As the United States population ages, employers face the possibility of a sustained retirement of the baby boom generation and a loss of their most experienced and knowledgeable employees. The public sector appears to be even more vulnerable, with an older-than-average workforce as well as a more traditional retirement system that encourages early retirement. As a result, there is a possibility of occupation-specific labor shortages, if not an overall labor shortage, as the baby boomers reach retirement age. For employers, the immediate challenge will be to determine how to employ aging workers by using phased retirement options such as flexible or part time hours and a quality work environment. Employers also face the challenge of a younger and more ethnically and culturally diverse workforce. As an example of this situation, California, although it has a younger population, also faces the demographic certainty of the aging baby boom and a culturally diverse workforce. As the most diverse state ethnically and culturally, California has the opportunity to lead the nation in accomplishing an ongoing transition to a workforce much more diverse than the workforce of the baby boom era. (Contains 21 endnotes.) (KC)
The growing number of elderly worldwide presents distinct challenges. In the United States, the looming issue is the aging of the baby boom generation. Employers face the possibility of a sustained retirement of an unprecedented magnitude of their most experienced and knowledgeable employees over the next several years. The public sector appears to be even more vulnerable with an older than average workforce as well as a more traditional retirement system that encourages early retirement. The possibility exists of occupation-specific labor shortages, if not an overall labor shortage, as the baby boomers reach retirement age.

For employers, the immediate challenge will be to determine the ways and means of employing aging workers by utilizing "phased" retirement options such as flexible or part-time hours and providing an adequate work environment. Employers must also recognize the changing face of the future workforce: younger and more diverse ethnically and culturally.

While California has a younger population, it still faces the demographic certainty of the aging baby boom. California's primary working age population (20–64 years of age) will shrink as a share of the state population after 2010. More importantly for the public sector, the share of population ages 20–54 will shrink 3 percent by the year 2010 and 6 percent by the year 2020. Age structure changes also will accompany more racial and ethnic diversity. California, as the most diverse state ethnically and culturally, has the opportunity to lead the nation in accomplishing an ongoing transition to a workforce much more diverse than the workforce of the baby boom era.
Introduction

Most Americans are familiar with the phrase, “the Graying of America,” referring to the growing number of elderly among our nation’s population. This event, however, is not uniquely American and, in fact, is of mounting concern for countries worldwide. The age structure of a population can have an impact on a variety of areas both directly and indirectly. From planning, to marketing, to public policy, the changing age structure of a population has wide and varying effects. Examples of changes to accommodate population shifts can range from marketing to a newly defined consumer group to demands for broad-sweeping policy changes in government programs such as Medicare and social security insurance benefits. This paper will focus on the direct effects of current population dynamics, more specifically age and ethnic changes, on the future labor force. While the focus primarily will be on California, a brief discussion of the global issue of aging presents the challenges that many countries will face. This paper also compares California and the U.S. to illustrate differences and similarities as the workforce transitions from one that is dominated by the baby boom to a post-baby boom workforce.
Aging On a Global Scale

The increasing number of elders worldwide is a tribute to better health and living standards, but also creates distinct challenges. In countries still experiencing moderate to rapid growth, a growing elderly population threatens to strain what social safety net exists. For these countries, a large population of young people coupled with a growing elderly population may force governments to make difficult choices regarding the distribution of public funds. In contrast, in countries with either slow or no growth, the rising concern is an aging population and a shrinking labor force. Years of declining birthrates have led to smaller cohorts and thus fewer potential workers.

For countries already experiencing or nearing population decline, a labor shortage is a very real concern. In these countries, the aging population is growing in numbers as well as share of population while the working age population is actually getting smaller. For example, data show that in Germany the death rate is now higher than the birth rate. Government officials in Austria, Germany, France, Japan, and elsewhere view their respective birth rates as too low. Immigrant labor has filled some of the void where there are too few native workers. Recent research suggests that Europe will need to have a sustained net-migration four times their current migration levels in order to satisfy worker demand due to population decline among the working age population. In the U.S., we also have a growing elderly population. This fact is getting more attention with the aging of the baby boom generation.

