

Labor Supply Slowdown:

Projections of Labor Force Growth and Change in Greater Long Beach to 2030

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Introduction

Labor supply is key input in producing goods and services. Wages and benefits account for more than half of the cost of resources used in producing non-agricultural goods and services in most private, for-profit industries in the nation.¹ The ability of firms to increase output, sales, and revenues is critically dependent on their ability to secure the appropriate quantity of labor supply, with requisite skills at the prevailing market wage rate.

In recent months, firms across the nation have been confronted with labor supply shortfalls in a number of labor market segments as firms have increased payroll employment levels as well as the number of job vacancies, but growth in labor supply has failed to keep pace with the expanding level of labor demand. The national unemployment rate has fallen below 4 percent for the first time in decades and the total number of available unemployed workers ready to go to work and the number of vacant jobs waiting to be filled are about identical. That is, there is one currently vacant job available for every unemployed worker in the nation. The Long Beach unemployment rate has hovered at the 4 percent level, suggesting a near full employment labor market with substantial spot labor supply constraints in a number of industry and occupational labor market segments. Indeed, the authors met individually and in groups with Long Beach employers and many indicated they were adjusting to a new relative scarcity in labor supply that had not existed in the city for a decade or longer. The new prosperity of Long Beach is increasingly limited by available labor supply.

This paper explores the likely nature of labor supply growth in the Greater Long Beach area. Employers operating in the Long Beach labor market will be limited in their ability to grow and prosper by the availability of labor supply. Growth in the regions labor force will be heavily influenced by three key factors:

- Growth in the overall size of the working age (16 and older) resident population in Greater Long Beach. The rate of change in the size of the working age population will influence the potential rate of growth in labor supply.

¹ Michael Giandrea and Shawn Sprague, “Estimating the U.S. Labor Share,” *Monthly Labor Review*, February, 2017.

- Changes in the age composition of the population will alter the pace of labor force growth. A relatively young population means higher potential labor supply, while an aging population suggests a diminished potential labor supply.
- Changes in the choices various population groups make about working or withdrawing from work will also influence the rate of labor force growth. Behavioral decisions about the choice to participate in the job market are important in determining the future availability of labor supply to local employers.

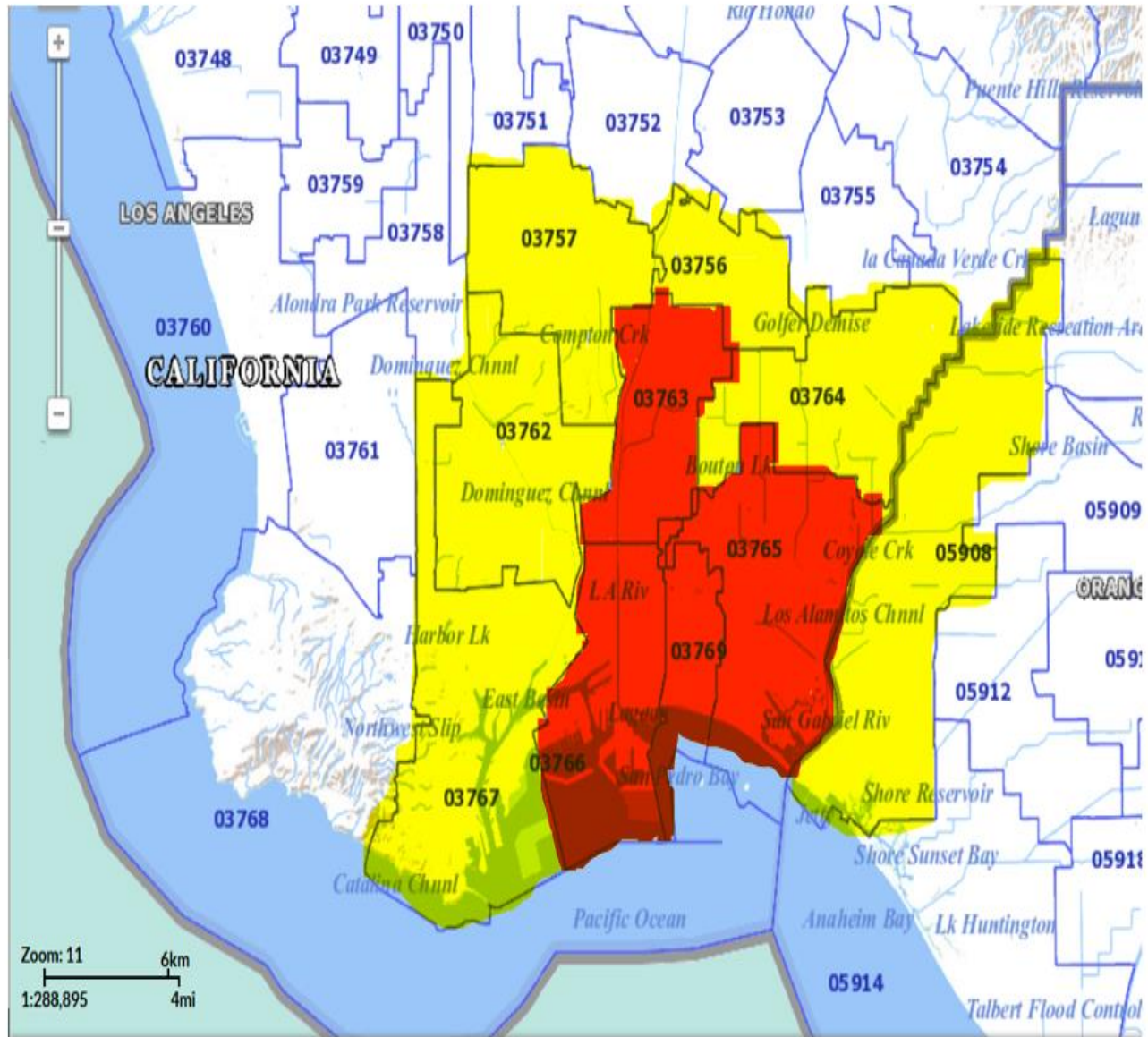
We explore the potential growth in the size of the Greater Long Beach labor force using current working age population and labor force measures for the region that we prepared from the American Community Survey's public use micro-data files (PUMS) data that include de-identified responses from individual households. We defined the Greater Long Beach region as those public use micro-data areas (PUMAs) that border on the City of Long Beach. A total of six PUMAs each with a population of over 100,000 persons were included in our Greater Long Beach measures. The total size of the working age population in the Greater Long Beach region averaged 1.1 million during 2015-2016. The region includes parts of the city of Los Angeles (South LA/San Pedro) and much of the southern part of Los Angeles County including the area covering Lakewood, Cerritos, Artesia and Hawaiian Gardens, Buena Park, Cypress, and Seal Beach, Bellflower and Paramount Compton and West Rancho Dominguez and Carson City.

