

# 2014 North County Prospects



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# INTRODUCTION

In a time of transition for North County, this inaugural edition of North County Prospects is meant to provide a clearer picture of where we are as a region so we can better discuss where we want to go. The theme of this year's North County Prospects, is understanding and connecting the world of work and employment with the education and infrastructure that is critical for our regional economic vitality.

This report is organized into three general components. The **economy** section looks at how jobs, industries and occupations have changed in North County since the great recession that began in 2008. This section also includes indicators on the region's key industry clusters and measures of **innovation** in the region. The **people** section examines North County's demographic makeup as well as its resident workforce. Lastly, the **place** section of the report examines the changing costs of commercial space and residential housing as well as a brief assessment of commute times and behavior.

## State of North County

An economic region with over 1.1 million people and 443 thousand jobs, San Diego's North County has a greater population than eight states including Delaware, Montana and South Dakota and more economic output<sup>1</sup> than eight states including Maine, Alaska and North Dakota. The North County region hosts several innovative export-oriented industry clusters, including Biotechnology & Biomedical Devices, Clean Technology, Sports & Active Lifestyle and Information & Communications Technology (ICT) -- all while being a net exporter of talent, providing high skilled workers to employers in neighboring communities. These regional assets provide some optimism for North County's economic future even though the region should also be aware that it was hit harder by the great recession and has recovered slower than San Diego County, California or the United States. These findings should be used to question how North County could build off of its assets, collaborate as a region, and move in a direction that offers economic health and opportunity for all of its residents and businesses.

Any analysis of North County's economy should acknowledge the importance of the surrounding regions upon its economic health. The remaining portion of San Diego County, Southwest Riverside and South Orange County as well as the entire greater Southern California economy, including across the border in Northwestern Baja all play a critical role in North County's current and future economic vitality. The information presented in this report is not meant to minimize North County's connectivity to the surrounding world, but instead to provide a deeper understanding of how North County is both similar and different from its regional neighbors.

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<sup>1</sup> As measured by Gross Domestic Product. Source: Bureau of Economic Analysis, 2012

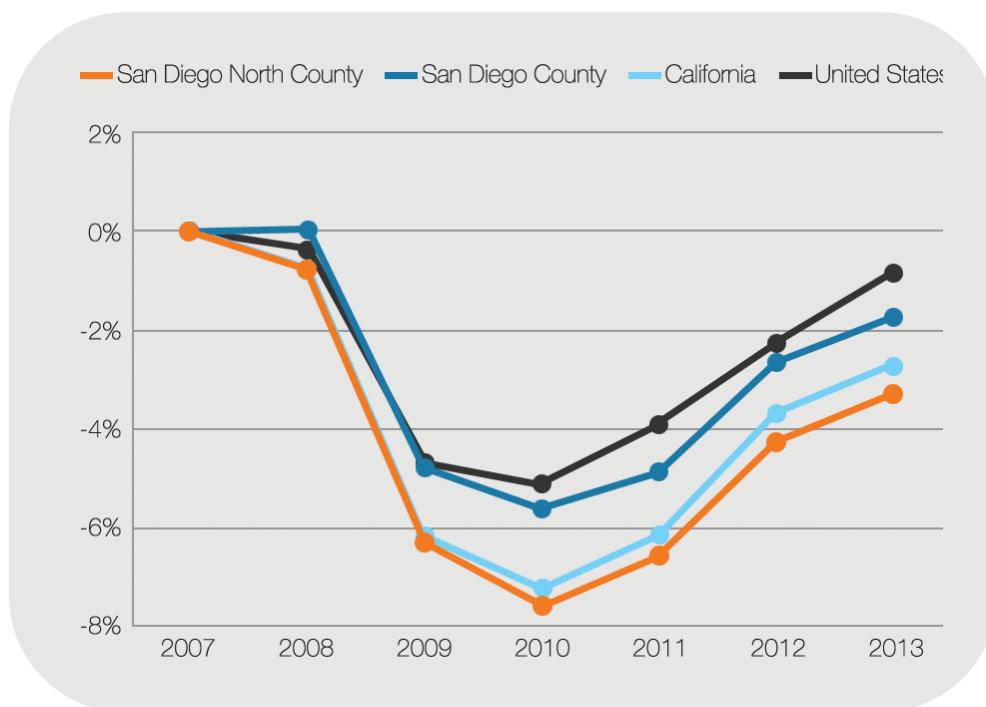
# Economy

Overall employment in North County was hit harder by the Great Recession than either San Diego County, California or the United States and the region has recovered slower. The figure below reflects the percentile change in overall employment by North County businesses.

Figure 2 (on the following page) reflects the overall employment level of North County residents. A different metric that reveals that the North County residents, who are working or looking for work, are more likely to be employed than California residents, who are working or looking for work. The labor force participation rate in North County is 65%, consistent with San Diego County and a little higher than California or the United States.

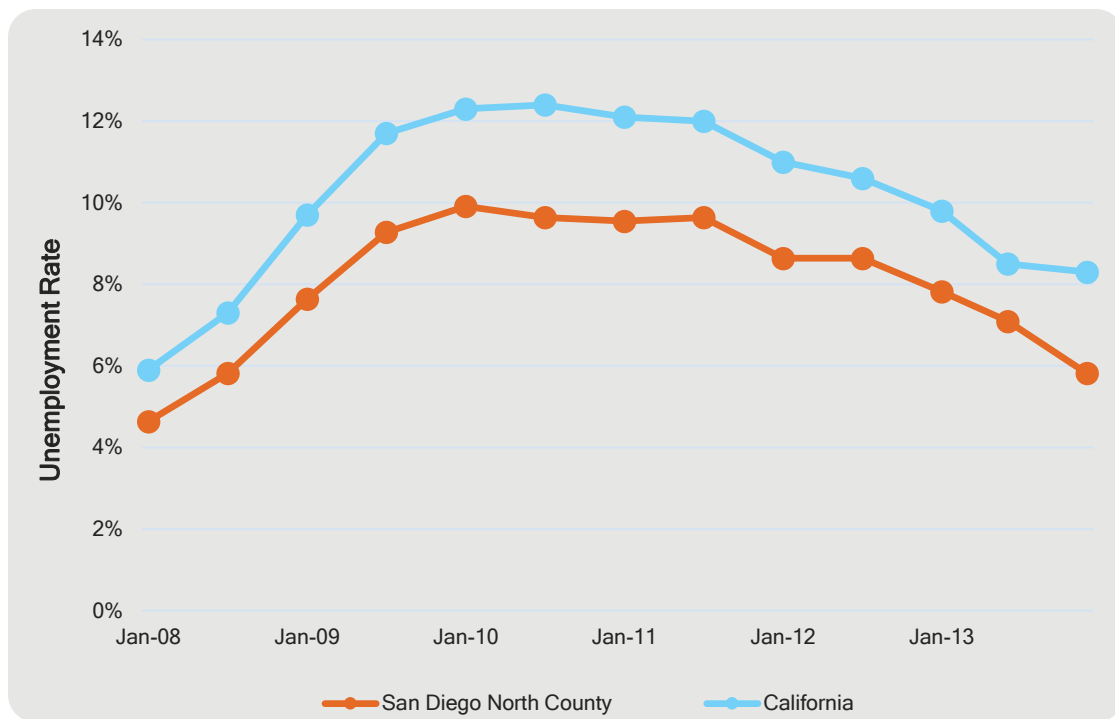
SDNC is  
still  
**3%**  
below 2007  
employment  
levels.

**Figure 1: Overall Percentage Change in Employment by Region from 2007 to 2013<sup>2</sup>**



<sup>2</sup> Source: EMSI 2013.4 Class of Worker, QCEW and Non-QCEW

**Figure 2: San Diego North County Historic Unemployment Rate (2008 to 2013)<sup>3</sup>**

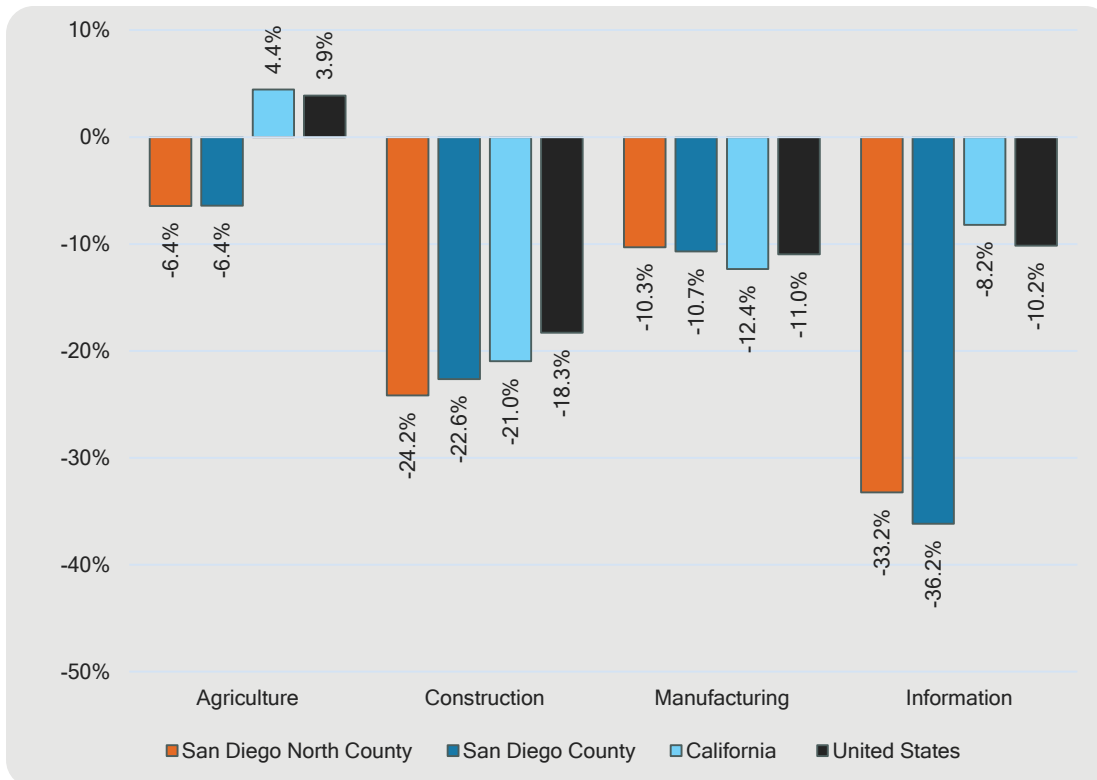


<sup>3</sup> Source: Employment Development Department (EDD), Weighted Based on Reported San Diego County Unemployment Data

## Regional Employment by Industry

Industries were impacted differently by the Great Recession and the slow recovery. Industries like construction have seen considerable contraction over the last six years and this is particularly true in North County (Figure 3). However, other industries like Healthcare and Professional, Scientific and Technical Services have experienced strong growth over that same time period.

**Figure 3: Industry Change in Employment by Region from 2007 to 2013<sup>4</sup>**

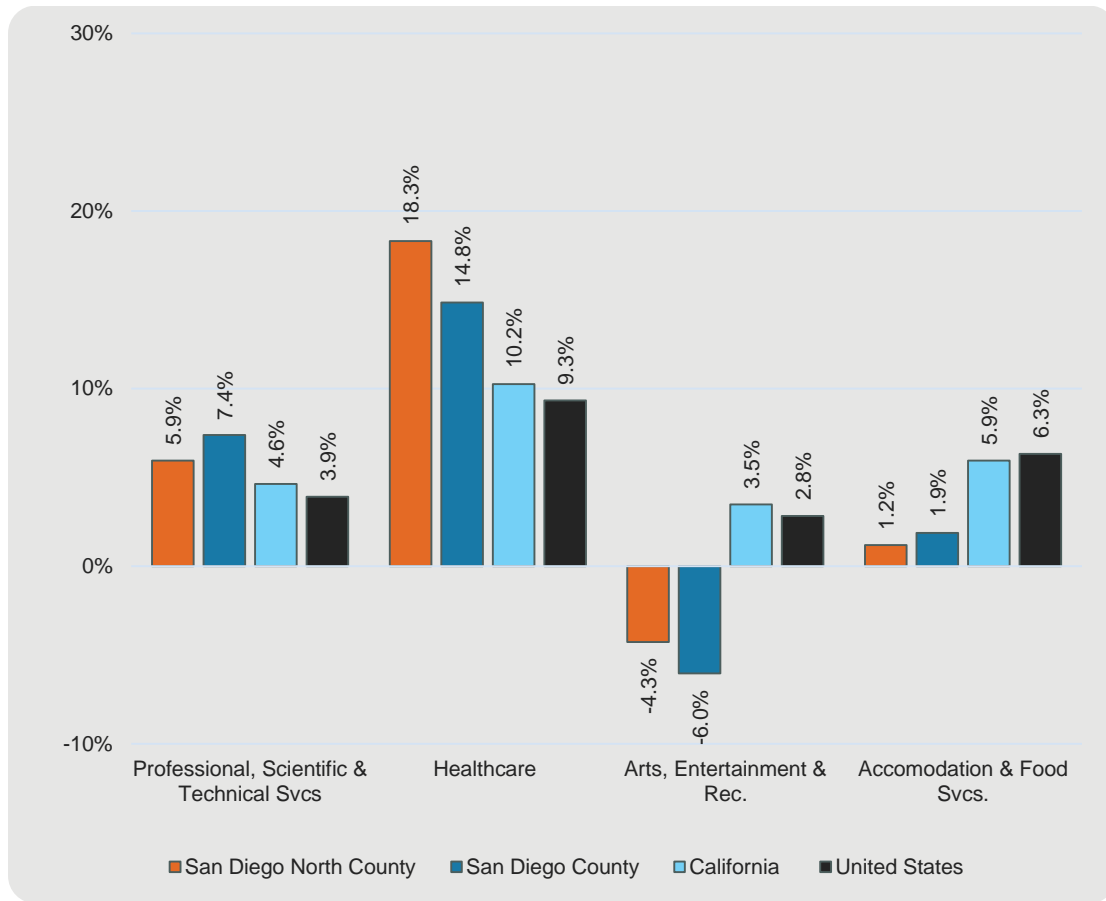


Construction employment dropped by almost a quarter in SDNC (2007 – 2013)

<sup>4</sup> Source: EMSI 2013.4 Class of Worker, QCEW and Non-QCEW



**Figure 4: Industry Change in Employment by Region from 2007 to 2013 (2)<sup>5</sup>**



<sup>5</sup> Source: EMSI 2013.4 Class of Worker, QCEW and Non-QCEW

## *San Diego North County Occupational Profile*

The unemployment rate, number of jobs created, number of people employed, and the size of the workforce, all these general statistics have some value when you are looking at North County's economy, but they also mask some critical information as well, starting with the reality **that not all jobs are equal**. A part-time job that pays minimum-wage with limited training and on-the-job skill development is considerably less valuable than a high-paying, full-time position with full benefits that continually develops and trains an individual for increasing levels of responsibility.

