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Strengthening The Southern Nevada Workforce Pipeline

Katie M. Gilbertson

University of Nevada, Las Vegas, katelin.gilbertson@unlv.edu

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Strengthening The Southern Nevada Workforce Pipeline

Katie Gilbertson May 2022



Abstract

Workforce development has been a keystone in the discussion of economic diversification of Las Vegas for decades. The leisure and hospitality industry is the lifeline for the Southern Nevada economy due to the reliance on tourism as the city's main economic driver. The leisure and hospitality industry requires physical labor and more face-to-face customer interaction than other employment sectors. Thus, these jobs often do not require high educational attainment, but rather sharp soft skills like effective listening, nonverbal communication, and negotiation strategies.¹ While these are valuable traits, the lack of educational attainment within the leisure and hospitality workforce suppresses employees' wages when compared to their higher educated counterparts in Las Vegas.

This report analyzes five leisure and hospitality occupational clusters: food service & preparation, entertainment & recreation, gaming, lodging, and sales. Within these five clusters, entry-level wage, mid-level wage, and upper-level wage occupations are identified to show the change in compensation and employment as a worker moves through the ranks. Next, this report utilizes the Las Vegas Global Economic Alliance's 2022 Workforce Blueprint to identify the top 15 in-demand occupations for Southern Nevada.² These four occupational clusters include computer analysts & developers, engineering, business & management, and other. All these occupations require at least a bachelor's degree and earn significantly more than the leisure and hospitality clusters. Finally, three policy recommendations that address the wage disparities within the Southern Nevada workforce are discussed. A case study example of the MGM College Opportunity Program (COP) is presented to demonstrate an existing workforce training program that promotes upward mobility of leisure and hospitality employees in the community. Policy recommendations include creating more private-public partnerships like the MGM COP, expanding outreach from workforce development agencies, and increasing funding for higher education. These recommendations require collaboration between key contributors to the Las Vegas economy in order to strengthen the regional workforce pipeline.

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Introduction

Las Vegas is notorious for its tourism reputation. The Entertainment Capital of the World provides a playground for adults to gamble, dine, shop, and watch performances all in the span of the four-mile Las Vegas Strip. In 2019, more than 42.5 million visitors came to Las Vegas, continuing a strong upward trend since the Great Recession.³ Despite COVID-19 ravaging the tourism industry, 2021 was an impressive rebound for Las Vegas with 32.2 million visitors flocking to the Strip.⁴ The itinerary of events continues to grow, with everything from the National Football League Draft to momentous concerts at Allegiant Stadium. It is clear that tourism remains vibrant and will continue to thrive in Las Vegas for years to come.

To anyone not from Nevada, it seems uncanny that people actually live and work in Las Vegas. However, there is an abundant workforce that fuels the Southern Nevada tourism industry. Waiters and waitresses bring exquisite food prepared by bustling chefs, while ushers and lobby attendants help guests find their seats at a spectacular show. It is difficult to precisely pin down the entire spectrum of workers that fall within the leisure and hospitality industry; almost as difficult as naming every activity to do on the Las Vegas Strip.

The Bureau of Labor Statistics (BLS) surveys the nation's labor market to create a multitude of data sets. The BLS utilizes the North American Industrial Classification System (NAICS), a framework for organizing market activity based on the primary activity of individual firms. Leisure and hospitality is one of the eleven supersectors which are further broken down into more specific sectors. The leisure and hospitality supersector is comprised of two sectors: arts, entertainment, and recreation and accommodation and food services.⁵ The leisure and hospitality employment supersector accounts for a plurality of jobs within Las Vegas labor force. Table 1 presents employment data for the eleven NAICS supersectors in Las Vegas for the latest available month, March 2022, along with the twelve-month percent change.⁶

Supersector	Las Vegas Employment March 2022	12-month Percent Change	
Labor Force	1,103,800	0.41%	
Mining and Logging	400	0.0%	
Construction	70,900	2.5%	
Manufacturing	27,100	8.8%	
Trade, Transportation, and Utilities	203,900	8.6%	
Professional and Business Services	157,100	16.5%	
Information	11,500	16.2%	
Education and Health Services	110,700	2.9%	
Financial Activities	56,700	7.0%	
Leisure and Hospitality	267,700	27.7%	
Other Services	28,900	6.3%	
Government	105,600	2.2%	

Table 1: Las Vegas Supersector Employment, March 2022

The leisure and hospitality supersector single-handedly employs over a quarter of a million people in Las Vegas. The next closest supersector is trade, transportation, and utilities at 203,900 workers, followed by professional and business services at 157,100 employees. Not only does this employment information reveal the number of workers within the industry, but also how fast it is growing. Within the past year, leisure and hospitality employment has grown 27.7 percent. This is even amidst a widespread labor shortage, which has made it difficult for businesses to fill open positions on the Las Vegas Strip.⁷ Compared to a lagging growth of the labor force (0.41%), it is apparent that leisure and hospitality is outpacing the rest of the broader Southern Nevada economy. The overwhelming breadth of the tourism industry merits an in-depth look to better understand this workforce.

About the Data

This report utilizes three sources to examine the workforce pipeline in Southern Nevada. Primarily, the BLS' Occupational Employment and Wage Statistics (OEWS) is used for occupational data in the Las Vegas metropolitan area. The OEWS is published annually with data from May in the prior year. For instance, the most recent OEWS data, May 2021, was published at the end of March 2022. The 2021 OEWS data reflect the earnings and

employment levels of occupations in different geographical regions in May 2021. The data are broken down by metropolitan, micropolitan, and combined statistical areas.

