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#### INTRODUCTION & KEY FINDINGS

As an economic region San Diego's North County (North County) has approximately 1.2 million residents and 459 thousand jobs. The region has a larger population than eight states in the Country, including Vermont, Rhode Island and Alaska, along with more employment than six states including Delaware, Montana and South Dakota. North County hosts several innovative, export-oriented industry clusters, including Biotechnology & Biomedial devices, Clean Technology, Sports & Active Lifestyle, and Information & Communication Technologies (ICT) – all while being a net exporter of talent, providing high skilled workers to employers in neighboring communities.

#### **State of North County**

In 2015, North County's economy is on the rebound. The region was hit harder than the rest of San Diego County by the Great Recession as total employment dropped by seven percent from 2007 to 2010. Over the last five years (2010 to 2014), North County's employment has grown faster than the rest of San Diego County, and has recovered stronger from the Great Recession than its neighbors to the north, including Orange and Riverside Counties. Not only have the number of jobs in North County grown, the quality of those jobs have improved. From 2010 to 2014, Tier 1 (higher paying, higher skill) occupations have grown faster in North County than their lower paying, lower skilled counterparts (Tier 2 and Tier 3 occupations). In a related finding, the region has experienced considerable employment growth (over 15%) from 2010 to 2014 in key industry clusters such as Clean Technology, Biotechnology & Biomedical devices and Building & Design. North County, has also seen demand for its commercial real estate (including office, industrial and retail) all improve from 2010 to 2014, as vacancy rates have declined, while inventories and average rents have increased. These indicators all point to a regional economy that has stepped beyond the shadow of the Great Recession and faces new challenges and opportunities beyond the post-recession economy.

#### What we Learned from the Data

The research findings and regional indicators for North County illustrate several key findings, including

 Industry clusters are playing an increasingly important role in North County's economy – From 2010 to 2014, the number of North County jobs found in the seven industry clusters identified in this study¹ had increased by approximately 17,000 jobs in the region and in 2014 accounted for 34 percent of all jobs in the regional economy. In comparison, the seven

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<sup>&</sup>lt;sup>1</sup> Industry clusters include: Connected Tourism & Agriculture (CTA), Healthcare, Information & Communication Technologies (ICT), Buidling & Design, Sports & Active Lifestyle (SAL), Biotechnology & Biomedical Devices, and Clean Technology.

industry clusters account for approximately 28 percent of all jobs in the rest of San Diego County's economy.

- 2. Quality of occupations in North County is improving, but the region remains a net exporter of high skilled talent From 2010 to 2014 Tier 1 and Tier 2 occupations have grown faster in the North County than their lower skilled, lower paying Tier 3 counterparts. That being said the region remains a net exporter of professional, largely Tier 1, workers, who live in the North County and are employed in a neighboring community.
- Employment data and commercial real estate indicators demonstrate North County's strong recovery from post-recession economy – Data from this report shows an improving employment picture and increasing demand for commercial real estate in North County, both overall and in comparison to neighboring regions.
- 4. North County's recovery has not been consistent across all subregions Like the United States and California, geography matters in North County in the aftermath of the Great Recession. From 2007 to 2014, North Coast, North Central Coast and North Central Inland all experienced total employment growth of about two percent, while North Inland is still six percent below its overall employment figures in 2007.
- 5. Proportion of STEM degrees<sup>2</sup> generated in North County is low and did not improve in the most recent data North County represents approximately three percent of California's population, and is home to high concentrations of businesses in ICT, Biotechnology & Biomedical Devices and Clean Technology, and yet only accounts for one percent of all 2 and 4 year STEM degrees produced in California.

#### What we will be watching for in 2015

Based on an analysis of regional, statewide and national data, these are the key issues and questions we will be watching closely in 2015 as we examine the North County economy;

- Growing pains of a strengthening economy While an improving employment picture and increasing demand for commercial and residential real estate are often considered valuable indicators of a strengthening economy, they also can create challenges related to housing affordability, traffic and congestion, and costs for small businesses.
- 2. Water prices, regulations and availability Every year, the impact of the drought seems to get closer and closer to home. Agriculture, particularly in North Inland has already felt the sting of higher prices and reduced supply, and the dominoes will continue to fall if water supplies continue to decline.

<sup>&</sup>lt;sup>2</sup> Two & Four year college or university degrees in Science, Technology, Engineering and Mathematics.

- 3. Quality of life as an increasingly valuable asset for regional economic vitality in the North County. Whether we are discussing the great weather, the access to beaches, mountains, parks or other related recreational and/or leisure activities connected to the craft beer industry, all these resources play an important role in the region's quality of life. When we look at these resources we tend to emphasize the impact they have on the tourism and hospitality industry and can forget the central role in attracting and retaining business decision makers and entrpreneurs who want to have their businesses located where they live and play.
- 4. Education providers and job-seekers respond to an increasingly churning regional economy. As the regional population continues to age resulting in declining labor participation rates and the needs of employers continue to change and evolve, the loose labor market that characterized the years right after the Great Recession could quickly turn into a tight labor market. We are already seeing employers in specific industries indicate more and more difficulty finding qualified job applicants for key positions.
- 5. North County's transition from a population serving economy to a more innovative, export-oriented economy. Will industry clusters continue to grow in North County and what impact will that have on the region's need for talent, venture capital and research resources?