A recent study by David Autor examined changes in the nation's occupational profile. Autor provided an in-depth examination of the quality and quantity of the jobs that employers have demanded over the last 30 years. In his analysis, Autor developed an occupational segmentation that BW Research has also used in regional occupational analyses. This occupational segmentation technique delineates all occupations into one of three tiers. The occupational tiers are broadly defined as follows:

Tier 1 Occupations include managers (Chief Executives, Financial Managers, and Sales Managers), professional positions (Lawyers, Accountants, and Physicians) and highly-skilled technical occupations, such as scientists, computer programmers, and engineers. These occupations are typically the highest-paying, highest-skilled occupations in the economy. In 2013, the average wage for Tier 1 occupations in North County was \$42.60 an hour or approximately \$88,600 a year (assuming a 40 hour work week for the entire year).

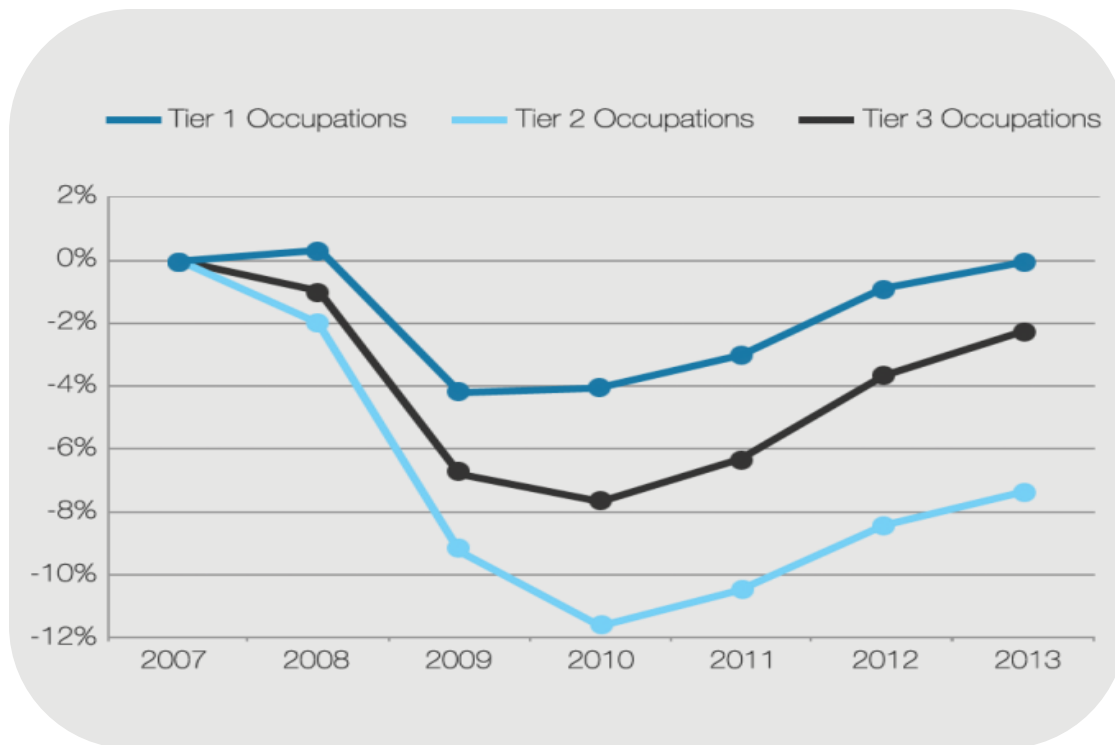
Tier 2 Occupations include sales positions (Sales Representatives), teachers, and librarians, office and administrative positions (Accounting Clerks and Secretaries), and manufacturing, operations, and production positions (Assemblers, Electricians, and Machinists). These occupations have historically provided the majority of employment opportunities and could be referred to as middle-wage, middle-skill positions. In 2013, the average wage for Tier 2 occupations in North County was \$20.96 an hour or approximately \$43,600 a year (assuming a 40 hour work week for the entire year).

Tier 3 Occupations include protective services (Security Guards), food service and retail positions (Waiters, Cooks, and Cashiers), building and grounds cleaning positions (Janitors), and personal care positions (Home Health Aides and Child Care Workers). These occupations typically represent lower-skilled service positions with lower wages that require little formal training and/or education. In 2013, the average wage for Tier 3 occupations in North County was \$11.31 an hour or approximately \$23,500 a year (assuming a 40 hour work week for the entire year).

Tier 1  
occupations  
have  
experienced  
the least  
decline from  
the Great  
Recession  
(2007 to  
2013) in  
SDNC

The figure below shows the percentage change in employment for each of the occupational tiers in North County, from 2007 to 2013. As the chart reveals, Tier 1 occupations saw the smallest decline in proportional employment over the six year period and have recovered back to 2007 levels. Tier 2 occupations experienced the greatest decline, and are still almost eight percent below where they were in 2007.

**Figure 5: Percentage Change in North County Occupational Tier Employment from 2007 to 2013<sup>6</sup>**

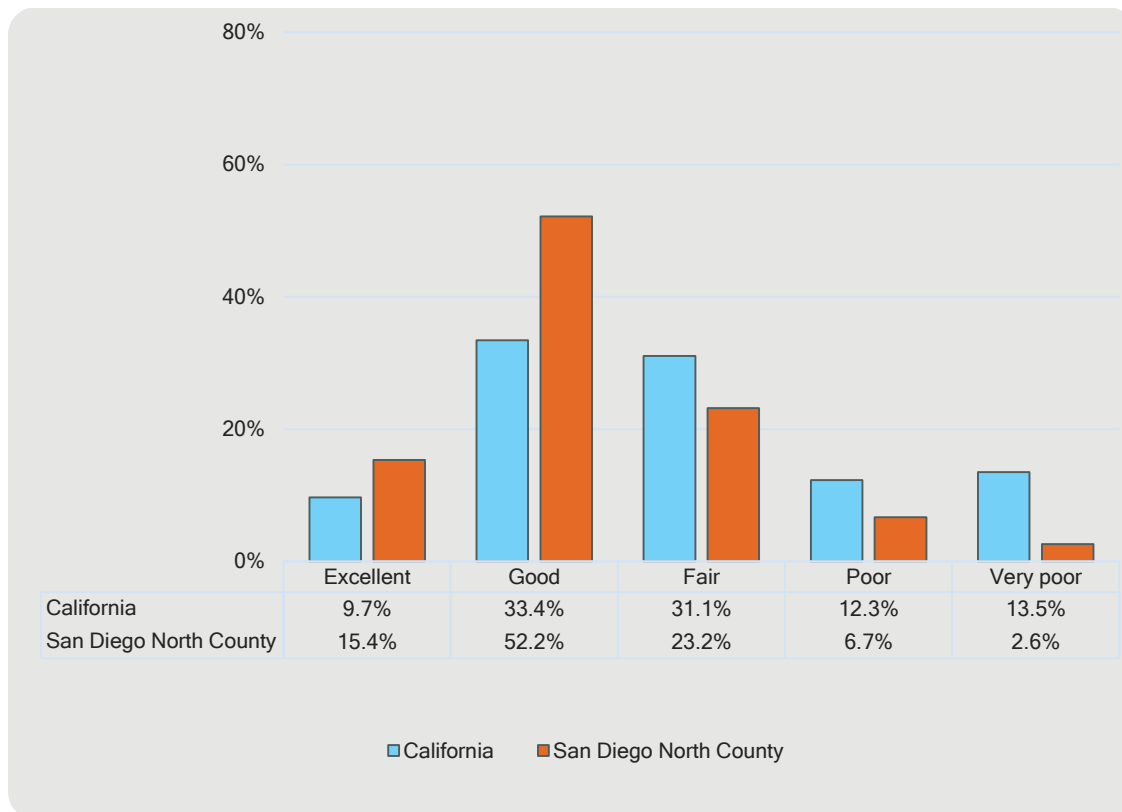


<sup>6</sup> Source: EMSI 2013.4 Class of Worker, QCEW and Non-QCEW

## Business Climate

As part of the research for North County Prospects, a sample of 349 North County businesses were surveyed to assess their perceptions of the business climate. The sampling plan for the survey was implemented to ensure a diverse and representative sample of businesses by size<sup>7</sup> and industry within North County. As the chart below reveals, North County businesses were more likely to rate the region as an excellent or good place to do business (68%) compared to California (43%). Newer firms that had been located in North County for five years or less were more likely to rate the region as excellent or good (75%) than those businesses that had been in the region for more than five years. From an industry cluster perspective, Information and Communications Technology (ICT) firms were more likely to rate North County as an excellent (35%) place to do business, compared to Building and Design firms (3%).

**Figure 6: Rating as a Place to do Business by Region (2014 Survey Data)<sup>8</sup>**



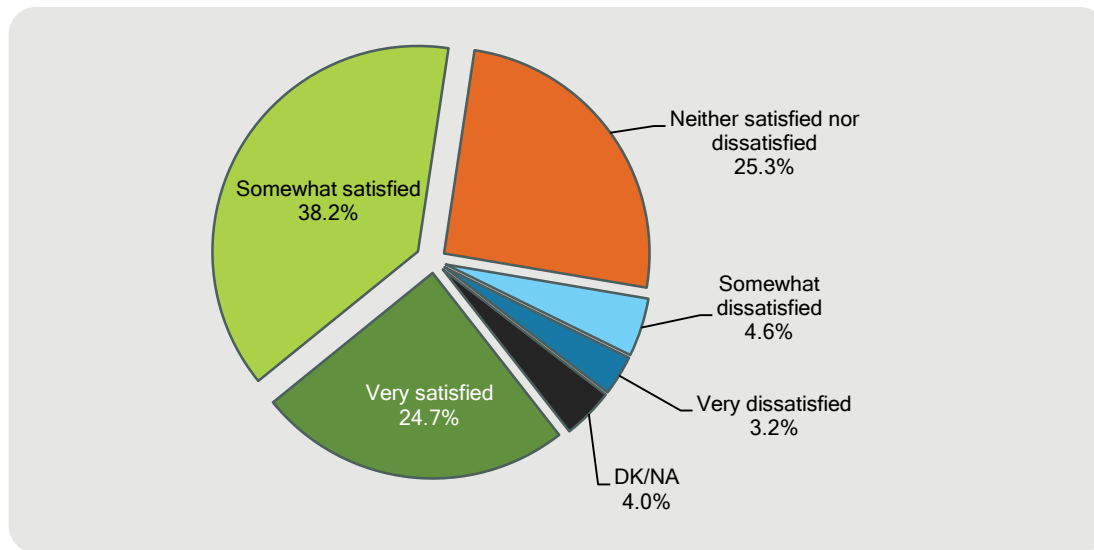
<sup>7</sup> Business size was defined by the number of employees.

<sup>8</sup> Source: BW Research Survey of North County Businesses (n=349, February 2014), w/ DK/NA Factored Out of Responses

**2/3**  
of SDNC  
businesses  
rate the  
region as  
an  
Excellent  
or Good  
place to  
do  
business

The survey also asked North County businesses to assess their satisfaction with the business climate in the region. Approximately, 63 percent of businesses were either very or somewhat satisfied with the region's business climate and only eight percent indicated some level of dissatisfaction (somewhat or very dissatisfied). The remaining 29 percent indicated neither satisfied or dissatisfied (25%) or did not offer an opinion. Larger firms, with 50 or more employees, expressed a higher level of satisfaction (76%) with the regional business climate than their smaller business counterparts. From an industry perspective, healthcare firms were the most likely to be satisfied (78%) with the region's business climate

**Figure 7: Satisfaction with North County's Business Climate (2014 Survey Data)<sup>9</sup>**

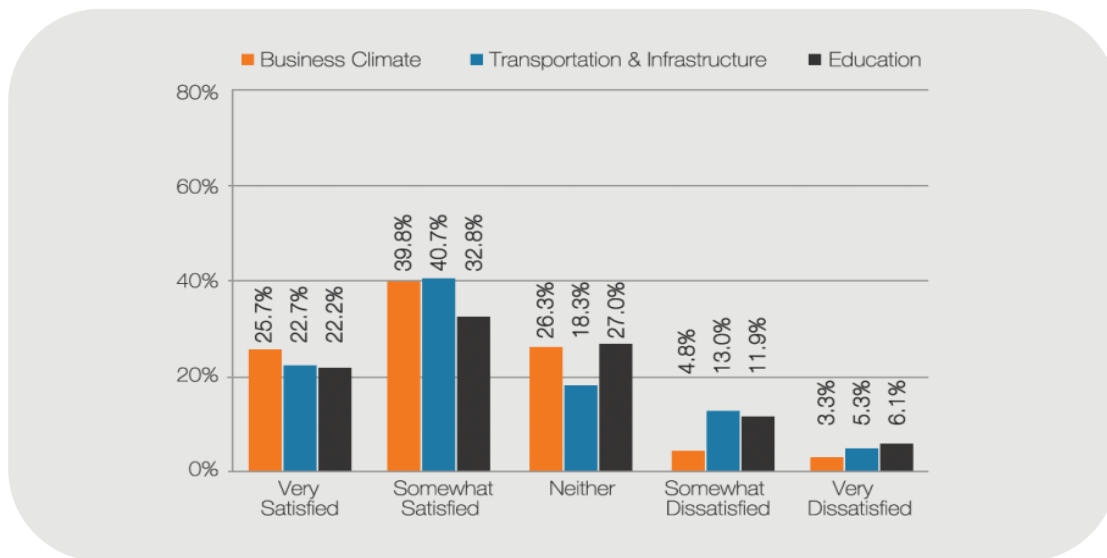


<sup>9</sup> Source: BW Research Survey of North County Businesses (n=349, February 2014)

North County businesses were asked to rate their level of satisfaction with North County's business climate<sup>10</sup>, transportation & infrastructure and education system. Over 60 percent of North County businesses were satisfied with the region's business climate and transportation & infrastructure, and over half were satisfied with the region's educational system. Less than 10 percent of businesses were dissatisfied with the region's business climate, while between 15 and 20 percent expressed dissatisfaction with the region's transportation & infrastructure and educational system. Some of the key findings from an analysis of key sub-groups include;

- Technology companies (ICT, Biotech and Biomedical, Sports and Active Lifestyle, and Clean Tech) were the most dissatisfied with the educational system in the North County (25% overall dissatisfaction) when compared to other industry clusters.
- Building & Design firms were more dissatisfied with transportation & infrastructure in North County (22% overall dissatisfaction) when compared to the typical North County business.
- Firms that are developing new technologies are more likely to be very satisfied with the region's business climate (44% very satisfied) than those firms that are not engaged in the use or development of new technologies (21% very satisfied).

