



REGIONAL *analyst*

● MAY 2008



Net domestic migration is clearly connected to California housing cycles, slightly negative during the housing slump from 1992-1996, booming during the housing run-up from 1999-2005, and recently turning negative again.

San Joaquin County Migration, Who Moved In and Who Moved Out

San Joaquin County is growing. For most of this decade, the area has been growing at more than double the pace of the nation and California. Migration of new residents from the United States (U.S.) and abroad contributes the most to population growth, although natural increase, the difference between births and deaths, is also a large contributor.

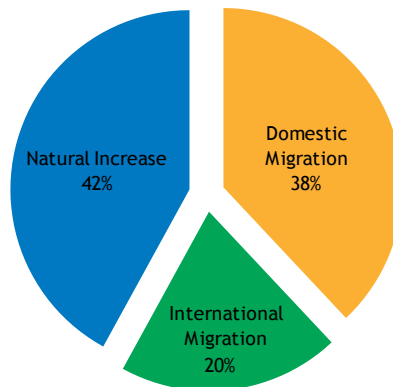
Figure 1 shows that natural increase and domestic migration each represents approximately 40% of the total population increase between 2000 and 2007, whereas international migration is considerably smaller at 20%. Since 2000, about 40,000 more U.S. residents have moved into San Joaquin County than have moved away. About 3,000 new international migrants arrive in the county each year, totaling a little more

than 20,000 since 2000. Without any migration from the U.S. or abroad, San Joaquin County's population would still grow at about 1% per year due to natural increase.

The sources of migration have different patterns over time. Figure 2 tracks population growth in San Joaquin County since 1990 and breaks it

down by these three components. The key point in this graph is that domestic migration is highly volatile and is most responsible for big swings in the rate of population growth. Net domestic migration is clearly connected to California housing cycles, slightly negative during the housing slump from 1992-1996, booming during the housing run-up from 1999-2005, and has recently turned negative again. International

Figure 1. San Joaquin County 2000-2007 Population Change by Components of Change



Total population gain = 102K

Source: U.S. Census Bureau Population Estimates

turned negative again. International

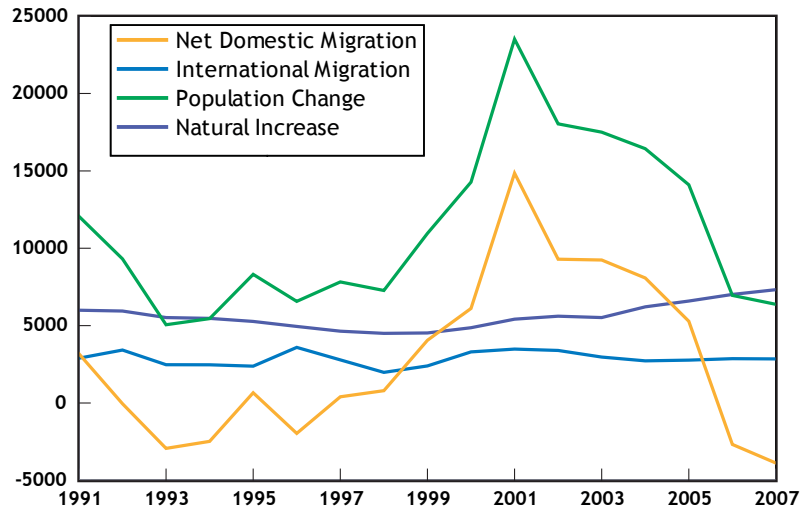
migration is the most stable category, consistently bringing about 3,000 new residents per year over the past two decades. As one would expect, the rate of natural increase is also relatively stable, although there is a notable increase in natural growth in recent years. Natural increase exceeded 7,000 in both 2006 and 2007, surpassing the total amount of population growth in 2007 as migration turned negative.

This issue of Regional Analyst focuses on migration and examines the characteristics of our new migrants, how they have changed in recent years and the implications for the future. The analysis breaks domestic migrants down into in-migrants and out-migrants to see if changing patterns and characteristics are related to who is coming to San Joaquin County or who is leaving. For international migrants, the analysis looks only at in-migration as data on out-migrants is unavailable. Natural increase is of growing importance and will be a key part of the next issue of Regional Analyst, which will forecast future population.

