



Workforce Innovations for a New Nevada - NSHE Capacity Program Application

The Workforce Innovations for a New Nevada (WINN) Fund was established to provide programs of workforce recruitment, assessment or training to the benefit of new or expanding companies in Nevada.

This application is to be completed by a representative of an Authorized Provider per NRS 231.1415 who wishes to provide a workforce training program with WINN funding. A separate application is necessary for each training program. Applications requesting funding in excess of \$100,000 must be reviewed and approved by the Board.

On December 2, 2021, GOED's Board approved minimum wage thresholds for WINN Fund investments. Jobs supported by the training program in this proposal must pay at least \$17 per hour; additional requirements apply and supplemental information may be requested to complete the application process.

Authorized Provider Information

Institution Name

Board of Regents, NSHE, obo Great Basin College

Address

1500 College Parkway, Elko, Nevada 89801

Workforce Development Program Experience

Great Basin College (GBC):

Great Basin College has extensive experience working with industry to provide workforce development programs. Since the college's inception in 1967, GBC has created more than 50 Associate, Bachelor and Certificate of Achievement programs aimed at filling workplace needs. The college also offers Industry Skills Certificates (less than 30 credits) to prepare students to fill in-demand positions.

Each program has its own technical skills committee comprised of regional industry professionals who help guide decisions regarding program launch, expansion, and sometimes revision. These professionals help GBC understand current industry needs so what students learn while training aligns with what they experience in the workplace.

Over the past decade, GBC has seen its graduation rate incrementally increase from 21% in 2015 to 52% in 2023. Following graduation, 90%+ of graduates from Career and Technical Education programs are employed within their chosen industry within 6 months. Electrical Systems Technology routinely graduates the most degree and certificate program graduates, followed by Diesel Technology, Instrumentation Technology, Welding Technology, and Industrial Millwright programs.

One of the reasons GBC has been so successful at creating workforce development programs that lead to high-skill, high-wage and in-demand positions is its Maintenance Training Cooperative (MTC) program. The MTC is made up of mining and support industries that partnered with GBC to "grow their own" highly trained employees. Through an application process, this group awards participating students a \$5,000 scholarship to cover tuition and other costs while also providing a paid internship at no less than \$20/hour; well over 90% of MTC participants go on to work with their internship provider full-time following graduation. For the 2023-2024 academic year, approximately 90 students were accepted into the program.

GBC also has a robust contract training services arm that provides specialized services to industry in order to train new workers or upskill current ones. This function will largely be folded into the newly created GBC-NORCAT Mine Skills Training partnership.

Northern Centre For Advanced Technology Inc. (NORCAT):

NORCAT is a private, non-profit organization that develops and provides world-class programs, services, and resources to reduce injuries, save lives, and enhance productivity in the workplace. To accomplish this, over the past 20 years NORCAT has worked with clients and partners to develop an array of integrated training and development programs to serve multiple sectors both in Canada and around the world, including, for example, the United States, Ecuador, Peru, Chile, Colombia, Argentina, Greenland, Mongolia, Saudi Arabia, Kenya and South Africa.

NORCAT offers training and development services for the mining industry – working with leading companies around the world on a variety of strategic and tactical programs. In addition, NORCAT has worked closely with various government ministries and corporations to assess, review, and make recommendations for enhanced training programs, health and safety policies, standard operating procedures, and technical regulations and guidelines.

NORCAT defines its competitive differentiators into five key categories:

- **Speed to market.** With a 30-year history of developing and delivering training and development programs and services, NORCAT has amassed a significant catalog of curricula, best practices, content, training plan methodologies, and integrated training platforms that enable NORCAT to listen to clients and build customized and quality strategies, programs and solutions faster than competitors.
- **Depth and Breadth.** NORCAT has a team of “tried and true” subject matter experts across multiple industries, with a primary focus on mining, that not only develop and design training programs, but also deliver them via in-person classroom training, in-the-field hands-on training, immersive/simulation training, and/or e-Learning. Few, if any, of NORCAT’s competitors are able to offer these integrated training options in a well-defined training and development program to the same depth and breadth that NORCAT can.
- **NORCAT Underground Centre.** NORCAT is the only mine training and development organization in the world that owns and operates an underground production mine that serves as a hands-on, experiential training center for the development of future mine workers. Within this unique facility, NORCAT offers an array of programs and works closely with mining companies and mining technology companies to develop customized programs to meet industry needs.
- **Technology and Innovation.** NORCAT is home to one of the world’s largest mining equipment simulation training and development centers. In this facility, NORCAT trains operators with multiple, high fidelity, 360-degree equipment simulators, which increase operator performance, efficiency, and safety. NORCAT is also a pioneer in bringing virtual reality, augmented reality, and avatar-based multi-player learning technology to the global skilled labor mining workforce.

- Quality Work Experience and Results with Global Mining Companies. From a client perspective, NORCAT has worked with leading companies in North America, Africa, and South America including Vale, Glencore, Pan American Silver, KGHM, Barrick Gold, Detour Gold, Lake Shore Gold, DeBeers, Baffinland Iron Ore Mines, among many other leading organizations in the mining and related industries.

Partnership Overview - GBC-NORCAT Mine Skills Training:

Both Great Basin College and NORCAT are focused on training and developing people in order to provide them with the skills, confidence and competence to enter into the skilled trades and mining industry. In this, both GBC and NORCAT are aligned in mandate, while offering services which complement and build upon each other's initiatives.

Great Basin College leads out in college-based curriculum development and delivery with a focus on the trades and STEM programming. NORCAT is a leader in corporate training with a focus on equipment operator and health and safety training and consulting services. A combined GBC-NORCAT offering provides students and industry with a complete and comprehensive service offering in a one-stop-shop structure which will deliver post-secondary education accreditation as well as industry leading corporate mine skills and safety training. This offering will result in new and existing workers who are well educated in both technical skills and safe work practices, preparing them to be job ready.

Primary applicants must be able to effectively track and document expenses related to this grant, procure equipment in a timely fashion, maintain procedures and internal controls for accounting, and have infrastructure for maintaining data and completing reports.

Organizational Capacity

Great Basin College uses the Workday accounting system to set up, maintain and close out grants. GBC has many years of experience managing grants from federal, state and local sources, as well as private foundations. GBC has adequate financial staffing and experience to implement and manage grants and is prepared to comply with any required assurances.

GBC can provide documentation regarding its internal controls, financial managements policies, conflict of interest policy, civil rights policy, student privacy policy and/or sample ledgers of expenditures as needed. Great Basin College has been accredited through the Northwest Commission on Colleges and Universities (NWCCU) since 1974. The accreditation was most recently reaffirmed in 2021.

Project Information

Project Name

GBC-NORCAT Mine Skills Training (MST)

Primary Economic Sector

Advanced & General Manufacturing
Logistics
Natural Resources Technology

Project Point of Contact

Nicole Maher

Title

Grants Director

Phone

(775) 761-2624

Email

nicole.maher@gbcnv.edu

Employer Partner(s)

Company 1

Company Name

Lithium Americas

Company Point of Contact

Sheldon Hurst, Plant Manager, Thacker Pass Project

E-mail

sheldon.hurst@lithiumamericas.com

Job Titles to Be Filled

2,000 Skilled Workers/Construction; 350 Trained Employees/Production

Number of Job Openings to be Assisted

350

Average Hourly Wage for Job Hires

Competitive wages consist with diversified mining, chemical industry and market standards within the region

Employer Commitment & Support Letter

GBC-NORCAT Letter of Support.Lithium Americas.pdf

Workforce Disruption - Prior 12 Months

No

Company 2

Company Name

Sawtooth Mining

Company Point of Contact

Guy Guidinger, President

E-mail

guy.guidinger@nacco.com

Job Titles to Be Filled

39 - 50 Electricians, Diesel Mechanics, Welders, Heavy Equipment Operators

Number of Job Openings to be Assisted

50

Average Hourly Wage for Job Hires

\$35/hour - \$44/hour; \$35/hour - \$44/hour; \$35/hour - \$44/hour; \$32/hour - \$40/hour

Employer Commitment & Support Letter

GBC-NORCAT Letter of Support.Sawtooth Mining.pdf

Workforce Disruption - Prior 12 Months

No

Company 3

Company Name

Nevada Gold Mines (NGM)

Company Point of Contact

Christine Whetten

E-mail

christinewhetten@nevadagoldmines.com

Job Titles to Be Filled

750 - 1,000 new workers annually over five years

Number of Job Openings to be Assisted

750

Average Hourly Wage for Job Hires
Depending on position: \$26/hour - \$42/hour

Employer Commitment & Support Letter
GBC-NORCAT MST Letter of Support.Nevada Gold Mines.pdf

Workforce Disruption - Prior 12 Months
No

Statement of Need

Needs Assessment

The August 2023 publication, Examination of the Relationship between Workforce Development, Housing, Education and Childcare Services, and Healthcare Services: A White Paper, published by the University Center for Economic Development in the College of Business at the University of Nevada, Reno, identifies the major main obstacles to workforce development in rural Nevada: “. . . community and economic development efforts have been increasingly hampered by a growing lack of available workers needed to fill open and new positions.” As the report notes, “Statewide, individual firms have opted to delay or cancel plans to start operations or expand existing operations” due to lack of available workforce. The report further specifies that gaps in the availability of educational services “have been identified as critical factors limiting the growth of local and regional workforces.”

The report, which highlights findings from five survey questions regarding workforce development needs, corroborates anecdotal observations on the part of GBC and NORCAT regarding the increasing difficulty for critical industry sectors to fill open and/or vacant employment positions.

In fact, the Nevada Office of Workforce Innovation (OWINN) shows that Nevada’s workforce is struggling to match or exceed the national average for labor force engagement (“Why Workforce Development Matters”); what’s more, while the state leads the country in job growth, it also leads in unemployment. Without adequate supports, there is a possibility that as new companies move into, and established companies expand across, the GBC service area, and more particularly Elko, Humboldt and Lander counties (creating jobs), they might not harvest the workers they need.

Another consideration is that while GBC currently works closely with Nevada mining to equip students to fill high-skill/high-wage and in-demand jobs and the resulting average salary (\$86,439) is nearly double the US median income (\$44,225), wages for other mostly non-skilled workers are much lower (-38% in Nevada) creating a significant need for education that leads to higher wage positions. This is especially true with adult students and those from minority populations where language, culture and other barriers can present challenges.