The OEWS relies on the Standard Occupational Classification System (SOC) to code the wages and employment of different jobs across the country. The SOC differs from NAICS because NAICS provides industrial sectors, which groups jobs based on the categorization of the business, while the SOC gives a more precise look a singular occupation. Take for example the difference between a retail store manager and a bank manager: NAICS would classify the first manager as part of the trade, transportation, and utilities supersector, and the second would fall under financial activities. On the other hand, SOC would group them together as management occupations. NAICS and SOC are not related; thus, the leisure and hospitality *industry* does not have a defined set of *occupations* within the SOC. For clarification, individual SOC occupations in this report were selected by their relevance to the overall NAICS supersector leisure and hospitality industry.

Second, this report relies on the Las Vegas Global Economic Alliance's 2022 Workforce Blueprint to determine the most current, in-demand occupations in Southern Nevada. The 2022 Workforce Blueprint supplements this report with the top 15 most needed occupations in Southern Nevada, their corresponding SOC code, and their aspirational growth job openings. Wage and employment data for these occupations were taken from the 2021 OEWS. Additionally, educational attainment data from the BLS are collected for both leisure and hospitality occupations and the top 15 in-demand occupations. This allows for wage comparison based on the basic academic requirements for the different types of jobs.

Finally, this report examines a way to bridge the educational attainment gap between the leisure and hospitality industry and the in-demand occupations. One existing program is the MGM College Opportunity Program (COP), a private-public partnership between MGM Resorts International and the Nevada System of Higher Education (NSHE). This collaboration allows full-time MGM employees to attend any NSHE institution for free, through pre-selected online degree options. In order to analyze how the MGM COP has been utilized at UNLV, enrollment data were obtained from the UNLV Office of Decision Support. This deidentified list provided the total enrollment number of MGM COP students, whether they are undergraduate or graduate students, the academic major of each student, and demographic data. With this data, the report assesses how MGM COP enrollment has fluctuated since the program's inception in Fall 2019, which majors students are pursuing, and how to best align these students to pursue the defined in-demand occupations for Southern Nevada.

The Leisure and Hospitality Industry

The leisure and hospitality industry encompasses a vast array of workers within Southern Nevada. For the purposes of this study, five occupational clusters are assigned to the leisure and hospitality supersector: 1) food service and preparation, 2) entertainment and recreation, 3) gaming, 4) lodging, and 5) sales. These categories were selected based on similar SOC codes to the NAICS breakdown of the leisure and hospitality industry into arts, entertainment, and recreation and accommodation and food services.⁸



Figure 1: Leisure and Hospitality Occupational Clusters

Within each of these occupational clusters, there are three tiers of potential occupations based on position type. The three position types are entry-level, mid-level, and upper-level. For instance, Table 2 depicts the three types of occupations within the gaming cluster. Gambling dealers are the entry-level occupations, while first-line supervisors of gambling services workers are the mid-level occupations, and gambling managers are the upper-level occupations. However, the chain of command does not exactly translate for each occupational cluster. Regarding the lodging cluster, baggage porters and bellhops may not be the entry-level occupations to be promoted as maids and housekeeping cleaners. Likewise, the maid and housekeeping cleaners will not necessarily be promoted to lodging managers. These occupations were selected because none within the lodging cluster had an apparent management correlation. However, the three jobs within the lodging cluster do offer an increase in pay between the entry-, mid-, and upper-level occupations, which serves as an equivalent to the promotions identified in other clusters.

The three-tier occupations provide insight into the compensation progression from entry to upper-level jobs. For each of the five clusters, pay increases from each tier. The greatest difference is within the sales cluster: upper-level sales managers earn \$47.72 per hour, or \$99,250 annually, while entry-level cashiers make \$11.06 per hour, or \$22,990 annually. This equates to a \$76,260 annual variation in pay among the different ranks of employees. The smallest difference is within the lodging cluster: upper-level lodging managers earn \$22.92 per hour, or \$47,670 annually, while entry-level baggage porters and bellhops earn \$11.15 per hour, or \$23,190 annually. This equals a \$24,480 annual difference in pay within the occupational cluster. Thus, it is beneficial to have an upper-level occupation within the leisure and hospitality industry because there is a large pay discrepancy among the entry and upper-level occupations.

Additionally, Table 2 provides the typical educational requirements for each leisure and hospitality occupation. This data is also provided by the BLS. No data were available for first-line supervisors of entertainment and recreation workers, except gambling services and entertainment and recreation managers, except gambling. The educational requirements data showcase that, excluding Sales Managers, *none* of the leisure and hospitality occupations require anything more than a high school diploma or equivalent. Three of the occupations (fast food and counter workers, maids and housekeeping cleaners, and cashiers) do not even require a high school diploma. Fast food and counter workers along with cashiers are entry-level jobs while maids and housekeeping cleaners are mid-level jobs. This finding is the first indication of a skills gap within the leisure and hospitality industry. Even within the upper-level leisure and hospitality occupations, workers are not required to have advanced education yet also receive relatively low compensation.

