TRENDS AFFECTING WORKFORCE DEVELOPMENT IN SAN MATEO COUNTY AND THE SAN FRANCISCO PENINSULA

Strategy and Policy Recommendations
ACKNOWLEDGEMENTS

Stephen Levy is the author of this report. He received invaluable assistance and access to data from the Association of Bay Area Governments and the Metropolitan Transportation Commission.

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Jill Jennings created the report’s layout and design; Duffy Jennings served as copy editor.

SILICON VALLEY INSTITUTE FOR REGIONAL STUDIES

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The leaders of San Mateo County are thinking strategically about the future.

Located in the heart of Silicon Valley, the County and the greater San Francisco Peninsula are leading the nation in terms of job growth. Many of those jobs are in the burgeoning information, professional, scientific and technical services sectors. Other opportunities are being created by the boom in Internet-based commerce, media, and mobile technology.

And yet San Mateo County also faces persistent poverty, even in the face of surging job growth. For a variety of structural reasons, the Peninsula economy is no longer generating as many mid-range jobs as it once did, and low-wage service jobs are proliferating. The gap is widening, and San Mateo County’s leaders are searching for ways to foster upward mobility.

This report takes a look at the broad economic forces acting on the County and outlines strategies that can be carried out by the pillar institutions (private industry, community colleges, workforce boards). Its most hopeful finding is that we can expect a sizeable wave of job openings created by boomer retirements over the coming decade. Can San Mateo County’s leaders take full advantage of this opportunity? Can they coalesce around a set of strategies, pursued regionally and across sectors, to move an entire cadre of people into these jobs?

These pages offer a compendium of best practices and recommends a path forward. It was prepared by Stephen Levy, acting as lead economist for the Silicon Valley Institute for Regional Studies. The report was commissioned by the San Mateo County Economic Development Association (SAMCEDA) and the Economic Vitality Research and Education Foundation (EVRE).

We see this report as the analytical foundation required for action. San Mateo County is fortunate to have leaders already crouched in the starting gates.

Russell Hancock
President
Silicon Valley Institute for Regional Studies
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</tbody>
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Executive Summary

This report reviews broad economic forces in San Mateo County and the Peninsula and considers their implications for workforce development. The report spotlights the persistence of poverty even in the face of surging job growth, reviews the best practices fostering upward mobility for the workforce, and outlines strategies that can be carried out by workforce boards, community colleges, private industry and community organizations.

San Mateo County has a higher share of adult residents with a BA degree or better compared to the state average.

The report recommends that industry leaders, education officials, workforce boards, and elected officials come together around regional approaches that will support the twin goals of workforce development and economic growth. Both of these goals are critical for efforts to reduce poverty and unemployment.

The Peninsula Economy is Surging

Job levels in the Peninsula metro areas were 8.3 percent above the pre-recession peak in April 2014 while the Peninsula unemployment rate was down to 4.8 percent. The gains were led by a surge in technology jobs from San Francisco to San Jose. Expansions are continuing throughout the Peninsula and these plus an upturn in housing, transportation and construction are leading to a strong rebound, including a significant uptick in construction jobs. Venture capital funding rose in the first quarter of 2014 to levels last seen in 2001 with the Bay Area recording a record high 57.7 percent share of the nation’s VC funding—nearly all of it in the Peninsula counties.
San Mateo County Residents Make Education and Income Gains, but Disparities Exist

San Mateo County has a higher share of adult residents with a BA degree or better compared to the state average (43.9 percent versus 30.1 percent) and a higher share of foreign-born residents (34.2 percent versus 27.1 percent) while the county has a lower share of residents living in poverty (7.4 percent) compared to the 15.3 percent state average. The share of residents under age 18 (22.2 percent) and renters (40.6 percent) is slightly below the state average. Median household income at $87,751 is well above the $61,400 state average but educational attainment and related household income is far below the county and state average for Hispanic and African-American residents.

Industry, Occupation and Wage Trends

The information, professional, scientific and technical services sectors have and will continue to lead the Peninsula’s economic base. Health care and the leisure and hospitality sectors (including restaurants) will also produce large job gains in the foreseeable future. Construction and related sectors are expected to continue their expansion.

There are two important high-level occupational trends that hold significance for the Peninsula:

One is that the Peninsula economy, like that of the Bay Area, will continue to have more low-wage and high-wage jobs, and fewer in the mid-range. Specifically, the Peninsula will have more jobs that have a median wage under $20 per hour and more jobs above $35 per hour, and either segment will outnumber middle wage jobs paying between $20 and $35 per hour. Helping all low wage workers move up will be extremely challenging.

Second, over the next ten years more than 2 of every 3 job openings available to workers/students and needed by businesses will be to replace people who retire or change occupations. Identifying and working to prepare job seekers for these jobs, rather than concentrating primarily on job growth, will become increasingly important.

Workforce Policies and Strategies for Future Success

To help San Mateo County leaders prepare for the future, this report identifies three crucial components of successful workforce strategies:

- Addressing barriers that make training more difficult such as education, English language and digital literacy deficiencies.
• Improving training initiatives by engaging industry partners and forming sector-based partnerships.

• Improving career navigation efforts by connecting workers and students to professional networks more effectively and helping people navigate the new online tools to apply for jobs.

The report also recommends six specific approaches to workforce development:

• **Using contextualized learning:** enhancing skills in a work-related context and environment.

• **Developing industry partnerships:** designing training curricula with direct input from a group of partners in an industry.

• **Exciting high school students:** using Linked Learning and internships to help students connect studies to good jobs.

• **Navigating the new world of job search:** helping job seekers understand and connect to the new world of online job search and application.

• **Connecting to mentors and networks:** building avenues so workers can connect to the advice and experience of successful people in their field.

• **Taking a regional approach:** looking at regional job opportunities, developing partnerships of workforce boards and education/training providers, and avoiding duplication of services.

**What San Mateo County Leaders Can Do**

To close gaps and seize future opportunities, industry leaders can:

• Host on site English and related job readiness programs

• Participate in Linked Learning programs to inform and excite high school students

• Help develop industry-driven training partnerships

Workforce boards and training partners can:

• Collaborate to develop regional programs that avoid duplication of services

• Help customers learn about the new world of online job search

• Form alumni groups to mentor and network with current program participants
Recent Economic Trends and San Mateo County

Strong Job Growth Brings Unemployment Down

The Peninsula region—from San Francisco to San Jose—is outpacing the state and nation in job recovery, and now job growth. Non-farm wage and salary job growth in both the San Francisco and San Jose metropolitan areas are surging ahead of pre-recession levels (see fig. 1) while the state and nation in April 2014 are still hovering around pre-recession job levels.

For most of the past year either the San Francisco or San Jose metropolitan areas have been first or second in the nation for comparable metro area job growth. In March 2014 the Bureau of Labor Statistics reported that the San Jose metropolitan area led the nation’s large metro areas with a 12-month job growth rate of 4.4 percent.

