

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

College of Southern Nevada (CSN)

Address

6375 W Charleston Blvd, WC E310, Las Vegas, Nevada 89146-1139

Workforce Development Program Experience

The CSN Advanced Manufacturing program is inclusive of both credit and non-credit programs and were developed using models from successful credit-based and non-credit business and industry based training programs from around the country.

A previous WINN grant was awarded to CSN to help support the initial establishment of a basic manufacturing pathway through the CSN Division of Workforce and Economic Development (DWED). The CSN DWED provides non-credit stackable industry recognized credentials and target the region's adult learner population currently pursuing their GED and HSE as well as individuals with High school diplomas seeking re-skilling and upskilling in two significant areas within the Advanced Manufacturing sector: machining and automation. CSN offers comprehensive, stackable credential based advanced manufacturing programs at the Sahara West Satellite and the CSN Henderson campus. Soon, in partnership with the City of Henderson, CSN will launch instruction in the new Center of Excellence for Advanced Manufacturing. This Center of Excellence is located across the street from where HAAS Automation is building their state of the art manufacturing facility.

In addition, the non-credit courses offered by DWED integrate into CSN Credit-based Skills Certificates,

Certificates of Achievement and Associate Degree pathways in Advanced Manufacturing in both machining and automation. Please find a visual attached to this application as supplemental materials that illustrates the CSN stackable credential pathways in Advanced Manufacturing.

This workforce enhancement request for Advanced Manufacturing is to provide funding for five full-time personnel to lead, deliver and support college credit and non-credit-based advanced manufacturing programming that includes a stackable credential pathway from basic workforce skills to credit-based certificates and an associate degree.

Additionally, this project will provide the funding for faculty training, certification testing for students, equipment software updates, tools, manufacturing materials and supplies. This new investment would allow CSN to prepare up to 120 new students per year to enter the workforce in advanced manufacturing.

Finally, CSN President, Dr. Federico Zaragoza, is a nationally recognized leader in Workforce Development and has committed his leadership and support to the local workforce development needs. His extensive career leading innovative workforce initiatives has resulted in numerous publications and recognized highly effective workforce training program models.

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

Founded in 1971, the College of Southern Nevada is the workforce development "engine" for the southern region of the state, comprising 70% of the population. We have managed a large number of grants from federal and state sources, including large grants such as Perkins (career & technical education) from the U.S. Department of Education, Trade Adjustment Assistance for Community College & Career Training from the Department of Labor, and STEM Equity from the State Office of Science, Innovation & Technology; and smaller grants such as the Lumina Foundation for Education and the National Science Foundation. In each case, there are stringent requirements for efficient and accurate record-keeping, reporting, and tracking of outcomes. CSN has an Office of Sponsored Projects which provides administrative support for each grant project investigator (project administrator), and financial management for reporting, once a grant is successfully sought and awarded. This grant will receive the same oversight and support, reporting progress and results in compliance with the terms dictated by the Governor's Office of Economic Development.

Project Information

Project Name

Advanced and General Manufacturing

Primary Economic Sector

Advanced & General Manufacturing

Project Point of Contact

Daniel Flick

Title

Executive Director for Advanced Manufacturing

Phone

(702) 651-3767

Email

daniel.flick@csn.edu

Employer Partner(s)

Company 1

Company Name

Entek

Company Point of Contact

Tim Glover

E-mail

tglover@entek.com

Job Titles to Be Filled

CNC Machinists

Number of Job Openings to be Assisted

50

Average Hourly Wage for Job Hires

\$20-25

Employer Commitment & Support Letter

ENTEK WINN Application Letter 5.9.23.pdf

Workforce Disruption - Prior 12 Months

No

Company 2

Company Name

Sunshine Minting

Company Point of Contact

Jason Trubey

E-mail

jtrubey@sunshinemint.com

Job Titles to Be Filled

CNC and machine operators/setters, CNC programmers, Technicians, Maintenance Technicians

Number of Job Openings to be Assisted

10

Average Hourly Wage for Job Hires

\$25.00

Employer Commitment & Support Letter

scan_daniel.flick_2023-05-12-16-12-42.pdf

Workforce Disruption - Prior 12 Months

No

Company 3

Company Name

Lithion

Company Point of Contact

James Hodge

E-mail

jhodge@lithionbattery.com

Job Titles to Be Filled

Professional, hourly, technicians, operators, trades

Number of Job Openings to be Assisted

25

Average Hourly Wage for Job Hires

N/A

Employer Commitment & Support Letter

230508 CSN letter of support.pdf

Workforce Disruption - Prior 12 Months

No

Company 4

Company Name

Arsenal Inc.

Company Point of Contact

Thomas Lillie

E-mail

tlillie@arsenalinc.com

Job Titles to Be Filled

CNC Lathe and Mill Machinist Level I through III, CNC Programmer, Gunsmith Assembly Apprentices, Warehouse and Maintenance

Number of Job Openings to be Assisted

12

Average Hourly Wage for Job Hires

18.00-30.00

Employer Commitment & Support Letter

CSN-EMPLOYER_SUPPORT_THOMAS LETTER.pdf

Workforce Disruption - Prior 12 Months

No

Company 5

Company Name

Sable System International, Inc.

Company Point of Contact

Robbin Turner

E-mail

mail@sablesys.com

Job Titles to Be Filled

Electronic Assembly Technicians

Number of Job Openings to be Assisted

4

Average Hourly Wage for Job Hires

20.00

Employer Commitment & Support Letter

SSI Letter of Support 2023-05-10.pdf

Workforce Disruption - Prior 12 Months

No

Company 6

Company Name

Western Group Packaging

Company Point of Contact

Heidi Aker

E-mail

heidi@wgpc.com

Job Titles to Be Filled

Maintenance Technicians

Number of Job Openings to be Assisted

40

Average Hourly Wage for Job Hires

22.00

Employer Commitment & Support Letter

Support College of Southern Nevada Advance Manufacturing Program 5.pdf

Workforce Disruption - Prior 12 Months

No

Statement of Need

Needs Assessment

Southern Nevada is experiencing an influx of manufacturing companies that are relocating or expanding in the region. CSN leadership has anticipated the coming wave of manufacturing companies and is preparing pipelines of available employee candidates, ready to fill the needs of our expanding manufacturing workforce. As evidenced by a sampling of support letters attached to this application, manufacturing education, including mechatronics, electricity, fluid and mechanical power transmission, metals manufacturing and CNC machining training is severely lacking in Clark County. CSN is the only post-secondary institution that offers comprehensive manufacturing workforce training in the greater Las Vegas area. Great Basin College has a very small presence in the southern Nevada manufacturing workforce ecosystem.