#### The North County Region



For this year's report, the North County region was divided into four distinct subregions. The sub-regions are;

- The **NC Coast** includes Carlsbad, Oceanside, Vista and Camp Pendleton
- The NC Central Coast includes Encinitas, Del Mar and Solana Beach
- The NC Inland includes San Marcos, Escondido, Fallbrook, Palomar Mountain, and Borrego Springs
- The **NC Central Inland** includes Poway, Ramona, and Julian

For zip code breakdowns of sub-regions, please see Appendix B.

## **Economy**

The North County continues to lag behind the rest of San Diego County and California in overall growth since the Great Recession, however, total employment by the end of 2014 (458,800) had reached pre-recession levels in the region. Also, the North County has fared somewhat better than neighboring Orange County since the 2008 economic downturn. The figure below reflects the percentile change in overall employment for all North County businesses.

Figure 1: Overall Change in Employment from 2007 to 2014 (Region)<sup>3</sup>

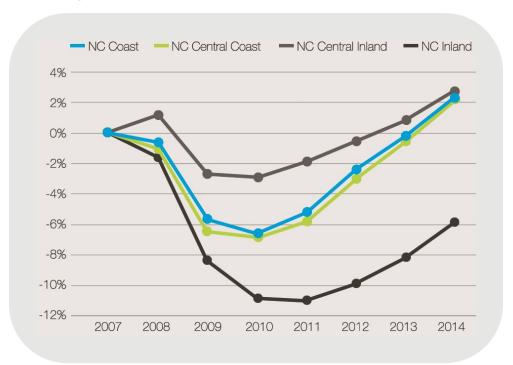


<sup>&</sup>lt;sup>3</sup> Source: EMSI 2014.4 Class of Worker, QCEW and Non-QCEW

#### <u>Sub-regional Analysis – Change in Employment</u>

The NC Inland sub-region underwent the largest decline in total employment since 2007, and is nearly six percent below employment levels from before the Great Recession. The remaining three sub-regions in North County have fared markedly better, with employment figures reaching over two percent higher than 2007 levels for each geography.

Figure 2: Overall Change in Employment by North County Area from 2007 to 2014 (Sub-region)<sup>4</sup>



<sup>&</sup>lt;sup>4</sup> Source: EMSI 2014.4 Class of Worker, QCEW and Non-QCEW

Figure 3 reflects the overall unemployment level of North County residents compared to those throughout California. The labor force participation rate in North Countyin 2013 was 64%, a slight decline from 2012 (65%), and consistent with the Rest of San Diego County and a little higher than California or the United States.<sup>5</sup>

14%
12%

be 10%

8%

6%

2%

0%

yarr<sup>0</sup>

yarr<sup>0</sup>

yarr<sup>1</sup>

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Agarr<sup>1</sup>

yarr<sup>1</sup>

California

Figure 3: San Diego North County Historic Unemployment Rate (Jan 2008 to Jan 2015)<sup>6</sup>

#### <u>Sub-regional Analysis – Labor Force Participation</u>

The labor force participation rates for the four sub-regional areas in North County are listed below;

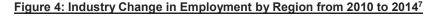
- NC Coast 65%
- NC Central Coast 59%
- NC Central Inland 65%
- NC Inland 59%

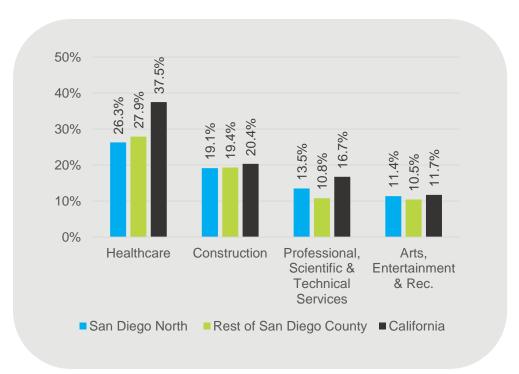
<sup>5</sup> Source: American Community Survey (ACS) 2013 5-year estimates

<sup>&</sup>lt;sup>6</sup> Source: Employment Development Department (EDD), Weighted Based on Reported San Diego County Unemployment Data

#### Regional Employment by Industry

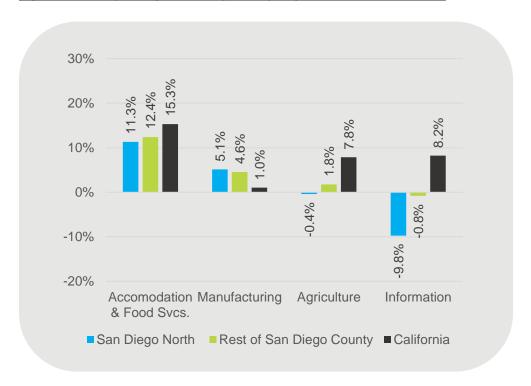
Several North County industries experienced strong growth between 2010 and 2014. Although the Healthcare industry in the region trended behind the rest of San Diego County and California, it expanded the most among traditional industries in North County. Manufacturing underwent slightly faster growth in North County when compared to the rest of the County, and over five times faster than the rate statewide. Agriculture and Information contracted in the region over the same time period (Figure 5).