Characteristics of Migrants

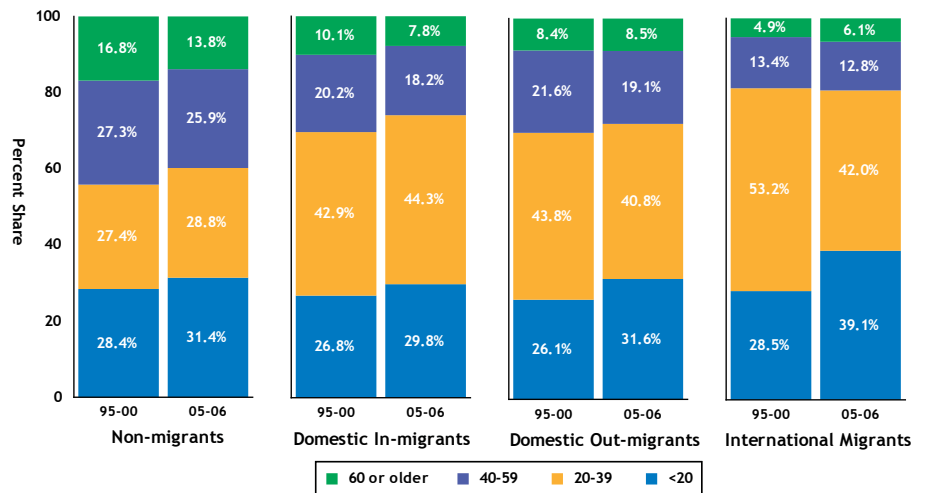
International migration is the most stable in terms of total numbers, but this category has changed the most in its characteristics. In contrast, domestic migrants have stable characteristics, but have big swings in numbers from period to period. This report examines the characteristics of migrants over time by using Census 2000 data to look at migrants from 1995-2000 and data from the Census Bureau's American Community Survey to look at migrants in 2005 and 2006. In the tables that follow, the report compares migrants to non-migrants, representing those who stayed in San Joaquin County at the beginning and end of the survey period.

Figure 2. Population Change by Components



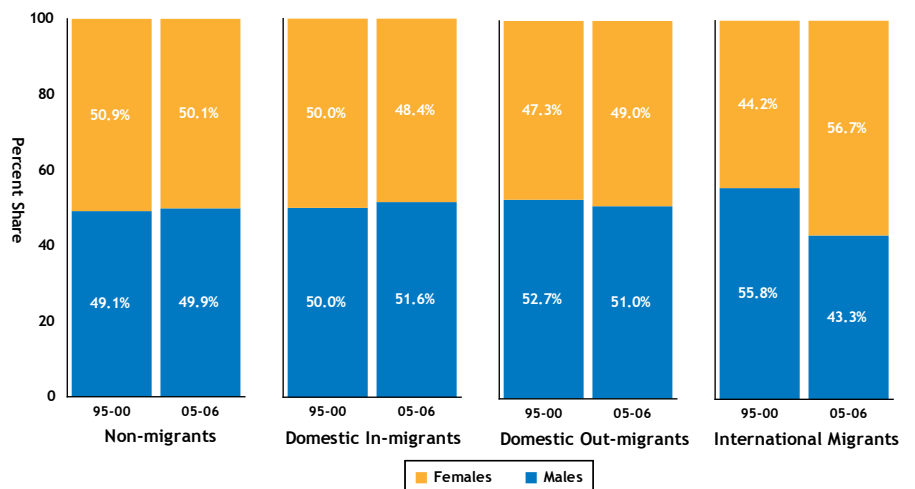
Sources: Population Estimates by California Department of Finance and U.S. Census Bureau

Figure 3. Migrants and Non-Migrants by Age Groups



Sources: STF3 and PUMS, Census 2000 and 2005 & 2006 American Community Survey

Figure 4. Migrants and Non-Migrants by Sex



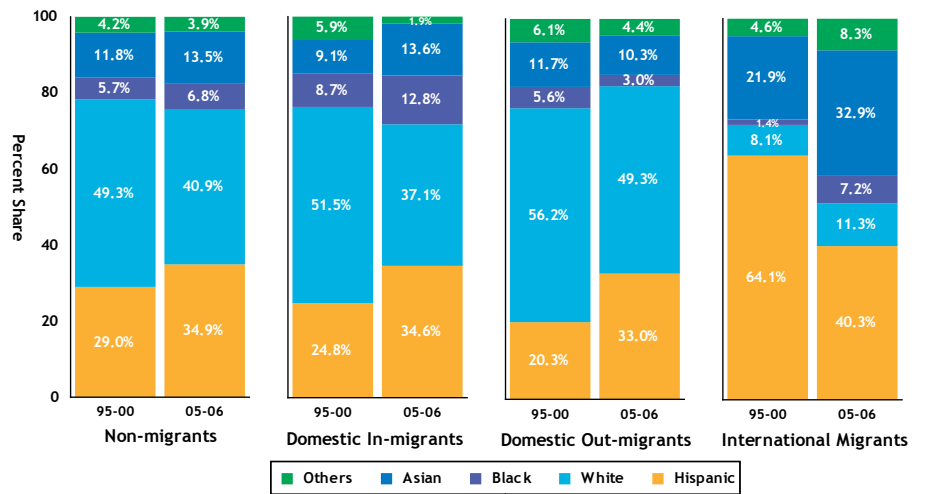
Sources: STF3 and PUMS, Census 2000 and 2005 & 2006 American Community Survey

Figure 3 shows that despite the warm weather, San Joaquin County is not a retirement destination. Our in-migrants are young and getting younger with time. Nearly 75% of domestic in-migrants and 80% of international migrants are under age 40. This is impacting the county's overall age distribution, which shows a shrinking share of residents over age 60 and a growing share of children and younger cohorts. This pattern is different than the national trend of a "graying" population.

