2018 Southern Nevada State of Sustainability Report



A Letter from ImpactNV

The concept of a sustainable community is constantly evolving and remaining ahead of the curve in one of the fastest-growing economies in the country can be challenging. However, the Southern Nevada economy has proven its ability to be resilient and adaptable over the better part of the past century. Ranking at or near the nation's top in terms of population and employment growth is a key element of the community's profile. Perhaps more importantly are quality of life factors for local residents - another area in which Southern Nevada excels. The region has also set the bar relative to being a "smart city" through innovation and technological advancements. To preserve this position of leadership and growth, Southern Nevada community and business leaders are focused on fostering a sustainable region: economy, health, nature, the built environment, energy, community, social equity and transportation.

Just as sustainability continues to evolve, Green Chips has rebranded to ImpactNV to represent the evolution of the organization beyond a strict focus on environmental development to a comprehensive definition of sustainability as well as to represent our preference to drive positive action for not only the community but for the state as a whole. As the voice that guides local partners to focus on renewable resources, ImpactNV is a leader in Southern Nevada's successes in sustainability. ImpactNV partners with local businesses, governments and non-profit organizations to not just tackle the region's challenges, but also to build upon Southern Nevada's nation-leading progress in areas such as recycling and decreasing its carbon footprint.

Our organization is squarely focused on three major strategies to help the region achieve sustainability: (1) foster inclusive partnerships with local companies and organizations, (2) utilize the United Nations' Sustainable Development Goals as an outline to create action plans for positive development in the region and (3) engage with the people of Clark County to help create better living conditions for all. Although Southern Nevada is home to many large companies, building a sustainable economy requires participation from all levels of the community through actions such as donating goods, volunteering and participating in local community programs.

ImpactNV is dedicated to making Southern Nevada one of the best cities and promoting a quality of life that is not just favorable to its residents but one that is also sustainable. By partnering with local businesses, we are able to expand our footprint and spread the word about sustainable initiatives in the region. We are proud to call Southern Nevada home and would like future residents to be proud of the community we are creating and leaving behind.

This report was created to provide the context surrounding the eight major pillars that support a sustainable community. Throughout the report, we also highlight the positive strides made in this ongoing effort while also recognizing the areas that require additional attention. Sustainability is a continuous process that requires constant attention to develop solutions for areas in need of improvement. Southern Nevada has and will continue to evolve to not just meet the standards of a sustainable city, but exceed them.

Lauren Boitel, Executive Director



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Applied Analysis was retained by Impact NV to summarize and analyze a series of indicators related to sustainability in Southern Nevada. Our research was conducted using data provided by third party sources, both quantitative and qualitative in nature. This summary report was assembled by Applied Analysis using that data. While we have no reason to doubt the accuracy of the data reported herein or utilized in the formation of our findings, the information collected was not subjected to any auditing or review procedures by Applied Analysis; therefore, we make no representations or assurances as to its completeness. Our findings and estimates are as of the last day of our fieldwork (February 26, 2018). We have no responsibility to update this report for the events and circumstances that may occur after this date. Copyright ©2018 - All Rights Reserved.

Southern Nevada Fact Sheet



The Southern Nevada economy has evolved significantly in recent years, transitioning from a strictly hospitality-driven economy to one that is diverse and has a strong presence in areas such as technological innovations and renewable energy options. Consequently, the residential real estate market has grown significantly, in response to employment demand, and a sizeable, permanent community has developed over time. The region's economy has also continued to recover from the past recession, and it has continued to grow sustainably. Clark County's population has continued to outpace the national average, reaching a record-high of 2.2 million residents in 2017. While the population grew, the region's unemployment rate continued to decline, dropping to 4.9 percent from a recessionary peak of 14.1 percent in 2010. Over the last year, the region added 29,900 jobs, with noteworthy increases in construction (+10,800 jobs), government (+5,500 jobs), professional & business services (+5,300 jobs) and education and health services (+4,400 jobs).

As the economy has improved, tourism has also continued to rebound, with strong visitation, airport traffic and gross gaming revenue performance. Clark County's visitor volume reached 45.7 million in 2017, which was slightly down from the historical peak reported in 2016. Passengers from McCarran International Airport also reached a record high of 48.5 million passengers in 2017, up 2.2 percent from 2016. Gaming revenue also rose to \$10.0 billion, up 2.7 percent from 2016. The business community has recognized the economy's improvement and has plans to invest over \$18.5 billion in local projects, \$14.7 billion of which are slated for tourism-related projects.

Southern Nevada's economy has also taken significant strides to increase its employment diversity. Companies such as Switch and Republic Services have made large investments in the region, bringing in jobs and making the region a national leader in fields such as data centers and recycling. Not only are private sector entities investing in developing a more dynamic and sustainable economy, citizens and members of civil society are also doing their fair share. Government entities have invested in infrastructure to facilitate an expanded economy, while more people are buying homes and planting roots in the region.



United Nations' Sustainable Development Goals Overview

In September 2015, the member states of the United Nations ("UN") initiated a plan to achieve sustainable development by setting forth 17 "development goals" that would reduce poverty, bolster community health, improve social equity and protect the surrounding environment. Each of these development goals has its own set of targets to be achieved over the next twelve years. Achieving these goals requires action from everyone, including governments, civil society, the private sector and individuals. Southern Nevada is doing its part to achieve these goals with efforts spearheaded by local businesses, local governments and local non-profits to make sustainability-related business practice changes, to provide sustainability education programs and by creating programs that help address and alleviate societal inequities such as poverty. These programs are wide ranging, and include initiatives such as Caesars Entertainment developing a social sustainability roadmap of proposed priority areas to align with the UN's Sustainable Development Goals at a corporate level as well as the development of an "Electric Highway" throughout the state of Nevada, which will make long-haul electric vehicle travel more practical. Southern Nevada is certainly working toward these goals, but there are always opportunities to continue to improve upon and expand these goals.

SUSTAINABLE G ALS



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A strong economy is the foundation upon which sustainability programs are built. Since the lows of the recession, Las Vegas' population has grown, as has its economy. The Las Vegas economy has experienced growth in employment and income, all while becoming more diverse. Las Vegas residents have recognized this improvement with increased spending, particularly on discretionary items.

Prior to the recession, Clark County's population grew at nation-leading rates. During the recession, population growth in Clark County slowed as resident mobility tended to slow. As the economy recovered, Clark County reported positive population growth for the past six consecutive years. Moreover, the Las Vegas MSA is currently the nation's third-fastest expanding large metropolitan area with a population growth rate of three times the national average. As of 2017, Clark County's population stands at a record high of 2.2 million people, giving the local economy the population base required for economic growth.

Clark County Population

Source: Clark County Comprehensive Planning



Annual Population Growth





Total establishment-based employment in the Las Vegas MSA has grown substantially in recent years and is currently the fourth-fastest growing large metropolitan area in the United States. The Las Vegas MSA has reported 82 months of consecutive positive employment growth. Total establishment-based employment grew by 3.1 percent year-over-year since December 2016. Since the Las Vegas MSA accounts for over 70 percent of Nevada's employment, Southern Nevada's employment growth directly correlates to Nevada's national standing as the fastest growing job market in the nation with a year-over-year growth rate of 3.3 percent. The sectors that experienced the most job growth over the past year in Las Vegas were construction (+10,800), government (+5,500) professional and business services (+5,300) and education and health services (+4,400).

Economy



Employment Growth by State Year-over-Year Change (Dec. 2016 vs Dec. 2017) Nevada 3.3% Nevada's job growth is the fastest in the country and to 2.2% has exceeded that of the to 1.8% 1.1% to 1.4% nation for 65 straight months. 0.9% to 1.1% 0.5% to 0.9% -6.0% to 0.5% Source: U.S. Bureau of Labor Statistics **Employment Growth by Metro Area** 35 Largest MSAs

4.0% 3.5% 3.0% 2.5% 2.0% 1.5% 1.0% 0.5% 0.0% Tampa, FL ndianapolis, IN Baltimore, MD Philadelphia, PA Columbus, OH Pittsburgh, PA Washington D.C **Minneapolis**, MN Dallas, TX Portland, OR Las Vegas, NV Cleveland, OH Cincinnati, OH Chicago, IL New York, NY Kansas City, MO St. Louis, IL Los Angeles, CA San Diego, CA Houston, TX Detroit, MI San Francisco, CA Charlotte, NC Phoenix, AZ Denver, CO Atlanta, GA Boston, MA San Jose, CA Sacramento, CA Miami, FL Seattle, WA Austin, TX San Antonio, TX Riverside, CA 님 Orlando,

Source: U.S. Bureau of Labor Statistics (Dec. 2016 vs. Dec. 2017)



Las Vegas' employment base is not only expanding, it is evolving. This can be seen in the Hachman Diversity Index, which has been consistently growing. The Hachman Index is a widely accepted measure of diversification in an economy. The index assumes the national economy reflects broad diversity, while measuring the aggregate variance in diversification of a subject's economy. A score of 100 reflects a diversified economy, while a score of 0 reflects a narrow economy. Pre-recession, Las Vegas was heavily dependent on the leisure and hospitality and construction sectors for employment and growth. However, through the efforts of the Governor's Office of Economic Development and other local agencies, key industries have been targeted to help the region become a more diverse economy. These efforts have contributed to the region's growth and evolving employment base.

