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JUNE 2018

LVGEA Industry Report: Manufacturing

LAS VEGAS GLOBAL ECONOMIC ALLIANCE

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Introduction

The purpose of this report, authored by the Las Vegas Global Economic Alliance (LVGEA), is to provide key stakeholders with an overview of the current state of Southern Nevada's manufacturing industry, along with findings and recommendations that can help to continue to bolster the industry's short- and long-term success. The results of this analysis are driven in part by LVGEA's ongoing commitment to support the growth of target industries for the region through business-level engagement with local companies throughout the calendar year. In first quarter of 2018, these engagement efforts focused on the Southern Nevada region's manufacturing industry – one of LVGEA's target industry segments for emerging growth opportunities – supported by face-to-face interviews with nearly 40 local manufacturing companies.

As identified in LVGEA's Target Industry Validation Study, commissioned and adopted by the LVGEA Board of Directors in March 2017, the manufacturing sector and related industries are experiencing great success both in Southern Nevada and across the nation. This region in particular has a number of unique assets that aid current growth and position the area for sustained success if properly supported. According to the U.S. Bureau of Labor Statistics (BLS), manufacturing employment in the U.S. has grown by 5% from 2011 to 2016. This growth has been supported at a national level by federal legislative efforts and policy initiatives such as the recently passed 2017 Tax Cuts and Jobs Act which reduced tax rates for businesses. Regionally, the growth of the Southern Nevada manufacturing sector is evident at a surface level when one simply considers a 42% increase in manufacturing wins through LVGEA, from 12 in 2015 to 17 in 2017. Furthermore, Southern Nevada has experienced six years of consecutive manufacturing growth, including 14.3% year-over-year growth from the latest Department of Employment, Training & Rehabilitation report¹. While there are many reasons for the region's recent surge in manufacturing activity, two in particular are often cited by companies that relocate to or expand their manufacturing base(s) in Southern Nevada. The geography and demographics of the southwestern U.S. states represents more than 60 million residents, many of whom reside in California. However, due to the state's high tax and regulatory environments, Southern Nevada represents an attractive operating base with lower taxes and multimodal connectivity options for accessing this concentration of consumers.

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1. http://nevadaworkforce.com/Portals/139/EIB/2018/Current_EIB.pdf Accessed 5/31/2018
 2. https://leaglobal.com/assets/page_pdfs/011017%20LEA%20ManufacturingSurvey.pdf Accessed 5/31/2018

Nationally, the demand for qualified workers remains a high priority for the manufacturing sector. In a recent 2017 national study², when asked about barriers to business growth, respondents cited lack of qualified workers (47%) and pressure for increased wages (36%) as some of their top concerns. Additionally, respondents cited a need for increased apprenticeships as well as external hires of current workforce participants possessing the required technical skills. Finally, manufacturers pointed to the increased use of technology in the industry as a critical input for making strategic operational decisions about supply chain, inventory, customer data, operations, financial record keeping, and asset management – skills that are increasingly sought in a variety of jobs in the sector, from front-line supervisory positions to senior management.

In April 2014, LVGEA identified a lack of available real estate as the primary obstacle to developing industrial assets in Southern Nevada that can be used to lure major manufacturers to the region³. Within eighteen months of the release of this report, major industrial developers began establishing large-scale industrial projects that led to successfully attracting and expanding companies in the region including Amazon, Hyperloop, FedEx, and Turano Baking Company. During this time, LVGEA also recognized the need to understand current business activities, and the needs of in-market companies to foster workforce development and corporate expansion that could be utilized to further inform the growth Southern Nevada industries. This led to the development and launch of BizCONNECT, the region's first regional business retention and expansion program. BizCONNECT serves a critical role for the region that it fulfills by conducting quantitative and qualitative research via direct outreach to local companies, with corresponding data used to catalyze regional growth initiatives, expedite tax abatement opportunities to qualifying companies, and assist with workforce development needs by aligning Southern Nevada's workforce pipeline with industry demand.

