

NEVADA GOVERNOR'S OFFICE OF

Economic Development

ANNUAL REPORT 2022



Nevada Governor's Office of

ECONOMIC DEVELOPMENT

Empowering Success



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LETTER

FROM EXECUTIVE DIRECTOR THOMAS BURNS



EXECUTIVE
DIRECTOR
THOMAS BURNS



GOVERNOR
JOE LOMBARDO

GOVERNOR JOE LOMBARDO declared in his State of the State Address that a top priority of his administration will be to restore Nevada's reputation as a pro-business, pro-development state. A week after making this speech, the Governor appointed me as the executive director of the Governor's Office of Economic Development.

For those of you who don't know me, I started my career as a Certified Public Accountant before spending the past 30 years with Cragin & Pike Insurance in Las Vegas where I spent the last 12 as President. Coming from the business community and being heavily involved in the Las Vegas Chamber of Commerce, I'm excited about the opportunity to ensure in the Governor's words that Nevada is back open for business, effective immediately.

Working with SRI International, GOED has completed its first comprehensive economic development strategy since the agency's inception in 2011. The plan entitled "Realizing Nevada's Electric, Innovative, and Connected Future" lays out Nevada's pathway to advancing five target industries over the next five years. Nevada is uniquely positioned to be a global leader in the complete cycle of clean energy innovation. The target industries we have identified for Nevada include:

- Information Technology
- Transportation & Logistics
- Natural Resources & Technologies
- Hospitality, Tourism, Sports, & Creative Industries
- Advanced Manufacturing

Our updated strategic plan builds on the success of GOED over the past decade and helps us expand the opportunities the state has going into the future. "Realizing Nevada's Electric, Innovative, and Connected Future" is an exciting blueprint that is included in this annual report to help us attract quality companies that will not only create good jobs but generate additional tax revenue.

GOED has had an outstanding track record during its existence and 2022 was another banner year. Since January of 2022, GOED approved \$169.8 million in abatements for 23 companies. Within two years these companies will bring on 2,381 jobs at \$30.94 an hour and make \$2.1 billion in capital investment. Over the next 10 years these companies will generate more than \$601 million in new net tax revenues for our state. We calculated that the return on investment of these abatements to be \$128.25 for every \$1 abated. In addition to these impressive statistics, GOED recognizes its responsibility to Nevada taxpayers and conducting its abatements program in public. GOED's website was ranked this past year as the most transparent of all state economic development websites in the nation by watchdog group Good Jobs First.

Our innovation-based Economic Development Office led by Karsten Heise also had a banner year. The U.S. Treasury approved up to \$112.9 million for Nevada's State Small Business Credit Initiative (SSBCI). We launched the first-ever nationally ranked small business and startup accelerator to operate in Nevada. Operated by gener8tor, the accelerators have already identified five companies in both Las Vegas and Reno and received \$100,000 investments from a venture fund. We partnered with the Attorney General's Office to create two innovative programs in the state using about \$10 million in settlement funds. First, we created a Nevada Community Development Financial Institution to assist minority owned businesses in Southern Nevada. We also stood up a program to support science and engineering students working on entrepreneurial programs at UNLV and UNR.

GOED

Our workforce development office led by Stacey Bostwick continued to assist new industry in the state, working to match their skilled workforce needs through programs in the Nevada System of Higher Education. The Workforce Innovations for the New Nevada (WINN) fund has set up a Commercial Driver's License Program at Western Nevada College and a training center at Truckee Meadows Community College to support Panasonic in Reno.

GOED's Film Office this past year issued film incentives to seven projects totaling \$7,377,082 with economic activity to Nevada totaling \$42,410,262. There were 13 in process productions with estimated incentives totaling \$9,836,492 with economic activity to Nevada totaling \$51,417,084. This activity created 214 full time equivalent jobs for these productions.

GOED was instrumental in the groundbreaking of the Helios Health and Wellness Campus in North Las Vegas. This historic venture will usher in a new era of economic development and job creation that will result in a transformative campus and economic hub to serve the growing population of North Las Vegas, as well as the southern Nevada community. Slated for completion in phases, this project is anticipated to create more than 10,000 jobs over the next 7 to 10 years, therefore fulfilling a tremendous need for health and wellness in the area. GOED will continue to work with the development team to ensure the best-suited partners are selected to build out the 135-acre site.

With federal and state funding, the newly named "APEX Accelerator (formerly the Nevada Procurement Technical Assistance Center)" worked with about 1,618 clients with a total of 37 outreach events or presentations either led by the Accelerator or a resource partners that involved the APEX Accelerator. APEX Accelerator, led by Joan Rueben, assisted with 1,517 prime contracts valued at a total of \$236,995,844. We also assisted clients earn 35 subcontracts valued at a total of \$25,528,476.

The Rural and Economic Development Division of GOED, led by Shari Davis, also made a major impact outside of our urban areas. Some of the

highlights include \$3,674,024 in Community Development Block Grant (CDBG) funds, led by Jessica Sanders, that were awarded to 17 projects in Carson City and rural Nevada, benefitting 17,625 Nevadans in five counties, the City of Ely, the City of Fallon, the City of Fernley, the City of Wells and Carson City. Nevada counties and cities invested an additional \$1,930,337 in matching grant funds.

GOED received \$14,448,197 in Community Development Block Grant CARES (CDBG-CV) funds from the U.S. Department of Housing and Urban Development to be used for COVID-related projects that must be used to prevent, prepare for, or be in response to the COVID-19 pandemic. \$14,192,735 has been allocated to Nevada communities. In 2022, CDBG staff reimbursed \$2,693,712 in requests from 14 communities and closed out 14 grants. GOED's CDBG was awarded \$1,620,125 for the Recovery Housing Program (RHP), a pilot program through the U.S. Department of Urban Development (HUD) intended to support individuals in recovery from a substance use disorder to become stably housed and on a path to self-sufficiency.

I'd like to close out with work GOED coordinated in Southern Nevada addressing critical infrastructure needs. As Nevada's economy continues to expand and the state's population increases, addressing the state's infrastructure needs is essential to long-term sustainability and resiliency. Since emerging from the pandemic, GOED has advanced a robust agenda to solve our infrastructure challenges.

Working with community leaders in Southern Nevada, GOED Deputy Director Kris Sanchez established a Working Group that was assembled to evaluate Southern Nevada's infrastructure assets and deficiencies, to identify its opportunities in the Southwest macro region, and to envision a niche for Southern Nevada that would add significant value to the state's overall economic ecosystem. The overarching goal was to position Southern Nevada as a highly attractive destination for private sector investment focused on 21st century-relevant growth.



STATE OF THE ECONOMY

By Bob Potts, GOED Deputy Director

GOED



AS THE STATE AND THE NATION

continued adjusting to the post-pandemic world in 2022 and responding to the various economic shocks and new realities that have settled in, the Governor's Office of Economic Development (GOED) continued pursuing its vision of fostering a vibrant, innovative, and sustainable economy with high-paying jobs for all Nevadans.

Nevada's pro-cyclical economy has led us to have higher highs and lower lows than the nation as a whole when it comes to boom-and-bust business cycles, as evidenced most recently by Nevada having the highest reported unemployment rate ever recorded for any state in April 2020, at 28.2 percent statewide versus a high of 14.7 percent for the nation. Across the state's metros, Las Vegas unemployment reached 31.1 percent while Reno-Sparks topped out at 18.2 percent and Carson City saw a high of 19.1 percent in April 2020. By December 2022, the statewide unemployment rate fell back down to 5.2 percent, much closer to the nationwide rate of 3.5 percent though still currently the highest of all 50 states.

Today, Nevada's economy does not look the same as it did in 2019. From February to May 2020, Nevada's Leisure & Hospitality sector lost 210,000 jobs—more than half of all jobs in the sector, and 84 percent of those losses were

concentrated in Clark County. Through December 2022, the state has regained 191,000 lost Leisure and Hospitality jobs, to sit 19,000 jobs or 5.3 percent below the pre-pandemic peak for the sector. At the same time, the state has gained 26,000 additional jobs in Trade, Transportation, and Utilities that didn't exist before the pandemic hit. Additionally, sectors such as Construction (up 8,800 jobs), Manufacturing (up 8,000) and Professional/Technical Services (up 5,700) are contributing to the recovery and resilience of Nevada's economy. Overall, despite the lagging recovery for Leisure and Hospitality, total jobs in the state reached 1,476,000 in December 2022, which is 26,400 jobs above the February 2020 pre-pandemic peak.

This job recovery was also mirrored by recoveries in the state's financials, such as the record-high Sales Tax (up 21.7 percent over the year) and Gaming Percentage Fee (up 40.8 percent) collections in State Fiscal Year 2022. Overall, Nevadans are back to work and spending money, but local, regional, and worldwide economic shocks and struggles persist.

The year 2022 saw increasing geopolitical instability in the form of Russia's invasion of Ukraine, as well as continued pressure on inflation from both the demand and supply sides. When the pandemic hit, many service-based industries were severely limited or shut down and spending patterns, enhanced with stimulus dollars, shifted to goods. This created demand-side pressure on the supply chain, while geopolitical instability and covid-related supply chain problems put supply-



STATE OF THE ECONOMY CONTINUED

side pressure on goods prices as well. When vaccines became widely available and much in-person activity resumed, the pent-up demand for services (travel, amongst other things) pushed up inflation pressure on the service side as well, leading to inflation peaking at 9.1 percent in June, its highest level since 1981.

According to the Federal Reserve, U.S. consumers accumulated \$2.1 trillion in excess savings during the pandemic, thanks to reduced spending as well as federal fiscal relief. Through the end of 2022, \$1.3 trillion of this excess savings has been drawn down, leaving more than \$800 billion in excess savings still available for spending. Meanwhile, spending on goods still represents a higher portion of overall consumption (versus spending on services) than before the pandemic. Consumer spending is the largest component of Gross Domestic Product (GDP) and was a primary contributor to the 2.1 percent real growth in 2022, according to advance estimates from the Bureau of Economic Analysis.

These trends suggest that although inflation has begun easing, price pressures remain elevated. The Federal Reserve and its Federal Open Market Committee (FOMC) wield monetary policy in support of its dual mandate of price stability and full employment. In order to tamp down on inflationary spending the FOMC increased the federal funds rate by four percentage points in 2022, from just 0.25-0.50% as late as March 2022, to 4.25-4.50% in December. The resulting change in interest rates has had and will continue to have significant effects on everything from business investment and expansion, to home prices and housing starts in Nevada. So far, the labor market both nationally and in Nevada has remained robust through these interest rate increases, with an average of two job openings for every unemployed person. Business investment has also remained healthy but is showing signs of slowing. The University of Michigan Consumer Sentiment index reached an all-time low in July 2022, and through the end of the year remained below 2021 levels. The Institute for Supply Management's (ISM) indices for manufacturing and services both remained below 50 through the end of 2022, suggesting a contraction.

These conflicting economic trends—strong spending, coupled with high price increases—are reflected in GOED's results for the year as well. During the year, GOED and our partner regional development authorities assisted 47 companies in relocating or expanding to



Nevada, bringing in an additional 3,719 jobs to the state. These figures, though great news for the state, represent declines of about 30 to 40 percent from the prior year. However, the average wages paid by assisted companies increased by 15 percent to almost \$31/hour, while capital investment from assisted companies tripled to over \$2.2 billion dollars during the year. We are seeing success in diversifying our economic base, with 40 percent of the assisted companies in the manufacturing sector, followed by 19 percent in logistics and operations and 13 percent in information technology/business services.

As described above, there are areas of weakness and of strength in Nevada's economy. State economists surveyed by GOED monthly have tamped down their expectations for economic growth in 2023, though the consensus remains positive and does not expect an extended contraction. We estimate recession risk for the upcoming year somewhere around a 50-60 percent chance, corresponding to national GDP growth of anywhere from flat to two percent.

In the incoming year we look forward to taking advantage of the unique tailwinds at the state's back and leveraging the opportunities that come with working with a new administration and Legislative Session. The pandemic hit Nevada particularly hard, but out of the challenges have come unique opportunities in areas such transportation and distribution, advanced manufacturing and onshoring, and emerging clean technologies. GOED will soon be releasing a new State Plan, to replace the Recovery and Resilience Plan enacted during the COVID pandemic. We look forward to building Nevada's electric, innovated, and connected future—the Nevada Way!

PERFORMANCE REPORT

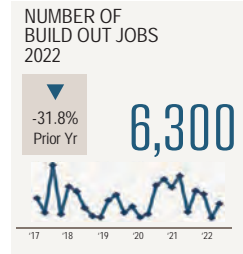
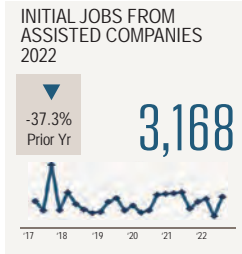
By Hayley Owens, Research Manager

GOED

Nevada Governor's Office of
ECONOMIC DEVELOPMENT

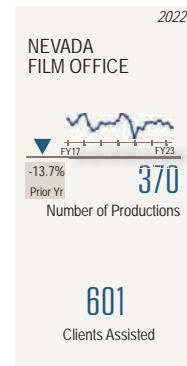
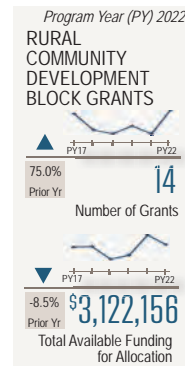
ECONOMIC DEVELOPMENT - 2022

2022 ANNUAL PERFORMANCE REPORT



*Assisted companies include both incentivized and non-incentivized companies.

DIVISIONS



PERFORMANCE REPORT CONTINUED

JOBS ANNOUNCED BY ASSISTED COMPANIES

In 2022, 47 companies committed to adding 3,168 jobs to Nevada's economy in the next two years. Once these companies are fully staffed, the build-out job estimate is 6,300 jobs. Incentivized companies are bringing in 2,381 jobs, while non-incentivized assisted companies are adding 787 jobs to the workforce.

In 2022, 40.4 percent of the assisted companies were in the manufacturing sector, followed by 18.8 percent in logistics and operations and 13.4 percent in information technology/business services. The remaining 27.3 percent was split between various other sectors.

WAGES PAID BY ASSISTED COMPANIES

Average wages paid by assisted companies grew significantly through 2022, with the first quarter average at \$26.92 and the fourth quarter average up to \$36.54, almost \$10 higher per hour. The overall average for 2022, at \$30.72, is almost \$4 higher than in 2021.

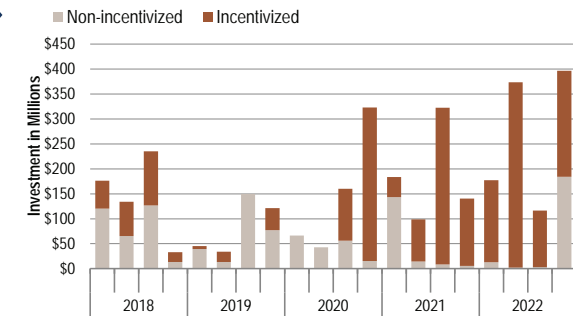
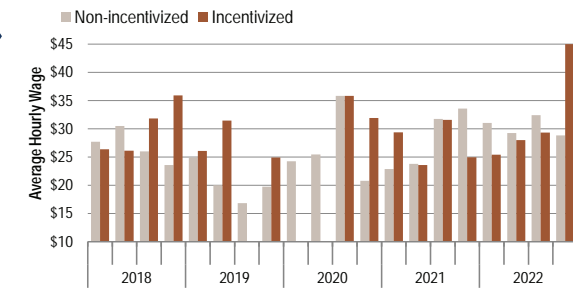
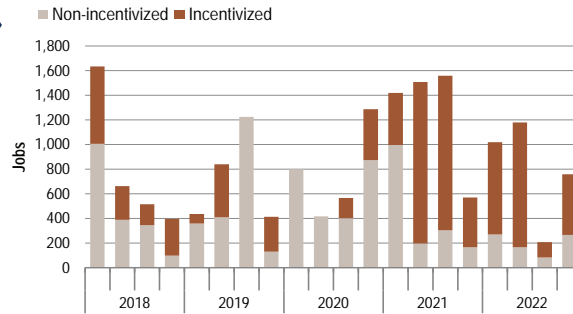
Average wages from incentivized companies came in at \$34.35 this year while non-incentivized companies had average wages of \$29.91 per hour.

ASSISTED COMPANY INVESTMENT

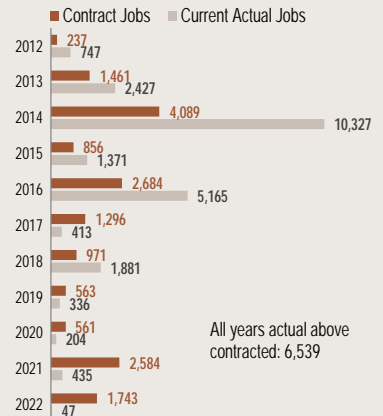
Capital investment by assisted companies (aside from large-scale projects*) totaled \$1,063.4 million in 2022, \$861.0 million of which is attributed to incentivized companies. Capital investment (excluding large-scale) in 2022 is above last year's total by \$302.1 million.

Additionally, 2022 saw a \$119.0 million investment from a company receiving a Data Center abatement, and a \$1.10 billion investment by Redwood Materials.

Total investments from incentivized companies in 2022 were \$2.09 billion.

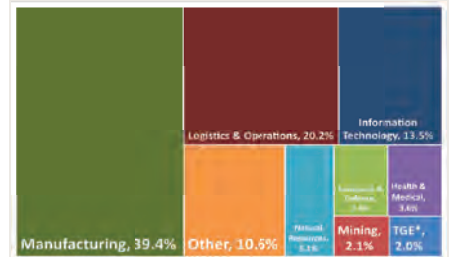


CONTRACT AND ACTUAL JOBS* BY NEW INCENTIVIZED COMPANIES



As new incentivized companies add staff, the number of actual jobs has exceeded those that were contracted. *Actual job counts as of 2022:Q2. Contract jobs do not include 2022:Q4 approved companies.

ASSISTED COMPANY INDUSTRY MIX 2009-2022, BY NUMBER OF COMPANIES



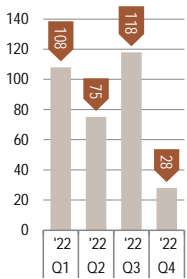
*Tourism, Gaming, and Entertainment

1 Large scale projects include Boulder Solar Power (\$1B), Apple (\$1B), Tesla (\$5B), Redwood (\$1B), or companies that qualified for Aviation or Data Center abatements.

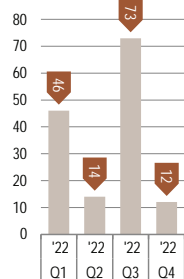
PERFORMANCE REPORT CONTINUED

RECRUITMENT ACTIVITY: 2022

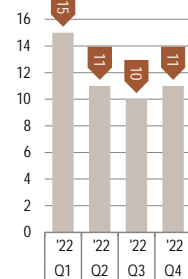
NEW LEADS



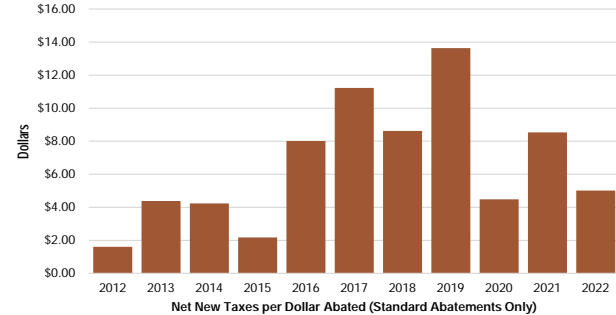
NEW PROSPECTS



WINS



STANDARD ABATEMENT RETURN ON INVESTMENT



The return on investment (ROI) of abated companies is determined by dividing the estimated dollar amount of new taxes after abatements by the dollar amount of taxes abated. In 2022, for every tax dollar abated in the standard abatement, \$5.01 of net taxes will be collected. Since 2010, the dollar-for-dollar return on investment of standard abatements is \$5.39. The ROI for all abatements (including standard, aviation, data center, and specialized abatements) is \$2.46 since 2010, and \$3.55 in 2022.

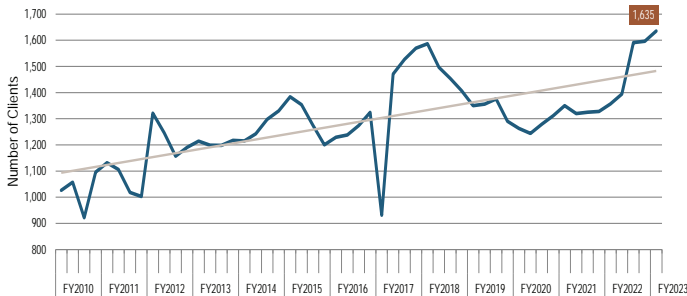
ANNUAL ASSISTED COMPANY STATISTICS

YEAR	COMPANIES	ALL ASSISTED COMPANIES				INCENTIVIZED COMPANIES				NON-INCENTIVIZED COMPANIES					
		INITIAL JOBS	BUILD-OUT JOBS	AVERAGE WAGE	CAPITAL INVESTMENT	COMPANIES	INITIAL JOBS	BUILD-OUT JOBS	AVERAGE WAGE	CAPITAL INVESTMENT	COMPANIES	INITIAL JOBS	BUILD-OUT JOBS	AVERAGE WAGE	CAPITAL INVESTMENT
2016	49	3,775	5,731	\$16.91	\$541,486,207	22	2,899	4,042	\$17.33	\$519,661,707	27	876	1,689	\$15.52	\$21,824,500
2017	62	4,994	6,961	\$18.89	\$267,725,624	24	2,129	3,181	\$24.08	\$176,401,707	38	2,865	3,780	\$15.04	\$91,323,917
2018	71	3,209	6,214	\$28.32	\$1,507,996,453	32	1,369	3,418	\$29.09	\$1,181,665,551	39	1,840	2,796	\$27.76	\$326,330,902
2019	52	2,915	4,655	\$21.60	\$583,078,677	15	789	1,416	\$28.59	\$302,926,677	37	2,126	3,239	\$19.00	\$280,152,000
2020	49	3,069	5,122	\$26.61	\$892,240,254	12	576	1,290	\$33.02	\$711,466,889	37	2,493	3,832	\$25.12	\$180,773,365
2021	77	5,055	9,233	\$26.85	\$745,616,685	39	3,391	6,156	\$27.42	\$573,258,740	38	1,664	3,077	\$25.69	\$172,357,945
2022	47	3,168	6,300	\$30.72	\$2,288,430,860	23	2,381	4,933	\$30.93	\$2,086,088,682	24	787	1,367	\$30.07	\$202,342,178

Note: This table excludes withdrawn and noncompliant companies.

PERFORMANCE REPORT CONTINUED

PROCUREMENT TECHNICAL ASSISTANCE CENTER

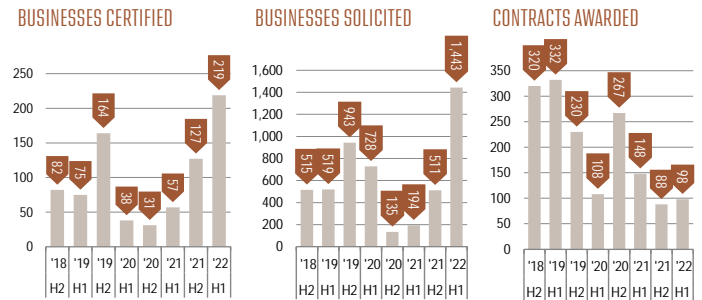


CLIENTS	PRIME CONTRACT AWARDS			SUBCONTRACT AWARDS		
	NO.	AMOUNT	AVERAGE	NO.	AMOUNT	AVERAGE
FY 2018	1,486	\$328,285,762	\$250,791	57	\$14,701,162	\$257,915
FY 2019	1,343	\$169,325,057	\$140,054	36	\$9,461,682	\$262,825
FY 2020	1,275	\$263,399,314	\$188,681	106	\$25,350,150	\$239,152
FY 2021	1,331	\$303,669,213	\$220,050	102	\$43,362,549	\$425,123
FY 2022	1,196	\$225,749,116	\$155,154	56	\$94,405,304	\$1,685,809
FY 2023 YTD	1,635	\$69,545,917	\$160,244	0	\$0	\$0

PROCUREMENT TECHNICAL ASSISTANCE CENTER OVERVIEW FY2023 Q1

- » The Nevada Procurement Technical Assistance Center (PTAC) reported 434 prime contracts during the first quarter of FY23, with an average award of \$160,244. The number of clients increased to 1,635.
- » The PTAC division continues to teach and provide one-on-one counseling sessions as clients pursue local, state, and federal government-related contracts and subcontracts. Counseling, in part, includes help with government solicitation document review, draft proposal review, and contract administration guidance. The PTAC also provides no-charge outreach events such as webinars.

EMERGING SMALL BUSINESS PROGRAM



	BUSINESSES CERTIFIED	BUSINESSES SOLICITED	CONTRACTS NUMBER	CONTRACTS AMOUNT	CONTRACTS AVERAGE
July – December 2018	82	515	320	\$6,978,338	\$21,807
January – June 2019	75	519	332	\$6,552,283	\$19,736
July – December 2019	164	943	230	\$6,010,495	\$26,133
January – June 2020	38	728	108	\$3,061,241	\$28,345
July – December 2020	31	135	267	\$12,267,731	\$45,947
January – June 2021	57	194	148	\$3,285,417	\$22,199
July – December 2021	127	511	88	\$3,879,631	\$44,087
January – June 2022	219	1,443	98	\$9,836,880	\$100,376

EMERGING SMALL BUSINESS PROGRAM OVERVIEW

- » The number of Emerging Small Businesses (ESB's) certified in the first half of calendar year 2022 increased by 284.2 percent from the same period last year, and 72.4 percent when compared to the second half of last year. The total number of ESBs that have been certified since 2014 now stands at 2,077.
- » The average contract in the first half of 2022 was \$100,376; more than three times the average contract amount from 2021.

PERFORMANCE REPORT CONTINUED

2022

Nevada Governor's Office of
ECONOMIC DEVELOPMENT

PERFORMANCE INDICATORS

NEVADA FILM OFFICE

NEVADA FILM OFFICE ANNUAL PRODUCTION REVENUE*

CALENDAR YEAR	NUMBER OF PRODUCTIONS	REVENUE*
2011	500	\$95,654,650
2012	540	\$78,177,704
2013	465	\$63,144,232
2014	435	\$61,938,244
2015	498	\$69,160,222
2016	451	\$58,382,974
2017	454	\$42,943,461
2018	377	\$34,586,650
2019	506	\$61,103,059
2020	284	\$42,341,161
2021	429	\$77,546,509
2022	370	\$72,090,163

*Revenue to Nevada, i.e. local production expenditures.

NEVADA FILM OFFICE ANNUAL HIGHLIGHTS

- » Issued film incentives to seven projects totaling \$7,377,082 with economic activity to Nevada totaling \$42,410,262.
- » Participated in the 8th Annual Nevada Women's Film Festival in Las Vegas and the Annual Cordillera International Film Festival in Reno. Danette Tull, of the Nevada Film Office, sits on the board of both festivals.
- » Attended the American Film Market in Santa Monica, one of the industry's largest acquisition, development and networking events.

COMMUNITY DEVELOPMENT BLOCK GRANTS

PROGRAM YEAR 2022 GRANTS

- » Seventeen grants (Rural and Urban) totaling \$3,611,626.
- » Rural Nevada: Fourteen grants with a total allocation of \$3,122,156.
- » Urban Nevada (Carson City): Three grants with a total allocation of \$489,470.

RURAL COMMUNITY DEVELOPMENT BLOCK GRANTS BY PROGRAM YEAR

PROGRAM YEAR	NUMBER OF GRANTS	TOTAL ALLOCATION*	AVERAGE GRANT AWARD	PERCENT ECONOMIC DEVELOPMENT
2015	20	\$2,544,500	\$127,225	84%
2016	18	\$2,759,320	\$153,296	61%
2017	13	\$3,044,377	\$234,183	69%
2018	9	\$3,061,919	\$340,213	70%
2019	8	\$2,677,129	\$334,641	91%
2020	10	\$2,793,254	\$279,325	97%
2021	8	\$3,411,248	\$426,406	79%
2022	14	\$3,122,156	\$223,011	64%

RURAL GRANT PROGRESS, FY2023 Q1

- » During the first state fiscal quarter (July through September 2022), \$82,303 in block grants were paid to four rural cities.
- » CDBG staff closed ten grants this period.
- » There are currently 55 open grants. For the standard CDBG program, there are two grants from 2018, one grant from 2019, four grants from 2020, 11 grants from 2021, and 17 grants from 2022. For the CDBG-CV program, there are 20 open grants from 2020.

URBAN COMMUNITY DEVELOPMENT BLOCK GRANTS, FY2023 Q1

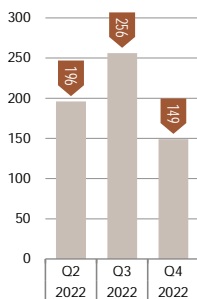
- » During the first state fiscal quarter, \$15,038 in block grants were paid to Carson City.
- » Carson City received \$482,788 in the HUD allocation to fund three projects for program year 2022.
- » In 2017 Carson City's program reverted to the state with an urban focus and different priorities than GOED's existing rural programs. Future urban project recommendations for funding will be reviewed to award grants with greater economic development impact.

*Total Allocation includes HUD allocation as well as recaptured funds from previous years.

ASSISTED CLIENTS AND COMPANIES

The Nevada Film Office assists clients with inquiries in areas such as: locations, permitting, crew, tax incentives, production troubleshooting, and more.

CLIENTS ASSISTED



SIGNIFICANT PROJECTS* IN 2022

PROJECT	PROJECT TYPE
BattleBots	Reality
Battle of Absolute Dominion	Feature Film
Sympathy For The Devil	Feature Film Ind.
Slap & The Ultimate Fighter Season 31	Reality
DRL Vegas Championship Race	TV Series
Street Outlaws: Fastest in America	Reality
The Cleaning Lady Season 2	TV Series
Skeletons in the Closet	Feature Film
Doubling Down with the Derricos	TV Series
Flip the Strip	TV Series
Ruthless	Feature Film
Couples Retreat 3	Reality
CSI: VEGAS Season 2 Episode 201	TV Series
NBC's American Ninja Warrior	TV Series
"Obliterated" Sony-Netflix Project	TV Series

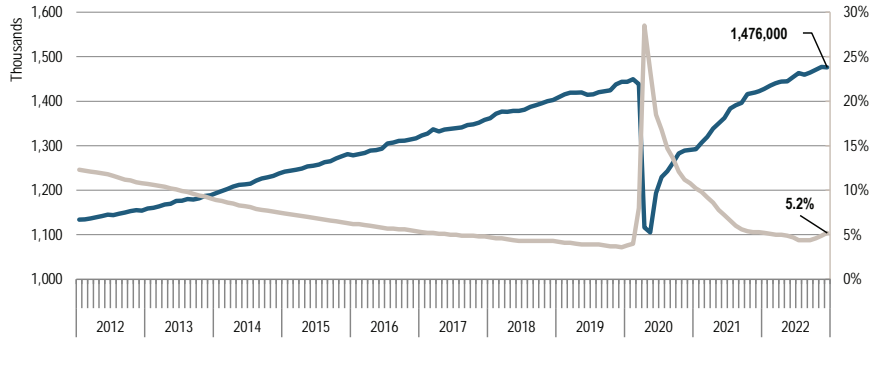
* Each of these projects contributed at least \$900,000 in local production expenditures.

PERFORMANCE REPORT CONTINUED

NEVADA JOBS AND UNEMPLOYMENT

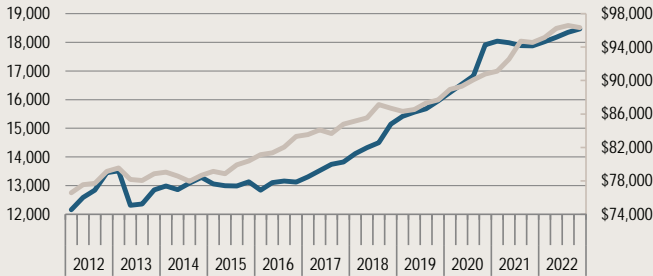
Nevada continued its postpandemic recovery in 2022, ending the year with 1,476,000 jobs. This represents a 3.8 percent increase from the prior year, and a gain of 26,400 jobs over the pre-pandemic high. Nationally, employment grew just 3.0 percent over the year.

Nevada's unemployment rate stood at 5.2 percent in December, the same rate as in the beginning of the year. Unemployment fluctuated across the state through the year, seeing a low of 4.4 percent from July through September before ticking back up again. However, labor force participation rates suggest that more Nevadans are getting up off the sidelines to return to the workforce, which puts upward pressure on unemployment as they search for work.



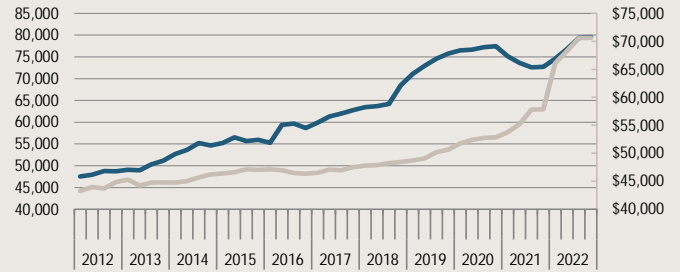
— Jobs (in thousands) — Unemployment Rate

AEROSPACE AND DEFENSE



Aerospace and Defense added 120 jobs in the fourth quarter of 2022, with 18,470 workers currently employed in the industry. Average annual earnings (measured as wages, salaries, and proprietor earnings) totaled \$96,340 per year, down \$250 over the quarter. When compared to last year, jobs have increased by 3.3 percent and earnings have grown 1.9 percent.

BUSINESS INFORMATION TECHNOLOGY



Employment in Nevada's Business Information Technology sector increased by 150 in the current quarter to a total of 79,520 workers. Average annual earnings increased slightly, up \$40 from last quarter to a new high of \$70,600. For the year, job counts have grown 9.3 percent and earnings increased by 22.0 percent.

Current industry data is derived from Lightcast's 2022:Q4 estimates. Industry groups do not equate to the two-digit NAICS sectors or the super-sector groups found in CES data.

— Jobs — Average Earnings per Job

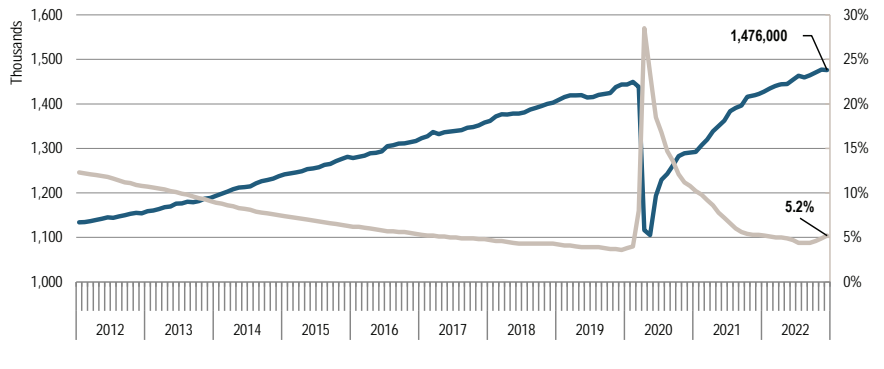
PERFORMANCE REPORT CONTINUED



NEVADA JOBS AND UNEMPLOYMENT

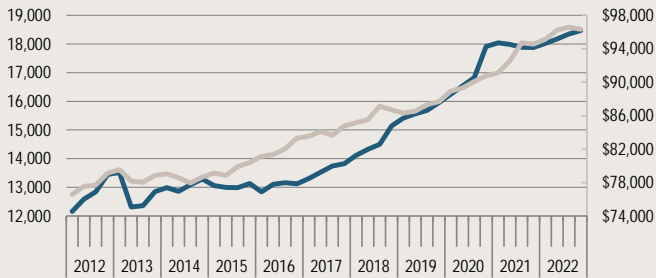
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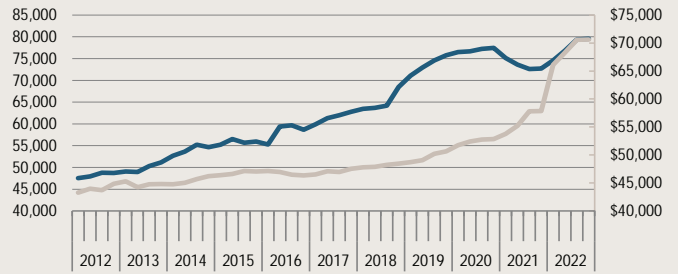
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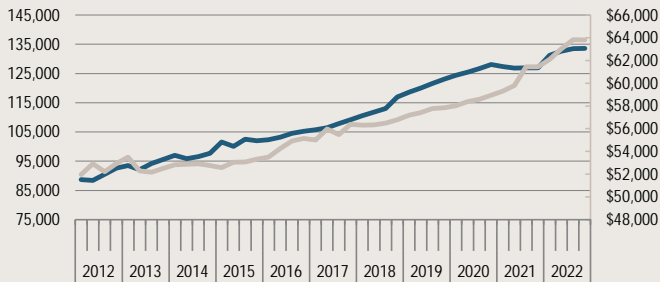
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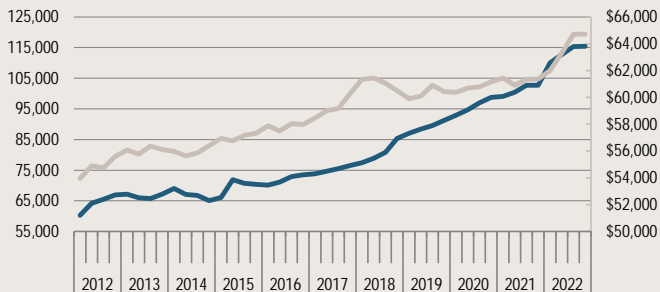
PERFORMANCE REPORT CONTINUED

HEALTH AND MEDICAL



Nevada's Health and Medical sector added 110 jobs during the quarter, bringing the total job count to 133,600 workers. Average annual earnings fell slightly to \$63,810. When compared to last year, job counts in Nevada's healthcare sector have grown by 5.3 percent and earnings have increased by 3.8 percent.

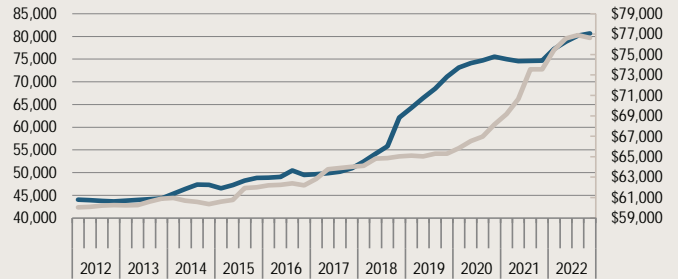
LOGISTICS AND OPERATIONS



Average annual earnings in Nevada's Logistics and Operations sector remained flat from last quarter, currently standing at \$64,710. Employment grew slightly this quarter to 115,380 total jobs in the sector. For the year, jobs have grown by 12.3 percent and earnings have increased by 5.4 percent.

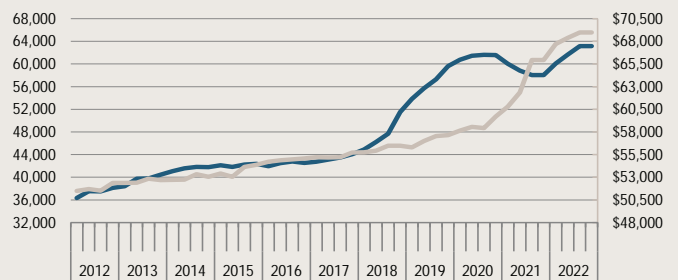
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NATURAL RESOURCE TECHNOLOGIES



There are a record 80,660 workers in Nevada's Natural Resource Technologies sector after an increase of 470 jobs in the current quarter. Average annual earnings fell by \$260 and currently stand at \$76,630. When compared to last year, job counts have increased by 8.0 percent and earnings have increased by 4.2 percent.

MANUFACTURING



Nevada's Manufacturing sector saw steady employment levels this quarter, at 63,160 jobs. Earnings also remained flat over the quarter, with workers currently employed in the sector making, on average, \$68,970 per year. Since last year, job counts have increased by 8.8 percent, while average annual earnings grew by 4.6 percent.

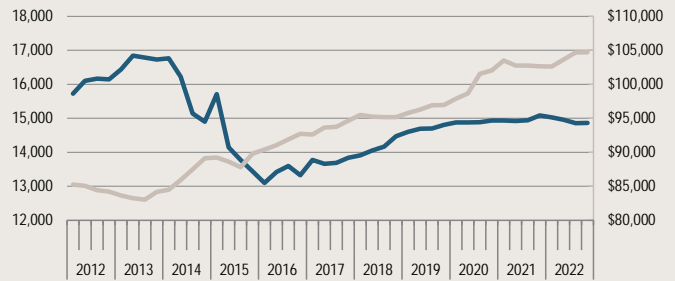
— Jobs — Average Earnings per Job

PERFORMANCE REPORT CONTINUED



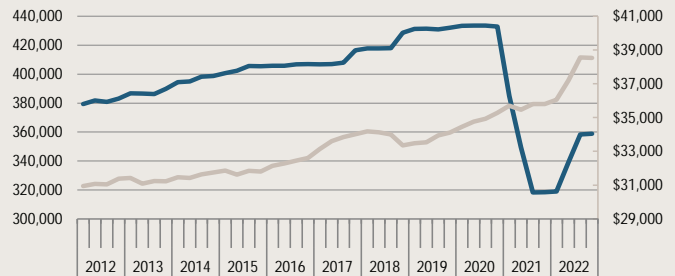
MINING

After several months of slight declines, Nevada's Mining sector began adding back jobs this quarter. Employment grew slightly this quarter to 14,870, while average annual earnings increased by \$30 and currently stand at \$104,690. When compared to last year's fourth quarter high, job counts have decreased by 1.4 percent while earnings increased by 2.0 percent.



TOURISM, GAMING, AND ENTERTAINMENT

The pandemic hit Nevada's Tourism, Gaming, and Entertainment industry especially hard. Total employment in Nevada's largest sector currently stands at 358,770 workers, up 410 jobs from the previous quarter. Annual earnings fell slightly by \$20 and now stand at \$38,540. Over the year, jobs increased 12.7 percent and earnings increased 7.6 percent.



Current industry data is derived from Lightcast's 2022:Q4 estimates. Industry groups do not equate to the two-digit NAICS sectors or the super-sector groups found in CES data.

— Jobs — Average Earnings per Job

BUSINESS DEVELOPMENT

By Melanie Sheldon, Senior Director of Business Development and Chelsea Walburg-Estep, Director of Business Development

INTRODUCTION

GOED's Business Development team had a significant year in its continuous efforts to attract and assist new businesses that will not only diversify Nevada's economy but also bring new investment into the state and create quality and highly paid jobs for Nevadans.

Since January 2022, the GOED has approved abatements for 23 companies. Within five years these companies will bring on 2,381 jobs and make \$2.1 billion in capital investment. Over the next ten years, these companies will generate more than \$601 million in new net tax revenues (after abatements) for our state.

Because our Leisure and Hospitality job sectors were hit particularly hard by the COVID pandemic, we have really focused on Southern Nevada. Of the 23 companies that were approved for abatements in 2022, 12 of them either relocated to or were existing in Southern Nevada.

In GOED's efforts to attract new investments, the Business Development Team assists potential and existing projects with site selection needs by working closely with Nevada's Regional Development Authorities (RDAs), local governments, utility providers, and other state agencies, as well as commercial real estate entities, to fast-track the process of finding the adequate commercial property/land with adequate infrastructure and to providing assistance and support for licensing or permitting processes. GOED also manages the state's abatement program application process, comprising everything from analyzing received applications, managing, and administering the quarterly Board Meeting process, to the contractual abatement phase.

The Business Development Team also works closely with different divisions within GOED and other government agencies. Currently, Melanie Sheldon, Senior Director of Business Development, and Chelsea Estep, Director of Business Development, worked with Shari Davis, Director of Rural Economic and Community Development, to arrange a listening tour with GOED's Rural RDAs. This series of meetings commenced in November 2022 and continued through February 2023. The Business Development Team will continue to work closely with Ms. Davis and will meet with the Rural RDAs on a semi-regular basis.

Business Attraction and Relocation Efforts

GOED's Business Development Team continues to work with companies considering Nevada as a potential location. As of December 2022, GOED's Business Development Pipeline has 18 active Request for Information (RFI) projects. These active projects are actively exploring Nevada as a location for their operations. Approximately 72 percent of these projects are manufacturing operations (80 percent), and the remainder is data centers or technology-driven operations, with an estimated 4,263 jobs to be created and approximately \$17.4 billion total investment in the State.

In 2022, we participated in five site visits throughout the State. To narrow down the best location for the company, our utility partners, like NV Energy, as well as commercial realtors will take companies to actual sites, whether it is land or a building, to see if they are a good fit for the company's needs. During these visits, the local RDA, local government representatives, GOED's team, and workforce specialists from DETR will also join the prospective company to discuss benefits of doing business in our State, as well as details about their operational needs.

These active RFIs will potentially result in companies moving and opening their operations in our State, and some of them, if they qualify, will apply for Tax Abatement packages that will be presented to the GOED Board during the quarterly Board meetings.

Tax Abatement Applications and GOED's Board Meetings:

As GOED continues its work with RDAs to diversify Nevada's economy and create quality jobs, 2022 was a busy year with companies relocating and expanding in our state and applying for tax abatements. Abatement applications were heard every quarter this year at our quarterly GOED Board Meetings. As of the end of December 2022, 23 companies have been incentivized. These companies will create an anticipated 2,381 new quality jobs with an average wage of \$30.94, in the first two years of operation. Overall, these companies are anticipated to make an estimated \$2.1 billion in capital investment in the State.

