# ECONOMIC DEVELOPMENT

# **WORKFORCE INNOVATIONS FOR A NEW NEVADA**

WORKFORCE DEVELOPMENT PROGRAM APPLICATION								
AUTHORIZED PROVIDER INFORMATION								
Name: Nevada System of Higher Education on behalf of Truckee Meadows Community College								
Address: 7000 Dandini Blvd.								
City: Reno		State: Nevada		ZIP Code: 89512				
Point of Contact: Kyle Dalpe Phone:		Phone: 775-856-5307		Email: kdalpe@tmcc.edu				
COMPANY INFORMATION								
Name: Lift361, TICKaFLIX and Grand Rounds								
Number of Primary Jobs Created: 70	Wage Neva	s: da Mean Wage \$30-40/hr	Industry: Multiple Sec	tors	Capital Investment: N/A			

#### **PROGRAM OBJECTIVES**

### **Employer support:**

Lift361, TICKaFLIX and Grand Rounds anticipate hiring 70 workers with Data Analytics skills in the next year. Additional employers have indicated that training in data analytics would benefit company and/or their incumbent workforce. Once developed, the training can benefit those employers and individuals through a self-pay or employer sponsored model. Once effectiveness of the program as a placement credential can be documented, it can be submitted to the WIOA Eligible Training Provider List (ETPL) for broader penetration in workforce development initiatives. The project will provide on-going benefit to employers and individuals in Northern Nevada.

# **Project Background:**

In 2014, as part of GOED's workforce development effort the agency in a public-private partnership approach created the *Learn and Earn Advanced-career Pathway* Framework (LEAP). As the standard template for career pathway development in Nevada, LEAP integrates education, government and industry in a systematic process to ensure that students and workers have the skills they need to succeed in the New Nevada economy.

GOED has been working with its partners TMCC, NCLab and DRI's AIC to develop a first building block of the Machine Learning option within the Advanced Automation and Robotics track of *LEAP Advanced ICT* (Information Communications Technology). This building block will address the growing workforce requirements for skills in Data Analytics and will be a decisive contribution to add to and considerably strengthen the talent pool in this field benefitting effectively every industry in Nevada as well as attracting 21<sup>st</sup> century technology heavy companies to locate in our state. Addressing the growing demand for lifelong learning this program offers students in all stages of their education or professional career access through an online and self-paced learning approach, thereby adhering to LEAP's principal of 'on and off ramps' on the career pathway.

This program addresses the workforce impact of how large data sets (aka Big Data) are changing the way industries process information. Advances in computer technology allow industries to gather and store large amounts of information to predict future trends based on historical data. Data analytics principles are at

the foundation of algorithms used in machine learning systems for autonomous vehicles and automated manufacturing. Workers with skills in business and data analytics are needed across many industry sectors. Nearly every enterprise including marketing, insurance, financial services, manufacturing, health care, information technology, mining, service industries and others use large data sets as the basis of decision making. As Nevada continues to diversify, the need for workers trained in data analytics is growing.

While data is increasingly more available, traditional data processing software is inadequate to deal with the collection (data mining), organization, visualization and predictive modeling needed to make big data useful. For this project, TMCC will partner with NCLab to develop and deliver an online training solution to engage learners with the latest tools and technology utilized in today's analytics fields. Proposed non-credit courses will be delivered online, self-paced and with hands-on demonstrative projects.

Based on the highly successful model developed by Wake Technical Community College, this project will include two courses:

#### DA 120: INTRODUCTION TO ANALYTICS AND ANALYTICAL PROGRAMMING

This course introduces students to the fundamentals of the analytical process and the role of the analyst, applied descriptive statistics, and exploratory data analysis. The students will also learn the basics of the Python programming language, and use the Pandas, Statsmodels, and Scipy libraries to explain basic concepts and applications of analytics. Topics include utilization of Python for data management, data visualization, and exploratory data analysis. Upon completion, students should be able to demonstrate a basic understanding of analytics for decision-making in business and to use Python and its libraries to conduct descriptive analytics.

