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Introduction

The North County Indicators (NCI) are designed to provide a quantitative assessment of North County and spark more informed conversations about the region's future. This is the sixth iteration of the NCI. The 2019 North County Indicators includes 40 indicators and 70 data sets. This year we are launching a dedicated website to illustrate the key indicators from the research, providing a way of updating the indicators and a place for continued dialogue about what these indicators mean for the region. Please visit <u>http://bwresearch.com/NCI</u> to engage in a dialogue about North County's future.

San Diego's North County (North County) has 1.2 million residents and just over 521,000 jobs. As a region, North County has a larger population than metropolitan areas like Salt Lake City or Tucson, and more jobs than Honolulu or Albuquerque. If North County were a state within the United States, it would be the 42nd largest state by population or employment.

Acknowledgments

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State of North County

North County continues to grow into a robust, vibrant, and increasingly independent economic region. From 2013–2018, the region experienced a 10% increase in jobs. Higher-skilled, higher-paying (Tier 1) occupations and industries continued to grow. The increased economic activity has resulted in historically low unemployment rates as well as continued upward pressure on housing prices. Some of the key issues and trends identified when compiling this year's North County Indicators include:

While North County remains a net-exporter of talent, many indicators suggest that is changing.

> North County's population continues to grow.

One of the key indicators *(see People, Figure 13)* examines the relationship between the number of workers that live in North County and the number of available jobs in the region. In 2015, there was a 10% gap (51,000) between people that lived and worked in North County and the number of available jobs in the region. In 2017, two years later, that gap diminished to 38,000. Almost all of the decline was found in higher-paying business, science, arts, and management occupations. In other words, companies that hire these individuals are finding it a competitive advantage to invest in North County, creating jobs where their existing (and future) workforce resides. The ability of North County businesses to find talent living close to work locations is a critical, if not the key, competitive advantage for the region.

In the past, much of the population growth in North County came from births and families forming. However, the majority of North County's population growth is now from an aging population that is living longer and staying in the region. From 2013–2018, North County's population grew almost 20% faster than California's and 25% faster than the national rate. Over two-thirds of the growth in population was in those aged 55 and older, while the population of young people (0–18 years old) grew by less than 1% (*see People, Figure 3*). This demographic transition is happening all over the country, but it is particularly stark in North County. This shift will have an immediate impact on demand for healthcare and other aging-related services as a growing portion of the population becomes 65 years and older and moves out of the workforce. There is also a concern that, as the population ages and leaves the workforce, there will be less available housing for the working-age population and for replacement workers due to the relatively static supply of housing. Additionally, the slow growth in the number of school-aged children has profound implications for North County's K-12 system, particularly in regards to increased fixed costs like aging infrastructure and teacher retirement benefits.

North County continues to be a high-income region, but income disparities within the region are growing. Overall, North County has higher annual median household or per capita income than San Diego County, neighboring counties, or the statewide average (*See People, Figure 15*). However, there are growing differences between household income by the subregions or areas within North County. In 2014 the median annual household income in North County Central Coast (Del Mar to Encinitas on the Coast) was \$49,700 higher than the comparable statistic in North County Inland (San Marcos to Borrego Springs); in 2017 the difference between these two areas had expanded to over \$55,000 (*see People, Figure 14*). The growing disparity in income will continue to exacerbate the housing affordability challenges and will likely impact the available workforce as younger and less affluent workers find it harder to live and work in the region.

Since the great recession (2008 to 2010), the four clusters that have grown considerably and shaped North County include:

Healthcare

Since 2009 this cluster has grown by more than 14,700 workers—a 40% increase—and will likely continue to grow as the population continues to age and North County looks to expand healthcare services.

Biotechnology & Biomedical Devices

Since 2009 this cluster has grown by more than 6,000 workers and in 2018 provided an annual average earning over \$100,000.

Defense, Aerospace & Transportation Manufacturing

Since 2009 this cluster has grown by more than 150%, with average annual earnings exceeding \$85,000. This cluster is largely found in North County Central Inland and was largely responsible for the sizeable jump in employment in that area between 2014 and 2017.

Craft Beer & Beverages

Since 2009 this cluster has grown by more than 75% and has shown continued growth.

Except for healthcare, which is responding to the changing demographics in

Four industry clusters have grown considerably and played a significant role in reshaping North County's Economy. North County, all of these clusters are export oriented and selling their goods and services to a global market. This is worth noting as one considers the impact that increased trade protectionist policies could have on the regional economy.¹

North County's K-12 schools are performing well above the state average in Math and English Language Arts. North County's K-12 schools scored more than ten percentage points higher than the California average on both the Math and English Language Arts statewide standardized assessment (*see Education, Figure 32 & Figure 33*). The region also scored higher than San Diego or Santa Clara Counties in both Math and English Language Arts. It is also worth noting that while there was considerable variation in the average proficiency scores by area in North County, all four areas scored at or above the California average on both tests. The education performance metrics provide a valuable insight into how the region is doing in preparing the next generation of workers for employment. These two standardized tests are a valuable initial metric into understanding how future job seekers will be able to learn new skills in an ever-changing world of work. This is a key economic development advantage for the region and leaders should think about how to leverage this advantage as a key selling point to both talent and employers.

North County residents are slowly changing how they commute to work.

From 2012–2017, the number of people that walked to work increased by 28% (see Place, Figure 43). In the North County Coast area just over 6% of commuters are walking to work. Over the same time period the number of people that work from home increased by 12%. In North County Central Coast 11% of workers are working from home. Less than 2% of North County residents are taking a taxi or rideshare to work, but the percentage who do increased by 42% between 2012 and 2017. At the other end of the spectrum, carpooling declined by 24%, public transportation (excluding taxicab) declined by 9%, and biking to work also declined by 9%. Just over three-quarters (77%) of North County workers drive alone to work, an increase of just under 1% over the same time period. Residents' commute patterns and preferences are important to consider as the region plans its transportation and community investments. Over time, commutes will impact employee productivity, retention, and, ultimately, the available workforce. These trends also have profound implications for how North County fits into regional mobility strategies. It could be that rather than shoehorn transit solutions into North County, suburban residents would be better served by programs that encourage even more pedestrian and bicycling activities or subsidize telecommuting to help reduce automobile trips.

¹ For a more detailed presentation of North County's Industry Clusters, See Economy, Figure 17-20.



Key Questions for North County in 2019 and Beyond?

The North County Indicators are not only focused on measuring and tracking the key variables that help us understand the community; they are also meant to serve as a starting point for discussing and planning how to respond to the changing economic environment and how the region plans for a brighter future. The following are seven questions that came out of this year's analysis of the 2019 North County Indicators.

How should North County respond to the demographic transition and the aging population?

The demographic transition in North County has begun and is expected to continue for the near future. Aging of the North County population will create a host of issues, including an increased demand for healthcare and aging services and potentially a smaller portion of the population that is able or willing to participate in the workforce. One of the issues that should be considered in this conversation is the potential impact Proposition 13 has in limiting the desire of older individuals to move out of larger single-family homes as they age. Another issue to consider is how healthcare and aging-related services are changing, and the impact that personalized and home-based care and new medical technologies could have on the provision of these services in the future.

How should North County increase economic opportunity for communities in the region that are struggling to get by?

Overall, socioeconomic indicators for North County residents are well above average and paint a generally healthy picture of the region. However, those overall statistics mask pockets of economic distress that can be found in the region's more northern and eastern zip codes *(see Economy, Figure 24)*. Given the looming labor market shortages and the growing income disparities within North County, the region needs to consider strategies that prepare populations

that have traditionally been underrepresented in middle- and higher-income career pathways. Regional leaders have embarked on a conversation about Inclusive Economic Development—that could be used as a starting point for a potential partnership or initial exploration of what could be done in North County (see https://www.sandiegobusiness.org/inclusivegrowth).

How should North County respond to the housing affordability crisis?

Housing affordability is not a new issue for North County but one that continues to grow in its current and potential impact on North County's economic landscape. While the overall housing costs and general lack of supply are important indicators, the high proportion of income spent on housing is probably the most pointed indication that housing is a growing challenge, especially for new entrants to the region's workforce (*see Place, Figure 23*). In several zip codes in North County over 60% of households are spending over 35% of their total household income on rent. While overall housing affordability is important, the ability for current and potential workers to find housing is a particularly relevant subset of the larger affordability question.

How should North County invest in transportation and community infrastructure to support residents, businesses, and the changing preferences in commuting behavior?

One of the interesting findings when looking at North County's commute behavior is that, although there were sizeable changes in commute behavior from 2012–2017 (see Place, Figure 43), the overall percentage of commuters that drove alone was essentially unchanged. With traffic congestion worsening and commute times lengthening, the question is does the region work to get drive-alone commuters to ultimately adopt new forms of commuting or is it possible to create the infrastructure that makes driving alone more efficient?

How should North County support industry clusters and entrepreneurs as they look to create and grow businesses in the region?

North County's economic industry profile is built upon a mix of tourism and hospitality, population-serving industries, and innovative export-oriented industry clusters, including Biotechnology & Biomedical Devices, Defense, Aerospace & Transportation Manufacturing, and Information & Communication Technologies (ICT). These three innovation clusters play a foundational role in driving high wages and high productivity in North County, and they have talent and funding needs that are often very specific to their cluster. Moving forward, what role can (and should) North County play in supporting entrepreneurs in these new and emerging industries? For example, should local governments or higher education institutions in North County find ways to partner to create incubator space? Should North County economic developers put additional time and effort into business services, such as law firms, banks, and consultants, so that would-be entrepreneurs don't need to continually travel south or north to find critical partners as they get their business off the ground? Put another way, does North County need a central business district such as that found in Downtown San Diego, UTC, or the "Y" in Irvine?

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How should North County prepare its students for the jobs of tomorrow and adapt to a more volatile and dynamic world of work?

The Education section of this report illustrates the largely positive direction that K-12 and regional colleges in North County are moving to prepare students for the world of work. The K-12 students in the region are outperforming state averages in Math and English Language Arts (*see Education, Figure 32 & Figure 33*), and regional colleges are expanding the number of students that graduate with a STEM degree (*see Education, Figure 34*). The question becomes—is this enough, regionally, to provide opportunities for current students to grow into sustainable careers that allow them to live and work in North County? There is not an easy answer but any planning around education and the world of work should consider three key components:

1. Continue to teach students how to learn.

One of the most important elements of education today is not to necessarily teaching students *what* they will be doing in their career five or ten years from now but teaching them *how* to learn both for technical and nontechnical skills in the future.

