



# REGIONAL *analyst*

● AUGUST 2009

## San Joaquin County Population Forecast

Over the past two years, population growth in San Joaquin County has changed substantially. Between 2000 and 2005, the County experienced a period of high population growth, initially spurred by relatively affordable housing, availability of jobs, and proximity to job centers in the Bay Area. However, as housing prices peaked in the middle of the decade, growth slowed. Since 2006, population growth has fallen far below the historical rate.

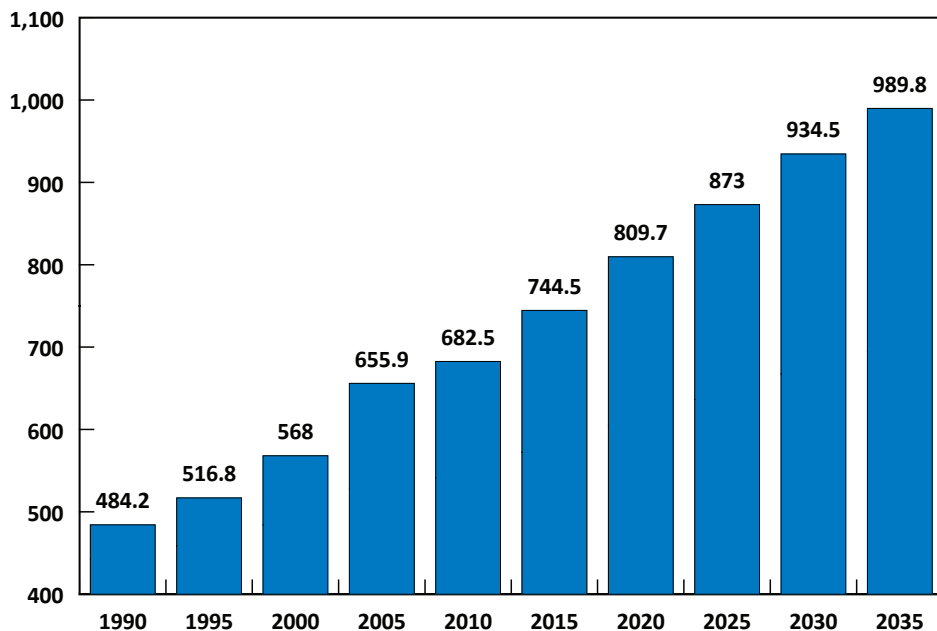
The latest San Joaquin County population projection can be found in Figure 1. We forecast the population of San Joaquin County will reach 682,500 in 2010 and 809,700 in 2020. Although our forecast is for continuing growth, it is dramatically lower than recent population projections. For comparison, the most recent population forecasts from the

California Department of Finance, published two years ago in 2007, predicted a 2010 population of 741,000 and 2020 population of 965,000. Our population projection from last year (see the

July 2008 Regional Analyst) was 712,000 by 2010, and 886,000 in 2020.

