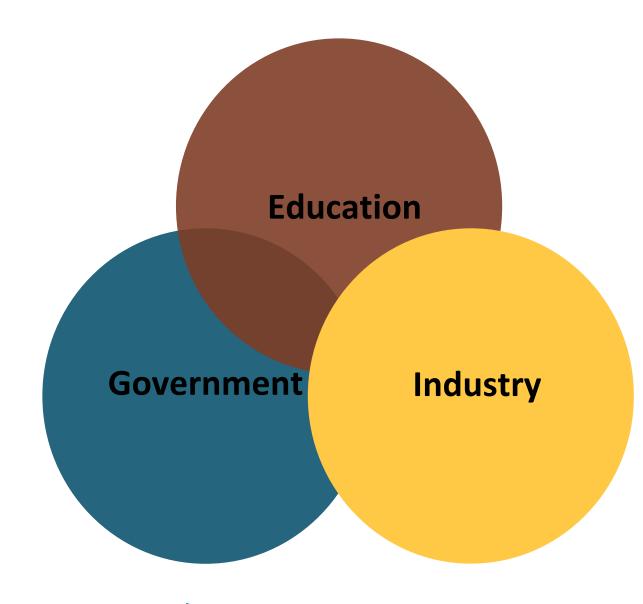


#### MISSION & PURPOSE

Talent Ready Utah, housed in USHE, was legislatively created to be an industry-facing organization to collaborate with industry, education, and government to align educational programs to workforce demands.

Our role is to engage with and convene stakeholders to identify workforce gaps and to create, expand, and align shortterm and long-term workforce solutions.