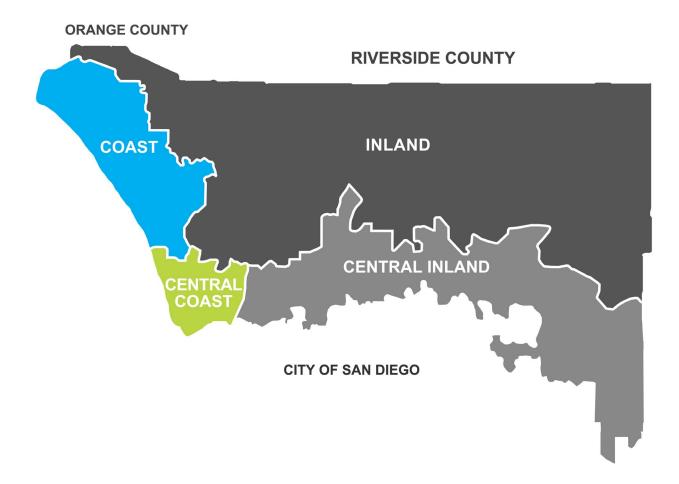
- Expose students to emerging industries, technologies, and career pathways. The fear that jobs are going to completely go away or diminish considerably is largely unfounded, but job requirements will change—students need to be exposed to the driving forces of some of these changes before entering the workforce.
- 3. Provide students options for careers that connect their passions and abilities with opportunities in the marketplace.

The world of work, with its changes and volatility, can be a scary and uncertain place. Helping students connect their interests and abilities with different career options should be an important part of what today's education provides.

How should North County balance economic growth and opportunity with the need to protect and maintain the high quality of life that defines the region?

This is not the first time this question has been asked and it will not be the last. North County's economic advantages are largely built upon the desire of entrepreneurs, business owners, and talent to live, work, and play in the region. Growth can be seen by many as impacting these core advantages. Economic development strategies to expand growth and opportunity in North County communities need to consider those strategies' impact upon the region's quality of life and creatively find solutions that allow growth to complement, not detract from, the aspects that make North County an amazing place to call home.

San Diego's North County Region



NORTH COUNTY'S JURISDICTIONS AND UNINCORPORATED AREAS

| COAST | CENTRAL COAST | INLAND | CENTRAL INLAND |
|--|---|---|---|
| Camp Pendleton Carlsbad Oceanside Vista | Cardiff by the Sea Del Mar Encinitas Rancho Santa Fe Solana Beach San Diego* (partial) | Bonsall Borrego Springs Escondido Fallbrook Palomar Mountain San Marcos Valley Center | Julian Poway Ramona San Diego* (partial) |

* = Zip codes 92127, 92129, 92128, 92130



People

The consensus among economic developers and economists focused on regional economies is that a region's people are central to economic prospects and prosperity. Indicators that help us understand how the population is changing are a valuable tool in assessing North County's evolving competitive advantages, challenges, and opportunities.

SECTION 1: A CHANGING POPULATION

San Diego's North County population has grown to approximately 1.2 million. This represents about 37% of San Diego County's total population and just over 3% of California's residents. If it was its own metropolitan statistical area (MSA), North County would be the 49th largest in the country, larger than the Salt Lake City, Tucson, or Honolulu MSAs. If it was its own city, North County would be the 10th largest in the nation.

From 2013–2018 the region's total population grew by just under 6%, adding approximately 62,000 people. That is

about 25% faster than California and more than 40% faster than the nation. North County's robust population growth is consistent with San Diego County as a whole, and both North County and the rest of San Diego are growing faster than its neighbors to the north (Los Angeles and Orange County).

There are important variations across the different subregions of North County and by age cohort. North County's Central Coast (Del Mar to Encinitas) has grown by almost 9% between 2013 and 2018. During the same time, North County Central Inland has only grown by 3%. Both the northern subregions, North County Coast and North County Inland, have grown by about 5%.

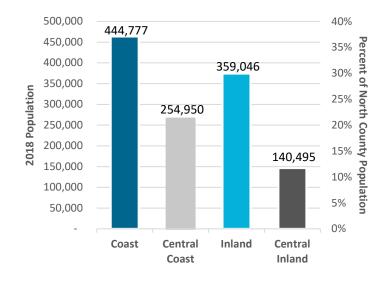
The more dramatic population change in North County is by age, where residents between the ages of 0–54 have only grown by 2%, while older residents (55 years and older) have grown by

WHY DO THESE INDICATORS MATTER?

Examining North County's evolving population composition allows us to better understand the driving forces of the region's supply and demand for regional healthcare, education, training, and childcare investments as well as the availability of workers in the regional economy. These changes will have ripple effects throughout the region.

16% and account for over two-thirds of the growth in the region from 2013–2018. Demographic forecasts by the San Diego Association of Governments indicate that this trend will continue into the coming decade.

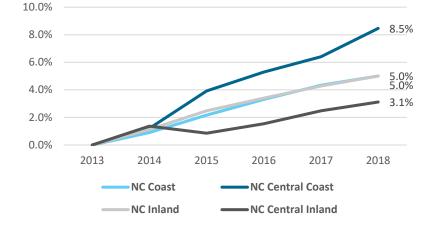
Although North County has a larger foreign-born population than the national average, it has a lower proportion of foreign-born individuals than San Diego County, other surrounding counties, and California. Similarly, North County has a lower proportion of those who speak a language other than English (though they may also speak English) than San Diego County and California overall. North County Inland is the only subregion where more than 30% speak a language other than English (*Figure 5*).





North County's population is near evenly split between Coast North County (58% of the population) and inland subregions (42%).

Figure 2. North County's Changing Population (2013 to 2018)³



More growth has occurred in North County's Central Coast region and, according to the latest estimates for 2017-18, this divergence from rest of the region is accelerating.

² Emsi 2019.1 QCEW and Non-QCEW

³ Emsi 2019.1 QCEW and Non-QCEW

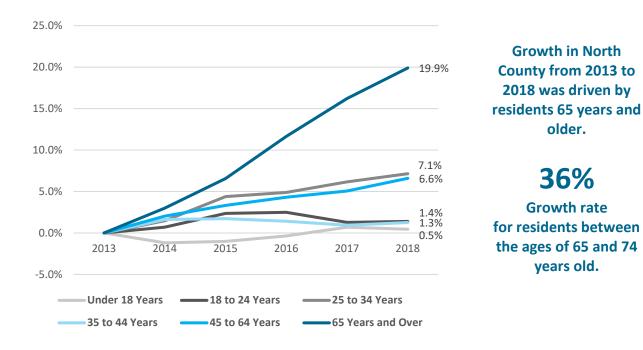


Figure 3. North County's Changing Population by Age (2018)⁴

According to the Harvard Business Review, "In the United States, immigrants are almost twice as likely to become entrepreneurs as native-born U.S. citizens."⁵ A working paper released in early 2019 by researchers at George Mason University states that immigrant-owned firms in the tech industry had "uniformly higher rates of innovation" than firms run by U.S. citizens in 15 of the 16 measures they surveyed.⁶ It is therefore not surprising that the county with the highest proportion of foreign-born residents (Santa Clara) is also the County with the highest number of patents year after year in the United States.

⁴ Emsi 2019.1 QCEW and Non-QCEW

⁵ Source: https://hbr.org/2016/10/why-are-immigrants-more-entrepreneurial

⁶ Source: https://www.nber.org/papers/w25565.pdf

Figure 4. North County Foreign-Born Population (2017)⁷

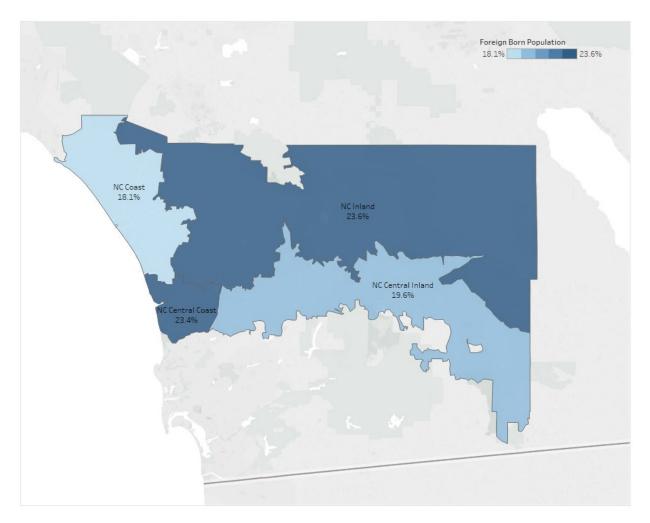


Table 1. Foreign-Born Population Comparison (2017)⁸

| | All North County | | San Diego County | California | Orange County | Los Angeles County | Santa Clara County |
|-------|---------------------|-------|---------------------|------------|------------------|-----------------------|-----------------------|
| 13.4% | 21.1% | 21.8% | 23.6% | 27.0% | 30.3% | 34.4% | 38.6% |

⁷ U.S. Census Bureau, 2013–2017 American Community Survey 5-Year Estimates.

⁸ U.S. Census Bureau, 2013–2017 American Community Survey 5-Year Estimates.

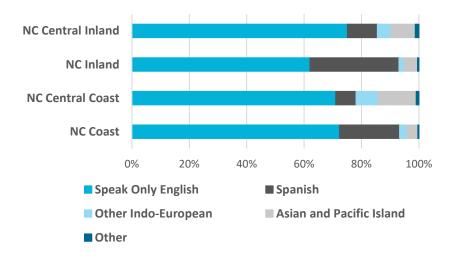
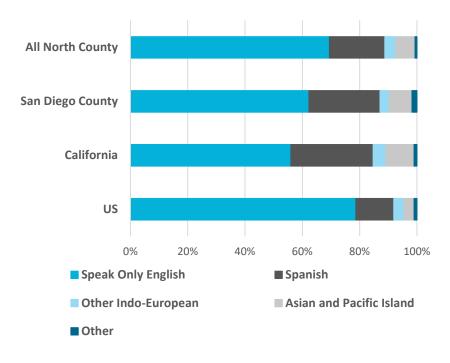


Figure 5. Languages Spoken in North County (5 years and older) (2017)⁹

It is important to note that for the indicators of languages spoken, those in the Spanish, Other Indo-European, Asian & Pacific Island, and Other categories are not necessarily monolingual and may speak English as well.