<sup>&</sup>lt;sup>7</sup> Source: EMSI 2014.4 Class of Worker, QCEW and Non-QCEW

Figure 5: Industry Change in Employment by Region from 2010 to 2014 (2)8



<sup>8</sup> Source: EMSI 2014.4 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 indicators 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**. An entry-level 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 2014, the average wage for Tier 1 occupations in North County was \$43.35 an hour or approximately \$90,200 a year (assuming a 40 hour work week for the entire year).

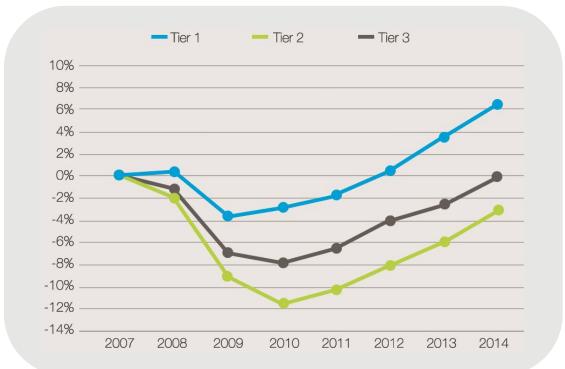
Tier 2 Occupations include sales positions (Sales Representatives), teachers, and librarians, office and administrative positions (Accounting Clerks and Secretaries), and manufacturing, operations, and production positions (Assemblers, Electricians, and Machinists). These occupations have historically provided the majority of employment opportunities and could be referred to as middle-wage, middle-skill positions. In 2014, the average wage for Tier 2 occupations in North County was \$21.23 an hour or approximately \$44,200 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 2014, the average wage for Tier 3 occupations in North County was \$11.39 an hour or approximately \$23,700 a year (assuming a 40 hour work week for the entire year).

The figure below displays the percentage change in employment for each of the occupational tiers in North County, from 2007 to 2014. Tier 1 occupations experienced the smallest decline in proportional employment over the six year period and recovered back to 2007 levels by 2012. In 2014, total employment in the Tier 3 occupational category returned to the levels recorded just before the Great Recession. Tier 2 occupations experienced the greatest decline, and are still over three percent below where they were in 2007.

When reviewing growth since 2010, Tier 1 (10% growth) and Tier 2 (9% growth) jobs in the North County have expanded faster than in the rest of San Diego County (8% growth for each category). The pace of growth for the higher wage and skill categories in the region is largely due to the quick growth for these occupations in the NC Coast (Tier 1 growth: 10%; Tier 2 growth: 10%) and NC Central Coast (Tier 1 growth: 13%; Tier 2 growth: 11%) sub-regions over the same time period.

Figure 6: Percentage Change in North County Occupational Tier Employment from 2007 to 2014<sup>9</sup>



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<sup>&</sup>lt;sup>9</sup> Source: EMSI 2014.4 Class of Worker, QCEW and Non-QCEW

#### Introduction to Industry Clusters

San Diego North Economic Development Council (SDNEDC) recognizes the importance of identifying and analyzing 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; it allows the North County 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

Below is a brief description of the industry clusters that were examined for the North County prospects. Each of the industry clusters examined is 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.

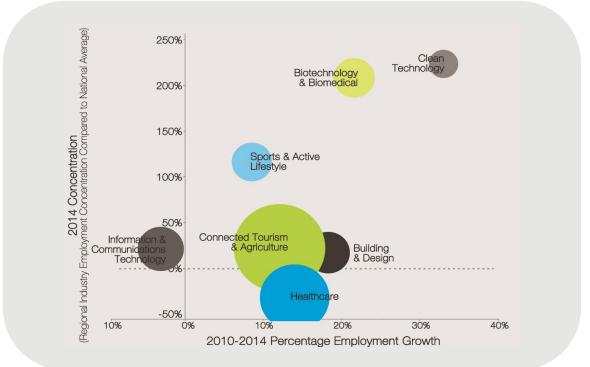
- <u>Biotechnology and Biomedical Devices</u> is a particularly important cluster for North County accounting for the research, development and production of medical equipment and pharmaceuticals.
- <u>Building & Design</u> involves the design and building of residential and nonresidential buildings and the interior design of buildings. This industry is actively involved in energy efficiency, building retrofits, and the use of sustainable building materials.
- <u>Clean Technology</u> consists of industries involved in the research and production of non-fossil fuel based energy and industries that work to improve environmental sustainably and meet environmental regulations. This industry cluster includes environmental consulting services and related manufacturing and consulting services.
- <u>Connected Tourism</u>, <u>& Agriculture</u> is one of the larger industry clusters in North County with over 60,000 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.