The growth has brought unemployment rates down below the state and national average, though the Peninsula is not yet back to pre-recession levels. By April 2014 the California unemployment rate had declined to 7.3 percent but rates for the Peninsula counties ranged from 4.2 percent in San Mateo County to 5.3 percent in Santa Clara County, both below the national rate of 5.9 percent. State and national rates are not seasonally adjusted to be comparable to county rates. Pre-recession unemployment rates were close to 4 percent for the three Peninsula counties (See fig. 2).
Trends Affecting Workforce Development in San Mateo County and the San Francisco Peninsula

Industry Structure on the Peninsula

The Peninsula job market currently includes just over 2 million wage and salary jobs, according to California Employment Development Department (EDD) estimates. There are, in addition, approximately 138,000 self-employed workers in the three Peninsula counties, according to the 2012 American Community Survey.1

The Peninsula area has an above average share of jobs in manufacturing, information, and professional & business services compared to the state average. The San Francisco metro area has by far the largest share of Peninsula jobs in Financial Activities, Leisure & Hospitality, Transportation, Warehousing and Utilities, while the San Jose metro area is home to most of the subregion’s manufacturing jobs (see table 1).

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1. The San Francisco metropolitan area data does include Marin County and the San Jose metro area data does include San Benito County but the number of jobs in these two counties is small and does not affect the industry pattern described here.
### Peninsula Area Industry Structure | April 2014

<table>
<thead>
<tr>
<th>Industry Category</th>
<th>SF METRO</th>
<th>SJ METRO</th>
<th>PENINSULA</th>
</tr>
</thead>
<tbody>
<tr>
<td>TOTAL, ALL INDUSTRIES</td>
<td>1,095,400</td>
<td>996,500</td>
<td>2,091,900</td>
</tr>
<tr>
<td>TOTAL FARM</td>
<td>2,100</td>
<td>5,200</td>
<td>7,300</td>
</tr>
<tr>
<td>TOTAL NONFARM</td>
<td>1,093,300</td>
<td>991,300</td>
<td>2,084,600</td>
</tr>
<tr>
<td>NATURAL RESOURCES, MINING AND CONSTRUCTION</td>
<td>100</td>
<td>300</td>
<td>400</td>
</tr>
<tr>
<td>CONSTRUCTION</td>
<td>41,200</td>
<td>38,000</td>
<td>79,200</td>
</tr>
<tr>
<td>MANUFACTURING</td>
<td>37,500</td>
<td>148,800</td>
<td>186,300</td>
</tr>
<tr>
<td>WHOLESALE TRADE</td>
<td>27,000</td>
<td>37,700</td>
<td>64,700</td>
</tr>
<tr>
<td>RETAIL TRADE</td>
<td>91,400</td>
<td>77,200</td>
<td>168,600</td>
</tr>
<tr>
<td>TRANSPORTATION, WAREHOUSING AND UTILITIES</td>
<td>40,800</td>
<td>14,200</td>
<td>55,000</td>
</tr>
<tr>
<td>INFORMATION</td>
<td>53,400</td>
<td>62,600</td>
<td>116,000</td>
</tr>
<tr>
<td>FINANCIAL ACTIVITIES</td>
<td>76,300</td>
<td>30,200</td>
<td>106,500</td>
</tr>
<tr>
<td>PROFESSIONAL AND BUSINESS SERVICES</td>
<td>252,700</td>
<td>194,600</td>
<td>447,300</td>
</tr>
<tr>
<td>EDUCATIONAL AND HEALTH SERVICES</td>
<td>148,600</td>
<td>153,200</td>
<td>301,800</td>
</tr>
<tr>
<td>LEISURE AND HOSPITALITY</td>
<td>144,900</td>
<td>89,500</td>
<td>234,400</td>
</tr>
<tr>
<td>OTHER SERVICES</td>
<td>42,800</td>
<td>25,200</td>
<td>68,000</td>
</tr>
<tr>
<td>GOVERNMENT</td>
<td>136,600</td>
<td>96,800</td>
<td>233,400</td>
</tr>
<tr>
<td>FEDERAL GOVERNMENT</td>
<td>18,000</td>
<td>10,100</td>
<td>28,100</td>
</tr>
<tr>
<td>STATE AND LOCAL GOVERNMENT</td>
<td>118,600</td>
<td>86,800</td>
<td>205,400</td>
</tr>
</tbody>
</table>

Source: California Employment Development Department (EDD)
Two groups of industries are leading the job growth in and around San Mateo County. Neither is a surprise. The Peninsula’s economic base is led by the surge in technology from Market Street in San Francisco to Market Street in San Jose. The Information and Professional & Business Services sectors are where most of this job growth is occurring. Health care and the Leisure & Hospitality sector (led by restaurant and hotel growth) are the other growth leaders (see fig. 3). These sectors were barely touched by the recession and have grown steadily during the recovery.

The broad technology sector is poised to continue adding jobs on the Peninsula and driving the region’s growth, though the pace of growth is likely to slow from today’s surging pace.

The Bay Area received $4.7 billion in venture capital funding in the first quarter of 2014. That is the highest level of funding since the fourth quarter of 2000 (the height of the “dot-com” period) and most of these investments were on the Peninsula. Both the Bay Area and California posted record high shares of national VC funding in this same quarter (see fig. 4). Software, accounts for 50 percent of the first quarter venture dollars, and information technology (IT) was the next leading category.
Health Care and Restaurants & Tourism are expected to continue as strong job growth sectors throughout the Bay Area, and certainly on the Peninsula.

Other sectors have not recovered all of the recession job losses and have mixed prospects looking ahead. The Construction sector has recovered 15,200 of the 27,800 jobs lost during the recession and is poised for growth since spending on housing; highways and public transit are all increasing. By contrast, the Financial Activities sector has recovered only 4,100 of the 19,300 jobs lost during the recession. While some additional gains are possible, the mass adaptation of mobile apps and other changes will restrict growth in this sector.

Retail jobs are likely to grow slowly as online shopping increases and the population ages. Government jobs, on the other hand, will recover past job losses and show additional (but slow) growth as revenues rebound and population increases drive more service needs.

The Manufacturing sector has recovered about half of the jobs lost during the recession, which is a better performance than the state or national manufacturing sectors. But the prospects for future job growth are limited as productivity growth is able to accommodate the rising demand for goods without the need for additional employees in most manufacturing sectors (see fig. 5).
Growing Transit Use Connects the Peninsula Counties

The latest data from the American Community Survey (2010) shows that a substantial number of San Mateo County residents work in San Francisco and Santa Clara counties and that a substantial number of workers in San Mateo County live outside the county (see table 2). Of the 348,055 resident workers in San Mateo County, 75,045 worked in San Francisco County and 50,125 worked in Santa Clara County. Of the 347,120 jobs in San Mateo County 43,425 were filled by residents of San Francisco County, 41,520 from Santa Clara County and 50,900 from other Bay Area counties.
The commute patterns make it clear that, for both job search and hiring activities, San Mateo County is situated squarely in the middle of a regional labor market.