San Joaquin County's annual population growth has fallen

**Figure 1. San Joaquin County Population Projection in thousands, 1990 - 2035**

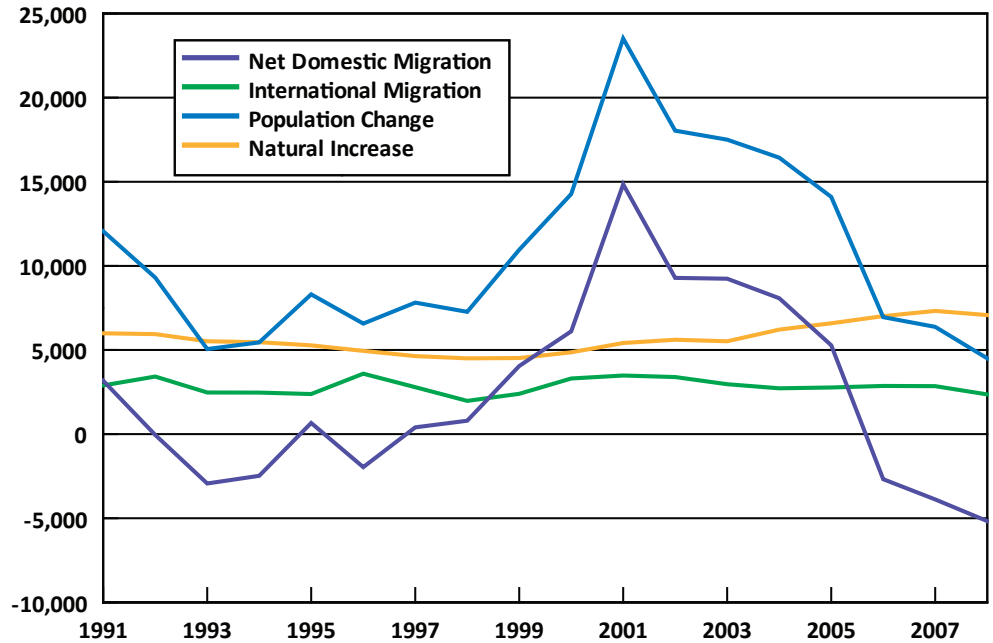


Note: 1990-2005 values are actual values, 2010-2035 are forecasted values.

Sources: U.S. Census Bureau, Annual Population Estimates; Business Forecasting Center, Population Projection Project

**Net domestic migration in San Joaquin County was a record low of -5,175 in 2008, about 15,000 people less than the average net gain of 10,000 from 2001 to 2005.**

**Figure 2. Population Change Follows Fluctuations in Domestic Migration, 1991 - 2008**



Sources: Population Estimates by California Department of Finance and U.S. Census Bureau

below 1% since 2006, and we expect population growth to continue to be significantly lower over the next few years. Considering the effects of unemployment and real estate on migration, current economic conditions in San Joaquin County, such as rising unemployment and foreclosures, create an environment where migration will be weak, if not negative, for several more years. Thus, our projection this year is more conservative than last year; for instance, the county population is now projected to surpass one million in 2036, compared to 2028 in last year's projection.

July's Regional Analyst examines the most recent data available to retool last year's population projection by taking into account

the current economic downturn and its affect on population growth in San Joaquin County out to 2035. First, changes in domestic migration – migration to or from areas in California or other areas in the United States - over the past two years due to the current recession and the impact on long-term population growth are analyzed. Finally, the analysis is extended to the major cities within San Joaquin County, their respective growth patterns out to 2035, and recent trends in school enrollments.

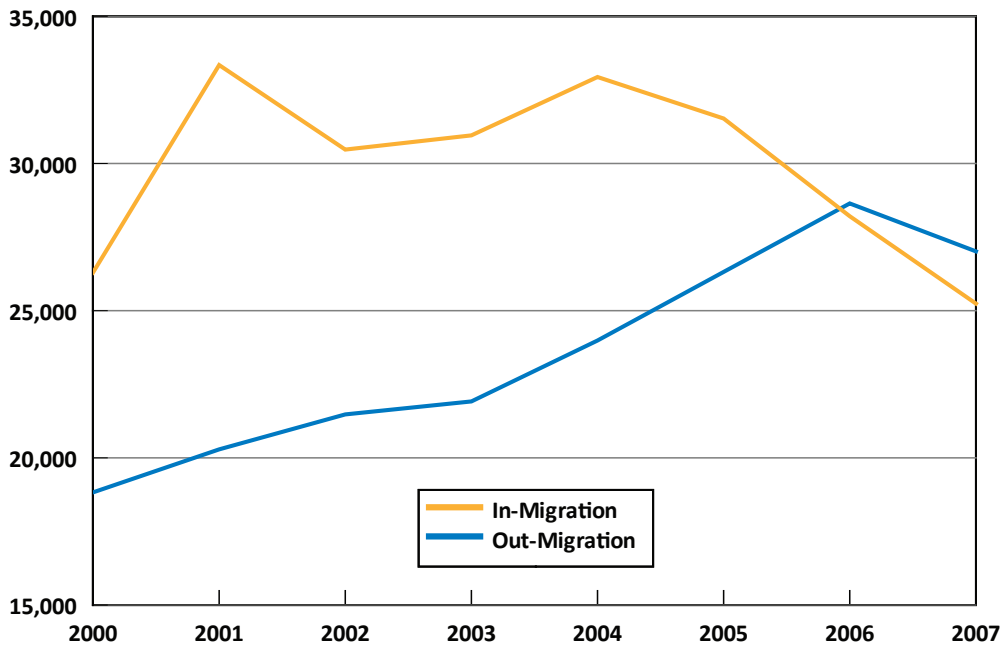
### Changes in Migration

Migration has been the driving force behind population change over the past few decades. Natural increase, or population change due to changes in birth and death rates, is an important part of population growth –

accounting for roughly 40% of the population change from 2000 to 2007. However, migration contributes far more - accounting for 60% of the total population change in the same time period. Furthermore, domestic migration is more unstable than natural increase and international migration, so rapid shifts in population change are almost always driven by domestic migration patterns.