- <u>Healthcare</u> 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.

Figure 7 displays 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 (% higher or lower the concentration of the cluster nationwide), and the overall employment growth or decline from 2010 to 2014. Clean Technology and Biotechnology and Biomedical in North County each sit at a concentration more than there times the national average and have experienced growth of greater than 20 percent since 2010.





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 (2014)<sup>11</sup>

Industry Cluster	Employment	Average Earnings Per Job
Connected Tourism & Agriculture	60,924	\$26,625
Healthcare	35,053	\$64,763
Information & Communications Technology	15,281	\$125,016
Building & Design	14,065	\$83,431
Biotechnology & Biomedical	12,915	\$116,787
Sports & Active Lifestyle	11,481	\$47,135
Clean Technology	6,377	\$89,674

<sup>&</sup>lt;sup>10</sup> Source: EMSI 2014.4 Class of Worker, QCEW and Non-QCEW

<sup>&</sup>lt;sup>11</sup> Source: EMSI 2014.4 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 a leader in incubating ideas and fostering innovation will not only help North County attract new businesses and investment, but also help 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 ranked second in among all U.S. counties in 2013, with a total of 4,805 approved utility patents. Santa Clara County led the pack with nearly 13,000 approved patents in 2013 (12,855). Growth in utility patents countywide over the one year period between 2012 and 2013 was nearly 20 percent (19.9%). Looking back over five years (2008 to 2013), the growth rate was a staggering 153 percent. In comparison, growth for Santa Clara County was 79 percent over the same time period.

Figure 8: Approved Patents by California County from 2000 to 2013<sup>12</sup>



<sup>&</sup>lt;sup>12</sup> Source: U.S. State Patenting Breakout by Regional Component; Count of 2000 - 2013 Utility Patent Grants, retrieved from:

http://www.uspto.gov/web/offices/ac/ido/oeip/taf/countyall/usa\_county\_gd.htm & http://patft.uspto.gov/netahtml/PTO/search-bool.html

Identifying patents by origin at the regional level<sup>13</sup>, the North County represented over 38 percent of patents by inventor origin countywide in 2014, and a fifth of patents by company origin (20%). The North County's production level for approved patents outweighs its county share of population (37%) and jobs (31%).

Figure 9: Patent Origin by Regional Totals (2014)14

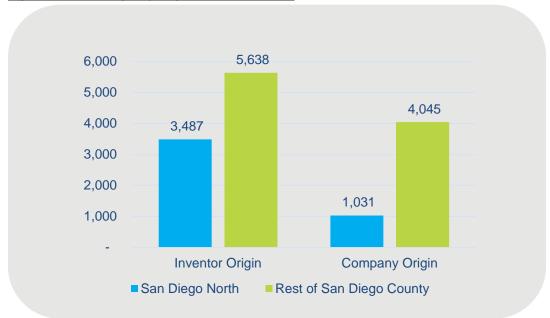
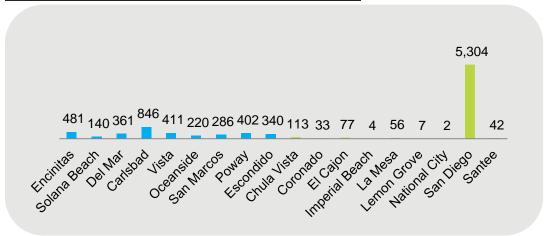


Figure 10: San Diego County Patents by Inventor Origin (2014)



<sup>&</sup>lt;sup>13</sup> Defined at the city level for San Diego North County and Rest of San Diego County.

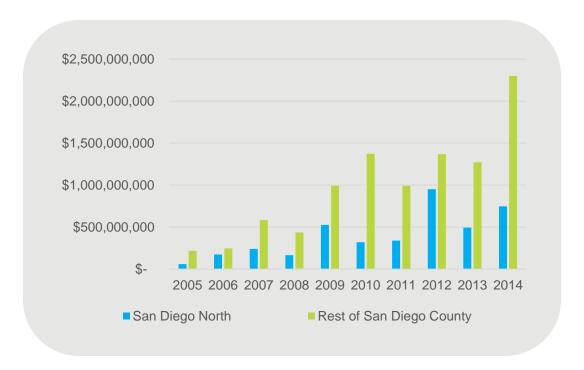
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<sup>&</sup>lt;sup>14</sup> Source: U.S. State Patenting Breakout by Regional Component; Count of 2014 Utility Patent Grants, retrieved from:

#### Total Investment

Total reported investment (venture, seed, angel, debt finance, equity, etc.) for North County companies in 2014 was almost three-quarters of a billion dollars, the second highest total recorded over the last ten years (\$951 million in 2012). North County investment was just under 25 percent of all reported investment in San Diego County in 2014.<sup>15</sup>

Figure 11: Overall Investment by Region from 2005 to 2014



<sup>&</sup>lt;sup>15</sup> Economic Advancement Research Institute (EARI) Analysis of Crunchbase Dataset 2015 Q1 for San Diego County

#### Start-up Investment

Start-up investment ws responsible for the majority of all reported investment in the North County region, with companies receiving over half a billion dollars in venture, seed or angel investments in 2014 (37% of all start-up funding in San Diego County).

