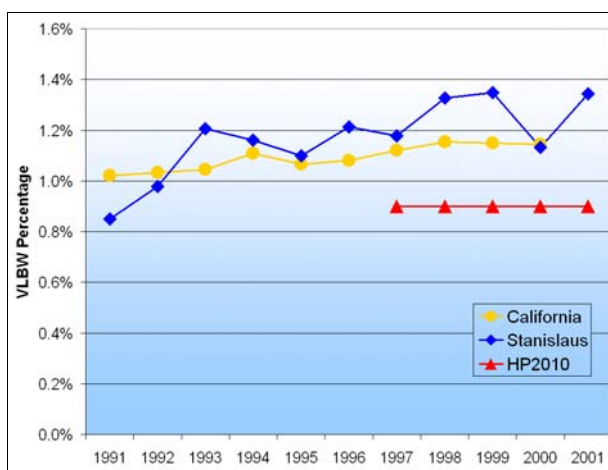


Figure 13: Very Low Birth Weight Births** by Race/Ethnicity, Stanislaus County

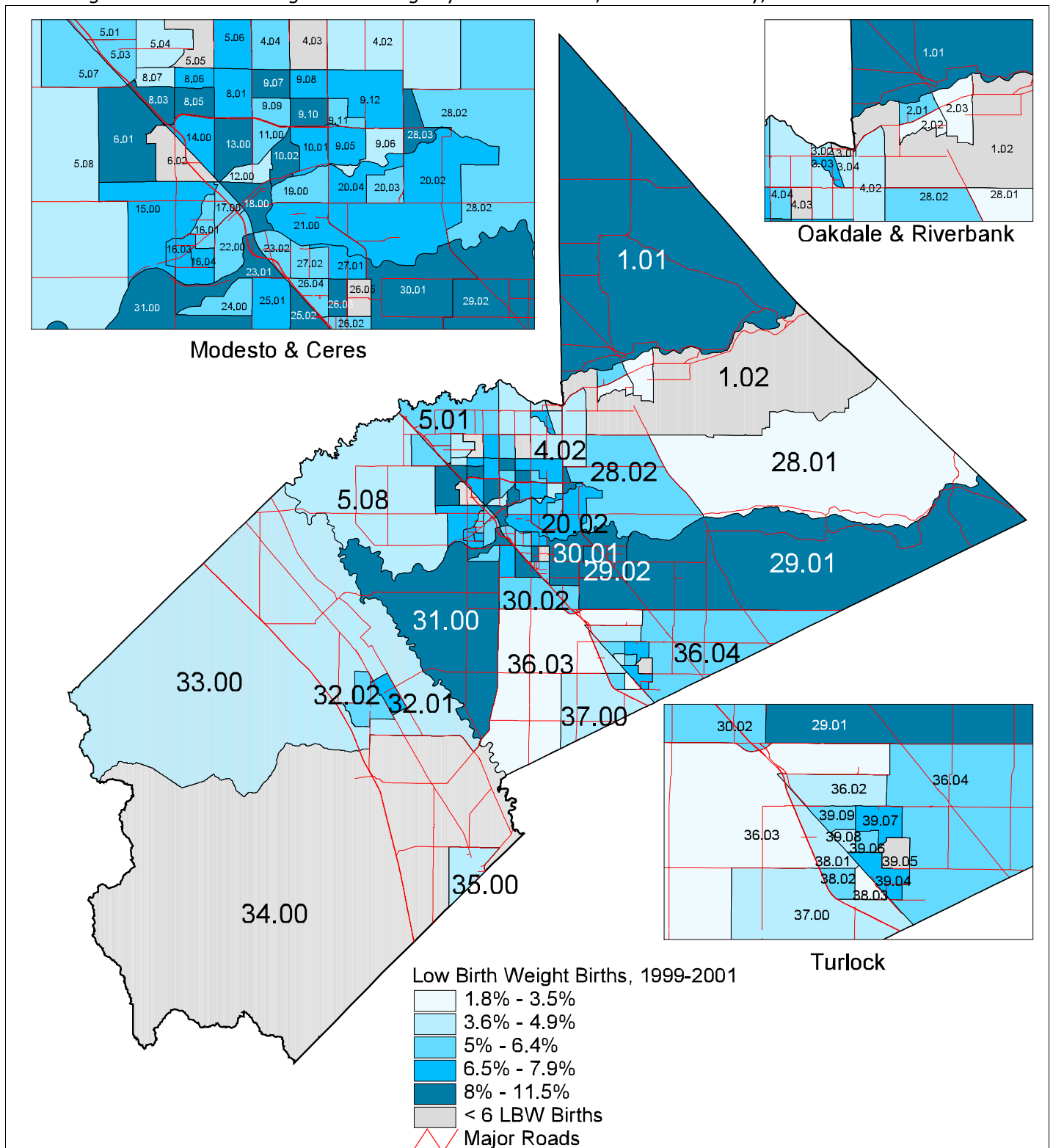


*Low Birth Weight is less than 2500 grams (5.5 pounds) at birth. Source: CA, DHS, Center for Health Statistics (1)

**Very Low Birth Weight is less than 1500 grams at birth.

Maternal, Child and Adolescent Health Low Birth Weight Births*

Figure 14: Low Birth Weight* Percentage by Census Tract**, Stanislaus County, 1999-2001



*Low Birth Weight is less than 2500 grams (5.5 pounds) at birth.
Source: Stanislaus County, HSA, Vital Statistics (20)

** The numbers on the map are the Census Tract labels.

Maternal, Child and Adolescent Health Prenatal Care

When addressing the low birth weight issue, the adequacy of a pregnant woman's prenatal care was identified as a major factor in birth weight outcomes. There is significant evidence that demonstrates that successful childbearing begins with prenatal care that is initiated early (in the first three months of gestation) and continued throughout the pregnancy. While there are many factors (transportation, child care, insurance, supply of providers, family support, mother's knowledge of her body) that play a role in whether a woman's care is started on time and whether she gets the correct number of prenatal care visits, the objective for the year 2010, is to have 90% of all pregnant women getting adequate or better prenatal care.

In Stanislaus County, almost 83% of pregnant women received adequate prenatal care in 2001. This is still below the national objective (HP2010), but it is increasing (Figure 15).

The percent of women entering care in the 1st trimester care is below the national objective for women in every ethnic group, but the non-White groups are significantly lower than their White counterparts (Figure 16).

Figure 17 illustrates an even larger discrepancy between groups receiving adequate prenatal care, as related to health insurance payment source. Those women who have private insurance have been very close to the national objective for a decade while 1 out of 4 women on Medi-Cal still do not receive adequate prenatal care. Much collaboration and coordination between providers, health plans, and Public Health has been done to ensure improvement in this significant area, but it is obvious that much work remains.

Figure 15: Percent of Women receiving Adequate Prenatal Care, Stanislaus County and California

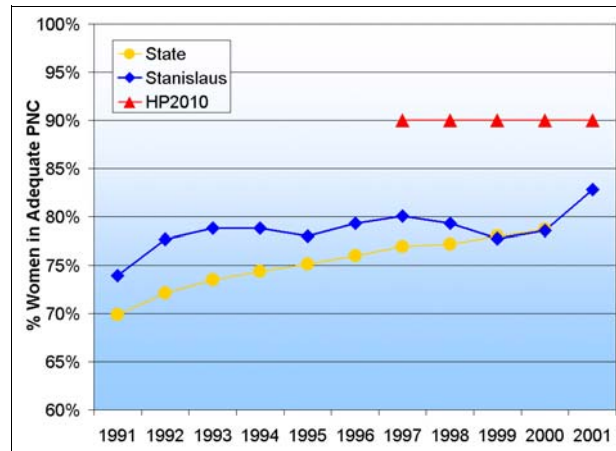


Figure 16: Percent of Women Starting Prenatal Care in the 1st Trimester by Race/Ethnicity, Stanislaus County

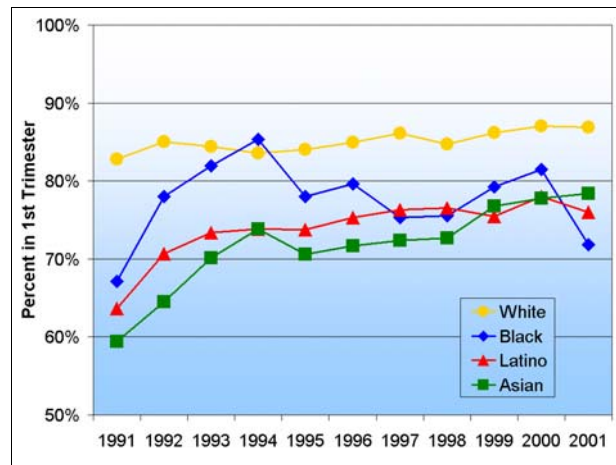
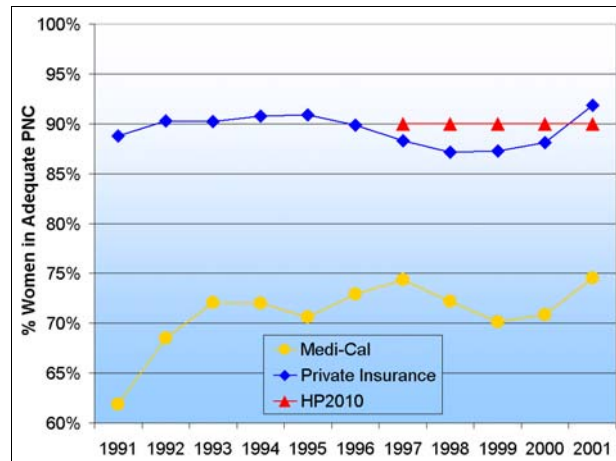


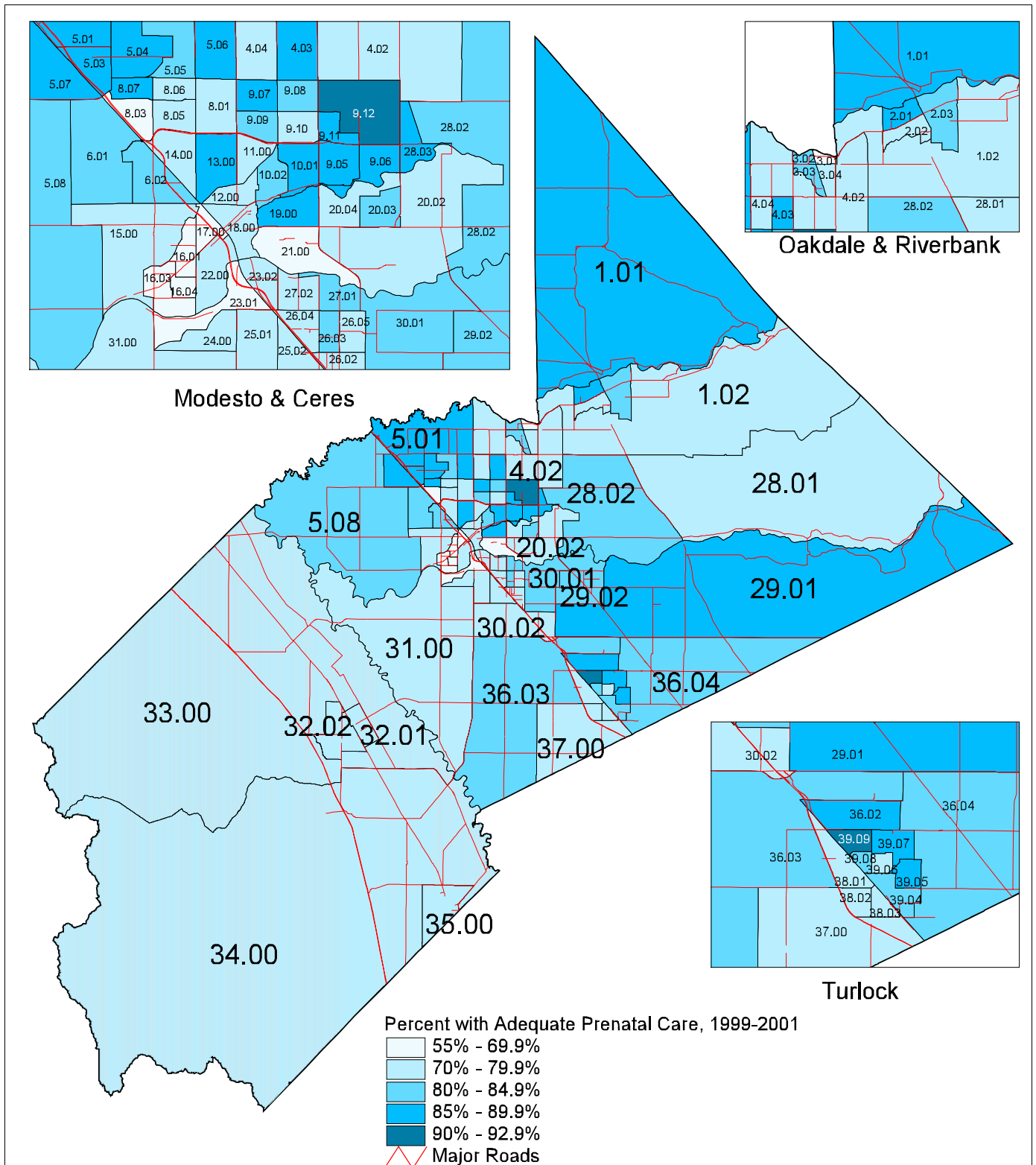
Figure 17: Percent of Women receiving Adequate Prenatal Care by Payment Source, Stanislaus County



Source: CA, DHS, Center for Health Statistics (1)

Maternal, Child and Adolescent Health Prenatal Care

Figure 18: Percent Receiving Adequate Prenatal Care by Census Tract*, Stanislaus County, 1999-2001



* The numbers on the map are the Census Tract labels. The rate or percent is indicated by the color on the map.
Source: Stanislaus County, HSA, Vital Records (20)

Maternal, Child and Adolescent Health Immunization Rates

The goal of the immunization campaign is to have California’s children up-to-date for age* with their immunizations completed by their second birthday. In order to ensure that this occurs, there are school laws in the Health and Safety Code requiring that children be up-to-date with their immunizations before they enter childcare or kindergarten.

Figure 19 shows the percentage of children entering childcare who are up-to-date* with their immunizations. This rate peaked at 95% in 1998 and 2000 and then dropped in 2001. While this hopefully is a transient development, it is partially due to an increase in the number of children with personal belief and medical exemptions. This increase in exemptions is probably due to the anecdotal and spurious information that has been disseminated about harmful side effects of immunizations in the recent past.

Figure 20 shows the up-to-date* percentage among kindergarteners which has traditionally been slightly higher in Stanislaus County than in California as a whole. In 1997, there was a significant decrease due to the additional requirements of the second dose of MMR as well as the Hepatitis B series. By looking at Figures 20 & 21, it would appear that much of the work has been accomplished and much of what currently taking place is maintaining up-to-date immunization coverage.

In reality, the high rates are due to the childcare and kindergarten legislation, but many children do not have current immunizations between the ages of two and five. In order to look at this issue, the California Department of Health Services, Immunization Branch conducts a retrospective kindergarten immunization record analysis each year. This study, which is illustrated in Figure 21, demonstrates that the percentage of two year olds that are up-to-date in California as a whole is rising as is the percentage in the Northern Central Valley**. Nonetheless, while the percentage is increasing, it shows that at least 30% of children are not up-to-date. This gives a realistic picture of the amount of work that still exists before all two year olds are fully immunized.

* See Appendix C for a definition of up-to-date for age means.

** Includes Sacramento, San Joaquin and Stanislaus Counties.

Source: CA DHS, Immunization Branch (4)

Figure 19: Immunization Rates at Child Care Centers, Stanislaus County and California

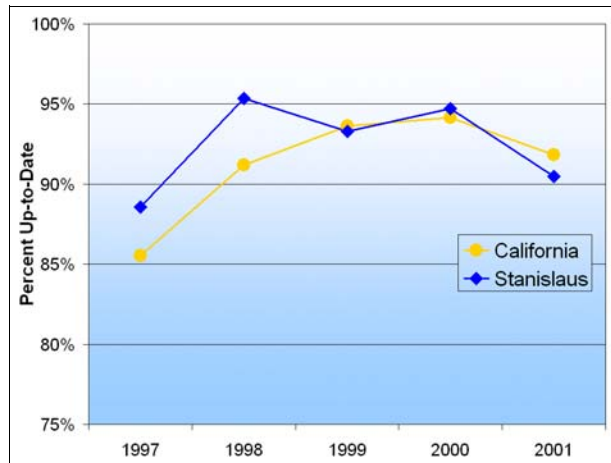


Figure 20: Immunization Rates at Entrance to Kindergarten, Stanislaus County and California

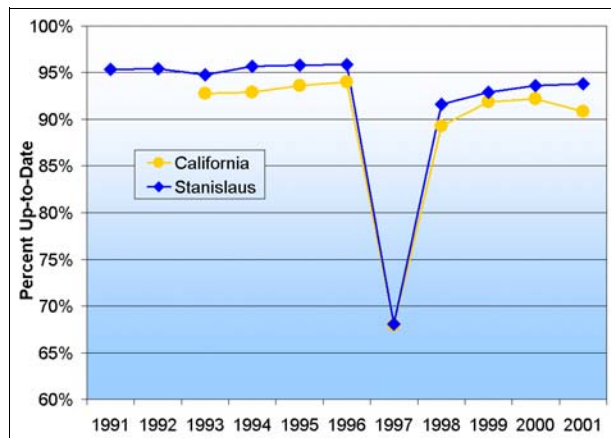
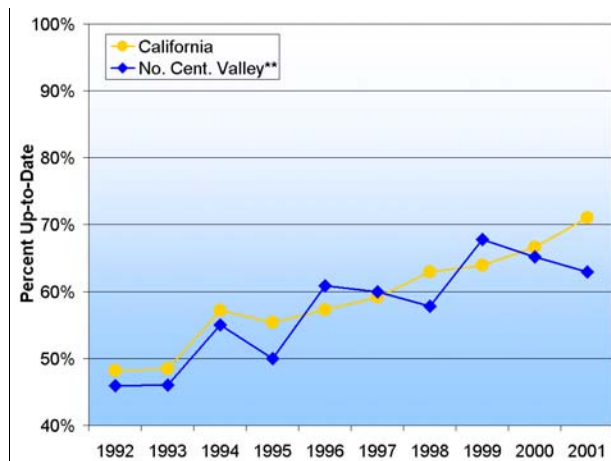


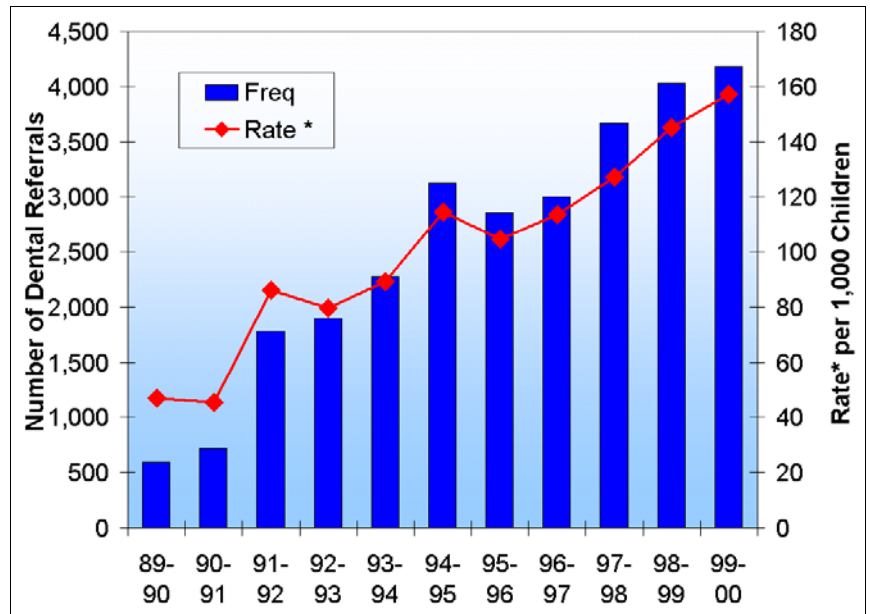
Figure 21: Retrospective Immunization Rates for Two Year Old Children, Northern Central Valley** and California



Maternal, Child and Adolescent Health CHDP (Child Health and Disability Prevention) Data

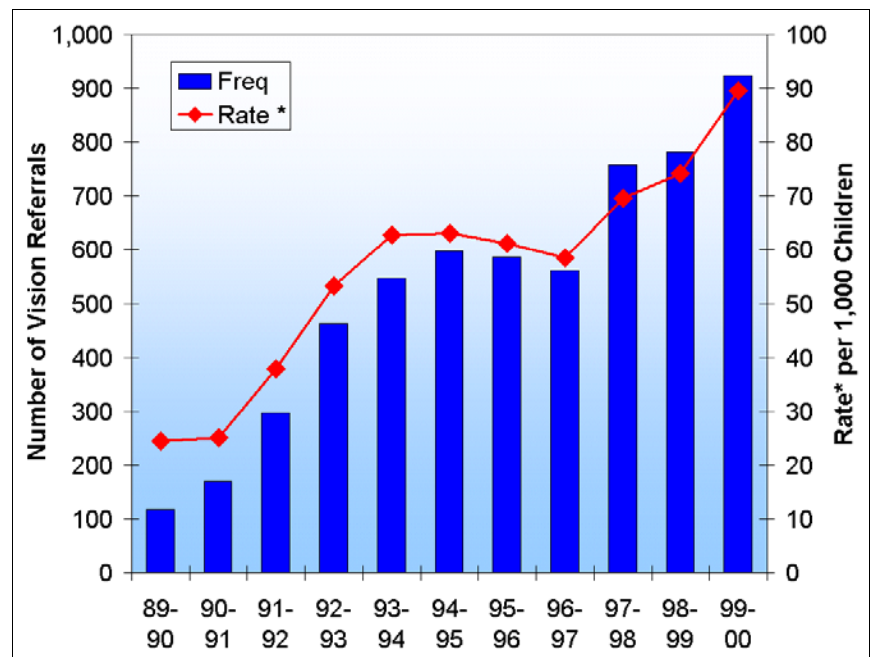
The Child Health and Disability Prevention program (California’s version of the national Early Periodic Screening Diagnosis and Treatment or EPSDT program) administers preventive health care exams to children who meet certain economic criteria. The children are eligible for such periodical exams depending on their age; the younger the child, the more frequently they can have a visit. The underlying plan is for children who cannot afford to see a physician except under extreme circumstances, to receive exams that will diagnose health problems (dental, nutritional, vision, lead poisoning, hearing, etc.) before they become emergent issues. These children are then referred to the respective specialist if the problem cannot be taken care of by the primary care physician.