Las Vegas MSA Employment



Las Vegas MSA Employment Growth by Sector

Prior Year to Present (Dec. 2016 vs Dec. 2017)



Las Vegas MSA Hachman Diversity Index





Source: U.S. Bureau of Labor Statistics

Note: To determine economic diversity, the Hachman Index compares the relative shares of the local economy with those of the national economy to identify the variances in each employment sector, also known as the location quotient. Impacts are then aggregated to create the diversity index. A score of 100 reflects a diversified economy, while a score of 0 reflects a narrow economy. The Hachman Index assumes the national economy reflects broad diversity.

Source: U.S. Bureau of Labor Statistics; Applied Analysis



Economy

Las Vegas Raiders Stadium

The Oakland Raiders have agreed to relocate to Southern Nevada which will have a tremendous impact on the local economy. The state of Nevada, the NFL and the Raiders organization are moving forward on a state-of-the-art, 65,000-seat stadium that will host the football team in addition to other major events. The \$1.9 billion project is expected to have an annual economic impact of \$620 million and create about 6,000 permanent jobs. The stadium will also bring a substantial amount of additional tourists to the area. An estimated 450,000 annual incremental visitors are expected to come to Las Vegas for stadium-related events, which will occupy an additional 708,000 incremental room nights per year.

The stadium is expected to bring in \$35.0 million annually to state and local government entities. Local governments are expected to receive \$22.5 million annually, while \$12.5 million will go to the Nevada General Fund, of which, \$13.4 million will be redirected towards education in Nevada.



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UN Sustainable Development Goals

Goal: Promote Inclusive and Sustainable Economic Growth, Employment and Decent Work for All

Sustainable economic growth is reflective of a society's ability to create sustainable, decent jobs that lift everyone out of poverty. According to the United Nations, roughly half of the world's population lives on about \$2 per day and the creation of decent work opportunities will continue to remain a challenge for nearly all economies if quality jobs are not added. In Southern Nevada, this quality employment growth has primarily come from the private sector. Contributing to this growth is Switch, the Las Vegas-based data center operator. During 2017, the company opened its fifth Las Vegas area Core Campus data center. The 350,000-square-foot center employed roughly 1,000 people during the construction process. Today, Switch employs over 600 people in high-paying industry jobs within Clark County. According to the Bureau of Labor Statistics, data processing and related services jobs in Clark County provide an average annual wage of \$81,300.







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Price Appreciation Map

December 2017 | By Zip Code



Source: SalesTraq



Southern Nevada offers an affordable housing market for its residents. The Housing Opportunity Index is a measure of the affordability of homes in the area based on median income. Of the largest 35 metropolitan areas in the United States, Las Vegas reported a relatively median housing affordability with an index of about 60, meaning most residents can afford to buy a house. Moreover, the House Price Index for Las Vegas is substantially less than that of the U.S. average, meaning houses in Las Vegas are generally more affordable. Las Vegas also ranks as one of the best large cities for first-time home buyers.

100 80 58.7 40 20 Boston, MA Dallas, TX Denver, CO Orlando, FL Austin, TX Las Vegas, NV Houston, TX San Antonio, TX Chicago, IL Philadelphia, PA Tampa, FL Phoenix, AZ Atlanta, GA Washington, DC Charlotte, NC Detroit, MI Minneapolis, MN Kansas City, MO Columbus, OH Baltimore, MD St. Louis, IL Pittsburgh, PA Cleveland, OH ramento, CA Portland, OR Seattle, WA Cincinnati, OH Indianapolis, IN S S Riverside, CA S S ≥ 1 Chicago, I San Jose, C San Diego, C New York, N Miami, F Los Angelse, C San Francisco, C Sacramento, C Portland, C

Housing Opportunity Index Rankings Largest 35 MSAs (Q3 2017)

Source: National Association of Home Builders/Wells Fargo



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House Price Index Las Vegas 500 - - - -408.9 400 300 ----200.5 200 -----100 -0 . '90 '91 '92 '93 '94 '95 '96 '97 '98 '99 '00 '01 '02 '03 '04 '05 '06 '07 '08 '09 '10 '11 '12 '13 '14 '15 '16 '17

Note: The House Price Index measures average price changes in repeat sales and refinances on the same properties. It is a broad measure of movements of single-family house prices.

Source: Federal Housing Finance Agency

Economy

Las Vegas MSA Gross Domestic Product

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Annual Taxable Retail Sale Growth

(TTM Oct. 2016 vs TTM Oct. 2017) | Ten Largest Sectors [Shares Indicated]

> **+3.8%** Clark County's Total Taxable Retail Sale Growth

Source: Nevada Department of Taxation

Building Material & Garden Equipment & Supplies [4.0%] 13.7% Merchant Wholesalers, Durable Goods [5.7%] 8.1 Health & Personal Care Stores [2.2%] Motor Vehicle & Parts Dealers [11.5%] 4 5% Rental & Leasing Services [3.7%] Food Services & Drinking Places [26.0%] 41% Food & Beverage Stores [3.1%] General Merchandise Stores [8.4%] Clothing & Clothing Accessories Stores [8.1%] -2.4% Electronics & Appliance Stores [2.6%] -2.7% -4% 0% 4% 8% 12%16%

These ten sectors comprise over 75% of the total taxable retail sales in Clark County



Clark County Median Household Income





It is no surprise that Las Vegas is one of the most popular tourist destinations in the world, but some may be surprised to know that a large portion of tourists come to Las Vegas for its expansive convention centers. Las Vegas has been the top trade show destination for 23 straight years due to its large convention spaces, premier services, innovative technologies and ability to easily host large crowds.

Clark County Visitor Volume



Source: Las Vegas Convention and Visitors Authority



Source: Las Vegas Convention and Visitors Authority

Las Vegas has been the #1 trade show destination

in the U.S. for 23 consecutive years

Source: Trade Show News Network



Sands Eco 360° Green Meetings

A strong example of event-planning innovation is the Las Vegas Sands' Eco 360° Green Meetings program, which incorporates a mix of sustainable facilities and green event-planning. At the company's Las Vegas facilities, more than 55 percent of waste campus-wide is recycled, reused or repurposed. Moreover, 85 percent of suite lighting utilizes the newest LED technology. The Sands also provides designated Green Meeting Concierges who provide comprehensive green event planning, including the provision of event impact statements and sustainable food and decor, as well as developing event sustainability action plans and goals. The Sands' meeting spaces in Las Vegas have won a number of awards including LEED-gold certification, LEED-silver certification, TripAdvisor Green Leader Gold Award and APEX/ASTM Environmentally Sustainable Meeting Standards Level Two Certification, which was the first ever awarded in the world. In 2016, the Sands expanded their sustainable meetings program as well as cosponsored the "Sustainable Meeting and Event Practices" study.

Source: Las Vegas Sands





Sustainability programs and healthcare programs have similar goals in that they are both intended to help provide citizens with a long, improved quality of life. Additionally, sustainable societies require robust healthcare programs to meet their goals. For a healthcare program to be successful, it must be affordable, accessible, staffed with sufficient personnel and cover as complete a variety of healthcare problems as possible.

With the passage of the Affordable Care Act (ACA), healthcare access and affordability have improved in Nevada. In particular, the ACA substantially expanded eligibility for Medicaid by

expanding eligibility to people younger than 65 earning 133 percent of the federal poverty-level wage annually. Since the ACA was passed into law in March 2010, Nevada's Medicaid-eligible population has more than doubled, growing from 252,000 people in 2010 to 652,000 in 2017. Furthermore, the access to healthcare has significantly affected the share of uninsured persons in Southern Nevada. The share of uninsured Clark County residents has dropped from its peak of 23.1 percent in 2010 to merely 12.1 percent in 2016.







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Valley-wide, nearly 235 per 1,000 residents are Medicaid eligible, with the highest eligibility in the northeast portion of the valley. Moreover, Medicaid expenditures in the United States have increased 3.9 percent over the year to nearly \$566 billion. Nevada checkup recipients have also increased as a result of more residents being insured. Over the year, Nevada checkup recipients increased 10.2 percent, reaching 317,700 recipients by November 2017.

Health





Despite the progress Nevada has made towards improving its healthcare programs, there is still room for improvement. Nevada has a smaller ratio of physicians/surgeons per 100,000 residents than the national average. As of 2016, there were 288 doctors per 100,000 people nationwide. Nevada reported 246 doctors per 100,000 people (85 percent of national ratio) in 2016 with Clark County reporting 237 doctors per 100,000 people (82 percent of the national ratio). In part, this can be explained by the presence of only one MD-track medical school in the state, located at University of Nevada-Reno. However, the opening of the University of Nevada-Las Vegas' (UNLV) medical school in July 2017 should help alleviate the relative shortage of doctors in the region through the training of new doctors, as well as the recruitment of doctors through new facilities and research opportunities.