While LVGEA's BizCONNECT efforts result in meeting with companies in various sectors, in 2018 the program takes a more specific and deeper look at the needs of regional target industries and current industry participants – recognizing how needs vary from one industry to another – by focusing on one industry per quarter. This report outlines the results of BizCONNECT's efforts during the first quarter of 2018, focused on the Southern Nevada manufacturing sector, including outreach efforts that included participating companies' goals, qualitative input regarding how LVGEA and other assets in the region can further support industry growth, and a discussion of the complexities of workforce retention and development in this sector.

3. <https://www.lvgea.org/new-report-shows-southern-nevadas-large-scale-industrial-building-market-isnt-meeting-demand-new-development-is-needed-3/>

Methodology

In order to explore the underlying reasons of a company's business decisions and gain a more robust understanding of local manufacturing issues, a questionnaire was developed to guide face-to-face interviews with respondents focused on gaining a comprehensive understanding of the experiences and attitudes of participating executives and management teams. This qualitative approach to data collection also allowed the interviewer to further discuss needs and opportunities via alternative questions if a specific issue was brought to light by the company representative. Interviews were conducted between January 1, 2018 and March 30, 2018, with the duration of each ranging from 30-to-45 minutes. A total of 36 interviews were completed for this study.

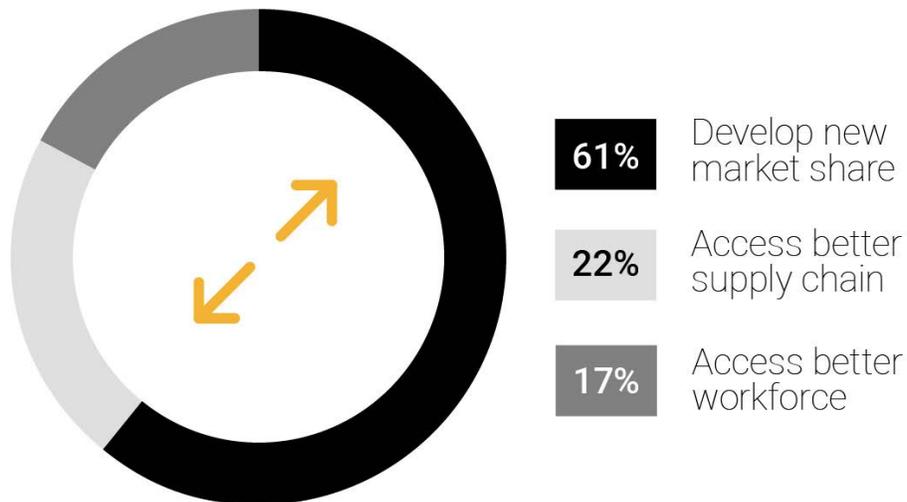
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Results

While some of the findings from this outreach aligned with LVGEA staff's existing understanding of the manufacturing sector, several anecdotes provided deeper industry insights that were used to inform corresponding recommendations for how to further facilitate the growth and success of the sector.

Overall, industry participants project significant growth over the next 12 to 24 months, with 60% of respondents reporting plans to expand. However, 58% of these companies that plan to expand will do so by expanding outside Nevada. Of these companies, respondents noted that their planned expansion efforts will happen outside of Nevada's borders in order to develop new market share, access a better supply chain, and to aid in workforce development efforts.



When asked about the best aspect of doing business in Southern Nevada, responses varied. While the tax-friendly atmosphere was identified as a clear influencer, given Nevada's standing as the nation's fifth-best tax climate in the U.S., other responses included the following:

- Proximity to the 5th largest economy in the world in California
- Quality of life and overall cost of living
- Low-cost logistical access throughout the western U.S., from San Diego to Seattle

Key interview excerpts related to Nevada’s pro-business regulatory environment included:

- “Both tax base and regulatory environment are ideal reasons for having business in Southern Nevada.”
- “Quality of life attracted corporate officers from Chicago and North Carolina.”

Although respondents clearly identified the state’s stable political and regulatory environment as a primary reason to relocate to and grow in Southern Nevada, companies noted very real constraints associated with the lack of a skilled and experienced workforce in the manufacturing sector.

Key interview excerpts related to noted workforce issues hampering economic growth for the region included:

- “Finding reliable labor (with a low unemployment rate) is very hard to come by.”
- “Labor supply is at its worst in the last 20 years.”
- “Low cost of doing business is offset by lack of available workforce.”