SOC	Occupations	Typical Education	Median Wage		
Code	Occupations	Needed for Entry	Hourly	Annual	
35-3023	Fast Food and Counter Workers	No formal educational	\$10.92	\$22,720	
35-1012	First-Line Supervisors of Food Preparation and Serving Workers	H.S. diploma or equiv.	\$14.70	\$30,570	
11-9051	Food Service Managers	H.S. diploma or equiv.	\$22.74	\$47,290	
39-7010	Tour and Travel Guides	H.S. diploma or equiv.	\$14.87	\$30,930	
39-1014	First-Line Supervisors of Entertainment and Recreation Workers, Except Gambling Services	Data not available	\$18.79	\$39,070	
11-9072	Entertainment and Recreation Managers, Except Gambling	Data not available	\$28.57	\$59,430	
39-3011	Gambling Dealers	H.S. diploma or equiv.	\$8.73	\$18,150	
39-1013	First-Line Supervisors of Gambling Services Workers	H.S. diploma or equiv.	\$23.17	\$48,200	
11-9071	Gambling Managers	H.S. diploma or equiv.	\$37.72	\$78,460	
39-6011	Baggage Porters and Bellhops	H.S. diploma or equiv.	\$11.15	\$23,190	
37-2012	Maids and Housekeeping Cleaners	No formal educational	\$14.50	\$30,170	
11-9081	Lodging Managers	H.S. diploma or equiv.	\$22.92	\$47,670	
41-2011	Cashiers	No formal educational	\$11.06	\$22,990	
41-1011	First-Line Supervisors of Retail Sales Workers	H.S. diploma or equiv.	\$18.12	\$37,690	
11-2022	Sales Managers	Bachelor's degree	\$47.72	\$99,250	

Table 2: Leisure and Hospitality Industry Occupational List, by Cluster

Wages

Figure 2 highlights the differences in annual wages among the leisure and hospitality occupations. The figure is listed in order of Table 2, beginning with the entry-level position for the start of each new color that corresponds to a different cluster. Among the lowest annual wage occupations are gambling dealers at \$18,150; fast food and counter workers at \$22,720; and cashiers at \$22,990. The highest annual wage occupations are sales managers at \$99,250; gambling managers at \$78,460; and entertainment and recreation managers, except gambling at \$59,430. Food service and preparation and lodging have very close

distributions of annual wages among the three-level of occupations. There are greater disparities in annual wage among the entry-level occupations for the Gambling and Sales clusters, indicated by the difference in length of the bars. An entry-level gambling dealer will make \$18,150 annually, while the upper-level gambling manager will make over four times as much of the entry-level occupation at annual wage of \$78,460.

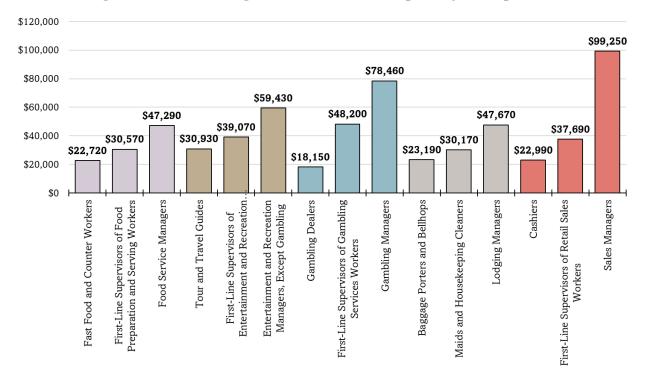


Figure 2: Annual Wage of Leisure and Hospitality Occupations

Figure 3 presents an alternative approach to examining differences among the leisure and hospitality occupational clusters wages. The five clusters are categorized by job tier, shown along the horizontal axis. This approach provides a way to compare the hourly wage for entry-, mid-, and upper-level occupations in each of the five clusters. At the time this data was collected in May 2021, the Nevada state minimum wage was \$8 per hour for employees that were offered health benefits and \$9 per hour for other employees who were not offered benefits.⁹ Regarding entry-level positions, entertainment and recreation starts off at the highest pay at \$14.87 per hour, while gaming earns the least at \$8.73. Figure 3 demonstrates that gambling dealers (the entry-level occupation in the gaming cluster) had a median hourly wage very close to the \$8 per hour state minimum wage. Surprisingly, among the mid-level hourly wage occupations, gaming provides the highest wages at \$23.17. Food service and preparation and lodging are almost akin for the lowest wages in the mid-level group, at \$14.70 per hour and \$14.50 per hour, respectively. Finally, the upper-level tier demonstrates the most amount of hourly wage variation between the five occupational clusters. Once again, food service and preparation and lodging have the lowest values at \$22.74 and \$22.92, respectively. On the high side, sales earns the most in upper-level hourly wage at \$47.72 per hour. Sales managers are also the only occupation that requires a bachelor's degree. This chart illustrates the hourly wage differences among the five leisure and hospitality industry occupational clusters.

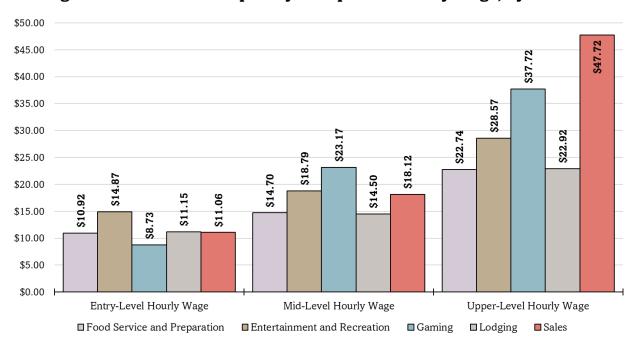


Figure 3: Leisure and Hospitality Occupations Hourly Wage, by Job Tier

Employment

Another important consideration when examining the state of leisure and hospitality industry is employment. The tourism economy was ravaged by the onset of the COVID-19 pandemic with the shutdown of nonessential businesses on March 17, 2020.¹⁰ The following month, Nevada led the nation with the highest unemployment rate at 29.8 percent while the Las Vegas MSA suffered with an unemployment rate of 33.5 percent.¹¹ Leisure and hospitality related jobs comprised a majority of those lost within the short amount of time. Even when

the casinos reopened on June 4, 2020, the tourism industry was initially slow to recover.¹² Yet the latest available data from March 2022 show leisure and hospitality employment is at 90 percent of what it was in March 2019.¹³ This is an impressive rebound for tourism-related employment in the short span of two years. The increase in the employment signifies a demand for service-based experiences that only the Las Vegas Strip can provide. This is advantageous to employees who need a job, as employers struggle to find workers to return to back to the labor force.