Moreover, from observation of traffic patterns, the interconnections among the Peninsula counties have increased since 2010. Caltrain ridership has surged. Average daily weekday ridership has increased since 2007 from 31,507 to 52,611 in 2014 (see fig. 6). Ridership increased in 2013 at all San Mateo County stations, led by gains at Redwood City (+12.5 percent), San Mateo (+17.8 percent) and Hillsdale (+10.3 percent).
While some riders may have switched from cars, it is also likely that a portion of the growth is driven by new inter-county commuting up and down the Peninsula. In addition, highway travel counts have increased along highways 101 and 280.

Who Lives in San Mateo County?

Population growth in the Bay Area has accelerated in the past two years and has outpaced the state’s growth since the 2010 Census. Population growth on the Peninsula has led the region’s growth, with Santa Clara County being the second fastest growing county (after Placer) and the fastest growing county since 2012 (see table 3).
Compared to California, San Mateo County and its neighbors have higher percentages of Asian residents and a lower percentage of Hispanic residents (see table 4).

San Mateo County and its neighbors to the north and south have a high share of residents with one or more college degrees when compared to the state average. Peninsula residents also show higher median household incomes and lower poverty rates. All three counties have an above-average share of residents who are foreign-born, and all have a substantial and growing share of households who rent (see table 5).
Table 5

Population Characteristics by County

<table>
<thead>
<tr>
<th></th>
<th>SAN MATEO</th>
<th>SAN FRANCISCO</th>
<th>SANTA CLARA</th>
<th>CALIFORNIA</th>
</tr>
</thead>
<tbody>
<tr>
<td>% BA OR HIGHER</td>
<td>43.9%</td>
<td>52.0%</td>
<td>46.0%</td>
<td>30.5%</td>
</tr>
<tr>
<td>MEDIAN HH INCOME</td>
<td>$87,751</td>
<td>$73,802</td>
<td>$90,747</td>
<td>$61,400</td>
</tr>
<tr>
<td>POVERTY RATE</td>
<td>7.4%</td>
<td>13.2%</td>
<td>9.7%</td>
<td>15.3%</td>
</tr>
<tr>
<td>FOREIGN BORN</td>
<td>34.2%</td>
<td>35.7%</td>
<td>36.8%</td>
<td>27.1%</td>
</tr>
<tr>
<td>UNDER 18</td>
<td>22.2%</td>
<td>13.4%</td>
<td>24.1%</td>
<td>25.0%</td>
</tr>
<tr>
<td>65+</td>
<td>13.4%</td>
<td>13.6%</td>
<td>11.1%</td>
<td>11.4%</td>
</tr>
<tr>
<td>RENTERS</td>
<td>40.6%</td>
<td>63.1%</td>
<td>42.4%</td>
<td>44.1%</td>
</tr>
</tbody>
</table>

Source: 2010 Census

Foreign immigration has been increasing on the Peninsula and is a major driver in the Peninsula’s accelerating population growth. Immigration added more than 26,000 residents to the three counties in 2013, up from 11,000 on 2011 (see fig. 7).

Fig. 7

Foreign Immigration

Source: California Department of Finance
Despite the overall prosperity in San Mateo County, some residents are not participating and some children are at risk of being unprepared for the 21st century economy. People with low levels of education have seen real income declines (see fig. 8).

Fig. 8

INDIVIDUAL MEDIAN INCOME BY EDUCATIONAL ATTAINMENT
Santa Clara & San Mateo Counties

Note: Some College includes Less than 1 year of college; Some college, 1 or more years, no degree; Associate degree; Professional certification. The 2008 value for Graduate or Professional Degree is for San Mateo County only. | Data Source: U.S. Census Bureau, American Community Survey
There are also income differences by race and ethnicity and these differences show up also in the educational attainment of children (see fig. 9).

Fig. 9

![HIGH SCHOOL GRADUATION RATES](image)

*Multi/None includes both students of two or more races, and those who did not report their race. Note: Graduation rates are four-year derived rates. Data Source: California Department of Education

There are also income differences by race and ethnicity and these differences show up also in the educational attainment of children.

### Future Population Trends

Current population growth in the Peninsula counties is running ahead of the pace anticipated in Plan Bay Area (the plan adopted in 2013 by the Metropolitan Transportation Commission and the Association of Bay Area Governments). The population growth is driven by surging job growth.

One demographic trend is certain: the population aged 65 and above will be the fastest growing age cohort during the next 15 years, as baby boomers age. It is also likely there will be future growth in Asian and Hispanic residents, driven by immigration and birth trends.

Changes to immigration policy are likely to increase the number of legal immigrants and immigrants with labor market skills.
No substantial change is expected in the total number of school age children.

In a related development, more than 70 percent of recent residential building has been in multi-family structures, for both sale and rental, and that share could increase in the coming years.

A Profile of the Workforce by Occupation and Earnings

This section presents recent industry, occupation and wage trends and some projections of future trends. The discussion focuses on three groups of occupations and their median wage levels:

1. Low and moderate wage jobs, paying less than $20 per hour, which is 80 percent of the Peninsula median wage.

2. Middle wage jobs, paying between $20 and $35 per hour.

3. Higher wage jobs, paying more than $35 per hour.

EDD data for the first quarter of 2013 shows that the middle wage jobs are the smallest portion (26 percent) of all jobs in San Mateo County. It also shows there

![Peninsula Jobs by Median Wage | Q1 2013](source: California Employment Development Department (EDD))
are more low-moderate jobs than high-wage jobs in the County. In addition, 63 percent of the jobs paying less than $20 per hour are in occupations with a median wage below $15 per hour (see fig. 10).

The Peninsula has 14 occupations that employ 9,000 or more people with a median wage under $15 per hour, and most of these are concentrated in the food service and retail sectors (see table 6).

Table 6

<table>
<thead>
<tr>
<th>Occupations with 9,000+ Workers in the Peninsula</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>OCCUPATION</strong></td>
</tr>
<tr>
<td>RETAIL SALESPERSONS</td>
</tr>
<tr>
<td>CASHIERS</td>
</tr>
<tr>
<td>WAITERS AND WAITRESSES</td>
</tr>
<tr>
<td>JANITORS AND CLEANERS, EXCEPT MAIDS AND HOUSEKEEPING CLEANERS</td>
</tr>
<tr>
<td>COMBINED FOOD PREPARATION AND SERVING WORKERS, INCLUDING FAST FOOD</td>
</tr>
<tr>
<td>LABORERS AND FREIGHT, STOCK, AND MATERIAL Movers, HAND</td>
</tr>
<tr>
<td>STOCK CLERKS AND ORDER FILLERS</td>
</tr>
<tr>
<td>COOKS, RESTAURANT</td>
</tr>
<tr>
<td>FOOD PREPARATION WORKERS</td>
</tr>
<tr>
<td>DISHWASHERS</td>
</tr>
<tr>
<td>COOKS, FAST FOOD</td>
</tr>
<tr>
<td>COUNTER AND RENTAL CLERKS</td>
</tr>
<tr>
<td>DINING ROOM AND CAFETERIA ATTENDANTS AND BARTENDER HELPERS</td>
</tr>
<tr>
<td>COUNTER ATTENDANTS, CAFETERIA, FOOD CONCESSION, AND COFFEE SHOP</td>
</tr>
</tbody>
</table>

Source: California Employment Development Department (EDD)
The occupations with a median wage of $15 to $20 per hour and at least 9,000 employees are fewer in number (9) and spread more throughout the economy.

