# **Connection to Careers #2**

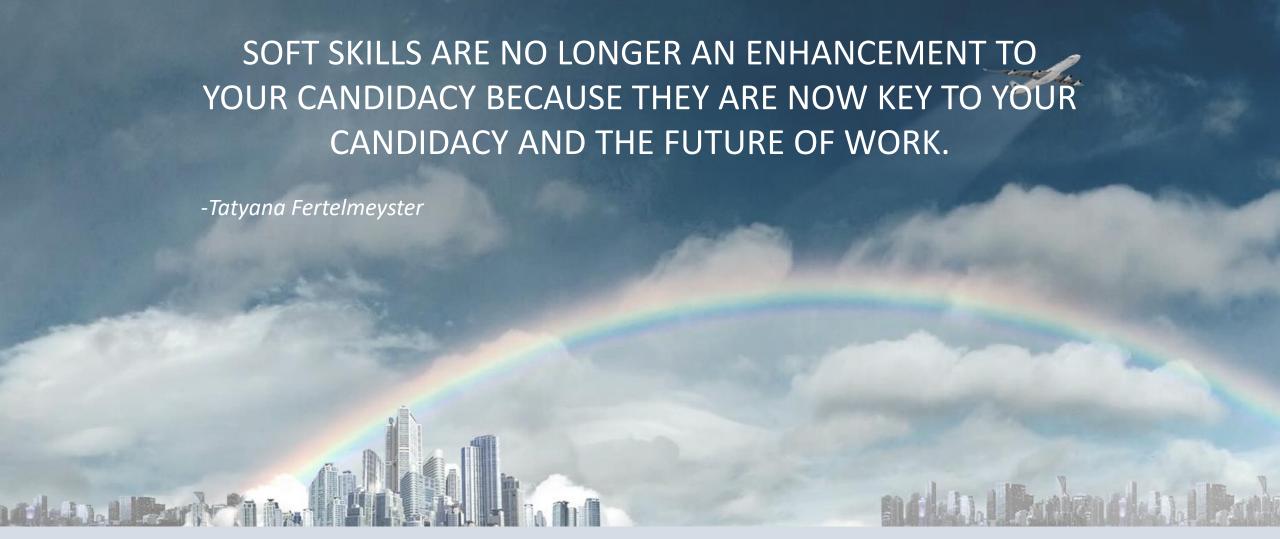


**Trevor Stokes**President & CEO



Making The World of Work Understandable





# Connection to Careers Employability Skills



# Connection to Careers Employability Skills



# Connection to Careers Employability Skills

#### The Employability Skills Series

**Session One: November 10** 

The Importance of Employability Skills

**Session Two: November 17** 

Identifying and Communicating Priority Skills

**Session Three: November 24** 

Integrating Employability Skills into Instructional Models





- 1 Introduction and Expectations
- **102** Recap of the Labor Market Analysis
- **03** Knowledge, Skills and Abilities
- 1 Three Tools for Skills Profiling
- 05 Call to Action





1 Introduction and Expectations



#### Labor Market Intelligence for Students

"I have never seen my kids more excited about their education than they are right now. They are lined up at my desk to make counseling appointments."

-Karen



#### Labor Market Intelligence for Students

"I have never seen my kids more excited about their education than they are right now. They are lined up at my desk to make counseling appointments."

-Karen, Adobe Mountain High School
Arizona Department of Juvenile Corrections





- 1 Introduction and Expectations
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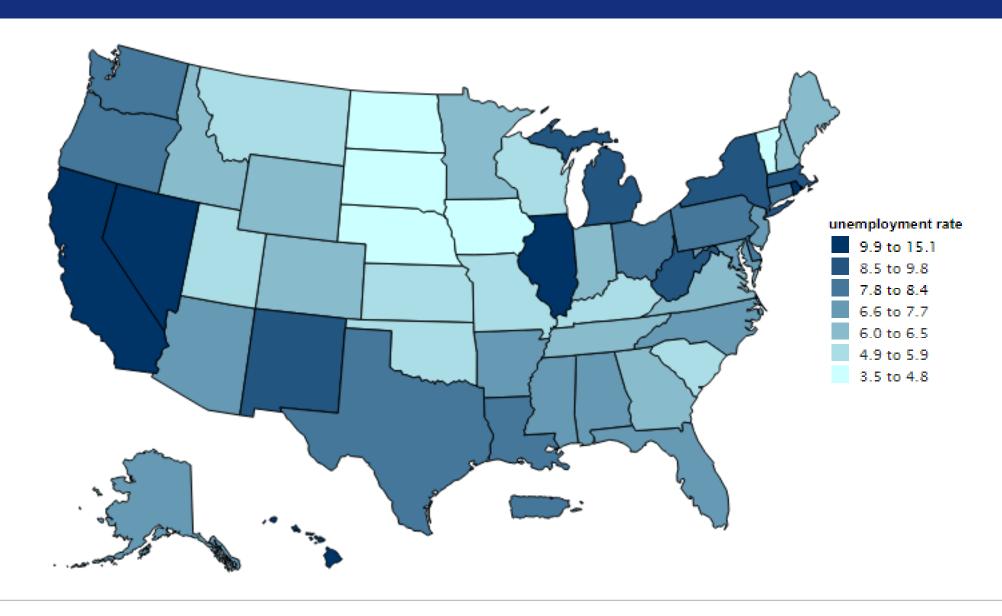
Recap of the Labor Market Analysis