Table 3 offers a specific breakdown of employment data for each occupation within the five leisure and hospitality clusters. By far, the most populous jobs are fast food and counter workers and cashiers, though this could certainly be influenced by the fact that these jobs are not confined specifically to the leisure and hospitality industry. Within the more specific tourism clusters of entertainment and recreation, gaming, and lodging, maids and housekeeping cleaners along with gambling dealers are the most prevalent occupations. The entertainment and recreation category as a whole employs the fewest number of workers, while sales employs the most.

SOC Code	Occupations	Total Las Vegas Employment
35-3023	Fast Food and Counter Workers	21,920
35-1012	First-Line Supervisors of Food Preparation and Serving Workers	8,670
11-9051	Food Service Managers	3,650
39-7010	Tour and Travel Guides	380
39-1014	First-Line Supervisors of Entertainment and Recreation Workers, Except Gambling Services	490
11-9072	Entertainment and Recreation Managers, Except Gambling	200
39-3011	Gambling Dealers	11,020
39-1013	First-Line Supervisors of Gambling Services Workers	3,190
11-9071	Gambling Managers	330
39-6011	Baggage Porters and Bellhops	1,790
37-2012	Maids and Housekeeping Cleaners	12,850
11-9081	Lodging Managers	640
41-2011	Cashiers	25,380
41-1011	First-Line Supervisors of Retail Sales Workers	8,820
11-2022	Sales Managers	2,770

Table 3: Leisure and Hospitality Occupations Employment

Furthermore, it is important to examine the employment level of the three-tiered job levels within each occupational cluster. Figure 4 depicts the percentage of employees within entry (coral), mid (beige), and upper-level (light brown) occupational categories, along with the average among the five categories. The results greatly vary between the occupational clusters. Food service and preparation, gaming, and sales have the highest concentration of workers in entry-level positions, while entertainment and recreation and lodging have the highest concentration of employees in the mid-level positions. However, across all clusters, the upper-level occupations comprise a relatively small percent of employees, averaging at less than 10 percent. This is an important distinction because it signifies a roadblock for entry and mid-level employees to be promoted toward higher paying roles.

The ADP Research Institute, a part of the human resources management software company ADP, produced the "2019 State of the Workforce Report: Pay, Promotions and Retention" highlighting national trends among the major job industries.¹⁴ One metric is the span of control, or the number of subordinates that are under the control of a manager.¹⁵ The report mentions "sectors with unskilled workers, where the job functions tend to be routine and relatively simple, are more likely to have wide spans, as is the case with the leisure and hospitality sector, which has the highest overall span of control at 11.4 directs per manager."¹⁶ In other words, the entry-level occupations should have considerably more workers than their supervisor and managerial counterparts. This phenomenon is most prevalent within the leisure and hospitality industry, which means a majority of the Southern Nevada workforce will find it difficult to move among the promotional ranks. Figure 4 provides support for that notion because there are fewer workers within the upper-level occupations than there are in the entry and mid-occupations.

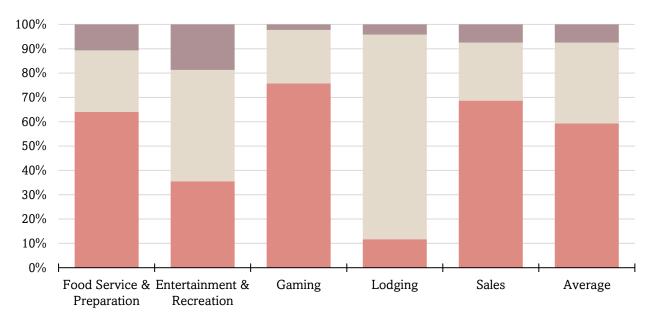


Figure 4: Leisure and Hospitality Occupations Employment, by Occupational Cluster and Job Type

Entry-Level Hourly Employment Mid-Level Hourly Employment Upper-Level Hourly Employment

In-Demand Occupations

While the leisure and hospitality industry is an imperative contributor to the overall success of the Southern Nevada economy, a dynamic and advanced workforce will propel the region into expedited economic prosperity. Economic diversification has been a priority for Clark County, particularly after the Great Recession.¹⁷ Las Vegas, North Las Vegas, and Henderson are all attracting new and notable companies to set up shop in Southern Nevada. The Governor's Office of Economic Development (GOED) reported that in 2021, out of 42 companies that received tax abatements to come to the state, 30 of those businesses are coming to Southern Nevada.¹⁸ What's more, 15 of those businesses that are relocating to Clark County are manufacturing operations.¹⁹ This follows a trend since the Great Recession of major companies relocating to Southern Nevada, including Amazon, Google, and Allegiant. Businesses that are currently building in Southern Nevada include Haas Automation, the Rockefeller Group, and Nuro.²⁰

The expanding Southern Nevada economy will require a renaissance of workforce development. As previously demonstrated, a quarter of the Southern Nevada workforce are in the leisure and hospitality industry, which does not require high educational attainment. This skills gap will pose a challenge to manufacturing and other advanced sectors that relocate to Southern Nevada because there will be an insufficient number of qualified workers. The Las Vegas Global Economic Alliance (LVGEA) in April 2022 produced the *2022 Workforce Blueprint* to highlight the current state and future challenges of the region's economy. Provided in the report is a list of the top 100 high-demand occupations for Southern Nevada's target industries.²¹ To simplify the list and provide a comparable number of jobs that were outlined for the leisure and hospitality industry, the top 15 occupations were included in this report. Figure 5 represents the four clusters of the most demanded jobs. These are 1) computer analysts & developers, 2) engineering, 3) business and management, and 4) other for occupations that did not fit into the three prior categories.