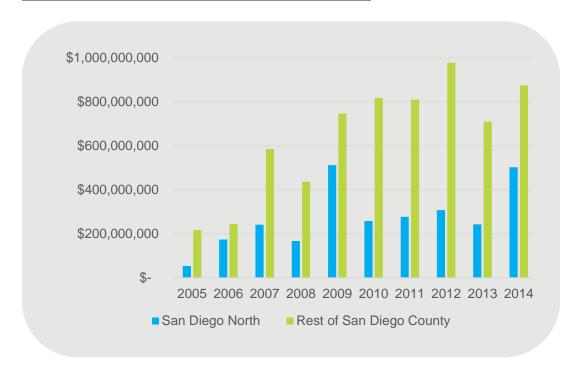


Figure 12: Start-up Investment by Region from 2005 to 2014<sup>16</sup>

The figures on the following page further breakout start-up investment by company type. Biotech and Healthcare firms attracted the most start-up funding activity through 2014 with approximately \$228 million in investment, while Information and Communications Technologies (ICT) companies drew over \$185 million in total venture, seed or angel investments. North County ICT start-ups received more funding than their conterparts in the rest of San Diego County (\$138 million) in 2014.

<sup>&</sup>lt;sup>16</sup> Economic Advancement Research Institute (EARI) Analysis of Crunchbase Dataset 2015 Q1 for San Diego County

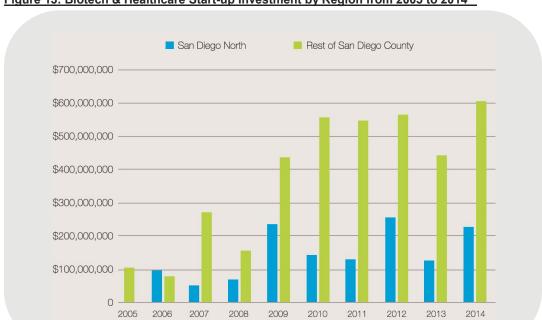
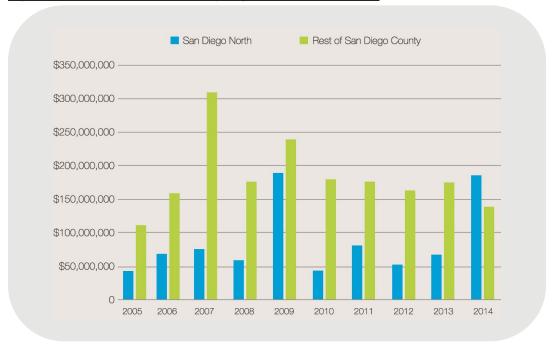


Figure 13: Biotech & Healthcare Start-up Investment by Region from 2005 to 2014<sup>17</sup>





 $<sup>^{17}</sup>$  Economic Advancement Research Institute (EARI) Analysis of Crunchbase Dataset 2015 Q1 for San Diego County

<sup>18</sup> *Id*.

## People

#### **Demographics**

Approximately 1,182,900 people live in the North County, which is about 37 percent of the overall population in San Diego County. The majority of these residents live in the NC Coast sub-region (420,800), followed by NC Inland (346,500), the NC Central Coast (257,100), and the NC Central Inland (158,500) sub-region.

The North County region has a higher proportion of younger residents (under 18 years of old) and older residents (50 years and older) than the rest of San Diego County and Califronia as a whole. Reviewing North County sub-regions, the NC Central Coast has the highest proportion of residents under the age of 18 (25%) while the NC Central Inland maintains the highest proportion of residents aged 55 or older (28%).

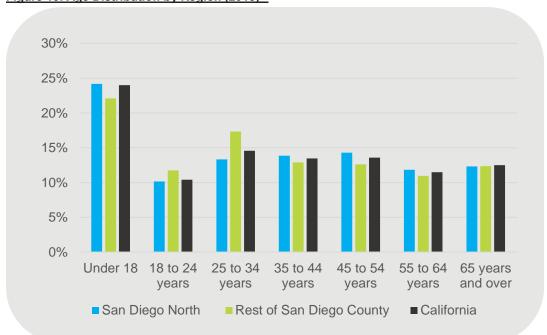


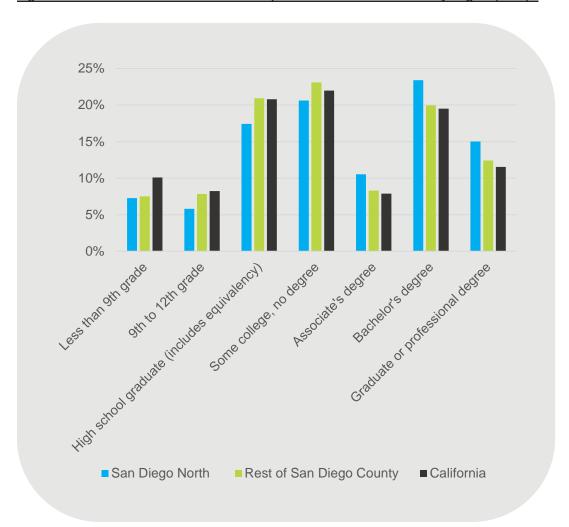
Figure 15: Age Distribution by Region (2013)<sup>19</sup>

<sup>&</sup>lt;sup>19</sup> Source: American Community Survey (ACS) 2013 5-year estimates

North County residents are also a higher educated population proportionally when compared to the rest of San Diego County and the state. 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 (rest of San Diego County and Southern California).

