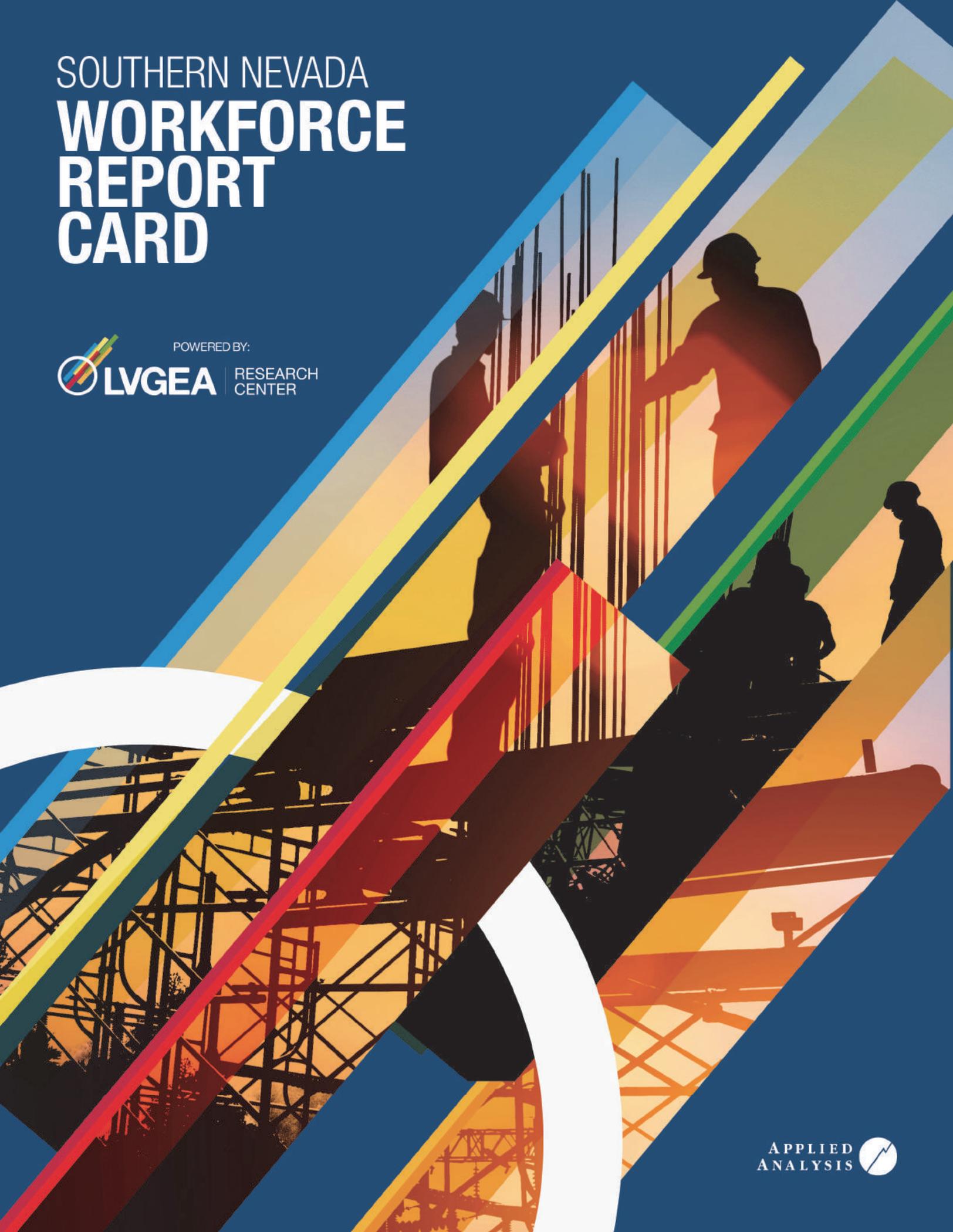


# SOUTHERN NEVADA WORKFORCE REPORT CARD

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# EXECUTIVE SUMMARY



## EXECUTIVE SUMMARY

Children’s performance at school is typically summarized in a report card. Importantly, a report card does not provide a definitive conclusion about who a child is or what a child will become as much as it identifies areas of strength and areas of weakness as a guide to aid improvement over time.

A similar, objective assessment of Nevada’s workforce is warranted and long overdue. To this end, we offer the *2017 Southern Nevada Workforce Report Card*. This report is designed to provide an evaluation of the Southern Nevada workforce – where it has been, where it stands and where it should focus its efforts going forward.

Time and again, the Las Vegas area community responds to the demands of an expanding workforce. The area has been one of the most prolific economies in the United States during the better part of the past half century, as it consistently ranks near the top of national lists in measures of growth and expansion. And, while the last economic downturn created challenges for an economy that is effectively geared for growth, it also provided an opportunity to rethink the state and regional focus going forward.

The three phases of ensuring that a qualified pool of workers is available include: (1) attracting new talent to the community; (2) developing the talent; and (3) retaining the workforce.

Southern Nevada’s rapid economic growth has necessitated a steady inflow of skilled and unskilled workers into the region. Historically, attracting talent has not been an issue. The leisure and hospitality sector, construction industry and other service-oriented occupations have been filled by a steady stream of workers migrating into Southern Nevada, although acute challenge areas have emerged in the healthcare and education fields. Notably, Las Vegas is not an island; the local economy

functions as part of a larger regional ecosystem that consists of Southern California and Central Arizona, a geographic area comprised of over 12 million employees. Without this regionalization, Southern Nevada would have never been able to increase its workforce by nearly 50 percent, or 340,000 workers, since 2000.

Southern Nevada consistently attracts talent into the region because job opportunities are abundant, quality-of-life scores tend to be high and cost-of-living indices tend to be low. The community is highly competitive when it comes to affordability, particularly for those migrating from neighboring California. Additionally, the state is well positioned as a low-tax/pro-business environment for businesses (and their workforce) looking to expand or relocate. In addition, Las Vegas ranks high on measures of entrepreneurship and business start-ups. The attractiveness of Southern Nevada is supplemented by its endless amenities located along the world-famous Las Vegas Strip as well as surrounding outdoor venues and places for activities ranging from snow skiing at Lee Canyon to boating on Lake Mead. Commute times within the area are relatively modest compared to the national average and, in particular, major metropolitan areas in surrounding states. Overall quality of life for areas workers ranks high.

Nevada is also committed to developing talent through public education and workforce training initiatives. In 2011, the Nevada State Legislature and Governor Brian Sandoval created the Governor’s Office of Economic Development (“GOED”). It was at this point that priorities in the Silver State, including Southern Nevada, narrowed in on selected industries and a series of initiatives were developed to achieve their goals. Then, in 2015, Governor Sandoval challenged the legislature to invest in our most important resource – our people.



The state made a billion-dollar-plus bet on education, designed specifically to better develop and retain talent in the state. Among these initiatives were the restructuring of the Clark County School District to make the nation's fifth-largest district operate more nimbly; placing decision-making for individual schools with principals, parents and teachers; aggressively identifying, assessing and restructuring chronically underperforming schools; expanding programs that enable English-language learners and ensuring that students are prepared to succeed by demanding reading proficiency by third grade. These reforms were not altruistic; they were made out of self-preservation. Nevada's education system was underperforming and something needed to be done. In all, more than 20 education reforms were passed during the 2015 legislative session, setting the state on a new path relative to public education.

Beyond K-12 education, Nevada has also enhanced its colleges and universities. This includes the development of the UNLV School of Medicine, which earned preliminary accreditation in October 2016; an award-winning robotics program; cutting-edge research at the Desert Research Institute; and new programs in water resources, renewable energy and battery technology. Today, the combined enrollment of UNLV, Nevada State College and the College of Southern Nevada totals more than 67,000 students, almost two-thirds of the 107,000 higher education students statewide. They are preparing to participate in the economy of tomorrow and filling the immediate needs of the region in healthcare, education and technology.

Workforce training programs, outside of the traditional education system, have also been an integral part of Southern Nevada's transformation and will continue to be important moving forward. Several of these programs are integrated with the educational system, allowing students who participate in career or technical education during high school to continue their development through a direct training program following graduation. Others exist to help individuals acquire additional skills to better transition between careers or to rejoin the workforce after time away.

Retaining the workforce is the final step in the cycle that provides future businesses a qualified and talented pool to choose from. As the mix of employees continues to shift into emerging industries and educational attainment continues to rise, wages and salaries are likely to follow suit. Increased compensation is not the only retention tool at the disposal of employers. One could argue the pride of community far outweighs the dollars and cents a paycheck can offer. Building a strong network and offering quality community assets is expected to further strengthen workforce retention.

Current performance metrics would suggest that Nevada's workforce strategy has been generally effective historically but may face increased risk going forward. More specific to the performance of the current workforce, the last two decades have been somewhat of a roller coaster as the labor pool posted unsustainable growth rates during the late 1990s into the 2000s. The region's 2007 peak was followed by a similarly untenable decline, as the community lost 150,000 jobs as the Great Recession ravaged core tourism and construction industries. Since then, the market has gradually recovered all of its lost jobs, and today, the Las Vegas area boasts an all-time high level of employment. Despite the recovery of previously lost jobs, an empirically-driven strategic investment in workforce education is imperative to ensure a stable foundation for the future growth of the Southern Nevada economy.

Nevada has had some notable economic development wins on its road to economic recovery. In 2014, Nevada landed Tesla's Gigafactory, and in 2016, Faraday Future's electric car manufacturing operation and Hyperloop One's testing facility were both announced. While these were among the most public announcements, Nevada has added more than 10,000 new businesses during the past five years, most of which are located in the Las Vegas area.

Las Vegas is now back on the radar of large-scale firms that were somewhat pensive about investing in the region in the wake of the economic slowdown. Retailers like Amazon, Bed Bath & Beyond, Fanatics and others are now investing in major distribution facilities in Southern Nevada. In 2016,

IKEA open a 350,000-square-foot retail outlet in the rapidly expanding 215 Beltway southwest corridor, and the Nevada Legislature signed into law public contributions making possible the development of a \$1.9 billion domed stadium designed to host the National Football League's Raiders and the \$1.4 billion expansion and renovation of the Las Vegas Convention Center. These are just a few examples of how Las Vegas is moving forward on a number of business fronts.

In addition to the positives taking place in the local economy and within its workforce, there are challenges that must be addressed as well. Continuing to increase educational attainment at the K-12 and post-secondary levels is vital to the long-run success of the community. Great strides are being made, infrastructure is being reconfigured to address structural challenges and funding mechanisms are established. The shared responsibility falls on the shoulders of community leaders, educators and parents.

In addition to educational investments, employers carry the responsibility for developing their talent internally as well. Mentoring programs, educational assistance, job training

programs, cross-training initiatives and other innovative development proposals remain the responsibility of employers to further expand local worker skillsets and expertise.

Developing talent requires a concerted effort from education, workforce training programs and on-the-job training as well as our business and civic leaders. Southern Nevada has established the core infrastructure to further develop talent. Taking lessons from the resort industry, it is clear the workforce must evolve, particularly as new technologies advance the economy forward. The skills of workers today will not be the right tools for tomorrow.

Taking stock of the Southern Nevada workforce is an important exercise to ensure an expanding talent pool is ready, willing and able. While the migration of businesses into Nevada is a clear sign that companies are moving here to take advantage of the qualified workforce, not in spite of it, its shortcomings are a clear and present risk to the state's long-term economic development goals.

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**THE IMPORTANCE  
OF THE SOUTHERN  
NEVADA WORKFORCE**



## THE IMPORTANCE OF THE SOUTHERN NEVADA WORKFORCE

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Human capital is one of the fundamental building blocks of economic production, providing the intellectual capital to develop ideas, produce products, provide services and innovate. A qualified and capable workforce provides businesses with the labor they need to effectively execute their business plans for growth and long-term success. This relationship between labor and business is especially relevant for Southern Nevada, where rapid economic expansion over the past century has demanded a workforce to keep pace and meet the evolving needs of core and emerging industries.

Throughout recent history, the Southern Nevada workforce has met those ever-shifting needs, and it must continue to do so as economic diversification creates market opportunities and incremental labor demands. Not unlike any community in the global economy, businesses are asking more of their workers, and the Southern Nevada workforce has proven its ability to adapt to those demands.

### ALIGNMENT WITH A REGION'S ECONOMY



The workforce of any community must align with the economic profile of that community to ensure harmony between its resources and its production. There is no question that the leisure, hospitality and tourism industries have been key drivers of the Southern Nevada economy during the past century. Currently, the tourism industry directly accounts for approximately 30 percent of Southern Nevada's job base. When secondary impacts are considered, the tourism sector accounts for approximately 41 percent of the area's employment. Additionally, the sector is directly and indirectly responsible for nearly 38 percent of wages and salaries, as well as 55 percent of the region's gross product.<sup>1</sup>

While the community seeks to diversity the job base, this analysis is not to suggest that Las Vegas abandon its core competencies. Not only is the tourism industry changing locally, but the broader economy is shifting. The graphic on the following page reflects the current location quotients for selected industries in the Las Vegas area; these data reflect the relative concentrations of employment in the local market, as compared to the national average. Values above one suggest higher concentrations and values below one suggest lower concentrations relative to the nation as a whole. The leisure and hospitality sector in Southern Nevada is 2.72 times more concentrated than the national average. Construction is 1.21 times that national, while all service-providing industries are slightly more concentrated than the national average at 1.16 times.

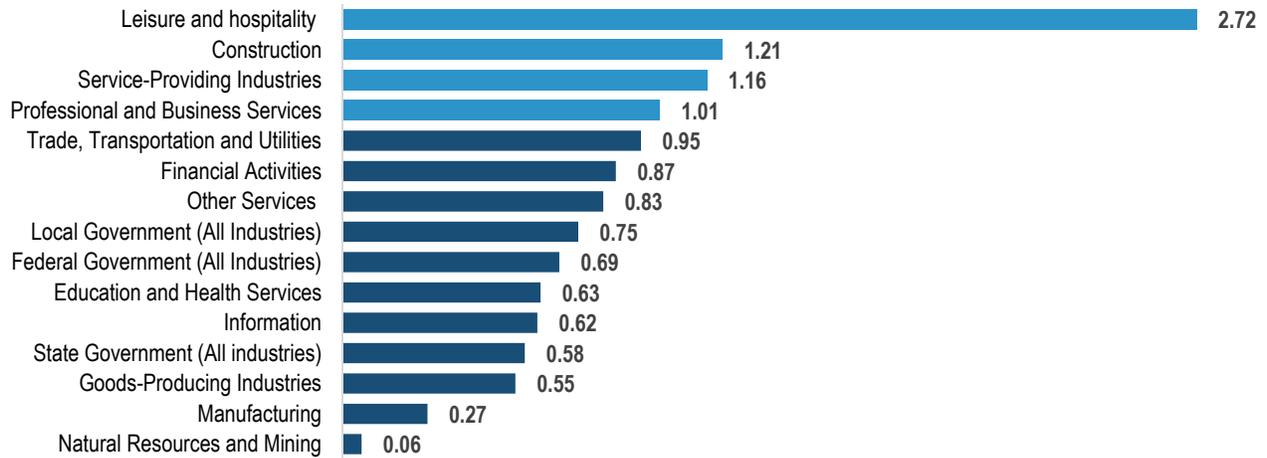
The tourism sector is becoming increasingly less dependent on casino-gaming activities as the community has evolved into a full-service resort market unrivaled by any other. Gaming revenues within the largest hotel-casino properties along the world-famous Las Vegas Strip has been shrinking as a total of overall activity, while dining, shopping, entertainment and other offerings are capturing a greater share of consumer spending.



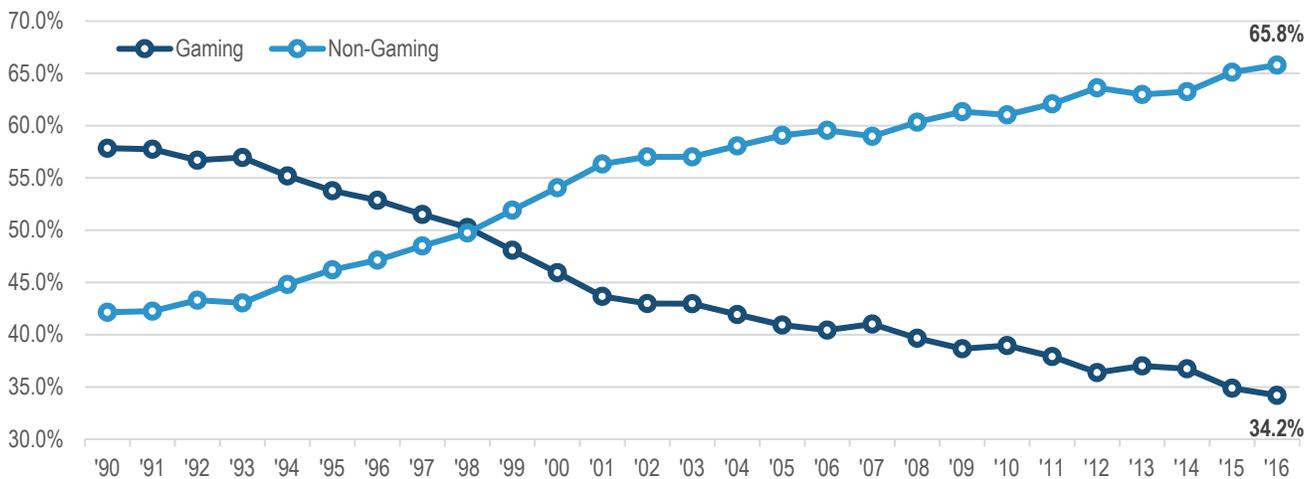

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<sup>1</sup> Source: Las Vegas Convention and Visitors Authority Economic Impact Series Brief, March 2016.

### Location Quotients | Las Vegas MSA<sup>2</sup>



### Las Vegas Strip Resort Properties | Revenue Distribution<sup>3</sup>



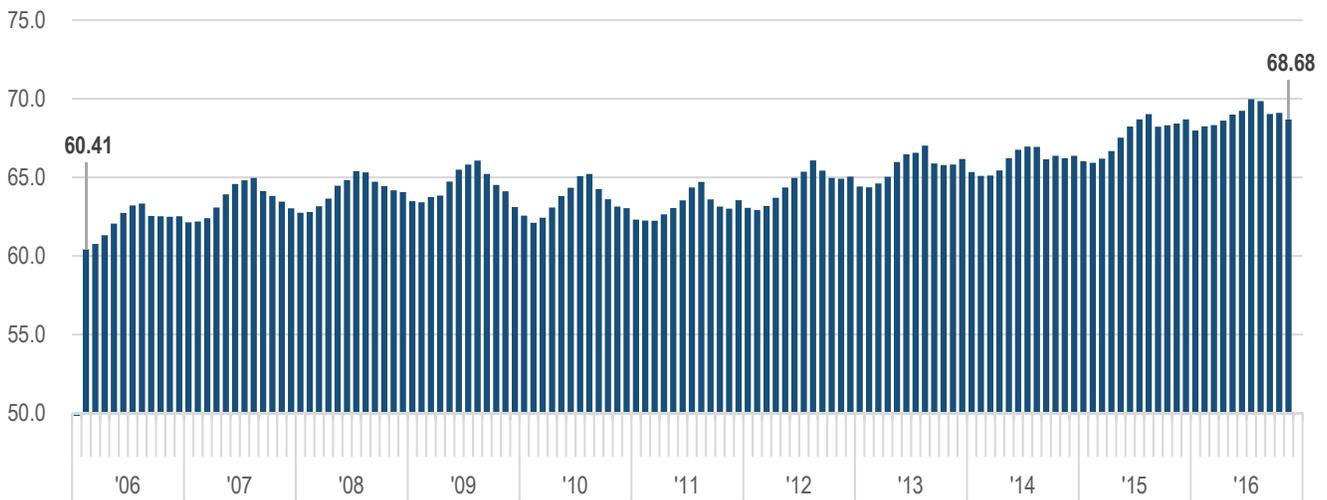
In addition to the shifts taking place within the local tourism industry, the broader economy in Southern Nevada is also experiencing a more diversified portfolio of businesses and employees. One method to measure the overall diversity of an economy is to compare its performance over time against the national economy, a theoretically perfectly diversified economy. This technique also allows for measures across communities. A frequently cited measure of how employment concentrations change is a diversity index.<sup>4</sup>

<sup>2</sup> Source: US Bureau of Labor Statistics and MyResearcher.com.

<sup>3</sup> Source: Nevada Gaming Abstract, Nevada Gaming Control Board.

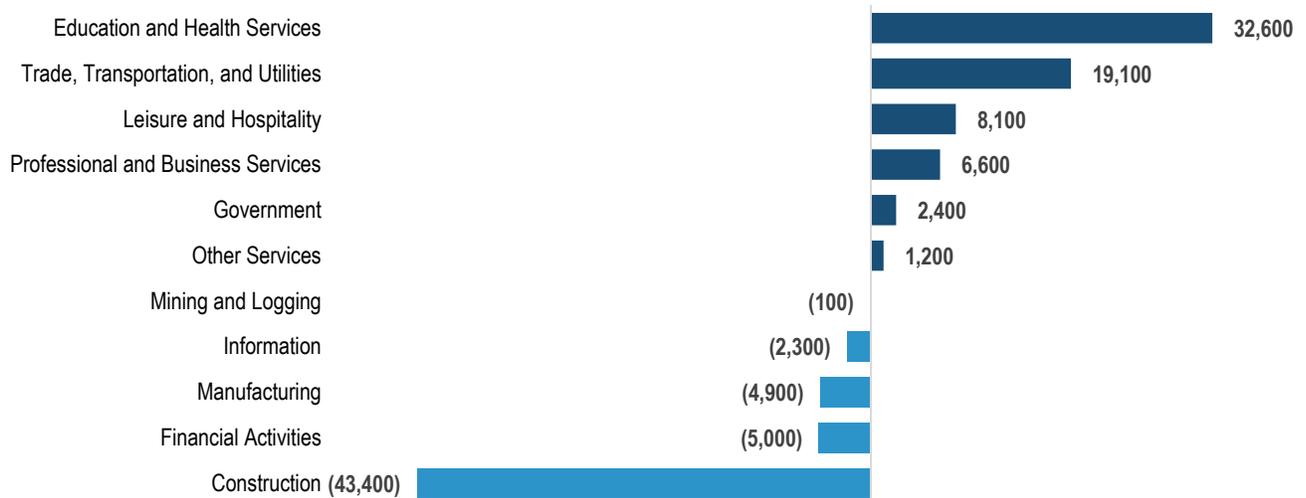
<sup>4</sup> In this instance, the relative shares of the Las Vegas economy are compared with those of the nation to identify the variances of each employment sector, also known as the location quotient. The aggregate impacts are summarized in the diversity index; a score value of 100 reflects a diversified economy comparable to the nation, while a score of 0 reflects a narrow economy.