Projections of the size of the working age population that we prepared assume that the pattern of population change that is expected to prevail in Los Angeles County in the future would also occur in the Greater Long Beach region. We use expected rates of population growth for 16 separate age/gender groups derived from state population projections for Los Angeles County and apply them to the actual 2015-16 ACS working age population measures produced by the authors.² Using this approach we create projections for each of the 16 age/gender population groups from 2015-16 through 2030, a 14-year population projection horizon. It is important to note that sub-state population

² California Department of Finance, Population Projections for California and its Counties, 2016 Baseline Series, <http://www.dof.ca.gov/Forecasting/Demographics/Projections/>

developments are influenced by a variety of factors including local fertility and mortality, as well as domestic and international migration trends. The population projections model we use is a demographic one, that is it focuses on demographic change. However, another

Chart 1:
The PUMA Geographic Composition of the Greater Long Beach Region, 2015-2016



way that population projections are sometimes made is through the use of economic projections approaches. States and localities with strong economic growth and low consumer costs (like states and cities in the Southwest and Mountain region states) may experience very rapid (and unanticipated) population growth. Such growth is fueled by

domestic migration from more costly and/or less prosperous states and cites who respond to a perception of improved living standards and quality of life in the growing areas. However, many employers we spoke with saw high local consumer costs (especially housing—as well as commuting times) as a major barrier to increased migration from other states and regions of the nation to Southern California.³

In recent years California has experienced substantial net domestic out-migration, especially to Texas, Arizona, and Nevada. This outmigration is concentrated almost exclusively among households with incomes under \$110,000. California has experienced positive net domestic in-migration only among a small group of very affluent households with very high levels of educational attainment, and so is better equipped to achieve improved living standards in the state compared to the much larger group of migrants exiting California who have lower household incomes and lower levels of educational attainment.⁴

Most of this high-income net in-migration to California occurred in counties located in the San Francisco Bay region. California’s domestic outmigration is heavily concentrated in San Bernardino, Orange, and Los Angeles counties with little offsetting domestic migration of high-income households.⁵ Given these recent migration trends we have opted to rely on the demographic projections model. However, it is important to note that the nature of domestic migration can change rapidly, especially at the sub-state level, thus we emphasize (as with all projections) that past trends do not necessarily predict future developments, but are simply the most reliable guideposts available with which to consider the future.

³ California has essentially the highest home ownership and housing rental costs in the continental United States. See Mac Taylor, *California High Housing Costs: Causes and Consequences*, Legislative Analyst’s Office, March, 2015

<http://lao.ca.gov/reports/2015/finance/housing-costs/housing-costs.pdf>

⁴ Brian Uhler and Justin Garosi, “California Losing Residents Via Domestic Migration” *California Economy and Taxes*, Legislative Analyst’s Office February, 2018

<http://lao.ca.gov/LAOEconTax/Article/Detail/265>

⁵ Brian Uhler and Justin Garosi, “A Look At County Level Domestic Migration,” *California Economy and Taxes*, Legislative Analyst’s Office, March, 2018

Outlook for the Working Age Population in Greater Long Beach

The overall working age population of the Greater Long Beach region averaged 1.108 million civilian residents during 2015-16. Women’s share in the working-age population was 4percentage points higher than men (52% women versus 48% men). There were 572,300 female residents and 536,000 male residents, yielding a ratio of 107 female residents per male residents. The data provided in table examine the distribution of Greater Long Beach residents by gender and age groups. Among teens and young adults, there were more male residents than females, however, after the age of 35 their gender imbalance is reversed.