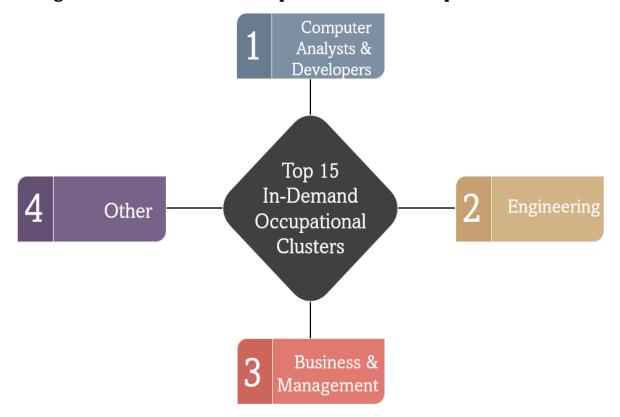


Figure 5: Southern Nevada's Top 15 In-Demand Occupational Clusters

Table 4 provides a breakdown of the jobs that comprise the four in-demand occupational clusters. Occupations are color coded based on their designated cluster. These in-demand occupations span a broad spectrum of supersector industries. For instance, the computer analyst and developers occupational cluster aligns with the information supersector.²² However, the engineering occupational cluster could align with construction, natural resources and mining, or information supersectors.²³ Thus, as the economic ecosystem diversifies, it will require worker talent from varying fields. The two most needed occupations are different types of software developers; the demand for these occupations is related to the new types of businesses coming to Southern Nevada. Additionaly, it is important to note that all occupations on this list have a bachelor's degree or higher for their typical entry-level education. Nurse practitioners require a master's degree and veterinarians require a doctoral or professional degree. The educational requirements for top demanded jobs indicate that the demand for higher skilled workers will require higher educational attainment versus the majority of occupations within the leisure and hospitality industry.

Rank	soc	Occupations	Typical Entry-Level	Median Wage		
	Code	occupations	Education	Hourly	Annual	
1.	15-1132	Software Developers, Applications	Bachelor's degree	\$47.94	\$99,720	
2.	15-1133	Software Developers, Systems Software	Bachelor's degree	\$47.94	\$99,720	
3.	17-2051	Civil Engineers	Bachelor's degree	\$47.11	\$97,990	
4.	11-9199	Managers, All Other	Bachelor's degree	\$37.99	\$79,030	
5.	29-1131	Veterinarians	Doctoral or professional degree	\$47.51	\$98,810	
6.	17-2071	Electronics Engineers, Except Computer	Bachelor's degree	\$49.08	\$102,080	
7.	19-2041	Environmental Scientists and Specialists, Including Health	Bachelor's degree	\$37.72	\$78,450	
8.	11-1021	General and Operations Managers	Bachelor's degree	\$37.51	\$78,020	
9.	17-2011	Aerospace Engineers	Bachelor's degree	\$49.08	\$102,080	
10.	15-1122	Information Security Analysts	Bachelor's degree	\$38.45	\$79,980	
11.	29-1171	Nurse Practitioners	Master's degree	\$61.52	\$127,970	
12.	15-1121	Computer Systems Analysts	Bachelor's degree	\$45.67	\$94,990	
13.	13-1199	Business Operations Specialists, All Other	Bachelor's degree	\$29.36	\$61,070	
14.	17-1011	Architects, Except Landscape and Naval	Bachelor's degree	\$37.34	\$77,660	
15.	17-2081	Environmental Engineers	Bachelor's degree	\$62.41	\$129,820	

Table 4: Southern Nevada's Top 15 In-Demand Occupations List

Figure 6 presents the annual wages of Southern Nevada's top 15 in-demand occupations. Between the four occupational clusters, business and management offers the lowest annual wage, averaging \$72,707 from the three indicated occupations. Engineering ranks the best in terms of average annual salary, averaging \$107,993 from the four designated occupations. In terms of singular jobs, environmental engineers earn the most annually at \$129,820 with nurse practitioners closely behind at \$127,970. Business operations specialists, all other earns the least annually at \$61,070. Yet it is important to note that the lowest annual wage from the top 15 in-demand occupations list is \$42,920 greater than the lowest annual wage occupation from the leisure and hospitality industry, gambling dealers. This demonstrates a perceptible difference in pay among the leisure and hospitality industry occupations and the in-demand occupations in Southern Nevada.