GBC-NORCAT is ready to tackle these dichotomies by focusing on individual company needs. Rather than offering a program that can feed multiple companies with newly trained workers (which GBC already does very well, and will continue to do well) the GBC-NORCAT MST will focus on meeting individual company needs and offering training that will help companies meet production goals, expansion timelines and more. These workforce development services will easily include traditional workers, but due to the individualized nature of the training and the state-of-the art tools and processes that the GBC-NORCAT MST will employ, it can also easily capture untapped employee pools, including nontraditional workers, adults, and workers from other cultural or ethnic population groups.

Program Objectives and Outcomes

Program Overview

Great Basin College (GBC) and the Northern Centre For Advanced Technology Inc. (NORCAT) have formed a partnership to expand skilled labor training and development initiatives in Nevada. The GBC-NORCAT Mine Skills Training (MST) will allow GBC, one of Nevada’s principal Career and

Technical Education (CTE) providers, and NORCAT, a notable leader in mining industry training, to develop and enhance workforce capabilities in the region.

Through this workforce-focused partnership, GBC will build new and expand current postsecondary training opportunities with subject matter expertise from NORCAT's 30-year history of developing and delivering training and development programs and services. NORCAT will lead out in providing industry-leading corporate mine skills training and advisory services, backed by GBC's vast rural network and longstanding industry relationships in the region.

This for-profit venture will introduce a new era in educational-corporate partnership by:

1. Offering initial mining training to potential hires and/or screened/probationary hires with a pathway to entry-level positions in the mining industry;
2. Defining future industry training requirements to be delivered through the GBC-NORCAT MST, in collaboration with industry and communities; and,
3. Partnering on corporate training and advisory opportunities as they emerge that help to strengthen and add value to Nevada's mining and mining-related industries.

Employer Engagement

GBC-NORCAT Mine Skills Training has been founded by a team of business and academic visionaries who are intent on promoting, educating and supporting regional industry, including established companies, entrepreneurs, tech innovators, and skilled labor workers, to enable long-term and sustainable economic and social prosperity for rural Nevada.

The role of community stakeholders is to work one-on-one with GBC-NORCAT MST to build the programs, services, and resources they need to fulfill their diverse priorities, goals and career aspirations.

Company needs will be varied. They might focus on health and safety hazards that require identifying best practices for incident prevention during daily activities, or they might require knowledge and skills for a specific operational upgrade that will be coming online. Whatever the need, GBC-NORCAT's five-step methodology and approach can develop complete training solutions from concept to implementation:

(1) Analysis of needed instructional content, including course learning objectives, stakeholder input, milestones, task schedules, and progress measurement devices; (2) Design of the content framework by identifying the topics and content and determining an educational approach that is aligned with the learning objectives and scope defined during the analysis; (3) Developing content into a draft training program for stakeholders and subject matter experts to review, including eLearning, classroom and in-the-field delivery and assessment methods; (4) Delivering the training via a train-the-trainer model; and, (5) Evaluating the effectiveness of the training using a pilot group of learners, representative of the target population, and reviewing/documenting any needed improvements.

As an example of meeting future industry trends, GBC-NORCAT have shared with one employer their ability to recreate industry operator control rooms in 3D design which can be programmed to function according to real-life parameters. These simulated control rooms can be presented to the learner via touch screen devices or large format touch screen TVs and can be used to train operators prior to operating the actual equipment. Another example is to develop virtual reality (VR) modules where a worker must perform various maintenance tasks in a virtual process plant to practice their skills.

Capacity-Building Program Design

The GBC-NORCAT partnership is a collaborative effort focused on delivering cutting-edge corporate training and services to support mines and mining-related projects in northern Nevada with a shared vision of fostering a highly skilled, safety-focused workforce. To achieve this goal, GBC-NORCAT have outlined the following workforce training objectives:

1. MINE SKILLS TRAINING: Provide comprehensive training programs designed to equip workers with the essential skills and knowledge needed for entry-level positions in the mining industry. Through a blend of hands-on instruction cutting-edge virtual reality (VR), augmented reality (AR), and industry-leading education, participants will gain essential skills and knowledge vital for success in the mining industry.

As an example of preparing workers for initial entry onto a mine site, GBC-NORCAT can provide comprehensive training on:

- Workplace Hazards
- Safe Work Practices
- Workplace Hazardous Materials Information System
- Respiratory Protection Awareness
- Mining Fundamentals
- Surface and Underground Induction Procedures
- General Inspections
- Loose Rock Scaling
- General Lock Out and Tag on Prime Moves and Related Equipment
- Basic Hoisting and Rigging
- Working at Heights
- Heavy Equipment Operation

2. CORPORATE TRAINING AND CONSULTING SERVICES: Collaborate on corporate training initiatives and consulting services aimed at strengthening and adding value to Nevada's mining industry. By leveraging their combined expertise and resources, GBC-NORCAT will provide tailored solutions to meet the evolving needs of mining companies in the region.

As an example of delivering comprehensive training and consulting services, GBC-NORCAT can provide in-depth current state analyses that focuses on:

- Training Management and Administration
- Training Materials and Content
- Training Deployment
- Evaluation of Trainers and Trainees
- Training Documentation and Records Management
- Training Monitoring and Measurement

GBC-NORCAT's combined experience in developing and implementing training programs will not only meet but exceed local standards and expectations, ensuring that the workforce is well-prepared, compliant, and capable of achieving project success.

3. FUTURE INDUSTRY TRAINING REQUIREMENTS: In collaboration with industry stakeholders and local communities, identify and define future training requirements specific to the mining industry in northern Nevada. By staying ahead of industry trends and emerging technologies, GBC-NORCAT will aim to ensure that training programs remain relevant and effective.

As an example of meeting future industry trends, GBC-NORCAT have shared the possibility of recreating industry operator control rooms in 3D design and programming them to function according to real-life parameters. These simulated control rooms can be presented to the learner via touch screen devices or large format touch screen TVs and can be used to train operators prior to operating the actual equipment. Another example is to develop virtual reality (VR) modules where a worker must perform various maintenance tasks in a virtual process plant to practice their skills.

The GBC-NORCAT Mine Skills Training office will be housed at GBC-Elko in the Carl A. Diekhans Industrial Technology Center (DCIT). The space will include a welcome area with receptionist, several large classroom/instruction areas, office space, and a computer testing area for students to achieve

industry certifications.

In addition, please consider the following:

Management Oversight / Business Direction and Support: GBC-NORCAT will hire a full-time general manager/trainer and a full-time trainer. The general manager will report directly to the NORCAT Chief Operating Officer with regard to workforce initiatives, while the trainer will report to the general manager. Both staff will work on customized recruitment, assessment and training activities for job seekers and corporate entities. The NORCAT COO has opened three other locations offering similar services over the course of the past 10 years and every training center is self-sustaining and profitable today.

Sales Support: As the GBC-NORCAT general manager recruits potential clients, GBC-NORCAT will help educate new and existing clients, as needed, about the services GBC-NORCAT can offer to help clients succeed in their short- and long-term training objectives. Relevant GBC-NORCAT staff will be included in these client-facing meetings.

Advisory Services: NORCAT's Chief Advisory Officer will work with the GBC-NORCAT general manager when offering advisory services to industry in Nevada. The CAO will aid in client-facing meetings and the CAO's team will work on final deliverables.

Learning Technologies: GBC-NORCAT will provide appropriate and available off-the-shelf learning technologies that align to any training being delivered through the MST. NORCAT will train MST staff how to use the learning technologies.

Marketing Support: GBC Communications and the NORCAT marketing team will collaborate in the design and development of relevant digital and media-based marketing materials. NORCAT also will manage the MST social media channels and keep content up-to-date and relevant for stakeholders. GBC-NORCAT will promote the MST at trade shows, conferences, and industry events, helping to build the GBC-NORCAT MST brand and generate sales leads.

Additional Training Support: If specific subject matter experts are required due to project deliverable outcomes, GBC and/or NORCAT will leverage internal subject matter experts to assist in project delivery in an effort to provide a wide-array of offerings to clients that may be beyond the skill set of the direct MST staff.

Stakeholder Engagement: GBC-NORCAT will ensure that MST staff have sufficient support when engaging with clients, government agencies, industry associations, and other external stakeholders.

General Support: NORCAT has five locations and approximately 100 staff members who have delivered industry-relevant over the past 30 years. GBC has four campuses and an accompanying cadre of academic experts who also deliver relevant, industry-centric content. The GBC-NORCAT team will leverage their combined strengths to help the MST team produce client deliverables that will not only help develop Nevada's workforce, but create a successful corporate-education partnership and model that others can follow.

Will this program include funding for staff?

Yes

Will this program include funding for existing staff?

No

Recruitment

GBC-NORCAT MST has a two-fold purpose with regard to workforce recruitment: (1) Connect job seekers with customized education and training that will lead to high-skill, high-wage and in-demand jobs; and, (2) Connect employers with customized, sustainable tools and solutions that will help them recruit new talent

and upskill existing employees.

GBC-NORCAT will focus on operation-specific learning pathways tailored to the local context through pre- and post-employment training. This emphasis on immediate job readiness will bridge the gap between project needs and local talent availability, and help industry realize production targets in the most efficient, compliant and safe manner possible.

As an example, GBC-NORCAT MST is working with a new-to-the-region mine and process operator that is in Phase 1 construction; Phase II operations are slated to launch in 2026. Some potential employees will graduate through GBC's existing training programs, including electrical systems technology, welding technology, and industrial systems technology, while other workers will be hired first by the company and its affiliates and then train in programs customized by GBC-NORCAT that will allow for immediate job readiness. In this way, GBC-NORCAT will blend existing credentialing opportunities with industry-specific education and training that will help this and other companies better reach production goals.

Outcomes

The GBC-NORCAT MST will begin launch in August 2024 by establishing a presence on the GBC-Elko campus of Great Basin College. GBC-NORCAT will hire a manager/trainer and trainer by mid-fall 2024 and begin training students and employees by late fall 2024.

GBC-NORCAT MST expects the following initial outcomes:

- Train 90 students/employees in entry-level miner curriculum, by June 30, 2025 (Begin December 2024: 15/month x 6 months).
- Develop specialized content and training material for three (3) Nevada companies that conform to best case training practices used in industry today to establish best case learning and evaluation protocols, by June 30, 2025.
- Develop and track financial goals: GBC-NORCAT MST's target is to be wholly self-supporting by June 30, 2026.
- Ensure all training programs include safety content and safe operating practices such as applicable legislative regulations/industry standards, health and safety risks/hazards, safety precautions, and required personal protective equipment.
- Establish a steady and reliable recruiting and training pipeline to help Nevada industry meet its production and safety goals.