Table 1:
The Age and Gender Composition of the Greater Long Beach, 2015-2016

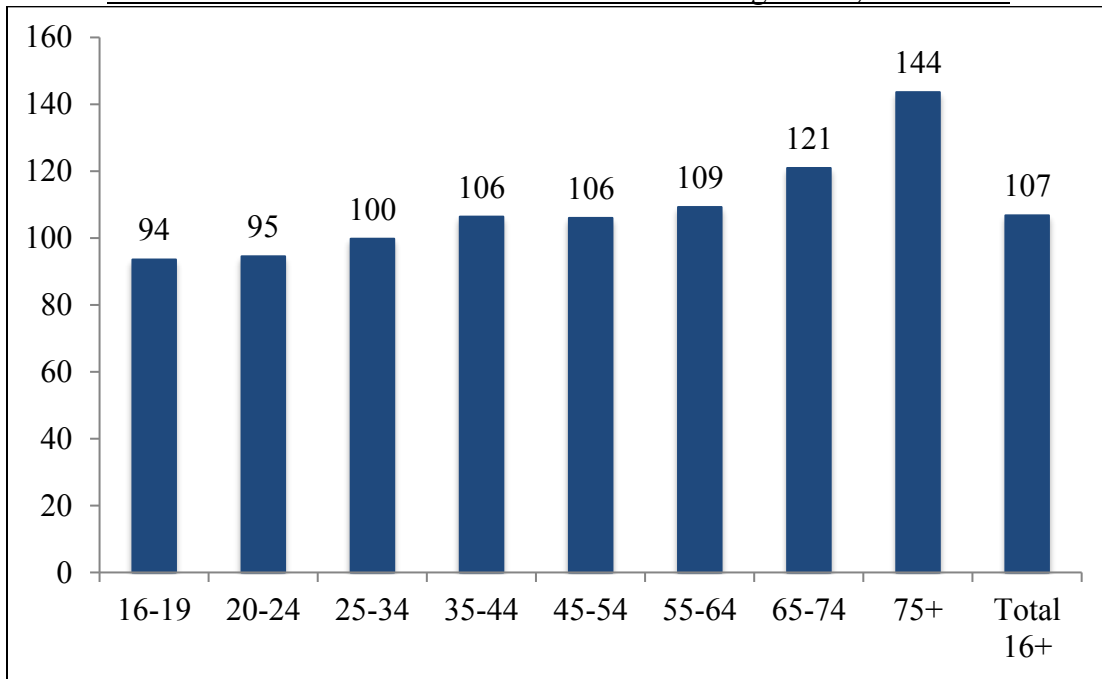
	Males		Females	
	Number	Percent Distribution	Number	Percent Distribution
16-19	39,566	7%	37,042	6%
20-24	54,128	10%	51,162	9%
25-34	102,723	19%	102,554	18%
35-44	91,277	17%	97,160	17%
45-54	94,619	18%	100,333	18%
55-64	75,587	14%	82,591	14%
65-74	47,047	9%	56,909	10%
75+	30,997	6%	44,527	8%
Total 16+	535,944	100%	572,278	100%

Source: U.S Bureau of the Census, American Community Survey, PUMS data files, 2015-2016, tabulations by authors

Among teen residents of the Greater Long Beach region, there were only 94 females per 100 males with a similarly low ratio for young adults (20- to 24-years-old) with 95 females per 100 males. Between the ages of 25 and 34, the number of men and women were equal. However, the female-male disparity in population size increases sharply with age. The female to male ratio rose to 109 for persons aged 55 to 64 and then rose to 121 females per 100 males in 65 to74 age group, and eventually to 144 women per 100 men at age 75 and older. The median age of working age men in Long Beach area during 2015-16 was 42, while the median age of women residents of the region was 44. Women in their pre-regiment retirement years, that is aged 55 to 64, when job market

attachment and work intensity began to decline, along with women at retirement age accounted for about 17 percent of the region’s 2015-16 working age population, while men in these age groups accounted for 14 percent. Together men and women aged 55 and above accounted for about 30 percent of the region’s working age population.

Chart 2:
Ratio of Female to Male Residents of Greater Long Beach, 2015-2016



Source: U.S Bureau of the Census, American Community Survey, PUMS data files, 2015-2016, tabulations by authors

The pace of growth in the size of the Greater Long Beach working age population is expected to be quite slow. The overall size of the region’s 16+ population is expected to increase by just 10.4 percent over the entire 14-year period, a rise of just 7/10ths of 1 percent per year. The working age population is expected to grow by about 115,000

Table 2:
Projections of the Size of the Greater Long Beach Working Age Population, By Gender 2015-16 to 2030

	2015-16	2030	Change	Percent Change
Total	1,108,222	1,223,475	115,253	10.4%
Female	572,278	628,371	56,093	9.8%
Male	535,944	595,103	59,159	11.0%

Source: Authors’ analysis of ACS and California Population Projections

persons over the 14 years, just over 10,000 per year. The male population is projected to rise slightly more rapidly than that of females and account for a larger share of the overall population growth as the life expectancy of men has continued to improve relative to women.

The growth in the size of the Greater Long Beach working age population will be the result of a very rapid expansion in the size of the elderly resident population in the region. The most rapidly growing age group within the Greater Long Beach resident population are persons aged 75 and over who are expected to increase from 75,500 during 2015-16 to 142,500 in 2030, a rise of 67,000 in this population group, accounting for more than one-half of the total rise in the size of the region’s working age population. Over the next 14 years, the share of the resident population who are over the age of 75 will increase from 7 percent in 2015-16 to 12 percent in 2030, an 89 percent relative rise.

Table 3:
Projections of the Size of the Greater Long Beach Working Age Population,
By Age Group 2015-16 to 2030

	2015-16	2030	Projected Change	Percent Change
16-19	76,608	75,641	-967	-1%
20-24	105,290	99,798	-5,492	-5%
25-34	205,277	197,751	-7,526	-4%
35-44	188,437	178,225	-10,212	-5%
45-54	194,952	195,126	174	0%
55-64	158,178	174,297	16,119	10%
65-74	103,956	160,083	56,127	54%
75+	75,524	142,553	67,029	89%
Total 16+	1,108,222	1,223,475	115,253	10%

Source: Authors analysis of ACS and California Population Projections

This increase in older population (75+) will mean that much of the region’s net population growth will not be available to supply labor. Persons who are age 75 or older (as we will discuss in more detail in the following section) are unlikely to participate in the job market at all, although they are more engaged in the world of work today than in the past. A complicating factor for this group of ‘frail elderly’ as they are known is that they are very likely to report a limitation in an activity of daily living. Indeed, a

substantial proportion of frail elderly report two or more limitations in activities of daily living, the threshold for long term care insurance and Medicaid support for direct care and nursing home services.⁶