Tax Abatements Return on Investment:

In 2022, GOED approved \$169.8 million in tax abatements. From these incentivized operations, the State will be collecting an estimated \$601 million in new tax revenues after tax abatements. We calculated the Return on Investment (ROI) of these abatements to be \$3.54 meaning that for every \$1 abated Nevada would receive \$3.54 back in tax revenues.

It is critically important to keep in mind these abatements are partial abatements, not exemptions, and that once the abatement contract sunsets, state and local governments will continue to receive full tax revenues from these companies. This full impact on budgets in perpetuity would be lost if abatements were not approved because companies would choose to expand or relocate elsewhere.

GOED estimated the total economic impact from these companies, and their operations, to be approximately \$21.8 billion. Looking at this Economic Impact and the amount of the approved tax abatements we can estimate the economic benefit of abated companies in 2022 to be approximately \$128.25 for each dollar the company received from Nevada in abatements. Although this economic impact ROI is a bit of a rough estimate, it is still helpful because it estimates the dollar value of all economic activity generated for every tax dollar discounted through the abatement process.

The State works with RDAs on recruiting companies within the targeted industries to diversify regional and the State economy. Out of 23 companies that were approved for tax abatements 42 percent of them were manufacturing operations, creating 1,924 jobs while 22 percent were Logistics and Operations companies, creating 703 quality jobs in the first two years of operations.

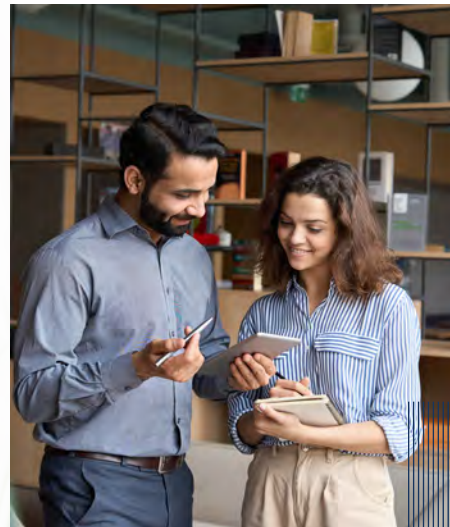
What is noticeable within the manufacturing industry is the formation of a new electric vehicle, battery manufacturing, and recycling cluster. With Tesla and Panasonic moving into the state, and with Nevada's abundant mineral and lithium deposits, more companies within the industry (like Western Ceramics Company and Redwood Materials) have moved to or shown interest in opening their operations in Nevada.

As COVID took a significant toll on our economy, especially Clark County, it became obvious that our State's economic dependence on Hospitality and Entertainment is not sustainable for economic growth. High unemployment in the Leisure and Hospitality sector made GOED rethink priorities on diversification of the economy, especially in Clark County.

To create jobs and diversify the economy in the South, GOED's team worked closely with LVGEA. As a result, in 2022, out of the 23 companies that received tax abatements, 12 of them, or approximately 52 percent were businesses that decided to start or expand operations in Clark County, 44 percent of which are manufacturing operations.

The Business Development Team ended 2022 strong with nine companies presented at the December Board meeting, including an abatement for Redwood Materials, Inc. after the company announced the second largest capital investment since GOED's inception more than a decade ago—\$1.1 billion.

The GOED Business Development Team already has several RFI's, and applications lined up in the queue for next year.



GOED

BUSINESS DEVELOPMENT CONTINUED

COMPANIES	Sector	Initial Jobs (2 Yrs)	Build out of Jobs (5 Yrs)	Average Wage	Overall Capital Investment	Total Partial Tax Abatements	New Taxes, After Abatements	Economic Impact
March 17, 2022								
Haas Automation, Inc*	Manufacturing	500	1,400	\$24.04	\$100,000,000	\$10,501,083	\$112,185,915	\$4,021,617,347
Airgas Safety, Inc.	Logistics and Operations	55	66	\$23.10	\$3,650,000	\$362,882	\$3,956,058	\$157,463,927
ENTEK Manufacturing, LLC	Manufacturing	53	73	\$29.44	\$10,862,117	\$1,073,218	\$5,729,473	\$269,526,549
Society Manufacturing LLC	Logistics and Operations	60	90	\$25.50	\$1,020,629	\$162,357	\$4,626,566	\$151,335,124
Stellar Snacks, LLC	Manufacturing	58	133	\$28.32	\$23,469,996	\$1,849,419	\$12,371,913	\$655,395,752
Western Ceramics Company 1, LLC	Manufacturing	24	24	\$43.63	\$25,136,727	\$2,304,202	\$8,386,661	\$295,172,009
		750	1,786	\$25.43	\$164,139,469	\$16,253,161	\$147,256,586	\$5,550,510,708
*Haas Automation, Inc was previously approved for abatements in 2019. They were reapproved at this meeting.								
June 16, 2022								
Bella + Canvas, LLC	Other: Wholesale Trade	10	10	\$30.00	\$19,034,935	\$1,598,693	\$4,741,997	\$33,355,135
Cross, Inc.	Logistics and Operations	250	325	\$26.98	\$85,000,000	\$8,642,248	\$29,848,241	\$882,348,309
Foam of Nevada, Inc.	Manufacturing	450	720	\$24.28	\$12,530,000	\$1,271,031	\$41,283,033	\$2,588,667,460
Nova Holdings, LLC	Business Information Technology Ecosystems	11	11	\$30.60	\$119,037,375	\$15,283,444	\$19,722,541	\$115,812,089
Ntherma Corp*	Manufacturing	44	294	\$45.19	\$76,524,800	TBD	TBD	TBD
VSE, LLC (Valley Service Electronic)	Business Information Technology Ecosystems	70	140	\$29.64	\$2,193,634	\$318,449	\$7,875,327	\$238,065,385
Ball Metal Beverage Container Corp	Manufacturing	178	222	\$33.65	\$175,988,700	\$17,476,855	\$39,827,950	\$832,811,257
		1,013	1,722	\$28.00	\$490,309,444	\$44,590,720	\$143,299,089	\$4,691,059,635
*Ntherma Corp may locate in either Washoe County or Clark County. The company has yet to pick the county they are going to locate in. As such, the estimates for the Total Partial Tax Abatements, New Taxes, After Abatements, and Economic Impact are omitted this document. The estimates for both locations are available here: https://gsed.nv.gov/wp-content/uploads/2022/06/B-E-Ntherma-Corp-Board-Packet-1.pdf								
**Ball Metal Beverage Container Corp was previously approved for abatements in 2021. They were reapproved at this meeting.								
September 22, 2022								
ARES Nevada, LLC	Natural Resources	8	51	\$42.20	\$26,694,370	\$2,462,353	\$4,847,558	\$121,615,045
Electronic Evolution Technologies, Inc.	Manufacturing	25	57	\$24.40	\$400,000	\$35,863	\$3,690,034	\$190,243,753
Post Consumer Brands, LLC	Manufacturing	30	30	\$28.22	\$69,580,500	\$5,207,771	\$7,724,258	\$172,935,157
Sephora USA, Inc.	Logistics and Operations	33	147	\$27.20	\$12,000,000	\$779,612	\$11,994,192	\$310,890,716
TLS Supply Chain Solutions, Inc.	Logistics and Operations	30	150	\$33.58	\$4,512,596	\$479,204	\$8,400,690	\$316,539,149
		126	435	\$29.36	\$113,187,466	\$8,964,803	\$36,656,732	\$1,112,223,820
December 1, 2022								
American AVK Company	Manufacturing	12	54	\$28.25	\$16,846,359	\$1,064,336	\$6,572,936	\$131,469,605
Kodiak Trucking, Inc.	Manufacturing	250	330	\$58.58	\$13,700,000	\$2,064,214	\$43,324,487	\$4,271,143,896
West Coast Salmon Nevada LP	Natural Resources	55	96	\$35.96	\$179,587,242	\$16,010,541	\$19,451,851	\$269,462,782
Wilien Las Vegas, LLC	Manufacturing	25	60	\$30.14	\$2,292,171	\$193,560	\$3,330,582	\$126,020,917
Redwood Materials, Inc.	Manufacturing	150	450	\$32.03	\$1,106,026,532	\$80,651,634	\$201,073,256	\$5,623,496,000
		492	990	\$45.77	\$1,318,452,304	\$99,984,285	\$273,753,112	\$10,421,593,200
Grand Total 2022		2,381	4,933	\$30.93	\$2,086,088,683	\$169,792,969	\$600,965,519	\$21,775,387,363

Other Activities

Nevada Emerging Small Business (ESB) Program



In addition to Business recruitment and retention, Jeanette Holguin, GOED's Business Development Coordinator, oversees the Emerging Small Business (ESB) program which seeks to assist small businesses in obtaining work with state and local government agencies by

identifying small businesses that want to contract with government agencies. Nevada businesses interested in doing business with the State of Nevada Purchasing Division, State of Nevada Public Works Division and/or local governments in Nevada (specifically Clark and Washoe counties) are encouraged to apply. GOED has focused on growing the pool of ESBs over the past year while continuing to support those already certified. State and local government agencies report ESB activity to GOED twice per year. For the July 1, 2021 through June 30, 2022 reporting period, the business development team certified 219 small businesses, and 98 contracts were awarded by state and local agencies to ESB-certified businesses which amounted to \$9.8 million dollars in contracts. Outreach efforts will continue to target potential ESB applicants for future opportunities through participation in local workshops, expos, and GOED events.

Special Highlights in 2022

In April 2022, Melanie Sheldon, Senior Director of Business Development, attended a special Google event. Google announced it plans to invest \$30 million in Nevada in 2022, part of a push to put billions of dollars into offices and data centers around the nation. United States Senator Jacky Rosen and Google.org President Jacqueline Fuller held an event at the company's data center in Henderson to make the announcement. Google broke ground on the Henderson center back in 2019. Its second data, in the state, became fully operational in Storey County in, Northern Nevada, in 2021. The company says it will partner with Nevada to help workers develop digital skills, offering Google Career Certificates with support from the state's Department of Employment,



U.S. Sen. Jacky Rosen, center, and other representatives for the state of Nevada and Google pose for a photo. Google announced it would invest \$30 million in Nevada through 2022.

Training and Rehabilitation. Google says it will donate \$100,000 to the Clark County School District to expand its Career & Technical Education programming as well.



Representatives from GOED, The GOED Nevada Film Office and LVGEA attended the grand opening of Vū Studios, in Las Vegas.

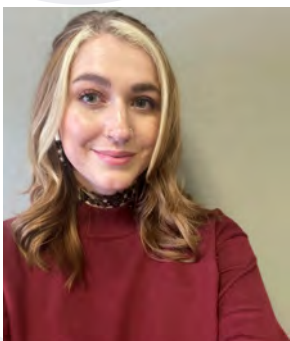
In April 2022, Melanie Sheldon, Senior Director of Business Development, and Danette Tull, Productions and Communications Manager for GOED's Nevada Film Office, attended the grand opening of Vū Studios (Vū). Vū is a technology company specializing in virtual production studios for advertising and commercial videos, hosted its grand opening celebration in Las Vegas. The new 40,000-square-foot Las Vegas studio is the latest addition to the company's growing portfolio. The company worked with the Business Development Team to locate in Nevada and to be approved for state tax abatements in September 2021. Vū

BUSINESS DEVELOPMENT CONTINUED



B&I Small Business Fair.

is a great example of successful business recruitment in Creative Industries, one of GOED's target sectors. In May 2022, Melanie Sheldon, Senior Director of Business Development, and Jeanette Holguin, Business Development Coordinator set up an exhibitor table at Business and Industry's Small Business Resource Fair in May of 2022 as representatives of GOED at the Sahara West Library. Melanie and Jeanette spread awareness to attendees with marketing and informational guides on the Tax Abatement and Emerging Small Business program and connected with many other organizations taking part in the event. This fair was created with the intent to assist small businesses and ensure local Nevadans had access to free resources such as training, business licensing, funding, and certifications. Melanie and Jeanette have signed up and look forward to being a part of B&I's fair again this year to provide information on GOED's programs and services. GOED's Procurement Technical Assistance Center (PTAC) and GOED's International Trade Division also participated in the event. Over 50 Business Resource partners participated in the event which had approximately 600 attendees throughout the day.



In September 2022, the Business Development Team welcomed its new Director of Business Development, Northern Nevada, Chelsea Estep. Chelsea held the previous position of GOED's Research Manager. As Research Manager, Chelsea was a remarkable asset to the agency and her familiarity

with GOED's business development efforts made her the obvious choice to move up to this position. Chelsea

brings a wealth and knowledge of state experience. We are very pleased to have Chelsea fill this critically important role.

In December 2022, held its last GOED Board Meeting under Governor Sisolak's Administration. At this final meeting, the GOED Board approved five companies in total, including Redwood Materials, that will receive \$124,947,733 in tax abatements. In return, these companies are required to create 492 jobs in the next two years at an average weighted hourly wage of \$45.77. That figure is expected to grow to 990 in five years. Additionally, these companies will make capital investments of \$1,318,452,304 in the first two years of operation and generate \$273,753,112 in net new tax revenues over the next 20 years.



GOED Board Members, GOED Executive Director Brown and Governor Sisolak pose for a photo to commemorate Governor Sisolak's final GOED Board Meeting. Governor Sisolak presented two plaques, one to Secretary of State Cegavske and a second to Lieutenant Governor Cano Burkhead (not pictured) in grateful appreciation for their dedication and commitment to bettering Nevada.

Under Governor Sisolak's administration, The GOED Board has approved 101 companies, 90 of which are compliant and participating. These companies will create 13,900 jobs over five years. These companies are making \$3.8 billion in capital investments and will generate \$1.5 billion in new tax revenues.

INNOVATION-BASED ECONOMIC DEVELOPMENT

By Karsten Heise, Senior Director Strategic Programs & Innovation

GOED'S OBJECTIVE TO FOSTER an innovation economy in Nevada is grounded in the application of the Innovation Based Economic Development (IBED) framework as well as in relevant scientific theories such as complexity and network theory. Applications of the latter ensures that our approach remains dynamic, adaptable and future oriented. Both IBED framework and scientific theoretical grounding also guide any programs and/or initiatives which means that neither programs nor initiatives are devised in isolation for their own sake but must be part of a holistic systems approach (see Figure 2 below).

An IBED framework consist of five mutually dependent components:

- A research base that generates new knowledge;
- Mechanisms for transferring knowledge to the marketplace;
- An entrepreneurial culture;
- Sources of risk capital; and,
- A technically skilled workforce.

By supporting each component with appropriately designed initiatives and programs we can strengthen and stimulate Nevada's innovation economy. An innovation economy transforms new ideas of products or processes, newly developed technologies into new jobs and businesses, fosters entrepreneurship, increases access to critical resources, and ensures economic prosperity and opportunity for all residents, both today and for future generations.

The below graphic depicts the startup lifecycle from the creation of a new technology to company formation and scale up including the associated funding timeline.

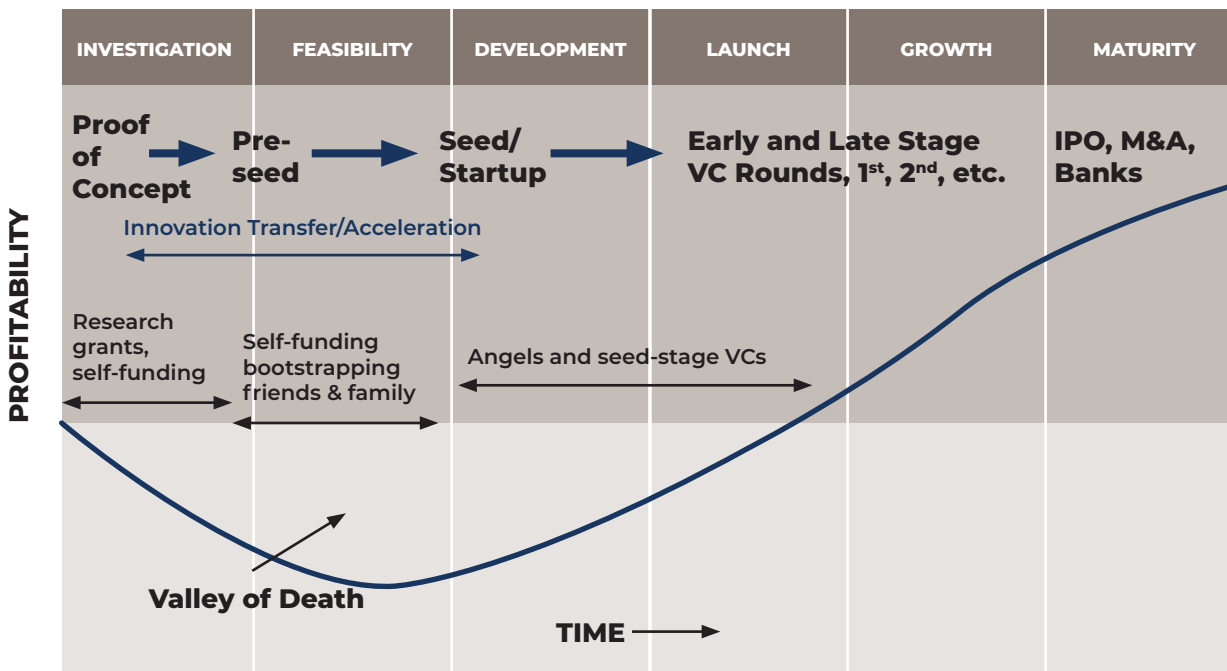


FIGURE 1

INNOVATION-BASED ECONOMIC DEVELOPMENT CONTINUED

2022 IBED PROGRAMS AND INITIATIVES HIGHLIGHTS

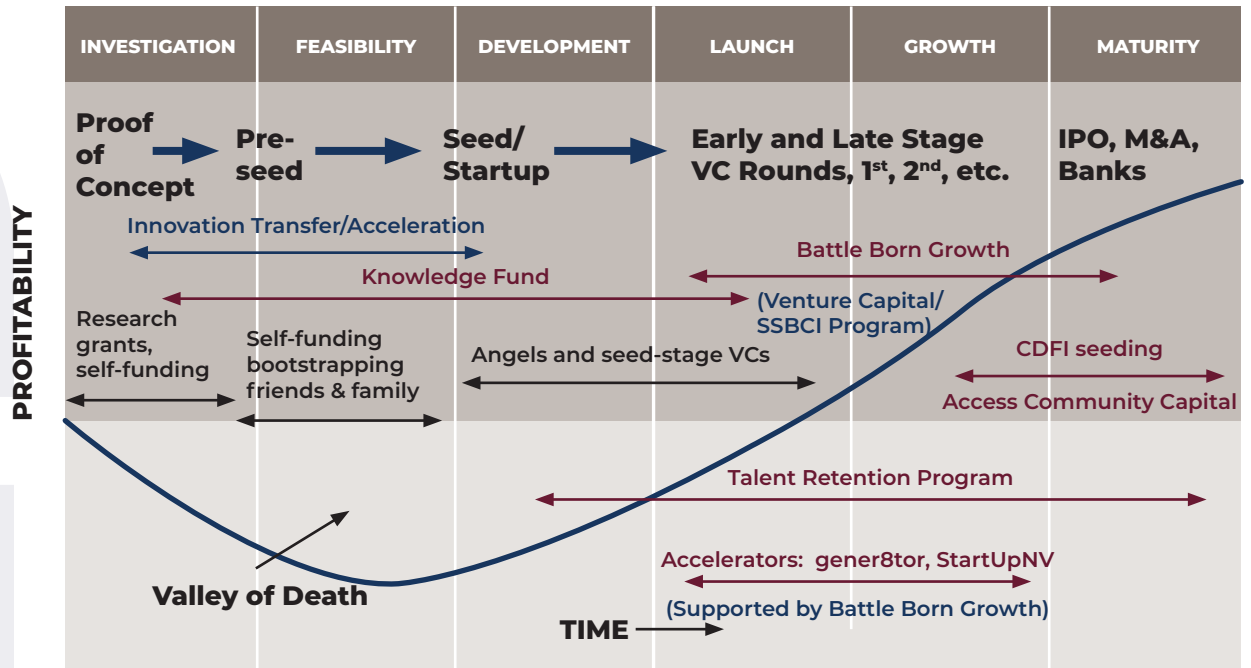


FIGURE 2

CDFI Seed Funding

The Nevada Governor’s Office of Economic Development’s (GOED) contracted with Access Community Capital in Southern Nevada to administer a minority-focused direct loan program, targeting startups and early-stage businesses based on the utilization of \$6 million from the Attorney General’s office T-Mobile and Sprint settlement. The funding for the CDFI is the result of the Nevada Attorney General’s settlement resolving concerns with the planned merger between T-Mobile and Sprint in 2019.

The allocation to GOED was approved by the Nevada Legislative Interim Finance Committee on April 8, 2022.

The main goal of the project is to seed a home-grown Nevada Community Development Financial Institution (CDFI) with a direct focus on minority small business financing. Through its revolving loan program, it will help grow businesses in low-income communities, with a focus on minority and women owned businesses — areas that have been historically overlooked by traditional financial institutions but are critically important to growing and diversifying Nevada’s economy.

Access Community Capital has submitted its application for certification to the CDFI Fund, which is part of the U.S. Department of the Treasury.

This support will not only result in protecting existing jobs for enterprising Nevadans, but also create opportunities for the creation of new businesses and new jobs. CDFIs can be the unsung heroes and champions to the residents



GOED, Access Community Capital, and Las Vegas Urban Chamber celebrating the approval of GOED’s CDFI Seed Funding program by the Interim Finance Committee at the Nevada Legislature.

INNOVATION-BASED ECONOMIC DEVELOPMENT CONTINUED

GOED

and businesses of low-income communities and communities of color. According to the Opportunity Finance Network, CDFI borrowers are 84 percent low-income, 60 percent of color, and 50 percent women. CDFIs are vital. In addition to their commitment to deliver affordable credit and financial services to small businesses and communities underserved by mainstream commercial banks and lenders, they also provide much needed technical assistance services.

Access Community Capital was founded by entrepreneurs who know firsthand how the lack of access to affordable capital can stifle the growth trajectory of an otherwise successful business idea. The entire mission and premise of our organization is to help others achieve their highest potential. When this is realized, there is a spillover effect, positively impacting their families, their community, and the state economy.

Talent Retention Program

The Nevada Governor's Office of Economic Development worked with the Nevada Attorney General's Office to contract with the University of Nevada, Las Vegas (UNLV) and University of Nevada, Reno (UNR) using \$4 million to stand up a program to retain top science and engineering talent in Nevada. The project was approved at the Interim Finance Committee meeting on Oct. 20, 2022 and emphasizes help toward minority, women and first-generation college students.

The funding comes from the Attorney General's Office as a result of a 2019 settlement with T-Mobile that included a charitable contribution of \$30 million earmarked for enhancing entrepreneurial opportunities for women, minorities, and women and minority-owned businesses.

This idea was sparked by round table discussions Governor Sisolak led with startup founders and entrepreneurs in early 2022 alongside GOED leadership. The challenge that was identified was the need for the state to support startups and technology companies by addressing their increasing need for science and engineering graduates.

This program will help bolster Nevada's economy and help retain our pool of talented NSHE graduates. Startup and entrepreneurial

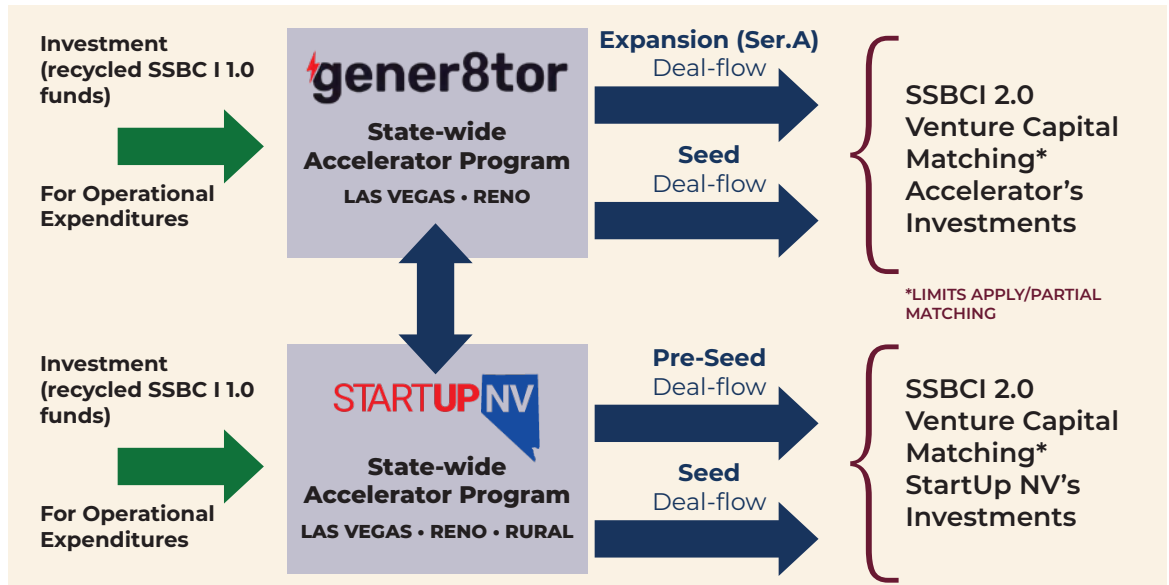
communities consistently raise concern about the severe talent shortage jeopardizing the growth of early-stage companies particularly in the technology sector with a specific shortage of engineering and computer science talent. GOED's research division analyzed data provided by NPWR and confirmed that talent in science and engineering is scarcer to begin with in Nevada but also there is also a much lower retention rate within a year after graduation compared to other fields of study. This is being further exacerbated when considering national census data for women and underrepresented minorities in Science, Technology, Engineering and Math (STEM) careers. These groups represent a tremendous untapped talent resource and an incredible opportunity forgone. Through this Talent Retention Program GOED will now have an active instrument in our hands to prevent a "Nevada Brain Drain" by pairing science and engineering students early with tech-based companies and startups via a program that is meaningful, targeted, and effective while paying a competitive wage of \$18 per hour.

Additional envisioned positive impacts are that this initiative will prompt more women and minority students to enroll in science and engineering degrees as well as what we call a 'deferred founder' effect:



INNOVATION-BASED ECONOMIC DEVELOPMENT CONTINUED

Nevada SSBCI 2.0 — **Venture Capital** State-wide **Feeder Mechanism for Deal Generation**



as Nevada is home to large numbers of first-generation college students who are understandably more risk-averse but as the result of their talent retention program experience will turn into startup founders after having spent an initial few years as employees at technology companies in Nevada. Technology-based companies are strongly encouraged to reach out to UNR and UNLV and explore how to engage and secure talent. The program is a true win-win for Nevada, as UNLV students will earn valuable workplace experience and emerging local businesses will gain an infusion of talent during the early stages of growth when they need it most. GOED's Talent Retention Program helps address this by providing internships for Nevada's best and brightest students so they can work for our local technology firms. This gives students real world skills and employers the opportunity to attract the best emerging talent.

Accelerator Engagement and Support

GOED through Nevada Battle Born Growth Escalator, Inc. has partnered with both nationally ranked gener8tor and local Nevada StartUpNV accelerators to generate deal flow for the SSBCI Venture Capital Program. The SSBCI Venture Capital Program will match up gener8tor's investments in its cohort companies up to \$1 million in total over two years and StartUpNV's investment in its cohort companies up to \$1.5M in total over three years.

In March 2022, Governor Sisolak announced the launch of a first-ever nationally-ranked small business and startup accelerator to operate in Nevada. Operated by gener8tor, the accelerators will be located in Las Vegas and Reno-Tahoe to provide investment, support, mentorship, and access to in-state and out-of-state capital to early-stage small businesses and startups throughout Nevada.

Alongside Nevada's State Small Business Credit Initiative (SSBCI) program, gener8tor Las Vegas and gener8tor Reno-Tahoe will invest in and accelerate at least 10 small businesses and startups per year. These Nevada companies will experience a program focused on mentorship, customer discovery, creating value for consumers and communities, strategic planning for company growth, individualized coaching and pitch meetings with investors in Nevada and from across the country.

The gener8tor accelerators anchored in Las Vegas and Reno will provide a pathway for more businesses owned by founders from disadvantaged backgrounds to access the capital and mentorship needed to level the playing field and make certain Nevada is an economic powerhouse for generations to come.

gener8tor will work alongside GOED, Las Vegas, and Reno to empower communities in Northern and Southern Nevada to invest in their best and brightest.

INNOVATION-BASED ECONOMIC DEVELOPMENT CONTINUED



Reno and Las Vegas gener8tor Launch Event held in December 2022.

The accelerator will bring its focus on investing across race, place, and gender along with a national network of companies, investors, and relationships to Nevada to incentivize companies to start here, hire here, and stay here. This program is a groundbreaking next step in the evolution of the Nevada's State Venture Capital Program under the federal SSBCI. gener8tor Las Vegas and gener8tor Reno accelerators will be funded with recycled dollars from the first version of SSBCI, a federal program created in 2010 and still being operated by GOED. The second version of SSBCI which GOED as the designated state allows the State to invest millions more in federal funds, alongside private funds, into Nevada small businesses and startups through a venture capital program, including into companies that participate in these two new Nevada accelerators. The emphasis will be on equitable access to capital as 'innovation is everywhere, but equal opportunity is not' and gener8tor is an ideal partner in this endeavor.

At the International Innovation Center @Vegas in downtown Las Vegas, Nevada State Treasurer Zach Conine announced that GOED will partner with local StartUpNV, a nonprofit statewide incubator and accelerator for startup companies. SSBCI funding will match selected investments made by StartUpNV's affiliated venture funds, including AngelNV, a \$200,000 annual conference fund; FundNV, a \$1 million pre-seed fund; and a newly formed \$10 million seed fund. All investees will have participated

in StartUpNV programs, including its AngelNV education bootcamp or its business accelerator. StartUpNV has a proven track record of success in investing and mentoring Nevada-based startups, and



Reno and Las Vegas Gener8tor Launch Event held in December 2022.

this partnership will enable it to expand their efforts and support more businesses at various cycles of development with the necessary capital to succeed.

By investing in our homegrown startups, Nevada is investing in its own future to create a more resilient and diverse economy to benefit generations to come. This is a ground-breaking next step in the evolution of the Nevada's State Venture Capital Program under the federal SSBCI program.

INNOVATION-BASED ECONOMIC DEVELOPMENT CONTINUED

Knowledge Fund

The Knowledge Fund was enacted during the 2011 legislative session (NRS 231.1591 to 231.1597) but was not funded until the fiscal year 2014. The Knowledge Fund is the most critical program to foster Nevada's innovation economy, turning scientific research into market opportunities at Nevada's three research institutions, University of Nevada, Reno; University of Nevada, Las Vegas; Desert Research Institute, in areas the state has targeted for economic growth. The Knowledge Fund is GOED's main instrument within its IBED strategy to foster an innovation economy.



Four university alumni, now American Battery Technology Company employees, in the co-location lab on campus.

An innovation economy transforms scientific research into new jobs and businesses, fosters entrepreneurship, increases access to critical resources, and ensures economic prosperity and opportunity for all people, both today and for future generations. When the people and institutions in a region are creating new scientific knowledge and technology, innovators and entrepreneurs are creating startups and high-growth small businesses, and the local workforce is educated and trained in the necessary skills to utilize the latest advances. All Nevadans will benefit from increases in growth and prosperity.

These integrated forces drive an economy that creates new businesses and well-paying jobs while developing solutions for serious problems. In short, an innovation economy raises the overall quality of life for the people in that region. Importantly, because this economy is

built on a foundation of identifying and transforming new knowledge, the system continues to produce these benefits well into the future—beyond the boom-and-bust lifecycle of any one industry or business.

The Knowledge Fund is the most critical program to foster Nevada's innovation economy...

Over the past five funding cycles (2013, 2015, 2017, 2019, 2021), GOED has been selecting projects with the objective to strengthen the innovation economy ecosystem. To do this, GOED developed a vision of implementing Applied Research Centers at each of Nevada's universities and Desert Research Institute (DRI). These centers would conduct applied research and create intellectual property that will be used to develop new, relevant technologies to help companies

grow their research and development (R&D) base and enhance their growth through innovation. Applied Research Centers will assist companies to turn advanced technologies into production processes and commercial products by working collaboratively with such firms. These centers can be regarded as 'outsourced R&D departments' providing 'innovation on demand' services. The origins of this model are based on the 'Fraunhofer Institutes' in Germany and the 'Catapult' centers in the United Kingdom. Thus, entrepreneurial startup culture has, over time, been spilling over to the universities and spur a 'change of culture,' including an increased rate of development of marketable university IP. Hence, for the second phase, a reformed Knowledge Fund will be broadening its approach and continue supporting Applied Research Centers in their focus on the regional growth economy ecosystem. It will also increase directing efforts at the startup economy ecosystem focusing on small, highly scalable businesses and support structures for fostering their formation and growth. Following the 2021 session of the Nevada Legislature the Knowledge Fund added investments which center on supporting and building the tech startup economy in Nevada by commercializing technologies and monetizing IP from Nevada's three research universities.

INNOVATION-BASED ECONOMIC DEVELOPMENT CONTINUED



The current funded Knowledge Fund projects are:

UNLV

Applied Research Collaborative

The UNLV Applied Research Collaborative (ARC) is housed at the Lee School of Business' Center for Business and Economic Research (CBER), with support facilities and activities at Black Fire Innovation and the UNLV Incubator. This support will provide dedicated funding to the applied research mission that has proven so successful at UNLV's sister institution, UNR, with its Nevada Center for Advanced Research (NCAR). In that spirit, this new UNLV program will result in business research coverage of the entire state via a number of services that enhance the competitiveness of Nevada's businesses—and help attract new ones—by supporting and improving the environment for interdisciplinary collaboration private and public entities. To achieve these outcomes, this initiative will:

1. Establish collaborative relationships between academic and business leaders to promote innovation, research programs, and startups to address real-world and marketplace problems.
2. Produce a business plan that leads to the development of a facility with flexible laboratory space that will bring together academia, private industry, and venture capital to test and commercialize brand new technologies and companies in and around all disciplines.
3. Connect industry partners with governmental agencies to promote pilot programs, research

- initiatives, and other collaborations.
4. Facilitate access to cutting-edge research labs, incubators, and accelerators across Southern Nevada in a way that develops and diversifies the economy while providing students and faculty with real-world access to data, expertise, and startup support.
5. Build interdisciplinary teams of faculty, scientists, postdoctoral students, and grad students to solve industry problems, including those in priority science areas.
6. Provide access to an innovation ecosystem that includes incubation, acceleration, and business mentoring at the UNLV Incubator, UNLV's Black Fire Innovation accelerator, Troesch Center for Innovation and Entrepreneurship, the Small Business Development Center (SBDC), the UNLV School of Engineering, and the UNLV School of Medicine.
7. Provide co-working space for Nevada's university communities and local startups, leveraging world-class facilities including the \$35M Harry Reid Research and Technology Park facilities or other facilities in the community.

Autonomous Infrastructure

The project task is to develop infrastructure supported perception for fixed locations to provide more consistent field of view and environmental perception for safe operation of autonomous vehicles in constrained environments. The project is comprised of the following main components:

1. Selection of appropriate sensing technologies for constrained environments (including camera, radar, lidar, or ultrasonic).
2. Development of robust object detection and recognition algorithms for road users (e.g., cars, trucks, buses, and pedestrians) given a sensor package.
3. Definition of communication scheme for safe 'connected and autonomous vehicles' (CAV) control at low speeds.

DRI

Anchoring a Commercialization Ecosystem for Environmental Technologies and Know-How

This project aims to create an ecosystem at the Desert Research Institute (DRI) where there is ongoing opportunity for faculty to nurture any

INNOVATION-BASED ECONOMIC DEVELOPMENT CONTINUED

ideas that have the potential to contribute to economic development, an understanding of the different paths to commercial viability, and an accounting of the resources available to bring to bear in pursuit of such success. This ecosystem framework is intended to reflect DRI's existing "bottom-up" culture.

The project consists of two components:

1. A program of progressive education and training for groups of DRI faculty and staff (Commercialization Fellowship). Short, workshop-type interactions will be provided for a broad range of faculty and staff in order to raise the level of sophistication across the board with respect to technology transfer and commercialization. One or two dozen faculty-driven ideas will be selected through a competition for further refinement in more focused workshops and one-on-one mentoring and further winnowed through meeting of milestones and other factors to a handful of project ideas that will be developed more intensively by the faculty members, office of the Vice President of Research (VPR), and outside resources to include other Nevada System of Higher Education (NSHE) institutions, regional non-profit organizations, and out-of-state direction and mentoring as needed.
2. Encouragement and support for obtaining funding through federal Small Business Innovative Research (SBIR) and Small Technology Transfer Research (STTR) federal programs. Through a matching program enabled by the proposed project, DRI aims to incentivize faculty to participate more fully in obtaining and using SBIR/STTR program funds. Although the sectors of interest will not be limited intentionally, due to the nature of DRI research it is likely that the technologies that will be introduced into the project will have a strong environmental or climate component.

Currently, the project is expanding by initiating a new Entrepreneur in Residence (EIR) program in partnership with the UNLV Technology Transfer Office to hire two EIRs who will identify commercializable technology at DRI and UNLV, form a startup company, and lead that startup company to a successful spin-out from the campus. A project manager based at UNLV will oversee the implementation of the EIR program with sufficient oversight from leadership at both campuses to ensure that the resources and time of the EIRs is shared equitably between the two campuses.

UNR

Nevada Center for Applied Research

The Nevada Center for Applied Research (NCAR) is a stand-alone, fully functional applied research and development technology center that serves to enhance the global competitiveness of Nevada industry by leveraging the physical and intellectual assets of the University of Nevada, Reno (UNR). NCAR's mission is to stimulate regional innovation-based economic development (IBED) by aligning the needs of industry, startup companies, researchers, and entrepreneurs with resources at UNR. This is achieved through:

1. Establish collaborative relationships between industry and academia that promote open innovation research programs and scientific studies to address real-world problems.
2. Facilitate industry access to cutting-edge shared research laboratories and sophisticated instrumentation and equipment.
3. Build an interdisciplinary team of faculty, scientists, postdoctoral students, and grad students to work on ongoing or one-off projects, or new-complex developments.
4. Provide access to an entrepreneurs' support network that includes incubation and business mentoring from experienced entrepreneurs and executives.
5. Provide reduced cost co-working space available to the University community and local startups.



The Living Lab component of NCAR is proving to be an excellent real-world experimental platform on which to pilot new concepts, discover engineering limitations, and develop solutions. Primarily, the issues of network management, sensor data quality, sensor fusion, computer vision, and cybersecurity are seen as the near-term practical research areas in which to invest development time and effort.

INNOVATION-BASED ECONOMIC DEVELOPMENT CONTINUED

GOED



The Sierra Accelerator for Growth and Entrepreneurship (SAGE) program supports community and economic development by providing SBIR/STTR grant support services to Nevada businesses, innovators, and entrepreneurs.

WolfCorps is designed to help move research beyond the university laboratory and guide the process of transferring research innovations into products and processes that benefit society. Based on the Lean Launchpad methodology developed by Steve Blank, WolfCorps offers researchers an immersive training experience where participants engage with industry leaders to identify challenges and develop targeted solutions.

Knowledge Fund Return on Investment

Since its inception, the Knowledge Fund has demonstrated substantial returns on investment for Nevada's economy and positively impacting every Nevadan:

At the University of Nevada Reno (UNR) the Knowledge Fund has:

- Created more than 710 jobs by affiliated companies;
- Located more than 47 companies with

- university-based operations;
- Raised more than \$35.2M in grants and contracts;
- More than 375 companies and organizations engaged through memberships or agreements;
- Affiliated companies raised \$198.8M in Venture Capital funding;
- Created a Living Lab for autonomous vehicle technologies in Reno-Sparks;
- NCAR affiliated company American Battery Technology Company received a total of \$68 million as part of the Battery material Processing and Component Manufacturing Act through the US Department of Energy.

At the University of Nevada Las Vegas (UNLV) the Knowledge Fund resulted in:

- Five spinout companies, 82 patents filed;
- \$28.98M in sponsored research awards and \$6.87M in gifts and donations;
- Spinout companies HeligenicsQuantum Copper, NoFire Zone have been continuing to raise seed and venture capital funding and have been supported by the State's Venture Capital Program Battle Born Growth;
- 127 students and interns have been engaged with projects;
- Black Fire Innovation facility is a direct result of the Knowledge Fund.



INNOVATION-BASED ECONOMIC DEVELOPMENT CONTINUED

At the Desert Research Institute (DRI) Knowledge Fund investment:

- Created the Healthy Nevada Project, a population health study that is examining genetic and environmental risks for certain diseases;
- Established a partnership between DRI and Renown Healthcare, as a direct result of the Healthy Nevada project, culminating in the creation of the Renown Institute for Health Innovation (IHI);
- Introduced a Commercialization Fellowship Program and the launch of an Entrepreneur in Residence Program;
- Formed four spinout organizations most prominently Tu Biomics which has continued to raise additional seed funding rounds from venture investors, including the State's Venture Capital Program Battle Born Growth and strategic industry partners;
- Created WaterStart, now operating independently, which has evaluated more than 400 technologies for members, and deployed 42 technology pilot projects leading to \$3.2M in investments.

State Small Business Credit Initiative (SSBCI)

On October 4th, 2022 Nevada's SSBCI Program was approved by U.S. Treasury...



Nevada's SSBCI Program is overseen by GOED and operated by Nevada Battle Born Growth Escalator, Inc. a corporation for public benefit and 501(c)(3)

created by GOED in 2016 following the passage of AB17 of the 2015 Nevada Legislative Session.

Nevada's small businesses and start-ups are encouraged to consult the program's website at <https://nvsmallbiz.org/>.



The SSBCI program does not directly lend but businesses are encouraged to work with their lenders to benefit from SSBCI. Small business applicants to the Microloan program should consult our website or the subsection <https://nvsmallbiz.org/microloans/>. Technology-based highly scalable startups should go to our website or the subsection <https://battlebornventure.com/>.

Startups are encouraged prior to application to check out if they are a fit: <https://battlebornventure.com/are-we-a-fit/>.

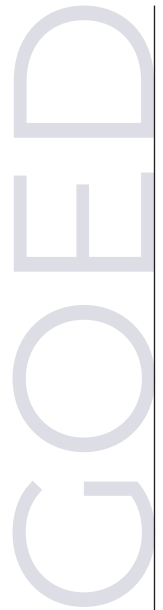
SSBCI was first authorized by P.L. 111-240, the Small Business Jobs Act of 2010, as a means to assist small businesses following the Great Recession (2007-2009).

The core requirement of SSBCI programs is that federal funds must be matched by private capital. The state must ensure at least a 1:1 match of federal and private capital across all of its deals. In addition, when states apply to Treasury for program approval, they must demonstrate a reasonable expectation that they will be able to generate 10 private dollars for every dollar of SSBCI funding over the duration of the program averaging across all of its components.

GOED has been the designated agency to create and oversee the Nevada SSBCI Program. It stood up two component programs—Collateral Support (CSP) and a Venture Capital Program, Battle Born Growth Escalator.

The American Rescue Plan Act of 2021 (ARPA) reauthorizes and amends the Small Business Jobs Act (SBJA) of 2010, which established the State Small Business Credit Initiative (SSBCI) Program. ARPA provides a combined \$10 billion to states, the District of Columbia, territories, and Tribal governments (Eligible Jurisdictions) to help address the economic fallout of

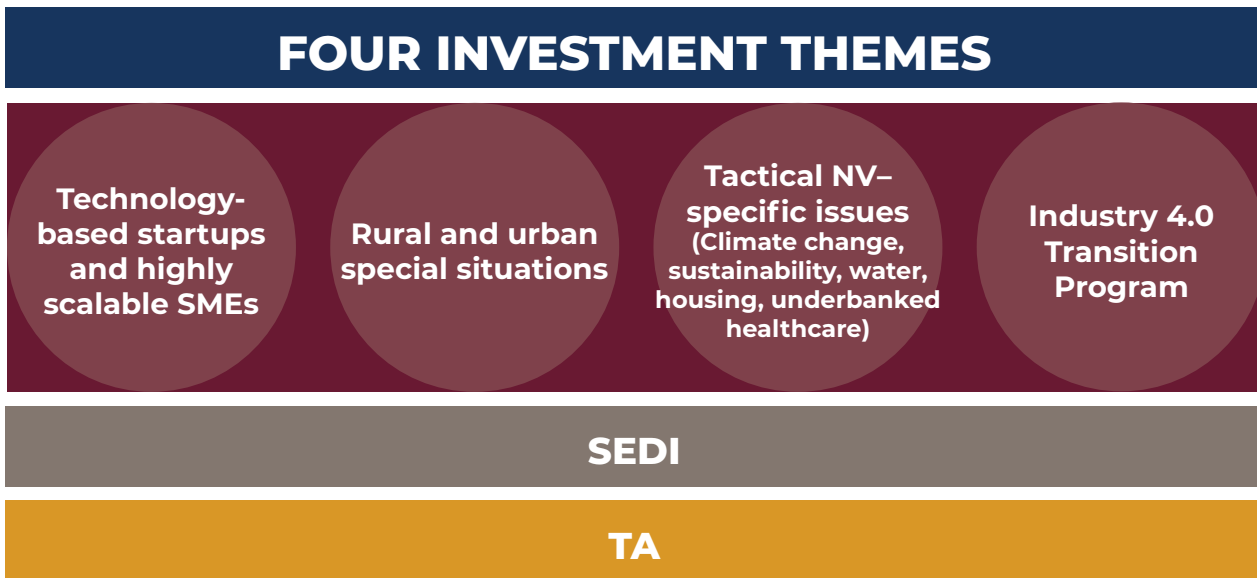
INNOVATION-BASED ECONOMIC DEVELOPMENT CONTINUED



the pandemic and lay the foundation for a strong and equitable recovery by providing direct support to jurisdictions for programs that increase access to credit for small businesses.

