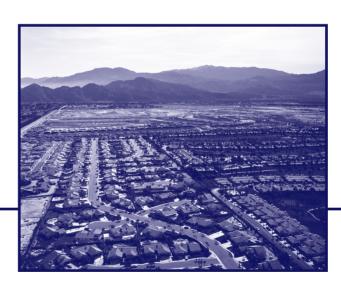
The Inland Empire in 2015

Hans P. Johnson Deborah Reed Joseph M. Hayes



The Inland Empire in 2015

• • •

Hans P. Johnson Deborah Reed Joseph M. Hayes

with research support from Amanda Bailey

2008

Supported with funding from The James Irvine Foundation

Library of Congress Cataloging-in-Publication Data Johnson, Hans P.

The Inland Empire in 2015 / Hans P. Johnson, Deborah Reed, Joseph M. Hayes; with research support from Amanda Bailey. p. cm.

ISBN: 978-1-58213-128-3

- 1. Population—Forecasting—California—San Bernardino County.
- 2. Population—Forecasting—California—Riverside County. 3. Economic forecasting—California—California—San Bernardino County. 4. Economic forecasting—California—California—Riverside County. 5. Political participation—California—San Bernardino County—Forecasting. 6. Political participation—California—Riverside County—Forecasting. I. Reed, Deborah,

1967- II. Hayes, Joseph M. (Joseph Michael), 1969- III. Title.

HB3525.C2J64 2008 303.49794'95090512—dc22

2008006787

Copyright © 2008 by Public Policy Institute of California All rights reserved San Francisco, CA

Short sections of text, not to exceed three paragraphs, may be quoted without written permission provided that full attribution is given to the source and the above copyright notice is included.

PPIC does not take or support positions on any ballot measure or on any local, state, or federal legislation, nor does it endorse, support, or oppose any political parties or candidates for public office.

Research publications reflect the views of the authors and do not necessarily reflect the views of the staff, officers, or Board of Directors of the Public Policy Institute of California.

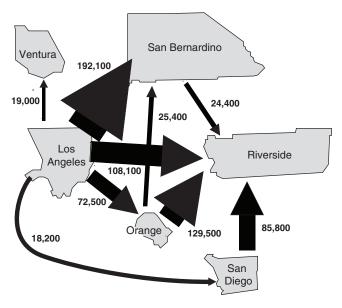
Summary

Riverside and San Bernardino Counties together constitute California's Inland Empire, a vast region distinguished by tremendous growth in recent decades. Local policymakers are working to plan for future growth and, indeed, to shape growth. This report seeks to inform public investment and growth policy by broadly describing the direction of growth in the region. We use recent trends to develop projections for 2015 and to characterize the population, the workforce, and political participation.

We project that the coming decade will be a critical time for the Inland Empire as its population continues to expand and as the region increasingly plays a dual economic role—both creating new jobs locally and providing housing to residents who commute to jobs in other regions. Our projections indicate that the Inland Empire's population will grow from 3.9 million in 2005 to 4.9 million by 2015. Growth during that period will be equivalent to five times the current population of the city of San Bernardino. With recent and impending declines in new housing construction, annual growth rates will be lower than in recent years. Nonetheless, the Inland Empire will remain the locus of growth in Southern California. Growth rates will be robust in all of the subregions of the Inland Empire, but especially in the San Jacinto Valley, where the population will increase more than 50 percent between 2005 and 2015.

The primary driver of this population growth has been and will continue to be migration, primarily local. Almost all of the very large flows of migrants into the Inland Empire originate in coastal Southern California. Those flows have increased in recent years, with large and notable gains in the number of Inland Empire residents arriving from Orange and San Diego Counties. Los Angeles County, with its ten million residents, remains the primary origin of migrants to San Bernardino County, and Riverside County gains large numbers of migrants from Orange and San Diego Counties as well (Figure S.1).

The Inland Empire gains relatively small numbers of international migrants directly from abroad, and loses small numbers of migrants to other states. However, reflecting the demographic changes of their counties of origin, recent migrants are more likely to be Latino or Asian than in the



SOURCES: Authors' estimates based on Internal Revenue Service tax return records, California Department of Finance estimates, and the 2005 and 2006 American Community Surveys.

Figure S.1—Net Migration Flows Between Southern California Counties, 2000–2006

past, and large numbers of foreign-born individuals move to the Inland Empire from coastal counties.

Recent migrants are slightly better educated than previous migrants or current residents. However, on a net basis, the Inland Empire attracts more migrants without a high school diploma than college graduates.

Migrants are attracted to the Inland Empire because of housing and strong job growth. Not only is Inland Empire housing less expensive than in the coastal regions, the relative abundance of new and large single family homes has drawn many coastal residents who often cannot find such housing in the more dense and built-up coastal counties. Substantial shares of the region's new residents are renters, who find less-expensive rents in the Inland Empire. Job growth in the Inland Empire has fueled some of its growth, but the number of residents who commute to coastal county jobs continues to increase.

We find that the Latino and Asian populations will continue to experience strong population growth (Table S.1). By 2015, Latinos will constitute a majority population in the Inland Empire. Latinos will be the new majority in many of the most populated subregions as well, including the Coachella Valley, Northwestern Riverside, Western San Bernardino, and Eastern San Bernardino. Whites will remain the majority population in the San Jacinto Valley and Southwestern Riverside areas. In the High Desert area, no racial or ethnic group will constitute a majority.

Like the rest of the nation, the Inland Empire is aging. The number of residents ages 55–69 is expected to more than double between 2000 and 2015 (Figure S.2). The number of young adults ages 20–34 will also increase substantially (by 70%) through continued migration and because, as in the rest of the nation, the population bulge representing the children of baby boomers will reach these ages. In contrast to most other parts of California, the number of young children in the Inland Empire will continue to grow, albeit at a more modest pace than in recent years. Continued growth in the school-age population reflects the region's attractiveness to young families, in large part because of relatively inexpensive housing.

These changes in age patterns are projected to be broadly similar for each subregion. However, growth in the young adult population is expected to be particularly strong in the San Jacinto Valley, so much so that the share of residents ages 65 and older there will actually decline. In contrast, in the

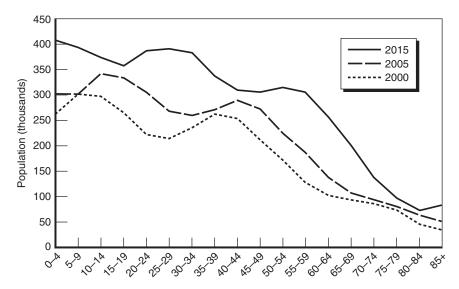
Table S.1

Projected Percentage Ethnic Distribution in the Inland Empire, 2000, 2005, and 2015

	2000	2005	2015
White	47.2	41.9	32.1
Latino	38.4	43.1	51.2
Asian	4.6	5.2	6.6
African American	7.6	7.4	7.2
American Indian	0.6	0.6	0.5
Multiracial	1.6	1.8	2.4

SOURCES: California Department of Finance estimates for July 1, 2000, and authors' projections for 2005 and 2015.

NOTE: Asian includes Pacific Islanders.



SOURCES: California Department of Finance estimates for July 1, 2000, and authors' projections for 2005 and 2015.

Figure S.2—Population Projections for the Inland Empire, by Age Group, 2000, 2005, and 2015

High Desert and the Coachella Valley, the share of residents ages 65 and older is projected to increase.

We find that the educational attainment levels of the population will increase slightly between now and 2015, with an increase in the percentage of college graduates but little change in the percentage of adults who have not completed high school (Table S.2). These minor improvements will not be enough to bring the region's overall educational attainment up to the current level of the state as a whole.

Educational attainment differs substantially across subregions although the projected direction of changes is similar: Each subregion except Eastern San Bernardino is projected to see an increase in the share of adults with at least a bachelor's degree. Likewise, in each region except Eastern and Western San Bernardino, the share of residents who have not finished high school is expected to decline slightly.

Employment projections show that the Inland Empire economy is shifting to industries that hire workers with lower levels of education,

Table S.2

Percentage Distribution of Educational Attainment Among Adults: Trends and Projections, 1990–2015

	Less Than High School Diploma	High School Diploma	Some College	Bachelor's Degree	Graduate Degree
		Inland Em	pire		
1990	22	26	36	10	5
2000	24	24	35	11	6
2005	23	26	33	13	6
2015	22	29	28	15	6
		Californ	ia		
1990	21	21	33	17	9
2000	22	19	31	18	10
2005	19	21	29	20	11

SOURCES: Authors' calculations based on the 1990 and 2000 Censuses and projections for 2005 and 2015. State estimates for 2005 are based on the American Community Survey.

NOTES: The table includes adults ages 25–64. Columns may not sum to 100 percent because of rounding. See Appendix A for details of the projections method.

particularly administrative services. However, within several major industries, the recent trend has been toward hiring more workers with higher levels of education. If this trend continues, employment opportunities will shift slightly, with an increase in demand for more educated workers. The decline in the share of jobs for workers who have not completed high school coupled with the large supply of such workers suggests that the least-educated adults will face even more difficulties in the future labor market. In contrast, the region will have too few high school graduates relative to jobs. On the high end of the educational attainment spectrum, increases in the number of college graduates match up fairly well with employers' needs. However, in an ongoing challenge for the region, the share of adults with a college degree as well as the share of jobs that require a college degree will remain far lower than in the rest of the state.

Projections for political participation suggest an increase in naturalization rates among Latinos and Asians as these populations shift toward older and longer-term immigrants. Increased naturalization in conjunction with a growing share of second-generation adult immigrants

(citizens by birth) will lead to larger shares of citizens among Latinos and Asians. Despite this, we project that whites will constitute nearly half of all registered voters (Table S.3), although they make up only a little more than one-third of the adult population. Furthermore, among registered voters, the propensity to vote is highest for whites. Thus, whites will continue to make up a majority of voters.

The findings of this report suggest several challenges for the Inland Empire as it continues down a path of substantial growth. First, the region should seek to improve educational outcomes and training for its lower-skilled workers. For most of the subregions, this means improving high school graduation rates. Promoting education and workforce training will remain an important goal for the region because about one in four adults is expected to have less than a high school diploma in 2015. Ideally, the upgrading of workforce skills will go hand in hand with growth in jobs that require more skills and in better-paying jobs for workers with low skills. Finally, to help ensure that policies are broadly beneficial, efforts should be made to increase participation in the public decisions that will help shape the future of the region.

Table S.3

Percentage Distribution of Registered Voters, by Race/Ethnicity, 2005 and 2015

	2005		2015	
	Adults	Registered Voters	Adults	Registered Voters
White	47	62	35	48
Latino	39	24	48	34
African American	7	9	7	9
Asian	6	4	8	6
American Indian	1	1	1	1
Multiracial	1	1	2	2

SOURCE: Authors' projections for 2005 and 2015.

NOTES: Asian includes Pacific Islanders. Columns may not sum to 100 percent because of rounding.

Contents

Fig Ta	mmary gures bles knowledgments	xi
1.	INTRODUCTION	1
2.	DEMOGRAPHIC AND ECONOMIC CONTEXT	
3.	INTERNATIONAL AND DOMESTIC MIGRATION Flows of Migrants	19
4.	POPULATION PROJECTIONS Projected Population Counts Projected Population Characteristics	40
5.	EDUCATION AND ECONOMIC PROJECTIONS Education Projections Employment Projections Skills Gaps Commuting Expanding Opportunities.	51 57 67
6.	POLITICAL PARTICIPATION	75
7.	CONCLUSION: INVESTING IN THE FUTURE	85
A.	opendix Notes on Data and Methods. Auxiliary Tables.	

References	115
About the Authors	119
Related PPIC Publications	121

Figures

S.1.	Net Migration Flows Between Southern California Counties, 2000–2006
C 2	
S.2.	Population Projections for the Inland Empire, by Age
1 1	Group, 2000, 2005, and 2015
1.1.	Map of the Inland Empire's Subregions
2.1.	Total Population of the Inland Empire, 1970–2006
2.2.	Ethnic Composition of the Inland Empire and California,
	1990 and 2006
2.3.	Average Annual Earnings per Job, by Metropolitan Area,
	20069
2.4.	Wages in California's Largest Metropolitan Areas Relative
	to the U.S. Average Wage, 1969–2006
3.1.	Annual Population Growth in the Inland Empire, by
	Components of Change, 1970–2006
3.2.	Net Migration Flows Between Southern California
	Counties, 1995–2000
3.3.	Net Migration Flows Between Southern California
	Counties, 2000–2006
3.4.	Age-Specific Migration Rates for the Inland Empire,
	by Age Group, 2004–2006
3.5.	Net Domestic Migration Flows to the Inland Empire,
	by Educational Attainment, 2004–2006
3.6.	Indexed Wage and Salary Employment in Selected
0.0.	Counties, 1969–2006
4.1.	New Residential Building Permits in Riverside and San
1.1.	Bernardino Counties, 1980–2007
4.2.	Population Projections for the Inland Empire, by Age
1.2.	Group, 2000, 2005, and 2015
5.1.	Percentage Distribution of Educational Attainment in the
J.1.	· ·
5.2	Inland Empire, by Age Group, 2005
5.2.	Percentage Change in the Number of Commuters in the
<i>5</i> 2	Inland Empire, by Place of Work, 2000 to 2005–200671
5.3.	Percentage of Inland Empire Workers Commuting Out of
	the Region, by Educational Attainment, 2005–200672

Tables

S.1.	Projected Percentage Ethnic Distribution in the Inland	
	Empire, 2000, 2005, and 2015	v
S.2.	Percentage Distribution of Educational Attainment Among	
	Adults: Trends and Projections, 1990–2015	. vii
S.3.	Percentage Distribution of Registered Voters, by Race/	
	Ethnicity, 2005 and 2015	viii
2.1.	Populations of the Inland Empire's Subregions, 1990,	
	2000, and 2005	. 13
2.2.	Percentage Distribution of Residents in the Inland Empire's	
	Subregions, by Race/Ethnicity and Nativity, 2000	. 14
2.3.	Percentage Distribution of Educational Attainment in the	
	Inland Empire's Subregions, 2000	. 15
2.4.	Percentage Age Distribution in the Inland Empire's	
	Subregions, 2000	. 16
2.5.	Income and Housing Characteristics in the Inland Empire's	
	Subregions, 2000	. 17
3.1.	International Migration to the Inland Empire, by Sending	
	Region, 1995–2000 and 2004–2006	. 21
3.2.	Domestic Migration Flows to and from the Inland Empire,	
	by Sending Region, 2000–2006	. 21
3.3.	Migration Flows to the Inland Empire, by Age Group,	
	2004–2006	. 25
3.4a.	Characteristics of Migrants Moving to and from the Inland	
	Empire, 2004–2006	27
3.4b.	Socioeconomic and Demographic Characteristics of	
	Migrants Moving to and from the Inland Empire,	
	2004–2006	. 29
3.5.	Estimates of Net Migration to San Bernardino and	
	Riverside Counties, by Ethnicity, 2000–2006	
3.6.	Median Home Prices in Selected Counties, 1999–2007	
3.7.	Reasons for Moving to the Inland Empire	
3.8.	Average Monthly Rent in Selected Regions, 2006	38
4.1.	Population Estimates and Projections for the Inland Empire,	
	2000–2005 and 2005–2015	41

4.2.	Population Projections for the Inland Empire's Subregions,	/ -
, -	2000, 2005, and 2015	. 43
4.3.	Projected Percentage Ethnic Distribution in the Inland Empire, 2000, 2005, and 2015	. 46
4.4.	Projected Percentage Ethnic Distribution in the Inland	
	Empire's Subregions, 2000 and 2015	. 48
4.5.	Projected Percentage of Foreign-Born Residents in the	
	Inland Empire, by Ethnicity, 2005 and 2015	. 50
5.1.	Percentage Distribution of Educational Attainment	
	Among Adults: Trends and Projections, 1990–2015	52
5.2.	Projected Percentage Distribution of Educational	
	Attainment, by Age Group, 2015	. 54
5.3.	Percentage Distribution of Subregion Educational	
	Attainment: Trends and Projections	55
5.4.	Projected Employment Growth in the Inland Empire,	
	by Industry, 2005 and 2015	59
5.5.	Percentage Distribution of Workforce Education in the	
	Inland Empire, by Industry, 2005 and 2015	. 60
5.6.	Percentage Distribution of Employers' Demand for	
	Education, 2005 and 2015	61
5.7.	Projected Percentage Change in Employment Share,	
	by Industry and Subregion, 2005–2015	. 64
5.8.	Percentage Distribution of Employers' Demand for	
	Education, by Subregion, 2005 and 2015	. 66
5.9.	Percentage Distribution of Educational Attainment and	
	Employers' Demand for Education, by Subregion, 2015	. 68
6.1.	Number of Adults in the Population, by Voter Eligibility	
	Status and Voter Registration Status, 2007	76
6.2.	Percentage Distribution of Voting Among Registered	
	Voters, by Region, 2002–2007	. 77
6.3.	Projected Percentage Distribution of Adult Citizenship,	
	by Race/Ethnicity, 2005 and 2015	. 77
6.4.	Projected Percentage Distribution of Voter Registration,	
	by Race/Ethnicity, 2005 and 2015	79
6.5.	Percentage Distribution of Registered Voters, by Race/	
	Ethnicity, 2005 and 2015	79
6.6.	Percentage Distribution of Voting Among Registered	
	Voters in the Inland Empire, by Race/Ethnicity,	
	2002–2007	. 80

6.7.	Percentage Distribution of Voting in the Inland Empire,
	by Age Group and Years in Home, 2002–200781
6.8.	Percentage Distribution of Voting in the Inland Empire,
	by Education and Income, 2002–200782
6.9.	Percentage Distribution of Nonvoting Political Participation,
	by Region, 2002–200783
A.1.	Base Year Life Expectancies, by Race/Ethnicity
A.2.	Total Fertility Rates in Riverside and San Bernardino
	Counties, 2000 and 201589
A.3.	Subregion Percentage Shares of Total and Incorporated
	County Populations, 1990, 2000, and 2006
B.1.	Populations in the Subregions and Incorporated Cities of
	the Inland Empire, 1990, 2000, and 2006
B.2.	Percentage Distribution of Characteristics of Intrastate
	Migrants Moving to and from the Inland Empire, by
	Region, 1995–2000. 99
B.3.	Intrastate Migration Flows to and from the Inland Empire,
	by Characteristics and Region, 1995–2000 102
B.4.	Industry Descriptions
B.5.	Projected Employment Growth in California, by Industry,
	2005–2015
B.6.	Percentage Distribution of Workforce Education in
	California, by Industry, 2000 and 2015 109
B.7.	Percentage Distribution of Employers' Demand for
	Education, California Department of Transportation
	Projections, 2005 and 2015
B.8.	Employment, by Industry and Subregion, 2005 111
B.9.	Percentage Distribution of Employment Growth, by
	Industry and Subregion, 2005–2015

Acknowledgments

This report was generously funded by The James Irvine Foundation and benefited from discussions with the staff at The James Irvine Foundation, especially Martha Campbell. We are also grateful to the many Inland Empire officials and leaders who provided us with local perspectives, including Steve PonTell of the La Jolla Institute, Norman King of the Leonard Transportation Center at the California State University at San Bernardino, Ty Schuiling and Steven Smith of San Bernardino Associated Governments, John Wohlmuth of the Coachella Valley Association of Governments, Rick Daniels of the Coachella Valley Economic Partnership, and Andy McCue, formerly of UC Riverside's Edward J. Blakely Center for Sustainable Suburban Development.

We appreciate the input we received from Rick Burnham and Juliann Allison of the Blakely Center; Martin Johnson and Karthick Ramakrishnan of UC Riverside; Rick Bishop of the Western Riverside Council of Governments; William Gayk of the County of Riverside Transportation and Land Management Agency; William Carney of the Inland Empire Economic Partnership; regional economist John Husing; Cindy Roth of the Greater Riverside Chambers of Commerce; Rose Mayes and Johnnie Jones of the Fair Housing Council of Riverside County; Maurice Calderón of Arrowhead Credit Union; Corey Timpson, Tom Dolan, and Elizabeth Ayala of Inland Congregations United for Change; Jeanette Arnquist of the Diocese of San Bernardino's Office of Social Concerns; Paul Gomez of Chaffey College; Vici Nagel of the High Desert Resource Network; Riverside Mayor Ron Loveridge; Susan Brodeur of Frontier Homes; Herb Fischer, San Bernardino County Superintendent of Schools; and Paul Herrera of the San Bernardino County Economic Development Agency.

We extend our thanks to those who provided data: Thomas Flournoy at the California Employment Development Department; Julie Hoang and Tadese Alemu at the California Department of Finance; Emily Gross at the Internal Revenue Service; Srinivasa Bhat, Ping Chang, and Hsi-hwa Hu at the Southern California Association of Governments; and Dean Bonner, Jennifer Paluch, and Sonja Petek of the PPIC Statewide Survey team. Qian

Li provided valuable programming assistance with the economic projections and the PPIC Statewide Survey.

The contents of this report were solely determined by its authors. Any errors in this report are those of the authors. Any opinions or interpretations expressed here are those of the authors alone and do not necessarily reflect the views of the Public Policy Institute of California.

1. Introduction

The Inland Empire of California—Riverside and San Bernardino Counties—is a vast region characterized by tremendous growth. In total area, the region covers more than one-sixth of California and is roughly equal in size to Virginia. Since 1990, the region's population has grown by more than 50 percent, a rate of growth twice that of the rest of California. At just over four million people, the Inland Empire's population is larger than that of Oregon. Employment in the region grew to nearly 1.2 million jobs with a rate of growth (57%) that greatly exceeded that of the rest of the state (10%).¹

In the context of this tremendous growth and the trends that have shaped the region over recent decades, we ask, "Where is the region headed?" To answer that question, we develop population and economic projections for 2015 for the Inland Empire. Our focus is on people and the economy and we highlight economic, educational, and civic opportunities and challenges the region will face over the coming decade. Specifically, we address eight questions:

- How many people will be added to the Inland Empire's population between now and 2015?
- What are the underlying dynamics driving this growth?
- How is the population likely to change in terms of demographic characteristics?
- What will be the likely education levels of the adult population?
- How is the Inland Empire's economy changing?
- What labor force skills will the region's economy demand?
- How well do the projected needs of the labor force match the projected skills of the population?
- How well will voters represent the population?

¹Information on population growth from 1990 to 2006 comes from California Department of Finance (2006a, 2006b). Information on total employment from 1990 to 2004 comes from the California Employment Development Department (2006a).

The Inland Empire is a geographically diverse region. Elevations range from 228 feet below sea level at the Salton Sea to 11,502 feet above at Mt. San Gorgonio, Southern California's highest peak. Vast areas of the Inland Empire are lightly populated deserts or mountainous regions. The overwhelming majority of the region's population resides in the western reaches of both counties—areas that are close to the large urban conglomeration of coastal Southern California. But even within the urbanized areas, distinct subregions can be identified.

Having consulted with local officials and examined socioeconomic characteristics, we identify ten such subregions in this report (Figure 1.1). In defining subregions, we primarily considered combining contiguous cities and neighborhoods that had similar commuting patterns, jobs, and economic characteristics. Where possible, our analysis examines each

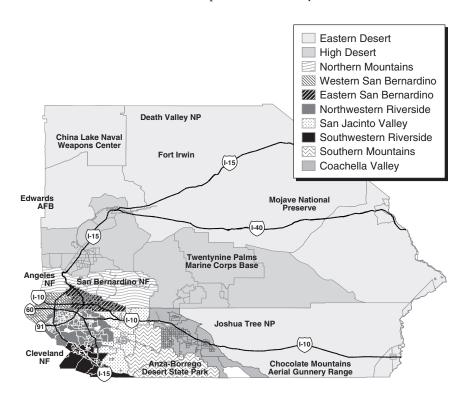


Figure 1.1—Map of the Inland Empire's Subregions

subregion separately. For the three subregions with fairly small populations, the Eastern Desert and the two mountain regions, our analysis is somewhat limited. Appendix Table B.1 lists the incorporated cities and their populations for each subregion.²

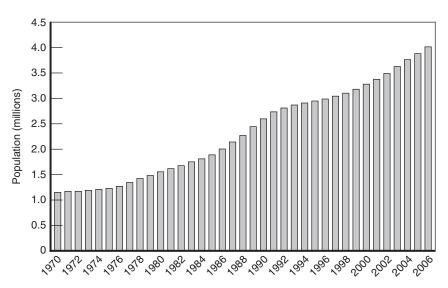
The report is organized as follows. Chapter 2 provides a portrait of demographic and economic trends and conditions in the Inland Empire. Chapter 3 describes regional migration patterns, because migration is the most important factor driving population growth and change in this region. In Chapter 4, we develop the population projections including the age, race/ethnicity, and nativity (foreign-born status) of future Inland Empire residents. Chapter 5 examines workforce projections, looking first at the education levels of adults and then at the educational needs of the future labor market. Chapter 6 describes political participation in the region. Readers interested in data and methods are referred to the appendices.