The NC Central Coast boasts the highest educated populace among North County sub-regions, with 63 percent of residents (25 years of age and older) with a bachelor's degree or higher. Conversely, the NC Inland sub-region has the highest proportion of residents (25 years of age and older) with less than high school equivalency (21%).





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<sup>&</sup>lt;sup>20</sup> American Community Survey (ACS) 2013 5-year estimates

The educated population of North County continues to correlate with higher household incomes. As in 2012, almost one in five households in 2012 had an annual income of \$150,000 or more (18%), which is a considerably higher proportion than the rest of San Diego County (12%). Just as impressive, nearly half (48%) of all households in North County accumulated at least \$75,000 in yearly income (rest of San Diego County: 38%; California: 41%).

Not surprisingly, the NC Central Coast sub-region not only leads in terms of educational attainment, but a third of all households (33%) reported an annual household income of \$150,000 or more in 2013. More striking, 59 percent of these households reported an annual household income of \$200,000 or more.

The proportion of households in the North County with reported annual incomes of less than \$35,000 in 2013 was highest in the NC Inland sub-region (32%), followed by the NC Coast sub-region (28%), the NC Central Inland (16%), and finally the NC Central Coast (16%).



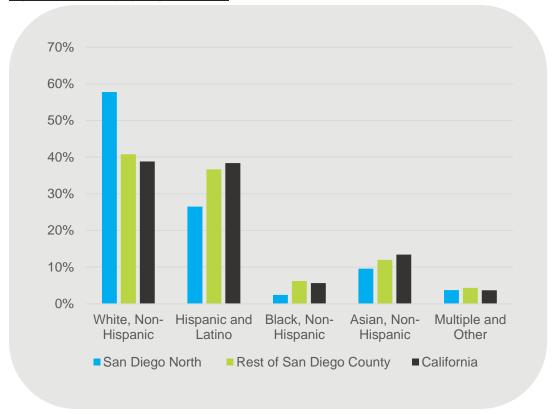
Figure 17: Household Income Distribution by Region (2013)<sup>21</sup>

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<sup>&</sup>lt;sup>21</sup> Source: American Community Survey (ACS) 2013 5-year estimates

The following figure illustrates the breakdown of the population by ethnicity for San Diego North County, the rest of San Diego County and California.

Figure 18: Ethnicity by Region (2013)<sup>22</sup>



<sup>&</sup>lt;sup>22</sup> Source: American Community Survey (ACS) 2013 5-year estimates

#### Education

The number of STEM completions at the North County's postsecondary institutions (California State University San Marcos, MiraCosta College, and Palomar College) has steadily risen from 2009 to 2013. While the region saw considerable growth in STEM completions from 2011 to 2012 (43% growth), that growth dropped off dramatically between 2012 and 2013 (4% growth). The 4 percent growth in STEM completions translates to 35 additional STEM completions over the previous year (2012).

The North County's share of total STEM completions in California decreased in 2013 to 1.0%, down from 1.1% in 2012. It is worth noting, that North County represents just over three percent of California's population but only one percent of the total STEM completions for 2 or 4 year college or university degrees.

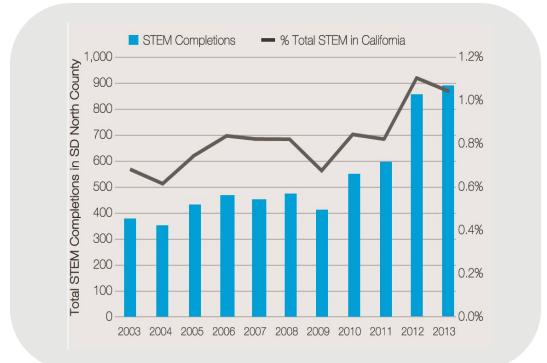


Figure 19: Total STEM Completions (2 or 4 Year Degrees) from 2003 to 2013<sup>23</sup>

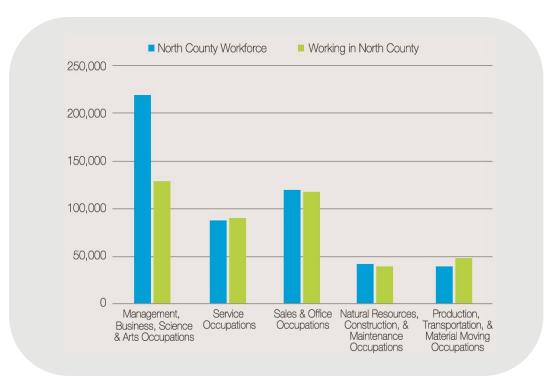
<sup>&</sup>lt;sup>23</sup> Source: Integrated Postsecondary Education Data Systems (IPEDS) 2013 and historical CIP Identified Completions

#### 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: 510,000; employed in the region: 459,000). 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.