GOED has devised an expanded program structure building on its extensive SSBCI experience. The agency submitted the required “initiated application” in December, 2021 and will submit the State’s “complete application” by February 11, 2022.

As a reflection of the wider scope of the reauthorized SSBCI—namely a specific allocation to very small and Socially and Economically Disadvantaged Individual run small businesses—GOED will take a theme-based approach for its program design. This theme-based approach focuses specifically on areas of impact on Nevada’s economy as well as an ‘evergreen timeline’ first, and financial instruments as defined by U.S. Treasury second. The latter constitute the necessary tools for achieving the desired impacts under each theme. The Program’s structure can be depicted as follows:



Both Social Economic Disadvantaged Individual run small businesses (SEDI) and SSBCI’s Technical Assistance (TA) components will be applicable to each of the four themes. Detailed description of Nevada’s four themes:

1. **Technology-based and highly scalable small and medium enterprises:** Fostering the growth and sustainability entrepreneurial ecosystems in the high growth small business segment resulting in above average job growth and scale. Financial instruments comprise direct investment through a co-investment model to satisfy U.S. Treasury matching and leverage requirements and will build on the current Battle Born Growth Escalator SSBCI Venture Capital Program. This segment will also include the utilization of accelerators mainly sponsoring (with recycled SSBCI 1.0

- 1 funds) early-stage¹ Nevada-wide accelerator operated by local StartupNV, and expansion- and growth stage Nevada-wide accelerator operated by a national recognized accelerator brand which will ensure attractions of startups to Nevada. In addition, both accelerators connect and collaborate as operations are additive and non-competitive.
2. **Rural and urban special situations:** Achieving a more equitable access to and distribution of capital for small businesses including very small business category (as per reauthorized SSBCI segment). Particularly in rural but also in many urban areas scalable small businesses are the exception and so called ‘main street’ businesses dominate. These also often fall within the SEDI category. Hence, credit instruments such as Loan Participation—including a dedicated program focusing on

1 Pre-seed and seed-stages.



INNOVATION-BASED ECONOMIC DEVELOPMENT CONTINUED

smaller loans of less than \$150k—and Collateral Support Programs will comprise the focus of the financial instruments-portfolio. To ensure sufficient demand and deployment an efficient mechanism of engagement with both credit providers as well as small businesses would need to be put into operation. This will be achieved through the creation of a ‘Small Business Marketplace site’, aka landing-site, for both credit providers (mainly community development institutions, CDFIs) and small businesses, particularly very small and SEDI businesses.

3. **Tactical Nevada-specific issues:** Assisting small businesses helping Nevada address the state’s specific socio-economic and environmental challenges. For example, strong economic growth in recent years has led to an affordable-housing shortage, the pandemic has brought to the forefront that a large number of particularly vulnerable populations are not in the possession of a bank account, and Nevada as a Western-mountain state is particular vulnerable to climate change impacts. While traditional governmental support programs are continuing to address those challenges the state’s SSBCI program can also incentivize private-sector entrepreneurs to develop solutions and either form new companies or expanding existing small businesses as those challenges represent attractive market opportunities. This segment is expected to be supported mainly by Loan Participation Programs as well as Venture Capital². Following the passage of SB283 at the 2021 Nevada legislative session, the latter also containing a C-PACE Fund for financing commercial real estate energy efficient upgrading³.
4. **Industry 4.0 transition:** Maintaining and supporting Nevada manufacturers competitiveness in the age of automation. Nevada’s manufacturing sector has undergone stellar growth over the last decade. To maintain momentum and ensure competitiveness of manufacturers, of which many are small businesses, SSBCI can provide better access to capital required for investments in the next generation of advanced manufacturing technologies (also known as ‘Industry 4.0’). This segment will mainly be supported with traditional credit programs such as Loan Participation and Collateral Support, as well as revenue-based financing within Venture Capital.

Reimagine Workforce Preparation

Progress in Workforce Recovery

The Supporting and Advancing Nevada’s Dislocated Individuals (SANDI) project using virtual reality and 3D digital content teaches labor market literacy and provides online training using class materials formatted into virtual reality. The career navigation system decodes prior work experience to assign college credit and/or competency badges. Virtual reality content enables individuals to “see” and experience tasks, key skills and abilities of in-demand STEM careers so they can evaluate job interest and aptitude. Then if the individual feels well suited to begin a program of study, the training leads to stackable, nationally recognized STEM credentials of value that can be obtained in months, not years.

Teaching Tools in 3D to Improve Learning Outcomes in Workforce Training

Project SANDI is amplifying immersive technology in workforce development. Libraries use of virtual reality, augmented reality and 3D objects and video, like all technological advancements, have been slowly but surely growing over the years. However, in 2022, it is no longer seen as a technology of the future: it is officially here being used in workforce recovery programs across the country. Its adoption is global within medical schools as an essential tool for surgical training and is used in teaching hospitals. Libraries of all types across the country are actively using VR/AR/3D technologies to drive accelerated learning, especially in STEM. According to a 2020 study in the British Journal of Educational Technology, students who use virtual reality in their science lessons over six weeks significantly outperformed the control group in terms of academic improvement⁴ (Bower, M., & Jong, M., 2020).

Milestones in the SANDI ‘Building’

- Great Basin College has fully implemented virtual reality instructional assets into its CNA program, students Director of Programs, Gina Johnson says: *“Instructors can assign students to go to the library and check out a virtual reality headset to be worn as a mobile classroom. Virtual reality CNA content will enhance the textbook theory content, adding an additional layer of immersive visual learning. What is learned in the classroom is accentuated*

² It could also include utilizing funds for impact investing, a strategy that seeks to generate financial returns while also creating a positive social or environmental impact. The benefits will include an expectation of a measurable social, as well as financial, return will the goal to foster economic development while achieving social outcomes.

³ See also Nevada Climate Strategy: <https://climateaction.nv.gov/> and C-Pace in state climate strategy: <https://climateaction.nv.gov/policies/pace/>

⁴ Bower, M., & Jong, M. (2020). Immersive virtual reality in education. British Journal of Educational Technology, 51(6).

INNOVATION-BASED ECONOMIC DEVELOPMENT CONTINUED



with a dimension, like guided anatomy and physiology and active clinical judgement lessons. This really enhances learning by appealing to all learning styles: visual, auditory, reading, and kinesthetic learners. Improving clinical judgement before going to the clinical setting improves confidence and safety,” says Gina Johnson. “Also, the content applies across many kinds of health science courses, so instructors teaching related concepts can have their students use this too, creating course reserves available from the academic library.”

- 1018 PicoNeo2 headsets are distributed throughout Nevada libraries to include cataloging in the community colleges library collections for deposit collections into corresponding public libraries. This is the first of its kind in America to share and connect resources between the community college academic library and public library that specifically advance workforce training programs leading to industry recognized credentials and career navigation leading to those priority programs.
- Five virtual reality work environments are complete, the first of their kind in America.
- 10 virtual reality field trips are complete allowing career seekers to ‘see into’ a new career.
- The Nevada CareerExplorer’s expanded features are live, and more than 50 career navigators are now ‘rostered into’ the system.
- The SANDI catalog of courses from the community colleges is combined with the awards from private training providers—starts Nevadans using SANDI resources in 2023 in a great position.

SANDI Presenting Nationally and Internationally

GOED’s Karsten Heise and Tammy Westergard joined an esteemed group of educators to include Dr. Milton Chen, the co-founder of the George Lucas Educational Foundation, Children’s Television Workshop and public television pioneer, renown author, with Dr. Chen, Microsoft’s Catherine Devine, WNC’s Dr. Dana Ryan, Karsten Heise and others a lively opening panel focused on the wisdom of the virtual reality learning tools embodied within SANDI Project. This was for San Jose State University’s Library 2.0 Virtual Reality and Learning, Leading the Way with over 3,500 registrants from all over the world.

GOED’s SANDI team members led three workshops on at the 38th annual meeting of the National Association of Workforce Development Professionals (NAWDP) in Las Vegas held at the South Point Hotel on Tuesday featuring the role that virtual reality plays in workforce development. These three workshops were: “*Feel the Learn—How virtual reality amplifies upskilling and talent,*” “*Fly in Close Formation: Grow Bandwidth through a Community of Practice,*” and “*Hello, meet my colleague and my co-bot*”.

The annual NAWDP conference presented an opportunity for Nevada to showcase its leadership in employing cutting edge educational and career navigation technologies as well as its unique stakeholder engagement approach. GOED’s Tammy Westergard and her team developed a unique methodology termed the SANDI Community of Practice” (CoP), which is bringing together workforce professionals in the public and non-profit sector from every county in Nevada at local and state levels.



GOED’s SANDI Coordinator Tammy Westergard and virtual reality publisher Lifeliqe pictured with the team at Vineburg Machining.



INNOVATION-BASED ECONOMIC DEVELOPMENT CONTINUED



Great Basin College CNA Students and Program Director Gina Johnson Virtual Reality Headset Kit

SANDI Community of Practice—Keeping their Eye on the Prize

Instruction and messaging to date has emphasized SANDI's career information database, the Nevada Career Explorer, virtual and augmented reality components, and highlights of the partnerships with NSHE community colleges as well as other training providers. Details about precision career navigation through the Nevada Career Explorer and 3D, augmented and virtual reality that map to Nevada's resilient STEM jobs and how having a second teacher in virtual reality and helping people decode their skills brings a new suite of tools to coaches. And an overview of how Nevada's public libraries can create an outreach funnel to raise awareness about Nevada's resilient STEM jobs through focused programs and extreme cooperation generated has generated robust buzz and enthusiasm for what is on the horizon.

About Project "SANDI"

Nevada is 1 of 8 states to be awarded the Supporting and Advancing Nevada's Dislocated Individuals (SANDI) project from the U.S. Department of Education. This investment toward expanding short-term education and training opportunities increases Nevadan's access to career pathways in Nevada's priority sectors including healthcare, advanced manufacturing, logistics, information technology (IT) and skilled trades to meet the needs of students, employers, and their local community. Project SANDI has supported more than 1,000 Nevadans from across the State in partnership with Great Basin College, College of Southern Nevada, Truckee Meadows Community College, Western Nevada College and other training providers.

This investment toward expanding short-term education and training opportunities increases Nevadan's access to career pathways in Nevada's priority sectors including healthcare, advanced manufacturing, logistics, information technology (IT) and skilled trades to meet the needs of students, employers, and their local community.

WORKFORCE DEVELOPMENT

By Stacey Bostwick, Director of Workforce Development

GOED

WORKFORCE INNOVATIONS FOR A NEW NEVADA 2023 BIENNIAL REPORT

Growing a WINN-ing Strategy

In 2016, the State of Nevada established a program known as Workforce Innovations for a New Nevada (WINN) to arm employers with skilled employees. WINN represents the first workforce development training program of its kind in Nevada and is administered by the Governor's Office of Economic Development (GOED). The overarching purpose of the WINN fund is to support Nevada's economic development through implementation of workforce development training programs that prioritize the recruitment, assessment and training of a highly skilled workforce.

This fund makes critical strategic investments in industry partnerships to ensure that new and existing businesses in Nevada will be able to recruit and retain qualified employees. The funding is uniquely positioned to support the build out of accelerated solutions essential to growing a knowledge-based economy for all Nevadans, resulting in over 2,000 residents gaining quality high-skill job training in targeted industry sectors, including information technology, mining, advanced manufacturing, logistics and healthcare. More information can be found at: <https://goed.nv.gov/programs-incentives/workforce-development/winn/>.

WINN has been deployed to support the needs of industry, in both localized strategy and statewide approaches, to leverage existing workforce development frameworks to provide wraparound services and sustainable pipelines, to collect data and share best practices for new economic models and to generate additional Federal investments in Nevada's workforce development efforts. Since its inception, the GOED Board and leadership have approved nearly \$13 million in WINN project funding—a significant State investment that is shaping new workforce training options, as a catalyst and accelerator to formal pathways of workforce development mechanisms. Funded projects will create pathways to family supporting careers for Nevadans needing to reskill as a result of structural shifts in our workforce and economy.

Project applications are accepted year-round, and must align with the State's Economic Development Plan and the WIOA Unified State Plan to prioritize workforce shortages identified therein. This Biennium, GOED's Workforce and Research teams partnered to develop a new report that maps out available training programs in GOED's targeted sectors: Advanced Manufacturing, Technology, Healthcare and Logistics. These reports support the identification of gaps in availability and issues of capacity for workforce training programs that produce the skilled talent needed by current and new Nevada employers. This analysis was provided to stakeholders throughout the State and is the basis of our strategy to target occupational areas and/or skill sets that are likely in high need of resources to support development, enhance capacity or update technology.

GOED will continue to administer the fund to promote the growth of programs to train Nevadans in high-wage, high-skill opportunities for all Nevada businesses to support to innovative industry-led partnerships, to construct pathways and programs that do not exist and further facilitate the reskilling and upskilling of the State's ready and willing workforce.

Since its inception, the GOED Board and leadership have approved nearly \$13 million in WINN project funding.

WORKFORCE DEVELOPMENT CONTINUED

Industry-Led Training Model

Success in WINN projects stems from robust round-robin relationships among industry partners, educational providers and supporting community agencies. WINN can move the needle on the volume, pace and creation of innovative training programs, but it cannot be done without effective program design and integration into existing workforce development strategies and partnerships. In that vein, WINN projects are a coordinated effort across Agency stakeholders including GOED, Nevada System of Higher Education (NSHE), the Nevada Department of Employment, Training and Rehabilitation (DETR), and the Governor's Office of Workforce Innovation (GOWINN). These partners convene on several workforce strategy projects, including joint Demand Occupations reports, Sector Council Labor Market data, GOED's Learn and Earn Advanced Career Pathways (LEAP), Project SANDI, Nevada Works Good Jobs Challenge—all of which inform the direction of WINN investments.



The WINN Fund requires industry partners drive the design of training solutions which is an effective way for educational institutions to develop accurate plans that ensure that their students are working on current technologies and gaining the needed skills. This is especially critical for industries that are new and less mature in Nevada's regional economies. While one college and one employer at a time move the needle, education providers are encouraged to engage several employers with similar needs when developing a project. This coordinated approach also bears fruit for the workforce. Industry validation of the skills that

prepare an employee for the job give students the clarity and assurance that career paths abound. Leading with industry in collaboration with system partners results in silo-busting workforce development initiatives.

As a result of their participation in any of the WINN project models, employers here are seeing an increasingly steady pipeline of candidates with in-demand skills to consider for hire, thus decreasing screening, interviewing, and training costs and also reducing worker turnover. Education providers are also working creatively with employers to design training solutions in a tight labor market for new hires. In turn, Nevadans gain access to education and skills needed for career advancement and self-sufficiency.

Access to Training

A key facet to WINN is ensuring that programs receiving funding have a clear plan in place to ensure all Nevadans can benefit from participating in the program, including those with barriers to employment. While WINN's main purpose is to deliver a skilled workforce to facilitate the success of Nevada's businesses, it must be done in a way that ensures economic mobility for all and makes strides in aligning the skill levels of Nevadans with the needs of industry. According to research by the National Governor's Association, a diverse workforce also means higher economic growth, innovation in business and a more qualified workforce (<https://www.nga.org/publications/creating-a-more-equitable-workforce-system-opportunities-for-governors-and-states/>).

The plan each WINN project must submit is commonly referred to as the Workforce Diversity Action Plan. The application process specifically requires partners discuss plans to engage and serve: Veterans, Gender (with respect to non-traditional employment), Race/Ethnicity, Recipients of Public Assistance, Returning Citizens, and Persons with Disabilities. Data from the last four years of projects broadly indicates that WINN projects have increasingly and effectively engaged diverse participants in training programs, including recipients of SNAP or other public assistance. Over 40% of female trainees in WINN projects were pursuing skills in an occupation not traditionally pursued and nearly half of all trainees were identified as a person of color. As is expected in effective service delivery models, WINN will continue to support the inclusion of all Nevadans in training projects, focusing on opportunities to complement services and avoid duplication of workforce or related programs.



Graphic from SHRM: <https://www.shrm.org/hr-today/news/hr-magazine/summer2020/pages/upskilling-benefits-companies-and-employees.aspx>

An additional consideration in terms of access to workforce development training is the need for ongoing education in response to transformative changes in industry. According to the World Economic Forum, 54 percent of all workers will soon need “significant upskilling.” Investments in workforce development must therefore be done along the entire career path and not only at varying points of entry. Strategies should strive to create a large and nimble workforce and more opportunities to position workforce training pipelines to serve both workers and employers. Systems may need to be upgraded or transformed to respond to tight labor markets or rapidly changing skills in demand.

Senate Bill 24

Senate Bill 24 passed the 81st session on May 31, 2021. The bill revised provisions governing the distribution and use of money provided to the Governor’s Office of Economic Development (GOED) for the Workforce Innovations for a New Nevada (WINN) Fund. SB 24 established the requirement that any program of workforce development that may be approved by the Governor’s Office of Economic Development (GOED) must result in a postsecondary or industry-recognized credential, or an identifiable occupational skill that meets the applicable industry standard. Additionally, it requires GOED to ensure that businesses participating in a program of workforce development meet certain criteria including private sector accountability and coordination with relevant State agencies to review federal Worker Adjustment and Retraining Notification Act notices. The bill also established additional criteria for determining the eligibility

and priority of certain programs of workforce development and requires the Board of Economic Development to define the construct for the priority given to programs providing high-skill and high-wage jobs. Finally, the bill clarifies the type of expenses that may be incurred by an authorized provider of a workforce development program, focusing the funding on infrastructure and capping indirect expenses.

The Board of GOED met on December 2, 2021 to define high-skill and high-wage jobs in accordance with SB 24. The definition provides a baseline requirement that is posted on the WINN website and is included in the funding pre-application and application preface. The Board defined a high-wage job eligible for WINN funding as jobs paying 85% or more of the average wage for the occupation benefitting from the application, but not less than \$17 per hour. The Board defined a high-skill occupation eligible for WINN funding as a position requiring education or training beyond a high school diploma.

Accountability

While each WINN project provides specific goals and outcomes in their program description, GOED also ensures the grantees have a mechanism to report mandatory elements according to NRS 231.1513 including expenses, number of persons trained, number of persons employed by participating businesses, average wages of those hired and workforce diversity action plan activities. The grantees are also supplied with the tools to gain permission and collect this data, from participants and employers alike.



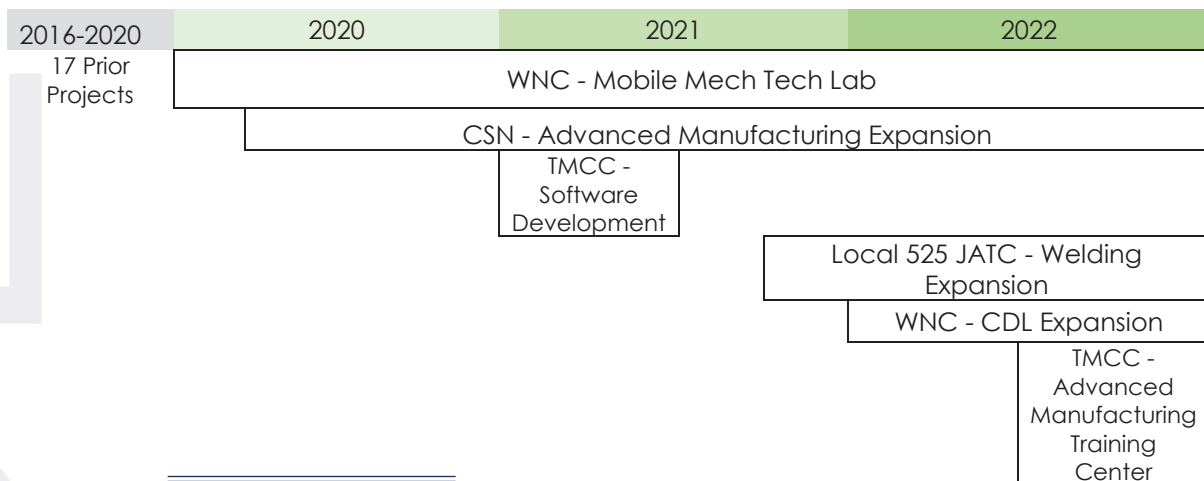
WORKFORCE DEVELOPMENT CONTINUED

Grantees are required to submit this data on a quarterly basis to GOED. The outcomes reported by the grantee and subsequently compiled for this Biennial report capture results known to the educational provider. Staff evaluates applicant and trainee level data, including demographics and the outputs for each program to determine if they are demonstrating satisfactory progress. This evaluation can also identify areas for improvement or the need for staff support. In the event a program is not meeting its benchmarks, GOED will provide notice of non-performance and work with the Grantee towards a solution through corrective action.

FUNDED PROJECTS

Project Summaries

A total of seventeen (23) projects have been approved for WINN funding since 2016, for a total of \$12,838,955.70 in obligations. Following this project approval timeline is a summary of projects awarded WINN funding who were active during the period of January 2021 through December 2022. Outcomes reported capture program activities through September 30, 2022.



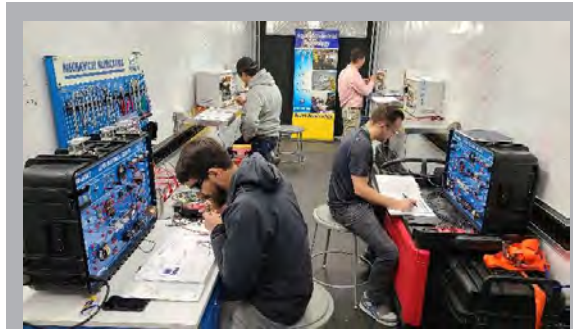
WORKFORCE DEVELOPMENT CONTINUED

WESTERN NEVADA COLLEGE Mobile Mech Tech Lab

18 Trained
10 Credentials

This project provides substantial support to WNC in their efforts to develop and deploy the Tech Express Lab, a mobile learning lab for mechanical technology skills needed in regional mining, advanced manufacturing and aerospace sectors. Meeting students where they are physically is a critical component of the mobile lab model alongside the effort to increase access to workforce training and closing rural educational attainment gaps. WNC is also planning to include industry-based deployments to serve area employers with new hires in need of skills training.

The WINN Fund investment opened up additional investment from the William N. Pennington Foundation, Tesla and Wells Fargo. WNC has been engaging new industry partners, coordinating with local secondary schools for training, and adding content offerings to the mobile lab menu. The WINN agreement for this project is scheduled to cease at the end of the Biennium, June 30, 2023.



"This program is one [more] way we are working closely with WNC to develop our employees and keep them up to speed on current technologies. Improving their skills through training is important for our employees as they solidify and grow their careers at Baker Hughes-Bentley Nevada," said Global Supply Chain Executive John Sanchez



"I think this program is really fantastic. The teachers are approachable; I can talk to them after class. Ms. Tenera makes it fun and interesting. The students raise their hands and correct each other – we don't mind helping each other. The way Mr. Marco explains it makes it easy to understand. It's a dynamic that I really like with a nice spread of different students of all ages" – M. Brown, current student

COLLEGE OF SOUTHERN NEVADA Advanced Manufacturing Expansion

48 Trained
13 Credential
90% Participants Representing
Workforce Diversity

The major focus for this initiative is advanced manufacturing, in preparation for the growth this industry sector will experience over the next several years in southern Nevada. With over 1,100 manufacturing employers in Clark County and only one post-secondary manufacturing skills program that targets middle skills required of most job opportunities, CSN proposed to expand skilled training programs to better meet the demands of the sector. CSN has finalized curriculum development to offer skills training for CNC machinists and industrial automation technicians that leads to up to 5 industry credentials through SACA or NIMS.



WORKFORCE DEVELOPMENT CONTINUED

CSN has utilized this investment to leverage partnerships leading to Haas Technical Education Centers (HTEC) in Henderson and at the Sahara West Center. CSN has also invested in the program by bringing in leadership with an Executive Director of Advanced Manufacturing. The training is offered as open entry/open exit or through 12-week classes. They will soon look to build out customized training and incumbent worker training offerings. The WINN agreement for this project is scheduled to cease at the end of August, 2023.

Nevada's commitment to developing the programs necessary to grow a skilled manufacturing workforce is proof that Haas Automation made the right decision to invest in Southern Nevada. As the largest manufacturer of machine tools in the U.S., we understand that skilled workers are essential to our success. Right on cue, the Governor's Office of Economic Development (GOED) ... helped fund programming that will meet our needs and those of other manufacturers in the region."

—GENE HAAS, FOUNDER AND CEO, HAAS AUTOMATION, INC.



Though we are committed to hiring local talent, it is often difficult when looking for software developers (front end, back end and full stack). In collaboration with local employers, TMCC has created an education and training program that reflects the current skills we look for in potential employees or want to develop in our current workforce. The program provides a solid foundation that will strengthen the regional pipeline of skilled technology workers. — Zak Gulling, CIO, Monarch Casino & Resort, Inc

COLLEGE OF SOUTHERN NEVADA Software Development Boot Camp

20 Trained

TMCC worked closely with the Economic Development Authority of Western Nevada (EDAWN) to understand the workforce needs of technology companies and put together a training pilot to help prospective technology employees develop the foundational skills they will need to enter the career field. The bootcamp style training known as Tech Careers FastTrack is self-paced, custom to individual needs and linked to paid work experiences.

With their funding, TMCC developed the online portal for accessible curriculum, paid for software license fees, and

acquired computers for students who would did not have computer access to complete the training. TMCC committed to the ongoing success of the program by braiding the program in Project SANDI funding so a Navigator could provide student support and program outreach. The funding to launch this effort ended June 30, 2021.

WORKFORCE DEVELOPMENT CONTINUED

LOCAL 525 JATC Welding Expansion

The Pipe Trades Joint Apprentice and Journeyman Training Center of Southern Nevada sought project funding to advance the welding technology capacity in southern Nevada to meet emerging industry needs. The JATC will begin offering pipe welding, and advanced skill training not currently available in the region. The JATC will imbed the training into its apprenticeship program, offer the training as a distinct module for journeyman to upskill, and will open it up to graduates or other advanced students in the College of Southern Nevada's welding program as an enhancement training option.

With this funding, the JATC will acquire 3 new welding systems, orbital welding heads, and a cutting and beveling machine. The welding systems have recently been installed and the training module will be available in 2023. The WINN funding for this project must cease at the end of the Biennium, June 30, 2023.



The welding training program at the Pipe Trades Joint Apprentice and Journeyman Training Center of Southern Nevada (JATC) ...will provide our organization with the skilled workforce we need. Harris Company is always up to date with the newest technology and resources to make our work more efficient. We need our skilled workforce trained and certified to keep up with the workload that continues to grow. We rely on our Local JATC to provide this training to our Journeyman and Apprentices. – Michael Matey, Plumbing/Piping Field Superintendent, Harris



"I passed my Class A CDL today. I just wanted to say thanks, and let you know how great an instructor Joe [Terry] was. He takes his time with the students... and also made it clear what he expected of us. Joe is great, the class was great, and I'm thankful ... to Western Nevada College for my training." –RM, recent grad

WESTERN NEVADA COLLEGE Commercial Driver Expansion

12 Trained

11 Credential

83% Employment

\$23.33 Average Starting Wage

This project was funded to enable the development of a second training site for this much-needed workforce training. With these funds, WNC will develop a training site in conjunction with their Carson City campus. This project was supported by numerous local employers and enables WNC to become a DMV certified third-party testing site. Additionally, WNC is engaged with partners to recruit a diverse pool of trainees to provide access to a stable career offering family-sustaining wages.

WORKFORCE DEVELOPMENT CONTINUED

With this funding, WNC will add 100 training slots annually to address the capacity shortfall to meet current and growing demand for commercial drivers. Since being funded in March 2022, WNC has acquired an additional training truck, on boarded new instructors,

and expanded simulation offerings in their program. Training commenced in the new location in the fall of 2022. The WINN funding for this project must cease at the end of the Biennium, June 30, 2023.



Panasonic North America (PENA) is pleased to enter into partnership with Truckee Meadows Community College (TMCC) in an effort to develop an Advanced Manufacturing Training Center to address the current and future need for advanced-skill operators and maintenance technicians.

PENA's partnership with TMCC will provide a non-traditional, low-risk entry point into a training program that leads to or is concurrent with new employment. We greatly appreciate the opportunity to partner with TMCC and GOED in the development of the project and the impact it will have in providing training... to first-time manufacturing job seekers.

- Louis Berry, Director of Production Training and Industrial Engineering – Panasonic Energy of North America

TRUCKEE MEADOWS COMMUNITY COLLEGE Advanced Manufacturing Training Center

GOED partnered with the Department of Employment, Training and Rehabilitation to fund this effort to establish a training center within the new Panasonic Energy North America (PENA) facility being renovated on Plumb Lane in Reno. More than \$1 million in training equipment will outfit the TMCC training labs facility in the new Advanced Manufacturing Training Center which will increase access to training opportunities in advanced manufacturing, production systems, automation, and robotics for those seeking a living wage career pathway or those upskilling for advancement. Although the Center is housed with PENA, the training will offer non-proprietary skills courses.

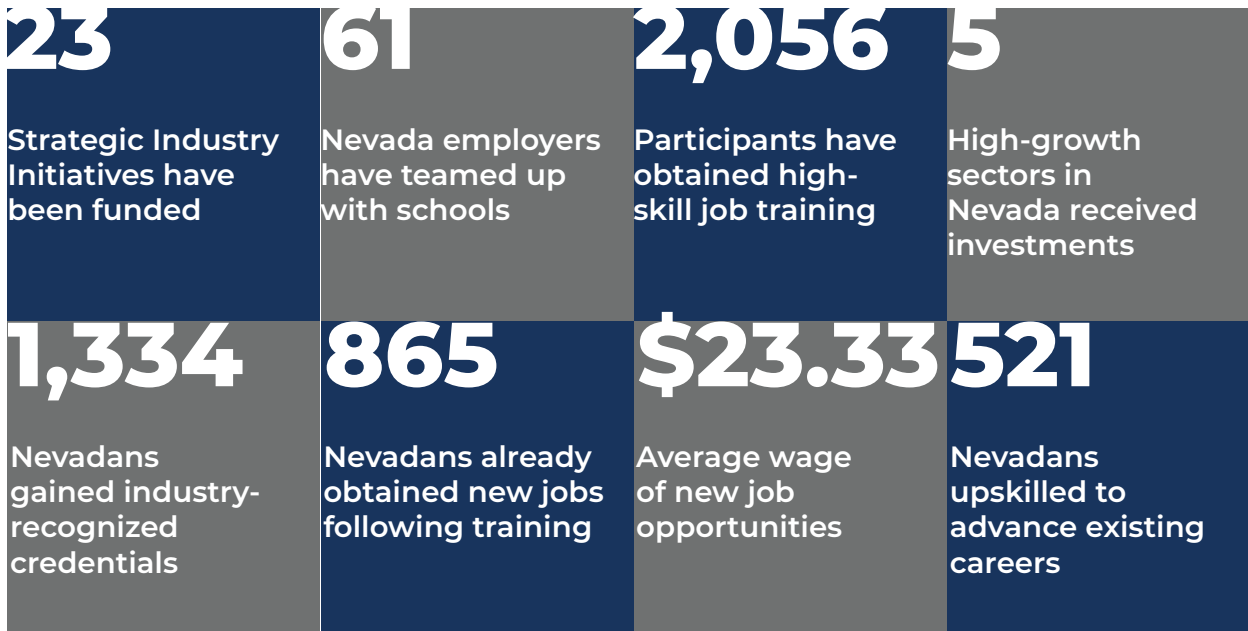
With this funding, TMCC will add an instructor and coordinator dedicated to the new community-based center. TMCC is actively working with PENA to design and outfit the labs while the building renovation continues. TMCC will provisionally offer training at other local facilities until the Plumb Lane site becomes accessible. Move in and launch of on-site training is expected in Spring 2023. It is anticipated that the new training labs will have a capacity of 400 students annually. The WINN funding for this project must cease at the end of the Biennium, June 30, 2023, but will be funded through June 30, 2024 using DETR funds.

WORKFORCE DEVELOPMENT CONTINUED

GOED

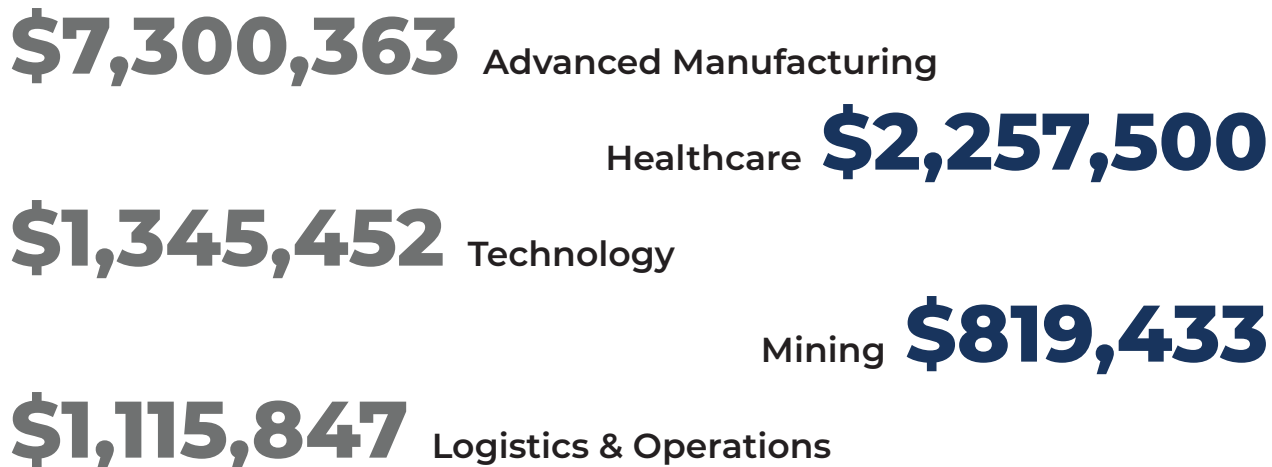
2021-2022 OUTCOMES

WINN By the Numbers



WINN Sector Strategy Investments

WINN projects have addressed skilled training programs in five critical sectors, addressing high-skill demands with substantial labor market returns. The investments outlined below are in fast-growing sectors that foster opportunities for Nevadans to participate in the labor force with potential for growth.



WORKFORCE DEVELOPMENT CONTINUED

Workforce Diversity Plan Outcomes

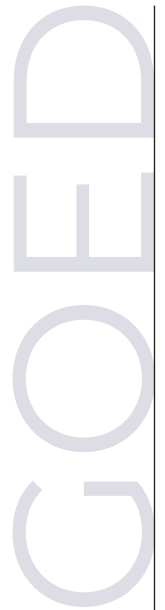


EXPENSE SUMMARY

GOED WINN Account				
Expenditure Summary				
	Actual	Actual	Actual	Obligations
	SFY 21	SFY 22	SFY 23	Remaining - SFY 23
Approved WINN Projects through December 2022				
CSN - Advanced Manufacturing Expansion**	1,720,752.28	-	-	-
Local 525 JATC Welding Initiative	-	15,655.49	48,741.84	32,017.67
TMCC - Advanced Manufacturing Training Center	-	-	-	1,640,000.00
TMCC - Software Development Bootcamp*	99,959.20	-	-	-
WNC - Commerical Driver Expansion	-	7,300.84	110,171.51	277,091.33
WNC - Mech Tech Mobile Lab**	85,586.66	-	-	-
Total Obligations/Expenditures:	<u>1,906,298.14</u>	<u>22,956.33</u>	<u>158,913.35</u>	<u>1,949,109.00</u>

* Denotes projects with end dates of 6/30/21 whose unexpended funds reverted to the General Fund at the end of the Biennium budget.

** Denotes currently active projects whose budget authority ended 6/30/21 and whose unexpended funds reverted to the General Fund at the end of the Biennium budget.



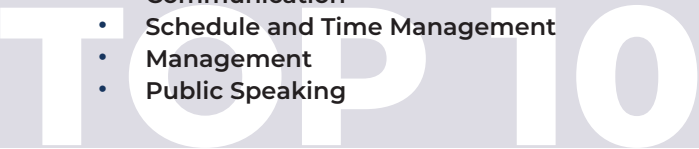
SkillsMatch

GOED partnered with the Department of Employment, Training and Rehabilitation to fund a second year of the SkillsMatch website. GOED has deployed a variety of outreach and engagement efforts reaching about 40 workforce system representatives, along with veterans accessing the Nevada Department of Veteran Services Transition Assistance Program (TAP) seminars. In 2022, over 4200 Nevadans have accessed the site with 700 researching courses or programs to address skill gaps and nearly 600 using their existing skills to find jobs where their skills can be transferred.

NEVADANS HAVE ADDED ALMOST 42,000 SKILLS THAT THEY BRING TO THE WORKFORCE.

THE TOP TEN SKILLS IN 2022 ARE:

- Customer Service
- Teamwork
- Detail Oriented
- Leadership
- Writing
- Microsoft Office: Word, Excel, Powerpoint
- Communication
- Schedule and Time Management
- Management
- Public Speaking



Incumbent Worker Training Strategy Development
In order to strategically support the development and expansion of business, GOED participates in cross-agency workforce development planning at the State level. As a member of the Governor's Workforce & Economic Development Subcabinet, GOED advocated to fill a workforce training gap for existing (incumbent) employees throughout the pandemic and in post-pandemic recovery. Growing and emerging industries are experiencing rapid growth and change, and tools to train existing employees in addition to the investments to deliver a skilled workforce are critical to successful retention and expansion of Nevada employers. DETR recently deployed a \$1 million Incumbent Worker Training pilot to support businesses and

their employees by providing reimbursement for a part of the cost of providing the training (press release for more language, summary for detail process). GOED is supporting the outreach to targeted industries in Nevada and coordinates with DETR to further the impact of the pilot.

AB450

In 2022, Stacey Bostwick, GOED's Director of Workforce Development was appointed to the Community College Workforce Training and Programs Committee developed pursuant to AB450. The committee was tasked with studying opportunities for alignment of programs to Nevada's economy and analyzing funding and governance of community colleges. In addition, the committee was among the groups that was asked to look at ways to make community college and other apprentice programs free by 2025 pursuant to the 2022 State of the State. The work of the committee concluded on July 31, 2022 with a report to the legislature August 1, 2022. Three (3) key recommendations resulted from the committee's work:

1. Support a request for a comprehensive study of the NSHE funding formula
2. Support NSHE policy revisions related to institutional advisory councils to strengthen connections between industry and educational institutions
3. Support ARP funding application for a New Workforce Incentive Grant to support students seeking targeted degrees who are ineligible for existing scholarship programs

Nevada's community colleges have shown a commitment to address the workforce needs in the State; we need to rally around their work and support its alignment to employer demands.



SOUTHERN NEVADA INFRASTRUCTURE WORKING GROUP

By Kris Sanchez, Deputy Director

AS NEVADA'S ECONOMY CONTINUES

to expand and the state's population increases, addressing the state's infrastructure needs is essential to long-term sustainability and resiliency. Since emerging from the pandemic, GOED has advanced a robust agenda to solve our infrastructure challenges.

Working with community leaders in Southern Nevada, GOED established a Working Group that was assembled to evaluate Southern Nevada's infrastructure assets and deficiencies, to identify its opportunities in the Southwest macro region, and to envision a niche for Southern Nevada that would add significant value to the state's overall economic ecosystem. The overarching goal was to position Southern Nevada as a highly attractive destination for private sector investment focused on 21st century-relevant growth. Other priorities in this mission assessment included:

- Ensuring that infrastructure enhancement will benefit Southern Nevada's most at-risk communities
- Ensuring that small businesses will benefit
- Avoiding incremental and siloed approaches to infrastructure development
- Planning beyond and across jurisdictional boundaries

The WG focused on traditional core infrastructure topics such as energy, water, road and rail networks, and digital information technology, but members also explored sustainability/conservation, education, health, childcare, and other themes, especially in their private interviews. Informal definitions of infrastructure used by WG members in the private interviews ranged from, "the built environment, everything it takes to support that built environment, and the social infrastructure" to "infrastructure connects people—to places, to opportunities, and, most importantly, to a job."

In their two-on-one interviews with Chairman Sanchez and RCG, many WG members stressed the need for a regional approach to infrastructure planning in Southern Nevada that moves beyond jurisdictional boundaries, as opposed to incremental and siloed approaches to development. Some members even expressed a need for Southern

Nevada to look at infrastructure, in a broad sense, as a macro-level challenge facing Nevada and its neighboring states, rather than geographic silos with state boundaries. Members suggested various ways to have these regional conversations about important decisions, including establishing a bipartisan, independent commission that has the responsibility and the political weight behind it to make some hard choices. Some members expressed a belief that existing silos are unlikely to be overcome without such a body, supported by the state, to make decisions from a regional perspective.

Southwest Mining Supply Chain Initiative

Due to Nevada's location in the Southwest, the state serves as a pass-through location for international cargo moving from the Port of Long Beach to Chicago and the East Coast. As the country emerged out of the pandemic and the nation's supply chains suffered from increased demand, aging networks, archaic systems, shortages of containers, flatbeds, and personnel, I began to consider how Nevada might reposition itself. In working with the Port of Long Beach, the Utah Inland Port, and Utah's Governor's Office of Opportunity, I determined that the best strategy to enhance Nevada's supply chain infrastructure was through strategic partnerships with industry. With this in mind, we formed a partnership with the Nevada Mining Association and launched a confidential mining supply chain initiative that will bring the Southwest mining associations (seven states) together to identify gaps in the supply chain ecosystem, opportunities for reshoring/onshoring, and the identification of capital to improve rail networks and related infrastructure.

WaterWise (APRA Funded)

This statewide program administered through a GOED contract with WaterStart aligns economic development entities, water agencies, technology providers, and water consumers to enable Nevada to transition to a more sustainable water-wise economy in alignment with the State Economic Development Plan. WaterWise will enhance our competitive advantage in the Southwest region, and preserve the health and vitality of our communities and accomplish the following:

SOUTHERN NEVADA INFRASTRUCTURE WORKING GROUP CONTINUED



1. Expand Water Conservation
2. Enable Sustainable Economic Growth
3. Increase Water Data Availability for Informed Policy Development
4. Provide a Consistent Platform for Economic Development Decision-Making
5. Protect Nevada's Reputation for Continued Investment

The water-wise economic performance framework provides guidance on how to incorporate consumptive water use as a factor in the economic incentive process. For example, prospective businesses that show potential for making large investments in Nevada while also consuming small amounts of water could be additionally incentivized. This framework also accounts for industries that make large investments which also require high levels of consumptive water use. These “targets for innovation” would become the focus of new categories of incentives that support reductions in water consumption and participate

in an offsetting program. Many of these “targets for innovation” already are eligible for existing incentive programs and include firms in high-tech manufacturing, energy storage, data centers, and warehousing, distribution, and logistics centers.

Southern Nevada Study (Funded through EDA State Planning Grant)

During the third and fourth quarters of 2022, I worked with a team of researchers at UNLV to develop a framework for Southern Nevada. The goal of this project is to further define Southern Nevada’s place in the Southwest and to determine how the region should consider growth opportunities in light of land deficits, a changing climate (e.g. heat island impacts and water), supply chain modernization, and lagging infrastructure investment. This project will define regionalism more succinctly for Southern Nevada policy makers.

Southern Nevada is at a critical point of potential growth or non-growth, with both opportunities and challenges in economic diversification, environmental and climate policy, and land-use needs.

If Southern Nevada is to meet the demands of the 21st century and beyond, a coordinated regional plan is necessary if the region will prosper. Fortunately, recognition of these needs has begun with the Southern Nevada Infrastructure Working Group in 2021, and a federal Bipartisan Infrastructure Investments and Jobs Act (IIJA) has dedicated funding and legislation to infrastructure. This is a start, and while the region must come together as a micro-region, challenges and opportunities also demand Southern Nevada have a plan and strategy for the opportunities and challenges it faces as part of the macro-region in the Southwest.

SOUTHERN NEVADA INFRASTRUCTURE WORKING GROUP CONTINUED

The project will be based on a regional study of the Southwest Triangle Megapolitan Cluster (Southern Nevada, Southern California, and Arizona) and Utah to document the current setting in SNV related to economic development, infrastructure, supply chain, climate policies, policies of states in the Megapolitan Cluster, and diversification opportunities, and to identify strategies or plans to enhance the region's cohesive planning for navigating regional challenges (e.g., drought, limited land availability) and a plan for how to navigate in the Southwest region. At the conclusion, leaders in Southern Nevada will have resources for a new decision-making paradigm to make regional decision considering climate policy and land-use planning, economic development, and infrastructure development.

This study will have two phases: 1) develop 10-year regional forecast in industry and workforce and identifies competing and cohesive opportunities for Southern Nevada compared to adjacent regions; and 2) identify key priorities and investments (fiscal, policy, etc.) needed to responsibly grow Southern Nevada as a micro-region and recommendations on how to navigate as a macro-region.