A second major source of the net population increase in the Greater Long Beach region will be among persons aged 65 to 74; the size of this group is expected to rise from about 104,000 in 2015-2016 to 160,000 by 2030, a 54 percent increase over the period. The share of the region's working age population in this age category will rise from 9 percent in 2015-2016 to 13 percent by 2030. The standard age of retirement is generally 65, suggesting that many individuals in this group do not participate in the labor market at all. At this age persons who have worked most of their lives are expected to withdraw from work and enjoy the savings they have accumulated as part of a life cycle pattern of consumption that is based on the idea that consumers base their consumption and savings choices on a very long-time horizon and make consumption and savings decisions each day based on a view of their 'permanent income'. The result is that young people have generally low savings rates (since their income is below their permanent income level), while older persons save more since their incomes are above their expected permanent level.

Retirees spend their savings that were accumulated largely in their prime working age (25- to 54-years-old) as they try to maintain their household income consumption at the permanent income level.⁷ The result is that the bulk of persons who reach the age of 65 opt to retire and begin to spend down their savings. In recent years, declines in assets values and increased concerns about investment risk have had only a very modest impact on the pace of retirement, while the rising labor force attachment of persons among this

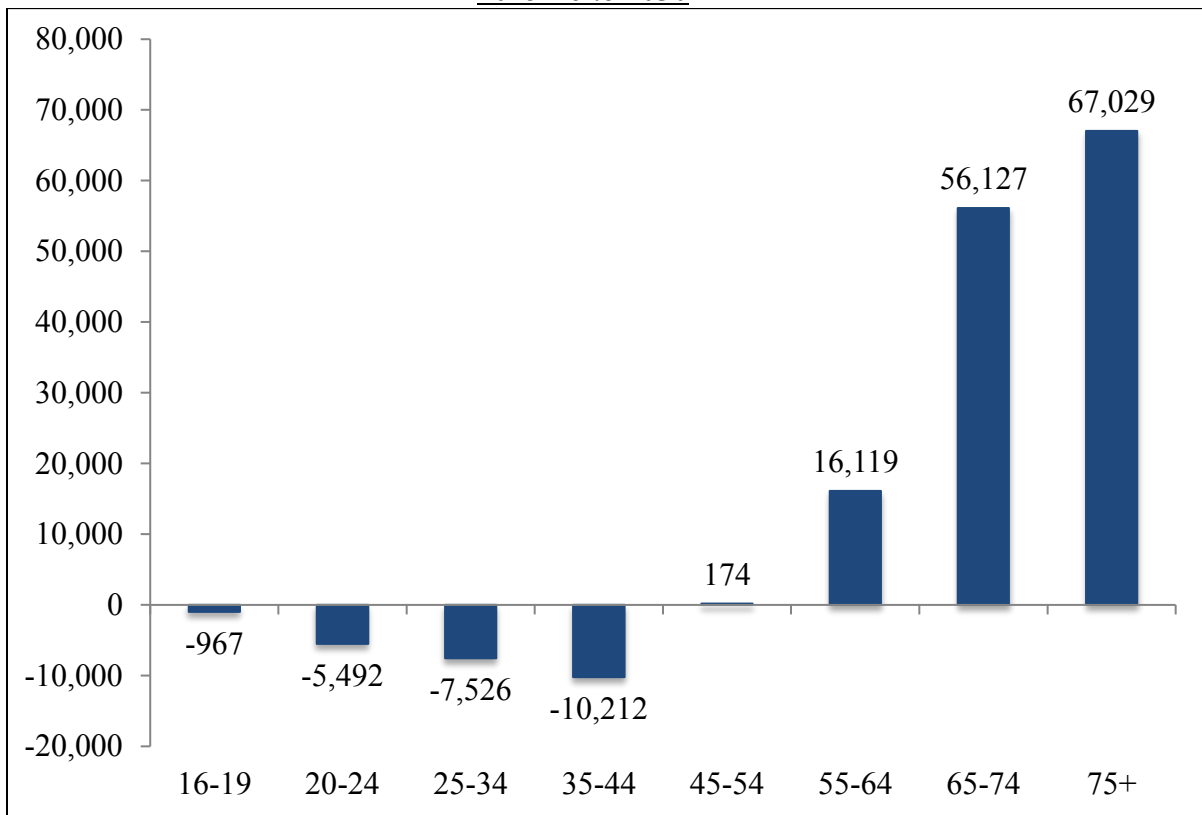
⁶ For a discussion of some of the labor market impacts of a rapidly aging population see: Neeta Fogg, Paul Harrington and Nancy Snyder, *Gray Warnings: Challenges in the Direct Care Workforce*, Office of the State Auditor, Commonwealth of Massachusetts, June 2018

⁷ Angus Deaton, *Franco Modigliano and the Life Cycle Theory of Consumption*, at the Convegno Internazionale Franco Modigliani, Accademia Nazionale dei Lincei, Rome, February 17th–18th, 2005.

age group has increased in recent years, the vast majority of persons aged 65 to 74 opt for retirement.⁸

The only other age group that will likely experience a population increase in the Greater Long Beach region are people aged 55 to 64. People in these pre-retirement years are less likely to work than persons in their prime age. When we examine the chart below, it is clear that ALL of the population increase in the Greater Long Beach region will be among people aged 55 and older. The size of the prime working age population, the group with traditionally the strongest job market is projected to fall by 3 percent over the next 14 years.