**Diversity Index | Las Vegas Metropolitan Statistical Area (MSA)**



The long-run trend is clear – the Southern Nevada community is continuing to diversify into industries outside of the core tourism sector. With the Diversity Index rising from 60.41 to 68.68 over the past decade, the 13.7 percent increase is telling – the community is investing in a wide range of industries and human resources. The following chart highlights employment growth by sector since the pre-recession peak. The gains in the job market during the past decade have occurred despite the sustained loss of over 43,000 construction-related jobs.

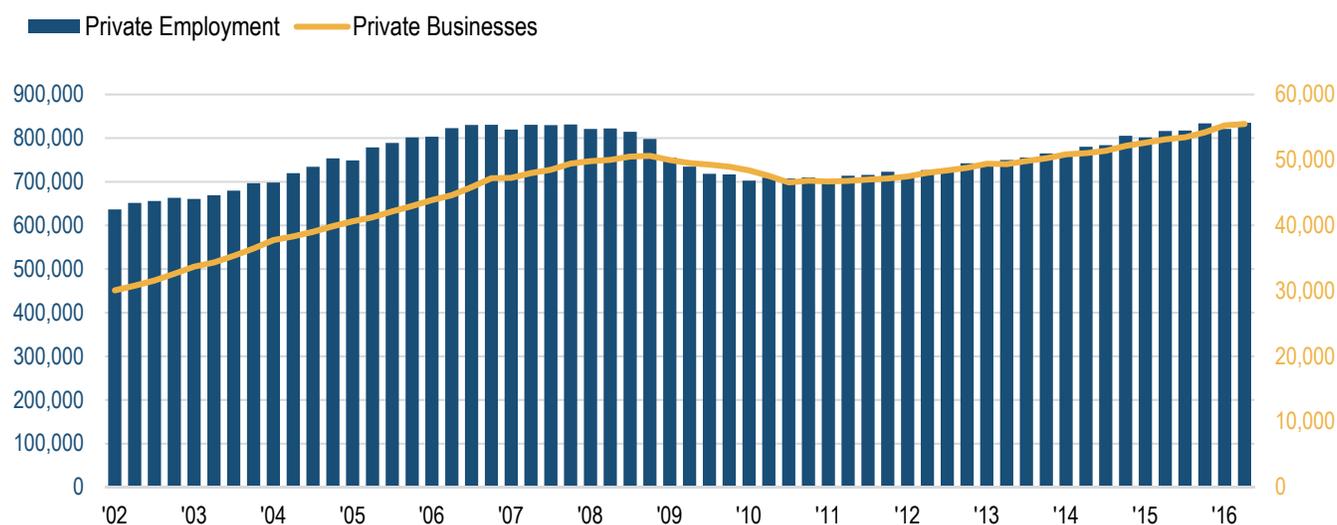
**Employment Gains (Losses) Since the Pre-Recession Peak | Las Vegas MSA**



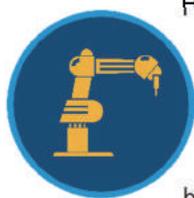
## WORKFORCE REMAINS A KEY ELEMENT IN BUSINESS FORMATION

While there are tremendous advancements in technology and automation taking place, the workforce remains an important element of the business growth equation. Just as workers rely on businesses for employment opportunities, businesses rely on workers for economic growth. Businesses wouldn't be able to expand without an adequate number of qualified employees, and people wouldn't be employed without businesses. This trend is evident in the chart below illustrating the relationship between private employment and private business growth in the Las Vegas metropolitan area.

### Alignment of Employment and Business Growth | Las Vegas MSA<sup>5</sup>



## A KEY ELEMENT OF INNOVATION



Human capital is the primary driver of innovation in modern industry. Having access to the right people makes companies more relevant in an increasingly complex and technologically advanced competitive environment. Nevada has made considerable strides in investing and maintaining a talented and educated workforce. As a result, Southern Nevada has become a hub for the development of many cutting-edge technologies and is now home to some of the most innovative companies in the world. Amazon recently brought 1,000 new jobs to Southern Nevada with the construction of its 800,000-square-foot fulfillment center,<sup>6</sup>

Hyperloop One is soon to begin testing on its high-speed pneumatic transportation system with the hopes of having a fully operational freight system by 2020,<sup>7</sup> and electric automaker Faraday Future is planning a \$1 billion manufacturing facility.<sup>8</sup> While these are just a few of the major companies taking advantage of the economic climate in Southern Nevada, many of these companies have pledged to hire a majority of their new workforce from the area.

<sup>5</sup> Source: US Bureau of Economic Analysis; State of Nevada.

<sup>6</sup> Source: <http://www.reviewjournal.com/business/amazon-plans-new-north-las-vegas-fulfillment-center-estimated-1k-jobs>.

<sup>7</sup> Source: <http://www.reviewjournal.com/business/hyperloop-one-plans-full-test-north-las-vegas-site>.

<sup>8</sup> Source: <https://www.ff.com/en/futuresight/faraday-future-looks-to-set-up-shop-in-north-las-vegas/>.

Companies in a wide range of industries are now calling Southern Nevada home, and the region has emerged as a leader in a variety of cutting-edge industries. Nevada is one of the foremost locations for the development and testing of Unmanned Aerial Vehicles (UAVs), or drone technology. With testing facilities at Creech and Nellis Air Force bases, Southern Nevada offers companies unparalleled access to open air and space corridors.



Additionally, the City of Henderson will be the first city in Nevada to have an unmanned aerial system test site.<sup>9</sup> Partnering with

Nevada State College and the Nevada Institute for Autonomous Systems, the Henderson Unmanned Vehicle Range will allow commercial drone operators a place where they can test and fine tune their products in development. With reduced barriers to entry and a low cost of start-up, coupled with the aerospace infrastructure drone companies' need already in place, Southern Nevada is emerging as a key location for the unmanned aerospace industry.

Southern Nevada is also a prime location for testing and development within the autonomous vehicle industry. Audi debuted its Traffic Light Information (TLI) system in Las Vegas after months of testing, providing drivers with a countdown to a traffic light's shift in color. Audi hopes to take this technology further, optimizing the vehicle's engine at stops to save fuel or allow the vehicle's navigation system to recommend speeds and routes for the driver to help avoid red lights.<sup>10</sup>

Audi applauded Las Vegas for its innovation and forward-thinking approach to the industry. Specifically, Audi noted, "Las Vegas continues its leadership in smart city technology by being the first city to connect traffic signal network to vehicles." American President of Audi, Scott Keogh, said, "V2I (vehicle-to-infrastructure) applications and services like Traffic Light Information are essential components as we continue to move toward an autonomous future. We applaud the innovative approach of Las Vegas in working with us on V2I as well as on our various piloted driving demonstrations over the past years."

<sup>9</sup> Source: <http://www.reviewjournal.com/local/henderson/henderson-will-soon-have-the-state-s-first-drone-test-site-officials-say>.

<sup>10</sup> Source: <http://www.nydailynews.com/autos/video-audi-traffic-light-information-system-debuts-las-vegas-article-1.2909608> and <https://www.audiusa.com/newsroom/news/press-releases/2016/12/audi-launches-vehicle-to-infrastructure-tech-in-vegas>.



## Press Release Regarding Audi Technology Advancements

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# Press release



## Audi launches first Vehicle-to-Infrastructure (V2I) technology in the U.S. starting in Las Vegas

December 06, 2016 | HERNDON, Virginia

- Audi is the first manufacturer to launch V2I technology in the U.S. in select 2017 Audi A4, Q7 and allroad® models in Las Vegas
- Traffic Light Information is the first step in connecting a vehicle to its surrounding infrastructure
- Las Vegas continues its leadership in smart city technology by being the first city to connect traffic signal network to vehicles.

### Audi launches Traffic Light Information, the first Vehicle-to-Infrastructure technology in the U.S.

“The launch of this technology is another in a long list of firsts for Audi that have positioned us as the industry leader in connectivity solutions,” said Audi of America President Scott Keogh. “V2I applications and services like Traffic Light Information are essential components as we continue to move toward an autonomous future. We applaud the innovative approach of Las Vegas in working with us on V2I as well as on our various piloted driving demonstrations over the past years.”

Traffic Light Information, an Audi connect PRIME feature, is available on select 2017 Audi A4, Q7 & allroad® models, and enables the car to communicate with the infrastructure in select cities and metropolitan areas across the U.S. The car receives real-time signal information from the advanced traffic management system that monitors traffic lights via the on-board 4G LTE data connection.

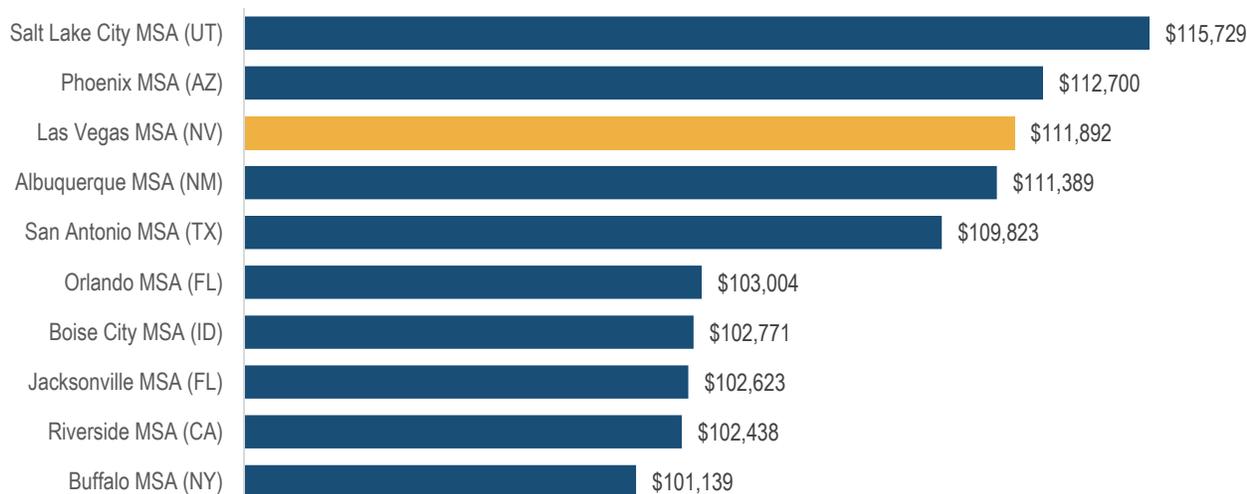
When approaching a connected traffic light, Traffic Light Information displays the time remaining until the signal changes to green in the driver instrument cluster, as well as the head-up-display (if equipped). Providing the driver with this additional information helps reduce stress and allows the driver to relax knowing approximately how much time remains before the changing of the light.

## ARGUABLY THE SINGLE MOST IMPORTANT RESOURCE

While Southern Nevada is home to a number of resources, none rank more highly in terms of economic performance than human capital. The people of Southern Nevada are not just sources of innovation, but drivers of economic progress. That progress is found in the hospitality sector and is sourced to the community's highly skilled and technologically advanced fields. Southern Nevada has made considerable efforts in investing in its human capital, including improvements to its education programs and regional healthcare.

To demonstrate how important human capital is in Southern Nevada, it is important to review how the region compares from a productivity perspective. GDP per employee in the Las Vegas MSA equates to \$111,900, which ranks favorably among other major markets. The volume of activity reflects the importance that should be placed on continuing to develop the community's talent to foster above-average production levels.

### Gross Domestic Product per Employee<sup>11</sup>



### IMPORTANTLY, THE WORKFORCE IS NOT ONE THING, NOR IS IT STATIC

The workforce, on both national and regional levels, is continually evolving in response to the changing demands of the economy. Whether it is adapting to new technology, new processes or new business models, the workforce has found a way to learn new skills and adapt to emerging needs. Much has been written about the rapid development of artificial intelligence and automated processes that could undercut many of the traditional occupations that have employed millions of U.S. workers during most of the past 50 years. This is a valid concern, and the workforce will be required retool itself and adapt to the changing economy, just as it has for centuries.



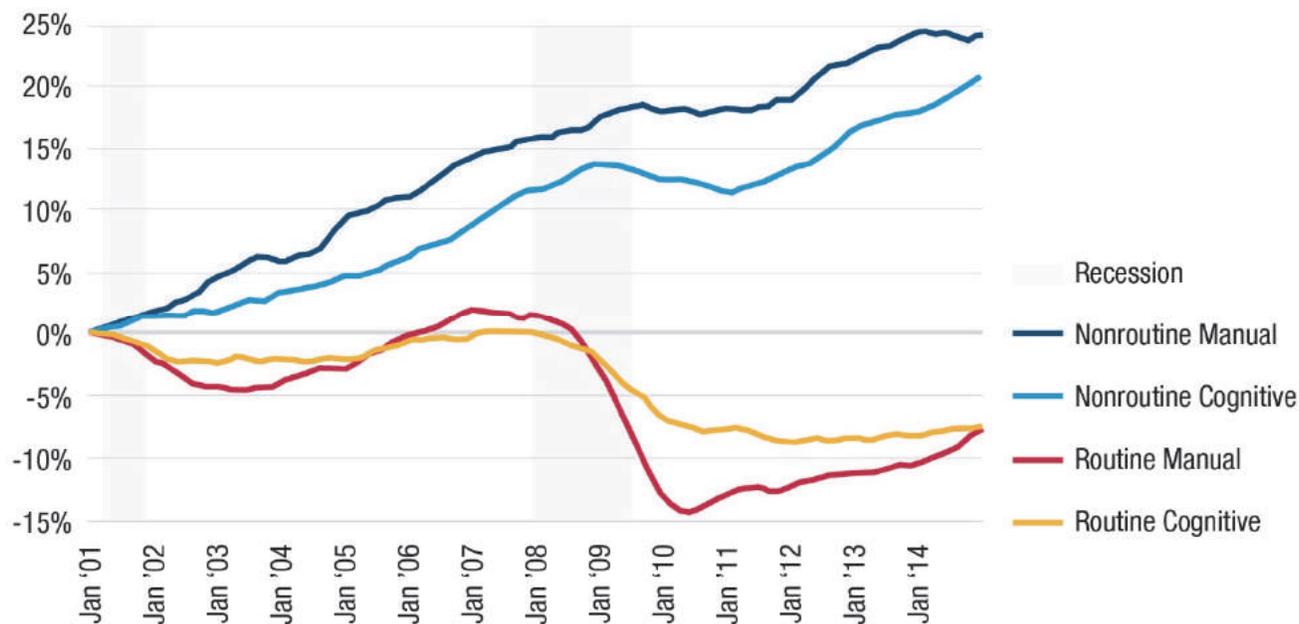
The shifting economic landscape provides new opportunities for a workforce that is well positioned to accommodate the projected demands of the future economy. Automation will impact many industries and occupations, but those are expected to be concentrated in jobs where routine tasks performed by humans can be duplicated and carried out more efficiently by machines. These routine-intensive occupations can include both manual labor (such as factory and construction workers) and cognitive labor (such as sales and office workers), and both categories of workers face the prospect of being replaced by automation in the future.

When jobs are sorted by whether the work is routine, all job growth nationally since 2001 has been in non-routine jobs.<sup>12</sup> The following highlights this concept. Importantly, Southern Nevada job growth has largely been tied to non-routine positions, with gains concentrated in service-producing positions.

<sup>11</sup> Source: Bureau of Labor Statistics and US Census Bureau.

<sup>12</sup> Source: Henry Siu and Nir Jaimovich for Third Way, Wall Street Journal.

**Job Growth Sourced to Routine and Non-Routine Positions | United States<sup>13</sup>**



In Southern Nevada, the existing workforce is well positioned. The existing base of workers have above-average concentrations in tourism and other service industries, which are less susceptible to automation. At the same time, the community is on the leading edge of the development of automated technologies and industries. Simply stated, the community is expanding into automation rather than having its existing workforce being replaced by it.

The region's workforce is heavily oriented toward the service industry, and while some of those jobs could be automated someday, others are less apt for conversion (e.g., healthcare positions). Meanwhile, jobs classified as non-routine cognitive (to include management and professional occupations) are also projected to be resistant to automation. These job categories are a growing segment of the Southern Nevada workforce and align well with ongoing regional economic development efforts that include high technology industries such as autonomous vehicles, unmanned aerial systems and healthcare.

<sup>13</sup> Source: Henry Siu and Nir Jaimovich for Third Way, Wall Street Journal.





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# SOUTHERN NEVADA'S EVOLVING WORKFORCE

CORE BASE OF EMPLOYEES

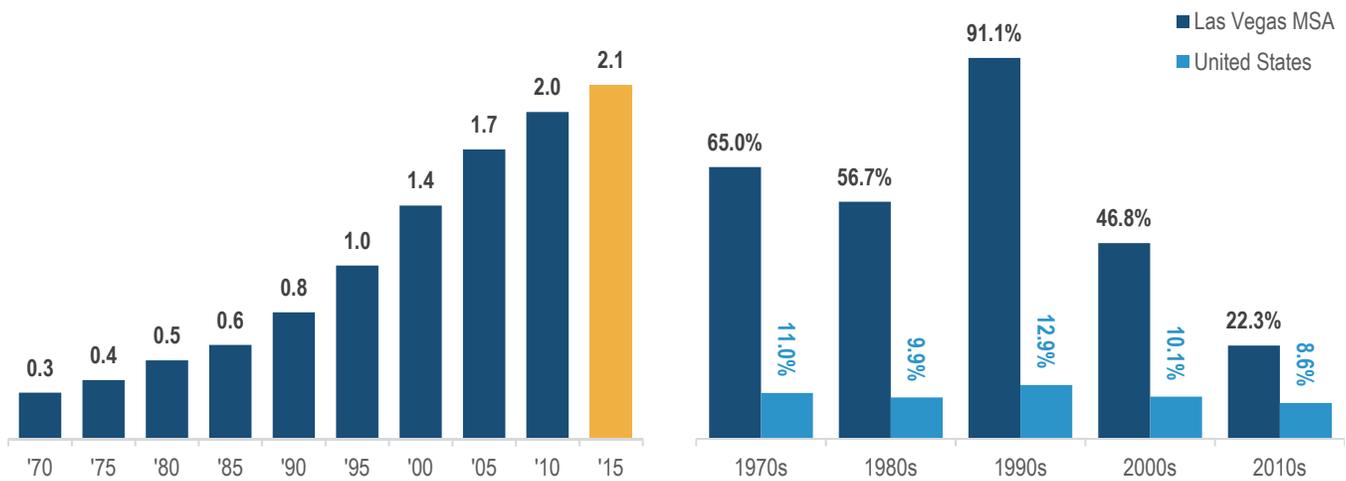


## SOUTHERN NEVADA’S EVOLVING WORKFORCE | CORE BASE OF EMPLOYEES

Over the past several decades, Southern Nevada has been home to one of the fastest growing populations and economies in the United States. Since 2000, the Las Vegas metropolitan statistical area has grown from 1.4 million residents to 2.1 million residents, a 52 percent growth rate that ranks first among the nation’s 50 largest metropolitan areas. The national average population growth for the same period was 14 percent. Importantly, annual surveys of residents consistently suggest that employment opportunities are the number one reason that residents migrate to Southern Nevada.<sup>14</sup>

Population (in millions) | Las Vegas MSA

Population Growth Rates by Decade



### THE PROOF IS IN THE PERFORMANCE

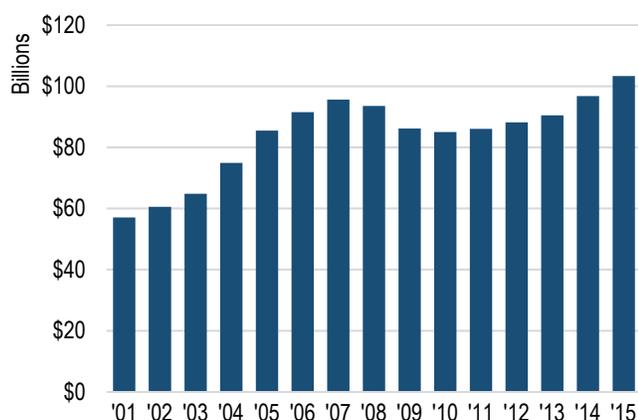


Las Vegas’s population growth went hand in hand with its position as one of the fastest growing economies in the nation. Southern Nevada’s gross domestic product (“GDP”) expanded by 81 percent between 2001 and 2015, economic growth that was fueled by significant expansions in the local tourism and construction industries.

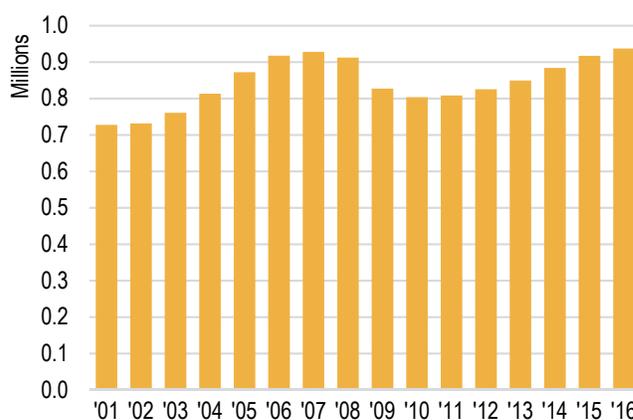
The workforce has been a key component of Southern Nevada’s population and economic growth throughout its history. That workforce, and its ability to expand and adapt to the demands of the regional economy, provide the necessary human capital to support the growth and prosperity of the economy as a whole. This relationship is clear in the time series charts showing GDP and employment, as both metrics have climbed and fallen in concert during the past decade and a half.

<sup>14</sup> Source: Las Vegas Perspective.

### Gross Domestic Product | Las Vegas MSA



### Employment | Las Vegas MSA



The expansion of jobs and the labor force since 2011 has been particularly important to the recovery of the regional economy that was one of the hardest hit by the Great Recession. Since employment reached a post-recession low in 2011, it has added more than 150,000 jobs to surpass previous pre-recession peaks. At the same time, Las Vegas GDP grew 20 percent, outpacing national GDP growth of 17 percent.

Employment will continue to play an integral role in the further expansion of the Southern Nevada economy, and a qualified workforce that meets the needs of existing and emerging industries will be critical to filling those new jobs.

### SIZE AND STRUCTURE OF THE WORKFORCE

The current workforce in Southern Nevada reflects the shifting economic landscape following the economic turmoil and subsequent recovery of the past decade as well as the shifting demographic profile of the nation's Sun Belt.