Basic manufacturing skills training is now available through our CSN Department of Workforce and Economic Development (DWED) which includes incumbent worker and short-term certification training in the areas of CNC machining and mechatronics/automation. DWED is doing an exceptional job of tailoring training content and outcomes to current, in demand Advanced Manufacturing employment needs.

CSN's manufacturing credit-based program consists of a recently approved certificate and degree pathway and, through this grant, will be positioned to tailor course and program content and outcomes to current and future industry employment needs. CSN has committed to moving forward to serve Southern Nevada by increasing the pipeline of available candidates through expansion of existing offerings in mechanical and automation technology and to start CNC machining/automation training and education. To support and sustain these, in demand offerings, the GOED WINN funds are critical to support the hiring of instructors, to provide funding for instructor professional development, and for procuring and maintaining industry standard, leading edge technology for equipment and software. Our current and future manufacturers are struggling to find suitable employees. The outcomes of this proposal is to help train more future employees for our region's manufacturing employers.

Through 2031, the US Department of Labor, Bureau of Labor Statistics report a 14% employment increase in manufacturing skills position such as, millwrights, machinists, and machinery maintenance workers (Much faster than average occupations). Manufacturing jobs in general are expected to increase a little more than 18% from current levels through 2028 according to the DETR website. A total increase over 10,000 added manufacturing jobs is expected statewide by 2028. With the relocation of Haas Automation (one of the largest machine tool manufacturers in the US) to Henderson, that percentage may be higher.

Short and long term projections for manufacturing related jobs is evidenced in the supporting documents attached to this application.

Program Objectives and Outcomes

Program Overview

The Advanced Manufacturing program design includes a core of machining, metrology, computer aided design, and mechanical or power technology courses to establish a technical skillset required of any Manufacturing Technologist. The credential includes basic industrial skills followed by advanced technical courses that supplement or complement the core skill area. This 2-year Associate of Applied Science degree also presents our students with the potential of entering the 4-year Bachelor of Applied Science program in Project Management.

The educational pathway, culminating in an Advanced Manufacturing Associate of Applied Science (in

either Automation or Machining, 60 credits each) consists of Skills Certificates in Advanced Manufacturing: Automation (14 credits), Machining Skills: Milling (12 credits), Machining Skills: Lathe (Turning) (12 credits), and; Certificates of Achievement in Automation and Machining (both 30 credits). The entire program will be delivered in semester courses over a period of up to 5 semesters (including a summer semester).

Included in the machining courses are industry certifications from the National Institute of Metalworking Skills (NIMS). CSN is working on embedding Smart Automation Certification Alliance (SACA) certifications in the Automation courses, which will align with Clark County School Districts existing Manufacturing programs SACA certifications for articulation.

This program will begin in Fall 2023 with personnel recruitment, training/professional development as well as supply acquisition. Two existing and filled positions, whose funding will end on June 30, 2023, are budgeted on the grant to continue on July 1, 2023. One faculty position was in recruitment this spring in the hopes that CSN would obtain funding for a July 1, 2023 start. Recruitment for the two remaining personnel noted in the grant budget will begin in summer 2023 with the goal of new program faculty and staff beginning in January 2024 in time for the program to begin at that same time.

Employer Engagement

The CSN School of Advanced & Applied Technologies has regular advisory committees to include an Advanced Manufacturing Advisory Council. Additionally, the CSN Executive Director for Advanced Manufacturing has continual outreach to many manufacturing companies. These interactions allow for curriculum input, site visits, both to CSN and to the company, and to provide curriculum, program expansion planning and progress updates to these critical industry partners. To maintain a robust connection between the companies and our Advanced Manufacturing programs, a program charter, association, and collaborative is in the works, in cooperation with DWED manufacturing programs. This industry advisor affiliation structure will enhance CSN's relationship with existing and future partners.

Additionally, CSN hosts periodic open houses, career/job fairs and showcase events. These are very effective for the recruitment and retention for students as well as regular connectivity to the community, industry, community partners, and vendors.

Capacity-Building Program Design

The CSN program design includes three full time instructors with appropriate experience and education levels in order to offer the newly developed comprehensive pathways in our Advanced Manufacturing programs. Further, CSN requires one Advisor who will help recruit students and ensure they remain on path to complete their program. Finally, CSN requires a program leader to serve as the subject-matter expert and singular point of contact with business and industry. This leader will continue to build and maintain the program, oversee and maintain all facilities and equipment, assess student learning outcomes for continuous improvement, recruit additional students into the program, and serve as the responsible leader for all elements of the Advanced Manufacturing program.

Additionally, the CSN Advanced Manufacturing training uses industry standards and current equipment which require periodic maintenance, replacement tooling, materials, and updated curriculum. This program proposal accounts for these things to occur.

Finally, professional development and training for instructors is needed on equipment, software, and processes, so they can maintain relevance to the latest technology and make sure that they are up-to-date on current industry trends.

Will this program include funding for staff?

Yes

Will this program include funding for existing staff?

Yes

Justification for Existing Staff

Currently, there are two one-shot funded positions that are filled in Advanced Manufacturing that CSN is proposing to be extended using the WINN Fund. Without this GOED grant funding, it will be difficult to continue these three existing positions and thus it will be incredibly challenging for CSN to offer this Advanced Manufacturing program for Southern Nevada.