Senator Ann Millner, Chair

**Representative – Val Peterson** 

Rich Nye - Gov's Education Advisor

Jefferson Moss – GOEO, Executive Director

**Casey Cameron – DWS, Executive Director** 

**Margaret Busse – Commerce, Executive Director** 

**Geoff Landward – Commissioner of USHE** 

**Molly Hart - Superintendent of USBE** 

Joshua Aikens - Zonos, Chief of Staff

**Chuck Taylor - SyberJet, CEO** 

**Jake Hinkley - Sunroc, Director of Workforce** 

**Erin Casale - Qualtrics, Director of Customer** 

Keith Hepler - BAE, VP

**Heather Brace - Intermountain Health, CHRO** 

Will Clive - LVT, CHRO

Richard Bowles – HAFB, Chief of Training & Workforce Development

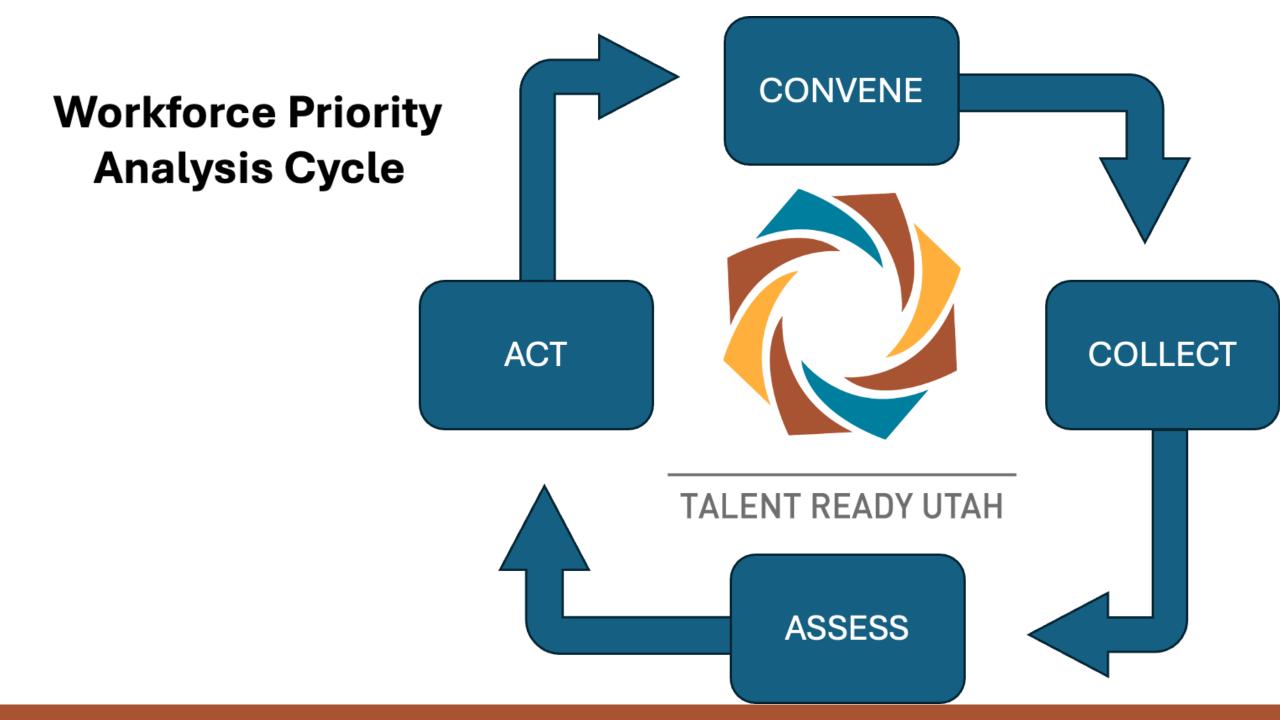
**Workforce Development** 

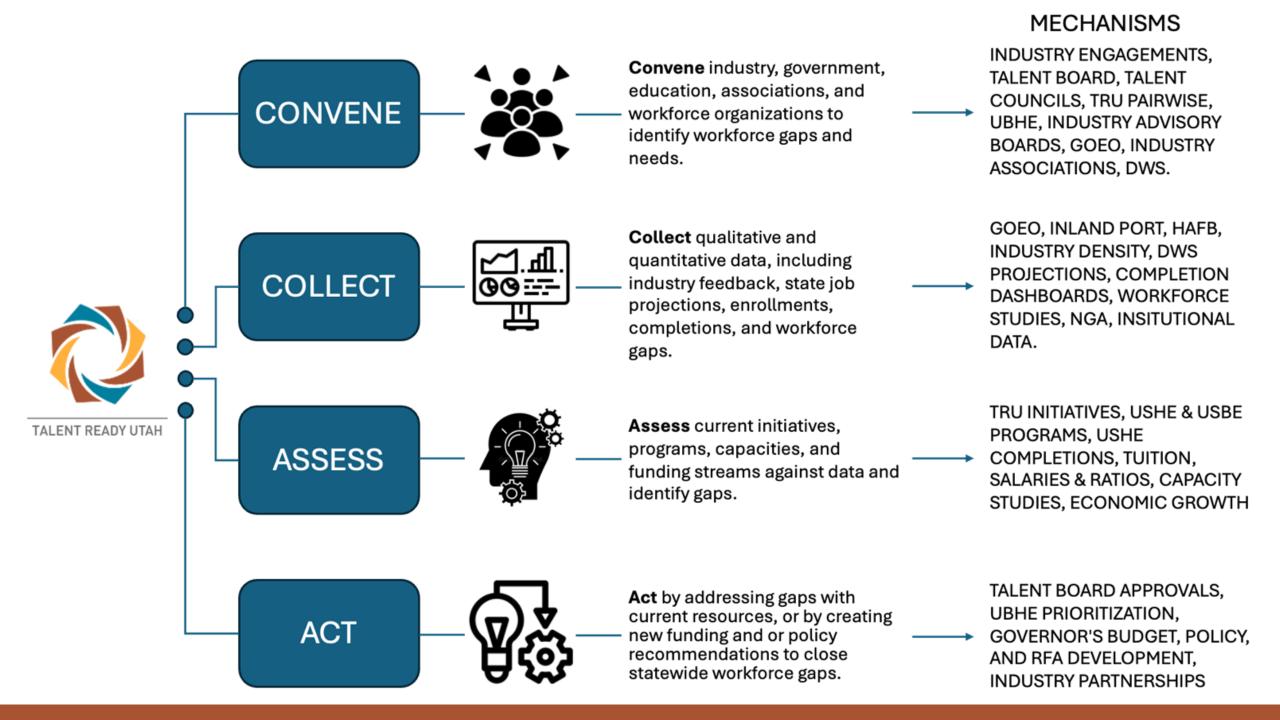
Sidni Shorter - CEO of the Black Chamber