Figure 22: Number and Rate of CHDP Dental Referrals, Stanislaus County



The most common issue reported from these screening exams is dental problems. Both the number of children with dental problems and the rate of dental referrals has increased remarkably in the past decade (Figure 22). Approximately 500 children were identified with dental issues in 1989-90, but in 1998-99 there were 4,000. The rate of referrals has also increased. Ten years ago, approximately 5% of the children were referred for dental care, but in the 1999-00 fiscal year, almost 16% (160/1,000) were referred.

Figure 23: Number and Rate of CHDP Vision Referrals, Stanislaus County



The number of referrals for vision problems has seen a similar growth pattern (Figure 23). Both the number of children with vision problems (almost an 8 fold increase) and the rate of vision referrals (a 3 fold increase) have grown remarkably in the past decade.

*Rate per 1,000 Children Screened

Source: CA DHS CMS, Yearly Summary Reports (5).

Maternal, Child and Adolescent Health

PedNSS (Pediatric Nutrition Surveillance System) Data

An underweight child is defined as one whose weight for height is less than the 5th percentile. Also referred to as thinness, acute malnutrition, or wasting, underweight is often associated with recent severe illness. In developing countries, underweight can indicate acute malnutrition due to severe food deprivation, persistent diarrhea, or both.

In Stanislaus County, underweight has been hovering between 3.2 to 4.3% over the past decade (Figure 24). In California, the state's average has decreased from 2.8% in 1993 to 2.4%. The low prevalence of underweight among children indicates that acute malnutrition is not a major public health problem. Data from the national pediatric nutrition surveillance study indicated that the prevalence of underweight was highest among African American children and Asian or Pacific Islander children. African American infants aged 0-2 months had the highest rate of underweight. This statistic may reflect the high rate of low birth weight infants in this group.

Interventions to improve underweight for height in children include providing better nutrition, adding calorie dense foods to the diet; improving prevention, diagnosis, and treatment of infectious and chronic diseases; and providing and encouraging use of adequate health services. Special attention should be given to homeless children and those with special health care needs.

In Stanislaus County, the overweight rate of CHDP patients spanning the last ten years has been above 10% (Figure 25). Although below the California state average of 14.5% in the year 2000, Stanislaus County is at 11.5%. The Healthy People 2010 target (HP2010) for overweight children is 5%.

Overweight indicates excess energy intake, low energy expenditure, or both. The health problems associated with childhood obesity include: high blood pressure, high cholesterol, glucose intolerance, orthopedic disorders, and psychosocial disorders. In addition, longitudinal studies show that overweight in children is associated with overweight in adulthood.

Obesity is a result of a complex variety of social, behavioral, cultural, environmental, physiological, and genetic factors. Efforts to maintain a healthy weight should start early in childhood and continue through adulthood. A healthy diet and regular physical activity are both important for maintaining a healthy weight. Patterns of healthy eating behavior need to begin in childhood and be maintained throughout adulthood. These patterns can be encouraged through nutrition education at schools and worksites that takes into account cultural and other factors influencing diet.

* Underweight in children is defined as weight for height less than the 5th percentile.

** Obese is defined as weight for height above the 95th percentile.

Source: CA DHS CMS, Yearly Summary Reports (5).

Figure 24: Underweight* CHDP Children, Stanislaus County and California

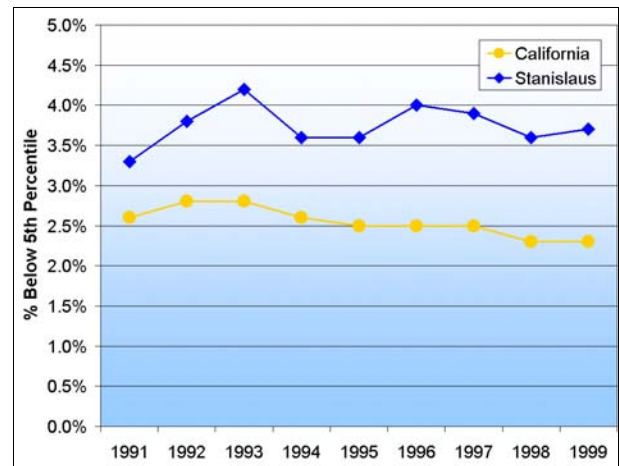
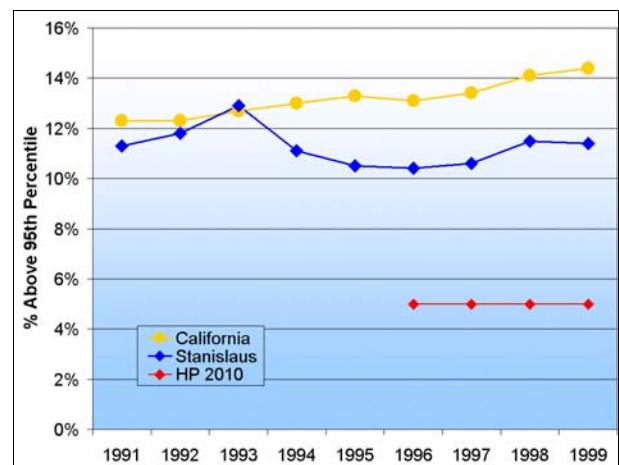


Figure 25: Obese** CHDP Children, Stanislaus County and California



Communicable Diseases

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Communicable Diseases

Chlamydia

Chlamydia is a sexually transmitted infection that became a reportable disease in the mid 1980's. It soon became the most common reportable communicable disease in the nation. There has been an average of 1,000 cases of chlamydia reported each year for the past decade in Stanislaus County.

Many individuals who are infected with chlamydia are asymptomatic and thus they do not know that they have the disease and are able to transmit the bacteria to their sexual partners. This is the reason why it is now standard practice to screen all sexually active women between the ages of 15 and 24 at least once a year. The large number of asymptomatic individuals also contributes to the realization that the number of infections that is reported to the health department and thus displayed in these graphs is only the tip of the iceberg. The real incidence of chlamydia is much higher.

This also illustrates why there can be increases and decreases in the reported rate of disease without a true change in the real incidence of the disease. If additional resources are applied to screening appropriate populations, additional cases will be found. It is thought that before the real incidence of disease decreases, the reported cases will increase as they are identified and treated. Figure 1 shows an increase in the rate of disease for the past several years. This is hopefully a sign that many more of the asymptomatic carriers are being discovered and treated.

The White and Asian populations in Stanislaus County have the lowest rate of reported chlamydia (Figure 2). The African American group has the highest rate of reported chlamydia followed by the Latino population. Although the African American population in Stanislaus County is small compared to other ethnic groups, they are disproportionately impacted by chlamydia.

Figure 3 illustrates the reason behind the targeted screening of 15-24 year olds. The reported rate among this age group is more than 17 times higher than the rate among the rest of the population. This indicates the need for awareness and prevention programs that target sexually active adolescents and young adults.

Figures 4 and 5 show overall rate of reported chlamydia by Census Tract in Stanislaus County and the rate for the 15-24 year old age group.

Figure 1: Chlamydia Rate, Stanislaus County and California

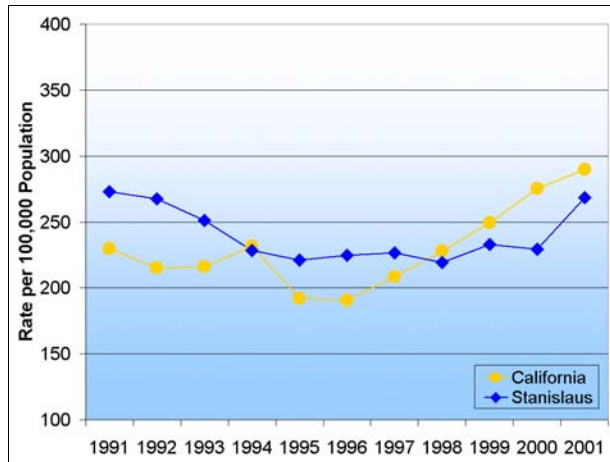


Figure 2: Chlamydia Rate by Race/Ethnicity, Stanislaus County

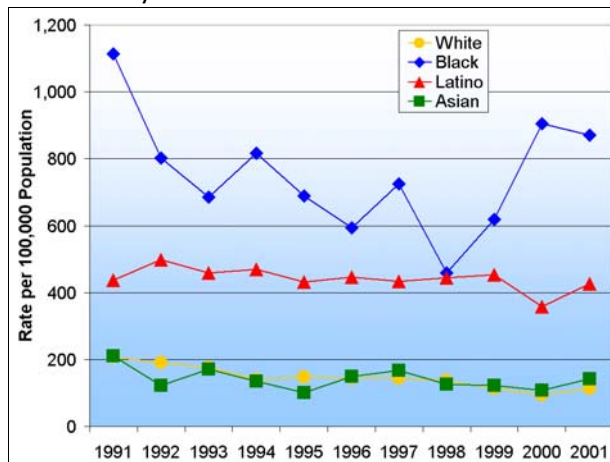
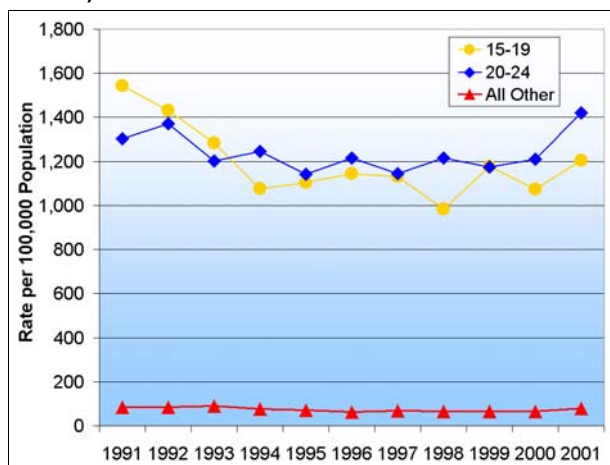


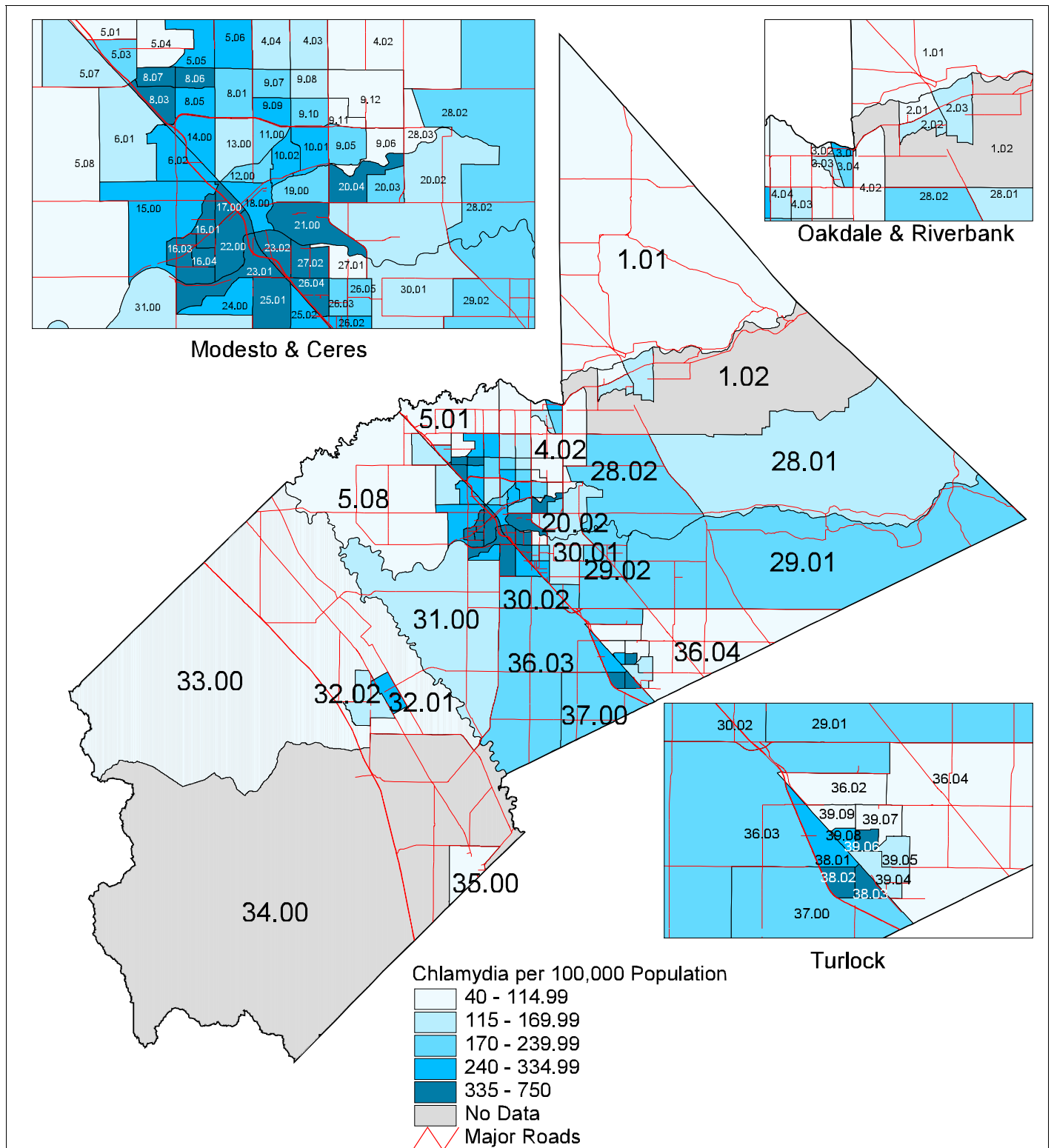
Figure 3: Chlamydia Rate by Age Group, Stanislaus County



Source: Stanislaus County, HSA, CD Program, AVSS (10) & CA, DHS, STD Branch (7).

Communicable Diseases Chlamydia

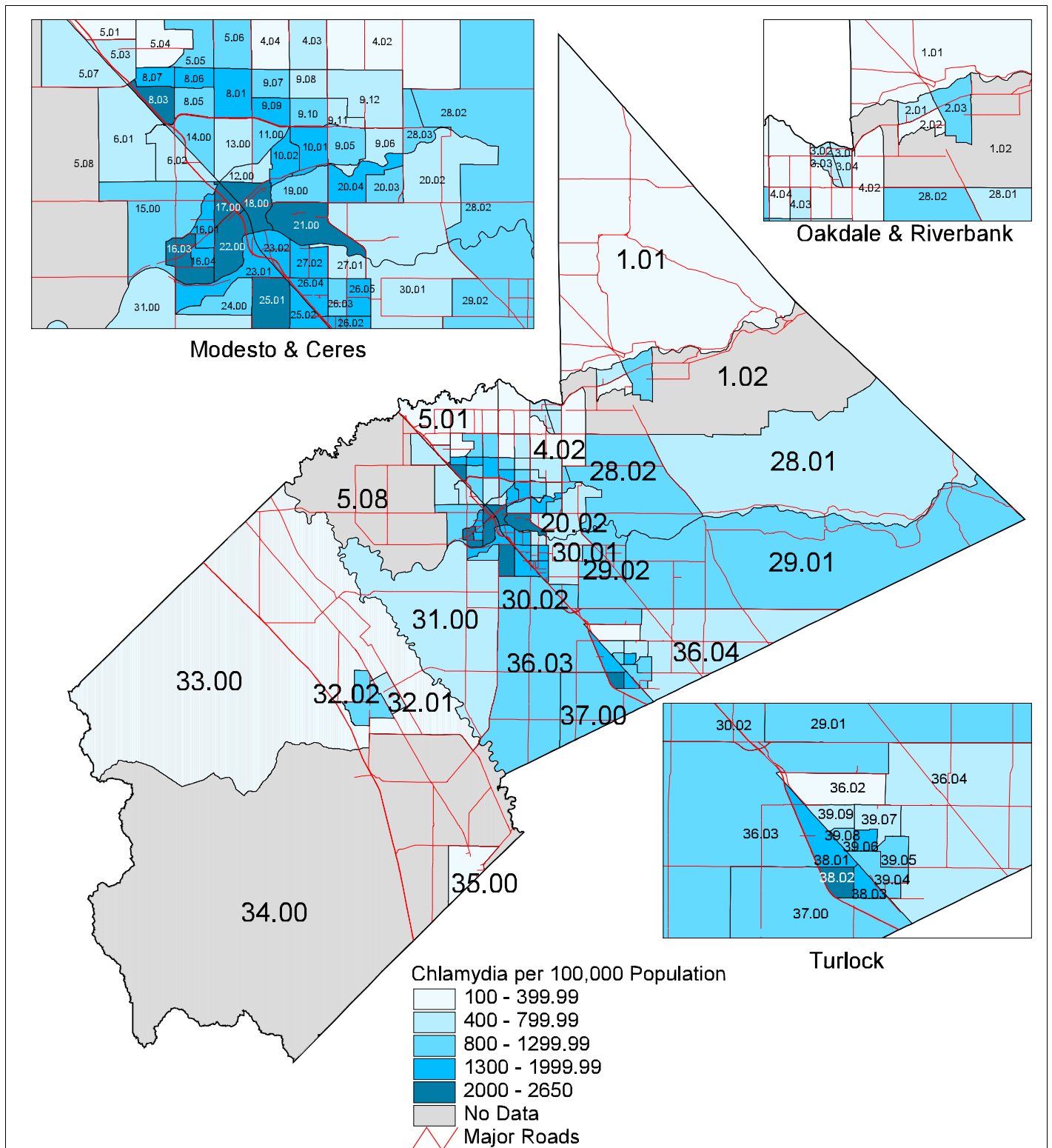
Figure 4: Rate of Reported Chlamydia by Census Tract*, Stanislaus County, 2001



* The numbers on the map are the Census Tract labels. The rate or percent is indicated by the color on the map.
Source: Stanislaus County, HSA, CD Program, AVSS (10) & US Census Bureau, 2000 (16)

Communicable Diseases Chlamydia

Figure 5: Rate of Reported Chlamydia Among 15-24 Year Olds by Census Tract*, Stanislaus County, 2001



* The numbers on the map are the Census Tract labels. The rate or percent is indicated by the color on the map.
Source: Stanislaus County, HSA, CD Program, AVSS (10) & US Census Bureau, 2000 (16)

Communicable Diseases Gonorrhea

Gonorrhea is a symptomatic sexually transmitted disease, unlike chlamydia. Most of the individuals infected with the bacteria will seek treatment for the disease, which has historically been very efficient and effective. The gonorrhea bacteria has remained very sensitive to antibiotics, but there is an alarming trend that has been identified globally and is being monitored by the California Department of Health Services locally. A growing percentage of gonorrhea cultures from infected individuals have acquired antibiotic resistance. This development may soon require more vigilance when diagnosing and treating this disease.

In 2000, a urine base-screening tool for chlamydia and gonorrhea was introduced, which has made it much easier to conduct the screening for the infections. The availability of these new tests is expected to encourage individuals to be tested and could cause a rise in the number of reported infections.

Although gonorrhea rates have been decreasing in both California and Stanislaus County (Figure 6), more improvement is still needed in order to reach the national objective (HP2010). Historically, gonorrhea rates have been declining since 1979 when the rate of reported gonorrhea was nearly 600 cases per 100,000 population in Stanislaus County.

The highest rate for gonorrhea is among the African American population (Figure 7). It is important to note that this is the reported rate of the disease and not all infections are consistently reported. Some other reasons for this population's high rates could be poor access to healthcare, limited knowledge of sexually transmitted diseases, and lack of culturally sensitive outreach to this population.