²For a detailed description of Inland Empire cities, see Husing (2005c).

2. Demographic and Economic Context

California's Inland Empire is a region of astounding population growth. Since 1970, it has grown almost fourfold, a rate almost twice that of the rest of California and about 2.5 times that of the rest of the United States. Almost perennially, and at least since the 1950s, the Inland Empire has been either the fastest-growing metropolitan area in the United States or one of the top two or three. By 2006, its population had surpassed four million people (Figure 2.1), larger than Oregon and 23 other states.

Not only has the Inland Empire experienced tremendous population growth, the ethnic composition of the region's population has also undergone dramatic transformations. As recently as 1990, over 60 percent of the region's residents were non-Hispanic whites. Today, no single race or ethnic group constitutes a majority of the region's population; Latinos are



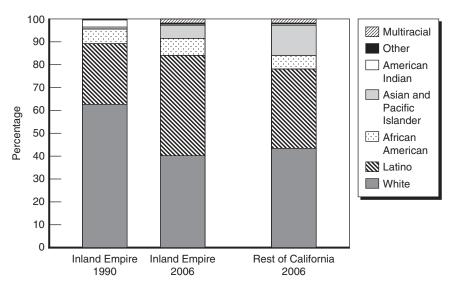
SOURCE: Authors' calculations based on California Department of Finance estimates.

Figure 2.1—Total Population of the Inland Empire, 1970–2006

now the largest group (Figure 2.2). Moreover, the region has seen strong increases in the population of African Americans, a recent phenomenon attributable to large flows from Los Angeles County. That movement began in the 1980s and accelerated in the 1990s.

Indeed, migration has been the primary driver of population growth in the Inland Empire. From 1970 through 2006, migration directly accounted for 70 percent of the region's population growth. As discussed in the following chapter, the vast majority of migrants to the Inland Empire are domestic, from other parts of California and the United States, rather than international. Migration flows were especially large in the late 1980s and in the current decade, both periods of surging home prices and new housing construction.

Job growth has been strong, but the Inland Empire remains one of the largest sources of intercounty commuters in the United States. Among the 20 most populated counties in the United States, only two New York City boroughs (Queens and Brooklyn) had a higher share of workers commuting



SOURCES: Authors' calculations based on the 1990 Census, California Department of Finance estimates, and the 2006 American Community Survey.

Figure 2.2—Ethnic Composition of the Inland Empire and California, 1990 and 2006

out of the county. In 2006, 30 percent of San Bernardino County residents with a job commuted out of the county, and 29 percent of Riverside County workers did so.¹ These percentages remain little changed since 1990. Of course, some intercounty commuters go from one Inland Empire county to another, but the large majority commute to a coastal county. In 2006, about 70 percent of San Bernardino out-of-county workers commuted to a coastal county and two-thirds of Riverside County outof-county workers did so. Thus, although job growth internally has been strong, so has the increase in commuting out of the region. From 2000 to 2006, the number of workers commuting out of the region increased 30 percent, and the number of workers both living and working in the Inland Empire increased 38 percent. Riverside County saw especially strong growth both in the number of residents remaining in the county to work (with a 48% increase from 2000 to 2006) and in the number of workers commuting outside the county (43%); in San Bernardino County, these increases were 28 percent and 23 percent, respectively.²

With rapid employment and population growth, poverty rates in the Inland Empire have declined since 2000, although average incomes and wages remain well below those in the rest of the state and nation. With poverty rates of 12.2 percent in Riverside and 13.7 percent in San Bernardino in 2006, the Inland Empire has poverty rates (13.0%) similar to those of the state (13.1%) and the nation (13.3%). The region does have a substantial share of high-income families. However, at 19 percent, the share of Inland Empire households with annual incomes above \$100,000 is lower than the statewide share of 25 percent.³ Average household incomes are substantially lower in the Inland Empire (\$67,200 in 2006) than in the state (\$77,400). Riverside County tends to have slightly higher household incomes (\$68,500) than San Bernardino County (\$65,800). Of course,

 $^{^{\}rm 1}{\rm Authors'}$ calculations based on the 2006 American Community Survey.

²Authors' calculations based on the 2000 Census and the 2006 American Community Survey.

³Authors' calculations based on the 2006 American Community Survey. See Reed (2006) for estimates of poverty by California county with adjustments for housing costs.

lower housing costs, at least compared to coastal counties, help ameliorate some of the wage differential.

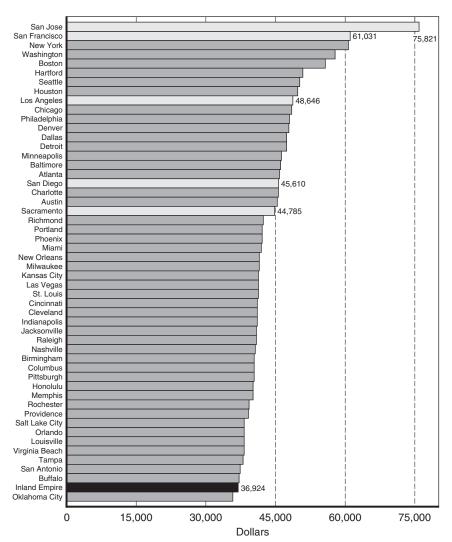
The Inland Empire's lower household incomes are primarily a consequence of lower-paying jobs in the region. In 2006, average annual wages of Inland Empire jobs (\$36,924) were well below state (\$48,027) and national (\$41,991) averages.⁴ A ranking of annual wages in the 52 largest metropolitan areas in the United States (those with more than 500,000 jobs) places the Inland Empire 51st, ahead of only Oklahoma City, and well below California's other large metropolitan areas (Figure 2.3). Moreover as the population has grown, wages have fallen even further behind those in the rest of the nation; in 1969, Inland Empire jobs paid about the same as jobs in the rest of the nation, but by 2006, Inland Empire wages were 12 percent lower, despite some improvement earlier this decade (Figure 2.4). San Bernardino County jobs tend to pay slightly better than Riverside County's (\$37,445 versus \$36,378). Riverside County's higher household incomes are due to more nonwage income as well as the higher incomes of residents who commute to higher-paying jobs in other counties, particularly the nearby coastal counties. Inland Empire residents who commute to coastal county jobs tend to have higher levels of education and earnings than residents who live and work in the Inland Empire.

Subregion Descriptions

The vast majority of the Inland Empire's residents live in the western portion of the region, in areas adjacent to Los Angeles, Orange, and San Diego Counties and within commuting distance to those coastal counties. (Even the Eastern San Bernardino subregion is really in the western portion of the county.) In Riverside County, the Coachella Valley subregion is a notable exception, as is the High Desert in San Bernardino County. Both regions are some distance away from the coastal counties and contain sizable populations.

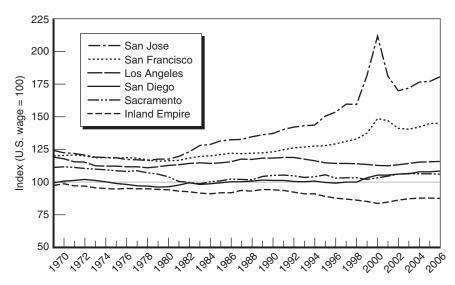
The three largest subregions—Western San Bernardino, Eastern San Bernardino, and Northwestern Riverside—lie on the western edge of the Inland Empire, bordered on the north by the San Gabriel and San

 $^{^4}$ Data in this paragraph are derived from the U.S. Bureau of Economic Analysis (2008).



SOURCE: Authors' calculations based on U.S. Bureau of Economic Analysis data for U.S. metropolitan areas with 500,000 or more jobs (U.S. Bureau of Economic Analysis, 2008).

Figure 2.3—Average Annual Earnings per Job, by Metropolitan Area, 2006



SOURCE: Authors' calculations based on U.S. Bureau of Economic Analysis (2008) data. NOTE: The U.S. average wage is normalized to a baseline of 100 for each year.

Figure 2.4—Wages in California's Largest Metropolitan Areas Relative to the U.S. Average Wage, 1969–2006

Bernardino Mountains and on the southwest by the Santa Ana Mountains. The subregions share a history of settlement spurred by the establishment of railroads (the Southern Pacific and the California Southern), irrigation systems from the surrounding mountains, and citrus agriculture (primarily navel and Valencia oranges). With ready access to rail transport, the first incorporated cities in each of these subregions—Ontario, San Bernardino, and Riverside, respectively—became centers of citrus and dairy farming and resort destinations for travelers seeking a warm, dry climate. In the early 20th century, the construction of the Pacific Electric Railroad and U.S. Route 66 allowed enhanced access to the rapidly growing city of Los Angeles, establishing the area as a crossroads between the West Coast and the rest of the country and providing new markets for its agricultural products and hospitality industries. Manufacturing industries also emerged in Fontana and Ontario. The nationwide postwar expansion of suburbs and the defense industry increased the population of these three subregions. However, an even greater influx began in the 1980s and continued in the

1990s, when residents of Los Angeles and Orange Counties moved east to escape high rents and real estate prices. The newly incorporated cities of Chino Hills, Yucaipa, and Moreno Valley have grown by 54 percent, 31 percent, and 25 percent, respectively, since 1995.

The San Jacinto Valley subregion in Riverside County, between the San Jacinto Mountains to the east and the Northwestern Riverside subregion to the west, followed a similar, if more protracted path. The San Gorgonio Pass attracted the attention of the U.S. government as a feasible route to the Pacific Ocean, and railroad tracks were laid shortly after its discovery in the mid-19th century. With a reliable water source from Lake Hemet on the San Jacinto River, the area became known for its horticulture (mainly apples, citrus, walnuts, and stone fruits) and for recreational resorts. In recent years, residential developers have begun to turn toward the San Jacinto Valley, and the population, including a sizable retiree contingent, has grown rapidly.

The Southwestern Riverside subregion constitutes the southwest corner of the Inland Empire. Characterized by a gentle, rolling topography, it lies between the Santa Ana Mountains (that separate it from Orange County) and the San Diego border to the south. Like the San Jacinto Valley region to the northeast, it has grown dramatically in its very recent history.

Lake Elsinore was incorporated in the late 19th century, but the rest of the subregion, used largely for sheep and cattle ranching, saw slow population growth. The sale of ranchland to developers in the 1960s sparked a boom in residential construction that intensified in the 1990s when families from nearby San Diego and Orange Counties began moving in to take advantage of relatively affordable housing prices. Such newly incorporated cities as Murrieta and Temecula have seen some of the Inland Empire's most dramatic population increases during the past decade.

The High Desert is another example of a traditionally slow-growing area experiencing a recent and dramatic population boom. The subregion stretches eastward from the western border of San Bernardino County, north of the San Gabriel and San Bernardino Mountains, to encompass part of the Mojave Desert. Its cities are typically situated at altitudes between 2,000 and 3,000 feet, and nearby peaks may reach 6,000 feet. Modern settlement in the High Desert developed from silver and borax mining in the Mojave Desert, the subsequent construction of

transportation infrastructure, and, more recently, the establishment of several military installations nearby. The High Desert's northernmost city, Barstow, was established upon the arrival of the Santa Fe Railroad and was the first to incorporate, in 1947, following the construction of Route 66. The subregion's phenomenal recent population growth, however, owes mostly to the newer cities along the Mojave River—Apple Valley, Hesperia, and Victorville have grown by 26 percent, 32 percent, and 48 percent, respectively, since 1995.

The Coachella Valley runs northwest to southeast, from the San Gorgonio Pass to the Salton Sea in Riverside County. The San Jacinto and Santa Rosa Mountains lie to the southwest and the Little San Bernardino Mountains to the northeast. In 1926, the construction of Highway 99, connecting the valley with Los Angeles and later augmented by Interstate 10, helped establish the region as a center of agriculture and tourism. More recently, several of the area's American Indian tribes have established high-end casinos and resorts to draw people to the valley for recreation. But many others are coming to stay—signs for new home construction are nearly as prevalent as in the Southwestern Riverside and High Desert regions—and the Coachella Valley's population has mushroomed, led by growth in the oldest cities (such as Indio, with 54% growth since 1995) as well as in the newest (such as La Quinta, with 118%).

Using data from the 2000 Census and our own estimates for 2005, we see a few patterns emerge that are consistent with the type and timing of growth in each of these subregions.

Northwestern Riverside and Western San Bernardino are the most populated subregions, each with over 800,000 residents (Table 2.1). Along with the subregion experiencing the highest growth rates—Southwestern Riverside—these areas are home to many of the Inland Empire's coastal county commuters. All of the more populous subregions experienced growth rates much greater than that of the state during this decade (1.3% per year for the rest of the state). Eastern San Bernardino has grown less rapidly than the rest of the Inland Empire and was surpassed in population by the Western San Bernardino subregion during the 1990s.

In addition to population growth rates, the subregions differ substantially across other dimensions as well. One of these is ethnicity.

 $Table\ 2.1$ Populations of the Inland Empire's Subregions, 1990, 2000, and 2005

				Average	Average Annual	Average	Average Annual
			1	Percentag	Percentage Change	Absolute	Absolute Change
	1990	2000	2005	1990–2000	2000–2005	1990-2000	2000-2005
			Riverside County	ınty			
Coachella Valley	230,900	319,600	535,000	3.3	4.6	8,870	16,280
Southern Mountains	9,500	11,800	(a)	2.2	(a)	230	(a)
Northwestern Riverside	628,100	773,600	1,013,000	2.1	2.8	14,550	23,080
San Jacinto Valley	157,900	192,800	361,000	2.0	3.8	3,490	7,840
Southwestern Riverside	125,700	223,100	477,000	5.9	7.5	9,740	19,580
		Saı	San Bernardino County	County			
High Desert	283,300	345,700	420,000	2.0	4.0	6,240	14,860
Northern Mountains	45,100	46,300	(a)	0.3	(a)	120	
Western San Bernardino	567,500	717,100	835,000	2.4	3.1	14,960	23,580
Eastern San Bernardino	495,300	562,000	618,000	1.3	1.9	6,670	11,200
Eastern Desert	45,700	62,900	(a)	3.2	(a)	1,720	(a)
			Totals				
Riverside County	1,170,400	1,170,400 1,546,600	1,930,900	2.8	4.5	37,620	76,860
San Bernardino County	1,418,400	1,708,200	1,967,700	1.9	2.9	28,980	51,900
Inland Empire	2,588,800	3,254,800	3,898,500	2.3	3.7	909,99	128,740
SOURCES: Authors' calculations based on the 2000 Census and estimates for 2005.	ions based on th	e 2000 Census	s and estimate	s for 2005.			

^aEstimates not available.

NOTE: Numbers may not sum because of rounding. Eastern Desert is in both counties.

Only three subregions—the San Jacinto Valley, Southwestern Riverside, and the High Desert—had a majority non-Hispanic white population, according to the 2000 Census (each over 60%; see Table 2.2). In the other four subregions, no ethnic group constituted a majority of the population. Latinos were a near majority of the population in the Coachella Valley and in Western San Bernardino and were the largest ethnic group in Eastern San Bernardino. African American shares were greatest in Eastern San Bernardino. Asians constituted less than 10 percent of the total of every subregion, with the highest Asian share in Western San Bernardino. Shares of multiracial and American Indian persons (not shown) were not more than 3 percent and 2 percent, respectively, in each subregion.

The Coachella Valley and Western San Bernardino had the highest share of foreign-born residents in 2000, at 26 percent and 24 percent, respectively, putting them on a par with the state as a whole (Table 2.2). Only 10 percent of the population in the High Desert, San Jacinto Valley, and Southwestern Riverside subregions was foreign-born, compared to about one-fifth in Northwestern Riverside, Eastern San Bernardino, and the Inland Empire as a whole.

Table 2.2

Percentage Distribution of Residents in the Inland Empire's Subregions, by Race/Ethnicity and Nativity, 2000

	White	Latino	African American	Asian or Pacific Islander	Foreign- Born
Coachella Valley	48	46	2	2	27
Northwestern Riverside	43	39	9	5	20
San Jacinto Valley	66	25	3	2	12
Southwestern Riverside	69	22	3	3	11
High Desert	62	25	7	2	9
Western San Bernardino	36	47	8	7	24
Eastern San Bernardino	38	42	12	5	19
Inland Empire	47	38	7	4	19
California	47	32	6	11	26

Educational attainment levels differ across the subregions as well but primarily at the upper end of the distribution rather than at the lower end (Table 2.3). In all but one of the Inland Empire's seven most populated subregions, about one of every four adults has not graduated from high school. The percentage of college graduates is only 11 percent in the High Desert and 20 percent in the Coachella Valley. Although the High Desert has relatively few college graduates, it also has relatively few high school dropouts. Conversely, the Coachella Valley has a relatively high share of high school dropouts. This bifurcated educational distribution in the Coachella Valley is related to its economy, with many well-educated retirees moving to the area for its amenities, and younger, lower-skill workers migrating in for service sector and agricultural employment.

Whereas the Inland Empire is a primary destination for young families and all the subregions have relatively high shares of young children, certain subregions do attract substantial numbers of retirees. The San Jacinto Valley and the Coachella Valley have historically been primary destinations for retirees. Those moving to the Coachella Valley have tended to have

Table 2.3

Percentage Distribution of Educational Attainment in the Inland Empire's Subregions, 2000

	Less Than a High School Diploma	Bachelor's Degree or Higher
Coachella Valley	28	20
Northwestern Riverside	26	16
San Jacinto Valley	24	13
Southwestern Riverside	16	19
High Desert	22	11
Western San Bernardino	27	17
Eastern San Bernardino	28	16
Inland Empire	25	16
California	23	27

more education than those moving to the San Jacinto Valley. Most of the subregions have relatively high shares of children compared to the state overall (Table 2.4). Strong population growth among young adults has led to these large child populations.

In each of the Inland Empire's subregions, per-capita income is lower than that of the state as a whole (Table 2.5). The rapidly growing Southwestern Riverside subregion has among the highest per-capita incomes in the Inland Empire and the lowest poverty rate (8%). The Coachella Valley has the highest per-capita income of all the subregions, at nearly \$22,000, but also posts one of the highest poverty rates (17%). The other subregions with high poverty rates—Eastern San Bernardino, the High Desert, and the San Jacinto Valley—all have incomes lower than the regional average.

Southwestern Riverside also stands out as the region with the largest proportion of housing units built in the last decade (35%) and of workers who commute more than 39 minutes to their jobs (40%). These figures, combined with the high proportion of residents who lived in a different county five years earlier (32%; not shown) and who work in a different

Table 2.4

Percentage Age Distribution in the Inland Empire's
Subregions, 2000

	Under	Ages 65
	Age 15	and Over
Coachella Valley	24	18
Northwestern Riverside	29	8
San Jacinto Valley	23	24
Southwestern Riverside	28	13
High Desert	27	13
Western San Bernardino	29	6
Eastern San Bernardino	29	9
Inland Empire	26	10
California	23	11

county (36%), contribute to a profile of Southwestern Riverside as a place of rapid recent in-migration from coastal counties by people who, for the time being at least, continue to work in those counties. A similar description may apply to Western San Bernardino and Northwestern Riverside, with the highest proportions of out-of-county commuters and recent arrivals (24% in each case; not shown), although the housing stock is not nearly as new in these relatively built-out subregions—only 11 percent of units in Western San Bernardino and 8 percent in Northwestern Riverside were built in the 1990s. The Coachella Valley and the High Desert both have high proportions of recently built housing but very different commute patterns. Only 6 percent of Coachella Valley residents travel out of county for work, and only 10 percent have a long commute, suggesting that many residents work in their home subregions. In contrast, although only 16 percent of High Desert residents commute out of county, they have the second-highest proportion of long commutes (31%). This likely reflects the time driving through the Cajon Pass between population centers such as Apple Valley, Hesperia, and Victorville, and to job sites in or near the city of San Bernardino.

Table 2.5

Income and Housing Characteristics in the Inland Empire's Subregions, 2000

	Per-Capita Income (\$)	Poverty Rate (%)	Housing Units Built in 1990s (%)	Work in a Different County (%)	Commute Longer Than 39 Minutes (%)
Coachella Valley	21,822	17	28	6	9
Northwestern Riverside	17,423	14	8	39	29
San Jacinto Valley	16,986	16	22	20	27
Southwestern Riverside	20,925	8	35	36	40
High Desert	15,733	17	29	16	31
Western San Bernardino	18,029	12	11	44	29
Eastern San Bernardino	15,487	20	12	23	19
Inland Empire	17,726	15	16	30	26
California	22,711	14	11	17	21

In sum, the Inland Empire is a rapidly growing region composed of diverse subregions. Relative to the rest of California, the region has a larger share of Latinos and African Americans. Despite strong job growth, wage growth has been relatively slow and poverty rates are somewhat higher than statewide. Relative to the rest of the state, the region has a greater share of young people and a smaller share of adults who are college graduates. For a broader description of the demographic and economic context of the Inland Empire, see Husing (2006a).⁵

⁵See Husing (2005a) for a description of the Coachella Valley.

3. International and Domestic Migration

The long-term transformative power of migration is clearly evident in the Inland Empire. As the largest source of population growth in a rapidly growing region, migration is the most important driver of change in the Inland Empire. In this chapter, we first describe the size and origins of these migration flows. Next, we discuss characteristics of the migrants. Finally, we identify key factors that drive the migration.

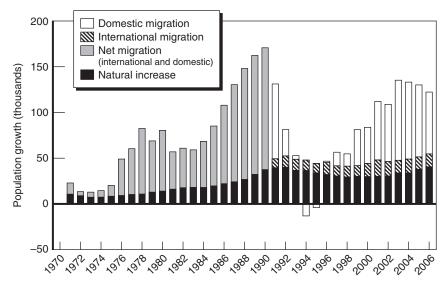
Flows of Migrants

Migration has been the primary driver of population growth in the Inland Empire for many years (Figure 3.1). From 1970 through 2006, migration directly accounted for 70 percent of the region's population growth. Migration flows were especially large in the late 1980s and in the current decade, both periods of surging home prices and new housing construction. Downturns in migration flows in the early 1990s were related to the recession, one that was longer and deeper in Southern California than in the rest of the nation. Even during that downturn, the Inland Empire experienced only small net outflows of migrants. Over the past five years, migration flows have been very high, rivaling the record-setting flows of the late 1980s.

Most of the Inland Empire's migrants are not from other countries but from other places in the United States.¹ Since 2000, the Inland Empire has experienced a net gain of 587,000 migrants, with 82 percent of this attributable to migration exchanges with other places in the United States and the remaining 18 percent attributable to international migration.² Of the international migrants, over half are from Latin America, primarily Mexico, but a substantial share are U.S.-born citizens returning from

¹It is not possible to distinguish undocumented immigrants from other immigrants in the datasets we use.

²Based on the authors' tabulations of California Department of Finance estimates.



SOURCE: Authors' calculations based on California Department of Finance data. NOTES: The figure shows net migration. For 1990 and earlier years, domestic and international net migration are combined (gray bars).

Figure 3.1—Annual Population Growth in the Inland Empire, by Components of Change, 1970–2006

abroad (Table 3.1). Many of the U.S.-born citizens moving internationally are military personnel, with Iraq one of the leading countries of origin for the most recent international migrants.

Not only does the Inland Empire grow primarily from domestic migration, the source of the domestic migrants is highly localized. Almost all of the net gains in domestic migration in the Inland Empire are attributable to flows from the coastal counties of Southern California (Table 3.2). Within Southern California, the large urban coastal counties are dominant contributors. Los Angeles County alone accounts for over half of all net domestic migration to the Inland Empire.

In contrast, flows to and from other regions within California are similar in size, and the Inland Empire actually sends more migrants to other states in the United States than it receives from those states. About half of this net loss occurs in exchanges with just two states: Arizona and Nevada. Those losses are much lower in this decade than in the latter half of the 1990s.

Table 3.1

International Migration to the Inland Empire, by Sending Region, 1995–2000 and 2004–2006

	1995–2000 Share of Total	2004–2006 Share of Total
Foreign-born, %		
Latin America	55.3	54.7
Asia	13.2	13.1
Europe	4.3	5.8
Canada	1.9	4.0
Rest of world	2.2	1.5
U.Sborn returning migrants, %	23.1	20.9
Total flow	85,700	50,000

SOURCES: Authors' calculations based on the 2000 Census and the 2005 and 2006 American Community Surveys.

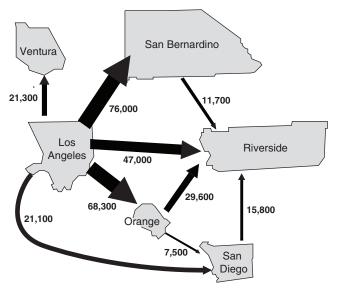
Table 3.2

Domestic Migration Flows to and from the Inland Empire, by Sending Region, 2000–2006

	Domestic In	Domestic Out	Net Domestic
Los Angeles County	481,700	181,600	300,100
Orange County	244,900	89,900	154,900
San Diego County	147,000	57,100	89,900
Ventura County	8,500	7,100	1,400
Imperial County	8,300	6,700	1,600
Remainder of state	93,300	90,400	2,900
Other states	300,500	382,900	-82,400
Total domestic	1,284,300	815,800	468,500

SOURCES: Authors' calculations based on Internal Revenue Service tax return records, California Department of Finance estimates, and the 2005 and 2006 American Community Surveys.