Figure 6. Languages Spoken Comparison (5 years and older) (2017)¹⁰

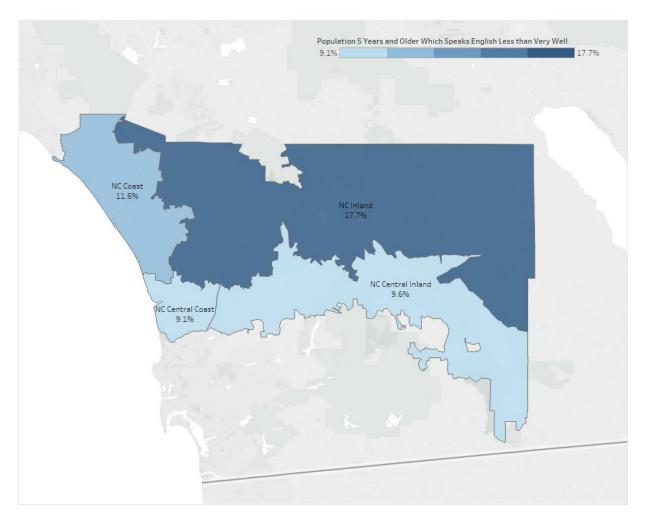


In comparison to San Diego County and California, North County has a smaller proportion of residents who can speak a language other than English. However, North County does have a relatively large percentage of residents who can speak an Indo-European language other than English.

⁹ U.S. Census Bureau, 2013–2017 American Community Survey 5-Year Estimates.

¹⁰ U.S. Census Bureau, 2013–2017 American Community Survey 5-Year Estimates.

Figure 7. Speak English Less than Very Well in North County (5 year and older) (2017)¹¹



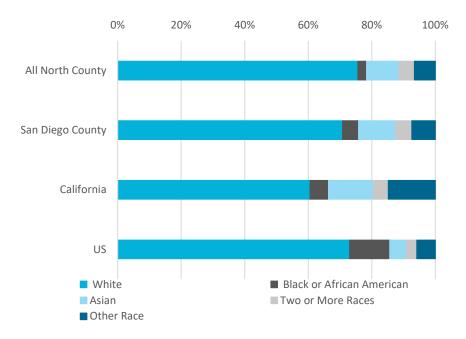
There is a notable difference between North County Coast and North County Inland, where one in six residents report that they speak English less than "very well." As a whole, North County has a lower percentage of residents who reported speaking English less than "very well" than California and other comparable regions in the state.

¹¹ U.S. Census Bureau, 2013–2017 American Community Survey 5-Year Estimates.

Table 2. Speak English Less than Very Well Comparison (5 year and older) (2017)¹²

| United States | | San Diego County | Riverside County | California | Orange County | Santa Clara County | Los Angeles County |
|------------------|-------|---------------------|---------------------|------------|------------------|-----------------------|-----------------------|
| 8.5% | 12.7% | 14.6% | 14.9% | 18.4% | 20.0% | 20.7% | 24.5% |

Figure 8. Race & Ethnicity Comparison (2017)¹³



North County has a higher proportion of white residents than San Diego County and the state. On average, North County also has a proportionately smaller population of individuals of Hispanic descent than San Diego County and California.

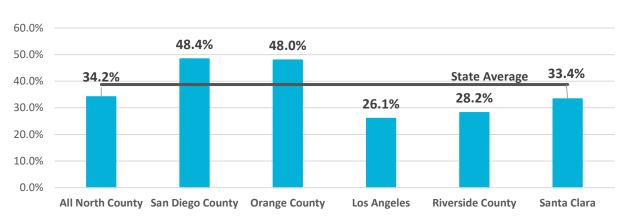


Figure 9. Hispanic Population

¹² U.S. Census Bureau, 2013–2017 American Community Survey 5-Year Estimates.

¹³ U.S. Census Bureau, 2013–2017 American Community Survey 5-Year Estimates.

SECTION 2: HEALTHCARE

Approximately nine out of ten (91%) North County residents have access to insured healthcare. This is just slightly above the averages for San Diego County, California, and the United States. North County's Central Coast reaches as high as 95%, while North County's Inland subregion falls below the national average at 86%.

Figure 10. Healthcare Insured Rate in North County (2017)¹⁴

WHY DO THESE INDICATORS MATTER?

Even after the implementation of the Affordable Care Act, access to insured healthcare remains a challenge for many households in the U.S. These metrics help us understand how large the demand for healthcare can be and how many residents do not currently have access. Lack of coverage also strains the budgets of healthcare providers in North County, impacting their capacity to make the investments that will be required to meet growing demands that will result from the region's changing demographics.

95.2% 96.0% 93.3% 94.0% 92.0% 90.1% State Average 90.0% 88.0% 86.3% 86.0% 84.0% 82.0% 80.0% NC Coast **NC Central Coast** NC Inland NC Central Inland

With the exception of North County Inland, insurance coverage rates in North County exceed rates in comparable regions as well as the state average. Given the importance of healthcare coverage and the negative effects of large uninsured populations, initiatives that aim to boost healthcare coverage in North County Inland should be considered.

Table 3. Healthcare Insured Rate Comparison (2017)¹⁵

| Santa Clara County | | San Diego County | | California | United States | Los Angeles County | Riverside County |
|-----------------------|-------|---------------------|-------|------------|------------------|-----------------------|---------------------|
| 93.8% | 90.6% | 89.6% | 89.6% | 89.5% | 89.5% | 86.7% | 87.7% |

¹⁴ U.S. Census Bureau, 2013–2017 American Community Survey 5-Year Estimates.

¹⁵ U.S. Census Bureau, 2013–2017 American Community Survey 5-Year Estimates.

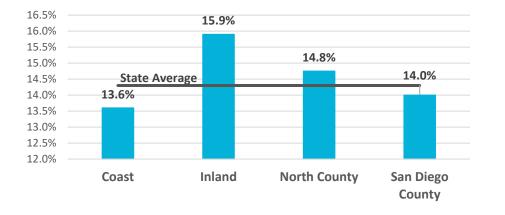
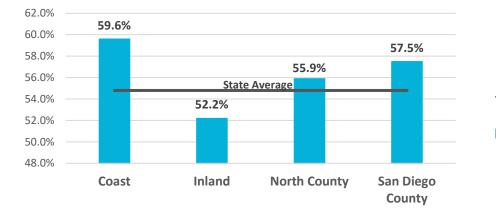


Figure 11. Percent of population who has smoked cigarettes within the past 12 months^{16*}

North County has a greater percentage of cigarette smokers than the San Diego County and state averages.

Figure 12. Percentage of population that spends two or more hours exercising a week^{17*}



While North County overall has a higher percentage of those who exercise regularly than the state average, North County Inland has a lower percentage than the state and county-wide average.

¹⁶ "Live Well San Diego" County of San Diego Health and Human Services Agency

^{*}These subregions do not exactly match the subregional definitions utilized throughout the report. "Coast" combines both Central Coast and Coast, and "Inland" combines both Central Inland and Inland definitions throughout this report.

¹⁷ "Live Well San Diego" County of San Diego Health and Human Services Agency

^{*}These subregions do not exactly match the subregional definitions utilized throughout the report. "Coast" combines both Central Coast and Coast, and "Inland" combines both Central Inland and Inland definitions throughout this report.

SECTION 3: WORKFORCE & INCOME

North County remains a net exporter of talent, with a slightly larger resident workforce (555k) than total number

of jobs (522k) in the region. In most occupational clusters, North County has surpluses, including some of the higher-paying, higher-skilled occupational categories, such as Business & Financial Operations and Life, Physical & Social Science. The surplus of higher-paying occupations is consistent with the relatively high median household income. North County's median household income of approximately \$85,000 is higher than San Diego County, Orange County, California, and the U.S. North County's Central Coast is particularly high at approximately \$122,000—well above Santa Clara County (~\$107,000).

There are certain jobs categories in which there is a regional deficit (where the region imports workers who live outside of North County to fill jobs in the region). Two of the most notable areas are construction and extraction occupations and food preparation and service occupations.

WHY DO THESE INDICATORS MATTER?

The relationship between the types of jobs in a given region and the skills and abilities of its resident workforce is important for understanding some of the key dynamics behind commute and transportation patterns as well as the dependence the region has on neighboring areas for maintaining high incomes and strong quality of life. This is particularly true for a region that is transitioning from a traditional bedroom and suburban community to one that has its own integrated, dynamic, and increasingly independent economy. We measure household income levels because they are a way of measuring the purchasing power of resident populations as well as the resources available to manage economic distress.

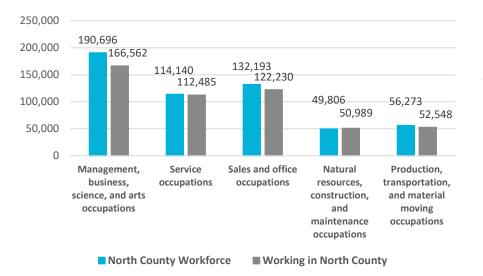
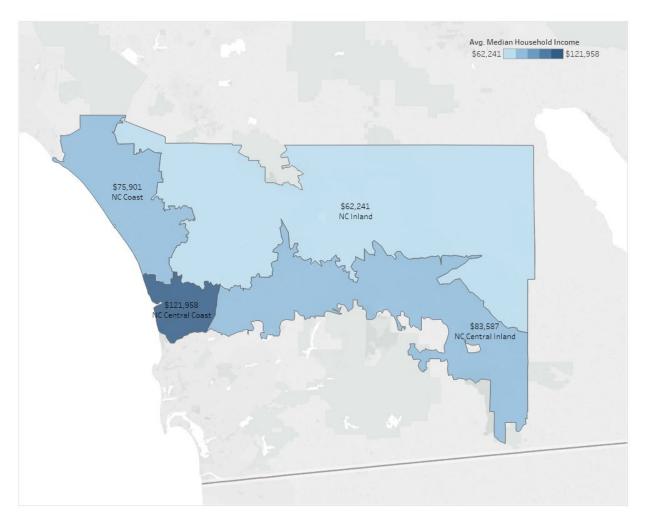


Figure 13. North County's Resident Workforce vs. Working in North County (2017)¹⁸

Although North County has seen significant increases in its highervalued industries like Life Science & Information and Communication Technology, the region still has at least 24,000 residents working in "Management, Business, Science, and Arts" occupations commuting to jobs outside of North County.

¹⁸ U.S. Census Bureau, 2013–2017 American Community Survey 5-Year Estimates.

Figure 14. Median Household Income in North County (2017)¹⁹



Household incomes in North Central Coast North County are nearly twice as high as those found in North County Inland, even though the subregions are adjacent. There are extremely affluent neighborhoods, such as Rancho Santa Fe or Fairbanks Ranch, that are less than 10 miles from economically challenged neighborhoods, such as northern Downtown Escondido.

¹⁹ U.S. Census Bureau, 2013–2017 American Community Survey 5-Year Estimates.

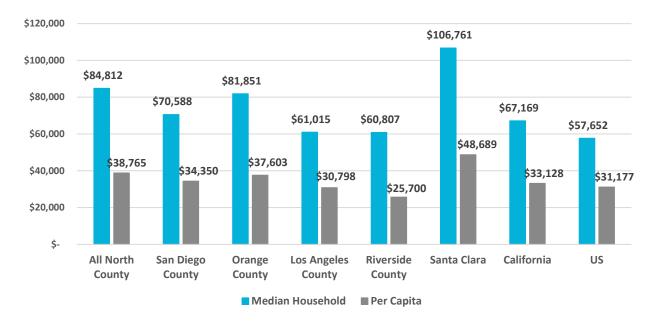


Figure 15. Median Annual Household Income Comparison (2017)²⁰

North County has higher median household incomes than the rest of the county, state, and nation.