Figure 2 shows the annual population change of San Joaquin County over the past 18 years, and breaks the change down into its components of natural increase, international migration, and net domestic migration. Over the past decade, natural increase has slowly increased from about 6,000 to 7,000 people per year. International migration

**Figure 3. San Joaquin County Domestic In-Migration and Out-Migration, 2000 to 2007**



**Note:** 2007 migration flow represents the number of people living in another county when filing for tax returns in 2006. The same definition applies to flows in the other years.  
**Source:** Tax return files, IRS

has been relatively stable around 3,000 people per year, but has recently declined to below 2,500. These two components consistently add about 10,000 people to San Joaquin County population each year. It is net domestic migration that makes wide swings from negative to positive values and creates most of the uncertainty about future growth.

Figure 3 breaks domestic migration into in-migration and out-migration as measured by IRS tax returns from 2000 to 2007. In-migration is down significantly since 2004, declining 23% to 25,240 people in 2007, while out-migration fell for the first time since 2000 to 27,016 people.

Net domestic migration – the difference between in-migration and out-migration from other parts of the U.S., including California – averaged a net gain of 8,800 people per year from 2000 to 2005. Out-migration increased between 2003 and 2006 as housing prices surged, and people left San Joaquin County for more affordable locations, usually in other states. Since 2006, net domestic migration has shifted to a net loss, growing to a loss of 5,175 people in 2008. Interestingly, while out-migration has fallen from a 2006 peak, this more recent shift has been driven primarily by a sharp decrease in in-migration.

This follows a national trend of decreasing population mobility due to the declining real estate market.

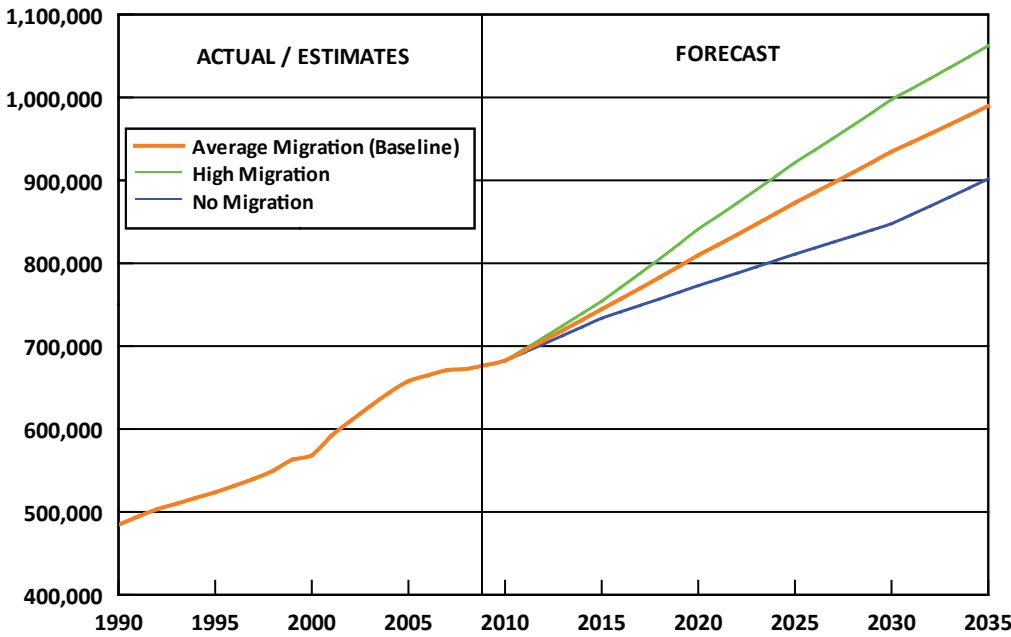
In-migration from the Bay Area accounts for 50-60% of all domestic in-migration into San Joaquin County in a typical year. Even as San Joaquin County net domestic migration has turned negative overall, it continues to experience a net population gain from the Bay Area, although the gain has declined from a peak of 15,000 people in 2001 to less than 5,000 in recent years. Out-migration destinations are much more balanced geographically. In a typical year, San Joaquin County experiences a net loss of about 2,000 residents to California outside the Bay Area. Since 2004, the annual net population loss to other states has increased from around 2,000 to 4,000 people per year.

### Detailed Projection Results

The above discussion outlines some of the significant changes in migration that have occurred in recent years, and our population projection has been updated to reflect these changing migration patterns and the local and national economic climate.