Figure 6: Gonorrhea Rate, Stanislaus County and California

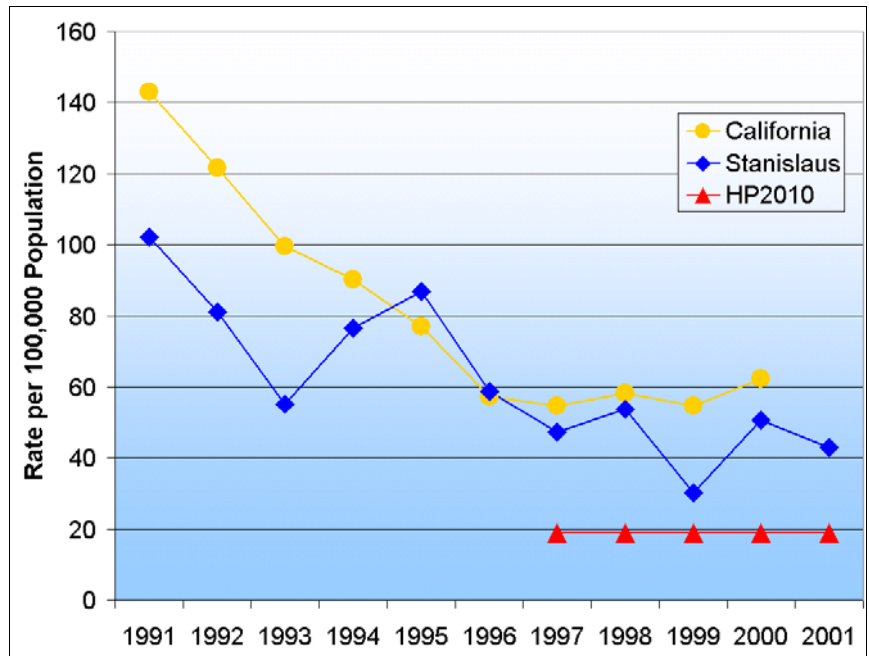
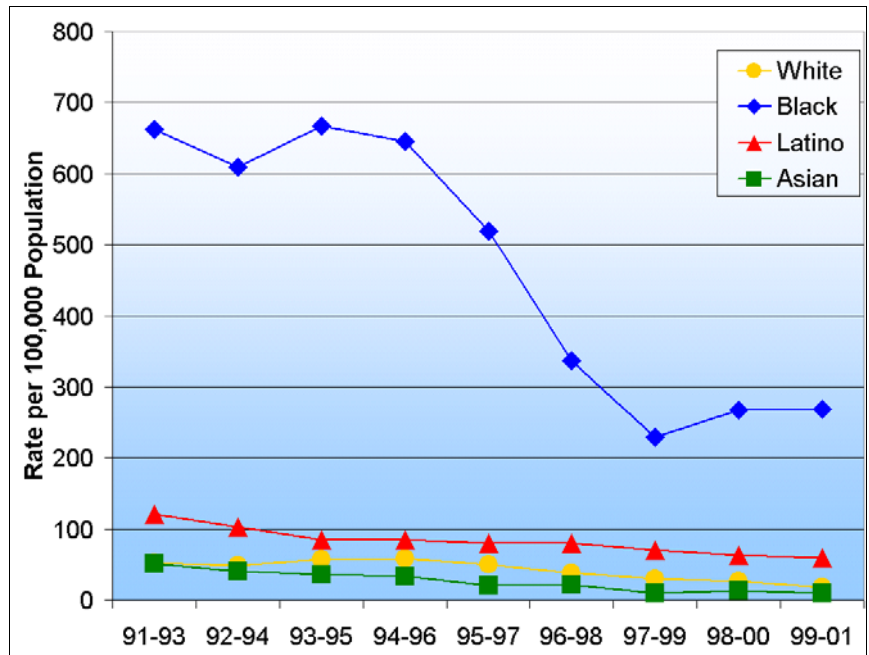


Figure 7: Gonorrhea Rate by Race/Ethnicity, Stanislaus County



Source: Stanislaus County, HSA, CD Program, AVSS (10) & CA, DHS, STD Branch (7).

Communicable Diseases

AIDS

The rate of reported AIDS cases is different than the rate of individuals infected with HIV, the virus that causes AIDS. To be classified as having AIDS, a patient needs to have several symptoms or co-infections in addition to being HIV positive. Understanding this nuance explains why there was a large peak of cases (Figure 8) in the early 1990's when the AIDS case definition was expanded. The new definition then classified many individuals as AIDS cases who had not fit the definition earlier.

The precipitous decline in the number of reported AIDS cases throughout the 1990's can be attributed to the tremendous improvement in the treatment of AIDS. This improvement has consisted of new and more effective drugs, better knowledge of HIV by physicians and other health care providers, and additional resources for the infected, such as the AIDS Drug Assistance Program. Both Stanislaus County and California have not met the Healthy People 2010 objective (HP2010) although the trend lines are leading in that direction.

Even though the African American population is fairly small in Stanislaus County, they carry a disproportionate burden of AIDS cases (Figure 9) as well as other communicable diseases in this county. The rate of AIDS cases among the White and Latino population is very close while the rate among the Asian population is the lowest in the county although there has been a rise among that group in the past couple of years. Some cultures have attitude and belief issues that hinder testing and early treatment for HIV infection.

Figure 10 shows that the age group that has the highest rate of AIDS are those individuals between the ages of 25-44. Since it takes approximately 8-10 years for the HIV infection to meet the clinical definition of AIDS, it can be assumed that most individuals are infected with HIV between the ages of 15 and 34.

The rate of infection has always been greater among males compared to the female population. This is mainly due to male homosexual behavior that puts males at significant risk for HIV infection. Females have been less likely to test for HIV and have a

Figure 8: AIDS Rate, Stanislaus County and California

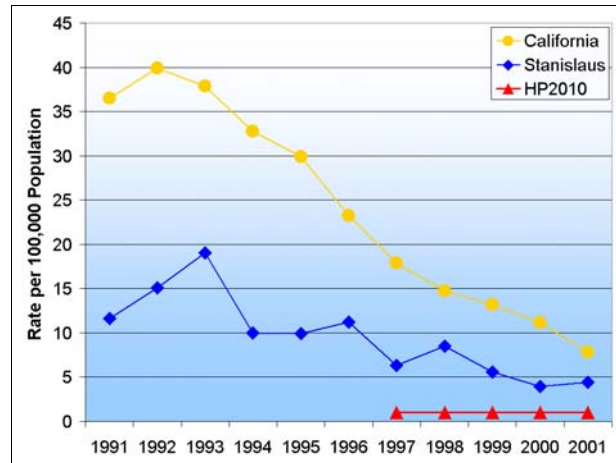


Figure 9: AIDS Rate by Race/Ethnicity, Stanislaus County

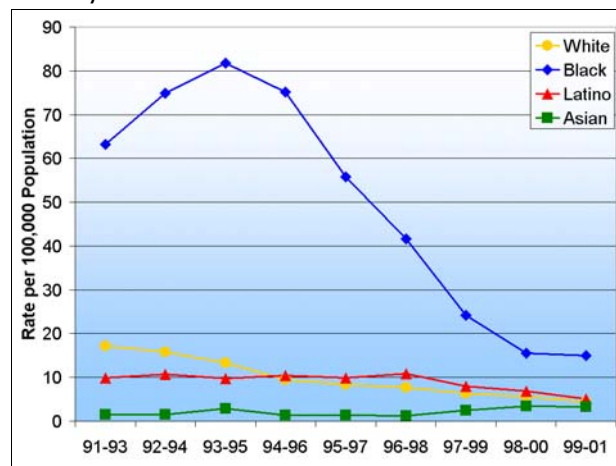
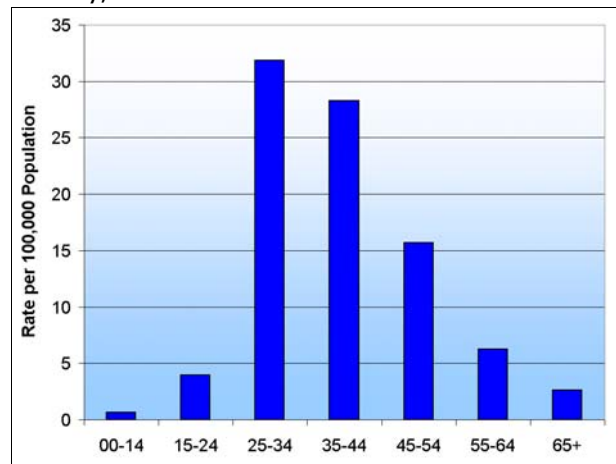


Figure 10: AIDS Rate by Age Group, Stanislaus County, 1991-2001



Source: Stanislaus County, HSA, AIDS Program (11) & CA, DHS, OOA (8).

Communicable Diseases AIDS

different attitude about how HIV may impact them. Both genders are at risk for contacting HIV when engaging in unprotected sex and/or when sharing needles. The rate among females has remained steady while the rate among males has dropped in the past decade. This means that the proportion of AIDS cases that are female has grown recently.

HIV infection has long been considered a death sentence, but due to improved treatment capabilities, many are living longer with the infection. Figure 12 illustrates both points as it shows that most of the individuals who were diagnosed with AIDS in the 1980's have expired, but that many of those recently diagnosed are still alive.

Figure 11: AIDS Rate by Gender, Stanislaus County

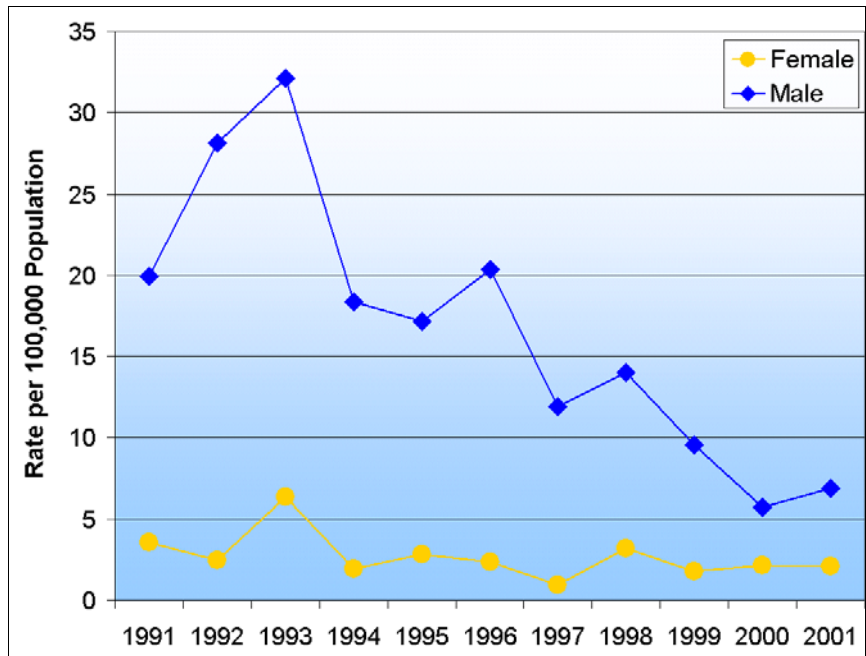
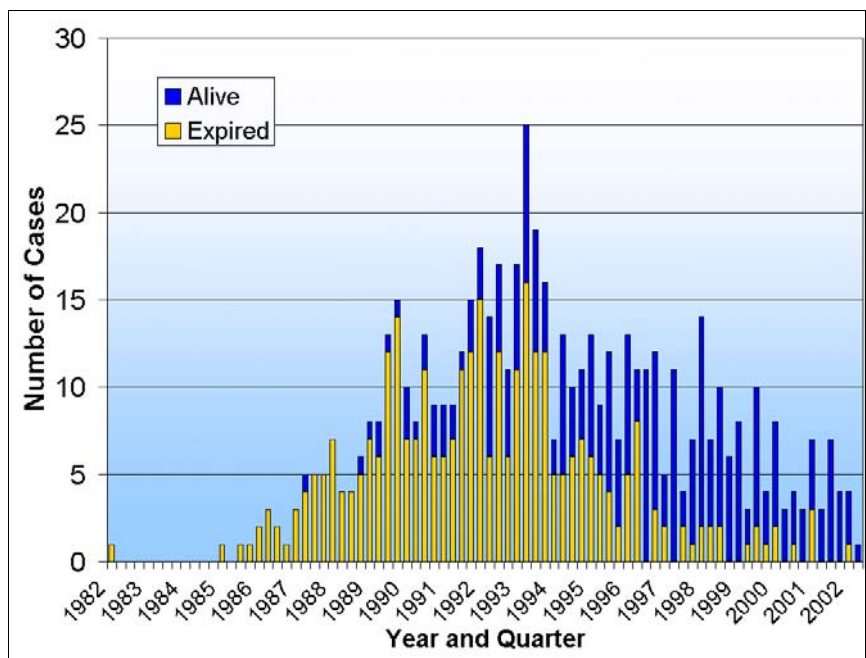


Figure 12: Survival Status of Individuals with AIDS by Quarter and Year of Diagnosis, Stanislaus County



Source: Stanislaus County, HSA, AIDS Program (11).

Communicable Diseases Hepatitis A

Hepatitis A is an acute viral disease that is transmitted by the fecal-oral route or when sanitary procedures (hand washing) are not followed.

Some hepatitis experts believe that one of the contributing factors to the outbreak of hepatitis A in the central San Joaquin Valley is the methamphetamine culture (its production and abuse) and the unsanitary habits that are kept while under its influence.

There is an effective vaccine that will provide immunity against this virus. The individuals that are currently recommended to receive the vaccination are those who are at high risk for the infection (e.g. travelers to countries with a high rate of hepatitis A, men who have sex with men, injecting-drug users, and persons with clotting-factor disorders).

California’s rate of hepatitis A has declined over the past 10 years (Figure 13) and is close to the national objective (HP2010). Stanislaus County also has seen a decline in the rate of hepatitis A; however, the current rate is nearly 2.5 times that of the national objective. It is interesting to note that during the flood of 1997, the hepatitis A rate did not increase in Stanislaus County.

Hepatitis A incidence varies by race/ethnicity. In Stanislaus County, Latinos have the highest rate followed by Whites and African-Americans (Figure 14). This difference among the race/ethnic groups may be related to factors such as differences in socioeconomic levels, resultant living conditions (e.g. crowding), and more frequent contact with people from countries where hepatitis A is endemic (e.g. Mexico and Central America).

The incidence of hepatitis A in Stanislaus County is highest among the younger age groups (Figure 15). Nearly 59% of the cases are seen in people ages 24 and under. Children can remain relatively asymptomatic, and can transmit the disease to others unknowingly.

Figure 13: Hepatitis A Rate, Stanislaus County and California

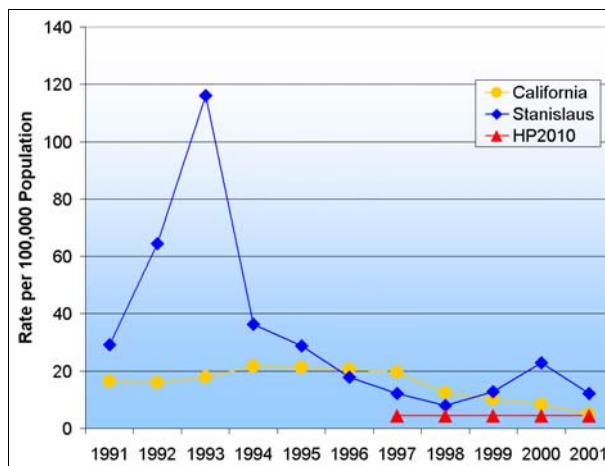


Figure 14: Hepatitis A Rate by Race/Ethnicity, Stanislaus County

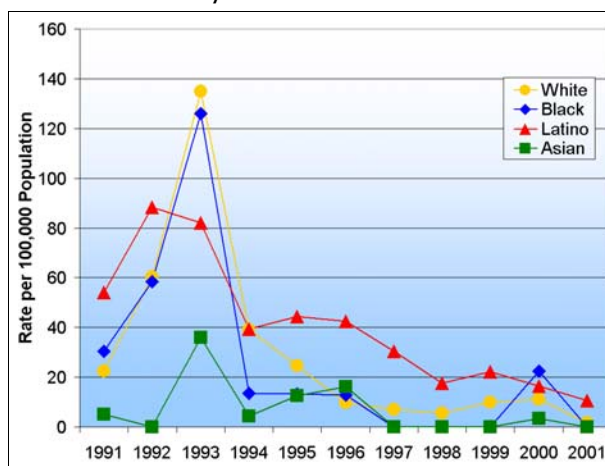
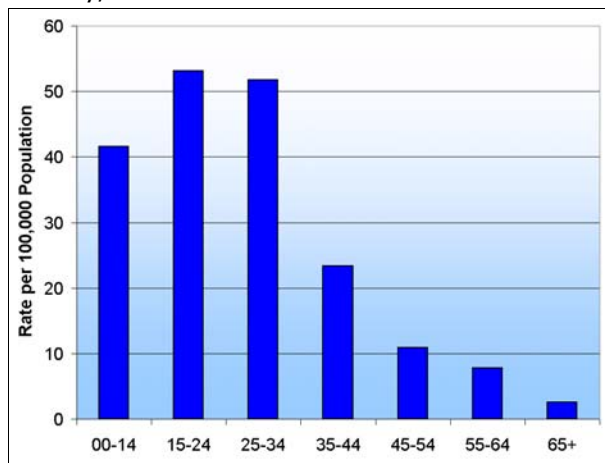


Figure 15: Hepatitis A Rate by Age Group, Stanislaus County, 1991-2001



Source: Stanislaus County, HSA, CD Program, AVSS (10) & CA, DHS, DCDC (6).

Communicable Diseases Hepatitis B

Hepatitis B is a viral infection that attacks the liver. Other than the fact that it affects the liver, it is not related to hepatitis A or hepatitis C. Hepatitis B is transmitted primarily through sexual contact, breaks in the skin (percutaneous), and from mother to infant around the time of birth (perinatal). Due to these transmission routes, those individuals at highest risk for being infected with hepatitis B include illicit drug users, individuals with many sexual partners, institutionalized persons, and health care workers.

The high rate of hepatitis B in Stanislaus County and California during 1991 and 1992, may be due to several factors. First, the chronic hepatitis B carrier status became a reportable condition in 1989. Two, there was a high rate of hepatitis B among refugees entering the country. Lastly, the perinatal hepatitis B prevention program, which was initiated in the summer of 1990, identified infected pregnant women and their sexual partners. Since 1992, the rate of hepatitis B has declined in Stanislaus County and California (Figure 16).

Although Asians have the highest rate of Hepatitis B in Stanislaus County (Figure 17), the rates have been decreasing since 1998. The other racial and ethnic groups have rates of hepatitis B that are very close to one another.

It's not surprising that the 25-34 year olds have the highest rate of hepatitis B (Figure 18). Those who were infected at birth may now begin to show symptoms and seek testing. It is also the peak of childbearing years for women where testing is initiated as part of a routine prenatal exam. Those individuals infected as adults have a 10% chance of remaining carriers; however, those infected at birth have a 90% chance of becoming lifelong hepatitis B carriers. There is a significant increase in mortality due to being a hepatitis B carrier.

Figure 16: Acute Hepatitis B, Stanislaus County and California

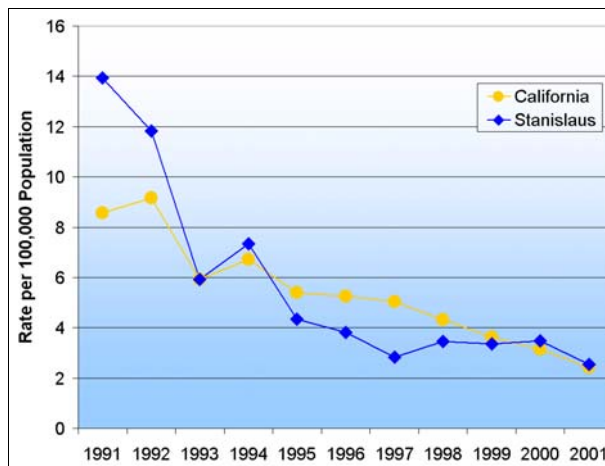


Figure 17: Rate of All Hepatitis B by Race/Ethnicity, Stanislaus County

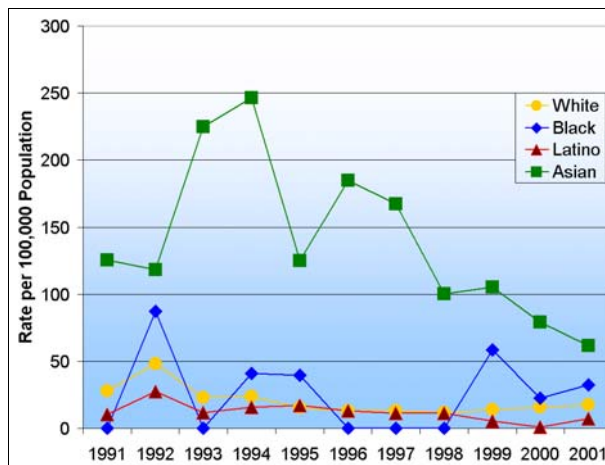
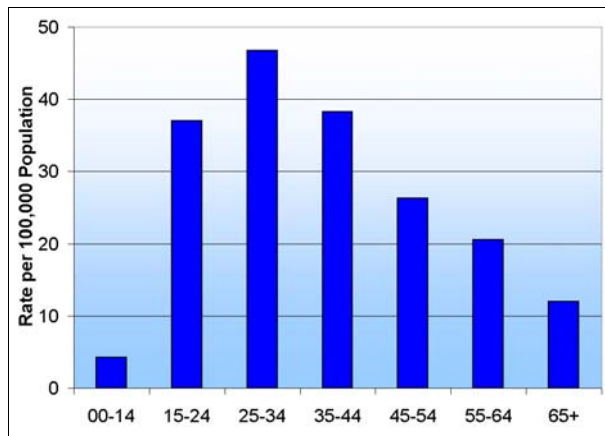


Figure 18: Rate of All Hepatitis B by Age Group, Stanislaus County, 1991-2001



Source: Stanislaus County, HSA, CD Program, AVSS (10) & CA, DHS, DCDC (6).