### **COURSE OUTCOMES**

Students will be able to:

- Explain the analytical process and the role of the analyst.
- Learn the basic principles of statistics for data analytics applications.
- Learn the basics of the Python programming language.
- Learn how to extract data from SQL databases.
- Utilize Python and its powerful free libraries to conduct descriptive analytics.
- Utilize applied descriptive statistics to make basic business decisions.
- Utilize exploratory data analysis to make basic business decisions.

### **DA 121: DATA VISUALIZATION**

This course introduces students to the basics of the Python programming language, using the open-source libraries Numpy, Seaborn, and Matplotlib to explain key concepts in data visualization and reporting. Topics include concepts and methods used in graphical representation of data, exploration and reporting of data, and basic linear regression methods. Upon completion, students should be able to effectively use graphical tools to communicate insights about data. Students must complete DA 120 prior to taking this course/

### **COURSE OUTCOMES**

Students will:

- Learn the basics of the Python programming language.
- Utilize concepts and methods in the graphical representation of data.
- Utilize concepts and methods in the exploration and reporting of data.
- Conduct basic linear regression methods.

• Apply data visualization concepts to communicate insights about data.

#### Timeline:

Development of courses with deep employer input and feedback based on their need for real-world scenarios will begin upon award of funds. Other project partners including Dickson Realty, Nevada Mining Association, Entrepreneurs Assembly and JOIN who support this project will be engaged here as well. Promotion and intake will begin within two months with a targeted course start by Oct. 2018. Each course will take 80-120 hours for completion and we estimate funding will be fully utilized by June 30, 2019.

### **Qualifications:**

As a public institution, TMCC is required to have open enrollment. However, selection criteria can be used to qualify for funding priority, including (but not limited to):

- Employer Offer Letter
- Existing Employees: Employers supporting application
- U.S. Military Veteran
- Residency: Qualify as a Nevada resident
- Low Income/Underemployed

Funding will be disbursed on a first-come, first-serve basis for candidates seeking employment or wage gain. Participants will sign an agreement to provide outcomes information (job placement, wage gain, promotion, etc.) prior to receiving the funded training. The online delivery format will allow for accessibility even in rural region.

### PROGRAM OUTCOMES

This project seeks funding to develop a completely online, hands-on and self-paced learning program (noncredit) and make it available to 500 workers and job seekers in targeted and yet unknown businesses in the Reno area to provide the skills and knowledge necessary for employment and growth in analytical professions. Program outcomes will be reported and evaluated using self-reported data gathered from participants and employer partners to understand the placement and wage gains experienced as a result of program completion. After the launch of the pilot program, NCLab commits to providing an additional 140 seats for distribution across Nevada at no cost to the state (available to June 30, 2020). These seats can be distributed through community colleges and state agencies, used for state employees or allocated in a manner that GOED approves to support the Nevada economy. This project is intended to assist employers by making a necessary skill set available in the workforce and by building interest in technology based careers.

#### WORKFORCE DIVERSITY ACTION PLAN

#### Statement to Comply with Federal & State Law:

TMCC is committed to providing a place of work and learning free of discrimination on the basis of race, color, national origin, disability (whether actual or perceived by others), religion, age, sex/gender (including pregnancy related conditions), sexual orientation, gender identity or expression, genetic information, veteran status (military status or military obligations) in the programs or activities which it operates. Where discrimination is found to have occurred, TMCC will act to stop the discrimination, to prevent its recurrence, to remedy its effects, and to discipline those responsible. The following person has been designated to handle inquiries regarding non- discrimination policies at TMCC and is responsible for coordinating compliance efforts concerning, Executive Order 11246, Title VI and Title VII of the Civil Rights Act of 1964, Title IX Educational Amendments of 1972, Title II of the Americans with Disabilities Act, Section 504 of the Rehabilitation Act of 1973, the Age Discrimination Act of 1990:

