

Farmland Conversion in California: Evidence from the Williamson Act Program

Kent Kovacs

The recent boom in the housing market created significant pressure for farmland conversion throughout California. The highest expected net loss of farmland from the Williamson Act program, California's premier agricultural land protection program, was in 2007. In spite of the widespread pressure, conversion in most regions of California is consistent with historic levels of conversion from the last housing boom. The exception is the San Joaquin Valley, where unprecedented farmland conversion is likely in the next decade.

California land is in high demand, not only for agriculture, but for non-agricultural land use that creates pressure for farmland conversion. This demand for non-agricultural land use comes largely from urban influence driven by anticipated population growth of California. The Public Policy Institute of California (PPIC) estimates that by 2020, California's population will grow from 37 million to reach between 42 million to 48 million people. This growth relies on new commercial, industrial, and residential real estate which all occupy land.

The housing market is cyclical and until recently, California's market was booming. The PPIC estimates that, between 2000 and 2005, the median sale price for single-family homes rose by 117 percent, and building permits issued for single-family homes rose by 42 percent. A key finding of this article is that the boom in the housing market resulted in farmland loss throughout

California, but most significantly in the San Joaquin Valley. This rapid low-density development has significant implications, not only for farmland loss, but for traffic congestion, air quality, and the cost of public services.

Tracking the loss of farmland in California is possible through an examination of the cumulative non-renewals in the Williamson Act program. The California Land Conservation Act, better known as the Williamson Act, is the state's premier agricultural land protection program since its enactment in 1965. Private landowners voluntarily restrict their land to agricultural and compatible open space uses under minimum 10-year rolling term contracts with local governments. In return, restricted parcels are assessed for property tax purposes at a rate consistent with their actual use rather than potential market value. Cumulative non-renewal acreage refers to the total amount of acreage undergoing the nine-year phase out of contract status at any one time. Non-renewals indicate the

anticipation of converting farmland to other uses.

Since 2003 each year had an expected net loss of farmland in the Williamson Act program, as shown in Figure 1. The figure shows *expected* net loss because cumulative non-renewals indicate how much acreage is planning to leave the program. (Ideally, new enrollment would show acreage planning to join the program, rather than just enrollment for that year, but such data are not available.) Large enrollment in Merced County in 2001 and 2002 kept new enrollment above cumulative non-renewals in those years. However, after 2002, the new enrollment fell and the cumulative non-renewals rose rapidly. The greatest expected net loss of acreage to the program was in 2007. A decomposition of the cumulative non-renewals into non-renewal initiations (acreage initiating phase out of the program) and expirations (acreage leaving the program) shown in Figure 2 allows for a closer examination of the rapid rise of