Sustainability Plan

There is no anticipation the GBC-NORCAT MST will end; it will continue as long as student/employee and industry demand exist. The equipment is a one-time purchase, and will be used for many years after the end of the grant period. The training that students/employees receive through the program will serve them and their employers for many years in the workplace. If needed, GBC-NORCAT will request additional grant funding to extend position salaries into Year 2 (ending June 30, 2026). At that time, GBC-NORCAT's goal is to be self-supporting.

To further ensure the sustainability of the GBC-NORCAT MST partnership:

- GBC-NORCAT will continue to collaborate with regional business and industry to provide educational, training and employment opportunities.
- GBC-NORCAT will work with advisory board members, job agencies, and other local and regional employers to increase internship and externship opportunities for students.
- GBC-NORCAT will ensure that instruction, equipment and supplies reflect current workplace procedures and technology.
- GBC-NORCAT will seek out professional development opportunities to ensure that MST staff are current with industry practices and technologies.

Is the program offered consistent with the Unified State Plan (WIOA)?

No

Supporting Documents

GBC-NORCAT Letter of Support.NVMA.pdf

GBC-NORCAT Letter of Support.Nevada Battery Coalition.pdf

Workforce Diversity Action Plan

WINN requires that projects consider how to ensure equitable access to high-skill and high-wage opportunities for all Nevadans.

This application must include an explanation of the actions that will be taken and strategies that will be implemented to promote workforce diversity and the goals and performance measures which will be used to measure the success of the plan in achieving those goals.

A strong plan will show an understanding of the interventions and supports diverse participants will need to prepare them for success and include methods for monitoring at the training and employment levels of the project.

GOED seeks to read plans including efforts to address the needs of Veterans, Gender inclusion and penetration in non-traditional employment, recipients of public assistance, justice-involved citizens, racial and ethnically diverse students, and persons with disabilities.

Diversity Action Plan

GBC is committed to workforce diversity with regard to training and employment. GBC helps to promote workforce diversity as follows:

GENDER (NON-TRADITIONAL EMPLOYMENT)

GBC is committed to helping students prepare for nontraditional fields, although nontraditional enrollment has historically been a challenge. Of the 13 programs that lead to nontraditional occupations for a particular gender, only two have shown nontraditional enrollment over 25%. Otherwise, nontraditional concentrator rates have remained relatively low (12% of CTE concentrators were enrolled in program courses that lead to nontraditional fields).

To combat these low percentages, GBC: (1) Has expanded marketing efforts, which is showing good results. Of the programs that have increasing nontraditional enrollment (Electrical Systems Technology, Industrial Millwright and Nursing) all have included recent marketing materials that featured nontraditional students; (2) Continues to explore ways to recruit instructors that mirror nontraditional students; most recently, GBC has hired one female Electrical Systems Technology, one female Instrumentation Technology, and one male Medical Assistant/Phlebotomist/EKG Technician (MAPE) instructor; and, (3) Facilitates in-service training and professional development opportunities that help CTE instructors be most effective at helping students overcome cultural, language, gender and other barriers. GBC also is striving to ensure at least some advisory board members reflect the nontraditional populations.

RACE/ETHNICITY

GBC CTE is dedicated to helping special populations prepare for high-skill, high-wage, and in-demand occupations. According to GBC's latest statistics, Native American/Alaskan Native and Hispanic/Latino are trending negatively with regard to earning a credential of value, while Asian students saw the largest gaps in retention and placement. GBC recognizes that Native American/Alaskan Native and Hispanic/Latino students may be lagging behind in certificate/degree completion and job placement in part due to cultural

or language barriers. Reliable, adequate and affordable internet may be another barrier; 60% of GBC CTE programs are online, while others are hybrid, also requiring internet access.

A further barrier is that students are challenged by general education requirements and program prerequisites. For instance, the math requirement for Business programs has delayed students' degree progression; the English requirements for AAS in the Diesel, Electrical, Millwright and Welding technology programs have also been a particular barrier for Hispanic/Latino students.

In order to address these challenges, GBC: (1) Has placed tutors in the CTE classrooms to provide on-demand help to students; (2) Is extending CTE staff recruitment efforts to channels within underrepresented communities.; (3) Is working to resurrect the Native American Student Association (NASA) on campus as an additional Native American resource; (4) Has invited Native American/Alaskan Native and Hispanic/Latino industry partners and business owners to serve as advisory board members; (5) Is incorporating mandatory tutoring into general education courses that have historically low pass rates; (6) Is raising awareness regarding available tutoring services; and, (7) Is collecting more data on student access to reliable internet and technology, including surveys, disaggregated by race and income, to help establish important context around what supports students need.

Workforce Diversity Commitment Statement

Great Basin College, a member of the Nevada System of Higher Education, is an Affirmative Action/Equal Employment Opportunity educational institution. It is guided by the principle that equal opportunity means more than equal employment opportunity, and that access to facilities and services shall be available to all people regardless of their race, age, religion, color, gender, including pregnancy related conditions, sexual orientation, disability, whether actual or perceived by others and including service related disabilities, national origin, military status or military obligation, gender, identity or expression or genetic information. This also includes a person's clothing or traits historically associated with national origin, race, color or religion, including, but not limited to, hair texture, hairstyle or head wear. This principle is applicable to every member of the GBC/NSHE community, both students and employed personnel at every level, and to all facilities and services.

Statement to Comply with Federal & State Law

Great Basin College complies with all federal, state and local laws and regulations that are applicable to its operation as an institution of higher learning and a member of the Nevada System of Higher Education.

Request for Funding

Has any part of this program received prior capacity funding?

No

Total Project Cost

\$1,322,230.00

WINN Funding Request

\$832,230.00

WINN is primarily a reimbursement-based grant. Can your institution cover the costs included in your budget without advanced funding?

Yes

Reimbursement invoices must be submitted quarterly, but may be submitted as often as monthly.

What are your invoicing plans?

Monthly

Cost Estimates

GBC-NORCAT WINN-Application-Budget-Template-

APPLICATION FOR WINN FUNDS - BUDGET BREAKDOWN

APPLICANT NAME: Board of Regents, NSHE, obo Great Basin College

PROJECT NAME: GBC-NORCAT Mine Services Training

PROJECT PERIOD: August 2024 - June 2025

PRIORITY PROGRAM COSTS

Enter the total cost for each line in the far right column

Total WINN Request

Candidate Assessment Fees	\$0.00
Instructional and/or Curriculum Development Services	\$233,000.00
Direct Program Personnel (e.g. Navigator, Liaison, Coordinator)	\$327,430.00
Equipment or Technology for Training	\$205,800.00

Priority Costs Subtotal: \$766,230.00

ALLOWABLE PROGRAM COSTS

Enter the total cost for each line in the far right column

Total WINN Request

Training Fees	\$0.00
Analysis of On-Site Training	\$0.00
Administrative or General Support Personnel (May not exceed 10% of total funding)	\$0.00
Instructional Facility Rental Costs	\$0.00
Program Promotion Costs	\$30,000.00
Other Necessary Costs	\$36,000.00

Non-Priority Costs Subtotal: \$66,000.00

TOTAL WINN REQUEST: \$832,230.00

Please contact the GOED Director of Workforce Development at 702-486-0609 with any questions regarding the budget breakdown.

TOTAL PROJECT FUNDING SOURCES

APPLICANT NAME: Board of Regents, NSHE, obo Great Basin College

PROJECT NAME: NORCAT Mine Skills Training (MST)

<u>Budget Category</u>	<u>Source of Funds</u>				<u>Total</u>
	<u>WINN Funds</u>	<u>Great Basin College</u>	<u>NORCAT</u>		
Priority Program Costs	\$ 766,230.00	\$ 250,000.00	\$ 200,000.00	\$	1,216,230.00
Allowable Program Costs	\$ 66,000.00	\$ 15,000.00	\$ 25,000.00	\$	106,000.00
Total Budget:	\$832,230.00	\$265,000.00	\$225,000.00		\$1,322,230.00

Additional Information on Total Project Cost, if any:

GBC contribution includes curriculum development of existing programs; instructors; office/training spaces; use of GBC vehicle; printing/distribution of promotional materials. NORCAT contribution includes curriculum development of existing training; consultants; office personnel; marketing/promotion.

WINN Budget Narrative Instructions

In a separate Word document, develop a Budget Narrative that will provide the justification and information necessary to determine how the budget was calculated and the relationship between budgeted items and the grant funded program's goals. The budget narrative must explain how each cost is necessary for the program, and match those items listed in the Program Narrative.

There should be section for each line of the WINN Budget you intend to submit and that section should include the total cost and how that cost was calculated and what expenses fall within that line item. For example, the Candidate Assessment Fee section may indicate a total ask of \$1000 with justification such as deploying a WorkKeys assessment prior to program entry at a cost of \$50 for 20 participants.

The Instructional Services section should indicate hiring intention and corresponding costs (salary/fringe for hire, for how many months or consultant monthly fee, etc.) If equipment is to be purchased, its proposed use and relationship to the grant funded program should be described. All equipment purchased must be necessary to the program and used by grant funded personnel. Both the Equipment section and the Other Necessary Cost section must itemize each cost contained within the total line.

2024.xlsx

Budget Narrative

GBC-NORCAT.Budget Narrative.docx

WINN Budget Narrative
GBC-NORCAT Mine Skills Training
FY24-25

Priority Program Costs

Instructional and/or Curriculum Development Services - \$233,000

Curriculum development costs as follows:

Entry Level Miner Certificate Program

- Mining Fundamentals - \$24,000
- Workplace Hazards/Materials Information System (WHMIS) - \$8,000
- Confined Space Awareness - \$12,000
- Basic Hoisting and Rigging - \$35,000
- Working at Heights - \$18,000
- Operate Elevating Work Platform - \$24,000
- Operate Forklift - \$24,000

Training of New Miners

- Training of New Miners (Part 48) - \$48,000
- Training of New Miners (Part 46) - \$40,000

Direct Program Personnel - \$327,430

- 1- GBC-NORCAT MST Manager/Trainer Salary - 100% FTE: \$125,000 annual salary + \$44,000 (35.2% negotiated fringe rate)
- 1- GBC-NORCAT MST Trainer Salary – 100% FTE: \$90,000 annual salary + \$31,680 (35.2% negotiated fringe rate)
- 1- GBC-NORCAT MST Administrative Assistant – 50% FTE: \$35,000 part-time salary + \$1,750 (5% negotiated fringe rate)

Equipment or Technology for Training - \$205,800

- Basic Hoisting and Rigging/Learning Technology Hardware - \$31,500 (includes 12 Virtual Reality headsets, 2 clean box, 2 65" TVs, 2 peripherals, 2 routers)
- Basic Hoisting and Rigging/Equipment - \$18,000 (includes slings, bridles, shackles, wear pads, misc supplies)
- Working at Heights Equipment - \$18,000 (includes harnesses, lanyards, lifelines, rope grabs, carabiners, anchors, SRL, leg stirrups, hooks, step ladder)
- Training of New Miners/Learning Technology Hardware - \$36,000 (includes 2 FiAR)
- Training of New Miners/Equipment - \$38,300 (includes respirator samples, scaling bar samples, 2 LOTO simulators, extend services and ground control samples)
- Operate Elevating Work Platform/Equipment - \$15,000 (scissor lift)
- Operate Forklift/Equipment - \$15,000 (forklift)
- Classroom Furniture - \$34,000 (includes desks, chairs, teaching accessories for approximately 30 students)

Allowable Program Costs

Program Promotion Costs - \$30,000

Promotional budget (approximately \$2,500/month x 12 months; includes website, promotional materials, social media management, etc.)