**San Joaquin County population is forecast to reach 682,500 in 2010, 809,700 in 2020, and exceed one million in 2036.**

**Figure 4. Projected Population of San Joaquin County, 1990 to 2035**



Sources: Actuals/Estimates: U.S. Census Bureau, 2000 Census and Annual Population Estimates  
Forecast: Business Forecasting Center, Population Projection Project

**Table 1. San Joaquin County Population Projection Under Varying Migration Scenarios**

Scenarios	2010	2015	2020	2025	2030	2035
Average Migration	682.5	744.5	809.7	873.0	934.5	989.8
High Migration	682.5	754.3	841.2	921.5	997.3	1,062.4
No Migration	682.5	733.6	773.0	811.0	847.8	901.8

Source: Business Forecasting Center, Population Projection Project

Three different projections are presented in Figure 4 and Table 1: one for average migration (our baseline), high migration, and no migration. These projections are built using the same cohort-component model containing historic birth and death rates for population cohorts defined by age, race and sex. The estimates differ only in the assumed rate of domestic migration after 2010. The model is calibrated to 2008 Census population estimates, and migration between 2008 and 2010 is assumed to stay at

the 2007-08 level through 2010.

The “average migration” projection - our baseline - assumes that migration after 2010 will be at the 1995-2000 average rate. Domestic migration was low throughout most of the 1990s mostly due to persistence of the 1991-92 recession which hit California disproportionately hard. The “high migration” projection assumes that migration will be an average of the 1995-2005 rates, incorporating the period of rapid growth between 2001 and 2005.

Finally, a “no migration” projection is presented. This projection assumes net domestic migration will be zero from 2010 to 2035 (population change is due only to natural increase and international migration). The area of the graph above this projection line represents positive domestic migration (population gain from domestic migration) and the area below represents negative domestic migration (net loss). Although, the no migration scenario may seem unrealistic, it represents a higher rate of growth than San Joaquin County has experienced in recent years. We believe continued negative migration is unlikely beyond 2010, and have not included a negative migration scenario.

Between 2010 and 2015, we expect migration to slowly return to the pre-recession rate as the economy recovers. This will eventually increase population growth to 1.75% per year, outpacing the projected state and nation growth rates of about 1.1%. However, the increased growth rate will not make up for growth lost during the recession: annual population growth after 2015 will slowly decline as the share of persons aged 20-39 decreases to only 25% of the San Joaquin County population in 2035. We project San Joaquin County will surpass the one million mark in 2036.

Table 2 shows more detailed age and racial information. The Hispanic population will exceed the White population

**Table 2. Summary of San Joaquin County  
Baseline Population Projection, 2010-2035**

Characteristics	2010	2015	2020	2025	2030	2035
<b>By Age (thousands)</b>						
0-19	219.3	235.3	258.4	277.3	297.3	314.8
20-39	192.1	205.9	217.2	231.3	243.0	251.3
40-59	171.0	179.1	185.0	190.6	201.1	216.1
60+	100.1	124.1	149.2	173.7	193.0	207.5
Total	682.5	744.5	809.7	873.0	934.5	989.8
<b>By Race (thousands)</b>						
Hispanic	243.8	286.5	328.4	370.4	414.5	457.5
Non Hispanic	438.7	458.0	481.3	502.5	520.0	532.3
White	251.3	247.3	247.8	246.8	243.1	235.5
Asian	95.8	110.9	126.5	142.1	157.4	173.1
Hawaiian / Pacific Islanders	2.4	2.7	3.0	3.3	3.5	3.8
Black	64.0	68.6	72.1	74.9	76.9	77.5
American Indian / Alaska Native	3.2	3.2	3.1	3.1	3.0	2.9
Others	22.0	25.3	28.8	32.4	36.1	39.6
Total	682.5	744.5	809.7	873.0	934.5	989.8

Source: Business Forecasting Center, Population Projection Project

around 2012, increasing from 36% in 2010 to 46% of the total population in 2035, growing by 87% over 25 years - more quickly than any other race. The County will remain extremely diverse; the only races that do not grow are the White and Native Indian/Alaskan populations. The total decline in the White population is very small, but the White share population declines dramatically from 37% in 2010 to 24% in 2035. The Asian population is projected to grow almost as quickly as the Hispanic population - 81% over 25 years. The Asian population share will slowly increase from 14% to 17.5% over this period. Growth of the Black population

is expected to be slower than the Hispanic and Asian populations, averaging about 1% annual growth. The Black population share will decline slightly from 9.4% to 7.8% of total population. San Joaquin County will remain distinctive for its overall diversity, with no classification constituting a majority in 2010 or 2035.