There are nine occupations with a median wage of $20 to $35 per hour and at least 9,000 employees in 2013. And these too are varied (see table 7).

More than two thirds of the job growth projected to 2020 had already occurred by April 2014.

<table>
<thead>
<tr>
<th>Occupation</th>
<th>Jobs in Q1 2013</th>
<th>Occupation</th>
<th>Jobs in Q1 2013</th>
</tr>
</thead>
<tbody>
<tr>
<td>SECRETARIES, EXCEPT LEGAL, MEDICAL, AND EXECUTIVE</td>
<td>24,490</td>
<td>COMPUTER SOFTWARE ENGINEERS, APPLICATIONS</td>
<td>38,230</td>
</tr>
<tr>
<td>BOOKKEEPING, ACCOUNTING, AND AUDITING CLERKS</td>
<td>21,060</td>
<td>GENERAL AND OPERATIONS MANAGERS</td>
<td>36,910</td>
</tr>
<tr>
<td>EXECUTIVE SECRETARIES AND ADMINISTRATIVE ASSISTANTS</td>
<td>18,930</td>
<td>COMPUTER SOFTWARE ENGINEERS, SYSTEMS SOFTWARE</td>
<td>35,760</td>
</tr>
<tr>
<td>FIRST-LINE SUPERVISORS/MANAGERS OF OFFICE AND ADMINISTRATIVE SUPPORT WORKERS</td>
<td>18,910</td>
<td>REGISTERED NURSES</td>
<td>30,110</td>
</tr>
<tr>
<td>SALES REPRESENTATIVES, SERVICES, ALL OTHER</td>
<td>18,030</td>
<td>ACCOUNTANTS AND AUDITORS</td>
<td>25,200</td>
</tr>
<tr>
<td>COMPUTER SUPPORT SPECIALISTS</td>
<td>13,950</td>
<td>BUSINESS OPERATIONS SPECIALISTS, ALL OTHER</td>
<td>22,490</td>
</tr>
<tr>
<td>MAINTENANCE AND REPAIR WORKERS, GENERAL</td>
<td>12,940</td>
<td>COMPUTER SYSTEMS ANALYSTS</td>
<td>17,640</td>
</tr>
<tr>
<td>SALES REPRESENTATIVES, WHOLESALE AND MANUFACTURING, EXCEPT TECHNICAL AND SCIENTIFIC PRODUCTS</td>
<td>11,290</td>
<td>COMPUTER AND INFORMATION SYSTEMS MANAGERS</td>
<td>15,460</td>
</tr>
<tr>
<td>CONSTRUCTION LABORERS</td>
<td>10,170</td>
<td>LAWYERS</td>
<td>14,950</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Occupation</th>
<th>Jobs in Q1 2013</th>
</tr>
</thead>
<tbody>
<tr>
<td>MANAGEMENT ANALYSTS</td>
<td>14,010</td>
</tr>
<tr>
<td>FINANCIAL MANAGERS</td>
<td>13,440</td>
</tr>
<tr>
<td>COMPUTER PROGRAMMERS</td>
<td>12,690</td>
</tr>
<tr>
<td>SALES REPRESENTATIVES, WHOLESALE AND MANUFACTURING, TECHNICAL AND SCIENTIFIC PRODUCTS</td>
<td>12,280</td>
</tr>
<tr>
<td>SALES MANAGERS</td>
<td>10,140</td>
</tr>
<tr>
<td>COMPUTER HARDWARE ENGINEERS</td>
<td>9,960</td>
</tr>
<tr>
<td>ELECTRONICS ENGINEERS, EXCEPT COMPUTER</td>
<td>9,380</td>
</tr>
<tr>
<td>NETWORK AND COMPUTER SYSTEMS ADMINISTRATORS</td>
<td>9,220</td>
</tr>
</tbody>
</table>

Source: California Employment Development Department (EDD)
In 2013 the Peninsula had 18 occupations with a median wage above $35 per hour employing 9,000 or more people, and these were highly concentrated in technology, management and engineering.

Trends To Expect in the Future

This section presents key information taken from the last round of the Employment Development Department (EDD) projections, and makes comments in light of the most recent job trends.

The largest number of future job openings in the two Peninsula metro areas are expected in low and moderate wage occupations. The next largest number of openings are expected in the high-wage category, and the smallest number of openings in middle-wage occupations.

A large number of job openings going forward will be to replace workers who retire (the coming tsunami of baby boomer retirements) or change occupations. Table 8 (starting from 2010) shows only a slightly higher number of openings from replacement versus growth, but the perspective from 2014 is quite different.

In the past four years the Peninsula job market has recovered all of the recession job losses and added new growth. More than two thirds of the job growth projected to 2020 had already occurred by April 2014, while it is likely that only a small portion of the retirements have happened. New national projections from the Bureau of Labor Statistics project that 70 percent of all job openings will be to replace existing workers between 2012 and 2022.

Table 8

<table>
<thead>
<tr>
<th>Job Openings 2010-2020</th>
<th>Peninsula Metro Areas</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>FROM GROWTH</td>
</tr>
<tr>
<td>$35+</td>
<td>161,570</td>
</tr>
<tr>
<td>$20-$35</td>
<td>91,810</td>
</tr>
<tr>
<td>UNDER $20</td>
<td>137,900</td>
</tr>
<tr>
<td>TOTAL</td>
<td>391,280</td>
</tr>
</tbody>
</table>

Source: California Employment Development Department (EDD)
While the Bay Area shares of job openings from new job growth may be higher than the U.S. average, replacement job openings will be a major focus for Peninsula area workforce policy and strategies.

The industries likely to have the largest number of middle and high wage job openings in the near future are Professional, Scientific & Technical Services, Software & Internet Services, Health Care and Construction. Low-wage job growth will continue, driven by growing incomes in the high wage sectors. The largest number of job openings is expected in Food Service and Tourism.

Training is focused on occupations and related skills. In some cases the occupations with large numbers of job openings are directly related to industries, so the career pathways are reasonably clear. This is true for construction, health care and tourism and somewhat true in the many technology fields. However, it is also true that tech workers can apply their skills in a variety of subsectors of the technology economy.

But some occupations with large numbers of job openings are spread across different industries. For example, two of the occupational sectors with the largest expected Peninsula job openings are in sales and related occupations, or in office and administrative occupations. Managerial and supervisory occupations also have a large number of future openings, and all of these occupations cut across a variety of industries.