Communicable Diseases

Hepatitis C

Hepatitis C is a viral infection that attacks the liver and is transmitted primarily through contact with blood. The laboratory procedure that is able to test for this infection became widely available in the early 1990's. Before this test, many cases of hepatitis C were reported as non-A and non-B. Because of the relatively new diagnostic tools, many individuals are just now learning that they carry the virus even though they have been infected for many years. Before the laboratory test, the blood supply was not screened for hepatitis C and individuals were infected by receiving transfusions. The blood supply is now screened for this virus. The most common transmission route is through the sharing of needles.

The information presented here does not distinguish between acute (recent infections) and chronic (old infections) cases of hepatitis C. As such, the data presented here includes individuals that were infected in the 1970's or 1980's, but are just now being tested as well as individuals who were recently infected. The rapidly rising rate (Figure 19) indicates an epidemic of awareness as opposed to a true epidemic of current (incident) disease transmission. The rate reflects the number of new individuals reported, but it does not represent the number of individuals who have become infected during the reporting period. The distinction is important for two reasons. First, for prevention purposes, it is necessary to know how much transmission is occurring currently and secondly, all other reported diseases do represent recent infection and there can be misinterpretation of the data if this difference is not stated.

African-Americans have had a substantially higher rate of hepatitis C (Figure 20) since 1998 when compared

Figure 19: Hepatitis C Rate, Stanislaus County and California

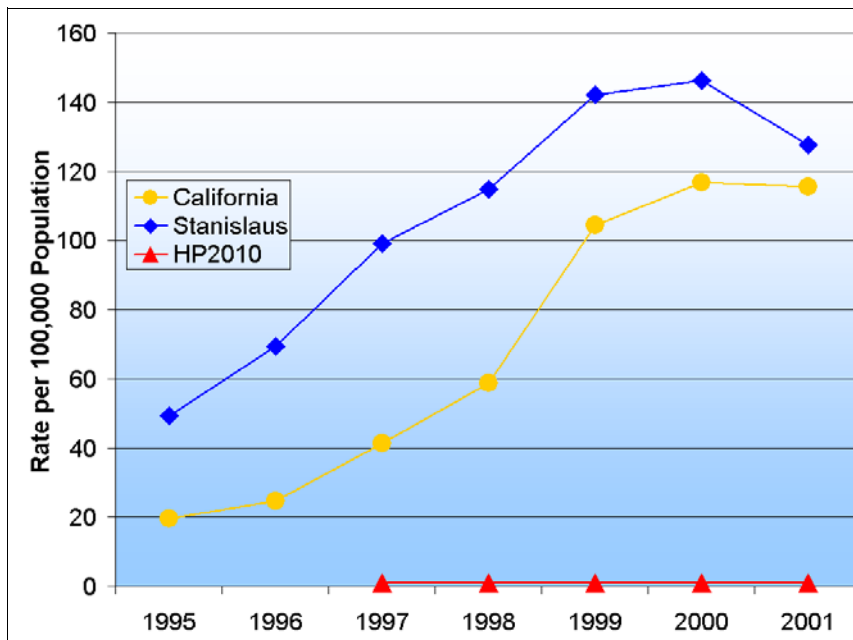
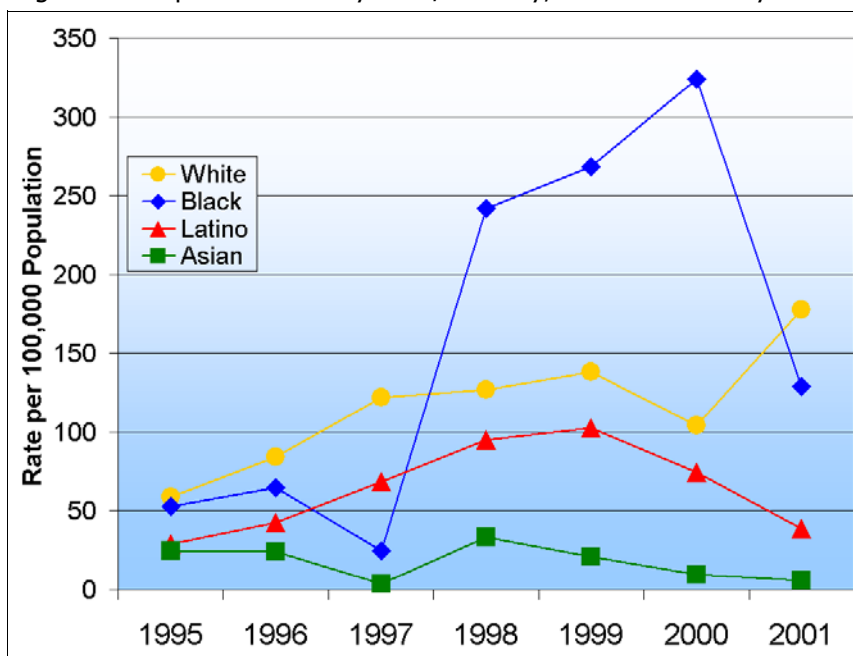


Figure 20: Hepatitis C Rate by Race/Ethnicity, Stanislaus County



Source: Stanislaus County, HSA, CD Program, AVSS (10) & CA, DHS, DCDC (6).

Communicable Diseases

Hepatitis C

to other race/ethnic groups in Stanislaus County. The rate among Whites is also high, and was the highest after an increase in 2001. Latinos and Asians have had lower rates of reported hepatitis C, particularly since 1997.

Figure 21 shows that the highest rates of reported hepatitis C in Stanislaus County are among the 35-54 year age groups. This is comparable to the overall trend in the country and also illustrates the fact that many of these individuals are just now discovering that they are living with this virus even though they were infected with it 10-20 years previously when they engaged in high risk behavior or were exposed to the virus via a transfusion.

Most of these individuals are chronically infected with the virus but are not usually aware of the infection because they are not clinically ill. These infected individuals are able to transmit the virus to other individuals and are also at risk of developing chronic liver disease or other hepatitis C-related chronic diseases. These complications can develop within two decades but can take even longer. Chronic liver disease due to hepatitis C infection is the top cause of liver transplants in the United States.

Males have had a substantially higher rate of hepatitis C infection than females in Stanislaus County (Figure 22). There has been a steady increase in the rate of reported infection among both genders.

Figure 21: Hepatitis C Rate by Age Group, Stanislaus County, 1994-2000

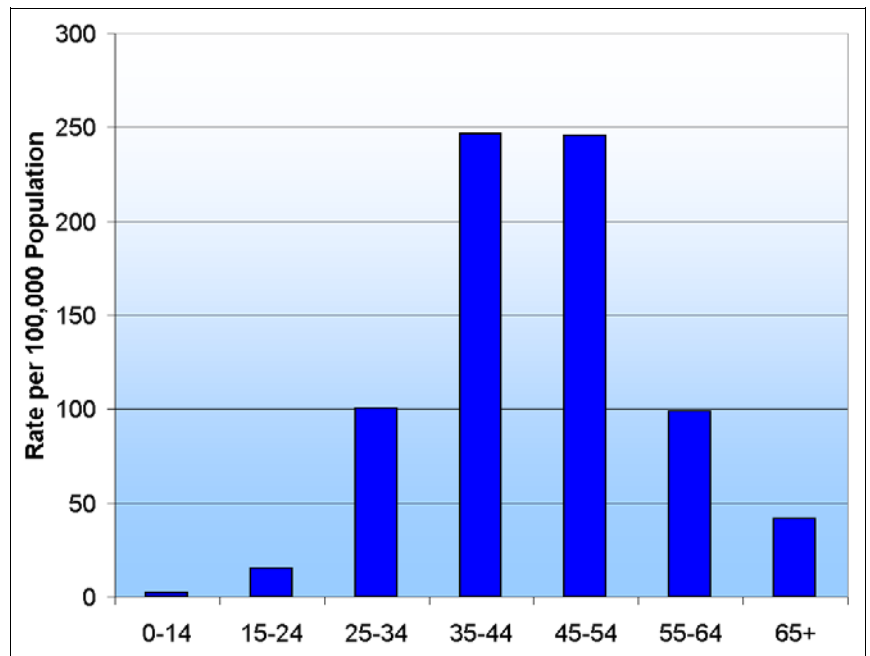
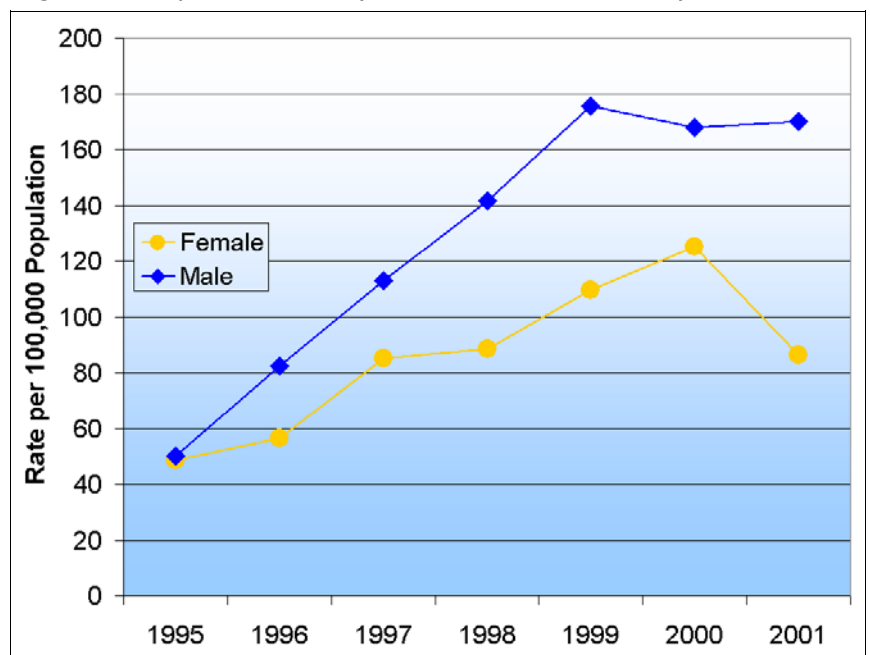


Figure 22: Hepatitis C Rate by Gender, Stanislaus County



Source: Stanislaus County, HSA, CD Program, AVSS (10).

Communicable Diseases Meningococcal Meningitis

There are several different organisms that can cause meningitis which is an infection of the brain or spinal cord and the membrane that surrounds them. The organism that causes one of the most severe types of meningitis is the bacteria *Neisseria meningitidis*. This bacteria is spread through droplets from the nose and mouth of infected people. 25% of the population may be asymptomatic carriers of the disease and spread it to others unknowingly. The symptoms of **meningococcal meningitis** can initially be very mild, but rapidly becomes life threatening. Prompt diagnosis and early treatment are the keys to improving survival rates.

Stanislaus County has had an elevated rate (3-6 cases per 100,000 population) of meningococcal meningitis for several years, but to be considered an epidemic, the rate needs to be about 10 times higher than the expected rate which is 1 case per 100,000 individuals.

The population that is most at risk for this infection is the very young. In the past 10 years, 23% of all cases in Stanislaus County have occurred in infants who have yet to reach their first birthday and two out of every three cases has been in a child less than six years of age.

Currently, routine vaccination against meningococcal meningitis among children is not recommended because of its ineffectiveness in children under 2 years of age. The vaccination is recommended for college freshman living in campus housing as they are at increased risk of transmission and the vaccination is effective at this age although the immunity only lasts for a few years and does not cover all the serotypes of the bacteria.

Figure 23: Meningococcal Meningitis Rate, Stanislaus County and California

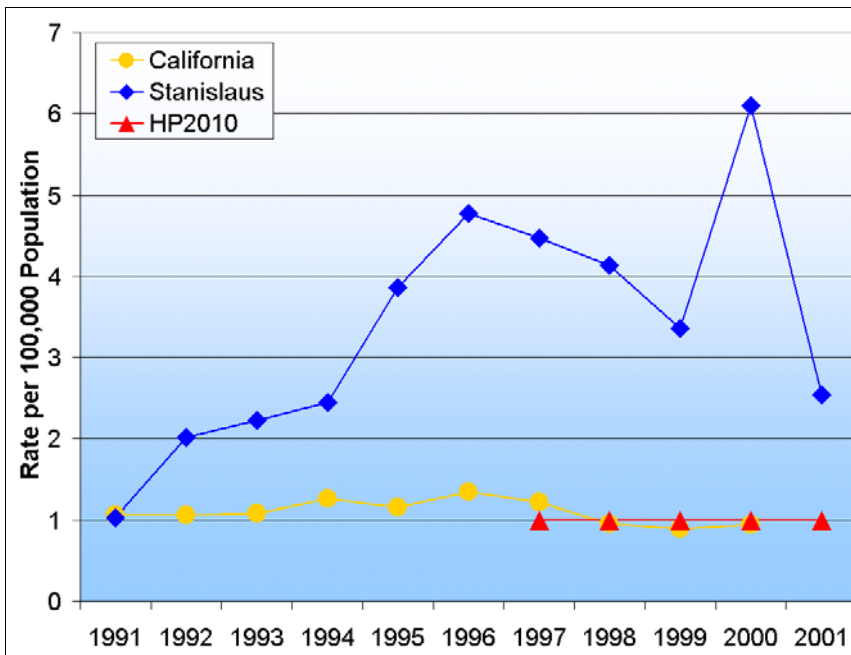
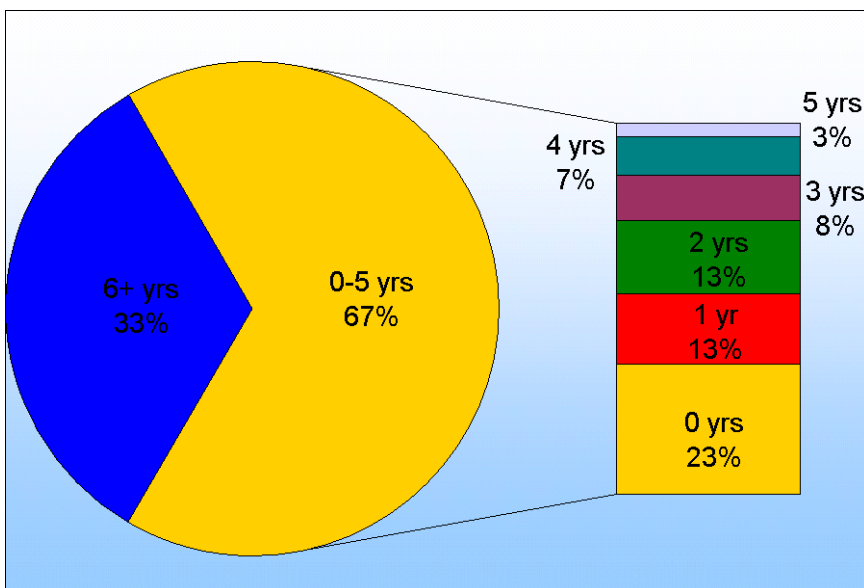


Figure 24: Meningococcal Meningitis Cases by Age, Stanislaus County, 1991-2001



Source: Stanislaus County, HSA, CD Program, AVSS (10) & CA, DHS, DCDC (6).

Communicable Diseases Tuberculosis

Tuberculosis (TB) is an airborne disease that has been a public health scourge for centuries. Since it is airborne, the entire community is potentially vulnerable. There is no effective vaccine for the infection and it cannot be avoided by behavior modification like the sexually transmitted diseases or hepatitis A, B, & C. The community is dependent upon the public health effort to identify and treat the individuals with tuberculosis so as to reduce the risk to the overall community. Because TB is not an infection that progresses with frightening speed like meningitis, it can hide in a population for years, only to be identified later after many additional individuals have become infected. The rate of TB rose in the late 1980's and early 1990's because of the many HIV infections which decimated the immune system, allowing the TB bacteria to grow and cause serious disease in those who were co-infected.

The rate of tuberculosis in Stanislaus County (Figure 25) continues to be below the state and national average although there is still much work to be done in order to reach the aggressive Healthy People 2010 (HP2010) goal. The downward trend can be attributed to many factors such as an aggressive prevention program and a coordinated community effort to identify and treat tuberculosis at the earliest stage possible. This includes local implementation of the internationally successful directly observed therapy model which requires health care personnel to personally administer the TB antibiotic to each patient daily.

Although the rate of TB is declining

Figure 25: Tuberculosis Rate, Stanislaus County and California

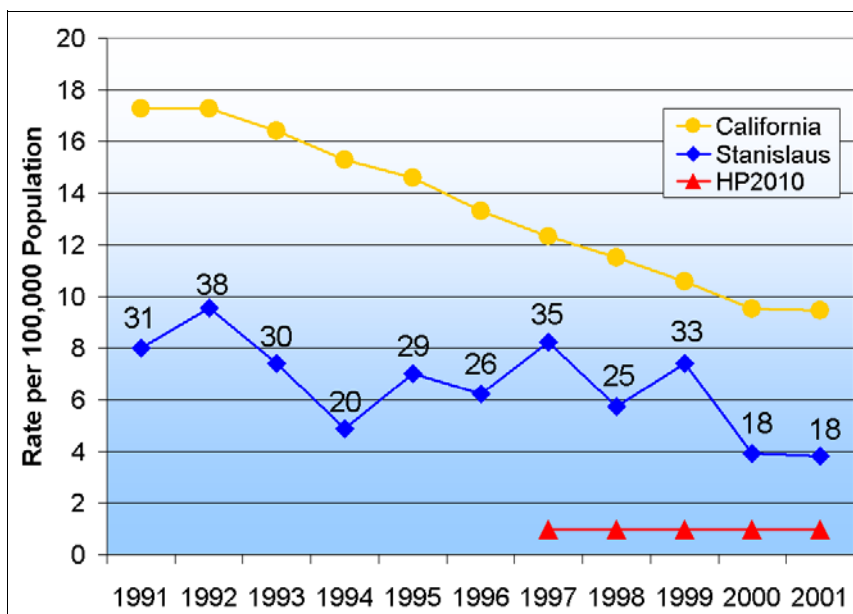
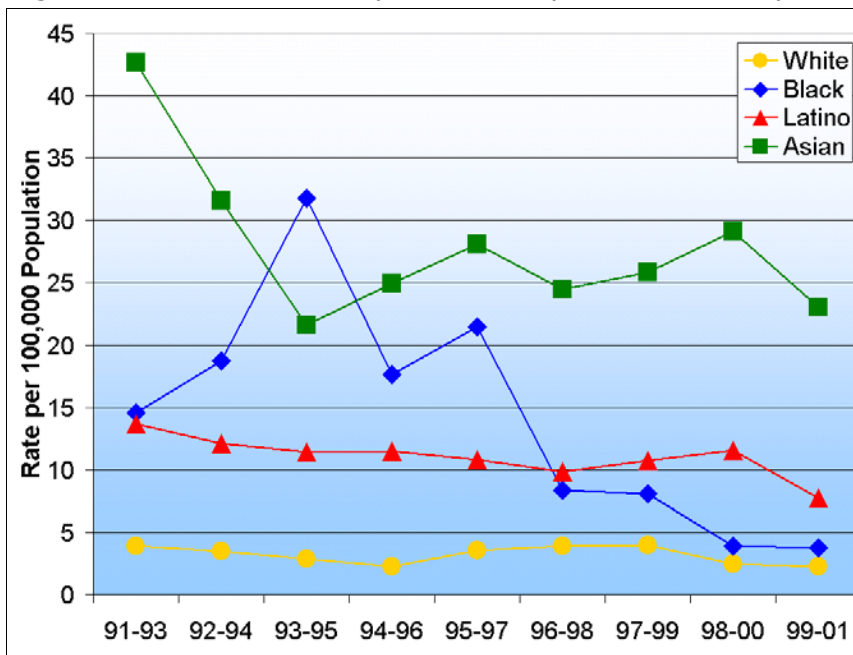


Figure 26: Tuberculosis Rate by Race/Ethnicity, Stanislaus County



Source: Stanislaus County, HSA, CD Program, AVSS (10) & CA, DHS, TB Control Branch (9).

Communicable Diseases Tuberculosis

in Stanislaus County, the infection remains epidemic in developing countries around the world, killing nearly three million people each year. Many immigrants from these countries have latent (inactive) TB infection because they have been exposed to the bacteria so often in their country of origin. Figure 26 shows a high rate of TB among the Asian population and Figure 28 shows that most of the cases have been among the unemployed. Many of these cases of TB are among those that have immigrated to the United States. This underscores the need to maintain strong bridges to these communities and break down barriers that hinder their access to care.

Stanislaus County did not have any reported cases of active tuberculosis disease among children less than 15 years of age in 2000 or 2001 (Figure 27). This can be attributed to the coordination of efforts among all of those who provide health care (CHDP, Migrant Education, school-based clinics) to children, particularly the poor and underserved children.