Equity and Inclusion Office Truckee Meadows Community College 7000 Dandini Boulevard, RDMT 208 Reno. Nevada 89512-3999

Telephone: 775-673-7027

#### STATEWIDE PORTABILITY PLAN

#### **Potential or Existing Plan:**

After the launch of the pilot program, NCLab commits to providing an additional 140 seats for distribution across Nevada at no cost to the state (available to June 30, 2020). These seats can be distributed through community colleges and state agencies, used for state employees or allocated in a manner that GOED approves to support the Nevada economy. NCLab commits to working with the State of Nevada for ongoing availability to the training programs at negotiated low cost. The low cost of the training should allow the ongoing sustainability of the program after the grant. Partnering with a private vendor will allow for the curriculum to be improved and upgraded for all participants at no cost to the State or college.

COST ESTIMATES						
Category	FY19	Total				
Program development (includes content creation with real-life Employer inputs, general interactive course Apps infrastructure and connections (back-end development), course design and front-end Development, spreadsheets/tables module, SQL module, Python module with Data Analytics and Visualization libraries, interactive quizzes, teacher materials (Syllabus, Lesson Plans, Pacing Guides), videos and tutorials, final assessment, certificate). \$137,000						
Student fees (\$150 per course x 2 courses x 70 participants)	\$21,000	\$21,000				
Discretionary (Promotion, program administration costs, tracking, etc.)  Total Request	\$7,000	\$7,000 <b>\$165,000</b>				

TRAINING FACILITIES						
Facility Name: Pennington Applied Technology Center or ONLINE from any location						
Address: 475 Edison Way	City: Reno	Hours: 7:30 am – 9:00 pm (M-F); 9am- 3pm (Sat.)				

#### NSHE - TMCC - Lift 361 - TICKaFLIX - Grand Rounds

#### WORKFORCE DIVERSITY ACTION PLAN

Lift 361, Grand Rounds and TICKaFLIX (collectively, the Clients) aim to recruit a well-trained, diverse workforce. This Workforce Diversity Action Plan outlines key considerations and actions steps that will be used to help accomplish workforce diversity goals.

In order to develop this diverse workforce, it is important to consider ways to engage all segments of the population in (1) recruiting, (2) interviewing, and (3) hiring.

#### **AGENCY SUPPORT**

The Nevada Governor's Office of Economic Development (GOED) will provide leadership, guidance and facilitation, in order to ensure that interactions between state agencies and the Clients are efficient and effective.

The Nevada Department of Employment Training & Rehabilitation will provide assistance to the Clients. DETR will utilize connections with local workforce boards and community organizations who work closely with underserved and underrepresented segments of the community.

The Nevada Department of Veterans Services (NDVS) will provide support and assistance to DETR in order to facilitate direct engagement with local military installations and organizations.

The Nevada System of Higher Education (NSHE), through Truckee Meadows Community College (TMCC), will provide customized workforce training programs, as well as ad hoc, performance-based curriculum for potential employees who may face basic education or language barriers.

The Nevada Department of Education (NDE) and Nevada Governor's Office of Science, Innovation and Technology (OSIT) will work with GOED to develop and implement Career and Technical Education (CTE) pathways that will prepare Nevada students to be successful members of the Client's workforce. As part of this initiative, close attention will be paid to how these CTE programs can be tailored towards underserved and underrepresented segments of the community.

### **ACTION PLAN**

DETR, state agencies, and the Clients will develop specific plans over time, but the following action plan describes broad steps and considerations that will be considered throughout.

The Clients, in collaboration with DETR and other appropriate offices and agencies, will develop, implement and evaluate strategic outreach and recruiting initiatives targeted towards underserved or underrepresented segments of the community.

During and after each part of the process, the Clients will assess the success of their efforts to understand the relative success of recruiting, interviewing and hiring underserved or underrepresented segments of the community. This is part of a continuous improvement feedback process that will assess performance and inform necessary modifications to the strategy.