As shown in Figures 3.2 and 3.3, flows of migrants to the Inland Empire from coastal Southern California have increased substantially in the first part of this decade compared to the latter half of the 1990s. Los

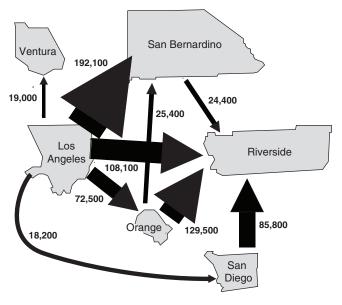


SOURCE: Authors' estimates based on the 2000 Census.

Figure 3.2—Net Migration Flows Between Southern California Counties, 1995–2000

Angeles County, with ten million residents, remains the dominant source of migrants to the Inland Empire. Los Angeles County migrants especially dominate the flows to San Bernardino County, with average annual net migration more than doubling from the last part of the 1990s to the first part of the 2000s. A relatively small but noteworthy flow has also developed from Orange County to San Bernardino County.

However, one of the most notable changes over the past ten years has been the increasing importance of Orange and San Diego Counties as sources of migrants to the Inland Empire. Riverside County is by far the primary destination of these greatly increased flows, such that Riverside County now receives about twice as many migrants from Orange and San Diego Counties combined as from Los Angeles County. Average annual flows from Orange County have more than tripled in this decade compared to the last half of the 1990s, and flows from San Diego County have increased nearly fivefold. Net migration flows between the two Inland



SOURCES: Authors' estimates based on IRS tax return records, California Department of Finance estimates, and the 2005 and 2006 American Community Surveys.

Figure 3.3—Net Migration Flows Between Southern California Counties, 2000–2006

Empire counties are not large but are consistently from San Bernardino County to Riverside County.

Characteristics of Migrants

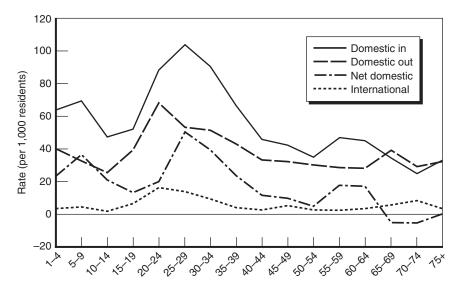
More than half of the Inland Empire's residents were born elsewhere.³ Thus, the socioeconomic characteristics of its residents are to a large degree determined by the characteristics of migrants to the region.

Many of these migrants are young adults. Mobility and migration rates tend to be much higher for young adults than for older adults

³The 2004 American Community Survey shows that 57 percent of Inland Empire residents were born in California. Although we do not have information on place of birth within the state, large migration flows from other parts of California make it a certainty that a large share of California-born Inland Empire residents were born outside the Inland Empire.

(Figure 3.4). Life events more common among young adults—attending or graduating from college, getting married, having children, establishing a career, changing jobs—often lead to migration. In the Inland Empire, adults in their twenties and early thirties have the highest migration rates. Rates of domestic migration both to and from the region are high at these ages. Between 2004 and 2006, domestic out-migration rates for 20- to 24-year-olds were almost as high as domestic in-migration rates for this group, whereas domestic in-migration rates were far higher for adults in their late twenties and early thirties. International migration rates are far lower. International migrants tend to be quite young, with migration rates peaking for 20- to 24-year-olds.

A noteworthy increase in migration to the Inland Empire occurs at early retirement ages, with no offsetting increase in out-migration. On a net basis, then, this early or preretirement group experienced large positive net migration rates between 2004 and 2006.



SOURCES: Authors' calculations based on the 2005 and 2006 American Community Surveys.

Figure 3.4—Age-Specific Migration Rates for the Inland Empire, by Age Group, 2004–2006

However, it is important to bear in mind that younger adult age groups have many more people than do older age groups. Therefore, for example, high positive net migration rates of 60- to 64-year-olds leads to much lower absolute population gains than similar net migration rates for 35- to 39-year-olds who are a much larger cohort (Table 3.3). Nonetheless, 15 percent of the net domestic migration flow between 1995 and 2000 consisted of adults ages 50 and older.

The Inland Empire is especially attractive to young families, evidenced by the strong positive net flows of adults in their thirties and relatively large flows of young children. About half of domestic migrants to the Inland Empire are married. By comparison, young singles dominate the flows

Table 3.3

Migration Flows to the Inland Empire, by Age Group, 2004–2006

Age Group	Domestic In	Domestic Out	Ñet Domestic	International In
1-4	39,000	24,800	14,200	2,200
5-9	42,400	20,300	22,100	2,800
10-14	32,400	17,400	15,000	1,500
15-19	34,000	25,300	8,700	4,600
20-24	53,900	41,700	12,200	10,000
25-29	67,700	35,100	32,700	9,300
30-34	51,600	29,200	22,400	5,400
35-39	37,200	23,900	13,300	2,300
40-44	26,400	19,500	6,900	1,700
45-49	22,500	17,200	5,300	2,900
50-54	15,800	13,600	2,200	1,400
55-59	16,200	10,000	6,200	900
60-64	12,300	7,600	4,600	1,000
65-69	7,100	8,200	(1,000)	1,200
70-74	4,400	5,300	(900)	1,600
75+	12,300	12,100	200	1,300
Total	475,200	311,200	164,100	50,100

SOURCES: Authors' calculations based on the 2005 and 2006 American Community Surveys.

NOTE: Row differences may not equal net because of rounding.

out of the Inland Empire to other regions in California, whereas married couples are the largest share of adults moving to other states (Tables 3.4a and 3.4b).

Migration flows into the Inland Empire are ethnically diverse (Tables 3.4a and 3.4b, race/ethnicity panels). Latinos make up a majority of international immigrants, and whites dominate the flows, both in and out, of domestic interstate migrants. However, because intrastate migration makes up the vast majority of the net gains attributable to migration, these flows are the most important. Among intrastate migrants to the Inland Empire, Latinos make up the majority. To a certain extent, these flows represent the ethnic composition of the places of origin of the migrants. For example, whites dominate the flows from Orange and San Diego Counties, whereas Latinos dominate the flows from Los Angeles County (see Appendix Table B.2 for migrant characteristics by origin county). Recent estimates (Table 3.5) suggest that Latinos constitute more than half of net migration to Riverside County and the vast majority of net migration to San Bernardino County. The estimates also suggest that Asian migration, especially to Riverside County, has increased substantially this decade compared to the previous one.

Although international migration directly contributes less than 20 percent of all net migration gains, many intrastate migrants to the Inland Empire are in fact foreign-born. This stepwise migration pattern, in which immigrants first settle in an ethnic enclave of foreign-born co-ethnics and then eventually move out of the enclave, is well documented in the research literature. In the case of the Inland Empire, 30 percent of intrastate in-migrants are foreign born (Tables 3.4a and 3.4b). Most of these foreign-born intrastate migrants to the Inland Empire are from Los Angeles County and have been in the United States for more than ten years (see Appendix Table B.3 for migration flows by origin county). Thus, a substantial share of the intrastate flows to the Inland Empire includes many individuals and families who first came to the United States and settled in Los Angeles County; then, after many years in the United States, they moved from Los Angeles to the Inland Empire.

Domestic migrants of all types—to and from the Inland Empire, interstate and intrastate—are more likely than native residents to have

 $Table\ 3.4 a$ Characteristics of Migrants Moving to and from the Inland Empire, 2004–2006

	All	International	Interstate	Interstate	Intrastate	Intrastate
	Residents	In	In	Out	In	Out
Sex						
Female	50.2	45.1	49.6	49.0	48.8	46.7
Male	49.8	54.9	50.4	51.0	51.2	53.3
Race/ethnicity						
White	40.6	19.8	56.1	57.2	26.5	38.9
Latino	43.8	61.6	26.4	26.8	54.6	35.5
African American	7.1	2.8	7.2	8.4	8.1	8.2
Asian	5.5	12.9	6.3	4.3	8.6	12.2
American Indian	0.5	0.6	1.1	0.9	0.3	0.3
Multiracial	1.7	0.2	2.2	2.3	1.5	4.0
Other	0.8	2.1	0.6	0.1	0.4	0.9
Citizenship						
Citizen by birth	78.0	20.8	85.4	85.8	69.8	78.5
Naturalized citizen	8.3	2.5	4.9	6.2	11.0	8.3
Not a citizen	13.7	76.7	9.7	8.0	19.2	13.3
Education						
8th grade or less	10.1	25.7	4.6	6.3	12.2	4.9
Some high school	12.6	9.0	11.6	7.5	14.9	11.6
High school						
graduate	27.6	21.1	26.7	28.5	26.0	27.8
Some college	31.1	19.2	27.6	37.8	26.9	31.9
Bachelor's degree	12.2	17.3	19.0	13.7	14.7	14.5
Graduate degree	6.3	7.7	10.5	6.2	5.2	9.3
Marital status						
Married	55.2	49.3	48.8	54.8	50.4	37.4
Never married	26.7	38.3	33.2	27.2	33.7	43.5
Separated/divorced	12.8	7.2	12.6	12.8	12.6	15.3
Widowed	5.3	5.3	5.4	5.2	3.3	13.8
Poverty status						
Above poverty	86.0	63.0	85.3	80.1	80.2	72.1
At or below poverty	14.0	37.0	14.7	19.9	19.8	27.9

Table 3.4a (continued)

-	All	International	Interstate	Interstate	Intrastate	Intrastate
	Residents	In	In	Out	In	Out
Welfare status						
No welfare	97.3	99.1	96.8	97.8	97.7	96.7
Received welfare	2.7	0.9	3.2	2.1	2.3	3.3
Household income, \$1,000s						
<25	16.3	30.2	15.9	22.1	15.2	20.3
25-49	24.8	23.0	21.7	32.3	26.8	23.3
50-74	20.8	21.0	21.9	21.9	25.1	21.0
75–99	15.0	10.5	13.3	11.5	13.6	13.8
100+	23.1	15.3	27.2	12.1	19.2	21.6
Housing tenure						
Renter	32.3	66.2	69.3	57.0	41.8	73.3
Owner	67.7	33.8	30.7	43.0	58.2	26.7

SOURCES: Authors' calculations based on the 2005 and 2006 American Community Surveys.

NOTES: Education is determined for adults ages 25 and over; marital status for adults ages 18 and over; poverty status for persons in households; and welfare and housing tenure for household heads.

at least a bachelor's degree (Tables 3.4a and 3.4b). Moreover, between 2004 and 2006, a higher share of international migrants (25%) graduated from college than did all Inland Empire residents (18.5%). However, an even larger share of international migrants had not completed high school (35%). The best-educated migrants are interstate in-migrants, but there are relatively few of them. Intrastate out-migrants from the Inland Empire are also relatively well educated (24% are college graduates) and tend to be better educated than intrastate in-migrants.

The overall picture that emerges with respect to migration and educational attainment is at best mixed. A substantial share of international migrants to the Inland Empire have college degrees, but many more have not graduated from high school, and most of these have less than a ninth-grade education. In its domestic migration exchanges, the Inland Empire is a net importer of migrants at every level of education, but also gains far more residents at the low end of the education spectrum than at the higher

Socioeconomic and Demographic Characteristics of Migrants Moving to and from the Inland Empire, 2004-2006

Table 3.4b

	International Interstate Interstate In In Out	Interstate In	Interstate Out	Intrastate In	Intrastate Out	Intrastate Intrastate Total Domestic Total Domestic In Out	Total Domestic Out	Total Net Domestic
Sex								
Female	22,500	54,600	80,500	178,200	68,600	232,800	149,100	83,700
Male	274,400	55,500	83,800	187,000	78,300	242,500	162,100	80,400
Race/ethnicity								
White	9,900	61,800	94,000	96,800	57,200	158,500	151,100	7,400
Latino	30,800	29,100	44,000	199,400	52,200	228,500	96,200	132,300
African American	1,400	7,900	13,800	29,600	12,100	37,500	25,800	11,700
Asian	6,400	6,900	7,100	31,400	17,900	38,300	25,000	13,300
American Indian	300	1,200	1,500	1,100	400	2,300	1,900	400
Multiracial	100	2,400	3,800	5,500	5,900	7,900	9,700	(1,800)
Other	1,000	700	200	1,500	1,300	2,100	1,500	009
Citizenship								
Citizen by birth	10,400	94,000	140,900	254,900	115,400	349,000	256,300	92,700
Naturalized citizen	1,200	5,400	10,200	40,200	12,200	45,600	22,400	23,200
Not a citizen	38,300	10,700	13,100	70,100	19,500	80,800	32,700	48,100
Education								
8th grade or less	7,500	2,900	6,000	25,800	4,200	28,700	10,200	18,500
Some high school	2,600	7,200	7,200	31,500	10,000	38,700	17,200	21,500

Table 3.4b (continued)

	International Interstate Interstate In In Out	Interstate In	Interstate Out		Intrastate Out	Intrastate Intrastate Total Domestic Total Domestic In Out	Total Domestic Out	Total Net Domestic
High school	001	00001	000	000	000%	1000	000	00% 00
graduate	6,100	16,600	7,700	000,66	24,000	/ 1,600	21,200	20,400
Some college	2,600	17,200	36,100	56,900	27,500	74,000	63,600	10,400
Bachelor's degree	5,000	11,800	13,100	31,100	12,500	42,900	25,600	17,300
Graduate degree	2,200	6,500	5,900	11,000	8,000	17,500	13,900	3,600
Marital status								
Married	20,400	41,300	65,800	131,200	45,000	172,500	110,800	61,700
Never married	15,800	28,100	32,700	87,700	52,300	115,800	85,000	30,800
Separated/divorced	3,000	10,700	15,400	32,800	18,400	43,500	33,800	9,700
Widowed	2,200	4,600	6,200	8,600	16,600	13,200	22,800	(9,600)
Poverty status								
Above poverty	31,500	93,900	131,600	292,900	106,000	386,800	237,500	149,300
Below poverty	18,500	16,200	32,700	72,300	41,000	88,500	73,700	14,800
Welfare status								
No welfare	8,100	30,200	55,700	103,700	43,500	133,900	99,300	34,600
Received welfare	100	1,000	1,200	2,400	1,500	3,400	2,700	200
Household income, \$1,000s								
<25	14,300	17,000	35,100	53,100	26,000	70,100	61,100	9,000
25–49	10,900	23,200	51,300	93,700	29,800	116,800	81,100	35,700

Table 3.4b (continued)

	International	Interstate	Interstate	Intrastate	Intrast	ate Total Domestic	Tot	Total Net
	In	In	Out	$_{ m In}$	Out	In		Domestic
50–74	10,000	23,400	34,800	87,700	26,900	111,100	61,700	49,400
75–99	5,000	14,200	18,300	47,500	17,700	61,700	35,900	25,800
100+	7,300	29,000	19,200	67,100	27,600	96,100	46,900	49,200
Housing tenure								
Renter	31,400	73,900	90,600	146,100	93,800	220,000	184,300	35,700

NOTES: Education is determined for adults ages 25 and over; marital status for adults ages 18 and over; poverty status for persons in SOURCES: Authors' calculations based on the 2005 and 2006 American Community Surveys. households; and welfare and housing tenure for household heads.

133,700

102,500

236,200

34,100

203,400

68,300

32,800

16,100

Owner

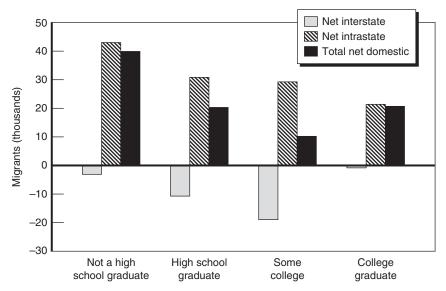
Table 3.5
Estimates of Net Migration to San Bernardino and Riverside
Counties, by Ethnicity, 2000–2006

	San Bernardino County	Riverside County
Total	166,400	364,200
White	-26,500	99,700
Latino	169,400	203,600
Asian	14,600	47,100
African American	16,200	8,800
American Indian	2,000	2,500
Multiracial	-9,800	2,300

SOURCES: Authors' calculations based on California Department of Finance estimates for 2000–2004 and the 2005 and 2006 American Community Surveys.

end (Figure 3.5). Thus, while the Inland Empire does not suffer a brain drain, it disproportionately receives more less-educated migrants. Net domestic in-flows of adults who have not graduated from high school are twice those of adults with a college degree.

As housing prices have risen this decade and as the region continues to create large numbers of new jobs, some have suggested that recent migrants are better educated than past migrants. We find some evidence that this is the case, but the changes have been minimal. Educational attainment levels of migrants to the Inland Empire are now slightly higher than in the late 1990s, but educational attainment levels of out-migrants from the Inland Empire are also higher. For example, among intrastate migrants, 20 percent of those moving to the region between 2004 and 2006 had a college degree, compared to 19 percent in the late 1990s; among out-migrants to the rest of the state, the share of college graduates has increased from 23 percent to 24 percent. The best-educated migrants are those moving from other states, but they are relatively few in number. Indeed, the general pattern in which there is a greater share of college graduates among out-migrants than among in-migrants is one that is at least two decades old. The Inland Empire has not experienced a net loss of college



SOURCES: Authors' calculations based on the 2005 and 2006 American Community Surveys.

Figure 3.5—Net Domestic Migration Flows to the Inland Empire, by Educational Attainment, 2004–2006

graduates simply because it receives so many more migrants than it sends out.

The region does experience a net loss of college-bound high school seniors. Among high school graduates who enrolled in a public university in California between 2000 and 2004, the Inland Empire experienced a net loss of almost 5,000 students (9,900 came to the Inland Empire to attend public universities and 14,600 left the Inland Empire to go to public universities elsewhere in the state). These losses were entirely due to San Bernardino County patterns. In Riverside County, students arriving at UC Riverside led to a net gain of 2,100 college-bound high school students; 70 percent of UC Riverside's freshmen are from outside the Inland Empire—and most of those (four out of five) are from coastal Southern California counties—counties that many return to once they graduate. In contrast,

⁴Authors' calculations based on California Postsecondary Education Commission data, 2000–2004, for freshmen ages 19 and under.

between 2000 and 2004, San Bernardino County lost almost four times as many college-bound high school seniors as it gained, for a total net loss of 6,900 students, and despite the presence of California State University at San Bernardino, the county even lost high school students headed for a Cal State University. Most (64%) of Inland Empire high school graduates who go to a Cal State University campus do *not* go to CSU San Bernardino, even though 5,295 of 6,176 freshmen there were from the Inland Empire.⁵

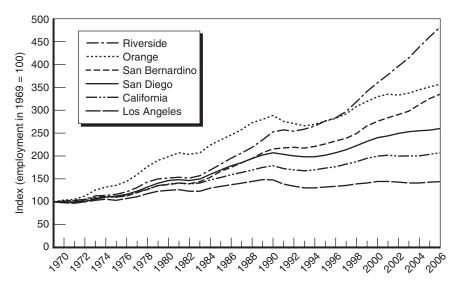
On a net basis, the Inland Empire attracts residents at all income levels. The number of high-income households is substantially greater than the number of low-income households (Table 3.6). Examination of the specific flows shows that poverty rates are especially high for international migrants (Tables 3.4a and 3.4b). Despite their high poverty rates, welfare use is low among international migrants. Interstate migrants coming to the Inland Empire and intrastate migrants leaving it have slightly higher welfare rates than do all Inland Empire residents.

Determinants of Migration

Strong job growth in the Inland Empire has been an important magnet for migrants to the region. Job growth in the region has for many years consistently outpaced job growth in the rest of Southern California (Figure 3.6). Job growth has been especially impressive over the past ten years. Even during the severe recession of the early 1990s, Riverside County continued to gain jobs and San Bernardino County had a very small loss for one year only. From 2000 to 2006, the number of jobs increased 22 percent in San Bernardino County and 34 percent in Riverside County.

Despite this strong growth, the Inland Empire remains more of a housing center than a job center—population gains continue to outstrip job gains. Between 2000 and 2006, the number of residents commuting to another county increased even as the number of people living and working

⁵The Inland Empire is home to several private universities as well. However, these universities are relatively small, with full-time undergraduate enrollments of fewer than 4,000 students total. The largest, the University of Redlands, enrolled about 600 full-time freshmen in 2004 (according to National Center for Education Statistics data at http://nces.ed.gov/ipeds/cool/). Larger institutions, specifically the Claremont Colleges and California State Polytechnic University at Pomona, are located nearby in Los Angeles County.



SOURCE: Authors' calculations based on U.S. Bureau of Economic Analysis data on jobs. NOTE: The number of jobs in 1969 is normalized to a base of 100 for each region.

Figure 3.6—Indexed Wage and Salary Employment in Selected Counties, 1969–2006

within the two counties also increased. Despite recent declines, housing prices in the Inland Empire have risen tremendously this decade. Still, the region remains one of the least-expensive housing markets in the state (Table 3.6). Relative differences between housing prices in the Inland Empire and coastal Southern California have remained large. Housing prices also differ substantially within the Inland Empire and even within its subregions. For example, the highest median price for homes sold in 2007 in the Inland Empire was \$785,000 in Indian Wells in the Coachella Valley; not far away, and also in the Coachella Valley, the median price in Desert Hot Springs was \$267,500. The High Desert has the lowest prices of any subregion, with the median in Twentynine Palms less than \$150,000 for homes sold in 2007. The most expensive subregions outside the Coachella Valley are Western San Bernardino and Southwestern Riverside.

⁶See also Puri (2006).

Table 3.6

Median Home Prices in Selected Counties, 1999–2007

				Percentage Change,	Percentage Change,
County	August 1999	August 2006	August 2007	1999–2006	2006-2007
Orange	241,000	630,000	642,000	156	2
San Diego	213,000	495,000	475,000	131	-4
Los Angeles	191,000	520,000	550,000	159	6
Riverside	150,000	420,000	395,000	159	-6
San Bernardino	137,000	366,000	360,000	144	-2

SOURCE: DataQuick at http://www.dgnews.com/RRSCA0905.shtm.

Of course, people move for many reasons other than jobs or housing. Parsing out the separate effects of housing from job availability is difficult enough, let alone incorporating other factors such as family. One source of information on the relative importance of various reasons for moving is the Current Population Surveys. Respondents who moved within the last year are asked their "main reason" for moving. As shown in Table 3.7, the primary reason cited among intercounty migrants to Riverside and San Bernardino Counties was housing. Indeed, more than half of all adult respondents identified housing as the primary reason. Job-related reasons were listed third, behind family-related reasons.

Among those citing a specific housing reason, the most common reasons cited were the desire for a "new or better house/apartment," followed by the desire to buy rather than rent, the desire for a better neighborhood (including one with less crime), and the desire for cheaper housing. Clearly, it is the availability and relative affordability of housing in the Inland Empire that seems to be the primary draw for most migrants. A separate survey of San Bernardino County residents found that "affordable housing" was cited third most frequently as the "one best thing about living in San Bernardino County" (after general area/location/scenery and climate (Bockman, Sirotnik, and Ruiz, 2005)).

Not only are Inland Empire housing prices less than those in the coastal regions, the relative abundance of new and large single-family homes has drawn many coastal residents who often cannot find such housing in the more densely built-up coastal counties, where new

Table 3.7
Reasons for Moving to the Inland Empire

D	Percentage
Reason	of Movers
Housing	54.4
Family	24.2
Job	16.2
College	2.0
Health	0.9
Retirement	0.9
Climate	0.1
Other	1.3

SOURCES: Authors' calculations based on the 1995 to 2005 Current Population Surveys. NOTE: Restricted to intercounty migrants to the Inland Empire, ages 18 and over.

single-family housing is less prevalent. Many of the new houses in the Inland Empire are not inexpensive; they are simply less expensive than similar houses in coastal areas. More than half of houses built in the Inland Empire this decade have four or more bedrooms, and in 2006 over 40 percent of all new owner-occupied housing units built in the region were valued at above \$400,000. For many coastal residents, the decision to move to the Inland Empire is not only about price but also about house size and other features of newer housing, including newer schools and community amenities.

Of course, substantial shares of the region's new residents are renters. These migrants are attracted by the less-expensive rents in the Inland Empire and by the availability of larger rental units, including houses. About three of every ten rental units in the Inland Empire have three or more bedrooms, compared to only about three in 20 rental units in coastal Southern California. Rents tend to be substantially lower in the Inland Empire than in the adjacent coastal counties (Table 3.8).

Housing affordability has become an even greater concern as prices have risen. Large proportions of homeowners and renters spend inordinate shares of their income on housing. In both Riverside and San Bernardino

Table 3.8

Average Monthly Rent in Selected Regions, 2006

		Bedrooms				
Region	One	Two	Three or More			
Inland Empire	765	996	1,338			
Los Angeles County	855	1,107	1,439			
Orange County	1,063	1,358	1,829			
San Diego County	896	1,177	1,660			
Rest of the state	855	1,016	1,340			
Rest of the nation	614	745	906			

SOURCE: Author's calculations based on the 2006 American Community Survey.