CSN is requesting to continue funding the Executive Director position through this project. The Executive Director was focused on the foundational building blocks of the program in the prior Biennium, including curriculum review and development, course mapping and approval, and equipment alignment and acquisition. The Executive Director must now pivot to recruitment, enrollment and production of talent through non-credit to credit on-ramps, identification of degree path candidates and up-skilling partnerships with industry. The Executive Director focuses on strengthening and building out the certificate and degree (credit-based) programming, until the programs gain enrollment and become sustainable, at which point funds for the director, and all, positions would transition to a CSN Advanced Manufacturing budget that will be supported by tuition, fees, and the NSHE funding formula.

CSN is also requesting to continue funding an Advisor position through this project. The existing Advisor position is needed to help support program recruitment, to serve as an academic advisor to students, and as a transfer guide/workforce connector for students as they complete the CSN program.

Recruitment

The target student population for recruitment into the CSN Advanced manufacturing pathways include the following:

1. High school juniors and seniors at CCSD who will be, or are currently enrolled in manufacturing program at any of the high schools or CTE centers. CSN is working on concurrent enrollment/early college in coordination with two Nevada based companies, and one company opening a manufacturing facility in North Las Vegas. Nevada Gold Mines, Tesla (northwest Nevada), and View Inc. (currently located in Olive Branch, MS) have partnered with CSN to create a pipeline of trained workers, which will benefit other companies with similar job descriptions. The increased capacity requires the purchase of more Advanced Manufacturing training equipment, similar to the equipment previously purchased through WINN grants.
2. Adult high school graduates currently unemployed, underemployed, or those seeking to change careers to manufacturing.
3. Unemployed, underemployed, and disadvantaged GED, HSE seeking adult students. This population is currently being served through DWED manufacturing programs, where the manufacturing students are concurrently completing HSE. Increasing enrollment, due to constant industry needs based curriculum evaluation and refinement, will be possible utilizing the enhancement grant.
4. Incumbent workers, looking to upskill or attain certificates or a degree. These incumbent workers include company sponsored training through our credit programs or DWED, and those informed by their companies about CSN's Advanced Manufacturing programs through our industry outreach.
5. Utilize the "Mobile Training Labs" to recruit and train students in rural areas and places where we do not normally have a noticeable presence, like shopping malls, sporting, industry, and community events.

The overall recruitment strategy includes outreach and marketing through social media and email marketing, partnerships with local businesses, high schools, and community organizations to identify potential candidates for training programs, implementing referral programs that can incentivize participants to refer others to the training program.

Outcomes

Goals:

1. Hire 1 full time instructor for August 2023 and recruit and hire 2 full time instructors to begin full time instruction not later than January 2024.
2. Increase credit enrollment by up to 30 students in fall '23, and up to 30 more students in spring of '24.
3. Increase credit enrollment up to 30 more students for fall '24, and up to 30 more in spring of '25.
4. Total enrollment impact over the two-year grant period is projected to be 120 students.
5. Beyond the grant period, we expect to continue to enroll up to 60 students each year longitudinally. Additionally, CSN will continue to offer existing workers the upskill training that need. This will increase both credit and non-credit program areas. As the Advanced Manufacturing programs gain momentum, the demand for upper level courses will increase as certificate holders and incumbent workers strive for the next level in their education and experience. This should also increase interest in DWED short term certificate programs.
6. Place existing certificate seeking students needing work in either full time or part time positions, having them continue through the next certification or degree level at CSN.
7. Place 75% of Skill Certificate, Certificate of Achievement, and AAS recipients in positions ranging \$18-\$30/hour to start, while encouraging those not attaining the terminal AAS degree to continue through their degree.

CSN has built a robust stackable credential-based pathway in two major areas within the Advanced Manufacturing sector: Automation and Machining. CSN will be offering the advanced manufacturing comprehensive stackable credential programs at the CSN Henderson campuses. Additionally, there will be cohorts of juniors and seniors from Clark County School District in concurrent enrolment in the Advanced Manufacturing Certificate of Achievement, 30 credit certificate program.

The workforce enhancement request for Advanced Manufacturing is to provide funding for 5 full time personnel along with initial and subsequent items used for instruction. Additionally, this budget will be used to service an Advanced Manufacturing mobile training lab that will be designed to provide certificate-based training to students in rural southern Nevada as well as to high school students who are pursuing early college programming.

This investment would allow CSN to prepare up to 60 students per year for a total of 120 students over the grant period.

The specific and measurable goals for this funding is a 100% enrollment increase for FY24 and FY25 (currently there are no officially enrolled students in the newly approved credit-based certificates and degree) and attaining at least a 75% job placement rate at salaries ranging from \$18.00 to \$30.00/hour. CSN has many companies who are eager to hire students from the CSN Advanced Manufacturing programs. These companies are also a fantastic resource for curriculum development, and a source for instructors.

To accomplish the anticipated increased enrollment, our Advanced Manufacturing program must search for, and hire instructors specific to each area of the program. Given the difficulty in recruiting qualified instructors in this career field, CSN will focus on leveraging industry partners to identify talent and will work to offer competitive salaries as a means of recruiting top talent. The timeline to acquire hires for fall '23 semester, and allowing for curriculum and equipment familiarity and development is a priority.

Much of the equipment used for the Advanced Manufacturing programs is in place and will be ready for

training in August. We anticipate that beginning in January 2024, the CSN Advanced Manufacturing programs will have increased capacity to accommodate the anticipated increased enrollment as our new Center of Excellence for Advanced Manufacturing is opened in west Henderson.

Sustainability Plan

Enrollment will be sustained as students and employees use scholarships through the CSN Foundation (Gene Haas Foundation funds) tuition reimbursement or state/federal funding avenues, and continued contributions and involvement with current and future industry partners like, Nevada Gold Mines, Tesla, and View Inc.

As our local industry adopts new technologies and processes, it is the intent of the Director for Advanced Manufacturing to partner with the vendors for these technologies and processes. This will be accomplished by hosting seminars, demonstrations, and open houses where companies, such as Renishaw, can demonstrate the latest and greatest applying the technologies and processes to our existing Advanced Manufacturing curriculum.

In conjunction with DWED, we are developing an ongoing/living Internal Project Management Charter based on Internal Team consensus, sustaining an Advanced Manufacturing advisory committee, and creating an Advanced Manufacturing Association and Collaborative.