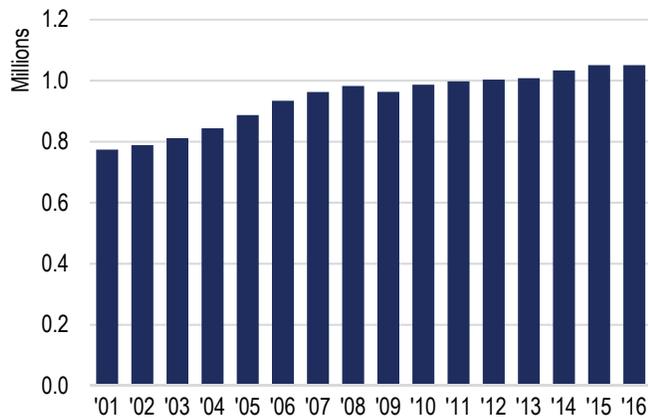
Overall, the size of the region's labor force, which includes people with jobs and those who are officially counted as unemployed because they are actively looking for a job, has been expanding. The labor pool has experienced consistent growth since 2000 - in line with population growth trends - and currently exceeds 1.0 million. However, aligned with the national trend, labor force participation, which measures how many residents aged 16 or older have a job or, if unemployed, are actively looking for work, has been declining. This has been attributed to several factors, including increased retirements for the Baby Boomer generation and elevated rates of college attendance among young people.

For most of the past 15 years, Nevada's labor force participation rate exceeded the national rate, yet the lingering effects of the economic downturn have depressed the state's labor force participation rate, which currently trails the U.S. rate by about one percentage point. Nevada's rate in November 2016 was 61.8 percent, while the U.S. averaged 62.7 percent.<sup>15</sup> However, in the Las Vegas metro area, the labor force participation rate of 63 percent remains slightly higher than the national average, an indication of more abundant employment opportunities for working-age Southern Nevadans compared to the rest of the nation.

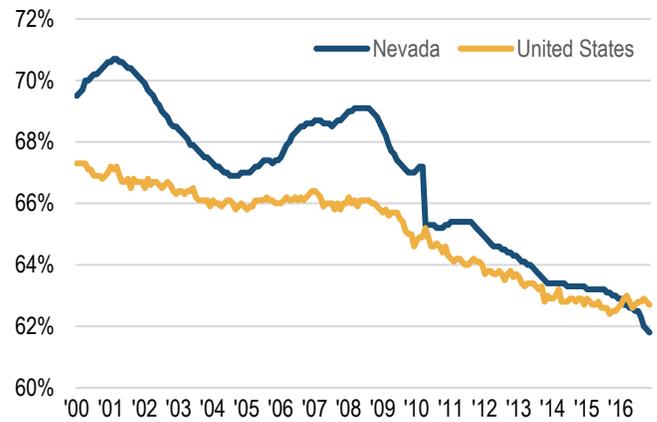
<sup>15</sup> Source: Bureau of Labor Statistics.



### Labor Force | Las Vegas MSA

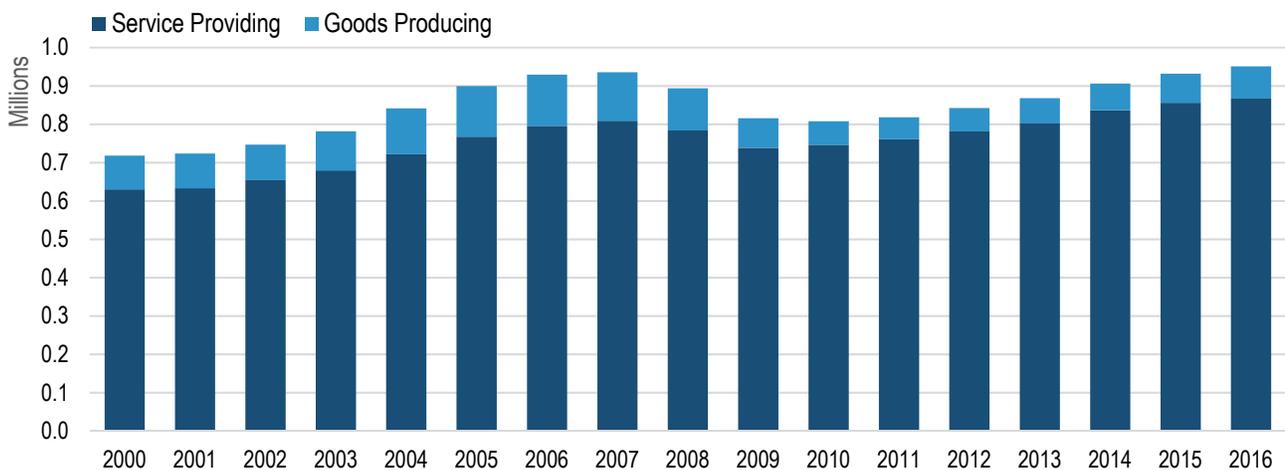


### Labor Force Participation Rates



In Southern Nevada, the leisure and hospitality industry, retail trade and other service industries make up a significant portion of the employment opportunities. The abundance of low-skilled positions does not mean that the talent, skills or education required for work in other more knowledge-based industries are not available in the Las Vegas workforce. Southern Nevada's population growth in recent years has been fueled by migration driven by the availability of jobs in the region, and the skill sets of job seekers who moved here for employment matched the skills of the available jobs.

### Employment Distribution | Las Vegas MSA

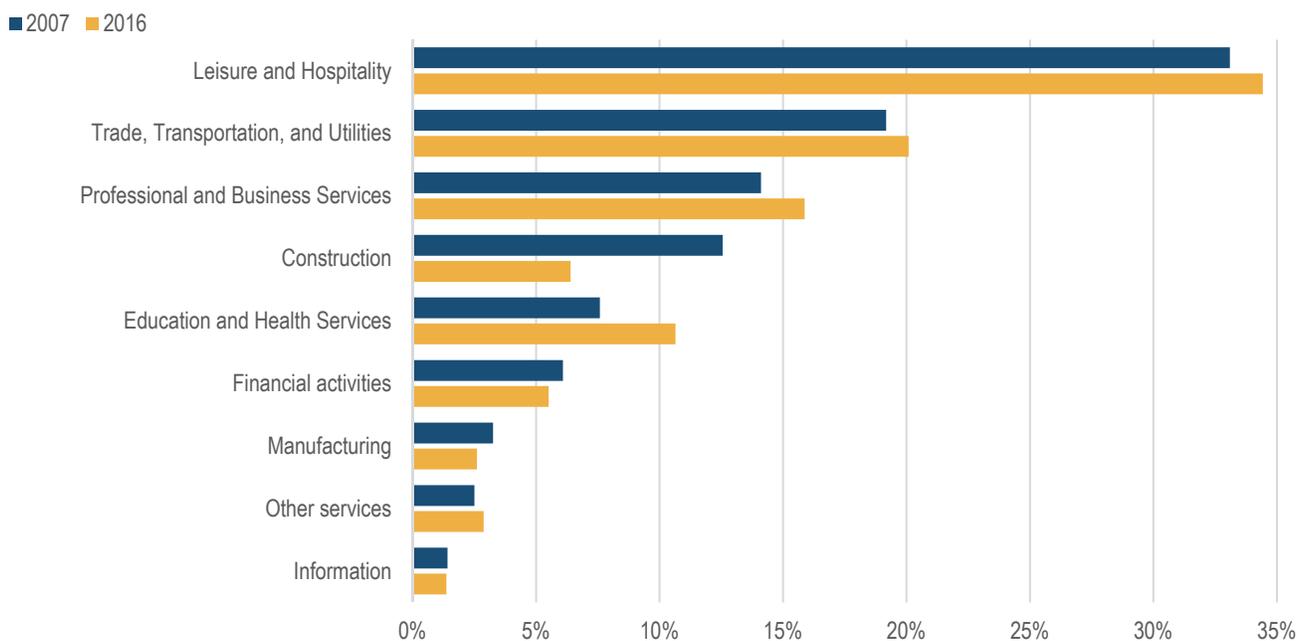


Prior to the economic downturn, goods producing jobs accounted for nearly 15 percent of total employment in 2005. In 2016, goods-producing positions declined to approximately 9 percent of overall jobs. The decline in overall construction activity from the peak of the market was a key contributor to the shifting profile. Southern Nevada has created more than 150,000 jobs since 2011, growth that pushed total employment past the pre-recession peak in 2016. While the region has regained all of the jobs



lost amid the economic downturn, the employment mix today reflects a more stable blend of industries compared to a decade ago. Notably, construction employment, which is closely tied to the cyclical demands of the overall economy, had represented 12.6 percent of employment in 2007, yet today stands at about half that at 6.4 percent. Meanwhile, employment gains in other industries have replaced lost construction jobs. During that time, the education and health services sector has reported the largest gain, increasing from just 7.6 percent of employment to 10.7 percent today.<sup>16</sup> That shift of jobs between two large employment sectors demonstrates the evolutionary nature of the Southern Nevada workforce and its ability to expand and contract within industries to meet the ever-changing needs of the economy as a whole.

### Employment Share by Sector | Las Vegas MSA



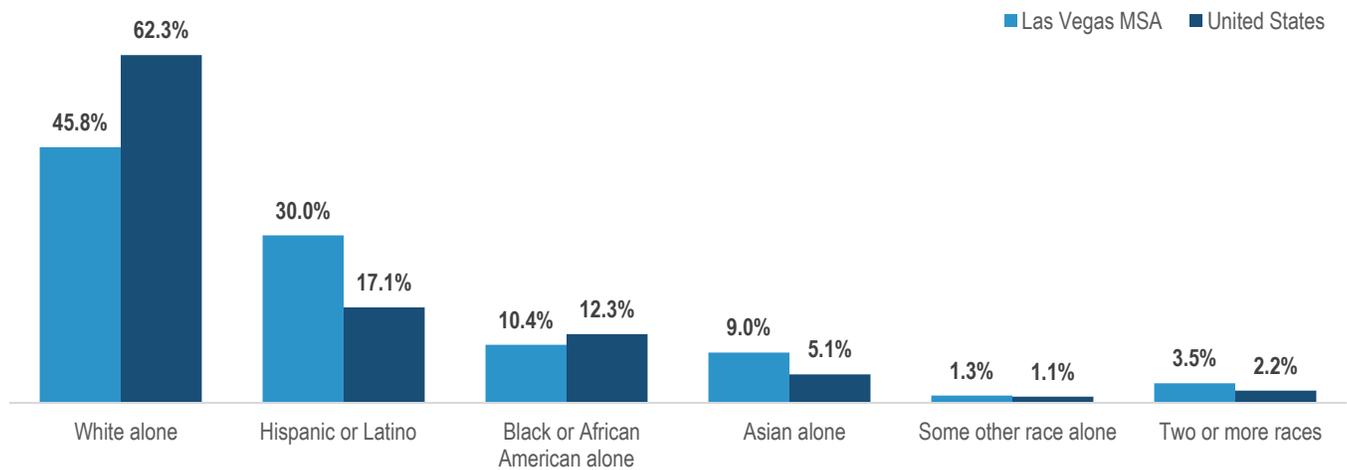
Just as Southern Nevada’s workforce has evolved to meet the needs of the economy, so too has the workforce transformed to reflect the changing face of the community at large. Today, the greater Las Vegas area is one of the most diverse in the nation, with a combined minority population of 54.2 percent. Nationwide, various minority groups combine for just 37.7 percent of the total U.S. population.<sup>17</sup> Many employers see value in diversity of ethnicity and cultural background. This is a particularly valuable trait of the workforce in Southern Nevada, with a tourism industry that caters to visitors from all over the globe. It can also be attractive for employers with a diverse and far-reaching customer base that requires an equally diverse workforce.

<sup>16</sup> Source: Bureau of Labor Statistics.

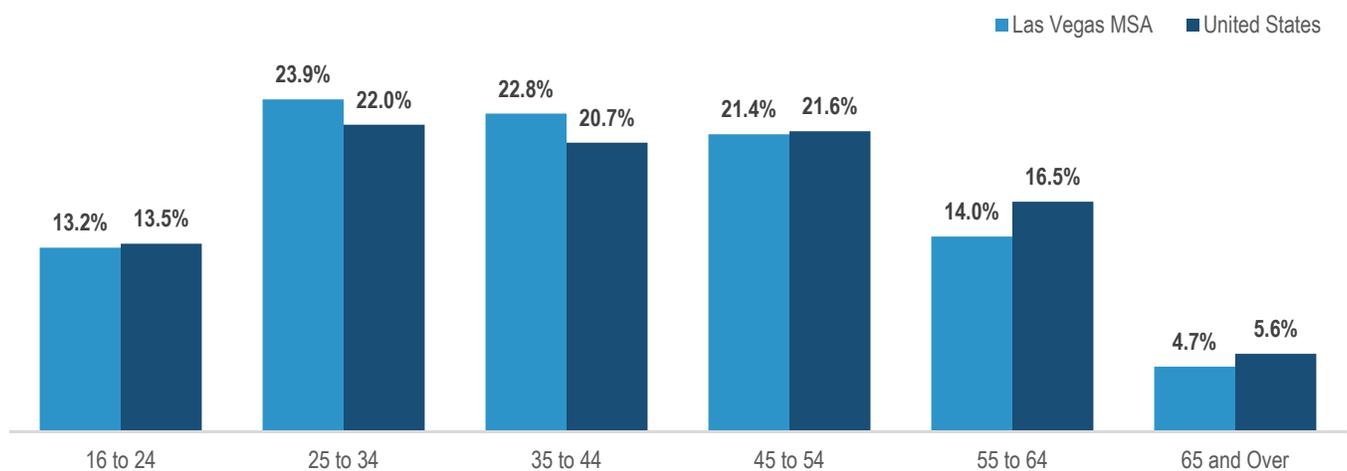
<sup>17</sup> Source: U.S. Census Bureau, American Community Survey.



### Population Distribution by Ethnicity



### Labor Force Distribution by Age Group



Southern Nevada has a younger population, on average, than the rest of the nation. The median age in the Las Vegas metro area is 36.4 compared to the national median age of 37.6. The younger age trend is reflected in the Southern Nevada workforce, where larger shares of the labor force are concentrated in the 25-to-34 and 35-to-44 age groups. In total, an estimated 68.1 percent of the Southern Nevada labor force is within the prime working age group of 25 to 54, compared to 64.3 percent for the U.S.<sup>18</sup>

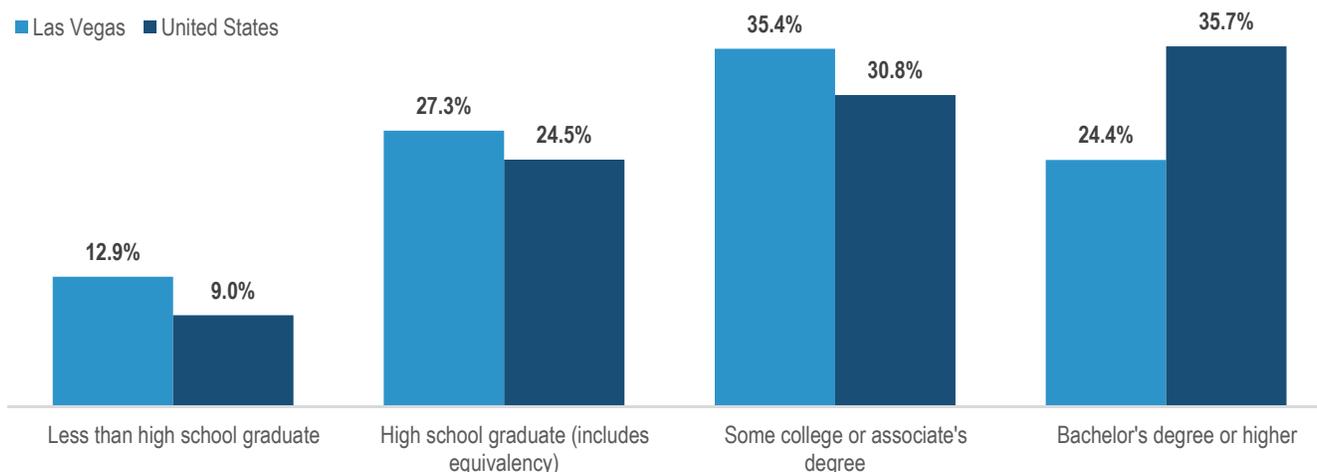
<sup>18</sup> Source: U.S. Census Bureau, American Community Survey.



Millennials are also the most-educated of any generation in the United States, or will be once the last of them reach college age, as college enrollment rates have increased steadily over the past century.<sup>19</sup> As higher education continues to become even more of the norm, those younger members of society will join the workforce as prepared, or more so, than the generations before them.

It is no surprise that Nevada has a less educated workforce than the national average. This does not mean that it does not have an educated workforce; we are not one thing. Core industries in Nevada have traditionally required employees with less formal education, including retail, transportation, hospitality and construction. As such, these are the workers that were attracted to the region. Today, these industries continue to grow and other industries have taken advantage of the depth of the local workforce, respecting its limitations, which local policy makers have used to attract and expand some of the most technologically advanced industries into the state and increase the educational attainment of the next generation of workers.

### Labor Force Distribution by Educational Attainment



Even with the availability of a large number of low-skilled positions, Las Vegas has made significant gains in education among the workforce. According to the U.S. Census Bureau, in 2000 roughly 17.3 percent of Las Vegas residents 25 years or older had a bachelor's degree or higher. This translates to roughly 155,000 people with a bachelor's degree in the region, slightly more when the 4.1 percent of residents aged 18 to 24 with a degree are included. In 2015, Census estimates place the educational attainment of Las Vegas residents at 22.7 percent of those over 25 years old having at least a bachelor's degree. The number of 18-to-24-year-olds with a bachelor's degree also increased, up to 4.9 percent from 4.1 percent in 2000. While these percentage gains may seem modest, it is important to note that Las Vegas' population increased more than 50 percent over the same period. This means that the number of people with bachelor's degrees or higher in Las Vegas has actually doubled since 2000 to over 317,000. While many of those additional degree holders have filled additional job openings in the healthcare, education and business/financial operations fields, there is a lot more untapped potential in the Las Vegas workforce.

<sup>19</sup> Source: National Center for Education Statistics.

## THE RELEVANCE OF REGIONAL HISTORY

It is important to note that the makeup of the current workforce is inherently tied to the employment requirements of the industries and businesses that have existed in Southern Nevada. The leisure and hospitality sector has long been the dominant industry in terms of employment and business activity in the region. As such, a large portion of jobs available were in that industry, and the requisite labor force was developed through both internal and external means.

In many ways, the path of investment and development of new industries will often lead the development of the labor force, as workers either move into the region to take jobs based on their skills, or they train locally to garner the necessary skills to work in a given field or industry. There is no reason to believe that this trend will end any time soon, particularly given Southern Nevada's ability to attract labor from neighboring areas to fill new job opportunities.

A review of Southern Nevada's historical performance provides some insight into the future. Just as the development of the tourism industry inevitably led to the development of a workforce to serve that industry, other industries with fast-growing needs, such as healthcare or emerging industries (e.g., unmanned aerial systems), will dictate the development of skilled labor to fill those needs. New investments and business relocations reflect confidence in the ability of Southern Nevada's workforce to adapt to the demands of emerging and high technology industries.

In the Las Vegas area, hometown data services company Switch is currently building a \$1 billion expansion of its headquarters and data center in addition to the \$3 billion data center it has under construction in the Reno area. Electric car manufacturer Faraday Future chose Southern Nevada as the location for its new factory, an estimated \$1 billion investment by the company. Hyperloop One, which is developing a pneumatic tube-based cargo and passenger transportation system, also chose Southern Nevada for its new \$121 million testing facility. Tesla, which is building its \$5 billion gigafactory outside of Reno, has been recruiting in the Las Vegas area for workers to fill openings at the factory, which is estimated to support over 6,000 jobs upon full operation. To keep pace with the growing demand for high-skilled labor, the University of Nevada, Las Vegas has planned over \$300 million worth of investments, including a new medical school. Along with more than \$200 million in investments from University of Nevada, Reno and significantly increased funding for public K-12 education, these initiatives signal the state's intent, from both the public and private sectors, to build a workforce capable of meeting the new demands of technology and innovation.

## THE CURRENT LABOR POOL AND ECONOMIC DEVELOPMENT



Southern Nevada's population growth, and by extension, workforce expansion, has historically been linked to heavy migration from other states and nations. This influx of new residents has been a key driver of economic development. Today, civic and business leaders recognize the importance of economic diversification to strengthen the economy against cyclical downturns and cultivate better-paying jobs in both core and emerging industries.

The Nevada Governor's Office of Economic Development, along with regional development agencies such as the Las Vegas Global Economic Alliance, have worked to attract new businesses from varied industries to Southern Nevada. Yet it is evident that the existing workforce faces some challenges when it comes to some demand industries and their need for high-skilled workers. This is why many new programs have been designed to increase opportunities for job training and education in skills tailored to the needs of industries targeted for economic development, such as autonomous vehicles, healthcare and unmanned

aerial systems. These programs are focused on developing the next generation of workers for the next generation of industry. They include public educational programs from K-12 through college, as well as associate's degree and vocational programs focused on specific skills or industries.

Developing the current labor pool in the interests of companies that may relocate to Southern Nevada and those that have been here for decades remains a priority for civic, business and educational leaders. The myriad internal training and educational efforts, combined with recruitment of new workers and their skills to Southern Nevada, hold the keys to successful elevation of the existing labor pool and creating one that is prepared for a rapidly evolving economic landscape. Those efforts are vital to a stronger and more diverse economy for today and tomorrow.

### Did You Know?

Hyperloop One is reinventing transportation by developing the world's first Hyperloop, an elegant, integrated structure to move passengers and cargo between two points immediately, safely, efficiently, and sustainably. The Hyperloop One team has the world's leading experts in engineering, technology and transport project delivery, working in tandem with global partners and investors to make Hyperloop a reality, now. The company has operations and its testing facility located in Southern Nevada. In addition, Hyperloop One issued a global challenge to identify potential uses for its technology. The request garnered 2,600 applications from around the world, which were narrowed down to a semifinalist list of 35 candidates – one of which is the Nevada team.

*Source: Hyperloop One and media reports.*





4

# **SOUTHERN NEVADA'S EVOLVING WORKFORCE**

ATTRACTING TALENT, A REGIONAL PERSPECTIVE



## SOUTHERN NEVADA’S EVOLVING WORKFORCE | ATTRACTING TALENT, A REGIONAL PERSPECTIVE

Throughout its many decades of strong economic growth, Southern Nevada has relied upon an influx of new residents to expand the workforce to support rising labor demands for a fast-growing regional economy. In-migration pushed Las Vegas to the top of the fastest-growing cities list in the early 2000s, and the same incentives for workers that existed 15 years ago still exist today. With no individual or corporate income taxes, Nevada’s tax structure remains attractive not only to individuals but to companies as well. This climate contrasts starkly with neighboring California (the largest contributing state of net in-migration to Southern Nevada) where the top personal income tax rate is 13.3 percent. Because of these and other benefits of living in the Las Vegas metropolitan area compared to other areas in the West, as the economy continues to diversify and attract investment from high tech and emerging companies, the workforce necessary to fill new positions will likely follow as it has for decades.