Figure 4 shows an interesting shift in the gender of international migrants over time. In the 1990s, international in-migrants were more likely to be male. In recent years, this has flipped as the majority of recent international migrants are female. As shown in Figure 5, there has been a shift in the racial make-up of international migrants. The share of Hispanics has declined from 64% to 40% as international migration for all other races increased. Asian international migrants are now nearly equal to Hispanic migrants while the share of Black and White international migrants has also grown. In the past, the typical international migrant to San Joaquin County was a Hispanic male; the more common recent profile is a female who is almost as likely to be Asian as Hispanic.

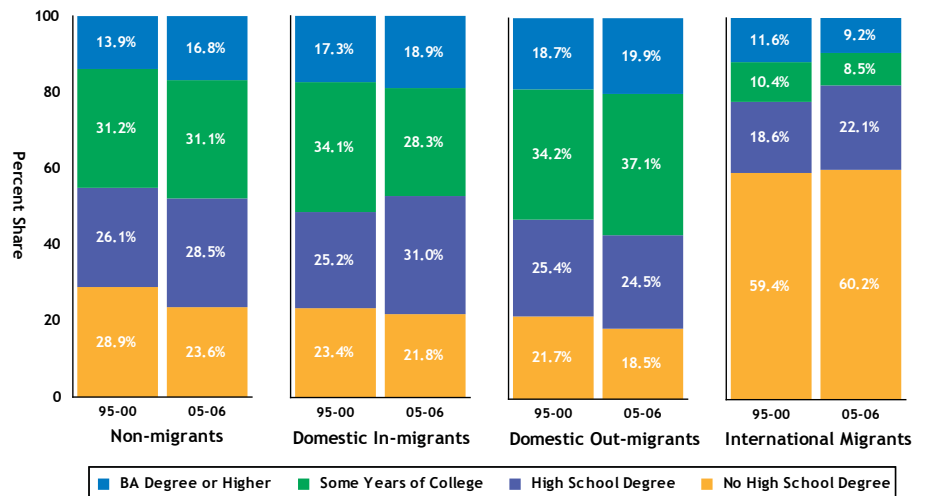
While the Hispanic share of international migration is falling, the share of Hispanics in domestic migrants is rising. As a result of this and natural increase, the proportion of Hispanics in San Joaquin County continues to grow although they are more likely to have been born here or to have moved from another part of the state or nation rather than from abroad. The share of the Asian and

Figure 5. Migrants and Non-Migrants by Race



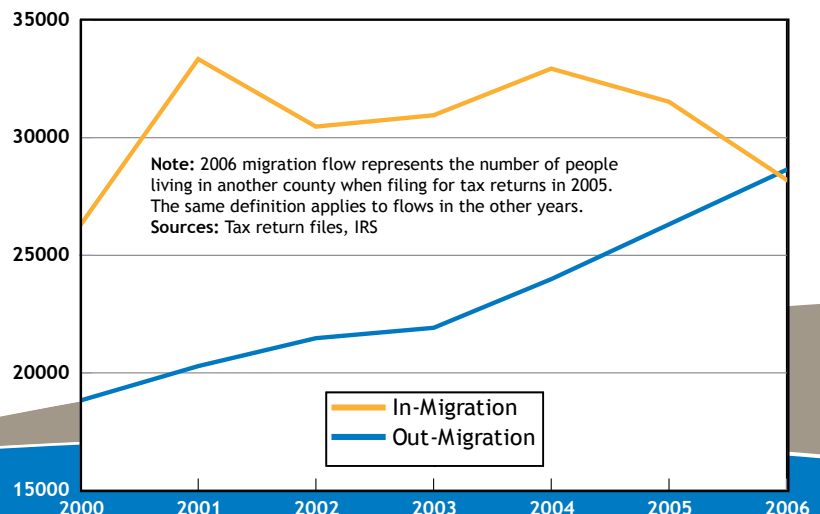
Sources: STF3 and PUMS, Census 2000 and 2005 & 2006 American Community Survey