<sup>&</sup>lt;sup>24</sup> Source: American Community Survey (ACS) 2013 5-year estimates & EMSI 2014.4 Class of Worker, QCEW and Non-QCEW

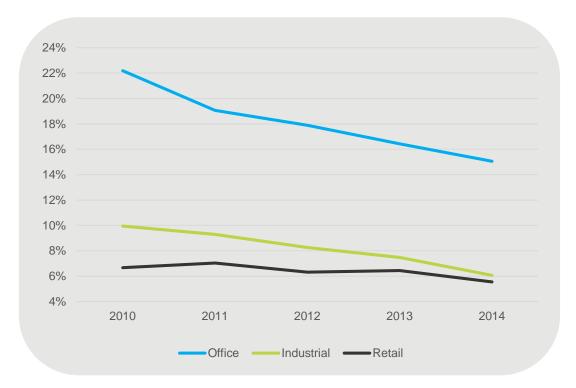
## Place

San Diego's North County is a diverse 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 economic vitality in the region 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 illustrates the vacancy rate for industrial, office and retail space for the North County from 2010 to 2014. The declining vacancy rates in North County become an even stronger indicator of economic improvement when you consider that commercial real estate inventories increased by five percent for office space, and two percent for both industrial and retail space over the same period of time. It is also worth noting that average rents for office and retail increased by ten percent or more over the same time period.

Figure 21: Vacancy Rate by Commercial Type in North County (2010 to 2014)<sup>25</sup>

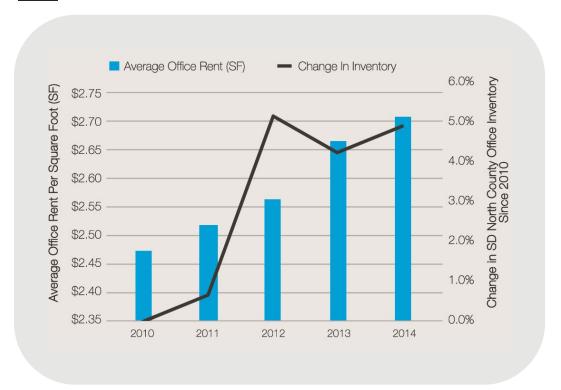


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<sup>25</sup> Source: DTZ

The figure below reveals the average office rents (per square foot) and the proportional change in office inventory both in North County from 2010 to 2014. It is worth noting that North County experienced a five percent increase in office inventory with a corresponding 10 percent increase in average rents from 2010 to 2014, while over the same period of time the rest of San Diego County saw a 2 percent decline in office inventories and only a five percent increase in average rents. These figures support the improving North County economy in comparison to the rest of San Diego County.

Figure 22: Average Office Rent and Change in Office Inventory in North County (2010 to 2014)<sup>26</sup>



<sup>&</sup>lt;sup>26</sup> Source: DTZ

The figure below illustrates the average office rents by the four sub-regions that make up the North County. The NC Central Coast has experienced relatively consistent growth in average office rents from 2010 through 2013, with a plateau from 2013 to 2014, while the NC Coast has seen a less pronounced increase in average office rents. Both NC Central Inland and NC Inland experienced a decline in average rents over the 2010 to 2014 period, but also saw increasing inventory and declining vacancy rates.

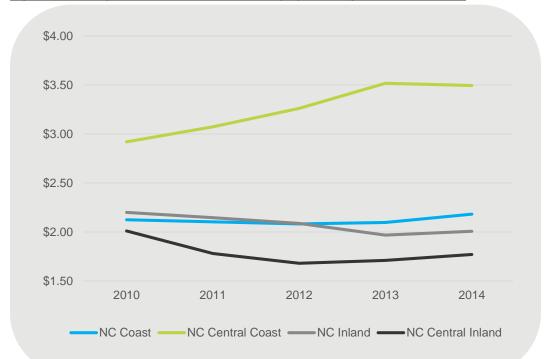


Figure 23: Average Office Rents in North County by Sub-Region (2010 to 2014)<sup>27</sup>

<sup>&</sup>lt;sup>27</sup> Source: DTZ

#### Housing

The North County is home to higher housing costs when compared to the rest of San Diego County and California. 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; thirty-nine percent of home owners with a mortgage and nearly half of renters (49%) allocated over a third of their household earnings to shelter in 2012. Approximately 43 percent of all households in North County were renters.

The NC Coast and NC Inland are the costliest areas in the North County for renters, with 53 percent of residents in each area allocating 35 percent or more of their household income towards rent. These sub-regions are also the home to the highest proportion of homeowners with a mortgage for which ownership costs are 35 percent or more of household income (NC Coast: 39%; NC Inland: 44%).