Other Necessary Costs - \$36,000

Travel budget (approximate \$3,000/month x 12 months; includes mileage, lodging, per diem)

TOTAL: \$832,230

SAWTOOTH MINING, LLC

June 29, 2024

Elaine Silverstone, Director of Workforce Development
Governor's Office of Economic Development
1 State of Nevada Way, 4th Floor
Las Vegas, NV 89119

Re: GBC-NORCAT Mine Skills Training – Workforce Innovations for a New Nevada (WINN) Application

Dear Ms. Silverstone:

Thank you for this opportunity for Sawtooth Mining, LLC to express support for the joint venture between Great Basin College (GBC) and NORCAT. Combining GBC's skilled labor curriculum with NORCAT's mining health and safety training will provide comprehensive education for Northern Nevada's essential mining workforce.

Sawtooth Mining, LLC is a member of NACCO Natural Resources, a family of companies in the natural resources industry with more than 110 years of mining experience. NACCO Natural Resources has launched a portfolio of successful related businesses which, together, responsibly manage entrusted resources to deliver aggregates, minerals, reliable fuels, and environmental solutions to customers and partners.

Sawtooth Mining, LLC is the exclusive permanent mining partner for the Thacker Pass Lithium Project in Northern Nevada. Thacker Pass is the largest known lithium resource in North America. It is a sedimentary-clay deposit that will utilize similar mining techniques to many coal deposits. It will be mined as a shallow open pit, average depth of 300 feet, and will be actively reclaimed throughout the life of the project.

In order to operate in a safe and economical manner, Sawtooth Mining, LLC will require a well-trained workforce that can help us meet our partner goals. That's why we are pleased to express support for the joint venture between Great Basin College (GBC) and NORCAT. This initiative promises to blend GBC's Career and Technical Education course offerings with NORCAT's cutting-edge mining health and safety training, fostering a comprehensive educational framework tailored for the mining industry in Northern Nevada.

In order to carry out the mining associated with the Thacker Pass Lithium Project and maintain needed equipment, Sawtooth Mining, LLC anticipates hiring the following staff:

- 4 to 6 electricians over the next five years at \$35 to \$44 per hour;
- 6 to 8 diesel mechanics over the next three years at \$35 to \$44 per hour;
- 4 to 6 welders over the next five years at \$35 to \$44 per hour; and,
- 25 to 30 heavy equipment operators over the next five years at \$32 to \$40 per hour.

We feel confident that GBC-NORCAT can help us, as needed, to train a qualified and safe workforce, which will help ensure the operational success of Sawtooth Mining.

We look forward to the successful realization of this joint venture and the positive impacts it will have on our industry and community.

Sincerely,



Guy Guidinger
President, Sawtooth Mining, LLC

6/19/2024

Elaine Silverstone, Director of Workforce Development
Governor's Office of Economic Development
1 State of Nevada Way, 4th Floor
Las Vegas, NV 89119

Re: GBC-NORCAT Mine Skills Training – Workforce Innovations for a New Nevada (WINN) Application

Dear Ms. Silverstone:

Thank you for this opportunity for Lithium Americas Corp (LAC) to express support for the joint venture between Great Basin College (GBC) and NORCAT. Combining GBC's skilled labor curriculum with NORCAT's mining health and safety training will provide well-rounded education for Northern Nevada's essential mining workforce.

Lithium Americas Corp is developing the Thacker Pass Project in Northern Nevada. Thacker Pass will be the largest source of lithium carbonate produced in North America, initially furnishing enough battery-grade lithium for as many as 750,000 electric vehicles per year. The project will dramatically improve our country's goals to build a domestic battery supply-chain and secure our country's energy future.

The Thacker Pass Project is permitted, and construction has begun. Over the next three years, roughly 2,000 skilled workers will be utilized to complete phase 1 construction. Once in production, Thacker Pass will employ more than 350 trained employees to operate the mine and processing plants.

Lithium Americas Corp needs the GBC-NORCAT partnership to help meet our workforce development needs. In addition to GBC's general skills education, LAC has committed to using the college to train plant operators and plant maintenance personnel. Upon completion of their training, these workers can expect to earn competitive wages consistent with diversified mining, chemical industry and market standards within the region. Adding NORCAT health and safety training to these programs will help ensure our future workforce is fully prepared for fulfilling jobs at Thacker Pass. Moreover, they will come knowing that safety is the most important aspect of their jobs.

We look forward to working with GBC-NORCAT in this important effort. If you have any questions or would like any additional information, please feel free to contact me via email at sheldon.hurst@lithiumamericas.com, or by phone at (229) 251-7419.

Sincerely,



Sheldon Hurst
Plant Manager, Thacker Pass Project



NEVADA GOLD MINES LLC
1655 Mountain City Hwy
Elko, Nevada 89801

www.nevadagoldmines.com

June 27, 2024

Elaine Silverstone, Director of Workforce Development
Governor's Office of Economic Development
1 State of Nevada Way, 4th Floor
Las Vegas, NV 89119

Re: GBC-NORCAT Mine Skills Training – Workforce Innovations for a New Nevada (WINN)
Application

Dear Ms. Silverstone:

Thank you for allowing Nevada Gold Mines (NGM) to express support for the joint venture between Great Basin College (GBC) and NORCAT. The collaboration between GBC, a leading provider of Career and Technical Education (CTE), and NORCAT, a notable leader in mining industry training, holds great promise for developing and enhancing workforce capabilities in the region.

NORCAT's proven track record in international skilled labor training, cutting-edge research, and commitment to virtual reality training align with GBC's mission to offer comprehensive CTE for trades in Nevada. The proposed certificate courses provide a well-rounded and adaptable skill set for individuals entering the workforce, for upskilling current employees, and for meeting the unique contract training needs of the mining industry.

With 7,000 employees and one of the largest mining operators in Nevada, training and preparing our future workforce is of utmost importance to NGM, especially regarding safety. The mining industry and the State of Nevada would undoubtedly benefit significantly from being able to hire and retain a skilled local workforce.

GBC-NORCAT will offer a host of training to help prepare safety-focused mine workers, including accident and incident awareness, safe work practices, working at heights, rigging, hoisting and towing, lock-out and tag-out, driver orientation, pit induction and common core, underground induction and common core, mill operation, forklift training, confined space entry, chemical hazards, basics of supervision, and more.

Nevada Gold Mines anticipates hiring 750 to 1,000 new workers annually over the five years. Depending on the position, compensation will range from \$26.00 to \$42.00 per hour.

We look forward to the successful realization of this joint venture and its positive impact on our industry and community.

Sincerely,

Christine Whetten

Christine Whetten
Manager, Talent Acquisition and Talent Management
Nevada Gold Mines Operated by Barrick
775-934-2573

December 1, 2023

Dr. Sam Spearing, Executive Director
Workforce Development & Mining Center of Excellence
Great Basin College
1500 College Parkway
Elko, Nevada 89801

Dear Dr. Spearing:

On behalf of the Nevada Mining Association (NVMA), I am pleased to share that the NVMA supports the proposed joint venture between NORCAT and Great Basin College (GBC). The potential GBC partnership with NORCAT, a leader in skilled labor training and development and a member of the Nevada Mining Association, would expand the Career and Technical Education (CTE) course offerings at GBC's four campuses in rural Nevada. Such a partnership would create and expand training opportunities for the Nevada mining industry with a focus on promoting safe workplace practices.

As the industry continues to evolve, there is an ever-increasing demand for skilled labor, and a partnership like this creates a proactive approach to future workforce needs. A joint venture between GBC and NORCAT has the potential to bring in new talent, expertise, and resources to help alleviate labor shortages and enhance the efficiency and productivity of mining operations. With more mineral production operations expected to come online in the coming years, this joint venture can help address future workforce challenges and ensure sustainable growth in the mining industry.

In conclusion, NVMA fully supports the proposed joint venture between NORCAT and GBC. This collaboration can create and expand training opportunities to ensure safe workplace practices and provide the highest level of skilled labor to the Nevada mining industry. Expanding CTE offerings in rural Nevada will also benefit the local communities and provide alternative paths to higher education.

Kindest regards,



Dana R. Bennett, PhD
Interim President



November 17, 2023

Great Basin College, Elko
c/o Sam Spearing
Executive Director, Workforce Development & Mining Center of Excellence

RE: Letter of Support for mining training center

To Whom It May Concern:

The Nevada Battery Coalition is pleased to express support for the proposed joint venture between NORCAT and Great Basin College (GBC) in expanding skilled labor training and development initiatives in Nevada. The collaboration between NORCAT, a notable leader in mining industry training, and GBC, a prominent institution providing Career and Technical Education (CTE), holds great promise for the development and enhancement of workforce capabilities in the region.

NORCAT's proven track record in international skilled labor training, cutting-edge research facilities and commitment to virtual reality training, aligns with GBC's mission to offer comprehensive CTE for trades in Nevada. The proposed certificate courses provide a well-rounded and adaptable skill set for individuals entering the workforce, recognizing the unique needs of the mining industry. The suggested training offerings cover a spectrum of essential areas, including accident awareness, safe work practices, and specialized mining operations. The proposed expansion into Nevada represents a strategic move to meet the growing demands for skilled labor and training in the region. Both NORCAT and GBC share a common belief that this joint venture will not only benefit our organizations but also contribute significantly to the success and safety of mining operations in Nevada.