Chart 3:
Projected Change in the Size of the Greater Long Beach Working Age Population,
2015-16 to 2030



Source: Authors' analysis of ACS and California Population Projections

⁸ Alan Gustman, Thomas Steinmeir and Nahid Tabatabai, "What the Stock Market Decline for the Financial Security and Retirement Choices of the Near Retirement Population," *Journal of Economic Perspective*, Winter 2010

The very slow overall pace of projected population growth with a decline in the size of the number of persons in the prime working age population does not suggest the potential for much gain in the size of the region's labor force. Barring a sharp turnaround in domestic outmigration in the region, it is unlikely that population growth itself will contribute much to overall labor force growth and thus to the productive capacity of the Greater Long Beach region.

Labor Force Participation Rates

The size and composition of the future Greater Long Beach labor force will be influenced not only by changes in the working age population within the region, but also by decisions made by working age individuals to actively participate in the labor market. Labor force participation choices are influenced by a variety of factors. For example, additional years of schooling has become a more frequent choice for teens and young adults and may reduce their labor force attachment. Prime age women, especially mothers, are much more likely to participate in the labor force than has been the case in the past. Older persons are much more likely to withdraw from the labor force, although in recent years we have seen their labor force attachment rise markedly, in part because of increased expectations of longevity, diminished physical demands in the services economy, and increased uncertainty about future income as retirement is increasingly financed from defined contribution retirement systems and personal savings.

The labor force participation rate (LFPR) measures the fraction of the working age population that is actively engaged in the job market at a point in time either by working (employment) or for the jobless, actively seeking work (unemployment). The sum of employed and unemployed working age adults is the measure of an area's labor force and when divided by the working age population for any given population group yields the LFPR.

Table 4 examines the LFPR for 16 different age/gender combinations in the Greater Long Beach area during 2015-16, along with separate measures of labor force attachment for the total working age population by age and gender. These data reveal that the overall labor force participation rate in the Greater Long Beach region averaged 63.1 percent during 2015-16, close to the average of the nation at that time. Men were

substantially more likely to participate in the labor force than women, with nearly 70 percent of males and 57 percent of females attached to the labor force. One of the most interesting findings in this table is that the participation rate for persons aged 65 to 75, was actually higher than that of teenagers (16- to 19-years-old). The teen participation rate in the Greater Long Beach region was very low and this does not bode well for future labor force attachment of this age cohort. Early work experience leads to higher future labor force participation, lower future unemployment, and improved earnings experiences relative to those young people who are disconnected from the labor force.

Table 4:
Labor Force Participation Rates of the Resident Greater Long Beach Working Age Population, by Age and Gender, 2015-16

	Male	Female	Total
16-19	24.1	25.2	24.6
20-24	71.4	69.0	70.2
25-34	87.0	75.5	81.3
35-44	88.2	71.4	79.5
45-54	88.3	73.8	80.8
55-64	71.0	54.9	62.6
65-74	30.9	20.7	25.3
75+	8.2	4.9	6.3
Total	69.6	57.0	63.1

Source: Authors' analysis of ACS

Using these data for Greater Long Beach as the projections base, we use findings from the U.S. Bureau of Labor Statistics national labor force participation rate projections to estimate the change in labor force attachment for each of the 16 age/gender groups included in the Table 4 into the future. Essentially, these local projections assume that the national rates of change in labor force participation for each age/gender group will also prevail in Greater Long Beach area.

Table 5 presents our estimates of the likely path of future labor force participation rates in the Greater Long Beach Region. These findings suggest that overall labor force attachment will decline modestly in the future. The region's overall labor force participation rate is expected to decline from 63.1 percent during 2015-16 to 61.3 percent by 2030. This decline is the result of two key factors:

- The labor force attachment of persons under the age of 55, especially teens and young adults is projected to decline into the foreseeable future.
- While the labor force participation rate of older persons is expected to rise in the future, the large population surge aging into the pre-retirement and retirement years means that the comparatively low labor force attachment of older workers will also contribute to the reduction in the overall labor force attachment of the region's working age population.

Table 5:
Projections of the Labor Force Participation Rate in the Greater Long Beach Region, by
Age/Gender, 2015-16 to 2030

Sex	Age Group	Actual LFPR 2015-2016	Projected LFPR with 2026 US Change Factor	Percentage Point Change
Male	16-19	24.1	19.6	-4.5
	20-24	71.4	68.4	-3
	25-34	87.0	85.8	-1.2
	35-44	88.2	87.4	-0.8
	45-54	88.3	87.2	-1.1
	55-64	71.0	70.9	-0.1
	65-74	30.9	34.1	3.2
	75+	8.2	10.1	1.9
	Total	69.6	66.6	-3
Female	16-19	25.2	22.8	-2.4
	20-24	69.0	68.6	-0.4
	25-34	75.5	77.0	1.5
	35-44	71.4	71.7	0.3
	45-54	73.8	76.3	2.5
	55-64	54.9	59.9	5.0
	65-74	20.7	24.2	3.5
	75+	4.9	9.8	4.9
	Total	57.0	56.3	-0.7
Total	16-19	24.6	21.1	-3.5
	20-24	70.2	68.5	-1.7
	25-34	81.3	81.5	0.2
	35-44	79.5	79.4	-0.1
	45-54	80.8	81.5	0.7
	55-64	62.6	65.1	2.5
	65-74	25.3	28.7	3.4
	75+	6.3	8.7	2.4
	Total	63.1	61.3	-1.8

Source: Authors' analysis of ACS and U.S. Bureau of Labor Statistics Labor Force Projections

The regional labor force projections suggest that teen and young adult labor force attachment will continue to decline. Teen participation will fall sharply from 24.6 percent to 21.1 percent. The decline for teen boys will be by more than double that for girls, a continued and very worrisome disconnection from the world of work for teens, especially boys, residing in the region.