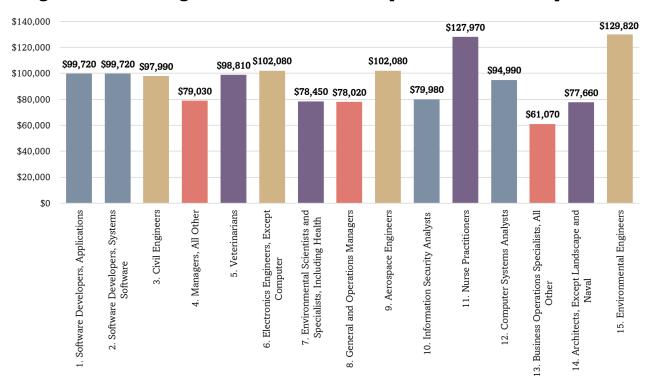


Figure 6: Annual Wage of Southern Nevada's Top 15 In-Demand Occupations

Additionally, the *2022 Workforce Blueprint* provides current employment and annual job openings for each of the in-demand occupations. The bars in Figure 7 display the current total employment for each occupation in Las Vegas, while the black dots represent the annual openings projected based on aspirational growth targets. The LVGEA's calculated

aspirational growth targets rely on Southern Nevada economic trends, shifts of predominant industries coming to the region, and other projections.²⁴ In conjunction, LVGEA aligned each occupation's aspirational growth factor with the anticipated growth forecasted by the Department of Employment, Training, and Rehabilitation (DETR)'s base employment analysis.²⁵ Hence, the aspirational growth factor considers many different facets when determining future employment growth of each in-demand occupation.

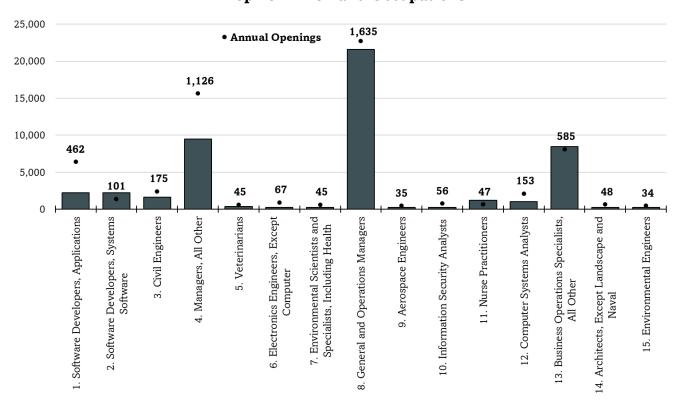


Figure 7: Total Employment and Annual Job Openings for Southern Nevada's Top 15 In-Demand Occupations

Figure 7 reveals that all in-demand occupations will have numerous job openings. The amount of job openings is relative to the current amount of total employment. For instance, general and operations managers already employs a large number of Southern Nevadans (21,600), and it is also projected to have the highest amount of job annual job openings (1,635). On the other hand, environmental engineers are projected to have the lowest amount of annual job openings (34) but are also tied for the lowest current number of employees (270, along with environmental scientists and specialists). The high number of annual

openings across all of the top 15 occupations is indicative that there is a great demand for employees to fill these jobs. Each occupation will have a significant amount of career openings in the near future. However, Table 4 reveals that all of these jobs require a bachelor's degree or more for entry-level education requirements. With one-fourth of the Southern Nevada workforce in low-educational attainment occupations, it will be difficult for these employers in the top demanded occupations to find skilled employees. The following section of the report examines a way to remedy the labor force skill gap.

Recommendations for Policy

The data presented in this report so far illustrate that there is a workforce skill gap within the Southern Nevada workforce pipeline. Las Vegas' economy is heavily reliant on the leisure and hospitality industry, which is very volatile in times of economic uncertainty and provides relatively low-paying jobs. The top in-demand occupations provide more sustainable careers and higher wages, yet they all require higher educational attainment. Employers cannot match the abundance of lower-skilled workers to the demands of innovative employers

Not to mention, lower-skill occupations might become obsolete within the near future. MIT researcher, Andrew McAfee, and Stanford University senior fellow, Erik Brynjolfsson, write about the potential harm of automation to the low-skill workforce in their novel *The Second Machine Age: Work Progress, and Prosperity in a Time of Brilliant Technologies.*²⁶ The authors illuminate that low-skill jobs are susceptible to automation because artificial intelligence is first to replace jobs that rely on routine tasks.²⁷ Examples of this phenomenon already exist within the Las Vegas leisure and hospitality industry. The Tipsy Robot located in the Miracle Miles Shops pours robot-crafted alcoholic drinks for dazzled tourists, concocting 1,440 drinks per day.²⁸ The Vdara Hotel offers room service from Fetch and Jett, two Relay robots who deliver meals, drinks, and spa products to guests all from the comfort of their hotel room.²⁹ The Fred Segal Market at Resorts World is a cashier-less convenience store. Amazon's "just walk out" technology allows shoppers to enter with a credit card and

leave with their items and no human interaction.³⁰ All of these examples demonstrate that some entry-level leisure and hospitality occupations are subject to automation. This inherent risk begs for a reskilling of Las Vegas workforce.

The leisure and hospitality worker renaissance will need to be bolstered by three key contributors: private businesses, higher education institutions, and state and local governments. Yet these entities cannot operate alone. Rather, they must collaborate to strengthen the Las Vegas employment ecosystem. The first way is through private-public partnerships, where private businesses fund their employee's education at public universities or colleges. The second way is for government workforce development agencies to bolster connections with existing businesses in Southern Nevada and encourage relationships with new companies coming the area. Finally, the third way is for the government to increase higher education funding. These three policy recommendations are visualized in Figure 8. Without support from private businesses, higher education institutions, and the government, the Southern Nevada workforce will continue the cycle of a predominate low-wage workforce instead of welcoming the potential opportunities tied to economic diversification.