**Figure 8: Satisfaction with Business Attributes (2014 Survey Data)<sup>11</sup>**

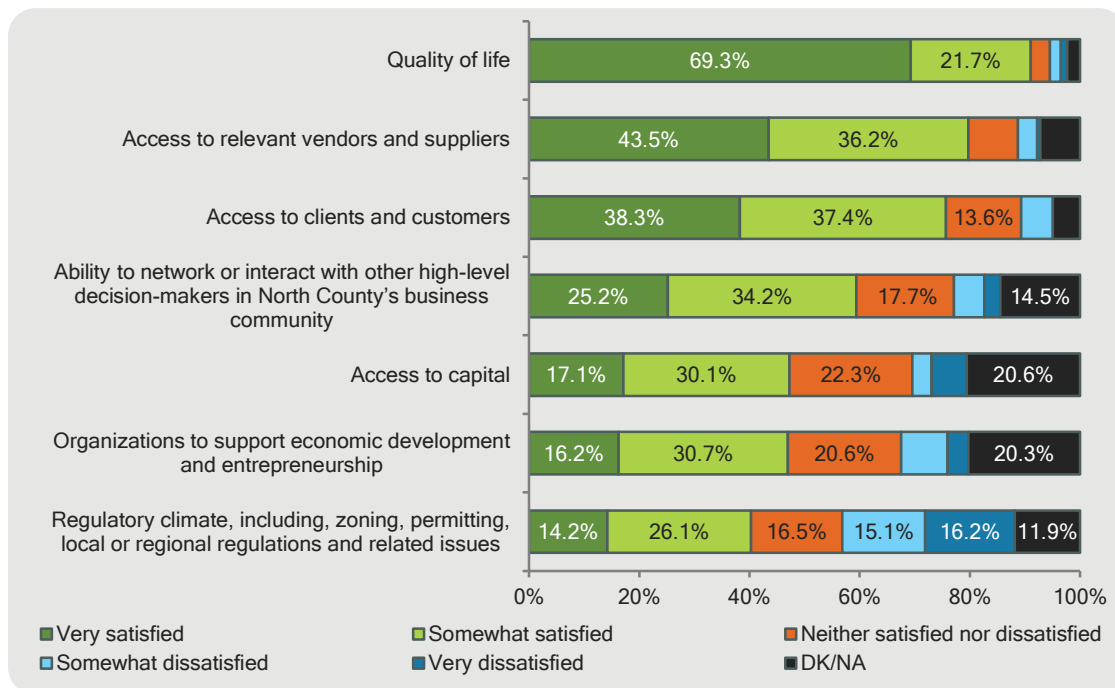


<sup>10</sup> The Business Climate figures factor out DK/NA responses that is why they are not equal to Figure 7

<sup>11</sup> Source: BW Research Survey of North County Businesses (n=349, February 2014), w/ DK/NA Factored Out for Responses

North County businesses were asked about their level of satisfaction with different attributes of the region's business climate and were most satisfied with the quality of life. Access to relevant vendors and suppliers as well as clients and customers also received relatively high levels of satisfaction. Not surprisingly, the regulatory climate received the lowest level of satisfaction, but it is worth noting access to capital and organizations to support economic development received less than 50 percent satisfaction from North County businesses.

**Figure 9: Satisfaction with Issues Related to North County's Business Climate (2014 Survey Data)<sup>12</sup>**

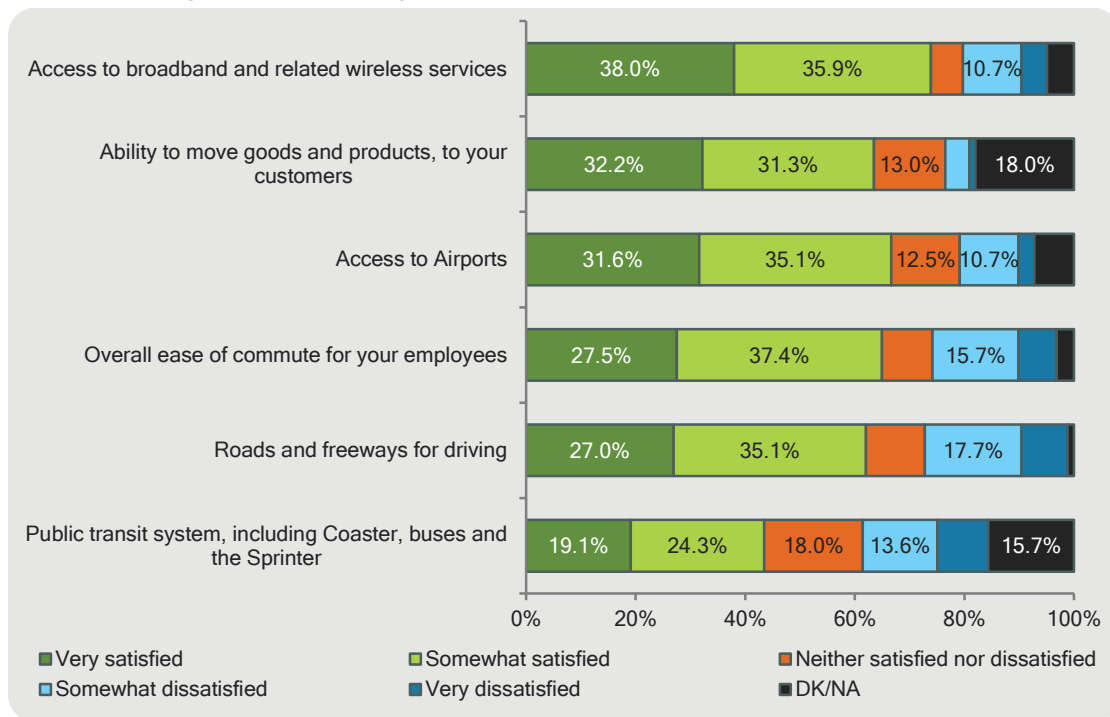


**69%**  
of SDNC  
businesses  
are **very**  
**satisfied**  
w/ the  
region's  
QoL

<sup>12</sup> Source: BW Research Survey of North County Businesses (n=349, February 2014)

North County businesses were asked about their level of satisfaction with different attributes of the region's transportation and infrastructure. North County businesses were most satisfied with the region's access to broadband and related wireless services, and also indicated relatively high levels of satisfaction with the ability to move goods and products and access to airports.

**Figure 10: Satisfaction with Issues and Attributes of North County's Transportation and Infrastructure System (2014 Survey Data)<sup>13</sup>**

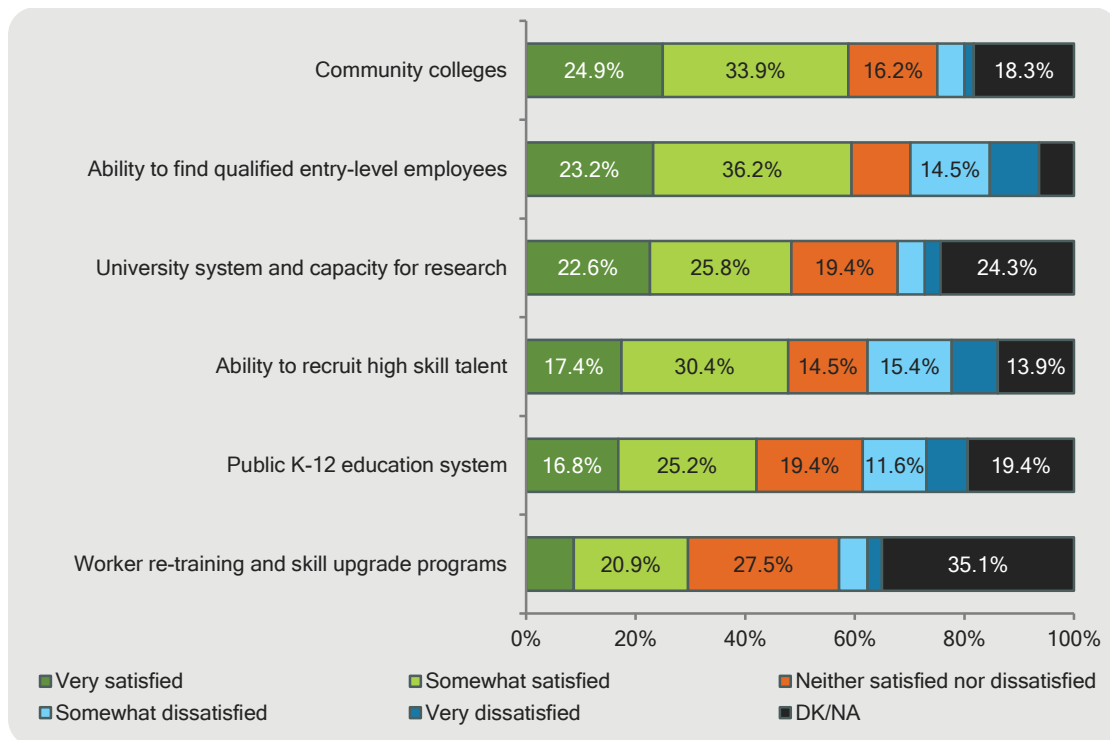


<sup>13</sup> Source: BW Research Survey of North County Businesses (n=349, February 2014)



North County businesses were asked about their level of satisfaction with different attributes of the region's education, training and available workforce. Over half of North County businesses were satisfied with the region's community colleges and the ability to find qualified entry-level employees. It is also worth noting that almost a quarter of North County businesses were dissatisfied with their ability to recruit high skill talent (24% dissatisfaction) or find qualified entry level employees (24% dissatisfaction).

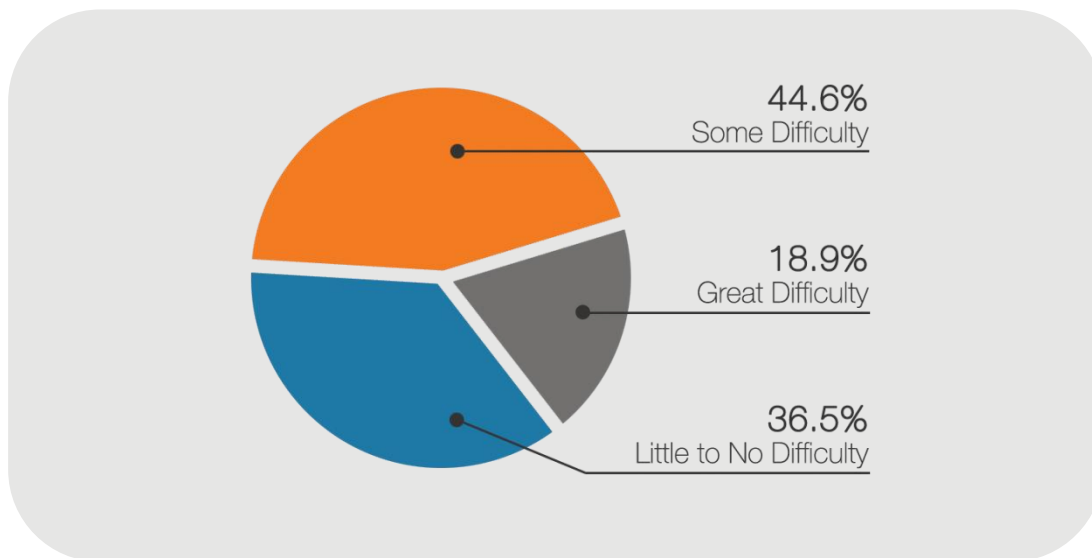
**Figure 11: Satisfaction with Issues and Attributes of North County's Education and Training System and the Available Workforce (2014 Survey Data)<sup>14</sup>**



<sup>14</sup> Source: BW Research Survey of North County Businesses (n=349, February 2014)

Lastly, North County businesses were asked about the difficulty of finding qualified job applicants. In a relatively loose labor market with high unemployment, over 60 percent of businesses that provided an opinion on this question, indicated at least some difficulty finding qualified job applicants. Interestingly enough, no single industry, cluster or type of employer had considerably higher difficulty of finding qualified job applicants; the difficulty finding qualified job applicants was relatively evenly spread across the business community.

**Figure 12: Difficulty Finding Qualified Applicants (2014 Survey Data)<sup>15</sup>**



Almost  
1 in 5  
SDNC  
businesses  
had great  
difficulty  
finding  
qualified  
job  
applicants

<sup>15</sup> Source: BW Research Survey of North County Businesses (n=349, February 2014), w/ DK/NA Factored Out for Responses

## *Introduction to Industry Clusters*

San Diego North Economic Development Council (SDNEDC) has recently begun to examine the industry clusters in North County.

**What are Industry Clusters?** Michael Porter, a Harvard economist and pioneer of industry cluster research, defined the cluster as a geographic concentration of inter-connected companies and institutions working in a common industry. This definition has been expanded over the years to account for employers in shared technologies, supply chains, services, and/or customers whose competition and/or collaboration create opportunities for new business creation, increased regional wealth, and new employment.

An emphasis on industry clusters in a given region has several advantages; they allow us to move beyond the general industry assessment to identify regional economic drivers, shared resources that are needed (including human resources), and a better understanding of the markets in which employers compete and cooperate. Analyses of industry clusters are valuable tools to understanding how the regional economy is segmented in terms of differing growth expectations, workforce needs, and infrastructure requirements.