Male participation rates for those under age 55 are expected to decline for every age group. Even prime age males—those aged 25 to 54 are expected to reduce their job market attachment. Rising incidence of disability is closely associated with this decline in job market engagement among men. Partially offsetting these declines among prime age men are small increases in the rate of labor force attachment of women. Historically, growth in female labor force participation has come from married women with children, but the pace of increase in labor force attachment for this group of women has slowed as the size of the father-mother participation gap has narrowed considerably over time.

The labor force attachment of older workers is expected to continue to increase through 2030. Women aged 55 to 64 will experience the largest increase in labor force participation with rates rising from 54.9 percent to 59.9 percent over the period. In contrast, we expect no increase in the LFPR among pre-retirement aged men. Both men and women in the ‘early retirement’ years are expected to increase their labor force attachment. By 2030 we expect that more than one-third of men (34.1%) aged 65 to 75 will be actively engaged in the labor market. Among women in the same age group, the LFPR is expected to rise from 20.7 percent to 24.2 percent. Even among persons aged 75 and above, persons sometime referred to as the frail elderly because of their high incidence of disability, we expect a rise in job market participation. By 2030 we expect that one in ten persons aged 75 or older will be actively participating in the job market at any point in time.

Projected Labor Force Growth and Change in Greater Long Beach

Slowing population growth, an aging resident population and declining labor force participation combined will create a future of almost no net increase in the size of the available labor supply within the Greater Long Beach region. We expect that between 2015-16 and 2030, the total size of the region’s labor force will increase by just 3.9

percent, a rise of just 26,800 workers over the 14-year forecast period. This means that each year through 2030 we expect that the entire region will increase its labor supply by just 1,900 workers per year, or just 0.3 percent per year. This very slow growth in labor supply means that employers will likely face increasing difficulty in meeting their workforce requirements and potentially be forced to adjust the nature of both their human resource strategies and production methods.

Characteristics of Labor Force Growth and Change in Greater Long Beach

The pace of labor force growth in Greater Long Beach will be somewhat higher for women than for men. Our projections over the 2015-16 and 2030 period suggest that the size of the region’s female labor force will rise by 4.8 percent in comparisons to 3.1 percent for males. This means that 137 females will enter the labor force per 100 males through 2030, the consequence of a sharper reduction in labor force participation among men, relative to women.

Table 6:
Projections of the Size of the Greater Long Beach Labor Force,
by Gender, 2015-16 to 2030

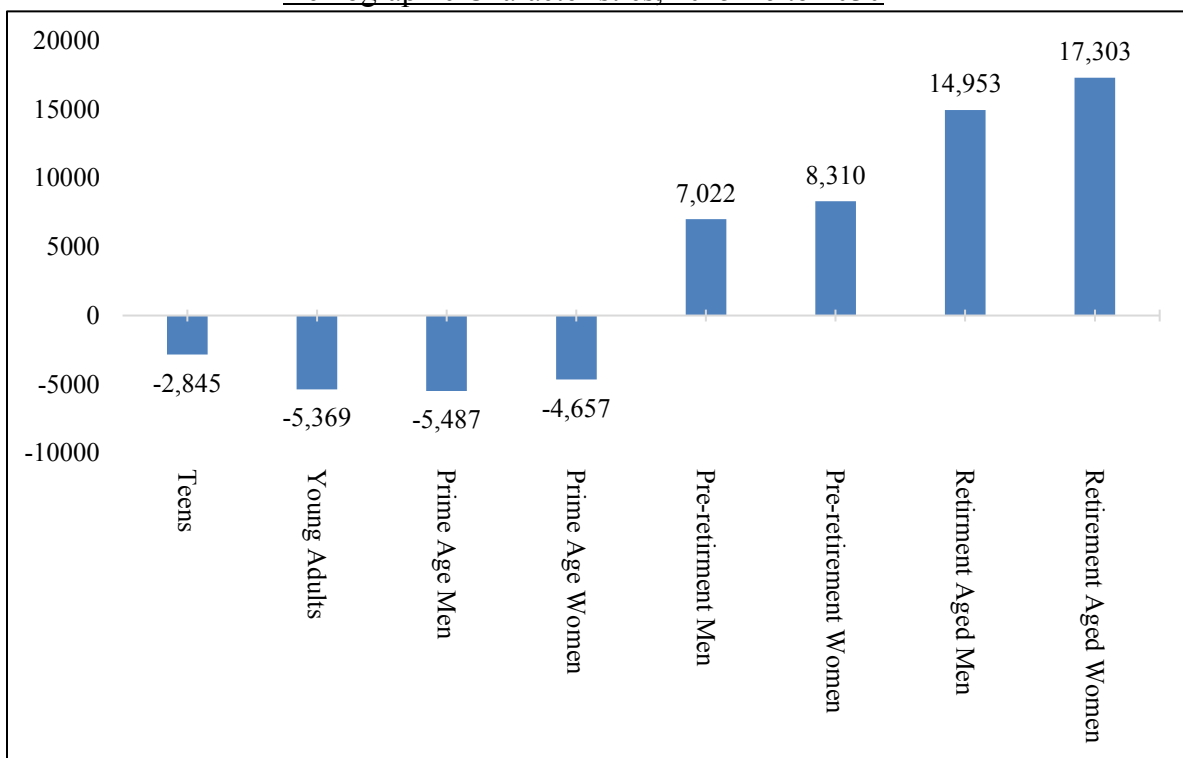
	Actual Labor Force 2015-2016	Projected Labor Force 2030	Projected Change	Percent Change
Men	369,475	380,754	11,279	3.1%
Women	324,220	339,740	15,520	4.8%
Total	693,695	720,494	26,799	3.9%

Source: Authors’ analysis of ACS and California Population Projections

All of the growth in the size of the region’s labor force will be concentrated among older workers. We expect that the size of the teen labor force will fall by about 2,800 as teenagers in the region continue to disengage from the world of work. While the size of the teen population in Greater Long Beach is expected to decline slightly (-1.2 percent over the next 14 years), declining labor force attachment of teens will further reduce their future role in supplying labor to economic establishments in the area. Similarly, we expect that the number of young adults aged 20 to 24 who participate in the

labor force will continue to decline. The decline in the size of the young adult labor force in Greater Long Beach is the result in declines in their numbers, as well as a continued decline in their attachment to the job market. Overall, the number of young adults participating in the regions workforce is expected to fall by about 5,400, particularly disproportionately large decline in the size of the young adult male labor force. Again, this decline is sparked by further reductions in job market engagement of young men.