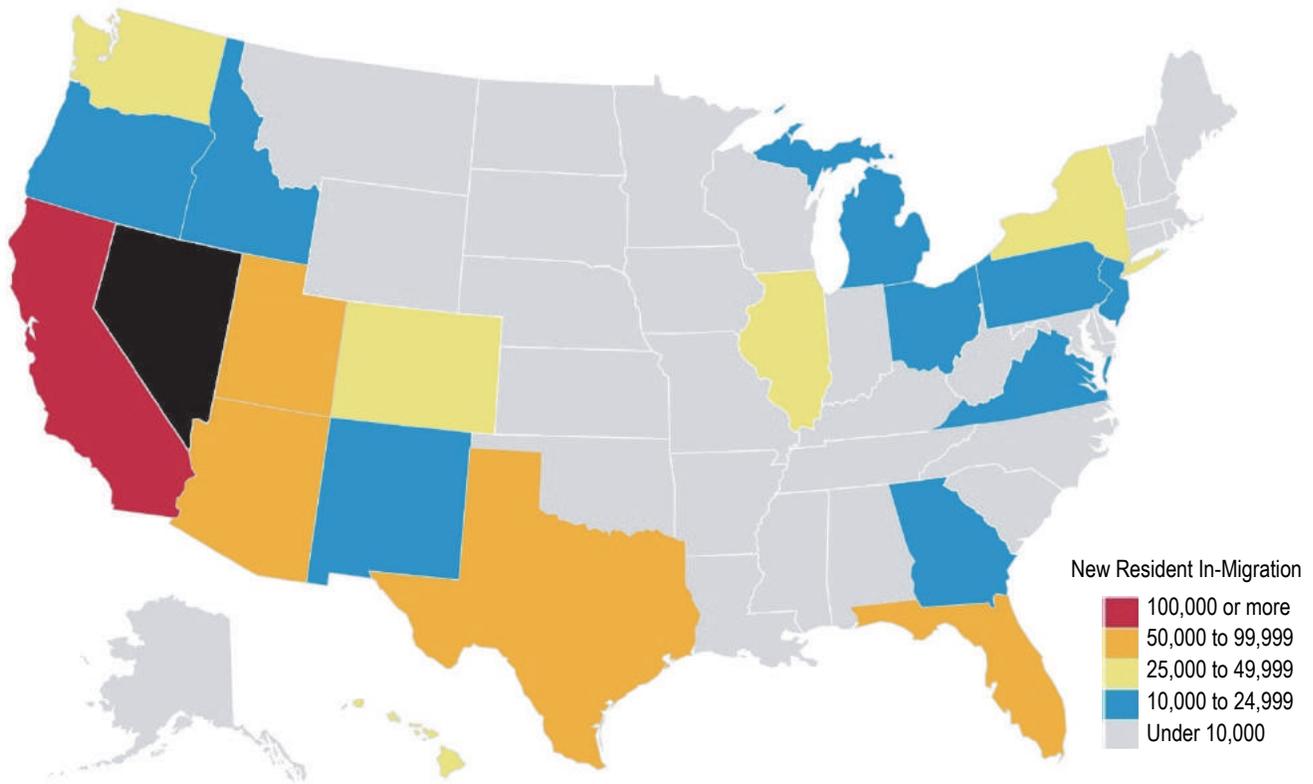
Las Vegas’ marketability as a place to live and conduct business is enhanced by its proximity to population centers in Southern California and Central Arizona. As these areas are large sources of in-migration to Southern Nevada, it is important for potential employers to understand the employment, business and demographic traits and trends in these areas. Southern California has been defined to include Los Angeles-Long Beach-Anaheim MSA, Riverside-San Bernardino-Ontario MSA and San Diego-Carlsbad MSA. Central Arizona includes Phoenix-Mesa-Scottsdale MSA and Tucson MSA. Combined with Southern Nevada, this super region provides a diverse, fast-growing population source for employers looking to hire skilled workers. This defined market is referred to as “regional” or the “region” for purposes of this analysis. Finally, Nevada’s performance within the 11-state western region offers employers a unique opportunity.

### INTERCONNECTIVITY OF SOUTHERN NEVADA, SOUTHERN CALIFORNIA, CENTRAL ARIZONA

Nevada’s 1.9 percent growth in population from 2014 to 2015 makes it the third-fastest growing state in the country. Population growth in the Las Vegas MSA was even stronger at 2.2 percent, which was nearly three times the national growth rate and the fifth-highest growth rate among the 50 largest metro areas. Southern Nevada’s population is continuing to expand, and with a high influx of Southern California and Central Arizona residents, employers can tap into a larger pool of talented workers. Since 2000, the largest sources of in-migration to Nevada have been California and Arizona, with 453,300 and 77,800 new residents, respectively.



**Clark County In-Migration by State (2000 – 2015)<sup>20</sup>**



Looking more closely at Southern California, 317,400 new residents or 151,800 new households moved to Clark County from 2000 to 2015. Central Arizona has been the source of 48,800 new residents or 24,800 new households during this same period.

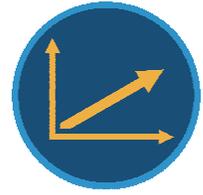
**DID YOU KNOW?**

In the 40<sup>th</sup> Annual United Van Lines National Movers Study, Nevada was ranked the ninth highest moving destination nationwide, and fourth highest among the 11 western states. Classified as a “high-inbound” state with 58 percent of moves going into Nevada, the top reasons for moving to the state included employment (39.6 percent), retirement (32.4 percent) and lifestyle (21.2 percent). Nevada has been considered a high- to medium-inbound state for 6 consecutive years. Other high- to medium-inbound western states included Oregon (67 percent inbound, #3 ranking), Idaho (65 percent, #4 ranking), Washington (58 percent inbound, #6 ranking) and Arizona (57 percent inbound, #10 ranking). The survey tracks household moves coming into and out of the 48 contiguous states and Washington, D.C., as a way of identifying migration patterns. *Source: United Van Lines*

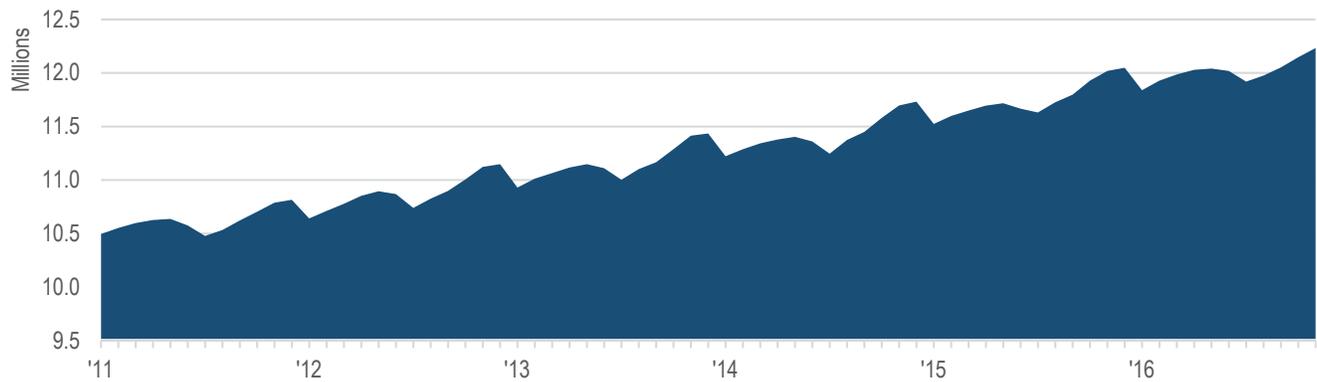
<sup>20</sup> Source: Internal Revenue Service.

### EMPLOYMENT GROWTH TRENDS

Las Vegas' proximity to large neighboring metropolitan areas in California and Arizona gives employers access to a combined employment base of over 12.2 million. The foundation of jobs has expanded in recent years, as evidenced by 74 months, or over six years, of consecutive year-over-year employment growth beginning in October 2010.

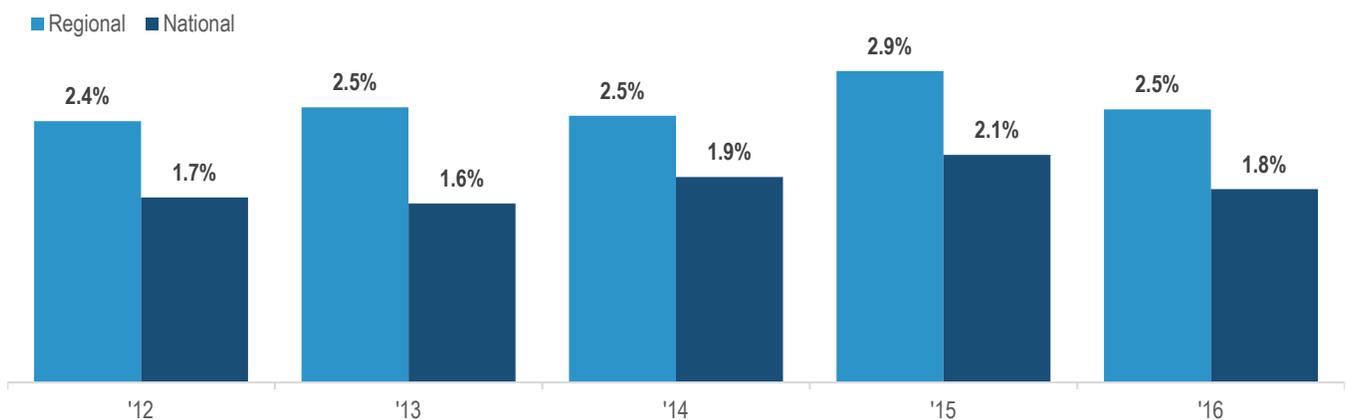


### Regional Employment<sup>21</sup>



For the 12 months ending November 2016 (the most recent data available), the region's employment base grew 2.5 percent where it has generally remained since 2012. At a broader view, most western states reported above-average employment growth during this timeframe. It is worth noting, the regional employment growth has consistently outpaced the national average.

### Regional vs. National Employment Growth<sup>22</sup>

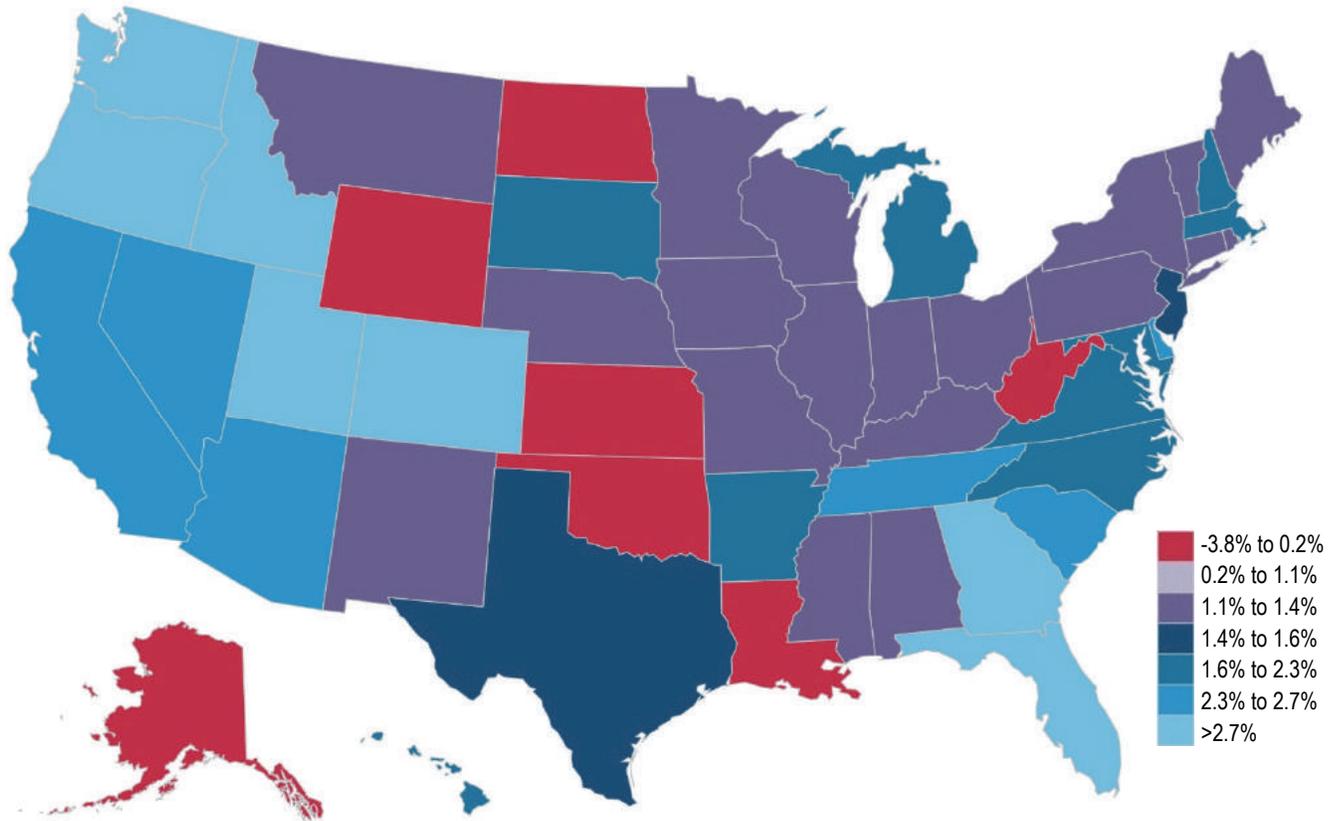


<sup>21</sup> Source: United States Bureau of Labor Statistics; Applied Analysis.

<sup>22</sup> Source: United States Bureau of Labor Statistics; Applied Analysis. Note: Trailing 12 month comparisons have been made for 2016.



**Annual Employment Growth by State (2016)<sup>23</sup>**

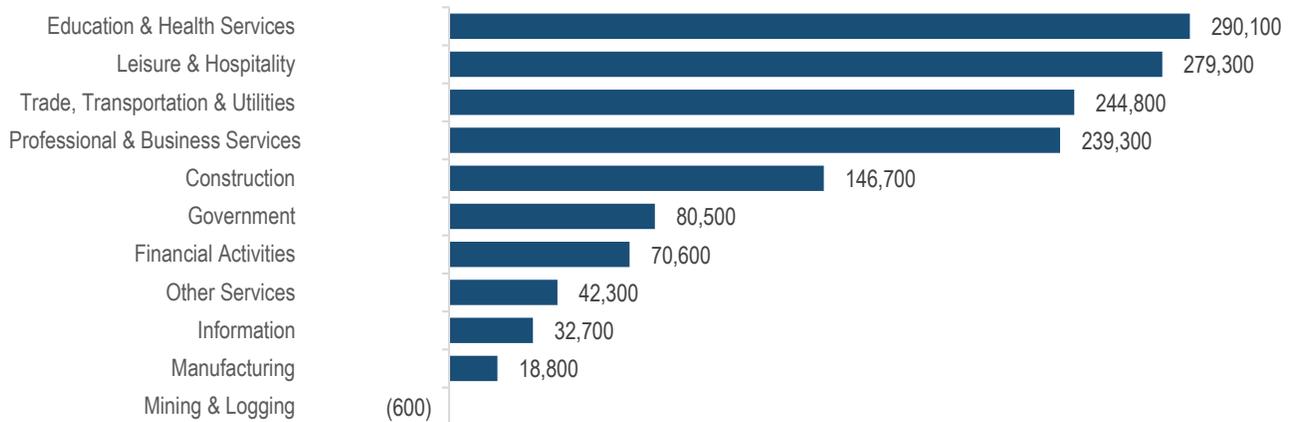


On a regional level, the education and health services sector has added the most jobs over the last five years, with a net gain of 290,100 jobs. This is followed by leisure and hospitality (+279,300 jobs) and trade, transportation and utilities (+244,800 jobs). Sectors with the greatest percentage growth in the last five years are construction (+34.2 percent), leisure and hospitality (+20.9 percent) and education and health services (+18.2 percent). These three sectors have led employment growth in Southern Nevada over the past year, and the region is poised to accommodate additional growth in these sectors.

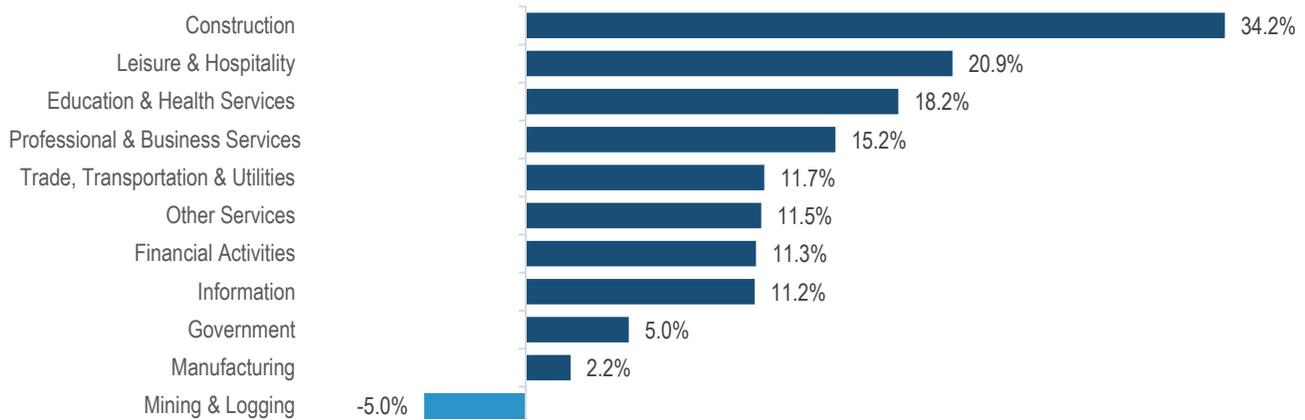
<sup>23</sup> Source: MyResearcher.com, using data from the United States Bureau of Labor Statistics. Note: Data compare 12 months ending November 2016 to 12 months ending November 2015.



### Regional Employment Growth | Past 5 Years (Net Change)<sup>24</sup>



### Regional Employment Growth | Past 5 Years (Percentage Change)<sup>25</sup>



### BUSINESS GROWTH TRENDS

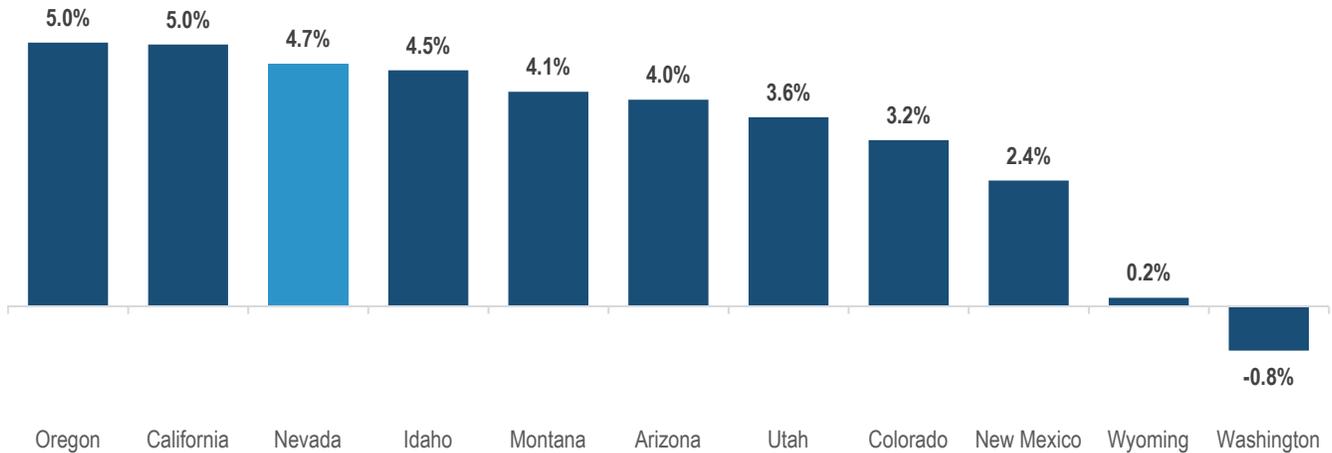
Among the 11 western states, there has been 4.0 percent growth in the number of private companies opening their doors in the past year. This translates to nearly 100,000 new companies from Q2 2015 to Q2 2016 (latest data available). In comparison, the number of Nevada private companies grew 4.7 percent to over 80,000 during this timeframe.

<sup>24</sup> Source: United States Bureau of Labor Statistics; Applied Analysis. Note: Data compare November 2016 to November 2011.

<sup>25</sup> Source: United States Bureau of Labor Statistics; Applied Analysis. Note: Data compare November 2016 to November 2011.