# IMPACT OF THE PANDEMIC

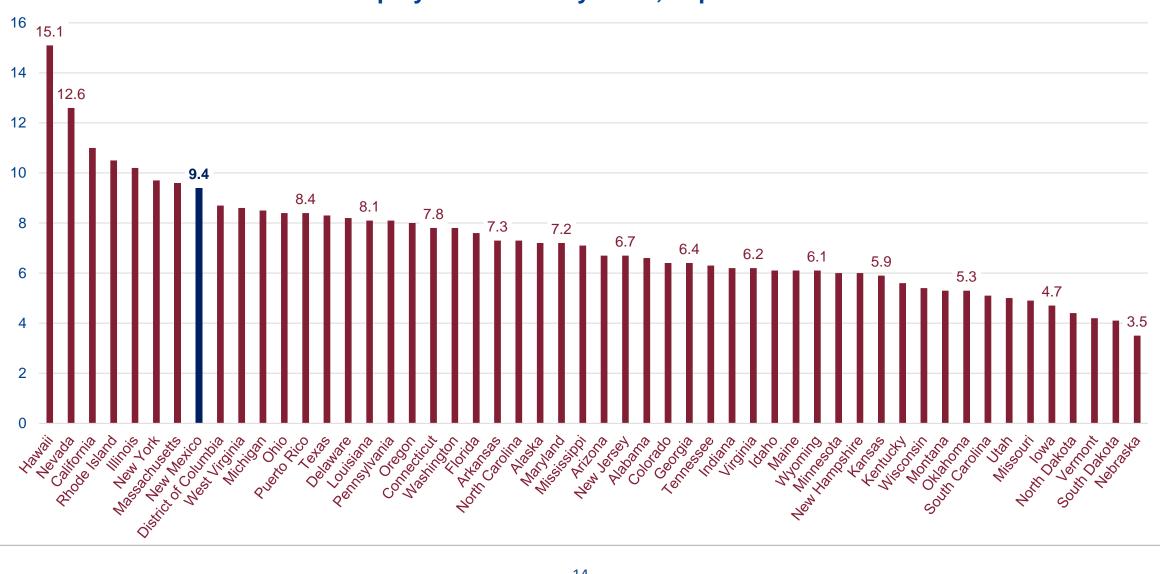








#### **Unemployment Rates by State, September 2020**



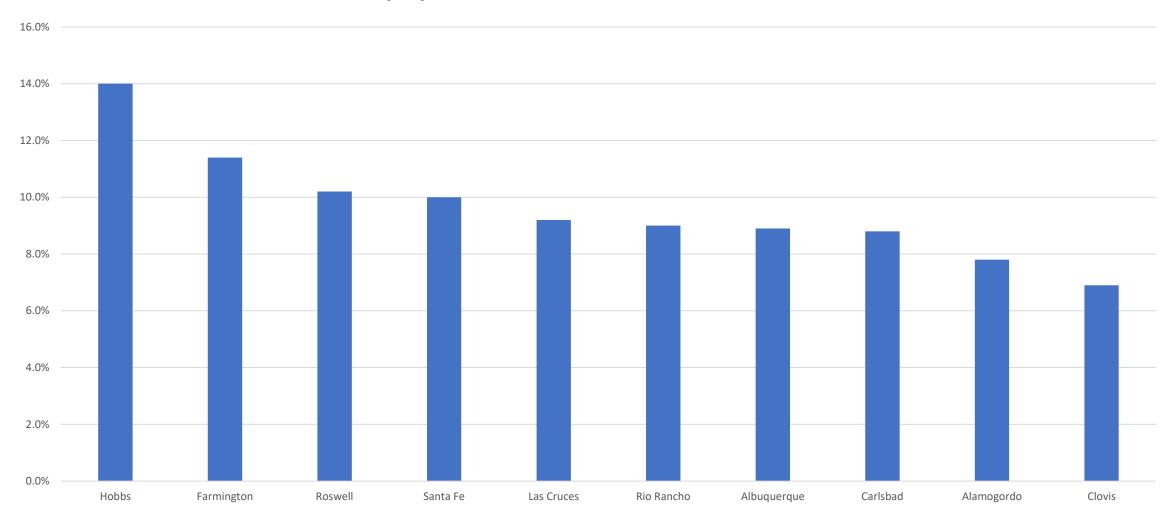


#### **Unemployment Rate, New Mexico, 2016-2020**



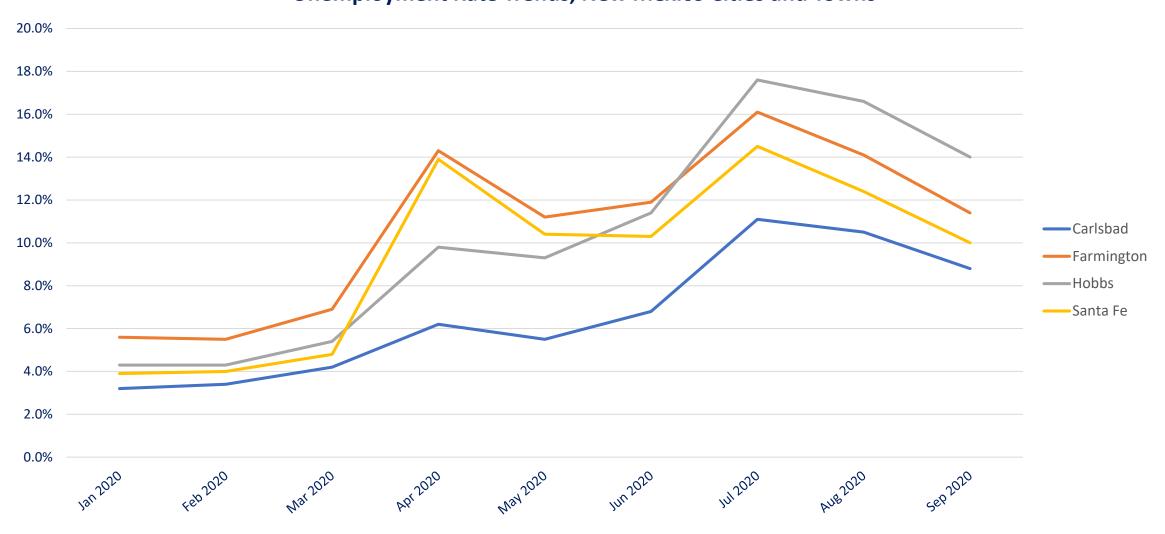


#### **Unemployment Rates, New Mexico Cities and Towns**



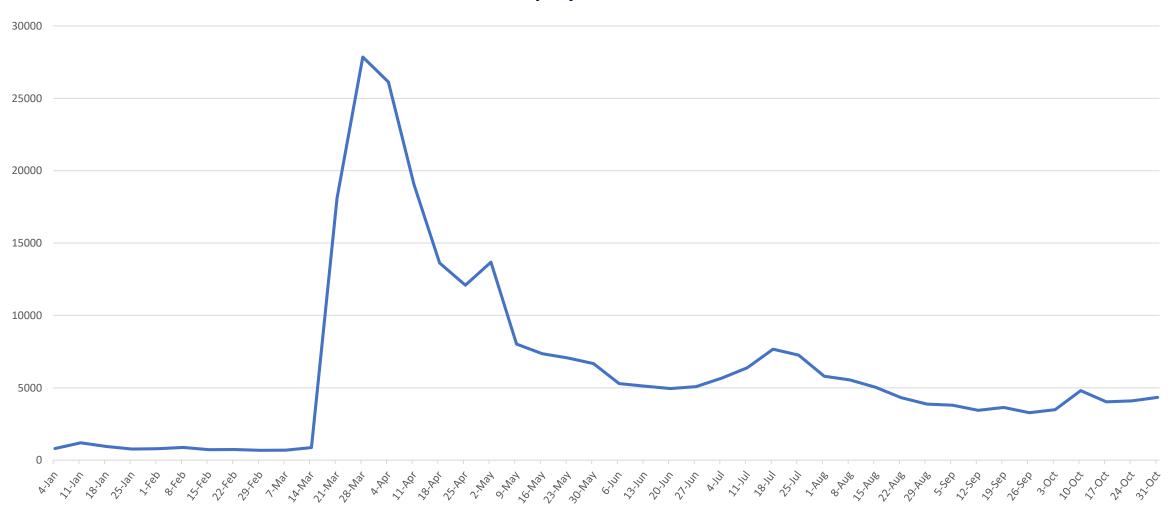


#### **Unemployment Rate Trends, New Mexico Cities and Towns**



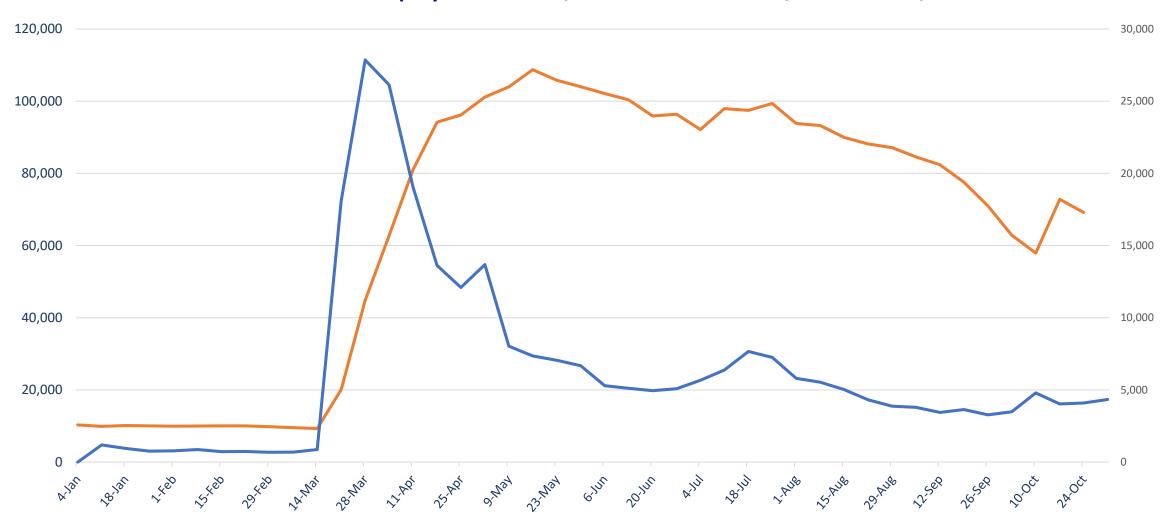


#### **Initial Unemployment Claims, New Mexico, 2020**





#### **Unemployment Claims, Initial and Continued, New Mexico, 2020**





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#### **Three Methods for Basic Skills Profiling**

- The Employment and Training Administration Occupation Profiles
- Job Postings Analysis
- Industry Sector Partnerships



#### **Three Methods for Basic Skills Profiling**

 The Employment and Training Administration Occupation Profiles

**The United States** Department of Labor-Employment and Training Administration





- Knowledge
- Skills
- Abilities



- Interests
- Work Styles
- Work Values



Work Activities

Work Context



Knowledge: 33 elements

- Biology
- Building and Construction
- Chemistry
- Communications and Media
- Computers and Electronics
- English Language
- History and Archeology
- Production and Processing