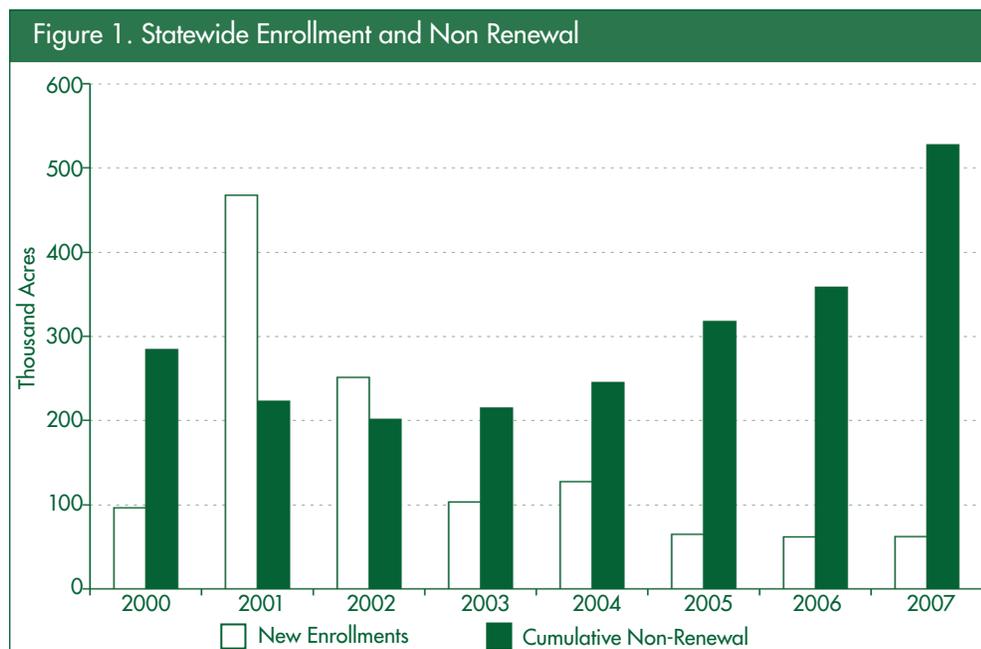


Figure 2. Statewide Non Renewal and Expirations

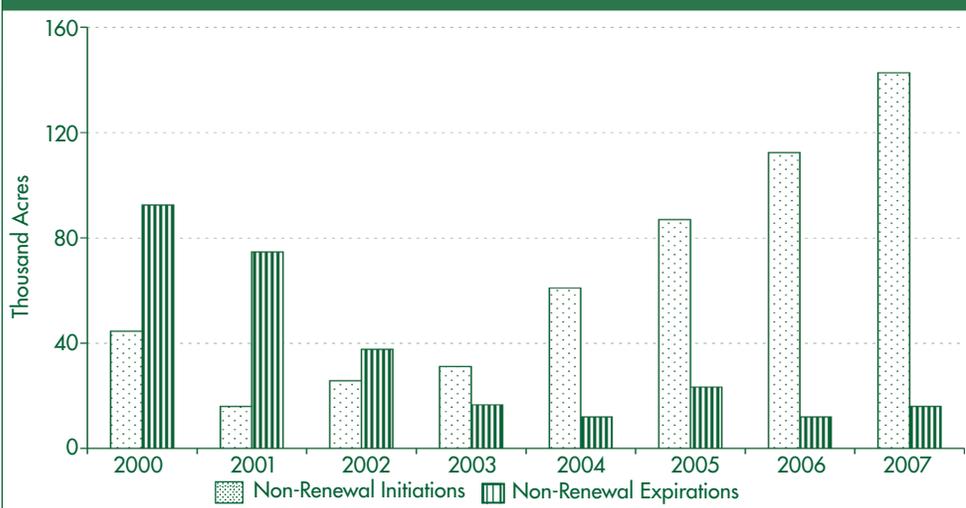


Figure 3. Williamson Act Regions

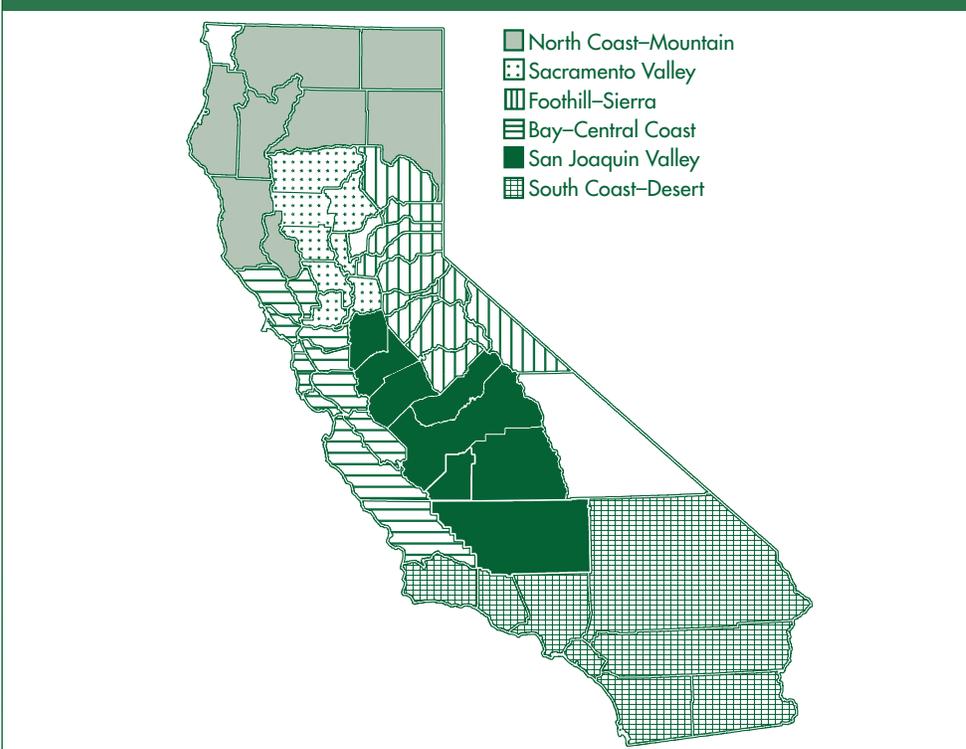
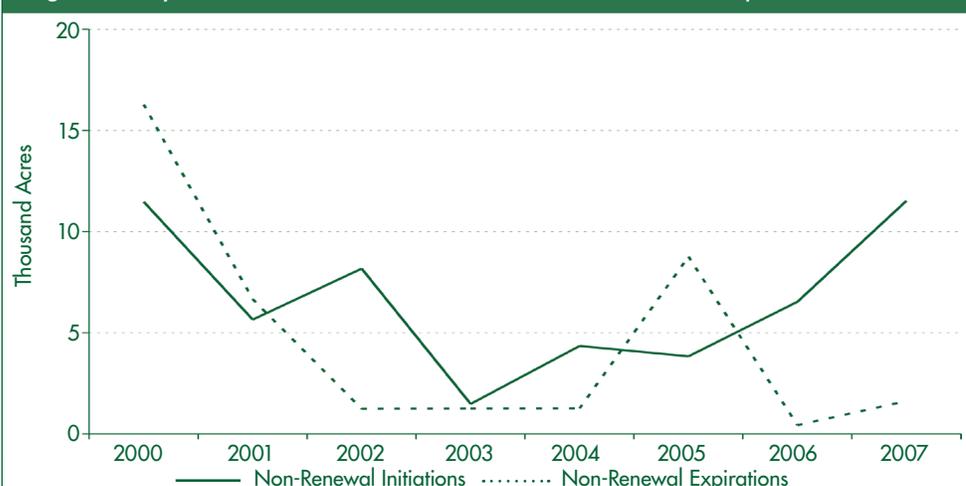


Figure 4. Bay and Central Coast Non-Renewal Initiations and Expirations



cumulative non-renewals. Most of the cumulative non-renewals since 2003 are non-renewal initiations.

The non-renewal initiation is for a landowner who begins the nine-year phase out of a contract, and non-renewal expiration is the termination of a contract as a result of completing the nine-year phase out. The plot of non-renewal initiations and expirations for the eight-year period is equivalent to showing the non-renewal initiations for sixteen years (eight years in the past and the eight years shown in the plot) and non-renewal expirations for sixteen years (eight years shown in the plot and eight years in the future). Preferably a full eighteen-year period would be shown by displaying the 1999 non-renewal initiations and expirations. Unfortunately, the 1999 non-renewal data are unavailable. Another look at Figure 2 indicates that non-renewal initiations prior to 2004 are comparable to recent historic levels, but after 2004 an unprecedented level of non-renewal initiations took place. This indicates that substantial loss of farmland is anticipated between 2014 and 2016.

The statewide plot of non-renewal initiations and expirations does not provide much insight into where the non-renewals are occurring. A policy response to the non-renewals would need to identify the regions with the most non-renewals since California is a geographically diverse state. The regions shown in Figure 3 for the spatial examination of the non-renewals include the Bay and Central Coast, Foothills and Sierra, North Coast and Mountain, Sacramento Valley, San Joaquin Valley, and the South Coast and Desert. Figures 4 to 9 show the non-renewal initiations and expirations for each of the regions.

The non-renewals for the Bay and Central Coast region show that recent initiations are well within historic levels of initiation, as illustrated in Figure 4. This is evident from the non-renewal

expirations plot being above the non-renewal initiations plot for a number of years. For the Bay and Coast region, the highest anticipated level of farmland loss occurred back in 1991. The similar finding of recent non-renewal initiations well within historic levels is shown for the Foothills and Sierra, North Coast and Mountain, and the Sacramento Valley regions in Figures 5–7. However, for each of those regions, there is an upward surge in non-renewal initiations in 2006 and 2007. Much of the early 1990s growth in the North Coast and Mountain region appears over, but the Foothills and Sierra and the Sacramento Valley regions appear to have more growth in store.