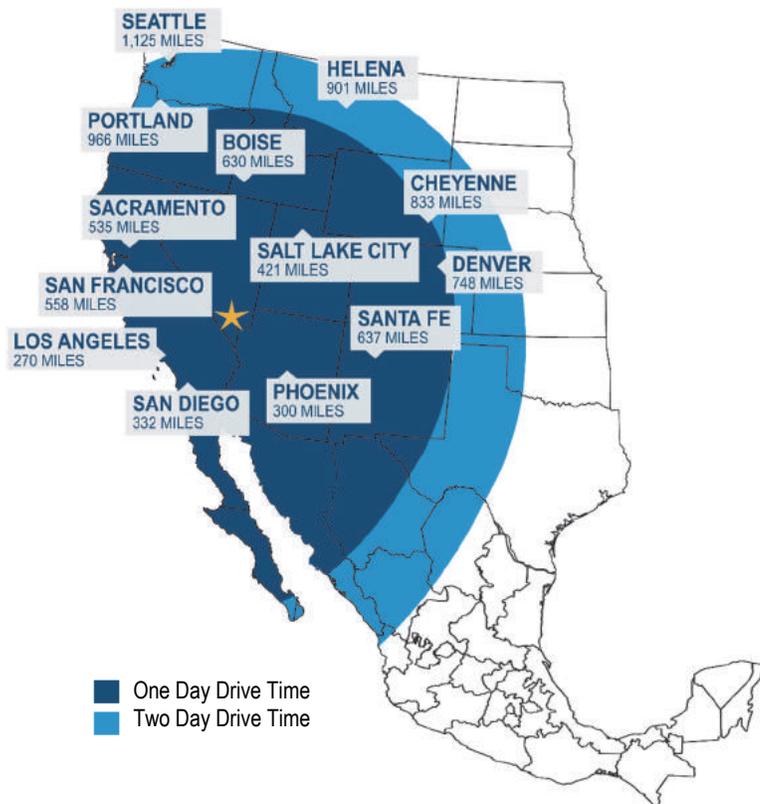


**Private Business Growth<sup>26</sup>**



Companies looking to move or relocate can take advantage of the benefits that Nevada, and Southern Nevada in particular, has to offer, including:

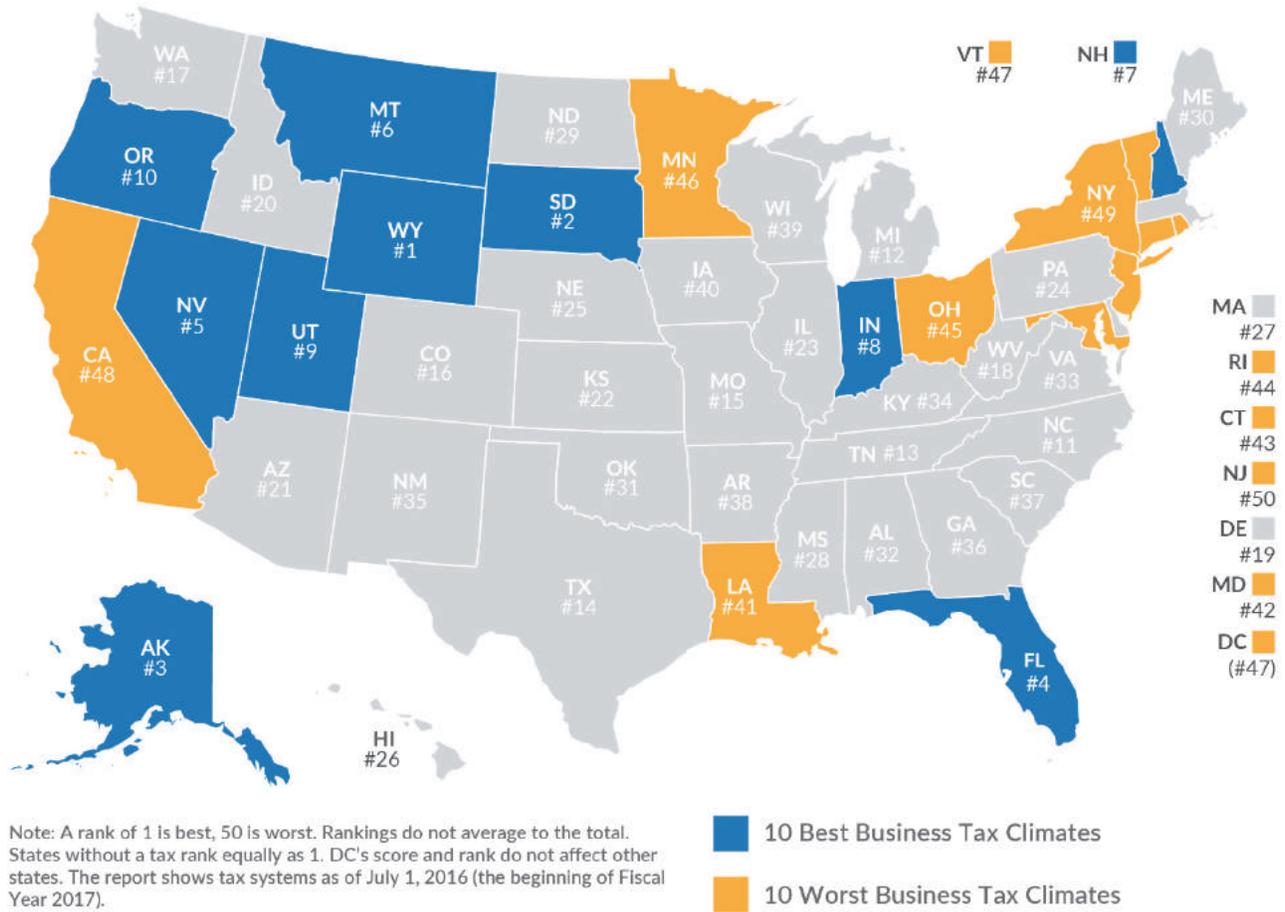
- No Corporate Income Tax
- No Personal Income Tax
- No Unitary Tax
- No Estate Tax
- No Admissions Tax
- No Franchise Tax on Income
- No Inheritance or Gift Tax
- Availability of State Incentives
- Expanding Telecommunications & Technology Infrastructure
- Competitive Energy
- Competitive Property Tax Rates
- 1- to 2-Day Travel Time to 13 Major U.S. Cities & Mexico
- Access to McCarran International Airport (Ranked 8<sup>th</sup> Busiest U.S. Airport & 26<sup>th</sup> Busiest World Airport by Airports Council International)
- Foreign Trade Zone #89



<sup>26</sup> Source: United States Bureau of Labor Statistics, Q2 2016 vs. Q2 2015.

Nevada's tax benefits have earned it the title of fifth-best business tax climate by the Tax Foundation, behind just Wyoming (#1), South Dakota (#2), Alaska (#3) and Florida (#4).

**State Business Tax Climate Index (2017)<sup>27</sup>**



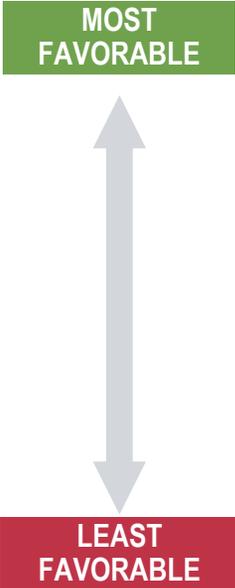
<sup>27</sup> Source: Tax Foundation.

Furthermore, in a Boyd Co. poll of western U.S. Fortune 1000 company executives, Nevada was rated the most-favorable tax and business climate in the 11-western state region. The list of benefits will likely grow as state and local government agencies look for ways to continuously improve the site selection process for prospective companies.

**Favorable Business Climate Among 11-Western State Region<sup>28</sup>**

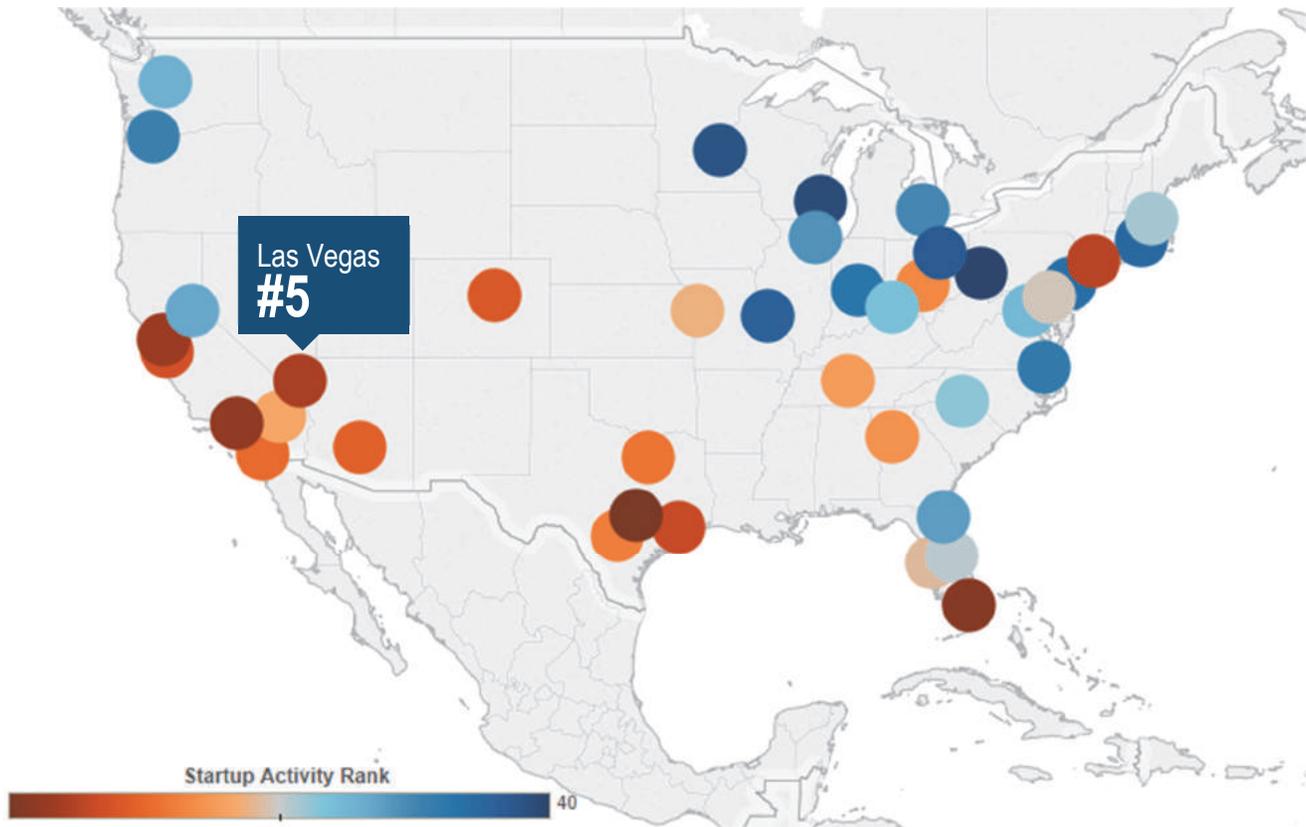


WESTERN STATES RANKING	
<b>NEVADA</b>	<b>24%</b>
Utah	14%
Idaho	13%
Wyoming	13%
Arizona	11%
Washington	8%
New Mexico	6%
Montana	5%
Oregon	3%
Colorado	2%
California	1%



Southern Nevada also ranks favorably when it comes to start-up activities. The Kauffman Index of Start-up Activity ranked Las Vegas as the fifth best metropolitan area for start-ups. Las Vegas increased its ranking from sixth in the prior year. Only the cities of Austin, Miami, Los Angeles and San Francisco ranked higher.

**Start-up Activity Rankings<sup>29</sup>**



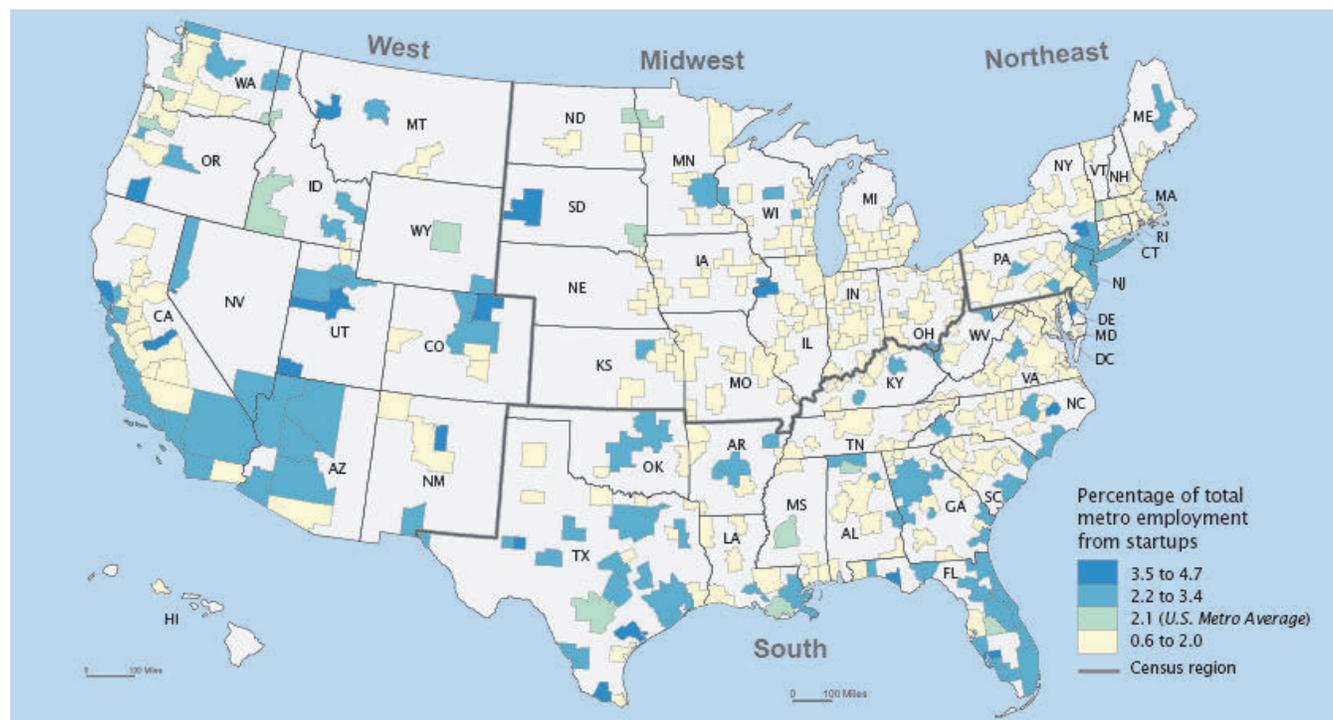
<sup>28</sup> Source: The Boyd Co, Inc. 2016 Boyd Corporate Site Selection Leading Indicator Poll.

<sup>29</sup> Source: The Kauffman Index. The index is a composite measure of start-up and entrepreneur data, including: (1) the rate of new entrepreneurs in the economy, the opportunity share of new entrepreneurs, and the start-up density of a region.



In addition to The Kauffman Index rankings, the United States Census Bureau has also identified Las Vegas among areas in which start-ups have contributed significantly to their communities. Start-ups contributed more to employment in the Las Vegas metropolitan area as compared to the nation as a whole and other major metropolitan areas.

**Start-ups' Contribution to Metropolitan Employment Growth<sup>30</sup>**



**DID YOU KNOW?**

Switch is a Las Vegas-based start-up. Switch's multi-tenant data centers are revolutionizing the data storage industry. The company has been awarded the only Tier IV Gold certification for its operations by the Uptime Institute and has earned a spot among top internet companies in the "Clicking Clean: Who is Winning the Race to Build a Green Internet?" report for its transition to 100 percent renewable energy. The company has nine digital exchange campuses in Southern Nevada and three more campuses actively under construction or in the planning stages. Once completed, these campuses will consist of 2.4 million square feet of space and maintain up to 325 MVA of power. In addition, Switch's plans to build a 500-mile fiber optic SUPERLOOP that will connect Las Vegas data centers with those in Reno and planned centers in San Francisco and Los Angeles will provide data to its wide range of clients faster than ever. *Source: Switch*



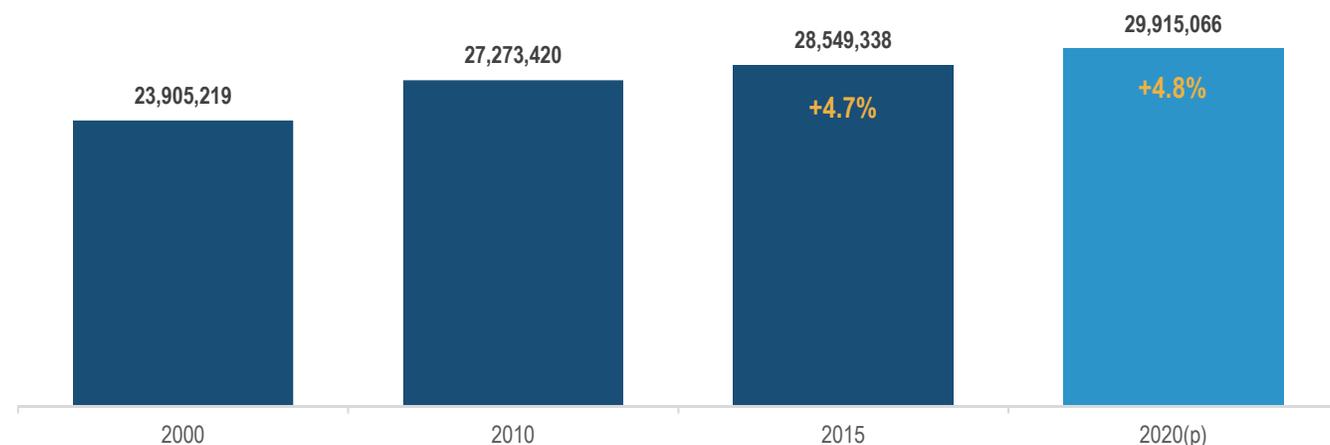
<sup>30</sup> Source: US Census.

## REGIONAL DEMOGRAPHIC PROFILE

In addition to the favorable business environment, the region boasts a fast-growing, diverse population representing a variety of races, educational backgrounds and occupations. The combined populations of the Las Vegas MSA and neighboring metro areas make it possible for employers to more easily recruit quality candidates to fill positions.

Regional population has been characterized by above-average growth rates. From 2000 to 2010, the population grew 14.1 percent to 27.3 million residents. This was nearly 1.5 times the national growth rate. From 2010 to 2015, the population grew 4.7 percent compared to 3.5 percent nationwide. Looking forward, the regional population is expected to grow 4.8 percent to 29.9 million residents, compared to national projections of 3.5 percent.

### Regional Population Growth<sup>31</sup>



Approximately 41 percent of the population is of Hispanic or Latino origin, which is more than two times higher than that of the national average, and nearly 31 percent of the population aged 5 and older speak Spanish in the home. In addition, 7.9 percent of the population aged 5 and older speak an Asian or Pacific Islander language, compared to just 3.3 percent nationwide. The average age is 37.3 years and the share of men and women is roughly even. Among the population aged 25 and older, 28.9 percent report having a bachelor's degree or higher, which is in line with the national average. Overall, Southern Nevada reports that 22.0 percent of residents have a bachelor's degree or higher, but it is important to note that the broader region (Southern Nevada, Southern California and Central Arizona) posted a share that is nearly 7 percentage points higher (29 percent in total). The median household income is \$55,257 and the average household size is 2.90 people, slightly larger than the 2.57 reported nationwide. About 63.4 percent of the population is currently in the labor force and of those that are currently employed, about 60.4 percent work in white-collar occupations. The following provides additional highlights of the regional demographic profile from which Las Vegas and businesses draw from.

<sup>31</sup> Source: Claritas.



## Regional Demographic Profile

Demographics	Total	Share (%)
<b>2015 Est. Population by Single-Classification Race</b>	<b>28,549,338</b>	
White	16,581,723	58.1%
Black/African American	1,912,321	6.7%
American Indian/Alaska Native	332,607	1.2%
Asian	3,103,823	10.9%
Native Hawaiian/Other Pacific Islander	94,769	0.3%
Other Race	5,178,830	18.1%
Two or More Races	1,345,265	4.7%
<b>2015 Est. Population by Hispanic or Latino Origin</b>	<b>28,549,338</b>	
Not Hispanic or Latino	16,850,248	59.0%
Hispanic or Latino	11,699,090	41.0%
<b>2015 Est. Population Age 5+ by Language Spoken at Home</b>	<b>26,665,996</b>	
English Only	15,039,061	56.4%
Asian/Pacific Islander Language	2,117,445	7.9%
IndoEuropean Language	1,000,298	3.8%
Spanish	8,220,799	30.8%
Other Language	288,393	1.1%
2015 Est. Median Age	35.9	
2015 Est. Average Age	37.3	
<b>2015 Est. Population Age 25+ by Educational Attainment</b>	<b>18,745,834</b>	
Less than 9th Grade	1,837,290	9.8%
Some High School, No Diploma	1,666,007	8.9%
High School Graduate (or GED)	4,143,914	22.1%
Some College, No Degree	4,235,578	22.6%
Associate's Degree	1,449,108	7.7%
Bachelor's Degree	3,497,417	18.7%
Master's Degree	1,287,832	6.9%
Professional School Degree	396,110	2.1%
Doctorate Degree	232,578	1.2%
No High School Diploma	3,503,297	18.7%
High School Graduate	4,143,914	22.1%
Some College or Associate's Degree	5,684,686	30.3%
Bachelor's Degree or Higher	5,413,937	28.9%
2015 Est. Average Household Income	\$76,327	
2015 Est. Median Household Income	\$55,257	
<b>2015 Est. Population Age 16+ by Employment Status</b>	<b>22,466,025</b>	
In Armed Forces	119,979	0.5%
Civilian - Employed	12,604,694	56.1%
Civilian - Unemployed	1,638,186	7.3%
Not in Labor Force	8,103,166	36.1%
<b>2015 Est. Civilian Employed Population Age 16+ by Occupation</b>	<b>12,914,800</b>	
Architect/Engineer	246,796	1.9%
Arts/Entertainment/Sports	366,648	2.8%
Building Grounds Maintenance	611,502	4.7%
Business/Financial Operations	619,264	4.8%
Community/Social Services	187,812	1.5%
Computer/Mathematical	305,146	2.4%
Construction/Extraction	622,010	4.8%
Education/Training/Library	680,781	5.3%
Farming/Fishing/Forestry	54,783	0.4%

Demographics	Total	Share (%)
Food Prep/Serving	785,768	6.1%
Health Practitioner/Technician	625,545	4.8%
Healthcare Support	264,751	2.0%
Maintenance Repair	394,456	3.1%
Legal	159,810	1.2%
Life/Physical/Social Science	99,858	0.8%
Management	1,204,971	9.3%
Office/Admin. Support	1,771,492	13.7%
Production	696,869	5.4%
Protective Services	306,098	2.4%
Sales/Related	1,537,259	11.9%
Personal Care/Service	609,391	4.7%
Transportation/Moving	763,790	5.9%
<b>2016 Est. Population Age 16+ by Occupation Classification</b>	<b>12,914,800</b>	
Blue Collar	2,477,125	19.2%
White Collar	7,805,382	60.4%
Service & Farm	2,632,293	20.4%

## DID YOU KNOW?

Large-scale retailers are quickly making Southern Nevada a key location as a regional distribution hub given its proximity to major cities in the western United States. Notable additions that during the past 12 months include:

- Amazon's 813,120-square-foot fulfillment center at Northgate Distribution Center;
- The Honest Company's 570,810-square-foot warehouse and distribution center at Northgate Distribution Center;
- Bed Bath & Beyond's 525,200-square-foot distribution center at Prologis I-15 Speedway Logistics Center; and
- Fanatics' 400,186-square-foot distribution center at Northgate Distribution Center.

Source: Applied Analysis and various media reports.