²⁰ U.S. Census Bureau, 2013–2017 American Community Survey 5-Year Estimates.



Economy

Regional economic development is often viewed through the lens of industry clusters or regional concentrations of related industries. The term has come to mean closely-affiliated industries that often work together in supply chains or through other partnerships to create value. They arise out of concern that the traditional categories used in government data failed to appreciate emerging relationships between what were seemingly different industries.

Clusters not only provide a way of segmenting and categorizing a region's economic profile, they also serve as a foundation for understanding and developing regional economic development strategies. The indicators reported below help us understand how the environment for employment in the region is changing and the role that industry clusters are playing in shaping both employment and economic opportunities in North County.

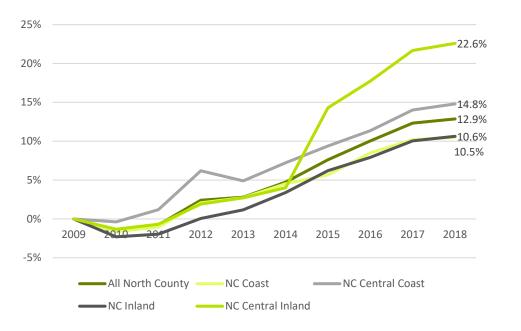
SECTION 1: OVERALL EMPLOYMENT

The total number of jobs in North County has continued to grow to over 521,000. From 2016 through 2018, total employment growth in North County outpaced that of San Diego County and California.

WHY DO THESE INDICATORS MATTER?

The fact that North County's employment growth is above that of the rest of the county and the state suggests that inward investment is increasingly identifying North County as a place to successfully grow one's business and find quality talent. As an indicator, it signals that North County is increasingly not a bedroom community but, rather, an independent economy. This means the region's economy reflects the unique conditions and factors that are somewhat independent of activities and events to the south. For example, while San Diego proper is fairly dependent on business and group sales in its tourist economy, much of North County's Visitors Industry is fueled by the decisions of leisure travelers. Similarly, the North County office market is less dependent on the leasing decisions of large business service firms, such as law firms with up to 100 partners, and more driven by smaller startups and smaller professional service companies.





North County Central Inland has experienced substantial growth since 2009; much of this fueled by companies like General Atomic and Northrup Grumman.

Table 4. Employment (2018) and Employment Growth (2013-2018)

| | Employment | Growth (2013-2018) |
|--------------------|------------|--------------------|
| All North County | 521,606 | 9.8% |
| San Diego County | 1,579,462 | 9.7% |
| Orange County | 1,651,244 | 11.2% |
| Los Angeles County | 4,573,598 | 8.5% |
| Riverside County | 743,855 | 20.6% |
| Santa Clara County | 1,111,246 | 14.6% |
| California | 17,815,980 | 11.2% |

²¹ Emsi 2019.1 QCEW and Non-QCEW

SECTION 2: INDUSTRY CLUSTERS

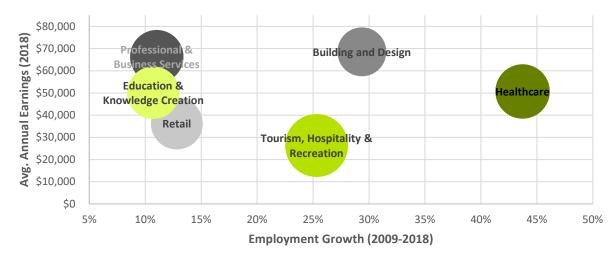
Key industry clusters have been the source of much of the region's growth; Healthcare, Building & Design, Biotechnology & Biomedical Devices, and Defense, Aerospace & Transportation Manufacturing all increased by more than 25% between 2009 and 2018. A number of clusters saw decreases, including Information and Communications, Energy, Other Services, and Other Manufacturing.

It is important to note that the quality of jobs in the region has continued to improve. Higher-skill, higherpaying jobs (Tier 1) outpaced the growth seen in middle-skill, middle-wage (Tier 2) jobs and lower-skill, lower-wage (Tier 3) jobs. In fact, North County Tier 1 occupations grew by at least eight percentage points more than Tier 2 and Tier 3 occupations.

WHY DO THESE INDICATORS MATTER?

As noted above, cluster analysis helps convey the regional strengths and weaknesses across industries in an area. Layered on that approach, measuring job quality is a particularly important metric in North County as higher costs of living and housing often make some occupations unsustainable. A large portion of the population may be struggling to make ends meet if they rely on lower-skill, lower-paying occupations. In combination, these indicators suggest that developing robust industry clusters is essential to supporting sustainable career pathways in the region.

Between 2009 and 2018, more than 14,700 jobs were added to the Healthcare industry in North County. Most of these jobs were in services for the elderly and persons with disabilities, doctors' offices, and continuing care retirement communities and assisted living facilities for the elderly. Indeed, the number of individuals working at Hospitals remained relatively unchanged, suggesting there are profound changes in how healthcare is delivered in North County. Figure 17. Industry Clusters in North County with 38,000 Jobs or More*22



*Size of bubble is relative to the number of jobs in 2018

It bears attention that one of the highest paying clusters in North County (Information & Communication Technology) actually contracted between 2009 and 2018. A decline in wireless telecommunications (excluding satellite) played a significant role in this decline.

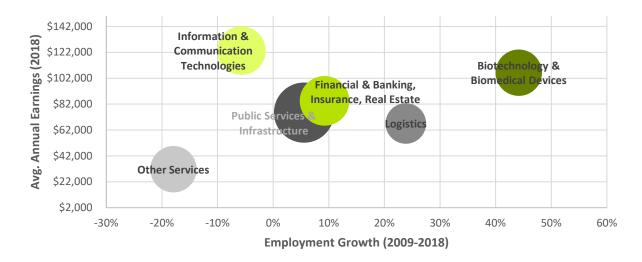


Figure 18. Industry Clusters in North County with between 15,000 and 37,999 Jobs*²³

*Size of bubble is relative to the number of jobs in 2018

²² Emsi 2019.1 QCEW and Non-QCEW

²³ Emsi 2019.1 QCEW and Non-QCEW

The Defense, Aerospace & Transportation Manufacturing industry saw a huge boost in employment due to the expansion of facilities by Northrop Grumman & General Atomics. Most of the jobs added were in aerospace product and parts manufacturing and in navigational, measuring, electromedical, and control instruments manufacturing.

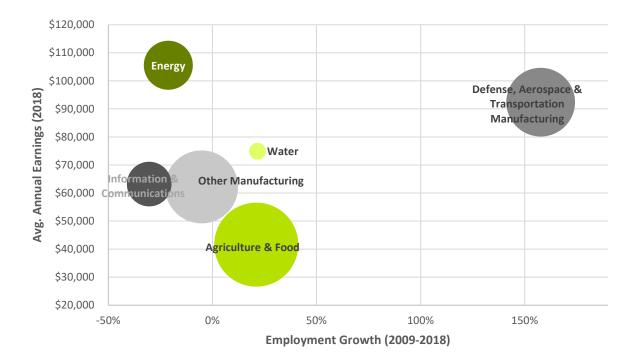


Figure 19. Industry Clusters in North County with Fewer than 14,999 Jobs*²⁴

*Size of bubble is relative to the number of jobs in 2018

²⁴ Emsi 2019.1 QCEW and Non-QCEW

Craft Beer and Beverages saw robust growth even as some skeptics have said that North County had reached "Peak Beer." In contrast, the Sports and Active Lifestyle cluster seems to have stagnated—likely a result of the challenge many companies in this space face in trying to manufacture in a higher-cost region like North County.

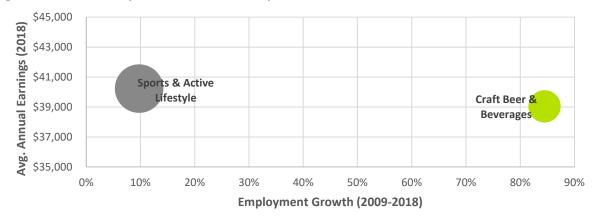


Figure 20. Niche Industry Clusters in North County

*Size of bubble is relative to the number of jobs in 2018

TIER 1 OCCUPATIONS

are typically the highest-paying, highest-skilled occupations in the economy. This occupational category includes positions such as managers (e.g., Chief Executives and Sales Managers), professional positions (e.g., Lawyers and Physicians), and highly-skilled technology occupations, such as scientists, engineers, computer programmers, and software developers.

TIER 2 OCCUPATIONS

are typically the middle-skill, middle-wage occupations. This occupational category includes positions such as technicians, teachers, office and administrative positions (e.g., Accounting Clerks and Secretaries), manufacturing, operations, and production positions (e.g., Assemblers, Electricians, and Machinists).

TIER 3 OCCUPATIONS

are typically the lowest-paying, lowest-skilled occupations that have historically provided the largest portion of employment in the region. These occupations include positions such as security guards, food service and retail positions, building and grounds cleaning positions (e.g., Janitors), and personal care positions (e.g., Home Health Aides and Child Care Workers).



Figure 21. Growth in Employment by Occupational Tier (2009-2018)²⁵

Like many places around the country, North County saw slower growth in middle-tier occupations than either the high-tier (Tier 1) or low-tier (Tier 3) occupations. Across the country this trend poses profound questions about income inequality and the challenges faced by the middle class.

General and operations managers, registered nurses, and business operations specialists were the three Tier 1 occupations with the most jobs added between 2009 and 2018.