Connecting occupational training to the actual job openings on the Peninsula is a crucial challenge for San Mateo County leaders, and the subject of the next section.

Workforce Policies and Strategies for Future Success

Public workforce organizations and their education partners have a dual responsibility to (1) prepare workers and students to succeed in the 21st century workforce and (2) to help employers find skilled workers. More firms are reporting difficulties in finding skilled workers across a wide range of industries and occupations. These hiring challenges will intensify as more previously unemployed workers find jobs, the economy continues to grow and the coming tidal wave of baby boomer retirements hits full force.
The Components of a Successful Career Pathways Strategy

In today’s economy, people change jobs often and, at the same time, the skill requirements in many jobs are also changing and increasing. The phrase “career pathways” denotes that successful strategies almost always involve more than one-time training.

There are three components of a career pathways strategy:

• Addressing barriers that make training more difficult such as education, English language and digital literacy deficiencies

• Improving training initiatives through engaging industry partners and forming sector-based partnerships

• Improving career navigation efforts through better connecting workers and students to professional networks and the new ways that people find and apply for jobs

The key partners for the career pathways training strategies described above include:

• A group of industry partners to advise on curriculum that will lead to job placements

• A training provider such as a community college or apprenticeship program

• A lead agency to put the partnership together such as workforce board or community college

• A funding source

The key concepts for workforce policy success include:

• Using contextualized learning—enhancing skills in a work-related context and environment

• Developing industry partnerships—designing training curricula with direct input from a group of partners from an industry

• Taking a regional approach—looking at regional job opportunities, developing partnerships of workforce boards and education/training providers, and avoiding duplication of services

• Exciting high school students—using Linked Learning and internships to help students connect studies to good jobs
• **Navigating the New World of Job Search**—helping job seekers understand and connect to the new world of online job search and application

• **Connecting to Mentors and Networks**—building avenues so workers can connect to the advice and experience of successful people in their field

It is important to recognize that the workforce preparation system in California and the nation is undergoing substantial transformation in response to major changes in how people need to prepare for and find jobs. The San Mateo County Workforce Board is in such a period of transition.

Some of the transformations require additional funding. But even with additional funding, it is still necessary to make structural, administrative and policy changes. In particular, it is necessary to make sure that current spending in workforce development is most effectively targeted.

**Strategy One: Expanding Job-Focused Basic Skills Training**

The basic components of this strategy are 1) English language acquisition for workers with limited English skills, 2) digital literacy training and 3) other basic skills such as reading and math remediation, GED preparation and soft skills/work readiness skills.

Completing a good high school education is a critical foundation for access to most middle-wage and higher paying jobs. Some high school initiatives tied to career pathways are explored on page 34 but the broader question of better preschool and K-12 education is beyond the scope of this report.

The Peninsula has a comparatively large number of foreign-born workers in the economy and some have limited English skills. This is a barrier both for the many jobs that require contact with customers and co-workers, and for the job search process.

Lack of digital literacy skills is a barrier to employment for two reasons: first, more jobs today, especially middle-wage jobs, require basic digital literacy skills; second, finding a job is now done more online than in the past.

The best practice models for basic skills acquisition for adults in the workforce involve contextualized learning. The basic concept is that people and especially adults with some learning barriers learn better when the subject material is related to real life situations that are familiar and important to them. In the best practice examples discussed below, this means that ESL and digital literacy are related to workforce preparation and are taught in a job-based context where learners can practice.
Increase English language acquisition programs focused on a workplace context.

There are two Bay Area best practice initiatives that help workers with English language skills in the context of what is relevant to their workplace and improving their job prospects and pay.

The Building Skills Partnership in Silicon Valley has an established program of providing English language and other job-related training to janitors. The Service Employees International Union—United Service Workers West (SEIU-USWW) partners with companies and building maintenance contractors to provide education and training on site, with space donated by companies. This also allows workers to take classes at convenient times and often with pay.

A leading program is called ADVANCE Workplace ESL & Job Skills, and is a six-month program blending Vocational English as a Second Language (VESL) curriculum with job skills instruction. Classes are held at over 30 large, corporate work sites on paid time, ensuring high attendance and graduation rates of over 80 percent. Janitors who graduate from the 50-100 hour intensive courses are often promoted to higher paid day cleaning, event service, building maintenance, clean room, and supervisory positions. The ADVANCE program is another example of contextualized learning.

In Silicon Valley, the Alliance for Language Learners’ Education and Success (ALLIES) is a new collaboration of San Mateo and Santa Clara County workforce boards with educators, labor, business and community partners. Its objective is to build the workforce competencies of adult immigrants. The project supports workers requiring English language acquisition and related work-readiness skills by teaching these skills in a work context with appropriate industry, education, workforce and community partners and in high need regional industry sectors.

There are four pilot projects currently underway. One ALLIES project is with the Palo Alto Unified School District and Sequoia High School District adult education program teaching basic English and job readiness skills. One is a partnership between SEIU and Kaiser in Santa Clara using the Building Skills Partnership model to teach vocational English and job readiness skills on site to current workers. A third project is a partnership of the work2future workforce investment board and Evergreen Valley College, focusing on English and digital literacy skills for work2future clients.

A fourth pilot project involves Skyline College and four hotels in San Mateo County. The hotel sector has a large number of English language learners on staff and this program, which includes release time from the employers, helps workers prepare for better jobs in the industry.

3. To learn more, see www.buildingskills.org/programs/advance.
4. For more information, see www.svallies.org.
Expand digital literacy training.

Teaching digital literacy connected to job search is another example of a contextualized learning approach. JobScout is a program that resulted from a partnership of the California state library system and the LINKS AMERICAS Foundation. The program provides an innovative, game-driven online tool to teach the digital skills needed to conduct a job search online. An innovative Peninsula approach to teaching digital literacy in the context of helping people search for jobs in the new world of online search is described below on page 35.

Efforts of organizations like the San Francisco-based California Emerging Technology Fund to expand broadband access are also to expanding digital literacy.

Improve programs focused on soft skills and work readiness, as well as other basic skills.

Many organizations and educational providers throughout the Bay Area are focused on work readiness training. While many of these skills were in the past taught in high school, there are many employers who note that some workers lack basic math and reading skills, as well as other work readiness “soft skills” that affect performance in the workplace. The key strategy is to continue expansion of these programs—and the further incorporation of soft skill and workplace readiness training—into high schools and the overall education system. One example of an organization working on basic skills training is Jewish Vocational Services in San Francisco.6

Strategy Two: Develop industry-driven, sector-based regional training partnerships.

This strategy responds to a skills gap barrier for workers reported by some employers. Many workers do not have the skills required for current and future middle-wage and higher paying jobs, and many employers have difficulty finding enough skilled workers. A recent Bay Area example that illustrates this finding is the advanced manufacturing workforce analysis developed for the Workforce Development Board of Contra Costa County. In the analysis, companies identified middle-wage job openings, many as a result of baby boomer retirements. The openings do not require advanced education but do require specialized training to meet industry needs.
The presence of an industry partner is the critical factor differentiating this strategy. The industry partner is essential for designing programs that have a high chance of leading to actual jobs at the end of the training.