Aging in the United States

With increasing life expectancies, the U.S. also is experiencing a growing elderly population. What looms on the horizon, however, is the aging of the baby boom generation that will swell the number of elderly in our society. The baby boom cohort spans post World War II births from 1946 through 1964. These add up to about 75
million births over that 19-year period. Figure 1 shows births by year from 1946 to 1999. Three periods mark these years: the baby boom; the drop in births known as the baby bust; and the rise in births starting in the mid-1970s, known as the echo boom. Figure 2 shows overall population growth from the first year of the baby boom up to 1999. Unlike the contrasts depicted in Figure 1, Figure 2 illustrates how population growth through natural increase (Births – Deaths) and immigration has steadily increased over the course of half a century without much impact from the decreases and increases in 100s of 1000s of births or even a 1,000,000 births over the course of a few years (see difference between 1961 and 1973 in Figure 1). However, even with the steady growth shown in Figure 2, the age structure of the population will be very important over the next several decades. Figure 3 exhibits a “population pyramid” for both the U.S. and California to illustrate the importance of age structure in a population. These snapshots reveal the dominance of the baby boom in the working age population.

At least three issues arise as a result of the aging baby boom in the labor force. First, we expect to see an increase in older workers. Second, there will be a smaller pool of workers in the generation (baby bust) that immediately follows the baby boom. Finally, the workforce will transition from an older more homogeneous workforce to a younger more diverse workforce.

The Aging Workforce: A Workforce in Transition

Comprising nearly half of the current labor force, baby boomers continue their historic impact on America's labor force. In 1962 (before baby boomers entered the workforce), the median age of the workforce was 40.5 years of age. \(^4\) By 1978 with the entry of most of the baby boom in the workforce, the median age dropped to 34.8, reflecting the presence of the relatively youthful baby boomers. By 2008 the median age of the American worker will be 40.7 as baby boomers move ever closer to their retirement...
years. This movement towards retirement age of such a large portion of the labor force should give employers pause as they plan for the future. Baby boomers make up a large portion of the experienced, skilled, and leadership positions in their respective places of employment. A large-scale sustained retirement could leave employers scrambling for qualified replacements. Making matters worse, the workers in the age group following the boomers (baby bust) are a smaller pool from which to draw. Traditionally, this group would move into positions of upper management or the most skilled and experienced positions as the generation preceding them (the boomers) retires. While workers that follow the baby bust group in age (echo boom) are more numerous, as younger and newer entrants to the workforce, in most cases, they likely lack the experience, institutional knowledge, and maturity necessary to replace workers approaching retirement. While the retirement of the baby boom looms, recent trends and events may serve to mitigate a crippling large-scale retirement.

Fortunately for employers, survey after survey finds that many workers want or need to work past normal retirement age, lessening the likelihood of a large-scale retirement among U.S. workers.\(^5\) With fewer workers being offered traditional retirement pensions, the recent trend of older workers staying in the workforce could gain momentum.\(^6\) Employers appear willing to adapt the work environment to accommodate the older worker. In one employer survey, among employers that offered "phased" retirement, they did so in order to retain valued older employees.\(^7\) However, employers appeared to be constrained by their own retirement plans and legal considerations. The survey found that while most employers acknowledged phased retirement as a good strategy to retain workers, there is only a gradual movement toward offering phased retirement opportunities. Tax codes and social security regulations can inhibit phased retirement efforts and have prompted employers to lobby
Congress in an effort to overcome various restrictive laws that hamper the retention of older employees.⁸⁹

Aging workers who want to keep working may find themselves in the best position possibly ever faced by older workers if the tight labor market continues and as others in their age group retire. This labor market competitive advantage hinges on several factors: whether the older worker has desirable skills that the employer wishes to retain; whether employers will in fact offer flexible work arrangements that older workers desire; and, whether low-skilled older workers will be able to obtain or maintain employment if job growth slows and competition for jobs increases. However, demographic forces, lack of defined benefit plan pensions, and changes in social security regulations should result in more older workers remaining in the workforce and more employers making the workplace more hospitable to a multigenerational workforce.¹⁰ This optimistic approach of viewing the U.S. labor force in its entirety seems to dispel some of the potential problems associated with the aging baby boom in the workforce. But some areas of employment could still prove vulnerable.

One area in particular that could face worker shortages is the public sector. With the leading edge of the baby boom generation turning 55 in 2001, public employers may experience a growing number of vacancies as civil service employees retire in greater numbers. According to recent data, 59 percent of officials and administrators in public administration were age 45 or older in 1998.¹¹ An older workforce and hiring slowdowns or freezes in recent years combined with a more traditional retirement plan puts this sector at risk under an aging workforce scenario. Public education appears to be especially vulnerable. According to a recent article on retiring boomers, public education occupations will face a dramatic hiring demand due to an older than average workforce, early retirement options, and a larger-than-average percentage of its older workers leaving.¹² Another in-depth report on education suggests more active recruitment of 20
24 year olds as the pool of workers in the 25 to 34 age group shrinks over this
decade. With smaller class size mandates and California's relatively large number of
young people, this particular issue could prove even more serious for this state.
Undoubtedly, California will experience many of the same issues as the rest of country
with some similarities and some differences.