Creation of an Advanced Manufacturing Student Association

The Advisory Committee for Advance Manufacturing will be enhanced.

Develop graphics with TPM (Talent Pipeline Management) flow-micro-credential/stackable employment and credential development while employed. This could include noncredit and credit pathways.

Identify a consortium of manufacturing employers to TPM connectivity from currently trained and those completing training and certifications.

Integrate into CSN Career Services college-wide strategy.

In this model, industry is viewed as the end user and primary champions/drivers of the Collaborative. Defining the talent expectations of the Advanced Manufacturing Initiative (AMI) group and developing the training/ curriculum ecosystem that will meet those needs is the goal of this initiative. Ultimately, the charter/strategy is a working guide to help achieve this purpose. The AMI initiative is for both the credit and non-credit programs for CSN.

Finally, for the credit-based courses in this program, increased student enrollment will sustain the program itself given that the disciplines have a high weighted student credit hour rate of return through an allocation of future state budgets as provided through the NSHE funding formula.

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

Yes

Supporting Documents

MFG_Occupations_Courses_Focus_DWED_2023.pdf

MFG_Employment_Projections_2028_Sectors.pdf

CSN Advanced Manufacturing Stackable Pathways Visual.JPG

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

Gender (Non-traditional Industry and Employment)

Given that gender representation in Manufacturing occupations in Nevada is well below the national average, CSN will leverage prior experience and program contacts to target increased female participation in these programs to broaden opportunities for women in this industry. Partners who share this commitment include Workforce Connections and DETR. Encouraging more women to enter the Advanced Manufacturing fields is a significant goal of the programs.

Recipients of Public Assistance

CSN has already recruited, and will continue recruiting from our partner agencies listed below. Having the support system available at all of the training locations, CSN lessens many barriers to attendance for those on public assistance.

We will partner with Workforce Connections, Goodwill, DETR and DWSS to share this opportunity with recipients of public assistance. We are also developing "wrap around" service centers on each of our campuses. These centers will act as one-stop opportunities for students who are on public assistance, or those seeking to avail themselves of public assistance programs, as opportunities to determine how their qualified assistance program can aid them in their educational pursuit.

The College of Southern Nevada (CSN) has a long-standing commitment to educating underrepresented students. Educating these students gives them skills needed to find immediate work in one of Nevada's highest-demand industry sectors. Unfortunately, many employers are still forced to find employees in other States. CSN is positioned to build workforce equity through student diversity. Manufacturing professionals are needed throughout Nevada and these professionals must come from our ethnically diverse communities.

Workforce Diversity Commitment Statement

CSN's organizational culture is committed to and strongly emphasizes Diversity at every level. An Equal Employment Opportunity/Affirmative Action institution, the college does not discriminate on the basis of sex, age, race, color, religion, disability, national origin, veteran status, sexual orientation, genetic information, gender identity, or gender expression in employment, admissions, educational programs, services, or activities in which it operates. To accommodate the shared governance model at CSN, the recruitment process is conducted by the Talent Acquisition team as well as a Screening Committee that includes a member from each employee group as well as a Faculty Senate representative. These individuals are charged with the responsibility of screening applications and identifying candidates who meet designated qualifications and required experience, with the guidance of the subject matter experts within the Talent Acquisition team. Once the candidates are carefully screened, the committee works with their designated recruiter to contact candidates and schedule interviews. This also ensures for a thorough,

non-bias process. Interviews are then conducted to identify the individual who best meets the criteria, while also demonstrating to be a "good fit" for the position and the organization as a whole. Reference checks are conducted along with Nevada State fingerprinting/background checks and drug testing (when applicable).

Statement to Comply with Federal & State Law

The CSN Office of Sponsored Projects assigns Program Managers (PM) and Fiscal Managers (FM) to ensure appropriate use of funds in compliance with Uniform Guidance, EDGAR and institutional policies and procedures; facilitate budgetary decisions, projections and expenditure approval. The Office of Sponsored Projects oversees the financial administration of grants to ensure compliance with the standard accounting practices and federal cost principles. CSN has a strong record in federal, state, and local grants management. This proposed budget is sufficient to support the implementation of activities to achieve the objectives of the Program. Program staff submit monthly progress reports to the PM, summarizing implementation progress, travel, use of consultants, development & piloting of courses/degree programs and student support system, acquisition of and installment of equipment and supplies, formative and summative evaluation issues, unanticipated problems, potential solutions, delays in projected timeline, requests for assistance. Quarterly reports by the PM summarizing progress toward activity outcomes & obstacles encountered form the basis of briefings for the Steering Committee, & Annual Performance Reports.

Request for Funding

Has any part of this program received prior capacity funding?

Yes

Justification for Continued Capacity Funding

During the last biennium, the NV legislature appropriated "capacity funding" to the NSHE community colleges to support the development and/or expansion of workforce development programs in critical, in-demand industry sectors.

CSN utilized prior capacity funding through June 30, 2023 for only two filled positions proposed for continuity in this request: the Executive Director of Manufacturing and and Advisor. The goals proposed with that funding have been realized and the additional time through this request allows for the Manufacturing program to realize enrollment in all of the developed pathways to ensure the program will be sustainable.

Total Project Cost

\$1,048,394.00

WINN Funding Request

\$1,048,394.00

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 submitted as often as monthly. What are your invoicing plans?