- Cognitive
- Sensory
- Psychomotor
- Physical



- Cognitive
  - Deductive reasoning
  - Memorization
  - Number facility
  - Fluency of ideas
  - Written comprehension



- Psychomotor
  - Arm-Hand steadiness
  - Finger dexterity
  - Rate control



- Physical
  - Dynamic strength
  - Stamina
  - Extent Flexibility



- Sensory
  - Auditory attention
  - Far vision
  - Depth perception



#### Skills: 6 categories/52 elements

- Basic
- Complex Problem Solving
- Resource Management
- Social
- Systems
- Technical



Skills: 6 categories/52 elements

- Basic 10
  - Active Listening
  - Critical Thinking
  - Mathematics
  - Reading Comprehension
  - Speaking



#### Skills: 6 categories/52 elements

- Social 6
  - Coordination
  - Instructing
  - Negotiation
  - Persuasion
  - Service Orientation
  - Social Perceptiveness



Skills: 6 categories/52 elements

Complex Problem Solving - 1



Skills: 6 categories/52 elements

- Technical- 11
  - Equipment Maintenance
  - Equipment Selection
  - Programming
  - Repairing
  - Troubleshooting



Skills: 6 categories/52 elements

- Systems 3
  - Judgment and Decision Making
  - Systems Analysis
  - Systems Evaluation



Skills: 6 categories/52 elements

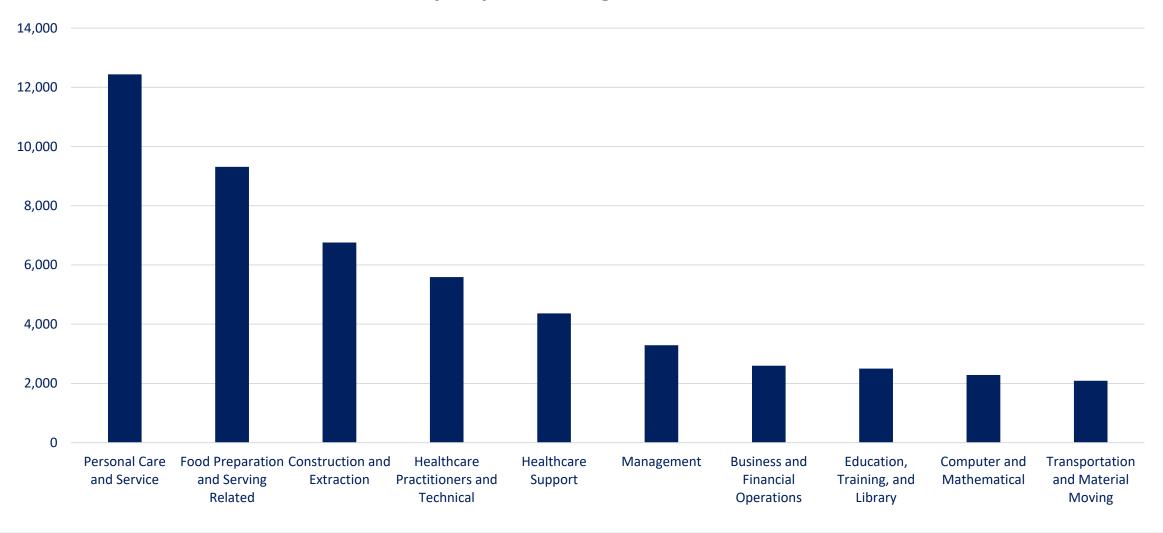
- Resource Management 4
  - Management of Financial Resources
  - Management of Material Resources
  - Management of Personnel Resources
  - Time Management



# **Matching Skills to High-Demand Fields**



#### Job Families by Projected Change, New Mexico, 2018-2028





## **Construction Supervisors**

7,284 Jobs

8,069 Projected Jobs

785 New Jobs

11% Growth

876 Annual Openings

\$58,730 Median Annual Wages

- 60% require a high school diploma
- 20% require an associate's degree
- 20% don't specify an educational requirement





## **Construction Supervisors**

#### **Skills**

- Coordination adjusting actions in relation to others
- Active Listening Giving full attention to what other people are saying and taking the time to understand the points being made
- Speaking Talking to others to convey information effectively
- Critical Thinking Using logic and reasoning to identify the strengths and weaknesses of alternative solutions or approaches to problems





## **Construction Supervisors**

Skill	Importance	Level
Coordination	72	55
Active Listening	69	55
Speaking	69	54
Critical Thinking	66	52





## **Construction Supervisors**

Work Activities	Importance	Level
Communicating with Supervisors, Peers or Subordinates	82	68
Making Decisions and Solving Problems	79	70
Inspecting Equipment, Structures or Material	78	59
Getting Information	77	52





## **Electricians**

4,566 Jobs

5,085 Projected Jobs

519 New Jobs

11% Growth

876 Annual Openings

\$49,040 Median Annual Wages

- 48% require a high school diploma
- 28% require a vocational school certificate
- 5% require an associate's degree
- 19% don't specify an educational requirement





## **Electricians**

#### **Skills**

- Troubleshooting determining causes of operating errors and deciding what to do about it
- **Repairing** Repairing machines or systems
- Active Listening Giving full attention to what other people are saying and taking the time to understand the points being made
- Critical Thinking Using logic and reasoning to identify the strengths and weaknesses of alternative solutions or approaches to problems