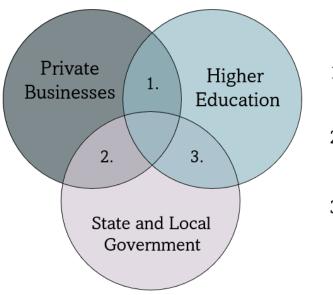


Figure 8: Policy Recommendations

- Private-Public 1. Partnerships like MGM COP
- Expand Outreach
- 2. from Workforce Development Agencies
- 3. Increase Higher Education Funding

Private-Public Partnership Case Study: The MGM COP

One of the most prominent names in the tourism industry catalyzed the private-public partnership opportunity for leisure and hospitality employees to pursue higher education. MGM Resorts International created the College Opportunity Program (COP), "the first ever partnership between a state-wide higher education system and a Fortune 500 company," uniting with the Nevada System of Higher Education (NSHE) in 2019.³¹ The COP offers eligible MGM Resorts employees free tuition for the following six NSHE institutions: University of Nevada, Las Vegas; University of Nevada, Reno; Great Basin College; Western Nevada College; College of Southern Nevada; and Truckee Meadows Community College.³² MGM employees can earn a certificate, associate's degree, bachelor's degree, master's or professional degree from a predetermined list.³³ The COP has already gained significant traction in its short three years. Figure 9 provides the undergraduate and graduate enrollment data from the University of Nevada, Las Vegas (UNLV) for each semester since the program's inception. Enrollment peaked in the Spring 2020 semester, but then decreased for subsequent semesters. This follows a national trend of more than half a million students dropping out of college during the COVID-19 pandemic.³⁴ Nonetheless, the MGM COP is significantly impacting the lives of those taking advantage of the program. Across all semesters, excluding Summer 2020, undergraduate enrollment has surpassed graduate enrollment. Enrollment is the lowest during the shorter summer semesters.

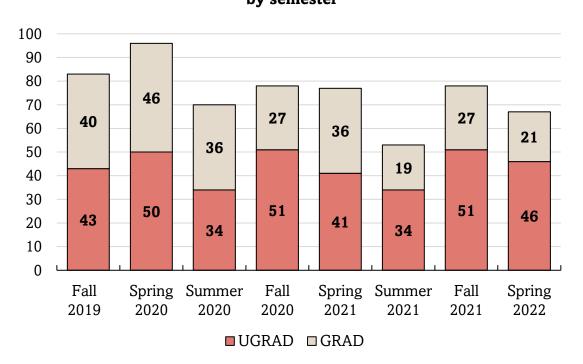


Figure 9: UNLV Undergraduate and Graduate Enrollment in the MGM COP, by semester

Table 5 presents the enrollment by degree at UNLV for each of the semesters. It is important to note that MGM COP students are constrained to the degree programs they can pursue. At UNLV, the Fall 2019 cohort had ten options to choose from, six undergraduate degree programs and four master's degree programs. In Spring 2022, students had fifteen options, ten undergraduate degree plans, two certificates, and three master's degree programs.³⁵ Take into consideration that not all the available majors correlate to the leisure and hospitality industry. Skills acquired through an urban leadership or criminal justice degree could be widely applicable across multiple industries, further developing the student's assets which will help them become more employable. Also, not every program listed in Table 5 was available each semester, hence why some of the boxes have null data. The enrollment data is longitudinal, meaning that a student pursuing the Anthropology BA in Fall 2019 could be the same student in the total for Anthropology BA in Spring 2022. Among the undergraduate majors, communication studies and psychology have been popular choices for MGM COP students. Regarding master's degrees, hospitality administration has had the most number of students by a large majority.

Academic Majors	Fall 2019	Spring 2020	Summer 2020	Fall 2020	Spring 2021	Summer 2021	Fall 2021	Spring 2022
Anthropology BA	2	2	2	3	3	2	3	3
Business PRE				1		1	1	2
Communication Studies BA			8	9	10	9	9	6
Communication Studies PRE	23	23	5	3	3	1	3	3
Criminal Justice BA				2		1	2	2
Criminal Justice PRE				2	1		2	2
Emergency and Crisis Mgmt MS	3	3		1	2		1	1
Entrepreneurship BSBA				1		1	1	1
Exec Mstr Hlthcare Admn EMHA				1	1		1	
Graduate Non-degree Seeking				1		1	1	
Health Care Admin PRE	5	6	3	2	2	1	2	2
Health Care Administration BS	1	1	1	2	2	2	2	2
Hospitality Administration MHA	29	31	24	21	28	17	21	17
Hospitality Management BS			5	6	6	5	6	7
Interdisc-Multidisc Studies BA	2	1		2	1	1	2	2
Interdisc-Social Sci Stud BA	7	3	1	4	2	1	4	3
Psychology BA	1	9	5	13	8	7	13	11
Urban Leadership MA	8	12	12	3	5	1	3	3
Urban Studies BS	2	5	4	1	3	2	1	
Total	83	96	70	78	77	53	78	67

Table 5: UNLV Degree Program Enrollment, Fall 2019 through Spring 2022

The MGM COP is a clear example of a private-public partnership that enables employees to invest in their own human capital. The program has already successfully graduated twenty-seven students at UNLV: six undergraduates and twenty-one master's students.³⁶ However, this program cannot stand alone in the community. Other tourism corporations like Caesars and Station Casinos should adopt a similar program to advance their workers with free higher education and certificate training. The training options should be broad so that employees could use their education to transition into higher-wage jobs that are potentially in different industries. Another option is to expand private-public partnership outreach beyond the leisure and hospitality industry. One example is the Starbucks College Achievement Plan (CAP) with Arizona State University (ASU). Similar to the MGM COP, the Starbucks CAP provides full tuition coverage for eligible employees to attend an online degree program at ASU. A private-public partnership should be an option large companies in diverse industries, such as Switch or the Raiders, explore in order to heighten the skills of their entry-level employees to promote them toward managerial roles. Businesses could also align their chosen curriculum with academic majors or certificates that benefit their company. For example, Switch could create a private-public partnership with NSHE to enroll their employees in computer science courses in order to become software developers, a highly sought-after occupation in Southern Nevada. Private-public partnerships are often used for investment in infrastructure projects, however workforce training and reskilling share similar goals of promoting the general welfare. The MGM COP needs to continue strengthening the human capital of Southern Nevada and other notable businesses should follow suit to create their own private-public partnerships with NSHE.