Monthly

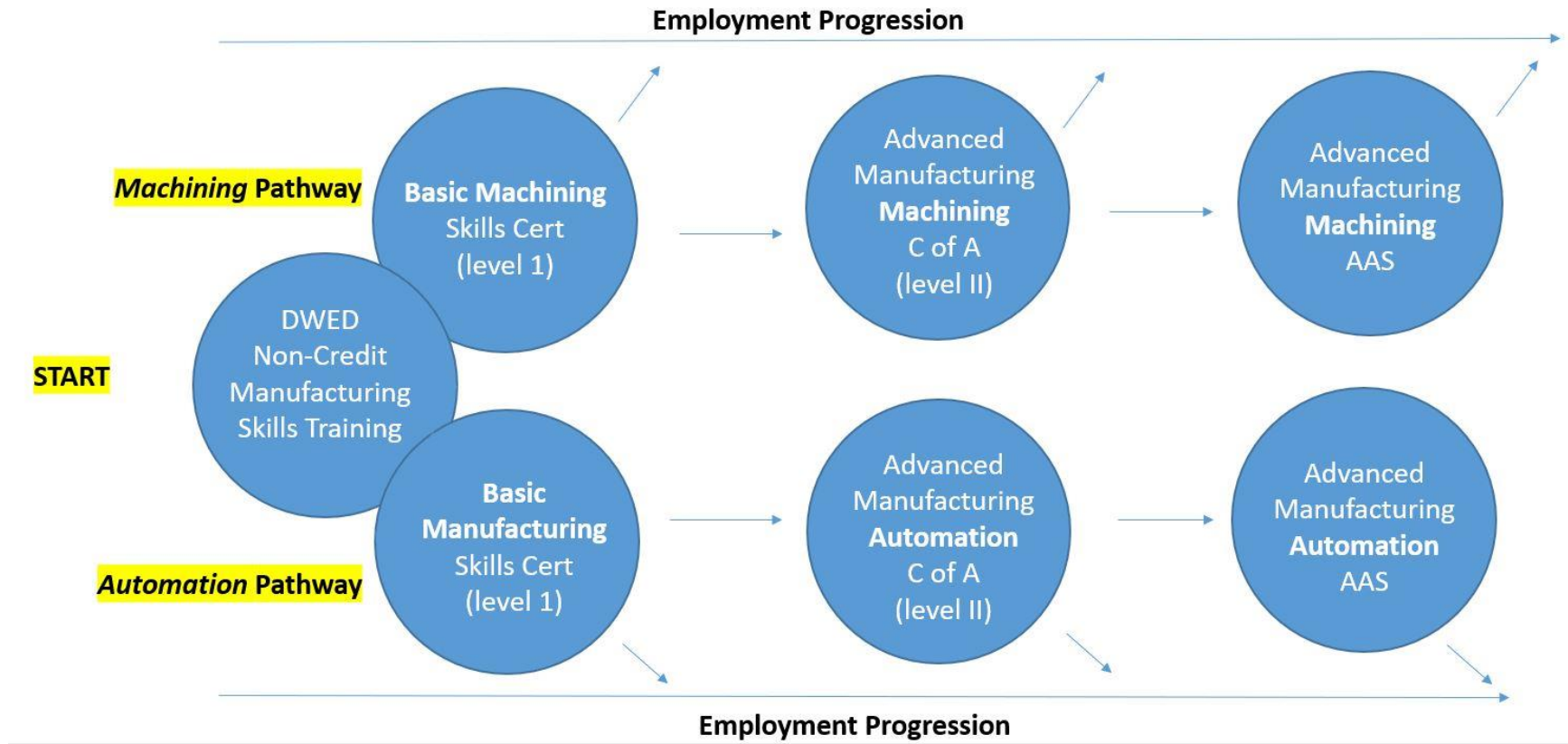
Cost Estimates

WINN Application Budget Template 2023
(CSN_Advanced Manufacturing) (Final 6-13-2023).xlsx

Budget Narrative

NSHE WED WINN Request Budget Narrative
(CSN_Advanced Manufacturing) (Final_
6_13_2023).docx

CSN Advanced Manufacturing Stackable Credentials



APPLICATION FOR WINN FUNDS - BUDGET BREAKDOWN

APPLICANT NAME: College of Southern Nevada

PROJECT NAME: Advanced Manufacturing

PROJECT PERIOD: FY24 & FY25

PRIORITY PROGRAM COSTS

Enter the total cost for each line in the far right column	Total WINN Request
Candidate Assessment Fees	\$11,000.00
Instructional and/or Curriculum Development Services	\$438,099.00
Direct Program Personnel (e.g. Navigator, Liaison, Coordinator)	\$505,795.00
Equipment or Technology for Training	\$65,500.00
Priority Costs Subtotal:	\$1,020,394.00

ALLOWABLE PROGRAM COSTS

Enter the total cost for each line in the far right column	Total WINN Request
Training Fees	
Analysis of On-Site Training	
Administrative or General Support Personnel (May not exceed 10% of total funding)	
Instructional Facility Rental Costs	
Program Promotion Costs	
Other Necessary Costs	\$28,000.00
Non-Priority Costs Subtotal:	\$28,000.00

TOTAL WINN REQUEST: \$1,048,394.00

Please contact Stacey Bostwick at 702-486-0609 with any questions regarding the budget breakdown template.

College of Southern Nevada
Advanced Manufacturing
2023 WINN Request – NSHE Capacity

Priority Category Direct Program \$1,020,394

Candidate Assessment Fees (\$11,000 total for FY24 and FY25)

The Advanced Manufacturing Automation and Machining programs offer certification embedded in the curriculum. For the Automation program the Smart Automation Certification Alliance (SACA) certifications are used.

The National Institute for Metalworking Skills (NIMS) is an industry certification program used in education and industry to validate metalworking and industrial maintenance skills mastered by students and employees.

FY24 - NIMS Certifications \$3,000 + SACA Certifications \$2,500 = \$5,500

FY25 - NIMS Certifications \$3,000 + SACA Certifications \$2,500 = \$5,500

Instructional and/or Curriculum Development Services (\$438,099 salary and fringe total for FY24 & FY25): Each of the three full time faculty positions will teach a minimum of 30 instructional credits per year (five classes per semester on average). Please see the tables below for the calculations.