## **Electricians**

Importance	Level
66	57
63	52
60	46
60	52
	66 63 60





## **Electricians**

Work Activities	Importance	Level
Getting Information	78	45
Identifying Objects, Actions and Events	78	60
Making Decisions and Solving Problems	75	56
Inspecting Equipment, Structures and Material	74	58





## **Three Methods for Basic Skills Profiling**

- The Employment and Training Administration Occupation Profiles
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- Industry Sector Partnerships

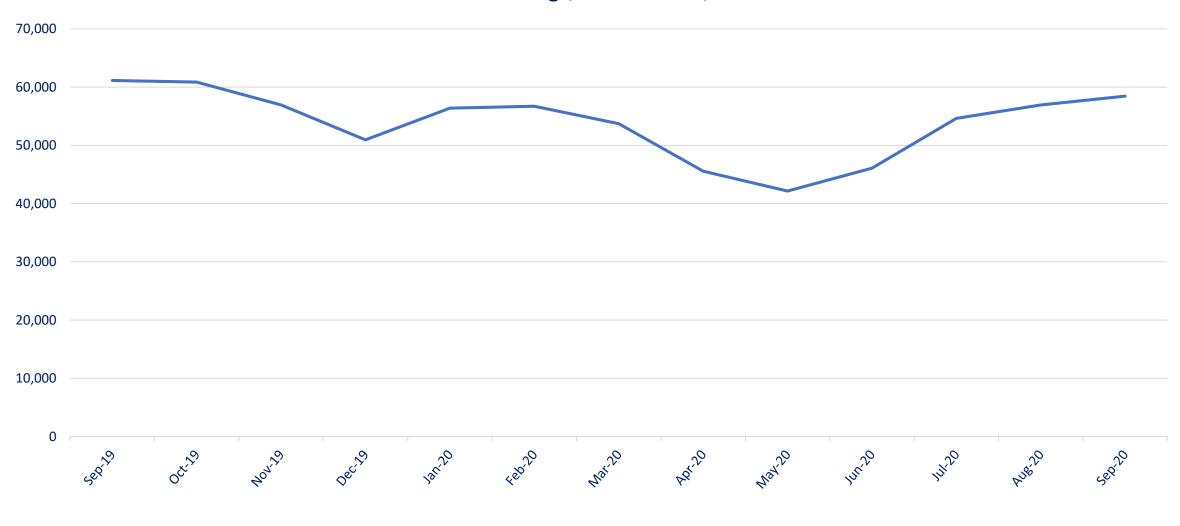


# **Three Methods for Basic Skills Profiling**

Job Postings Analysis

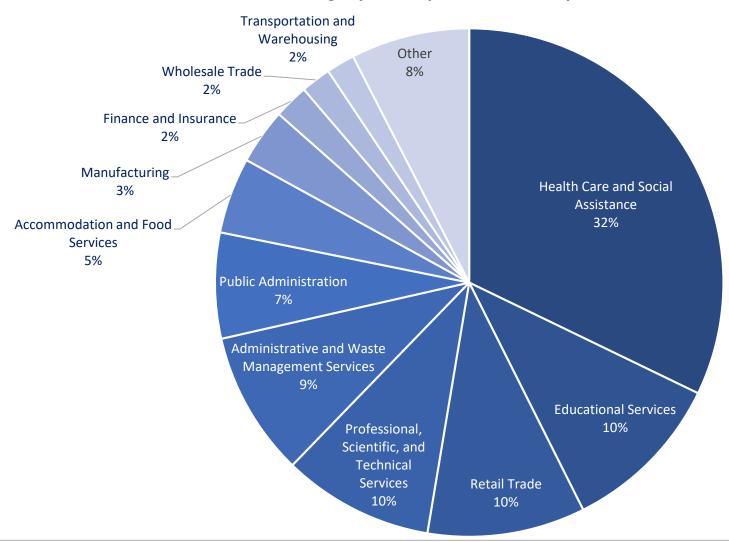


#### **Job Postings, New Mexico, 12 Months**





#### **Job Postings by Industry, New Mexico, September 2020**





### **Registered Nurses**

Job Titles	Postings, 2020
Registered Nurses	18,377
Travel Registered Nurses	8,629
Labor and Delivery Registered Nurses	9,574
Medical Surgical Registered Nurses	7,732
Telemetry Travel Registered Nurses	3,557
ICU Registered Nurses	7,648
Operating Room Registered Nurses	4,914
PACU Registered Nurses	5,480
Emergency Room Registered Nurses	7,029
Medical Surgical Travel Registered Nurses	5,389



### **Software Developers**

Job Titles	Postings, 2020
Software Engineers	2,881
Systems Engineers	1,374
Senior Software Engineers	939
.NET Full Stack Developers	335
Software Developers	868
Full Stack Java Developers	308
Java Developers	854
DevOps Engineers	381
Senior Software Development Managers	517
Full Stack Developers	381



### **Registered Nurses**

Most Requested Technical Skills	
Nursing	CPR
Basic Life Support	Telemetry
Advanced Cardiovascular Life Support (ACLS)	Post-Anesthesia Care
Intensive Care	Surgery
Pediatric Advanced Life Support	Pediatrics
Emergency Departments	Critical Care
Medical Surgical Nursing	Nursing Process
Operating Room	Case Management



### **Software Developers**

Most Requested Technical Skills		
Software Engineering	C++ (Programming Language)	
Java	C# (Programming Language)	
Software Development	Debugging	
Computer Science	.NET Framework	
JavaScript	Linux	
Python	Systems Engineering	
Agile Methodology	C (Programming Language)	
SQL	Full Stack Software Engineering	