Figure 27: Tuberculosis Cases by Age Group, Stanislaus County

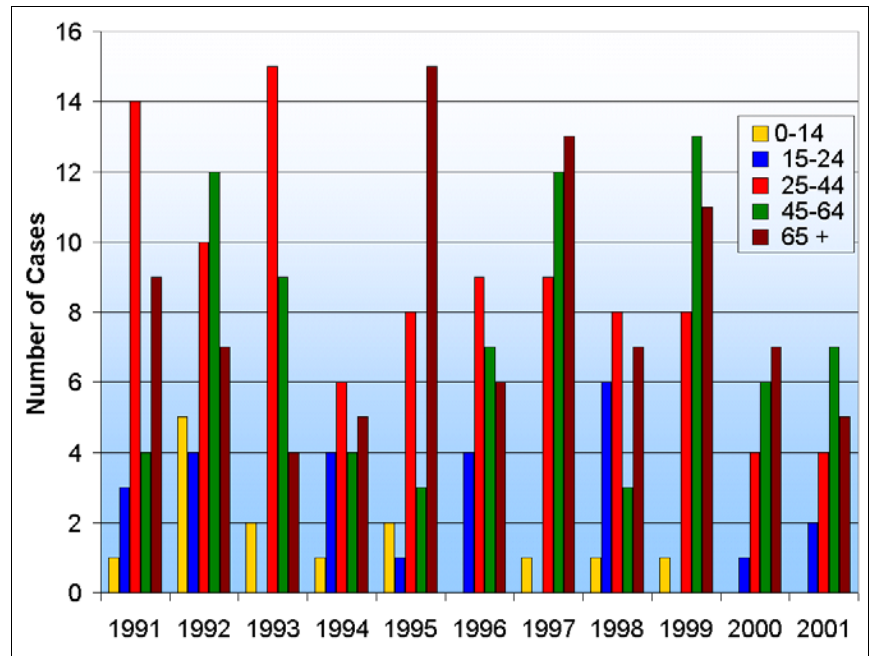
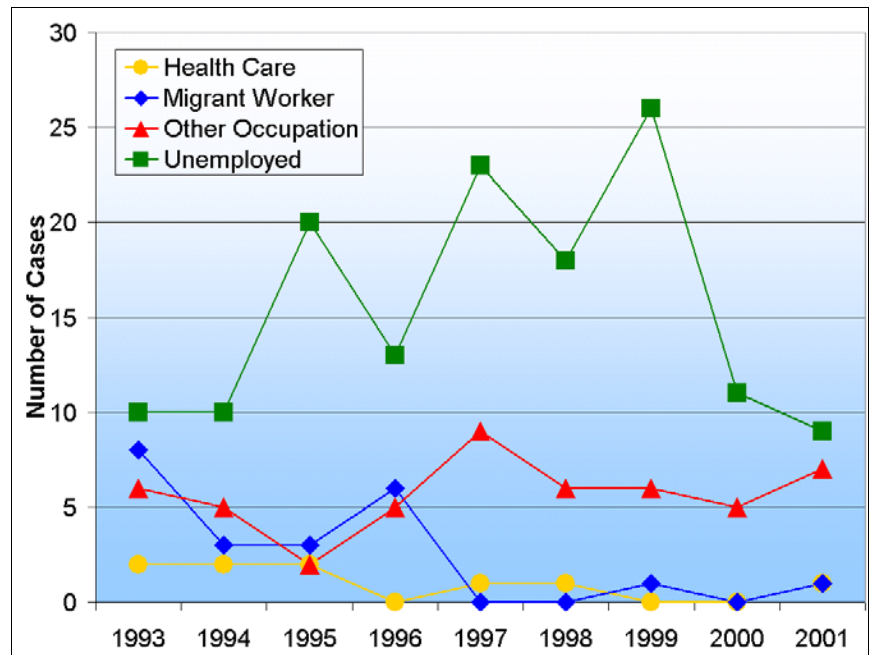


Figure 28: Tuberculosis Cases by Occupation, Stanislaus County



Source: Stanislaus County, HSA, CD Program, AVSS (10) & CA, DHS, TB Control Branch (9).

Mortality

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Mortality Leading Causes

Over the last century, the developed world has made major strides forward in the fight against disease and illness. The life expectancy has risen substantially and the causes of death have drastically changed. At the beginning of 21st century, infectious diseases of various kinds were the leading causes of death. Now at the beginning of the new century, it is obvious that the major causes of death are chronic conditions. After overcoming many infectious diseases, we are now able to live long enough to observe other disease processes.

Coronary heart disease and stroke (they are similar in that they are both diseases of the cardiovascular system) were the cause of 33% of the deaths to Californians in 2000. All forms of cancer accounted for almost another 25%.

Societal issues also play an important role in the mortality pattern. Suicide and homicide are two of the top ten leading causes of death, which is a disturbing statement about the world in which we live. Additionally, the fact that we depend heavily on our motor vehicles in our modern world is directly responsible for unintentional deaths being on the top ten list as well.

Figures 1 and 2, show that Stanislaus County has a larger proportion of all deaths due to coronary heart disease.

Coronary heart disease and cancer are the two leading causes of death among all racial/ethnic groups in Stanislaus County (Figure 3). Latinos have the highest percentage of deaths due to unintentional causes and motor vehicle injuries when compared to the other ethnic groups. Death due to unintentional causes ranked third among Latinos and fourth for the other groups. Asians had the highest percent of deaths due to stroke.

* COPD is Chronic Obstructive Pulmonary Disease.
 ** CHD is Coronary Heart Disease.
 Source: CA, DHS, CHS, Death Stat Master File (3).

Figure 1: Percent of Deaths for the 10 Leading Causes of Death in California by Gender, California, 2000

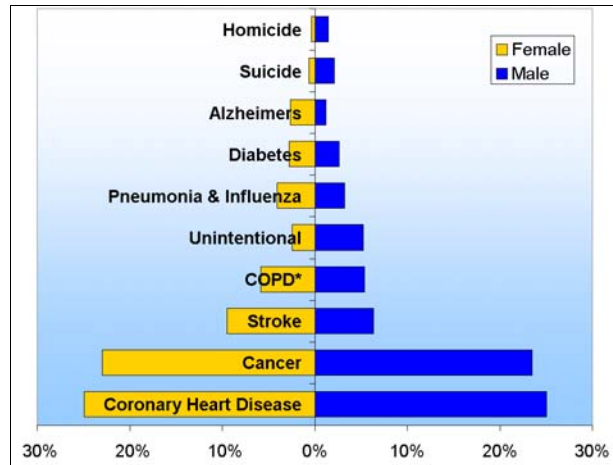


Figure 2: Percent of Deaths for the 10 Leading Causes of Death in California by Gender, Stanislaus County, 2000

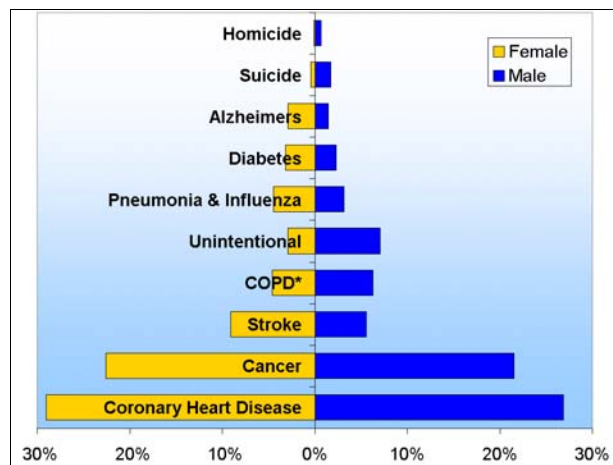
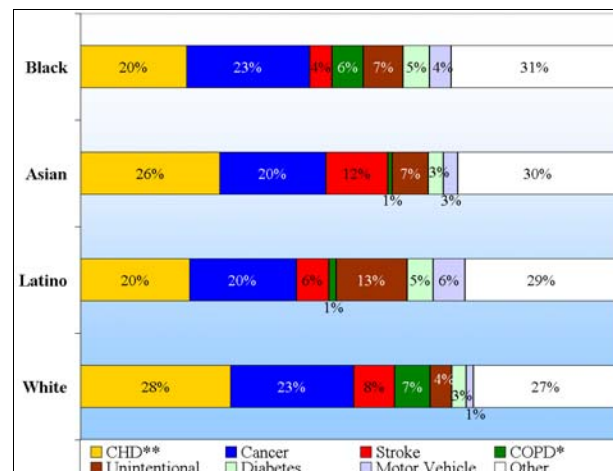


Figure 3: Percent of Deaths for the Leading Causes of Death by Race/Ethnicity, Stanislaus County, 1999-2000



Mortality All Causes

The overall number of deaths to Stanislaus County residents increased from 2,838 in 1991 to 3,401 in 2000, but this increase paralleled the overall increase in population. The age-adjusted death rate* for **all causes** in Stanislaus County dropped 6% during that same time period while California's rate dropped almost 14% (Figure 4). It is obvious that there is a real trend occurring in California, but it still remains to be seen if the decline in Stanislaus County will be maintained. Clearly, residents of Stanislaus County have a slight increased risk of dying (independent of age) compared to California as a whole.

The age-adjusted rates among the racial/ethnic groups in Stanislaus County have slightly decreased over the past decade. Asians and Latinos have had the lowest rates, followed by Whites and then African Americans (Figure 5).

Figure 6 shows that this discrepancy between race/ethnicity is constant throughout all of the age groups. African Americans have a higher death rate in each age group (visible differences in this graph in the 45+ age groups) except for the very oldest group. In addition, the Asian and Latino groups have a lower death rate than the White population at each of the ages as well. The fact that these two groups have a lower death rate is due to the lower rates they have for both cardiovascular disease as well as stroke, both of which are major causes of death.

The age-specific death rate (Figure 6) shows the tremendous trend of rising death rate as age increases. The death rate among infants (below 1 year of age) is the highest at any point in life until one reaches the 55-64 year age group. This also illustrates the large difference in infant mortality rates between the races.

* See Appendix B for an explanation of Age-Adjusting.
Source: CA, DHS, CHS, Death Stat Master File (3).

Figure 4: Age-Adjusted* Overall Death Rate, Stanislaus County and California

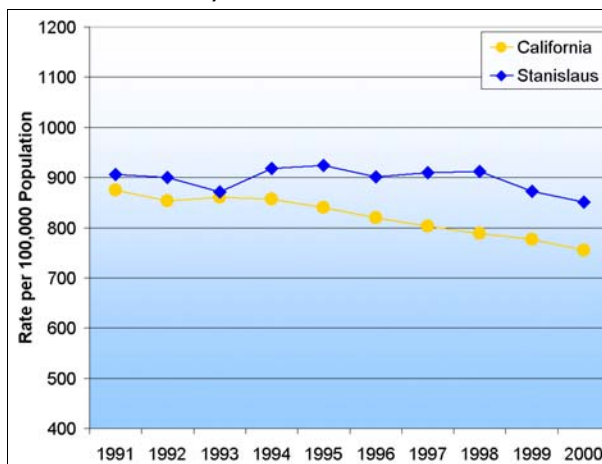


Figure 5: Age-Adjusted* Overall Death Rate by Race/Ethnicity, Stanislaus County

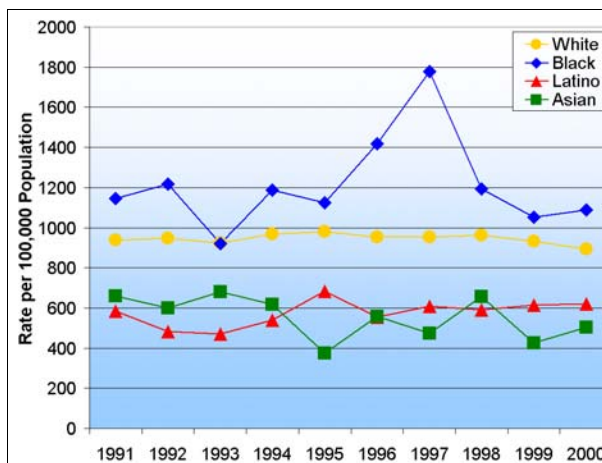
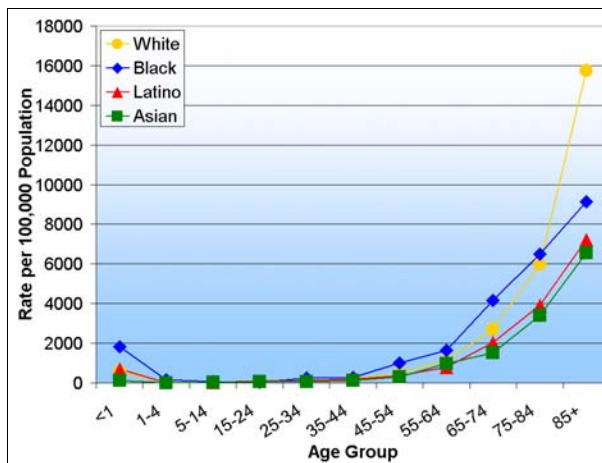


Figure 6: Age and Race Specific Overall Death Rate, Stanislaus County, 1998-2000



Mortality Coronary Heart Disease (CHD)

Deaths due to **heart disease** continue to be the leading cause of death in the state (Figure 1). The age-adjusted death rate for CHD in Stanislaus County remains higher than the state (Figure 7). Although California and Stanislaus County both have higher rates than the national objective (HP2010), the state rate shows a steady decline approaching the national target.

Risk factors for cardiovascular disease have been well documented and include smoking, physical inactivity, poor diet, high cholesterol, high blood pressure, obesity and overweight, diabetes, increased age, and heredity. Most of these major risk factors can be modified, treated or controlled by changes in lifestyle or taking medication. These lifestyle changes are not easy, but will result in improvements not only in heart disease, but other lethal diseases as well.

In Stanislaus County, the age-adjusted death rate for heart disease is highest among African Americans (Figure 8), followed by Whites, which has stayed steady over the years. There appears to be a slight trend of increasing coronary heart disease among Latinos. Asians have the lowest rates among all racial/ethnic groups, showing a downward trend, interrupted by an increase in 1998.

Since there was a change in the classification of diseases used to code cause of death between 1998 and 1999, rates between these years should not be compared to one another.

Figure 7: Age-Adjusted** Death Rate Due to Coronary Heart Disease, Stanislaus County and California

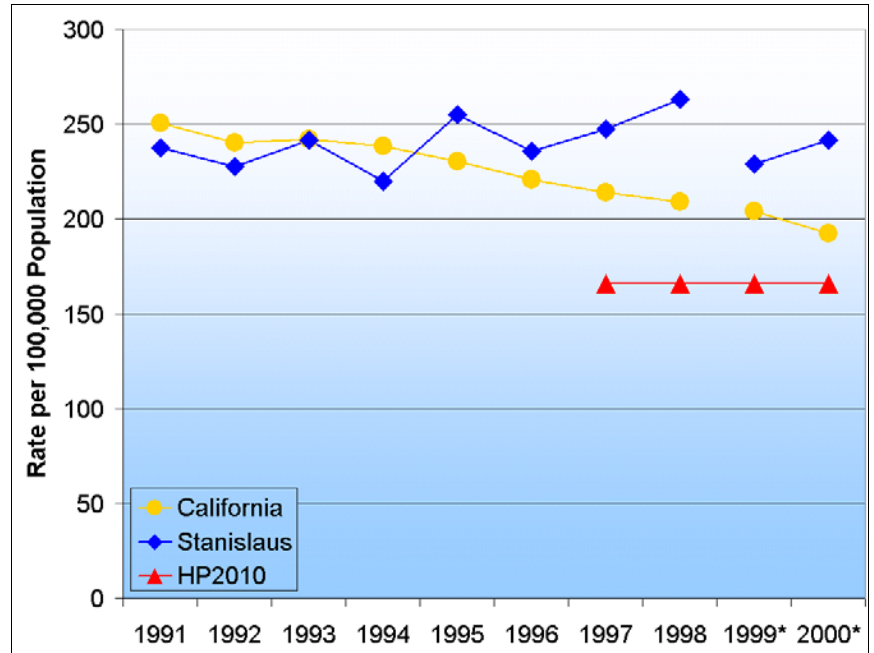
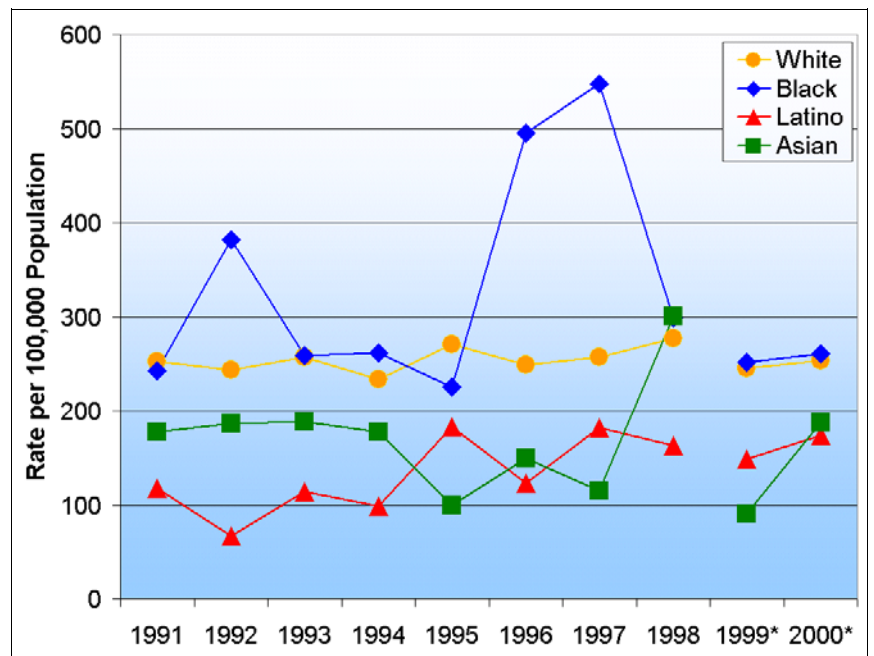


Figure 8: Age-Adjusted** Death Rate Due to Coronary Heart Disease by Race/Ethnicity, Stanislaus County



* Changed from using ICD-9 to ICD-10 codes, see Appendix C for an explanation of ICD codes.

** See Appendix B for an explanation of Age-Adjusting.

Source: CA, DHS, CHS, Death Stat Master File (3).

Mortality Stroke

Stroke (cerebrovascular disease) has remained the third leading cause of death in the state over the past decade (Figure 1). The age-adjusted rates for Stanislaus County and the state are nearly the same; however, both are much higher than the national objective. The overall state rate appears to be on a downward trajectory.

Risk factors for stroke are similar to those for cardiovascular disease, which means that lifestyle changes are needed to reduce the risk of stroke.

African Americans had the highest age-adjusted death rate due to stroke in Stanislaus County while Whites had the second highest rate. Latinos and Asians have the lowest rate of deaths due to stroke in Stanislaus County. The lower rates of death in these racial/ethnic groups both for stroke and cardiovascular disease are probably attributed to a healthier diet than the other races.

Figure 9: Age-Adjusted** Death Rate Due to Stroke, Stanislaus County and California

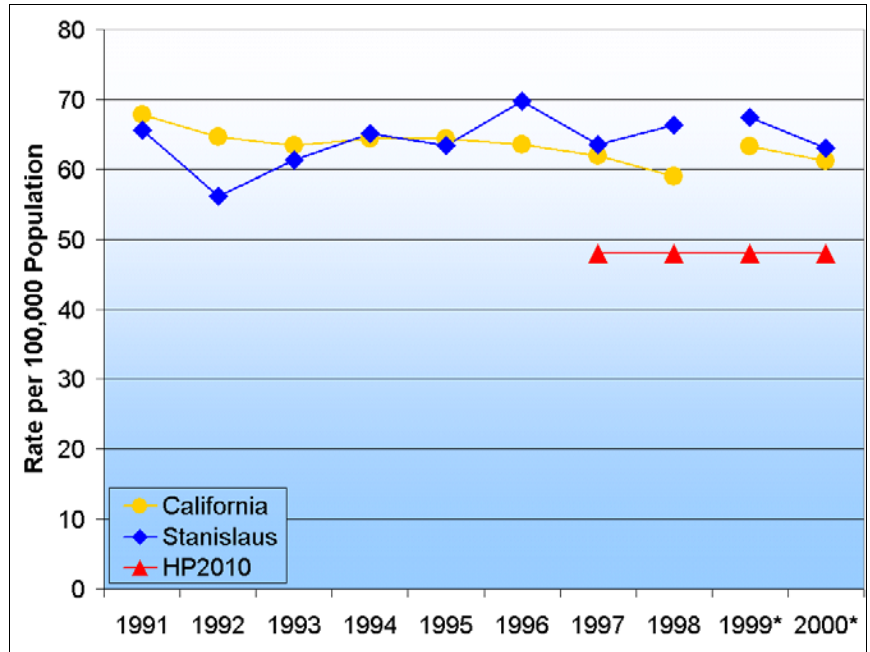
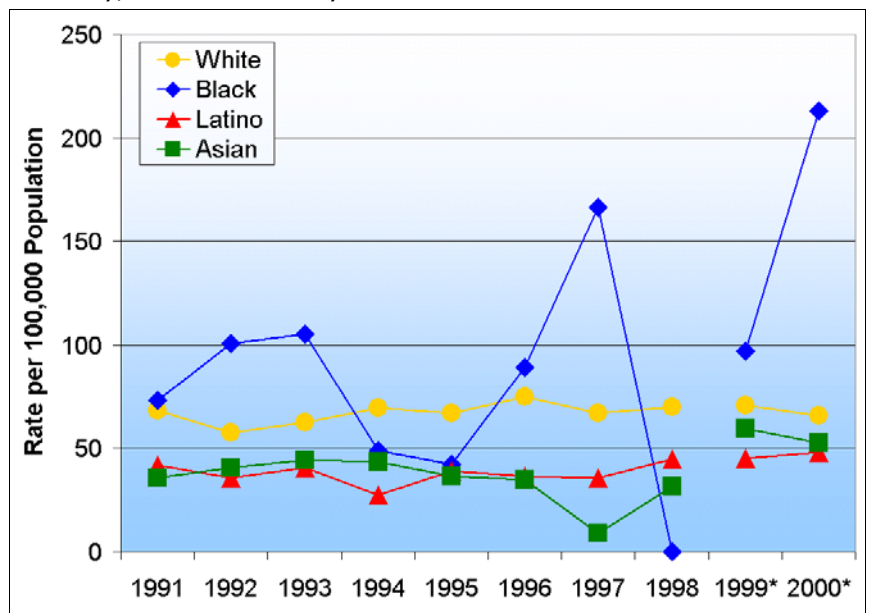


Figure 10: Age-Adjusted** Death Rate Due to Stroke by Race/Ethnicity, Stanislaus County



* Changed from using ICD-9 to ICD-10 codes, see Appendix C for an explanation of ICD codes.