The three components of a successful industry-driven regional training partnership are:

- Identifying industry partners to develop curriculum and provide financial support.
- Coordinating training regionally.
- Including additional career pathways tools.

The Bay Area has several ongoing programs that include all of these key components and, in addition, provide direct access to jobs, internships and apprenticeships. Two excellent examples are the Bay Area Consortium for Water and Wastewater Education (BACWWE) and the Loyd E. Williams Pipe Trades Training Center (PTTC) in San Jose.

Solano Community College is the lead agency for the BACWWE. The industry partners include water and wastewater organizations in Solano, Alameda, Contra Costa, Marin and San Mateo counties, giving the project both scale and regional breadth. The Contra Costa Water District initiated the program when it approached the college and expressed concern about how to replace the wave of skilled baby boomers nearing retirement age. The courses are taught at industry partner sites throughout the region. Most of the instructors hold high-level positions in the agency partners.

The partners teach the courses at times convenient to students. The program also includes the ability to accumulate what are called “stackable certificates,” where a student or worker can gain one skill level, work for a while, and go back and get additional training leading to additional certifications and a chance for higher paying jobs.

Industry partners pay for students’ training costs and provide program funds.

The program has 1) an industry partner, 2) industry help in designing curriculum, teaching the courses and providing financial support, 3) a regional approach that increases both the number of students and the number of available internships and jobs, and 4) a program that works toward actual jobs and access to training convenient to students.

The Loyd E. Williams Pipe Trades Training Center (PTTC) currently has 275 enrolled apprentices and over 970 journey-level training seats annually. The center is industry-funded via a joint labor-management trust, providing a

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7. See more information at www.bacwwe.org.
permanent, predictable stream of funding. A joint committee of union and industry representatives oversees the Center’s work and ensures that the training it provides is directly responsive to employers’ needs.

The instructor roster includes 70 trained instructors who work in the field and bring their hands-on experience into the classroom. The curriculum is informed by the 70-plus pipe trades contractors who employ the apprentices and journey-level workers, a number of whom sit on the governing board of the Center. The training approach is the product of a comprehensive strategy to create a workforce pipeline for the industry through clearly defined and articulated career pathways leading from the entry-level up to the highest skilled.

Apprentices that begin the five-year program have a greater than 85 percent chance of graduating, according to past performance. The program’s partner employers hire registered apprenticeship participants as they begin their classroom training. The employers also provide on-the-job training in concert with the classroom and lab instruction. Personal mentoring by field coordinators for each apprentice is instrumental in facilitating placement and retention.\(^8\)

Identifying industry partners who are interested and able to design programs that lead to actual jobs (or internships/apprenticeships) and who also provide financial support is not an easy task. However, the following approaches have the best chance for success:

1. Find industries where there is either large expected job growth or, more likely, a large wave of upcoming retirements. As the economic recovery proceeds, the number of industries facing a wave of skilled worker retirements will grow. Training replacement workers is critical for more industries in the region, state and nation.

2. Think regionally. This means that workforce boards and community colleges should work together to find industry partners. This reflects the realities that most industries have a regional scope within the Bay Area and also the reality that multiple partners are more likely to be found within a region than in local college or workforce board service areas.

3. Work to find multiple industry partners. The successful initiatives described above all had multiple industry partners whether or not they were regional in scope. Finding multiple partners with the same needs is important for designing programs that are large enough to make a difference in meeting the project goal, and also will provide a wider choice of job opportunities for people completing the training.

The Bay Area has examples of successful programs that had a variety of lead partners.

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8. For more information, see [www.pipetradestraining.org](http://www.pipetradestraining.org).
The SolarTech Workforce Innovations Collaborative (SWIC) was a partnership of SolarTech, Foothill-De Anza Community College District, and the NOVA Workforce Board. The goal of the partnership was to expand workforce training programs and meet the needs of employers by providing highly skilled workers for California businesses that are moving toward emerging green economies.  

Community-based organizations can lead these efforts as well. The Stride Center in Oakland has had success with preparing low- and moderate-wage workers for entry-level positions in the information and communication technologies (ICT) sector. The program works by understanding industry requirements for entry-level jobs and designing training to meet these requirements. Funding is a mixture of private and foundation donations and industry support. 

The Stride Center is a central partner in one of the recently awarded pilot projects led by NOVA and funded through the HUD Regional Prosperity project. The project proposes to increase access to sustainable ICT careers for Bay Area low- and moderate-income workers. It will create and deliver career navigation curriculum content for Stride Center students (career navigation skills include professional networking, personal marketing and the ability to access relevant labor market information). The project will work with industry partners to create internship and employment opportunities for students as well as share the curriculum and outcomes with regional workforce stakeholders in the fast-growing ICT industry. The project will also create a networking group of program alumni to provide advice to current and future program participants.

Another model for industry sector training partnerships involves direct financial participation by a company or industry. One example is PG&E’s PowerPathway program where the company donates equipment as well as advice on the training needed to fill their current or anticipated vacancies. More and more companies like PG&E are anticipating the need to fill vacancies created by retiring baby boomers. One example of the PowerPathway program is shown below.

The program is partnering with Laney College in Oakland to help train welders who could end up working for the utility. Other PowerPathway programs are open to residents with 8th to 10th grade math and English proficiency. Applicants are screened by workforce boards and use federal individual training account funds to pay for programs. Starting wages in 2013 were $24.41 an hour.

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9. For more information, see www.novaworks.org/SpecialProjects/GreenInnovations.aspx.
10. For more information on this program, see www.stridecenter.org.
Industry-driven partnership models in other states

The Professional Automotive Training Center (PACT) at Shoreline Community College near Seattle, Washington is the premier automotive technician program in the U.S. The PACT and its industry partners originated this innovative model that integrates education with hands-on workplace experience. The average automotive technician salary for the region ranges from $50,000 to $52,000, depending on location and the individual’s production abilities. Because the PACT program is so closely tied to the industry, the job-placement rate for PACT graduates is high, approaching 100 percent.\(^{12}\)

The Hobart Institute of Welding Technology in Troy, Ohio responds to the shortage of skilled welders and the imminent retirement of more (the average age of welders is 55) with a nine-month program including 1,000 hours of actual practice.\(^{13}\) The average starting hourly salary is $17. The starting salary is higher for those who master the trigonometry classes at the institute. The American Welding Society estimates there will be a shortage of 290,000 welding professionals by 2020.\(^{14}\)

States are using industry-driven training programs as an incentive for plant location. Mississippi offered to train residents in basic manufacturing at a community college ($4 million) and build a skills center ($7.5 million) for a new Yokohama Tire Corporation factory. Florida announced a $20 million program in January 2014 to train employees for jobs in science and technology while Wisconsin has pledged $35 million to provide customized training for companies. In Georgia, a new Caterpillar Inc. training center mimics the factory floor.