Figure 6. Migrants and Non-Migrants 25 Years or Older by Educational Attainment



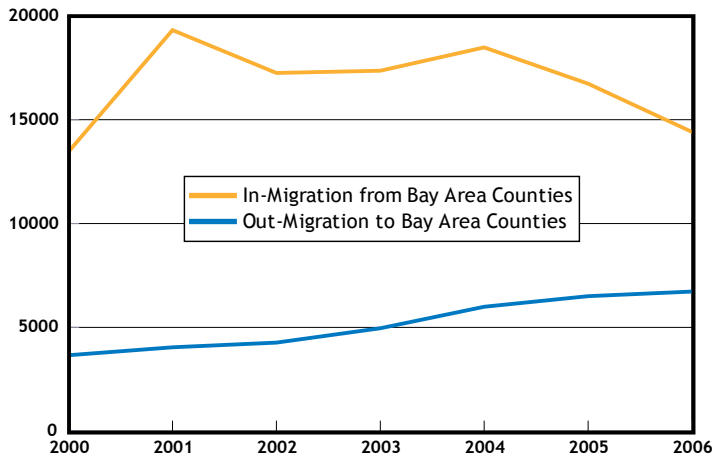
Sources: STF3 and PUMS, Census 2000 and 2005 & 2006 American Community Survey

Figure 7. San Joaquin County Domestic In-Migration and Out-Migration, 2000 to 2006



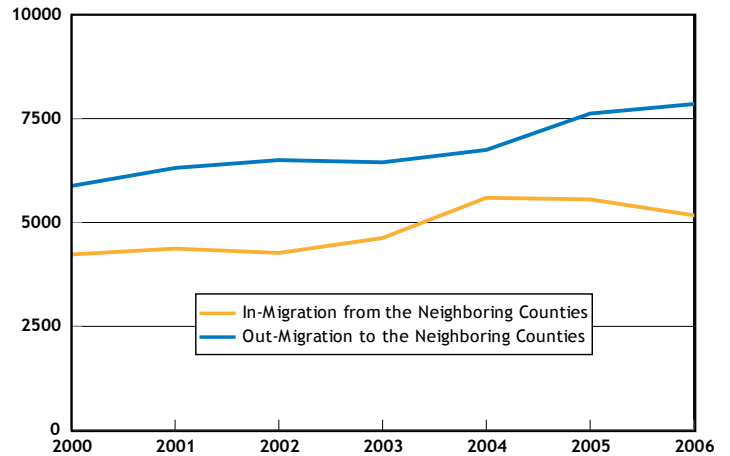
The education level of those leaving the county is higher than the education level of those who are moving in.

Figure 8. San Joaquin County In-Migration and Out-Migration From and Into Bay Area Counties, 2000 to 2006



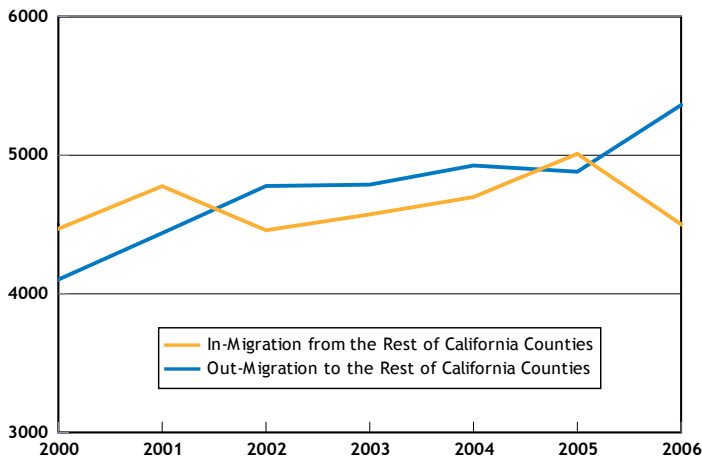
Notes: 2006 migration flow represents the number of people living in another county when filing for tax returns in 2005. The same definition applies to flows in the other years. Bay Area Counties include: Alameda, Contra Costa, Marin, Monterey, San Mateo, Santa Clara, and Santa Cruz. Source: Tax return files, IRS

Figure 9. San Joaquin County In-Migration and Out-Migration From and Into the Neighboring Counties, 2000 to 2006



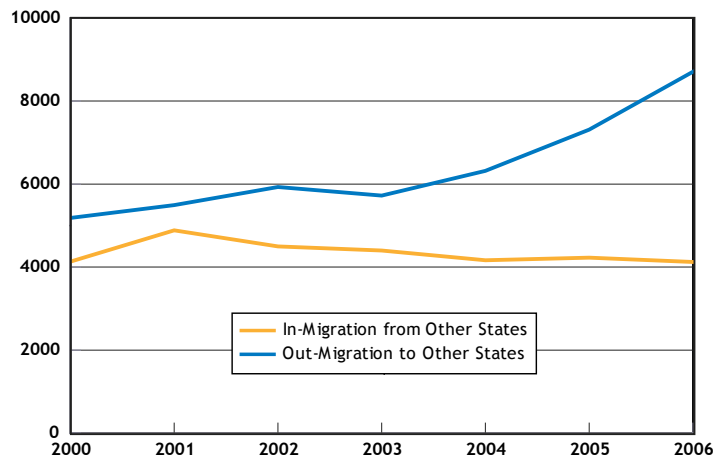
Notes: 2006 migration flow represents the number of people living in another county when filing for tax returns in 2005. The same definition applies to flows in the other years. Neighboring Counties include: Amador, Calaveras, Sacramento, and Stanislaus. Source: Tax return files, IRS