San Joaquin County is young, but the population is projected to age over time following broader trends. The “Over 60” population is currently the smallest group, but will be the fastest growing. The population in San Joaquin County over 60 will increase by

more than 100,000 people over the next 25 years. The share of the “Under 20” age group will remain relatively unchanged and grow by approximately 95,000 by 2035. The population in the prime working ages of 20-59 will grow the slowest, and their population share will decline from 53% to 46% between 2010 and 2035. The declining share of 20-39 year olds and increasing share of over 60 year olds gradually slows the rate of natural population growth over time.

**In-migration began declining in 2004, and has declined rapidly since 2005. Out-migration rose rapidly between 2003 and 2006, but declined in 2007.**

**Table 3. Cities of San Joaquin County, Population Projections through 2035**

City	2000	2005	2010	2015	2020	2025	2030	2035
Stockton	244.6	282.7	290.0	312.2	340.0	366.6	392.7	416.4
Lodi	57.4	61.6	61.8	64.0	66.7	69.7	72.6	75.5
Manteca	50.4	62.2	66.3	76.8	85.9	95.7	105.8	114.9
Tracy	58.1	79.0	79.6	91.4	99.8	109.2	118.2	126.5
Lathrop	11.2	13.5	17.9	20.6	23.6	25.6	27.5	29.2
Ripon	10.3	13.4	14.9	17.4	20.4	23.1	26.0	28.6
Other Areas	136.1	143.3	151.9	162.0	173.3	183.2	191.7	198.7
Total	568.0	655.9	682.5	744.5	809.7	873.0	934.5	989.8

Sources: Business Forecasting Center, Population Projection Project; U.S. Census Bureau, Annual Population Estimates

## Population Growth of Cities

This edition of Regional Analyst extends our population projections to the cities of San Joaquin County exceeding 10,000 in current population. The first feature of these projections to note is every city faces positive population growth. Realistically, this won't be true for every year; however, the overall projected trend is for positive growth over the next 25 years. Growth rates for each city will depend on how each city recovers from the current recession and local planning decisions, and may vary significantly from this forecast based on historical patterns and broad regional trends.

Three San Joaquin County cities are expected to nearly double in size over the next 25 years: Manteca, Lathrop, and Ripon. Growth in these cities will be driven primarily

by their proximity to major freeway arteries to the Bay Area, job growth potential, and their relative desirability when compared to other cities.

As the largest city in the County, Stockton will see the most growth, expanding by about 70%, or 171,000 residents, between now and 2035. Tracy will remain the second largest city in the County and will likely reach 100,000 residents in 2020. Lodi should continue along its recent path of slow growth after being surpassed by Manteca and Tracy in size during the past decade. Although the Sacramento area is rapidly growing, this growth will not