** See Appendix B for an explanation of Age-Adjusting.

Source: CA, DHS, CHS, Death Stat Master File (3).

Mortality Diabetes

Death due to **diabetes** was ranked seventh among California’s ten leading causes of death in 2000 (Figure 1). The age-adjusted death rates** for diabetes in Stanislaus County and California are lower than the national objective (HP2010); however, there has been a steady increase in the death rate for the county and state. The age-adjusted rates in Stanislaus County for diabetes increased from 14 deaths per 100,000 population in 1991 to 24 in 2000 (Figure 11). During the same period the age-adjusted rates for the state increased nearly 50%. The sharp increase in deaths due to diabetes between 1993 and 1994 was due to an expanded definition that changed the cause of death coding practices.

Figure 11: Age-Adjusted** Death Rate Due to Diabetes, Stanislaus County and California

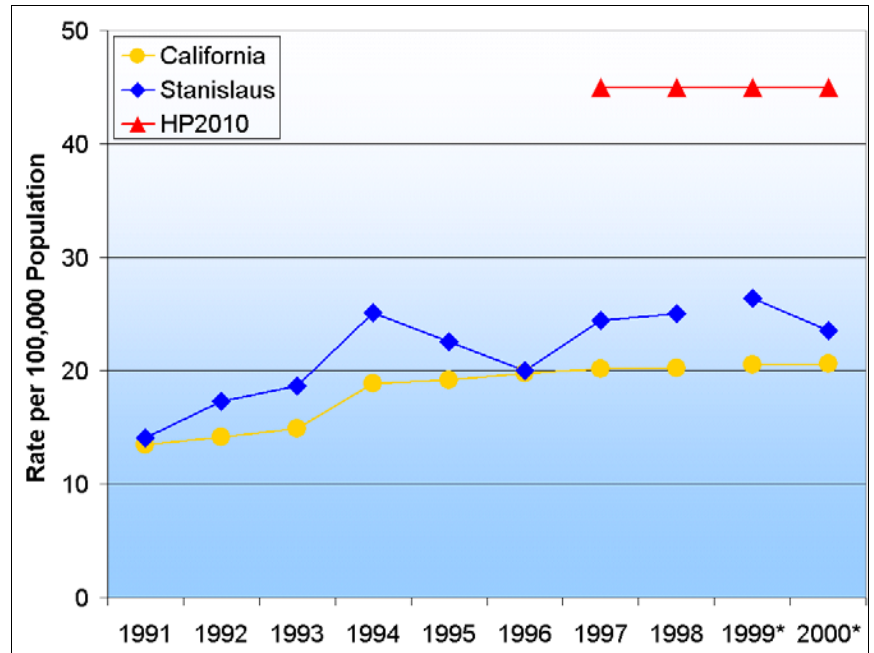
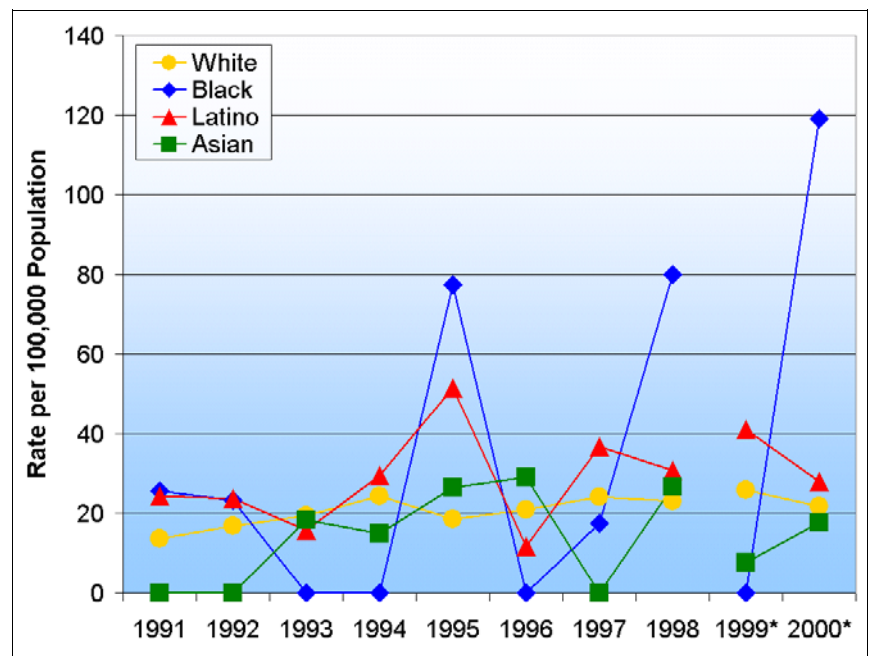


Figure 12: Age-Adjusted** Death Rate Due to Diabetes by Race/Ethnicity, Stanislaus County

The racial/ethnic death rates due to diabetes in Stanislaus County are difficult to interpret because of small numbers (Figure 12). Nonetheless, it appears that African Americans and Latinos tend to have high rates of death due to diabetes. The death rate due to diabetes in Whites has remained relatively stable since 1991. It is widely known that there is a substantial increase in the number of Latinos diagnosed with diabetes. If access to health care and attention to the risk factors is not improved, the rate of deaths among the Latino population is likely to gradually rise.



* Changed from using ICD-9 to ICD-10 codes, see Appendix C for an explanation of ICD codes.

** See Appendix B for an explanation of Age-Adjusting.

Source: CA, DHS, CHS, Death Stat Master File (3).

Mortality All Cancer

Deaths due to all types of **cancers** continue to be the second largest cause of death (Figure 1) in the state. There were 619 deaths due to cancer in 1991 and 750 in 2000, making up almost 25% of all deaths. The age-adjusted death rate for all cancers in Stanislaus County remains close to the state rate (Figure 13). California and Stanislaus County have rates that are in excess of the national objective (HP2010); however, both rates have declined over the decade and are making progress toward the national target.

The causes of cancer are many and varied depending on the type of cancer. The major factors that impact numerous types of cancers (as well as other disease processes) are tobacco use and a high fat diet.

The highest rates of cancer in Stanislaus County are seen among African Americans, followed by Whites (Figure 14). The death rate due to all cancers among Whites has stayed relatively constant (around 210 per 100,000) over the past decade. Once again, the Latinos and Asians have the lowest rates of death due to all cancers.

Figure 13: Age-Adjusted** Death Rate Due to All Cancer, Stanislaus County and California

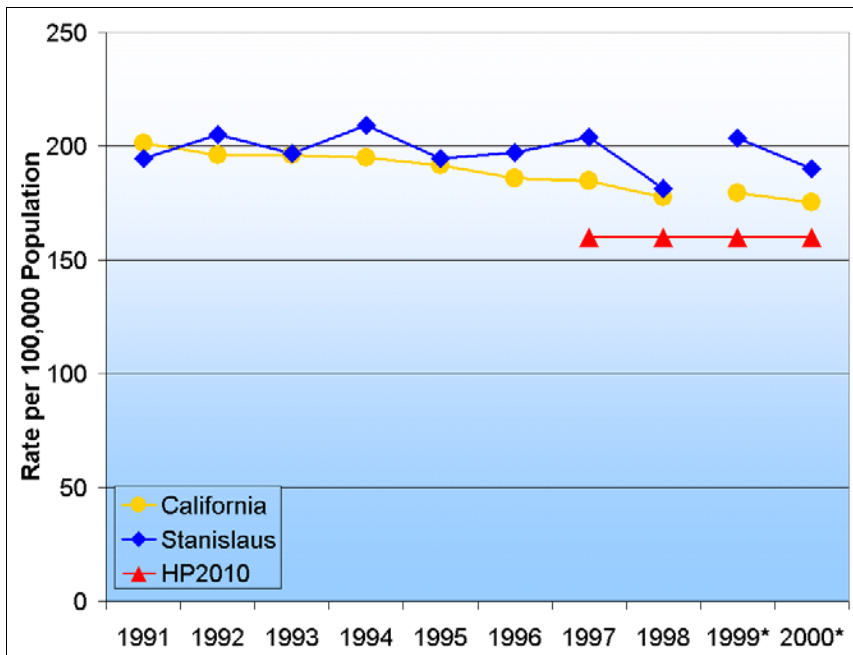
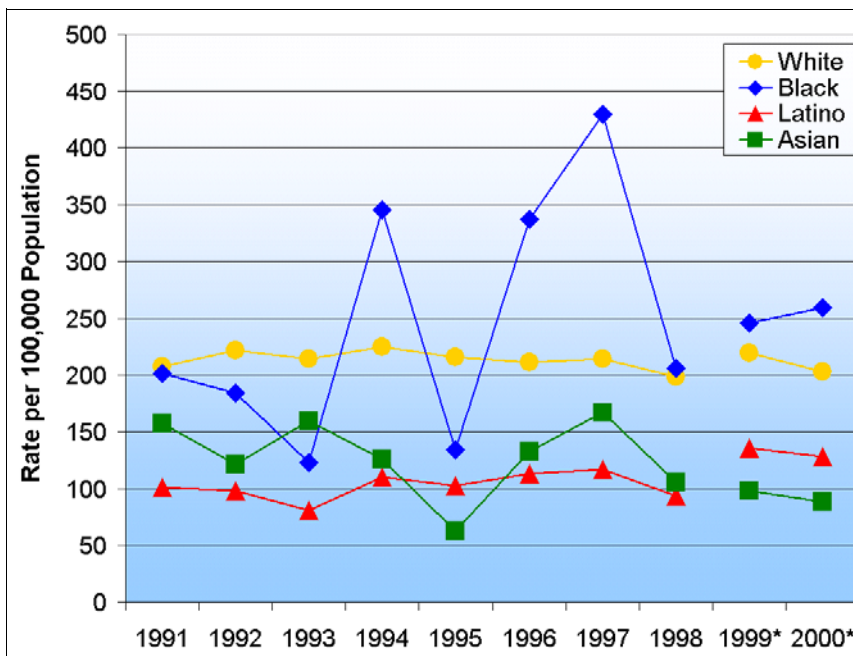


Figure 14: Age-Adjusted** Death Rate Due to All Cancer by Race/Ethnicity, Stanislaus County



* Changed from using ICD-9 to ICD-10 codes, see Appendix C for an explanation of ICD codes.

** See Appendix B for an explanation of Age-Adjusting.

Source: CA, DHS, CHS, Death Stat Master File (3).

Mortality Lung Cancer

Lung cancer is the leading cause of cancer deaths among both men and women in the state. The rate for Stanislaus County has been higher than the state and national objective (HP2010) for the past decade (Figure 15). California's rate has been declining and has reached the national objective.

The main risk factor for cancer in general and lung cancer in particular is the smoking of tobacco. Smoking will not cause cancer immediately, but it can begin the gradual changes at the cellular level that eventually result in serious forms of cancer. This means that the habits and trends we see in our youth of today are determining the lung cancer rates of tomorrow.

Figure 15: Age-Adjusted** Death Rate Due to Lung Cancer, Stanislaus County and California

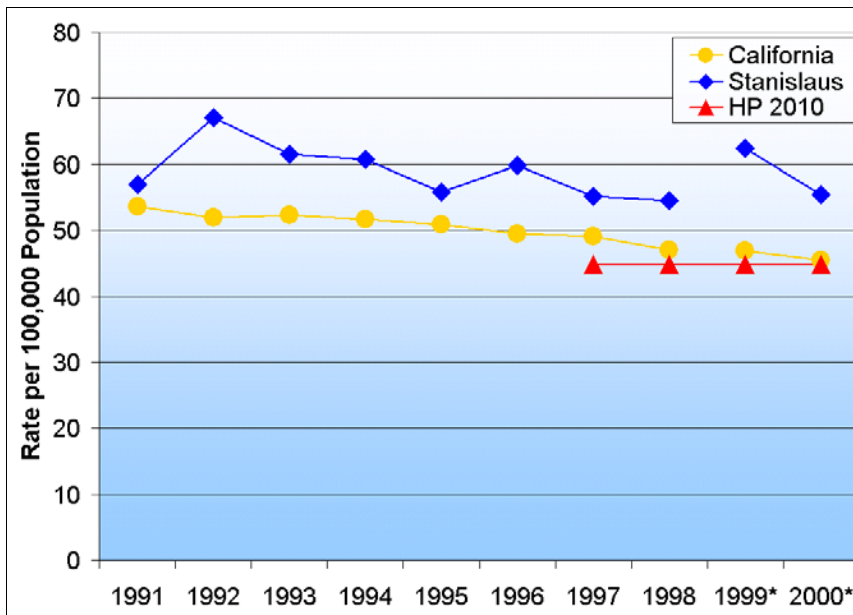
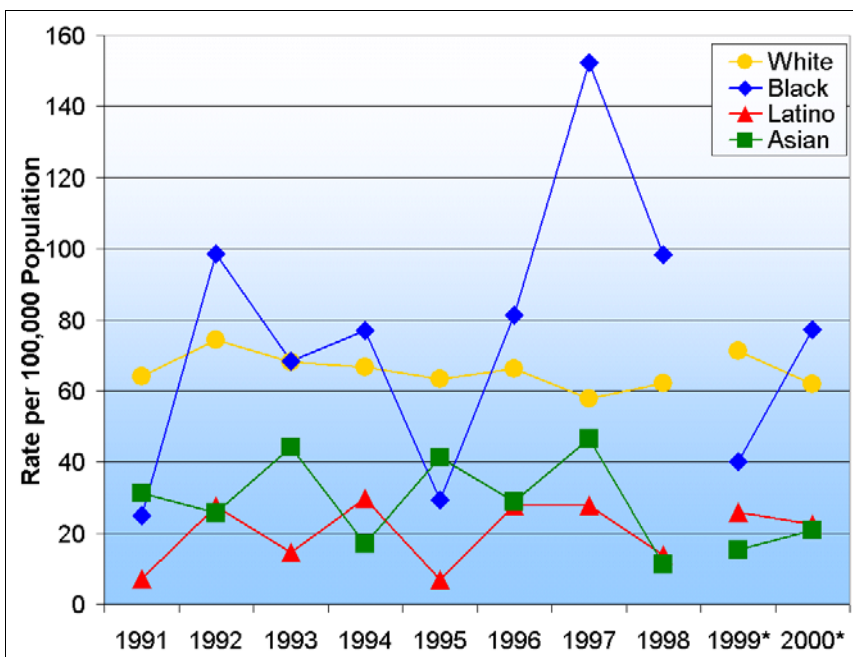


Figure 16: Age-Adjusted** Death Rate Due to Lung Cancer by Race/Ethnicity, Stanislaus County



African Americans in Stanislaus County have had a higher death rate due to lung cancer when compared to the other racial/ethnic groups although it is relatively close to the rate among the White population, which has been steady at 60 deaths per 100,000 (Figure 16). In comparison, Latinos and Asians have had somewhat lower rates.

* Changed from using ICD-9 to ICD-10 codes, see Appendix C for an explanation of ICD codes.
 ** See Appendix B for an explanation of Age-Adjusting.

Source: CA, DHS, CHS, Death Stat Master File (3).

Mortality Breast Cancer

Breast cancer is the second leading cause of cancer death among women in California (lung cancer is the first). The age-adjusted rates** for Stanislaus County and the state are approaching the national objective (HP2010) of 22.3 per 100,000 (Figure 17).

The decline in breast cancer death rates can be attributed to improved screening, diagnostic procedures, and treatment. The earlier breast cancer is found, the better the chances are for successful treatment. This underscores the need for women to undergo periodic mammograms in addition to performing regular, self administered breast exams.

Figure 17: Age-Adjusted** Death Rate Due to Breast Cancer, Stanislaus County and California

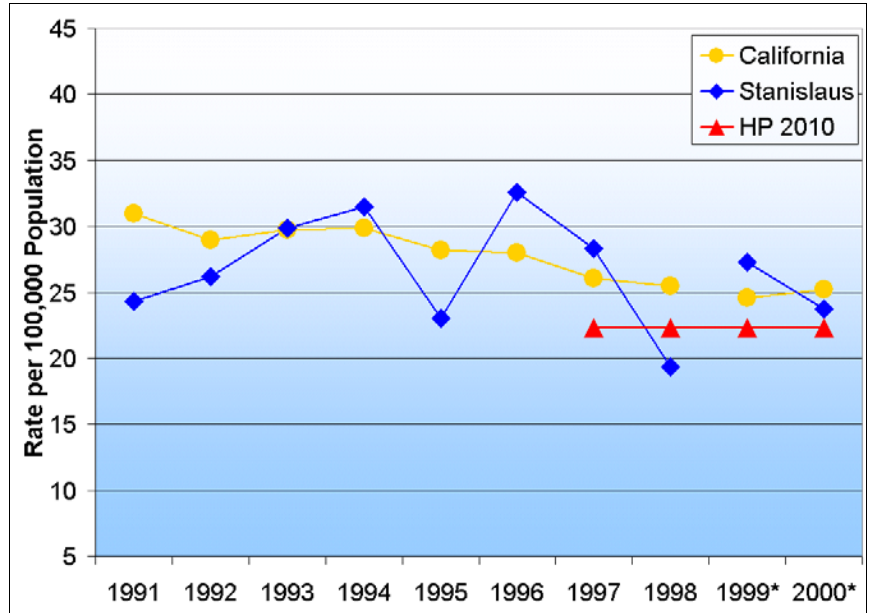
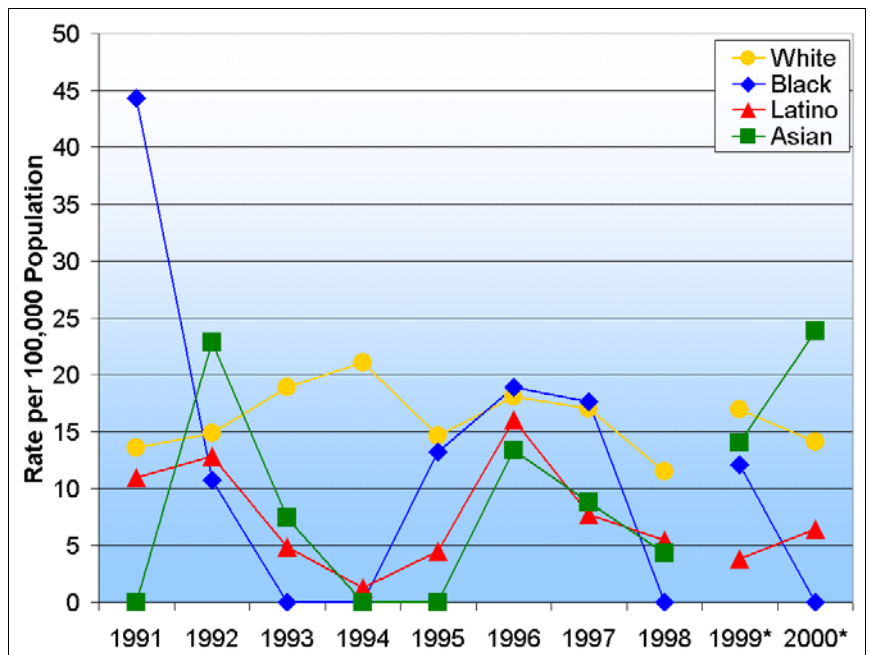


Figure 18: Age-Adjusted** Death Rate Due to Breast Cancer by Race/Ethnicity, Stanislaus County

The death rate due to breast cancer in White women in Stanislaus County is generally the highest among all the racial/ethnic groups. Latino women have had the lowest rates in the county (Figure 18).



* Changed from using ICD-9 to ICD-10 codes, see Appendix C for an explanation of ICD codes.

** See Appendix B for an explanation of Age-Adjusting.

Source: CA, DHS, CHS, Death Stat Master File (3).

Mortality Prostate Cancer

Deaths due to **prostate cancer** are the second leading cause of cancer deaths among men in the state (lung cancer is the leading cause). Stanislaus County and California have met and surpassed the national objective (HP2010) for prostate cancer. The age-adjusted rates for deaths due to prostate cancer decreased appreciably in 1997 and have stayed low for the past 4 years (Figure 19).

Just like breast cancer in women, the key to driving the mortality rate from prostate cancer down is to increase the proportion of males receiving the appropriate screening tests at the recommended time intervals.