The Importance of Thinking Regionally

There are three primary reasons to think regionally (at least across the three Peninsula county job markets) in developing industry-driven sector training partnerships.

• As shown on page 14, many San Mateo County residents work in adjacent counties and San Mateo County companies employ many people from adjacent counties. For the most part, the same sectors have the largest number of job openings in each county. It is one labor market, not three.

• It will be easier to get to the scale needed to move the needle on skills and job placement if partners think regionally.

• Regional coordination is especially important when workforce dollars are scarce as they are now. Regional coordination can avoid unintended duplication of services among training partners, including workforce boards and community colleges.

All of these facts suggest that a regional approach to workforce training is appropriate. In practice that means that not every workforce board, community college, labor union or nonprofit training provider should target each

\(^{12}\) For more information, see www.shoreline.edu/auto.

\(^{13}\) See www.welding.org for more information.

occupation or industry of opportunity. It means that specialization and memo-
randa of understanding delineating areas of responsibility are the best ways to
make efficient use of limited funding for sector-based training.

The California Workforce Board is developing a new initiative called SlingShot
to provide direction and financial incentives for the development of regional
partnerships to “focus on a vexing employment, education, and jobs issue” in
the region. The priority is to focus on opportunities to improve upward income
mobility for residents—similar to the goal of the Regional Economic Prosperity
project described on page 24.

There is an opportunity for San Mateo County business and education/training
partners to participate in a Bay Area SlingShot proposal and that opportunity is
discussed in more detail in the following section.

The Bay Area Community College Consortium (BACCC) is comprised of the 28
colleges surrounding the San Francisco and Monterey Bays. The BACCC\(^{15}\) serves
as a regional framework to enhance the coordination of regional programs;
to increase collaboration on regional priorities; and to serve as a link between
the colleges’ Career Technical Education programs, Economic and Workforce
Development Initiatives, and the Chancellor’s Office.

The San Mateo, NOVA and work2future workforce boards have existing collabo-
rations and the San Mateo and NOVA boards are exploring additional ways to
work together to improve service and avoid duplication.

Skyline College has been selected to host a regional Retail, Hospitality and
Tourism initiative.\(^{16}\) The initiative is funded from the California Community
College District’s “Doing What Matters for Jobs and the Economy” program.\(^{17}\) The
initiative has a regional focus from San Francisco to Monterey.

Programs are being developed to reach from middle school students to career
pathway credentials at community colleges. Industry partners are joining the
program. One example is a paid on site summer internship program run by Bon
Appétite, the food management company for Google.

The San Mateo County Community College District is implementing programs inive sectors—health care, biotech, digital media, entry level computer informa-
tion systems and accounting oriented to small business needs. These programs
are informed by strong industry participation based on executive forums and
other outreach efforts of the District.

\(^{15}\) For more info, see sites.google.com/a/cabrillo.edu/baccc.
\(^{16}\) For more info, see www.bayregionrht.com.
\(^{17}\) For more info, see doingwhatmatters.cccco.edu/Overview.aspx.
Strategy Three: Improve career navigation systems and support pathways at the K-12 level and beyond.

The basic components of this strategy are 1) programs that provide experience and connections to higher paying jobs such as Linked Learning, apprenticeships, and paid internships, 2) programs that help workers navigate the new world of job search, and 3) programs that help workers network as part of their job search such as ProMatch, a Santa Clara County program that helps dislocated workers network.

This strategy responds to changes in how people find and get jobs after they acquire the needed skills, and to the need to excite students about the connection between learning and getting a good job.

This strategy also responds to barriers identified in the Regional Economic Prosperity project, including poor high school connection to the world of work, difficulty in gaining experience to qualify for better jobs and difficulty navigating the new online world of job search and application. Another barrier is the difficulty for many in giving up paid work to make time for training that is not on-the-job or paid for by employers.

Expand Linked Learning programs

The concept called “Linked Learning” responds to four workforce challenges:

• Helping students understand how learning is connected to getting a good job
• Providing students with some real life experience at area companies
• Providing a program that could excite students to stay in school
• Providing an opportunity for employers to share their experience and workforce needs with students

The end result of successful programs is to excite and encourage students and, hopefully, reduce the rate of high school dropouts.

This concept has led to the development of Linked Learning programs and initiatives throughout the state.

The statewide Linked Learning program helps high school students, many from disadvantaged backgrounds, find pathways to higher education and/or work. The program shows students the linkage between what they study and actual
job opportunities. Similar programs for workers highlight linkages between work experience and future opportunities. The James Irvine Foundation has sponsored and organized a major Linked Learning initiative with 16 California high schools.\textsuperscript{18}

California is committed to expanding these effective programs. Legislation passed in the 2013-14 state budget sets up the California Career Pathways Trust with $250 million to be awarded in competitive grants to support career-pathways programs, strengthen K-14 alignment, and build scalable work-based learning infrastructure. The state hopes to foster a variety of successful initiatives and if that happens, overall funding will be increased in future years.\textsuperscript{19}

Help workers navigate the new world of online job search and applications.

Searching and applying for middle-wage jobs is now done primarily online. Interviews and any personal contact happen at the end of the process, not at the beginning. That means that individuals need to understand how resumes are reviewed online and what companies are looking for in the resume besides skills and experience. In addition, more and more job listings are found only online, which adds to the technical skills needed to find and apply for jobs.

The NOVA Workforce Board has developed an online tool called My Plan to help job seekers find jobs and prepare for job search, application and interviews.\textsuperscript{20} The goal is to develop a step-by-step process that can be used by experienced and inexperienced Internet users alike. My Plan enables users to learn lessons at their own pace, greatly multiplying the number of users with access to job search and preparation tools and allowing job seekers to prepare for personal visits to the NOVA job center when needed.

This model can be adapted and used in different settings throughout the region. It can be integrated with digital literacy training appropriate for the customers of organizations helping people prepare for and find jobs.

Create networking opportunities for low- and moderate-wage workers.

Many people get jobs through initial contacts with people they know. This is true for workers at different income levels. Networks are both virtual (like LinkedIn) and physical (social clubs or meetup groups). But the value of networks is both

\textsuperscript{18} An overview of the program can be reviewed at irvine.org/linkedlearning2013/overview and SRI International is conducting an evaluation of the program. Early results are positive as reported in www.sri.com/sites/default/files/publications/fluencecsumm-2013june20.pdf.

\textsuperscript{19} For more information see linkedlearning.org/wp-content/uploads/2013/07/California-Career-Pathways-Trust.pdf.

\textsuperscript{20} The new online tool is available at myplan.novaworks.org.
based on who is in the network as well as how someone utilizes the network to achieve their specific goals. Workers are more likely to be hired for a new job when referred by an existing employee.