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# **SOUTHERN NEVADA'S EVOLVING WORKFORCE**

**ATTRACTING TALENT, LOCAL CONSIDERATIONS**



## SOUTHERN NEVADA’S EVOLVING WORKFORCE | ATTRACTING TALENT, LOCAL CONSIDERATIONS

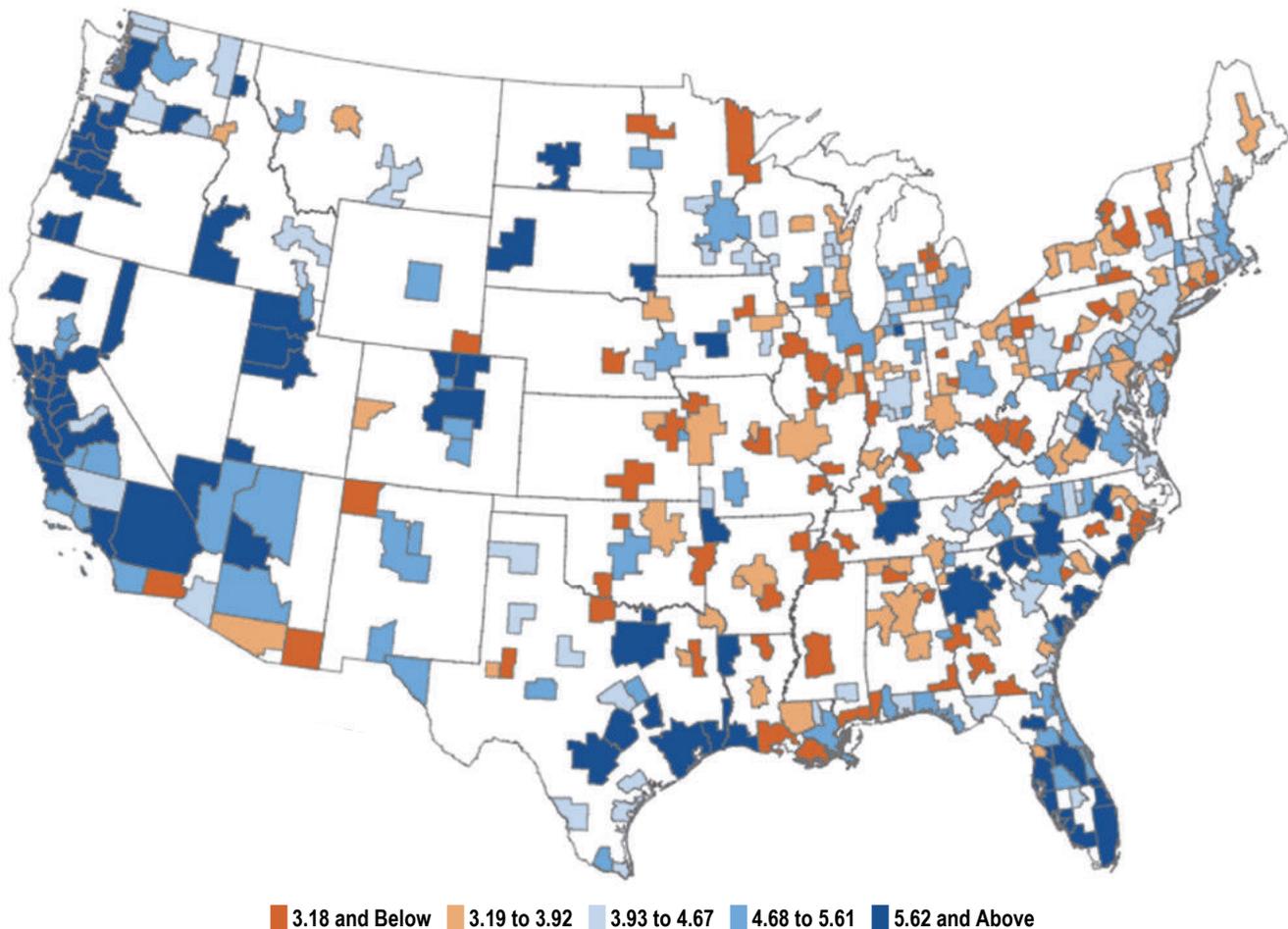
In addition to ongoing efforts to improve the existing workforce in Las Vegas, there are many reasons that Las Vegas is able to attract new members of the workforce. For the past three decades, Las Vegas has been one of the fastest-growing and most dynamically shifting economies in the nation. This has not only provided a great place to start a business, but has also resulted in a large and stable community, capable of supporting working families while providing a higher standard of living than many neighboring regions.

### GROWING INCOMES



Southern Nevada’s personal income has one of the highest rates of growth in the nation. From 2013-2015, incomes in the Las Vegas metropolitan area rose by 5.7 percent, enough to put Las Vegas into the top 20 percent of the fastest growing metropolitan markets in the nation. Furthermore, during the same timeframe personal income per capita grew by 7.1 percent to \$40,652. As the employment market in the area continues to tighten, personal incomes are anticipated to continue growing.

### Personal Income Growth by Metropolitan Area (2013 – 2015)



## COST OF LIVING

From a purely financial standpoint, Las Vegas is much more affordable than most large metropolitan areas in the western United States. The table below uses the Bureau of Economic Analysis' Regional Price Parities data to compare cities in the region, both on overall costs and rent costs. A score of 100 is the national average, and the scores represent each city's cost as a percentage of the national average.



### Cost of Living Rankings Among Major Metropolitan Areas in the Western United States

Selected Metropolitan Area	Overall Index Value	Rent Index Value	Housing Affordability Index
Phoenix, AZ	97.7	96.9	167.1
<b>Las Vegas, NV</b>	<b>98.7</b>	<b>98.4</b>	<b>156.0</b>
Salt Lake City, UT	99.7	103.8	160.9
Portland, OR	101.3	112.6	130.7
Sacramento, CA	102.5	118.7	141.9
Denver, CO	104.7	117.7	128.7
Riverside-San Bernardino, CA	105.9	119.0	118.8
Seattle, WA	107.8	129.0	129.9
San Diego, CA	115.9	163.9	79.8
Los Angeles, CA	117.0	166.4	73.6
San Francisco-Oakland, CA	121.3	183.9	72.6
San Jose, CA	122.9	200.7	63.9

Of these major metropolitan areas, Las Vegas is one of just three cities with overall cost levels below the national average. Other factors that make Southern Nevada attractive for incoming workers is the absence of a state income tax and the generally higher wages for lower-skilled jobs. For example, in 2015 Las Vegas' largest occupational group was Food Preparation and Serving Related Occupations, which accounted for 15.7 percent of all employment in the region compared to 9.1 percent in the U.S. Median hourly wages for that group were \$11.32 in Southern Nevada compared to \$9.41 nationally. Similarly, hotel clerks earned \$16.15 in Southern Nevada compared to \$10.87 nationally. Finally, construction laborers earned \$21.34 in Southern Nevada compared to the national average of \$17.57.

Also in the above table is the Housing Affordability Index, a National Association of Realtors indicator that compares single-family home prices with family incomes across metropolitan areas. A score of 100 means a typical family's income would adequately cover payments for a median home; a score above 100 means the family would have more than enough to cover a mortgage in the area. As shown above, Las Vegas has a score of 156.0, meaning the average family makes 56 percent more than necessary to cover a typical mortgage in the area. This is the third-highest score, suggesting Las Vegas homes are nearly as affordable as Phoenix (167.1) and Salt Lake City (160.9).

Combine these factors (lower cost of living, affordable housing and competitive wages), and Southern Nevada provides a compelling formula for attracting new workers from neighboring regions and across the United States. This formula has been a primary driver of migration into Southern Nevada for decades, ensuring an available flow of prospective workers into the region to support continued economic growth and development.

## HOUSING AND NEIGHBORHOODS



Southern Nevada's record growth over the past three decades means that the area's housing stock is one of the newest in the country, with the median house construction year being 1995.<sup>32</sup> The Las Vegas valley has been built with the latest urban design philosophies in mind, and has been able to create communities and housing that best fit the demands of a growing and varied array of residents.

New communities throughout the valley are a mixture of small developments filling in parcels in urban areas and large-scale master-planned communities. These master-planned communities are large in scale and cohesively designed to support the needs of residents by planning streets, parks, recreational centers, community areas, retail and ensuring the area's neighborhoods are appropriate for raising families. In fact, two of these communities, Summerlin and Inspirada, were among the top 10 selling nationally in home sales in 2016. They represent an important component of the area's growing economy, allowing families of all types a safe, well-thought out community.

### Top-Selling Master-Planned Communities in the United States<sup>33</sup>

Rank	Master-Planned Community	City	State	2016 Sales	2015 Sales	Change
1	Irvine Ranch	Orange County	CA	1,989	1,674	19%
2	The Villages	The Villages	FL	1,966	2,294	-14%
3	Nocatee	Ponte Vedra	FL	973	1,105	-12%
4	Lakewood Ranch	Sarasota	FL	775	535	45%
<b>5</b>	<b>Summerlin</b>	<b>Las Vegas</b>	<b>NV</b>	<b>769</b>	<b>602</b>	<b>28%</b>
6	Cane Bay Plantation	Charleston	SC	569	520	9%
<b>7</b>	<b>Inspirada</b>	<b>Las Vegas</b>	<b>NV</b>	<b>564</b>	<b>389</b>	<b>45%</b>
8	Great Park Neighborhoods	Irvine	CA	530	282	88%
9	Westridge	McKinney	TX	528	472	12%
10	Paloma Creek	Dallas	TX	515	450	14%
11	Eastmark	Mesa	AZ	502	554	-9%
12	Lake Nona	Orlando	FL	495	500	-1%
13	Stapleton	Denver	CO	471	665	-29%
14	Rancho Mission Viejo	San Juan Capistrano	CA	458	302	52%
15	Vistancia	Peoria	AZ	453	466	-3%
16	Daybreak	South Jordan	UT	452	415	9%
17	Baker Ranch	Lake Forest	CA	443	355	25%
18	Riverstone	Fort Bend County	TX	441	609	-28%
19	Aliana	Fort Bend County	TX	426	443	-4%
20	Verrado	Buckeye	AZ	413	343	20%

<sup>32</sup> Source: 2013 American Housing Survey.

<sup>33</sup> Source: RCLCO.

Notable is the fact that Southern Nevada’s development has actually fostered large and diverse neighborhoods throughout the urban valley. According to a recent Brookings Institution study of metropolitan areas with over one million people, Las Vegas ranked first in diversity. The study noted that Las Vegas reported the lowest level of segregation and that this phenomenon is “opening the door for development of new housing tracts since older, segregated neighborhoods were already established.” Neighborhoods throughout the area reflect the coalescence of unique ideas and cultures.

### Segregation Rankings (Top 10 vs. Bottom 10) Among Largest Metro Areas<sup>34</sup>

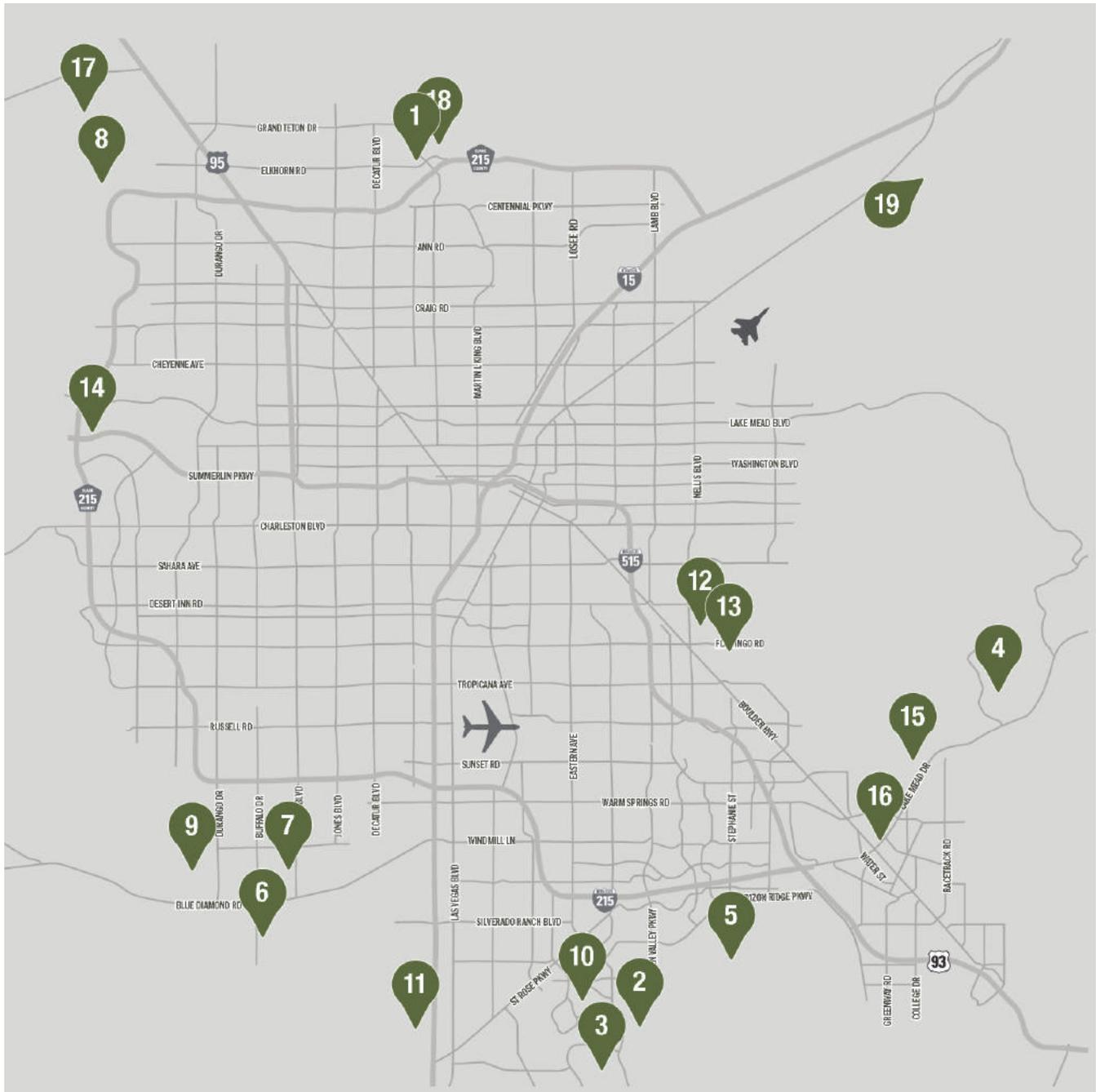
Most Segregated		Least Segregated	
	Metro Area		Metro Area
1	Milwaukee-Waukesha-West Allis	40	Seattle-Tacoma-Bellevue
2	New York-Newark-Jersey City	41	Austin-Round Rock
3	Chicago-Naperville-Elgin	42	Portland-Vancouver-Hillsboro
4	Detroit-Warren-Dearborn	43	San Antonio-New Braunfels
5	Cleveland-Elyria	44	Orlando-Kissimmee-Sanford
6	Buffalo-Cheektowaga-Niagara Falls	45	Phoenix-Mesa-Scottsdale
7	St. Louis	46	Virginia Beach-Norfolk-Newport News
8	Los Angeles-Long Beach-Anaheim	47	Riverside-San Bernardino-Ontario
9	Cincinnati	48	Raleigh
10	Philadelphia-Camden-Wilmington	49	<b>Las Vegas-Henderson-Paradise</b>

Whether a worker wishes to move into downtown Las Vegas (urban core) to keep up with the latest in suburban developments, enjoy a large backyard of their own in the southwest, or experience the great outdoor spaces of Summerlin, housing growth in Las Vegas will continue to support a nearly unlimited array of options for resident demands of all types. The following highlights major residential developments throughout Southern Nevada.

<sup>34</sup> Source: Brookings Institution.



### Major Residential Development in Southern Nevada



Note: Community references are included on the following page.



POWERED BY:



No.	Community	Year Established	Acres	No. of Units at Build-Out
1	Aliante	2003	1,905	6,500
2	Anthem	1998	4,755	13,000
3	Inspirada	2007	2,000	8,500
4	Lake Las Vegas	1984	3,592	1,700
5	MacDonald Highlands	1995	3,210	6,500
6	Mountain's Edge	2004	3,500	12,500
7	Nevada Trails	2001	310	1,400
8	Providence	2006	1,200	7,500
9	Rhodes Ranch Country Club	1996	1,330	5,000
10	Seven Hills	1994	1,300	2,500
11	Southern Highlands	1997	2,299	8,500
12	Stallion Mountain	1994	636	1,800
13	Stallion Mountain Country Club	1992	640	1,200
14	Summerlin	1990	22,500	80,000
15	Tuscany Village	2005	518	2,000
16	Cadence	2015	2,200	13,000
17	Skye Canyon	2015	1,700	9,000
18	The Villages at Tule Springs	2017	2,017	2,017
19	Mesquite Master-Planned Communities			
	Sun City Mesquite	2006	2,031	6,052
	Canyon Crest	2004	333	999
	Highland Vistas	2005	325	1,005
	Mesquite Estates	2004	767	2,301

**THE AREA AND ITS AMENITIES**



Las Vegas is commonly known as the entertainment capital of the world. The nickname is largely sourced to the plethora of shows and venues located along the Las Vegas Strip. In addition to the commonly known amenities, the area's expansion has also attracted the attention of major league sports. The National Hockey League (NHL) will debut the Vegas Golden Knights as the expansion team enters the league in the Fall of 2017. There are also investments in development to construct a state-of-the-art domed stadium that will be suitable for a National Football League (NFL) franchise. Other major league sports are also being targeted.

Beyond traditional amenities in the resort corridor, the Las Vegas valley is positioned between a number of unique outdoor amenities and attractions. The number of options for outdoor enthusiasts is impressive: hiking at Red Rock Canyon, boating at Lake Mead, kayaking down Black Canyon, exploring Mt. Charleston or skiing Lee Canyon, just to name a few. In addition, the area is less than a four-hour drive to Zion, Bryce, Grand Canyon and Joshua Tree National Parks and countless other preservation and recreational areas. Southern Nevada also has significant resources allocated to 260 public parks and recreational centers within the community.

**Selected Outdoor Attractions in Southern Nevada**

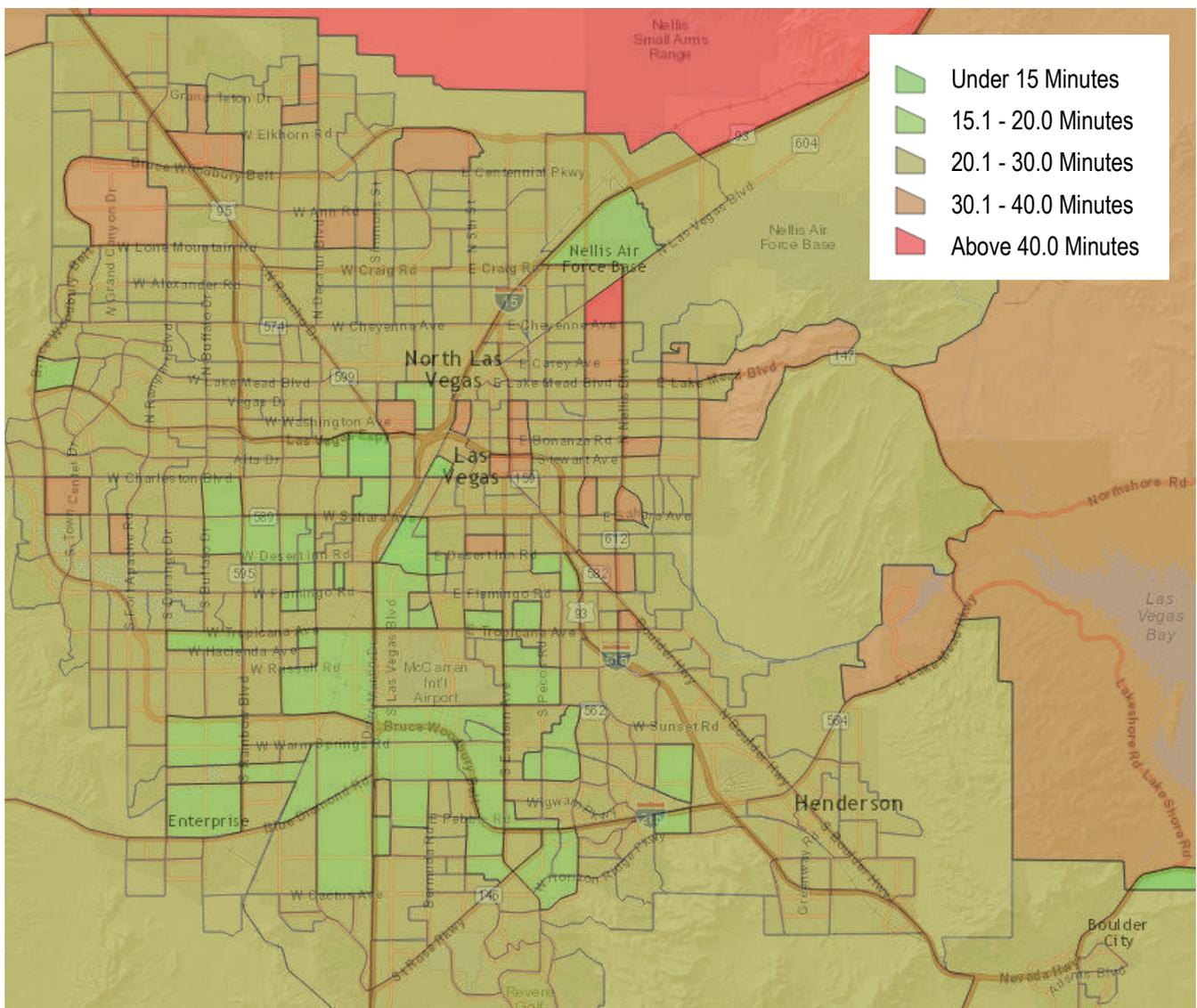


## COMMUTING AND TRAFFIC

In terms of commute times, Las Vegas has an average commute time of just 24.4 minutes, below the national average commute to work of 25.9 minutes. As shown in the map below, very few areas of the urban valley have an average commute of longer than 30 minutes per day. This is in large part due to the area's extensive freeway and traffic management systems as supervised by the Regional Transportation Commission. Southern Nevada also ranks 39<sup>th</sup> out of the 50 largest major metropolitan areas in terms of average commute time.<sup>35</sup>