Figure 10. San Joaquin County In-Migration and Out-Migration From and Into the Rest of California Counties, 2000 to 2006



Notes: 2006 migration flow represents the number of people living in another county when filing for tax returns in 2005. The same definition applies to flows in the other years. Rest of California Counties include any California counties other than the Bay Area and the San Joaquin County Neighboring Counties. Source: Tax return files, IRS

Figure 11. San Joaquin County In-Migration and Out-Migration From and Into Other States, 2000 to 2006



Note: 2006 migration flow represents the number of people living in another county when filing for tax returns in 2005. The same definition applies to flows in the other years. Source: Tax return files, IRS

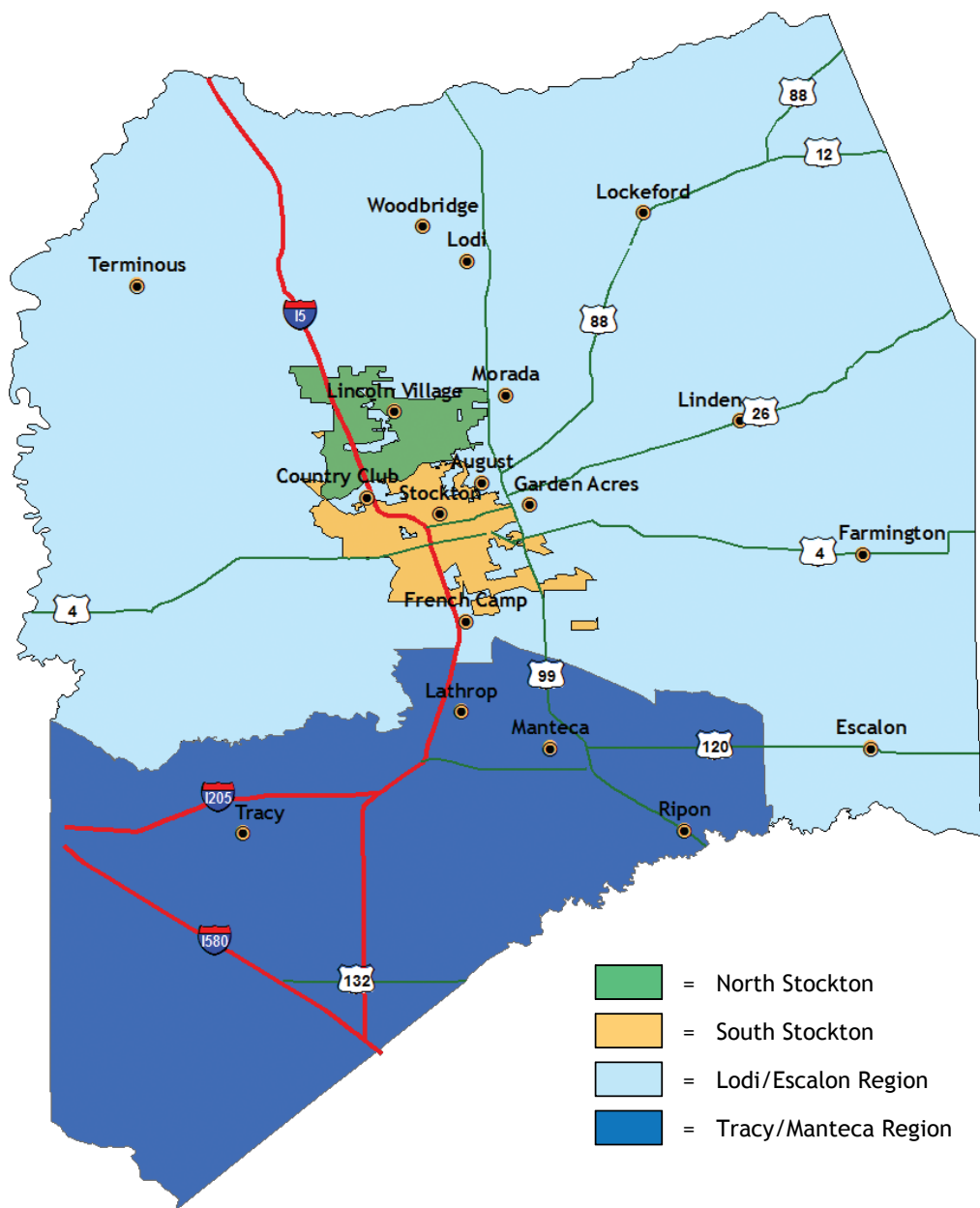
Black among domestic in-migrants is slowly increasing, while their share among domestic out-migrants has remained steady. The share of White domestic in-migrants has decreased significantly since the 1990s, while the share of the same out-migrants continue to be about half of those leaving San Joaquin County. As a result, the proportion of White residents in San Joaquin County will

continue to decline as the population becomes more diverse.