PRIORITY PROGRAM COSTS - PERSONNEL							
Instructional and/or Curriculum Development Services							
Position	FY24 Salary	FY24 Fringe*	FY24 Total Compensation	FY25 Salary**	FY25 Fringe*	FY25 Total Compensation	Total Compensation (FY24 & FY25)
Instructor, Advanced Manufacturing***	65,368	20,199	85,566	67,982	21,007	88,989	174,555
Instructor, Advanced Manufacturing****	32,684	10,099	42,783	67,982	21,007	88,989	131,772
Instructor, Advanced Manufacturing****	32,684	10,099	42,783	67,982	21,007	88,989	131,772
Total Instructional and/or Curriculum Development Services:	130,735	40,397	171,133	203,947	63,020	266,967	438,099

* 30.90% Fringe Rate on CSN Professional positions
** 4% COLA on July 1, 2024
*** Existing CSN position on funding that ends June 30, 2023; Proposed July 1, 2023 WINN start date
**** New CSN position; Anticipated January 1, 2024 WINN start date

Direct Program Personnel (\$505,795 salary and fringe total for FY24 & FY25): Includes one Executive Director position and one Advisor position. Please see tables below for the calculations:

Direct Program Personnel							
Position	FY24 Salary	FY24 Fringe*	FY24 Total Compensation	FY25 Salary**	FY25 Fringe*	FY25 Total Compensation	Total Compensation (FY24 & FY25)
Executive Director, Advanced Manufacturing***	138,291	42,732	181,023	143,823	44,441	188,264	369,286
Advisor, Advanced Manufacturing***	51,120	15,796	66,916	53,165	16,428	69,593	136,509
Total Direct Program Personnel	189,411	58,528	247,939	196,987	60,869	257,857	505,795

* 30.90% Fringe Rate on CSN Professional positions
** 4% COLA on July 1, 2024
*** Existing CSN position on funding that ends June 30, 2023; Proposed July 1, 2023 WINN start date
**** New CSN position; Anticipated January 1, 2024 WINN start date

Equipment or Technology for Training (\$65,500 total for FY24 and FY25)

Software Updates & Subscriptions (\$13,800 total for FY24 and FY25)

The CSN Advanced Manufacturing Automation and Machining programs use up to date industry standard software for Computer Assisted Design & Computer Assisted Manufacturing (CAD/CAM) applications. The software is called **Mastercam**, which is updated each year.

In the Advanced Manufacturing Machining program, students and instructors have access to an online content and learning management system, **Immese2Learn**, from Immersive Engineering. Students gain access to this online content via a subscription provided by the instructor.

FY24 - Mastercam Maintenance \$2,400 + Immersive \$4,500 = \$6,900

FY25 - Mastercam Maintenance \$2,400 + Immersive \$4,500 = \$6,900

Tooling (\$28,500 total for FY24 and FY25)

Advanced Manufacturing education is a very intensive, hands-on program where students are constantly using tools and tooling. Items like drills, endmills, and edge finders, spindle probe replacements, DMM probes and batteries are all used daily by students.

FY24 - Tooling/Initial- Endmill assortment (60 @ approx. \$75 ea.) \$4,500 + Mill tooling kits (2@ \$4450 ea.) \$8900 + Drill indexes (4@ \$250 ea.) \$1000 + edge Finders (12 @ \$40) \$480 + Tapping assort \$300 + Workholding lathe (2 @ \$1500) \$3000 + Lathe Tooling kits (2@\$1,150) \$2,300.

FY25 - Tooling/Replacement-endmill (20 @ approx. \$75 ea.) \$1500 + Drills (10@ \$30 ea.) \$300 + edge Finders (4 @ \$40) \$160 + Taps \$200 + lathe soft-jaws (10 @ \$70) \$700 + Mill soft jaws (10 @ \$85) \$850 + Replacement batteries and probes (3 @ \$150) \$450 + miscellaneous tooling replacements \$4,340.

Project Material (\$23,200 total for FY24 and FY25)

Raw materials like aluminum, various steels, plastics, and wiring are needed for student projects and laboratory exercises.

FY24 - Project material: Aluminum \$4,800 + CRS Steel \$2,900 + Plastics \$1,700 + Wiring \$400 + Brass \$1800.00

FY25 - Project material: Aluminum \$4,800 + CRS Steel \$2,900 + Plastics \$1,700 + Wiring \$400 + Brass \$1800.00

Priority Program Costs Total: \$1,020,394

Allowable Program Costs

Other Necessary Costs (\$28,000)

Machine and Air Compressor Maintenance (\$16,000 total for FY24 and FY25)

At each CSN location used for Advanced manufacturing programs, there are Computer Numerical Control machines (CNC), various mechanical, electrical, pneumatic, and hydraulic simulators that students train on.

FY24 - Air Compressor Maintenance and repair \$1333.33 X 3 compressors=\$4,000/year

CNC Machine Maintenance and repair \$285.71 X 14 CNC machines=\$4,000/year

FY25 - Air Compressor Maintenance and repair \$1333.33 X 3 compressors=\$4,000/year

CNC Machine Maintenance and repair \$285.71 X 14 CNC machines=\$4,000/year

Various Supplies (\$12,000 total for FY24 and FY25)

This category includes cleaning supplies like cleaning fluids, rags, mops, machinery cleaner, and metalworking and maintenance equipment fluids such as coolants, lubricants, hydraulic oil, rust inhibitors, and tapping compounds.

FY24 - \$6000 Total-Cleaner degreaser \$290 + Hydraulic oil (\$234/5 gal. X 10) \$2340 + Machine Coolant (55gal) \$2150 + Rust inhibitors \$230 + Shop towels/rags \$220 + Tapping fluid \$30 + Dykem \$40 + Spill kits (\$150 X 2) \$300 + Misc. \$400

FY25 - \$6000 Total-Cleaner degreaser \$290 + Hydraulic oil (\$234/5 gal. X 10) \$2340 + Machine Coolant (55gal) \$2150 + Rust inhibitors \$230 + Shop towels/rags \$220 + Tapping fluid \$30 + Dykem \$40 + Spill kits (\$150 X 2) \$300 + Misc. \$400

Allowable Program Costs Total: \$28,000

Total Budget Requested: \$1,048,394



May 8, 2023

Stacey Bostwick, Director of Workforce Development
Governor's Office of Economic Development
555 E. Washington Ave, Suite 5400
Las Vegas, NV 89101

Subject: Workforce Innovations for a New Nevada (WINN) Application

Dear Ms. Bostwick:

Lithion Battery is a manufacturer of Li-ion cells and batteries with two locations in Henderson, Nevada. Between these two locations, Lithion currently employs 105 professionals and hourly workers. We expect to add up to 20 additional employees between now and the end of the year. Like many in the manufacturing industry, we have found it challenging to hire workers with skills appropriate to our operations.