### Commute Times in the Las Vegas Valley



<sup>35</sup> Source: 2015 American Community Survey 5-Year Estimates



### Commute Time Rankings for the Largest 50 Metropolitan Areas

Rank	Major Metropolitan Area	Workers (16 Years+)	Avg. Commute Time (Minutes)
1	New York-Newark-Jersey City, NY-NJ-PA Metro Area	9,309,951	35.6
2	Washington-Arlington-Alexandria, DC-VA-MD-WV Metro Area	3,123,672	34.3
3	Riverside-San Bernardino-Ontario, CA Metro Area	1,715,042	31.4
4	Chicago-Naperville-Elgin, IL-IN-WI Metro Area	4,476,316	31.2
5	San Francisco-Oakland-Hayward, CA Metro Area	2,187,353	31.2
6	Atlanta-Sandy Springs-Roswell, GA Metro Area	2,542,630	30.7
7	Baltimore-Columbia-Towson, MD Metro Area	1,359,092	30.4
8	Boston-Cambridge-Newton, MA-NH Metro Area	2,411,520	30.2
9	Los Angeles-Long Beach-Anaheim, CA Metro Area	5,994,584	29.2
10	Houston-The Woodlands-Sugar Land, TX Metro Area	2,950,577	29.0
11	Philadelphia-Camden-Wilmington, PA-NJ-DE-MD Metro Area	2,805,540	29.0
12	Seattle-Tacoma-Bellevue, WA Metro Area	1,796,181	29.0
13	Miami-Fort Lauderdale-West Palm Beach, FL Metro Area	2,665,569	28.1
14	Dallas-Fort Worth-Arlington, TX Metro Area	3,273,745	27.4
15	Orlando-Kissimmee-Sanford, FL Metro Area	1,050,683	27.4
16	Denver-Aurora-Lakewood, CO Metro Area	1,384,084	27.2
17	Nashville-Davidson--Murfreesboro--Franklin, TN Metro Area	852,139	26.8
18	Detroit-Warren-Dearborn, MI Metro Area	1,862,194	26.6
19	San Jose-Sunnyvale-Santa Clara, CA Metro Area	918,011	26.5
20	Pittsburgh, PA Metro Area	1,118,018	26.4
21	Tampa-St. Petersburg-Clearwater, FL Metro Area	1,264,344	26.3
22	Austin-Round Rock, TX Metro Area	954,212	26.2
23	Sacramento--Roseville--Arden-Arcade, CA Metro Area	943,660	26.1
24	Charlotte-Concord-Gastonia, NC-SC Metro Area	1,088,302	26.0
25	Phoenix-Mesa-Scottsdale, AZ Metro Area	1,925,770	25.9
26	Portland-Vancouver-Hillsboro, OR-WA Metro Area	1,103,795	25.7
27	Jacksonville, FL Metro Area	633,381	25.7
28	New Orleans-Metairie, LA Metro Area	562,657	25.5
29	San Antonio-New Braunfels, TX Metro Area	1,032,859	25.4
30	St. Louis, MO-IL Metro Area	1,331,071	25.3
31	Providence-Warwick, RI-MA Metro Area	769,779	25.3
32	Minneapolis-St. Paul-Bloomington, MN-WI Metro Area	1,812,142	25.1
33	Raleigh, NC Metro Area	597,524	25.1
34	San Diego-Carlsbad, CA Metro Area	1,504,548	25.0
35	Indianapolis-Carmel-Anderson, IN Metro Area	921,428	24.8
36	Richmond, VA Metro Area	602,744	24.7
37	Cleveland-Elyria, OH Metro Area	949,823	24.6
38	Cincinnati, OH-KY-IN Metro Area	1,005,702	24.5
<b>39</b>	<b>Las Vegas-Henderson-Paradise, NV Metro Area</b>	<b>912,471</b>	<b>24.4</b>
40	Virginia Beach-Norfolk-Newport News, VA-NC Metro Area	833,736	24.1
41	Memphis, TN-MS-AR Metro Area	595,401	23.9
42	Louisville/Jefferson County, KY-IN Metro Area	588,618	23.7
43	Hartford-West Hartford-East Hartford, CT Metro Area	593,332	23.5
44	Columbus, OH Metro Area	954,288	23.4
45	Milwaukee-Waukesha-West Allis, WI Metro Area	759,463	23.2
46	Kansas City, MO-KS Metro Area	999,230	22.8
47	Salt Lake City, UT Metro Area	554,639	22.6
48	Oklahoma City, OK Metro Area	620,382	22.3
49	Buffalo-Cheektowaga-Niagara Falls, NY Metro Area	530,448	21.2
50	Rochester, NY Metro Area	505,199	21.1

POWERED BY:



Additionally, work will continue on improving these commute times further. Already, work is underway on the \$1.5 billion Project Neon, which will improve the interchange of Interstate 15 and US-95 and allow better access to downtown Las Vegas. In addition to transportation investments already underway, Clark County voters approved a measure to “index” fuel taxes based on the rate of inflation to further fund transportation infrastructure in Southern Nevada. This will allow the Regional Transportation Commission and its local government partners to build and improve roads throughout the valley to maintain favorable commute times as the community expands.





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# **SOUTHERN NEVADA'S EVOLVING WORKFORCE**

DEVELOPING AND RETAINING LOCAL TALENT



## SOUTHERN NEVADA’S EVOLVING WORKFORCE | DEVELOPING AND RETAINING LOCAL TALENT



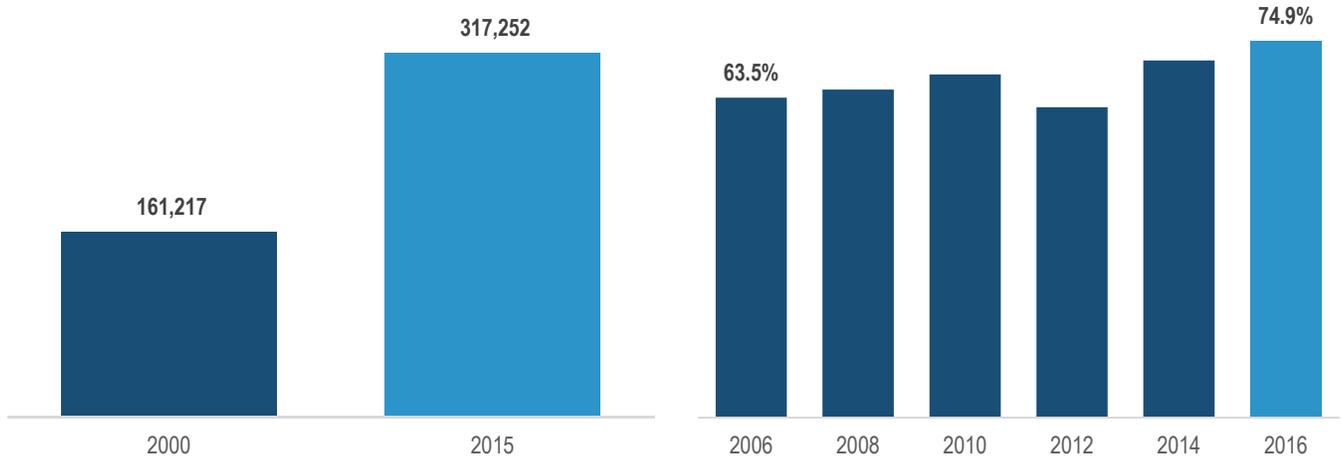
Local public and private educational institutions are a crucial part of the education, training and preparation of the future and current generations of workers for the jobs that will be available to them. The institutions in Southern Nevada have been constantly evolving to help develop and improve the local workforce, and the dividends in recent years have been considerable. The number of Southern Nevadans with a bachelor’s degree has exploded,<sup>36</sup> high school graduation rates have hit record highs,<sup>37</sup> medical school programs have begun to help address the region’s long-running medical field constraints, and the share of natives among the population (those people born within Nevada) continues to rise, indicating the expanded number of opportunities for workers in the area and a willingness of residents to remain permanently and seek out these opportunities.<sup>38</sup>

### DEVELOPING LOCAL TALENT LEADS TO SUCCESS

Education and training of Southern Nevada’s workforce begins at the primary education level and continues through post-secondary and other educational opportunities. Southern Nevada is home to a variety of educational institutions, both public and private, that provide pathways to higher learning, skill development and vocational training necessary to develop a workforce that can adapt and grow along with the evolving demands of existing and emerging industries.

#### Bachelor’s Degree or Higher in Southern Nevada

#### High School Graduation Rate



<sup>36</sup> U.S. Census Bureau.

<sup>37</sup> Clark County School District, Nevada ReportCard.

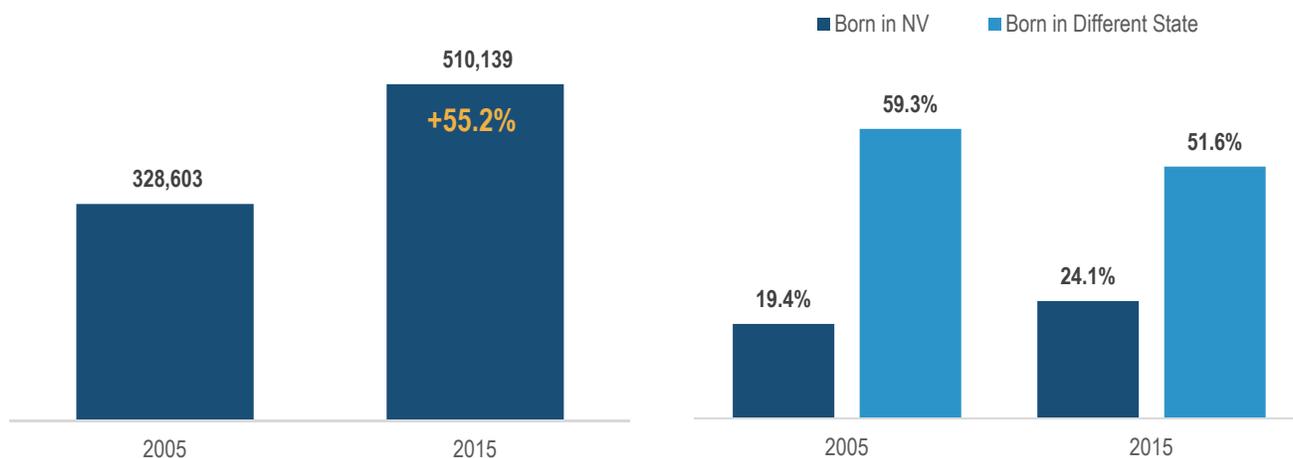
<sup>38</sup> U.S. Census Bureau.

### MORE LOCALS STAY LOCAL (RETENTION)

Retaining productive labor within the local community is a building block for future success. There is a reason that Southern Nevada is one of the fastest-growing communities in the country – its labor force has been able to keep pace, not only through strong in-migration but through retention of its home-grown talent.

#### Nevada-Born Residents in Southern Nevada

#### Residents by State of Birth



### EDUCATION IS AT THE CORE OF SOUTHERN NEVADA’S WORKFORCE

From K-12 education to public and private universities, the education system provides opportunity for our youth to learn new skills, develop a strong foundation from which future growth can thrive and create change in the community. The following subsections show the contribution of these various institutions as well as their cooperation with one another and connectivity to the needs of industry and the regional economy.



#### *Clark County School District (CCSD)*

The Nevada public education system and CCSD in particular are in the midst of a number of changes which affect their organization, funding, curriculum, testing procedures and proficiency standards. These changes, along with many others that have taken place in recent years, are aimed at improving educational outcomes for the over 300,000 students across all levels within the district. It is important to create a system where more students graduate with skillsets to be better prepared for university-level studies. It is also critical that more students graduate with technical or vocational skills. A better educated and trained pool of local graduates will ultimately have positive effects on business in the region.



A diversifying economy requires a more diverse skillset among the members of the workforce, and the public education system is at the center of that diversification. Increasing standards, curriculum changes, and the addition of multiple new career and

technical academies aimed at providing specific career skills training in addition to the standard curriculum will all help better prepare students in one of the country's largest school districts for success, regardless of what type of changes to the business landscape in Las Vegas are on the horizon. In addition, an ongoing reorganization process is aimed at giving individual schools greater control over their distribution of funds to better serve the unique needs of the students in their respective communities. A few highlights about CCSD are noted below.

- CCSD is the 5<sup>th</sup> largest school district in the country based on total student enrollment, trailing only school districts in New York City, Los Angeles, Chicago and Miami.
- In 2015, CCSD set a record with a nearly 75 percent high school graduation rate. While still lagging the national average of 83 percent by an unacceptable margin, current rates reflect a meaningful improvement over the low point in 2011.<sup>39</sup>
- Career and Technical Academies (CTAs) provide various career skills classes such as engineering, graphic design, nursing, and automotive repair, among many others. In the 2015-2016 school year, the seven CTAs graduated 99 percent of their seniors; well above the CCSD average of 75 percent and the national average of 83 percent. In the same year students at these schools also scored an average ACT composite score of 20.9 compared with the CCSD average of 17.2, showing their greater preparedness for the workplace or college level courses.<sup>40</sup>

### Career & Technical Academy Programs by Category

Technology		
Networking Technology	Biotechnology	Mechanical Technology
Construction Technology	Automotive Technology	Collision Repair Technology
IT Systems	IT Networking	IT Management
Digital Game Technology	Computer Science	
Creative		
Graphic Design	Web Design & Development	Culinary Arts
Photography	Digital Media	Interior Design
Fashion Design	Animation	Architectural Design
Digital Game Development		
Health		
Health Information Mgmt.	Medical Professions	Medical/Bio-Medical Sciences
Cosmetology	Nursing	Sports Medicine
Emergency Medical Services	Respiratory Therapy	Dental Assisting
Environmental Management		
Other		
Business Mgmt./Admin.	Hospitality & Tourism	Legal Studies
Civil Engineering	Environmental Engineering	Engineering & Design
Early Childhood Education	Teacher Education	Marketing
Law Enforcement, Forensic Science, Criminal Justice		Media Communications

<sup>39</sup> Source: Nevada ReportCard.

<sup>40</sup> Source: Nevada ReportCard.



- Magnet programs also allow students to take more specialized and intensive classes, ranging from the arts and design to STEM and aviation. These intensive programs help students gain valuable workplace skills and discover their talents and interests early, making for a more efficient educational experience.
- In 2016, 25 CCSD magnet programs across all education levels were honored by Magnet Schools of America at their annual conference for the outstanding achievement of their programs.
- CCSD cooperates with the College of Southern Nevada (CSN) through the CSN High School program to provide students the ability to earn college credits while in high school and prepare them for more rigorous coursework at the next level. Advanced Placement (AP) and International Baccalaureate (IB) programs also allow high achieving students to earn college credit and prepare themselves for the workforce faster and more thoroughly.

### Did You Know?

The Las Vegas Global Economic Alliance has teamed up with CCSD on the FutureReady Industry Tours, a series of industry-specific tours connecting local industry with Southern Nevada's future workforce. The program exposes students, primarily at magnet schools and career and technical academies, to various jobs in different industries to help the students properly prepare for their future. Initial efforts have been focused on manufacturing and engineering, programming and robotics, digital media and graphic design, manned and unmanned aerial systems, and health sciences.

*Source: Las Vegas Global Economic Alliance.*

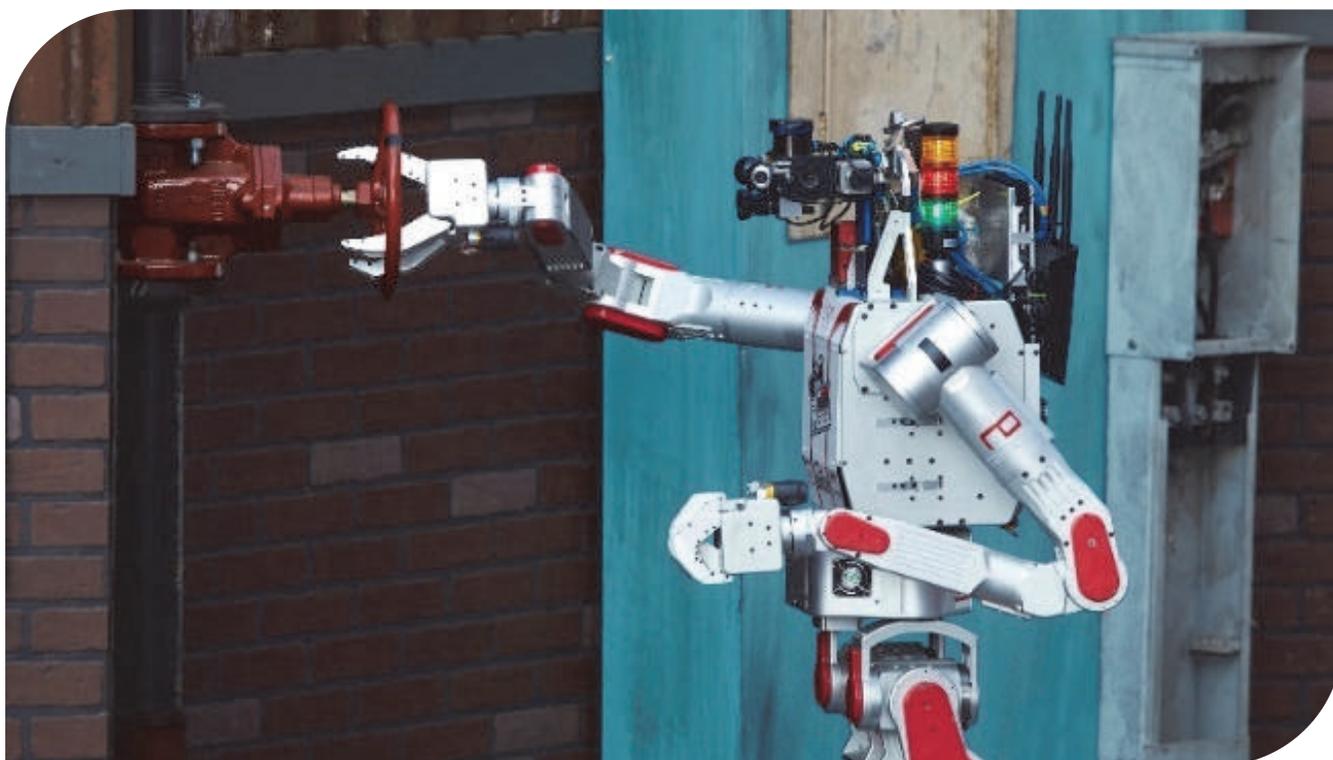


*University of Nevada, Las Vegas (UNLV)*

UNLV is making significant progress in its ongoing effort to become a Carnegie Tier One research university, a designation used to describe universities with high levels of research activity and funding. A significant part of this process has been the expansion and improvement of its graduate programs as a way to offer more research opportunities in a wider variety of fields, thus increasing the opportunities to receive funding for various research projects. The biggest of these improvements is the addition of a medical school. UNLV is also building new facilities for the engineering and business schools, as well as upgrading and expanding many student residences. Investments in the athletic department, such as a new football training facility and legislative approval of a \$1.9 billion stadium, which UNLV would play in, should help to elevate the national exposure of the university and allow it to attract more talent in the application process.

# UNLV

UNLV is also expanding robotics and data programs to help meet the needs of the diversifying Southern Nevada economy. Nevada was designated one of six places in the United States where drone technology can be tested, and UNLV established its Center for Advanced Mobility to help with that development. UNLV is also home to the National Supercomputing Institute and the supercomputer Cherry Creek II, one of the top 500 machines in the world in terms of computing power. The recent addition of Cherry Creek II has greatly enhanced research efforts at UNLV and has allowed the university to attract greater amounts of research funding, such as a five-year \$11.1 million grant from the National Institutes of Health for research in conjunction with the Lou Ruvo Center for Brain Health in Las Vegas. UNLV already has a premier hotel administration and management program, and these investments will only broaden its reach and expand the abilities of its graduates.



Selected highlights for UNLV include the following.

- New medical school, which is part of \$330 million in planned upgrades helping UNLV with its goal of becoming a Tier One research university.<sup>41</sup>
- Most common undergraduate field of study is the hospitality and hotel administration/management program, accounting for 16 percent of all bachelor's degrees awarded in 2014-2015. UNLV has long been connected to industry in the region, and continues to evolve to meet the changing demands of Las Vegas' increasingly diverse economy.<sup>42</sup>
- As the unmanned aerial vehicle or drone industry grows in Nevada, having been selected by the FAA as a designated testing and research area, UNLV has expanded its robotics and research programs to position it as a hub for drone research and development (Center for Advanced Mobility).
- UNLV continues to grow both its undergraduate and graduate programs, setting new graduate records nearly each year. This growth has helped improve the overall education level of the workforce. In 2000, only 17.3 percent of people over 25 in the Las Vegas MSA held a bachelor's degree or higher – in 2015 that had risen to 22.7 percent. Over the same period the number of people aged 18 to 24 with a bachelor's degree or higher grew from 4.1 percent to 4.9 percent.<sup>43</sup>
- UNLV has been ranked by U.S. News & World Report as one of the top 10 most diverse universities in the United States for five consecutive years, tying for second in the 2015 edition of the report.
- UNLV (and other Nevada schools) also allows graduates to emerge with less debt than their counterparts nationally, enabling them to contribute even more to the local economy after receiving their degree. The graphs below show this comparison for 2015.<sup>44</sup>



<sup>41</sup> Source: UNLV.

<sup>42</sup> Source: UNLV.

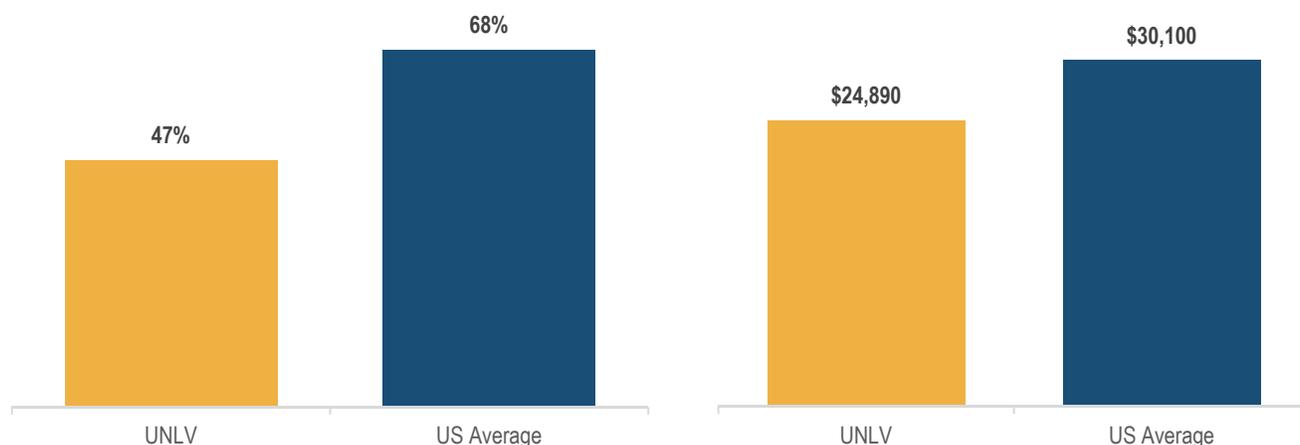
<sup>43</sup> Source: U.S. Census Bureau.

<sup>44</sup> Source: The Institute for College Access & Success.



**Percent of Graduates with Debt**

**Average Student Loan Debt per Borrower**



*College of Southern Nevada (CSN)*

CSN is a community college specializing in two-year degrees and specific vocational training. CSN is the largest institution of higher education in the state based on enrollment of over 34,000 students and 273 different degree and certificate programs. Recent years have shown an upward trend in degree completions, numbering over 3,500 for the 2015-2016 school year, nearly double the 1,879 degree or certificate completions in 2010-2011.<sup>45</sup>



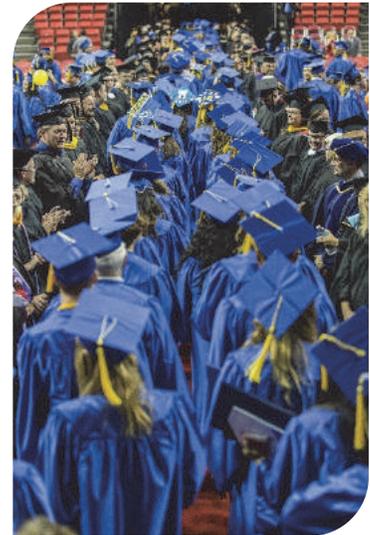
Many students use CSN to earn credits toward a four-year degree, as CSN credits are transferable to four-year institutions within the Nevada System of Higher Education (“NSHE”). While CSN offers many general education courses, much of the value for members of the workforce comes from the numerous career-specific vocational training programs, many of which are aimed at people who are currently working. Recently, a program was started where employees in downtown Las Vegas can take business classes over their lunch break, and many degree programs are offered entirely online to allow students even more flexibility. Selected highlights are noted as follows.