Chart 4:
Projected Change in the Size of the Greater Long Beach Labor Force, by Selected Demographic Characteristics, 2015-16 to 2030



Source: Authors' analysis of ACS and California Population Projections

Declining labor force participation among teens and young adults is particularly worrisome. Work experience as teens and young adults exerts important positive impacts on educational attainment, as well as future employment, earnings and even wealth accumulation for young people over their potential working lives.⁹ Working during high

⁹ Neeta P. Fogg, Paul E. Harrington and Ishwar Khatiwada, "The Collapse of the Labor Market for 16 to 24 Year Olds, *Cascade*, Federal Reserve Bank of Philadelphia, Fall, 2011

school and beyond creates the opportunity for young people to develop work related abilities - including traits like reliability, respectfulness, self-control, and communications competencies that are highly valued by employers across industries and occupations. Labor force attachment is path dependent, that is, the chance of a person participating in the labor market in the future is closely connected to their prior work experience. The depressed labor force attachment of teens and young adults in the Greater Long Beach region suggests lower future participation in the job market, potentially even below the current forecast level.

Table 7:
Projections of the Size of the Greater Long Beach Labor Force,
by Age and Gender, 2015-16 to 2030

Sex	Age Group	Actual CLF ACS 2015- 2016	Projected CLF 2030	Projected Change	Percent Change
Male	16-19	9,491	7,675	-1816	-19%
	20-24	38,410	35,017	-3393	-9%
	25-34	88,542	85,224	-3318	-4%
	35-44	79,825	77,108	-2717	-3%
	45-54	83,247	83,795	548	1%
	55-64	53,209	60,231	7022	13%
	65-74	14,288	25,482	11194	78%
	75+	2,463	6,223	3760	153%
	Total	369,475	380,754	11279	3%
Female	16-19	9,314	8,284	-1030	-11%
	20-24	35,325	33,349	-1976	-6%
	25-34	77,448	75,871	-1577	-2%
	35-44	69,244	64,515	-4729	-7%
	45-54	73,883	75,532	1649	2%
	55-64	45,220	53,530	8310	18%
	65-74	11,681	20,675	8994	77%
	75+	2,105	7,985	5880	279%
	Total	324,220	339,740	15520	5%
Total	16-19	18,805	15,960	-2845	-15%
	20-24	73,735	68,366	-5369	-7%
	25-34	165,990	161,095	-4895	-3%
	35-44	149,069	141,622	-7447	-5%
	45-54	157,130	159,327	2197	1%
	55-64	98,429	113,761	15332	16%
	65-74	25,969	46,156	20187	78%
	75+	4,568	14,207	9639	211%
	Total	693,695	720,494	26799	4%

Source: Authors' analysis of ACS and California Population Projections

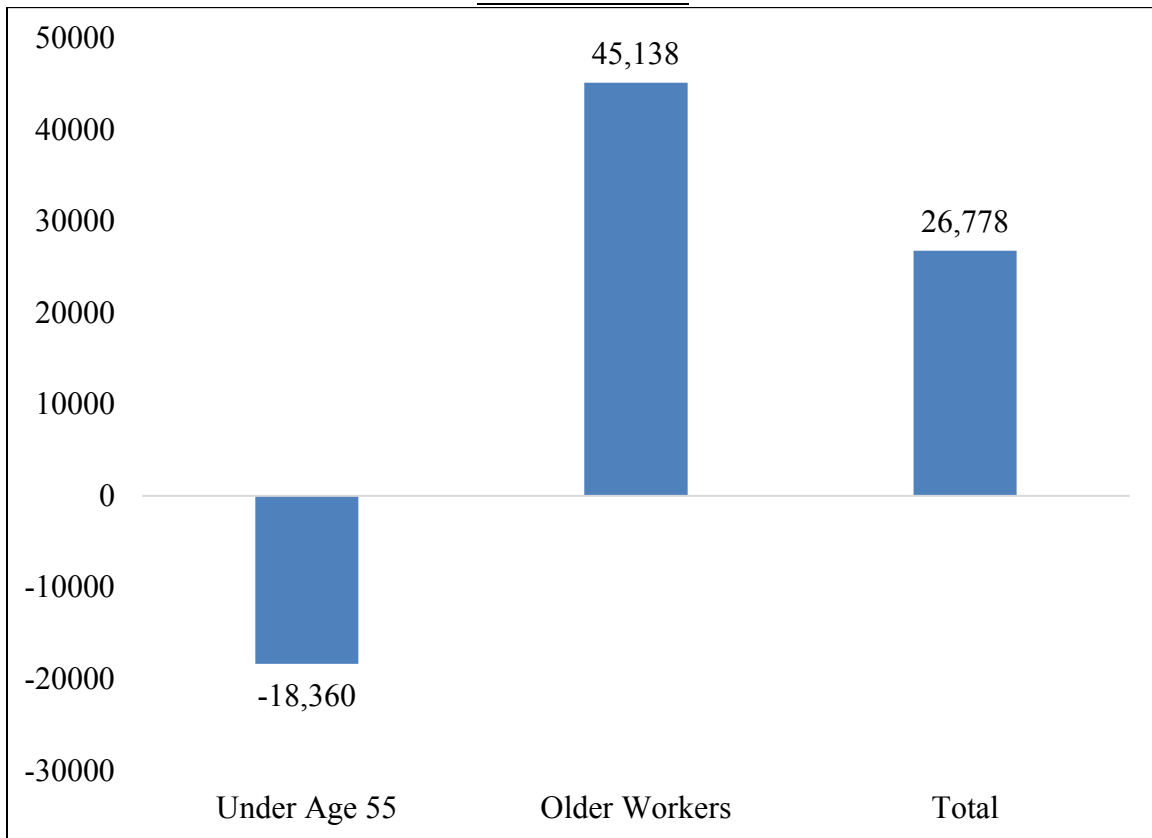
Prime age workers are those aged 25 to 54, who are generally expected to be engaged in the world of work as a central focus of their life activity. While those aged 16 to 24 may be primarily focused on schooling and those aged 55 and older may be focused on permanently exiting the labor force, prime age workers are the core of the workforce. The gains on the job learning (closely associated with years of work experience) yield large productivity gains for employers and wage advances for workers. The size of the Greater Long Beach prime age workforce is expected to decline by just over 10,000 persons between 2015-16 and 2030, a reduction of about 2 percent over the 14-year projections period. The losses in the prime age work force will be exclusively concentrated among its youngest age groups. As the findings in Table 7 reveal, we expect that the number of persons aged 45 to 54 who participate in the labor market will rise slightly. In contrast the number of prime age workers in the 25- to 44-years-old range will fall by more than 12,300, a 4 percent decline over the 14-year period.