THE WORKING TEAM MEMBERS INCLUDED:

Kris Sanchez, CHAIR, GOED
Dave Johnson/Doa Ross, LAS VEGAS VALLEY WATER DISTRICT (LVVWD)
Jeff Brigger, NV ENERGY
Justin Brown, SOUTHWEST GAS
Terri Sheridan, CITY OF NORTH LAS VEGAS
Derek Armstrong, CITY OF HENDERSON
Bill Arent, CITY OF LAS VEGAS
Raffi Festekjian, CITY OF BOULDER CITY
Myisha Williams, NEVADA COMMISSION ON MINORITY AFFAIRS
Marilyn Kirkpatrick, COMMISSIONER/PRESIDENT OF NACO, CLARK COUNTY
Shani Coleman, CLARK COUNTY
Betsy Fretwell, SWITCH/LAS VEGAS GLOBAL ECONOMIC ALLIANCE (LVGEA)
James Chrisley, MCCARRAN AIRPORT
Bo Bernhard/Victor Wei, UNLV
Michael Bolognini, COX CABLE
Bradley Crowell/Jim Lawrence, NV DEPARTMENT OF CONSERVATION AND NATURAL RESOURCES (NDCNR)
MJ Maynard/David Swallow, RTC
Dr. Melody Rose, CHANCELLOR – NSHE
David Bobzien/Jennifer Taylor, NV OFFICE OF ENERGY
Dr. Federico Zaragoza, PRESIDENT/CE, CSN
Sondra Rosenberg/Kristina Swallow, NDOT
Constance Brooks, LAS VEGAS CONVENTION AND VISITORS AUTHORITY
Christine Guerci, DAG – LEGAL COUNSEL
Kristen Averyt, NEVADA CLIMATE INITIATIVE
Dr. Kumud Acharya, PRESIDENT – DRI
Bart Patterson, PRESIDENT – NSC

APEX ACCELERATOR

By Joan C. Rueben, NCMA Fellow – Nevada APEX Accelerator Director

WITH FEDERAL AND STATE FUNDING, the multiple-award-winning and newly-named “APEX Accelerator [formerly the Nevada Procurement Technical Assistance Center (PTAC)]” helps its formal clients—for-profit Nevada businesses, especially the small businesses, with goods and/or services to sell—pursue public sector or local, state, and federal government-related contracts (or prime contracts) and subcontracts inside and/or outside of Nevada.

In its November 2022 newsletter, the then Nevada PTAC communicated that it learned that its federal government funder would be modifying its organization’s name from Nevada PTAC to a different name.

In the December 2022 newsletter issued in the latter part of the month, the then Nevada PTAC shared that its new modified name is “APEX Accelerator [formerly the Nevada Procurement Technical Assistance Center (PTAC)],” per its federal funder.

The modified name change is based on the program—a nationwide program of APEX Accelerators (or former PTACs in the U.S. states) helping for-profit businesses of any size with their local, state, and federal government contracting and subcontracting pursuits—being elevated from the Defense Logistics Agency to the Office of the Under Secretary of Defense for Acquisition & Sustainment/U.S. Department of Defense (DoD) Office of Small Business Programs. Please note that “APEX” is not an acronym.

A variety of webpages and e-materials and so on will be changed to show the modified name over time; wherever Nevada PTAC or any variation thereof is seen herein or elsewhere, such reference is to be read as the APEX Accelerator [formerly the Nevada Procurement Technical Assistance Center (PTAC)]. Also, this APEX Accelerator is funded in part through a cooperative agreement with the DoD.

The APEX Accelerator [formerly the Nevada Procurement Technical Assistance Center (PTAC)] team provides no-charge, one-on-one counseling sessions to assist its clients on their public sector contracting and subcontracting pursuits. Counseling, in part, includes helping clients with solicitation document review and understanding, draft proposal review within a reasonable timeframe, and contract



APEX Accelerator (former Nevada PTAC) team members at a small business resource fair in Northern Nevada.

administration guidance within scope of the program. When applicable, companies are referred to business resource partners for requests that are outside the program scope of the APEX Accelerator [formerly the Nevada Procurement Technical Assistance Center (PTAC)].

APEX ACCELERATOR CONTINUED



The APEX Accelerator [formerly the Nevada Procurement Technical Assistance Center (PTAC)] also provides no-charge outreach events such as, but not limited to, webinars whether led by the APEX Accelerator [formerly the Nevada Procurement Technical Assistance Center (PTAC)] or that feature business resource partners in Nevada.

A sampling of calendar year 2022 outreach events for Nevada for-profit businesses included the following:

- Webinars that covered harnessing publicly-available business intelligence and data for federal government contracting
- A webinar on how to prepare federal government proposals
- Webinars on federal government contracting opportunities in the U.S. in the “Contract Opportunities” part of SAM.gov
- Webinars on state government contracting opportunities in Nevada on NevadaEPro
- Webinars on local government and other public sector contracting opportunities in Nevada on the Nevada Government eMarketplace
- A webinar featuring a panel discussion on government contracting by the team
- A webinar that featured the Federal Emergency Management Agency (FEMA), a federal government agency, and how to do business with the government entity
- A webinar featuring Mission Support and Test Services, a large federal government prime contractor managing and operating the former Nevada Test Site, and how to do business with the organization
- Webinars that featured Siemens, a large government prime contractor, and how to do business with the company
- A webinar featuring a formal small business client, Live Electric Inc.
- A webinar featuring a formal small business client, Polymath Solutions LLC
- Webinars on a business creating a winning capabilities statement document
- Webinars discussing resources for veteran-owned businesses
- Delivering a government contracting-related presentation for the Society of American Military Engineers-Southern Nevada Post
- Providing an outreach presentation for the U.S. Navy’s Navy Week event
- Hosting an outreach table for the U.S. Small Business Administration’s Emerging Leaders Program event
- Hosting an outreach table for an Institute for Supply Management-Nevada event
- Hosting outreach tables for the Nevada Office of Small Business Advocacy’s small business fairs
- Executing a virtual government contracting-related presentation for the State of Nevada Department of Business & Industry’s Small Business Roundtable

APEX ACCELERATOR CONTINUED

- Serving on the planning committee and hosting an outreach table for the State of Nevada Department of Business & Industry's Nevada Small Business Resource Fair event
- Providing a government contracting-related presentation for the Nevada Bankers Association Credit and Lenders Conference
- Hosting an outreach table for the Regional Transportation Commission-Southern Nevada
- Serving on the planning committee and hosting an outreach table for the Regional Business Development Advisory Council's Committed to Our Business Community event
- Giving an outreach presentation to the Business Development Advisory Council Committee
- Delivering a virtual government contracting-related presentation for the Strengthening Entrepreneurial Women online networking group
- Hosting an outreach table for an Urban Chamber of Commerce event

A subset of total APEX Accelerator [formerly the Nevada Procurement Technical Assistance Center (PTAC)] clients has competed for and been awarded public sector contracts, which are vitally important during the economic downturn the pandemic had caused. As relayed to the APEX Accelerator [formerly the Nevada Procurement Technical Assistance Center (PTAC)] by a number of clients, and if it were not for public sector business, clients do not know how they would have survived and/or thrived during the Great Recession. The same holds true even more so today given the downturn caused by the ongoing pandemic, and more businesses expanding their portfolios to sell to local, state, and federal government agencies within and outside of Nevada and to the agencies' prime contractors.

The APEX Accelerator [formerly the Nevada Procurement Technical Assistance Center (PTAC)] team and its resource partners laud clients for: carefully reviewing and responding to a variety of formal government agency and government prime contractor solicitations; submitting quality, compliant, and competitive proposals and other formal offers; being awarded government-related contracts and subcontracts; executing and delivering under those contracts to help the government agencies and government prime contractors meet their respective missions; sustaining and/or scaling their businesses to keep jobs, create jobs, diversify the economy, and help to keep our communities strong and vibrant; and agreeing to be featured as a client success story in monthly e-newsletters to help inspire fellow businesses with their respective government contracting and subcontracting pursuits and journeys.

Following are APEX Accelerator [formerly the Nevada Procurement Technical Assistance Center (PTAC)] statistics for the program year ending July 31, 2022* (8/1/21-7/31/22): about 1,618 total clients/a total of 37 outreach events or presentations either led by the Accelerator [formerly the Nevada Procurement Technical Assistance Center (PTAC)] or a resource partner that involved the APEX Accelerator [formerly the Nevada Procurement Technical Assistance Center (PTAC)]/a subset of the total clients was awarded a total of 1,517 prime contracts valued at a total of \$236,995,844/a subset of the total clients was awarded a total of 35 subcontracts valued at a total of \$25,528,476.

**COVID-19 pandemic continues*

A subset of the entire client base was awarded a total of 1,517 prime contracts with an overall value of \$236,995,844.

DEVELOP



NEVADA FILM OFFICE

By Danette Tull, Nevada Film Office Production & Communications Manager

THE NEVADA FILM OFFICE (NFO) markets the State as a production destination; facilitating connections with local crew, vendors, and services; generating economic impact through job creation and in-state production spending.

The Office helps production crews find locations, assists with the permitting processes and coordinates intergovernmental cooperation statewide.

The NFO administers a Transferable Film Tax Credit program to spur the growth of the production industry in Nevada highlighting its unique locations and attractions throughout the state contributing to the tourism economy.

HIGHLIGHTS

After two years of industry uncertainty spurred by the pandemic, 2022 saw a resurgence of film production nationwide. The Nevada Film Office continues to research industry trends to gain a deeper understanding of the profession, define the opportunities, and identify the threats to its growth and vitality. In order to accomplish this objective, office leadership conducted a listening tour with prominent industry professionals. During this session, the team collected feedback, identified challenges in workforce development, and analyzed the competitiveness of Nevada's film tax incentive program with the goal of proposing potential legislative changes needed to position Nevada as a premier production destination.

NFO Highlights for 2022:

- Issued film incentives to seven projects totaling \$7,377,082 with economic activity to Nevada totaling \$42,410,262.
- Thirteen in process productions with estimated incentives totaling \$9,836,492 with economic activity to Nevada totaling \$51,417,084.
- Created 214 full time equivalent jobs for these productions.
- The NFO provides a state-of-the-art Online Production Directory allowing content producers worldwide to connect with local businesses in the industry, further driving economic development and industry diversification in the State. Currently, the online directory has over 250 businesses, small to large who generate opportunities from connecting via our online marketplace.
- Similarly, the NFO provides an Online Locations Database of the diverse filming locations around the entire state. Anyone with a local or private residence, a small business, or a commercial enterprise can feature their location to be used in the production of content, including film, TV shows, commercials, etc. There are currently about 700 unique locations that attract business opportunities to a worldwide audience using this marketplace. Location, location, location. Bottom line, Nevada residents and businesses have income opportunities working with the content creation industry here in Nevada.
- Coordinating with the University of Nevada, Las Vegas and Community Colleges of Nevada, the NFO engages with the film and video production programs to create opportunities and work towards pathways for students in Nevada to remain in the Nevada workforce and grow within the industry.
- The NFO coordinates with local union representatives from the International Alliance of Theatrical Stage Employees (IATSE) to provide comprehensive support to productions in Nevada and further develop the local workforce.
- The team troubleshoots permit and location challenges experienced by productions during shooting.
- The Agency and team proudly work with and promote film festivals in Nevada.

NEVADA FILM OFFICE CONTINUED

Notable incentivized productions in 2022 include:

Sympathy for the Devil

– A psychological thriller starring Nicolas Cage and Joel Kinnaman from director Yuval Adler.

Battle Bots – Season 7

(Discovery) – Robotic combat show exclusive to Las Vegas

Other significant non-incentivized projects that filmed partially or entirely in Nevada include:

Cleaning Lady (Fox) –

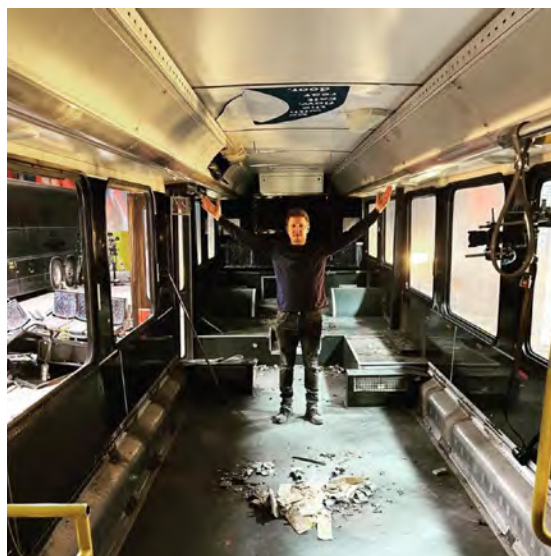
American crime drama that centers on a former Cambodian-Filipino surgeon who is currently working and living in Las Vegas

Poker Face (Peacock Network) – A “case of the week” mystery comedy-drama TV series soon to be released produced and starring Natasha Lyonne.

Rennervations – TV show following Jeremy Renner as he travels the world helping communities by “reimagining unique purpose-built vehicles.” Shot in Northern Nevada.

CSI Las Vegas (CBS) TV – A drama following forensic investigators in Las Vegas.

Fool Us – Season 9 (The CW) – A magic competition television show in which magicians perform tricks in front of magician-comedians Penn & Teller. Shot entirely at the Penn and Teller theater at the Rio



GOED

HEALTHCARE INDUSTRY REPORT

By Vance Farrow, Healthcare Industry Specialist

GOED HAS BEEN WORKING with the Cleveland Clinic, Lou Ruvo Center for Brain Health, and the Chartis Group to do a National Growth Strategy with specific focus on the Las Vegas Market. This study will be utilized by the Cleveland Clinic to determine their extended infrastructure and clinical footprint in southern Nevada. Multiple interviews have been conducted engaging numerous strategic partners.

GOED has been working with the Nevada Department of Health and Human Services team to coordinate a Statewide Human Services Provider Summit that was held in Clark County this past Spring. The goal of the Summit was to connect with providers in the state and across the country who provide the full scope of human services to include home and community-based, mental & behavioral health, as well as the most acute services that will allow us to better care for Nevadans, as we analyze lessons learned from the pandemic.



Organizers and hosts of the Smart Cities Expo held in Miami, Florida.



State and Federal leaders join Gov. Sisolak at the Governor's Healthcare Provider Summit.

GOED worked with the Department of Healthcare Finance and Policy and the City of Las Vegas to prioritize economic development initiatives that will directly impact the state's highest out-of-state reimbursement categories for medical treatment. Letters of Agreement and supporting data were identified, and based on the data analyzed, specific centers of excellence will be targeted as the primary focus for recruitment and subsequent workforce pipeline enhancement.

GOED was invited to serve on the Sub-committee of the Nevada Patient Protection Commission. This group was formed to create innovative public policy solutions to increase access to

affordable, quality health care. Collectively, the Sub-committee and the Commission will provide recommendations to 1) Develop a statewide health care cost growth benchmark; 2) Calculate and analyze statewide health care cost growth; and 3) Analyze drivers of health care cost growth.

GOED was invited to serve on the Advisory Board for the University of Nevada, Las Vegas, School of Nursing's proposed project, Nevada State Higher-education Innovations for Nursing Expansion Strategies (Nevada SHINES). Nevada SHINES, a project developed in response to the U.S. Department of Labor's (DOL's) Nursing Expansion Grant Program, will help to increase the number of nurses in the healthcare workforce, addressing a critical need in Nevada. The project will also improve the skills of the nursing workforce through higher-quality clinical training, which will contribute to better patient outcomes.

GOED worked with the Roseman University of Health Sciences, School of Medicine team to launch Project Genesis. GENESIS is a household-centered approach to aligning healthcare, public health and social services to help vulnerable households achieve resiliency. It provides clinical and social services to households in medically underserved communities through household visits, interprofessional clinical practices and patient navigation. Care teams will span the entire spectrum of the Roseman family to include medicine, nursing, pharmacy, and oral health.

GOED represented Nevada while attending the Smart Cities Expo USA. This event hosted the country's most innovative government, tech, equity, and infrastructure leaders that are redefining "smart" cities, solving urgent municipal issues, and harnessing \$1T of federal funds to build inclusive and resilient cities through electrification, climate resiliency, telehealth, and cybersecurity with an emphasis on education equity, the future of work, and next-gen infrastructure. The next several years of federal infrastructure grants will be centered around these conversations and initiatives.

GOED has been working with the U.S. Soccer Foundation and Colgate Palmolive to establish the Soccer for Success Program in Nevada. This Program is the Foundation's after school program and is led by trained coach-mentors and is proven to help youth establish healthy habits and develop critical life skills. It is offered at little to no cost to families and will be a joint effort between the City of Las Vegas, Clark County School District and the UNLV Department of Sports Research and Innovation.

City of West Wendover

GOED has been working with officials of the City of West Wendover, the Nevada League of Cities, UNR School of Medicine, Office of Rural Health, and Nevada Health Centers to expand quality healthcare services in West Wendover, NV. Desired expanded services include Cardiology, Obstetrics, and Dialysis. Ideally, appointments would be stacked on a phased-in timeline to support rotating physicians and additional providers. Ongoing negotiations are still occurring in to bring much needed services to each of these deserving communities.

City of Wells

GOED is also working with the Primary Care Office, University of Nevada, Reno, and the City of Wells, and other community partners to recruit and expand operations for a rural health care access center. Leveraging the J-1 Visa program in addition to other state and federal incentives are being considered to expedite the timeline of re-opening the center for daily operations. The Nevada Health Centers is also a potential partner in ongoing negotiations to bring much needed services to the City of Wells.

City of Las Vegas

GOED has been working continuously with several planning groups to plan and develop the Las Vegas Medical District. Adding wet-lab space, a potential bio-incubator and other best practices will establish the Las Vegas Medical District as a fertile location for expansion of medical treatment, research and development. The foundation for legislative bill draft requests that will support continued infrastructure growth are also being developed for consideration during this coming Legislative Session.

Hundred Plan in Action

GOED has been working with the City of Las Vegas staff to implement The Hundred Plan. MGM Resorts International recently provided a \$500,000 philanthropic contribution to the City of Las Vegas to acquire two ready built, plug and play container grow facilities, providing approximately 320 square feet of growing space, and producing eight tons of produce annually. The containers



HEALTHCARE INDUSTRY REPORT CONTINUED

are located within James Gary III Park and when operational, they will provide their first harvestable crops within eight weeks. The City is working with a partner to finalize a plan to distribute the fresh produce to Historic Westside residents, and in the long term, a co-operative market will be the distribution point of the produce grown.

City of North Las Vegas

GOED was instrumental in the groundbreaking of the Helios Health and Wellness Campus in North Las Vegas. This historic event will usher in a new era of economic development and job creation that will result in a transformative campus and economic hub to serve the growing population of North Las Vegas, as well as the southern Nevada community. Slated for completion in phases, this project is anticipated to create over 10,000 jobs over the next 7 to 10 years, therefore fulfilling a tremendous need for health and wellness in the area. GOED will continue to work with the development team to ensure the best-suited partners are selected to build out the 135-acre site.



NEVADA PARTNERS

GOED Healthcare Industry Specialist co-chairs the Nevada Partners 'Promise Neighborhood Healthy Children, Families & Communities Pillar' addressing underserved Nevada residents of Las Vegas and North Las Vegas. Combining this role with membership on the Immunize Nevada Flu and COVID-19 Task Force, events are taking place to distribute COVID-19 testing and vaccinations, in addition to flu vaccinations. Statewide coordination for the greatest reach along with the development of communication materials and systematic data tracking are the priority. Regularly scheduled radio shows, townhalls, podcasts and webinars have also been implemented throughout the year to educate the public and are being administered by key stakeholder groups free to providers and interested Nevadans.

Tens of thousands of Nevadans have been reached through these and other coordinated efforts include:

- Regular scheduled primary care health screenings for community residents, Covid testing and vaccinations, Flu vaccinations, behavioral healthcare screenings & interventions, and increased access to healthy, affordable, locally harvested foods.
- Ongoing cohorts in training, credentialing, and placing medical assistants, community health workers and certified nursing assistants within multisectoral partnerships to expand opportunities, share resources and sponsorship funds.
- Leading the grant application process for the NIH Community Partnerships to Advance Science for Society (ComPASS) Program. This grant opportunity will fund \$6 million in federal funds to support building healthy, sustainable communities where residents can achieve their full potential through effective education, meaningful employment, safe and affordable housing, and vibrant and civic cultural engagement. There are over 50 multi-sector partnerships and organizations collaborating for this grant that will (1) establish a common agenda and shared measurement, (2) advance targeted policy, (3) build a continuum of cradle-to-career solutions, (4) expand organizational capacity, and (5) scale up proven and effective solutions.

RURAL ECONOMIC AND COMMUNITY DEVELOPMENT

By Shari Davis, Rural Economic & Community Development Director, and Jessica Sanders CDBG Program Administrator

BEFORE

AFTER

National Community Development Week
April 11 - 15, 2022
#CDWeek2022
#CDBGWorks #HOMEWorks

WHITE PINE COUNTY
MCGILL BALLPARK DIRT PILE DEMO PROJECT

Nevada Governor's Office of
ECONOMIC DEVELOPMENT

#CDWEEK2022

McGill Ballpark Dirt Pile Demo Project – utilizing CDBG funding, dirt and debris was removed and the area was turned into a beautiful spot for picnicking and an ice-skating rink.

THE RURAL ECONOMIC AND COMMUNITY DEVELOPMENT

DIVISION of the Nevada Governor's Office of Economic Development (GOED) is tasked with promoting and facilitating economic and community development throughout rural Nevada. The overarching objective is to build prosperity and enhance the quality of life in rural Nevada. The Division works towards this objective through community development, which is the process of managing change within communities and involves: dialogue among community members to decide their shared vision of the future; reaching a consensus on what needs to be done to achieve that vision; and communication, cooperation and collaboration within the community and with resource-providers in achieving that vision. The Rural Economic and Community Development Division utilizes several programs within its purview to achieve this goal, including the Community Development Block Grant (CDBG) program, the Community Development Block Grant CARES (CDBG-CV) program, and the Nevada Main Street Program.

Community Development Block Grant (CDBG)

\$3,674,024 in Community Development Block Grant (CDBG) funds were awarded to 17 projects in Carson City and rural Nevada, benefitting 17,625 Nevadans in five counties, the City of Ely, the City of Fallon, the City of Fernley, the City of Wells and Carson City. Nevada counties and cities invested an additional \$1,930,337 in matching grant funds.

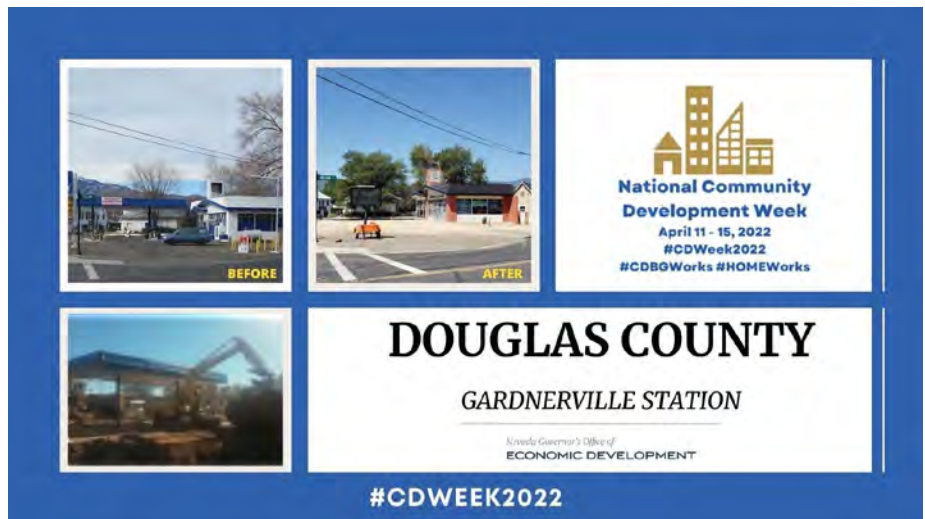
Since 1982, when the State began administration of the program, more than \$103 million dollars has been awarded to rural Nevada communities. The CDBG program enables local governments to undertake a wide range of activities intended to create suitable living environments, provide decent affordable housing and create economic opportunities, primarily for persons of low and moderate income. The U.S. Department of Housing and Urban Development (HUD) oversees the program, and the Rural Community Development Division of the Governor's

RURAL ECONOMIC AND COMMUNITY DEVELOPMENT CONTINUED

Office of Economic Development administers the program for the State of Nevada.

Nevada's CDBG programs for 2022 include:

- \$330,000 for the Desatoya Dr. ADA Compliance Improvement Project Phase in Carson City that benefits 1,600
- \$35,000 for the Ron Woods Youth Family Resiliency Program Project in Carson City that benefits 300
- \$48,279 for the Grant Management Project in Carson City
- \$274,350 for the Bell Ave Waterline Project in Ely that benefits 22
- \$373,350 for the Parker/Stevens Ave Sewer Project in Ely that benefits 43
- \$395,000 for the Fernley Depot Amenity Building/ADA Compliant Restroom in Fernley that benefits 3,590
- \$100,000 for the Fernley Main Street Beautification/Placemaking Project in Fernley that benefits 3,590
- \$405,045 for the Court St. Sidewalk ADA Compliance Project in Fallon that benefits 2,455
- \$260,000 for the Wells Wastewater Treatment Headwall Project in Wells that benefits 1,063
- \$150,000 for the Wells Main Street Retail Center Project in Wells that benefits 1,063
- \$80,000 for the Woodhills Trail's Feasibility Study Project in Wells that benefits 1,063
- \$110,000 for the Douglas Food Closet Vehicle Purchase Project in Douglas County that benefits 649
- \$85,000 for the Montello Exploratory Wells Project in Elko County that benefits 1,300
- \$65,000 for the Tuscarora Preliminary Engineering Report Project in Elko County that benefits 280
- \$800,000 for the Pioche Airport Road Phase II Project in Lincoln County that benefits 570
- \$90,000 for the Rural Critical Home Repair Project in Nye County that benefits 7
- \$75,000 for the Baker GID Preliminary Engineering Report Project in White Pine County that benefits 30



Gardnerville Station – utilizing CDBG funding, Gardnerville Station was transformed from a gasoline station with leaking tanks and ground contamination to a meeting and event location.

These grants went to rural cities under 50,000 in population and rural counties under 200,000 in population. Clark County, Las Vegas, North Las Vegas, Henderson, Reno and Sparks are Entitlement communities and receive separate allocations and conduct a separate application process.

Community Development Block Grant CARES (CDBG-CV)

The Governor's Office of Economic Development received \$14,448,197 in Community Development Block Grant CARES (CDBG-CV) funds from the U.S. Department of Housing and Urban Development to be used for COVID-related projects that must be used to prevent, prepare for, or be in response to the COVID-19 pandemic. \$14,192,735 has been allocated to Nevada communities.

In 2022, CDBG staff reimbursed \$2,693,712 in requests from 14 communities and closed out 14 grants.

Recovery Housing Program (RHP)

The Governor's Office of Economic Development/Community Development Block Grant program (CDBG) was awarded \$1,620,125 for the Recovery Housing Program (RHP), a pilot program through the U.S. Department of

RURAL ECONOMIC AND COMMUNITY DEVELOPMENT CONTINUED



St. Patrick's Day Parade through the Water Street District.

Urban Development (HUD) intended to support individuals in recovery from a substance use disorder to become stably housed and on a path to self-sufficiency. These funds are treated as Community Development Block Grant (CDBG) funds and will be governed by the CDBG regulations. This pilot program authorizes assistance to grantees (states) to provide stable, temporary housing to individuals in recovery from a substance use disorder.

RHP has determined to use the funding for the following eligible activities:

- Public Facility Improvements
- Acquisition of Real Property
- Rehabilitation and Reconstruction
- Disposition of Real Property Acquisition
- Clearance and Demolition
- Relocation
- New Construction

Applications were received from November 1, 2022 through December 31, 2022 and will be awarded in 2023.

Nevada Main Street

Nevada Main Street is a holistic approach to downtown revitalization that includes historic preservation, community development, beautification, and economic vitality. It supports business creation and retention to build and sustain healthy and economically vibrant communities, with a primary focus on improving quality of life for residents. The program offers community-based initiatives with a practical, adaptable framework to adjust for each unique community, growing with the community over time. The state program began in 2017. There are currently 20 active Main Street organizations in Nevada.

"The beauty of Main Street programs is they are so diverse in what we accomplish through district design concepts, economic vitality, historic preservation, and community events. Most Main Street programs are a "grassroots" approach to enriching our communities. We are very fortunate as an organization to have the support of our

RURAL ECONOMIC AND COMMUNITY DEVELOPMENT CONTINUED

local government investing in our program, because they see the value we are to the community. The programs and community-building we are able to provide for our small businesses, the community at large, and our local municipalities and government we are able to accomplish through fundraising, grants, and volunteerism. We are able to go further together and accomplish more without further taxing their already spread-thin resources.”

—JEN NALDER, EXECUTIVE DIRECTOR, MAIN STREET GARDNERVILLE

“The National Main Street Program has developed proven methods to revitalize downtowns and business districts around the country for decades. The resources and support available through Nevada’s Main Street Program, under the Governor’s Office of Economic Development have supported many successful beautification projects, new event development, signage, business support programs, and marketing campaigns for downtown Ely and other communities in the county. We have seen a major change in the activity in our downtown since actively becoming a main street community which has resulted in increased revenues for our businesses. The benefits of the Nevada Main Street Program go beyond just economic benefit. Their support has helped us build the necessary relationships and access valuable resources that have been the catalyst for all aspects of community development and engagement. It is important to fund and support the Nevada Main Street Program so that they can continue to move our state forward by working with Nevada communities to create success and sustainability at the fundamental level.”

—CAROLINE MCINTOSH, CHAIRPERSON WHITE PINE MAIN STREET



Tonopah Main Street

Dec 8, 2022 · 🌐

“Gallery Grey” owner and operator is our amazing middle and high school art and photography teacher Cameron Murrin. His gallery will soon boast prints of his photographs. You can find art supplies, home decor, seasonal decorations, and just about everything cute! Stop on by on Fridays or Saturdays (or winter break). Gallery Grey is also one of our Business Bingo participants. Located right next to the “Tonopah Garage”.



Tonopah Main Street showcasing yet another new business opening.



Realizing Nevada's Electric, Innovative, and Connected Future

5-Year Comprehensive Economic Development Strategy

February 2023

Prepared for:

Nevada Governor's Office of Economic
Development

Prepared by:

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Authors

This report was researched and written by Roland Stephen, Christiana McFarland, Jurgita Staniulyte, Shay Moore, Will Ebert, and Christa Reid at the Center for Innovation Strategy and Policy, SRI International. The authors would like to acknowledge significant support provided by the staff of the Governor’s Office of Economic Development.

Note

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Executive Summary

In the wake of the COVID-19 pandemic, the economic landscape of Nevada changed immeasurably. It is estimated that Nevada's tourism and creative economy lost around \$1.3 billion in revenue and experienced 64% unemployment due to COVID. The crisis also accelerated ongoing shifts in the international supply chain and accelerated the integration and implementation of new technologies more rapidly than expected. Moreover, the pandemic highlighted the national security implications of outsourced resources extraction, parts manufacturing, and advanced manufacturing production.

Nevada, however, is uniquely situated to turn these headwinds into a win for the state's economy and a win for national economic recovery, security, and sustainability. The Governor's Office of Economic Development (GOED) collaborated with SRI International to assess Nevada's current economic landscape, map key assets and challenges to growth, identify opportunities for emerging industries and diversification within mature industries, and develop strategies and action steps to catalyze a vibrant, innovative, and sustainable economy with high-paying jobs for Nevadans. This five year statewide economic development strategy, **Realizing Nevada's Electric, Innovative, and Connected Future**, provides a roadmap for state leadership to leverage Nevada's assets, build upon its emerging growth, diversification, and innovation, while ensuring inclusive growth.

KEY FINDINGS

- Given the development in Nevada's clean tech industry and its complete lithium supply chain, **Nevada is positioned to be ground zero for the energy transition and to play a key role in securing the energy independence and security of the United States.** The development of the IT and Advanced Manufacturing industries, Nevada's access to and production of natural resources such as lithium, and its proximity to innovation hubs and talent, has enabled clean energy to flourish in the state. The expansion of existing Redwood Materials operations has closed the electric value chain loop for electric batteries giving Nevada a significant competitive advantage in the industry as the only state in the nation that can claim such a feature.
- Nevada's **innovation ecosystem benefits from a strong entrepreneurial culture, dynamic economy, low cost of living, and easy access to the fifth largest economy in the world, California.** Furthermore, the state's Knowledge Fund recruits highly specialized science and research faculty, expands existing research areas, and assists applied research centers in supporting industry innovation in Nevada. Nevada's strong flow of venture capital investments and patenting activity indicates additional significant innovation potential. Despite these trends, Nevada lags competitors in new business growth and research and development.
- To diversify the economy and grow target industries, Nevada needs a **new generation of infrastructure** and has transformative opportunities underway, including Nevada's Comprehensive Connectivity Strategy, funding from the Infrastructure Investment and Jobs Act



(IIJA), funding from National Telecommunications and Information Administration to expand internet access to 11 Tribal communities, and an agreement to develop high-capacity transit in Las Vegas.

- **Significant economic disparities exist among Nevada’s diverse communities.** Nearly 13% of Nevada’s population live in distressed communities located throughout the state. The distressed communities within Nevada are concentrated in three regions: Northeast (Elko), Northwest (Reno), and Las Vegas. The state should prioritize collaboration with community leaders, such as the Southern Nevada Enterprise Community (SNEC), to understand the challenges these communities face and develop specific programmatic interventions necessary to mitigate these challenges.

CURRENT CONDITIONS

Higher wage, innovation-based industries grew more quickly over the past decade than more mature state economic drivers, demonstrating the positive structural changes taking place in the economy. However, structural change is not without pain points. Hospitality worker unemployment soared, underscoring the imperative of inclusive growth and creating pathways to allow these workers and others to access new opportunities within growing industries.

Nevada’s population and labor force is driven largely by in-migration, with many new residents coming from California. Although Nevada has a relatively high share of associate degree graduates with technology skills, the state lags in science, technology, engineering, and mathematics (STEM) education overall. While entrepreneurship and research and development (R&D) lag competitors, rapidly increasing venture capital investments and patenting activity across a diverse range of industries indicates significant innovation potential in the state. Key assets of the state’s economy are its natural resources, favorable business environment, and recreational amenities. Key economic enablers such as housing availability and affordability, water supply, grid infrastructure, healthcare, and quality of K-12 education threaten growth if not addressed. The state should encourage and support creation of high-quality healthcare centers of medicine to improve healthcare quality in communities, enhance access to medical care, and serve as a catalyst for economic development.

Several industries are particularly well-positioned to grow and provide quality jobs in the coming years, including Information Technology, Transportation and Logistics, Natural Resources and Technologies, Hospitality, Tourism, Sports, and Creative Industries, and Advanced Manufacturing. Over the past decade, Data Hubs, the largest **Information Technology** industry sector and highest paying, was also the fastest growing, while Broadband declined. The pandemic exacerbated core challenges related to the **Transportation and Logistics** industry. While several sectors demonstrated strong growth in recent years, including Warehousing, Trucking, and Multi-Modal Hubs; Rail, Wholesaling, and Air were not as resilient. These declining sectors are also some of the better paying. The **Natural Resources and Technologies** industry has gained employment and comparative advantage over the past decade, notably in the areas of clean energy. Nevada’s natural assets, mining workforce, manufacturing capabilities, proximity to regional innovation hubs, and attraction of key employers have resulted in Nevada as one of a few, if only, locations in the world with a complete lithium supply chain and overall natural resources and technologies ecosystem ripe for further growth.

The higher-wage Sports and Creative Industries sectors in the **Hospitality, Tourism, Sports, and Creative Industries** grew faster over the past decade than gaming and other mature sectors within the industry and experienced slower decline during COVID. This points to adaptation, structural change, and diversification within the hospitality and entertainment-related industries. The ongoing green transition has provided an opening for the state to develop its own **Advanced Manufacturing** hub by disrupting the traditional emission-based supply chain. While aerospace and defense continue to remain the largest manufacturing sectors by volume, Clean Technologies and various types of



transportation that use electric energy (E-Mobility) have grown, especially E-Mobility as battery storage manufacturers flock to the state.

VISION AND GOALS

GOED's mission is a vibrant, innovative, and sustainable economy with high-paying jobs for Nevadans. This economic future will be realized by pursuing clean energy, strengthening innovation ecosystems, and bolstering critical infrastructure.



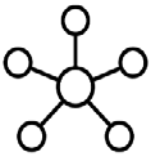
Electric Nevada

Nevada will be a global player in a circular economy by leading the development of clean energy innovations. It will capitalize on its assets and export the innovative processes and products in mining and production of batteries and solar energy to new global markets. Nevada will be ground zero for the energy transition.



Innovative Nevada

Nevada's economy will be supported by a thriving innovation ecosystem that builds on state assets, history, and culture, and strengthened by collaborating academia, industry, and government players. It will engage a workforce with technical skills at all levels, attract a diverse portfolio of investments, and develop and commercialize world-changing new ideas.



Connected Nevada

Nevada will lead next generation infrastructure that connects industries and businesses within the state to accelerate new economic opportunities. The state will capitalize on its strengths and enhance its connectivity efforts by updating multimodal inland ports and industrial parks, adding new rail links, and expanding broadband infrastructure. Nevada will make investments as necessary to convert its unique geographic locations in the northern and southern regions into connected hubs for re-shored supply chains and digital networks.



STRATEGIES

GOED will advance Nevada's unique competitive position, address critical gaps, and strengthen coordination and collaboration amongst stakeholders with a new five-year strategy supported by the following actions:

Electric Nevada

- Assess and strengthen electric vehicle (EV) production vertical supply chain
- Enable solar energy-related innovations
- Support completion of utility connectivity
- Support the build out of EV infrastructure

Innovative Nevada

- Create a unified vision for innovation
- Increase capital access to startups and later-stage businesses
- Strengthen university technology transfer system
- Scale industry partnerships to expand STEM workforce
- Lead globally on water scarcity policy and innovation

Connected Nevada

- Support development of multimodal inland port
- Develop tech-ready industrial parks
- Identify private-sector investment opportunities for freight rail
- Support planned airport-related infrastructure developments
- Support expansion of broadband and 5G infrastructure

At the core of Nevada's new economic development strategy is its people. The success of the strategy rests on a foundation of educated, healthy, and connected communities with capable public services and access to quality jobs. As such, the strategy includes a Leadership Plan for Inclusive Growth to ensure that residents throughout the state, regardless of background or zip code, can contribute to and benefit from economic growth.

These action items and overall strategy move Nevada closer to fulfilling its vision, leveraging the state's unique economic assets, culture, and history, and enabling the collaboration necessary to realize Nevada's electric, innovative, and connected inclusive future.

Strategy Development Approach

The Governor's Office of Economic Development (GOED) worked with SRI International to develop this strategy and its underlying goals. To generate the insights for this strategy, SRI's Center for Innovation Strategy and Policy (CISP):

- Facilitated convenings of the leadership of the regional the Regional Development Authorities (RDA) within the state and the GOED Board of Directors;
- Interviewed key stakeholders across government, the private sector, academia, and community organizations;
- Gathered and analyzed economic and workforce data; and reviewed previous and current regional and state economic development policy documents; and
- Researched best practices from Nevada and other states.

In addition to a comprehensive economic and community assessment and SWOT analysis, the insights from these efforts supported the identification of five target industries (Information Technology; Transportation & Logistics; Natural Resources & Technologies; Hospitality, Tourism, Sports, & Creative Industries; Advanced Manufacturing) and actions to advance them over the next five years.



Introduction

Nevada is accelerating economic diversification and increasing its competitiveness in industries critical to world markets, including Information Technology, Transportation and Logistics, Natural Resources and Technologies, and Advanced Manufacturing. The most innovative components of the Hospitality, Tourism, Sports, & Creative Industries are also fast growing, including professional sports, e-sports, and the performing and digital arts.

This statewide Comprehensive Economic Development Strategy, **Realizing Nevada's Electric, Innovative, and Connected Future**, lays out a roadmap for Nevada to fully develop these industries over the next five years. It uncovers the state's core economic assets, threats, and gaps; provides a rigorous analysis of the state's competitive position vis-à-vis global and national market trends; and synthesizes these findings into a strategic plan to align and coordinate action by state policymakers the following comprehensive economic and community development goals:



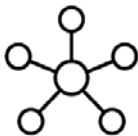
Electric Nevada

Nevada will be a world leader in the development and use of clean energy innovations. It will capitalize on its strengths and export the innovative processes and products in mining and production of batteries and solar energy to new global markets supported by a robust, statewide electric vehicle (EV) and energy storage infrastructure. Nevada will be ground zero for the energy transition.



Innovative Nevada

Nevada's economy will be supported by a thriving innovation ecosystem that builds on state assets, history, and culture, strengthened by collaboration among academia, industry, and government. It will prepare and engage a workforce with technical skills at all levels, attract a diverse portfolio of investments, and develop and commercialize world-changing new ideas.



Connected Nevada

Nevada will lead next generation infrastructure that connects industries and businesses within the state to accelerate new economic opportunities. The state will capitalize on its strengths and enhance its connectivity efforts by updating multimodal inland ports and industrial parks, adding new rail links, and expanding broadband infrastructure. Nevada will make infrastructure investments as necessary to convert its unique geographic locations in the northern, southern regions as well as rural areas into connected hubs for re-shored supply chains and digital networks.



The Governor's Office of Economic Development (GOED) worked with SRI International to develop this strategy and its underlying goals. To generate the insights for this strategy, SRI's Center for Innovation Strategy and Policy:

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- gathered and analyzed economic and workforce data;
- reviewed previous and current regional and state economic development policy documents; and
- researched best practices from Nevada and other states.

In addition to a comprehensive economic and community assessment and SWOT (strengths, weaknesses, opportunities, threats) analysis, the insights from these efforts supported the identification of five target industries (Information Technology; Transportation & Logistics; Natural Resources & Technologies; Hospitality, Tourism, Sports & Creative Industries; Advanced Manufacturing) and actions to advance them over the next five years. The success of these strategies, however, requires that Nevada's economy rest on a solid foundation of educated, healthy, and connected communities with capable public services and access to quality jobs. To this end, this five-year strategy also includes a Leadership Plan for Inclusive Growth detailing how the state will ensure that residents, regardless of background or zip code, can contribute to and benefit from economic growth.

GOED's mission is to foster an economy that is vibrant, innovative, and sustainable with high-paying jobs and great quality of life for all Nevadans. This plan moves Nevada closer to fulfilling this mission by leveraging the state's unique economic assets, culture, and history, to enable the collaboration necessary to realize Nevada's electric, innovative, connected, and inclusive future.





Economic and Community Assessment

While the state's economy is historically pro-cyclical, and the impact of the COVID-19 pandemic on travel and hospitality worsened this exposure, Nevada has rebounded and is well positioned for growth. Significant public and private investments in recent years have diversified the economy, leveraged emerging technologies, and developed state assets. The ability for Nevada to capitalize on these growth opportunities for long-term prosperity will require an understanding of core strengths and weaknesses and coordinated action across a diverse set of public and private stakeholders.

This assessment of Nevada's economy lays the foundation for action and examines workforce quality and alignment, industry and occupational landscape, innovation capacity, infrastructure, quality of life and overall community development to better understand growth and change in key economic enablers. The analysis assesses changes over the past decade, puts shorter-term impacts from COVID-19 into a broader context, and compares indicators across peer states of Arizona and Utah and with the United States overall.

Key findings from the economic and community assessment:

- **Population and Talent:** Net migration was a key contributor to population growth over the past decade, with most new residents coming from California. Although Nevada has a relatively high share of associate degree graduates with technology skills, the state lags in science, technology, engineering, and mathematics (STEM) education overall.
- **Diversification:** Those occupations and industries growing most quickly in the state are also those offering the highest wages.
- **Innovation:** While entrepreneurship and research and development (R&D) lag competitors, rapidly increasing venture capital investments and patenting activity across a diverse range of industries indicates significant innovation potential in the state.
- **Infrastructure and Quality of Life:** Key enablers of the state's economy are its infrastructure, renewable energy, and recreational amenities. Housing availability and affordability, water supply, grid infrastructure, and quality of K-12 education threaten growth if not addressed.
- **Health Quality and Access:** Among Mountain West states, Nevada has the lowest rate of adults with a dedicated healthcare provider, the lowest rate of adults attending regular dental visits, the lowest rate of adults with a flu vaccination, and highest rate of adults who avoided care due to costs. Increasing capacity, coordination, and innovation within the healthcare sector is of critical importance. Although more employees are needed in this field to meet growing demand, healthcare practitioners and technical workers are some of the fastest growing occupations within the state.



- Business Environment:** The state’s taxes, policies and regulations are some of the most favorable towards business in the nation. Combined with a lower cost of living, Nevada’s business environment is a strong economic asset.

Data were collected from both administrative sources such as the U.S. Census Bureau and proprietary sources such as Lightcast. Additionally, stakeholders from industry, government, and education provided insights on the current state of the economy, target industries, and ideas for government support. This first section of the report forms the foundation for the subsequent SWOT Analysis, Strategy and Action Plan, and Inclusive Growth Leadership Plan.

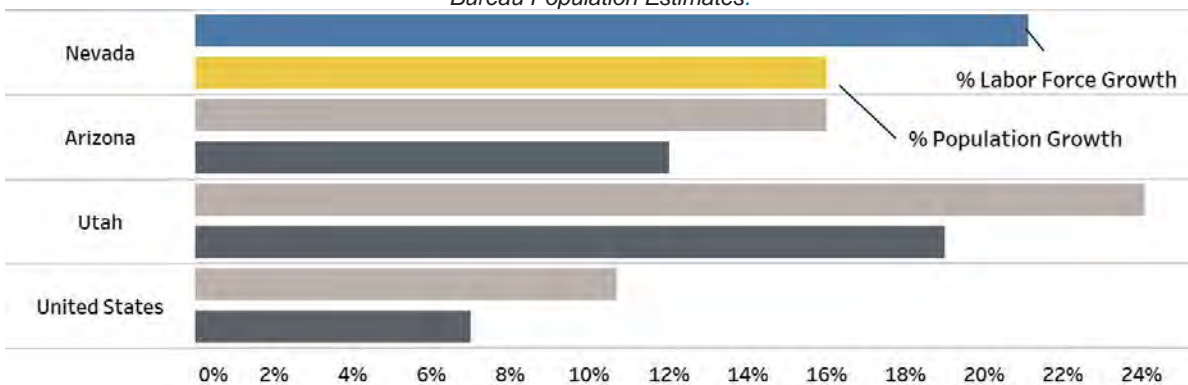
POPULATION AND TALENT

Successful economies rely on a thriving population and workforce. From 2011 to 2021, Nevada’s population grew 16% — a rate that outpaces that of Arizona and the United States overall, and that is second in the nation only behind Utah (Figure 1). The state’s labor force grew (21%) even more quickly than the overall population over the past decade.