In conclusion, we are confident that the combined expertise of NORCAT and GBC will enhance the educational landscape and workforce preparedness in Nevada. This joint venture holds the potential to become a benchmark for effective collaboration between industry leaders and educational institutions by providing a cost-effective solution to address the training needs of the mining industry in Nevada. Thank you for considering our proposal. We look forward to the opportunity to discuss this venture further and explore the positive impact it can have on the mining industry and the broader community in Nevada.

Sincerely,

A handwritten signature in blue ink, reading "Caleb S. Cage".

Caleb S. Cage
Executive Director



SKILLS TRAINING FOR THE FUTURE

July 22, 2024

Elaine Silverstone, Director of Workforce Development
Governor's Office of Economic Development
1 State of Nevada Way, 4th Floor
Las Vegas, NV 89119

Subject: Letter of Support for the Joint Venture between NORCAT and Great Basin College

I am writing to express NORCAT's enthusiastic support for the collaboration between Great Basin College (GBC) and NORCAT. This partnership promises to yield significant benefits for new and existing workers in the Nevada mining industry.

GBC and NORCAT will jointly develop and deliver cutting-edge training programs. Delivering to new workers, structured entry-level miner programming, we aim to equip the next generation workforce with the essential skills they need. The growing critical minerals industry is in the need of workers. This partnership will create standardized entry level training for new miners so that they have the competence and the confidence to enter the mining industry and work safely and be productive. Safety is at the heart of all training and services the GBC – NORCAT MST partnership will offer. Because the most important thing to come out of a mine, is its workers.

Additionally, specialized content tailored for Nevada mining and mining supply companies will adhere to industry best practices, ensuring effective learning and evaluation protocols. Together, we will establish a recruiting and training pipeline for industry. This initiative will help Nevada's mining industry meet human capital targets while prioritizing safety.

NORCAT has a track record of working with post-secondary institutions in the development and delivery of world-class mine skills training programs. Our innovative learning technologies include virtual reality, augmented reality, and simulation tools which will empower this partnership to deliver leading-edge programming in the most modern and effective ways. NORCAT's learning technologies have twice been recognized and awarded as the world's best VR technology in the educational category by industry leaders at the yearly AIXR Awards ceremony.

As a trusted partner by international mining companies around the globe, NORCAT offers a wide variety of services to industry for every stage of a mine's life. From exploration, to feasibility stages, through construction, ramp-up, steady state operations and mine closure, NORCAT will bring to the Nevada mining industry a wealth of support services close to home.

We look forward to witnessing the positive outcomes of this collaboration. GBC and NORCAT share a commitment to excellence, innovation, and community engagement.

Sincerely,

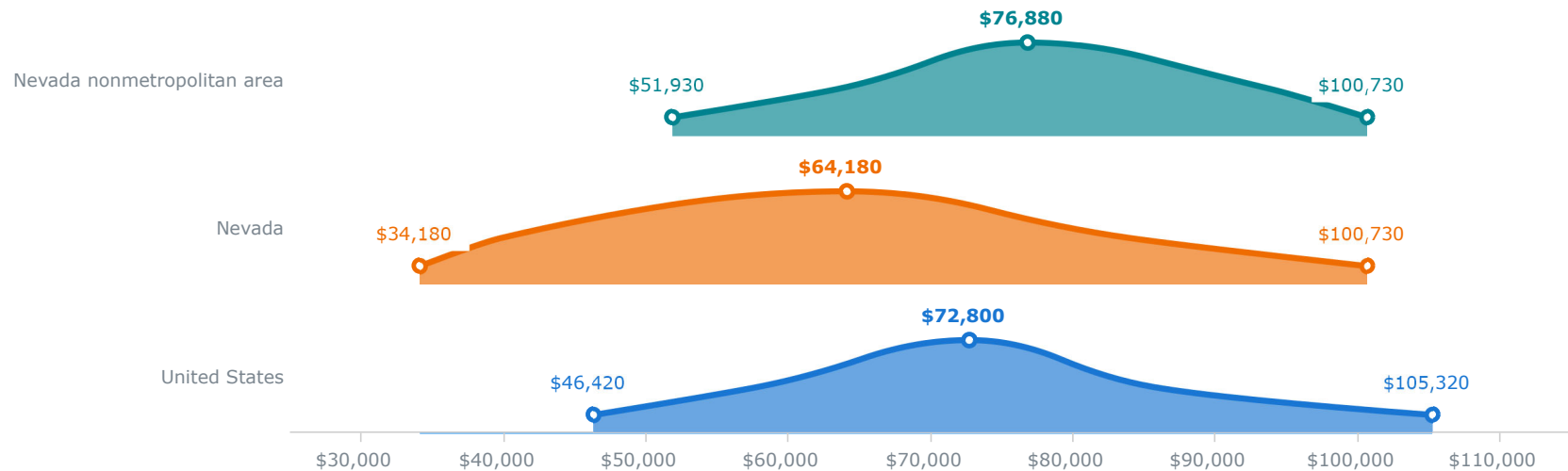
A handwritten signature in black ink, appearing to read 'Jason Bubba'.

Jason Bubba,
Chief Operating Officer - NORCAT

**O*NET OnLine**

Occupation keyword search

Local Wages

17-3023.00 - [Electrical and Electronic Engineering Technologists and Technicians](#)Wages for state: Wages near ZIP Code: Annual Wages [Hourly Wages](#)

In Nevada nonmetropolitan area:


- Workers on average earn **\$76,880**.
- 10% of workers earn **\$51,930 or less**.
- 10% of workers earn **\$100,730 or more**.

In Nevada:

- Workers on average earn **\$64,180**.
- 10% of workers earn **\$34,180 or less**.
- 10% of workers earn **\$100,730 or more**.

In the United States:

- Workers on average earn **\$72,800**.
- 10% of workers earn **\$46,420 or less**.
- 10% of workers earn **\$105,320 or more**.

Source: Bureau of Labor Statistics [2023 wage data](#) .

Full Details

Save Table:  [XLSX](#)  [CSV](#)

Location	Annual Low (10%)	Annual Q _L (25%)	Annual Median (50%)	Annual Q _U (75%)	Annual High (90%)
United States	\$46,420	\$57,990	\$72,800	\$85,680	\$105,320
Nevada	\$34,180	\$39,870	\$64,180	\$84,060	\$100,730
Nevada nonmetropolitan area	\$51,930	\$63,420	\$76,880	\$94,010	\$100,730
Boise City, ID	\$50,390	\$51,210	\$63,340	\$73,690	\$88,340
Las Vegas-Henderson-Paradise, NV	\$36,930	\$48,710	\$79,110	\$93,670	\$128,980
Reno, NV	\$34,180	\$34,350	\$34,350	\$62,120	\$77,450

**O*NET OnLine**

Occupation keyword search

Nevada Employment Trends

17-3023.00 - [Electrical and Electronic Engineering Technologists and Technicians](#)View trends for state:

In Nevada:

Employment data for **Electrical and Electronic Engineering Technicians**.

Employment (2020)	1,330 employees
Projected employment (2030)	1,550 employees
Projected growth (2020-2030)	17%
Projected annual job openings (2020-2030)	150

In the United States:

Employment data for **Electrical and Electronic Engineering Technologists and Technicians**.

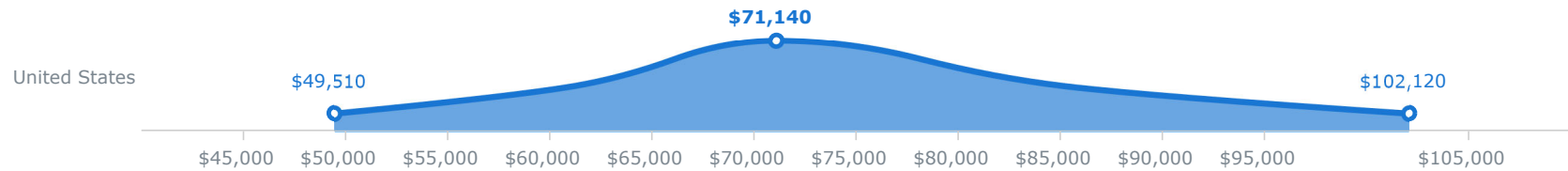
Employment (2022)	102,500 employees
Projected employment (2032)	103,300 employees
Projected growth (2022-2032)	■ ■ ■ ■ 1% Little or no change
Projected annual job openings (2022-2032)	9,900

Nevada source: Projections Central [2020-2030 long-term projections](#) [↗](#). United States source: Bureau of Labor Statistics [2022-2032 employment projections](#) [↗](#). "Projected growth" represents the estimated change in total employment over the projections period. "Projected annual job openings" represent openings due to growth and replacement.

**O*NET OnLine**

Occupation keyword search

Local Wages

47-2011.00 - [Boilermakers](#)Wages for state: Nevada Wages near ZIP Code: 89801 Annual Wages [Hourly Wages](#)

In Nevada nonmetropolitan area:

No data available.

In Nevada:

No data available.

In the United States:

- Workers on average earn **\$71,140**.
- 10% of workers earn **\$49,510 or less**.
- 10% of workers earn **\$102,120 or more**.

Source: Bureau of Labor Statistics [2023 wage data](#) [↗](#)

Full Details

Save Table: [XLSX](#) [CSV](#)

Location	Annual Low (10%)	Annual Q _L (25%)	Annual Median (50%)	Annual Q _U (75%)	Annual High (90%)
United States	\$49,510	\$61,220	\$71,140	\$85,270	\$102,120

**O*NET OnLine**

Occupation keyword search



electrician

Go

Nevada Employment Trends

47-2011.00 - [Boilermakers](#)

View trends for state:

Nevada

Go

In Nevada:

Employment (2020)	130 employees
Projected employment (2030)	150 employees
Projected growth (2020-2030)	15%
Projected annual job openings (2020-2030)	10

In the United States:

Employment (2022)	13,700 employees
Projected employment (2032)	13,100 employees
Projected growth (2022-2032)	<div><div></div><div></div><div></div><div></div></div> -4% Decline
Projected annual job openings (2022-2032)	1,100

Nevada source: Projections Central [2020-2030 long-term projections](#). United States source: Bureau of Labor Statistics [2022-2032 employment projections](#). "Projected growth" represents the estimated change in total employment over the projections period. "Projected annual job openings" represent openings due to growth and replacement.