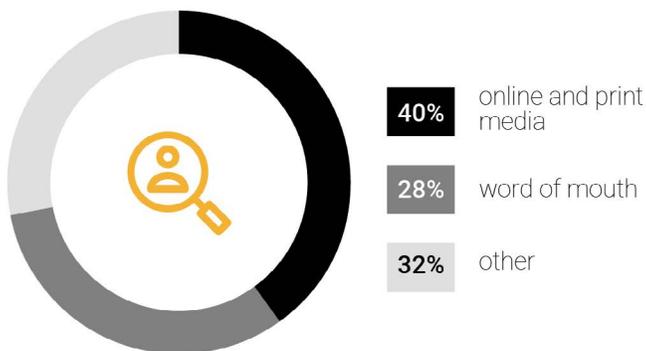
High-demand jobs routinely identified by respondents included those that are engineering-related, specifically equipment operations and maintenance. Most commonly, companies reported a reliance on recruiting out-of-state workforce due to a lack of existing supply in the region.

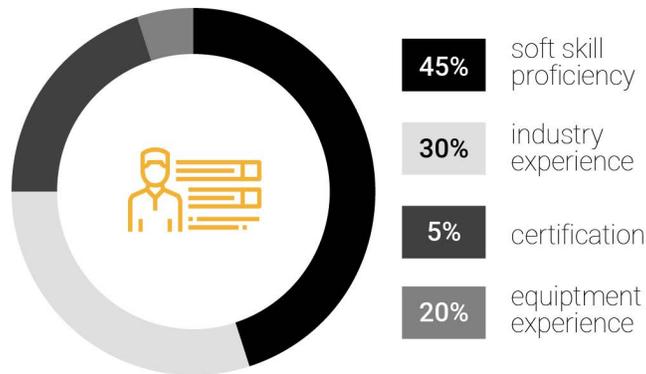
Key comments regarding the state of the regional workforce supply included:

- “The local workforce has improved over the last several years where you don’t find companies fighting for talent.”
- “Companies either have talent and are paying a premium to keep them or they continue searching (out of state).”

One respondent has worked in the local area since 1991, remarking that while “Vegas continues to have a transient workforce, this has improved over the last decade.” Additional comments from this respondent pointed to a lack of technical as well as problem solving skills “the ability to troubleshoot is becoming a lost art” and “PLC operators are rare to find”, shifting demographics and language barriers, and lack of formal education for workforce participants “higher education lowering standards to fill seats in classrooms has impacted (manufacturers) for the worst”.

LVGEA further explored these workforce recruitment needs by asking respondents about their primary sources for talent, with top results including online and print media, and the core requirements companies seek when hiring entry-level candidates, with top results including proficiency in soft skills and some level of industry experience.





As a natural byproduct of a lack of skilled workforce, contract services and contract staffing are increasing, with respondents overwhelmingly noting their use of contract support in both staffing and manufacturing processes.

Key comments regarding the use of contract and outsourced manufacturing services included:

- "Contract services (are being) increased to support peak periods, protecting (the) company with purchasing capital intensive equipment and (taking into account) the concern of future excess production capacity when market activity dips."
 - "Contract manufacturing will increase in Europe and China with new tariffs in place that will increase costs of imports."
 - "It's not necessarily more expensive to manufacture in Germany."



65%	outsource staffing
35%	hire in house

As outlined in recent LVGEA studies and industry analyses, the environments of many industries are expected to change dramatically in the coming three to five years, particularly as it relates to impacting overall efficiency and workforce needs. Respondents noted desired skill needs to accommodate these expected shifts within the manufacturing sector as automation, robotics, and programming.

Key comments related to expected workforce trends and their impact on the manufacturing industry included:

- "While automation in manufacturing is prevalent in Los Angeles, it's slowly starting to have more of a presence in Vegas."
- "While teaching robotics is becoming more mainstream, there is no focus on how robots function from the ground up. (There is currently) a lack of trouble-shooting expertise."
- "Automation is the future, but human quality control will always be a constant."