Figure 6 shows the educational background of migrants. The education level of San Joaquin County adults has followed national trends, and increased in recent years, yet not the education of new international migrants. The majority of new international migrants continue to have less than a high school education,

and the level of higher education in international migrants has made a small decline as this segment has shifted to become more female and less Hispanic. In general, the education level of San Joaquin County adults lags the national average and migration patterns are not helping. Domestically, it is a concern that the education level of those leaving the county is higher than the education

Figure 12. Four PUMAs in San Joaquin County



- = North Stockton
- = South Stockton
- = Lodi/Escalon Region
- = Tracy/Manteca Region

level of those who are moving in. This pattern is stronger in 2005-2006 than in 1995-2000.

A Closer Look at Domestic Migration

IRS tax return files are a valuable source of migration data within the U.S. The data shows where domestic in-migrants are coming from and

where out-migrants go. As discussed earlier, net domestic migration is highly volatile, driving record population growth in the first part of this decade, and making a sharp reversal to negative levels in 2006 and 2007. Figure 7 shows that this

reversal has been driven more by an increase in out-migration than a decrease in domestic in-migrants. Domestic in-migration surged in 2000 and 2001, driven by solid job growth and relatively inexpensive housing. Domestic in-migration has dropped somewhat in recent years, but remains close to 30,000 per year.

On the other hand, out-migration has risen throughout the entire decade and has increased sharply since 2003. The Bay area is an important source of San Joaquin County migration, but Figure 8 shows this area is not the whole or even largest part of the recent drop in net domestic migration. Over half of new San Joaquin County residents come from the Bay area, whereas this region only receives 20-25% of San Joaquin County out-migrants. Even as net domestic migration was negative in 2006, Bay area in-migrants still exceeded out-migrants by more than a 2-1 margin. An average of more than 15,000 people per year have moved to San Joaquin County from the Bay area over the past decade, compared to only about 5,000 San Joaquin County residents moving west each year.

In contrast to the Bay area, San Joaquin County consistently loses population to the counties bordering it on the north, east, and south. On average, there is a net loss of 700-1,000 residents each year to Sacramento and Stanislaus Counties. The consistent net loss of residents to Stanislaus County is a bit of a puzzle as unemployment in that county is somewhat higher and many quality of life indicators are similar. In recent

In the past, the typical international migrant to San Joaquin County was a Hispanic male; the more common recent profile is a female who is almost as likely to be Asian as Hispanic.

Figure 13. Selected Demographic Characteristics by PUMA Areas
San Joaquin County, 2006

Demographic Characteristics	South Stockton	North Stockton	Tracy/Manteca Region	Lodi/Escalon Region	San Joaquin County
Median HH Income	37,592	49,576	67,280	50,255	51,951
Total Population	120,287	160,150	207,892	184,841	673,170
% Hispanic	50.4%	27.7%	31.2%	38.2%	35.7%
% White	19.8%	31.9%	46.7%	51.2%	39.6%
% Other Races	29.7%	40.4%	22.0%	10.5%	24.6%
% All Races	100.0%	100.0%	100.0%	100.0%	100.0%
Share of Non-US Citizen	20.00%	14.20%	12.10%	14.10%	14.60%
Share of Individuals Whose Income Below Poverty Level	18.00%	14.00%	12.30%	14.00%	14.20%
Share of Owner Occupied Housing	56.00%	54.50%	71.00%	66.30%	62.90%

Source: 2006 American Community Survey

North Stockton, South Stockton, and Tracy/Manteca. As seen on the map, the Lodi/Escalon area also contains rural areas to the east and west of Stockton. Tracy/Manteca also includes Ripon, Lathrop and rural areas in the southern region.

As shown in Figure 13, each of these areas has more than 100,000 residents. Tracy/Manteca is the largest, fastest growing, highest income area with the greatest share of owner-occupied housing. North Stockton and Lodi regions have similar economic characteristics but are very different in racial composition. There are larger shares of Whites and Hispanics in Lodi and relatively larger shares of Asian and Blacks in North Stockton. South Stockton is the smallest and poorest region, and is the only area where Hispanics surpass Whites as the largest racial group.