- The Division of Workforce and Economic Development exists to help train and prepare students for success in the workforce. Through partnerships with the City of Las Vegas and Nevada’s Department of Employment, Training, and Rehabilitation, CSN specifically tailors programs to meet the changing needs of the region’s economy and ensure that graduates are able to contribute immediately.

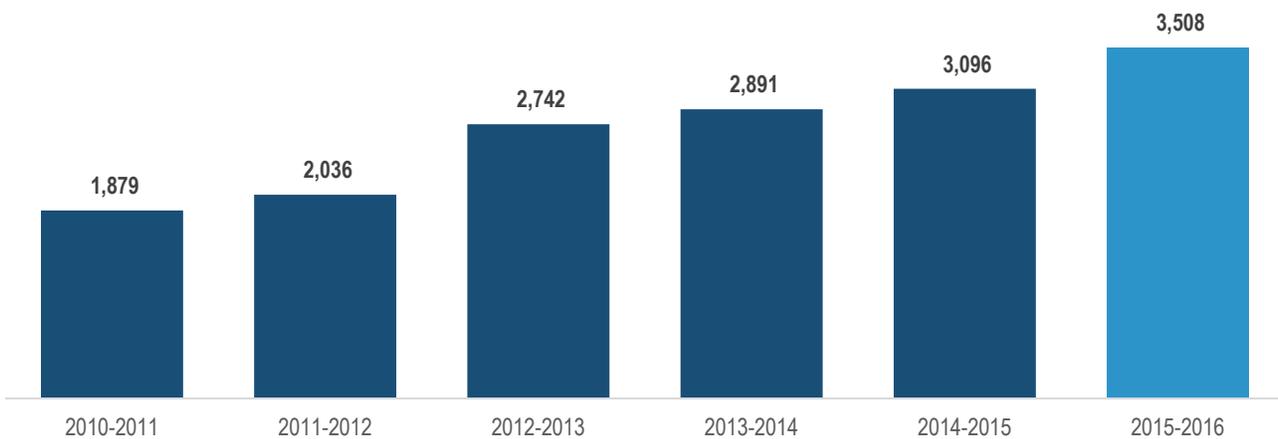
<sup>45</sup> Source: College of Southern Nevada.



- The Division of Apprenticeship Studies helps to train students for specific vocations and offers a variety of options including carpentry, plumbing, electrical and metalworking.
- The School of Advanced & Applied Technologies trains students directly for work in a number of fields, including HVAC, automotive repair and construction.
- In 2015 CSN was designated as a Hispanic Serving Institution by the U.S. Department of Education for its high levels of diversity. This designation requires a minimum of 25 percent of the student body to be Hispanic, and only 370 institutions nationwide have earned the designation.
- On average CSN graduates earn 35 percent more than individuals with only a high school diploma and receive a 14.2 percent return on their educational investment.



**Degree and Certificate Completions | College of Southern Nevada**



*WGU Nevada (WGU)*

Western Governors University (WGU) was created through a collaboration of 19 state governors to provide affordable and flexible education options to members of the workforce looking to gain extra skills. Nevada joined the program in 2011, but the original institution began accepting students in 1999. WGU focuses on several in demand areas, specifically business, education, health/nursing and IT. WGU is different from not only the traditional brick and mortar institutions, but also many online programs. Using a competency-based educational approach, WGU allows students to use their pre-existing knowledge and skills to move quickly through parts of the curriculum that they may already be familiar with and focus on developing new skills. WGU Nevada has over 2,100 students statewide, 1,288 of which are in Clark County, and

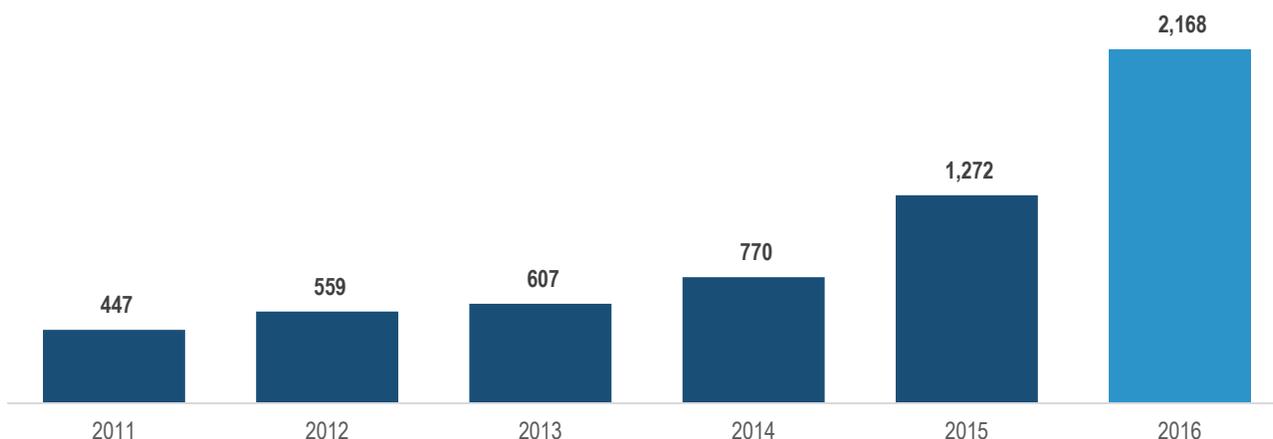


has awarded over 1,300 degrees in just five years since it began.<sup>46</sup> Enrollment has been increasing rapidly, and given the flexible nature of the program should continue to do so, allowing WGU to make an even larger impact in the community and provide many of the skills necessary to continue the diversification and strengthening of the Southern Nevada economy. Selected highlights are noted below.

- WGU was recognized by the National Council on Teacher Quality in 2014 as having the top program for secondary teachers in the entire county.
- Nursing program was named a “Center of Excellence” by the National League for Nursing.
- The average time to a Bachelor’s Degree is only 2½ years, made possible by the use of the competency-based curriculum.<sup>47</sup>
- Outperformed the national average in many categories of the 2015 National Survey of Student Engagement, and has a 96 percent overall student satisfaction rate.

**WGU Nevada Enrollment (End of Year)**

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<sup>46</sup> Source: Western Governors University.

<sup>47</sup> Source: Western Governors University.



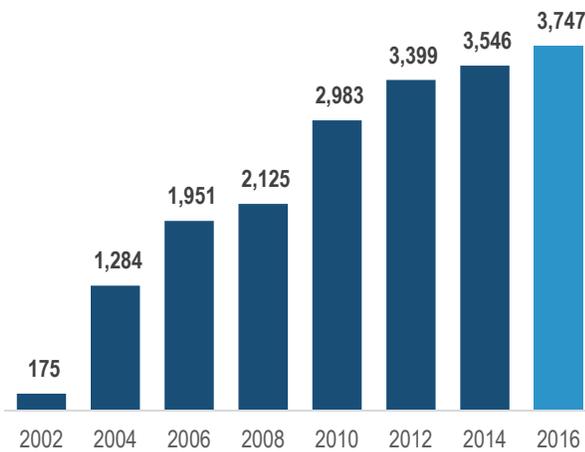
*Nevada State College (NSC)*

Nevada State College was founded in 2003 and, like WGU, focuses on mostly career-driven fields of study. The largest programs include nursing and education, which combined for nearly 49 percent of the institution’s 420 graduates during the 2015-2016 school year. NSC has a physical campus, but also offers many online and hybrid courses to allow flexibility for non-traditional students. NSC has been growing quickly, and is one of the many institutions filling the needs in the community for these various types of skills training. Sixty-two percent of NSC students are the first generation in their family to go to college, a major cultural shift which should have lasting effects in the community and result in more future Southern Nevadans seeking higher education. Selected highlights include the following.<sup>48</sup>

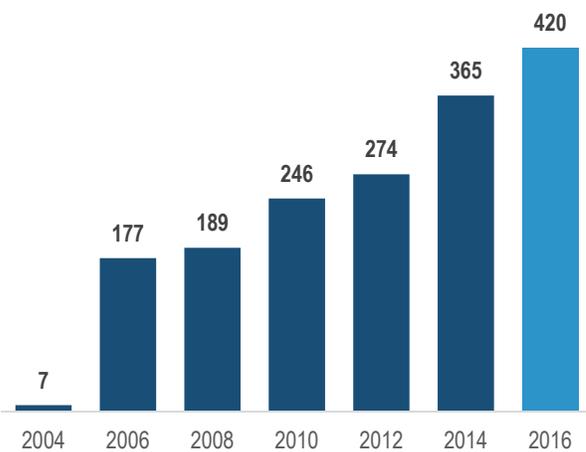


- Enrollment growth and fundraising has fueled campus development activity, including a \$54 million project over the past two years to add new facilities to house the nursing and science programs, and another new building is planned to house the education program.
- With over 500 acres of land under school control, more land than is owned by UNLV, there are endless opportunities for NSC to continue growth into the future.

**Nevada State College Enrollment (Fall Semester)**



**Nevada State College Degrees Conferred**



<sup>48</sup> Source: Nevada State College.

### *Touro University (Touro)*

Touro University was established in 2004 and focuses mainly on professional health programs. Touro offers degrees in nursing, occupational therapy, physical therapy, education and osteopathic medicine. Overall Touro has over 1,300 students, and the osteopathic medicine program makes Touro the largest medical school in the state with roughly 135 students at each level.<sup>49</sup> Osteopathic medicine is a slightly different type of program than the traditional allopathic medicine programs, where graduates become MDs (Doctors of Medicine). Osteopathic medicine focuses on the connection between all parts of the body and can be considered a more holistic approach to medicine. While DOs (Doctors of Osteopathy) are a smaller proportion of the physician population as a whole than MDs, they are equally qualified physicians that provide the same important types of patient care. Touro is also the only school in Nevada that offers a Master of Physician Assistant Studies or a Master of Occupational Therapy.



- In addition to helping train the next generation of healthcare workers in Southern Nevada, Touro also runs a full service medical clinic that is staffed by faculty members.
- Touro's mobile healthcare clinic allows medical students to gain experience while providing free medical care to the homeless population of the Las Vegas valley.

### *Roseman University (Roseman)*

Roseman University has multiple campuses: two in Southern Nevada and one in Utah. At the Nevada locations, Roseman offers degrees in orthodontics, nursing, pharmacy, and business. Roseman is also currently in the process of adding a medical school with a target of 60 students per year. The addition of this medical school along with the new UNLV medical school will greatly improve Southern Nevada's ability to produce doctors to meet the ever-growing demand. Since Roseman's founding in 1999, the university has grown to an enrollment of over 1,600 students between its three campuses and has added programs and upgraded its facilities along the way.<sup>50</sup> Since the recent recession, education and health services has been the fastest growing economic supersector by employment, and institutions such as Roseman will help to ensure continued growth and improved access to medical care for residents of Southern Nevada.



- Launched an online RN to BSN (Bachelor of Science in Nursing) program in 2016 to help fill a need for baccalaureate-prepared nurses. The need was estimated to increase by 80 percent by 2020. Roseman's program is designed to take only nine months, which should allow for a quick increase in the number of such qualified nurses.
- Roseman also sponsors research programs aimed at helping with such medical issues as diabetes, obesity, cancer, Alzheimer's, Parkinson's, and adult stem cell and regenerative medicine.
- Roseman runs an orthodontic clinic through its Nevada campuses, offering a low cost orthodontic option to Southern Nevada residents.

<sup>49</sup> Source: Touro University

<sup>50</sup> Source: Roseman University

## WORKFORCE TRAINING PROGRAMS IN SOUTHERN NEVADA

In Nevada, we have a unique and timely opportunity to integrate workforce and economic development programs, planning and services. In fact, to a large extent, our continued success in growing and sustaining a more diversified economy depends on our ability to create innovative workforce programs. Governor Sandoval's recent executive order creating an Office of Workforce Innovation (OWINN) provides a framework for Nevada to leap ahead of other states. The new office is charged with providing support to develop a strategy for the cooperation and collaboration among all stakeholders focused on workforce development. OWINN's role in the process includes the creation and implementation of the state's workforce development plan in conjunction with the Governor's Workforce Development Board. OWINN helps devise development strategies and directs workers to approved training providers in their chosen field.

Additionally, the structure and deal flow of Regional Development Authorities such as the LVGEA provides an attractive, regional structure for the direct deployment of some workforce programs and services. By adding workforce roles to the LVGEA, Southern Nevada can leverage robust economic development client pipelines, existing private sector leadership and market knowledge from existing firms. Workforce roles include: 1) Application management of job training programs; 2) Leadership of sector councils, and; 3) Empowerment to establish regional workforce strategy.

As mentioned throughout the previous section covering the various educational institutions in Southern Nevada, a number of workforce training programs are blended with the state's education agenda, including the CTAs in the Clark County School District and the Division of Workforce and Economic Development at CSN. However, there are many programs unrelated to these institutions, including trade schools, nonprofits, and those sponsored by government agencies such as the Office of Workforce Innovation and the Department of Employment, Training, and Rehabilitation (DETR). As part of its mission, DETR sponsors many programs and helps unemployed workers find training services.

Through a partnership with Nevada JobConnect, training and placement opportunities are provided, often utilizing the numerous trade schools in Southern Nevada, which provide training in a variety of industries including hospitality and tourism, medical services and construction. Within DETR, the Rehabilitation Division focuses on services for Nevadans with disabilities. The Rehabilitation Division's services include training and job placement as well as treatment for the individual's disability and education as to their rights in the workplace.

Veterans also qualify for special assistance through various DETR and Nevada JobConnect programs, like the Career Enhancement Program (CEP). The CEP is funded by employers, who cooperate with DETR to provide participants with job training, placement and counseling services, along with access to data and information about the local labor market to ensure that their time is spent most productively. DETR's efforts in this respect help ensure that all Nevadans can support themselves and contribute significantly to the community.

Vegas PBS offers a significant number of job training courses, all of which are available online. These courses can be accessed by anyone and can help workers transition into a new industry or improve their abilities within their current occupation. There is a wide variety in the courses offered, which cover many industries and include skills such as food handling and safety, foreign languages, computer software and many others.

Other unique programs exist completely outside the realm of government, such as RedFlint. RedFlint's goal is to increase the exchange of information and technology throughout the business community, helping workers and entrepreneurs take

advantage of technology to turn their visions into reality. RedFlint offers various workshops where attendees can learn about new technologies while making connections with business leaders. RedFlint seeks to create an environment where people can learn, ideas can grow, and businesses can succeed, all at an accelerated pace.

Training programs such as these help fill in the gaps of standard K-12 and higher education. While university degrees are important for a number of jobs, they are unnecessary for many jobs where a year or even less of specialized training would suffice. Having this blend of options and the government committed to helping people find the right programs for them helps improve both economic efficiency and overall outcomes. As programs expand and more residents are made aware of their options, community benefits will continue to grow.





# TALENT TAKES MANY FORMS



## TALENT TAKES MANY FORMS

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What exactly does it mean to have a “talented” workforce? Does it mean that the workforce is highly educated? Certainly this is helpful if your business requires employees with advanced degrees. Does it mean that the workforce is adaptable? Certainly this is a valuable trait for the workforce given the speed at which the economy is evolving. Does it mean the workforce is innovative? While always an asset, the number of businesses relying on employee innovation is limited. Every business values talent, but most businesses also value employees’ passion, dedication, work ethic, attitude, aptitude and fortitude. How do you measure these attributes in a workforce? Perhaps the best measure of the quality of a workforce is the success of the businesses within the underlying economy. Southern Nevada has added nearly 10,000 businesses during the past five years. And today, those businesses are increasing their demand for new employees at a rate well exceeding national averages. “Talent” means the right employee for the job, and Southern Nevada’s workforce has time and again proven itself resilient, resourceful and up to the task.

### NO ABSENCE OF INNOVATION



To cultivate the next wave of critical thinkers, the current workforce must be well positioned and capable of making the next generation of workers better than the last. Southern Nevada has a proven track record, particularly when considering the visionary group of leaders in the tourism industry. Innovators operating casinos on the Las Vegas Strip, such as Kirk Kerkorian, Steve Wynn and Sheldon Adelson, have redefined the hotel-casino experience not only in Las Vegas, but around the world. Technology visionaries such as Switch founder and CEO Rob Roy have leveraged innovative thinking in data center design and management, allowing Switch’s SuperNAP to be the first and only carrier-neutral multi-tenant/colocation data centers to be certified Tier IV Gold in Operations by the Uptime Institute. Doctors at the Las Vegas-based Lou Ruvo Center for Brain Health | Cleveland Clinic are doing cutting edge research in conjunction with the Lerner Research Institute, and Dr. Paul Oh, Lincy Professor of Unmanned Aerial Systems at UNLV, is using 20-plus years of robotics research to do everything from improving customer service at hotels to saving lives in an emergency situation.

Southern Nevada is also fostering the next generation of innovators. Career and technical academies such as West Career and Technical Academy, Advanced Technologies Academy, and Veterans Tribute Career and Technical Academy are preparing students for careers in engineering, healthcare and technology. In 2016, Hyde Park Middle School students received recognition for their research on greywater recycling, mechanical technology students from East Career & Technical Academy won first place for Best-Themed Team at the Welding Thunder Competition, and an entrepreneurial student at Southwest Career and Technical Academy took first place out of 80,000 entrants in a national graphic design competition sponsored by Adobe Systems and Certiport.

### SOUTHERN NEVADA’S GREATEST ASSET MAY BE ITS DIVERSITY, GEOGRAPHIC AND DEMOGRAPHIC



The Las Vegas area is well positioned when it comes to its diversity. A 2011 study by Brown University economists entitled *Cultural Diversity, Geographical Isolation and the Origin of the Wealth of Nations*, found that “the interplay between cultural assimilation and cultural diffusion have played a significant role in giving rise to differential patterns of economic development across the globe.” A similar assessment by professors at University of Bologna, Italy and University of California, Davis found “net positive effect of cultural diversity

on the productivity.” These and other studies show that diversity, an asset that Southern Nevada has in spades, spurs economic development. In commenting on the Brown University study, renowned urban studies theorist Richard Florida said, “It’s time for diversity’s skeptics and naysayers to get over their hang-ups. The evidence is mounting that geographical openness and cultural diversity and tolerance are not by-products but key drivers of economic progress.”<sup>51</sup>

### **SOUTHERN NEVADA IS NOT AN ISLAND, WE SHARE AND BORROW RESOURCES (INCLUDING HUMAN RESOURCES)**



The idea that consumers, businesses or workers are tethered in any particular geographic area is inaccurate and inconsistent with clear evidence to the contrary. In fact, population movement within economic corridors is significant and regions like the Southern Nevada-Southern California-Central Arizona corridor routinely “share” all types of resources (e.g., water along the Colorado River and interstate highways). The reality is that employees are mobile and are gravitating to locations where jobs exists. This is a national trend. In fact, U.S. Census Bureau figures released in 2016 showed that the nation’s top 50 cities accounted for 20 percent of the nation’s population growth in 2015, with particular strength reported in warm-weather cities, with stronger job markets and lower housing costs. Similarly, a 2016 report by Pew Charitable Trust found that “Americans are heading South and West again in search of jobs and more affordable housing, as the nation’s economic health continues to improve.”

In terms of shared resources, this too is clear from Southern Nevada’s migration profile. The single largest motivation for relocation to Southern Nevada is job opportunities and the two states providing the greatest number of in-migrants are California and Arizona. Proximity is certainly a factor, but it is one that appears to favor the Las Vegas area as skilled and unskilled workers alike have chosen to relocate into Nevada, expanding and fortifying the region’s workforce.

### **BUSINESSES ARE MOVING TO SOUTHERN NEVADA BECAUSE OF OUR WORKFORCE (TALENT), NOT IN SPITE OF IT**



With every year, businesses are faced with new and difficult challenges that require companies to adjust, transform and innovate in the face of increasing complexity and competition. Organizations with the capability to meet these challenges have the opportunity to thrive in a global economy, with a reach that until this point has been unprecedented. While the recipe for this success varies company to company, there is one singular ingredient that is part of every formula. Having a labor force with the skills and abilities to adjust with the times and push a business forward is imperative to dealing with the shifting sands of enterprise.

This workforce talent can take many forms. It can be measured in skills, diversity, education, experience, creativity and imagination. While all of these assets are in high demand, talent does not originate or simply exist in a certain location. It is cultivated within a community that provides the resources and economic nutrients that lead to growth. Southern Nevada is one of those communities where the business climate is suited to nurture and attract the type of workforce companies need to succeed. While Nevada has historically been known for hospitality and leisure as its primary industry, the past 10 years demonstrate that the state is broadening its scope beyond that core industry. Nevada’s economic diversity has grown steadily for over a decade and so too has Southern Nevada’s gross domestic product. Nevada has placed additional emphasis on developing its healthcare resources, investing in the Las Vegas Medical District and new healthcare assets such as Union Village. With legislation offering over a billion dollars in stimulus for the public education system, Nevada is additionally

<sup>51</sup> Source: CityLab, “How Diversity Leads to Economic Growth,” December 12, 2011.

committed to ensuring that the future of the workforce is secure and prepared to meet the needs of the families who will call it home.

Southern Nevada is not an island, however. While the trends within the area are positive, Las Vegas is unique in that the tourism industry makes Las Vegas integrated and connected not just with the surrounding area, but also with the world. McCarran International Airport's improvements and additional international routes make Las Vegas an ideal location for travel and business on a global scale. The transportation infrastructure already in place in Southern Nevada makes it uniquely connected and integrated with the world's economy.

In the end, the evidence that Southern Nevada's human capital is present, talented and growing is confirmed by the companies that have already seen the potential the area has to offer.



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Applied Analysis, a Nevada-based economic research and analysis consultancy, was retained by Las Vegas Global Economic Alliance to assemble, evaluate and report on the state of the Southern Nevada workforce. The assessment includes highlights of key areas of strength, as well as, opportunities for improvement, and the results have been assembled in this Workforce Report Card. This analysis is not intended to provide an all-encompassing assessment of each sector of the economy's talent pool; the research is intended to highlight factors impacting the labor force and demonstrate the overall importance of human resources on the Southern Nevada economy. The Workforce Report is designed to establish a foundation from which additional research and investments should be measured.

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