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Heart disease is the leading cause of death in the United States. In 2016, Nevada reported the sixth-highest rate of heart disease deaths per capita in the country. Nevada's heart disease rate has been consistently higher than the national average and has increased 2.5 percent since 2015. The main risk factors for heart disease are diabetes, obesity, poor diet, limited physical activity and excessive alcohol intake.

Health

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Another leading cause of death in Nevada is opioid overdose. Nevada currently has the same opioid overdoes death rate as the U.S. average with 13.3 per 100,000 population and ranks as the 26th highest opioid overdoes death rate in the nation. According to the Centers for Disease Control and Prevention, over 1,000 people are treated each day for misusing prescription opioids.





Mental health has become a leading topic in healthcare of the past few years. Mental health is defined as a person's condition with regard to their psychological and emotional well-being. According to Mental Health America, Nevada ranks last in the country in overall mental health with the main reason being that 66.0 percent of adults in Nevada with a mental health illness have not received treatment. Furthermore, there are 28.2 percent of adults in Nevada who have a mental health illness but are uninsured. Southern Nevada is making strides to improve their mental health facilities by not only upgrading current facilities, but building new centers such as Southern Hills Hospital's new \$26 million behavioral center. The new 80-bed psychiatric facility will help address the shortage of in-patient mental health treatments in Southern Nevada.

Health





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Southern Hills Hospital's New Behavioral Center

In October 2017, Southern Hills Hospital broke ground on an 80-bed behavioral health center. The project will cost around \$26 million and is expected to take one year to complete. Once finished, the center will span over 43,000 square feet and treat patients as young as 13 years of age. This center represents Southern Nevada's continued efforts to expand its mental health facilities and provide patients with the care they need.



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UN Sustainable Development Goals Goal: Ensure Healthy Lives and Promote Well-being for All at All Ages

As part of the United Nation's development goals, it is critically important that all societal actors in each member state work to improve their overall health. Examples of targets in improving community health include decreasing deaths (particularly maternal and newborn deaths), ending epidemics and improving access to healthcare coverage of all forms. Currently Nevada's ratio of physicians and surgeons to residents is below the national average, and this is in part due to the previous presence of only one MD-track medical school in Nevada. The University of Nevada, Las Vegas recently opened a medical school in Las Vegas, which will expand the supply of medical professionals in Las Vegas and improve access to top-level healthcare for residents. The expanded medical presence in Las Vegas should help to address other health issues facing Nevadans, such as higher instances of heart disease, mental health issues and drug abuse.







Nature is what makes life on Earth possible, and its conservation through concerted efforts by all societal actors will help ensure and maintain a sustainable quality of living for subsequent generations. Such efforts include the development and maintenance of parklands, educational initiatives and technological initiatives. Every type of climate has its own challenges, and some areas are more delicate than others. This is certainly the case for Las Vegas, which, because of its desert location, must be particularly mindful of how its water supply is used and conserved. Consequently, Las Vegas has taken significant action in conserving its natural resources, especially its water supply.

Parks remind people of the importance of sustainability by offering a variety of recreational activities. Fortunately for residents of the cities of Las Vegas, Henderson and North Las Vegas, there are over 620 parks to choose from that have a combined 42,600 acres of park space. Additionally, there are 65 miles of multi-use trails and 35 miles of equestrian trails in Clark County. Based on a study of the 100 largest cities in the United States, the cities of Las Vegas and Henderson spend well above the median amount per resident on parks and recreation. The median for the large cities in the United States is \$83 per resident, whereas the City of Las Vegas spends \$116 per resident and the City of Henderson spends \$129 per resident.



Note: *Some spending is calculated on prior-year information. Parks include all city, county, metro, state and federal parkland within city limits. Parkland information only includes information for the major cities within Clark County (i.e. excludes Unincorporated Clark County).

Source: The Trust for Public Lands







Ongoing drought conditions in the Colorado River Basin have reduced the annual flows of the Colorado River over the past 15 years, causing Lake Mead's water level to decline approximately 140 feet since the drought began in the early 2000s and highlighting the importance of Southern Nevada's comprehensive water conservation programs. Regional water supply planning and conservation efforts, including programs to replace turf grass with water-efficient landscaping and the adoption of municipal codes that minimize outdoor water use have enabled the community to reduce its per capita water usage by 38 percent since 2002, even as the community's population grew by 600,000 residents during that time. Additionally, 40 percent of water used in Southern Nevada is recycled as either direct reuse or return flows back to Lake Mead where it may be used again. This community-wide water reuse efforts allows Southern Nevada to efficiently reclaim and recycle nearly all its indoor water use.



1.8% Share of Colorado River Water Allocated to Nevada

Nature

Source: Southern Nevada Water Authority

Source: U.S. Bureau of Reclamation





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Note: Based upon 2016 municipal metered potable and non-potable water use in the Southern Nevada Water Authority's metered service area. Source: Southern Nevada Water Authority





Source: Southern Nevada Water Authority



Average Daily Per-capita Water Use in the Las Vegas Valley in 2016

Toilets account for 27% of indoor water use in Southern Nevada.

Nearly all indoor water, which accounts for approximately **40 percent** of water used in Southern Nevada, is recycled through direct reuse or return flows back to Lake Mead. *Source: Southern Nevada Water Authority*



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UN Sustainable Development Goals Goal: **Clean Water and Sanitation**

Clean, accessible water is critical to public health, safety and sanitation. Unfortunately, lack of access to clean water disproportionately affects populations that are already the most vulnerable. In Southern Nevada, protecting all residents means maintaining both accessibility to the local water supply and assuring its quality and safe delivery. Clark County and local cities operate wastewater treatment facilities that reuse nearly all the community's wastewater for non-potable uses such as irrigation or water reuse efforts, where treated wastewater is returned to Lake Mead. To ensure the community's water supply meets or surpasses standards set forth in the federal Safe Water Drinking Act, the Southern Nevada Water Authority rigorously tests the water for more than 160 regulated and unregulated contaminants, with samples collected at more than 360 sampling stations across the valley, from Lake Mead to Mt. Charleston. From comprehensive water quality testing programs to innovative projects designed to explore new treatment technologies, Southern Nevada's water and wastewater agencies ensure clean water is accessible to the community.





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UN Sustainable Development Goals Goal: Conserve, Sustainably Manage and Protect the Oceans, Seas and Marine Resources

The world's oceans are pivotal to sustaining life on Earth, and preserving these natural resources requires delicate stewardship from humankind. Although Las Vegas is landlocked, this same principle can be applied to Lake Mead, the source of 90 percent of the Las Vegas region's water supply. An example of this commitment to stewardship is the recent opening of a temporary groundwater treatment facility in Henderson, Nevada, designed to remove perchlorate, a chemical pollutant that originated from a nearby industrial complex, from shallow groundwater flows before reaching the Las Vegas Wash and Lake Mead. Although perchlorate is no longer manufactured in that complex, contaminated groundwater remains. Built at a cost of more than \$18 million, this facility is expected to remove three tons of perchlorate from the shallow groundwater system over the next 18 months of operation. The treatment facility has the capacity to treat enough water every two minutes to fill a backyard pool. In addition, the Nevada Division of Environmental Protection has overseen the installation of an interception system that uses wells to extract the contaminated water. Perchlorate remediation efforts have proven extremely effective, reducing the amount of perchlorate entering the Las Vegas Wash by approximately 90 percent.





Nevada Recycling Rate



Source: Nevada Division of Environmental Protection

Nevada MSW Recycled Commodities



Nature

Note: MSW is municipal solid waste. Source: Nevada Division of Environmental Protection



2016 Clark County Recycling Rate

Note: The recycling rate is the ratio of municipal solid waste (MSW) recycled to the tons of MSW generated and includes recyclables, as well as household and commercially generated waste.

Source: Nevada Division of Environmental Protection

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UN Sustainable Development Goals Goal: **Responsible Consumption and Production**

Creating sustainable consumption and production helps to ensure that the future residents in the area will be left with the best possible environment we can create. Recycling is a prime example of how an area can help to reduce waste and promote responsible consumption and production. The Southern Nevada Republic Services Recycling Center in North Las Vegas opened two years ago and was recognized for its advanced recycling technologies and capabilities. Today, the center is the largest and smartest residential recycling facility in North America.





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UN Sustainable Development Goals Goal: Sustainably Manage Forests, Combat Desertification and Halt Biodiversity Loss

Maintaining natural habitats and preventing their degradation is critical to the advancement of sustainable development. Though Las Vegas is located in the Mojave Desert, it still has a delicate ecosystem that needs to be preserved. The Desert National Wildlife Refuge, located north of Las Vegas, consists of 1.6 million acres of land, and plays a significant role in preserving local wildlife, including several endemic species. It is important to keep this land protected and properly managed to ensure the wellbeing and longevity of the wildlife and desert flora in the region. As a refuge, the Desert National Wildlife Preserve has a Comprehensive Conservation Plan which provides a robust program that allows visitors to appreciate the ecosystem while maintaining cultural resources for the purpose of education and research. The plan also includes the preservation of bighorn sheep and other native species. Additionally, to maintain the natural ecosystem, the Desert National Wildlife Refuge also actively manages the Preserve by reintroducing native plant species and controlling for non-native species and weeds.