Nevada’s labor force grew more quickly than overall population driven by a complex set of trends, including strong in-migration from California.

Nevada’s labor force grew more quickly than overall population.

Figure 1: Change in population and labor force participation among Nevada, peer states, and the United States for populations aged 16 and over, 2011–2021. Source: U.S. Census Bureau Employment Estimates, U.S. Census Bureau Population Estimates.



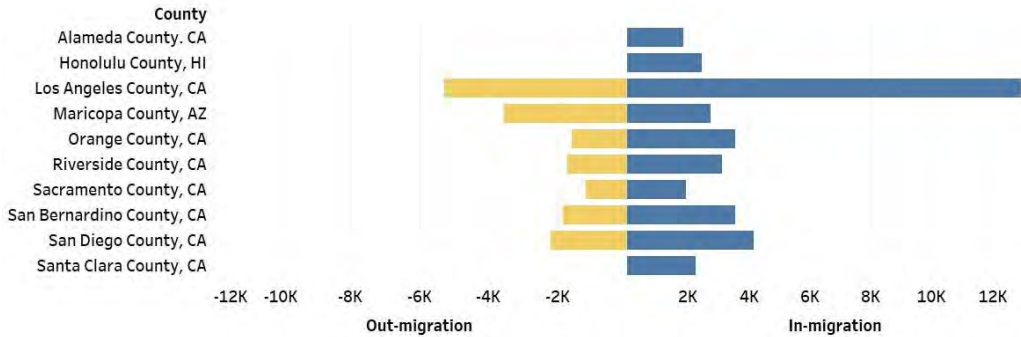
For Arizona, Utah, and the United States the light grey bar indicates labor force growth, and the dark grey bar indicated population growth.

Given the scale of the hospitality and tourism industry in the state, the pandemic severely disrupted labor force participation in Nevada, more so than peer states. Nevada’s unemployment rate of 4.6% continues to be one of the highest in the nation.¹ The prime-age (25–54 years old) employment rate (76%) is down more than five percentage points from 2019 pre-pandemic levels, the most significant decline experienced by any state in the United States.² Strong labor force growth over the decade, however, buoyed what could have been an even more catastrophic economic impact of the pandemic on the state’s economy.



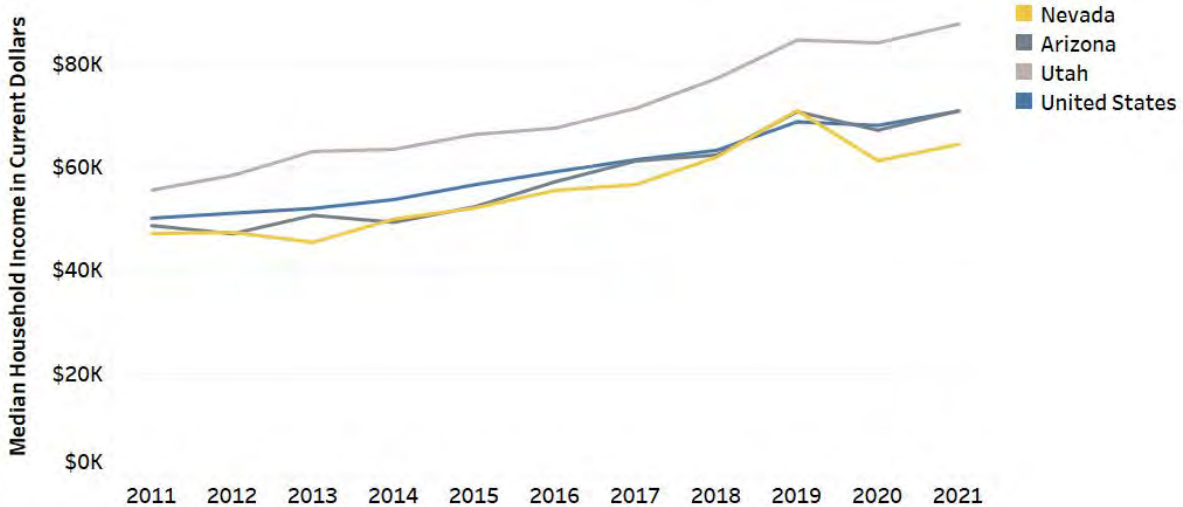
Faster labor force growth than population growth suggests a complex set of trends including an aging population, lower birth rates, and a strong influx of new talent coming to Nevada from outside the state. Annual net migration increased over 150% from just under 10,000 in 2012 to over 25,000 in 2020.³⁴ Most new residents over the past decade and more recently since the pandemic (Figure 2), have come from California, and specifically Los Angeles County. This trend reinforces Nevada's competitive position in the Pacific zone as a place ripe with employment opportunities in innovative industries, a high quality of life, and lower cost of living.

Figure 2: Nevada's inflow and outflow migration by top 50 counties, 2020. Source: Lightcast.



Incomes in Nevada lag peer state and the United States but are recovering.

Figure 3: Median household income for Nevada, peer states, and the United States, 2011–2021. Source: U.S. Census Bureau, Current Population Survey.



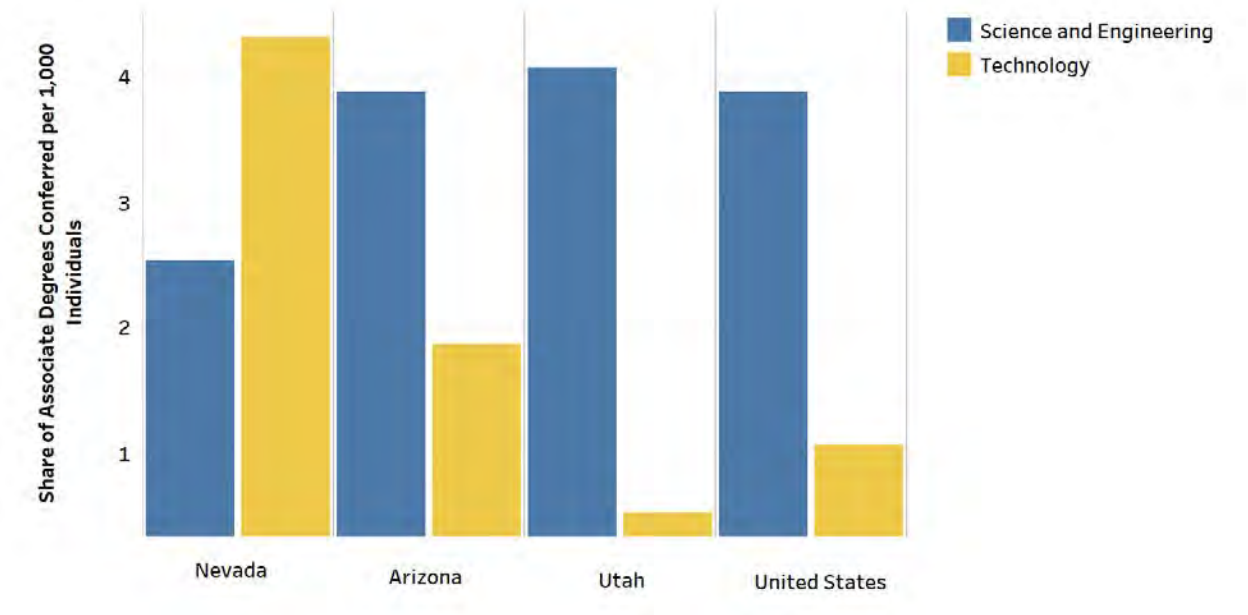
Income is one of the most common indicators of a state's standard of living and quality of life. Figure 3 demonstrates the change in median household income for Nevada, peer states, and the United States over the past decade. While incomes are lower in Nevada than the United States and peer states, the median household income in Nevada has steadily increased since 2011. With the onset of the pandemic, income dropped substantially, but has recovered at a pace like peer states and the United States overall. Given the more severe decline in Nevadans' employment, median household



income is still below pre-pandemic levels, despite consistent growth in hourly wages.⁵ This trend is indicative, once again, of the severe impact of the pandemic on the hospitality and tourism industries.

Nevada has a relatively high share of tech degree holders, but lags in science and engineering.

Figure 4: Share of associate degrees in technology and science & engineering conferred per 1,000 individuals aged 18–24, 2021. Sources: National Center for Education Statistics, Integrated Postsecondary Education Data System (various years), data available as of September 2022; U.S. Census Bureau, data available as of September 2022.⁶



Education and skills attainment, particularly in STEM-related fields, is key to economic mobility and a diverse economy. While degree conferment overall is lower in Nevada (34% of Nevadans aged 25 and older have earned an associate degree or higher) than peers states of Utah (47%) and Arizona (39%) and the United States overall (46%),⁷ in 2021 Nevada had a higher share of technology-related associate degree graduates than Arizona, Utah, and the United States average (Figure 4). Associate-level training in technology, science, and engineering fields provides the advanced skills and technical expertise needed for a competitive workforce to support innovation, productivity, and technological growth.⁸ Other peer states, however, outpace Nevada’s attainment of science and engineering associate degrees.

DIVERSIFICATION

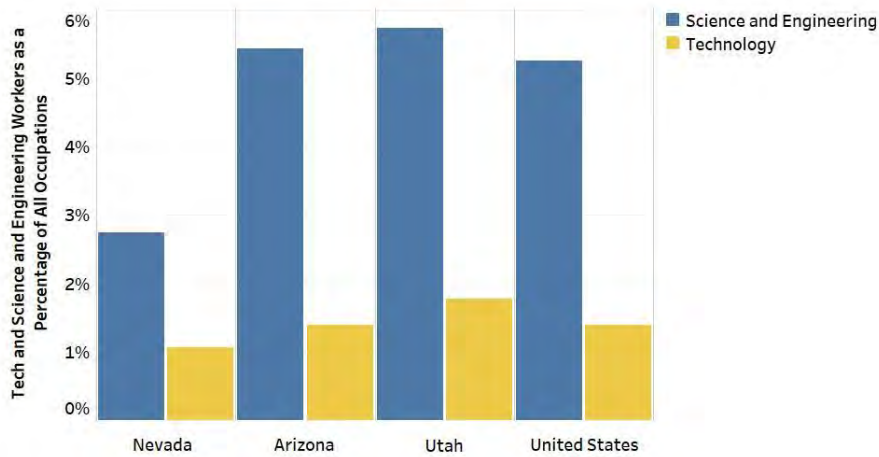
Figure 5 presents the share of individuals in the workforce employed in technical and science and engineering (S&E) occupations, a key indicator for innovation-driven economic growth and competitiveness. These occupations include engineers, computer scientists, life scientists, physical scientists, social scientists, medical and service specialized technicians, manufacturing specialized technicians, and postsecondary teachers in these fields. Increasing and retaining the STEM-related



workforce in Nevada will be integral to diversifying the state's economy and innovative capacity.¹ Despite a recent increase in the number of technology-related associate degree graduates, Nevada has the third lowest share of workforce in STEM-related occupations of all U.S. states (only ahead of Louisiana and Mississippi).⁹ Less than four percent of Nevada's workforce is engaged in STEM-related occupations, while Arizona and Utah are ahead of the national average. The STEM workforce brings the skills, creative ideas, and ability to advance basic scientific knowledge into tangible and useful products and services to grow the economy.

Nevada lags in STEM-related occupations driving the economy.

Figure 5: Individuals in tech and science and engineering occupations as a percentage of all occupations, 2020. Sources: National Science & Engineering State Indicators.

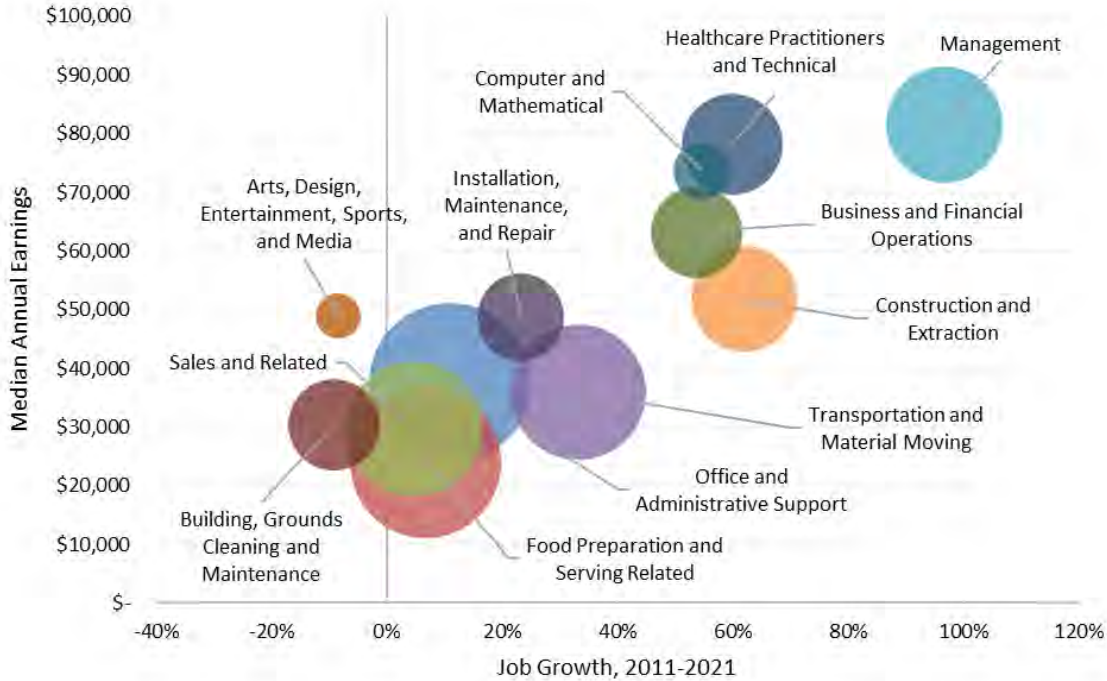


¹ S&E occupations are defined by SOC. They include engineers; computer, mathematical, life, physical, and social scientists; and postsecondary teachers in these fields. S&E managers, technicians, elementary and secondary schoolteachers, and medical personnel are not included.



Occupations growing most quickly in the state are also those offering the highest wages.

Figure 6: Growth, median annual earnings, and size of Nevada's largest OCCUPATIONS, 2011–2021. Sources: U.S. Census Bureau American Community Survey, Nevada Department of Employment, Training, and Rehabilitation.



Size of bubble indicates relative employment size.

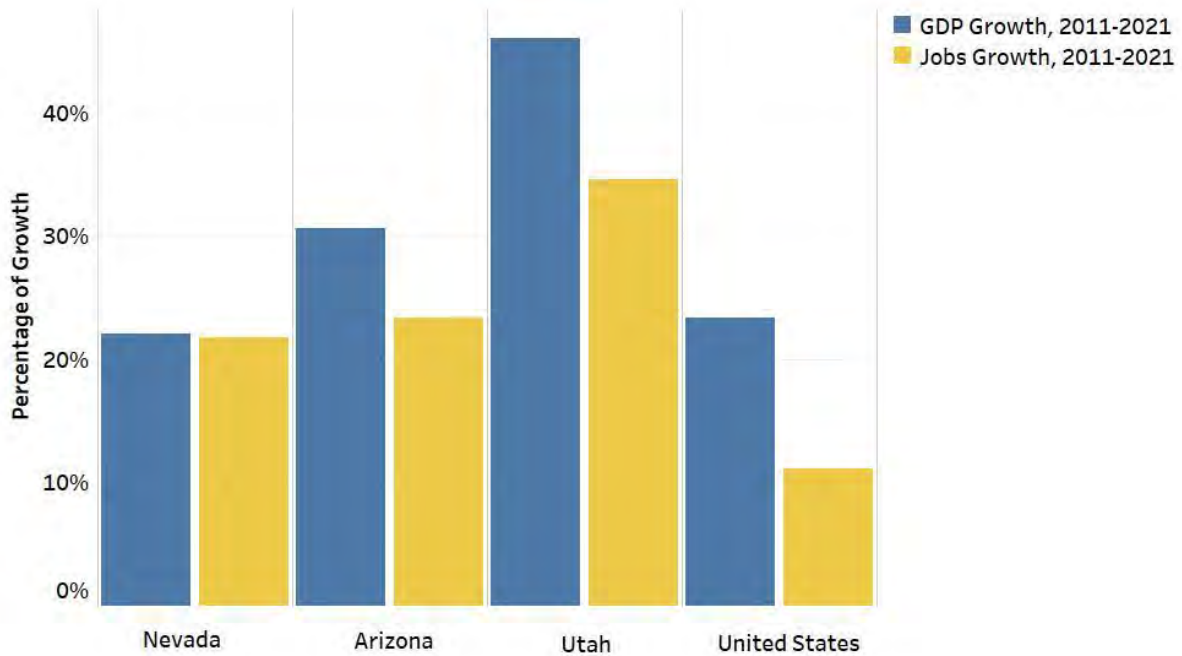
Despite the lower shares of STEM occupations, there is evidence of diversification within the economy toward higher wage, more technical fields. As indicated in Figure 6, those occupations growing most quickly in the state are also those offering the highest wages. Although they are not the largest occupations by size, management, healthcare, and construction and extraction have the fastest growth of all occupations. Computer and mathematical occupations and business and financial operations are also growing quickly. Some of those growing the slowest are also those with the lowest earnings and are hospitality-related, including building and grounds cleaning, sales, and food preparation.

Again, this reflects the reality of the COVID-19 pandemic during which in-person venues, performances, and activities were severely disrupted, impacting the creative sectors. Also, with increased demand on the healthcare sector due to the pandemic, there is a corresponding increase in job opportunities.

Although they are not the largest occupations by size, management, healthcare, and construction and extraction have the fastest growth of all occupations

Job growth in Nevada outpaced the United States average, while GDP lagged Arizona and Utah.

Figure 7: Employment and GDP growth for Nevada, peer regions, and the United States, 2011–2021. Sources: U.S. Census Bureau American Community Survey, Bureau of Economic Analysis.



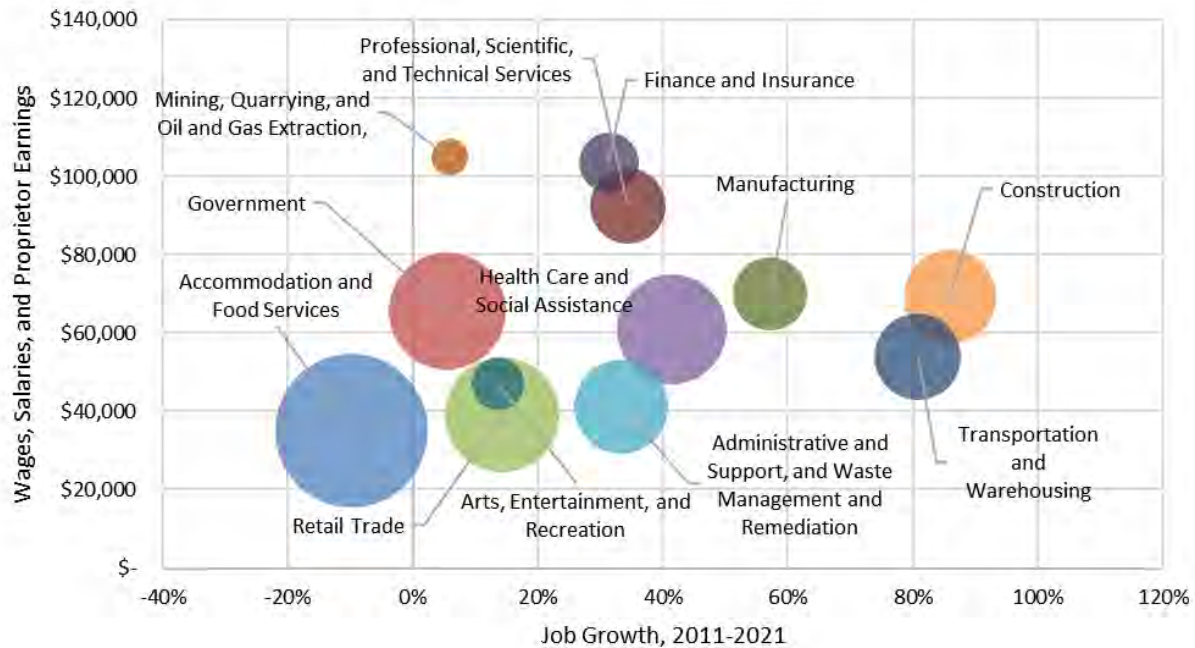
Over the past decade, Nevada’s job growth surpassed United States national average (Figure 7). Nevada’s Gross Domestic Product (GDP) grew at a similar pace to the United States but slower than Arizona and Utah. The industries most significantly driving Nevada’s GDP are real estate (rental and leasing); accommodation and food services; state and local government; retail trade; construction; finance and insurance; and healthcare and social assistance.²

² According to the quarterly data provided by BEA. BEA, *Regional Data GDP and Personal Income*: <https://www.bea.gov/itable/regional-gdp-and-personal-income>



Higher wage sectors are growing more quickly in the state and contributing to diversification and future sustainability.

Figure 8: Growth, wages, salaries, proprietor earnings, and size of Nevada's largest INDUSTRIES, 2011–2021.
Sources: Bureau of Labor Statistics, U.S. Census Bureau American Community Survey, Nevada Department of Employment, Training, and Rehabilitation, Bureau of Economic Analysis State and Local Personal Income Reports.



Size of bubble indicates relative employment size.

Nevada's economy is evolving with much of the state's recent growth driven by a diverse set of industries. Sectors such as construction, transportation and warehousing, manufacturing, and healthcare and social assistance have experienced significant employment growth over the past decade (Figure 8). This growth is reflective of Nevada's unique position in the Mountain West. Nevada is a gateway connecting California ports and businesses to the rest of the country through its existing transportation systems. The favorable tax and regulatory environment and low cost of operating businesses in Nevada has also kept it competitive.

On the other hand, other sectors that employ significant numbers of workers have experienced modest, stagnant, or even negative growth. Accommodations and food services and arts, entertainment, and recreation have historically formed the bedrock of the Nevadan economy. The COVID-19 pandemic greatly impacted in-person shows, performances, and venues and this is reflected in the latter sector, in which jobs have grown only 1.35% since 2011. Healthcare and social assistance grew by 3.53% in the last 10 years; finance and insurance increased by 2.76%; and government decreased by 0.54%. It is worth noting that of all sectors shown in Figure 9, finance and insurance offer the highest average annual wages at \$104,000. By contrast, the average annual wage in accommodations and food services is \$35,000. Declines or stagnation in less advanced industries and growth in more advanced industries point to structural changes occurring in Nevada's economy and the need to prepare the workforce with reskilling and training opportunities.

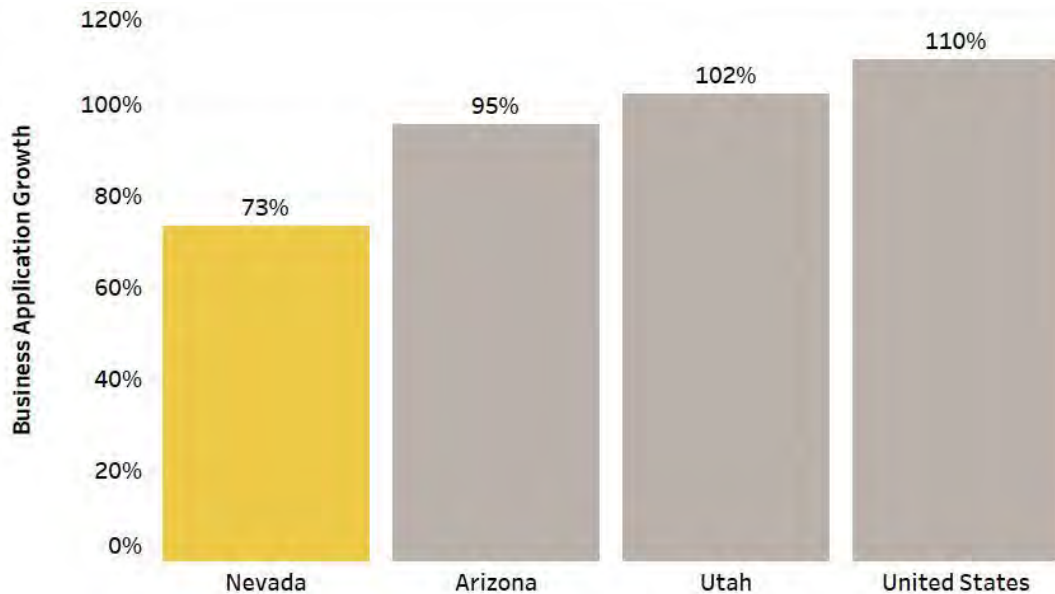


INNOVATION

Entrepreneurship is at the heart of any dynamic economy. A key indicator of the health of entrepreneurship is the rate of formation of new businesses. Nevada lags national and Arizona and Utah's growth of business applications submitted over the past decade (Figure 9). According to the U.S. Census, Business Formation Statistics, industries with the largest shares of business applications include retail trade, professional services, construction, and transportation and warehousing.

Nevada lags peer states and the United States in new business growth over the past decade.

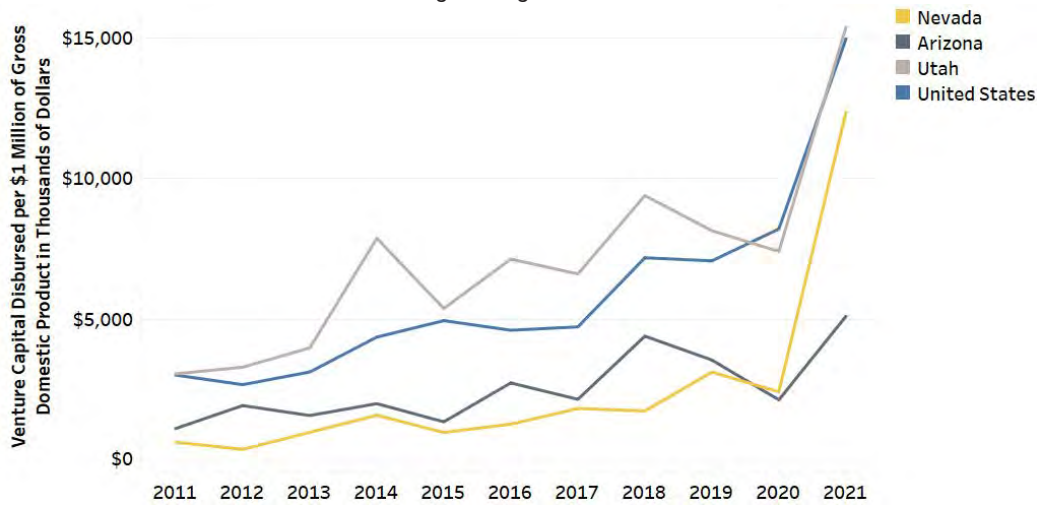
Figure 9: Business application growth in Nevada, peer regions, and the United States, 2011–2021. Sources: U.S. Census, Business Formation Statistics.



Currently, Nevada has two strong regional ecosystems, one in Reno and one in Las Vegas, however, the state lacks a unified innovation vision. Interviews with stakeholders indicated the lack of coordinated support for entrepreneurs and innovation within the state is a barrier for growth. Given Nevada's potential as a testbed for new technologies and its history and culture of individualism, risk-taking, and adventure, the state would be well served by coordinated action and new programs, initiatives, and funding to enhance state and regional innovation and entrepreneurial ecosystems.

Venture capital into the state is increasing at a steady pace.

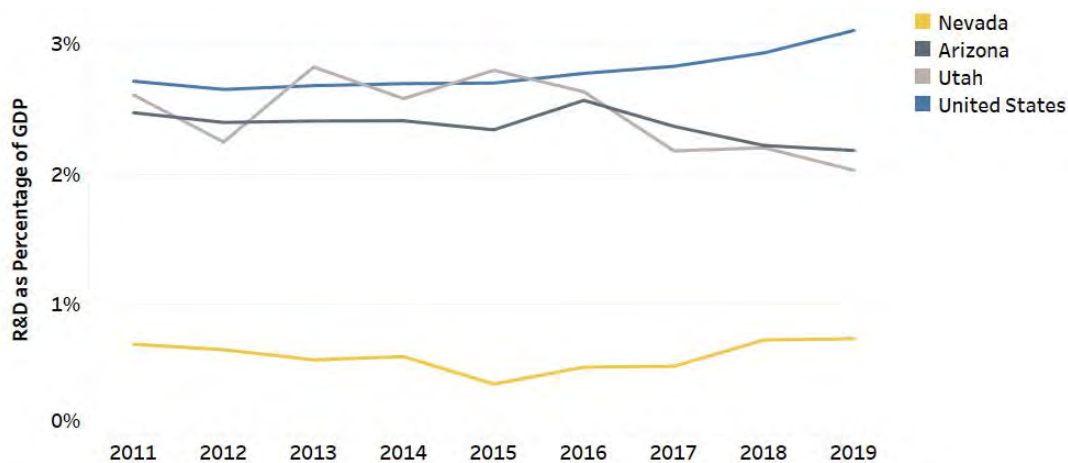
Figure 10: Venture capital disbursed per \$1 million of GDP, 2011-2021. Source: National Center for Science and Engineering Statistics.



Venture capital is an important source of funding for startups and new businesses, and it is important for states to attract and secure funding for innovators. Over the last 10 years, companies in the United States have seen an increase of venture capital from \$2,500 to \$15,000 per \$1 million of GDP (see Figure 10). While Nevada has historically lagged its peers and the national average for venture capital funding, in 2019, it surpassed Arizona and has grown steadily since (see Figure 10). Even during COVID-19, businesses in Nevada experienced a significant increase in venture capital funds. In the past two years, the largest shares of venture capital have gone to information technology (IT) (\$3.0B), business-to-business (B2B) (\$852.0M), business-to-consumer (B2C) (\$679.1M), healthcare (\$140.4M), energy (\$61.2M), and financial services (\$47.9M).¹⁰

Nevada substantially lags Arizona, Utah, and the United States in R&D as a share of GDP.

Figure 11: R&D as percentage of GDP, 2011–2019. Source: National Center for Science and Engineering Statistics.

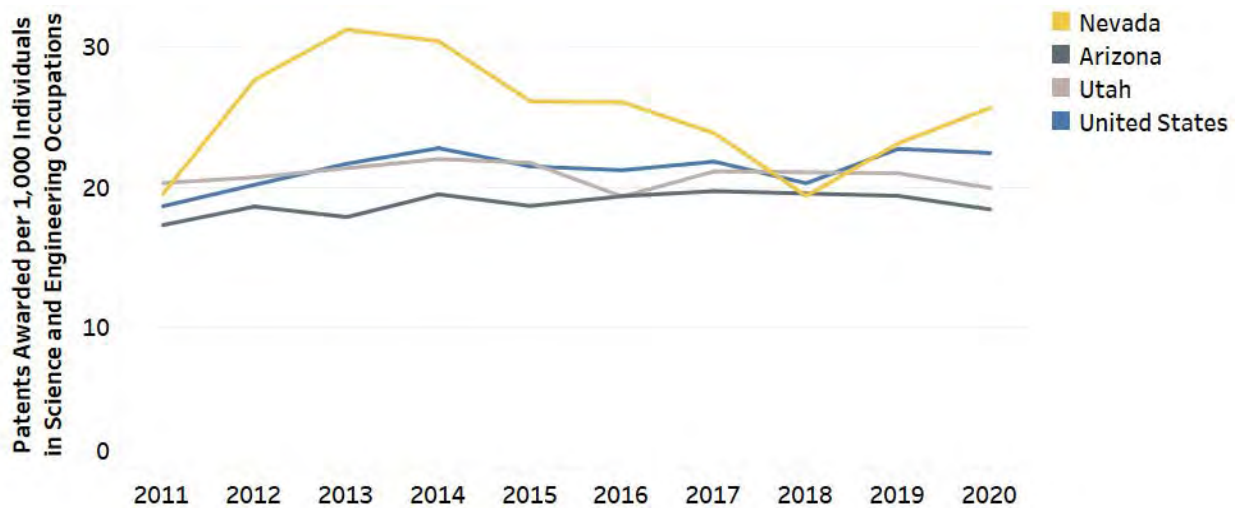


Strong levels of R&D activity conducted by federal and state agencies, businesses, universities, and has made great strides to increase its presence in R&D by achieving R1 classifications for University of Nevada Reno (UNR) and University of Nevada Las Vegas (UNLV) in 2018 (Figure 11). Peer states Arizona and Utah also have two R1 institutions each. However, Nevada substantially lags Arizona, Utah, and the United States in R&D as a share of GDP but has grown faster than its peers in recent years, setting it on a trajectory to close the gap.

Over the past decade, Nevada has almost always been above the national average and its peer states, in patents awarded per 1,000 in Science and Engineering Occupations.

Nevada leads peer states and the United States in patent awards relative to the size of the science and engineering workforce.

Figure 12: Patents awarded per 1,000 individuals in science and engineering occupations, 2011–2020. Source: National Center for Science and Engineering Statistics.



INFRASTRUCTURE AND QUALITY OF LIFE

Infrastructure

To support population growth and Nevada’s economic diversification and growth goals, the state will require significant new investments in its road, broadband, energy, water, and housing infrastructure.

Rail, Roads, and Highways: Most Nevada’s railroads run East to West across the state. The northern railroads connect the Reno region to Salt Lake City, Denver, Sacramento, and San Francisco. The Southern railroads run through Las Vegas and connect it to the largest harbor, Los Angeles, as well as Salt Lake City. Unfortunately, the southern corridor is not connected to the north so there is no railroad to connect the Las Vegas and Reno regions. Regarding the road infrastructure, Nevada’s road quality (86%) outpaces the U.S. average (81%) and its peer states, Arizona (78%) and Utah (80%).¹¹ Nevada’s highway system ranks 20th in the U.S. in overall cost-effectiveness and condition, which is better than Arizona (29th) but worse than Utah (6th). Nevada also has the lowest percentage of structurally deficient bridges in the nation.¹² Nevada’s road and highway systems allow for efficient and safe transportation.



Broadband: In Nevada, 86% of households have an internet subscription, but internet access and adoption vary significantly across the state, from 99% access in urban areas, 66% in rural areas, and even worse access on Tribal lands.^{13, 14}

Energy: In 2021, renewable energy sources generated about one-third of total electricity in Nevada, and the state ranked sixth in the nation in total solar capacity and generation. Nevada is one of seven states that has utility-scale electricity generation from geothermal energy, and the state is second in the nation, after California, in geothermal power production. Nevada's Renewable Portfolio Standard (RPS) requires electric utilities to acquire at least 50% of the electricity they sell from renewable sources by 2030.¹⁵ However, Nevada's electricity consumption often exceeds in-state generation (except for 2020), underscoring the need for investment in the grid.

In 2021, renewable energy sources generated about one-third of total electricity in Nevada, and the state ranked sixth in the nation in total solar capacity and generation.

Industrial Parks: Industrial Park development in Nevada has resulted in the diversification of the state's northern region with the maturation of the Tahoe Reno Industrial Center. Similar opportunities exist throughout the state with development potential in Southern Nevada in Jean and at APEX. Nevada's state agencies need to align planning functions in economic development, climate resiliency planning, land use planning, and infrastructure planning to address the complexities and realize the potential of large industrial park growth in Southern Nevada. Nevada policy makers should consider the state's competitive advantages in the greater Southwest and how strategic industrial park development will enhance the state's competitiveness.

Water: Due to the shortage conditions in the Colorado River, the federal government announced a tier 2 reduction for the seven states along the Colorado River. Nevada continues to dedicate itself to water conservation efforts, with Southern Nevada reducing its water consumption of Lake Mead over the last 20 years by 26%.¹⁶ In response to long-term drought conditions in the Colorado River Basin, GOED in partnership with WaterStart launched the WaterWise Program. The program will expand water conservation, enable sustainable economic growth, and increase the availability of data pertaining to Southern Nevada's water cluster.

Housing: According to the 2021 Building Permits Survey, Nevada issued 23,406 building permits, which is less than its peer states, Arizona (65,334) and Utah (39,058). In 2020, Nevada issued 6.4 building permits per capita, which is less than its peer states, Utah (9.7) and Arizona (8.4).¹⁷ While the supply is a challenge, since the COVID-19 pandemic, the increase in median home prices in Nevada has outpaced the rise in median household income; the increase in home value from 2019 (\$317,800) to 2021 (\$373,000) is a 17.4% increase, while the median household income has increased from \$63,276 to \$66,274, an increase of 4.7% for the same period.¹⁸

Quality of Life

Quality of life is indicated by a host of resources and amenities available to residents and businesses that allow them to thrive in the state. In this analysis, we assess Nevada's healthcare, K-12 education, recreational amenities, and business environment.



Healthcare: Nevada ranks 49th in the United States for public health dollars invested per capita (\$76). In 2021 among Mountain West states (including Utah and Arizona), Nevada has the lowest rate of adults with a dedicated healthcare provider (66.8%), the lowest rate of adults attending regular dental visits (60.8%), the lowest rate of adults with a flu vaccination (38.1%), and highest rate of adults who avoided care due to costs (11.1%).¹⁹ At least 2 million Nevadans live in an area lacking primary care providers, a particular challenge for rural areas, which tend to have higher poverty rates and are further from healthcare centers, clinics, and providers. Nevada would need to recruit more than 4,000 registered nurses to meet the national average.²⁰

Among Mountain West states (including Utah and Arizona), Nevada has the lowest rate of adults with a dedicated healthcare provider.

K-12 Education: Quality of education can partially be captured through the Change for Success Index, which combines information from 13 indicators that encompass a person’s early childhood to their career to better understand the role of education across an individual’s lifetime. These indicators include parents’ educational attainment, percentage of children enrolled in preschool, and high school graduation rates. Nevada ranks 50th in Chance for Success, 49th in school performance, and 50th overall.²¹ Nevada K-12 schools underperform compared to the national average in ACT scores as well as English and math literacy.²² Remediation rates (the rate of students who require additional education or training before enrolling in college-level courses) remain high.²³ The Nevada State Education Association estimates that there are more than 2,700 unfilled teaching positions in the state.²⁴

Recreational Amenities: Nevada is home to 27 state parks, 3 national historic trails, and provides access to many national parks (e.g., Death Valley and Great Basin). Festivals, such as Burning Man and the Electric Daisy Carnival, capitalize on the outdoor scenery and creative economy within the state to provide weeks of music, dancing, and performances and contribute millions of dollars to the state’s GDP. Nevada has three major league professional teams and several minor league teams for football, hockey, soccer, basketball, and baseball. In addition, Nevada still maintains its global brand for best-in-class shows, food, and gaming.

Business Environment: Nevada is a business-friendly state with a low cost of living (prices of goods and services are 2.5% less than the national average), a low-regulation environment, and an overall favorable tax environment for industry.²⁵ Nevada’s proximity to the west coast markets makes it a prime spot geographically for shipping and freight transport. Nevada is one of only eight states without a personal income tax and corporate and property tax rates are among the lowest in the country, ranking 7th best state for taxes in the Tax Foundation’s 2020 State Business Tax Climate Index. The state has several capital investment programs for business development (tax incentives, opportunity zones) and workforce development (WINN and LEAP).²⁶ Business Facilities’ Annual Ranking Report has ranked Nevada as a top state for business based on quality and availability of business facilities and renewable energy.²⁷



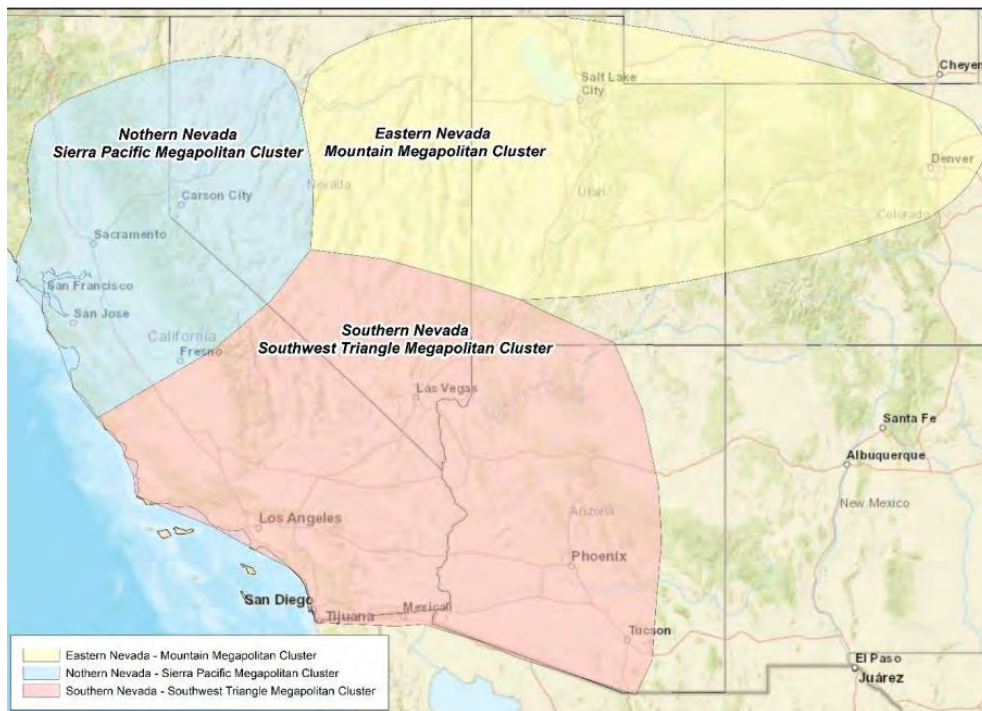
NEVADA'S NEW ECONOMIC GEOGRAPHY: THE "THREE NEVADAS"

Nevada is geographically well-situated between three vibrant economic partners: California, Arizona, and Utah. Each of these states exchanges people, goods, and ideas with Nevada. Despite having a population of just over 3 million, Nevada sits at the center of a trade region that exceeds 53 million residents, a region that exceeds in both population and GDP of nations such as South Korea (pop. 51.8 million) and Spain (pop 47.3 million).

According to the U.S. Census Bureau, Nevada's two largest metropolitan areas—Las Vegas MSA (pop. 2,266,715) and Reno-Sparks MSA (pop. 475,642)—join in the two largest urban complexes (or "megapolitan areas") in the western half of the United States. Las Vegas is part of the "Southwest Triangle megapolitan cluster," which includes Southern California and Arizona's "Sun Corridor" megapolitan area (Phoenix and Tucson). Together these regions now contain about 34 million people and form the second most populous megapolitan cluster behind the "Northeast Megalopolis." Reno lies at the eastern edge of the Sierra-Pacific megapolitan area, which includes the Bay Area and Sacramento metros. The Sierra-Pacific region includes about 13 million residents.

Together these regions now contain about 34 million people and form the second most populous megapolitan cluster.

Figure 13: Each of Nevada's Regions Remains Well-Positioned within Megapolitan Areas Throughout the Western United States. Source: Nevada's Megapolitan Clusters. Robert E. Lang and Jaewon Lim, Brookings Mountain West--UNLV, 2020.



Nevada's most important economic opportunities lie in deepening its ties to these adjacent megapolitan areas. The state can induce both corporate relocation and skilled labor migration from the greater Southwest. Nevada maintains lower costs, less regulation, and less tax burden, especially when compared to California.



Target Industries

Nevada’s target industries are those that have a foundation of assets in the state and will help the state move closer to its goals of a sustainable, innovative, and connected economy with high paying jobs for all Nevadans. While each target industry builds on the strengths of Nevada’s economy, there are also challenges that the state will need to address to ensure future competitiveness. This section presents the target industries and their sectors (below), their opportunities for growth, and the headwinds they face.