Counties, about 30 percent of renters in 2006 spent more than half of their income on rent, and almost one in four of the region's homeowners spend more than half their income on housing costs. Although the Inland Empire enjoys lower rents and housing prices than the rest of the state, the region's lower incomes mean that housing burdens for renters and homeowners are similar to those in the rest of California and are substantially higher than in the rest of the United States. The recent decline in housing prices (median prices remain far higher than in 1999) has led to high rates of foreclosure, as financially vulnerable homeowners are unable to meet increases in mortgage payments and cannot sell homes worth less than the outstanding mortgage. In the near term, the downturn in new housing construction will slow migration to the region.

 $^{^7}$ Among those with a mortgage, 25 percent of Riverside County homeowners and 22 percent of San Bernardino County homeowners pay more than half of their income on housing costs.

4. Population Projections

At the core of understanding the future opportunities and challenges of any region is understanding its future population. In this chapter, we describe projections for the population of the Inland Empire and its subregions. In addition to the total population counts, we also project key characteristics of the population including age, race/ethnicity, and nativity.

The accuracy of population projections depends on the validity of the underlying assumptions used to generate those projections. In general, short-range projections are more accurate than long-range projections, and projections for large populations are more accurate (in percentage terms) than projections for small populations. Projections of populations that have experienced little volatility in past rates of change are more accurate than projections for areas that have had large variations. Our projections for the Inland Empire are medium-term (15 years from 2000 to 2015) and include large populations for the entire region and small populations for the subregions. The Inland Empire has experienced rapid growth rates, with much of the growth fueled by migration—a component of change that has been somewhat volatile.

To project the Inland Empire's population, we use a cohort component method. In this approach, future populations are created by applying fertility, mortality, and migration rates to a base-year population. In our application, we disaggregate the population by age, gender, ethnicity, and nativity. Our assumptions about fertility, mortality, and migration are generally drawn from recent trends. To project populations for subregions, we use a "shift share" approach. In this method, future populations for a subregion are based on recent trends in that subregion's share of the total regional population. Details of the approach are given in Appendix A.

Our projections are for the resident population of the Inland Empire and its subregions. In some areas, seasonal movement can substantially alter the number of people living there at a particular point in time. Our projections are based on the population usually resident; that is, it includes only those residents who spend more time in their Inland Empire residence than in any other residence. Among the larger regions, the Coachella

Valley has a substantial seasonal or occasional population, with about one in five housing units held for seasonal or occasional use.¹

Projected Population Counts

Our projections indicate that the Inland Empire will continue to be one of the fastest-growing regions of the state. Between 2005 and 2015, the region will add one million additional residents to reach a total of 4.9 million. This is the equivalent of adding a population five times that of the city of San Bernardino. At 23 percent growth, the projections for the region far surpass the 13 percent projected growth rate for the state's population. Moreover, Riverside County will experience among the fastest rates of growth (26%) and the greatest absolute growth (569,000) of any county in the state. By 2007, Riverside County had already surpassed San Bernardino County to become the state's fourth most-populous county, after Los Angeles, Orange, and San Diego Counties.

Although we project rapid population growth for the Inland Empire, our projections could be considered modest based on the most recent trends. Our projected population growth—both in percentage and absolute terms—is lower on an annualized basis than has been experienced since 2000 (Table 4.1). This slightly lower growth between 2005 and 2015 is due primarily to our assumptions about migration and secondarily to our assumptions about fertility. Specifically, we assume a moderate decline in age-specific migration rates and a small decline in fertility rates (see Appendix A). Our projections for 4.9 million in 2015 are consistent with those of the California Department of Finance (2007).³

¹Author's calculations based on the 2005 and 2006 American Community Surveys. The share of seasonal housing units among total units has not changed appreciably this decade, increasing from 21 percent of all units in 2000 to 22 percent in 2006.

²Based on state projections from the California Department of Finance.

³Population estimates for 2005 from the U.S. Census Bureau and the California Department of Finance are in close agreement for the Inland Empire, even though the two agencies' statewide estimates differ substantially. Projections by the Southern California Association of Governments (Southern California Association of Governments, 2004) are also lower than our projections. Those projections put the 2015 population of the Inland Empire at about 4.6 million.

Table 4.1 Population Estimates and Projections for the Inland Empire, 2000–2005 and $2005{-}2015\,$

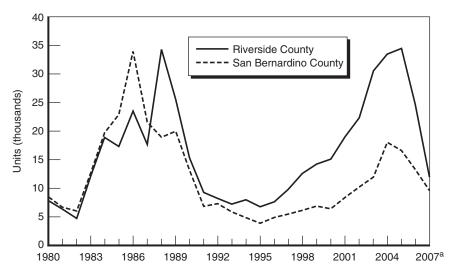
				Average Annual Absolute Change		Average Annual Percentage Change	
				2000-	2005-	2000-	2005-
Region	2000	2005	2015	2005	2015	2005	2015
Riverside County	1,559,100	1,930,900	2,499,800	74,300	56,900	4.4	2.6
San Bernardino County	1,722,800	1,967,700	2,377,200	49,000	40,900	2.7	1.9
Inland Empire	3,281,900	3,898,500	4,877,100	123,300	97,900	3.5	2.3

SOURCES: California Department of Finance estimates for July 1, 2000, and authors' projections for 2005 and 2015.

NOTE: Projections for 2005 are adjusted based on the July 1, 2005, estimates developed by the California Department of Finance.

Our projections assume a slowdown in growth similar to that in the Inland Empire in the 1990s after the tremendous growth of the late 1980s. Average annual growth rates in the Inland Empire during the 1990s, a decade of modest growth by Inland Empire standards, were 2.3 percent, the same rate of growth as in our projections from 2005 to 2015. Over the past quarter-century, the Inland Empire has experienced pronounced boom and bust cycles of growth, as exemplified by housing starts (Figure 4.1). In both counties, annual new housing starts reached about 35,000 units in the late 1980s and then fell precipitously. This decline was caused by the recession of the early 1990s—one that was much deeper and longerlasting in California than in the rest of the nation—and by the savings and loan crisis, which led to tighter lending standards (at least temporarily). The first half of this decade saw another booming housing market in the Inland Empire, particularly in Riverside County. Strong demand from coastal Southern California, strong job growth, and easy credit led to sharp increases in home building.

However, since 2005, another dramatic slowdown in new housing construction has occurred. Unlike the slowdown of the early 1990s, this



SOURCES: Authors' calculations based on Census data on residential construction permits (http://censtats.census.gov/bldg/bldgprmt.shtml) and U.S. Department of Housing and Urban Development's "State of the Cities Data System" (http://socds.huduser.org/permits/index.html).

^aEstimated annual number is based on the ratio of year-to-date permits (through September) for 2006 to 2007.

Figure 4.1—New Residential Building Permits in Riverside and San Bernardino Counties, 1980–2007

slowdown has not occurred in a recession, but rather as rapidly increasing home prices finally leveled off and subsequently began to decline. Many of the home buyers of the early 2000s, particularly those in the subprime mortgage market, took out loans that they were not able to sustain. The decline in home prices meant some of those homeowners owed more on their homes than they could sell them for. As a result, the Inland Empire now has one of the highest rates of foreclosure in the nation, and developers have dramatically reduced new home building. There is concern nationwide that problems in the housing sector will lead to a recession. Our projections implicitly assume that the booming growth of the early 2000s will not resume within the next few years but that in the long run, the Inland Empire will continue to be the locus of growth in Southern California.

We project strong but moderated growth in each of the region's highly populated subregions.⁴ Most of the subregions are projected to have growth rates that exceed those of the state as a whole, but growth rates are projected to decline for every subregion except the San Jacinto Valley—with its population increasing by about half between 2000 and 2015 (Table 4.2).

 $\label{eq:table 4.2}$ Population Projections for the Inland Empire's Subregions, 2000, 2005, and 2015

						Average	Annual
				Average Annual		Percentage	
				Absolute	Change	Cha	inge
				2000-	2005-	2000-	2005-
Subregion	2000	2005	2015	2005	2015	2005	2015
Coachella Valley	319,600	401,000	535,000	16,300	14,800	4.6	2.9
Northwestern							
Riverside	773,600	889,000	1,013,000	23,100	15,100	2.8	1.3
San Jacinto Valley	192,800	232,000	361,000	7,800	13,800	3.8	4.5
Southwestern							
Riverside	223,100	321,000	477,000	19,600	16,900	7.5	4.0
High Desert	345,700	420,000	565,000	14 900	14,500	4.0	3.0
Western San	31),700	120,000	707,000	11,700	11,500	1.0	3.0
Bernardino	717,100	835,000	957,000	23,600	12,200	3.1	1.4
Eastern San	, -,,	005,000	,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,	_0,	,	0.1	
Bernardino	562,000	618,000	721,000	11,200	10,300	1.9	1.6
Riverside County	1,546,600	1,930,900	2,500,000	76,900	56,900	4.5	2.6
San Bernardino							
County	1,708,200	1,967,700	2,377,000	51,900	40,900	2.9	1.9
Inland Empire	3,254,800	3 898 500	4,877,000	128,700	97 900	3.7	2.3

SOURCES: Census data for April 1, 2000, and authors' estimates for 2005 and projections for 2015.

 $^{^4}$ We exclude the three most lightly populated regions from these discussions. Those regions, the Southern Mountains, the Northern Mountains, and the Eastern Desert, had total populations of 122,000 in 2000.

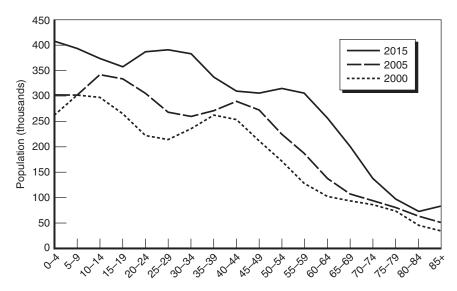
Southwestern Riverside will have the greatest absolute growth, increasing by about 170,000 new residents.

Projected Population Characteristics

Like the rest of the nation, the Inland Empire is aging. By 2015, the largest baby boom cohort will reach 55–59 years of age, and the leading edge of the baby boom generation will be 69 years old. These age groups, then, will experience rapid increases as the resident population ages, with the number of 55- to 69-year-olds more than doubling between 2000 and 2015 (Figure 4.2). In addition, declining mortality rates and past in-migration among retirees will lead to substantial increases in the very oldest Inland Empire residents, those ages 85 and older, whose numbers will more than double.

However, the Inland Empire is also experiencing strong growth in some younger age groups. The echo of the baby boom, adults 20–34 years old, will increase in numbers by more than 70 percent. This baby boomlet generation will include many young adults who continue to migrate to the Inland Empire, primarily from the rest of Southern California. The growth of this population will in turn lead to yet another echo—this time, the echo of the baby boomlet (or the echo of the echo of the baby boomlet generation reaches prime childbearing years, the number of children younger than five years old will increase by more than 50 percent between 2000 and 2015.

Importantly, and perhaps beneficially, the number of children of school age (5- to 17-year-olds) will grow modestly by Inland Empire standards. This age group is projected to increase 30 percent from 2000 to 2015 and only 17 percent between 2005 and 2015. The slowest-growing segment of this group will be high-school-age students, with only a 7 percent increase between 2005 and 2015. These relatively slow growth rates mean that building new schools will be less of a challenge than it has been in the past. Unlike other parts of California (especially large urban coastal areas), where the debates will be about which schools to close, the Inland Empire will still need to build new schools but the pace of construction will not need to be as great as in the past.



SOURCES: California Department of Finance estimates for July 1, 2000, and authors' projections for 2005 and 2015.

Figure 4.2—Population Projections for the Inland Empire, by Age Group, 2000, 2005, and 2015

The patterns of change with respect to age that we observed for the Inland Empire hold for its subregions, with a few notable exceptions. First, the Coachella Valley, already one of the subregions with the greatest share of older residents, will become even older. By 2015, 19 percent of the Coachella Valley's residents will be ages 65 and over, up slightly from 18 percent in 2000. At the same time, the Coachella Valley will also experience a greater increase than the rest of the region in the youngest age group, children younger than five. By contrast, the San Jacinto Valley is projected to become younger. In 2000, almost one of every four San Jacinto Valley residents was age 65 or over. Our projections suggest this share will decline to 18 percent by 2015 as the San Jacinto Valley increasingly attracts younger migrants in their twenties and thirties. Finally, the High Desert will experience an increase in its older population. The total number of adults ages 65 and older is projected to nearly double, with their share of the High Desert's total population increasing from 13 percent to 15 percent.

According to our projections, Latinos will become the new majority population in the Inland Empire by 2015 (Table 4.3). This increase will occur not only because a majority of international migrants are Latino but also because Latinos are the largest group among intrastate migrants. Los Angeles County, the primary source of migrants to the Inland Empire, will also have a majority Latino population by 2015, according to California Department of Finance projections. Moreover, because birth rates are relatively high and because Latinos are disproportionately represented among young adults of childbearing age, natural increase is quite high among Latinos.

Asians will continue to be another fast-growing segment of the Inland Empire's population, driven by both domestic and international migration. Birth rates are quite low for Asians, but the large share of Asians of childbearing age will contribute to natural increase. We project that the Asian population will increase from 204,000 in 2005 to 322,000 in 2015.

Dramatic gains in the African American population that occurred in the 1990s seem to have abated, according to California Department of Finance (2005) estimates. Our projections assume continued growth in the African American population, but at slower rates than in the 1990s. As a result, even though the African American population in the Inland Empire

Table 4.3

Projected Percentage Ethnic Distribution in the Inland Empire, 2000, 2005, and 2015

	2000	2005	2015
White	47.2	41.9	32.1
Latino	38.4	43.1	51.2
African American	7.6	7.4	7.2
Asian	4.6	5.2	6.6
American Indian	0.6	0.6	0.5
Multiracial	1.6	1.8	2.4

SOURCES: California Department of Finance estimates for July 1, 2000, and authors' projections for 2005 and 2015.

NOTE: Asian includes Pacific Islanders.

will increase from 290,000 to 349,000, the African American share of the region's population will decline to 7.2 percent.

For the entire region, the non-Hispanic white population is projected to remain at about 1.6 million from 2005 to 2015. San Bernardino County is projected to have a 10 percent decline in the white population, whereas Riverside County is projected to have a 1 percent increase. Low birth rates, a large share past childbearing age, and out-migration of whites from San Bernardino County account for these trends.

Perhaps the most dramatic subregional changes in ethnic distributions will occur in Western San Bernardino and Eastern San Bernardino. In 2000, Latinos were the largest group in both subregions but not a majority. By 2015, Latinos will be the majority ethnic group in both subregions (Table 4.4). Large declines in the non-Hispanic white population, which began in the 1990s, are projected to continue. In 1990, these two subregions were home to 593,000 whites; by 2000, that figure had declined to 471,000; and our projections for 2015 put that population at 374,000. Latinos are also projected to become the majority ethnic group in the Coachella Valley and in Northwestern Riverside.

Only two subregions will still have majority white populations: Southwestern Riverside and the San Jacinto Valley. Asian concentrations are highest in Southwestern Riverside, Northwestern Riverside, and Western San Bernardino.

We project a slight increase in the foreign-born population of the Inland Empire (Table 4.5) because of the more rapid growth of Asian and Latino populations, two groups with large shares who are foreignborn. However, among Asians and Latinos, the foreign-born share will decline. Both now and in future projections, San Bernardino and Riverside Counties have similar shares of foreign-born residents.

The most striking change with respect to nativity will occur among Latino and Asian young adult (20–34 years of age) populations. Currently, the large majority of these young adults are first-generation immigrants. However, by 2015, a majority will be U.S.-born. These changes result from the large growth in the number of second-generation children of immigrants throughout California. After several decades of strong and sustained flows of immigrants, the children of those immigrants are now

Table 4.4

Projected Percentage Ethnic Distribution in the Inland Empire's Subregions, 2000 and 2015

	2000	2015
Coache	ella Valley	
White	47.9	38.9
Latino	46.3	53.2
African American	1.9	0.9
Asian	2.2	5.2
American Indian	0.4	0.2
Multiracial	1.4	1.5
Northwest	ern Riverside	
White	43.5	22.8
Latino	39.1	57.3
African American	9.1	6.9
Asian	5.0	9.3
American Indian	0.5	0.4
Multiracial	2.8	3.3
San Jaci	into Valley	
White	66.4	52.1
Latino	25.0	37.0
African American	2.9	2.9
Asian	1.7	2.5
American Indian	1.8	2.7
Multiracial	2.2	2.8
Southwest	ern Riverside	
White	68.8	53.2
Latino	21.5	31.8
African American	3.1	3.3
Asian	3.1	8.5
American Indian	0.7	0.8
Multiracial	2.8	2.3
High	Desert	
White	61.7	47.9
Latino	25.2	38.7
African American	6.6	7.2

Table 4.4 (continued)

	2000	2015
Asian	2.4	2.8
American Indian	0.9	0.9
Multiracial	3.1	2.5
Western Sa	an Bernardino	
White	36.2	18.2
Latino	46.7	62.8
African American	7.6	7.0
Asian	6.5	9.8
American Indian	0.4	0.3
Eastern Sa	ın Bernardino	
Multiracial	2.6	1.8
White	37.8	21.8
Latino	42.2	59.1
African American	12.1	11.0
Asian	4.6	5.2
American Indian	0.6	0.6
Multiracial	2.7	2.4

SOURCES: California Department of Finance estimates for July 1, 2000, and authors' projections for 2015.

NOTE: Asian includes Pacific Islander.

reaching adulthood in very large numbers. To a large degree, it will be the success—both educational and economic—of these second-generation immigrants that will determine the future of the Inland Empire.

Table 4.5.

Projected Percentage of Foreign-Born Residents in the Inland Empire, by Ethnicity, 2005 and 2015

	2005	2015
White	4.5	4.8
Latino	36.0	34.6
African American	3.1	2.9
Asian	63.0	60.7
American Indian	2.6	2.8
Multiracial	13.3	13.3
Total	21.2	24.1

SOURCE: Authors' projections for 2005 and 2015

NOTE: Asian includes Pacific Islander.

5. Education and Economic Projections

Despite strong population and job growth, the Inland Empire has continued to be a region with per-capita income and worker earnings well below state and national averages. The future socioeconomic conditions in the region depend largely on the education and skills of its workers, as well as on the employment opportunities available to them. We begin this chapter with a discussion of education projections for the region. We then turn to economic projections and their implications for the demand for workers by education level. Combining these projections, we find that despite slight increases in the share of college graduates, the region's jobs and workers will still lag behind the rest of the state with respect to educational attainment. We conclude with a brief discussion of the implications of this mismatch for policies seeking to expand economic opportunities in the region.

Education Projections

Educational attainment among large populations typically changes very slowly over decades, even in regions of rapid population growth and in-migration. Between 1990 and 2005, the education levels of Inland Empire adults (ages 25–64) have changed only slightly (Table 5.1). During this period, almost one-quarter of adults had not finished high school and fewer than one in five adults had a bachelor's degree or more. The striking difference between the Inland Empire and the state is the low share of college graduates in the region. In 2005, the share of college graduates was more than 1.5 times higher in the state (31%) than in the Inland Empire (19%, Table 5.1).

Since 2000, there has been tremendous growth in domestic migration to the Inland Empire. The educational attainment levels of these migrants differ somewhat from those of previous migrants, with slightly higher shares of college graduates. Overall, then, among adults ages 25–64, we forecast some increases in educational attainment levels in the Inland

Table 5.1

Percentage Distribution of Educational Attainment Among Adults:
Trends and Projections, 1990–2015

	Less Than High School Diploma	High School Diploma	Some College	Bachelor's Degree	Graduate Degree			
Inland Empire								
1990	22	26	36	10	5			
2000	24	24	35	11	6			
2005	23	26	33	13	6			
2015	22	29	28	15	6			
California								
1990	21	21	33	17	9			
2000	22	19	31	18	10			
2005	19	21	29	20	11			

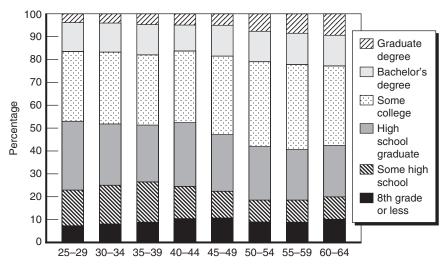
SOURCES: Authors' calculations based on the 1990 and 2000 Censuses and projections for 2005 and 2015. State estimates for 2005 are based on the American Community Survey.

NOTES: The table includes adults ages 25–64. Columns may not sum to 100 percent because of rounding. See Appendix A for details of the projections method.

Empire.¹ In absolute numbers, we forecast strong growth in the population at each level of education. However, because growth will be slightly higher among adults with a college degree, we forecast a small shift toward a more educated population. Specifically, the share of Inland Empire adults with less than a high school diploma is expected to decline slightly to 22 percent and the share with at least a bachelor's degree is expected to increase from 19 percent to 21 percent.

One reason for the slow progress in educational attainment among working-age adults is that the best-educated residents of the Inland Empire are older adults who may retire between now and 2015. In 2005, adults 50–64 years old were the best-educated age group in the Inland Empire, with more than 20 percent holding college degrees (Figure 5.1). This pattern is consistent with national figures and has been attributed partially to the effect of the Vietnam War draft from which college students were

¹These results are based on the assumptions outlined in Appendix A.



SOURCE: Authors' projections.

Figure 5.1—Percentage Distribution of Educational Attainment in the Inland Empire, by Age Group, 2005

exempted (Card and Lemieux, 2001). As relatively well-educated older workers retire and leave the labor force, they will be replaced by slightly less-educated younger cohorts. Our projections suggest that relatively highly educated domestic migrants will prevent the Inland Empire from experiencing declines in educational attainment. Still, by 2015, the share of adults with a college degree in the region will remain far lower than in the state as a whole, and the oldest cohort will still have the highest share of college graduates (Table 5.2).

Our projections indicate improvements in educational outcomes for all of the largest ethnic groups in the region. Most notably, the educational attainment of Latinos, the largest and fastest-growing group among young adults, increases slightly between 2005 and 2015. The share of college graduates among Latinos ages 25–64 increases from 7.7 percent in 2005 to 10.4 percent in 2015. The share that has not graduated from high school declines from 44 percent in 2005 to 39 percent in 2015. These improvements partly arise from a shift in the Latino population away from first-generation immigrants to U.S.-born natives. In 2005, 57 percent

Table 5.2

Projected Percentage Distribution of Educational Attainment,
by Age Group, 2015

	8th Grade	Some High	High School	Some	Bachelor's	Graduate
Age Group	or Less	School	Graduate	College	Degree	Degree
25-34	7	14	30	27	16	5
35-44	8	16	29	28	14	4
45-54	12	14	27	28	13	6
55-64	10	10	24	33	15	8

SOURCE: Authors' projections.

NOTE: Rows may not sum to 100 percent because of rounding.

of Latinos ages 25 and over in the Inland Empire were foreign-born; we project that by 2015, that share will decline to 53 percent. Because U.S.-born Latinos have substantially better educational outcomes than foreign-born Latinos, this shift leads to overall improvements in educational attainment among Latinos.

Despite this improvement, Latino education levels will remain substantially below those of other groups. For example, more than half of Asian and Pacific Islanders are projected to be college graduates, as are 27 percent of whites, 18 percent of African Americans, and 17 percent of American Indians. Thus, as Latinos become a larger share of the population, aggregate educational attainment will be dampened. In 2015, Latinos will make up 50 percent of adults ages 25–64, compared to 40 percent in 2005.

Large differences in educational attainment among the subregions of the Inland Empire are expected to persist, although differences between Riverside County and San Bernardino County will remain minimal. In every subregion, the population at every educational level is expected to grow. However, because of differential rates of growth across education groups and subregions, we project differential changes in the distribution of education by subregion (Table 5.3).