Figure 19: Age-Adjusted** Death Rate Due to Prostate Cancer, Stanislaus County and California

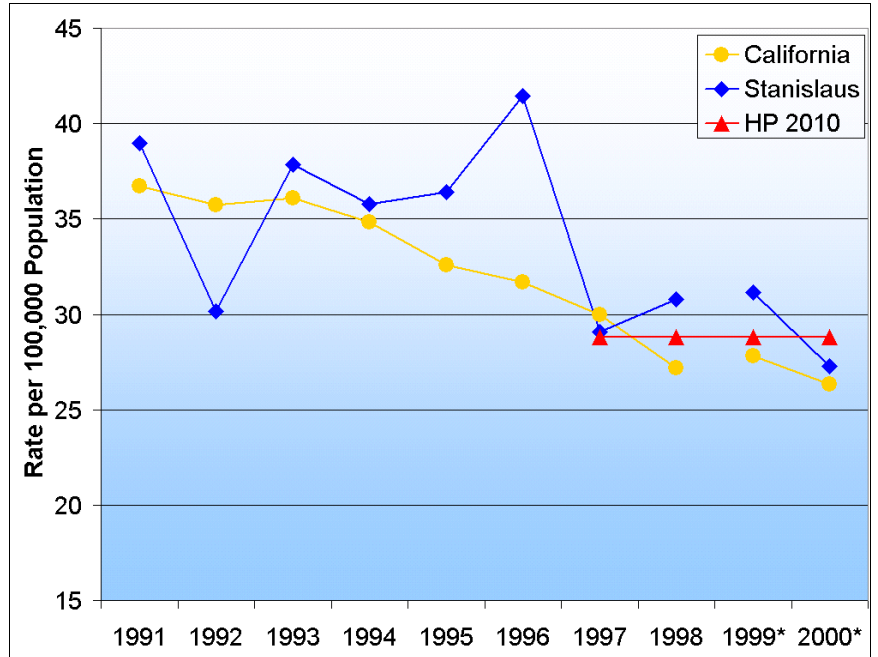
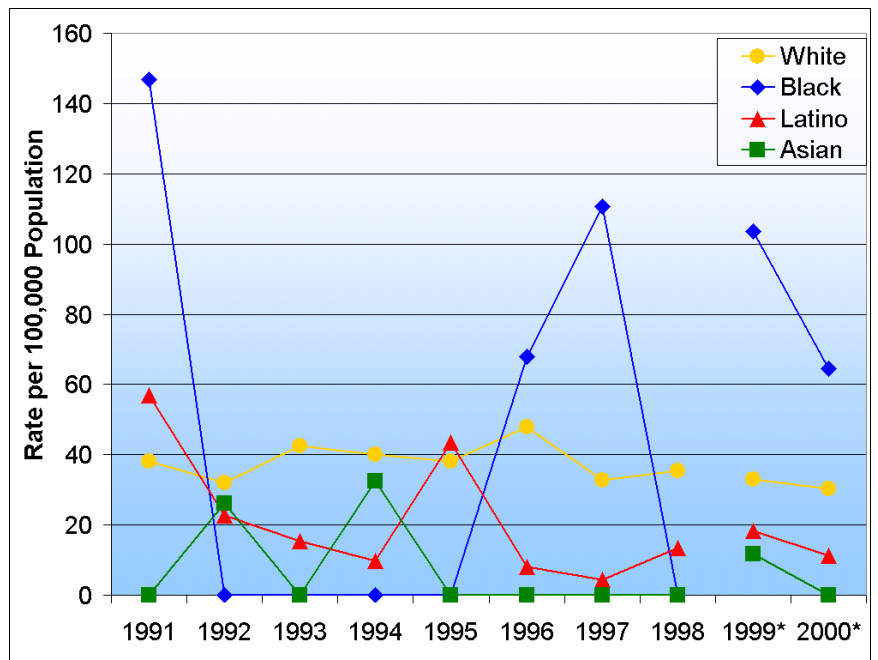


Figure 20: Age-Adjusted** Death Rate Due to Prostate Cancer by Race/Ethnicity, Stanislaus County

For unknown reasons, prostate cancer is more common among African American males than among White males. The rate of prostate cancer among African Americans appears erratic because of small numbers, but it can be seen that they have an increased risk of this form of cancer as do the White males when compared to Asian and Latinos (Figure 20).



* Changed from using ICD-9 to ICD-10 codes, see Appendix C for an explanation of ICD codes.

** See Appendix B for an explanation of Age-Adjusting.

Source: CA, DHS, CHS, Death Stat Master File (3).

Mortality Unintentional Causes

Unintentional deaths are at times called accidental. Public Health, in general, tends to avoid the term "accident" as it implies that there are no prevention strategies capable of making improvements. Unintentional deaths is a category that consists of deaths from falls, fires, drowning, electrocution, motor vehicle collisions (the largest subset), and some fire arm incidents. This category does not include suicides or most homicides as there is intention to harm in those incidents.

The age-adjusted rate of death due to unintentional causes in Stanislaus County and California is higher than the national objective (HP2010). The rate for Stanislaus County is significantly higher than the state and nearly double the national goal (Figure 21). There has been a decrease in deaths due to unintentional causes in Stanislaus County since 1997. The rate for the state has shown a steady decline over the past decade.

The rate of deaths due to unintentional causes does not differ by race/ethnicity (Figure 22) as much as some of the other causes of death, but Asians generally have a lower rate than the other groups.

Figure 21: Age-Adjusted** Death Rate Due to Unintentional Causes, Stanislaus County and California

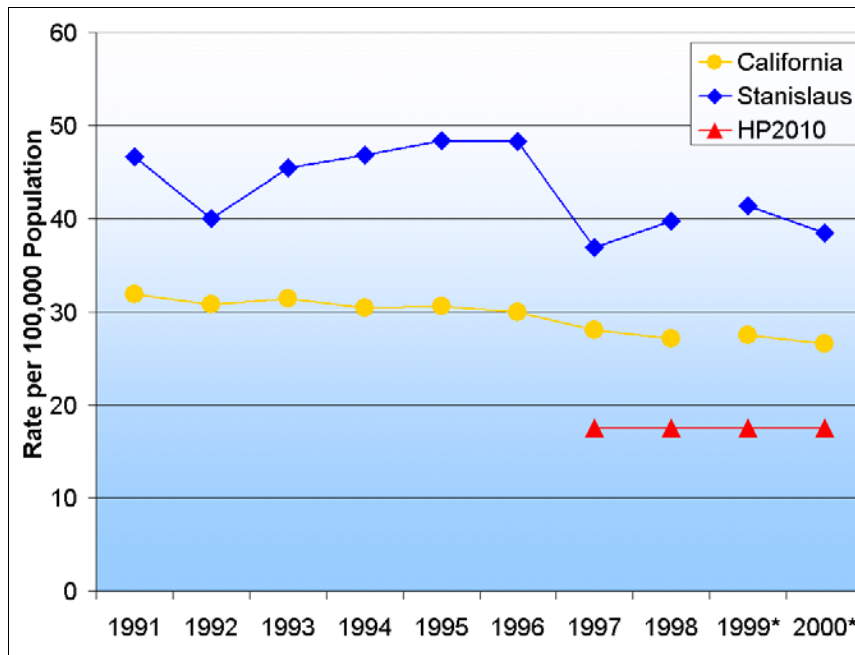
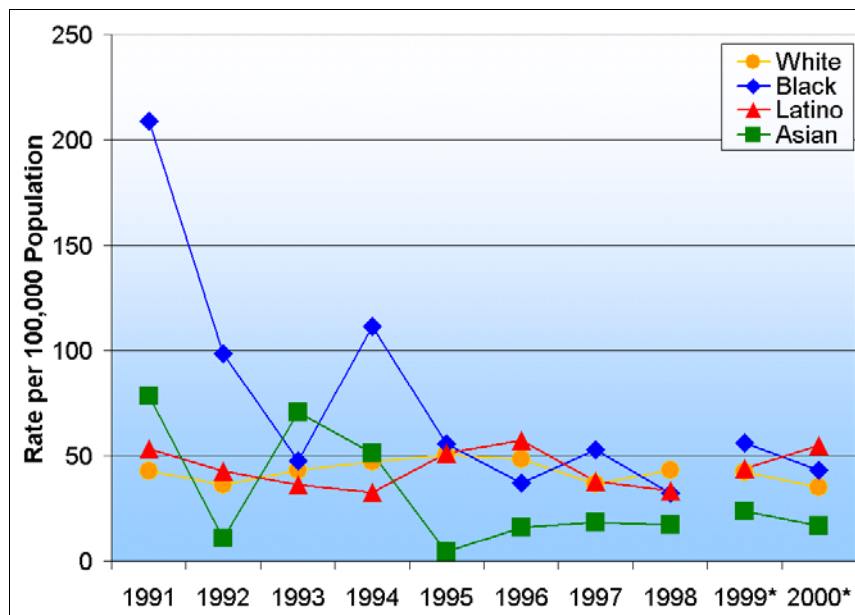


Figure 22: Age-Adjusted** Death Rate Due to Unintentional Causes by Race/Ethnicity, Stanislaus County



* Changed from using ICD-9 to ICD-10 codes, see Appendix C for an explanation of ICD codes.

** See Appendix B for an explanation of Age-Adjusting.

Source: CA, DHS, CHS, Death Stat Master File (3).

Health Behavior and Risk Factors

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Health Behavior and Risk Factors

Physical Activity & Nutrition

The California Healthy Kids Survey (CHKS) is funded by the California Department of Education and is administered in schools that receive Tobacco Youth Prevention Education grants every two years. It is designed to promote the development of comprehensive school health programs and to send a positive message to students, schools, and communities about the importance of healthy behaviors. The survey focuses on alcohol, tobacco, other drug use, violence, school safety, physical activity, and nutrition.

Lifetime dietary patterns are established during youth; hence, adolescents should be encouraged to cultivate healthy eating habits. The United States Department of Agriculture's Five-a-Day Campaign encourages everyone to eat at least 5 servings of fruits and vegetables a day. Figure 1 compares some of the dietary choices made by students in grades 7, 9 and 11. As the students' grade levels increase, there is a decrease in fruit and vegetable consumption.

The Center for Disease Control (CDC) has confirmed that people who exercise regularly also make healthy lifestyle and behavioral choices. A healthy body supports a healthy mind. Students who have breakfast and exercise regularly have improved scholastic performance.

In Stanislaus County, the percent of students eating breakfast decreases from 79% in the 5th grade to 51% in the 11th grade (Figure 2). As the grade levels increase, more students make unhealthy nutritional choices. The percentage of students who exercise at least three times a week is consistent amongst the four grades.

Figure 1: Percent Eating These Foods At Least Once a Day, Stanislaus County, 2000-2001

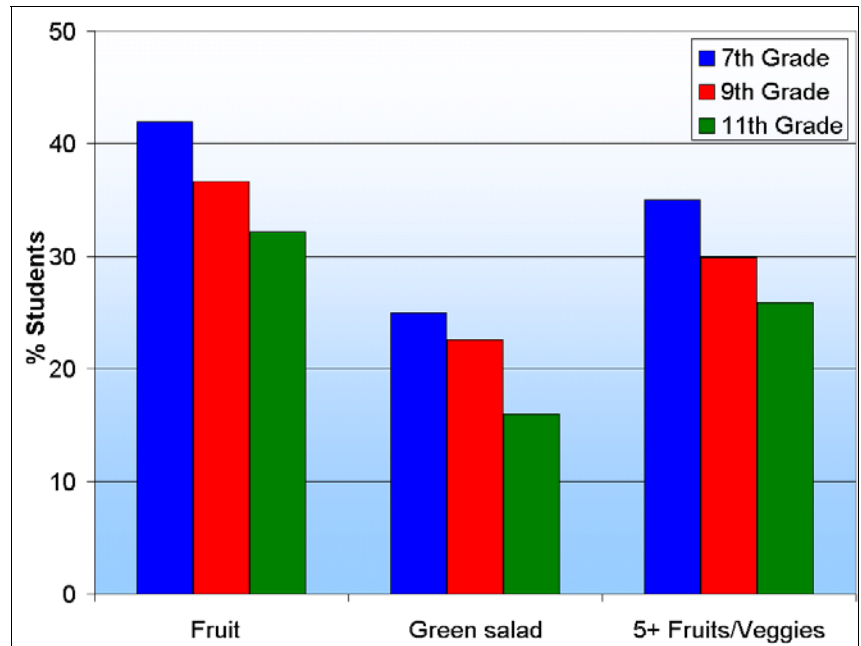
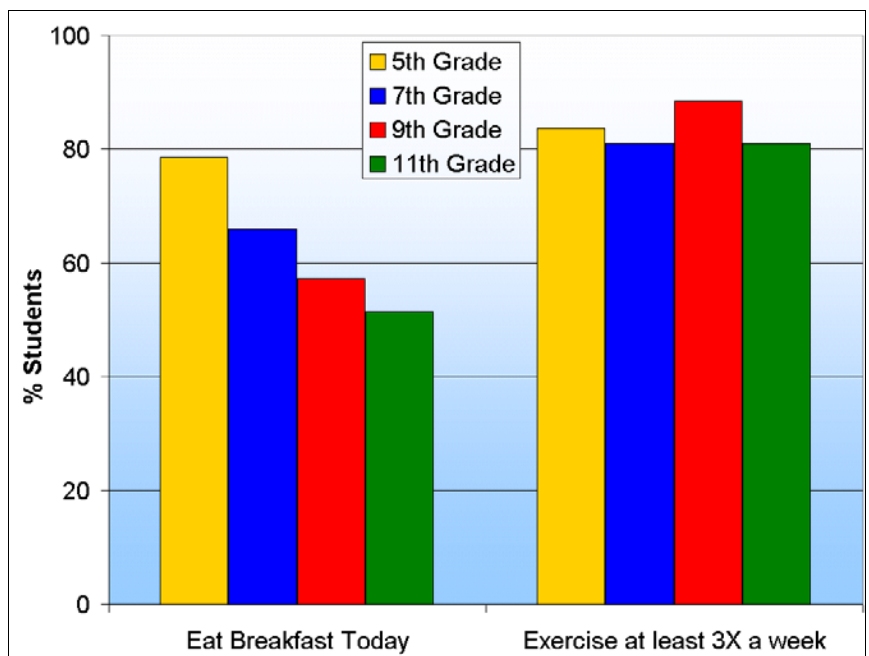


Figure 2: Breakfast Consumption and Weekly Exercise, Stanislaus County, 2000-2001



Source: California Healthy Kids Survey (CHKS) (19)

Health Behavior and Risk Factors Alcohol & Other Drug Use

Alcohol, tobacco, and other drug use leads to adverse physical and mental effects. Surveys show that alcohol is by far the most popular substance among youth. Early initiation to alcohol or other drug (AOD) use has been shown to increase the likelihood of continued use, dependence, and involvement in deviant activities. Tobacco use is a habit that is difficult to break. Cigarettes are the most common form of tobacco used by youth. Smoking has been determined to be the chief preventable cause of death in the United States. Research has repeatedly shown that the majority of people began smoking in adolescence. Hence, interventions to prevent the early onset of smoking among adolescents are critical.

Lifetime rates are especially valuable to assess use among younger students and provide a guide for the timing of preventive efforts. The percent of students who have ever used alcohol, marijuana, and smoked cigarettes is low in 5th grade, but increases rapidly from 5th to 11th grade (Figure 3). There is a certain progression in the use of these substances beginning with the use of substances like alcohol that are perceived to be less harmful, deviant, or illegal.

However, lifetime rates must be treated with caution, as they may be inflated by single, very early experiences involving small amounts. It is vital to compare lifetime rates with measures of frequency and level of use. When looking at students AOD use in the last 30 days, the same pattern occurs as in lifetime use but at a lower percentage. Still, almost 50% of the 11th graders used alcohol in the last month, showing only 15% of the students not currently using alcohol who have used alcohol in their lifetime.

Figure 5 compares the frequency of AOD use among students in 7th grade and high school. High school students report a high percentage of alcohol and other drug use. What constitutes being drunk or high are self-perceptions that students define for themselves in this survey. Binge drinking (multiple drinks consumed in a short period) is the most widely used indicator of heavy drinking. Because adolescents have limited drinking experience and low body weight, those who binge drink are highly vulnerable to intoxication and a variety of acute alcohol-related problems. AOD use before or while attending school indicates a particularly strong affiliation with the drug-using peer culture and a high degree of estrangement from school.

Figure 3: Percent of Students Who Have Ever Used Substances in Their Lifetime, Stanislaus County, 2000-

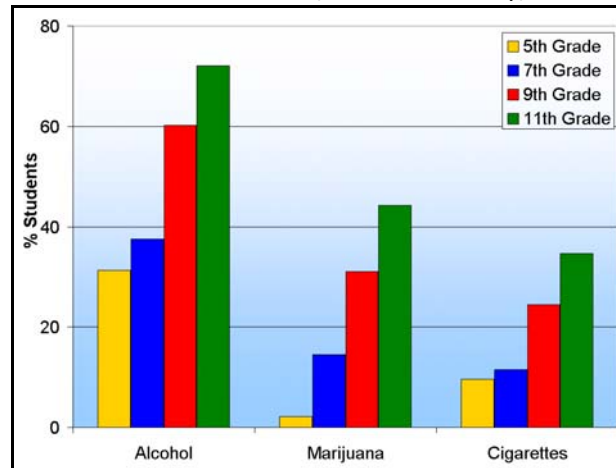


Figure 4: Percent of Students Who Used Substances Within the Past 30 Days, Stanislaus County, 2000-2001

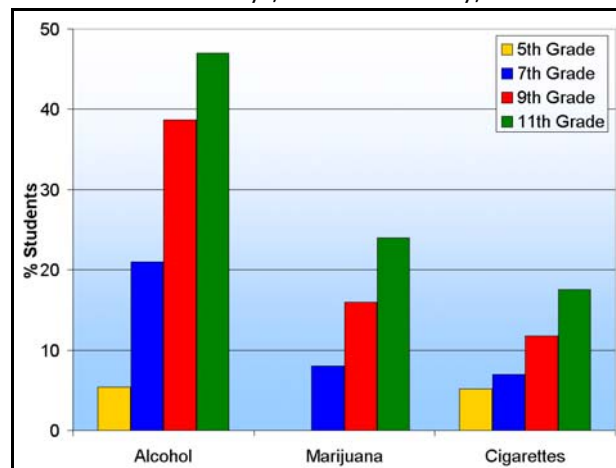
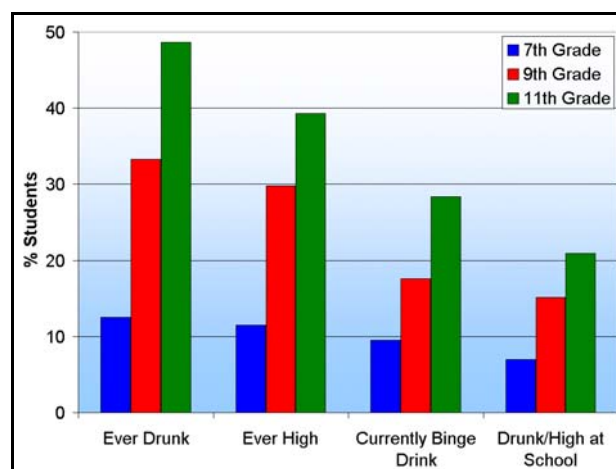


Figure 5: Percent of Students Answering 'Yes' to Various Drug and Alcohol Questions, Stanislaus County, 2000-2001



Source: California Healthy Kids Survey (CHKS) (19)

Health Behavior and Risk Factors

Violence & Safety

One indicator for the impact of violence on the school and community is student reports of their level of worry or concern about their personal safety. Safety is a basic need that must be met in order for students to succeed in school and life. Safe environments enhance creativity, cooperative behavior, affiliated behavior, exploration, and positive risk-taking. It is important to look at both the school and neighborhood environments, for often youth feel safer in school than in traveling back and forth from it. Feelings of insecurity; however, can have multiple sources, not all correctly reflecting the level of danger on a school campus. The feeling of being safe in school and neighborhoods was the lowest among 5th graders and highest among high school students in Stanislaus County schools. The 5th graders felt safer in school than in their neighborhoods.

Violence among youth in schools has compounded the problem of substance abuse. The California Healthy Kids Survey is an important addition to other existing sources of information on violence and crime on school campuses because it is based on students self-reporting. Patterns of school violence are known to vary by age. Bullying behavior is most frequent among upper elementary-age students while other forms of aggressive behavior like fighting, are common among junior high school students.

Harassment is a form of violence that instills a sense of vulnerability, isolation, and fear among its victims. The percent of students in grades 7, 9, and 11 who had been harassed at school is nearly the same (around 26%). Fighting behavior has been a major focus for the schools because of the obvious potential for injury or harm. The CHKS surveyed students on physical fights. The percent of students involved in a fight in Stanislaus County (2000-2001) is highest among 7th graders and lowest among 11th graders.