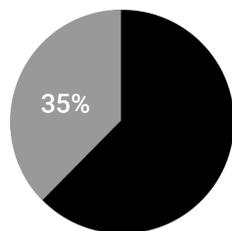
Overall, employee retention in the region has improved over the past three years. Employees who leave within twelve months have reported that they are seeking better paying jobs or are new to manufacturing and simply don't like the work. However, this same data suggests that of the hires who remain in their jobs longer than twelve months, most employees stay. In instances when employees do leave after twelve months, multiple companies cited they do so in order to move out of state and care for aging family.

Given this, it comes as no surprise that regional workforce participants are increasingly seeing value in a robust training and development program, with more than 35% of the companies interviewed reporting having a program in place or showing an interest in developing training programs.

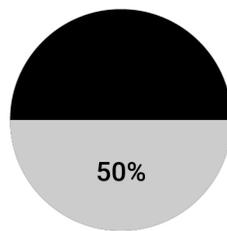
Key comments related to area workforce training programs and needs included:

- "(An interest in the) state's registered apprenticeship program to eventually expand operations with a second shift."
- "Supervisors would then have the responsibility of training/mentoring the operations team."

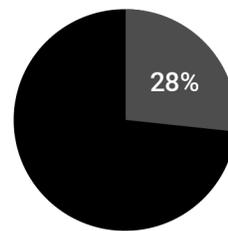
Finally, when asked if any customers or vendors had an interest in learning more about Southern Nevada's operating environment, each respondent noted a lack of referrals at the present time that could be made to LVGEA for such information.



interested in starting an internship or apprenticeship program



interested in expanding an existing internship or apprenticeship program



currently have an internship and/or apprenticeship program

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Recommendations

The Las Vegas Valley has a significant presence of manufacturers that continues to increase as LVGEA attracts more companies to the region. Through its BizCONNECT outreach efforts, LVGEA is building upon efforts to further identify and understand the types of manufacturing needs that exist in Southern Nevada while exploring each company's unique day-to-day operational challenges. The following recommendations outline steps or suggestions from LVGEA to address the challenges outlined by respondents, where they may exist, relative to expanding their manufacturing operations while further bolstering and building upon regional strengths that offer tremendous assets for companies operating in and out of the Southern Nevada market (e.g., strategic location near major markets such as Phoenix and Los Angeles and low tax climate).

1. Increase the number of area apprenticeship programs

Each respondent identified the lack of available workforce as their top concern, a challenge and deficiency well-known by LVGEA through ongoing industry engagement and prior research efforts such as the LVGEA Workforce Blueprint. Already, LVGEA is working to increase alignment between area educational institutions and local manufacturers to develop curricula to train future employees. The next step in this work should advance through partnerships with the Clark County School District Career and Technical Academies. Through these academies, local employers can serve on the Advisory Board and have the opportunity to identify skills that will then be used to prepare graduates to successfully enter the workforce. Additionally, LVGEA will work with Nevada's Office of Workforce Innovation (OWINN) to develop registered apprenticeship programs that align with manufacturers' workforce needs, another input that will help to improve the regional manufacturing candidate output.

2. Incorporate tomorrow's technology into today's curriculum

Today's training in secondary and higher education needs to incorporate tomorrow's technology for preparing Southern Nevada's future workforce. Furthermore, manufacturers must communicate to educators the types of technologies that will power future industrial activity, therefore helping to ensure effective training is in place for the workforce that will support these needs. In response, LVGEA will work to align with the Nevada Work Ready Communities initiative, through Workforce Connections, to implement the WorkKeys assessment that helps quantify the development of a qualified and educated workforce. This assessment provides a ready employee profile for interested employers while reducing turnover and provides a nationally validated certification to employees that is also portable and thus in demand among workforce participants.

3. Support and promote successful educational programs in the region

Study respondents identified the very real challenge of attracting new talent to the region, which is primarily influenced by the negative perception of the existing primary and secondary education system. While some reports have cited the availability of quality public school options as a deterrent in relocating to Southern Nevada⁴, Nevada high schools actually ranked 13th in the nation in a May 2018 analysis conducted by U.S. News and World Report⁵. Leveraging positive data and rankings such as these, local stakeholders must market and duplicate successful industry/education partnerships that, in addition to making a positive impact on area students and the local workforce, further dispel negative messaging while promoting the positive elements and the trajectory of local education options.