Many of the environmental challenges faced by society today are self-inflicted. Industrial emissions of materials such as carbon dioxide, carbon monoxide and sulfur dioxide have caused some of the greatest environmental challenges we face today. To ensure healthy living, it is important to preserve air quality and help reduce the region's global footprint.

The region's efforts have been effective because over the past decade carbon dioxide emissions have decreased dramatically. In 2015, carbon dioxide (CO2) emissions from Nevada totaled 35.2 million metric tons, which is a decrease of 29.5 percent since 2005 when Nevada's CO2 emissions totaled 49.9 million metric tons. The largest declines in carbon dioxide emissions from 2005 to 2015 in Nevada were sourced to emissions from electric-related sources (down 44.7 percent) and transportation-related sources (down 15.1 percent). In 2005, the majority of CO2 emissions were sourced to electric power, comprising 52.5 percent of emissions. However, this percentage has decreased to 41.0 percent of emissions in 2015. While electricity still represents the largest source of carbon dioxide emissions in Nevada, it no longer accounts for a majority of emissions as it did a decade prior.







Clark County's Air Quality Index (AQI) 2017

	AQI	Days of Occurrence
Good	0-50	92
Moderate	51-100	106
Unhealthy for Sensitive Groups	101-150	12
Unhealthy	151-200	1
Very Unhealthy	201-300	0
Hazardous	301-500	0



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Note: Days of occurrence are based on the days on which measurements from any monitoring site in the county were reported to the AQS database and may not sum to 365 days.

Source: Environmental Protection Agency



National Ambient Air Quality Standards

The Environmental Protection Agency (EPA) is required by the Clean Air Act to set national ambient air quality standards for pollutants that are considered harmful to public health and the environment. The act identifies two types of national ambient air quality standards: (1) Primary standards and (2) Secondary standards. Primary standards provide public health protection which includes protecting the health of "sensitive populations" such as the elderly, children and asthmatics. Secondary standards provide public welfare protection which includes protection against damage to crops, animals and buildings, as well as protecting against decreased visibility. The units of measure for the standards are parts per million (ppm) and parts per billion (ppb) for volume.

Source: Environmental Protection Agency



	Clark County Average	National Ambient Air Quality Standards			
	Annual Concentration	Primary/Secondary	Averaging Time	Level	Form
Oarban Manavida	0.01		8 Hours	9 ppm	Not to be exceeded more
Carbon Monoxide	0.31 ppm	Primary	1 Hour	35 ppm	than once per year
					98th percentile of
		Dim	1 Hour	100 ppb	1-hour daily maximum
Nitua nan Diavida	0416	Primary			concentrations, averaged
Nitrogen Dioxide	24.16 ppb				over 3 years
		Primary and	1 Veer	[] nnh	A name of the end of
		Secondary	1 Year	53 ppb	Annual mean
			8 Hours 0.07 ppm	Annual fourth-highest	
Ozone	0.05 ppm	Primary and		0.07 ppm	daily maximum 8-hour
Uzone		Secondary			concentration, averaged
				over 3 years	
					99th percentile of
		Dia	1	75 ppb	1-hour daily maximum
Oulfur Disuida	0.70	Primary	hary 1 Hour	bur 75 ppb	concentrations, averaged
Sulfur Dioxide	0.78 ppb				over 3 years
		Que en la ma			Not to be exceeded more
		Secondary	3 Hours	0.5 ppm	than once per year

Source: Environmental Protection Agency



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UN Sustainable Development Goals Goal: **Climate Action**

Climate change is one of the most pressing issues of our time. To combat climate change and its impacts, every societal entity needs to not only raise awareness of climate change, but also make policy decisions that demonstrate a conscientiousness of potential environmental impacts. On a local level, Nevada is demonstrating its reliability on renewable power by closing its coal-fired plants. In 2017, NV Energy closed its Southern Nevada coal-fired plant which was 40 miles north of Las Vegas. This closure leaves only one coal-fired plant in Northern Nevada which is due to close by 2025. Since 2005, NV Energy has been transitioning toward renewable energy sources, which have helped to decrease carbon emissions in the state.



Nevada's businesses and residences continue to reduce carbon emissions by building LEEDcertified buildings. In 2006, there were only two LEED-certified buildings in Nevada. But, a decade later, this number increased to 221 LEED buildings. As of 2016, Nevada added the sixthmost square footage of LEED-certified buildings per capita in the country by adding 22 LEEDcertified buildings which totaled nearly 6.4 million gross square feet. More importantly, LEEDcertified buildings being built were meeting higher sustainability standards than the minimum requirements to participate in the LEED program, demonstrating that local entities recognize the benefits of sustainability initiatives, which not only help improve the environment, but also their bottom lines through utility savings. A strong local example of this commitment is CityCenter, which has six LEED-gold certifications, making it a leader in sustainable buildings.



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In 2016 alone, Nevada added 22 LEED-CERTIFIED BUILDINGS,

totaling 6.4 million gross square feet

76 Green Globes Certified Buildings in Nevada

Green Globes certified buildings are properties that demonstrate commitments to environmental efficiency practices. Nevada gained its first Green Globes certified building in 2010. Today, Nevada has 76 Green Globes certified projects totaling **60.5 million gross square feet**.



Southern Nevada has made significant strides to build a highly efficient water system that can meet water demands for a growing population while being contentious to avoid waste. Collectively, Southern Nevada maintains a comprehensive and highly efficient water delivery system that serves approximately 2 million people throughout the community. Southern Nevadans take water infrastructure seriously: billions of dollars have been invested to maintain a reliable and expanding water system. Together, Southern Nevada's regional water agency and purveyors maintain approximately 130 pumping stations, 160 reservoirs and more than 7,000 miles of buried pipeline. The infrastructure is designed to work together to seamlessly deliver quality water to homes and businesses throughout the Las Vegas Valley at efficiency levels that are considered world class.

In 2015, the Southern Nevada Water Authority's Lake Mead Intake No. 3 was put into service, which is Southern Nevada's deepest water intake in Lake Mead. Together with the Low Lake Level Pumping Station, which is currently under construction and slated for completion in 2020, the two pieces of major infrastructure will help protect Southern Nevada from declining lake levels.

6,518 Miles of Water Pipeline in Clark County





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Source: Southern Nevada Water Authority



The Innovation District Smart City Project in Las Vegas

In 2017, the City of Las Vegas announced a partnership with Cisco to become a smart city which would implement smart city projects and technologies to collect and analyze data. The project will focus on the environment, traffic, water, crowd control, transit, lighting, waste management, security and parking. The smart city projects will include the use of internet of things (IoT) technologies, connected cameras, sensors and platforms with the goal of improving the lifestyle for residents as well as enhancing the Las Vegas experience for visitors. The Innovation District located in Downtown Las Vegas will operate as a testing area for these new technologies. Some projects include parking sensors that allow the city to show where parking is available in real time, upgraded traffic signals that work in tandem with emergency response vehicles to expedite response times, and monitoring bike-share stations which show the count of available bicycles at each designated location. The City of Las Vegas is one of nine finalist competing in the Smart Cities Council's 2018 Readiness Challenge Grants. Five cities will be selected to receive mentoring with the addition of tailored products and services to assist with their smart city initiatives.



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UN Sustainable Development Goals Goal: Industry, Innovation and Infrastructure

In order for communities to continue advancing, investments must be made in the infrastructure. This includes making improvements to current infrastructure as well as promoting sustainable industrialization and fostering innovation. One way Las Vegas is taking action is with Waycare, a predictive analytics platform for smart cities. The Regional Transportation Commission of Southern Nevada (RTC) teamed up with Waycare to help develop and implement technology is Las Vegas that will help prevent traffic crashes and congestion. The technology analyzes both historical and real-time data, such as traffic light timing, major events, weather conditions and speeds, that help identify dangerous driving conditions on the roads before an incident occurs. This is the first time in U.S. history that this technology has been used, which promotes Las Vegas as a leader in roadway infrastructure innovations.







Energy consumption is at the crux of developing a sustainable society. This is because developing a sustainable society involves growing an economy while consuming as little non-renewable energy as possible. In order for sustainable energy practices to truly take hold and become widely adopted, it requires cooperation from all elements of society, including governments, businesses and individual residents. An example of such cooperation includes the incentivizing

of adopting renewables by government on behalf of local businesses and residents.

As Nevada's population has grown substantially in recent years, it has consumed significantly less energy than it did previously. Though Nevada's population grew over 18 percent from 2005 through 2015, its total energy consumption dropped by almost 50 trillion Btu, a decline of 7.0 percent. Additionally, during this time, the percentage of energy coming from renewable sources more than doubled, increasing from 5.5 percent in 2005 to 13.1 percent in 2015. This demonstrates the effectiveness of adopting renewables.