The story changes for the San Joaquin Valley and the South Coast and Desert regions, as illustrated in Figures 8 and 9. In the past few years, non-renewal initiations are well above the historic levels of initiation. The dramatic rise in initiations suggests that a shift toward farmland loss is occurring in these regions beyond the natural response to a housing boom. The counties in the San Joaquin Valley with consistent double-digit losses of farmland include Kern, Madera, and Tulare. The Highway 99 corridor threads through these counties that have the significant farmland losses; the existing population centers in the San Joaquin Valley are along the Highway 99. For the South Coast and Desert region, the significant non-renewal initiations are in Santa Barbara County and, most recently, Imperial County.

In spite of the pressure of urban influence in most regions of California, there remain counties where there is minimal pressure for farmland conversion. In August 1998, the Legislature enhanced the Williamson Act with the Farmland Security Zone (FSZ) provisions. The FSZ provisions offer landowners greater property tax reduction in return for a minimum 20-year rolling

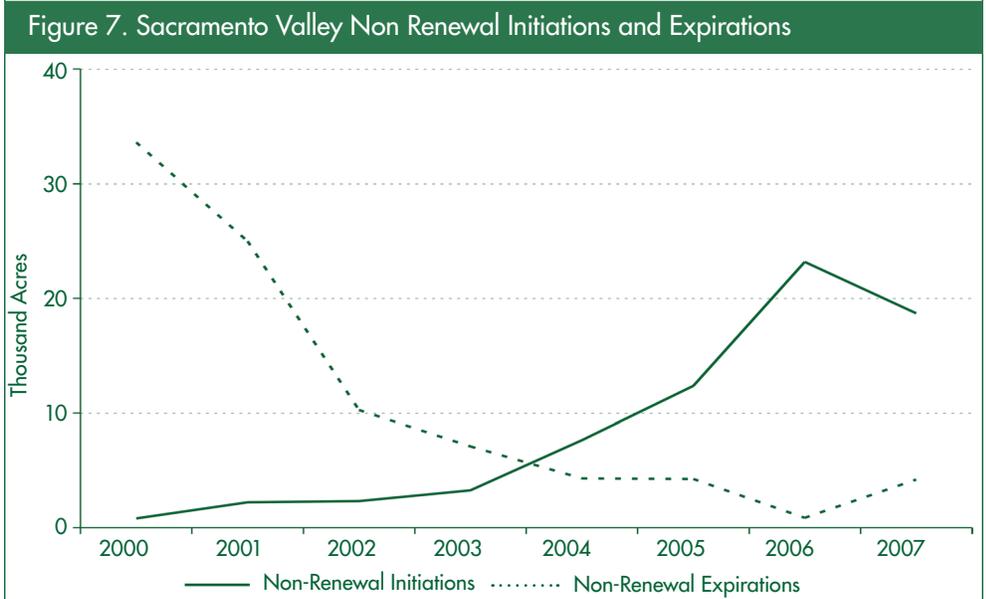
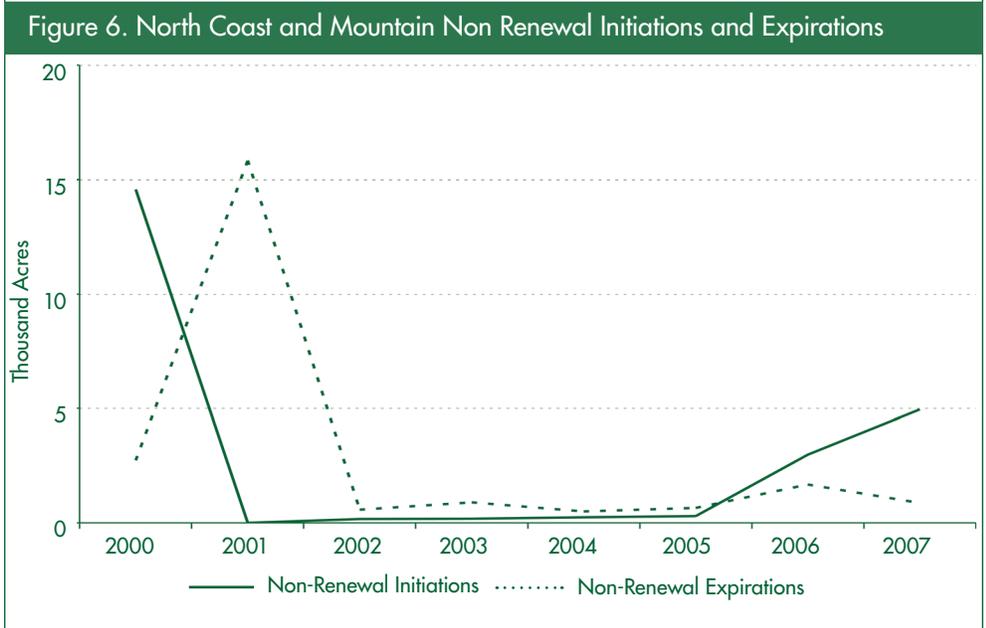
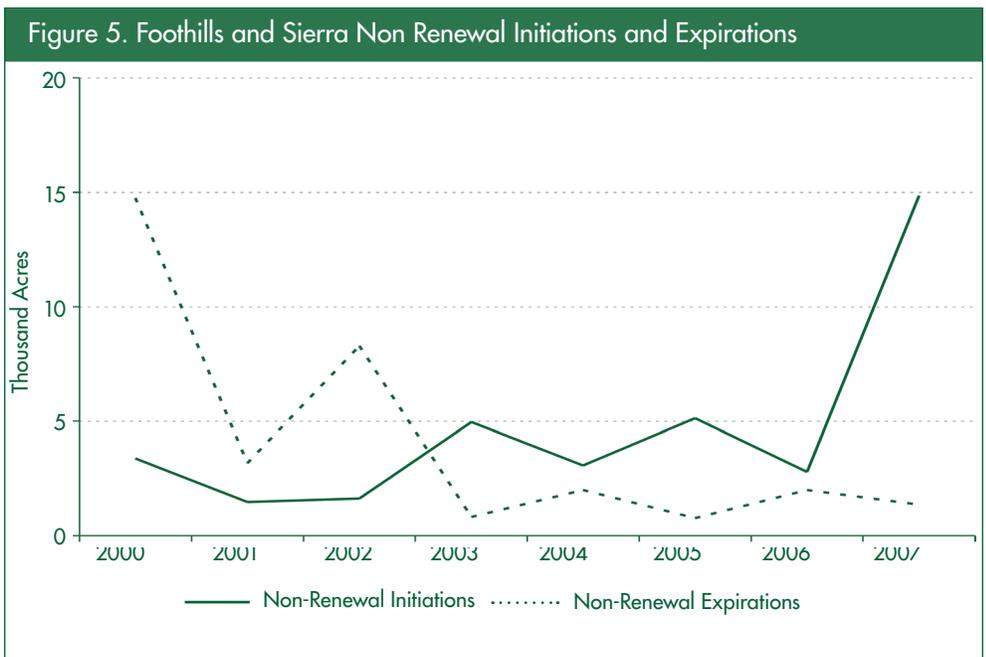