**O*NET OnLine**

Occupation keyword search



electrician

Go

Local Wages

47-2031.00 - [Carpenters](#)

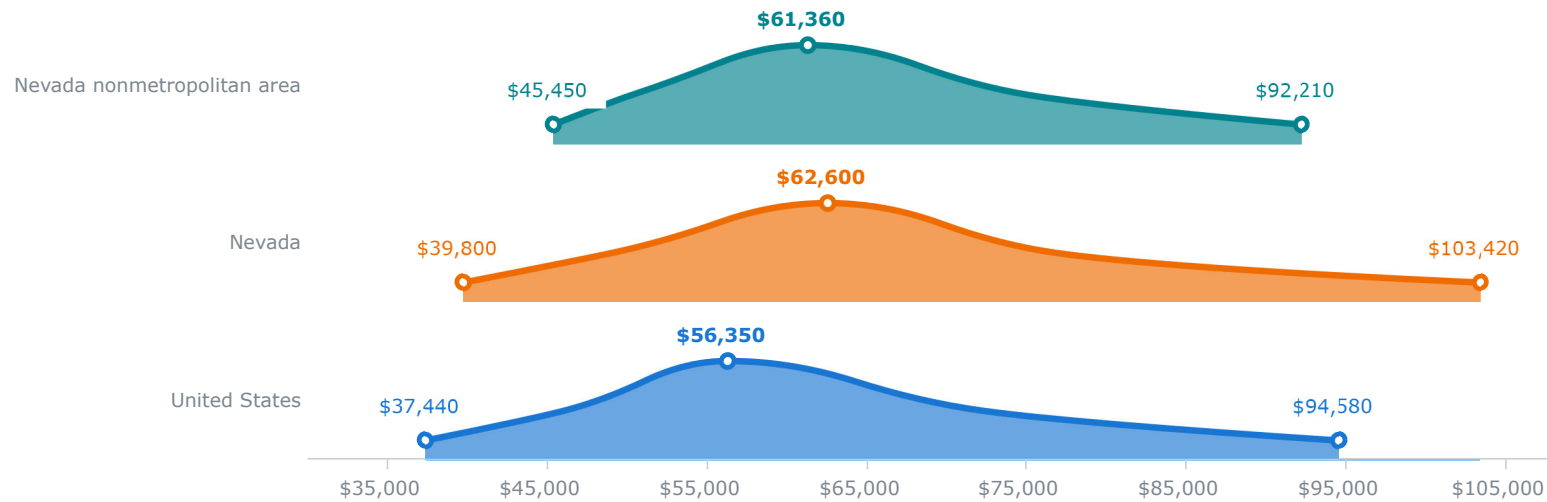
Wages for state: Nevada

Go

Wages near ZIP Code: 89801

Go

Annual Wages

[Hourly Wages](#)

In Nevada nonmetropolitan area:

- Workers on average earn **\$61,360**.
- 10% of workers earn **\$45,450 or less**.
- 10% of workers earn **\$92,210 or more**.

In Nevada:

- Workers on average earn **\$62,600**.
- 10% of workers earn **\$39,800 or less**.
- 10% of workers earn **\$103,420 or more**.

In the United States:

- Workers on average earn **\$56,350**.
- 10% of workers earn **\$37,440 or less**.
- 10% of workers earn **\$94,580 or more**.

Source: Bureau of Labor Statistics [2023 wage data](#) 

Full Details

Save Table:  [XLSX](#)  [CSV](#)

Location	Annual Low (10%)	Annual Q _L (25%)	Annual Median (50%)	Annual Q _U (75%)	Annual High (90%)
United States	\$37,440	\$46,130	\$56,350	\$72,290	\$94,580
Nevada	\$39,800	\$49,160	\$62,600	\$76,820	\$103,420
Nevada nonmetropolitan area	\$45,450	\$50,390	\$61,360	\$75,090	\$92,210
Boise City, ID	\$36,560	\$39,820	\$46,210	\$53,000	\$62,500
Carson City, NV	\$46,270	\$51,590	\$62,390	\$74,750	\$83,590
Las Vegas-Henderson-Paradise, NV	\$38,630	\$48,180	\$62,410	\$77,510	\$104,480
Reno, NV	\$43,360	\$51,290	\$63,780	\$74,570	\$88,460



O*NET OnLine

Occupation keyword search

Go

Nevada Employment Trends

47-2031.00 - [Carpenters](#)

View trends for state:

Nevada

Go

In Nevada:

Employment (2020)	16,710 employees
Projected employment (2030)	19,650 employees
Projected growth (2020-2030)	18%
Projected annual job openings (2020-2030)	1,960

In the United States:

Employment (2022)	956,300 employees
Projected employment (2032)	964,900 employees
Projected growth (2022-2032)	<div><div></div><div></div><div></div><div></div></div> 1% Little or no change
Projected annual job openings (2022-2032)	79,500

Nevada source: Projections Central [2020-2030 long-term projections](#). United States source: Bureau of Labor Statistics [2022-2032 employment projections](#). "Projected growth" represents the estimated change in total employment over the projections period. "Projected annual job openings" represent openings due to growth and replacement.

**O*NET OnLine**

Occupation keyword search



electrician

Go

Local Wages

47-2073.00 - [Operating Engineers and Other Construction Equipment Operators](#)

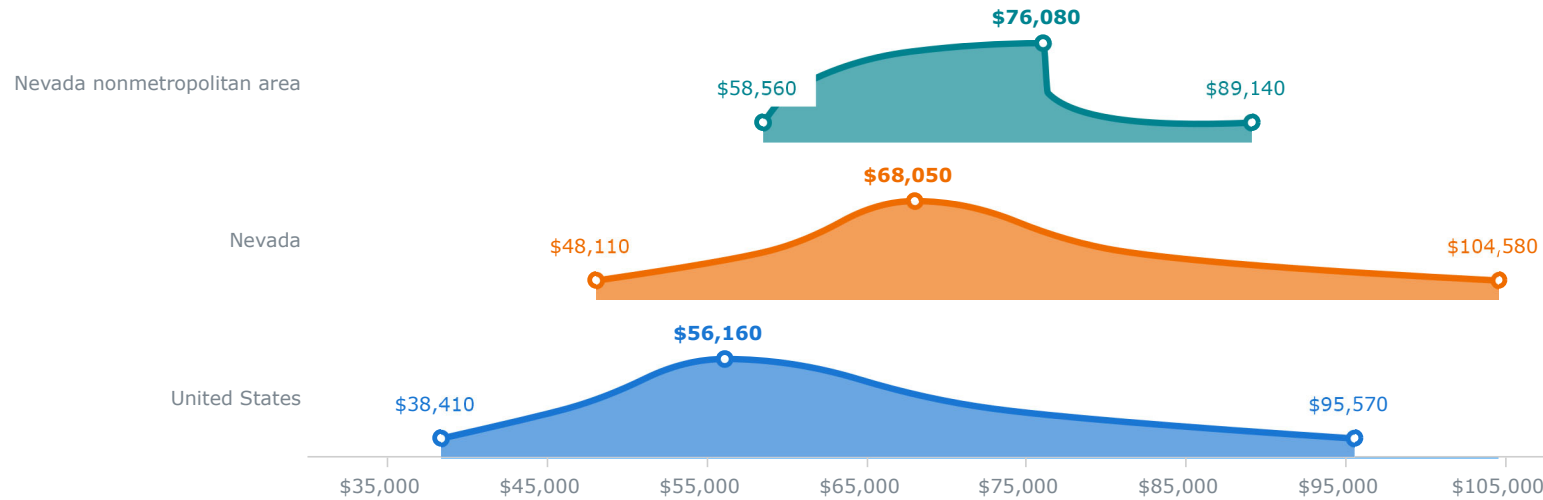
Wages for state: Nevada

Go

Wages near ZIP Code: 89801

Go

Annual Wages

[Hourly Wages](#)

In Nevada nonmetropolitan area:

- Workers on average earn **\$76,080**.
- 10% of workers earn **\$58,560 or less**.
- 10% of workers earn **\$89,140 or more**.

In Nevada:

- Workers on average earn **\$68,050**.
- 10% of workers earn **\$48,110 or less**.
- 10% of workers earn **\$104,580 or more**.

In the United States:

- Workers on average earn **\$56,160**.
- 10% of workers earn **\$38,410 or less**.
- 10% of workers earn **\$95,570 or more**.

Source: Bureau of Labor Statistics [2023 wage data](#) 

Full Details

Save Table:  [XLSX](#)  [CSV](#)

Location	Annual Low (10%)	Annual Q _L (25%)	Annual Median (50%)	Annual Q _U (75%)	Annual High (90%)
United States	\$38,410	\$46,270	\$56,160	\$72,970	\$95,570
Nevada	\$48,110	\$58,960	\$68,050	\$80,800	\$104,580
Nevada nonmetropolitan area	\$58,560	\$60,100	\$76,080	\$76,370	\$89,140
Boise City, ID	\$42,260	\$49,600	\$53,780	\$61,480	\$77,240
Carson City, NV	\$51,080	\$56,270	\$61,890	\$75,100	\$82,670
Las Vegas-Henderson-Paradise, NV	\$46,970	\$51,620	\$61,460	\$79,720	\$107,730
Reno, NV	\$48,150	\$60,980	\$68,350	\$87,940	\$113,970



O*NET OnLine

Occupation keyword search

Go

Nevada Employment Trends

47-2073.00 - [Operating Engineers and Other Construction Equipment Operators](#)

View trends for state:

Nevada

Go

In Nevada:

Employment (2020)	5,020 employees
Projected employment (2030)	6,060 employees
Projected growth (2020-2030)	21%
Projected annual job openings (2020-2030)	680

In the United States:

Employment (2022)	437,600 employees
Projected employment (2032)	449,200 employees
Projected growth (2022-2032)	<div><div></div><div></div><div></div><div></div></div> 3% Average
Projected annual job openings (2022-2032)	38,200

Nevada source: Projections Central [2020-2030 long-term projections](#). United States source: Bureau of Labor Statistics [2022-2032 employment projections](#). "Projected growth" represents the estimated change in total employment over the projections period. "Projected annual job openings" represent openings due to growth and replacement.