### **Registered Nurses**

Most Requested Employability Skills	
Communications	Coordinating
Planning	Problem Solving
Critical Thinking	Professionalism
Management	Accountability
Compassion	Detail Orientation
Leadership	Advocacy
Customer Service	Scheduling
Teaching	Teamwork

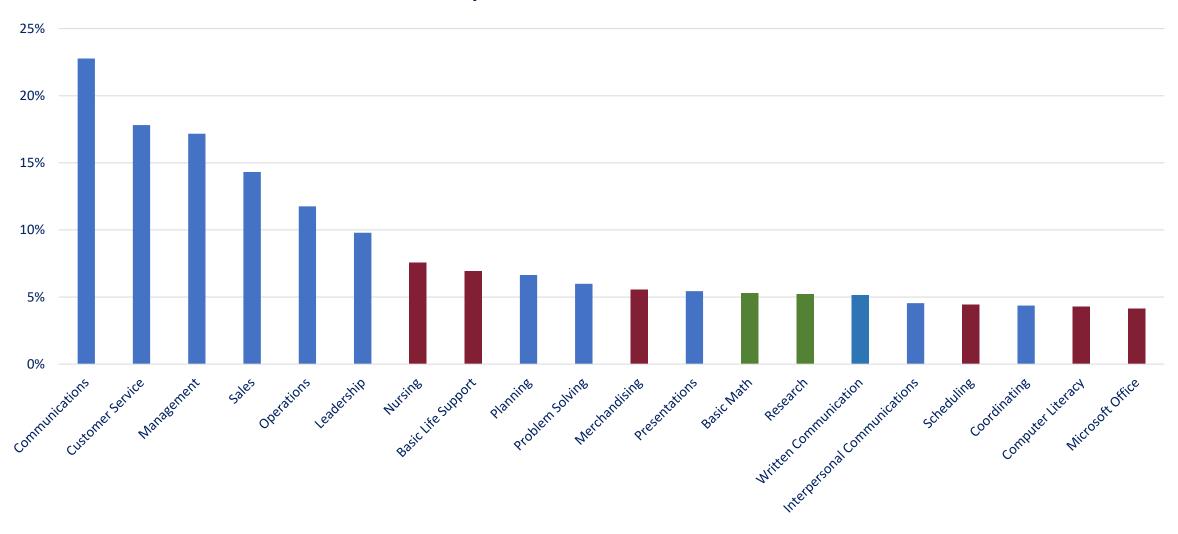


### **Software Developers**

Most Requested Employability Skills	
Communications	Operations
Management	Research
Problem Solving	Basic Math
Integration	Planning
Innovation	Written Communication
Infrastructure	Interpersonal Communications
Leadership	Application Development
Troubleshooting (Problem Solving)	Presentations



#### Most Requested Skills, New Mexico, 2020





## **Three Methods for Basic Skills Profiling**

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# **Three Methods for Basic Skills Profiling**

Industry Sector Partnerships



# THE NORTHEASTERN ARIZONA WORKFORCE QUALITY INITIATIVE





# The Northeastern Arizona Workforce Quality Initiative

Community-Level Labor Market Analysis and Workforce Strategies

Question-Show Low, Arizona:

What personal and interpersonal skills are most important in Registered Nurses?

#### **Verbal Communication Skills**

- -Patient advocacy
- -Persuasion
- -Connecting with a patient to build trust





# The Northeastern Arizona Workforce Quality Initiative

Community-Level Labor Market Analysis and Workforce Strategies

Question-Winslow, Arizona:

What personal and interpersonal skills are most important to the Public Works Department?

#### Attitude and Professionalism

- -Pass a drug screen
- -Show up every day
- -Willingness to learn





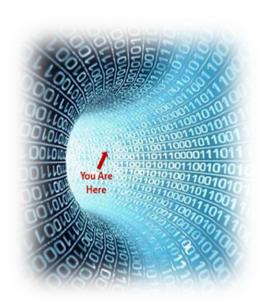
## **Aerospace and Defense Sector Summits**

Dozens of private-sector A&D professionals representing more than 5,700 employees offered perspectives on A&D careers

Question: What are the most significant issues creating the skills gap in the aerospace and defense industry in Arizona?

- #1 Lack of basic learning and critical thinking skills
- #2 Job security issues
- #3 Perception of the industry (layoff cycles, earning potential, gritty work) keeps quality talent away
- #8 Inadequate levels of math and science skills





## **Information Technology Sector Summits**

More than 200 IT employers representing more than 3,000 years of combined private sector experience offered perspectives on IT careers

Question: As you look at 'young professionals' coming into Arizona's IT workforce from colleges/universities and vocational schools, what are they LACKING? Where do they seem to be most under-skilled or under-prepared for the IT workforce?

- 1. Real world application of skills
- 2. Professional acumen
- 3. Motivation
- 4. Business experience/judgment

- 5. Aversion to risk
- 6. Strong communication skills, particularly verbal
- 7. Collaboration
- 8. Customer service





## **Industry Skills Summit**

More than 30 advanced manufacturing employers representing more than 18,000 workers and 400 years of combined private sector experience offered perspectives on manufacturing careers

Question: Think about an entry level position in your organization. When someone in this position does not work out, what is typically the reason?