Figure 14 looks at where migrants choose to live and how that has changed over time. In the past decade, there has been a shift in domestic migrants from outside of California choosing to live in Tracy/Manteca, and a large decrease in their likelihood to settle in Lodi or South Stockton. Many of these new residents are likely coming for jobs in the East Bay Area and are choosing Tracy/Manteca over higher-cost Bay Area locations or Stockton. In-migrants from California preferred Tracy/Manteca in both time periods, and show a growing trend towards North Stockton over South Stockton. South Stockton continues to be the most common destination for international migrants, but there has been a shift of international migrants away from Lodi and towards Tracy/Manteca that corresponds with the ethnic shift from being mostly Hispanic to a larger Asian share.

years, there is an increasing trend of people moving out to the smaller Foothills counties. The net loss to Calaveras County exceeded 500 in 2006 alone.

Figure 10 shows the contribution of the rest of the state on San Joaquin County migration. This is the most balanced flow of migration as in-migration and out-migration are typically within a few hundred people. In 2006, there was a sharp negative turn to net migration with this region, and it remains to be seen if this trend continues and if San Joaquin County begins to lose population to non-neighboring regions within California.

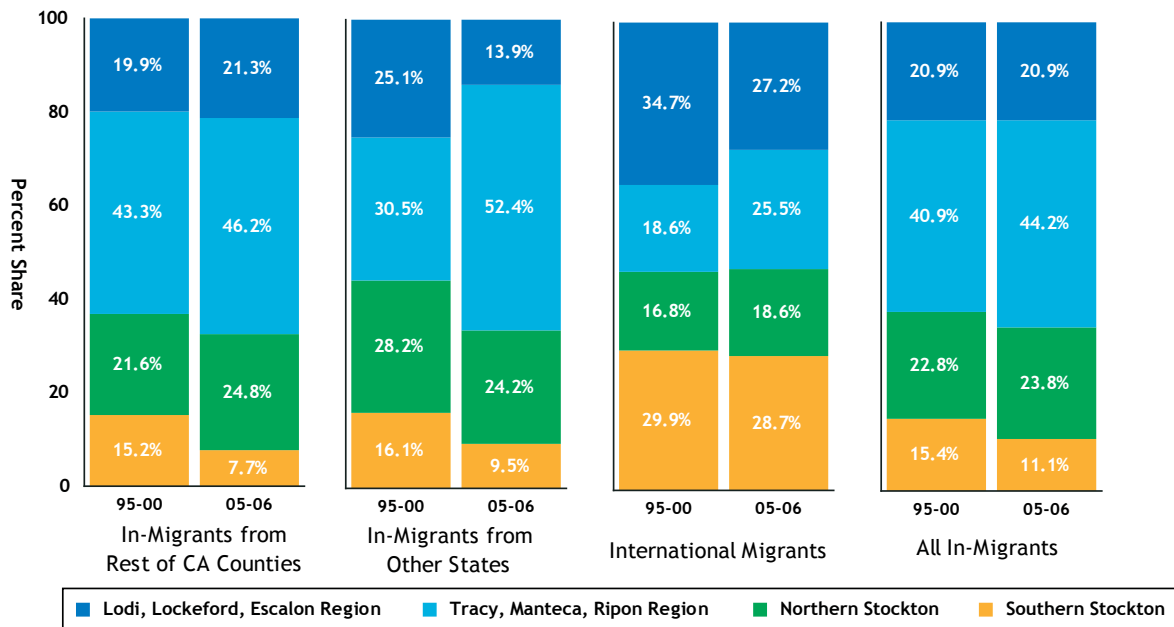
While the Bay Area was the driving force behind the surge of domestic migration between 2000 and 2004, Figure 11 shows that out-of-state migration is a big part of negative net domestic migration. For the entire decade, out-of-state in-migrants have been stable at a little more than 4,000 people per year. At only about 15%

of total in-migration, they are only a small contributor. On the other hand, out-migration to other states has undergone a very rapid rise since 2004. The net loss to other states is now nearly 5,000 residents per year after being close to balanced. Most of these people headed to southern states such as Texas, the Carolinas and Florida as well as to Midwestern, Western and Northeastern states. This suggests that housing costs are a significant driver of out-migration as the most popular destinations have lower housing costs than the rest of the nation along with a significantly lower cost of living than San Joaquin County.

Where do new Migrants Settle in San Joaquin County?

We can break down the migration data into four Public Microdata Area (PUMAs) as defined by the Census Bureau. Figure 12 shows the four PUMAs in San Joaquin County which we define as Lodi/Escalon,

Figure 14. In Which Part of San Joaquin County Do In-Migrants Choose to Live?



Sources: STF3 and PUMS, Census 2000 and 2005 & 2006 American Community Survey

Discussion and Conclusion

The analysis of migration patterns in San Joaquin County reveals several important facts:

- Net domestic migration is subject to huge swings in numbers that are driven by various factors influencing both the number of in-migrants and out-migrants.
- International migration is stable in numbers, but shifting in composition away from the traditional profile of Hispanic males to larger shares of Asian and females.
- In recent years, new migrants are more likely to settle in Tracy/Manteca and less likely to settle in South Stockton.