4. Increase the number shovel ready sites through expedited permitting process

It is clear that there is a lack of physical inventory and shovel-ready sites available for new manufacturing and expansion projects. In total, more than 58% of respondents indicated imminent plans for an expansion of plant operations. During and after the recession, development in Southern Nevada slowed significantly⁶; however, momentum has recently improved, and area stakeholders must work together to positively affect that rebound. More specifically, developers and local government must work hand-in-hand to expedite the permitting and development process that often can lead to the success or demise of a region's economic growth. In fact, many successful communities already have these types of programs in place. Furthermore, local communities in the Southern Nevada region should work together as one region to pursue U.S. Economic Development Administration funding sources to acquire and invest new capital into the region's industrial development infrastructure, which can further capitalize new private sector investments for the area.

5. Maintain the low cost of operations for doing business in Greater Vegas

It is essential to demonstrate to businesses that the region in which they operate is a controlled-cost environment and one in which manufacturers in particular can competitively operate for the foreseeable future, given the capital investment typically required by such operations. This is partially driven by a predictable and stable policy environment for economic development incentives such as Nevada's tax abatements, which can serve as a driving factor for corporate relocation decisions. Regionally, elected officials should continue to maintain – and ideally build upon – an environment that allows the state and region to offer tax abatements to manufacturers producing more than 50% of their revenues outside Nevada, with the goal of using such incentives and tools to attract manufacturing operations to Southern Nevada and

4. Jim LoScalzo, Best State Rankings (US News & World Report, 2018)

5. <https://www.usnews.com/education/best-high-schools/articles/how-states-compare>

6. Dr. Stephen P.A. Brown, PhD, The Current Economic Outlook for Metropolitan Las Vegas (UNLV Center for Business and Economic Research, 2011)

further influencing the future growth of the local manufacturing sector. For example, 37 states provide full sales and use tax exemptions on manufacturing equipment and machinery⁷. While Nevada has a tax abatement program reducing sales and use taxes to two percent for qualified companies, the state's regulations require a job creation component to activate this abatement. Consequently, when manufacturers are looking to invest in equipment without any additional job creation, it is difficult for Nevada to compete for such an investment – especially if these manufacturers already have multiple sites throughout the United States that provide this exemption. The first step to supporting manufacturing activity in the region is to ensure current tax abatements remain in place for the foreseeable future so as to not stall economic growth; however, moving forward, policymakers should consider building upon the state's current economic development incentive mix to become even more competitive with those states against which Nevada often finds itself competing against for investment and talent.

7. <https://www.accountingtoday.com/opinion/sales-tax-exemptions-vary-on-manufacturing-equipment>

Conclusions

The manufacturing sector is one that has seen tremendous growth in recent years across Southern Nevada, particularly as part of the region's astounding recovery following the depths of the Great Recession. Today, manufacturing activity in Southern Nevada continues to grow with opportunities for the region to further capitalize and expand upon the success of the sector through a favorable regulatory environment and the rapid advancement of technologies that support it. LVGEA's 2017 Target Industry Validation Study goes on to state, "the region's lower-cost, business friendly environment with lower taxes presents an option for companies considering such an investment that may choose to build a new factory or production facility rather than upgrade an existing one." However, this growth will not happen without support – both to sustain and build upon it. There are very real considerations that threaten to stall the success of this sector, primarily those surrounding access to a qualified workforce. LVGEA is committed to working hand-in-hand with industry participants, as well as local and state partners, to ensure the manufacturing sector in Southern Nevada remains a thriving one and those companies that have committed to the region remain so in the years to come.



Acknowledgements

This report was made possible by a number of partners that assisted in this vertical industry focus. In particular, LVGEA would like to acknowledge the Nevada Governor's Office of Economic Development, the City of Las Vegas, the City of North Las Vegas, the City of Henderson, the City of Boulder City, Clark County, Emergent Method, Nevada Industry Excellence, and the Nevada Office of Business and Industry for the many introductions to local businesses in Southern Nevada and each of these entities' support in creating a vibrant manufacturing economy for the region.

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