**O*NET OnLine**

Occupation keyword search



electrician

Go

Local Wages

47-2152.00 - [Plumbers, Pipefitters, and Steamfitters](#)

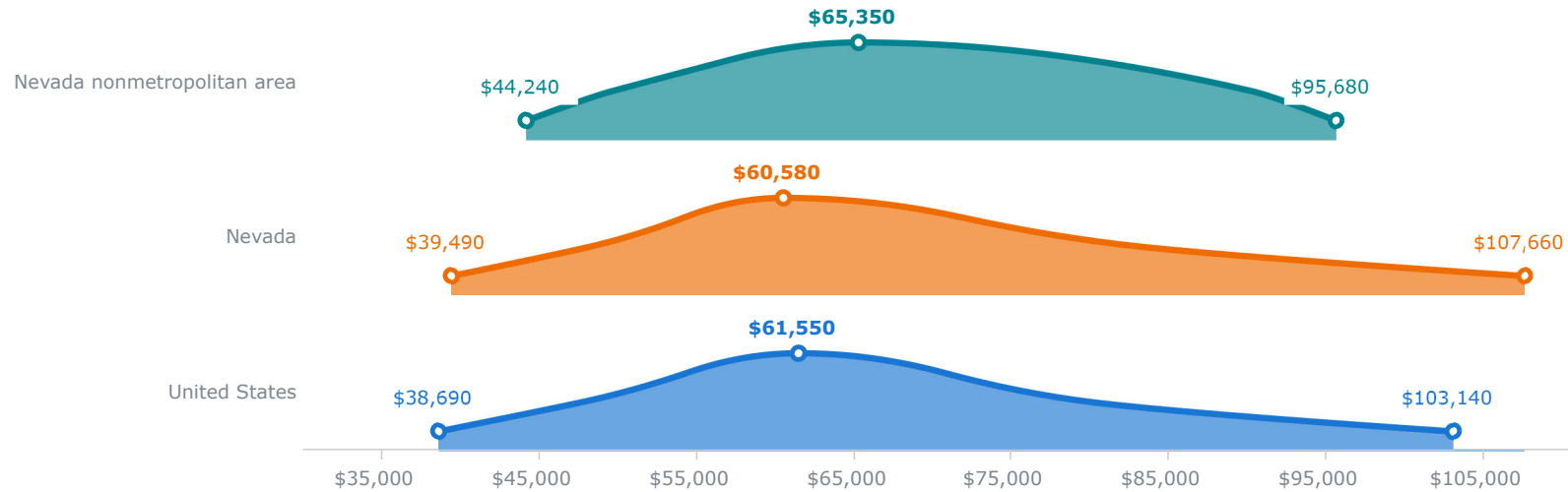
Wages for state: Nevada

Go

Wages near ZIP Code: 89801

Go

Annual Wages

[Hourly Wages](#)

In Nevada nonmetropolitan area:

- Workers on average earn **\$65,350**.
- 10% of workers earn **\$44,240 or less**.
- 10% of workers earn **\$95,680 or more**.

In Nevada:

- Workers on average earn **\$60,580**.
- 10% of workers earn **\$39,490 or less**.
- 10% of workers earn **\$107,660 or more**.

In the United States:

- Workers on average earn **\$61,550**.
- 10% of workers earn **\$38,690 or less**.
- 10% of workers earn **\$103,140 or more**.

Source: Bureau of Labor Statistics [2023 wage data](#) 

Full Details

Save Table:  [XLSX](#)  [CSV](#)

Location	Annual Low (10%)	Annual Q _L (25%)	Annual Median (50%)	Annual Q _U (75%)	Annual High (90%)
United States	\$38,690	\$47,810	\$61,550	\$80,190	\$103,140
Nevada	\$39,490	\$48,290	\$60,580	\$83,270	\$107,660
Nevada nonmetropolitan area	\$44,240	\$49,650	\$65,350	\$90,360	\$95,680
Boise City, ID	\$38,080	\$46,660	\$62,930	\$76,150	\$77,180
Carson City, NV	\$46,800	\$49,620	\$59,800	\$74,910	\$87,510
Las Vegas-Henderson-Paradise, NV	\$38,040	\$48,090	\$59,250	\$86,190	\$109,710
Reno, NV	\$47,420	\$50,720	\$61,680	\$80,730	\$101,590



O*NET OnLine

Occupation keyword search

Go

Nevada Employment Trends

47-2152.00 - [Plumbers, Pipefitters, and Steamfitters](#)

View trends for state:

Nevada

Go

In Nevada:

Employment (2020)	4,950 employees
Projected employment (2030)	6,020 employees
Projected growth (2020-2030)	22%
Projected annual job openings (2020-2030)	660

In the United States:

Employment (2022)	482,700 employees
Projected employment (2032)	493,600 employees
Projected growth (2022-2032)	<div><div></div><div></div><div></div><div></div></div> 2% Average
Projected annual job openings (2022-2032)	42,600

Nevada source: Projections Central [2020-2030 long-term projections](#). United States source: Bureau of Labor Statistics [2022-2032 employment projections](#). "Projected growth" represents the estimated change in total employment over the projections period. "Projected annual job openings" represent openings due to growth and replacement.

**O*NET OnLine**

Occupation keyword search

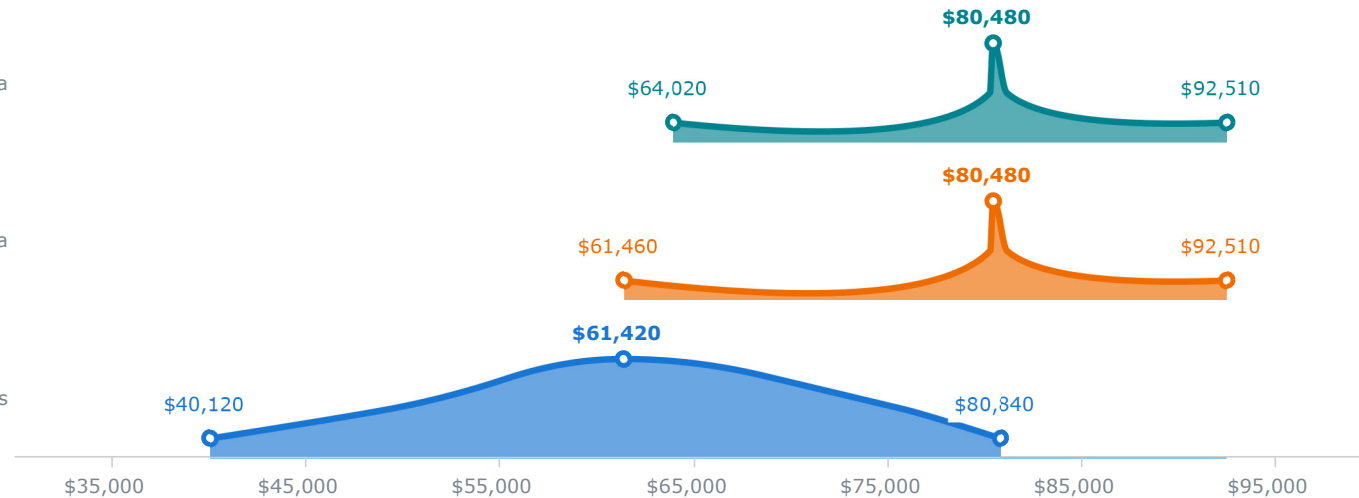
Local Wages

47-5041.00 - [Continuous Mining Machine Operators](#)Wages for state: Wages near ZIP Code: Annual Wages [Hourly Wages](#)

Nevada nonmetropolitan area

Nevada

United States



In Nevada nonmetropolitan area:

- Workers on average earn **\$80,480**.
- 10% of workers earn **\$64,020 or less**.
- 10% of workers earn **\$92,510 or more**.

In Nevada:

- Workers on average earn **\$80,480**.
- 10% of workers earn **\$61,460 or less**.
- 10% of workers earn **\$92,510 or more**.

In the United States:

- Workers on average earn **\$61,420**.
- 10% of workers earn **\$40,120 or less**.
- 10% of workers earn **\$80,840 or more**.

Source: Bureau of Labor Statistics [2023 wage data](#) [↗](#).

Full Details

Save Table: [XLSX](#) [CSV](#)

Location	Annual Low (10%)	Annual Q _L (25%)	Annual Median (50%)	Annual Q _U (75%)	Annual High (90%)
United States	\$40,120	\$49,450	\$61,420	\$75,730	\$80,840
Nevada	\$61,460	\$80,320	\$80,480	\$81,180	\$92,510
Nevada nonmetropolitan area	\$64,020	\$80,320	\$80,480	\$81,180	\$92,510

**O*NET OnLine**

Occupation keyword search



electrician

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Nevada Employment Trends

47-5041.00 - [Continuous Mining Machine Operators](#)

View trends for state:

Nevada



Go

In Nevada:

Employment 2,780 employees
(2020)**Projected employment** 3,330 employees
(2030)**Projected growth** 20%
(2020-2030)**Projected annual
job openings** 410
(2020-2030)

In the United States:

Employment 13,900 employees
(2022)**Projected employment** 13,500 employees
(2032)**Projected growth**  -3%
(2022-2032) Decline**Projected annual
job openings** 1,400
(2022-2032)

Nevada source: Projections Central [2020-2030 long-term projections](#) . United States source: Bureau of Labor Statistics [2022-2032 employment projections](#) . "Projected growth" represents the estimated change in total employment over the projections period. "Projected annual job openings" represent openings due to growth and replacement.

**O*NET OnLine**

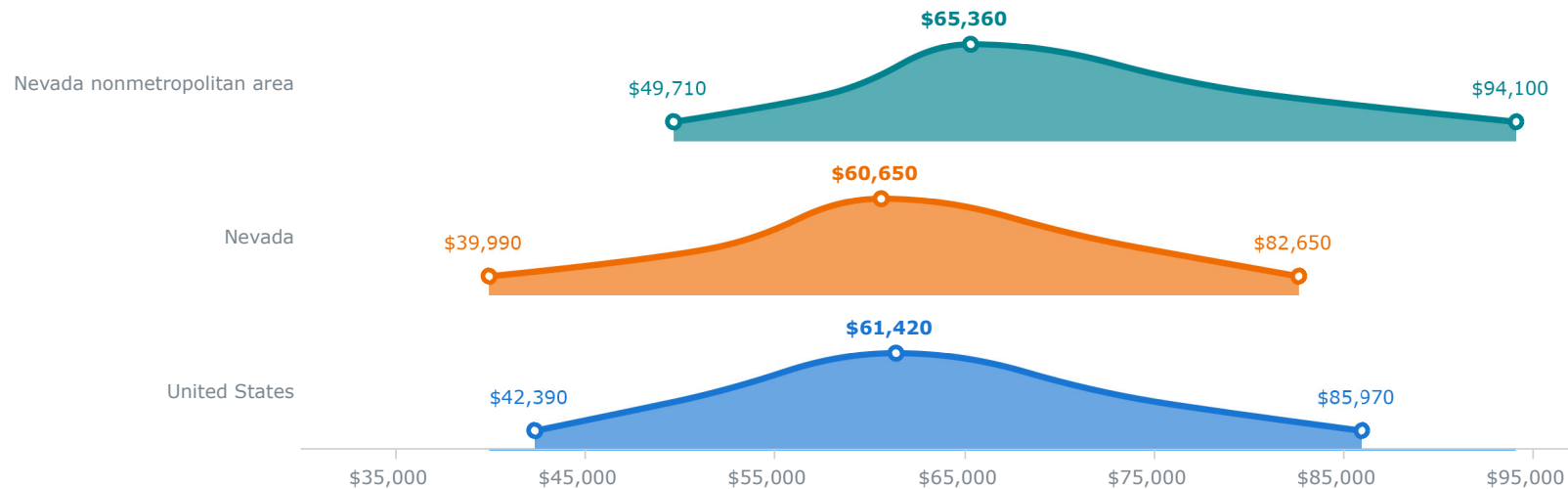
Occupation keyword search



electrician

Go

Local Wages

49-9041.00 - Industrial Machinery Mechanics **Bright Outlook**Wages for state: Nevada Wages near ZIP Code: 89801 ☒ Annual Wages ☐ Hourly Wages

In Nevada nonmetropolitan area:

- Workers on average earn **\$65,360**.
- 10% of workers earn **\$49,710 or less**.
- 10% of workers earn **\$94,100 or more**.