Note: Btu is British thermal units. Source: U.S. Energy Information Administration

Americans consume quadruple the amount of energy per capita that people do worldwide, consuming roughly 303 million Btu per person as of 2015. Despite this high number, Nevadans consume one of the lowest amounts of energy per capita in the country. Nevada residents consumed an average of 225 million Btu per capita of energy in 2015, making Nevada one of twelve states to consume less than 250 million Btu. Given Nevada's relatively small population, this means that Nevadans are using less energy in total, and when they do, a considerable amount of that energy is renewable. As an example of how abundant renewable sources are, Nevada has the highest solar capacity per capita rate in the country, at 745 watts per person. Per capita expenditures on energy are also lower, and are roughly 90 percent of the national per capita expenditures.

Enera



In 2011, latest available data, the **world per capita consumption of primary energy was about 75 million Btu**. During that same time, the U.S. was at 312 million Btu.



Renewable Energy Consumption



Source: U.S. Energy Information Administration



Nevada's Renewable Portfolio Standards (RPS)

25% by 2025

Nevada's Renewable Portfolio Standards (RPS) were first adopted by the Nevada Legislature in 1997 and have since been modified nearly every legislature session. The RPS established

the percentage of electricity sold to customers that must come from a renewable energy source. The percentage of renewable energy required by the RPS will increase every two years until it reaches 25 percent in 2025. Also in the RPS is the requirement that beginning in 2016 at least 6 percent of the total renewable energy must be generated by solar facilities. Nevada has been at 100 percent RPS achievement since 2008 with the exception of 2012 when it dropped to 99 percent.

Source: Public Utilities Commission of Nevada

2015 Renewable Portfolio Credits Nevada

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*Private Generation includes solar, wind, and hydro systems installed at a customer locations.

Source: NV Energy



Top States for Solar Electric Growth

Gigawatt Hours (GWh)

State	2007 Production	2016 Production	2007 - 2016 Increase	Rank by Increase
California	1,062	27,432	26,370	1
Arizona	17	5,408	5,391	2
North Carolina	1	4,016	4,015	3
Nevada	65	2,918	2,853	4
New Jersey	73	2,746	2,673	5
Massachusetts	6	1,949	1,943	6
Texas	5	1,108	1,103	7
Georgia	-	1,076	1,076	8
New York	16	1,067	1,051	9
Utah	0.3	1,023	1,023	10

745

430

305

297

270

218

Source: Frontier Group

Arizona

Vermont New Jersey

Source: Solar Industries Association

New Mexico

North Carolina

Massachusetts

Solar Capacity Per Capita Watts Per Person Nevada Utah Hawaii California

Nevada's Solar Industry				
2,191 mw cumulative capacity				
362,000	homes powered equivalent			
8,371 solar jobs				
745 watts per person				
984	mw capacity installed			

Source: Solar Energy Industries Association



During the 2016 election, Nevada voters approved Ballot Question 3

If approved again in 2018, the Energy Choice Initiative would amend the Nevada Constitution to allow the "electricity market to be open and competitive so that all electricity customers are afforded meaningful choice among different providers, and that economic and regulatory burdens be minimized in order to promote competition and choice in the electric energy market." This would create an open energy market that will present customers with the ability to choose their service providers while also giving customers the ability to choose to purchase more renewable energy options. Question 3 is backed by a group called Nevadans for Affordable Clean Energy Choices. Some founding members of the group include Switch, Las Vegas Sands Corporation, Tesla, MGM Resorts International and Solar City.



Nevada Clean Energy Bills

In 2017, Governor Brian Sandoval has enacted the following Clean Energy Bills:

Green Bank

Established the Nevada Green Energy Bank Program to fund energy improvement programs of certain local government nonprofits and financial institutions. SB 407.

Wind Permitting

Revises provisions concerning restrictions or requirements imposed by a local government on the installation of wind turbines. SB 314.

Improvement Districts

Provides for the creation of certain local improvement districts that include an energy efficiency improvement project or a renewable energy project. AB 5.

Incentives and Rates

Combines incentive programs; provides incentives for hydrogen; repeals requirements for lowincome solar programs; allows timeof-use rates; etc. SB 145.

Efficiency Planning

Requires an electric utility to submit to the PUC an energy efficiency plan designed to be cost effective and prescribe the contents of such plan. AB 223.

Energy Choice

Directs the Legislative Committee on Energy to conduct an interim study on energy choice. AB 452. Reinstates NEM; creates the contractual requirements to lease or purchase a DG system and a PPA; established minimum warranty requirements; provides certain immunity for solar companies; etc. AB 405.

Net Metering

Energy Storage

Requires the PUC to investigate and establish a requirement for certain electric utilities to procure energy storage systems if certain criteria are satisfied. SB 204.

DG Planning

Requires certain utilities to file a distributed resource plan with the PUC and prescribes the minimum requirements of such a plan. SB 146.

Energy Savings

Requires the PUC to establish annual energy savings goals and performance-based incentives for utilities through authorized raterecovery mechanisms. SB 150.

Resource Planning

Requires certain electric utilities to provide an overview of their resource plan to the PUC at least four months before filing the plan. SB 65.

Source: Nevada Legislature and EnerKnol Research



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UN Sustainable Development Goals Goal: **Affordable and Clean Energy**

Energy is the driving force of economies all over the world, and ensuring affordable and reliable clean energy is one of the most important factors in creating a sustainable environment. In 2013, a team of UNLV students participated in the International Solar Decathlon. The team designed its DesertSol house, which harnesses sunlight for solar electricity while capturing rain to provide evaporative cooling and irrigation. The team placed second overall but was the highest-placing team in the United States. The 754-square-foot home is currently located at the Springs Preserve in Las Vegas. The house is described as one of the finest examples of sustainable living.





A major component to a successful economy is its community. In Southern Nevada, residents have access to a wide variety of cultures and educational opportunities, while also experiencing a low cost of living.

The Clark County School District (CCSD) is the fifth-largest school district in the nation and continues to grow. The school district stands out nationally by being a majority-minority school district with 46.2 percent of the student enrollment being Hispanic/Latino and over 150 languages spoken. Although CCSD has traditionally lagged behind in educational statistics, the region has made significant strides in recent years to improve academic performance. In the past 10 years, graduation rates in CCSD have increased nearly 20 percentage points, rising from 63.0 percent to 82.7 percent. With over 50 five-star schools in the district, CCSD is continually making strides to improve its national standing.

Education

High School Graduation Rate

Clark County School District 90% -----82.7% 80% 70% 60% 50% 40% '07 '08 '09 '10 '11 '12 '13 '14 '15 '16 '17

Source: Nevada Report Card and Nevada Department of Education

Enrollment By Race/Ethnicity Clark County School District

Hispanic/Latino	46.2%
White	25.2%
Black/African American	13.8%
Asian	6.4%
Multiracial	6.4%
Hawaiian/Pacific Islander	1.6%
Native American	0.4%

More than 150 languages spoken

Note: Numbers may not add to 100% due to rounding. Source: Clark County School District

2017-18 Clark County School District Total Enrollment: 334,900 **5TH LARGEST SCHOOL DISTRICT** IN THE NATION



Clark County School District Enrollment and Budget per Student 2017-2018



\$7,158 Budget per Student

Currently, Nevada has the sixth-lowest percent of residents with bachelor's degree or higher among residents 25 and older, reporting roughly 23.5 percent. Nationally, 30.3 percent of the population has a bachelor's degree or higher. Since higher education is an essential factor for improving the talent pool in Southern Nevada, the University of Nevada, Las Vegas (UNLV) has continued to make improvements over the years to provide Southern Nevada with workplaceready employees. Since 2007, student enrollment at UNLV has increased 8.7 percent, rising to over 30,400 students in 2017. It is important that UNLV continues to grow because 85.6 percent of UNLV students are Nevada residents which means that those graduates will theoretically go directly into Nevada's labor force. For Fall 2011 entering freshman, UNLV reported 13.4 percent of students graduated in four years or fewer and 41.6 percent of students graduated in six years. 52



19th Best City for New College Graduates



Source: Time



Total University Enrollment



Source: UNLV Office of Decision Support

UNLV Graduation Rate¹ Nevada Residents 6 Years Retention

Note: Fall 2016-17. 1Degree-seeking full-time first-time, first-year students

UNLV Undergraduate Cost of Attendance Estimates Fall 2017-2018

6,236 In-State Tuition

Source: UNLV Cashiering and Student Accounts



College of Southern Nevada



Nevada State College





Source: Nevada System of Higher Education

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UNLV William F. Harrah College of Hospitality Building

In the beginning of 2018, construction completed on UNLV's new 93,500-square-foot, state-of-the-art Hospitality Hall. This was the newest building for UNLV since Greenspun Hall opened in Fall 2008. The \$59 million project had nearly half of its costs covered by the college's donors and industry partners. The building is set to receive LEED-silver certification due to its environmentally sustainable design. Currently, there are over 2,200 students pursuing a bachelor's degree in a hospitality-related major at UNLV, and this new building allows for UNLV's hospitality department to continue expanding and enrolling new students. UNLV's Harrah Hotel College was recently ranked as the world's best college for hospitality and leisure management by QS World University Rankings.