Findings for California and Comparisons to the U.S.
The situation for California may be only somewhat different than for the United States as
a whole. California is slightly younger than the rest of the country with a median age of
33 versus 36 for the U.S. As one would expect, California has a smaller share of older
workers (13%) compared to the rest of the country (16%). Public sector employment
in California, however, will likely experience the same challenges as public sector
employment elsewhere. According to a recent report, the average age of state civil
service employees in California is 43. The average age of management is 51 and the
average age of the technical and professional staff is 44. With the enhanced ability of
public sector employees to retire before normal retirement age, state employers could
face vacancies of a steadily growing magnitude. In one state department, 67 percent of
their upper-level managers were eligible to retire with 71 percent of potential
replacements already eligible to retire as well. California continues to be a relatively
youthful state. However, the time is right for state employers to plan for the aging and
retirement of its public sector workers and subsequent replacement and recruitment
needs.

The aging of California's workforce and the public sector in particular is one
example of how California's workforce will be changing in the coming years. Both the
private and public sector also will encounter a much more diverse workforce.
Figures 4a and 4b reveal the changing composition of California's racial and ethnic make-up. As Figure 4a illustrates, nearly half of all of the births in California in 1999 were to Hispanic mothers. Grouping "minority" or nonwhite births together, 66 percent of recent births in California fell in a "minority" category—a rather imprecise designation in simple numeric terms. California's public schools also reflect the ongoing diversity of the state's population. Figure 4b reveals a picture similar to that of the birth data with public school enrollment in the state portraying an ever more diverse student population. To get a better understanding of the distribution of the non-Hispanic white and the Hispanic population in California, Figures 5a and 5b show similarities as well as differences. Both groups share the baby boom bulge in the middle. However, the noticeable difference is at the bottom of the population pyramid where Hispanics show a larger share among the youngest age groups. California's most recent official projections suggest that Hispanics and Whites will essentially "trade" population share by 2040 with Whites going from just under 50 percent to about 31 percent and vice versa for the Hispanic population, from about 31 percent to just under 50 percent of California's population.  

California also will experience more diversity in the racial and ethnic make-up of its workforce. To illustrate part of the changing scenario, in Figures 6a and 6b national labor force participation rates for white and Hispanic males are applied to California's projected population for the years 2000 and 2020. Although national rates vary slightly from California rates, for illustrative purposes, these figures present a vast change in California's future workforce. For the year 2000, the estimated ratio of Hispanic males to...

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1 Older worker here is defined as 55 and older.

1 It is important to recognize that the term "Hispanic" as applied covers a diverse population, is not a racial term (Hispanics can be of any race), and includes, in the case of California (and elsewhere in the U.S.), recent immigrants as well as Californians whose families have resided here pre-dating California statehood. Comparisons between non-Hispanic whites and Hispanics is not as clear of a distinction as may be implied.
white males in the workforce is fairly close between the ages of 25 and 34 and then drops precipitously among older workers. In 2020, however, holding participation rates stable, the numbers suggest that Hispanic male workers will come close to a one-to-one ratio with white male workers in nearly all of the depicted age groups and may outnumber white males in the 25 to 29 age group. These ratios appear to be in line with the birth and K-12 public education data and are, in part, a reflection of past as well as current immigration trends.

California continues to be a primary destination for immigrants to the U.S. California receives about one fourth of all U.S. legal immigration even though the state accounts for 12 percent of the U.S. population. As a testament to the impact of immigration on California, foreign born residents make up about one fourth of the state's population. In contrast, foreign born residents comprise one tenth of the U.S. population. While most immigrants gain admission status through a family member, a significant number (11 percent) gain admission based on their occupation. In 1997 and 1998, among these employment-based immigrants (a defined admission status of immigration) to California, more than half were categorized in the following three occupational areas: executives, administrators, and managers (23 percent); engineers (17 percent); and in service occupations (12 percent). Immigrants also arrive in California under the H1-B visa (temporary foreign worker) program. Recent efforts by employers convinced the U.S. Congress to increase the number of visas to the current level that is a threefold increase from the 1997 number. While this program has its proponents as well as its detractors, when employers face a potential worker shortage immigrant labor can fill the gap.