Expand Outreach from Workforce Development Agencies

Another policy recommendation for creating a holistic approach to strengthening workforce development is increasing the influence of workforce development agencies. In Southern Nevada, workforce development agencies include the Las Vegas Global Economic Alliance (LVGEA), Workforce Connections, and the Vegas Chamber. The goal of all these organizations is to foster business development and assist community members in finding terrific employment opportunities. The success of these agencies is undeniable. Over the past ten years, the LVGEA has created over 33,000 jobs, supported 3,000 local businesses, and relocated 301 companies to Las Vegas.³⁷ The Vegas Chamber hosts more than 100 annual event and programming opportunities to connect the business community.³⁸ Recently, Workforce Connections was awarded \$1 million in ARP funding by the City of Las Vegas.³⁹ This funding should be used to expand outreach between Workforce Connections and businesses to assess what kind of workers they need and work with prospective employees to see where the community would like to work. There must be more of a cohesive relationship between companies and workforce development agencies to connect prospective candidates to impactful jobs.

Increase Higher Education Funding

More higher education funding equals more opportunities to assist Southern Nevadans with expanding their skillsets. Higher education budgets were slashed during the COVID-19 pandemic due to budget shortfalls. In Nevada, two rounds of budget cuts for fiscal year 2020 and fiscal year 2021 reduced higher education monetary resources by \$128.9 million.⁴⁰ Reductions in higher education spending will persist, as there will be a 12 percent decrease, or \$170 million loss, in higher education spending between fiscal year 2022 and fiscal year 2023.⁴¹ The lack in funding leads to an array of concerning issues. Among these risks are a decrease in availability of student services, vacant faculty positions and hiring freezes, and the threat of UNR and UNLV losing their Carnegie R1 research status if they cannot meet the required employee-to-student ratios.⁴² The ripple effects of higher education budget deficits impact enrollment. Enrollment decreased at the College of Southern Nevada (CSN), the state's largest higher education institution from Fall 2019 to Fall 2020. CSN witnessed a 11.7 percent drop in enrollment, equating to nearly 4,000 students in the span of one year.⁴³ A reduction in students leads to less Southern Nevadans learning invaluable skills that they can use in their professional careers.

The alarming concerns of a higher education funding decrease should prompt state and local governments to take action by reinstating some lost funding. One way this could be achieved is through federal dollars. The American Rescue Plan Act (ARPA) was passed by Congress on March 11, 2021, to supplement state and local governments with resources to recover from the COVID-19 pandemic.⁴⁴ Clark County has yet to submit their planned project report to the federal government, meaning that it is possible for Clark County to funnel ARPA money to higher education.⁴⁵ Skills training and certificates would also be a great avenue for ARPA funding. According to Jim Horden at London University, "Concerns about whether the stock of 'human capital' is sufficient to drive desired improvements in economic productivity may encourage governments to introduce policies that stimulate growth in new forms of higher education."⁴⁶ Therefore, higher education funding could be supplemented with federal money if state and local governments choose to prioritize their future workforce. Higher education and certificate completions play an imperative in the reskilling and reshaping of the Southern Nevada economy.

Discussion and Conclusion

Overall, the findings in this report illuminate the current state of the Las Vegas labor force, present workforce demands, and provides three policy recommendations to bridge the gap in the current workforce and the one that will be needed. Leisure and hospitality employs the most Southern Nevadans out of all the other supersectors, with rapid growth nearing pre-pandemic levels of employment. Within the leisure and hospitality industry, five occupational clusters were identified: 1) food service and preparation, 2) entertainment and recreation, 3) gaming, 4) lodging, and 5) sales. This was further broken down into a threetiered ranking by cluster of entry-, mid-, and upper-level occupations. The data reveal that wages are relatively low across the board in the leisure and hospitality industry. Moreover, educational requirements for leisure and hospitality industries are also very low. Entry-level occupations earn less in each occupational sector when compared to their upper-level counterparts. The educational attainment data suggest that promotions among the ranks are more due to time within the job rather than based on education. Outside research also unveils that low-skill industries, like leisure and hospitality, are more likely to have employees concentrated in the entry-level positions.

The LVGEA's 2022 Workforce Blueprint was utilized to examine the most needed jobs within Southern Nevada. Data reveal that all of these occupations require higher education, but also pay substantially more than the leisure and hospitality occupations. Finally, this report recognizes the skills and educational attainment gap within the Southern Nevada economy and provides policy recommendations for decision makers in private business, higher education, and state and local government. First, creating more privatepublic partnerships like the MGM College Opportunity Program would create partnerships between private businesses and higher education institutions. Next, expanding the outreach of workforce development agencies would allow employers to get connected with qualified candidates who are seeking employment. Finally, an increase in higher education funding would provide better opportunities for existing and potential students within Southern Nevada. Across all options, the cornerstone of these recommendations is accessible higher education. Andria Smythe with the Washington Center for Equitable Growth reinforces this idea through the following, "Institutions of higher learning shape and supply skilled labor to the economy. They absorb excess workers in low-income jobs from the labor market by providing a productive alternative to work and by providing opportunities for future advancement."⁴⁷ Southern Nevada should target this mindset in order to strengthen its workforce pipeline in order to achieve the coveted goal of economic diversification.

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