The shifts in international migration are occurring slowly and current trends will probably continue into the future as the role of agriculture in local

economy gradually diminishes and services grow. Domestic migration is a lot less predictable. As the real estate market cools, the surge in out-migration seen from 2004-2006 could diminish as the incentive and ability to sell high and move to lower cost areas dissipates. While this could make net migration trend positively, in-migration could also decrease as high gas prices greatly increase the cost of commuting. In addition, tighter credit markets limit the ability of Bay Area migrants to relocate to the region. On the other hand, rapidly declining real estate prices could attract new residents from neighboring counties as the spread between San Joaquin and Bay Area housing costs returns to levels seen in the early part of the decade. This uncertainty has its

greatest impact on the Tracy/Manteca area, which is the most common destination for the fast changing flows of domestic migration from both inside and outside the state.

An average of more than 15,000 people per year have moved to San Joaquin County from the bay area over the past decade.

For questions or comments about this article, please contact:

Business Forecasting Center
Eberhardt School of Business
 3601 Pacific Avenue
 Stockton, CA 95211
 Phone: 209.946.7385

Director, Jeffrey Michael
 E-mail: jmichael@pacific.edu

Regional Economic Analyst, Christiadi
 E-mail: cchristiadi@pacific.edu

Housing Prices and Bay Area Migration

San Joaquin County continues to gain new residents from the Bay Area, even when San Joaquin's net migration turned negative in 2006 and 2007. Most of them are attracted by less expensive housing.

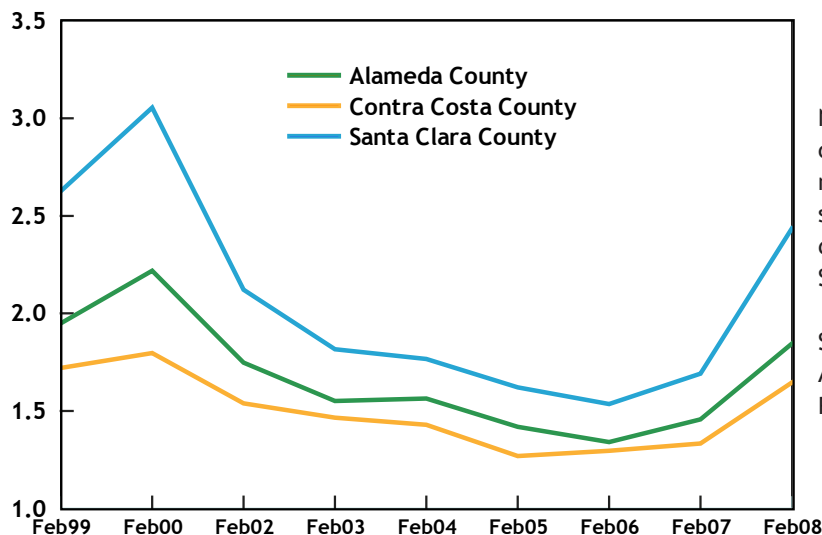
Figure 15 shows relative housing costs between San Joaquin and the three closest counties in the East Bay. As seen on the graph, the incentive to move to San Joaquin County slowly diminished between 2002 and 2006. Net migration from the Bay Area peaked in 2001 with a gain of approximately 15,000 new residents, but by 2006 this number has dropped in half.

The recent rapid decline in San Joaquin housing prices has restored Bay Area price ratios to 2001 levels. Will Bay Area migration also return to 2001 levels? Probably not.

In 2001, the collapse of the "dot.com" bubble greatly reduced jobs in the Bay Area and gas was relatively cheap. In 2008, record gasoline prices have increased commuting costs by as much as \$200 per month. The Bay Area job market is healthier than in 2001-2003

despite the current economic downturn. Nevertheless, the reversal of the home price ratio will stop the decline in Bay Area migration and could lead to net migration rates approaching 10,000 in the next few years.

Figure 15. Ratio of Housing Median Price in Selected Bay Area Counties to the Median Price in San Joaquin County



Note: The ratio is computed as the median price in the specified county divided by that in San Joaquin County.

Source: California Association of Realtors.



San Joaquin County Council of Governments
555 E. Weber Avenue
Stockton, CA 95202

PH: 209.468.3913

PRESORT
STANDARD U.S.
POSTAGE PAID
STOCKTON, CA
PERMIT #383

INSIDE THIS ISSUE

San Joaquin County Migration, Who Moved In and Who Moved Out	Page 1
Characteristics of Migrants	Page 2
A Closer Look at Domestic Migration	Page 5
Where do new Migrants Settle in San Joaquin County?	Page 6