The Coachella Valley will continue to have the highest share of adults with college degrees but will also have a substantial share of adults without a high school diploma. This reflects the bifurcated nature of migration to the Coachella Valley, with relatively well-educated older adults moving

Table 5.3

Percentage Distribution of Subregion Educational
Attainment: Trends and Projections

Educational Attainment	1990	2000	2015
Coachella			
No high school diploma	30.4	27.8	18.9
High school graduate	23.2	22.0	28.0
Some college	30.4	30.3	24.4
Bachelor's degree	10.5	12.4	19.5
Graduate degree	5.5	7.5	9.2
Northwestern	n Riverside		
No high school diploma	23.9	26.3	25.4
High school graduate	26.5	24.1	27.3
Some college	34.6	33.6	27.2
Bachelor's degree	9.9	10.3	14.0
Graduate degree	5.1	5.6	6.1
San Jacint	o Valley		
No high school diploma	30.0	24.4	17.7
High school graduate	29.5	29.2	35.1
Some college	29.8	33.7	31.0
Bachelor's degree	6.7	7.6	10.7
Graduate degree	4.0	5.0	5.6
Southwestern	n Riverside		
No high school diploma	19.9	16.1	9.6
High school graduate	27.6	25.5	29.6
Some college	36.9	39.8	33.4
Bachelor's degree	11.1	13.0	20.3
Graduate degree	4.5	5.7	7.1
High D	esert		
No high school diploma	24.2	21.9	19.2
High school graduate	32.3	29.8	33.4
Some college	33.0	37.0	35.2
Bachelor's degree	6.9	7.3	8.5
Graduate degree	3.6	4.0	3.7

Table 5.3 (continued)

Educational Attainment	1990	2000	2015
Western San I	Bernardino		
No high school diploma	24.5	27.4	25.5
High school graduate	25.4	23.0	27.2
Some college	34.8	32.4	26.0
Bachelor's degree	10.8	11.9	15.9
Graduate degree	4.5	5.2	5.4
Eastern San F	Bernardino		
No high school diploma	26.4	28.3	28.4
High school graduate	25.4	24.4	28.7
Some college	31.7	31.0	27.2
Bachelor's degree	10.1	10.0	10.2
Graduate degree	6.4	6.3	5.5
SOURCES: 1990 and 2000 C	ensuses an	d author	 s'

SOURCES: 1990 and 2000 Censuses and authors projections for 2015.

to the subregion's resort communities and relatively poorly educated immigrants moving there for low-skilled jobs in the service and agricultural sectors of the economy.

In the Northwestern Riverside subregion, the share of adults without a high school diploma will remain at high levels. At the same time, the number of college graduates is projected to increase and their share of all adults will reach one in five by 2015. During this current decade, increases in education have been most notable in the city of Riverside and are undoubtedly related to the presence of UC Riverside. A new medical school at UC Riverside could lead to even greater increases than those projected.

In contrast to Northwestern Riverside, the San Jacinto Valley will continue to experience large declines in the share of adults who have not completed high school and will gain large numbers of high school graduates. In 1990, among all Inland Empire subregions, the San Jacinto Valley had the highest share of adults who had not completed high school, partly a reflection of the importance of agriculture in the subregion then. By 2000, that share had fallen below the county average as the San Jacinto Valley became more urbanized. Although the share of college graduates is projected to increase in the subregion, the subregion will continue to have

the lowest share of college graduates among all the subregions in Riverside County.

The Southwestern Riverside subregion will experience large gains among adults who have graduated from college. These strong gains occur as many San Diego County residents move to Southwestern Riverside for larger, more affordable housing. As with the Northern San Joaquin Valley, a region in Northern California that has grown dramatically with Bay Area commuters, these new residents are relatively highly educated. By 2015, more than one in four adults ages 25–64 in Southwestern Riverside will have a college degree.

The High Desert subregion of San Bernardino County will also see strong growth at all education levels, perhaps because housing prices in the High Desert are among the lowest in the Inland Empire. However, the subregion will continue to have the lowest share of college graduates of any of the Inland Empire subregions.

The Western San Bernardino subregion will experience large gains in the number of college graduates. We project that in 2015, Western San Bernardino will have the highest share of college graduates in San Bernardino County but will still have a large share of adults who have not completed high school.

Finally, in the Eastern San Bernardino subregion, we project little change in educational attainment. In 2015 as today, the number of adults without a high school diploma will be almost double the number of college graduates.

Employment Projections

Projections for the next decade suggest that job growth in the Inland Empire will continue to outpace that in the state as a whole. By 2015, the Inland Empire is expected to have almost 1.5 million nonfarm, civilian jobs—up about 28 percent from fewer than 1.2 million such jobs in 2004.²

²This figure does not include self-employment or the farming sector. Almost 8 percent of workers in the Inland Empire are self-employed and the share is expected to fall to about 7.5 percent. The farming sector makes up about 1.5 percent of all civilian employment in the Inland Empire. This share is projected to decline to less than 1.1 percent by 2015. Inclusion of the farming sector in our analysis would not substantially change the results.

Statewide over the same period, the number of jobs is expected to grow by about 20 percent to 17.4 million in 2015.

Employment is projected to grow in every industry (except federal government employment) and in every subregion. To characterize the shift in the distribution of employment by industry, we examine whether each major industry is large enough and expected to grow enough that its share in overall employment will grow. By this measure, administrative services is the most important growth industry in the Inland Empire.³ Between 2005 and 2015, this industry is expected to grow from 85,800 jobs to 121,300 jobs. In 2005, it made up just over 7 percent of all jobs in the Inland Empire and the share is expected to grow to over 8 percent by 2015 (Table 5.4). The next most important growth industries for the Inland Empire are wholesale trade—expected to grow from 4.0 percent to 4.4 percent of all employment—and transportation and warehousing—expected to increase from 4.4 to 4.8 percent of all employment. By contrast, durable manufacturing and state and local government are each expected to decline in share by more than a percentage point.

Statewide, the expected changes in employment by industry show some patterns similar to those in the Inland Empire, including the growth in administrative services and the decline in durable manufacturing (see Appendix Table B.5). However, the statewide figures show much stronger growth in health care and social assistance, not as much growth in transportation and warehousing, and not as much decline in state and local government.

The industry projections are important for the education needs of the future labor market because the industries differ in their demand for skills. For example, in administrative services in 2005, 38 percent of workers had less than a high school diploma compared to the cross-industry average of 21 percent for the Inland Empire (Table 5.5). Furthermore, only 8 percent of administrative and support services workers had bachelor's degrees, compared to 18 percent overall. The projection that this will be the most important growth industry in the Inland Empire implies that employment in the region will not dramatically shift toward higher-skilled workers. In

 $^{^3}$ Other indicators for the region provide consistent evidence of growth in office jobs (Husing, 2006b).

Table 5.4

Projected Employment Growth in the Inland Empire, by Industry, 2005 and 2015

		nploymer housands			ntage S mployn	
Industry	2005	2015	Change (%)	2005	2015	Change (%)
Administrative services	85.8	121.3	41.4	7.2	8.1	0.9
Wholesale trade	47.2	66.2	40.3	4.0	4.4	0.5
Transportation and warehousing	52.1	71.0	36.3	4.4	4.8	0.4
Construction	114.8	149.2	30.0	9.7	10.0	0.3
Professional, scientific, and						
technical services	32.0	43.9	37.2	2.7	2.9	0.3
Accommodation and food services	104.0	134.1	28.9	8.8	9.0	0.2
Retail trade	157.5	200.4	27.2	13.3	13.5	0.2
Private education services	13.7	17.4	27.0	1.2	1.2	0.0
Mining	1.2	1.6	33.3	0.1	0.1	0.0
Arts, entertainment, and recreation	15.6	19.3	23.7	1.3	1.3	0.0
Utilities	5.1	5.9	15.7	0.4	0.4	0.0
Real estate, rental and leasing	18.0	21.5	19.4	1.5	1.4	-0.1
Information	14.2	16.7	17.6	1.2	1.1	-0.1
Finance and insurance	28.5	34.3	20.4	2.4	2.3	-0.1
Health care and social assistance	107.2	132.9	24.0	9.0	8.9	-0.1
Management	11.7	12.9	10.3	1.0	0.9	-0.1
Other services	40.1	48.5	20.9	3.4	3.3	-0.1
Federal government	17.3	17.1	-1.2	1.5	1.1	-0.3
State and local government	199.1	244.5	22.8	16.8	16.4	-0.4
Nondurable manufacturing	34.9	37.9	8.6	2.9	2.5	-0.4
Durable manufacturing	86.1	92.0	6.9	7.3	6.2	-1.1

SOURCES: Authors' calculations based on California Employment Development

Department industry projections for 2004–2014.

NOTE: See Appendix A for details on data and methods.

general, the fastest-growing industries in the Inland Empire do not require high levels of education. Of the seven industries projected to grow as a share of total employment in the region, only one—professional, scientific, and technical services—requires a large share of college graduates.

Table 5.5

Percentage Distribution of Workforce Education in the Inland Empire, by Industry, 2005 and 2015

	Less Tha School I	U	Bachelor' or Hi	
Industry	2005	2015	2000	2015
Administrative services	38	39	8	13
Wholesale trade	22	14	13	16
Transportation and warehousing	23	24	7	8
Construction	39	41	6	8
Professional, scientific, and technical services	5	0	32	30
Accommodation and food services	35	27	6	8
Retail trade	18	14	9	11
Private education services	3	0	42	35
Mining	17	16	7	4
Arts, entertainment, and recreation	17	3	19	31
Utilities	3	0	13	15
Real estate, rental and leasing	14	8	15	18
Information	9	4	17	19
Finance and insurance	4	0	20	20
Health care and social assistance	9	6	27	31
Management	0	0	31	35
Other services	26	21	12	10
Federal government	5	4	24	28
State and local government	5	3	44	48
Nondurable manufacturing	31	18	10	7
Durable manufacturing	33	32	11	10

SOURCES: Authors' calculations and projections based on the 2000 Census and the 2005 and 2006 American Community Surveys.

Increases in skill levels within industries are a more important trend than shifts in industrial employment. Most of the growth industries in the Inland Empire will require a relatively small but growing share of college graduates. This trend, toward upgrading of skills within industries, is found statewide (see Appendix Table B.6).

Combining the industrial shifts (Table 5.4) with the education level of workers (Table 5.5) provides a picture of the workforce education needs in

2015. Several of the industrial trends will shift employment toward low-education workers: growth in the shares of employment in administrative services, transportation and warehousing, and construction, along with a decline in the share of employment in state and local government. Countering this, the decline in manufacturing shifts employment away from low-education workers. Taking into account the full range of industry and education shifts, we find that employment in the Inland Empire will shift toward workers with a high school diploma and away from workers with less education (Table 5.6).⁴

Table 5.6

Percentage Distribution of Employers' Demand for Education,
2005 and 2015

	Less Than				
	High School	High School	Some	Bachelor's	Graduate
	Diploma	Diploma	College	Degree	Degree
		Inland Em	pire		
2005	20.6	29.2	32.1	11.5	6.6
2015	17.7	36.3	25.7	12.8	7.5
2015 alt.	20.8	29.3	32.0	11.4	6.5
		Californ	ia		
2005	15.9	22.7	31.1	20.0	10.4
2015	12.5	29.1	25.3	21.4	11.7
2015 alt.	15.9	22.6	31.1	20.0	10.5

SOURCES: Authors' calculations and projections based on the 2000 Census, the 2005 and 2006 American Community Surveys, and the California Employment Development Department industry projections for 2004–2014.

NOTES: Alternative projections for 2015 are based on the projected industry distribution in 2015 and the education distribution within each industry in 2005. These alternative projections are provided to demonstrate the importance of the shift toward higher-educated workers within industries.

⁴The major shifts described in Table 5.6 are not substantially different when we use California Department of Transportation industry employment projections for 2005–2015 (see Appendix Table B.7).

Workforce education projections for the Inland Empire are very sensitive to the assumption that the 2000–2005 shifts in education within industries will continue. If each industry were to employ workers in 2015 with the same educational distribution as its 2005 workers, the overall distribution of workers' education would be about the same in 2015 as in 2005 (Table 5.6, alternative projections).

Thus, the shift in education demand in the region primarily results from the growth in the use of workers with a high school diploma within several industries, rather than from a shift between industries. The alternative projections are provided to illustrate this point and are therefore not taken as our primary projections. Indeed, we have no reason to expect that the 2000-to-2005 shifts in education within the major industries will abate completely over the next decade. The more realistic projections are those that show the economy of the Inland Empire moving away from employment of workers who have not earned a high school diploma.

The demand for workers with a college degree is expected to increase from roughly 18 percent to 20 percent of workers. State and local government is the most important industry for the growth in demand for college-educated workers. Although growth in this sector as a whole will not keep pace with overall regional growth, local government employment in education is projected to grow substantially. Growth in teacher employment drives a shift toward college-educated workers in that sector. The second most important industry in the growing demand for college-educated workers is administrative and support services. Although this industry employs a relatively low share of college-educated workers, the industry is shifting toward employing more such workers. Finally, some high-education occupations are growing across industrial sectors: business operations occupations such as management analysts and accountants as well as computer-related specialists.

⁵Projections of school enrollment by the California Department of Finance suggest that the number of children in K–12 schools will increase 29 percent between 2005 and 2015 in the Inland Empire; by comparison, statewide enrollment is projected to increase by less than 1 percent.

⁶Occupational projections are from the California Employment Development Department. See Appendix A for details.

By comparison, projections for the state as a whole suggest that employment will move more rapidly toward workers with a bachelor's degree or higher. Statewide industry projections show growth in health care and social assistance, growth in private education services, and only small declines in state and local government—all industries that employ college-educated workers. However, the main reason for the projected increase in the demand for more educated workers statewide is the upward shift in education within industries (see Appendix Tables B.5 and B.6). Within most California industries, there has been an increase in the share of workers with a bachelor's degree; should this trend continue, it would substantially increase the demand for college-educated workers statewide.

Before turning to the implications of these findings, we examine industry projections for the subregions of the Inland Empire. These projections use the California Employment Development Department industry projections for the Inland Empire but allocate industrial growth to the subregions according to each subregion's industry employment growth pattern from 2001 to 2004 (see Appendix A for details). In general, the subregions share the same patterns of industrial growth and decline as found for the Inland Empire region (Table 5.7).⁷ Administrative services is projected to be the most important growth industry in each of the subregions. Growth in transportation and warehousing is more important in the San Bernardino areas and Northwestern Riverside. The accommodation and food services sector is projected to grow throughout the Inland Empire, whereas retail trade increases most rapidly in the San Jacinto Valley, Southwestern Riverside, and the High Desert. Construction is a strong growth industry in the San Jacinto Valley, the only subregion expected to experience an increase in population growth rates. Each of the subregions shows a decline in the share of employment in manufacturing this is particularly large in Western San Bernardino.

As was found for the Inland Empire as an aggregate region, in each subregion the projected changes in industrial employment will tend to shift employment toward high-education workers (Table 5.8).

⁷Table 5.7 shows the growth in employment share. All industries are expected to grow in every region, with the exception of federal government employment (see Appendix Tables B.8 and B.9).

Projected Percentage Change in Employment Share, by Industry and Subregion, 2005-2015 **Table 5.7**

Industry	Coachella Valley	Northwestern Riverside	San Jacinto Valley	Southwestern Riverside	High Desert	Western San Bernardino	Eastern San Bernardino
Administrative services	0.7	0.8	9.0	1.1	0.7	1.4	9.0
Wholesale trade	0.2	0.4	0.3	0.4	0.2	0.8	0.2
Transportation and warehousing	0.0	0.3	0.1	0.1	0.0	0.8	0.3
Construction	0.2	9.0	9.0	0.3	0.3	0.2	0.3
Professional, scientific, and technical							
services	0.2	0.3	0.1	0.3	0.2	0.2	0.3
Accommodation and food services	0.3	0.2	0.3	0.3	0.3	0.1	0.2
Retail trade	0.1	0.2	0.3	0.3	9.4	0.0	0.2
Private education services	0.0	0.0	0.0	0.0	0.1	0.0	0.0
Mining	N/A	0.0	N/A	0.0	0.0	0.0	0.0
Arts, entertainment, and recreation	-0.1	0.0	0.0	0.0	0.0	0.0	0.0
Utilities	0.0	0.0	0.0	N/A	0.0	0.0	0.0
Real estate, rental and leasing	-0.2	-0.1	-0.1	-0.1	-0.1	-0.1	-0.1
Information	-0.1	-0.1	0.0	-0.1	-0.2	-0.1	-0.1
Finance and insurance	-0.1	-0.1	-0.1	-0.1	-0.1	-0.1	-0.1
Health care and social assistance	-0.2	-0.1	-0.1	0.0	-0.1	-0.1	-0.2
Management	-0.1	-0.2	N/A	N/A	0.0	-0.1	-0.2
Other services	-0.2	-0.1	-0.1	-0.1	-0.1	-0.1	-0.1
Federal government	-0.1	-0.1	-0.1	-0.1	-0.1	0.0	-0.3

Table 5.7 (continued)

	Coachella	Z	Sa	0	High	Western San	Eastern San
Industry	Valley	Riverside	Valley	Riverside	Desert	Bernardino	Bernardino
State and local government	-0.3	9.0-	-0.4	9.0-	-0.4	-0.3	-0.3
Manufacturing	-0.4	-1.6	-1.2	-1.6	-1.0	-2.4	-0.8
SOURCES: Authors' calculations based on California Employment Development Department industry estimates and projection	sed on Califor	nia Employment	Development	Department ind	ustry estin	nates and proje	ctions.

NOTES: N/A identifies industry and subregion combinations where data are not available. These industries have few employers and employment data were suppressed by the California Employment Development Department to protect confidentiality.

Table 5.8

Percentage Distribution of Employers' Demand for Education, by Subregion, 2005 and 2015

	Less Than High School Diploma	High School Diploma	Some College	Bachelor's Degree	Graduate Degree
Coachella Valley					
2005	22.1	29.8	31.7	10.7	5.7
2015	18.5	37.3	25.1	12.5	6.6
2015 alt.	22.4	29.8	31.6	10.6	5.6
Northwestern Riverside	2				
2005	19.9	28.1	31.9	12.2	7.8
2015	17.5	34.7	25.6	13.3	9.0
2015 alt.	20.1	28.2	31.8	12.1	7.7
San Jacinto Valley					
2005	18.6	27.7	32.8	12.7	8.2
2015	15.6	34.1	26.9	14.0	9.5
2015 alt.	18.8	27.8	32.7	12.6	8.1
Southwestern Riverside					
2005	22.6	29.8	31.0	10.7	5.8
2015	19.6	37.1	24.5	12.2	6.6
2015 alt.	22.8	29.9	31.0	10.7	5.7
High Desert					
2005	19.4	29.1	33.0	11.6	6.9
2015	16.2	36.0	27.1	12.8	8.0
2015 alt.	19.5	29.2	32.9	11.5	6.8
Western San Bernardin	0				
2005	23.3	31.2	30.9	9.9	4.7
2015	20.3	39.2	24.0	11.5	5.1
2015 alt.	23.4	31.3	30.9	9.9	4.5
Eastern San Bernarding)				
2005	16.1	26.3	34.2	13.9	9.5
2015	13.5	32.4	28.5	14.8	10.9
2015 alt.	16.3	26.4	34.1	13.8	9.3

SOURCES: Authors' calculations and projections based on the 2000 Census, the 2005 and 2006 American Community Surveys, and California Employment Development Department industry estimates and projections for 2001–2014.

Skills Gaps

By comparing the projected education levels of Inland Empire adults in 2015 to the projected labor market education needs, we can examine whether there is likely to be a mismatch in skills. For the Inland Empire as a whole, the educational attainment of the adult population is projected to increase slightly, as are the educational demands of employers. Overall, then, the modest demands for slightly more workers with college degrees (bachelor's degree or higher) seem likely to be met by an increase in the supply of such workers. The share of adults with at least a bachelor's degree (20.6%) is expected to nearly match the employment demand for that skill level (20.3%, Table 5.9). However, at the low end of the educational spectrum, there does appear to be a mismatch. The share of employment appropriate for workers with less than a high school diploma (17.7%) is expected to be lower than the share of adults with less than a high school diploma (22.1%). In other words, finding a job for those without a high school diploma will be even more difficult in the future than now.

These projections for the Inland Empire are somewhat different from projections for California. Statewide projections suggest a notable mismatch, with too few college graduates. Employers will be looking for increasingly higher skills (as shown in Table 5.6) and the education of adults will not increase enough to meet employer demands (Hanak and Baldassare, 2005; Johnson and Reed, 2007).

A closer look at the subregions of the Inland Empire reveals substantial variation in the magnitude and nature of the skills match, or lack thereof, between employer needs and the population supply of workers. Of course, it is important to take these mismatches with a grain of salt. For the most part, the subregions are not separate labor markets. Extensive commuting between the subregions can and does alleviate some mismatches at a given education level.

Projections for the Coachella Valley reflect the slight regional shift toward employment for more highly educated workers. The projections suggest an increase in demand for high-skill workers, but the share of the population with college degrees will remain higher. This seeming mismatch may not be cause for concern, however—the region has long attracted college-educated early retirees and semi-retired people, many of

Table 5.9

Percentage Distribution of Educational Attainment and Employers' Demand for Education, by Subregion, 2015

	Less Than				
	High School	High School	Some	Bachelor's	Graduate
Subregion	Diploma	Diploma	College	Degree	Degree
Inland Empire					
Adult population	22.1	29.0	28.3	14.6	6.0
Employer needs	17.7	36.3	25.7	12.8	7.5
Coachella Valley					
Adult population	18.9	28.0	24.4	19.5	12.2
Employer needs	18.5	37.3	25.1	12.5	6.6
Northwestern Riverside					
Adult population	25.4	27.3	27.2	14.0	6.1
Employer needs	17.5	34.7	25.6	13.3	9.0
San Jacinto Valley					
Adult population	17.7	35.1	31.0	10.7	5.6
Employer needs	15.6	34.1	26.9	14.0	9.5
Southwestern Riverside					
Adult population	9.6	29.6	33.4	20.3	7.1
Employer needs	19.6	37.1	24.5	12.2	6.6
High Desert					
Adult population	19.2	33.4	35.2	8.5	3.7
Employer needs	16.2	36.0	27.1	12.8	8.0
Western San Bernardino					
Adult population	25.5	27.2	26.0	15.9	5.4
Employer needs	20.3	39.2	24.0	11.5	5.1
Eastern San Bernardino					
Adult population	28.4	28.7	27.2	10.2	5.5
Employer needs	13.5	32.4	28.5	14.8	10.9

SOURCES: Authors' calculations and projections based on the 2000 Census, the 2005 and 2006 American Community Surveys, and California Employment Development Department industry projections for 2004–2014.

whom are still of working age. These highly educated people appear in the working-age population projections but may not be full participants in the job market. Unlike in the region as a whole, the share of jobs for workers

with less than a high school diploma is expected to be similar to the share of adults at that education level.

The Northwestern Riverside area, which includes the city of Riverside, is also projected to shift toward more high-education jobs, whereas the high share of the adult population with less than a high school diploma is expected to decline only slightly. By 2015, this area is expected to have a surplus of poorly educated workers and a deficit of high school graduates.

By contrast, the Southwestern Riverside area is projected to have a very significant mismatch at the other end of the education spectrum, with an abundance of low-skill jobs and a deficit of jobs for college graduates. This mismatch was already substantial in 2000 but is projected to become even greater. Undoubtedly, some of these low-skill jobs will be filled by residents of Northwestern Riverside. The surplus of college graduates exists in large part because high shares of college-educated residents of this subregion commute to San Diego or Orange Counties.

Like Northwestern Riverside, the San Jacinto Valley subregion is projected to have more residents who have not finished high school than jobs at that education level and a deficit of workers with a college degree. The projections suggest that this mismatch will occur even as the share of residents with low education declines. The relatively low cost of housing in the area attracts lower- to middle-income residents who commute to other locations in the Inland Empire, or even to coastal counties, and middle-income early retirees. These patterns are also found in the High Desert region of San Bernardino County.

Eastern San Bernardino, including the city of San Bernardino, is another area in which the labor market demand for college-educated workers is expected to exceed the supply, and the demand for workers with less than a high school diploma is expected to be much lower than the supply of such workers. This mismatch was already apparent in the area in 2000. The large supply of workers with low levels of education is related to the city of San Bernardino's large and relatively less-expensive rental housing stock, which attracts lower-income and less-educated residents.⁸ The undersupply of college graduates reflects the subregion's status as an

⁸Almost half (48%) of occupied housing units in the city of San Bernardino in 2006 were rental units, compared to less than one-third (31%) of all occupied units in the rest of the Inland Empire, according to the 2006 American Community Survey.

employment center for college-educated workers from the surrounding areas. For example, Eastern San Bernardino attracts commuters from Western San Bernardino, a subregion that is projected to have too few jobs for college-educated residents. Like Southwestern Riverside, many college graduates in Western San Bernardino commute to either Los Angeles or Orange Counties.

Commuting

Of course, it is important to keep in mind that some of the mismatches between jobs and workers are resolved partly through commuting. This is particularly true at the subregion level, as large flows of workers commute every day between these subregions.

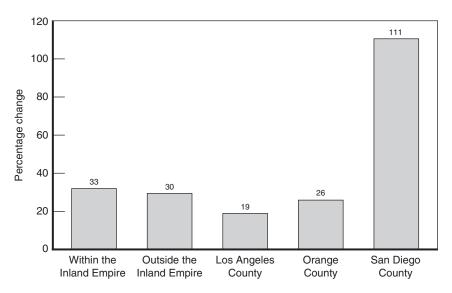
But even for the Inland Empire as a whole, some of the mismatch between jobs in the region and the education of the region's residents persists because large shares of Inland Empire residents commute to jobs in coastal Southern California. Although job growth was strong in the Inland Empire between 2000 and 2005–2006, the rate of increase in commuting was also high (Figure 5.2). In 2000, 21 percent of the region's workers commuted to jobs outside the region; by 2005–2006, 20 percent of the region's workers commuted to jobs outside the region.