UN Sustainable Development Goals Goal: Ensure Inclusive and Quality Education for All and Promote Lifelong Learning

Having a well-educated population with access to quality education is the foundation for not only creating a sustainable economy but also improving the quality of life. Education is always a topic for Nevada, but improvements are being made each day to ensure the best access to education for its residents. Clark County School District (CCSD) currently has 51 five-star schools and 33 magnet schools. Moreover, CCSD's magnet schools are leading the nation in STEM-based initiatives. Magnet Schools of America (MSA) named two CCSD magnet schools as National Demonstration Schools, out of only 10 schools nationally to receive this honor. Northwest Career and Technical Academy is a Nationally Certified Magnet School and currently boasts a 99 percent graduation rate.





#VegasStrong

Tragedy struck Las Vegas on October 1, 2017 as a gunman opened fire on a crowd of concertgoers at the Route 91 Harvest music festival, leaving 58 people dead and 546 injured. The response to the incident was comprehensive and involved all members of the community. On an immediate, medical level, roughly 150 ambulances helped transport 200 patients to 15 hospitals throughout the Las Vegas Valley.

The Las Vegas Victims' Fund (LVVF) is a non-profit corporation that was established almost immediately after the October 1st tragedy in an effort to help raise and distribute funds for victims and affected parties of the incident. By the end of 2017, the LVVF raised \$22 million.

The Vegas Strong Benefit Concert took place at the T-Mobile Arena on December 1st, exactly 2 months after the tragic incident shook Las Vegas. The concert attracted a sold-out crowd of over 12,000 attendees who gathered to watch performances by local artists such as the Killers and Imagine Dragons. The concert was a resounding success in helping to raise over \$700,000 towards the LVVF.

Vegas Strong Resiliency Center is a resource and referral program for those affected by the Route 91 Harvest Festival shooting, and is backed by Clark County Social Service, Nevada Victims of Crime Program, Southern Nevada Adult Mental Health Services and the Las Vegas Metropolitan Police Department Victim Services. Resources provided by the program include financial advice, legal aid, online FBI victim assistance services and behavioral and mental health support.

Police Presence per Capita Clark County | 2016

As of 2016, Clark County has roughly **1.83 police officers per 1,000 people**

Source: FBI Uniform Crime Reporting and U.S. Census Bureau

Violent and Non-Violent Crime Rates

	Violent Crimes	Non-Violent (Property) Crimes	Violent Crimes per 1,000	Non-Violent Crimes per 1,000
Las Vegas Metro Police Department	13,520	46,000	8.49	28.89
North Las Vegas Police Department	2,276	5,277	9.54	22.12
Henderson Police Department	617	5,484	2.12	18.81
Boulder City Police Department	19	164	1.21	10.47
Mesquite Police Department	22	336	1.22	18.70
Clark County Total	16,454	57,261	7.63	26.56

Source: FBI Uniform Crime Reporting



UN Sustainable Development Goals Goal: **Promote Just, Peaceful and Inclusive Societies**

Establishing a safe, peaceful society for children and adults to live is a critical goal that needs to be accomplished not just in Southern Nevada but in the world. The UN has a goal to significantly reduce all forms of violence in the world, but the steps start in your city. One outlining form of violence in the world is human trafficking which is defined by the UN as "the recruitment, transportation, transfer, harboring or receipt of persons, by means of the threat or use of force." Unfortunately, Nevada has the second-highest rate of human trafficking cases per capita in the nation with over 80 percent of cases being sourced to sex trafficking. The National Human Trafficking Resource Center is a national leader in the fight to end human trafficking. More awareness needs to be brought to this issue in order to help resolve it.

Nevada has the 2nd highest sex trafficking cases per 100,000 residents in the nation. In 2016, there was an average of 4.6 cases per 100,000 residents in Nevada. During that same time, the United States reported an average of 1.7 cases per 100,000 population.







Source: National Human Trafficking Hotline

Human Trafficking and Issues Related to Human Trafficking

Calls per 100,000 Residents for 100 Most Populous U.S. Cities 12/7/2007-12/31/2016

National Rank	Location	Calls per 100,000
1	Washington, DC	87
2	Atlanta, GA	84
3	Orlando, FL	83
4	Miami FL	80
5	Las Vegas, NV	79
6	Sacramento, CA	59
7	Houston, TX	44
7	Tampa, FL	44
9	Columbus, OH	41
9	Baton Rouge, LA	41

Note: Cases are defined as a unique report, situation or request for resources that originated as a signal to the National Human Trafficking Hotline.

Source: National Human Trafficking Hotline

According to LVMPD Vice Unit Commander, Lt. Ray Spencer, Southern Nevada "is ground zero for youth sex trafficking." In fact, in 2016, the Vice Unit, in collaboration with the FBI recovered 129 children in our community who were being made to perform commercial sexual acts by force, fraud or coercion. Moreover, as of mid-February 2018, 17 children have been recovered this year alone - indicating an increasing trend. The severity of these statistics far outweigh the numbers in even the largest cities across the country, such as Los Angeles and New York. While the true scope of the issue is elusive and underreported due to the complex nature of child sex trafficking, even the numbers we do have are alarming. Fortunately, due to the proactive state-wide efforts, community training, and leadership with internal policies by Vice and the FBI Innocence Lost Task Force, sex trafficking charges have been filed on approximately 30 percent of these cases in Southern Nevada.

Locations of Potential Human Trafficking Cases in the U.S.

Note: This map reflects cases where the location of the potential trafficking was known. Some cases may involve more than one location.

Source: National Human Trafficking Hotline and Polaris



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An essential part of a sustainable economy is ensuring equal opportunity and providing adequate resources for families in need. Southern Nevada has historically stood out for its generosity with numerous charities, organizations and programs that help families in need.

Clark County has been experiencing declines in poverty since the recession. At the height of the economic downturn in 2011, 16.8 percent of Clark County residents and 23.7 percent of Clark County's children were in poverty. By the end of 2016, that share had dropped to 14.6 percent of Clark County residents in poverty (down 2.2 percentage points since 2011). Furthermore, at the end of 2015, latest available data, 22.6 percent of Clark County's children were in poverty (down 1.1 percent from 2011). While there is always room for improvement in poverty figures, these trends are encouraging signs that the lives of the most vulnerable Nevadans are improving.







Percent of Children in Poverty Nevada

	2005	2015	Change
Nevada	15.4%	21.6%	6.2% 🔺
Clark County	15.8%	22.6%	6.8% 🔺

Source: Kids Count Data Center

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UN Sustainable Development Goals Goal: **No Poverty**

The United Nation's first goal to transform the world is for its members to eradicate global poverty. Poverty reaches past a lack of income and resources; it manifests into hunger and malnutrition, limited access to education and social discrimination. Specific targets for eliminating extreme poverty in the world include halving the proportion of people who live in poverty by 2030, ensuring those in poverty have equal rights to economic resources and basic services, reducing the vulnerability of those in poverty to natural, economic, social and environmental shocks, and to create sound poverty-alleviation policy frameworks. Social Assistance programs in Southern Nevada, such as TANF grants and the SNAP program have helped alleviate poverty through the provision of supplementary funds and access to food. TANF grants are particularly important for poverty alleviation because these grants require recipients to develop agency-approved "work plans" that are designed to help the recipient become self-sufficient and no longer require the grants. These grants act as a cushion that provides support while people lift themselves out of poverty. Since January 2014, TANF grant recipients in Nevada have dropped 20 percent. The Nevada population has expanded and the economy has improved during this period, suggesting that fewer people are reliant on social assistance, and those reliant on social assistance are becoming increasingly independent.





Source: Nevada Report Card

Valley-wide mean

(per 1,000 population)

Source: Nevada Division of Welfare and Supportive Services

8910989169 89121

89119 89120

89117 89146 89102/



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UN Sustainable Development Goals Goal: **Zero Hunger**

By 2030, the UN has implored its members to end hunger, achieve food security and ensure access by all people to adequate nutritious food year-round. Southern Nevada is taking particular strides to increase food access amongst those less fortunate. MGM Resorts International, in collaboration with Three Square Food Bank, has established the Surplus Banquet Food Donation Program, an innovative program that will reduce food waste and provide thousands of meals to local residents who struggle with food insecurity. The program involves the standardized, safe collection of large volumes of food from meetings and private events held at MGM Resorts properties. Since the program's inception in August 2016, more than 80,000 meals have been donated. By 2020, MGM Resorts anticipates donating more than 800,000 meals to Southern Nevadans who face food insecurity.







In order to live a healthy life, people must have access to nutritious food. However, there are still people who do not have access to enough food to live a healthy, active life, in which case there is food insecurity. The U.S. Department of Agriculture defines food insecurity as "a household-level economic and social condition of limited or uncertain access to adequate food." Clark County currently has 13.4 percent of its population living in a food insecure state. Three Square Food Bank is Southern Nevada's only food bank that provides food assistance to the residents in the region. They reported that 50.2 million meals are needed each year in order to close the gap between the food needed and what is currently provided through federal programs.

In addition to food insecurity are food deserts, which are described as a low income areas that have limited access to a large grocery store to obtain nutritious food for its residents. Clark County currently has 32 food deserts, most of which are located in the northeast portion of the valley.