## *North County's Industry Clusters*

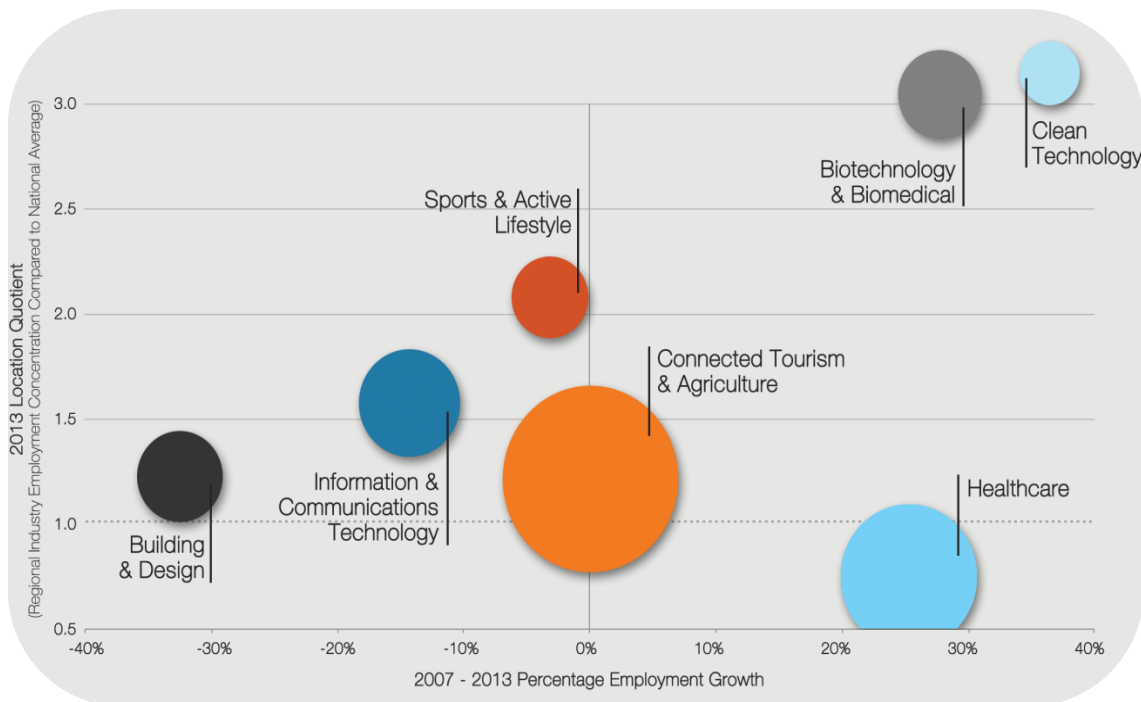
Here is a brief description of the industry clusters that were examined for the North County prospects. All of the industry clusters examined are export-oriented or traded clusters except for Healthcare, meaning they are able to sell their products or services to a market beyond just the residents of North County.

- Biotechnology and Biomedical Devices is a particularly important cluster for North County accounting for the research, development and production of medical equipment and pharmaceuticals.
- Building & Design involves the design and building of residential and non-residential buildings and the interior design of buildings. This industry is actively involved in energy efficiency, building retrofits, and the use of sustainable building materials.
- Clean Technology consists of industries involved in the research and production of non-fossil fuel based energy and industries that work to improve environmental sustainability and meet environmental regulations. This industry cluster includes environmental consulting services and related manufacturing and consulting services.
- Connected Tourism, & Agriculture is one of the larger industry clusters in North County with over 55,000 jobs. The industry cluster is a mix of agriculture, food production and service industries that draw tourists into the region. The cluster includes breweries, amusement services, gambling, and recreation industries.

- Healthcare is the diagnosis, treatment, and prevention of disease, illness, injury, and other physical and mental impairments. Healthcare is delivered by a wide range of practitioners in medicine, chiropractic, dentistry, nursing, pharmacy, etc. This industry cluster includes ambulatory care services, hospitals, and residential care facilities.
- Information & Communications Technologies (ICT) is a diverse group of technology industries that focus on the development and production of new products and services in telecommunications and information technology. Some of the sectors in this cluster include telecommunications carriers, software publishers, cyber security developers and computer and electronic product manufacturing.
- Sports & Active Lifestyle includes those firms that develop and manufacture sports and related equipment and apparel, as well as those firms that sell and distribute related sports and recreational products and services.

The figure below shows the relative size of employment in each industry cluster within the region (by the size of the sphere), the relative industry concentration within the region (2013 Location Quotient on the vertical axis), and the overall employment growth or decline from 2007 to 2013. As shown by the chart below Clean Technology, Biotechnology & Biomedical Devices and Healthcare has all experienced considerable growth in the region, while Building & Design and to a lesser degree ICT saw employment decline over the same time period.

**Figure 13: San Diego North County Industry Clusters by Concentration & Growth from 2007 to 2013<sup>16</sup>**



<sup>16</sup> Source: EMSI 2013.4 Class of Worker, QCEW and Non-QCEW

Biotech  
&  
Biomed  
have  
grown by  
over  
25% in  
SDNC  
(2007 to  
2013)

The table below shows current employment for each of the industry clusters in North County. Given the average earnings per job, it should not be surprising that Connected Tourism & Agriculture largely employ Tier 3 occupations, while industry clusters like Biotechnology & Biomedical Devices as well as ICT firms largely employ Tier 1 occupations.

**Table 1: Industry Cluster Employment and Earnings (2013)<sup>17</sup>**

Industry Cluster	Employment	Average Earnings Per Job
Connected Tourism & Agriculture	55,929	\$26,066
Healthcare	34,271	\$67,125
Information & Communications Technology	18,630	\$117,738
Building & Design	13,497	\$85,145
Biotechnology & Biomedical	12,457	\$118,592
Sports & Active Lifestyle	10,666	\$49,453
Clean Technology	6,624	\$92,089

<sup>17</sup> Source: EMSI 2013.4 Class of Worker, QCEW and Non-QCEW

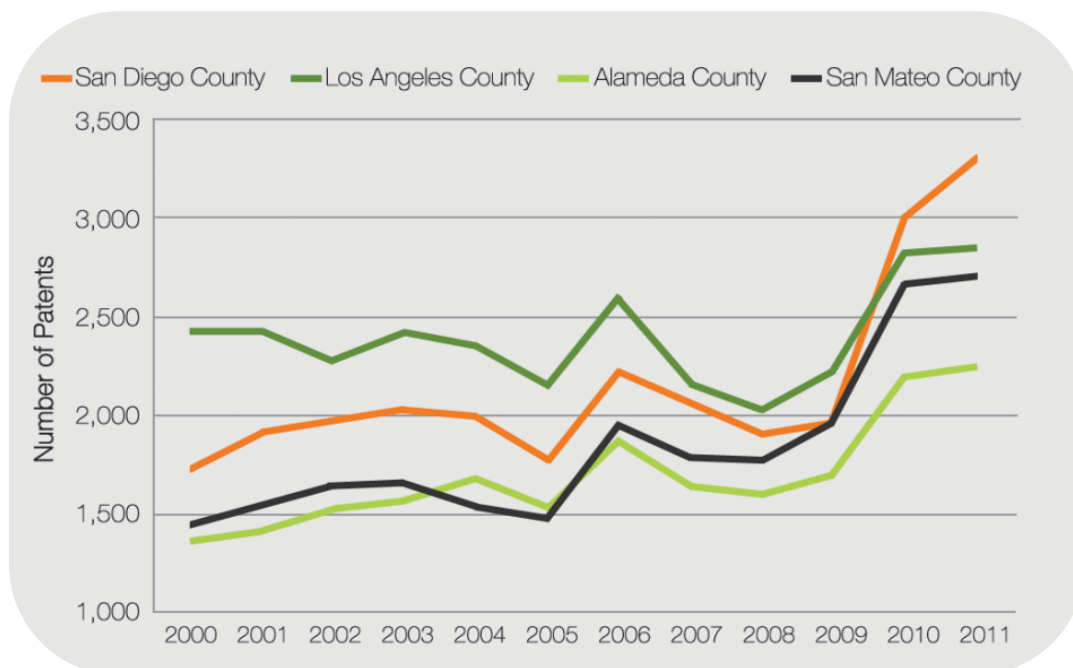
# Innovation

Innovation and the ability to take new ideas and create new products and services, is a critical ingredient for many of North County's industry clusters. Establishing itself as an incubator of ideas and innovation will not only help the North County attract new businesses and investment, but also to retain current businesses. The following section highlights indicators of innovation through patents and investment in the region. Patents are a measure of the generation of new ideas, while investments measure confidence and value in the area's businesses and entrepreneurs.

## Patents

San Diego County was home to 3,293 approved patents in 2011, higher than either Los Angeles, San Mateo or Alameda County. Silicon Valley (which includes San Mateo County) by comparison numbered 13,565 in the same year. While San Diego County is far behind Silicon Valley, prospects look good, as growth for patent registrations for the three year period between 2008 and 2011 was a staggering 73 percent.

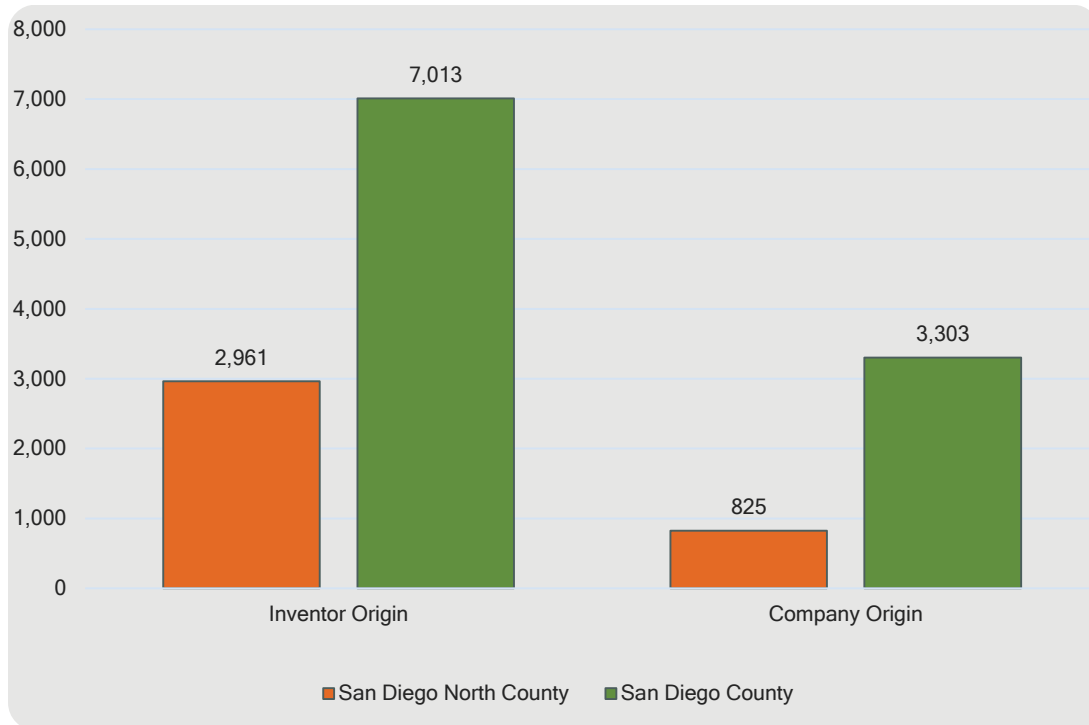
**Figure 14: Approved Patents by California County from 2000 to 2011<sup>18</sup>**



<sup>18</sup> Source: U.S. State Patenting Breakout by Regional Component; Count of 2000 - 2011 Utility Patent Grants, retrieved from:  
[http://www.uspto.gov/web/offices/ac/ido/oeip/taf/countyall/usa\\_county\\_gd.htm](http://www.uspto.gov/web/offices/ac/ido/oeip/taf/countyall/usa_county_gd.htm) &  
<http://patft.uspto.gov/netathtml/PTO/search-bool.html>

Identifying patents by origin at the regional level<sup>19</sup>, the North County represented over 42 percent of patents by inventor origin countywide in 2012, and a quarter of patents by company origin (25%). The proportion of patents by inventor origin in the North County is telling, as the region only contributes 35 percent of San Diego County's overall population and 31 percent of the total jobs in the county. The North County contributes a sizeable portion of the county's patents, indicating a healthy level of innovation in the region.

**Figure 15: Patent Origin by Regional Totals (2012)<sup>20</sup>**



**42%**  
of SD  
County  
2012  
patents  
have  
inventors  
living in  
North  
County

<sup>19</sup> Defined at the city level for San Diego North County and San Diego County.