The challenge to California as elsewhere will be managing the effects of a decreasing working age population in proportion to the rest of the population, especially if demand for labor grows steadily. According to population projections as shown in
Figure 7a, in 2020 the primary working age population will shrink in proportion to the 65 and over age group and will continue to lose population share through 2040. Using 55 and older (see Figure 7b) as a gauge for public sector employment needs, by 2010 the state will begin experiencing a shrinking share of the 20 to 54 age group that will continue to shrink (a loss of 6 percentage points) through 2020 with little change through the year 2040. In comparison, the U.S. as a whole is projected to experience a similar change in the primary working ages. However, growth will occur more rapidly in the older ages for the U.S. while California will experience a less accelerated growth among its aging population and will maintain a relatively large share of young people (under 20) compared to the U.S.

Conclusion
The baby boom continues to make its mark on the American landscape and will affect the American labor market as it moves from work to retirement. The U.S. workforce will change in age structure and ethnicity but not nearly as dramatically as the California workforce that will have large, older and younger cohorts, also differentiated by ethnicity and national origin. Employers can take some comfort that the baby boom generation appears to want to continue to work into traditional retirement years. Nevertheless, the size of the baby boom and its dominance in today's workforce should compel employers and policymakers to plan for their eventual exit and the workforce that will replace them. Clearly the public sector is vulnerable to the retirement of the baby boom, even in a relatively young state like California. Hiring and promotional challenges may occur and there may be insufficient numbers of workers ready to occupy vacant positions. How well employers and policy makers plan for an aging workforce and eventually transition to a post-baby boom workforce will determine how smooth or rocky the road will be for workers as well as employers in the coming decades. Employers should consider the
following: acclimating the workplace to accommodate older workers over the next
decade or two; implementing ways to offer flexible benefit packages based on an
intergenerational workforce with varying needs; acknowledging cultural and age
differences as they prepare for a younger, more diverse workforce; and, planning for a
smooth transition of job responsibilities particularly for supervisory, management, and
other experience-related positions. Policy makers and others should consider whether
as a state and a country we are equipping our young people with the requisite skills for
the 21st century. Foreign worker programs and employment-based immigration can be
vital when labor shortages arise. However, empowering our current and future
workforce, regardless of national origin, with the necessary skills to succeed will only
contribute to a more equitable and democratic society.
FIGURE 1
Born in the USA, 1946 - 1999

Source: National Center for Health Statistics, Division of Vital Statistics.
FIGURE 2
Population Growth

Sources: NCHS and United States Census Bureau
FIGURE 3
U.S. and California Population Pyramids

Sources: USCB and California Department of Finance, Demographic Research Center
FIGURE 4A
Births in California by Race/Ethnicity of Mother, 1999

Source: California Department of Health Services, Center for Health Statistics
FIGURE 4B
K-12 Projected Enrollment 2000-01 by Race/Ethnicity for California

HISPANIC 43%

WHITE 36%

ASIAN/PI 12%

BLACK 8%

NATIVE AMERICAN 1%

Source: California Department of Finance
FIGURE 5A Distribution of California Non-Hispanic White Population, 2000

Source: California Department of Finance
FIGURE 5B Distribution of California Hispanic Population, 2000

Source: California Department of Finance

N = 10.7 mil.
FIGURE 6A  Estimated Ratio of Hispanic Males to White Males in Labor Force, 2000 (CA)

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<tr>
<th>Age</th>
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<td>30-34</td>
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<tr>
<td>25-29</td>
<td>1</td>
<td>1.2</td>
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Sources: BLS 1998 Participation Rates; California Department of Finance for Population Data
FIGURE 6B Projected Ratio of Hispanic Males to White Males in Labor Force, 2020 (CA)

Sources: BLS 1998 Participation Rates; California Department of Finance
FIGURE 7A California Population by Age Group

Year
2000 2010 2020 2040

- 0-19
- 20-64
- 65 plus

2000

2010

2020

2040

Year
FIGURE 7B California Population by Age Group

- 0-19
- 20-54
- 55 plus

Year

2000 2010 2020 2040

19 22 26 26

31 31 30 31

0% 10% 20% 30% 40% 50% 60% 70% 80% 90% 100%
ENDNOTES

2 “2000 World Population Data Sheet.”
8 Purcell, Patrick J. “Older Workers.”
12 Dohm, Arlene. “Gauging the Labor Force.”
20 Legal Immigration to California, October 2000.
21 Legal Immigration to California, October 2000.
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