Key findings from the target industry assessment include:

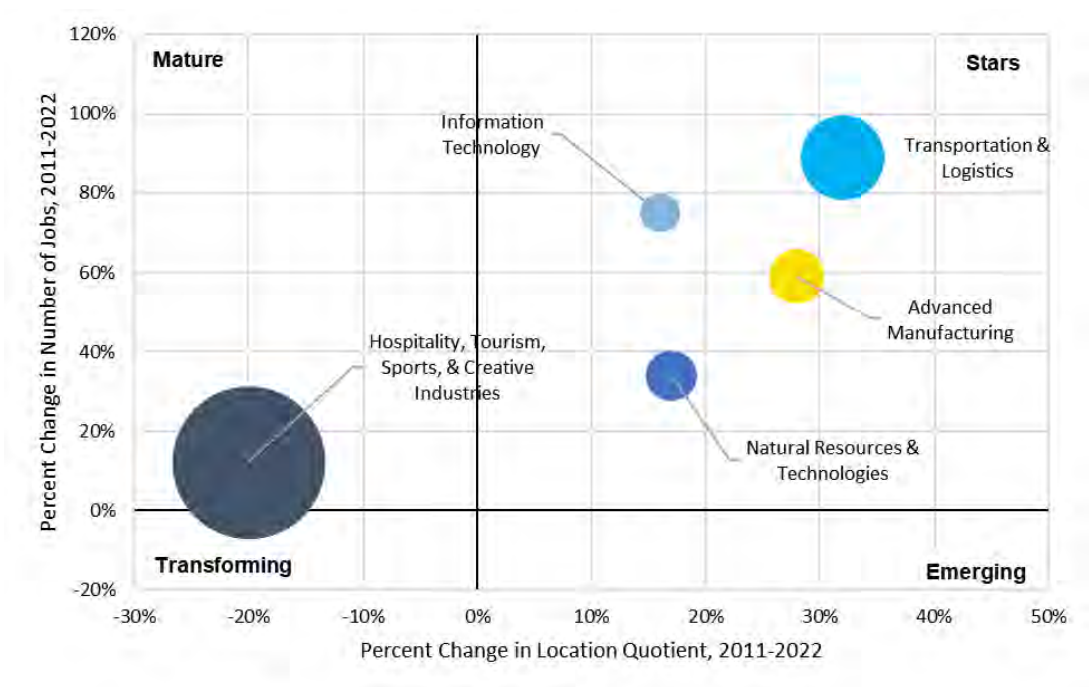
- Growth in employment and employment concentration of higher wage, innovation-based industries grew more quickly over the past decade than traditional state economic drivers, demonstrating the positive structural changes taking place in the economy.
- Since 2011, Data Hubs, the largest and highest paying **Information Technology** industry sector, was also the fastest growing, while Broadband declined.
- The pandemic exacerbated core challenges related to the **Transportation and Logistics** industry. While several sectors demonstrated strong growth in recent years, including Warehousing, Trucking, and Multi-Modal Hubs; Rail, Wholesaling, and Air sectors were not as resilient. These declining sectors are also some of the better paying.
- The **Natural Resources and Technologies** industry has gained employment and comparative advantage over the past decade, notably in the areas of clean energy. Nevada’s natural assets, mining workforce, manufacturing capabilities, proximity to regional innovation hubs, and attraction of key employers have resulted in Nevada being one of a few locations,

maybe the only location, in the world with a complete lithium supply chain and an overall natural resources and technologies ecosystem ripe for further growth in the state.

- The higher-wage Sports and Creative Industries sectors in the **Hospitality, Tourism, Sports, and Creative Industries** grew faster over the past decade and experienced slower decline during COVID than gaming. This points to adaptation, innovation, structural change, and diversification within the hospitality and entertainment-related industry.
- The ongoing green transition has provided an opening for the state to develop its own **Advanced Manufacturing** hub by disrupting the traditional emission-based supply chain. While Aerospace and Defense continue to remain the largest manufacturing industry by volume, and E-Mobility have grown as industries, especially E-Mobility as battery storage manufacturers flock to the state.

Innovation-based sectors grew quickly over the past decade, demonstrating the positive structural changes taking place in the economy.

Figure 14: Change in employment and employment concentration (location quotient) of Nevada’s target industries, 2011–2022. Sources: U.S. Census Bureau, Bureau of Labor Statistics, Bureau of Economic Analysis.



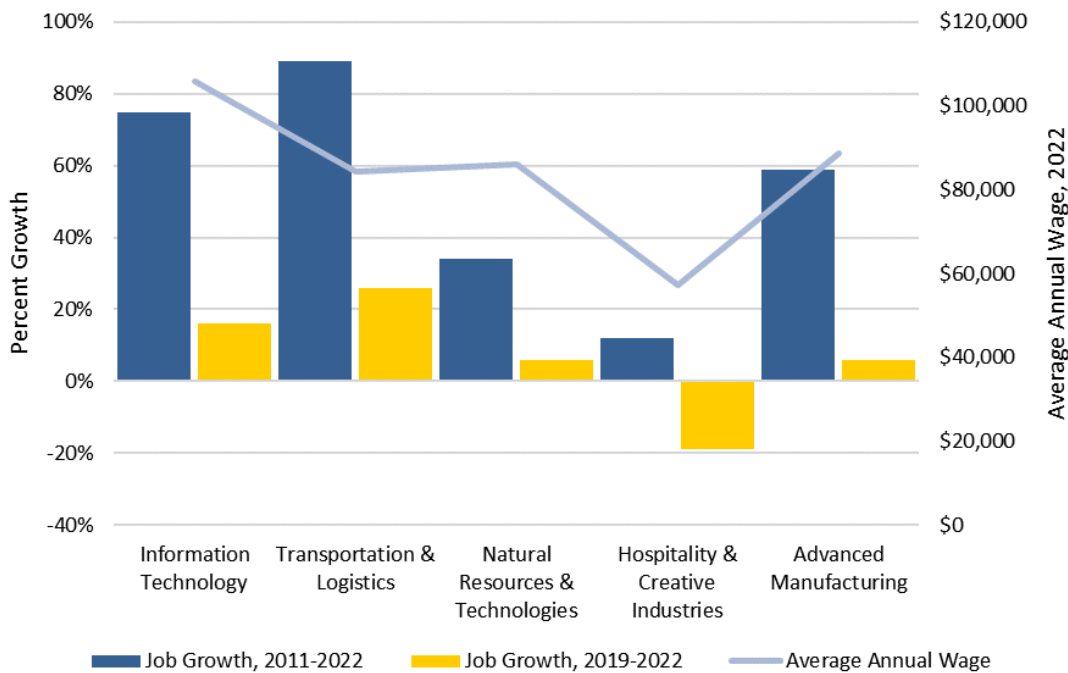
Size of bubble indicates number of jobs, 2022.

The COVID-19 pandemic reinforced and created an urgency around Nevada’s need to diversify its economy away from pro-cyclical industries, namely hospitality, gaming, and entertainment. While these activities, comprising the largest share of employment in the state, will continue to remain important and to evolve, other innovation-based industries have grown in the number of jobs and the concentration of jobs relative to the nation over the past decade (“stars”). These trends demonstrate the positive structural changes taking place in Nevada’s economy.



The industries that are growing are also those with more competitive wages.

Figure 15: Average annual wage and short- and long-term employment change by industry, 2011–2022. Sources: U.S. Census Bureau, Bureau of Labor Statistics, Bureau of Economic Analysis.



Since 2011, the number of jobs in the Information Technology industry cluster grew 75%, Transportation & Logistics grew 89%, Advanced Manufacturing grew 59%, and Natural Resources & Technologies grew 34% (Figure 12). The growing concentration of these sectors in Nevada relative to the rest of the United States (indicated by the location quotient) also indicates the competitive potential and diversification opportunities in these industries. Nevada’s target industries are also resilient—except for Hospitality, Tourism, Sports, & Creative Industries—and have not only recovered from the pandemic but have experienced strong growth (Figure 13). The industries that are growing are also those with more competitive wages. These two trends together indicate that the state’s economy is transitioning toward industries that are necessary to meet dynamic global demand of goods and services, positioning the state for future prosperity.

The sections below detail key industry developments in recent years, as well as longer-term growth, diversification, and resiliency trends of the specific sectors within Nevada’s target industries.

INFORMATION TECHNOLOGY

The Information Technology (IT) industry is composed of sectors ranging from Broadband and Cyber Security to Technology Manufacturing and Data Hubs. The employment and specialization of the IT industry and its sectors have increased significantly over the past decade with a diverse mix of established businesses and startups. The development of the IT industry has spurred an innovation ecosystem and enabled other tech-forward industries, such as Renewable Energy and Advanced Manufacturing, to flourish in the state.



Industry Snapshot

In July 2019, Google officially broke ground on its first \$600 million data center in Henderson, Nevada. A second \$600 million data center in Storey County followed, reaching full operations in February 2021. In addition to these two data centers, since 2019, Google has awarded more than \$1 million to Nevada nonprofits and has attracted a pool of talented data scientists to the area. As the Henderson and Storey County sites continue to attract new applicants, local businesses benefit from the expertise and qualified skillset that this new labor pool offers, allowing potential small businesses or startups to cultivate new knowledge bases, and giving the state a solid base for growing its IT ecosystem.³ Additionally, proximity to California, with its many mature and well-connected IT hubs, presents opportunities for an expanded talent pool for Northern Nevada-based companies and opportunities for entrepreneurial networking.

While Nevada’s business friendly environment and proximity to Silicon Valley have bolstered the IT industry in recent years, the state must address key workforce and infrastructure challenges and strengthen its innovation ecosystem for the industry to flourish. Recently relocated IT companies in the state have promised to further invest in K-12 education and internet accessibility for students, ensuring that students have opportunities to continue learning about IT-related fields and to apply the theoretical skills they learn in classrooms. Although there are new programs for software engineers and data scientists, few programs in the state target hardware engineers and technicians to develop physical IT infrastructure, creating a significant gap in the IT ecosystem.

Broadband remains a challenge for the state. Although broadband-related employment continued to decline over the last decade, the state government, along with important stakeholders, has recognized the critical value of broadband as an essential enabler to developments in healthcare, education, and public safety. Over the past few years, the state has issued a series of strategic plans and initiatives coupled with federal and state investments that aim to boost growth in the sector which, barring the interruption from the COVID-19 pandemic, should soon begin to bear fruit. Major initiatives include increasing the amount of federal broadband funding that local school districts receive by boosting applications, and connecting all rural hospitals, health clinics, and state correctional facilities to a broadband connection sufficient to provide telehealth services by 2025.²⁸

Growth, Diversification, & Resilience

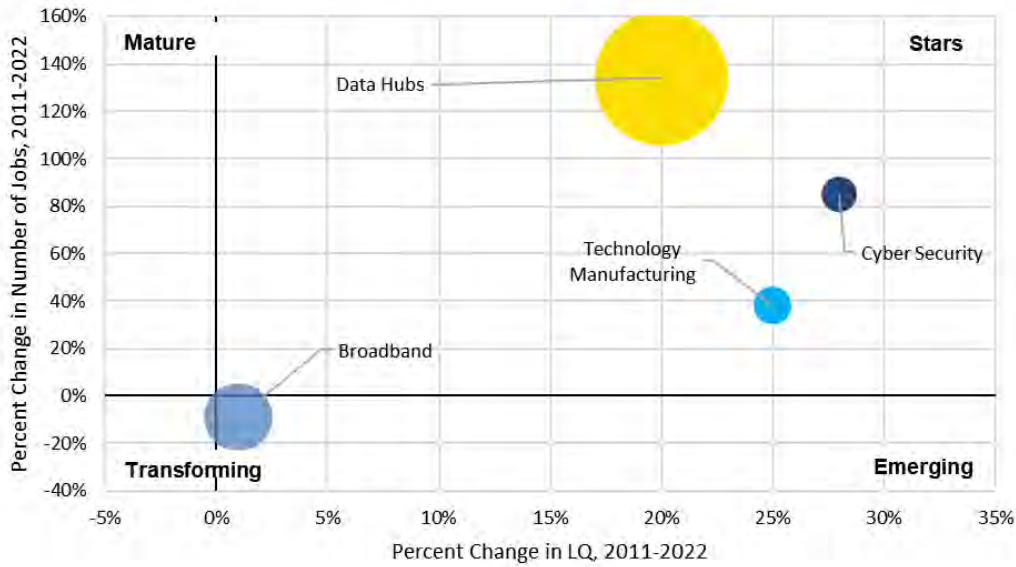
While the Information Technology industry represents only about 2% of all jobs in Nevada, its sectors have grown dramatically over the past decade. Since 2011, Data Hubs, the largest IT employment sector and highest paying, grew quickly with a 134% increase, while Technology Manufacturing and Cyber Security grew at 38% and 85%, respectively. The concentration of these sectors relative to the rest of the United States also grew over the last 10 years, indicating significant potential for increasing competitiveness with targeted policies and investments (Figure 16). These fast-growing IT sectors are also those offering the highest wages within the industry. Since 2019, despite it being the largest employer within the industry, the Broadband sector continued a trend of decline.

³ An ecosystem could be defined as networks of actors, relationships between actors, institutional conditions, and infrastructures dedicated to a purpose/vision that represents the values and motivations of local actors.



Nevada’s concentration of IT grew over the last 10 years, indicating significant opportunity for future competitiveness.

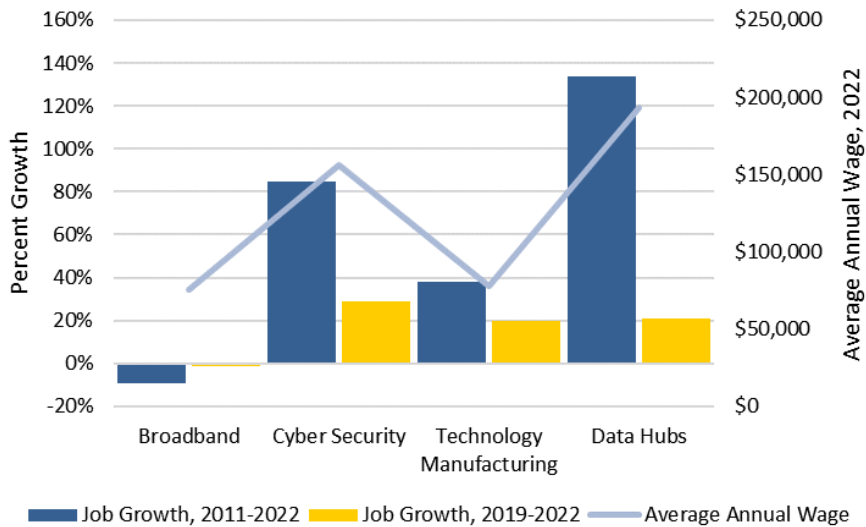
Figure 16: Change in employment and employment concentration (location quotient) in IT, 2011–2022. Sources: U.S. Census Bureau, Bureau of Labor Statistics, Bureau of Economic Analysis.



Size of bubble indicates number of jobs, 2022.

These fast-growing IT sectors are also those offering the highest wages within the industry.

Figure 17: Average annual wage and short- and long-term employment change in IT sector, 2011–2022. Sources: U.S. Census Bureau, Bureau of Labor Statistics, Bureau of Economic Analysis.



TRANSPORTATION & LOGISTICS

The Transportation & Logistics industry is one of the key elements of a successful, integrated supply chain that links consumers and producers through multiple modes of transportation, such as rail, air, and trucks. A strong Transportation and Logistics industry in Nevada and throughout the world is essential to the functioning of a strong economy, and specifically to the success of businesses and industries that rely on the transport and receipt of goods, notably Advanced Manufacturing sectors like electric vehicles (EVs).

Industry Snapshot

Nevada is equipped with a prime location, favorable tax structure and business environment, as well as well-established companies that can attract new businesses to the state and provide resources for development in the industry with positive spillover effects to other industries. Nevada has access to three major highways: Interstate 15, U.S Highway 95, and U.S Highway 93. Nevada's international and regional airports (Harry Reid International Airport, Reno-Tahoe International Airport, Elko Regional Airport, etc.) allow for goods to be received and shipped by air, increasing the modes used in the industry. Foreign Trade Zones (FTZs) in the state promote global engagement through exporting and importing. Nevada's proximity to the Port of Los Angeles provides a comparative advantage to other states with strong transportation and logistics sectors.

Foreign Trade Zones (FTZs) in the state promote global engagement through exporting and importing.

Nevada's tax structure is favorable to developing regional supply chains. Nevada does not have a tax for inventories that are held for sale within the state or for interstate transit, which incentivizes the acquisition, movement, production, manufacturing, and distribution of goods in Nevada.

As Nevada continues to grow new businesses, the state must ensure that its infrastructure is able to support that growth. Nevada has already begun to make headway in expanding its infrastructure capability as well as enhancing the existing infrastructure of the state's transportation sector, such as expanding road capacity around Harry Reid International Airport. Additional road and highway improvements throughout the state, along with investments in rail and air expansions will be critical to the future success of the industry and the economy overall.

Growth, Diversification, & Resilience

The Transportation & Logistics industry in Nevada can be categorized into six main sectors, Warehousing, Trucking, Rail, Multi-Modal Hubs, Wholesaling, and Air Transportation.⁴ Combined, these sectors represent 7.2% of all jobs in Nevada. Warehousing and Wholesaling comprise an overwhelming majority of the industry. Warehousing, Multi-Modal Hubs and Trucking have all seen significant job growth over the last 10 years, while also increasing their concentration in Nevada relative to the United States (Figure 18). This indicates the capacity of the state to attract and grow businesses in these sectors. The concentration of the Wholesaling and Air sectors, however, has grown only modestly, with Rail declining.

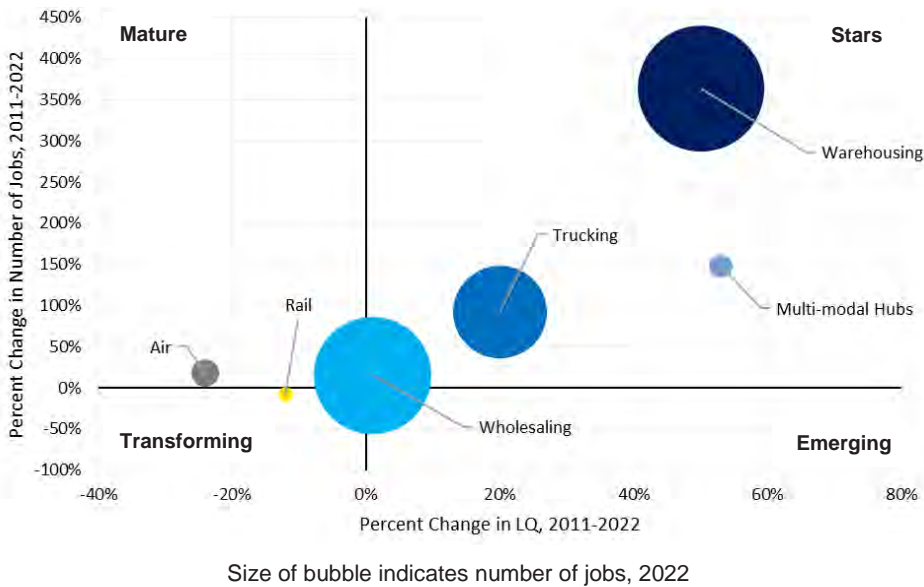
While several sectors have demonstrated strong growth since the pandemic, including Warehousing, Trucking, and Multi-Modal Hubs; Rail, Wholesaling, and Air were not as resilient. These declining sectors are also some of the better paying (Figure 19). The pandemic exacerbated core challenges

⁴ Water Transportation was originally included as a seventh main sector for peer state comparison, but since the sector has less than 100 jobs it was ultimately excluded from the analysis.



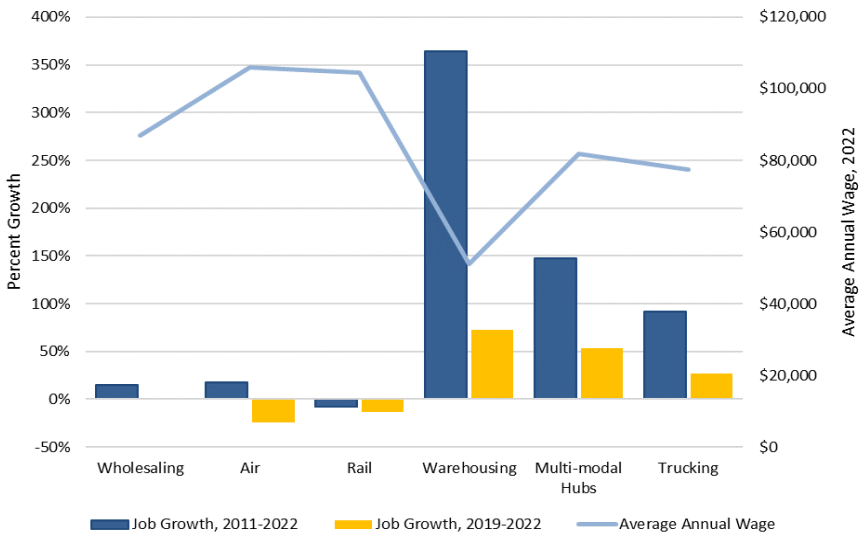
related to transportation and logistics that directly impact global supply chains, such as pilot shortages, material and equipment shortages, port closures, and insufficient infrastructure conditions and capacity. To relieve some of the burden of supply chain conditions and bottlenecks, and increase employment in these high-wage sectors, Nevada can increase the dependability of assets and industry conditions to promote growth and foster an environment that allows the transportation and logistics industry to grow and scale successfully and efficiently.

Figure 18: Change in employment and employment concentration (location quotient) in Transportation & Logistics, 2011–2022. Sources: U.S. Census Bureau, Bureau of Labor Statistics, Bureau of Economic Analysis.



The pandemic exacerbated challenges related to transportation and logistics sectors, including Air and Rail, that directly impacted global supply chains and the performance of these sectors in Nevada.

Figure 19: Average annual wage and short- and long-term employment change in Transportation & Logistics sector, 2011-2022. Sources: U.S. Census Bureau, Bureau of Labor Statistics, Bureau of Economic Analysis



NATURAL RESOURCES & TECHNOLOGIES

Natural Resources & Technologies, as an industry, has made its claim on the national stage as states begin to adopt clean energy initiatives and move toward climate-friendly processes and technologies. Nevada has emerged as a leader in clean energy technologies and resources because of the state's access to natural resources and production of related technologies and the expertise of its existing mining workforce.

Industry Snapshot

Nevada has diverse natural resources that can be useful in the development of clean technologies, notably lithium. Lithium is a key element used in the development of EV batteries. Mining the materials used in batteries presents a unique ability for Nevada to become a major player in the EV supply chain. The state has many businesses that are centered around the production of lithium or has products that require lithium: Tesla, Albemarle, Bonnie Clair Project, Clayton Valley Lithium Project, and Lithium Americas. The expansion of Redwoods Materials will fill further critical roles—refurbishment, recycling, refining, and remanufacturing of sustainable battery materials—making Nevada one of a few locations, maybe the only location, in the world with a complete lithium supply chain.

Moreover, Nevada's Agriculture sector contributes to the economy of rural communities and to the statewide economy. Nevada's Agriculture sector has historically been defined by livestock production, dairy, and food crops but as the industry is becoming more innovative, Nevada has attracted a wide breadth of companies that extend beyond the traditional Agriculture sectors historically seen in the state. The state's climate and soil conditions have led to new industries in cannabis and hemp production. The cannabis industry has grown significantly since legalization of recreational sales in 2016. In 2021 it brought in more than \$1 billion in taxable sales²⁹; Nevada's hemp industry is still in its early stages, but it has great potential. ³⁰ promotes and supports hemp industry through federal and state regulations. Another great example is West Coast Salmon. West Coast Salmon plans to establish a land-based salmon farm that uses recycled ground water to support the farm. In addition to West Coast Salmon, Urban Fresh Farms evolves agriculture to indoor innovations. Urban Fresh Farms, a hydroponic vegetable farm, provides a space that allows vegetables to be grown in an indoor setting eliminating the need for fertile soil. West Coast Salmon and Urban Fresh Farms provides an innovative twist to the agriculture industry in Nevada, and highlights Nevada's capability to support and encourage new and innovative changes to the agriculture industry.

Federal lands and water scarcity restrict the expansion of agriculture, access to clean water, and growth of the Renewable Energy sector. Nevada remains at the forefront of states that have the most land ownership by the federal government (almost 87%).³¹ The current land ownership and regulation structure of Nevada require that localities and private entities work with land managers to develop and provide services and infrastructure upon which constituents rely. Southern Nevada has been faced with the dire challenge of access to water. As the southern climate is becoming more arid and experiencing longer periods of drought, the water reserve is decreasing. The increasing concern of access to water not only impacts constituents but also the types of businesses that Nevada can attract and support in the state's southern region.

Growth, Diversification, & Resilience

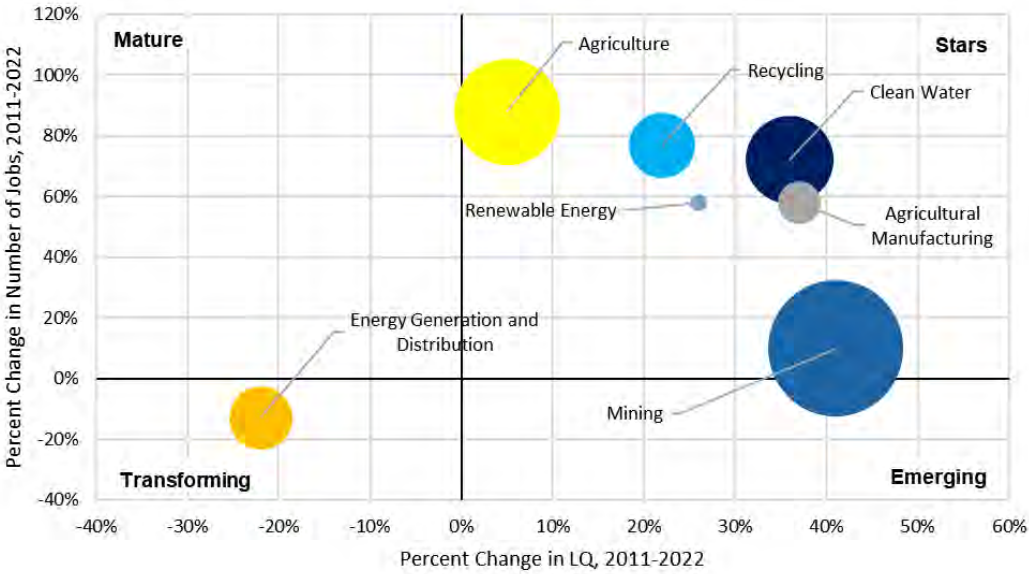
The Natural Resources & Technologies industry in Nevada includes the following sectors: Agriculture, Mining, Recycling, Clean Water, Renewable Energy, Agricultural Manufacturing, and Energy Generation & Distribution. The Natural Resources & Technologies industry represents 2.6% of all jobs in Nevada. Mining is the dominant sector in the industry with over 15,000 jobs. The number of jobs in all sectors of the industry, except Energy Distribution and Generation, grew significantly over the past decade (Figure 18). Since 2011 the same sectors also became more concentrated in Nevada relative to the United States as natural assets along with manufacturing capabilities and proximity to regional innovation hubs have created a Natural Resources and Technologies ecosystem ripe for growth in the state.



Regarding Energy Generation & Distribution, declines in the sector are largely attributed to inefficiencies in the state’s energy grid.³² Since 2019, Agriculture, Mining, Recycling, Agricultural Manufacturing, and Renewable Energy have grown, while Clean Water and Energy Generation & Distribution have declined (Figure 19). Unlike other industries, wages in Natural Resources & Technology sectors demonstrate a countervailing trend with growth. Although Energy Generation & Distribution is shrinking, wages are nearly double the next highest paying sectors (Renewable Energy and Mining). With a greater focus on bolstering the grid, the state is likely to see future growth in Energy Generation & Distribution.

The number of jobs in all sectors of the industry, except Energy Distribution and Generation, grew significantly over the past decade.

Figure 20: Change in employment and employment concentration (location quotient) in Natural Resources & Technology sector, 2011–2022. Sources: U.S. Census Bureau, Bureau of Labor Statistics, Bureau of Economic Analysis.⁵



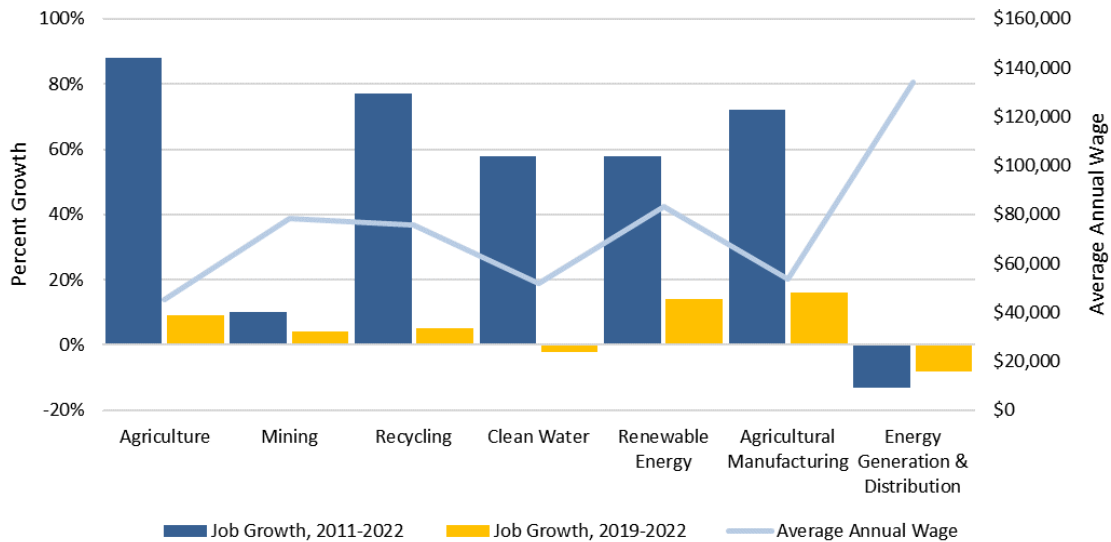
Size of bubble indicates number of jobs, 2022.

⁵ Data for solar electric power generation (NAICS 221114) is included under the renewable energy bubble.



Unlike other industries, wages in Natural Resources & Technology sectors demonstrate a countervailing trend with growth.

Figure 21: Average annual wage and short- and long-term employment change in Natural Resources and Technologies sector, 2011–2022. Sources: U.S. Census Bureau, Bureau of Labor Statistics, Bureau of Economic Analysis.



HOSPITALITY, TOURISM, SPORTS & CREATIVE INDUSTRIES

The creative economy-related sectors have been grouped together under Hospitality, Sports, Tourism & Creative Industries. Within this broad grouping are six main sectors: Outdoor Recreation, Tourism, Sports, Gaming, Film, Entertainment and Creative Industries. The creative economy professions provide commercial and cultural value to Nevada. Unfortunately, the COVID-19 pandemic severely impacted creative sectors by limiting performances and use of venues as well as forcing companies to cope with a more limited workforce. In response, more companies and creative workers are utilizing digital entertainment, automation, and virtual engagement to provide their services. The virtual space is becoming more prominent for creative industries to conduct business and will continue to be a high-growth area. The creative economy has a strong presence in Southern Nevada and the cluster of creative talent and opportunities continues to pull newcomers into the region. While the state is a powerhouse in these sectors, attention should be given to supporting the workforce through training and compensation packages, diversifying entertainment and leisure activities into sports and other high value sectors, connecting organizations to existing networks and community resources, and leveraging Southern Nevada’s proximity to Los Angeles.

Industry snapshot

Hospitality, tourism, sports, and creative industries are long established sectors in the state and are major contributors to the Nevadan economy. While the state is still linked to adult entertainment and the “Sin City” image, outdoor recreation and other forms of family entertainment are growing in the state. NASCAR races and Burning Man alone bring in over 150,000 people to the state annually, with a host of other special events and festivals that drive significant economic activity. Las Vegas has been selected to host the world-renowned Formula One Grand Prix in 2023. This event is expected to bring in over 100,000 official spectators into the state, and over 400 million TV viewers globally.³³ Las Vegas has also been selected to host the 2024 NFL Super Bowl LVIII and the Men’s Final Four NCAA championship in 2028. Due to Las Vegas’s image and brand as one of the top entertainment centers



in the world, there are major hospitality and tourism companies based in the region that employ large workforces and can accommodate high-value guests (e.g., celebrities, politicians). The food and restaurant scene are among the top in the United States for fine dining, celebrity chef offerings, and a highly diverse cuisine from various communities in the state.

Creative industries are significant contributors to the Nevadan economy, providing almost \$8 billion to the state (5% of the state GDP). The state continues to draw in a high number of creative professionals, particularly in entertainment, performance arts, and hospitality. The creative economy continues to be a valuable sector in part due to its connections to other sectors and the high amount of crossover with other fields of employment. For example, the IT industry pairs with creative professionals to create technical innovations. Media, publishing, and broadcasting services assist in the diffusion of cultures, knowledge, and curated experiences.

Creative industries are significant contributors to the Nevadan economy.

Sports infrastructure has significantly improved with the completion of Allegiant Stadium for the Raiders football team. This project brought in construction jobs and capital that has spurred interest in furthering sports infrastructure developments. Sports are concentrated in the southern region of the state with professional teams in the NHL, WNBA, and NBA and is experiencing gradual growth despite the pandemic reducing spectator turnout. Las Vegas has been able to successfully recruit the Raiders football team from Oakland and is currently working with the MLB's Oakland Athletics to relocate to the city. Compared to the Bay Area, Las Vegas provides a lower cost of living, lower cost of operations, and a better commute for those employed within the Sports sector and for sports enthusiasts traveling for games.

A key challenge for the industry is automation, which is more likely to impact lower-skilled jobs that involve repetition. In Nevada, some occupations in hospitality, gaming, and food services fall into the category of "low skill" and face a high risk of being replaced by automated processes. Nearly half of Nevada's workforce faces risk of automation, with 96% of game dealers facing automation risk. Automation allows for higher efficiency, decreased contact, and consistency, but Nevada will need to retrain its current workforce to keep them employed.

Growth, Diversification, & Resilience

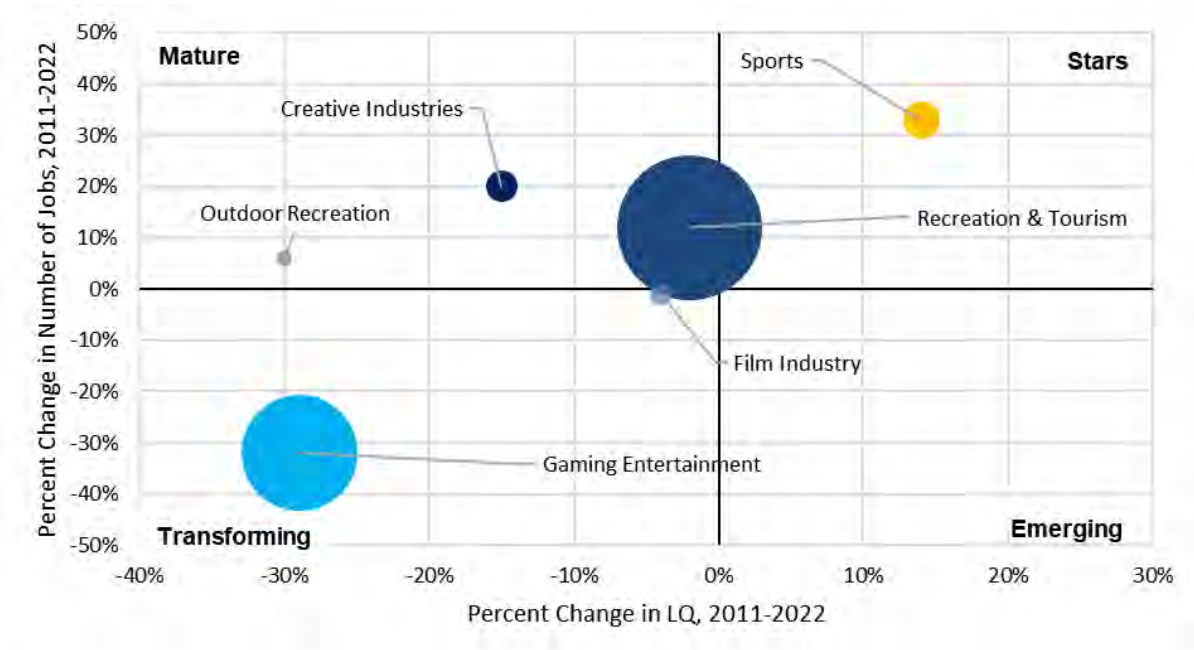
The Hospitality, Tourism, Sports, & Creative Industries cluster represents 23.5% of all jobs in Nevada, with Recreation & Tourism making up most employment in this cluster. Over the last 10 years, the number of jobs in Outdoor Recreation grew 6% and Recreation & Tourism grew 12%, modest growth for both sectors (Figure 20). The number of jobs in Sports and Creative Industries both grew at higher rates, with Sports growing by 30% and Creative Industries growing by 20% since 2011. However, the number of jobs in both Gaming Entertainment and Film Industry saw a decline. Gaming Entertainment saw a drastic decrease in the number of jobs, decreasing 32% since 2011, while the number of jobs in Film Industry fell only 1%.

The concentration of jobs relative to the United States for Outdoor Recreation, Recreation & Tourism, Gaming Entertainment, Film Industry, and Creative Industries all shrunk since 2011. The location quotients for Outdoor Recreation and Gaming Entertainment fell the most, with Outdoor Recreation shrinking by 30% and Gaming Entertainment shrinking by 32%. Recreation & Tourism fell by 2%, Film Industry fell by 4%, and Creative Industries fell by 15%, a more modest decrease in the location quotients.



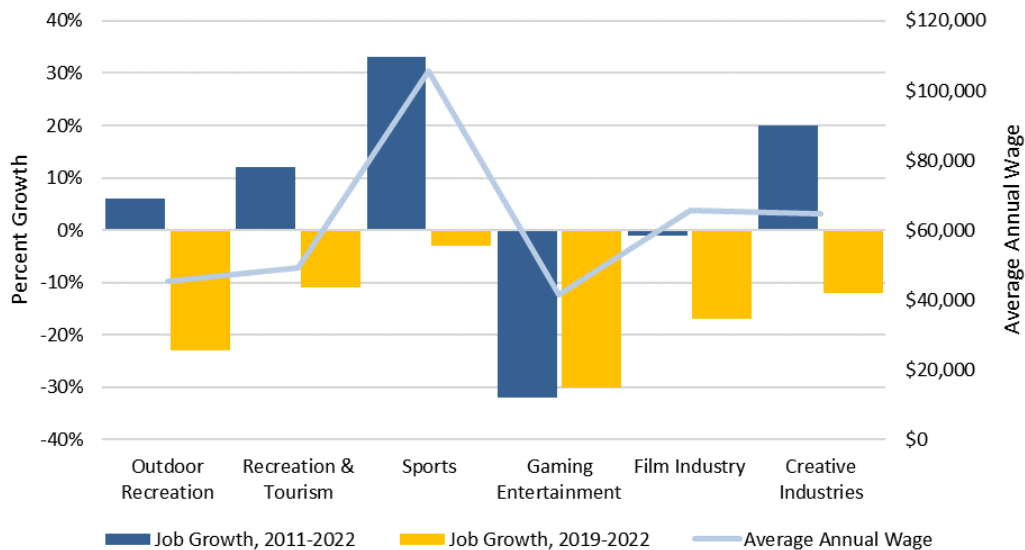
Higher-wage Sports and Creative Industries sectors grew faster over the past decade and experienced slower decline during COVID than gaming and other mature sectors in the industry.

Figure 22: Change in employment and employment concentration (location quotient) in Hospitality, Tourism, Sports, & Creative Industries, 2011–2022. Sources: U.S. Census Bureau, Bureau of Labor Statistics, Bureau of Economic Analysis.



Size of bubble indicates number of jobs, 2022.

Figure 23: Average annual wage and short- and long-term employment change in Hospitality, Tourism, Sports, & Creative Industries sector, 2011–2022. Sources: U.S. Census Bureau, Bureau of Labor Statistics, Bureau of Economic Analysis.



Post Covid, since 2019 no sector in the industry has experienced job growth (Figure 21). It is estimated that Nevada's creative economy lost around \$1.3 billion in revenue and experienced 64% unemployment due to COVID.³⁴ Those sectors that have grown over the past decade and that experienced slower decline during COVID, Sports and Creative Industries, also offer higher wages than other sectors in this area. This points to the need for adaptation, structural changes, and diversification within the hospitality and entertainment-related industry.

ADVANCED MANUFACTURING

The Advanced Manufacturing industry includes four main sectors: Aerospace & Defense, Clean Technologies, E-Mobility, and All Other Advanced Manufacturing.⁶ Over the last decade, Nevada's Advanced Manufacturing industry has made commendable strides to diversify and grow. Historically, Nevada has been positioned further upstream in the manufacturing supply chain, supplying raw materials. However, the ongoing green transition has provided an opening for the state to develop its own manufacturing hub by disrupting the traditional emission-based supply chain. While Aerospace & Defense continue to remain the largest manufacturing industry by volume, Clean Technologies and E-Mobility have grown as industries, especially E-Mobility as battery storage manufacturers flock to the state.

Nevada is in a competitive position to propel itself into a more mature Advanced Manufacturing industry, but it needs significant investment in its education system and workforce. The state has made substantial capital investments, but overall needs a comprehensive and targeted assessment and strategy to develop infrastructure to meet the demands of each segment of the supply chain.

Industry Snapshot

The arrival of large EV manufacturing companies to Nevada offers an excellent base for the state to develop its own industry. These EV manufacturing jobs are more secure than other prospective industries in that the long-term production forecast is stable and growing. For a generation at least, Nevadans can rely on these manufacturing jobs and the state should take this critical juncture to turn Nevada into a hub for EV manufacturing and innovation before the still-evolving EV supply chain begins to solidify and centralize in a few key areas. Moreover, EV manufacturing can be a key part of Nevada's greater push to diversify and expand its Advanced Manufacturing sector. The migration of new employees to the state seeking new EV-related jobs expands the pool of skilled workers in advanced manufacturing. This in turn attracts new companies looking to either relocate or set up shop near an area with a highly skilled workforce, thus creating a mutually reinforcing feedback loop if leveraged well.

Although the green transition is bringing jobs to Nevada, the state itself does not have the educational infrastructure to support emerging green technologies. Currently Nevada's university system only offers a few minor programs and certificates in green

For advanced manufacturing jobs that require green energy expertise, the state is relying on migrating workers and out-of-state universities to provide the necessary training for its own workforce.

⁶ "All Other Advanced Manufacturing includes advanced manufacturing sectors that do not fall into Aerospace & Defense, Clean Technologies, and E-Mobility based on previous classification from SRI-Brookings report, *Nevada's Plan for Recovery & Resilience*: <https://goed.nv.gov/wp-content/uploads/2021/01/Nevada-Recovery-and-Resiliency-Plan-FINAL.pdf>. See also *America's Advanced Industries: What They Are, Where They Are, and Why They Matter*: <https://www.brookings.edu/research/americas-advanced-industries-what-they-are-where-they-are-and-why-they-matter/> for further information.



technologies and almost none in the community college system. For advanced manufacturing jobs that require green energy expertise, the state is relying on migrating workers and out-of-state universities to provide the necessary training for its own workforce. This limits the state's ability to grow as a regional hub for green technologies and hampers its adaptability to new emerging technologies in the renewable energy field.

Advanced Manufacturing in Nevada is in its early stages, but the future looks promising. Proactively anticipating the energy needs of the future and recognizing the importance of decarbonization, the 12-year construction period of the Greenlink Nevada project (a new renewable energy and electrical infrastructure initiative that will make Nevada a leader in the clean energy economy) is expected to generate \$690 million in economic activity and support more than 3,700 jobs that will pay more than \$406 million in wages and salaries. The program will expand green technology in Nevada building the foundation for future development. However, there remains a significant gap in green engineering programs. Nevada's university and community college systems offer only a limited (if any) set of programs that can support this emerging sector.

The Nevada Center for Applied Research's (NCAR) push toward robotics and e-mobility offers a significant resource for developments in advanced manufacturing. Already efforts are being made to establish a working relationship with Nevada Industry Excellence (NVIE), Nevada's NIST-funded Manufacturing Extension Partnership (MEP) program. NCAR plans to provide technical expertise to NVIE to expand its outreach to small- and medium-sized manufacturers. The UNR university's faculty, researchers, staff and graduate students, and the R&D infrastructure all provide an essential resource for Nevada's manufacturers. This, however, remains only a single program that cannot on its own facilitate the growth of an industry. Assessing the successes or failures of this program may provide guidance to future endeavors.

The Nevada Center for Applied Research's (NCAR) push toward robotics and e-mobility offers a significant resource for developments in advanced manufacturing.

The College of Southern Nevada (CSN) has begun a new advanced manufacturing rapid response program on its Henderson campus. GOED spearheaded this expansion by offering nearly \$2 million from the Workforce Innovations for the New Nevada (WINN) fund. The funding aims to support companies looking to expand or locate their business operations in Nevada, with training programs that will equip workers with the skills needed by employers. CSN's new program will enhance workforce development efforts by manufacturers such as Haas Automation, Inc., which is moving forward on a major operation in Henderson. The program will result in students being able to obtain Manufacturing Skills Standards Council (MSSC) and National Institute for Metalworking Skills (NIMS) industry-recognized certifications, including: the MSSC Certified Production Technician; MSSC Certified Logistics Technician; and the National Institute for Metal Working Skills (NIMS) Computer Numerical Control (CNC) Machining Operator certification, which provides a pathway to Mechatronics and Robotics degrees, creating a huge opportunity for workers in the area.

Growth, Diversification, & Resilience

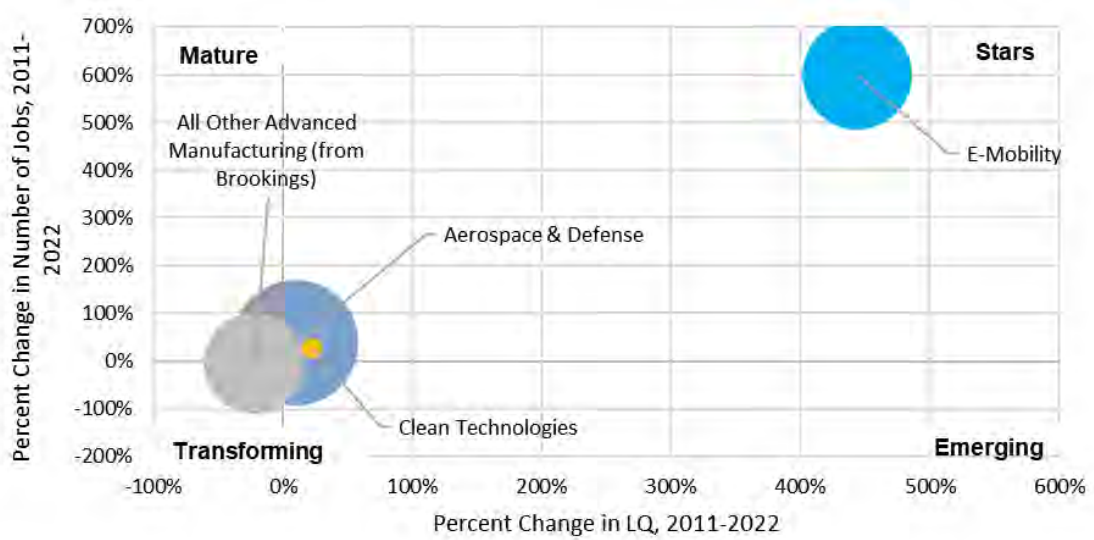
The Advanced Manufacturing industry represents just 3% of all jobs in Nevada. Over the last 10 years the number of jobs in Aerospace & Defense grew 39%, and Clean Technologies grew 26%, both significant increases (Figure 24). E-Mobility grew massively, increasing the number of jobs by 599%. All Other Advanced Manufacturing saw a small decrease in the number of jobs of 5%. The concentration of jobs relative to the United States for Aerospace & Defense, Clean Technologies, and E-Mobility all increased, bolstering the competitive advantage of Nevada as a state attractive to advanced industries.