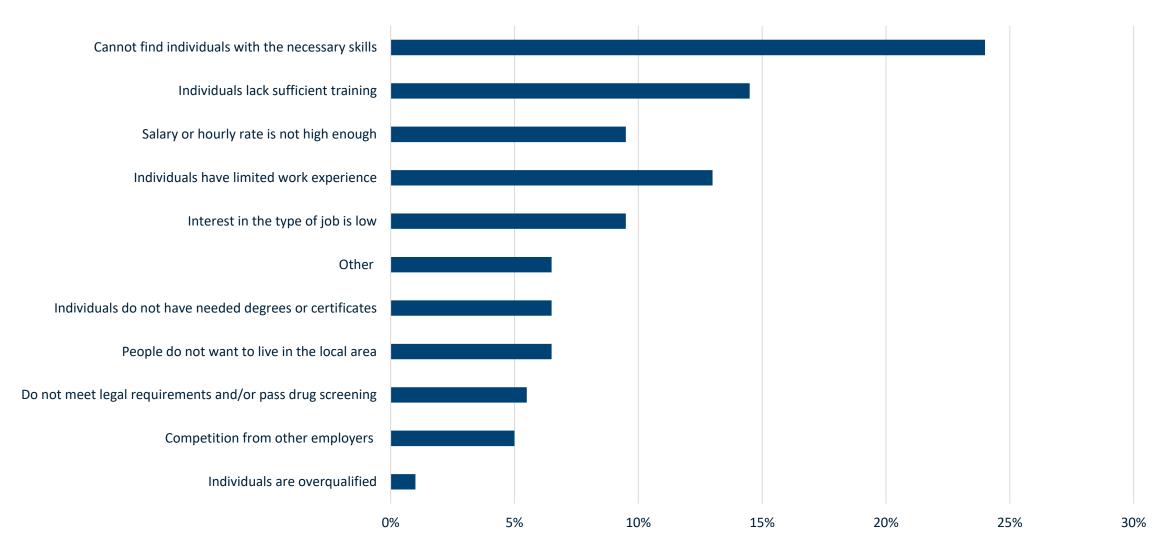
- 1. BY A LARGE MARGIN: Attendance
- 2. Work ethic/effort
- 3. Negative attitude
- 4. RARELY MENTIONED: work quality



# THE NEW MEXICO COMPREHENSIVE LOCAL NEEDS ASSESSMENT

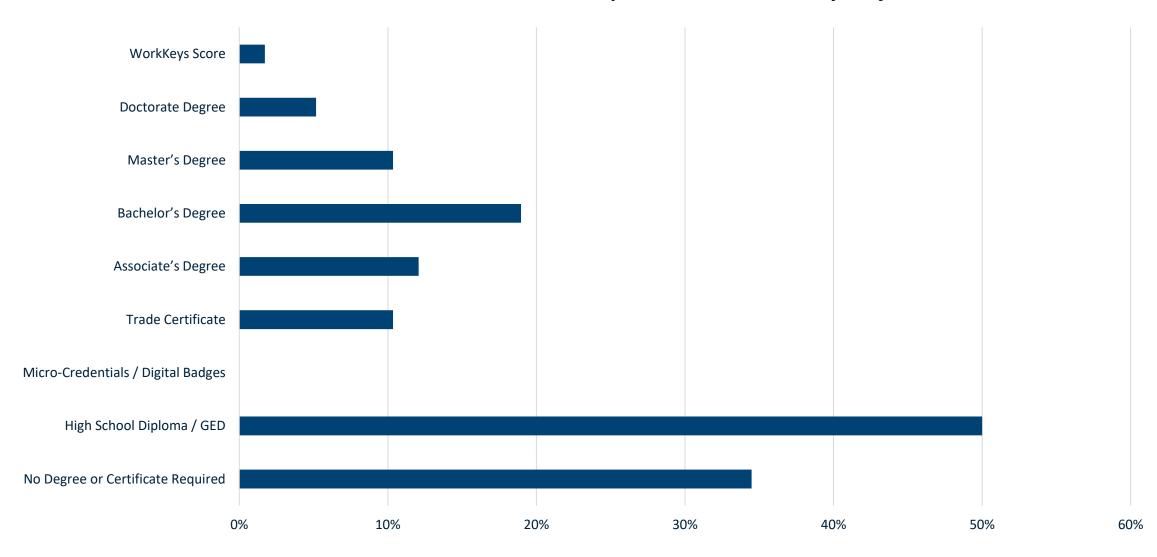


When your business/company struggles to fill open positions, what are the primary reasons?