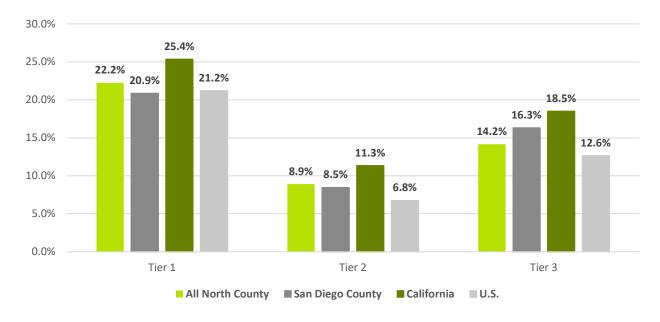


Figure 22. Growth by Occupational Tier (2009-2018)²⁶

²⁵ Emsi 2019.1 QCEW and Non-QCEW

²⁶ Emsi 2019.1 QCEW and Non-QCEW

Table 5. Job Quality Composition by Subregion (2018)

| | Tier 1 | Tier 2 | Tier 3 |
|-------------------|--------|--------|--------|
| NC Coast | 24.0% | 30.4% | 45.6% |
| NC Central Coast | 26.6% | 26.5% | 46.9% |
| NC Inland | 18.9% | 32.8% | 48.2% |
| NC Central Inland | 24.9% | 31.8% | 43.4% |

Table 6. Job Quality Composition (2018)

| | Tier 1 | Tier 2 | Tier 3 |
|------------------|--------|--------|--------|
| All North County | 23.4% | 30.3% | 46.2% |
| San Diego County | 24.8% | 30.0% | 45.3% |
| California | 22.5% | 30.4% | 47.1% |
| United States | 21.5% | 32.9% | 45.6% |

SECTION 3: ECONOMIC DISTRESS

The costs of living in North County generally increase as one goes from the northeast corner of the region towards southwest. Across regions there is about a \$13,600 per year difference in the living wage for a family of four. Given that housing is so expensive in North County, it is no surprise that poverty rates, particularly in the North County Inland region, range from 7.8% to 28.3%.

WHY DO THESE INDICATORS MATTER?

The high costs of living mean that many families may struggle to meet other daily household needs. It likely impacts savings rates and the ability of individuals and families to accumulate household wealth. It also squeezes household budgets, reducing the amount of money available to purchase goods and services. This, in turn, can have a deleterious impact on local finances, as less money is spent on taxable goods. Living wages are calculated by factoring the local costs of food, child care, medical expenses, housing, transportation, and other factors.

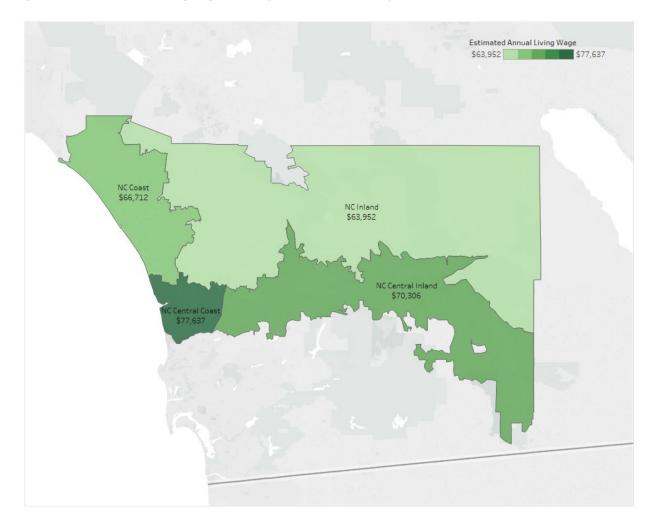


Figure 23. Estimated Annual Living Wage for Family of Four in North County (2018)²⁷

²⁷ Estimates for Family of Four (one adult working, two children) Source: MIT Living Wage Calculator. <u>http://livingwage.mit.edu/</u>

The poverty rate of 28.3% in the zip code 92066, near Ranchita in North County Inland, is comparable to poverty rates in Laredo, Texas and Las Cruces, New Mexico.

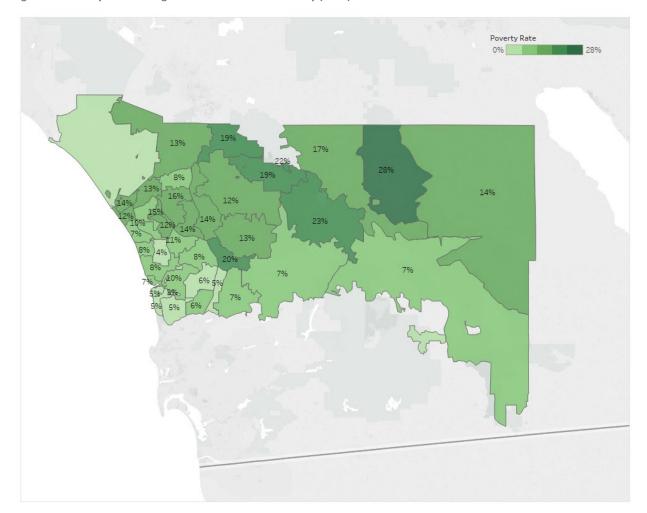


Figure 24. Poverty Rate Among All Residents in North County (2017)²⁸

²⁸ US Census Bureau, 2013–2017 American Community Survey 5-Year Estimates.



Innovation

New ideas, products, and services are an integral part of a region's economy, workforce, and even culture. Not only can innovation have profound impacts on shaping a region, it can usher in unprecedented growth and energy that often has ripple effects throughout the rest of the economy. Moreover, companies often experience their fastest rates of growth during their first few years of existence, fueling the overall prosperity of a region.

North County's innovation ecosystem has grown in recent years. The 2017 Kauffman Index Startup Activity report ranked the San Diego Metropolitan Area as the fourth-highest in its index, only behind Miami, Austin, and Los Angeles. Looking at metrics such as startup density, rate of new entrepreneurs, and the origins of those entrepreneurs, the San Diego Metropolitan Area, and subsequently North County, is increasingly a hub for innovation and entrepreneurial activity.

SECTION 1: INNOVATION FUNDING

Innovation funding is a metric frequently employed to evaluate a region's inventiveness. Innovation funding ranges from grants that support early stages of experimenting prototyping to later-stage development and commercialization funded through IPOs and venture capital. Innovation funding in North County quadrupled

between 2013 and 2018, while innovation funding in the Greater San Diego area increased by about 180% during the same time period.

In all, North County attracted more than \$2 billion in innovation funding between 2013 and 2018. The Coast regions tended to draw the most innovation funding. Carlsbad attracted more than \$1.3 billion in innovation funding while Encinitas acquired more than \$305 million. While funding acquired in the Central Inland subregion was relatively smaller, the region still attracted a substantial amount at nearly \$100 million in funding between 2013 and 2018.

WHY DO THESE INDICATORS MATTER?

Innovation funding is a relatively direct metric that captures innovation activity in a region. Funding is critical to any innovative activity, thus the presence or absence of it is indicative of innovation. The largest investment was a round of debt financing to Action Sports Manufacturer TaylorMade Golf in Carlsbad. In total, the investment amounted to \$225 million.

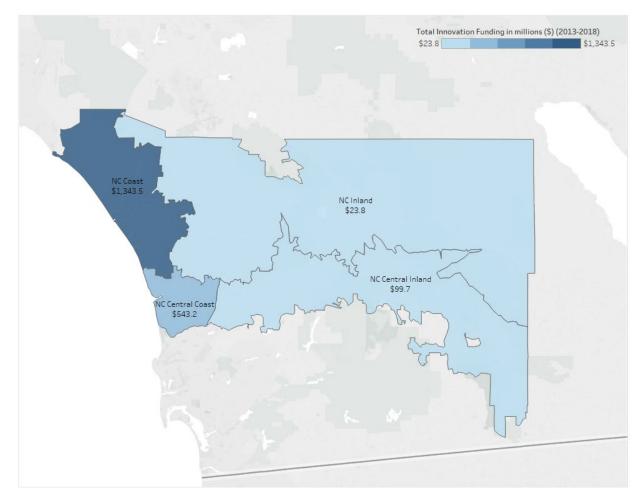


Figure 25. Total Innovation Funding in North County from 2013 to 2018²⁹

SECTION 2: STARTUPS AND ENTREPRENEURIALISM

The San Diego-Carlsbad-San Marcos Metropolitan Area (MSA) has increasingly become an attractive location for entrepreneurs. The metrics below highlight modest increases in startup growth and density and consistent growth in entrepreneurship. In 2017, the employment among startups during their first five years increased by a remarkable 81.2% on average (*Figure 26*). This means a startup founded in 2012 with five employees would have, on average, 9.1 employees by 2017. Simultaneously, in 2017 there were about 95 startups for every 1,000 businesses in the San Diego area (*Figure 27*). That amounts to nearly one in every hundred businesses.

²⁹ Crunchbase

After the downturn occasioned by the recession, entrepreneurial growth has rebounded sharply to above pre-2008 levels.

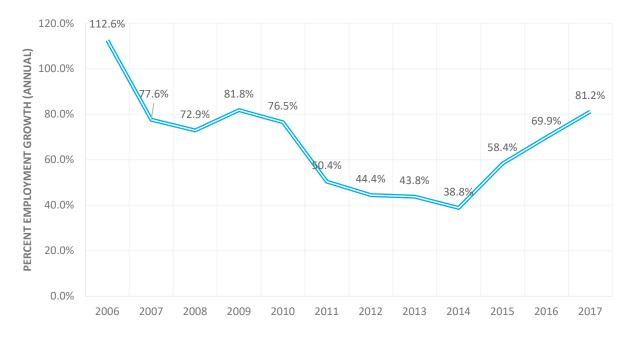
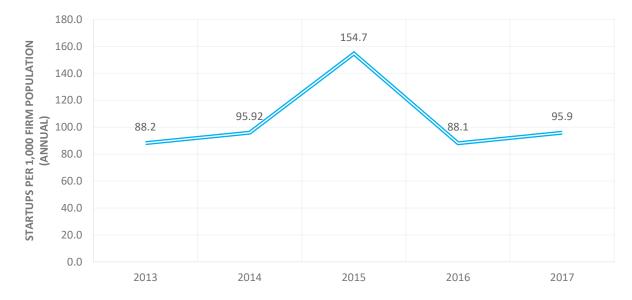


Figure 26. Startup growth in San Diego-Carlsbad-San Marcos Metropolitan Area (2006-2017)

Figure 27. Startup Density in San Diego-Carlsbad-San Marcos Metropolitan Area (2013-2017)³⁰



³⁰ 2017 Kauffman Index.

The quantity of entrepreneurs increased dramatically between 2013 and 2018. About one in every 200 adults in the San Diego area is an entrepreneur (*Figure 28*). The quality of entrepreneurs has also increased—fewer than 18% of entrepreneurs in the region were previously unemployed (*Figure 29*). This suggests that that the majority of those choosing to become entrepreneurs did so because of opportunity rather than out of necessity.

San Diego's rate of entrepreneurs was the 4th highest in the country according to the 2017 Kauffman Index Startup Activity Report.



Figure 28. Percent of Adult Population that Became Entrepreneurs in a Given Month in San Diego-Carlsbad-San Marcos MSA³¹

WHAT DOES THIS METRIC TELL US?

Studies show that entrepreneurs who were previously employed prior to beginning their endeavor were more likely to have higher incomes and employ other individuals than those who were previously unemployed.³²

³¹ 2017 Kauffman Index.

³² "Do the Unemployed Become Successful Entrepreneurs? A Comparison between the Unemployed, Inactive and Wage-Earners." Pernilla Andersson and Eskil Wadensjö. October 2006.