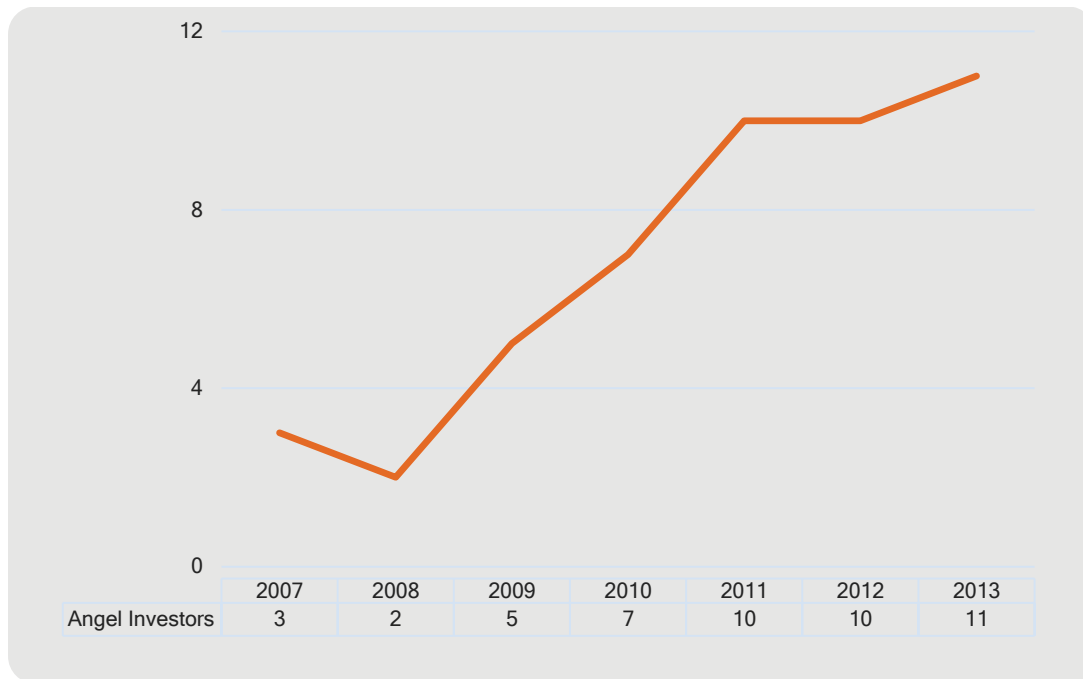
<sup>20</sup> Source: U.S. State Patenting Breakout by Regional Component; Count of 2012 Utility Patent Grants, retrieved from:

[http://www.uspto.gov/web/offices/ac/ido/oeip/taf/countyall/usa\\_county\\_gd.htm](http://www.uspto.gov/web/offices/ac/ido/oeip/taf/countyall/usa_county_gd.htm) &  
<http://patft.uspto.gov/netathtml/PTO/search-bool.html>

## Investment

Angel investment has steadily increased in the North County region since 2008, likely demonstrating increased confidence by investors in the region's economy and business potential.

**Figure 16: Angel Investors in San Diego North County from 2007 to 2013<sup>21</sup>**



<sup>21</sup> Source: CBI Insights' Deal Search (for Encinitas, Solana Beach, San Marcos, Carlsbad, Escondido, Vista, Poway, Del Mar and Oceanside), retrieved from: [https://www.cbinsights.com/deal\\_search.php](https://www.cbinsights.com/deal_search.php)



# People

## Demographics

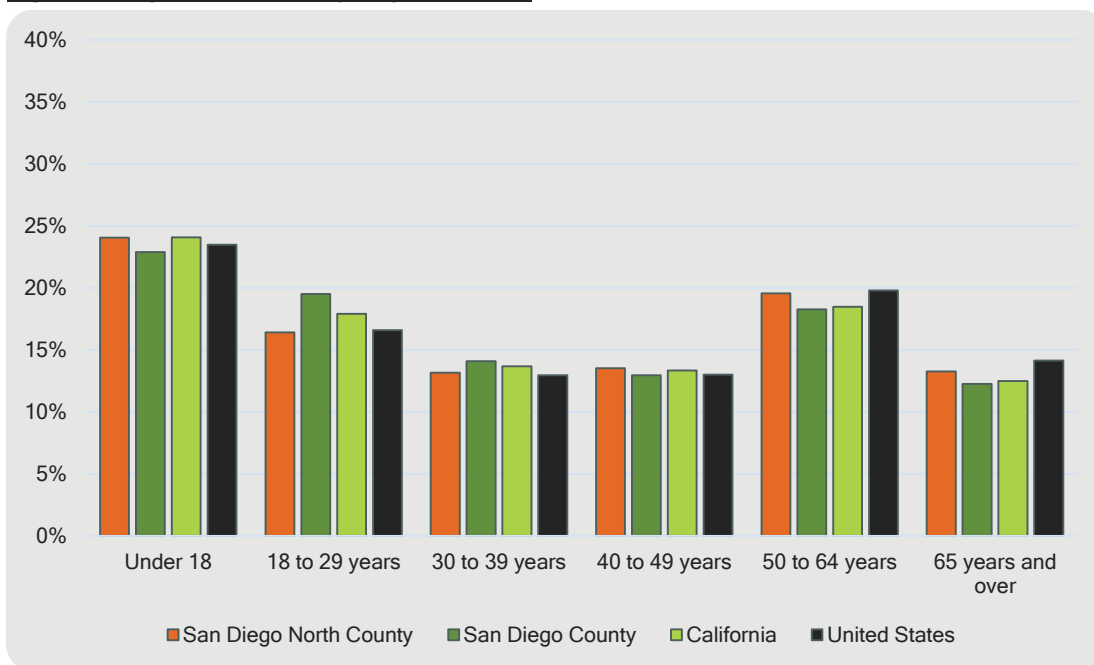
The North County is home to approximately 1,137,400 people, which is about 35 percent of the overall population in San Diego County. The region has a higher proportion of younger residents (under 18 years of old) and older residents (50 years and older) than San Diego County as a whole.

The North County also boasts a higher educated population proportionally when compared to San Diego County as a whole, the state, and the country. Almost two of every five individuals (25 years of age and older) in North County possesses a bachelor's degree or higher (38%), which indicates a vibrant talent pool for businesses in the region as well as those just beyond its borders (overall San Diego County and Southern California).

Higher education often correlates with higher incomes, and this is also true in the North County. Almost one in five households in 2012 had an annual income of \$150,000 or more (18%), which is a higher proportion than San Diego County (13%) and California (13%), and double that of the United States as a whole (9%). Just as impressive, nearly half (48%) of all households in North County accumulated at least \$75,000 in yearly income (San Diego County: 40%; California: 40%; United States: 33%).

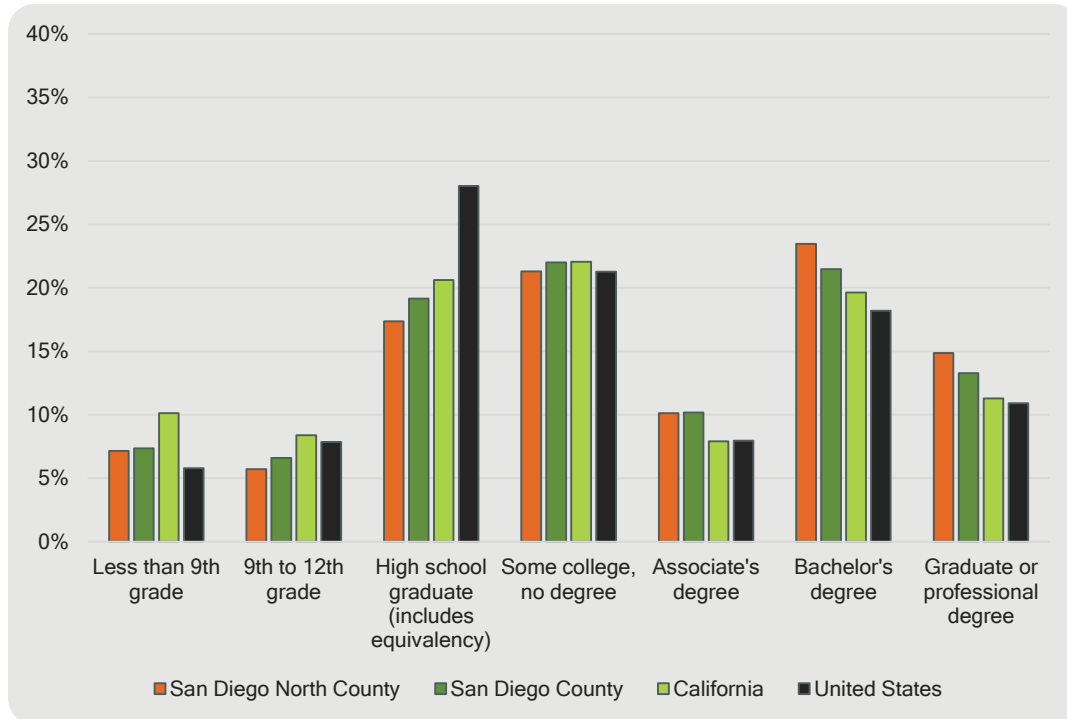
1.13  
million  
people  
live in  
North  
County

**Figure 17: Age Distribution by Region (2013)<sup>22</sup>**



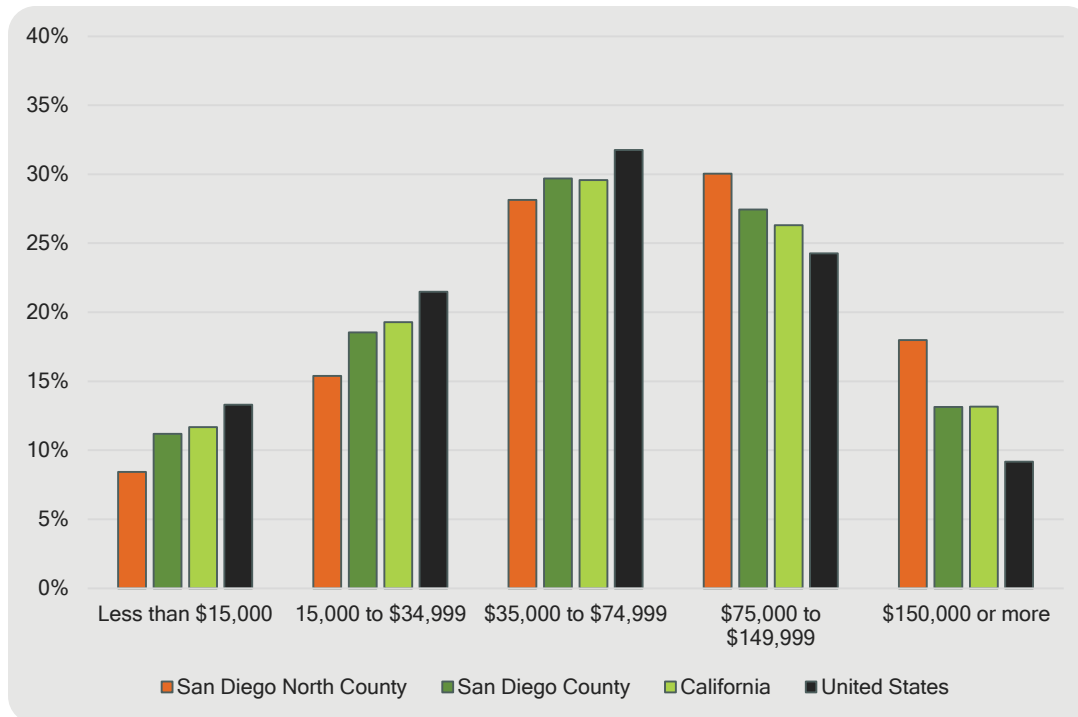
<sup>22</sup> Source: EMSI 2013.4 Class of Worker, QCEW and Non-QCEW

**Figure 18: Educational Attainment for the Population 25 Years and Older by Region (2012)<sup>23</sup>**



**38%**  
with a  
4-year  
degree  
or higher

**Figure 19: Household Income Distribution by Region (2012)<sup>24</sup>**

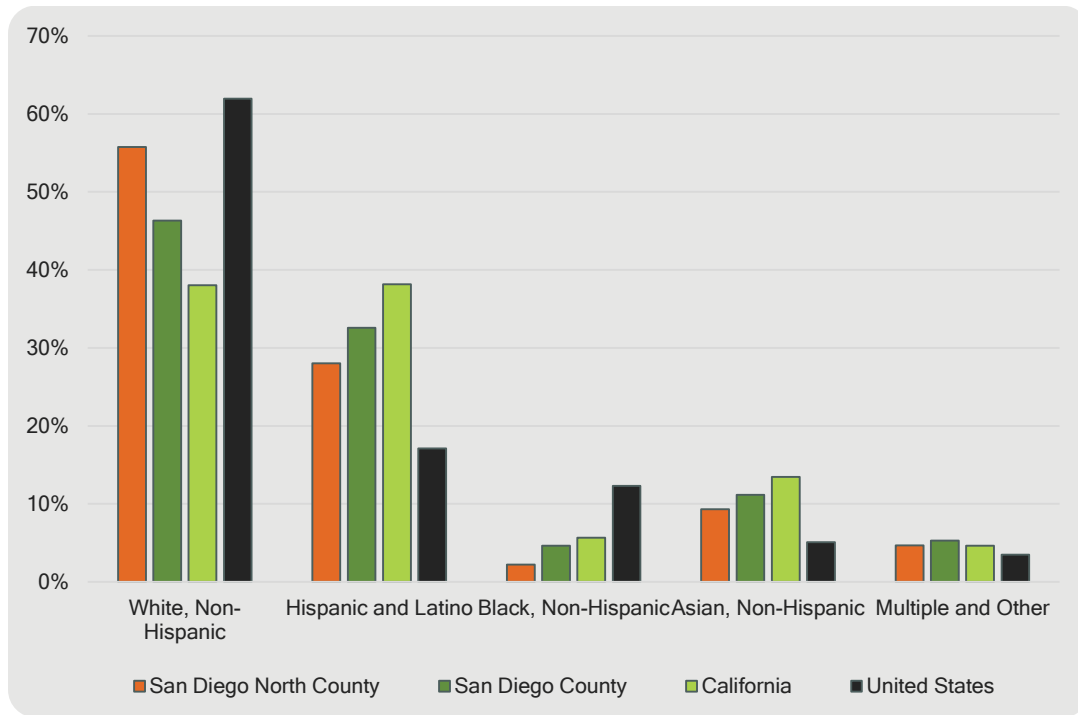


**18%**  
with  
income  
of \$150k  
or higher

<sup>23</sup> American Community Survey (ACS) 2012 5-year estimates

<sup>24</sup> Source: American Community Survey (ACS) 2012 5-year estimates

**Figure 20: Ethnicity by Region (2013)<sup>25</sup>**



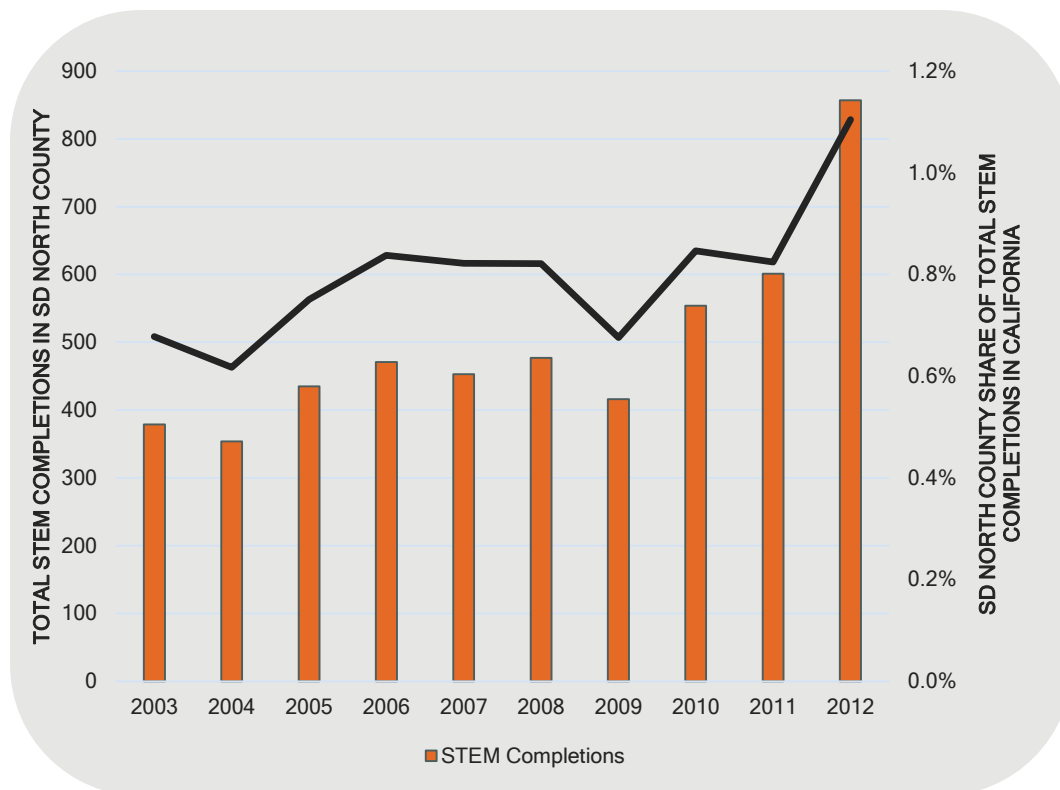
<sup>25</sup> Source: EMSI 2013.4 Class of Worker, QCEW and Non-QCEW