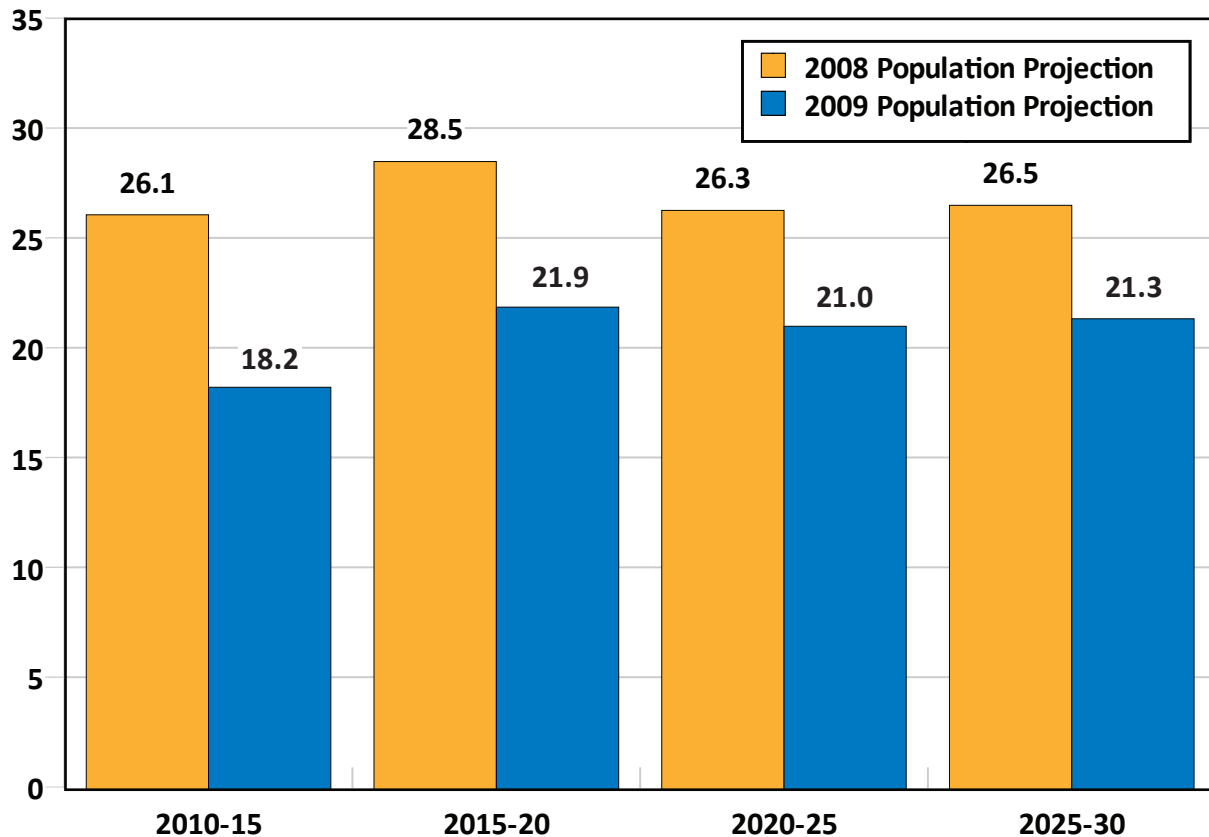
impact San Joaquin County the same way as Bay Area growth. Southern Sacramento County cities such as Elk Grove and Galt have similar real estate prices to San Joaquin County and are more receptive to new development than neighboring East Bay cities, such as Livermore and Pleasanton. Growth in the Stockton-Lodi area will be more connected to local job growth.



## Housing Needs Revisited

Lower population growth has several economic implications for San Joaquin County, including the level of new residential and commercial development, and employment growth in service sectors such as education and healthcare. A previous issue of *Regional Analyst* in December 2008 included a forecast of future housing needs, and Figure 5 shows how the latest population projection affects this earlier housing need forecast. Overall, slower population growth reduces our anticipated need for new housing units from an average of 5,360 per year to 4,120 annually. The actual pace of building will be less smooth than this need projection, as housing starts follow economic conditions. We project the current recession and foreclosure crisis will keep construction below 4,000 units through 2012. New construction will occasionally cycle above this calculated need, but is unlikely to match the 6-7,000 annual units produced between 2002 and 2005.

**Figure 5. Housing Need Projection, San Joaquin County**  
(in thousands of housing units)



Source: Business Forecasting Center, Population Projection Project

For questions or comments about this article, please contact:

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## School Enrollments

As the 2009-2010 school year begins, it is timely to look at recent trends in local school enrollments. After years of growing enrollments, 2008 marked a significant reversal. The three largest school districts in the County, Stockton, Lodi, and Manteca, all registered enrollment declines for the 2008-09 year. We define Tracy schools as including the smaller elementary districts that feed the high schools in Tracy school district. Using this definition, Tracy schools continued to see enrollment growth, but at a much slower pace. Stockton Unified and Lincoln have current enrollments near their 2000 level, as most of Stockton's recent population growth has been in the Lodi Unified School District which encompasses northern Stockton.

**Table 4. School Enrollment by School District in San Joaquin County**

District	1995	2000	2005	2007	2008
Linden Unified	2,299	2,433	2,515	2,529	2,522
Ripon Unified	2,345	2,632	2,981	2,992	3,051
Escalon Unified	2,955	3,125	3,201	3,104	3,060
Lincoln Unified	8,688	8,688	8,769	8,572	8,619
Tracy	12,245	16,133	21,271	22,169	22,382
Manteca Unified	15,094	19,746	23,781	23,654	23,082
Lodi Unified	25,500	27,339	30,911	31,609	31,259
Stockton Unified	34,637	37,573	38,936	38,408	37,835

**Note:** Districts which make up "Tracy": Banta Elementary, Jefferson Elementary, Lammersville Elementary, New Jerusalem, Oak View Union Elementary, and Tracy Unified

**Source:** San Joaquin County Office of Education, Annual School Enrollment