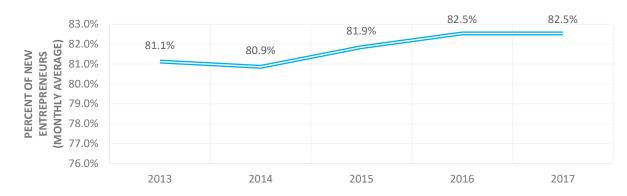


Figure 29. Percent of Entrepreneurs Who Were Not Unemployed Before Starting their Business in San Diego-Carlsbad-San Marcos MSA³³

SECTION 3: PATENTS

Patent filings are another metric that can serve as a proxy for measuring innovation in the region. Patents often lead to new products, new businesses, and even other new ideas. Though patent filings by inventors in North County have declined in recent years, the overall trend remains positive (*Figure 30*). Patent filings in Central Inland and Coast have increased the most between 2006 and 2017, increasing 56.7% and 64.3%, respectively.

WHY DOES THIS MATTER?

Patents are often the first step in securing intellectual property. Since many of these inventions will go on to become a commercial product, patents tend to be a leading indicator of innovation.

Though patents have seen a slight decline in recent years, patent filing in North County has increased more than 40% over a 12-year period.

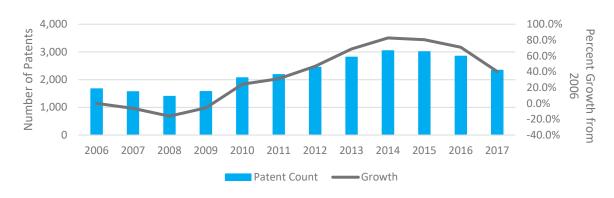


Figure 30. Patents Filed by Inventors in North County 2006-2017³⁴

³³ 2017 Kauffman Index.

³⁴ USPTO PatentsView Data Query. Search was done on the inventor database using inventor last known location by city.



Education

North County's residents are generally more educated than residents from the rest of San Diego County, California, or the United States. With that being said, more than one in four working-age adults (25–64 years old) who live in North County have a high school diploma or less as their highest level of education. Moreover, while a high school diploma may have at one time been enough education for economic sustainability that is no longer the case.

According the U.S. Bureau of Labor Statistics³⁵, in 2017 the median weekly earnings of someone with a high school diploma as their highest level of education earned around \$500 a week, while someone with a bachelor's degree as their highest level of education earned approximately \$1,200 a week. That translates into approximately \$25,000 a year (high school diploma) compared to \$60,000 a year (bachelor's degree).

While North County as a whole demonstrated strong educational attainment levels, North County Inland and, to a lesser degree, North County Coast had educational attainment levels that were below the County average. At the other end of the spectrum, North County's Central Coast had one of the

WHAT ARE WE MEASURING & WHY DOES IT MATTER?

The North County Indicators for the EDUCATION section are focused on understanding the current educational attainment composition of the adult population, as well as evaluating how the pipeline for education in the region is working.

highest levels of educational attainment from its working-aged adults (25–64), considerably higher than San Diego County or comparable communities such as Santa Clara County. Educational metrics of current student performance showed North County's Central Coast and Central Inland scored quite high on the California Assessment of Student Performance & Progress (CAASPP) in both English Language Arts (ELA) and Mathematics.

SECTION 1: EDUCATIONAL ATTAINMENT

Over 40% of North County's adult-aged residents (25–64 years old) have a bachelor's degree or higher as their highest level of education. This is a higher proportion than San Diego County, California, or the United States. North County's Central Coast is one of the most educated communities in the nation, with 70% of its working-aged adults having a bachelor's degree or higher. This is a core economic development advantage and it is one of

³⁵ Source: https://www.bls.gov/careeroutlook/2018/data-on-display/education-pays.htm

the reasons we believe the region has seen robust investment inflows and start-up activity over the past decade. Businesses increasingly look to locate and grow where talent is located, and North County's high quality of life has served to attract highlyeducated and talented workers.

North County has a higher percentage of adults with post-graduate degrees, buoyed primarily by the Central Coast and Central Inland, than every other comparison region, except for Santa Clara County.

WHY DOES THIS MATTER?

Educational attainment metrics provide an initial assessment of how skilled a regional workforce is and some measure of how prepared it is for the world of work both today and in the near future. As noted above, education levels are a key driver of economic investments, as firms increasingly find that talent and talent availability are the two key determinants of their success.

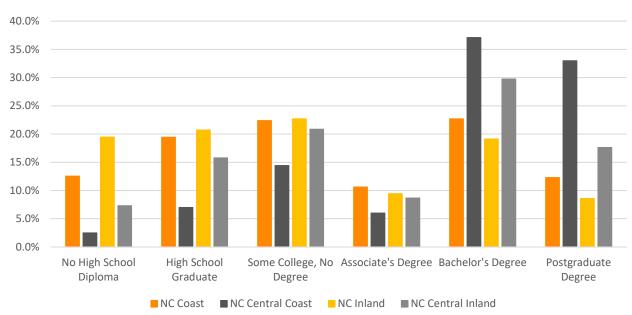


Figure 31. Educational Attainment for Working Aged Adults (25 to 64) in North County (2017)³⁶

³⁶ U.S. Census Bureau, 2013–2017 American Community Survey 5-Year Estimates.

| | No High School Diploma | High School Graduate | Some College, No Degree | Associate Degree | Bachelor's Degree | Postgraduate Degree |
|-------------------------|------------------------------|-------------------------|-------------------------------|---------------------|----------------------|------------------------|
| All North County | 11.7% | 16.6% | 20.5% | 9.0% | 25.7% | 16.5% |
| San Diego County | 12.5% | 18.3% | 22.8% | 8.5% | 24.0% | 13.9% |
| Orange County | 15.1% | 16.9% | 20.5% | 7.8% | 26.3% | 13.5% |
| Los Angeles County | 20.4% | 20.7% | 19.8% | 7.0% | 21.4% | 10.7% |
| Riverside County | 18.9% | 26.9% | 25.3% | 8.1% | 13.6% | 7.2% |
| Santa Clara County | 11.2% | 13.9% | 15.7% | 6.9% | 27.9% | 24.4% |
| California | 16.7% | 20.4% | 21.8% | 7.9% | 21.2% | 11.9% |

Table 7. Educational Attainment for Working Aged Adults (25 to 64) Comparison (2017)³⁷

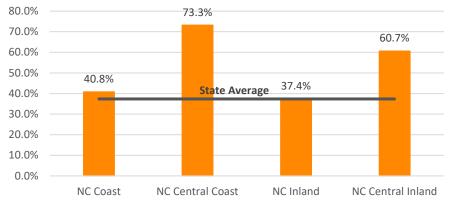
SECTION 2: PERFORMANCE & COMPLETIONS

Students in all subregions across North County scored at or above the state level both in Math and English Language Arts proficiency. Furthermore, North County proficiency averages trend higher than other surrounding counties. North County has also seen a dramatic increase in STEM graduation from California State University San Marcos and its two community colleges over the past decade.

Figure 32. CAASPP Math Proficiency in North County (2017-2018)³⁸

WHY DOES THIS MATTER?

Proficiency scores indicate that students in North County are above average in the important subjects of Math and English Language Arts. Additionally, studies in STEM are generally considered to offer experience in analytical and critical thinking and prepare students for the jobs of the future.



Due to particularly high math proficiency rates in North County **Central Coast and Central Inland, North County has generally** higher math proficiency scores than many surrounding regions, including broader San **Diego County.**

³⁷ U.S. Census Bureau, 2013–2017 American Community Survey 5-Year Estimates. ³⁸ CA Ed Data

Table 8. CAASPP Math Proficiency Comparison (2017-2018)³⁹

| Orange County | All North County | Santa Clara County | San Diego County | California | Los Angeles County | Riverside County |
|------------------|---------------------|-----------------------|---------------------|------------|-----------------------|---------------------|
| 48.7% | 48.0% | 47.9% | 43.7% | 37.4% | 37.0% | 32.0% |

Figure 33. CAASPP English Language Arts Proficiency in North County (2017-2018)⁴⁰

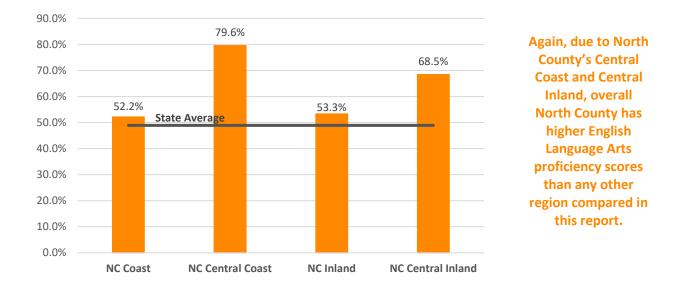


Table 9. CAASPP English Language Arts Proficiency Comparison (2017-2018)⁴¹

| All North | Orange | Santa Clara | San Diego | California | Los Angeles | Riverside |
|-----------|--------|-------------|-----------|------------|-------------|-----------|
| County | County | County | County | | County | County |
| 59.6% | 58.1% | 57.3% | 55.6% | 48.9% | 48.5% | 45.3% |

³⁹ CA Ed Data

⁴⁰ CA Ed Data

⁴¹ CA Ed Data

In 2017, California State University San Marcos accounted for 688 (or 53.1%) of these degrees. Palomar College and MiraCosta College each accounted for 330 and 229 STEM degree completions, respectively.

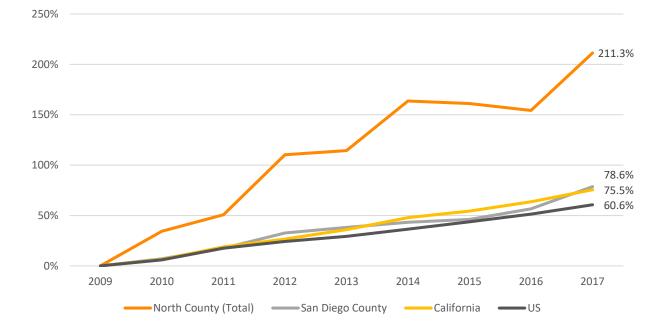


Figure 34. STEM Degree Completions in North County (2009-2017)⁴²

Table 10. STEM Degree Completions (2009-2017)

| | Completions | 2009-2017 Growth |
|------------------|-------------|------------------|
| All North County | 1,295 | 211.3% |
| San Diego County | 12,992 | 78.6% |
| California | 110,556 | 75.5% |
| U.S. | 871,618 | 60.6% |

⁴² Emsi 2019.1 2019.1 QCEW and Non-QCEW

SECTION 3: DISADVANTAGED POPULATIONS

North County generally has lower levels of disadvantaged student populations, including those effected by homelessness, those who are learning English, and those who receive free or reduced-price meals. Only North County Inland, which has 21.9% of students falling under the English language learner population, exceeds the state average.