Post Covid, since 2019 the sectors Aerospace & Defense, and E-Mobility have seen job growth, while the number of jobs in Clean Technologies fell by 25% and All Other Advanced Manufacturing fell by 5% (Figure 25). Wages across the industry are high, but lowest in the fastest growing sector, E-Mobility.

The concentration of Advanced Manufacturing jobs within the state signals the state’s increasing competitive advantage in the industry.

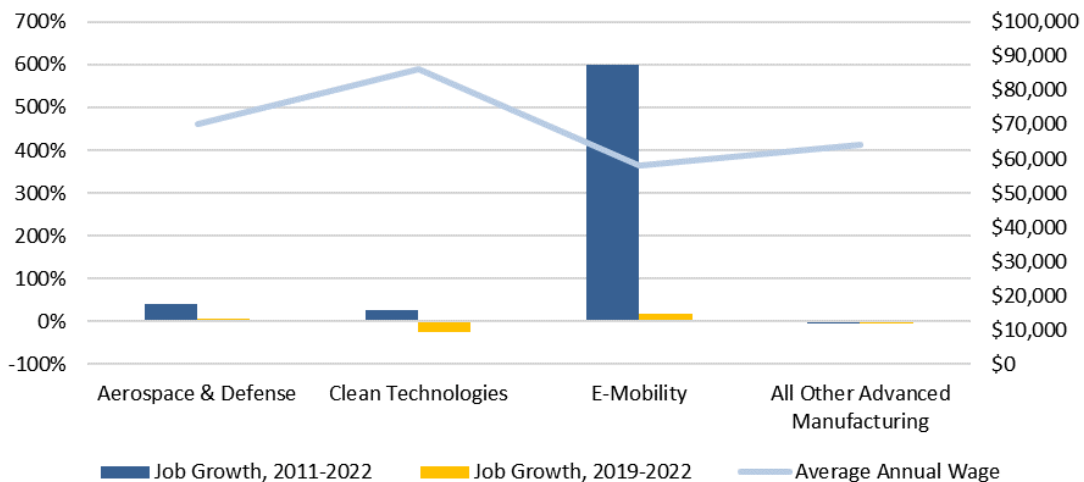
Figure 24: Change in employment and employment concentration (location quotient) in Advanced Manufacturing, 2011–2022. Sources: U.S. Census Bureau, Bureau of Labor Statistics, Bureau of Economic Analysis



Size of bubble indicates number of jobs, 2022.

Wages across the industry are high, but lowest in the fastest growing sector, E-Mobility.

Figure 25: Average annual wage and short- and long-term employment change in Advanced Manufacturing sector, 2011–2022. Sources: U.S. Census Bureau, Bureau of Labor Statistics, Bureau of Economic Analysis.





Strategic Position: SWOT

Nevada has already begun to diversify its industrial base, including sectors within the hospitality industry, and is well positioned to be ground zero for the energy transition. The development of the IT industry has enabled other tech-based sectors and industries, such as renewable energy and advanced manufacturing, to flourish in the state. Nevada's access and production of natural resources sets the stage for wide expansion and growth in the Natural Resources and Technologies industry, which has made its claim on the national stage as states begin to adopt clean energy initiatives and begin to move toward climate-friendly processes and technologies.

While the state benefits from natural resources, rich culture, quality of life, and diverse business and work opportunities it still struggles to ensure high quality healthcare, education, and affordable housing for its residents. The public sector is heavily understaffed; therefore, it is slow to change and suffers from various coordination and regulatory issues. Ineffective coordination between local governments contributes to ongoing issues such as a lack of doctors and nurses leading to low-quality healthcare services, a lack of teachers leading to low K-12 performance, and a lack of builders leading to housing shortage.

While the state benefits from natural resources, rich culture, quality of life, and diverse business and work opportunities it still struggles to ensure high quality healthcare, education, and affordable housing for its residents.

This section details the strengths, weaknesses, opportunities, and threats (SWOT) to enable the state and leading organizations to assess current capabilities as the basis for their future economic competitiveness (Figure 24). The framework for this SWOT analysis is based on overall core conditions that the economy needs to thrive. These economic conditions include human capital enablers (education, healthcare, community services) infrastructure enablers (water, energy, air, housing, land) and institutional enablers (governance and business environment, innovation system, workforce development). The SWOT also considers industry-specific assets, gaps, opportunities, and impediments to growth facing Nevada's target industries.

The SWOT is based on data collection and analysis; direct engagement with leadership of Regional Development Authorities (RDAs); a review of RDA strategy documents to understand nuances facing target industries in diverse regions throughout the state; extensive interviews with stakeholders across sectors to gauge their experiences and gain insights into key challenges and capabilities; and a review of previous statewide economic reports to understand the evolution of target industries over time.



STRENGTHS	WEAKNESSES	OPPORTUNITIES	THREATS
<ul style="list-style-type: none"> • Location: proximity to California • Natural resources • Low taxes • Diversification of industries • Quality of life • In-migration 	<ul style="list-style-type: none"> • Public sector capacity/ fiscal structure • Workforce development • Healthcare system • K-12 performance • Infrastructure: housing, broadband • Federal, state, and local regulatory issues: regulatory boards, licensing and permitting • Institutional inefficiencies of public organizations • Lack of coordination between local governments • Federal lands • Water availability 	<ul style="list-style-type: none"> • Testbed for new tech • Supply chain • Expansion of freight transportation, passenger rail, and airports • On-shoring • Clean energy ecosystem • WaterWise and WaterSmart technologies • Startup and entrepreneurship ecosystem • Remote/hybrid work 	<ul style="list-style-type: none"> • Exposure to economic cycles • Competition from Mountain West states • Cost of living • Skilled labor • Climate change

STRENGTHS

Nevada’s business-friendly, low-regulation and favorable tax environment have contributed to steadily increasing economic diversification into industries with relatively high wages, including health and medical services, manufacturing and logistics, and natural resources technologies. Nevada’s location also provides accessible connections to established innovation and logistics hubs on the West Coast. Businesses located in Reno-Sparks have easy access to the fifth largest economy in the world, California, while operating at a lower cost. Southern Nevada enjoys a strategic location and pathways for goods movement from the Port of Los Angeles to the rest of the country. Natural resources provide stable revenue streams for the state, and the recent discovery of lithium has poised Nevada to be a leader in the clean energy revolution. Nevada’s population, remote workers, and tourism continue to grow with Nevada ranked 10th in the United States for net migration.³⁵ The attraction of Nevada as a place to live and work stems from its high quality of life, reasonable cost of living, year-round outdoor amenities such as state and national parks, and world-class entertainment such as gaming, sports, and performing arts.

Nevada’s location provides accessible connections to established innovation and logistics hubs on the West Coast.

Assets within Nevada’s target industries provide opportunities for future economic growth and development. The development of the IT industry has enabled other tech-based industries to flourish in the state. The Transportation & Logistics industry is a key component of an integrated supply chain that links consumers and producers through multiple modes of transportation. The existence of Foreign Trade Zones (FTZs) is also an attractive asset for companies that export and import goods beyond U.S borders. Nevada’s access and production of natural resources sets the stage for wide expansion and growth in the Natural Resources & Technologies industry, which has made its claim on the national stage as states begin to adopt clean energy initiatives and move toward climate-friendly processes and technologies. Through this transition, Nevada has an opportunity to lead the clean energy technologies and resources transition as battery storage manufacturers flock to the state. The ongoing green transition has provided an opening for the state to develop its own manufacturing hub by disrupting the traditional emission-based supply chain. As a result, E-Mobility has a fair position to propel itself into a mature advanced manufacturing industry. Finally, Hospitality, Tourism, Sports, & Creative Industries add great commercial value to Nevada. The industry is also transforming through innovations and application of new technology such as e-sports, cutting-edge film and production technology, and specialized sports medicine.



WEAKNESSES

Nevada is the second lowest ranked state in the United States for K-12 educational performance. Poor performance has resulted in low high school graduation rates and limited transition to post-secondary education, including skills training and college. The challenges of K-12 are compounded by a lack of coordination between workforce development programs, community colleges, and other higher education institutions and a lack of alignment with industry needs. These trends are impeding the supply of a skilled workforce needed to grow target industries. Additionally, despite strong population growth, key community infrastructures have not kept pace, including hospitals, childcare, elderly care and community services, affordable and quality workforce housing, and access to and utilization of broadband. These issues are particularly prevalent in rural parts of the state. Hiring difficulties for nurses, teachers, and builders/contractors exacerbate state economic challenges. Additionally, hiring issues in the state and local government delay permitting and licensing procedures. Nevada's economic and community development is restricted by federal lands. In addition, the state government operates in silos with limited commitment and coordination by key agencies to common economic development goals or industry challenges. The state lacks an integrated planning process with policy being developed on an ad hoc basis. Engagement with small businesses is fragmented across multiple state agencies with no one single agency charged with providing a coordinated leadership. Companies that consider moving their operations to Nevada lack a "one-stop shop" service from the state.

Companies that consider moving their operations to Nevada lack a "one-stop shop" service from the state.

Hiring difficulties for nurses, teachers, and builders/contractors exacerbate state economic challenges.

Education, workforce, infrastructure, and innovation system weaknesses limit growth and development of target industries in the state. Only 25% of Nevadans 25 years and older hold a bachelor's degree, resulting in a limited supply of highly skilled workers, especially for technology-focused industries. In addition, Nevada lacks technical programs at colleges and universities aimed at supporting targeted industries. An insufficient educated workforce creates a problem for the transportation and logistics industry as well since many jobs require a bachelor's degree. The green transition brings new jobs to Nevada, but the state does not have the educational infrastructure to support emerging green technologies. For advanced manufacturing jobs that require green energy expertise, the state is relying on migrating workers and out-of-state universities to provide the necessary training for its own workforce. Such gaps in skilled workers limits the state's ability to grow as a regional hub for green technologies and hampers its adaptability to new emerging technologies in the renewable energy field. Lack of land and industrial space limit opportunities for growth in manufacturing-related sectors. Lack of a coordinated statewide innovation strategy results in weak connections between research institutions and industries, immature mentorship networks and gaps in funding of early state research and development, which slows growth of research-intensive industries.



OPPORTUNITIES

Nevada’s business-friendly environment, quality of life, and proximity to the Bay Area and Silicon Valley provides great relocation incentives for entrepreneurs, startups, and established companies from other states. The recent influx of technology-focused companies (Tesla, Panasonic, Switch, Apple, and Google), local entrepreneurship activity, and ongoing government efforts to establish infrastructure that supports business entry into the state have resulted in over 500 technology-related conferences in Las Vegas each year, the Consumer Electronics Show with 180,000 visitors each January, and Fortune 500 tech corporate and partner events.³⁶ This influx of technology-focused talent makes the state a perfect base for user research, especially for consumer facing technology platforms.

This influx of technology-focused talent makes the state a perfect base for user research, especially for consumer facing technology platforms.

Besides having a great environment to attract technology-focused entrepreneurs, the state also has an opportunity to position itself as a “remote worker” destination for mobile millennials and generation Z workers with high-paying jobs from other states where the cost of living is higher. Also, the state has a unique opportunity to involve elderly and retired professionals as mentors and investors (especially in the Tahoe region) to strengthen its mentorship and capital support to local entrepreneurs and startups. Many of these individuals have decades of professional experience, access to financial capital, and an interest in mentoring up-and-coming entrepreneurs. Regarding infrastructure improvements, Nevada can address supply-chain gaps by expanding rail and airports. An inter-state railway system would connect major metropolitan cities like Reno and Las Vegas, as well as allow ports in California and Washington to efficiently transport materials and goods to Nevada.

Nevada has a unique opportunity to attract highly qualified professionals and innovative companies to enhance future growth and development of Nevada’s technology-based sectors. The state needs to align workforce development priorities with economic development priorities. Investments by IT companies attracted a pool of talented data scientists to the area providing a solid base for growth of the IT ecosystem. Additionally, proximity to San Francisco, with many mature and well-connected IT hubs, presents opportunities for an expanded talent pool for Reno-based companies and opportunities for networking. The presence of the full lithium supply chain within the state is a unique feature and enormous competitive advantage in Nevada’s goals to become a major player in the EV supply chain. The state can grow its clean and renewable energy industry by assessing and investing in key assets and infrastructure required for the continued growth and success of this supply chain including physical infrastructure and a prepared workforce.

THREATS

While Nevada’s economy is diversifying, reliance on hospitality and tourism will continue to expose the state to economic cycles. A constantly increasing cost of living and stagnant wages in these sectors pose a real threat for residents. Therefore, it is important to support growth and development of target industries and develop relevant and affordable education and workforce development programs aimed at reskilling and upskilling those who want to change careers. Additionally, although proximity to California is an economic benefit in many ways, it also creates significant competition for talent. Nevada must provide more opportunities for career change possibilities and better education, healthcare, and other community services to prevent people from moving to other states.



Climate change and Nevada's unique geographical location makes the state vulnerable to wildfires and water shortages. A combination of the state's weather conditions, terrain, and vegetation make it particularly susceptible to the ignition and spread of high-intensity rapid-moving fires in wilderness areas. The state also receives the lowest average annual precipitation in the nation, exacerbating fire conditions, and limiting economic expansion. Climate change in Nevada poses a real threat for many industries including agriculture, hospitality, entertainment, and mining. Water will continue to be a challenge especially in Southern Nevada. As groundwater supplies decline, farmers in rural Nevada are impacted as they have fewer essential resources to sustain their farms.

When water sources are depleted for farmers, they are often forced to move due to the lack of other industries and jobs nearby. The Southern Nevada Water Authority notes that it has the equivalent of only eight years of water stored in reserve for future use. The persistence of decades-long drought conditions has resulted in significant water-level declines in major system reservoirs. The combined water storage in the Colorado River's two primary reservoirs (Lake Mead and Lake Powell) is at just 32% of capacity. Climate change is a threat to the metals and mining sectors. Mining is one of the most water-intensive industries. Although efforts have been made to increase the efficiency with which the industry uses water, more and worse droughts and greater competition for water resources are posing growing challenges. Overall demand for water will rise as Nevada plans to focus on batteries, renewable energy, and other green technologies, therefore, it is important to prioritize climate change-induced water shortages as they threaten the expansion of target industries.

Climate change in Nevada poses a real threat for many industries including agriculture, hospitality, entertainment, and mining. Water will continue to be a challenge especially in Southern Nevada.





Strategy and Action Plan

This statewide economic development strategy for Nevada is a roadmap to help the state realize its vision for the future: a sustainable, innovative, and connected economy with high paying jobs for all Nevadans. Nevada's unique economic assets from its competitive business environment and nascent innovation ecosystem to natural resources and geographic location make it primed for explosive growth in the years ahead and a cornerstone of national security. Success, however, depends on the state's ability to not only capitalize on assets but address critical gaps and strengthen coordination and collaboration among stakeholders. This strategy and action plan details recommendations for the Governor's Office of Economic Development to advance this vision.



Goal	Actions
<p>Electric Nevada</p>	<p>Nevada will be a global leader in the development and utilization of clean energy innovations. It will capitalize on its strengths, strength national security and vulnerable supply chains, and export the innovative processes and products in mining and production of batteries and solar energy to new global markets supported by a robust, statewide EV and energy storage infrastructure. In short, Nevada will be ground zero for the energy transition.</p>
<p>Conduct value chain analysis of the vertical supply chain of the EV production system.</p> <p>Enact specific regulatory changes and seek federal funding partnerships for the development, testing, and commercialization of solar energy-related innovations.</p> <p>Facilitate the work of Regional Transmission Organization and Greenlink Nevada through wider stakeholder engagement to ensure completion of utility connectivity across the state.</p> <p>Mobilize federal and other resources for the expansion of statewide EV infrastructure.</p>	
<p>Innovative Nevada</p>	<p>Nevada's economy will be supported by a thriving innovation ecosystem that builds on state assets, history, and culture; supports collaboration between academia, industry, and government; engages a workforce with technical skills at all levels; attracts a diverse portfolio of investments; and develops and commercializes world changing new ideas, products, and processes.</p>
<p>Create a unified vision for how innovation will be supported in the state.</p> <p>Close the gap between university startup funding and follow-on private investments in new companies and innovations.</p> <p>Strengthen university technology transfer throughout the state.</p> <p>Expand the STEM workforce pipeline to align with target industries.</p> <p>Grow Nevada's role as a global leader in the development of policy and innovative technologies to address water scarcity.</p>	
<p>Connected Nevada</p>	<p>Nevada will have next generation infrastructure that connects industries and businesses within the state for new economic opportunities. The state will capitalize on its strengths and enhance its connectivity efforts by updating multi-modal inland ports and industrial parks, adding new rail links, and expanding broadband infrastructure. Nevada will make investments as necessary to convert its unique geographic locations in the north and the south into connected hubs for re-shored supply chains and digital networks.</p>
<p>Support development of multi-modal inland port.</p> <p>Develop tech-ready industrial parks.</p> <p>Identify growth opportunities for freight rail that attract private-sector business and investment community funding.</p> <p>Support statewide airport-related infrastructure developments.</p> <p>Support expansion of broadband and 5G infrastructure.</p>	

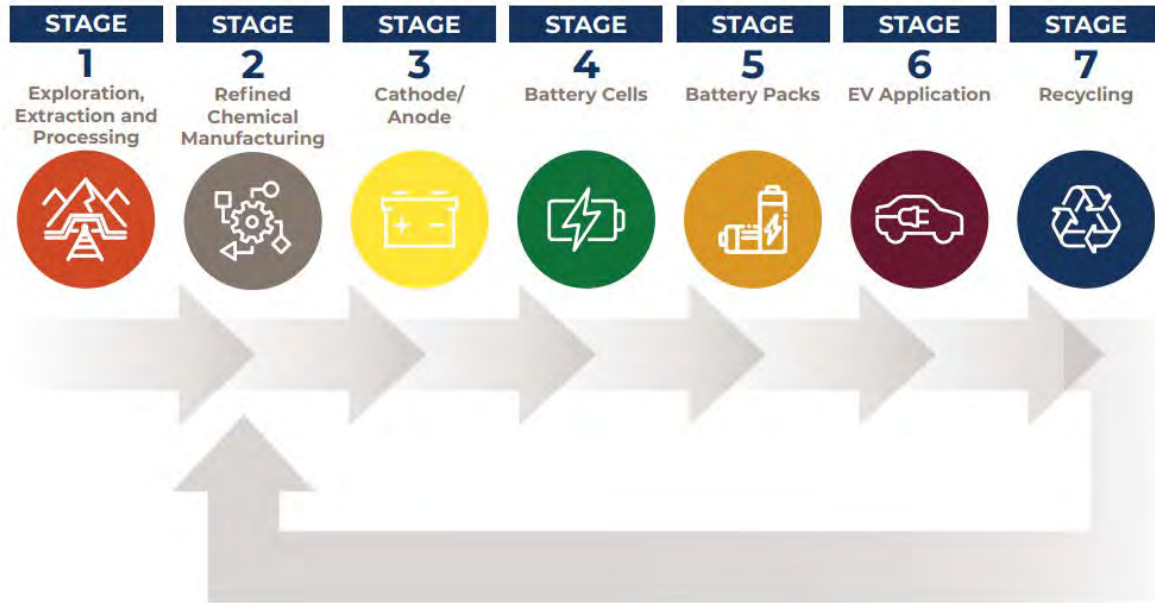
ELECTRIC NEVADA

Given the development in Nevada’s clean tech industry and its complete electric value chain, Nevada is positioned to be ground zero for the energy transition and to play a key role in securing the energy independence and security of the United States. The development of the IT and Advanced Manufacturing industries, Nevada’s access to and production of natural resources such as lithium, and its proximity to innovation hubs and talent, has enabled clean energy to flourish in the state. The recent attraction of Redwood Materials has closed the electric value chain loop for electric batteries, the only state in the nation that can claim such a feature, giving Nevada a significant competitive advantage in the industry.



NEVADA

Lithium Capital of North America



The state has also encouraged internal demand and development of renewable energy projects with renewable energy and incentive programs (e.g., SolarGenerations, HydroGenerations, Solar Thermal, Wind programs) for customers for installing wind, water, and solar power systems on residential properties and public buildings. Nevada's own company, Switch, also plays an important role in renewable energy and plans to build the largest solar project in the United States. The Gigawatt 1 project in Northern and Southern Nevada will produce low priced solar power and generate enough clean energy to power nearly one million homes.



An *Electric Nevada* will have an economy that leads in the development and utilization of clean energy innovations. An *Electric Nevada* will capitalize on its strengths and export innovative processes and products and production of batteries and solar energy to new global markets, while bolstering statewide EV and energy storage infrastructure. Below are four targeted actions to help Nevada realize this vision and place Nevada in the heart of the energy transition.

Action 1: Conduct value chain analysis of the vertical supply chain of the EV production

Owner/Supporters: GOED

Performance Metric: Comprehensive inventory of identified gaps in the vertical supply chain for component parts. Action plan to address them.

To increase capacity to deploy and export innovative processes and products related to mining and production of batteries, electric vehicles, and recycling to new global markets and to facilitate investments into rural counties and local government, GOED should commission supply chain studies of the component parts. These studies will identify bottlenecks (for example infrastructure, capital equipment or workforce skills) that need to be addressed to ensure full development. These constraints may be addressed by specific policy actions, for example refinements to tax abatements, the development of specialized workforce curricula, or specialized and enhance infrastructure.

Action 2: Enact specific regulatory changes and seek federal funding partnerships for the development, testing, and commercialization of solar energy-related innovations.

Owner/Supporters: GOED/ NSHE, GOE

Performance Metric: Number of new partnerships, programs, and investments targeting research, testing, and deployment of new solar energy technologies.

The state has a strong solar sector (87 solar companies of which 15 are manufacturers and 37 are installers/developers), but the sector needs greater support for development, testing, and commercialization of solar innovations to continue to grow. The state could partner with the Governor's Office of Energy (GOE) and Nevada System of Higher Education (NSHE) (research institutions and labs) for R&D projects and testing of solar-related innovative technologies. Industry experts note that from all renewable energy generation, solar photovoltaic (PV) is expected to grow the fastest from now until 2050.³⁷ Solar installations are integral parts of all electric grid interconnections all over the country. Therefore, Nevada should focus on development and commercialization of next-generation solar technologies such as solar skins and fabric, photovoltaic solar noise barriers and integrated



photovoltaics. GOED could introduce specific R&D and commercialization programs and funds through the Knowledge Fund and/or the Nevada Innovation Account aimed at new solar technologies.

Action 3: Facilitate the work of Regional Transmission Organization and Greenlink Nevada through wider stakeholder engagement to ensure completion of utility connectivity across the state.

Owner/Supporters: Public Utilities Commission (PUC), GOED, GOE

Performance Metric: Join a regional electricity market by 2030 and support implementation of Greenlink Nevada.

GOED has two key opportunities to support efforts to strengthen and ensure completion of utility connectivity, including the Regional Transmission Organization and Greenlink. A recent study for Advanced Energy Economy (AEE) by independent consulting firm Energy Strategies found that establishing a broad, Western US states organized electricity market known as a Regional Transmission Organization (RTO) would create 4,900–21,300 permanent, high-paying jobs (with an average salary of \$65,000) in Nevada.³⁸ An RTO is a cooperation agreement that allows electric utilities across multiple states to share resources and leverage the cheapest, cleanest, and most efficient energy sources through an organized regional market. Currently, the West is one of the only regions in the United States without an RTO managing its power grid. The 11 states studied were Arizona, California, Colorado, Idaho, Montana, Nevada, New Mexico, Oregon, Utah, Washington, and Wyoming. The analysis also found that a western RTO would diversify Nevada's economy and save ratepayers \$32 million per year in energy costs. A western grid would also help homes and businesses keep the lights on. With a shared grid, Nevada could bring in energy from other states during seasons of extreme heat. In 2021, both Nevada and Colorado passed legislation directing utilities to join a regional market by 2030. A regional market could be a way of getting more low-cost energy that also helps Nevada meet its renewable energy goals.

Greenlink Nevada is a new renewable energy and electrical infrastructure initiative of NV Energy that will make Nevada a leader in the clean energy economy. The transmission initiative will be made up of Greenlink West (in service by December 2026) and Greenlink North (in service by December 2028).³⁹ Greenlink is essential to helping Nevada achieve its climate action and de-carbonization goals and increased renewable portfolio standard, moving Nevada closer to a future powered by 100% renewable energy, and reducing Nevada's carbon footprint. It also creates a renewable energy highway that allows access to Nevada's resource-rich renewable energy zones. It diversifies Nevada's renewable portfolio by creating access to affordable wind and hydro energy across the western United States. It will improve NV Energy's overall system reliability by providing a second critical statewide transmission connection. Greenlink will allow customers to enjoy more cost savings by sharing resources between Northern and Southern Nevada. Both RTO and Greenlink are essential for supporting current and future data hubs in Nevada.



Action 4: Mobilize federal and other resources for the expansion of statewide EV infrastructure.

Owner/Supporters: GOED, GOE, NDOT, PUC. **Performance Metric:** Charging centers every 50 miles along state highways within the next five years. Percent/number increase in charging centers per year.

Nevada's public agencies and private sector are working together to develop a comprehensive statewide plan for installation of EV charging networks within the next five years. Transitioning vehicles from gas powered to electric will allow Nevada to boost the impact of benefits from its clean energy generation. Initially, Nevada's Strategic Planning Framework established the goal to complete the "Nevada Electric Highway" system serving the entire state by 2020, building on initial plans to install publicly available EV fast charging infrastructure along U.S. Highway 95 between Reno and Las Vegas. As a result, currently, Nevada has 485 public and private electric charging stations, more than 80 of which are direct current fast-charging stations. Furthermore, Nevada will receive \$38 million in federal funding over the next five years to expand its grid of electric vehicle chargers, part of President Biden's bipartisan infrastructure law, with a goal to build a nationwide network of 500,000 charging stations. Nevada plans to prioritize a "full build-out" of charging centers every 50 miles along state highways, including both the 215 Beltway and Interstate 15 in Southern Nevada and Interstate 80 in the north. The next phase would address U.S. highways (U.S. 93 and U.S. 95) and other state routes. An efficient electric grid described in the previous action item will greatly enhance development of the EV infrastructure.



INNOVATIVE NEVADA

Nevada's innovation ecosystem benefits from a strong entrepreneurial culture, dynamic economy, low cost of living, and easy access to West Coast markets. Furthermore, the state's Knowledge Fund acts as an instrument to recruit highly specialized science and research faculty, expand existing research areas, and assist applied research centers in supporting industry innovation in Nevada. Through the Knowledge Fund, GOED supports projects at the University of Nevada-Las Vegas (UNLV), the University of Nevada-Reno (UNR), and the Desert Research Institute (DRI). Most recently ABTC company (created through the Knowledge Fund initiative) was awarded \$58 million as part of the Battery Material Processing and Component Manufacturing Act to develop next generation scientists and engineers and create 150 high-skilled jobs. University of Nevada-Reno's Center for Applied Research (NCAR) is a leading player in Nevada's innovation ecosystem due to its intellectual capital, infrastructure (such as Living Lab), laboratories, and critical equipment that support new innovative companies. Most recently, the Nevada Innovation Account was created in the State General Fund and will be used to fund innovation-related programs starting in July 2023. The state, however, has low levels of entrepreneurship and R&D, and no unified vision for advancing innovation as a core driver of economic growth.

An *Innovative Nevada* will have an economy that builds on its assets in new ways, for example, by developing an innovation district in the southern part of the state, expanding emerging healthcare sectors in sports medicine and cosmetic surgery, and globally exporting clean-tech innovations for large facilities. An *Innovative Nevada* will address key challenges that impede the acceleration of a cohesive ecosystem to spur industry growth and job opportunities across the skills spectrum. These needs include a shared vision, funding for early-stage companies and ideas, a coordinated commercialization system across research universities, and increased STEM skills in the workforce. Below are nine targeted actions to help Nevada realize this vision.

Action 1: Create a unified vision for how innovation will be supported in the state.

Owner/Supporters: GOED Office of Science, **Performance Metric:** Host a Governor's Innovation and Technology (OSIT), LVGEA, Innovation Summit.
EDAWN

Nevada has two strong regional ecosystems, one in Reno (coordinated by the Economic Development Authority of Western Nevada EDAWN⁴⁰), and one in Las Vegas (coordinated by Las Vegas Global Economic Alliance LVGEA⁴¹). However, Nevada's innovation ecosystem lacks a unifying vision for innovation resulting in a lack of coordination and alignment among various actors and programs that support statewide R&D, innovation commercialization, and entrepreneurship initiatives. This lack of coordination results in information and funding gaps, leaving research universities, and innovative businesses unaware of various support programs and incentives. In recent years, the University of Nevada-Las Vegas (UNLV), the University of Nevada-Reno (UNR), and the Desert Research Institute (DRI) have all increased their level of engagement with entrepreneurs and regional innovation ecosystems. However, the level and quality of engagement is far short of what is required for truly vibrant innovation ecosystems. To overcome these challenges, the state will need to develop a unified vision for innovation and spur stronger government, industry, academia, and civic collaboration. A unifying vision for innovation within the state could be developed at annual meetings, such as the Governor's Innovation Summit, during which representatives from public and private organizations share their plans and goals and develop coordinated actions. Such an event would highlight the importance of a unifying innovation vision for the state and would encourage collaboration between government agencies, research universities, and industries.



An example of such an event is the One Utah Summit organized by the Governor’s Office of Economic Opportunity. One Utah is held twice a year, as a collaborative way in which the governor, alongside stakeholders, discusses relevant trends and topics. Each year, the summit highlights overarching topics in the region that are critical for economic growth in the state. For example, the 2016 summit focused on the theme “Innovate Utah.” Besides representatives from various government agencies, it attracted more than 1,200 business and community leaders, small business owners, entrepreneurs, and students. One Utah relies on the expertise and experiences of a diverse group of stakeholders to help guide discussions and provide insights on how to navigate an innovative economy, while providing a platform for governing officials and stakeholders to collaborate and coordinate on shared goals.⁴²

Action 2: Close the gap between start-up funding and follow-on private investments in new companies and innovations.

Owner/Supporters: GOED/NSHE

Performance Metrics: Increase in number of startup and accelerator support programs, by year. Increase diversification of projects funded by the Knowledge Fund, by technical domain and year, particularly for early-stage development.

Insights from stakeholder interviews reveal that breakthroughs in research from the lab to the marketplace is constrained by the lack of available early-stage capital and development support in Nevada. This “gap” extends between the end of government funding of basic research to the point at which existing companies or investors are willing to accept the risk to commercialize or invest in the technology or startup. This lack of early-stage development capital is a serious threat to future innovation opportunities for the state. To address this challenge, the state could work with research institutions and industry partners to co-fund startup and accelerator support programs as a capital and innovation support mechanism. These programs should address critical elements of technology development and startup formation from research institutions.

GOED manages the Knowledge Fund, which acts as an instrument to recruit highly specialized science and research faculty, expand existing research areas, and assist applied research centers in the effort to support industry innovation in Nevada. Through the Knowledge Fund, GOED supports projects at the University of Nevada, Las Vegas (UNLV), the University of Nevada, Reno (UNR), and the Desert Research Institute (DRI). To obtain the funding, the Nevada System of Higher Education (NSHE) submits applications to GOED for projects that could benefit from Knowledge Fund support. However, findings from stakeholder interviews indicate that the existing investments are too small and too centered on university research. Therefore, GOED should expand funding and the purpose of the fund to accelerator programs, startups, and commercialization partnerships as well as increase funding to eliminate “gap” funding for universities at later stages of research.



Action 3: Strengthen university technology transfer throughout the state.

Owner/Supporters: GOED, NSHE

Performance Metric: Develop the design for a consolidated statewide tech transfer system at NCAR. Include an implementation plan with a timeline, milestones, and resources needed.

Although R&D plays a critical part in the innovation landscape, the adoption of the technology for commercialized use plays a key role in a state's potential for economic growth. The adoption of research ideas to be commercialized is known as a technology transfer. For technology transfers to be successful the resources must be available for protecting intellectual property (IP) and accessing market potential, whether it be through venture capital, licensing, or patenting a product to sell. Currently Nevada has three tech transfer offices at UNLV, UNR, and DRI. DRI has partnered with UNLV to enable faculty and students to leverage each other's talent and resources to foster new research collaborations and transform technologies and inventions into new products and services in Southern Nevada. The first successful product of the new partnership was a commercial licensing agreement for Cumulus Weather Solutions LLC, a DRI-born startup company that builds weather decision support systems for the wind and solar energy industries.⁴³

However, NCAR is a very strong leader in supporting incubation and tech transfer processes for new innovative firms. It has worked with over 110 companies and organizations to attract over \$20 million in venture capital investment as well as \$23.6 million in grants and other contracts for the UNR university during the last four years. NCAR currently has 13 companies on campus. Most recently three technology companies (Bioelectronica, NexTech Batteries, and LactaLogics) have emerged after successful business incubation and relocated to a commercial space. Due to its ongoing success in matching industry needs with academic goals, NCAR should become a leading applied research and development technology center for the state. Having one tech transfer office would consolidate and enhance support and funding of the statewide tech transfer opportunities. For example, to support and coordinate these tech transfer opportunities, the Arizona Board of Regents provides a consolidated platform for the state's three public colleges to receive the resources to bridge the pipeline between research and the market. Important to NCAR's efforts will be to ensure support for innovation in both the northern and southern parts of the state.

Action 4: Expand the STEM workforce to align with target industries.

Owner/Supporters: GOED/NSHE, GOWINN, OSIT colleges and universities

Performance Metric: Number of new workforce-industry partnerships in target industries with education programs at local colleges and universities by year.

The state should align workforce development priorities to economic development priorities. One critical step would be to bring the Governor's Office of Workforce Innovation (GOWINN) back into the Governor's office and empower it to coordinate and align all education and workforce development efforts in the state. As mentioned in GOED's 2017 In-Demand Occupation analysis, Nevada's target industries and advancements in automation require high levels of STEM workers, particularly those with middle-skills (those with technical skills and knowledge but hold less than a bachelor's degree). To expand the STEM workforce, the state must understand and measure industry demand of skills at all levels and assess the readiness of universities, community colleges, and other workforce programs



within relevant labor markets in the state. The impact of the pandemic on the hospitality industry offers an opportunity to expand the STEM workforce by increasing funding for high-value curricula and training programs to support the transition of low-skill workers in non-advanced industries to STEM fields and higher-wage occupations.

Truckee Meadows Community College's (TMCC) successful partnership with Panasonic Energy North America (PENA) is one such model. The GOED board approved \$1.6 million of funding to TMCC to fill a workforce gap at PENA. Through this partnership TMCC will establish a training center in Reno that supports PENA in filling 400 jobs.⁴⁴ The TMCC and PENA partnership highlights the importance of partnerships between community colleges and industry players in providing the resources needed to train and up-skill individuals, as well as creating a pipeline to supply industry with skilled talent.

HAAS Automation is another such instance that bridges the gap between community colleges, skilled workers, and industry. In 2019, HAAS worked with LVGEA to relocate and expand their practices to southern Nevada.⁴⁵ HAAS was set to provide 1,400 jobs at an average hourly wage of \$24. In 2022, the Center of Excellence by HAAS broke ground in Henderson, Nevada. This center will be equipped with a manufacturing environment that ensures students can acquire the hands-on experience needed to be successful in their careers. In addition to the hands-on experience, HAAS plans on implementing employer-tailored curricula so that the needs of the employers are met through the targeted training of the students. Initiatives like HAAS allow for individuals to acquire and utilize desirable skills while providing industry players with access to a skilled workforce.

Nevada also has a unique opportunity to connect STEM related fields to creative industries since the state is home to many artists, performers, and creators. Indeed, its hospitality and entertainment industry is an important part of the economy and has a global brand but needs to diversify and transition to higher-tech integration to sustain itself into the future. Digital art fields (e.g., video animation, user interface, artwork, and film) are growing and they depend on innovative technology sectors like IT, engineering, and advanced manufacturing. For example, Nevada's film industry has a great potential to grow. Las Vegas and Reno-Tahoe compete well internationally as a production location due to the brand, tax incentives, and a large community of talented professionals. However, film production is heavily driven by incentives, and Nevada's tax incentive package is not as good as in California, New Mexico, or Georgia. Besides competing on tax incentives, Nevada should consider supporting development of innovative industries for next generation technologies (e.g., AI sound design and AI screenplays, autonomous drones, drone goggles, ultra-HD 3D technology, dual virtual reality camera, and smartphone filmmaking gear) that would support and move digital arts, film, and other related industries to the next level. Connecting creative professionals to businesses and innovators in technology-driven industries and providing funding opportunities should become one of the priorities for the state. Technologies for creative industries should become a part of education programs at local colleges and universities as well. GOED could introduce specific R&D focused programs and provide funds through the Knowledge Fund and/or the Nevada Innovation Account aimed at development and commercialization of new technologies for creative industries.



Action 5: Grow Nevada’s role as a global leader in the development of policy and innovative technologies to address water scarcity.

Owner/Supporters: GOED/SNWA, DRI.

Performance Metrics: Number of new locations funded for Watersmart technology per year.

Water scarcity in Nevada has been an ongoing issue for all major industries as well as residents. Therefore, the Southern Nevada Water Authority (SNWA) has been aggressively moving to reduce consumptive uses of water in the communities as well as modernizing complex infrastructure networks and system controls. Southern Nevada has done an effective job responding to the drought through water conservation. However, the state must accelerate the development and application of new smart infrastructures and technologies to scale water conservation efforts. For example, the SNWA will be piloting Xylem's Water Network Optimization solution to help optimize water system operations, water quality, energy, and operating costs.⁴⁶ The SNWA is also working to implement smart irrigation controllers for homes and commercial properties that will adapt to weather conditions. Additionally, The City of North Las Vegas, the City of Henderson, and the Las Vegas Valley Water District (LVVWD) are all implementing advanced metering infrastructure in various phases—a smart meter gives SNWA real-time data on each residence’s water usage, which they can then share with consumers. These innovations can be exported to further the state’s economy and sustainability and situate Nevada as a global leader in water technology.

Innovative technologies can be exported to further the state’s economy and sustainability and situate Nevada as a global leader in water technology.

The SNWA also passed a resolution supporting a moratorium on the installation and use of evaporative cooling mechanisms in new commercial and industrial buildings in the Las Vegas Valley. This restriction does not apply to single-family homes. Evaporative cooling mechanisms are highly water intensive and are Southern Nevada’s second largest consumptive use of water, exhausting nearly 10% of Southern Nevada’s Colorado River allocation annually. The Las Vegas Valley Water District approved the new conservation measure, ensuring that after September 1, 2023, no new permits in their service area will be approved for commercial and industrial buildings that plan to be evaporatively cooled. The other SNWA member agencies will also need to adopt and enact this measure into regulatory codes, ordinances, and policies before this moratorium can be enforced. Alternative cooling technologies are available that are less water intensive, and SNWA offers incentives to replace evaporative cooling. This policy serves as a framework for GOED to assess the types of assistance it offers to businesses based on tradeoffs between economic impact and water usage. These actions represent Nevada’s leadership in bold policy development in a resource-scarce environment. As technologies related to water and other resources evolve in the state and as global challenges to natural resources persist, Nevada should continue to lead the world in innovative policies that address critical needs and advance the economy.

Most recently, a newly funded National Science Foundation (NSF) project based at the University of Nevada-Reno will bring together water suppliers, users, policymakers, and academics. The project, Nevada Water,⁴⁷ has a goal to structure and set goals for the Nevada Water network. The next step is to apply for a 5-year \$15 million Track 1 grant through the NSF Sustainable Regional Systems Research Network program.

To address the water scarcity issue as well as to support growth of the water technologies sector, GOED could introduce specific water technology development programs together with SNWA and



help innovative companies and startups develop, test, and commercialize new water-smart related technologies.

CONNECTED NEVADA

To diversify the economy and grow target industries, Nevada needs a new generation of infrastructure. Availability of high-quality and high-speed broadband is essential for economic development since it enables institutions, business, and residents in Nevada’s urban, rural, and remote areas to communicate and provide and receive critical services. Greater transportation connectivity is also needed to support a growing and diversifying population. Industrial land, industrial parks, and critical infrastructure at existing parks are essential for changing industry landscape of the state.

The state has been working on various infrastructure projects. Implementation of Nevada’s Comprehensive Connectivity Strategy as well as the new High-Speed Nevada Initiative will be enhanced by \$100 million from the Infrastructure Investment and Jobs Act (IIJA). Additionally, the Inter-Tribal Council of Nevada recently received an \$18.9 million grant from the National Telecommunications and Information Administration to expand internet access to 11 Tribal communities in Nevada. The City of Las Vegas secured an agreement with Axios Nevada to develop a high-capacity transit line that would connect Downtown Las Vegas to the Medical District and Downtown Summerlin.

A *Connected Nevada* will have next generation infrastructure that connects industries and businesses within the state for new economic opportunities. A *Connected Nevada* will capitalize on its strengths and enhance its connectivity efforts by updating multi-modal inland ports and industrial parks, adding new rail links, and expanding broadband infrastructure. The following targeted actions will help Nevada realize this vision.

Action 1: Support development of multi-modal inland port.

Owner/Supporters: GOED, RDAs.

Performance Metric: GOED to provide annual updates on implementation activities and progress for each proposed inland port.

Southern Nevada’s population has been increasing rapidly, growing twice as fast as the average for U.S. metro areas since 2010. Therefore, greater transportation connectivity is needed to support a growing and diversifying population within the state. Global supply-chain disruption caused by the pandemic has also contributed to the renewed attention on inland ports. Inland ports are non-coastal, but have direct access to highway, railway, and air transport facilities. Inland ports are mentioned in the state’s Plan for Recovery & Resilience, which highlighted better integration and connectivity between Southern and Northern Nevada as one of the priorities. As a result, the Northern Nevada Development Authority (NNDA) proposed the establishment of two inland ports in 2021 along the state’s western front. One port would be in the Fernley area in Northern Nevada. The other port would be in Jean-Ivanpah Valley in Southern Nevada. Establishment of these two inland ports would be linked by North-South rail lines: Fernley and Innovation Park in Northern Nevada and Jean and Ivanpah Valley in Southern Nevada. These ports would connect through a 400-mile stretch of existing freight rail and trucking networks. As a result, this North-South linkage will foster economic diversification, growth and resiliency of the state, and connectivity to other states.

Most recently, Fernley’s ‘Victory Project’ received a \$25 million federal grant.⁴⁸ This grant is part of the Bipartisan Infrastructure Law and provides Fernley with the means to be an integral hub in the West for the distribution of goods. The grant will help complete a link between two major federal highways



by funding road, bridge, and rail improvements; creating an inland port designed for additional rail capacity; increasing the efficiency of the supply chain; and helping lower the cost of goods leaving

Action 2: Develop tech-ready industrial parks.

Fernley. The entire Northern Nevada area will benefit from better highway and railway connections, a more efficient supply chain, and expansion of logistics and manufacturing capacity.

<p>Owner/Supporters: GOED/Apex Industrial Park, UNLV's Harry Reid Technology Park, BLM, SNWA, NV Energy.</p>	<p>Performance Metric: Create a \$100 million Industrial Park Infrastructure Fund for grants to build out critical facilities to make Nevada's industrial parks competitive with Utah and Arizona. GOED to coordinate and report out kick-off meeting for key stakeholders.</p>
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The lack of industrial land, industrial parks, and critical infrastructure at existing parks is closing opportunities for Nevada just when major tech companies are seeking to make investments in data centers. Apex Industrial Park is the largest industrial park in Southern Nevada and is strategically located between major West Coast and Southwest hubs. There is an opportunity to bolster Apex's offerings by attracting more diverse businesses, including solar power plant developers and electric car manufacturers, and providing the necessary infrastructure these various businesses require. UNLV's Harry Reid Technology Park also has great opportunities to attract next generation technology-focused companies. It is expected to generate 25,000 new jobs and \$2.6 billion in direct and indirect economic impact in Las Vegas. The state also plans to lease the Jean Prison property for private commercial use. The Jean location, with its proximity to California and the Pacific Rim ports, is ideal for a low-impact industrial park-based development. Initial economic impact during the construction phase of the property is estimated to bring in 8,387 total jobs. Total dollar economic impact per year to the region during the construction phase is expected to be \$341.2 million. Due to these benefits, the state intends to lease the Jean Prison property, including the 471 acres under patent.

To make it more attractive to innovation and sustainability-focused companies, a tech-ready industrial park could focus on industrial symbiosis. Companies could gain a competitive advantage through the physical exchange of materials, energy, water, and by-products, thereby fostering inclusive and sustainable development. Such eco-industrial parks would promote resource efficiency and circular economy practices.⁴⁹ Such tech-ready parks could also be next to multi-modal hubs⁵⁰ that connect multiple modes of transport and increase the efficiency and speed of movement.