## Education

The number of STEM completions at the North County's postsecondary institutions (California State University San Marcos, MiraCosta College, and Palomar College) rose steadily between 2009 and 2012. Perhaps more impressive, total STEM completions in 2012 were more than double the completions in either 2003 or 2004.

The North County's share of total STEM completions in California has increased steadily since 2009. The region was home to over one percent of all California STEM completions in 2012. While not a huge proportion in the state, the overall completion numbers and the steady increase over the last few years in the region is promising and bodes well for the competitive attributes of the North County workforce.

**Figure 21: Total STEM Completions (2 or 4 Year Degrees) from 2003 to 2012<sup>26</sup>**



<sup>26</sup> Source: Integrated Postsecondary Education Data Systems (IPEDS) CIP Identified Completions

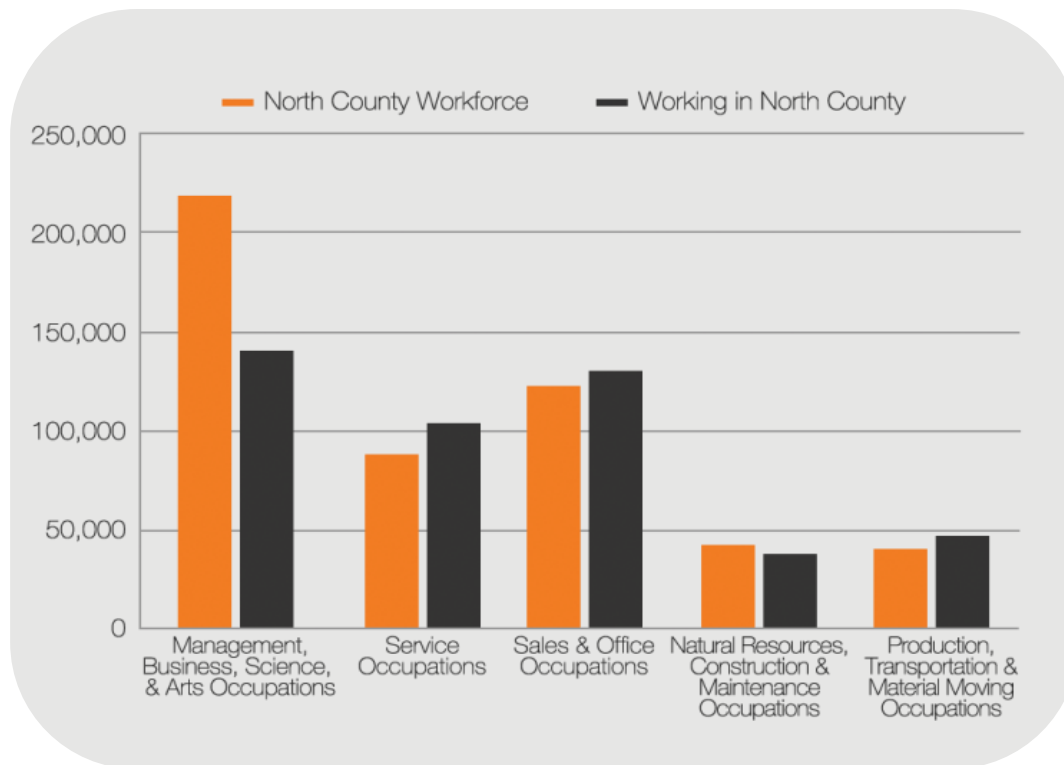
1.1%  
of CA  
STEM  
degrees  
are  
earned  
in North  
County

## Workforce

There are several ways of examining how the region's residents are prepared to work for regional employers. One way is to compare how residents of the North County in the labor force (identified as the resident workforce) and those working or employed in the North County (regardless of where they live) look in terms of the general occupational categories and skills that they provide.

As the figure below reveals, the North County has a larger resident workforce than the total amount of workers employed in the region (resident workforce: 511,000; employed in the region: 443,000). The largest gaps between the resident workforce and those employed in the region are found in management, business, science, and arts occupations and service occupations. This signifies that the North County is generally an exporter of higher-skilled workers, such as those in management, business, science, and arts occupations, and an importer of lower-skilled workers, such as those in service and production, transportation, and material moving occupations.

**Figure 22: Resident Workforce vs. Working in the Region by Occupations<sup>27</sup>**



<sup>27</sup> Source: American Community Survey (ACS) 2012 5-year estimates & EMSI 2013.4 Class of Worker, QCEW and Non-QCEW

Overall,  
North  
County  
**exports**  
over  
**70k**  
Tier 1 -  
professionals  
to  
neighboring  
regions

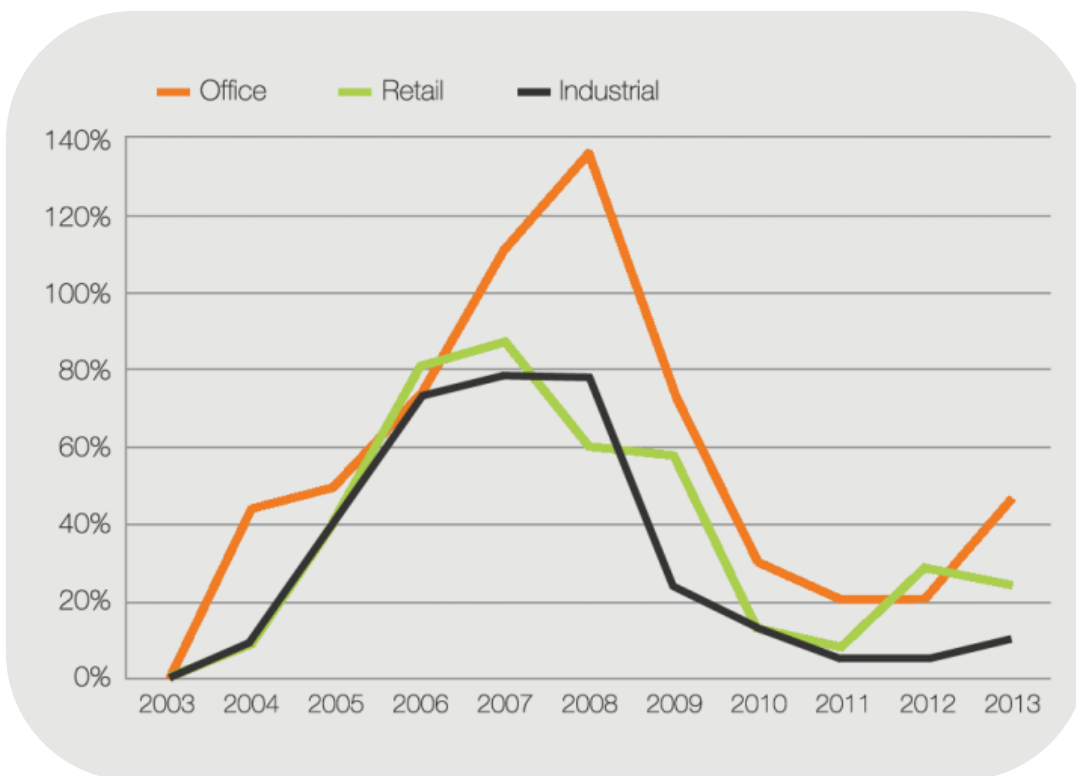
# Place

San Diego's North County is an expansive stretch of land that encompasses the area as far south as the 56 freeway, from Del Mar to Poway, to as far north as Camp Pendleton and Borrego Springs. One way to assess the quality of life in a region and the general strength of the economy is to review real estate prices and housing costs. This section also examines commute patterns for the region's workforce.

## *Commercial Real Estate*

The figure below compares real estate costs for industrial, office and retail space for the North County from 2003 to 2013. While costs for commercial real estate hit highs (relative to 2003) just before and during the great recession, they plummeted to near 2003 levels, finally reaching their lowest levels in 2011. The uptick in prices for all commercial space since 2011 is a clear indicator that the economy is recovering in the North County, albeit slower than San Diego County, California and the United States as a whole (as presented earlier in the report). Nevertheless, this is a promising sign for the overall economy in the region.

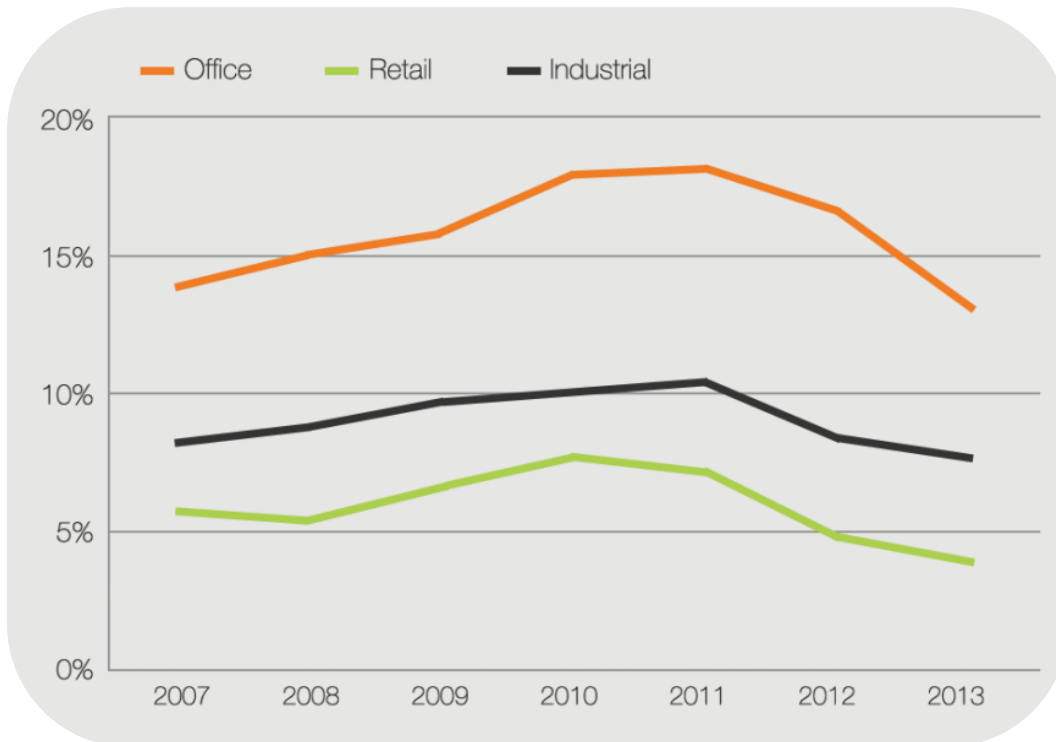
**Figure 23: Change in Price per Square Foot for Commercial Real Estate from 2003 to 2013<sup>28</sup>**



<sup>28</sup> Source: Cassidy Turley

Vacancy rates have an inverse relationship to costs. While costs fell during and after the great recession, vacancy rates increased for commercial real estate in the North County between 2007-2008 and 2010-2011, a clear indicator of a struggling economy. However, while costs have not reached pre-recession or recession levels, vacancy rates have decreased for all commercial space (industrial, office and retail) in the North County -- yet another assuring sign that the economy in the region is on the rebound.