WHY DOES THIS MATTER?

Student populations with challenges require additional efforts to ensure that students have the best chance at success.

Although North County overall has a lower percentage of homeless students, North County Coast has a greater percentage of homeless students than the state average.

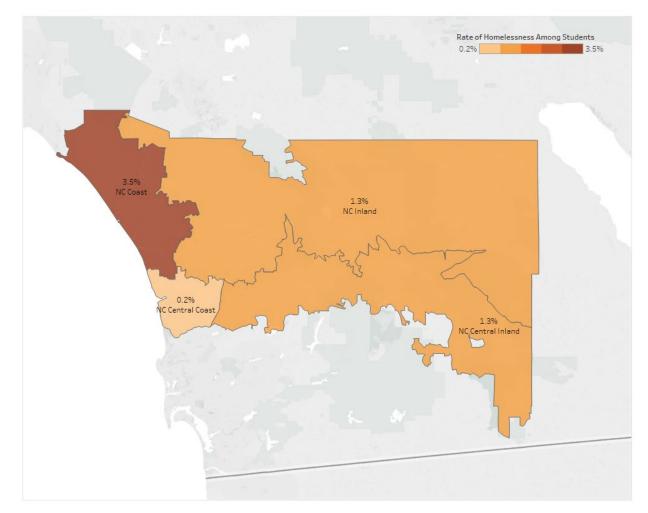


Figure 35. Student Homeless Population in North County (2017-2018)⁴³

43 CA Ed Data

| Table 11. Student Homeless Population Com | parison (2017-2018) ⁴⁴ |
|--|-----------------------------------|
|--|-----------------------------------|

| Santa Clara | All North | San Diego | California | Los Angeles | Riverside | Orange |
|-------------|-----------|-----------|------------|-------------|-----------|--------|
| County | County | County | | County | County | County |
| 1.1% | 2.2% | 3.0% | 3.3% | 3.6% | 3.7% | 5.0% |

Figure 36. English Language Learner Population in North County (2017-2018)⁴⁵

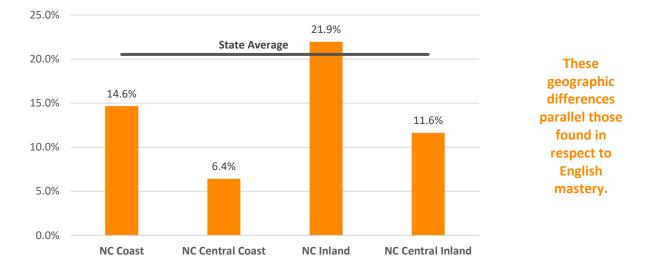


Table 12. English Language Learner Population Comparison (2017-2018)⁴⁶

| All North | Riverside | San Diego | Los Angeles | California | Orange | Santa Clara |
|-----------|-----------|-----------|-------------|------------|--------|-------------|
| County | County | County | County | | County | County |
| 15.6% | 19.1% | 20.4% | 20.5% | 20.5% | 23.5% | 24.3% |

⁴⁴ CA Ed Data

⁴⁵ CA Ed Data

⁴⁶ CA Ed Data

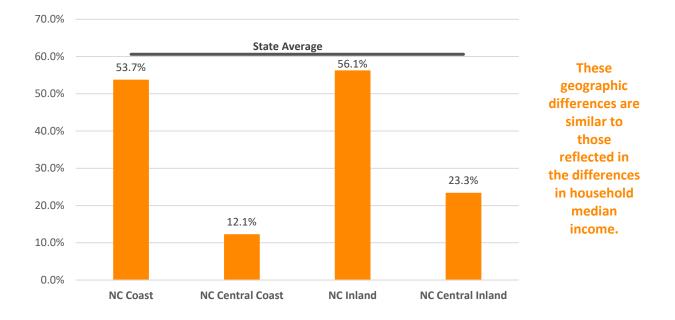


Figure 37. Students Who Receive Free or Reduced-Price Meals in North County (2017-2018)⁴⁷

Table 13. Students Who Receive Free or Reduced-Price Meals Comparison (2017-2018)⁴⁸

| Santa Clara | All North | Orange | San Diego | California | Riverside | Los Angeles |
|-------------|-----------|--------|-----------|------------|-----------|-------------|
| County | County | County | County | | County | County |
| 42.4% | 42.6% | 49.3% | 51.8% | 60.6% | 65.3% | 69.6% |



Place

North County's quality of life is special and envied the world over. This special location has a cost—most notably the high price of living and working in the region, and the challenge of moving in and around the region. The issues related to *housing and transportation* are not only important to residents and elected officials, they are increasingly a key issue for businesses and employers. As was reported in the 2018 North County Indicators, businesses in the region were most dissatisfied with the ability of their employees to find reasonably-priced housing that is close to work.⁴⁹ Residents, especially renters, spend a large portion of their total household income on housing. A greater percentage of North County renters spend 35% or more of their total income on housing than San Diego County or California renters and considerably more than the national average.

WHAT ARE WE MEASURING & WHY DOES IT MATTER?

The North County Indicators for the PLACE section are focused on understanding the ability to live, work, and move within and through the region. These indicators are important for several reasons. First, they provide a baseline measure of how expensive it is to live in North County. They also describe the costs current and potential business face in finding office space and getting access to talent that is traveling farther to get to work. More broadly, a key economic advantage the region has is its quality of life. Without action, the high cost of housing and increasing number of "mega commuters" threaten to erode these advantages—or at the very least drive many residents out of North County who can no longer afford to live here, further exacerbating the challenge of growing middle-tier jobs in the region.

SECTION 1: HOUSING

The cost to live and work in North County remains particularly high. Median home sale prices in North County are among the highest among comparative regions, only surpassed by Santa Clara County.

⁴⁹ 2018 North County Business Survey conducted by BW Research and included the assessment of eight different business issues.

WHY DOES THIS MATTER?

Housing affordability metrics provide a measure of how costs are going up, not just in nominal terms but also in terms of affordability and sustainability. High housing costs tend to put additional pressure on those who are already struggling to get by.

Housing availability and relative costs are also likely to have a longer-term impact on regional economic vitality, particularly as it relates to attracting and retaining talent. North County's economic health and sustainability is built upon innovative and dynamic industry clusters like Biotechnology & Biomedical Devices and Information & Communications Technologies (ICT), which require highly-skilled and often highly-educated talent. Entrepreneurs and employers are increasingly aware of the need to have their office locations in close proximity to where talent lives and plays. One of North County's foundational competitive advantages is the ability to attract and retain high-performing talent, who may begin their career as a single adult but stay in the region as she or he gets married, builds a family, and grows roots in the community. As housing options decline, commute times increase and connectivity between where people live, work, and play diminishes, potentially putting one of the region's core competitive advantages in jeopardy.

North County's Central Coast median house sale price is the highest among all regions included in this report, even surpassing the median house sale prices in Santa Clara County.

| | Median House Sale Price (2018) ⁵¹ | Homeowner Vacancy | Rental Vacancy | Renter-Occupied Housing Units (% of Occupied Units) |
|-------------------|---|----------------------|----------------|---|
| All North County | \$770,616 | 1.1% | 3.2% | 38.8% |
| NC Coast | \$636,943 | 1.6% | 2.8% | 44.9% |
| NC Central Coast | \$1,272,789 | 0.7% | 2.7% | 33.6% |
| NC Inland | \$574,083 | 1.1% | 4.2% | 38.7% |
| NC Central Inland | \$613,103 | 0.7% | 3.2% | 29.7% |

Table 14. Housing Comparison (2017)⁵⁰

⁵⁰ U.S. Census Bureau, 2013–2017 American Community Survey 5-Year Estimates and JobsEQ.

⁵¹ Zillow Research

Table 15. Regional Housing Comparison (2017)⁵²

| | Median House Sale Price ⁵³ | Homeowner Vacancy | Rental Vacancy | Renter-Occupied Housing Units (% of Occupied Units) |
|-------------------------|--|----------------------|----------------|---|
| All North County | \$770,616 | 1.1% | 3.2% | 38.8% |
| San Diego County | \$555,325 | 1.1% | 3.6% | 47.0% |
| Riverside County | \$367,308 | 1.9% | 5.6% | 35.0% |
| Santa Clara County | \$1,142,167 | 0.4% | 3.3% | 43.1% |
| California | \$482,775 | 1.2% | 3.6% | 45.5% |
| United States | \$227,025 | 1.7% | 6.1% | 36.2% |

The poverty rate is a poor measure of economic distress as it is largely based on the cost of food (which was a much larger portion of household spending 100 years ago) and does not account for the largest expenditure for most households—housing costs. The figures below show just how large a portion of household income is spent on a mortgage or rent.

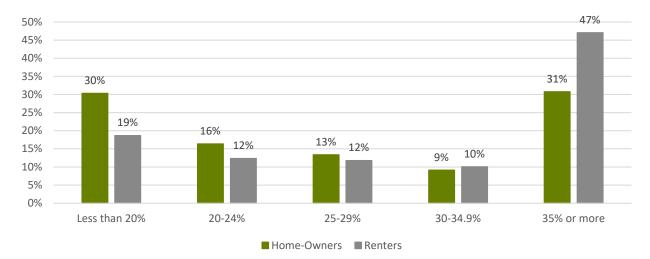


Figure 38. North County Housing Costs as a Percentage of Household Income (2017)⁵⁴

⁵² U.S. Census Bureau, 2013–2017 American Community Survey 5-Year Estimates and JobsEQ.

⁵³ Zillow Research

⁵⁴ U.S. Census Bureau, 2013–2017 American Community Survey 5-Year Estimates.

It is important to note that as a subregion, North County Coast has the highest percentage of renters (52%), followed closely by North County Inland (49%), that spend 35% or more of their household income on rent.