Note: Food deserts occur when low income communities have inadequate access to a large grocery store or supermarket (generally defined as 1 mile urban access, 10 miles in rural areas). Source: U.S. Department of Agriculture



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Zion Choice Neighborhood Community Garden Park

Zion Choice Neighborhood Community Garden Park was established in 2016 as a result of a partnership between the Zion United Methodist Church and the Conservation District of Southern Nevada. The garden park serves the three highest food-insecure areas in North Las Vegas with food insecurity rates over 20 percent. The Zion Choice Neighborhood Community Garden Park provides fresh produce and education on sustainable agriculture practices to locals in the area. The garden park received the 2017 GREENfest Transformers Award from the U.S. Green Building Council Nevada and Green Alliance.

Source: U.S. Department of Agriculture

During the recession, many residents in Clark County experienced foreclosures and lost their homes. This resulted in an unstable environment for Clark County. However, since then, the area has regained its housing stability. During the peak in 2009, Clark County reported 3,800 foreclosures in a single month. By the end of 2017, foreclosures have dropped to 65 trustee deeds in Clark County, a decline of 98.3 percent. Moreover, over the past year, the number of bank-owned homes in Clark County has also decreased, dropping 13.3 percent from 10,800 bank-owned homes in December 2016 to 9,300 bank-owned homes in December 2017.



Source: Clark County Recorder's Office



Social Equity





The United States continues to attract people from all over the world that want to become citizens due to the freedom of the country and quality of life. Nevada has maintained a consistent trend in granting citizenship. In 2016, 8,900 aliens became Nevada residents and thus U.S. citizens. These residents help contribute to the diversity of the region while also bringing unique traits from all over the world.



Homelessness remains a concern in the United States. According to the U.S. Department of Housing and Urban Development, on a single night in 2017, nearly 554,000 people were experiencing homelessness in the United States. During 2017, about 27 in every 10,000 people were experiencing homelessness in Nevada, which is an increase of 5.9 percent since the prior year. Nevada reported the second-highest share of people experiencing homelessness who were unsheltered in the nation. Over four-fifths of the homeless people in Nevada are located in Clark County, and account for nearly 95 percent of the unaccompanied homeless youth in the state. Clark County has the eighth-largest number of people experiencing homelessness in a major city with over two-thirds of the homeless people being unsheltered. To help combat the issue, the City of Las Vegas opened the Corridor for Hope, which is a place homeless individuals can go to access resources such as healthcare, housing and employment services. The Corridor of Hope is launching its second phase in March 2018 which will feature security, shade areas and restrooms. The courtyard is geared toward helping to end the cycle of homelessness by providing a quality living situation and needed services to help the homeless people living in the area obtain a job, housing and the skills needed to re-enter society.



Major City CoC's with Largest Number of People Experiencing Homelessness 2017

Note: A Continuum of Care (CoC) is a regional or local planning body that coordinates housing and services funding for homeless families and individuals.

Source: U.S. Department of Housing and Urban Development

Rank	Continuum of Care	Total Homeless
1	New York City, NY	76,501
2	Los Angeles City & County, CA	55,188
3	Seattle/King County, WA	11,643
4	San Diego City & County, CA	9,160
5	District of Columbia	7,473
6	San Jose/Santa Clara City & County, CA	7,394
7	San Francisco, CA	6,858
8	Las Vegas/Clark County, NV	6,490
9	Boston, MA	6,135
10	Philadelphia, PA	5,693

Social Equity

Estimates of Homelessness in Nevada in 2017



Source: U.S. Department of Housing and Urban Development

82.9%

Share of Homeless People in Nevada Living in Las Vegas/ Clark County In Las Vegas/Clark County, NV

67.1% Share of Unsheltered People

Experiencing Homelessness

2,052 Unaccompanied Homeless Youth 691 Homeless Veterans

Children in Foster Care Nevada

Source: U.S. Department of Housing and Urban Development





Note: This is the estimated count of children adopted with public child welfare agency involvement.

Source: U.S. Department of Health and Human Services: Children's Bureau


UN Sustainable Development Goals Goal: **Reduced Inequalities**

While inequality between countries has decreased, inequality within countries has increased. Economic growth is not enough to combat inequality. Policies need to be specifically tailored to improve the lives of disadvantaged and marginalized communities. Moreover, reducing income inequality requires the partnership and collaboration of all societal actors. In Southern Nevada, the primary focus of income inequality reduction is the various anti-poverty programs run by Clark County, such as the Step Up program. This program helps assist "aged-out" former foster care youth become self-sufficient. Step Up provides services for qualified youth such as housing assistance, employment assistance, educational assistance, transportation assistance, as well as other services such as referrals.





UN Sustainable Development Goals Goal: **Gender Equality**

Although the number of women and men in the world is roughly equal, there is still a divide in the two genders. The world has made great strides to achieve gender equality, but there is still some work that needs to be done to ensure that women and girls have equal access to education, healthcare, quality jobs and representation in political and economic decision-making processes. Nevada is taking the initiative to achieve gender equality in the state. Although women represent less than a quarter of the nation's lawmakers, they accounted for nearly 40 percent of the seats in Nevada's Senate and Assembly during the 2017 Legislative Session. In an effort to advance the cause of gender equality, the Nevada Legislature passed laws requiring health insurance providers to cover 12-month supplies of contraceptives and allowing for a referendum on the pink tax imposed on feminine hygiene products. Governor Brian Sandoval also signed into law two other measures related to equal rights: (1) Assembly Bill 106 which establishes a program of certification of vendors who pay equal pay for equal work without regard to gender, and (2) Assembly Bill 276 which prohibits an employer from discriminating against employees who discuss information about wages. These are just a few of the ways that Nevada is taking a stand on gender equality.

Percentages of Women in State Legislatures 2017



Nevada has the 2nd Highest Share of Women in State Legislature with 39.4%

< 15.0% 15.0% to 24.9% 25.0% to 34.9% ≥ 35.0%



Three Ways Corporate America Can Advance Gender Equity

Jan Jones Blackhurst, Executive Vice President, Public Policy & Corporate Responsibility, shares her perspective on how companies can advance gender equity.

I believe there are some core ways business leaders can address the enduring lack of equality and equitable distribution of power between men and women while also combatting sexual harassment.

1. Set Goals and Measure Progress

In an industry where we have 50-50 representation at the entry level but less than 22 percent women at the executive level, we're taking a first step by addressing manager-level and above employees. By striving to achieve 50 percent women among our corporate-level and casino/hotel-level managers by 2025, we will establish a strong pipeline of female leaders, set up to break the industry's glass ceiling.

Until companies are willing to set bold goals and actionable plans around gender equity, there isn't a way to hold people accountable to their role in achieving equity. Another useful way to advance diversity and inclusion is through the introduction of something like Caesars' new Equity Councils at the Corporate and Regional levels, which are taskforces of leaders, guided by external experts, who will help implement our gender equity initiative and support activities such as the rollout of unconscious bias training across Caesars management teams.

2. Create a Strong Zero-Tolerance Culture

When women experience the abuse of power in the form of sexual harassment, fear of retaliation can make them hesitant to speak out. But how can we create an environment in which women (and men, too) who are subject to harassment aren't afraid? I believe the onus is on the company to foster a culture of zero tolerance for intimidation, including that of a sexual nature. At Caesars Entertainment, that's the culture we do our best to create for everyone, from our guest room attendants to our corporate office employees to our entertainers.

Companies small and large should outline concrete steps to be taken if those boundaries are crossed, which ideally leads to workplaces in which employees can feel safe, protected and empowered.

3. Live Your Values

Supporting women in business means advocating for those beyond the walls of any given company. For example, procurement executives can look to their supply chains, or IT leaders can establish behavioral expectations among partners. Why not ask about the percentage of women at the manager level? And what about at the executive level?

Ultimately, we need a gender equity and equality index similar to the Human Rights Campaign Foundation's Corporate Equality Index, which evaluates companies based on how well they support LGBTQ employees. There are 609 companies on the 2018 list, including Caesars Entertainment. I'd love to see corporate leaders striving for a spot on a similar, gender-focused index – because it takes changing policies and practices to improve scores on lists like these.



Sustainable, economically viable societies require a mobile workforce that can move about while creating as minimal an ecological impact as possible. As a growing metro area, Las Vegas residents often need to drive or take the bus to reach their destinations, whether those be work, school or errands. These distances mean greater amounts of fossil fuel emissions, and consequently greater pollution and environmental degradation. All societal participants, including government, individuals and the private sector, have worked to help address this problem, either through the adoption of reduced-emission vehicles, the investment in infrastructure, or the development of incentive programs to change transportation habits.

Despite decreased bus ridership, the Regional Transportation Commission (RTC) of Las Vegas has demonstrated a serious commitment to facilitating bus ridership and reducing environmental impact. To make catching the bus easier, RTC launched the Ride RTC App, which has been downloaded more than 68,000 times and has led to the sales of over 100,000 bus passes. Additionally, to reduce the environmental effects of its fleet, RTC is replacing old diesel buses with condensed natural gas busses that put less strain on the environment.