**Figure 24: Vacancy Rates for Commercial Real Estate from 2007 to 2013<sup>29</sup>**



Commercial  
vacancy  
rates are  
**below**  
**2007**  
levels

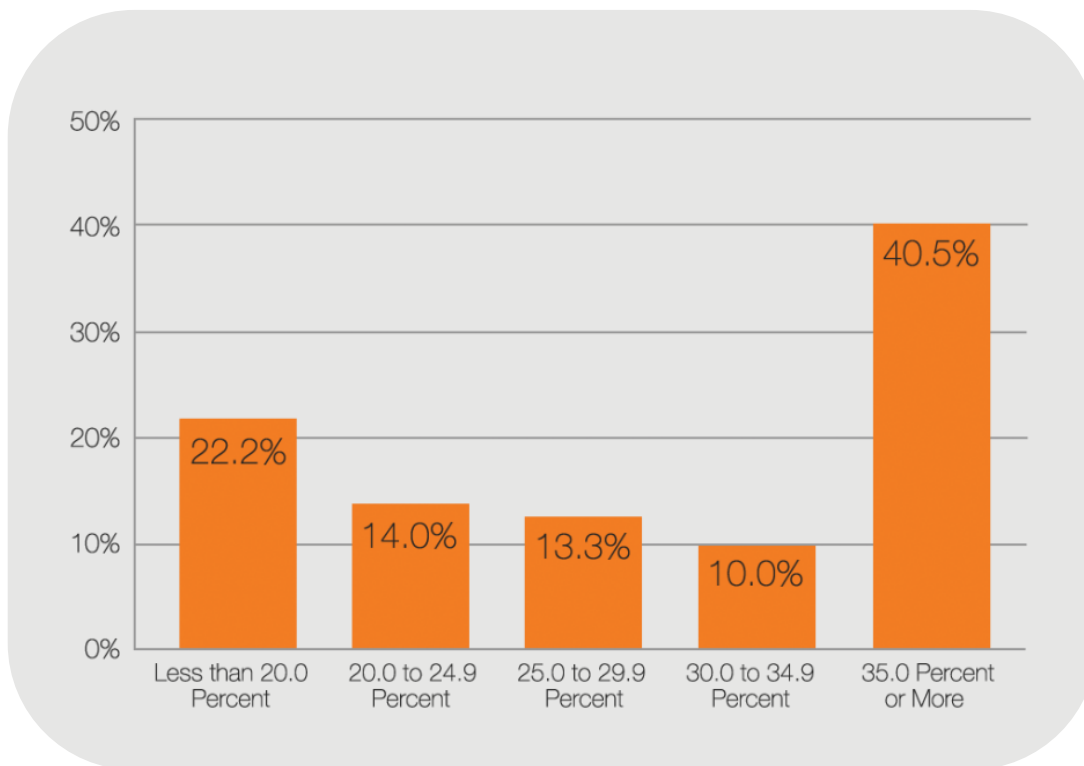
<sup>29</sup> Source: Cassidy Turley

## Housing

The North County is home to higher housing costs when compared to San Diego County, California and the United States, likely reflecting the desirability of the region. The high quality of life experienced by residents in the North County results in the willingness to pay more of a proportion of their income towards housing; forty-one percent of home owners and nearly a half of renters (49%) allocated over a third of their household earnings to shelter in 2012.

There is negative side to the high cost of housing in the North County besides the cost itself; medium to low wage earners will more likely live further away from the cities in which they work, contributing to higher traffic volume and congestion. Those that pay more for housing will have less for other essentials such as food, clothing, utilities, health care, etc. Furthermore, high costs are detrimental to first-time home buyers or those medium to low wage earners looking to move to the region for work.

**Figure 25: Home Owner Costs as a Percentage of Household Income (2012)<sup>30</sup>**

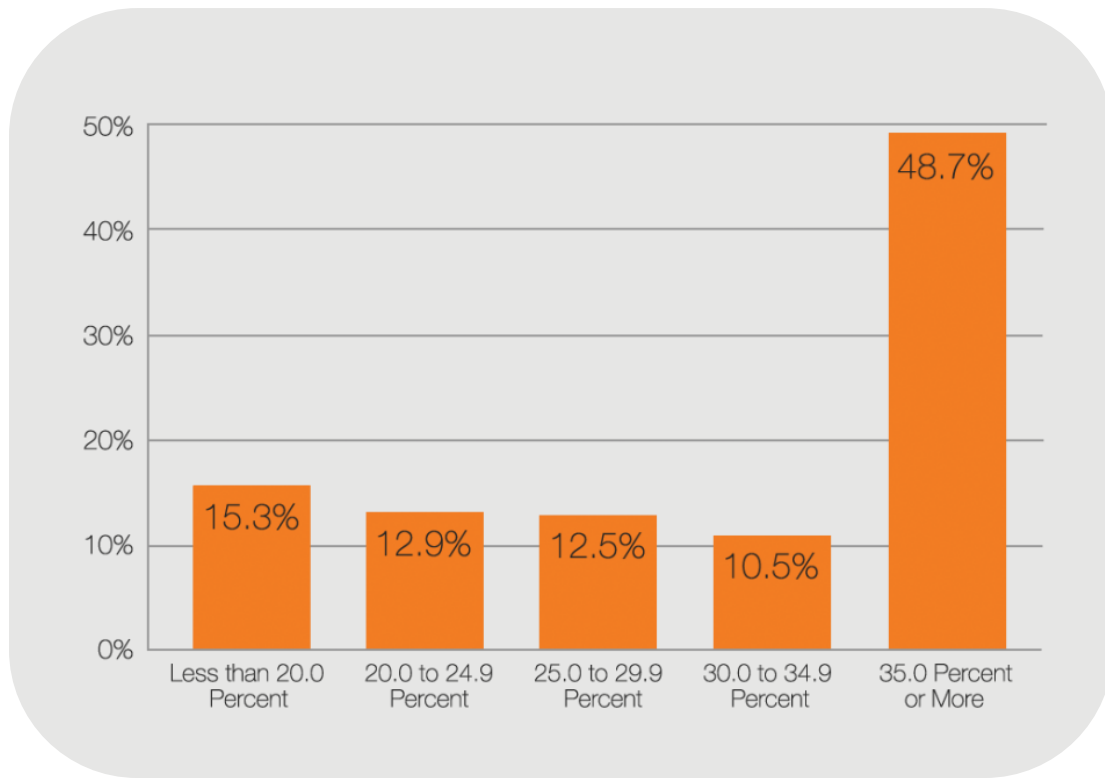


**41%**  
of  
SDNC  
home  
owners  
pay  
over  
**35%**  
of  
income  
for  
housing

<sup>30</sup> Source: American Community Survey (ACS) 2012 5-year estimates



**Figure 26: Gross Rental Costs as a Percentage of Household Income (2012)<sup>31</sup>**



**49%**  
of  
SDNC  
renters  
pay  
over  
**35%**  
of  
income  
for  
housing

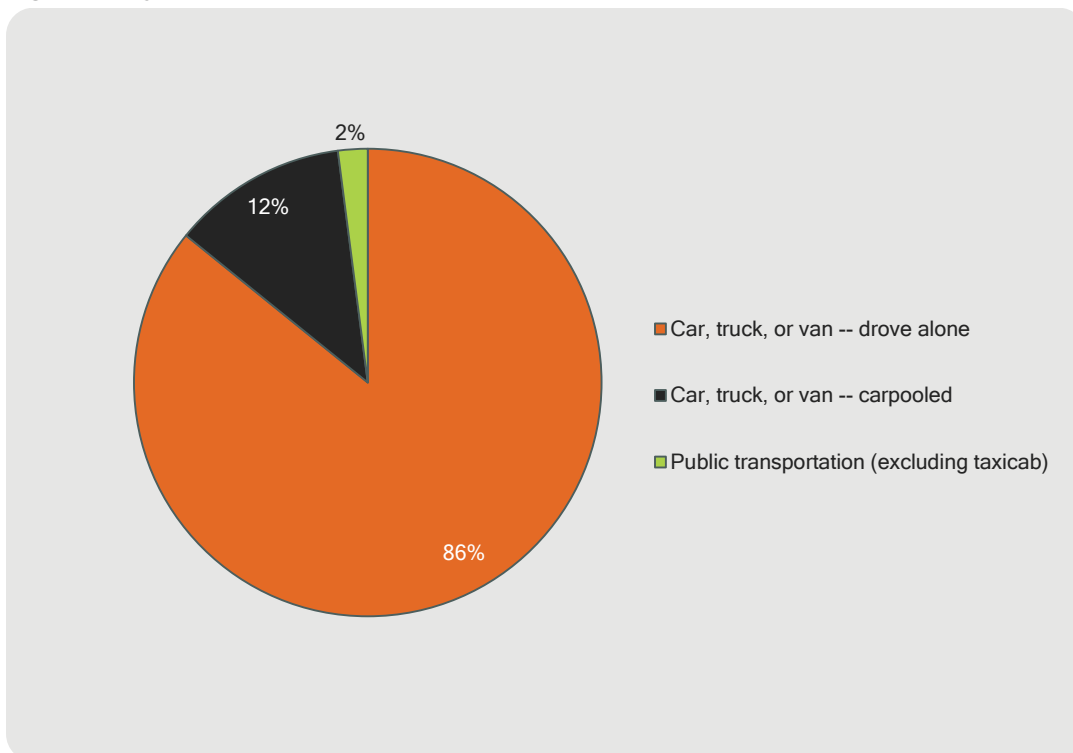
<sup>31</sup> Source: American Community Survey (ACS) 2012 5-year estimates

## Commute

The vast majority of North County commuters drove alone to work in 2012 (86%), which is consistent with the larger San Diego County, California, and the United States. With over 460,000 commuters utilizing personal vehicles to get to work (either alone or in carpools), transportation infrastructure, particularly highway and road capacity and access to public transportation, is of high importance (both maintenance and expansion).

Commute times for workers 16 years of age and older in the North County are fairly consistent with San Diego County as a whole and slightly less when compared to California.

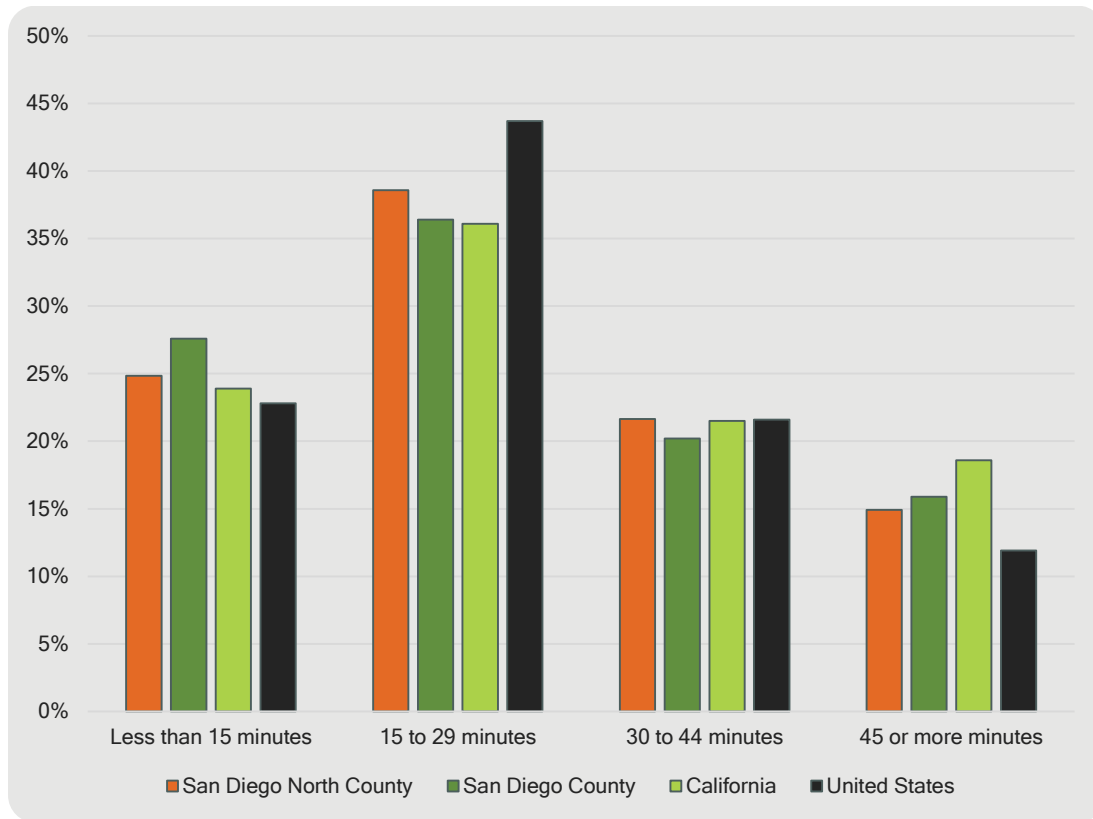
**Figure 27: Type of Travel to Work for Workers 16 Years and Older (2012)<sup>32</sup>**



<sup>32</sup> Source: American Community Survey (ACS) 2012 5-year estimates

460k  
SDNC  
workers  
drove  
to work  
alone

**Figure 28: Travel Time to Work for Workers 16 Years and Older by Region (2012)<sup>33</sup>**



<sup>33</sup> Source: American Community Survey (ACS) 2012 5-year estimates

# APPENDIX A:

## EMPLOYER SURVEY METHODOLOGY

Data compiled for this report were drawn from both primary and secondary data sources. The table below provides a brief overview of the methodology utilized for the project.

**Table 2: Overview of Project Methodology**

<b>Method</b>	Secondary Research of North County Population, Employment, & Educational Completion Data Survey of North County Businesses
<b>Number of Survey Participants</b>	349 Firms in North County Completed a Web or Telephone Survey
<b>Survey Field Dates</b>	February 5, 2014 – February 14, 2014
<b>Survey Universe</b>	54,690 Firms with Two or More Employees in the North County
<b>Survey Margin of Error</b>	The margin of error for questions answered by all 210 respondents was +/-5.23% at the 95% level of confidence.

### SECONDARY RESEARCH

Complete employment, gross regional product, population, and educational completion statistics datasets for San Diego North County were defined by zip code, census tracts, or classification of instructional programs (CIP) codes.

For this study, industry clusters were defined using the North American Industry Classification System (NAICS) codes.

Complete employment data was compiled from the Economic Modeling Specialists Inc. (EMSI) 2013.4 Complete Employment dataset for the zip code defined North County. The EMSI Complete Employment dataset includes state and federal level data sources and include QCEW and non-QCEW workers.

EMSI current year estimates are partial projections based on the Quarterly Census of Employment and Wages (QCEW) and Current Employment Statistics (CES) provided by the Bureau of Labor Statistics (BLS). Future year projections are based on available historical data for industries and clustered industries.

Complete employment datasets were also culled directly from the Economic Development Department (EDD) and Bureau of Labor Statistics (BLS).

Gross regional product data was utilized from the Bureau of Economic Analysis (BEA).

Population statistics were compiled from the Census Bureau's American Community Survey (ACS) 2012 5-year estimates for the census tract defined North County.

Educational completion statistics were compiled from the Integrated Postsecondary Education Data System (IPEDS) for the years 2003 to 2012. Completions were combined for all North County postsecondary schools.

## **PRIMARY RESEARCH**

A telephone and web survey of 349 North County businesses was conducted as part of this study.