Figure 8. San Joaquin Valley Non-Renewal Initiations and Expirations

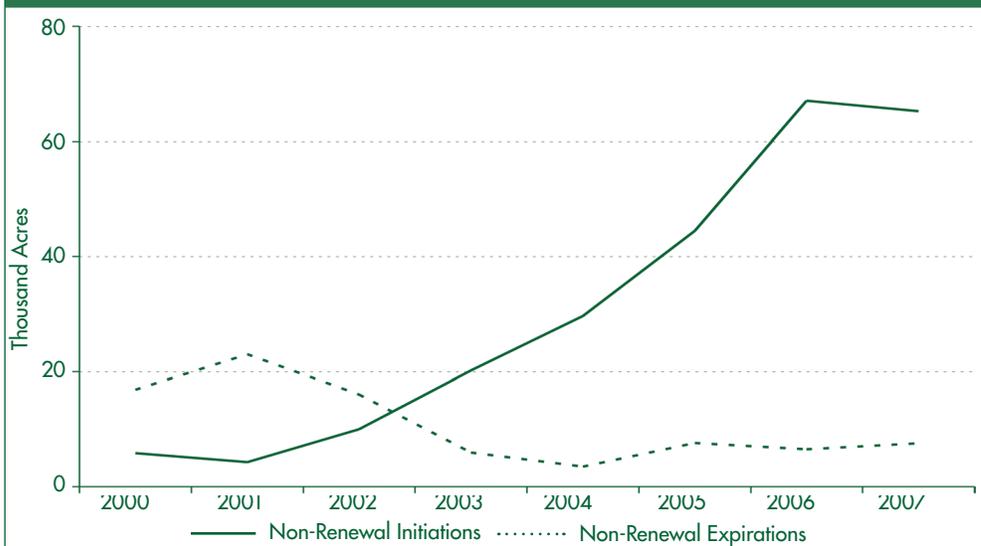
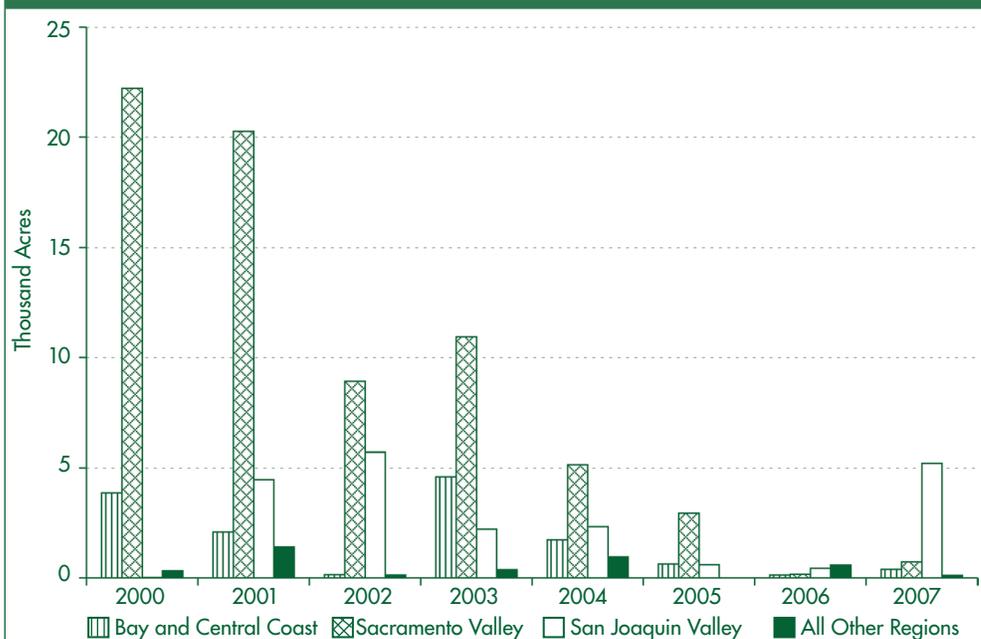


Figure 9. South Coast and Desert Non-Renewal Initiations and Expirations



Figure 10. Farm Security Zone Enrollment by Region



term contract. Figure 9 shows FSZ enrollment by region since 2000. Most of the FSZ enrollment from 2000 to 2003 is in Colusa and Glenn counties on the northeast side of the Sacramento Valley. There is also enrollment in Kings and Kern counties on the south-east side of the San Joaquin Valley. However, for the most part, landowners in California appear reluctant to enroll in the FSZ.

There seems no doubt that urban influence will continue to place pressure on agricultural land in California. In most regions the pressure of urban influence appears to follow the natural ebb and flow in the housing market, but the San Joaquin Valley is an exception. Over the next decade, there will likely be unprecedented growth in the San Joaquin Valley, and this growth will shift the traditional balance between agricultural and non-agricultural land uses. The cities along Highway 99 may want to revisit their planning codes to pro-actively identify how to handle the growth to come.

Kent Kovacs received his Ph.D. degree from the Department of Agricultural and Resource Economics at the University of California, Davis. Currently, he is a research assistant professor in the Department of Resource Economics at the University of Nevada, Reno. He can be contacted by e-mail at kkovacs@cabnr.unr.edu.

Source for Figures 1-10: California Department of Conservation, Division of Land Resource Protection.

For more information, the author recommends:

State of California Department of Conservation, Division of Land Resource Protection, "The Californian Land Conservation (Williamson) Act: 2006 Status Report." Available at www.consrv.ca.gov/dlrp/lca/stats_reports/Pages/2006%20williamson%20act%20status%20report.aspx.

Tietz, Micheal B., Charles Dietzel, and William Fulton. "How Will Urbanization Change the San Joaquin Valley?" Research Brief, Public Policy Institute of California, Issue #98, February 2005.