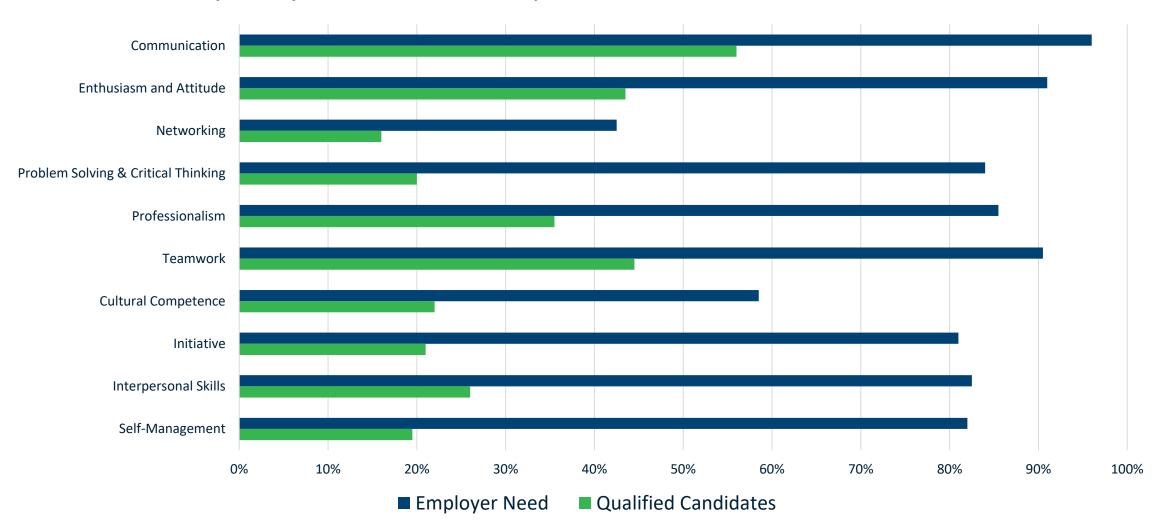


#### What is the minimum educational requirement for most of your jobs?



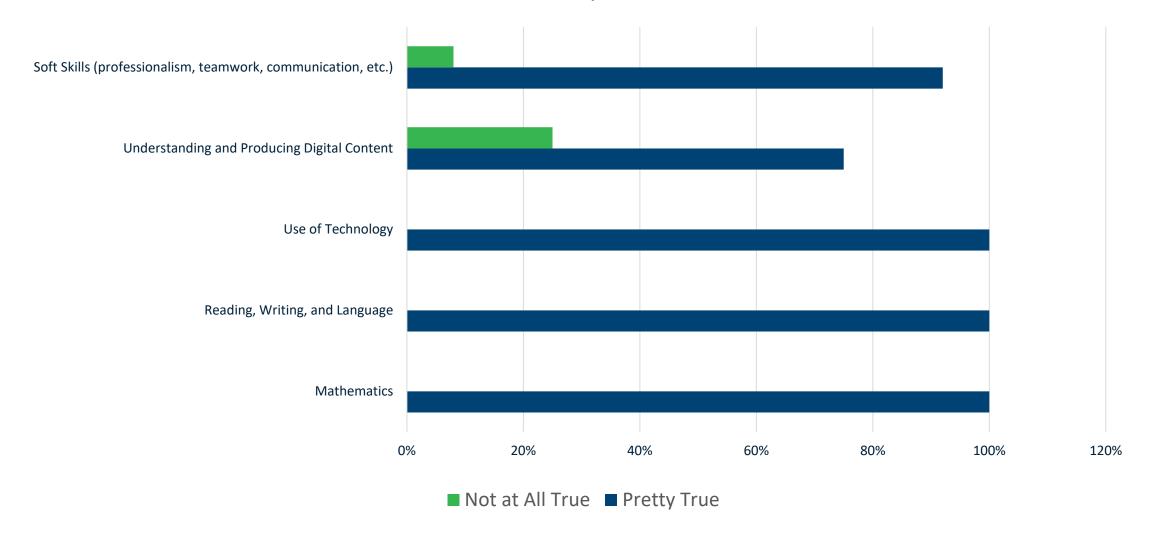


Do most jobs in your company require a basic mastery of the following EMPLOYABILITY OR "SOFT" skills to perform job-related tasks and how qualified with those skills do candidates seem to be?



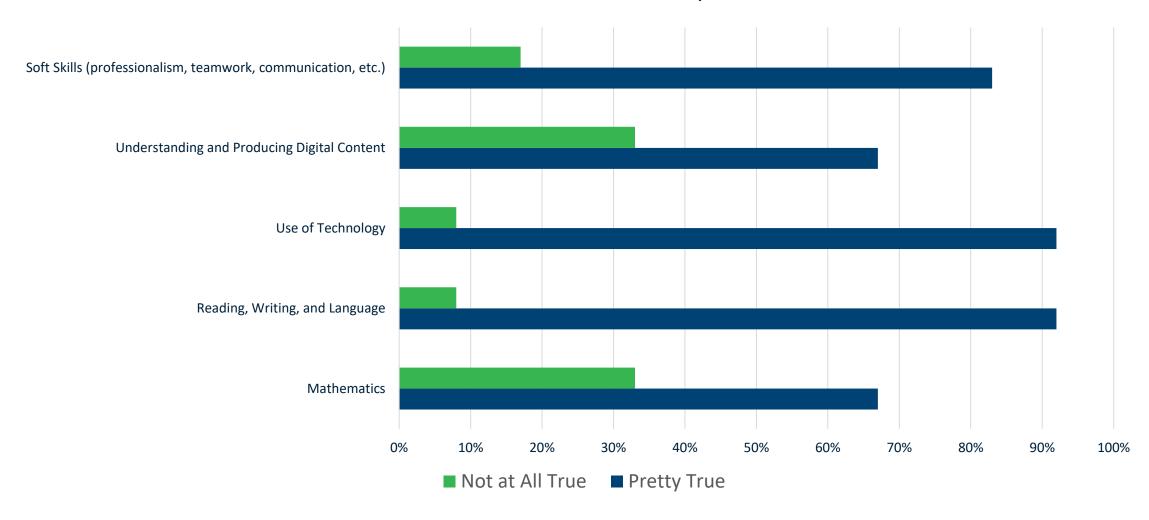


When hiring new employees, those with a **bachelor's degree** typically demonstrate a basic mastery of...





When hiring new employees, those with a **trade certificate or associate's degree** typically demonstrate a basic mastery of...





## **Statewide Summary**

### **Optimal Characteristics of the Local Workforce**

- Problem Solving
- Critical Thinking
- Self-Direction
- Strong Work Ethic
- Inquisitive and Innovative
- Communication Skills

- Teachable
- Committed to Lifelong Learning
- Professional Presence
- Confidence
- Ability to Pass a Background Check

## **Conclusions and Recommendations**

- Classroom evaluations of labor market demands
- Integration of non-cognitive competencies
- Skills maps for critical pathways
- Industry sector partnerships