Most commuters who leave the Inland Empire go to jobs in Los Angeles County (53%) or Orange County (31%). However, the number of Inland Empire residents commuting to San Diego County more than doubled in only five years, and by 2005–2006, they accounted for 14 percent of all out-of-region commuters.

Moreover, commuters who leave the region tend to be the most highly educated residents of the Inland Empire: 26 percent of all college graduates in the labor force commute out of the region for work, compared to only 15 percent of workers who have not completed high school (Figure 5.3). Thus, the Inland Empire serves as an important source of highly educated workers for coastal Southern California.

Expanding Opportunities

These projections have important implications for policymakers and others who seek to improve economic conditions in the Inland Empire. For

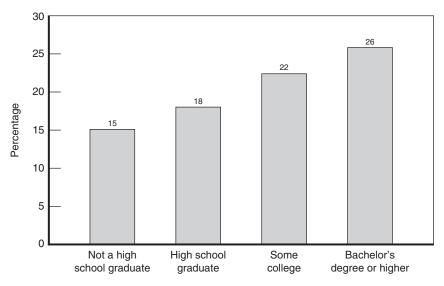


SOURCES: Authors' calculations based on the 2005 and 2006 American Community Surveys and the 2000 Census.

Figure 5.2—Percentage Change in the Number of Commuters in the Inland Empire, by Place of Work, 2000 to 2005–2006

the region as a whole, we see some improvements with a projected increase in both the share of jobs that require a college degree and increases in the educational attainment of the area's residents. This is good news, as these jobs will bring higher wages and better economic conditions for the region and will provide more local opportunities for employment for the large number of college graduates who currently commute to jobs in coastal counties.

However, the Inland Empire will continue to lag far behind the rest of the state and most other large metropolitan areas of the nation. The rather modest improvements we see with regard to jobs and education suggest that the gap between the Inland Empire and the rest of the state is unlikely to narrow any time soon. Instead, the Inland Empire will continue to attract jobs that typically do not require high levels of education. Of course, it is important to note that many jobs that do not require a college degree are relatively well remunerated. Some of these jobs fall under the category of "clean work, moderate pay" and "dirty work, moderate pay," according



SOURCES: Authors' calculations based on the 2005 and 2006 American Community Surveys.

Figure 5.3—Percentage of Inland Empire Workers Commuting Out of the Region, by Educational Attainment, 2005–2006

to local economist John Husing (Husing, 2007), and can be one part of a strong and vibrant local economy. Nonetheless, one of the primary challenges of economic development in the Inland Empire is the creation of high-paying jobs for college graduates.

Economic development efforts would do well to concentrate on encouraging local college graduates to establish new firms in the region. PPIC research has found that the vast majority of jobs that are created in the state derive from new firm creation rather than from firm migration (Kolko and Neumark, 2007). Rather than attracting firms from other locations, then, local officials might want to concentrate on growing new firms by retaining some of the region's highly educated college graduates likely to establish these firms and become employers.

At the other end of the educational attainment spectrum, the relative abundance of workers without a high school diploma presents a challenge for the region. At least part of the solution lies with the region's educational system. High school dropout rates in the Inland Empire are relatively high: In 2004–2005, San Bernardino County's dropout rate was 20 percent, compared to 14 percent for Riverside County and 13 percent for the entire state. A further challenge is presented by the numbers of domestic and international migrants who arrive in the region as adults but lack a high school diploma. Programs to encourage college-going should be encouraged and evaluated. Expansions of local colleges, including the new medical school at UC Riverside, will offer more opportunities for local students and will attract highly educated faculty.

At the subregional level, local leaders have begun to implement their own concrete solutions to these potential problems. Local officials in the Coachella Valley have recognized the need to improve college-going opportunities by helping to establish satellite campuses of CSU San Bernardino as well as UC Riverside. These efforts are designed to be integrated into the local labor market by focusing on education in health care, a good fit with the subregion's large population of older residents, and are intended to encourage new opportunities with a focus on business and entertainment (specifically creative writing, including screenwriting). ¹⁰

For Northwestern Riverside and Western San Bernardino, the projections suggest a dual strategy. Each region has a relatively large share of residents who have not finished high school. Education and workforce training will be particularly important for increasing their earnings potential. Workforce training should go hand-in-hand with economic development strategies that attract employers of higher-skilled workers. According to economic development professionals, efforts in this direction have begun to show signs of success in Western San Bernardino, as logistics and retail enterprises have given way to firms in the biotech, advanced manufacturing, homeland security, engineering, and architecture industries.

⁹See the Southern California Association of Governments' "State of the Region 2006–Quality of Life" report for other education indicators and trends, available at http://www.scag.ca.gov/publications/pdf/2006/SOTR06/SOTR06_Quality.pdf.

¹⁰At UC Riverside's Palm Desert Graduate Center, students can earn either an MBA or an MFA in creative writing and writing for the performing arts.

¹¹Analysis of specific strategies is beyond the scope of this study. See Alliance for Education (http://www.sbcalliance.org/) for a discussion of education strategies. Tornatzky and Barreto (2004) suggest that linkages with UC Riverside could provide positive economic development for Northwestern Riverside.

In Southwestern Riverside, the projected share of residents with a bachelor's degree exceeds the share of job opportunities for college-educated workers. College-educated workers are commuting from these areas to other areas of the Inland Empire and, more significantly, to coastal areas. In this subregion, economic development strategies could involve using the relatively highly educated population to attract employers.

6. Political Participation

As the Inland Empire continues on its course of phenomenal growth, voters in the region will be called on to plan for and shape growth through local policy decisions. In this region of rapid change, public investments and policy planning have the potential for tremendous effects on the lives of residents. The democratic ideal is that the residents of the region will determine the policies that help shape their future. Yet the concern in California and throughout the nation is that the voters are increasingly not representative of the people, particularly with respect to race and ethnicity. In this chapter, we develop projections to examine whether future Inland Empire voters are likely to be representative of the region's residents. Aside from voting, people engage and participate in political life in many ways. We also examine Inland Empire political participation beyond voting.¹

Citizenship, Voter Registration, and Voting

There are three links in the chain that connects the adult population to the voting population. The first is eligibility; only American citizens who have not been convicted of a felony are able to vote. According to the California Secretary of State's Office, about 474,000 Inland Empire adults (16%) were ineligible to vote in 2007, either because they were not citizens or because they had been convicted of a felony. Statewide, a higher share was ineligible to vote (18%). To examine eligibility, we develop projections of the foreign-born population and the share of those who are naturalized citizens. We do not have data or projections for the convicted felon population.

The second link is registration; voters must register in advance of the election. Of Inland Empire adults who are eligible to vote, less than two-thirds are registered (Table 6.1). This share (61%) is somewhat lower than the share in California (69%). We examine future voter registration by

 $^{^{1}}$ The main data sources used for this chapter do not identify subregions of the Inland Empire.

Table 6.1

Number of Adults in the Population, by Voter Eligibility Status and Voter Registration Status, 2007

		Eligible	Registered	%
Region	Adults	to Vote	to Vote	Registered
Inland Empire	2,917,027	2,442,699	1,488,630	61
California	27,803,081	22,768,146	15,682,358	69

SOURCES: California Department of Finance (2007) for number of adults ages 18 and older. California Secretary of State (2007) for eligibility and registration.

NOTES: The table reports the percentage registered as a share of the eligible population. The share registered among all adults was 51 percent in the Inland Empire and 56 percent statewide.

developing projections of the registered population as a share of the projected eligible population.

The final link is voting itself; only a fraction of registered voters actually vote. Among registered voters, those in the Inland Empire are less likely to vote than Californians statewide (Table 6.2).² We examine patterns in voting behavior by race/ethnicity and other demographic characteristics, but we do not attempt to project who will vote in 2015.³

Among Latino and Asian adults, the share who are foreign-born is expected to decline as greater numbers of children born in the United States age into adulthood (Table 6.3). In addition, naturalization rates will improve for Latinos (by 6 percentage points) and for Asians (by 4 percentage points), primarily because in 2015 these immigrant populations

 $^{^2\}mathrm{Voter}$ information is from the PPIC Statewide Survey. For more information on this survey, visit www.ppic.org. Mark Baldassare, PPIC survey director, bears no responsibility for the interpretations presented or conclusions reached based on our analysis of the PPIC survey data.

³One difficulty in projecting voter participation is that our projection models rely on survey data. Voter participation records often show lower participation than self-reported survey data. For example, voter participation records from the Secretary of State for November 7, 2006, show statewide participation of 56 percent, whereas the Current Population Survey for November 2006 shows that 77 percent of registered voters in California reported that they voted. In PPIC Statewide Surveys over the period 2002–2007, 66 percent of registered voters reported that they always vote. All three sources of data show lower participation rates in the Inland Empire relative to those statewide (50% and 56%, respectively, in the Secretary of State records for November 2006).

Table 6.2 $\label{eq:percentage} \mbox{Percentage Distribution of Voting Among Registered Voters, by Region, } \\ 2002–2007$

					San	
	Inland	Los	South	Central	Francisco	
	Empire	Angeles	Coast	Valley	Bay Area	California
Likely voter	64	69	70	66	73	69
How often do you vote?						
Always	61	61	67	68	69	66
Nearly always	25	26	22	20	22	23
Part of the time	9	9	7	7	6	7
Seldom	3	3	3	3	2	3
Never	2	2	2	2	1	2

SOURCE: Authors' calculations from the PPIC Statewide Surveys.

NOTES: "Likely voter" is constructed based on past voting, current interest, and voting intentions. Columns may not sum to 100 because of rounding.

Table 6.3

Projected Percentage Distribution of Adult Citizenship,
by Race/Ethnicity, 2005 and 2015

	Foreign Sha		Naturali Rat		Citizen Share		
	2005 2015		2005	2005 2015		2015	
White	5	6	64	66	98	98	
Latino	52	47	31	37	65	70	
African American	4	4	63	67	98	99	
Asian	76	70	61	65	70	75	
Multiracial	22	21	58	61	91	92	
Total	27	30	40	44	84	83	

SOURCE: Authors' projections for 2005 and 2015.

NOTES: The "naturalization rate" is the share of foreign-born who are naturalized citizens. The "citizen share" is the percentage of adults who are citizens. Asian includes Pacific Islanders.

will be made up of somewhat older adults who have been in the United States longer. Taken together, the growing share born in the United States and the higher naturalization rates among the foreign-born likely will increase citizenship levels for Latinos to 70 percent and for Asians to 75 percent. However, in aggregate, the share of Inland Empire adults who are citizens likely will remain stable at about 83 percent. This occurs primarily because improvements in citizenship levels among Latinos and Asians will be countered by a shifting of the population toward these two groups that will continue to have low citizenship rates relative to whites.

Low rates of naturalization among Latinos are partly, if not largely, attributable to legal status. Undocumented immigrants are not eligible for citizenship without first changing to legal status. Although we cannot distinguish between legal immigrants and undocumented immigrants in our data, it is likely that well over 100,000 Latino immigrants in the Inland Empire in 2000 were undocumented. It is possible, then, that among those eligible (legal permanent residents), naturalization rates might not be so different between Latinos and other groups. Our projections do not take into account potential changes in legalization status that might result from federal immigration policy reform.

Among citizens, both U.S.-born and naturalized, we forecast that voter registration rates will improve somewhat for each racial and ethnic group (Table 6.4). Combined with the increase in citizenship among Latinos and Asians, a higher share of these groups will be registered to vote. Among Latino adults, the share registered is projected to increase from 34 percent to 38 percent. Among Asian adults, the share registered is projected to increase from 38 percent to 44 percent.

Although we project improvement, the shares of Latinos and Asians who are registered voters will remain substantially lower than the shares for other groups. These lower shares translate into underrepresentation in the registered voter population (Table 6.5). Nearly half of adults will be Latino, but only about one-third of registered voters will be Latino. Conversely, just over one-third of adults will be white, whereas nearly half of registered voters will be white. The underrepresentation of Latino and Asian adults in the registered voter population in 2015 will be only slightly improved from the 2005 distribution.

In the Inland Empire, and throughout California, white registered voters are more likely to vote than are registered voters from other racial and ethnic groups. Among whites, 69 percent of registered voters are

Table 6.4

Projected Percentage Distribution of Voter Registration, by Race/Ethnicity, 2005 and 2015

	Citize	Citizen Share		ion Rate	Share Registered	
	2005	2015	2005	2015	2005	2015
White	98	98	74	76	73	75
Latino	65	70	53	54	34	38
African American	98	99	69	71	68	70
Asian	70	75	55	58	38	44
American Indian	97	98	58	62	56	60
Multiracial	91	92	60	61	55	56
Total	84	83	66	65	55	54

SOURCE: Authors' projections for 2005 and 2015.

NOTES: The "registration rate" is the share of citizens who are registered to vote. The "share registered" is the percentage of all adults who are registered to vote. Asian includes Pacific Islanders.

Table 6.5

Percentage Distribution of Registered Voters, by Race/Ethnicity, 2005 and 2015

	20	005	2015		
	Adults	Registered Voters	Adults	Registered Voters	
White	47	62	35	48	
Latino	39	24	48	33	
African American	7	9	7	9	
Asian	6	4	8	6	
American Indian	1	1	1	1	
Multiracial	1	1	2	2	

SOURCE: Authors' projections for 2005 and 2015.

NOTES: Columns may not sum to 100 because of rounding. Asian includes Pacific Islanders.

"likely voters"—a category based on past voting patterns, current interests, and voting intentions (Table 6.6). The shares were substantially lower among Latinos (50%), African Americans (55%), and Asians (54%). If

Table 6.6

Percentage Distribution of Voting Among Registered Voters in the Inland Empire, by Race/Ethnicity, 2002–2007

	*****		African		0.1
	White	Latino	American	Asian	Other
Likely voters	69	50	55	54	67
How often do you vote?					
Always	65	52	55	48	65
Nearly always	25	27	24	28	19
Part of the time	7	14	13	11	9
Seldom	2	4	5	7	4
Never	1	4	2	5	3

SOURCE: Authors' calculations based on the PPIC Statewide Surveys. NOTE: "Likely voter" is constructed based on past voting, current interest, and voting intentions.

these voting behavior patterns continue, the higher voting frequency among white registered voters combined with their higher share registered means that whites will make up the majority of voters in 2015 even though they will constitute just over one-third of the adult population. All other groups will be underrepresented among voters.

Factors Contributing to Lower Voting Participation

We have shown that Inland Empire adults are somewhat less likely than other Californians to register to vote. Moreover, among those registered, Inland Empire residents are less likely to vote. Taken together, this means that substantially lower shares of citizens in the Inland Empire vote than in the rest of the state. In this section, to help understand the lower levels of registration and voting in the Inland Empire, we examine voting by age, years in current residence, education, and income. All of these factors help explain the lower rates of registration and voting.

Compared to the state, the Inland Empire has a population that is both younger and more likely to have recently moved to the region. As shown in Table 6.7, it is older adults and those who have been living in the same residence for many years who are more likely to register to vote, more likely to actually vote, and more likely to be interested in politics. Furthermore,

Table 6.7

Percentage Distribution of Voting in the Inland Empire, by Age Group and Years in Home, 2002–2007

		Age Grou	p	Years in Home			
	18-24	35-44	55-64	<5	5-10	10-20	
Registered to vote (citizens)	58	75	87	68	77	88	
Likely voters (registered)	37	64	78	40	80	85	
How often do you vote? (register	red)						
Always	42	58	72	54	62	68	
Nearly always	26	30	20	28	24	22	
Part of the time	15	9	6	11	9	7	
Seldom	8	3	1	4	3	2	
Never	10	1	0	3	2	2	
How much interest in politics? (a	all residen	ts)					
Great deal	15	20	29	20	22	25	
Fair amount	37	41	46	41	42	46	
Only a little	38	31	21	31	30	25	
None	10	7	4	8	7	4	

SOURCE: Authors' calculations based on the PPIC Statewide Surveys.

NOTE: Columns may not sum to 100 because of rounding.

relative to all Californians, Inland Empire adults have lower levels of education and income. Voter registration, voting, and interest in politics are higher among better-educated adults and those with higher incomes (Table 6.8).

These factors also help explain why Latinos have lower registration and vote less than do whites. Compared to the white population, the Latino population is younger, less educated, lower income, and more likely to have recently moved to the region.

The registration and voting patterns described here also suggest that over the next decade, the Inland Empire will continue to have lower registration and voting than the rest of California. Our projections for 2015 show that the region will continue to be younger and less educated and thus likely to have incomes lower than those statewide. The continuation of substantial migration to the Inland Empire will mean that a high share of the future population will have moved relatively recently to the Inland Empire.

 $\label{eq:table 6.8}$ Percentage Distribution of Voting in the Inland Empire, by Education and Income, 2002–2007

		Education	l	Income (\$ thousands)					
	Less Than High School	High School Graduate	Bachelor's Degree	< \$20	\$40 to \$60	\$100+			
Registered to vote (citizens)	37	77	91	56	79	93			
Likely voters (registered)	37	58	78	46	61	78			
How often do you vote? (reg	istered vote	ers)							
Always	48	58	69	50	60	67			
Nearly always	23	25	24	24	26	27			
Part of the time	16	10	5	16	10	5			
Seldom	6	4	1	4	3	1			
Never	7	2	1	5	2	0			
How much interest in politics? (all residents)									
Great deal	14	19	31	18	20	31			
Fair amount	20	44	48	28	45	51			
Only a little	49	31	17	41	30	16			

SOURCE: Authors' calculations based on the PPIC Statewide Surveys.

NOTE: Columns may not sum to 100 because of rounding.

Other Forms of Political Participation

There are many forms of political participation beyond voting. Citizens and noncitizens alike can participate in political rallies, contribute time or money to a political campaign, attend local government meetings, and take part in other political activities. In this section, we examine these other forms of political participation, comparing the Inland Empire with other regions of the state. Unfortunately, the number of people surveyed is too small to permit consideration of these other political activities by race and ethnicity within the Inland Empire.⁴

⁴For a studies of civic and political participation among racial, ethnic, and immigrant-generation groups in California, see Ramakrishnan and Viramontes (2006) and Ramakrishnan and Baldassare (2004).

As was true for voter registration (Table 6.1), Inland Empire residents are less likely than other Californians to be politically active in other ways. However, the differences from statewide trends are not as great (Table 6.9). Among Inland Empire adults, 11 percent attended a political rally in the last year compared to a statewide share of 16 percent. Inland Empire residents were a few percentage points less likely than other Californians to sign a petition, work for a political party, or contribute to a political campaign. Inland Empire residents were more likely to attend a school board or other local meeting (42% compared to 40%). However, this probably reflects the region's greater share of adults who are parents rather than higher political participation rates among the region's parents.

We have shown that voter registration among Latinos and Asians is low relative to that of whites, and our projections suggest that this will continue

Table 6.9 Percentage Distribution of Nonvoting Political Participation, by Region, 2002-2007

					San	
	Inland	Los	South	Central	Francisco	
	Empire	Angeles	Coast	Valley	Bay Area	California
In the last year, have you						
Attended a rally?	11	16	13	16	18	16
Attended a meeting on local or school affairs?	42	38	39	38	40	40
Signed a petition?	36	38	41	36	41	39
Worked for a political party?	3	6	6	6	7	6
Given money to a campaign, party, or candidate?	16	19	23	18	24	21
How much interest in politics?						
Great deal	22	24	24	22	26	24
Fair amount	42	39	43	42	44	42
Only a little	29	29	27	29	24	27
None	7	8	6	7	5	7

SOURCES: Authors' calculations based on the PPIC Statewide Surveys. The upper panel is based on survey data from 2002 to 2004; the lower panel is based on 2007 data.

NOTE: Columns of the lower panel may not sum to 100 because of rounding.

to be true over the next decade. These trends are not unique to the Inland Empire. Citrin and Highton (2002) argue that multiple policy approaches are needed to address the racial and ethnic voting gaps: English language instruction, civics education, assistance with naturalization applications, convenient voter registration, clear and easy-to-access information about ballot measures and candidates, multiple language outreach, and voter mobilization through various community groups. Ramakrishnan and Baldassare (2004) note the importance of informing and motivating residents about participation beyond voting. In particular, they conclude that immigrants represent a mostly untapped source for civic involvement with a strong expressed interest in volunteering.⁵ Finally, racial and ethnic differences in participation are linked to differences in English language skills, education, and economic conditions. Reducing these socioeconomic gaps will help close participation gaps.

 $^{^5\}mathrm{See}$ also Wong (2006) for a discussion of political incorporation of Latino and Asian immigrants.

7. Conclusion: Investing in the Future

The future of the Inland Empire over the next decade will be driven, in large part, by demographic and economic forces. Projections for the population and the economy of the region show growth rates that will continue to surpass those for the rest of the state. Growth can bring economic opportunities to the region, but it also poses challenges for public services, infrastructure, and the environment. The substantial migration to the Inland Empire from the coastal areas of Southern California is a testament to the continued attractiveness of the region. Yet the projections in this report reveal potential problems with the nature of new jobs, the education of the population, and political participation.

Economic projections show that the region's economy is slowly moving toward jobs that require higher levels of education. Since these jobs are associated with higher wages, this is good news. However, the pace of increase is quite modest, and the region is projected to remain well behind the rest of the state.

Similarly, our projections suggest some increase in educational attainment levels in the region, partly a consequence of increases in education among the region's migrants who are drawn primarily from coastal counties in Southern California. Even so, the share of adults without a high school diploma will remain quite high.

Concerned about these trends, planners and policymakers in the Inland Empire are already working to promote economic development that will bring higher-skilled jobs to the region. If these economic development plans are to expand opportunities broadly, then they must also encourage employment with decent wages for workers with lower skills, and education and training programs to improve worker skills. Husing (2005d) suggests that the logistics industry offers good pay opportunities and on-the-job training to workers with low educational attainment. Our projections suggest that in 2015, nearly one-quarter of the adults in the Inland Empire will not have finished high school. The projected share without a high school diploma is expected to be at least this high in the three most

populous subregions—Northwestern Riverside, Western San Bernardino, and Eastern San Bernardino. Thus, it is important that economic development efforts also focus on workers who do not have high school diplomas (see also Husing, 2005b). Improvements in educational outcomes and economic opportunities for Inland Empire residents who are less well-off will benefit all of the region's residents.

Public investments and growth policies require tough choices. A key concern for the future is who will participate in these choices. Our projections suggest that whites will constitute just over one-third of the adult population but will make up a majority of the voters and that older adults and homeowners will be disproportionately overrepresented among voters. The region faces the risk that public choices about the future will be made by a relatively privileged minority. Thus, to promote policies that are broadly beneficial, efforts toward economic development and workforce training should be matched with efforts to increase participation through voting and other means in public decisionmaking that will help shape the future of the region.

Appendix A

Notes on Data and Methods

Throughout this report we have relied on several sources of data as well as on a variety of methods. In this appendix, we provide further details on the data and methods. The appendix is arranged by chapter and, within chapters, generally follows the order that data and methods are discussed in the main text.

Data and Methods Used in Chapter 4

We use the cohort component method to project populations of the Inland Empire. The method is straightforward conceptually but complex in its details. The cohort component approach we take is purely demographic and makes no explicit assumptions about the economy. Implicitly, the projections assume that past patterns of economic change and policies regarding growth will continue into the future.

In the cohort component method, populations are aged across time by applying mortality rates, migration rates, and fertility rates. We disaggregate populations by age, gender, ethnicity, nativity (foreignborn and U.S.-born), and county. Future rates of change are based on past patterns. Historic rates that are stable across time or changing in a constant manner are easiest to forecast. Disaggregations of populations (by age, gender, ethnicity, nativity, and county) are partly done to identify consistent levels and trends in fertility, mortality, and migration that are often very different across population subgroups. For example, fertility rates are much lower for whites than for Latinos; and among Latinos, rates are much lower for the U.S.-born than the foreign-born. Disaggregating projections by groups with different fertility, mortality, and migration rates leads to enhanced understanding of the processes driving population growth and increases the precision of the forecasts. We consider six ethnic groups (African American, American Indian, Asian and Pacific Islander, Latino, multiracial, and white), 21 age groups (five-year age groups from

age 0 to age 100, and 100 and over), both genders, two nativities, and two counties (Riverside and San Bernardino).

Mortality rates are the easiest to forecast. Annual reductions in age-specific mortality rates have been fairly consistent across time for all groups. We draw on previous PPIC research to establish past trends and levels (Johnson and Hayes, 2004b). We assume that mortality rates by age, gender, ethnicity, and nativity are the same in the Inland Empire as in the rest of the state. We use white rates for the multiracial group. For American Indians, we use separate rates for males and females, but we do not distinguish between foreign-born and U.S.-born American Indians. Our projections for 2000 through 2015 assume a 5 percent reduction in age-specific mortality rates for all groups. A good summary measure of age-specific death rates is life expectancy. Our base year (2000) age-specific mortality rates translate into the life expectancies shown in Table A.1.