Source: California Healthy Kids Survey (CHKS) (19)

Figure 6: Student's Perception of Safety at School and in Their Neighborhood, Stanislaus County, 2000-2001

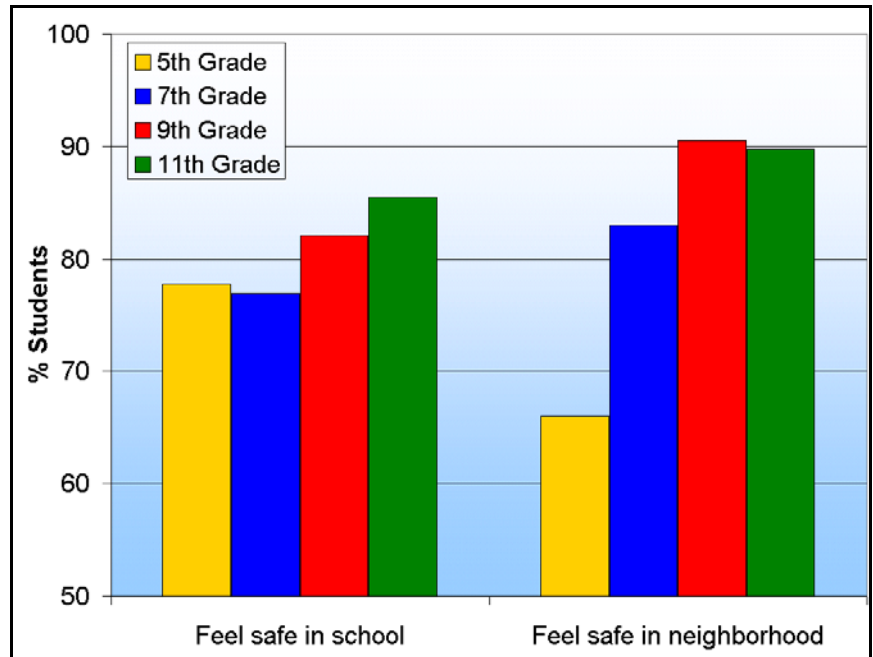
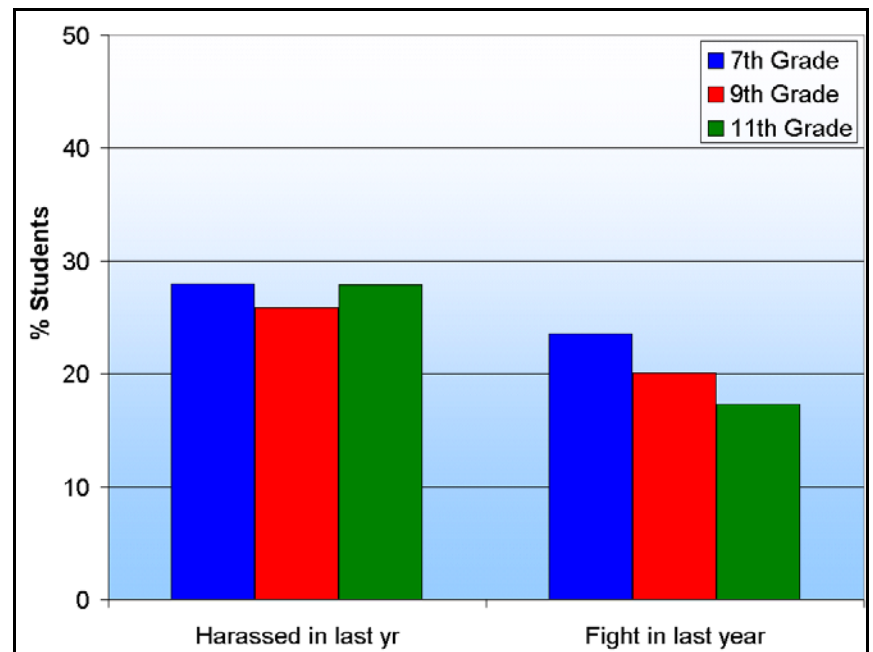


Figure 7: Percent of Students Who Have Been Harassed or In A Fight, Stanislaus County, 2000-2001



Appendices

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B. Methods.....	N1-4
C. Definitions.....	O1-5

Data Sources

1. California, Department of Health Services (DHS), Center for Health Statistics (CHS), Birth Public Use File.
2. California, Department of Finance (DOF), Race/Ethnic Population with Age and Sex Detail, 1970-2040. Sacramento, CA, December 1998.
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8. California, Department of Health Services (DHS), Office of AIDS (OOA).
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27. US Census Bureau. Census 1980 Summary File 1 California, <http://www.census.gov/>.

Methods

Maternal, Child and Adolescent Health

Fertility Rate

This indicator is calculated by taking the total number of births and dividing it by the female population between the ages of 15 and 44 years. This is then multiplied by 1,000 so that the resulting rate is interpreted as the number of births per 1,000 women.

Teen Birth Rate

This health indicator can be calculated to include various ages. The most common ways are to include the 15-17 year olds or the 15-19 year olds. In these two methods, the births to women younger than 15 years are not included as a way to define both the numerator and the denominator. Since there are few births to females less than 15 years of age, the rate would become diluted if we included 12 and 13 year olds in the denominator every year even when there were no births to females that age.

The calculation is simply the number of births to women in the defined age range divided by the total number of women in the defined age range. This fraction is then multiplied by 1,000 to make it greater than 1 and thus something that can be interpreted. The rate is then interpreted as then number of births per 1,000 women of that age range.

Infant Mortality Rate

This indicator is calculated by taking the number of deaths to children less than one year of age in a calendar year and dividing it by the total number of live births in the same year. This is then multiplied by 1,000 and interpreted as the number of infant deaths per 1,000 live births.

Retrospective Kindergarten Immunization Survey

In this study, they review a sample of kindergarteners in geographical regions within California and determine the percentage that were up-to-date when they were two years of age. Thus, the data for 2001 is really looking roughly at the percentage of two year olds that were up-to-date in 1998. This study gives a good glimpse at the real target in the immunization campaign.

Pediatric Nutrition Surveillance System

PedNSS is designed as a program-based surveillance system. It uses already available data collected from health, nutrition, and food assistance programs for infants and children, such as the Women, Infants, and Children Supplemental Food Program (WIC); Early Periodic Screening, Diagnosis and Treatment (EPSDT); and clinics funded by Maternal and Child Health Program (MCH) Block Grants. Data are collected on socio-demographic variables (ethnicity/race, age, geographic location), birth weight, anthropometric indices (height/length, weight), iron status (hemoglobin and/or hematocrit), and breastfeeding.

State health departments which choose to participate in the PedNSS submit data to CDC on a monthly basis. Data are sent to CDC on computer tapes or disks. Monthly reports listing children at high nutritional risk and reported errors are sent back to surveillance participants. These data are analyzed Semi-annually and annually and summaries are returned for use in program planning, management, and evaluation of state and local maternal and child health programs and activities. Data analysis occurs at both CDC and the state level. CDC provides assistance to the participants on using and interpreting their data. CDC encourages the PedNSS participants to distribute appropriate sections of the summaries to individual counties, clinics, and programs.

Source: <http://www.cdc.gov/nccdphp/dnpa/pednss.htm>

Education Data

Elementary School English Learners Map

The overall percentage of elementary school English learners for the 2000-2001 school year was calculated for the whole county along with 95% confidence intervals. This same calculation was done for each publicly funded elementary school that has defined borders (excluding most of the charters) in Stanislaus County. If the percentage for the elementary school was statistically lower (fewer English learners) than the county average, then it was considered to be "Statistically Lower". If the school was "Statistically Lower" than the county average (23.7%) for the 2000-2001 school year, and it was also had fewer than 10% English learners (a cutoff point that was chosen because it was about half the magnitude of the county average), it was considered to be "Much Lower". The same calculation was done to determine the schools that were "Statistically Higher" than the county average. Schools that had more than 45% English learners (about 20% higher than the county average) were considered to be "Much Higher".

Elementary School Free and Reduced Lunch Map

The overall percentage of elementary school students that received free or reduced lunches at school during the 2000-2001 school year was calculated for the whole county along with 95% confidence intervals. This same calculation was done for each publicly funded elementary school that has defined borders (excluding most of the charters) in Stanislaus County. If the percentage of students receiving free or reduced lunches for the elementary school was statistically lower (fewer students receiving free or reduced lunches) than the county average, then it was considered to be "Statistically Lower". If the school was "Statistically Lower" than the county average (58.7%) for the 2000-2001 school year, and it was also had fewer than 40% of its students receiving free or reduced lunches (about 20% lower than the county average), it was considered to be "Much Lower". The same calculation was done to determine the schools that were "Statistically Higher" than the county average. Schools that had more than 80% of its students receiving free or reduced lunches (about 20% higher than the county average) were considered to be "Much Higher".

Elementary School Score Strata

The elementary schools in Stanislaus County were broken up into three strata for the purpose of looking at the SAT-9 scores. This was done in order to more accurately make comparisons. Each school has unique circumstances within which it must function. Schools that have a high number of English learners are going to be focusing on getting students mainstreamed and not as focused on the test scores for those students. Schools that have a higher percentage of students living in or close to poverty (receiving free or reduced school lunches) have a different climate in which to work than those schools that have more affluent parents. This division of schools is not one of class or superiority. It was done to make the comparison of scores more appropriate.

The first strata were those schools that had statistically fewer students receiving free and reduced school lunches as well as fewer students classified as English learners. This was done by looking at the 1998-99, 1999-00 and 2000-01 school years. If the school had statistically (at the 95% confidence level) fewer students in both categories at least two out of the three school years, then it was put into this first strata. The third strata were those schools that had a statistically higher number of students in both categories. Once again, the school had to have higher numbers for two of the last three years in both categories. The second strata of schools were all the schools that were left. There were two ways to end up in the second strata. First, a school could have been equal to the county average (not statistically different) for all of the three years or at least for two of the three years for both categories. Only two schools fit this description. Secondly, the school could have been statistically higher when considering the free and reduced lunches, but statistically lower when considering the English learning population or vice versa. It was decided to put all of these schools into the second strata since there were so few that fell into the first description.

Community Safety

Crime Index

The California Crime Index (CCI) is the rate per 100,000 population for homicide, forcible rape, robbery, aggravated assault, burglary, and motor-vehicle theft. The FBI Crime Index is the rate per 100,000 population for all crimes in the CCI plus larceny-theft and arson. The number of reported crimes by each type of was converted into a rate and then added to create the index. The number of reported homicide, forcible rape, and aggravated assault crimes represents known victims, while with robbery, burglary, larceny-theft, motor vehicle theft, and arson, the number represents known incidents. If a person is arrested for multiple offenses, the Monthly Arrest and Citation Register (MACR) selects only the most serious offense, based on the severity of possible punishment. All counties follow the same definitions and rules of the Uniform Crime Reporting (UCR) Program administered by the Department of Justice (DOJ).

Mortality Data

Age-Adjusted Death Rates

Because many health indicators vary by age, data for a number of objectives are age adjusted to control for differences due only to differences in age composition. Age-adjustment, using the direct method, is the application of age-specific rates in a population of interest to a standardized age distribution in order to eliminate differences in observed rates that result from age differences in the population composition. This adjustment is usually done when comparing two or more populations (such as race/ethnic groups) at one point in time or one population at two or more points in time.

Age-adjusted rates are useful for comparison purposes only, not to measure absolute magnitude. (To compare absolute magnitude, numbers or crude rates are used.) The actual numerical value of an age-adjusted rate is dependent on the standard population used and, therefore, has no intrinsic meaning. Because age-adjusted rates are adjusted to a predetermined standard, they should be viewed as constructs or indexes rather than as direct or actual measures. It is important to note that in order to compare age-adjusted rates they must be adjusted to the same standard population.

For the Healthy People 2000 objectives, age adjustment was used for most of the mortality objectives and only for a very few selected other objectives. For Healthy People 2010, age adjustment is used again for most of the mortality objectives but also for many objectives that measure health outcomes and risk factors. Age-adjusted data may be shown for objectives that target either the total population or a groups with a large age range. Objectives or population subgroups that target groups with relatively small age ranges (generally less than 40 years) are not adjusted.

For some population groups, the age-adjusted rates are considerably different than crude rates. This happens because the population distribution of the group is quite different from the distribution of the standard population, which, for most objectives, is based on the projected year 2000 population for the entire United States. For example, for the Hispanic population (especially Mexican Americans) the age-adjusted rates for many outcomes and behaviors that are generally more frequent among the older population are considerably higher than the crude rates. This occurs because the Hispanic population has a much younger age distribution than the standard population.

Any data not specifically denoted as age adjusted, should be considered crude (unadjusted) data.

Source: http://www.health.gov/healthypeople/document/html/tracking/THP_PartA.htm

Census Data

Percent of Households with Children That Have Single Parents

The number of single parent households (See Appendix C for the definition) divided by the total number of households with children under the age of 18.

Percent of Families that are Married

The number of Married households divided by the total number of Family households.

Definitions

Maternal, Child and Adolescent Health Data

Kessner Index of Prenatal Care

The Kessner Index incorporates information from three items recorded on birth certificates—the length of gestation, timing of the first prenatal care visit, and number of visits— into one index. Although this index measures quantity of care better than either the number or timing of prenatal visits alone, it does not measure quality of care. A pregnant woman could have made several prenatal visits, but have received substandard care. Also, the index does not consider the relative risk of the mother. A mother could have been at high risk and have received an intermediate amount of care as measured by the index. However, the quantity of her care may have been inadequate given her condition. Moreover, in many cases the index relies upon accurate recall of onset of care and number of visits. Despite these shortcomings, the Kessner Index remains a good comparative measure of prenatal care adequacy.

Source: <http://www.tdh.state.tx.us/bvs/stats95/text/kessner.htm>

Up-To-Date for Age Immunizations

The California school immunization law was passed in 1978, which required kindergarteners to be up-to-date on their immunizations before they entered school or to have a medical exemption or personal belief waiver. This law has been modified several times in subsequent years as shown below.

Year	Required Immunizations
1978	Completed DTP (Diphtheria, Tetanus and Pertussis) series Completed Polio series 1 dose of MMR (Measles, Mumps and Rubella) vaccine
1997	2 doses of MMR vaccine Completed Hepatitis B series (3 shots)
1998	2 doses of MMR vaccine
1999	7th graders also had to have 2 doses of MMR and a completed Hepatitis B series
2001	Completed Varicella (chicken pox) series

Census Data

Household

A household includes all of the people who occupy a housing unit. A housing unit is a house, an apartment, a mobile home, a group of rooms, or a single room occupied (or if vacant, intended for occupancy) as separate living quarters. Separate living quarters are those in which the occupants live separately from any other people in the building and that have direct access from the outside of the building or through a common hall. The occupants may be a single family, one person living alone, two or more families living together, or any other group of related or unrelated people who share living quarters.

Average household size

A measure obtained by dividing the number of people in households by the number of households (or householders).

Definitions

Family

A family includes a householder and one or more other people living in the same household who are related to the householder by birth, marriage, or adoption. All people in a household who are related to the householder are regarded as members of his or her family. A household can contain only one family for purposes of census tabulations. Not all households contain families since a household may be a group of unrelated people or one person living alone.

Families are classified by type as either a "married-couple family" or an "other family" according to the presence of a spouse. "Other family" is further broken out according to the sex of the householder. The data on family type are based on answers to questions on sex and relationship that were asked on a 100-percent basis.

Average family size

A measure obtained by dividing the number of people in families by the total number of families (or family householders).

Single Parent Family

Those households with children under the age of 18, but with no wife or husband present or were not considered to be a Nonfamily household.

Married-Couple Family

A married-couple family is one in which the householder and his or her spouse are enumerated as members of the same household.

Education

Graduation Rate

One (1) year graduation rate is the number of 12th graders enrolled in one school year divided by the number of graduates at the end of that school year.

Four (4) year graduation rate is the number of 9th graders enrolled in a school year divided by the number of graduates four school years later at the time that the 9th graders should be graduating. For example, 9th grade enrollment in 95-96 divided by the graduated in 98-99.

Dropout & Dropout Rate

"*Dropout*" - Students twenty years or younger who have dropped from school in a specific year without a request for a transcript from another district. (CBEDS Definition)

One (1) year Dropout rate is the total number of dropouts (9-12 grade) in one school year divided by the total number of students (9-12 grade) that are enrolled in that school year. (CBEDS Definition)

Pupil-Teacher Ratio

The total enrollment in a district in one school year divided by the full time equivalent (FTE) number of teachers. For example: If a school district has 1,000 students enrolled and 50 FTE teachers, the ratio is 20 students for every teacher. (CBEDS Definition)

Average Class Size

The total enrollment in classes divided by the number of classes. The calculation of average class size excludes special education classes, and other instruction-related assignments, department chairs, classes with zero enrollment, and classes with enrollment over 50. (CBEDS Definition)

Definitions

English Learners (EL) Students (*formerly known as Limited-English-Proficient or LEP*)

EL students are those students for whom there is a report of a primary language other than English on the state-approved *Home Language Survey* and who, on the basis of the state approved oral language (grades K-12) assessment procedures and including literacy (grades 3-12 only), have been determined to lack the clearly defined English language skills of listening comprehension, speaking, reading, and writing necessary to succeed in the school's regular instructional programs. (Language Census Data Files R30-LC)

Free/Reduced Price Meals

Basic Eligibility Guidelines for Free/Reduced Lunch based on the annual income for a family of four is: Free Lunch—Below \$22,945; Reduced Lunch—Below \$32,653 (Modesto City Schools Report On The District's, February 2002).

Vocational Graduates

This is the number of twelfth-grade graduates who also completed a vocational education sequence of courses. This data includes summer graduates and does not include students with high school equivalencies (i.e., GED or CHSPE).

Social Environment

See the Census Data Section

Mortality

Age-Adjusted Rate

Age-adjusted rates are a weighted average of age-specific rates, where the weight represents the age distribution of a standard population. Age-adjusted rates are used to compare the risk across gender, age and race/ethnic groups and to compare risk over time. All age-adjusted rates in this report use the 2000 U.S. Standard Population and are calculated per 100,000 persons.

ICD-9 & ICD-10 Codes

The International Classification of Diseases (ICD) was developed by the World Health Organization (WHO) to allow for uniform coding of diseases and causes of death. California DHS used the ICD-9 codes to code the cause of death until 1998. Starting 1999 there was a change to using the ICD-10 codes. This means that some of the differences in rates between 1998 and 1999 could be due to classification issues and not due to any real change in the population's health at all.

Crime

Arrest: taking a person into custody, in a case and in the manner authorized by law. An arrest may be made by a peace officer or by a private person.

Arson: any willful or malicious burning or attempt to burn, with or without intent to defraud, a dwelling house, public building, motor vehicle or aircraft, personal property of another, etc.

Burglary: the unlawful entry of a structure to commit a felony or a theft.

California Crime Index (CCI): a group of offenses chosen to serve as an index for gauging fluctuation in the overall volume and rate of crime. These offenses, chosen because of the seriousness and likelihood of being reported to the police by the public, are willful homicide, forcible rape, robbery, aggravated

Definitions

assault, burglary, and motor vehicle theft. These offenses are reported according to definitions taken from the FBI's Uniform Crime Reporting Handbook.

Caseload: the total number of clients or cases on probation or under supervision with a given agency.

Crime: an act committed or omitted in violation of a law forbidding or commanding it.

FBI Crime Index: the FBI chose seven crimes to serve as an index for gauging fluctuation in the overall volume and rate of crime. These offenses include homicide, forcible rape, robbery, aggravated assault, burglary, larceny-theft, and motor vehicle theft. By congressional mandate, arson was added as the eighth index offense in 1979.

Forcible rape: the carnal knowledge of a female forcibly and against her will. Assaults or attempts to commit rape by force or threat of force are included.

Homicide: the willful (nonnegligent) killing of one human being by another. Murder and nonnegligent manslaughter are included.

Larceny-theft: the unlawful taking, carrying, leading, or riding away of property from the possession of another (except embezzlement, fraud, forgery, and worthless checks).

Misdemeanor: a crime punishable by imprisonment in a county jail for up to one year.

Motor vehicle theft: the theft or attempted theft of a motor vehicle.

Probation: a judicial requirement that a person fulfill certain conditions of behavior in lieu of a sentence to confinement.

Property crimes: crimes against property. This category includes burglary and motor vehicle theft.

Property offenses: arrest offenses for crimes against property. This includes burglary, motor vehicle theft; forgery, check and access card offenses; and arson.

Removal: a case removed from an active caseload and no longer under the supervision of the probation department, or a case not removed but escalated to a more advanced level of supervision.

Revoke: cancellation or suspension of parole or probation.

Robbery: the taking or attempting to take anything of value from the care, custody, or control of a person or persons by force or threat of force or violence and/or by creating fear in the victim.

Terminated: satisfactorily completed specified term of probation.

Violent Offenses: arrest offenses for crimes against people. This category includes homicide, forcible rape, robbery, aggravated assault, and kidnapping.

Air Quality

Ozone: Ozone is a pollutant that forms on hot summer days and should not be confused with ozone in the upper atmosphere or stratosphere. Ozone in the air we breathe is virtually invisible and odorless but by no means harmless.

Ozone is not directly emitted by any one source. Two pollutants are needed to create ozone: volatile organic compounds or reactive organic gases (ROG) and nitrogen oxides. In the presence of sunlight, especially on hot summer days, this mixture of pollution forms ozone.

PM-10: Particulate matter under 10 microns per cubic meter. PM10 is made up of fine solid or liquid such as dust, fly ash, soot, smoke, aerosols, fumes, mists, and condensing vapors. The Federal standard is 150 $\mu\text{g}/\text{m}^3$ measured over 24 hours. The California standard is 50 $\mu\text{g}/\text{m}^3$ measured over 24 hours.

ROG: Reactive Organic Gases (ROG) that contribute to the formation of ozone.

NOx: Oxides of nitrogen, like nitrogen dioxide.

Air Quality Index (AQI)

The federal standard of each pollutant is indexed to 100. 101 and above is a violation of the standard. The higher the Air Quality Index, the higher the health risk. However, certain sensitive populations will be experience distress at lower AQIs i.e. 90 or 80.

Fourth High of 8-Hour Ozone

8-hour average ozone level (the Federal standard is 0.08 ppm) is expressed in parts per million. A standard way to measure air pollution is to compare the fourth highest value measured over three years. The purpose of choosing the fourth high is to remove much of the meteorological variability.