This process will help identify gaps and barriers that may be preventing diverse segments of the community from applying for positions. For example, this process may highlight segments of the community that have been blatantly overlooked in recruiting, or may expose necessary improvements to non-English language postings that have not been well-translated, or could identify efforts that are particularly successful at engaging diverse segments of the community.

### **RECRUITING STRATEGIES**

### General

Marketing campaigns (e.g. radio, TV, print, social media) will be tailored to reach diverse audiences, promote awareness of job opportunities, and direct interested individuals to the Clients', DETR and workforce development partner offices, job fairs, and other community events. Job announcements will also be posted at major web sites and job boards.

Examples of successful efforts include but are not limited to:

- Posting job announcements in multiple languages
- Advertising on non-English speaking radio stations
- Implementing social media campaigns
- Holding job fairs at local churches, schools, Tribal centers or other community gathering places where traditionally underserved or underrepresented segments of the community are likely to frequent

## **Adults & Youth**

DETR will work with the Clients to create skill-based profiles for the Clients' workforce positions in order to understand basic requirements for each position and to identify potential opportunities for targeted recruitment.

For manufacturing positions, DETR will compare position skill-profiles with existing profiles in the Nevada Job Connect Operating System (NJCOS). Using this information, DETR will identify diverse candidates who may be suited to the position, and will actively recruit individuals via phone, email and traditional mail.

Recruiting will also occur at DETR and workforce development partner offices throughout the Northern Nevada. Cumulatively, these offices provide service to thousands of Nevadans each year. Many of these offices are located within traditionally diverse communities. Primary locations provide individualized job-matching, job preparation workshops, STEM workshops, skills-based assessments and other supportive services.

Once a job seeker engages with these offices, they will undergo a thorough assessment to identify areas for improvement and possible barriers to employment.

GOED and DETR will also work with workforce partners and NDE to identify locations for job fairs or recruiting campaigns at area high schools with diverse populations. Working with career counselors and CTE programs, this will provide a pipeline of youth who are trained and ready to work at the Client's facility as well as increase awareness among parents/family and the community as a whole of career opportunities.

# **Professional Positions**

Management, engineering, accounting, human resource and other professional positions will also be actively recruited in diverse communities. In addition to marketing campaigns, DETR will work with the Client to engage professional diversity organizations who can distribute openings to their members.

In addition to the strategies outlined above, specific initiatives will be utilized to target the following segments of the community:

### **Veterans**

GOED and DETR will work with NDVS to recruit veterans and veteran families for positions at the Clients' facilities. NDVS will facilitate direct engagement with local military installations and organizations, and assist DETR in assembling skill profiles for eligible persons.

- Hold job fairs at local military installations and post on veteran-based job sites
  - Fallon Naval Air Station
  - o Nevada National Guard
  - o Nevada Green Zone Initiative

# Persons with Disabilities

Persons with disabilities will be assisted by DETR's Bureau of Vocational Rehabilitation (BVR). BVR provides services, technology, education, training and workforce support to more than 5,200 individuals with disabilities in Nevada each year. BVR will assist the Client with recruitment and retention of these individuals, and will customize work readiness and training, as needed. BVR's services ensure that individuals can meet the same performance standards and expectations as other employees. BVR can provide funding for on- and off-site training tailored to specific needs, and pays for the salaries of potential employees while they are learning, and also for job coaching, instruction at Nevada colleges, assistive technology and additional on-the-job supports. BVR will also provide the Client with information related to accessing additional tax incentives related to employing individuals with disabilities.

GOED and DETR will also work with community organization and partners that specialize in working with individuals with disabilities, including:

o UNR, TMCC, DETR

# **Individuals with Criminal Records**

GOED will work with the Clients to understand which level of convictions may preclude an ex-offender from applying for a position, consistent with best practices established by the National Workrights Institute or other

similar organization. DETR will also work with the Nevada Department of Corrections and area education institutions to determine if an appropriate training program can be developed and implemented for incarcerated persons or ex-offenders.