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 24: Gross Housing Costs as a Percentage of Household Income (2013)<sup>28</sup>

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<sup>&</sup>lt;sup>28</sup> Source: American Community Survey (ACS) 2013 5-year estimates

#### Commute

Almost 409,000 workers 16 and over drove to work alone in 2013, while 53,400 carpooled, and 8,500 took public transportation on a regular basis. With over 462,000 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).

Over one-third of all commuters 16 years of age and older (36%) in the North County spend at least 30 minutes or more getting to work. Commute times are highest for the NC Central Inland and NC Inland workers, where over 40 percent in each sub-region spend at least half an hour traveling to their jobs.

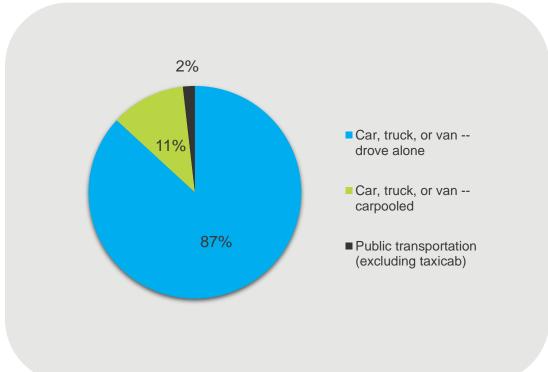


Figure 25: Type of Travel to Work for Workers 16 Years and Older (2013)<sup>29</sup>

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<sup>&</sup>lt;sup>29</sup> Source: American Community Survey (ACS) 2012 5-year estimates



Figure 26: Travel Time to Work for Workers 16 Years and Older by Region (2013)<sup>30</sup>

<sup>&</sup>lt;sup>30</sup> Source: American Community Survey (ACS) 2013 5-year estimates

# APPENDIX A: RESEARCH METHODOLOGY

Data compiled for this report were drawn from secondary data sources.

#### 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) 2014.4 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) 2013 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 2013. Completions were combined for all North County postsecondary schools.

# APPENDIX B: NORTH COUNTY ZIP CODES

NC Coast Region
City & Zip Codes
92008 Carlsbad (in San Diego county, CA)
92009 Carlsbad (in San Diego county, CA)
92010 Carlsbad (in San Diego county, CA)
92011 Carlsbad (in San Diego county, CA)
92049 Oceanside (in San Diego county, CA)
92051 Oceanside (in San Diego county, CA)
92052 Oceanside (in San Diego county, CA)
92054 Oceanside (in San Diego county, CA)
92055 Camp Pendleton (in San Diego county, CA)
92056 Oceanside (in San Diego county, CA)
92057 Oceanside (in San Diego county, CA)
92058 Oceanside (in San Diego county, CA)
92081 Vista (in San Diego county, CA)
92083 Vista (in San Diego county, CA)
92084 Vista (in San Diego county, CA)
92085 Vista (in San Diego county, CA)

NC Central Coast Region
City & Zip Codes
92007 Cardiff By The Sea (in San Diego county, CA)
92014 Del Mar (in San Diego county, CA)
92024 Encinitas (in San Diego county, CA)
92075 Solana Beach (in San Diego county, CA)
92127 San Diego (in San Diego county, CA)
92129 San Diego (in San Diego county, CA)
92130 San Diego (in San Diego county, CA)
92067 Rancho Santa Fe (in San Diego county, CA)
92091 Rancho Santa Fe (in San Diego county, CA)

NC Central Inland Region
City & Zip Codes
92036 Julian (in San Diego county, CA)
92064 Poway (in San Diego county, CA)
92065 Ramona (in San Diego county, CA)
92128 San Diego (in San Diego county, CA)

NC Inland Region
City & Zip Codes
91948 Mount Laguna (in San Diego county, CA)
92003 Bonsall (in San Diego county, CA)
92004 Borrego Springs (in San Diego county, CA)
92025 Escondido (in San Diego county, CA)
92026 Escondido (in San Diego county, CA)
92027 Escondido (in San Diego county, CA)
92028 Fallbrook (in San Diego county, CA)
92029 Escondido (in San Diego county, CA)
92030 Escondido (in San Diego county, CA)
92033 Escondido (in San Diego county, CA)
92046 Escondido (in San Diego county, CA)
92059 Pala (in San Diego county, CA)
92060 Palomar Mountain (in San Diego county, CA)
92061 Pauma Valley (in San Diego county, CA)
92066 Ranchita (in San Diego county, CA)
92068 San Luis Rey (in San Diego county, CA)
92069 San Marcos (in San Diego county, CA)
92070 Santa Ysabel (in San Diego county, CA)
92078 San Marcos (in San Diego county, CA)
92079 San Marcos (in San Diego county, CA)
92082 Valley Center (in San Diego county, CA)
92086 Warner Springs (in San Diego county, CA)
92088 Fallbrook (in San Diego county, CA)
92096 San Marcos (in San Diego county, CA)