### ***Survey Design***

Through an iterative process, BW Research worked closely with the San Diego North Economic Development Council to develop a survey instrument that met all the research objectives of the study. In developing the survey instrument, BW Research utilized techniques to overcome known biases in survey research and minimize potential sources of measurement error within the survey.

### ***Sampling Method***

A database of North County firms was purchased from Hoovers. That initial database was then compared with firms and contact information provided by SDNEDC and finally reviewed and refined through duplication checks. A secondary database was also compiled to include an oversample of firms in NAICS defined industry clusters.

### ***Data Collection***

Prior to beginning data collection, BW Research conducted interviewer training and also pre-tested the survey instrument to ensure that all words and questions were easily understood by the respondents. Telephone interviews were generally conducted from 9:00am to 4:30pm Monday through Friday. The data collection period was February 5, 2014 through February 14, 2014.

A web version of the survey was also developed and businesses with an email address within the North County were sent an online invitation.

### ***A Note about Margin of Error and Analysis of Sub-Groups***

The overall margin of error for the survey, at the 95 percent level of confidence, is +/- 5.23 percent for questions answered by all 349 respondents. It is important to note that questions asked of smaller groups of respondents (such as questions that were only asked to firms based off their previous responses) will have a margin of error greater than +/- 5.23 percent, with the exact margin of error dependent on the number of respondents in each sub-group

# APPENDIX B: EMPLOYER SURVEY TOPLINES

(n=349)

## *Screeners Questions*

**SCREENER A** Are you involved in staffing, planning or hiring decisions at your firm or organization?

100%	Yes [CONTINUE]
0%	No [TERMINATE]
0%	(Don't Read) DK/NA [TERMINATE]

**SCREENER B** Does your company or organization have one or more locations in San Diego's North County – If yes, how many locations?

79.4%	1 location
12.9%	2 to 4 locations
2.9%	5 to 9 locations
2.6%	10 to 19 locations
2.0%	20 or more locations
0.3%	(Don't Read) DK/NA

### SECTION 1 - Organization-Related Questions

I'd like to begin by asking you a few general questions about your firm and your current employees. For this survey, please only answer for your North County location(s).

**Q1** Including all full-time and part-time employees, how many permanent and temporary employees work at your North County location(s)?

28.9%	1 to 4 employees
24.4%	5 to 9 employees
24.4%	10 to 24 employees
10.0%	25 to 49 employees
4.9%	50 to 99 employees
6.0%	100 or more employees
1.4%	(Don't Read) DK/NA

**Q2** If you currently have [TAKE Q1 #] full-time and part-time permanent and temporary employees at your North County location(s), how many more or fewer employees do you expect to have 12 months from now?

36.7%	More
2.3%	Fewer
52.7%	Same number
8.3%	(Don't Read) DK/NA

## SECTION 2 – Technology Profile

Next, I would like to ask about the industry or industries that are important to your business.

**Q3**

Which industry does [FIRM NAME] most identify with? (Multiple responses are permitted. Percentages may sum to greater than 100%)

20.9%	Building and design (includes construction, architecture and engineering)
11.7%	Professional, technical and scientific services (including consulting)
11.2%	Healthcare services
6.9%	Information technology, telecommunications or communications
6.9%	Biotechnology, medical devices, life sciences or pharmaceuticals
6.3%	Food and accommodation services
5.2%	Tourism
5.2%	Energy and the environment
4.9%	Agriculture
4.9%	Retail
4.6%	Business support services (includes employment and management services)
4.6%	Finance, insurance, and real estate
3.7%	Computer and related electronic products manufacturing
3.7%	Automotive
3.2%	Clean technology, renewable energy or energy efficiency
2.9%	Wholesale trade and logistics
2.3%	Manufacturing
2.0%	Education
16.6%	Other (No individual category above two percent)
0.9%	(Don't Read) DK/NA



**Q4**

Are there other industries that are important to your business? (Multiple responses are permitted. Percentages may sum to greater than 100%)

10.4%	Building and design (includes construction, architecture and engineering)
8.1%	Professional, technical and scientific services (including consulting)
7.5%	Retail
6.9%	Information technology, telecommunications or communications
6.9%	Biotechnology, medical devices, life sciences or pharmaceuticals
6.9%	Healthcare services
6.4%	Energy and the environment
5.8%	Clean technology, renewable energy or energy efficiency
5.5%	Tourism
4.9%	Food and accommodation services
4.6%	Agriculture
4.6%	Business support services (includes employment and management services)
4.3%	Computer and related electronic products manufacturing
3.5%	Wholesale trade and logistics
1.4%	Finance, insurance, and real estate
1.2%	Education
0.9%	Automotive
14.7%	Other (No individual category above two percent)
52.0%	(Don't Read) DK/NA

Next, I would like to ask about the role of technology at [FIRM NAME].

**Q5** Is your firm focused on developing or supporting the development of new technology or is the technology you are using largely established or are you involved with both?

5.2%	Technology is being developed
53.6%	Technology is largely established
35.2%	Both, we use both emerging and established technologies
3.4%	Neither
2.6%	(Don't Read) DK/NA

[IF Q5=1 OR 3 ASK Q6 OTHERWISE SKIP]

**Q6** Please identify the areas of technology that are most important to your firm. (Multiple responses are permitted. Percentages may sum to greater than 100%)

15.6%	Healthcare, biotechnology and medical devices related research
15.6%	Internet, phones, and computers
7.8%	Cyber and encryption technologies
5.7%	Agricultural research
4.3%	Defense related research
2.8%	Energy research, including smart grid, wind and/or photovoltaic
2.8%	Biofuels and biomaterials
57.4%	Other (No individual category above two percent)
8.5%	(Don't Read) DK/NA

Next I want to ask about your location(s) in San Diego's North County and discuss issues related to being in this specific region and more generally in California.

**Q7** How long has your company been located in the North County?

0.3%	Less than 12 months
3.2%	Between 1 year and just under 2 years
12.3%	Between 2 years and just under 5 years
18.6%	Between 5 years and just under 10 years
27.2%	Between 10 years and just under 20 years
37.8%	More than 20 years
0.6%	(Don't Read) DK/NA

**Q8** What were the main reasons your company originally located in the North County? (Multiple responses are permitted. Percentages may sum to greater than 100%)

49.0%	Founders lived here
6.3%	Spun-off another company that was already here
7.2%	Quality of life in the region
14.9%	Proximity to customers, collaborators, and vendors
0.6%	Connection to university or related institutions
19.8%	Other (No individual category above two percent)
14.0%	(Don't Read) DK/NA

Next, I want to ask you generally, how you would rate the region and the state for doing business.

**Q9** How would you rate the state of California as a place to business?

9.5%	Excellent
32.7%	Good
30.4%	Fair
12.0%	Poor
13.2%	Very poor
2.3%	(Don't Read) DK/NA

**Q10** Thinking more locally, how would you rate San Diego's North County as a place to do business?

15.2%	Excellent
51.6%	Good
22.9%	Fair
6.6%	Poor
2.6%	Very poor
1.1%	(Don't Read) DK/NA

### PART 3 - Specific Business Issues - Business Climate

Now I am going to ask you about different aspects of doing business in the North County.

First I want to ask you about the North County's Business Climate.

**Q11** Overall, is your company satisfied, dissatisfied, or neither satisfied or dissatisfied with the North County's business climate? (GET ANSWER IF SAT OR DISSAT, THEN ASK:) Would that be very (satisfied/dissatisfied) or somewhat (satisfied/dissatisfied)? (n=348)

24.7%	Very satisfied
38.2%	Somewhat satisfied
25.3%	Neither satisfied nor dissatisfied
4.6%	Somewhat dissatisfied
3.2%	Very dissatisfied
4.0%	(Don't Read) DK/NA

Please tell me how satisfied your company is with the following issues and attributes regarding the North County's business climate.

**Q12**

Is your company is satisfied, dissatisfied, or neither satisfied nor dissatisfied with the North County's: \_\_\_\_\_? (GET ANSWER AND THEN ASK:) Would that be very (satisfied/dissatisfied) or somewhat (satisfied/dissatisfied)? (n=345)

RANDOMIZE						
	<u>Very sat</u>	<u>Smwht sat</u>	<u>Neither sat nor dissat</u>	<u>Smwht dissat</u>	<u>Very dissat</u>	<u>(Don't Read) DK/NA</u>
<b>A.</b> Access to capital	17.1%	30.1%	22.3%	3.5%	6.4%	20.6%
<b>B.</b> Quality of life	69.3%	21.7%	3.5%	2.0%	1.2%	2.3%
<b>C.</b> Organizations to support economic development and entrepreneurship	16.2%	30.7%	20.6%	8.4%	3.8%	20.3%
<b>D.</b> Access to clients and customers	38.3%	37.4%	13.6%	5.8%	0.0%	4.9%
<b>E.</b> Access to relevant vendors and suppliers	43.5%	36.2%	9.0%	3.5%	0.6%	7.2%
<b>F.</b> Ability to network or interact with other high-level decision-makers in North County's business community	25.2%	34.2%	17.7%	5.5%	2.9%	14.5%
<b>G.</b> Regulatory climate, including, zoning, permitting, local or regional regulations and related issues	14.2%	26.1%	16.5%	15.1%	16.2%	11.9%

#### **PART 4 - Specific Business Issues - Transportation and Infrastructure**

Next I am going to ask you about the North County's transportation and infrastructure system. This includes the capacity to move people and goods in and around the North County, as well as the region's capacity to provide electricity, broadband, and water for businesses.

**Q13** Overall, is your company satisfied, dissatisfied, or neither satisfied or dissatisfied with the North County's transportation and infrastructure for business? (GET ANSWER IF SAT OR DISSAT, THEN ASK:) Would that be very (satisfied/dissatisfied) or somewhat (satisfied/dissatisfied)? (n=345)

21.2%	Very satisfied
38.0%	Somewhat satisfied
17.1%	Neither satisfied nor dissatisfied
12.2%	Somewhat dissatisfied
4.9%	Very dissatisfied
6.7%	(Don't Read) DK/NA

Please tell me how satisfied your company is with the following issues and attributes regarding the North County's transportation and infrastructure system.

**Q14**

Is your company satisfied, dissatisfied or neither satisfied nor dissatisfied with the North County's: \_\_\_\_\_? (GET ANSWER AND THEN ASK:) Would that be very (satisfied/dissatisfied) or somewhat (satisfied/dissatisfied)? (n=345)

RANDOMIZE						
	<u>Very sat</u>	<u>Smwht sat</u>	<u>Neither sat nor dissat</u>	<u>Smwht dissat</u>	<u>Very dissat</u>	<u>(Don't Read) DK/NA</u>
<b>A.</b> Roads and freeways for driving	27.0%	35.1%	10.7%	17.7%	8.4%	1.2%
<b>B.</b> Public transit system, including Coaster, buses and the Sprinter	19.1%	24.3%	18.0%	13.6%	9.3%	15.7%
<b>C.</b> Access to Airports	31.6%	35.1%	12.5%	10.7%	2.9%	7.2%
<b>D.</b> Overall ease of commute for your employees	27.5%	37.4%	9.3%	15.7%	7.0%	3.2%
<b>E.</b> Access to broadband and related wireless services	38.0%	35.9%	5.8%	10.7%	4.6%	4.9%
<b>F.</b> Ability to move goods and products, to your customers	32.2%	31.3%	13.0%	4.3%	1.2%	18.0%



## PART 5 - Specific Business Issues - Education and Workforce

Next I am going to ask you about the North County's education and workforce.

**Q15**

Overall, is your company satisfied, dissatisfied, or neither satisfied or dissatisfied with the North County's education system? (GET ANSWER IF SAT OR DISSAT, THEN ASK:) Would that be very (satisfied/dissatisfied) or somewhat (satisfied/dissatisfied)? (n=345)

18.8%	Very satisfied
27.8%	Somewhat satisfied
22.9%	Neither satisfied nor dissatisfied
10.1%	Somewhat dissatisfied
5.2%	Very dissatisfied
15.1%	(Don't Read) DK/NA

**Q16**

Thinking about the people you hire in the North County, how much difficulty does your company have finding qualified applicants who meet the organization's hiring standards? (n=345)

34.2%	Little to no difficulty
41.7%	Some difficulty
17.7%	Great difficulty
6.4%	(Don't Read) DK/NA

Please tell me how satisfied your company is with the following issues and attributes regarding the North County's education and training system and the available workforce.

**Q17**

Is your company satisfied, dissatisfied, or neither satisfied nor dissatisfied with the North County's: \_\_\_\_\_? (GET ANSWER AND THEN ASK:) Would that be very (satisfied/dissatisfied) or somewhat (satisfied/dissatisfied)? (n=345)

RANDOMIZE						
	<u>Very sat</u>	<u>Smwht sat</u>	<u>Neither sat nor dissat</u>	<u>Smwht dissat</u>	<u>Very dissat</u>	<u>(Don't Read) DK/NA</u>
<b>A.</b> University system and capacity for research	22.6%	25.8%	19.4%	4.9%	2.9%	24.3%
<b>B.</b> Public k-12 education system	16.8%	25.2%	19.4%	11.6%	7.5%	19.4%
<b>C.</b> Community colleges	24.9%	33.9%	16.2%	4.9%	1.7%	18.3%
<b>D.</b> Worker re-training and skill upgrade programs	8.7%	20.9%	27.5%	5.2%	2.6%	35.1%
<b>E.</b> Ability to recruit high skill talent	17.4%	30.4%	14.5%	15.4%	8.4%	13.9%
<b>F.</b> Ability to find qualified entry-level employees	23.2%	36.2%	10.7%	14.5%	9.0%	6.4%

## PART 6

Lastly, I want to ask some final questions about your company.

**Q18** What would you say are the top three challenges facing your company?

Verbatim responses to be provided

**Q19**

Is there anything else you feel we should know to better help your company and industry succeed in the North County?

Verbatim responses to be provided

**Q20**

Lastly, would you be interested in advising regional decision makers on how to best prepare students and job-seekers on how to work in today's economy? (n=344)

23.3%	Yes
73.0%	No
3.8%	(Don't Read) DK/NA

**Thank you for completing the survey. Since it sometimes becomes necessary for the project manager to call back and confirm responses to certain questions, I would like to verify your contact information.**

**Those are all the questions I have.**

**Thank you very much for your time.**