By this letter, we wish to express our need for and support for the expansion of a micro-credentialing program to provide our organization with the skilled workforce we need. Our existing operations currently have a need for specialized training in areas such as PLC programming, pneumatics, process monitoring and control, data management and analysis, statistics, and quality systems. The increased capacity of this program will ensure there is sufficient qualified workforce for us to employ in high-wage opportunities that we have not been able to fill by other means. At our company, we anticipate approximately 20 to 30 such openings in the next two years and are confident that this program will provide the highly skilled workforce we need.

We understand the need to report outcomes for this publicly funded effort and would generate quarterly reports on hiring plans and feedback on skill levels of new employees hired out of the program. We look forward to continuing to work in partnership with the College of Southern Nevada and other stakeholders in this important effort.

Sincerely yours,

A handwritten signature in black ink that reads "James D. Hodge". The signature is written in a cursive, flowing style.

James D. Hodge, Ph.D.
Vice President, Power Sources



May 9, 2023

Stacey Bostwick, Director of Workforce Development
Governor's Office of Economic Development
555 E. Washington Ave, Suite 5400
Las Vegas, NV 89101

Subject: Workforce Innovations for a New Nevada (WINN) Application

Dear Ms. Bostwick:

ENTEK is headquartered in Lebanon, Oregon. We decided to expand our footprint to the Henderson, NV area over 3 years ago and have been in our current facility for almost 18 months. We have nearly 100,000 sq ft of shop floor space equipped with a full machine shop and fabrication/assembly area. Here in Henderson, NV we engineer, manufacture, and fabricate all wear parts for the extruders and material handling capabilities that are required not only in our own facilities but our customer's facilities as well.

ENTEK sells lead-acid separators, lithium-ion separators, extruders, and engineering services on six continents. We design and build our battery separator lines, extruders, and parts with our in-house engineering, machining, and fabrication resources. Combining best-in-class equipment with our pursuit of continuous improvement manufacturing gives our customers the full benefit of nearly 40 years of experience in these industries. We believe that our success is possible only if we do our utmost to make our customers successful.

By this letter, we wish to express our need for and support for the expansion of the Advanced Manufacturing & Applied Technologies programs at the College of Southern Nevada to provide our organization with the skilled workforce, and upskilling potential we need. Currently, we have a high priority placed around expanding & retaining our workforce to expand at a very high rate. This increased capacity of this program will ensure there is sufficient qualified workforce for us to employ in high-wage opportunities that we have not been able to fill by other means. At our company, we anticipate approximately 50 such openings in the next 3 years and are confident that this program will help to provide the highly skilled workforce we need.

We understand the need to report outcomes for this publicly funded effort. Our company will be in frequent contact with CSN evaluating course and program certifications, content and outcomes prior to onboarding new hires and evaluate incumbent worker training effectiveness. We look forward to continuing to work in partnership with the College of Southern Nevada, and other stakeholders in this important effort.

Sincerely yours,

A handwritten signature in black ink, appearing to read 'Larry Keith', written over a horizontal line.

Larry Keith
CEO, Owner

820 Wigwam Parkway, Suite 130 • Henderson, NV 89014 USA • Phone: 702.564.4897
www.entek.com



SABLE SYSTEMS INTERNATIONAL, INC.

Instrumentation and Software Solutions

By Scientists, For Scientists

Date: May 10, 2023

Stacey Bostwick, Director of Workforce Development
Governor's Office of Economic Development
555 E. Washington Ave, Suite 5400
Las Vegas, NV 89101

Subject: Workforce Innovations for a New Nevada (WINN) Application

Dear Ms. Bostwick:

Sable Systems International is a product development and manufacturing company innovating within the medical device research arena. Over the past 17 years we have benefited from our constructive partnership with Manufacture Nevada, (formerly Nevada Industry Excellence). This organization is our 'go to' resource for professional development in lean and agile skill building and as a quality management system advisory resource.

With this letter, we wish to express our need for and support of the expansion of the Advanced Manufacturing programs at the College of Southern Nevada to provide our organization with the skilled workforce, and upskilling potential we need. Due to the continued growth year over year of our small but highly technical business, we need experienced people to support our expansion. We have found the acquisition of technically experienced team members in the service-based Las Vegas area to be difficult due to insufficient training of talent and/or with manufacturing experience. We are interested in acquiring team members who have skills in soldering, materials management, basic troubleshooting of electronics, basic knowledge on reading blueprints/schematics, basic component naming and wire color-code ID skills, using electric tooling safely such as drill presses and saws, using fine tools such as calipers/micrometers, and basic computer skills that include Microsoft based programs like Excel and Word.

This increased capacity of this program will ensure there is sufficient qualified workforce for us to employ in high-wage opportunities that we have not been able to fill by other means. At our company, we anticipate approximately [2] such openings in [1] one year and 4-8 in the next five [5] years. We are confident that this program will provide the highly skilled workforce we need.

We understand the need to report outcomes for this publicly funded effort. Our company will be in frequent contact with CSN evaluating course and program certifications, content and outcomes prior to onboarding new hires and evaluate incumbent worker training effectiveness. We look forward to continuing to work in partnership with the College of Southern Nevada, and other stakeholders in this important effort.

Sincerely yours,

Name: Robbin Turner
Title: Chief Executive Officer

3840 N. Commerce Street • North Las Vegas, NV 89032 USA • Office: (702) 269-4445 • Fax: (702) 269-4446
Website: www.sablesys.com • Email: mail@sablesys.com



May 22, 2023

Stacey Bostwick, Director of Workforce Development
Governor's Office of Economic Development
555 E. Washington Ave, Suite 5400
Las Vegas, NV 89101

Subject: Workforce Innovations for a New Nevada (WINN) Application

Dear Ms. Bostwick:

Western Group Packaging's North Las Vegas facility is revolutionizing bottle beverage manufacturing industry. With the use of almost a fully automated assembly line process we are in full production 7 days a week 24 hours a day manufacturing bottled beverages for top name brands. Our beverage manufacturing facilities are one of the most state of the art facilities on the west coast ensuring the highest controls in quality and production reliability in the beverage industry.