Fertility rates are more variable than mortality rates. Differences in fertility between ethnic and nativity groups are the largest source of variation. Our method fully accounts for this variation. Temporal changes in fertility are less pronounced but also considered. We rely on past PPIC research to project fertility rates for population subgroups, and we use 2000 Census data in conjunction with vital records on births to develop base-year fertility rates for ethnic and nativity groups in Riverside and San

Table A.1

Base Year Life Expectancies, by Race/Ethnicity

	N	1ale	Fe	male				All	
	U.S	Foreign-	U.S	Foreign-	All	All	All U.S	Foreign-	
	Born	Born	Born	Born	Male	Female	Born	Born	Total
All groups	75.0	79.3	79.9	83.4	76.0	80.8	77.4	81.5	78.4
American Indian					76.6	79.6			78.2
Asian	82.5	80.6	88.2	85.2	80.5	85.2	85.4	83.1	83.0
African									
American	68.7	74.4	75.1	79.3	69.0	75.3	71.9	77.2	72.1
Latino	75.6	79.7	82.6	84.3	77.7	83.2	79.2	82.1	80.5
White	75.3	77.5	79.9	81.7	75.5	80.1	77.7	79.7	77.8

Bernardino Counties. For groups with few births, we use statewide birth rates. Total fertility rates are a good summary measure of age-specific birth rates. The total fertility rate is the average number of children a woman will have in her lifetime if current age-specific rates prevail. Our base-year and 2015 birth rates are shown in Table A.2.

Finally, migration is especially volatile. Large swings in migration over short periods of time have characterized California's migration history. Although the Inland Empire has not experienced the large outflows of migrants that other regions of the state have, the magnitude of migration into the Inland Empire has fluctuated substantially. We develop separate projections for domestic in-migration, domestic out-migration, and net international migration for all of the subgroups noted above. We use

Table A.2

Total Fertility Rates in Riverside and San Bernardino Counties,
2000 and 2015

	U.SBorn Foreign-Born		U.SBorn	Foreign-Born
	Riverside, 2000		San Bern	ardino, 2000
Latino	2.43	3.57	2.45	3.01
White	1.98	3.01	1.93	3.41
African American	2.23	2.39	2.22	2.39
Asian and Pacific Islander	1.98	1.97	1.31	2.21
American Indian	1.53	1.53	1.53	1.53
Multiracial	1.71	1.71	1.59	1.59
	Rivers	side, 2015	San Bernardino, 2015	
Latino	2.43	2.86	2.45	2.71
White	1.98	2.86	1.93	3.24
African American	2.12	2.27	2.11	2.27
Asian and Pacific Islander	1.98	1.97	1.31	2.21
American Indian	1.53	1.53	1.53	1.53
Multiracial	1.71	1.71	1.59	1.59

NOTES: For groups with fewer than 200 births, we used fertility rates from a larger geography or rates for both the U.S.-born and foreign-born combined: For American Indians and foreign-born African Americans, we used California rates; for multiracial women, we combined U.S.-born and foreign-born.

2000 Census data to establish age, ethnicity, gender, and nativity-specific rates for each county. We adjust those rates in light of recent estimates of migration. Our projections assume that migration will remain the major driver of growth in the Inland Empire's population.

The base year of the projections is 2000, but we calibrate our 2005 projections to be consistent with the latest estimates of the region's population. We examine 2005 estimates produced by the California Department of Finance and the Census Bureau. Unlike the rest of the state, the two sets of estimates are fairly close for Riverside and San Bernardino Counties. We rely on California Department of Finance estimates of populations by ethnicity to calibrate our 2005 projections. Those estimates do not include age, gender, or nativity. We use the 2005 American Community Survey to calibrate our 2005 projections of the share of the population that is foreign-born.

Cohort component projections cannot be developed for the subregions because of data constraints. Instead, projections are allocated to subregions using a shift share method and local expert input. For each of the ten subregions, we calculate the subregional share of the county's total population, ethnic population (for each of six ethnic groups), and population by age. We calculate these shares for 1990 and 2000 and the change in share between 1990 and 2000 (known as the "shift" in the share). We project subregional shares of 2015 populations by assuming that the shift in share will continue into the future. For example, the Southwestern Riverside subregion was home to 10.74 percent of Riverside County's population in 1990 and 14.43 percent in 2000 (Table A.3), for a shift of 3.69 percentage points. We continue this shift over the next 15 years, giving Southwestern Riverside a 19.96 percent share of the total projected population of Riverside County. Thus, the projected shift in Southwestern Riverside's share is 5.53 percentage points, equal to 1.5 times the 1990 to 2000 shift. We multiply the historic shift by 1.5 to take into account the projection period of 15 years (the historic shift is based on a ten-year period). The projected shares based on total population, ethnicity, and age group are then averaged to develop a single projection for 2015. We are not able to calibrate these subregional projections to post-censal estimates because no such estimates exist. However, population

 $\label{eq:A.3}$ Subregion Percentage Shares of Total and Incorporated County Populations, 1990, 2000, and 2006

County P		Share of C	County Inco	
of County	of County	1990	2000	2006
Rive	erside County			
1.6	1.7	1.1	1.9	1.7
0.8	0.8	_	_	_
19.7	20.7	24.1	24.5	25.3
53.7	50.0	59.6	54.9	51.4
13.5	12.5	10.5	11.1	11.5
10.7	14.4	4.7	7.6	10.2
San Be	rnardino Cou	nty		
1.9	2.2	0.5	0.4	0.4
20.0	20.2	16.2	17.6	20.1
3.2	2.7	0.5	0.4	0.4
40.0	42.0	43.2	43.7	43.8
34.9	32.9	39.6	37.9	35.3
	County P 1990 Share of County Rive 1.6 0.8 19.7 53.7 13.5 10.7 San Bei 20.0 3.2 40.0	of County of County Riverside County 1.6 1.7 0.8 0.8 19.7 20.7 53.7 50.0 13.5 12.5 10.7 14.4 San Bernardino Court 1.9 2.2 20.0 20.2 3.2 2.7 40.0 42.0	County Population Subregion Share of County 1990 Share of County 1990 Riverside County 1.6 1.7 1.1 0.8 0.8 — 19.7 20.7 24.1 53.7 50.0 59.6 13.5 12.5 10.5 10.7 14.4 4.7 San Bernardino County 1.9 2.2 0.5 20.0 20.2 16.2 3.2 2.7 0.5 40.0 42.0 43.2	County Population Subregion Incorpora Share of County Incorpora Population 1990 Share of County Incorporal Population 1990 2000 Riverside County 1.6 1.7 1.1 1.9 0.8 0.8 — — 19.7 20.7 24.1 24.5 53.7 50.0 59.6 54.9 13.5 12.5 10.5 11.1 10.7 14.4 4.7 7.6 San Bertardino County 1.9 2.2 0.5 0.4 20.0 20.2 16.2 17.6 3.2 2.7 0.5 0.4 40.0 42.0 43.2 43.7

NOTES: Shares for incorporated cities are restricted to cities incorporated as of 1990. There are no incorporated cities in the Southern Mountains subregion.

estimates for incorporated cities for 2006 are available from the California Department of Finance. Those suggest that the 1990 to 2000 shifts in subregional shares of incorporated populations are not always good predictors of shifts in subregional shares of total populations. For example, the High Desert's share of San Bernardino County's population increased from 20.0 percent of the total in 1990 to 20.2 percent in 2000. However, its incorporated cities' share of the incorporated population of the county increased much more rapidly, from 16.2 percent to 17.6 percent of the total incorporated population of San Bernardino County. In general, the 2006 city estimates suggest that the general patterns of change observed between 1990 and 2000 have continued. The 2006 city estimates suggest that our shift share approach might understate growth in the High Desert and overstate growth in Western San Bernardino.

Because of these limitations with the shift share approach, we adjust the projections derived from the shift share approach with projections of local growth developed by the San Bernardino Association of Governments and the Western Riverside Council of Governments, who generously supplied those projections to us. Specifically, we weight the shift share projections by 0.3 and the regionally produced projections by 0.7 to develop projections for the subregions. Those subregional projections are then controlled to our total population projections for each county.

Data and Methods Used in Chapter 5

Our projections of educational attainment are produced in three steps: First, we project educational attainment for nonmigrated populations in the Inland Empire; second, we project the educational attainment levels of migrants to and from the Inland Empire. Adding the results of the first and second steps gives us educational attainment projections for both counties. In the third step, we disaggregate the county projections to subregions using a shift share method. These steps are discussed in more detail below.

In the first step, we develop population projections for each county in the absence of migration. We then apply educational attainment distributions to each cohort, with cohorts defined by age, gender, ethnicity, and nativity (as in the general population projections), and educational attainment distributions based on 2000 levels. For each cohort ages 30 and older in 2000, we allow educational attainment levels to increase slightly across time based on historical patterns. For the youngest cohort, those ages 25-29 in 2015 and 10-14 in 2000, we use mother's educational attainment to project educational outcomes. Previous PPIC research has found strong intergenerational increases in educational attainment, especially between the first and second generation (Reed et al., 2005). We use those relationships, as identified from 2000 Census data, to project educational outcomes for this youngest cohort. These relationships are identified separately by gender, ethnicity, and nativity. We consider six education categories: 8th grade and less, some high school, high school graduate, some college (including an associate degree), bachelor's degree, and graduate degree.

In the second step, we develop projections for migrants. We consider three types of migrants: domestic in-migrants, domestic out-migrants, and international migrants, and we use the same six education categories as in the nonmigrated projections. We use 2000 Census data and data from the 2005 and 2006 American Community Surveys to identify educational attainment patterns for these three types of migrants. Again, we disaggregate the patterns by ethnicity, gender, age, nativity, and county. Educational attainment distributions of migrants are applied to our population projections with migration—specifically to the projections of domestic in-migrants, domestic out-migrants, and international migrants.

Employment projections by industry are based on projections from the California Employment Development Department (2006b) for 2004–2014 (see Appendix Table B.4 for a description of the industries). Those county-level projections are developed from the county's past employment trends by industry and are then refined by a review of current economic developments within the local community. We use projections for nonfarm, civilian employment, not including self-employment. We extend the projections to 2015 by assuming that the average annual growth for 2004–2014 would continue to 2015 within each industry for the Inland Empire and statewide. We find similar results using industry employment projections from the California Department of Transportation for 2005–2015 (see Appendix Table B.7).

We estimate education by industry for the Inland Empire and statewide from the 2000 Census and from the 2005 and 2006 American Community Surveys (Public Use Microdata Samples). Following the method developed by Neumark (2005), we estimate the educational distribution of employment demand by weighting the within-industry educational distributions by the industry shares. For comparison with 2015 projections, we use this method to calculate the education distribution in 2005–2006. For 2015, we assume that the shifts in educational demand within each industry during the period 2000 to 2005–2006 would continue to 2015. For example, in durable manufacturing, the share of workers with less than a high school diploma decreased from 34.4 percent to 33.4 percent in the 5.5 years from 2000 to 2005–2006—or by 0.2 percentage points per year. Continuing this trend to 2015, the share with less than a high school diploma in 2015 would be 31.5 percent.

We use occupation projections from the California Employment Development Department for 2004–2014 to describe growth in the demand for college-educated workers in the Inland Empire. The occupation projections show relatively high growth in business and financial operations occupations, computer and mathematical occupations, and education occupations. Overall, the occupation projections combined with Bureau of Labor Statistics estimates of skill needs suggest growth in demand for college-educated workers in the Inland Empire but at a slower rate than we find. Because the Bureau of Labor Statistics estimates account only for a single level of training for each occupation and do not consider variation in educational needs within an occupation, we prefer to use the actual education levels of workers for a more accurate range. See Johnson and Reed (2007) for further discussion.

We develop industry employment projections by subregion using a special extract of employment data from the California Employment Development Department, aggregated by subregion for the period 2001-2004. For each industry, we allocate the total projected growth in the Inland Empire to the subregions based on the growth during 2001–2004. For example, in the Coachella Valley, accommodation and food services grew from 20,810 jobs to 22,297 jobs between 2001 and 2004. Growth in the Coachella Valley at 7 percent was less than throughout the Inland Empire at 9 percent (based on the sum of the subregional data). We assumed that the rate of growth of accommodation and food services in the Coachella Valley for 2004-2015 would be lower than that projected by the California Employment Development Department for the Inland Empire by a factor of 7/9. We applied this adjusted rate of growth to the baseline employment in accommodation and food services in the Coachella Valley in 2004. Data on education by industry are not available for the subregions. We used the Inland Empire educational distributions for each industry in each subregion.

Data and Methods Used in Chapter 6

Naturalization rates are estimated from the 2005 and 2006 American Community Surveys. We estimate a linear probability model for naturalization as a function of dummy variables indicating sex, age, and race/ethnicity. For adults ages 25–64, we included educational attainment (this is the age group for whom we project educational attainment in 2015). The model is estimated from a sample of Inland Empire residents ages 18 and older whose citizenship status was either "naturalized" or "not

a citizen." The model results are combined with our detailed population projections for 2015 to develop projections for the foreign-born. We develop projections of the citizen population by combining projections of the naturalized foreign-born population with projections of the native-born population.

We use a similar method to develop projections of voter registration. The base data are the November Current Population Survey (2002, 2004, and 2006, combined). The sample includes all citizens ages 18 and older. Because of the smaller size of this survey, the model is estimated for California as a whole with a dummy variable for the Inland Empire. The model also includes an indicator for naturalized citizens and for the year of the survey. Our registered voter projections for 2005 do not match the level of voter registration reported for 2005 by the California Secretary of State (49.9% and 55.3%, respectively). We multiply our projected rates by 1.1078 to create an exact match.

The data on voting behavior and on nonvoting forms of political participation are drawn from the PPIC Statewide Surveys. To ensure that sample sizes are large enough to represent regions accurately and to examine demographic differences within the Inland Empire, we have combined data from surveys conducted in 2002–2007. The PPIC Statewide Surveys have a larger Inland Empire sample over this period (over 8,100 registered voters) than does the November Current Population Survey (just over 1,100 registered voters). In addition, by using the PPIC Statewide Surveys for voting behavior, we have a comparable sample from the same survey for nonvoting forms of political participation.

Throughout Chapter 6 we refer to several regions of California. The "South Coast" region includes Orange and San Diego Counties. The "Central Valley" includes Butte, Colusa, El Dorado, Fresno, Glenn, Kern, Kings, Madera, Merced, Placer, Sacramento, San Joaquin, Shasta, Stanislaus, Sutter, Tehama, Tulare, Yolo, and Yuba Counties. The "San Francisco Bay Area" includes Alameda, Contra Costa, Marin, Napa, San Francisco, San Mateo, Santa Clara, Solano, and Sonoma Counties.

Appendix B

Auxiliary Tables

Table B.1

Populations in the Subregions and Incorporated Cities of the Inland Empire, 1990, 2000, and 2006

Subregion	City	1990	2000	2006
	Riversio	le County		
Coachella				
Valley	Cathedral City	29,050	42,300	51,081
	Coachella	16,600	22,150	35,207
	Desert Hot Springs	11,550	16,550	22,011
	Indian Wells	2,570	3,670	4,865
	Indio	35,400	48,650	71,654
	La Quinta	10,650	23,050	40,985
	Palm Desert	22,750	41,000	49,539
	Palm Springs	39,500	42,700	46,437
	Rancho Mirage	9,600	13,150	16,672
Northwestern				
Riverside	Corona	73,300	123,700	144,661
	Moreno Valley	115,500	142,000	174,565
	Norco	23,100	24,100	27,263
	Perris	21,050	35,900	47,139
	Riverside	223,300	253,800	287,820
San Jacinto				
Valley	Banning	19,950	23,500	28,128
	Beaumont	9,525	11,350	23,145
	Calimesa		7,075	7,415
	Hemet	35,350	58,500	69,544
	San Jacinto	15,500	23,400	31,066
Southwestern				
Riverside	Canyon Lake		9,925	10,939
	Lake Elsinore	17,900	28,700	38,340

Table B.1 (continued)

Subregion	City	1990	2000	2006
	Murrieta		43,850	92,933
	Temecula	25,300	56,600	93,923
Southern Mountains	(no incorporated cities)			
	San Bernare	dino County		
High Desert	Adelanto	8,250	18,200	24,880
	Apple Valley	44,800	54,000	67,507
	Barstow	21,150	21,100	23,599
	Hesperia	49,050	62,300	80,268
	Twentynine Palms	11,750	14,750	27,498
	Victorville	39,000	63,600	95,145
	Yucca Valley		16,800	20,537
Northern				
Mountains	Big Bear Lake	5,375	5,400	6,182
Western San	CI.	50.000	((000	50.055
Bernardino	Chino	59,300	66,900	78,055
	Chino Hills		66,300	77,969
	Fontana	85,100	127,300	165,462
	Montclair	28,050	32,850	35,648
	Ontario	130,000	157,600	171,113
	Rancho Cucamonga	98,500	126,600	170,479
	Upland	62,700	68,100	74,099
Eastern San		/	/	
Bernardino	Colton	39,400	47,500	51,781
	Grand Terrace	10,750	11,600	12,380
	Highland	33,850	44,550	51,489
	Loma Linda	17,000	18,650	21,912
	Redlands	59,600	63,400	71,086
	Rialto	70,300	91,600	99,189
	San Bernardino	161,800	185,100	201,823
	Yucaipa	32,400	41,150	50,553

Table B.1 (continued)

Subregion	City	1990	2000	2006
	Bot	h Counties		
Eastern Desert	Blythe	8,325	20,050	22,179
	Needles	5,050	4,830	5,681

SOURCE: Populations are as of January 1 of each year from California Department of Finance estimates.

Table B.2

Percentage Distribution of Characteristics of Intrastate Migrants Moving to and from the Inland Empire, by Region, 1995–2000

		ngeles inty		inge inty		Diego unty		h San n Valley
	Flows	Flows Out	Flows	Flows Out	Flows	Flows Out	Flows	Flows Out
Sex								
Female	50.0	50.1	49.1	50.2	48.8	49.4	46.0	30.1
Male	50.0	49.9	50.9	49.8	51.2	50.6	54.0	69.9
Race/ethnicity								
White	30.4	35.8	55.6	60.2	59.2	67.1	45.9	46.2
Latino	47.3	36.8	34.2	22.3	24.8	19.0	40.3	34.0
Asian	5.4	11.0	4.0	12.0	2.9	4.9	3.7	1.3
African American	13.8	12.7	3.7	1.7	8.0	4.9	7.4	14.9
American Indian	0.4	0.4	0.3	0.9	1.1	1.2	0.8	0.9
Multiracial	2.5	3.2	2.1	2.8	3.8	2.5	1.9	2.8
Other	0.2	0.1	0.1	0.0	0.1	0.3	0.0	0.0
Citizen								
Citizen by birth	72.5	74.6	78.3	78.6	85.9	87.3	80.0	82.4
Citizen born in U.S. islands or territory	0.3	0.3	0.1	0.1	0.3	0.2	0.2	7.5
Citizen born abroad of								
American parents	0.4	0.5	0.7	1.4	1.0	0.9	0.7	0.0
Naturalized citizen	11.0	10.7	7.1	10.2	5.4	5.4	3.7	2.9
Not a citizen	15.8	13.9	13.8	9.6	7.4	6.2	15.4	7.1

Table B.2 (continued)

		ngeles inty		inge inty		Diego unty		h San 1 Valley
	Flows In	Flows Out	Flows	Flows Out		Flows Out	Flows	Flows Out
Years in the United State	S							
1 or less	0.9	1.4	1.1	1.3	2.2	0.0	4.3	1.2
2–3	1.6	2.7	2.2	1.1	1.9	0.7	4.1	7.2
4–5	3.7	5.0	4.2	4.3	0.9	2.1	10.0	8.4
6–10	17.9	21.2	18.1	14.4	14.1	24.0	31.3	18.3
11–20	40.7	36.6	41.3	46.1	39.5	30.8	28.5	33.2
>20	35.3	33.1	33.2	32.8	41.4	42.4	21.8	31.7
Education								
8th grade or less	11.5	8.8	8.7	5.3	4.4	5.9	10.1	10.6
Some high school	17.4	14.8	12.2	9.8	10.3	8.4	17.2	17.9
High school graduate	25.0	21.2	24.0	19.8	22.4	18.8	27.4	32.9
Some college	30.7	33.7	35.8	37.1	40.0	37.5	31.3	30.1
Bachelor's degree	10.5	14.9	13.7	19.0	16.2	19.8	7.3	5.6
Graduate degree	4.7	6.6	5.6	9.0	6.7	9.6	6.7	3.0
Marital status								
Married	55.8	43.2	65.4	46.3	62.1	44.5	51.0	73.1
Never married	25.5	34.3	17.9	30.6	19.5	36.3	24.8	10.8
Separated/divorced	14.0	17.7	13.7	18.1	14.1	14.8	17.4	9.2
Widowed	4.6	4.7	2.9	5.0	4.3	4.4	6.8	6.9
Poverty status								
Above poverty	81.4	82.9	88.4	89.7	86.6	84.2	74.8	75.3
At or below poverty	18.6	17.1	11.6	10.3	13.4	15.8	25.2	24.7
Welfare status								
No welfare	95.8	95.3	97.6	98.8	98.0	98.5	96.4	98.3
Received welfare	4.2	4.7	2.4	1.2	2.0	1.5	3.6	1.7
Household income (\$1,0	00s)							
<20	21.1	21.4	14.8	13.2	18.4	25.1	32.4	60.6
20-39	25.4	22.3	19.7	16.5	19.5	22.1	29.2	14.3
40-59	19.2	19.3	21.3	20.3	24.4	20.5	9.4	9.8

Table B.2 (continued)

		ngeles inty		inge inty		Diego unty		h San 1 Valley
	Flows In	Flows Out	Flows	Flows Out	Flows In	Flows Out	Flows In	Flows Out
60–79	15.3	12.7	16.4	15.6	17.0	12.1	16.2	5.8
80-99	7.5	10.2	13.3	11.5	8.4	6.3	6.1	5.2
100+	11.4	14.1	14.6	23.0	12.3	13.9	6.8	4.3
Housing tenure								
Renter	35.6	62.3	26.6	50.9	33.5	64.2	52.5	55.9
Owner	64.4	37.7	73.4	49.1	66.5	35.8	47.5	44.1

SOURCE: Authors' calculations based on the 2000 Census (PUMS 5%).

NOTES: Education is determined for adults ages 25 and over; marital status for adults ages 18 and over; poverty status for persons in households; welfare for individuals between ages 18 and 64. Number of years in the United States is determined for the foreign-born. Asian includes Pacific Islanders.