In the meantime, GOED will work with the Bureau of Land Management (BLM), NV Energy, SNWA, and Apex landowners on an infrastructure development plan for Apex Industrial Park. GOED will fund (\$65M) the acceleration of the SNWA pipeline to Apex. GOED will work with UNLV to establish a development plan for the remaining acreage in the Harry Reid Technology Park. The state should also support the Clark County Lands Bill⁵¹ to swap federal public land for private development in the Las Vegas Valley.



Action 3: Identify growth opportunities for freight rail that attract private-sector business and investment community funding.

Owner/Supporters: NDOT/GOED

Performance Metric: Greater private investment for freight-rail infrastructure development.

Nevada has railroads at the heart of its development, with Reno, Sparks, Las Vegas, Caliente, Winnemucca, and many other towns founded with the arrival of rail. While railroads are hardly top of mind in the 21st century, they are key to Nevada's sustainable and successful future. The Nevada rail system has receded from its 1914 peak of 2,422 miles to its current 1,193 miles while the state's population and industrial activity continue to expand. *The Nevada State Rail Plan*⁵² (NVSRP) supports Nevada's commitment to creating a balanced transportation system that moves goods and people sustainably.

Some of the goals of NVSRP are to integrate rail and truck transportation for logistics services that capitalize on the strategic location of the state and its businesses; integrate freight transportation with strategic land-use planning; develop options for the efficient transportation and distribution of minerals and bio-resources and their return logistics for recycling, reuse, and re-manufacturing; explore how the state can leverage private-sector passenger rail initiatives and expand Amtrak service; and establish a public/private funding mechanism for new rail infrastructure. The NVSRP has been organized to facilitate eight rail-development regions. Eighty rail expansion projects offering an investment opportunity of \$7.8B are highlighted in *The State's Rail Service and Investment Program*. However, the NVSRP faces challenges to state rail plan implementation such as funding for rail infrastructure, organizational commitment, and regional marketplace dynamics that limit rail expansion. GOED could work with NDOT to identify and promote the most attractive opportunities for private investors since freight-rail development is essentially a private-sector activity.

Action 4: Support statewide airport-related infrastructure developments.

Owner/Supporters: Airport Authorities/GOED

Performance Metrics: Develop and post a single, statewide dashboard that reports project details and progress by airport by quarter.

As Nevada continues to grow and support new businesses, residents, and visitors the state must ensure that its infrastructure is able to support that growth. Nevada has already begun to make headway in expanding its infrastructure capability as well as enhancing the existing infrastructure of the state's airport sector. GOED should support the expansion of Harry Reid International Airport to increase capacity for growth in the state. Southwest Airlines just announced that it will build a 130,000-square-foot aircraft maintenance hangar at Harry Reid International Airport in the next five years.⁵³ During December of 2022, Harry Reid International Airport drew more than 5 million visitors in a single month,⁵⁴ leading airport officials to announce plans to upgrade the facility's often sold-out parking options. Other extension possibilities for the airport could be an intermodal infrastructure expansion such Amtrak integration with the airport. The U.S. Department of Transportation's Federal Aviation Administration will award an estimated \$58.6 million to Nevada's 30 airports from funding made available by the Bipartisan Infrastructure Law⁵⁵ for airport-related projects as defined under the existing Airport Improvement Grant and Passenger Facility Charge criteria. This is the first of five annual rounds of funding Nevada airports will receive. The following commercial airports in Nevada



are estimated to receive funding during the first year of the Bipartisan Infrastructure Law: Boulder City Municipal in Boulder City: \$1,954,538; Elko Regional in Elko: \$1,012,955; McCarran International in Las Vegas: \$43,982,805; and Reno/Tahoe International in Reno: \$6,851,041. The money can be invested in runways, taxiways, safety, and sustainability projects, as well as terminal, airport-transit connections, and roadway projects.

Action 5: Support expansion of broadband and 5G infrastructure.

Owner/Supporters: GEOD, legislature, RDAs, OSIT, rural counties and cities, internet service providers.

Performance Metrics: % increase in connectivity, download speeds, and reliability by provider by year. Increased diversification of providers by region.

Broadband access is still a big issue in rural and urban areas of Nevada. It impacts schools, libraries, hospitals, and other public and private organizations even more with post-pandemic remote learning and working circumstances. Broadband is essential for economic development since it enables institutions, business, and people in Nevada's rural and remote areas to communicate and provide critical services particularly in rural areas. The number of public and private internet users in rural areas continues to increase. However, some businesses simply cannot operate without reliable, affordable high-quality, high-speed broadband and internet services. Therefore, it is important to solve this problem to attract more businesses, institutions, and residents and boost economic development of rural areas. Currently, broadband in rural areas is characterized by a lack of choice of providers and is vulnerable to disruption in supply due to a lack of quality. Main obstacles to a better supply and quality of broadband include federal regulations, resource limitations, and a lack of coordination between private and public entities.

To address these obstacles, Nevada's Governor's Office of Science and Technology (OSIT) developed the Nevada Comprehensive Connectivity Strategy with five long-term goals: (1) access to affordable adequate broadband service at home, school, and work for every Nevadan and community anchor institutions such libraries, schools, universities, colleges, 2-year colleges, and healthcare providers by 2029, (2) every student has access to a connected device (laptop, tablet, or Chromebook) and a broadband connection at school and at home capable of supporting virtual learning, (3) development and implementation of a plan that provides broadband infrastructure access to all hospitals, clinics, Tribal clinics, and prison systems in the state by 2025; (4) access to broadband infrastructure and access to a workforce skilled in broadband infrastructure construction should be an economic development competitive advantage for Nevada; (5) by 2023, a statewide coordinated effort exists to expand the reach of digital equity and inclusion programming.

Implementation of Nevada's Comprehensive Connectivity Strategy as well as new the High-Speed Nevada Initiative will be supported by funds from the Infrastructure Investment and Jobs Act (IIJA). Nevada will receive a minimum allocation of \$100 million to help provide high-speed internet across the state, including providing access to at least 123,822 Nevadans who currently lack it. Governor Sisolak recently launched the High-Speed Nevada Initiative, funded in part with IIJA funds, to close the digital divide in unserved and underserved communities. Additionally, the Inter-Tribal Council of Nevada recently received an \$18.9 million grant from the National Telecommunications and Information Administration to expand internet access to 11 Tribal communities in Nevada. The IIJA also helps low-income families afford internet access through the Affordability Connectivity Benefit program. Approximately 26% of people in Nevada are eligible for this program.



Performance and Evaluation Plan

The performance and evaluation plan provides a framework for GOED to track progress of its strategies. The framework tool provides tracking information for each action item, including:

- Goal
- Action item
- Performance Metric
- Owner & Supporter
- Relevant Program & Funding
- Timeline
- Status

The performance measures presented allow GOED and its stakeholders to first measure the progress of its strategies and then to adapt and improve its work. Performance measures include some program activities (largely conducted by GOED) in support of community and economic development but are primarily outcomes for the state. These include a mix of outcomes that enhance Nevada’s capabilities and longer-term outcomes such as job and wage growth.

ELECTRIC NEVADA					
Action Item	Performance Metrics	Owner & Supporter	Relevant Program & Funding*	Timeline*	Status*
1: Conduct analyses of the vertical supply chain of the EV production system.	Comprehensive inventory of identified gaps in the vertical supply chain for component parts. Action plan to address them.	GOED			
2: Enact specific regulatory changes and seek federal funding partnerships for the development, testing, and commercialization of solar energy-related innovations.	Number of new partnerships, programs, and investments targeting research, testing and deployment of new solar energy technologies.	GOED, NSHE, GOE			



3: Support Regional Transmission Organization and Greenlink Nevada to ensure completion of utility connectivity across the state.	Join a regional electricity market by 2030 and support implementation of Greenlink Nevada.	PUC, GOED, GOE			
4: Support the build out of statewide EV infrastructure.	Charging centers every 50 miles along state highways within the next five years. Percent/number increase in charging centers per year.	GOED, GOE			

INNOVATIVE NEVADA

Action Item	Performance Metrics	Owner & Supporter	Relevant Program & Funding*	Timeline*	Status*
1: Create a unified vision for how innovation will be supported in the state.	Host a Governors Innovation Summit.	GOED, OSIT, LVGEA, EDAWIN			
2: Close the gap between university startup funding and follow-on private investments in new companies and innovations.	Increase in number of start-up and accelerator support programs, by year. Increase diversification of projects funded by the Knowledge Fund, by technical domain and year, particularly for early-stage development.	GOED, NSHE, GOE			
3: Strengthen university technology transfer throughout the state.	Develop the design for a consolidated statewide tech transfer system at NCAR. Include an implementation plan with a timeline, milestones, and resources needed.	GOED, NSHE			
4: Expand the STEM workforce to align with target industries.	Number of new workforce-industry partnerships in target industries with education programs at local colleges and universities by year.	GOED, NSHE, colleges and universities			
5: Grow Nevada's role as a global leader in the development of policy and innovative technologies to address water scarcity.	Number of new locations funded for Watersmart technology per year.	GOED, SNWA			

CONNECTED NEVADA

Action Item	Performance Metrics	Owner & Supporter	Relevant Program & Funding*	Timeline*	Status*
1: Support development of multimodal inland port.	GOED to provide annual updates on implementation activities and progress for each proposed inland port.	GOED, NNDA			



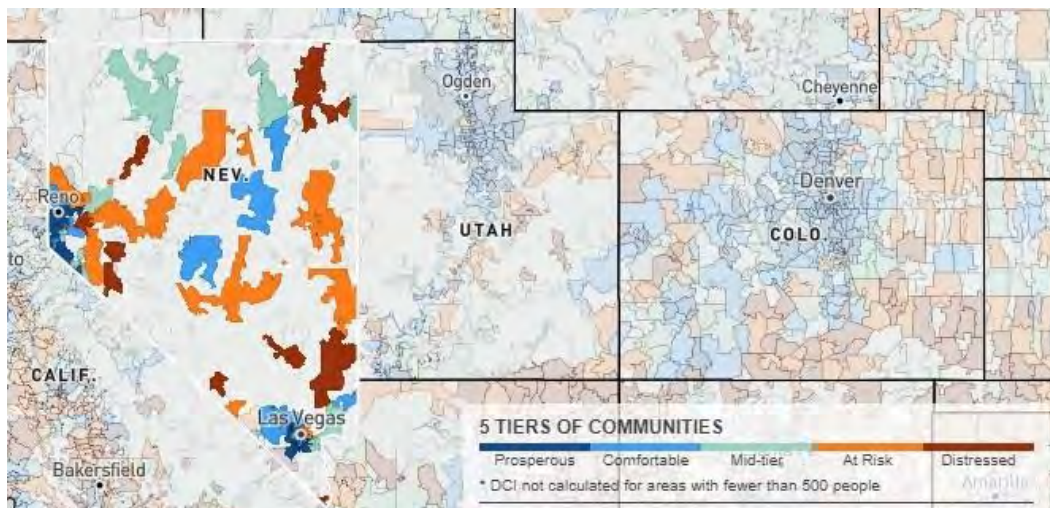
<p>2: Develop tech-ready industrial parks.</p>	<p>Create a \$100 million Industrial Park Infrastructure Fund for grants to build out critical facilities to make Nevada's industrial parks competitive with Utah and Arizona. GOED to coordinate and report out kick-off meeting for key stakeholders.</p>	<p>GOED, Apex Industrial Park, UNLV's Harry Reid Technology Park, BLM, SNWA, NV Energy.</p>			
<p>3: Identify growth opportunities for freight rail that attract private-sector business and investment community funding.</p>	<p>Greater private investments for freight-rail infrastructure development.</p>	<p>NDOT, GOED</p>			
<p>4: Support statewide airport-related infrastructure developments.</p>	<p>Develop and post a single, statewide dashboard that reports project details and progress by airport.</p>	<p>Airport Authority, GOED</p>			
<p>5: Support expansion of broadband and 5G infrastructure.</p>	<p>% increase in download speed, reliability, and choice of providers.</p>	<p>GEOD, legislature, RDAs, OSIT, rural counties and cities, internet service providers</p>			

**For GOED to add as the action items are being implemented.*



Leadership Plan for Inclusive Growth

Nearly 13% of Nevada’s population lives in distressed communities located throughout the state.⁵⁶ GOED and its partners can complement strategies to accelerate the growth of target industries with strategies to address economic disparities among Nevada’s diverse communities and prioritize collaboration with community leaders, such as the Southern Nevada Enterprise Community (SNEC), to understand the challenges these communities face and specific programmatic interventions necessary to mitigate them. This section summarizes economic and community conditions in the state’s most distressed zip codes and offers leadership recommendations to support inclusive growth. The strategies presented in this section underscore GOED’s goal to develop communities that are diverse, skilled, equitable, healthy, and creative and that provide residents with important public services.



ECONOMIC AND COMMUNITY CONDITIONS

To assess economic and community conditions in Nevada’s distressed communities, this analysis applies the Distressed Communities Index (DCI) developed by the Economic Innovation Group (EIG). DCI is a tool for measuring the comparative economic wellbeing of U.S. communities and illuminating ground-level disparities across the country.⁵⁷ DCI includes measures across seven key indicators, including share of population with no high school diploma, poverty rate, share of adults not working, housing vacancy rate, median household income, change in employment, and change in establishments (number of businesses within the physical location).

Nevada’s share of residents living in distressed communities is on par with the U.S. (14.8%) and peer state Arizona (13%), and greater than Utah (.9%), which has very little distress. Distressed communities within Nevada are concentrated in three regions: Northeast, Northwest, and Las Vegas.

Distress Indicators for Regions within Nevada, Source: Economic Innovation Group, Distressed Communities Index.⁷

Indicators, 2016-2020	Elko (89801)	Reno (89501)	Las Vegas (89101)
No HS Diploma	14.9%	6.6%	34.3%
Poverty Rate	11.1%	25.9%	31.8%
Adults not Working	19.7%	24.2%	42.0%
Housing Vacancy Rate	7.5%	9.3%	12.3%
Median Household Income	\$78,400	\$44,400	\$28,100
Change in Employment	4.5%	-1.0%	9.0%
Change in Establishments	-0.4%	11.8%	-0.8%

Northeast Region (Elko)

Distressed communities in the Northeast region include Wells (89835) and Jackpot (89825) communities, located in the northeast. These communities are primarily comprised of small towns and ranching communities. The poverty rates in Wells and Jackpot are above the national average (12.8%)⁵⁸ with 30.7% and 24.8%, respectively. Residents in Wells have fared better than their peer community, Jackpot. Wells has seen a notable increase in employment opportunities, a 20.5% increase in businesses moving to the area, and a median household income of \$48,000. Most residents in the area are employed in retail sales. Jackpot has experienced harsher economic realities with a 3.1% decrease in employment opportunities, a 16% decrease in businesses moving out of the, and a median household income of \$25,500.

⁷ See Appendix B for more detailed data based on zip code.



Northwest Region (Reno)

Distressed communities in the Northwest region include Schurz (89427), Hawthorne (89415), Silver Springs (89429), and Lovelock (89419). Since these distressed communities are located around Reno, their economies are primarily supported by manual labor (e.g., mining, oil extraction, agriculture, construction) and service jobs (healthcare, social services, food service) which support Reno's booming outdoor and recreation economy. Compared to the national average, these communities are experiencing a high level of unemployment and lack of job opportunities. Lovelock is primarily supported through mining, quarrying, and oil extraction operations. While mining is a booming industry in Nevada, 63.7% of Lovelock's adult population is not working, which is more than twice the national average of 21.4%. Schurz is primarily supported with construction jobs, and 44% of adults are not working in the community. Silver Springs houses Silver Springs Airport, which was recently renovated in 2016. Most of the residents commute out of the area for work and primarily work in retail, healthcare, and construction. Silver Springs has experienced more than a 10% decrease from 2016 to 2020 in the percentage of adults that work in the community, as well as a 13% decrease in the number of businesses located in the community.

Las Vegas Region

Distressed communities in the Las Vegas region include Caliente (89008), Whitney (89122), Alamo (89001), Beatty (89003), North Las Vegas (89030), Las Vegas (89106, 89102, 89101), Sunrise Manor (89104), Winchester (89109), Paradise (89169, 89121), Indian Springs (89018), Laughlin (89029), and Moapa Town (89025). Most of the communities surrounding Las Vegas are primarily supported through accommodations and food services sectors. Due to the proximity of Las Vegas, communities like Sunrise Manor and North Las Vegas have seen positive increases in job opportunities and businesses moving to those communities. However, Sunrise Manor and North Las Vegas also continue to experience high poverty rates (28.2% and 29.4%, respectively), which are more than twice the national average (12.8%), and high shares of adults not working.



STRATEGY AND ACTION PLAN

The success of Nevada’s economy rest on a solid foundation of educated, healthy, and connected communities with capable public services and access to quality jobs. The goal of the leadership plan is to ensure that residents throughout the state, regardless of background or zip code, can contribute to and benefit from economic growth. As the state’s primary economic development organization, GOED will work alongside key stakeholders to support Nevada’s communities in building capacity and providing opportunities to capitalize on growth and development of target industries for future statewide prosperity.

	Goal	Action
Effective Government	Improve government services and capacity in high need communities	Set a goal for annual reduction in public sector vacancies and review obstacles to workforce retention and expansion. Simplify state’s occupational licensing and renewals processes by implementing reciprocal license practices.
Aligned Workforce	Increase job access	Promote stronger target industry engagement in K-12 to bolster the future talent pipeline. Support a coordinated statewide strategy to align K-12 performance with target industry needs.
High-Quality and Accessible Healthcare	Prioritize health and well-being of residents and strengthen the state’s healthcare industry	Support innovative medicine efforts to bolster healthcare quality. Develop model collaboration agreement for NSHE institutions and hospitals to expand healthcare practitioner training programs. Review key obstacles to achieving a long-term comprehensive strategy for statewide healthcare system improvements. Improve access to healthcare in rural areas.
High-Quality Community	Ensure resource availability and access	Establish a “one-stop shop” website to address the needs of communities and to communicate funding and other services available to all distressed communities.
Efficient Land Use	Expand opportunities for business activities while respecting natural resources	Review permitting on federal lands

EFFECTIVE GOVERNMENT

Action 1: Set a goal for annual reduction in public sector vacancies and review obstacles to workforce retention and expansion.

Owner/Supporters: Department of Administration/GOED

Performance Metrics: Reduce public sector vacancies by 5% each year for the next five years.



Nevada's public sector currently has a vacancy rate of 25%⁵⁹ in staff positions, which places a huge burden on current staff and the overall performance of public institutions. Public sector inefficiencies have been highlighted as barriers to institutional change/modernization, process optimization, and better coordination amongst government agencies. During a few interviews stakeholders noted that public sector salaries are too low to attract the best talent and to fill vacant positions. This is echoed by GOED's 2017 In-Demand Occupational Analysis. Public sector roles such as teaching are facing shortages and low wages. Therefore, the Nevada's Department of Administration should establish a goal to reduce statewide public sector vacancies by 5% every year during the next five years. The department should evaluate and upgrade the proposed salaries and benefits to a national public sector average to attract highly qualified candidates. It should also offer relocation benefits to highly qualified candidates from other states.

Action 2: Simplify state's occupational licensing and renewals processes by implementing reciprocal license practices.

Owner/Supporters: Secretary of State/GOED

Performance Metrics: Develop a statewide reciprocal law for all licensing boards within the next five years.

Current occupational licensing restrictions are impeding Nevada's economic development and restricting the growth of the healthcare and construction sectors. Nevada has been working toward reciprocity opportunities for all licensing boards. Currently, Nevada has limited reciprocal agreements with California, Arizona, and Utah that recognize qualifications for certain trades and may eliminate the requirement for a trade examination. However, the lack of overall expedited service or reciprocity opportunities results in prolonged shortages of specialists, particularly in the healthcare (nurses), education (teachers), and construction (builders) industries. Reciprocal licensing makes it easier to attract specialists who are licensed in other states with mutual agreements to license people with the same or similar qualifications to those required in Nevada. Currently, 14 licensing boards provide reciprocity opportunities in Nevada. However, 16 still do not (for athletic trainers, physicians, cosmetologists, environmental health specialists, nurses,⁶⁰ occupational and physical therapists, optometrists, and podiatrists), which makes hiring processes longer and more difficult especially for the healthcare sector.⁶¹

For example, Nevada is not a part of the Nursing Licensure Compact (NLC) which restricts possibilities for hospitals and clinics to attract nurses from other states quickly. The NLC would be beneficial for Nevada nurses since it would allow them to consult patients remotely in other states as well. The NCL would also enhance nursing education possibilities for nurses that want to teach and mentor students in other states. Such possibility would open more out of state collaboration opportunities for teaching hospitals, universities and would contribute to the overall development of the healthcare sector. The Nevada State Board of Nursing has been trying for at least 10 years to get the nursing compact passed. Last year, NLC was introduced in the Nevada Legislature as Assembly Bill 142 but didn't pass.

In addition, Nevada suffers from a housing shortage and, consequently, housing affordability. However, the state has not been able to attract builders from other states. Builders and contractors must obtain a Nevada contractor's license⁶² to conduct business in Nevada. For example, Florida, Louisiana, Colorado, Connecticut, Kansas, Indiana, Missouri, New Hampshire, New York, Ohio, Pennsylvania, and Wyoming do not require a specific state license for contractors.



Nevada should aim for a statewide reciprocal license law for all licensing boards to strengthen the healthcare, education, and construction industries to provide better services to communities.

ALIGNED WORKFORCE

Action 1: Promote stronger target industry engagement in K-12 to bolster the future talent pipeline.

Owner/Supporters: GOED/Department of Education, K-12 schools, businesses

Performance Metrics: Increase STEM initiatives at high schools.

Nevada’s ambitious economic development goals are centered on emerging technologies. These industries and technologies require a set of skills that are new but attainable for middle-skilled workers. Currently, Nevada’s economy is dominated by a large pool of workers with either no formal educational credentials, or little to no higher education beyond high school. Low K-12 performance hinders future possibilities for residents to seek higher education and high-paying jobs. It also leads to skilled workforce pipeline issues for target industries since students leave high school without a relevant education base needed to pursue STEM credentials and, later, jobs in STEM fields. To address these issues, GOED could work with new and existing companies to establish and fund/co-fund various innovation and technology focused clubs (e.g., robotics, STEM, engineering, and life sciences) for high school students to encourage their interest in science and further their academic pursuits in the field. An example of such an initiative is the Nepris for Nevada program.⁶³ Another example is LifeWorks, the initiative funded through the New Skills for Youth grant that was awarded to the Nevada Department of Education by JPMorgan Chase & Co in 2017. The educational programs offered through LifeWorks expanded career pathways for students by providing technical education and experience. Companies operating within Nevada’s target industries as well as high school students would benefit from developing partnerships within such programs and bolstering the future talent pipeline.

Action 2: Support a coordinated statewide strategy to align K-12 performance with target industry needs.

Owner/Supporters: NDE / GOED, K-12 schools.

Performance Metrics: Meet and exceed annual K-12 performance goals.

K-12 education performance in Nevada has historically been below the national average. According to the Guinn Center for Policy Priorities, Nevada ranks 50th in chance for success, 49th in school performance, and 50th overall. Nevada K-12 schools underperform compared to the national average in ACT scores as well as English and math literacy. For example, math proficiency is only 21.2%, and English language proficiency is 45.7% in high schools based on 2021–2022 results.⁶⁴ Remediation rates (the rate of students who require additional education or training before enrolling in college-level courses) also remain high. Low K-12 performance hinders future possibilities for graduates to seek higher education and high-paying jobs. Math- and science-related capabilities are especially important for students seeking education and jobs in technology-related sectors, and particularly fast-growing STEM fields, such as nursing and engineering, that require post-secondary education. GOED’s *In-*



Demand Occupational report shows that Nevada is below the national average for open jobs in nursing and engineering and both fields are having a challenging time recruiting fast enough to satisfy future needs (ongoing analyses from GOED about the current economic and workforce environment provides additional information to help target needs). Therefore, it is essential for high schools to prepare enough students for future jobs in growing target industries. The low performance could be improved by engaging industry in pipeline development and mentorship programs in high schools, ensuring curriculum that sets students up for success, and develop performance goals and leadership accountability practices at Nevada’s high schools. GOED should work with the Education Department to establish long-term performance goals and incentive systems for high schools related to performance results.

HIGH-QUALITY AND ACCESSIBLE HEALTHCARE

Action 1: Support innovative medicine efforts to bolster healthcare quality.

Owner/Supporters: NSHE/GOED

Performance metrics: Expand medical research and infrastructure funding programs at university hospitals.

Innovations in medical treatment is a core driver of healthcare quality and generates substantial regional economic impact. Innovative medicine depends on public and private research spending at hospitals and universities. For example, National Institutes of Health (NIH) estimate that one research dollar received by an institution generates \$1.86 in additional regional economic impact. According to the NIH, every \$1 in investment in research stimulates an additional \$2.35 of industry R&D investment after three years and \$8.38 in industry R&D investment after eight years. Unfortunately, newer medical schools, especially those at universities with less developed research infrastructures, receive very little public R&D funding from the NIH. Therefore, it’s important to have new research infrastructure as well as residency programs to ensure development of innovative medicine within the state of Nevada.

GOED and its partners can consider scaling innovative medicine efforts like The Kirk Kerkorian School of Medicine at UNLV. Its recent addition, the Medical Education Building, accommodates a class size of up to 120, doubling the school’s prior capacity.⁶⁵ New features include training spaces for clinical skills, simulation, anatomy etc. Most of the project was funded by private donations (more than \$150 million), including contributions from the Estate of Kirk Kerkorian, Engelstad Foundation, philanthropist Mary Kaye Cashman, and the Boyd Family Foundation. The state of Nevada contributed \$25 million to the project and the largest corporate donation (\$1 million) came from Bank of America. This project will expand possibilities for stronger medical and health science education and research programs. It will also lead to higher quality healthcare system in Southern Nevada.



Action 2: Develop model collaboration agreement for NSHE institutions and hospitals to expand healthcare practitioner training programs.

Owner/Supporters: GOED, NSHE, NHA

Performance Metrics: Protocol designed and accepted by NSHE and NHA.

A constraint on the workforce pipeline for nurses is the availability of experienced nursing instructors. It's important to expand opportunities for experienced nurses to gain the necessary academic credentials for them to be able to teach at NSHE and other educational institutions. A significant barrier to widening the teaching pipeline is not just gathering the experienced nursing workforce, but also giving them the opportunity to gain the academic credentials that the higher education institutions require for them to be 'qualified' to teach, no matter how much clinical experience they have. This can be done at the community college level as well as the university level for the matriculation of the advanced nurse practitioners. Another solution is for community colleges and other programs for preparing nurses to decide for classes to be held on-site in participating hospitals. There, qualified practitioners can easily teach classes while continuing to discharge their professional responsibilities. Such an arrangement is a win-win for all involved. Senior practitioners get to share their knowledge and experience even as they continue to pursue their profession. Students have the experience of instruction in a hospital setting. Hospitals are supporting the professional development of nurses and other health practitioners that they need and can show off their workplace to students to facilitate recruitment. However, such arrangements can be complicated and involve legal, financial, and other administrative challenges. A solution is for NSHE and the Nevada Hospital Association (NHA) to develop a model protocol that provides any hospital and any workforce institution (community college, technical program, etc.) that wants to participate with a settled set of rules, agreements, and practices that can make the activity work smoothly.

Action 3: Review key obstacles to achieving a long-term comprehensive strategy for statewide healthcare system improvements.

Owner/Supporters: NSHE/ GOED

Performance metrics: Expand health services education programs at all levels of the education sector.

Nevada continues to have the highest share of one-star acute-care low-ranking hospitals nationally as indicated by the Centers for Medicare & Medicaid Services in July of 2022.⁶⁶ Six of the 14 major acute-care hospitals in the Las Vegas metro area were given a single star⁶⁷ in the annual ratings published by the federal agency. The highest rating for a Las Vegas metro hospital was three stars, given to four hospitals out of the area's 14. State leadership argues that Nevada has remained near the bottom of many healthcare rankings partly because of population growth. Despite the healthcare sector's growth in recent years, the most current data show that Nevada is an underserved healthcare state. Per capita, Nevada ranks 48th in the nation in physicians and 50th in primary care physicians.⁶⁸ Most stakeholders point to the role of education in strengthening the state's healthcare workforce. It is essential to expand health services education programs at all levels and to keep medical students in Nevada for their residencies. However, opportunities for residencies and more spaces in universities for additional students is an ongoing problem.



Action 4: Improve access to healthcare in rural areas.

Owner/Supporters: OSIT/GOED

Performance Metrics: Expand telehealth options in rural areas.

Telehealth is an important healthcare service especially for residents living in rural areas. It helps reduce barriers to care for those who live far away from healthcare services and specialists, who have time or access restrictions, or who have transportation or mobility issues. Telehealth is emerging as a critical component of the healthcare crisis solution in Nevada. It increases access to healthcare and reduces healthcare costs, and it improves health outcomes and support for patients and families. Telehealth also assists in addressing shortages and misdistribution of healthcare providers; nurses and specialists can serve more patients using telehealth technologies. Telehealth also supports clinical education programs especially for rural clinicians, improves overall organizational productivity, and reduces environmental impact by decreasing the related carbon footprint. Currently, there are 23 telehealth services available in Nevada,⁶⁹ however, there is still a lot of room for further expansion. Existing initiatives include the Rural Healthcare (RHC) Program⁷⁰ that provides support to eligible rural healthcare providers with reduced rates in telecommunications and broadband services; the Healthcare Connect Fund (HCF) Program that provides a 65% discount on eligible expenses related to broadband connectivity to both individual rural healthcare providers (HCPs) and consortia; the Telecommunications Program that provides reduced rates to rural HCPs for telecommunications services related to the use of telemedicine and telehealth.

HIGH-QUALITY COMMUNITY

Action 1: Establish a “one-stop shop” website to address the needs of communities and to communicate funding and other services available to all distressed communities.

Owner/Supporters: GOED

Performance Metrics: Online portal with resources for distressed communities, their residents, and their businesses.

During the interviews, representatives from distressed communities highlighted that the state should provide incentives for businesses to hire residents of distressed communities; support for minority-owned businesses; workforce training/reskilling opportunities; connections to businesses, industries, and regional Chambers of Commerce; and collaborations to solve the challenges of homelessness, access to healthcare, and mental healthcare. However, the state already provides some of these services,⁷¹ but it fails to communicate all relevant information to local leaders of all communities. Some of the current initiatives include Rural Community & Economic Development programs,⁷² the Emerging Small Business (ESB) program,⁷³ Procurement Technical Assistance Center (PTAC),⁷⁴ and Rural Relief Small Business Grants.⁷⁵ Therefore, GOED should facilitate all communication and collaboration with distressed communities about existing funding and other support opportunities.



Action 1: Review permitting on federal lands.

Owner/Supporters: GOED/BLM

Performance Metrics: Negotiate longer (5-10 year) permitting periods for federal lands.

A high percentage (almost 87%⁷⁶) of Nevada's land is owned by the federal government, which limits its use and excludes it from the tax base.⁷⁷ Private companies can apply for leases from the U.S. Bureau of Land Management (BLM) and explore various economic activities. Companies can apply for oil and gas permits to explore and produce energy on federal land, as well as permits for grazing animals on federal lands. However, the leases offered are usually short-term (two years), which makes them less attractive to private companies. Therefore, the state's leadership must continue to work with the federal delegation to establish longer permitting periods for federal lands to expand opportunities for various business activities. Reviewing, improving, and accelerating BLM's procedures for releasing federal land for auction is also critical. Additionally, the agency's appraisal guidelines and rules should be revisited to attract a broader range of buyers. Finally, BLM should work with the local jurisdictions in designating parcels for residential and non-residential uses to protect and enhance the regions jobs-housing balance.



PERFORMANCE AND EVALUATION PLAN

EFFECTIVE GOVERNMENT					
Action Item	Performance Metrics	Owner & Supporter	Relevant Program & Funding*	Timeline*	Status*
Set a goal for annual reduction in public sector vacancies and review obstacles to workforce retention and expansion.	Reduce public sector vacancies by 5% each year for the next five years.	Department of Administration for the State, GOED			
Simplify state's occupational licensing and renewals processes by implementing reciprocal license practices.	Develop statewide reciprocal law for all licensing boards within the next 5 years.	Secretary of State, GOED			
ALIGNED WORKFORCE					
Promote a stronger target industry engagement in K-12 to bolster the future talent pipeline.	Increase number of initiatives at various high schools.	GOED, Department of Education, K-12 schools, businesses.			
Support a coordinated statewide strategy on aligning K-12 performance with target industry needs.	Meet and exceed annual K-12 performance goals.	NDE, GOED, K-12 schools.			
HIGH-QUALITY AND ACCESSIBLE HEALTHCARE					
Support innovative medicine efforts to bolster healthcare quality.	Expand medical research and infrastructure funding programs at university hospitals.	NSHE, GOED			
Develop model collaboration agreement for NSHE institutions and hospitals to expand healthcare practitioner training programs.	Protocol agreed by designed and accepted by NSHE & NHA.	GOED, NSHE, NHA			
Review key obstacles to achieving a long-term comprehensive strategy for statewide healthcare system improvements.	Expand health services education programs at all levels of the education sector.	NSHE, GOED			
Improve access to healthcare in rural areas.	Expand telehealth options in rural areas.	OSIT, GOED			
HIGH-QUALITY COMMUNITIES					



Establish a "one stop shop" website to address needs of communities and to communicate funding and other services available to all distressed communities.	Online portal with resources for distressed communities, their residents, and their businesses.	GOED			
EFFICIENT LAND USE					
Review permitting on federal lands.	Negotiate longer (5-10 year) permitting periods for federal lands.	Secretary of State, GOED			

**For GOED to add as the action items are being implemented.*



Appendix A

Table 1: Data for employment and employment concentration (location quotient) for all target industries, 2011-2022.
Sources: US Census, Bureau of Labor Statistics, Bureau of Economic Analysis.

Target Industry	2011-2022 Job Growth	2019-2022 Job Growth	2011-2022 LQ Growth	2022 Employment	Average Annual Wage
Information Technology	75%	16%	16%	24,656	\$105,787
Transportation & Logistics	89%	26%	32%	111,046	\$84,169
Natural Resources & Technologies	34%	6%	17%	40,240	\$86,095
Hospitality & Creative Industries	12%	-19%	-20%	362,655	\$57,319
Advanced Manufacturing	59%	6%	28%	45,869	\$88,810

Table 2: Data for employment and employment concentration (location quotient) for Information Technology, 2011-2022. Sources: US Census, Bureau of Labor Statistics, Bureau of Economic Analysis.

Information Technology	2011-2022 Job Growth	2019-2022 Job Growth	2011-2022 LQ Growth	2022 Employment	Average Annual Wage
Broadband	-9%	-1%	1%	4,605	\$75,172
Cyber Security	85%	29%	28%	1,230	\$156,404
Technology Manufacturing	38%	20%	25%	1,238	\$78,155
Data Hubs	134%	21%	20%	17,587	\$193,474

Table 3: Data for employment and employment concentration (location quotient) for Transportation & Logistics, 2011-2022. Sources: US Census, Bureau of Labor Statistics, Bureau of Economic Analysis.

Transportation & Logistics	2011-2022 Job Growth	2019-2022 Job Growth	2011-2022 LQ Growth	2022 Employment	Average Annual Wage
Water	-55%	6%	-60%	45	\$50,243
Wholesaling	15%	-1%	1%	38,544	\$86,947
Air	18%	-24%	-24%	2,181	\$105,967
Rail	-8%	-13%	-12%	647	\$104,523
Warehousing	364%	73%	50%	44,100	\$50,987
Multi-Modal Hubs	148%	53%	53%	1,502	\$81,731
Trucking	92%	27%	92%	24,028	\$77,413



Table 4: Data for employment and employment concentration (location quotient) for Natural Resources and Technologies, 2011-2022. Sources: US Census, Bureau of Labor Statistics, Bureau of Economic Analysis.

Natural Resources & Technologies	2011-2022 Job Growth	2019-2022 Job Growth	2011-2022 LQ Growth	2022 Employment	Average Annual Wage
Agriculture	88%	9%	5%	9,462	\$45,027
Mining	10%	4%	41%	15,436	\$78,462
Recycling	77%	5%	22%	3,679	\$75,693
Clean Water	58%	-2%	26%	239	\$51,867
Renewable Energy	58%	14%	37%	1,530	\$83,295
Agricultural Manufacturing	72%	16%	36%	6,519	\$53,521
Energy Generation & Distribution	-13%	-8%	-22%	3,377	\$134,276

Table 5: Data for employment and employment concentration (location quotient) for all Hospitality, Tourism, Sports, & Creative Industries, 2011-2022. Sources: US Census, Bureau of Labor Statistics, Bureau of Economic Analysis.

Hospitality, Tourism, Sports, & Creative Industries	2011-2022 Job Growth	2019-2022 Job Growth	2011-2022 LQ Growth	2022 Employment	Average Annual Wage
Outdoor Recreation	6%	-23%	-30%	2,446	\$45,265
Recreation & Tourism	12%	-11%	-2%	204,053	\$49,334
Sports	33%	-3%	14%	13,094	\$105,610
Gaming Entertainment	-32%	-30%	-29%	128,955	\$41,492
Film Industry	-1%	-17%	-4%	4,412	\$65,498
Creative Industry	20%	-12%	-15%	9,695	\$64,597

Table 6: Data for employment and employment concentration (location quotient) for all Advanced Manufacturing, 2011-2022. Sources: US Census, Bureau of Labor Statistics, Bureau of Economic Analysis.

Advanced Manufacturing	2011-2022 Job Growth	2019-2022 Job Growth	2011-2022 LQ Growth	2022 Employment	Average Annual Wage
Aerospace & Defense	39%	7%	10%	18,840	\$70,251
Clean Technologies	26%	-25%	22%	456	\$86,248
E-Mobility	599%	17%	444%	14,338	\$58,164
All Other Advanced Manufacturing	-5%	-5%	-22%	12,234	\$64,055



Appendix B

Distressed Community Index Data for Selected Nevada Counties, 2016-2020

Indicators/ Zip Codes	No HS Diploma	Poverty Rate	Adults not Working	Housing Vacancy Rate	Median Household Income	Change in Employment	Change in Establishments
89835- Wells, NV	18.1%	30.7%	31.0%	20.7%	\$48,800	2.2%	20.5%
89008- Caliente, NV	11.4%	17.9%	32.9%	10.5%	\$24,200	-20.1%	-6.9%
89122- Whitney, NV	17.5%	17.1%	24.4%	9.7%	\$48,000	-11.4%	0.7%
89001- Alamo, NV	12.1%	0.4%	35.2%	19.7%	\$56,100	-9.3%	-23.5%
89427- Schurz, NV	10.9%	38.7%	44.0%	12.5%	\$23,800	16.3%	1.7%
89415- Hawthorne, NV	9.8%	15.5%	30.3%	28.6%	\$32,900	15.7%	-1.8%
89003 – Beatty, NV	34.5%	21.0%	39.2%	14.0%	\$19,700	2.5%	-4.0%
89429- Silver Springs, NV	16.1%	15.0%	40.4%	14.1%	\$46,500	-10.5%	-13.0%

Indicators/ Zip Codes	No HS Diploma	Poverty Rate	Adults not Working	Housing Vacancy Rate	Median Household Income	Change in Employment	Change in Establishments
89030- North Las Vegas, NV	42.8%	29.4%	33.5%	9.5%	\$37,000	16.8%	3.3%
89106- Las Vegas, NV	31.1%	29.6%	32.0%	12.3%	\$31,000	5.4%	3.6%
89102- Las Vegas, NV	23.9%	26.7%	27.3%	8.1%	\$38,100	-0.5%	-2.3%
89101- Las Vegas, NV	34.3%	31.8%	42.0%	12.3%	\$28,100	9.0%	-0.8%
89104- Sunrise Manor, NV	27.0%	22.7%	30.4%	9.7%	\$38,900	15.0%	2.1%



89109- Winchester, NV	11.0%	23.1%	30.9%	53.4%	\$44,900	-0.2%	-5.0%
89169- Paradise, NV	22.4%	28.8%	29.1%	20.3%	\$32,100	15.6%	11.1%
89121- Paradise, NV	20.2%	19.4%	24.9%	13.2%	\$43,200	-2.9%	2.9%

Indicators/ Zip Codes	No HS Diploma	Poverty Rate	Adults not Working	Housing Vacancy Rate	Median Household Income	Change in Employment	Change in Establishments
89419- Lovelock, NV	20.1%	10.4%	63.7%	13.3%	\$56,000	24.4%	-14.1%
89018- Indian Springs, NV	24.7%	17.2%	92.8%	19.3%	\$45,900	18.7%	-21.4%
89029- Laughlin, NV	13.6%	18.9%	42.8%	7.9%	\$37,400	-4.0%	-11.5%
89025- Moapa Town, NV	13.6%	19.8%	32.3%	25.1%	\$49,300	-5.3%	-11.1%
89825- Jackpot, NV	23.8%	24.8%	7.8%	36.8%	\$25,500	-3.1%	-16.7%



Endnotes

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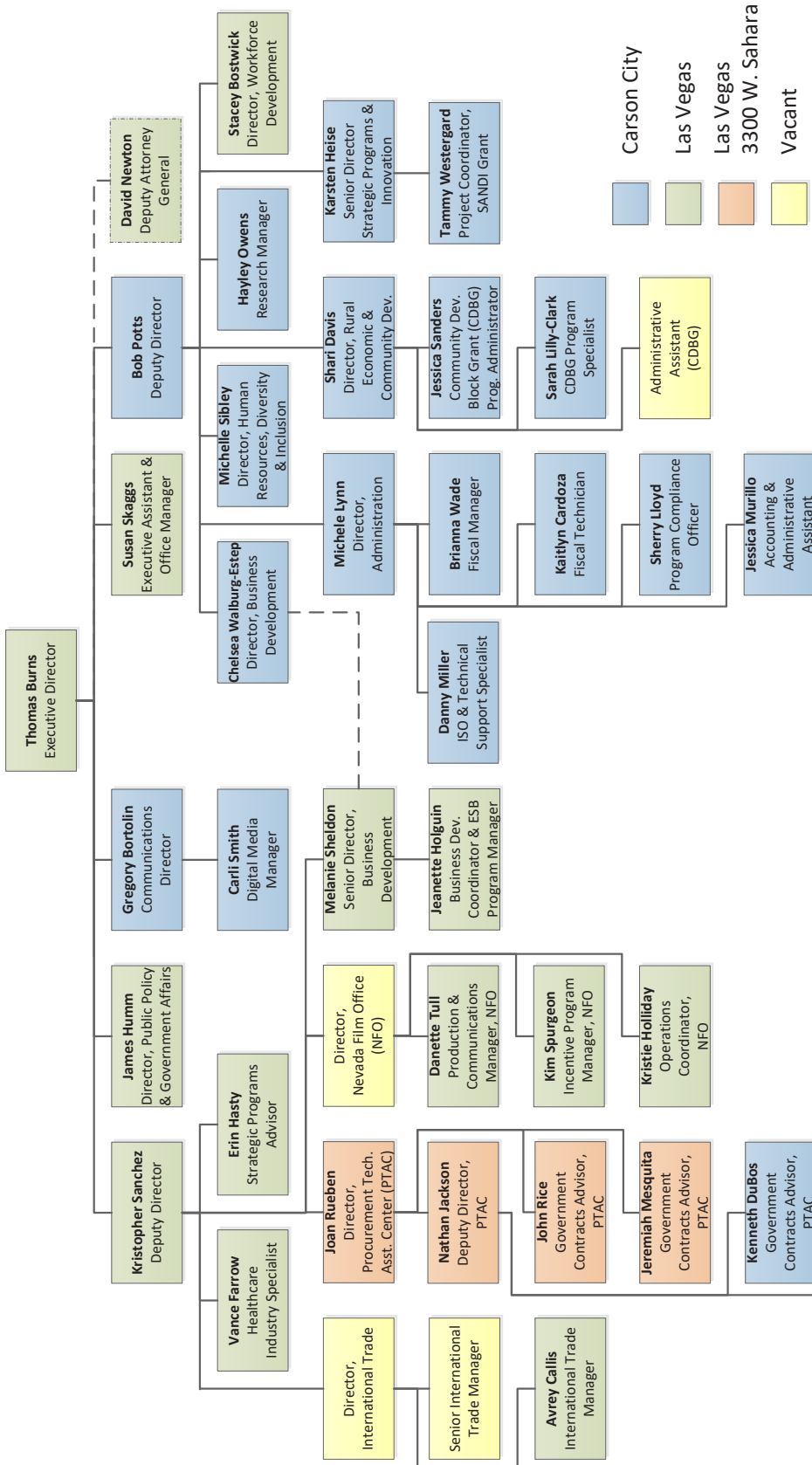
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GOED's ORGANIZATIONAL CHARTS



Nevada Governor's Office of
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1/30/23

GOED



ABOUT **GOED**

The Nevada Governor's Office of Economic Development (GOED) was created during the 2011 Session of the Nevada Legislature through a collaboration of the Nevada Governor's Office and the Leadership of the Nevada State Senate and State Assembly (Authority: NRS 231).

VISION

A vibrant, innovative, and sustainable economy with high-paying jobs for Nevadans.

MISSION

High-quality jobs for Nevadans.

Objectives, as identified in the first State Plan for Economic Development are:

- Establish a cohesive economic development operating system.
- Increase opportunity through education and workforce development.
- Catalyze innovation in core and emerging industries.
- Advance targeted sectors and opportunities in the region.
- Expand global engagement.

Nevada Governor's Office of

ECONOMIC DEVELOPMENT

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