By this letter, we wish to express our need for and support for the expansion of the Advanced Manufacturing programs at the College of Southern Nevada to provide our organization with the skilled workforce, and upskilling potential we need. We have found it difficult to source local candidates with the skill sets necessary to easily come in to our organization and learn our machinery and processes in a reasonable time frame. There is not a lack of candidates in Southern Nevada however there is a lack of individuals with knowledge surrounding automation, machinery, manufacturing, and the skills necessary to review, diagnosis, and troubleshoot failures when they arise on a production line. This increased capacity of this program will ensure there is sufficient qualified workforce for us to employ in high-wage opportunities that we have not been able to fill by other means. At our company, we anticipate approximately 40 such openings in the next two years and are confident that this program will provide the highly skilled workforce we need.

We understand the need to report outcomes for this publicly funded effort. Our company will be in frequent contact with CSN evaluating course and program certifications, content and outcomes prior to onboarding new hires and evaluate incumbent worker training effectiveness. We look forward to continuing to work in partnership with the College of Southern Nevada, and other stakeholders in this important effort.

Thank you for your consideration,

Heidi Aker

Heidi Aker
Human Resource Director
Western Group Packaging



"The Silver & Gold Source"

Stacey Bostwick, Director of Workforce Development
Governor's Office of Economic Development
555 E. Washington Ave, Suite 5400
Las Vegas, NV 89101

May 8, 2023

Subject: Workforce Innovations for a New Nevada (WINN) Application

Dear Ms. Bostwick:

Sunshine Minting is a primary supplier of silver and gold products to several of the largest sovereign mints around the world, capable of producing very large volumes of high-quality bullion, blanks, coins, bars, and medallions. At SMI, we combine art, technology, science, skilled workmanship, and experience to produce unique commemorative pieces. Sunshine Minting strives to be an employer of choice as well as a good neighbor and good business partner in the community. We maintain memberships in good standing with the Henderson and the Las Vegas Chambers of Commerce and work closely with all state and local agencies to promote Workforce Development. Sunshine Minting enjoys and is proud to give back to the community in the form of donations, volunteering and sponsorships.

By this letter, we wish to express our need for and support for the expansion of the Advanced Manufacturing programs at the College of Southern Nevada to provide our organization with the skilled workforce, and upskilling potential we need. Courses and curriculum specific to manufacturing are necessary to develop a workforce or people for the future needs not only of Sunshine Minting but also for the greater Southern Nevada area as more businesses move in from out of state. In addition to the need for individuals with skilled trades, it is also necessary to develop management and leadership skills to promote from within and provide people with the tools they need to succeed in their new roles. This increased capacity of this program will ensure there is sufficient qualified workforce for us to employ in high-wage opportunities that we have not been able to fill by other means. At our company, we anticipate approximately fifty such openings in the next five years and are confident that this program will provide the highly skilled workforce we need.

We understand the need to report outcomes for this publicly funded effort. Our company will be in frequent contact with CSN evaluating course and program certifications, content and outcomes prior to onboarding new hires and evaluate incumbent worker training effectiveness. We look forward to continuing to work in partnership with the College of Southern Nevada, and other stakeholders in this important effort.

Sincerely yours,

Jason Trubey
Executive Vice President Operations & COO
Sunshine Minting Inc.

Idaho Operations
750 West Canfield Avenue
Coeur d'Alene, ID 83815
Corporate 800.274.5837
Tel: 208.772.9592

Nevada Operations
7600 Eastgate Road
Henderson, NV 89011
Corporate 800.274.5837
Tel: 702.826.4441

Sunshine Minting International
(SHANGHAI) Co. Ltd.
365 Hong Liu Road, PuTuo District
Shanghai 200331 P.R. China
Tel: 021-60736118

CSN Advanced and General Manufacturing



Arsenal Inc.
4395 W. Post Road Unit 100
Las Vegas, NV 89118
Tel.: 1 888 539 2220
Fax: 1 702 643 8860
<http://www.arsenalinc.com>

Date:05/09/2023

Stacey Bostwick, Director of Workforce Development
Governor's Office of Economic Development
555 E. Washington Ave, Suite 5400
Las Vegas, NV 89101

Subject: Workforce Innovations for a New Nevada (WINN) Application

Dear Ms. Bostwick:

Arsenal Inc. is the exclusive licensed US manufacturer of the finest, most authentic semi-automatic sporting rifles. Available with either forged and CNC milled receivers or stamped receivers, they feature hammer-forged, chrome lined barrels and strict quality control in calibers 7.62x39mm, 5.56x45mm (.223 NATO), and 5.45x39.5mm. Arsenal Inc. utilizes the latest technology and materials while upholding the legendary standards of the world-famous Circle 10 factory, Arsenal of Bulgaria.

Founded in the year 2000, Arsenal Inc. is a manufacturer of firearms providing the Department of Defense (DOD), Federal, State, and local law enforcement with defense and offense products. Additionally, Arsenal Inc. provides said to the consuming public.

With this letter, we wish to express our need for and support for the expansion of the Advanced Manufacturing programs at the College of Southern Nevada to provide our organization with the skilled workforce and upskilling potential we need. Areas of growth include shift expansion requiring CNC Lathe and Mill Machinist Level's II, III, and IIII, Horizontal and Vertical CNC Milling Programmer, CNC Lathe Programmer, Gunsmith Assembly apprentices, Warehouse (shipping & receiving) workers and maintenance personnel. This increased capacity of the program will ensure there is sufficient qualified workforce for us to employ in high-wage opportunities that we have not been able to fill by other means. At our company, we anticipate approximately twelve (12) such openings in the next two (2) years and are confident that this program will provide the highly skilled workforce we need.

We understand the need to report outcomes for this publicly funded effort. Our company will be in frequent contact with CSN evaluating course and program certifications, content and outcomes prior to onboarding new hires and evaluate incumbent worker training effectiveness. We look forward to continuing to work in partnership with the College of Southern Nevada, and other stakeholders in this important effort.

Sincerely yours,

Thomas Lillie
Director of Manufacturing