In Nevada:

- Workers on average earn **\$60,650**.
- 10% of workers earn **\$39,990 or less**.
- 10% of workers earn **\$82,650 or more**.

In the United States:

- Workers on average earn **\$61,420**.
- 10% of workers earn **\$42,390 or less**.
- 10% of workers earn **\$85,970 or more**.

Source: Bureau of Labor Statistics [2023 wage data](#) 

Full Details

Save Table:  [XLSX](#)  [CSV](#)

Location	Annual Low (10%)	Annual Q _L (25%)	Annual Median (50%)	Annual Q _U (75%)	Annual High (90%)
United States	\$42,390	\$49,780	\$61,420	\$75,030	\$85,970
Nevada	\$39,990	\$52,000	\$60,650	\$74,080	\$82,650
Nevada nonmetropolitan area	\$49,710	\$58,120	\$65,360	\$80,240	\$94,100
Boise City, ID	\$44,300	\$50,230	\$61,010	\$66,520	\$77,690
Carson City, NV	\$44,420	\$47,700	\$61,920	\$66,710	\$82,860
Las Vegas-Henderson-Paradise, NV	\$37,330	\$48,990	\$59,960	\$72,090	\$80,980
Reno, NV	\$44,310	\$53,930	\$61,270	\$73,520	\$85,700



O*NET OnLine

Occupation keyword search

Go

Nevada Employment Trends

49-9041.00 - [Industrial Machinery Mechanics](#) **Bright Outlook**

View trends for state:

Nevada

Go

In Nevada:

Employment (2020)	2,370 employees
Projected employment (2030)	3,140 employees
Projected growth (2020-2030)	33%
Projected annual job openings (2020-2030)	310

In the United States:

Employment (2022)	402,200 employees
Projected employment (2032)	462,100 employees
Projected growth (2022-2032)	<div><div></div><div></div><div></div><div></div></div> 15% Much faster than average
Projected annual job openings (2022-2032)	39,200

Nevada source: Projections Central [2020-2030 long-term projections](#) . United States source: Bureau of Labor Statistics [2022-2032 employment projections](#) . "Projected growth" represents the estimated change in total employment over the projections period. "Projected annual job openings" represent openings due to growth and replacement.

**O*NET OnLine**

Occupation keyword search



electrician

Go

Local Wages

49-9044.00 - [Millwrights](#)

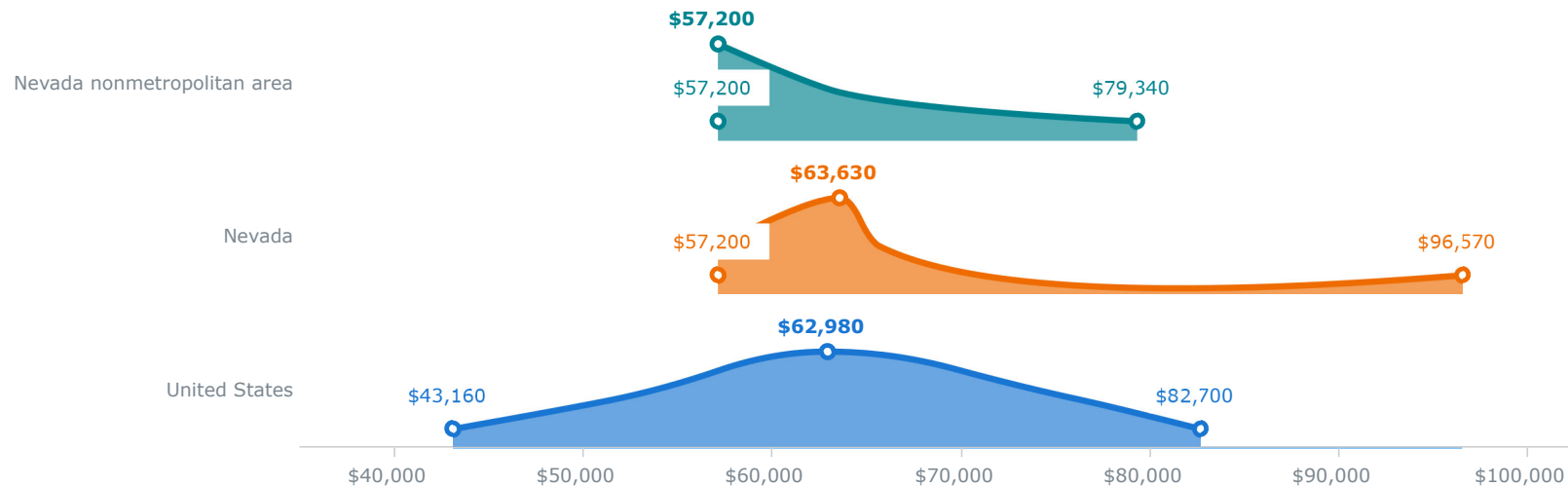
Wages for state: Nevada

Go

Wages near ZIP Code: 89801

Go

Annual Wages

[Hourly Wages](#)

In Nevada nonmetropolitan area:

- Workers on average earn **\$57,200**.
- 10% of workers earn **\$57,200 or less**.
- 10% of workers earn **\$79,340 or more**.

In Nevada:

- Workers on average earn **\$63,630**.
- 10% of workers earn **\$57,200 or less**.
- 10% of workers earn **\$96,570 or more**.

In the United States:

- Workers on average earn **\$62,980**.
- 10% of workers earn **\$43,160 or less**.
- 10% of workers earn **\$82,700 or more**.

Source: Bureau of Labor Statistics [2023 wage data](#) [↗](#).

Full Details

Save Table: [XLSX](#) [CSV](#)

Location	Annual Low (10%)	Annual Q _L (25%)	Annual Median (50%)	Annual Q _U (75%)	Annual High (90%)
United States	\$43,160	\$51,530	\$62,980	\$76,380	\$82,700
Nevada	\$57,200	\$57,200	\$63,630	\$65,740	\$96,570
Nevada nonmetropolitan area	\$57,200	\$57,200	\$57,200	\$63,630	\$79,340
Boise City, ID	\$48,250	\$52,680	\$53,640	\$64,530	\$76,330
Las Vegas-Henderson-Paradise, NV	\$57,440	\$57,440	\$63,900	\$63,920	\$96,930



O*NET OnLine

Occupation keyword search

Go

Nevada Employment Trends

49-9044.00 - [Millwrights](#)

View trends for state:

Nevada

Go

In Nevada:

No data available.

In the United States:

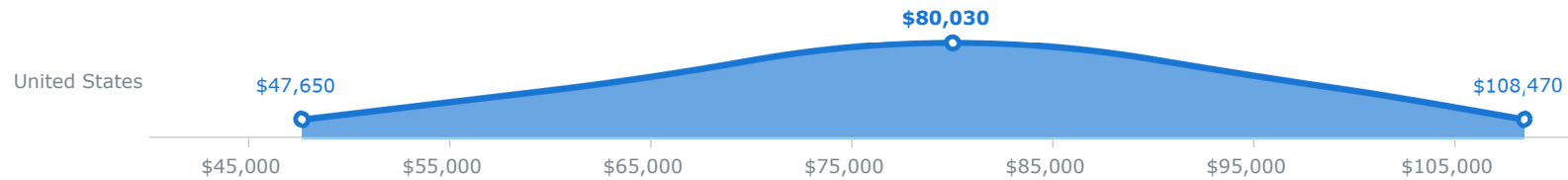
Employment (2022)	42,100 employees
Projected employment (2032)	43,400 employees
Projected growth (2022-2032)	<div><div></div><div></div><div></div><div></div></div> 3% Average
Projected annual job openings (2022-2032)	3,500

United States source: Bureau of Labor Statistics [2022-2032 employment projections](#) [↗](#). "Projected growth" represents the estimated change in total employment over the projections period. "Projected annual job openings" represent openings due to growth and replacement.



Local Wages

51-8091.00 - [Chemical Plant and System Operators](#)

Wages for state: Wages near ZIP Code: Annual Wages [Hourly Wages](#)

In Nevada nonmetropolitan area:

No data available.

In Nevada:

No data available.

In the United States:

- Workers on average earn **\$80,030**.
- 10% of workers earn **\$47,650 or less**.
- 10% of workers earn **\$108,470 or more**.

Source: Bureau of Labor Statistics [2023 wage data](#) [↗](#).

Full Details

Save Table: [XLSX](#) [CSV](#)

Location	Annual Low (10%)	Annual Q _L (25%)	Annual Median (50%)	Annual Q _U (75%)	Annual High (90%)
United States	\$47,650	\$59,830	\$80,030	\$99,960	\$108,470



O*NET OnLine

Occupation keyword search

Go

Nevada Employment Trends

51-8091.00 - [Chemical Plant and System Operators](#)

View trends for state:

Nevada

Go

In Nevada:

Employment (2020)	70 employees
Projected employment (2030)	80 employees
Projected growth (2020-2030)	14%
Projected annual job openings (2020-2030)	10

In the United States:

Employment (2022)	19,300 employees
Projected employment (2032)	18,600 employees
Projected growth (2022-2032)	<div><div></div><div></div><div></div><div></div></div> -3% Decline
Projected annual job openings (2022-2032)	1,700

Nevada source: Projections Central [2020-2030 long-term projections](#). United States source: Bureau of Labor Statistics [2022-2032 employment projections](#). "Projected growth" represents the estimated change in total employment over the projections period. "Projected annual job openings" represent openings due to growth and replacement.