#### **INTERVIEWING**

The clients may conduct preliminary interviews resulting in possible contingency offers of employment for participants. Offers may be contingent upon participant's successful completion of the courses outlined herein.

DETR may work with the Client to interview candidates for each position. DETR will provide locations in local Job Connect offices and identify other sites within or in close proximity to diverse communities in order to mitigate potential transportation issues that may prevent qualified candidates from interviewing for a position. DETR and the Client will also work to mitigate linguistic or cultural barriers by developing interview questions while paying close attention to how questions are phrased and how interviews are conducted.

### **HIRING**

Once the Client makes a determination to hire a candidate based on the candidate qualifications and best fit for the position, DETR will work with the Client to understand if, how or why underserved or underrepresented segments of the community are or are not being hired. This evaluation will be conducted at the Client's request, and will only be used to inform improvements in recruiting, interviewing or training programs implemented by DETR, TMCC or the State.

DETR will also work with the Client to understand potential barriers that might prevent candidates from being retained by the Client over the long term. These potential barriers include, but are not limited to, transportation, childcare or the need for continuing education. DETR will work to identify potential grants, model programs or other opportunities that the Client or State could apply for, provide or develop, to mitigate such barriers and help ensure that the diverse workforce is hired and retained.

## **DEFINITIONS**

#### **Availability**

Availability is an estimate of the percentage of minorities and women in the relevant labor market who are qualified and interested in positions

### Inclusion

Inclusion is a culture that connects each employee to the organization; encourages collaboration, flexibility, and fairness; and leverages diversity throughout the organization so that all individuals are able to participate and contribute to their full potential.

### **Racial & Ethnic Categories**

As currently defined in federal regulations:

 American Indian or Alaska Native: A person having origins in any of the original peoples of North and South America (including Central America) who maintains cultural identification through tribal affiliation or community attachment.

- Asian: A person having origins in any of the original peoples of the Far East, Southeast Asia, or the Indian Subcontinent, including, for example, Cambodia, China, India, Japan, Korea, Malaysia, Pakistan, the Philippine Islands, Thailand, and Vietnam.
- Black or African American: A person having origins in any of the black racial groups of Africa.
- **Hispanic or Latino**: A person of Cuban, Mexican, Puerto Rican, South or Central American, or other Spanish culture or origin, regardless of race.
- Native Hawaiian or Other Pacific Islander: A person having origins in any of the original peoples of Hawaii, Guam, Samoa, or other Pacific Islands.
- White: A person having origins in any of the original peoples of Europe, the Middle East, or North Africa.

#### Underserved

Community-specific data should be used to better understand the composition of the workforce and to identify potential gaps or opportunities for additional engagement. In addition to traditional characteristics such as national origin, language, race, color, sexual orientation, etc., this Action Plan also seeks to identify opportunities to engage family members of veterans and individuals who may be homeless, disabled, formerly incarcerated, elderly, or youth who may be disconnected from school and employment.

# Underrepresented

A situation in which the number of women or members of a minority group within a category of civil service employment constitutes a lower percentage of the total number of employees within the employment category than the percentage that women or the minority group constitutes within the civilian labor force of the United States.

#### Underutilized

Underutilization occurs when the percentage of employees of a minority group is less than the availability percentage for that group. Underutilization is calculated for employees in each job group. The declaration of underutilization does not amount to an admission of impermissible conduct. It is neither a finding of discrimination nor a finding of a lack of good faith affirmative action efforts. Rather, underutilization is a technical targeting term used exclusively by workforce diversity planners who seek to apply good faith efforts to increase in the future the percentage of utilization of minorities and women in a workforce.

### **Workforce Diversity**

Workforce diversity is a collection of individual attributes that together help agencies pursue organizational objectives efficiently and effectively. These include, but are not limited to, characteristics such as national origin, language, race, color, disability, ethnicity, gender, age, religion, sexual orientation, gender identity, socioeconomic status, veteran status, and family structures. The concept also encompasses differences among people concerning where they are from and where they have lived and their differences of thought and life experiences.