Regional Transportation Commission of Southern Nevada (RTC)



Source: Regional Transportation Commission of Southern Nevada





UN Sustainable Development Goals Goal: **Sustainable Cities and Communities**

Cities are where most of the economic development of a region comes together to advance its residents both socially and economically. However, cities often face many challenges related to congestion, roadway safety and affordable public transportation. By 2030, the UN has a goal to provide access to safe, affordable and sustainable transportation for all. Southern Nevada is working to stand out as a leader in transportation initiatives. Over the last three years, the Regional Transportation Commission (RTC) of Southern Nevada has worked to retire 28 diesel-fueled buses and replace them with compressed natural gas buses in order to improve fleet performance and be more environmentally responsible. In order to improve performance, these buses will have improved fuel economy, tire pressure and seating capacity.



Source: Regional Transportation Commission of Southern Nevada

RTC On Board Transit Plan

In order to continue to provide quality transportation for the valley while planning for regional growth, the RTC has launched On Board, the community's comprehensive future transit plan for Southern Nevada. The plan will identify how enhancements to the current transit system, new high capacity transit services and emerging transit technologies could all work together to provide the most benefit to riders, the community and the regional economy. Details on the plan are available at OnBoardSNV.com.



Source: Regional Transportation Commission of Southern Nevada

Daily Auto Traffic All Highways

Las Vegas Area | Trailing 12-month Average





2017 Average



Source: American Automobile Association

2016 Average

Source: UNLV Center for Business and Economic Research



The Las Vegas area is quite accessible. The area has the sixth-highest percentage of jobs accessible within a half hour in the United States. Furthermore, it has some of the best transportation infrastructure in the entire country, with Las Vegas, Henderson and North Las Vegas all among the ten best cities for traffic infrastructure. People are able to access work regardless of where they live in the region. What this also means is that locals comparatively do not sit in bad traffic, which in turn contributes to reduced pollution. However, Las Vegas residents do drive and consume more fuel than other cities. Thus, in order to effectively combat pollution in Las Vegas, drivers are switching to green vehicles to reduce fuel consumption.

Most and Least Auto Accessible MSAs in the U.S.

Jobs in Metropolitan Area Accessible Within 30 Minutes



93% of Las Vegas Area jobs can be **reached by automobile within 30 minutes** for the average employee

Source: New Geography

Traffic Conditions and Infrastructure Quality Among U.S. Cities

RANK	LOCATION
1	Henderson, NV
2	Lubbock, TX
3	Scottsdale, AZ
4	Las Vegas, NV
5	Corpus Christi, TX
6	Laredo, TX
7	North Las Vegas, NV
8	Chandler, AZ
9	Bakersfield, CA
10	Tucson, AZ

Clark County has **three of the top 10 cities** in the U.S. for traffic conditions and infrastructure quality

Source: WalletHub



Nevadans have taken on the challenge of adopting sustainable vehicles head-on. As a state, Nevada has the second-highest growth rate in the number of electric vehicles sold in the country. More impressive, however, is the fact that Las Vegas has the highest growth in electric vehicle sales in the entire country. At the end of 2017, there were roughly 2,200 electric vehicles registered in Clark County, up from 1,500 in 2016. The state government has responded enthusiastically to electric vehicles as well. Since 2015, Governor Sandoval and NV Energy have worked to create an "Electric Highway" between Las Vegas and Reno. As of June 2017, two of the four charging stations were fully operational. Governor Sandoval also announced an initiative with the governors of Utah and Colorado to connect 2,200 miles of Electric Highways in their states.





Electric Vehicles Registered in Clark County



Local government agencies have also played a substantial role in educating the community about the benefits of alternative means of transportation. In addition to replacing its bus fleet and developing apps to facilitate bus ridership, the RTC also plays a significant educational role in encouraging cycling and walking not just as a means of recreation, but also for day-to-day transportation. The Regional Bicycle and Pedestrian plan will make the city more walkable by almost tripling the walking and bicycling paths in the region. These paths will not just make the community healthier, they will increase access to work opportunities and consequently improve the economy, as well as facilitate choices that reduce emissions, and reduce strain on infrastructure.

RTC Regional Bicycle & Pedestrian Plan

From 2015 through 2017, the Regional Transportation Commission (RTC) of Southern Nevada researched and documented an update to the 2008 Regional Bicycle and Pedestrian Plan. The new plan has the following goals: to increase comfort and safety, to make bicycling and walking more convenient, to educate the community on bicycling and walking benefits, and to recognize the impact of the transportation system on health and underserved communities. The plan also calls for 1,336 new miles of walking/bicycle paths which would nearly triple the 687 miles of available space.

Source: Regional Transportation Commission

Clark County Safe Routes to School (SRTS)

YCLE & PEDESTRIAN PLAN

FOR SOUTHERN NEVADA

116 Schools in Clark County Participate in the SRTS program

Source: Regional Transportation Commission of Southern Nevada

Safe Routes to School (SRTS)

Education and encouragement programs can result in a **25% increase in walking and biking** over 5 years

CCSD SRTS Mission

Improve and increase health, safety and transportation options for CCSD Students



79



11.59 fatalities per 100,000 people.

Source: National Highway Traffic Safety Administration and Insurance Institute for Highway Safety

people in Clark County. Nationwide, there were 1.85 fatalities per 100,000 people.

Source: National Highway Traffic Safety Administration

Pedalcyclist Fatalities

In 2016, there were **0.23** pedalcyclist fatalities per 100,000 people in Clark County. Nationwide, there were 0.26 pedalcyclist fatalities per 100,000 people.

Source: National Highway Traffic Safety Administration



Las Vegas has a Walk Score of 41 overall, meaning most errands require a car. Downtown Las Vegas proves to be guite walkable, with the Arts District scoring an 84, meaning most errands can be accomplished on foot.

Note: The Walk Score measures the walkability of a city on a scale from 0 to 100. A higher score reflects a more walkable area.

Source: Walk Score





Inflation indexing on fuel taxes has helped, and will continue to help, Clark County develop its transportation infrastructure. Additionally, this tax will help to continue financing projects that will create jobs and bolster the economy, all while improving the quality of life. Examples of projects that are funded by this included traffic signal development and the improvement of roads. At the end of 2017, 223 design and construction contracts were awarded because of Fuel Revenue Indexing, including 78 contracts to local small businesses. These contracts were worth a total of \$452 million and have created roughly 5,800 jobs for the community. Fuel Revenue Indexing has been a timely injection of capital because total transportation funding in Nevada had not exceeded \$1.0 billion from 2013 to 2015. In 2016 and 2017, however, total funding in Nevada surpassed \$1.2 billion.

Mandalay Bay Monorail Extension

The Las Vegas Monorail is planning to extend their route to the Mandalay Bay. The Mandalay Bay Monorail extension will not only reduce Las Vegas Strip traffic congestion but it will also improve access between hotels and convention spaces. Upon completion, the Las Vegas Convention Center and the Mandalay Bay Convention Center, 2 of the 10 largest convention facilities in the United States, would be connected on the 5-mile rail system, along with 35,000 hotel rooms and 11 resort properties. This expansion is projected to add 2 million passengers, bringing the annual total to 7 million passengers.



Source: The Las Vegas Monorail

Total Transportation Funding

Nevada \$1.6B \$1.3B \$1.4B \$1.2B \$1.0B \$0.8B \$0.6B \$0.4B \$0.2B \$0.0B '07 '08 '09 '10 '11 '12 '13 '14 '15 '16 '17 Source: Nevada Department of Transportation

Inflation Index on Gasoline Tax



Source: Nevada Department of Transportation

Conclusion

Although what is considered a sustainable economy will continue to change and evolve, Southern Nevada has undoubtedly developed as a competitive and dynamic region. Maintaining sustainable growth has required addressing a number of issues, including poverty, social inequity, ensuring access to quality healthcare for all as well as the management and conservation of natural resources in the area. All of these issues must continue to be considered and addressed.

Southern Nevada has made great strides over the past few years to continue improving the region and provide for its residents. Industries, such as the technology sector, have been targeted to diversify the area and innovations have been made to improve the overall quality of life. Southern Nevada is truly unique and will keep evolving to meet the needs of not just its residents but its visitors.

Ensuring a healthy standard of living for all citizens needs to remain a top priority for not just government officials, but also community residents. Everyone has a part to play in the sustainability puzzle and each piece needs to work together to establish a region that is balanced transformational and supportive of all its stakeholders.





UN Sustainable Development Goals Goal: **Partnerships for the goals**

Partnerships are the most effective way to spread awareness on global, national and local issues while also providing paths that lead to results. ImpactNV would like to extend our gratitude and thanks to our Steering Committee members for their time, talent and expertise contributed to the development of this report which can be used as a tool to further enhance Southern Nevada's sustainability and provide a path to a cleaner, safer, healthier and more uniform economy for current and future residents.



Steering Committee

Honorary Co-Chairs:



Jan Jones Blackhurst



Rose Mckinney James

Steering Committee Members:

- Shane Ammerman, Clark County
- Councilman Scott Black, City of North Las Vegas
- Tim Buchanan, City of Henderson
- Margaret George, Caesars Entertainment Corporation
- Erik Hansen, Wynn Resorts
- Raymond Hess, Regional Transportation Commission of Southern Nevada
- Ralph McCullers, The Nevada Business Environmental Program
- Edgar Patino, NV Energy
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