The aging of the baby boom cohort into the retirement and pre-retirement years through 2030 means that the number of older workers participating in the Greater Long Beach regional labor market will rise by more than 45,000, a 10 percent increase in the number of older workers supplying labor. The plurality of this rise will come from persons aged 65 to 75. During 2015-16, Greater Long Beach had about 26,000 persons in this age group actively engaged in the labor market. By 2030, the number of ‘early retirement’ residents who will be engaged in the labor market will rise to 46,156, a 78 percent increase. Unlike younger age groups, the bulk of the increase in the size of the 65- to 74-year-old labor force will be among men, resulted from increased life expectancy among older men (much narrower male-female gap in life expectancy) will help bolster the growth in older men working—in combination with a continued rise in the labor force participation rate of these men. The size of the female 65- to 74-year-old population in the region will grow more slowly than that of men, but like men, their labor force attachment is expected to continue to rise.

The number of ‘frail elderly’ who are expected to participate in the region’s job market is expected to more than double over the next 14 years. The number of older workers in their pre-retirement years, those aged 55 to 64 is expected to increase by more than 15,000, a rise of 16 percent over the period.

These findings paint a troubling picture of the constraint that labor supply will place on economic growth in the Greater Long Beach labor market in the coming years. In recent months, as the US economy has moved to achieve full employment and real

Chart 5:
Projected Change in the Size of the Greater Long Beach Regional Labor Force,
2015-16 to 2030



Source: Authors' analysis of ACS and California Population Projections

wages have begun to increase, the nation's labor force participation rate has improved among persons aged 35 and younger. Nonetheless, these gains have been quite small given the strong employment situation—characterized by widespread labor shortfalls—that exists in the nation today. Employers in the Greater Long Beach area will continue to find labor supply an important constraint on growth during periods of strong overall economic growth. These employers will attempt to adjust to these local labor supply problems in several ways that we have already begun to see:

- At the entry level, employers have begun to raise wages and improve compensation packages for new hires in an effort to attract workers that, until recently, had been comparatively plentiful. However, increasing wages at the entry level often leads to accelerated quits by more experienced workers who see entry level wages approaching the wage rates of more experienced workers. In many instances, experienced employees find better options at other firms—who are also aggressively seeking new workers. The BLS Job Openings and Labor Turnover survey reports that quit rates across the nation are approaching historically high levels as the number of vacant jobs has skyrocketed.¹⁰
- Employers have stepped up out of region recruiting activities in two ways. Firms try and recruit very heavily from the local labor force, largely through improved wage offers. The focus on local workers is based on the view that living costs (especially the cost of housing) are too high for many workers to relocate to the region. As we observed earlier in our discussion of population trends, Southern California is experiencing substantial net population out-migration. Another response to high living costs for some local firms has been in the form of expanded tele-commuting. In a number of white collar (often college labor market level) occupations, firms hire out of state workers as regular payroll employees, but these individuals continue to reside in other, lower cost of living regions in the nation.
- Several firms we spoke with are considering expansion in other states, or even parts of California, where labor supply is thought to be more available and less costly.
- Firms are also seeking to substitute technology for skilled labor in the production process, however, this process is time consuming, sometimes very technically difficult to complete and can be quite costly. Despite concerns voiced in the media that workers will be displaced by technology, we see no evidence of this. Indeed, in the Greater Long Beach area, skilled workers and various forms of technology play strong complementary roles with one another. Generally, the

¹⁰ Jeffrey Bartash, “Americans quitting their jobs at fastest rate since 2001—and that’s a good thing”, *MarketWatch*, July 14, 2018

effect of technology is to expand employment and increase skill requirements. Certainly, the current labor supply situation in the nation belies the robotic bugaboo so popular in the press.

- Local firms seem interested in building connections to local sources of labor supply including connections to secondary and post-secondary educational institutions.