Some workforce investment boards have set up specific programs to try to instruct workers on how to establish and utilize networks to find jobs. For example, NOVA’s My Plan has a module focused on helping workers strengthen use of networks. It teaches workers that networking is more of a process about looking for and learning about opportunities, not simply asking contacts to get you a job. The strategy focuses on encouraging workers to ask specific questions of those in their network. The key questions are summarized as “AIR”:

- **Advice**: “Can you tell me the best way to apply for a position at your company?”
- **Information**: “From your perspective, what are the skills most in demand for someone in your field?”
- **Referrals**: “Do you know someone working in the field of (insert industry) with whom I might be able to connect for more information?”

In addition NOVA provides information on a five-step process for networking that involves making a list of the people one knows, developing a short statement about oneself, making contacts and asking the questions noted above.

NOVA has also developed a networking program called ProMatch for dislocated professionals. It is quite intensive and includes some skill building, volunteering to help mentor others and has been very successful in helping its members find jobs.  

Creating networking programs and opportunities for low- and moderate-wage workers will require new approaches. The NOVA and Stride Center project described earlier has an explicit networking component. The goal is to follow the ProMatch model and use alumni of the Stride Center to form a networking group for current enrollees.

The Stride Center/NOVA pilot project model can be adopted by other workforce training organizations. It can even be replicated retroactively for organizations that have good records of their alumni. Program alumni who have successfully entered the workforce can be asked to form an informal or formal network and mentorship group to help current workers receiving training.

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21. Details on the Pro Match program can be found at promatch.org.
Encourage apprenticeship programs and paid internships

A key model for helping workers move into the middle is to pay them to learn on the job. This can take the form of an apprenticeship program or a paid internship.

While many industries that pay middle wage jobs do not require formal education, many applicants may not qualify for jobs because they lack experience. On-the-job training through a paid internship or an apprenticeship program is an effective way to get necessary experience in a new work site. This gives workers an important leg up in their job search, even when the internship did not involve specific technical skills. Certain industries that demand more specialized technical skills could offer paid apprenticeship programs to allow workers to learn necessary skills in a structured setting.

The construction industry is the largest example of successful apprenticeship programs. The Pipe Trades Training Center program described above is one example of a career pathways program that incorporates apprenticeships. While most apprenticeship programs are in construction there are efforts to expand the concept to other sectors. President Obama's budget includes $2 billion for registered apprenticeships, which include many industries beyond construction.

Innovative paid apprenticeship programs

South Carolina, with its robust manufacturing base, has started Apprenticeship Carolina, offering tax-credits to firms who work with the state's education facilities to offer apprenticeship programs.

The Foundation for California Community Colleges is promoting paid internships as part of its Career Pathway program. The initiative pairs students with employers and offers to handle the record keeping and liability by being the employer of record. The initiative recognizes the importance of work experience in developing career pathways and the barriers facing students and employers in finding and developing paid internship opportunities. The Foundation has recently received a $1.2 million grant from J.P. Morgan Chase & Co. to fund internships within the Linked Learning initiative for high school students.

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22. For a more complete description of construction apprenticeship programs in California, see onlinecpi.org/wp-content/uploads/2011/06/Construction_Apprenticeship-Programs-report.pdf.
Trends Affecting Workforce Development in San Mateo County and the San Francisco Peninsula

Other components of a successful workforce development strategy

Education and training prepare residents for jobs and, by addressing acute skill shortages, can help increase the number of jobs in the region. However, the majority of job creation occurs from the decisions of private firms responding to national and world economic trends and market opportunities.

Firms also respond to the regional foundations for economic competitiveness. While a rising tide (strong job and wage growth) does not lift all boats (touch all residents), it is still the single most powerful component of helping job seekers find jobs and jobs that pay well. While the continuing Peninsula economic surge has not reduced unemployment to record levels, it has brought the Peninsula unemployment rate down from a recession high of 10.4 percent to 4.8 percent in April 2014, far below the state and national averages.

Much has been written about the critical economic competitiveness challenges facing the region, all of which also apply to the Peninsula economy. The Bay Area Council Economic Institute (BACEI) completed a regional economic assessment in October 2012 and is currently conducting follow up work with Bay Area business leaders. The recent Silicon Valley Leadership Group (SVLG) CEO Business Climate survey identifies high priority competitiveness challenges. The Regional Economic Prosperity project supported by ABAG and MTC adds to the discussion.

All of these efforts identify four critical components of regional economic competitiveness:

- A sufficient amount and variety of new housing
- Transportation investments to improve capacity and mobility
- A great K-12 education system across the region
- Land use, permitting and regulatory policies that support the coming growth consistent with a great environment

It is not within the scope of this paper to explore these issues further. But there are three important points for San Mateo County leaders to consider:

1. These policies do double duty as foundations for economic competitiveness and quality of life. Housing, transportation, K-12 education and land use policies meet the goals of residents and businesses simultaneously. They make San Mateo County a great place to live and work.

2. Many of these policies can be influenced by decisions of local leaders. They
These policies are in our control, unlike national economic, immigration or national infrastructure investment decisions where local leaders can have influence but not control.

3. Policies that support economic growth are the single most powerful tool for reducing poverty and unemployment. Advocates for reducing poverty and for job and wage growth are allies, not opponents in helping San Mateo County and the Peninsula to have more prosperity, broadly shared.

It is also true that there will be more workers in today’s low wage sectors in the future even as the economy grows. As a result, programs to improve job and wage growth will not, alone, reduce poverty to desired levels. Policies to improve the conditions for workers who remain in low wage jobs will be needed to help some of these workers and their families move out of poverty.

What San Mateo County Leaders Can Do

San Mateo County leaders can be active partners locally as well as advocates for state and federal policies that can support economic growth, help prepare students and current workers for career pathways and, in doing so, help reduce poverty. Local activities that can be done to improve workforce planning include:

1. Developing more efforts like the ALLIES project focusing on immigrant work readiness and upward mobility. The ALLIES projects is supported by a large DOL grant so funding for future efforts is an issue but so is getting business partners to step forward. San Mateo industries with a large number of immigrant workers who need help with English and other basic skills can look for education partners to develop programs similar to the ones described earlier in this report.

2. Expanding Linked Learning programs. San Mateo County partners can band together and apply for some of the $250 million state grant money. Companies and high schools can work together to broaden efforts to excite and inform at-risk high school students. Internships would be a plus.

3. Forming alumni mentor groups. All partners--WIBs, colleges, unions and community organizations--can form alumni groups of successful trainees to mentor and network with current program participants.
4. Developing more industry-based training partnerships. Companies (better if more than one) and colleges can work together to design curricula based on real industry needs—both for growth but also looking to replace retiring boomers.

5. Developing Peninsula wide collaborations. The San Mateo County Workforce Board and community colleges can think and act regionally in terms of services and course offerings. Some is going on now. This is important 1) because the county is in the middle of a regional labor market and 2) it is not efficient for everyone to do the same things.

6. Recognizing common interests. The economic development community and anti-poverty community need to see their interests are aligned. A rising tide does not lift all boats but without a rising tide (strong job growth) reducing poverty and unemployment is nearly impossible.