Intrastate Migration Flows to and from the Inland Empire, by Characteristics and Region, 1995-2000

	Los A	Los Angeles County	unty	Ora	Orange County	ıty	San I	San Diego County	unty	S. San	S. San Joaquin Valley	Valley
	Flows	Flows	Net	Flows	Flows	Net	Flows	Flows	Net	Flows	Flows	Net
	ln	Out	Flows	In	Out	Flows	ln	Out	Flows	In	Out	Flows
Sex												
Female	101,968	42,796	59,172	39,655	23,933	15,722	19,128	11,908	7,220	4,120	5,787	-1,667
Male	102,093	42,687	59,406	41,097	23,706	17,391	20,096	12,176	7,920	4,838	13,445	-8,607
Race/ethnicity												
White	62,097	30,575	31,522	44,895	28,702	16,193	23,228	16,157	7,071	4,108	8,884	-4,776
Latino	96,518	31,497	65,021	27,635	10,641	16,994	9,710	4,585	5,125	3,611	6,534	-2,923
Asian	11,047	9,380	1,667	3,256	5,728	-2,472	1,153	1,182	-29	332	245	87
African American	28,114	10,830	17,284	2,970	802	2,168	3,153	1,170	1,983	299	2,859	-2,192
American Indian	892	379	513	224	432	-208	445	300	145	73	173	-100
Multiracial	5,086	2,742	2,344	1,728	1,313	415	1,499	614	885	167	537	-370
Other	307	80	227	44	21	23	36	9/	-40	0	0	0
Citizen												
Citizen by birth	147,962	63,791	84,171	63,220	37,449	25,771	33,709	21,017	12,692	7,165	15,849	-8,684
Citizen born in U.S. islands or territory	546	279	267	87	09	27	109	42	29	14	1,451	-1,437
Citizen born abroad of American parents	895	434	461	999	664	86-	382	216	166	64	0	64

Table B.3 (continued)

	Los Aı	Los Angeles County	unty	Ora	Orange County	ıty	San I	San Diego County	unty	S. San	S. San Joaquin Valley	Valley
	Flows	Flows	Net	Flows	Flows	Net	Flows	Flows	Net	Flows	Flows	Net
	In	Out	Flows	In	Out	Flows	In	Out	Flows	In	Out	Flows
Naturalized citizen	22,416	9,119	13,297	5,717	4,870	847	2,115	1,308	807	333	595	-232
Not a citizen	32,242	11,860	20,382	11,162	4,596	995'9	2,909	1,501	1,408	1,382	1,367	15
Years in the United States												
1 or less	468	300	168	179	125	54	110	0	110	73	23	50
2–3	877	559	318	366	107	259	26	19	78	71	139	89-
4-5	2,017	1,048	696	701	406	295	47	09	-13	172	162	10
6-10	892,6	4,442	5,326	3,063	1,365	1,698	710	674	36	536	354	182
11–20	22,243	7,686	14,557	6,970	4,360	2,610	1,982	865	1,117	489	642	-153
>20	19,285	6,944	12,341	5,600	3,103	2,497	2,078	1,191	887	374	612	-238
Education												
8th grade or less	14,885	4,679	10,206	4,719	1,635	3,084	1,170	831	339	556	1,498	-942
Some high school	22,570	7,910	14,660	6,618	3,010	3,608	2,710	1,185	1,525	950	2,533	-1,583
High school graduate	32,401	11,295	21,106	13,075	6,009	9/6,9	5,909	2,656	3,253	1,514	4,649	-3,135
Some college	39,808	17,954	21,854	19,470	11,413	8,057	10,559	5,279	5,280	1,731	4,260	-2,529
Bachelor's degree	13,658	7,936	5,722	7,475	5,862	1,613	4,286	2,791	1,495	403	790	-387
Graduate degree	6,142	3,535	2,607	3,058	2,757	301	1,774	1,349	425	369	420	-51

Table B.3 (continued)

	Los A	Los Angeles County	unty	Ora	Orange County	nty	San I	San Diego County	unty	S. San	S. San Joaquin Valley	Valley
	Flows	Flows	Net	Flows	Flows	Net	Flows	Flows	Net	Flows	Flows	Net
	ln	Out	Flows	In	Out	Flows	In	Out	Flows	In	Out	Flows
Marital status												
Married	84,542	28,734	55,808	39,909	17,501	22,408	18,630	9,047	9,583	3,573	3,573 12,108	-8,535
Never married	38,642	22,811	15,831	10,941	11,558	-617	5,836	7,378	-1,542	1,739	1,739 1,786	-47
Separated/divorced	21,238	11,791	9,447	8,352	6,845	1,507	4,234	3,015	1,219	1,223	1,532	-309
Widowed	986'9	3,107	3,879	1,783	1,886	-103	1,293	905	388	477	1,144	- 99
Poverty status												
Above poverty	161,316	67,267	94,049	69,870	41,304	28,566	31,586	31,586 18,508	13,078	6,144	7,801	-1,657
At or below poverty	36,977	13,853	23,124	9,180	4,762	4,418	4,907	3,460	1,447	2,067	2,559	-492
Welfare status												
No welfare	130,205	57,532	72,673	53,284	34,393 18,891	18,891	26,000 17,821	17,821	8,179	5,899	5,899 15,268 -9,369	-9,369
Received welfare	5,668	2,844	2,824	1,332	403	929	528	279	249	220	261	-41
Household income (\$1,000s)												
<20	43,151	18,279	24,872	11,923	6,271	5,652	7,199	6,038	1,161	2,901	11,659	-8,758
20–39	51,818	19,072	32,746	15,889	7,872	8,017	7,630	5,316	2,314	2,612	2,759	-147
40–59	39,279	16,511	22,768	17,174	9,670	7,504	9,588	4,939	4,649	846	1,886	-1,040
62-09	31,269	10,861	20,408	13,241	7,414	5,827	6,683	2,923	3,760	1,448	1,109	339

Table B.3 (continued)

	Los A	Los Angeles County	unty	Ora	Orange County	ıty	San I	Diego Cor	San Diego County S. San Joaquin Valley	S. San	Joaquin	Valley
	Flows	Flows Flows Net	Net	Flows	Flows Flows Net	Net	Flows	Flows Flows Net	Net	Flows	Flows Flows Net	Net
	ln	Out	Flows	In	In Out Flows	Flows	In	In Out Flows	Flows	ln	In Out	Flows
80–99	15,249	8,738	15,249 8,738 6,511		5,460	10,725 5,460 5,265		3,289 1,526 1,763	1,763	544	266	-453
100+	23,295	12,022	23,295 12,022 11,273		11,800 10,952	848	848 4,835 3,342 1,493	3,342	1,493	209	822	-215
Housing tenure												
Renter	70,554	50,294	$70,554 \hspace{0.1cm} 50,294 \hspace{0.1cm} 20,260 \hspace{0.1cm} 21,026 \hspace{0.1cm} 23,423 \hspace{0.1cm} -2,397 \hspace{0.1cm} 12,202 \hspace{0.1cm} 13,971 \hspace{0.1cm} -1,769 \hspace{0.1cm} 4,275 \hspace{0.1cm} 5,804 \hspace{0.1cm} -1,529 \hspace{0.1cm} 13,921 0.1cm$	21,026	23,423	-2,397	12,202	13,971	-1,769	4,275	5,804	-1,529
Owner	127,840	30,435	127,840 30,435 97,405 58,022 22,560 35,462 24,196 7,803 16,393	58,022	22,560	35,462	24,196	7,803	16,393		3,875 4,582	_707_
SOURCE: Authors' calculations based on the 2000 Census (PUMS 5%). NOTES: Education is determined for adults ages 25 and over; marital status for adults ages 18 and over; poverty status for persons in households; welfare for individuals between ages 18 and 64. Number of years in the United States is determined for the foreign-born. The table shows only regions with the most migration activity. Data are available for all regions.	lations base ermined for dividuals be with the mos	d on the 2 adults age tween age st migratio	to 000 Cens ss 25 and cess 18	us (PUMS over; marii 64. Numb Data are	5%). tal status er of year available	for adults s in the U for all regi	ages 18 a nited Stat ons.	nd over; es is dete	poverty starmined fo	atus for p r the fore	ersons i	The

105

Table B.4
Industry Descriptions

Industry	Description
Administrative and support services	Administrative and support services including office administrative; facilities support, employment, and business support services; travel arrangement and reservation services; investigation and security services; services to buildings and dwellings; and other support services. Waste management and remediation services including waste treatment and disposal, waste collection and remediation, and other waste management services
Wholesale trade	Merchant wholesalers (durable and nondurable goods) and wholesale electronic (markets, agents, and brokers)
Transportation and warehousing	Air transportation, rail transportation, water transportation, truck transportation, transit and ground passenger transportation, pipeline and scenic and sightseeing transportation, support activities for transportation, couriers and messengers, warehousing and storage
Construction	Construction of buildings, heavy and civil engineering construction, specialty trade contractors
Professional, scientific, and technical services	Legal services; accounting, tax preparation, bookkeeping, and payroll services; architectural, engineering and related services; specialized design services; computer systems design and related services; management, scientific, and technical consulting services; scientific research and development services; advertising and related services; and other professional, scientific, and technical services
Accommodation and food services	Accommodation, food services, and drinking places
Retail trade	Motor vehicle and parts dealers; furniture and home furnishings stores; electronics and appliance stores; building material and garden equipment and supplies dealers; food and beverage stores; health and personal care stores; gasoline stations; clothing and clothing accessories stores; sporting goods, hobby, book, and music stores; general merchandise stores; miscellaneous store retailers; and nonstore retailers
Private education services	Private schools and other private education services
Mining	Oil and gas extraction, other mining, support activities for mining

Table B.4 (continued)

Industry	Description
Arts, entertainment, and recreation	Performing arts, spectator sports, and related industries; museums, historical sites, and similar institutions; and amusement, gambling, and recreation industries
Utilities	Electric power generation, transmission, and distribution; natural gas distribution; and water, sewage, and other systems
Real estate, rental and leasing	Real estate, rental and leasing services, and lessors of nonfinancial intangible assets
Information	Publishing, motion picture and sound recording, broadcasting, telecommunications, Internet service providers, web search portals, DP services, and other information services
Finance and insurance	Credit intermediation and related activities; insurance carriers, agencies, brokerages, and other insurance-related activities
Health care and social assistance	Ambulatory health care services, private hospitals, nursing and residential care facilities, and social assistance
Management	Management of companies and enterprises
Other services	Repair and maintenance; personal and laundry services; and religious, grantmaking, civic, professional, and similar organizations
Federal government	Federal civilian employment including U.S. Postal Service
State and local government	State and local government including public education and public hospitals
Nondurable manufacturing	Food, beverage, and tobacco products; textile mills; textile product mills; apparel, leather, and allied products; paper, printing, and related support activities; petroleum and coal products; and chemical, plastics, and rubber products
Durable manufacturing	Wood products, nonmetallic mineral products, primary metal, fabricated metal products, machinery, computer and electronic products, electrical equipment, appliances, components, transportation equipment, furniture and related products, and miscellaneous

SOURCE: California Employment Development Department descriptions are based on North American Industry Classification System categories.

NOTES: California Employment Development Department employment and projections data for the Inland Empire do not include "logging."

Table B.5
Projected Employment Growth in California, by Industry, 2005–2015

		Employme (thousand		Em	Shares o	
			Change			
Industry	2005	2015	(%)	2005	2015	Change
Administrative services	975.6	1,303.2	33.6	6.6	7.5	0.9
Wholesale trade	665.5	779.5	17.1	4.5	4.5	0.0
Transportation and warehousing	432.9	500.5	15.6	2.9	2.9	-0.1
Construction	865.4	1,031.0	19.1	5.9	5.9	0.1
Professional, scientific, and technical services	932.4	1,180.6	26.6	6.3	6.8	0.5
Accommodation and food						
services	1,222.6	1,444.0	18.1	8.3	8.3	0.0
Retail trade	1,643.5	1,924.3	17.1	11.1	11.1	-0.1
Private education services	269.5	345.8	28.3	1.8	2.0	0.2
Mining	20.5	21.3	3.9	0.1	0.1	0.0
Arts, entertainment, and recreation	241.9	296.9	22.7	1.6	1.7	0.1
Utilities	56.4	59.3	5.1	0.4	0.3	0.0
Real estate, rental and leasing	279.6	314.1	12.3	1.9	1.8	-0.1
Information	490.4	578.5	18.0	3.3	3.3	0.0
Finance and insurance	633.0	710.1	12.2	4.3	4.1	-0.2
Health care and social assistance	-	1,649.7	24.4	9.0	9.5	0.5
Management	230.3	267.9	16.3	1.6	1.5	0.0
Other services	511.8	597.5	16.7	3.5	3.4	0.0
Federal government	251.9	260.7	3.5	1.7	1.5	-0.2
State and local government	2,178.6	2,551.5	17.1	14.8	14.7	-0.1
Nondurable manufacturing	557.7	561.0	0.6	3.8	3.2	-0.5
Durable manufacturing	978.1	1,003.8	2.6	6.6	5.8	-0.8

SOURCES: Authors' calculations based on California Employment Development Department industry data and projections for 2004–2014.

Table B.6

Percentage Distribution of Workforce Education in California, by Industry, 2000 and 2015

	Less Tha School I		Bachelor' or Hi	_
Industry	2000	2015	2000	2015
Administrative services	32	33	15	15
Wholesale trade	19	13	24	30
Transportation and warehousing	19	18	14	14
Construction	34	37	9	8
Professional, scientific, and technical				
services	2	0	62	71
Accommodation and food services	31	19	10	13
Retail trade	16	11	15	15
Private education services	4	1	57	64
Mining	12	6	20	16
Arts, entertainment, and recreation	17	14	25	25
Utilities	4	0	27	28
Real estate, rental and leasing	11	5	28	31
Information	5	3	46	50
Finance and insurance	3	0	40	43
Health care and social assistance	8	5	35	38
Management	5	7	57	75
Other services	24	18	21	22
Federal government	4	2	34	37
State and local government	5	3	49	52
Nondurable manufacturing	32	24	20	23
Durable manufacturing	20	19	32	33

SOURCES: Authors' calculations based on the 2000 Census and the 2005 and 2006 American Community Surveys.

Table B.7

Percentage Distribution of Employers' Demand for Education,
California Department of Transportation Projections,
2005 and 2015

	Less Than				
	High School	High School	Some	Bachelor's	Graduate
	Diploma	Diploma	College	Degree	Degree
		Inland Emp	oire		
2005	21.1	29.1	31.9	11.5	6.4
2015	17.9	36.9	26.0	12.6	6.7
2015 alt.	21.0	29.5	32.0	11.4	6.0
		Californi	a		
2005	16.8	22.5	30.5	19.7	10.5
2015	12.9	28.8	25.3	20.9	12.0
2015 alt.	16.3	22.3	30.7	20.0	10.8

SOURCES: Authors' calculations and projections based on the 2000 Census, the 2005 and 2006 American Community Surveys, and California Department of Transportation industry projections for 2005–2015.

NOTES: Alternative projections for 2015 are based on the projected industry distribution in 2015 and the education distribution within each industry in 2005. These alternative projections are provided to demonstrate the importance of the shift toward higher-educated workers within industries.

Table B.8 Employment, by Industry and Subregion, 2005 (thousands)

Industry	Coachella Valley	Northwestern Riverside	San Jacinto Valley	Southwestern Riverside	High Desert	Western San Bernardino	Eastern San Bernardino
Administrative services	9.0	15.2	1.3	6.5	3.1	33.6	10.1
Wholesale trade	2.4	9.0	9.0	2.6	1.1	21.7	4.6
Transportation and warehousing	1.6	7.3	0.3	0.8	2.2	26.2	6.3
Construction	15.2	32.0	3.9	10.0	5.5	21.8	12.7
Professional, scientific, and technical							
services	3.2	7.0	6.0	2.1	1.6	7.1	9.9
Accommodation and food services	22.9	14.3	3.6	7.5	8.4	21.5	13.4
Retail trade	18.8	27.5	6.2	12.1	13.6	38.3	22.1
Private education services	9.0	2.5	0.1	0.4	6.0	1.2	4.7
Mining	N/A	0.2	N/A	0	0.3	0.1	0.2
Arts, entertainment, and recreation	5.3	2.2	9.0	1.1	9.0	2.6	1.4
Utilities	0.4	0.4	0.1	N/A	0.5	1.6	1.0
Real estate, rental and leasing	2.7	3.2	8.0	1.8	1.2	5.0	2.2
Information	2.1	3.3	0.5	0.8	1.6	3.5	1.4
Finance and insurance	2.5	5.8	9.0	1.9	1.6	7.9	5.8
Health care and social assistance	13.0	19.2	4.3	5.0	7.9	21.2	27.6
Management	0.5	4.2	N/A	N/A	0.2	3.0	3.2
Other services	4.4	7.4	1.1	2.3	2.0	7.6	6.2
Federal government	9.0	6.0	0.3	0.2	0.3	9.0	3.2

Table B.8 (continued)

	Coachella	Northwestern	San Jacinto	Coachella Northwestern San Jacinto Southwestern	High	Western San Eastern San	Eastern San
Industry	Valley	Riverside	Valley	Riverside	Desert	Desert Bernardino Bernardino	Bernardino
State and local government	16.5	57.0	10.0	11.2 12.9	12.9	25.1	53.5
Manufacturing	3.4	27.5	3.1	7.3	5.3	46.5	11.0
SOURCES: Authors' calculations based on California Employment Development Department industry estimates and projections.	ased on Califo	rnia Employment	Development	Department indus	stry estima	tes and projecti	ons.
NOTES: N/A identifies industry and subregion combinations where data are not available. These industries have few employers and	subregion cor	nbinations where	data are not a	ivailable. These i	ndustries h	lave few employ	ers and
employment data were suppressed by the California Employment Development Department to protect confidentiality.	by the Californ	ia Employment 🗅	Development D	epartment to prot	ect confide	ntiality.	

Percentage Distribution of Employment Growth, by Industry and Subregion, 2005-2015 Table B.9

	Coachella	Northwestern	San Iacinto	Southwestern	Hish	Western San	Fastern San
Industry	Valley	Riverside	Valley	Riverside	Desert	Bernardino	Bernardino
Administrative services	39	42	47	44	43	41	39
Wholesale trade	39	41	47	43	38	41	37
Transportation and warehousing	31	38	34	37	26	37	37
Construction	28	31	33	31	30	29	29
Professional, scientific, and technical							
services	37	38	31	40	37	36	36
Accommodation and food services	28	30	30	31	28	29	29
Retail trade	27	29	28	30	27	26	26
Private education services	27	28	22	26	36	25	26
Mining	N/A	39	N/A	21	26	36	27
Arts, entertainment, and recreation	24	26	24	29	21	27	23
Utilities	16	19	21	N/A	16	15	16
Real estate, rental and leasing	17	20	20	23	19	20	18
Information	18	20	22	19	15	17	14
Finance and insurance	20	21	19	21	19	21	19
Health care and social assistance	24	25	25	27	24	25	23
Management	10	12	N/A	N/A	12	6	6
Other services	21	22	20	22	20	21	21
Federal government	7	-1	-1	-1	T	-1	-1

Table B.9 (continued)

	Coachella	Northwestern	Northwestern San Jacinto	Southwestern	High	High Western San Eastern San	Eastern San
Industry	Valley	Riverside	Valley	Riverside	Desert	Bernardino Bernardino	Bernardino
State and local government	23	23	24	23	22	22	23
Manufacturing	_	8	_	8	8	_	
SOURCES: Authors' calculations based on California Employment Development Department industry estimates and projections.	sed on Califor	nia Employment I	Development I	Department indus	stry estimat	es and projection	ons.
NOTES: N/A identifies industry and subregion combinations where data are not available. These industries have few employers and	subregion com	binations where	data are not a	vailable. These i	ndustries h	ave few employ	ers and
employment data were suppressed by the California Employment Development Department to protect confidentiality.	y the California	a Employment De	evelopment De	spartment to prote	ect confide	ntiality.	

References

- Bockman, S., B. Sirotnik, and C. Ruiz, 2004/2005 San Bernardino County Annual Survey, Institute of Applied Research and Policy Analysis, California State University at San Bernardino, 2005.
- California Department of Finance, *Race/Ethnic Population with Age and Sex Detail*, 2000–2050, Sacramento, California, May 2004.
- California Department of Finance, California County Race/Ethnic Population Estimates and Components of Change by Year, July 1, 2000–2004, Sacramento, California, March 2006a.
- California Department of Finance, E-4 Population Estimates for Cities, Counties and the State, 2001–2006, with 2000 Benchmark, Sacramento, California, May 2006b.
- California Department of Finance, *Race/Ethnic Population with Age and Sex Detail*, 2000–2050, Sacramento, California, July 2007.
- California Employment Development Department, California Regional Economies Employment Series, Labor Market Information Division, Sacramento, California, 2006a.
- California Employment Development Department, *Projections of Employment by Industry, 2002–2012*, Labor Market Information Division, Sacramento, California, 2006b.
- California Secretary of State, February 10, 2007 Report of Registration, Sacramento, California, February 2007.
- Card, D., and T. Lemieux, "Can Falling Supply Explain the Rising Return to College for Younger Men? A Cohort-Based Analysis," *Quarterly Journal of Economics*, MIT Press, Vol. 116, No. 2, May 2001, pp. 705–746.
- Citrin, Jack, and Benjamin Highton, *How Race, Ethnicity, and Immigration Shape the California Electorate*, Public Policy Institute of California, San Francisco, California, 2002.
- Hanak, Ellen, and Mark Baldassare, eds., California 2025: Taking on the Future, Public Policy Institute of California, San Francisco, California, 2005.
- Husing, J. E., *Coachella Valley Economic Report*, Coachella Valley Economic Partnership, Palm Desert, California, 2005a.

- Husing, J. E., "Economic Development: Focus on the Bulk of Inland Empire Workers," *Inland Empire Quarterly Economic Report*, Vol. 17, No. 3, July 2005b.
- Husing, J. E., "Inland Empire City Profile 2005," *Inland Empire Quarterly Economic Report*, Vol. 17, No. 4, October 2005c.
- Husing, J. E., "Logistics . . . Key to the Future for Inland Empire's Blue Collar Workers," *Inland Empire Quarterly Economic Report*, Vol. 17, No. 1, January 2005d.
- Husing, J. E., "Inland Empire's Growing Diversity," *Inland Empire Quarterly Economic Report*, Vol. 18, No. 3, July 2006a.
- Husing, J. E., "Inland Empire's Office Market Coming to Life," *Inland Empire Quarterly Economic Report*, Vol. 18, No. 1, January 2006b.
- Husing, J. E., "Inland Empire's Employment," *Inland Empire Quarterly Economic Report*, Vol. 19, No. 4, October 2007.
- Johnson, Hans P., and Joseph M. Hayes, *The Central Valley at a Crossroads: Migration and Its Implications*, Public Policy Institute of California,
 San Francisco, California, 2004a.
- Johnson, Hans P., and Joseph M. Hayes, "The Demographics of Mortality in California," *California Counts*, Vol. 5, No. 4, Public Policy Institute of California, San Francisco, California, May 2004b.
- Johnson, Hans P., and Deborah Reed, "Can California Import Enough College Graduates to Meet Workforce Needs?" *California Counts*, Vol. 8, No. 4, May 2007.
- Kolko, Jed, and David Neumark, "Are California's Companies Shifting Their Employment to Other States?" Occasional Paper, Public Policy Insitute of California, San Francisco, California, 2007.
- Neumark, David, "California's Economic Future and Infrastructure Challenges," Occasional Paper, Public Policy Institute of California, San Francisco, California, 2005.
- Puri, A. K., "The CSUF Economic Forecast for the Southern California Region," *Regional Economic Forecast for Southern California 2006–07*, Southern California Association of Governments, Los Angeles, California, January 2006.
- Ramakrishnan, S. Karthick, and Mark Baldassare, *The Ties That Bind: Changing Demographics and Civic Engagement in California*, Public Policy Institute of California, San Francisco, California, 2004.
- Ramakrishnan, S. Karthick, and Celia Viramontes, Civic Inequalities: Immigrant Volunteerism and Community Organizations in California, Public Policy Institute of California, San Francisco, California, 2006.

- Reed, Deborah, "Poverty in California: Moving Beyond the Federal Measure," *California Counts*, Vol. 7, No. 4, May 2006.
- Reed, Deborah, Laura E. Hill, Christopher Jepsen, and Hans P. Johnson, Educational Progress Across Immigrant Generations in California, Public Policy Institute of California, San Francisco, 2005.
- Southern California Association of Governments, 2004 Regional Transportation Plan/Growth Vision: Socio-Economic Forecast Report, Community Development Division, Los Angeles, California, June 2004.
- Southern California Association of Governments, "State of the Region 2006–Quality of Life," available at http://www.scag.ca.gov/publications/pdf/2006/SOTR06/SOTR06_Quality.pdf.
- Tornatzky, L., and M. A. Barreto, *Economic Development and the Knowledge Economy in California's Inland Empire: Progress or Stagnation*, The Tomás Rivera Policy Institute, University of Southern California, Los Angeles, California, 2004.
- U.S. Bureau of Economic Analysis, Regional Economic Accounts, "County Wage and Salary Summary CA34, 1969–2006," available at http://www.bea.gov/bea/regional/reis/ca34.cfm, accessed 2008.
- Wong, Janelle, *Democracy's Promise: Immigrants and American Civic Institutions*, University of Michigan Press, Ann Arbor, Michigan, 2006.

About the Authors

HANS P. JOHNSON

Hans P. Johnson is a senior fellow and an associate director of research at the Public Policy Institute of California. His interests include international and domestic migration, population estimates and projections, and state and local demography. Before joining PPIC as a research fellow, he was senior demographer at the California Research Bureau, where he conducted research on population issues for the state legislature and the governor's office. He has also worked as a demographer at the California Department of Finance, specializing in population projections. He holds a Ph.D. in demography from the University of California, Berkeley.

DEBORAH REED

Deborah Reed is director of research and a senior fellow at the Public Policy Institute of California, where she also holds the Thomas C. Sutton Chair in Policy Research. She has expertise in poverty, income inequality, education, and labor markets in California. She leads the institute's research on social and health policy. Her recent publications include studies of California's future workforce needs, poverty measurement, and intergenerational progress among immigrants. She holds a Ph.D. in economics from Yale.

JOSEPH M. HAYES

Joseph M. Hayes, a research associate at the Public Policy Institute of California, studies migration and population change throughout the state. Previous projects have focused on migration in the Central Valley, the families of newly arrived immigrants to California, and the state's prison population. He holds an M.S. in agricultural economics from the University of Wisconsin, Madison.

Related PPIC Publications

California 2025: Taking on the Future (2005) Ellen Hanak, Mark Baldassare, editors

California's Inland Empire: The Leading Edge of Southern California Growth (2005)

Anthony Downs

Educational Progress Across Immigrant Generations in California (2005) Deborah Reed, Laura E. Hill, Christopher Jepsen, Hans P. Johnson

A State of Diversity: Demographic Trends in California's Regions (2002) Hans P. Johnson

The Ties That Bind: Changing Demographics and Civic Engagement in California (2004)

S. Karthick Ramakrishnan, Mark Baldassare

PPIC publications may be ordered by phone or from our website (800) 232-5343 [mainland U.S.]
(415) 291-4400 [Canada, Hawaii, overseas]
www.ppic.org