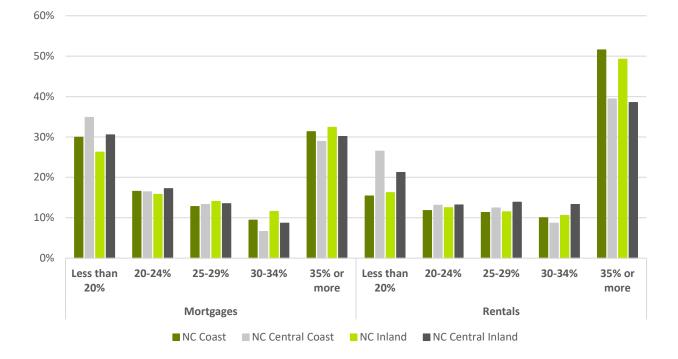
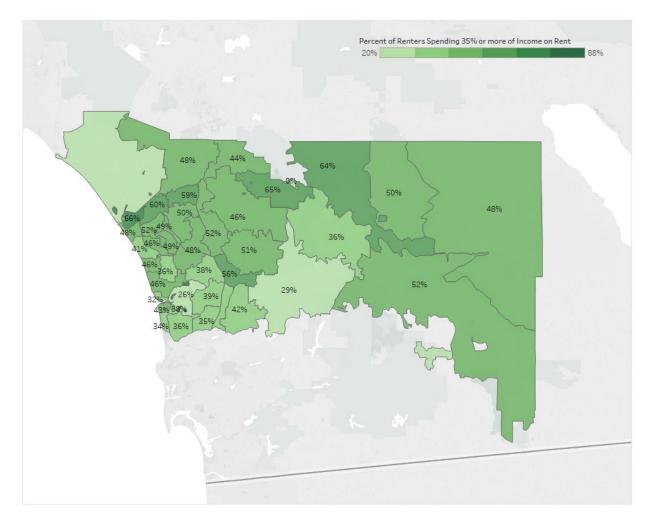


Figure 39. Housing Costs as a Percentage of Household Income (2017) by subregion⁵⁵

A visual comparison suggests there is a correlation between areas with higher poverty and high percentages of renters spending 35% or more on housing.

⁵⁵ U.S. Census Bureau, 2013–2017 American Community Survey 5-Year Estimates.

Figure 40. Proportion of Population in North County that Spends 35% or More of Household Income on Rent by Zip Code (2017). ⁵⁶



Place Section 2: Transportation

Most subregions in North County have average commute times that are below those of surrounding areas and the state average. The exception is North County Inland, which has a mean travel time two minutes higher than the state average. Notably, North County residents' choice of commuting vehicles has changed. Carpooling has declined by nearly a quarter, with 23.4% fewer commuters sharing vehicles to work, while means such as walking and ridesharing have seen increases between 2012 and 2017.

WHY DOES THIS MATTER?

Commute time plays a substantial role in quality of life. Lower commute times can result in happier employees and greater attraction for firms considering entering the area.

⁵⁶ U.S. Census Bureau, 2013–2017 American Community Survey 5-Year Estimates.

Residents in the North County Inland zip code 92066, near Ranchita, had an average commute time of 42 minutes.

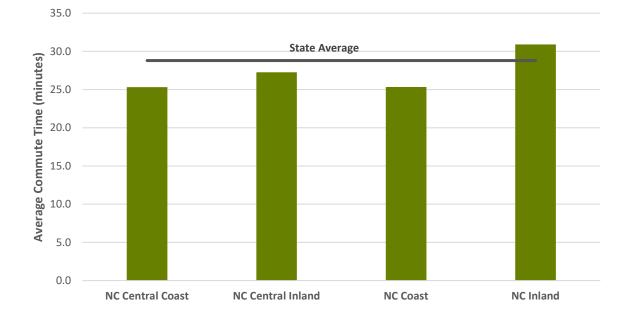


Figure 41. Mean Commute Time in North County (2012-2017) 57

Table 16. Mean Travel Time to Work in Minutes (2017)⁵⁸

| San Diego | United | Orange | All North | Santa Clara | California | Los Angeles | Riverside |
|-----------|--------|--------|-----------|-------------|------------|-------------|-----------|
| County | States | County | County | County | | County | County |
| 25.7 | 26.4 | 27.4 | 27.6 | 28.0 | 28.8 | 30.9 | 33.1 |

⁵⁷ U.S. Census Bureau, 2013–2017 American Community Survey 5-Year Estimates.

⁵⁸ U.S. Census Bureau, 2013–2017 American Community Survey 5-Year Estimates.

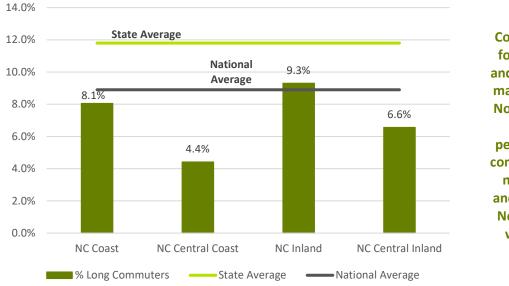
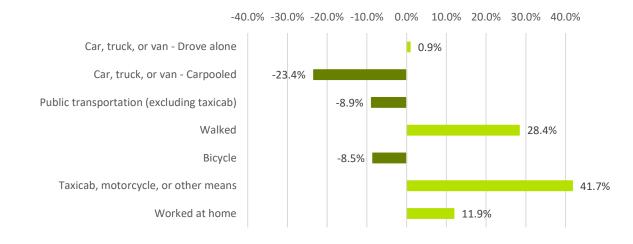


Figure 42. Long Commuters (60 or minutes or more) (2017)⁵⁹

Despite North County's reputation for long commutes and congestion along main highways, only North County Inland had a higher percentage of "long commuters" than the national average, and all subregions in North County were well below state average.

Though ultimately accounting for only 1.6% of commuters in North County, those taking a taxicab, motorcycle, or rideshare to work increased 42% between 2012–2017, likely a result of the increased prevalence of ridesharing.

Figure 43. Change in Means of Commute Transportation in North County (2012-2017)⁶⁰



⁵⁹ U.S. Census Bureau, 2013–2017 American Community Survey 5-Year Estimates.

⁶⁰ U.S. Census Bureau, 2013–2017 American Community Survey 5-Year Estimates.

SECTION 3: COMMERCIAL REAL ESTATE

The continued "flatness" of office rents outside of North County Central Coast and, to a somewhat lesser extent Carlsbad, is of particular interest. As noted in the section on Innovation, a topic we will continue to look at is the demand among both North County exportoriented clusters, like Software & ICT and business service firms for North County office space. The region has long seen robust demand from companies interested in flexible space and industrial uses that are, in fact, offices. The question for the region is whether it sees the kind of demand in its underlying economy to support large scale multi-tenant office uses, and whether this demand is spread throughout North County or is focused on one or a few neighborhoods that come to serve the same roles that are found in many central business districts.

WHY DOES THIS MATTER?

High office rental rates can dampen business prosperity and growth. Commercial real estate metrics are also a critical indicator of economic competitiveness. When rents and absorption rates are trending lower, it can be a sign that investors are growing bearish on a region's prospects. When they are increasing it can reflect optimism. When rates are increasing and inventory is stagnant, it can be a sign that a region is struggling to take advantage of economic opportunities, as there just is not enough space available to meet underlying demand.

Office inventory in North County has increased by about 15% between 2010 and 2018, while housing prices in North County have consistently trended upwards over the same nine-year timeframe. One exception is North County Central Coast, where the average office rent per square foot increased by 39.7% between 2010 and 2018.

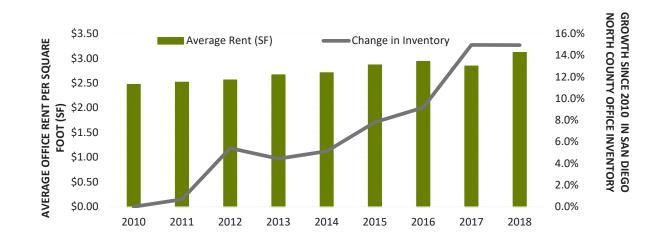


Figure 44. Average Office Rent & Change in Inventory in North County (2011-2018)⁶¹

⁶¹ Cushman & Wakefield Market Research

By far the most expensive market is in the Carmel Valley area in the North County Central Coast. This area has seen office rents increase by nearly 60% more than the North County Coastal, and almost double that of North County Central Inland. This reflects the robust demand from office users for space that is both proximate to the northern neighborhoods of the City of San Diego as well as other areas of North County.



Figure 45. Average Office Rents by Subregion (2011-2018)⁶²

SECTION 4: WATER

Given North County's arid climate and historicallyrecent drought, water usage and water recycling has received much-needed attention. Through efforts on behalf of all stakeholders, water usage in San Diego County has declined since 2001, though usage has increased slightly since 2016. Fortunately, the percentage of recycled water has increased over time as well. Since 2001 the percentage of recycled water has more than doubled.

WHY DOES THIS MATTER?

Water is critical not only to industries and agriculture but fundamentally to humans as well. Reducing water usage and increasing the use of recycled water will have positive environmental effects and allow the region to continue to grow.

⁶² Cushman & Wakefield Market Research.

Despite progress in reducing water consumption over nearly two decades, water usage per capita increased by 13.6% between 2015 and 2018.

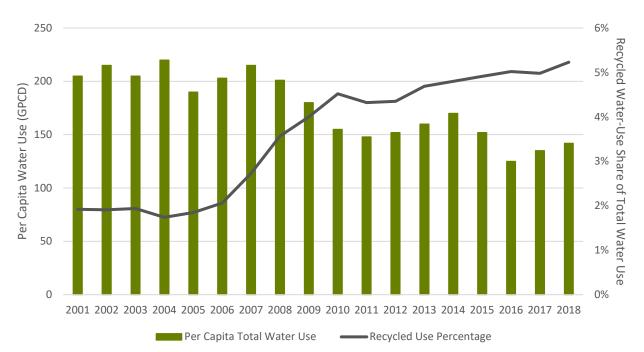


Figure 46. San Diego County Water and Recycled Water Use Per Capita⁶³

⁶³ San Diego County Water Authority

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 EMSI 2019 q.1 Class of Worker dataset for the zip code defined North County. The EMSI dataset includes state and federal level data sources and include QCEW and non-QCEW workers.

EMSI 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).

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

Population statistics were compiled from the U.S. Census Bureau's American Community Survey (ACS) 2017 5-year estimates for the census tract or zip code defined North County.

Patent data was compiled using the United States Patent and Trademark Office.

Appendix B: North County Cities and Zip Codes

NORTH COUNTY COAST REGION

| City | Zip Codes |
|----------------|---|
| Carlsbad | 92008, 92009, 92010, 92011 |
| Oceanside | 92049, 92051, 92052, 92054, 92056, 92057, 92058 |
| Camp Pendleton | 92055 |
| Vista | 92081, 92083, 92084, 92085 |

NORTH COUNTY CENTRAL COAST REGION

| City | Zip Codes |
|--------------------|---------------------|
| Cardiff by The Sea | 92007 |
| Del Mar | 92014 |
| Encinitas | 92024 |
| Solana Beach | 92075 |
| San Diego | 92127, 92129, 92130 |
| Rancho Santa Fe | 92067, 92091 |

NORTH COUNTY CENTRAL INLAND REGION

| City | Zip Codes |
|-----------|-----------|
| Julian | 92036 |
| Poway | 92064 |
| Ramona | 92065 |
| San Diego | 92128 |

NORTH COUNTY INLAND REGION

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