**Derek Miller - CEO of SLC Chamber** 

## Talent Ready Utah Board







### LE23 & LE24 TRU Partnership & Policy Efforts

- HB555 Talent Ready Utah Apprenticeship Amendments
- State Work-Based Learning Intermediary
- SB122 Youth Apprenticeship Governance Structure
- HB22 First Credential PRIME Expansions
- SB138 Utah Apprenticeship Act (TRAC)
- SB68 Talent Ready Connections Fund (\$4M)
- NGA Policy Academy Advancing Youth Apprenticeship
- NGA Policy Academy Work-Based Learning (3 times)
- NGA Mentor State for Work-Based Learning

## **LE25 TRU Partnership & Policy Efforts**

- HB157 Energy Education Policy
- SB 92 Juvenile Justice Workforce Development Policy
- HB 131 Talent Ready Amendments Policy
- SB 162 Co-Ops and Utah Talent Hub
- HB 265 Higher Education Strategic Reinvestment
- HB 260 Utah First Credential Policy & RFA
- Education & Career Mapping RFA
- Engineering & Computer Sciences Initiative

## State, National, Global Partnership Efforts

**GOEO Board Idaho National Labs Panel STEM Action Center Board** Federal Reserve Bank Al Panel **Jobs For The Future Panel Utah Energy Week Presenter Utah Al Research Consortium Talent Ready Alaska Talent Ready Arizona Business & Higher Education Forum Cobb County, Georgia Chamber Panel Tulsa County, Oklahoma Chamber Panel Open AI Business & Education Forum State Workforce Development Board** White House Education & Workforce Committee



## **CEMETS**

Center on the Economics and Management of Education and Training

#### July Institute- Zurich

8 States + Washington, D.C. (Colorado, Florida, Illinois, Indiana, Maryland, New York, North Carolina, Utah)































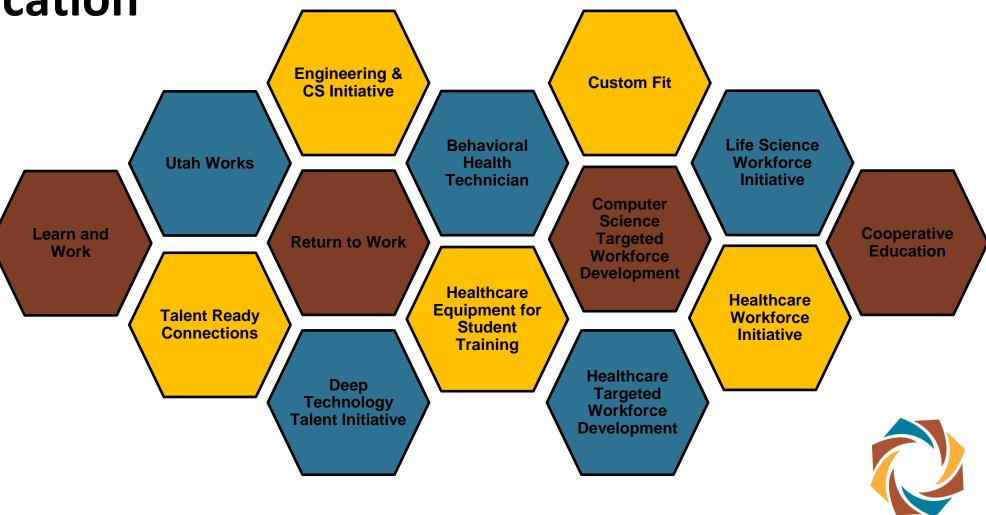




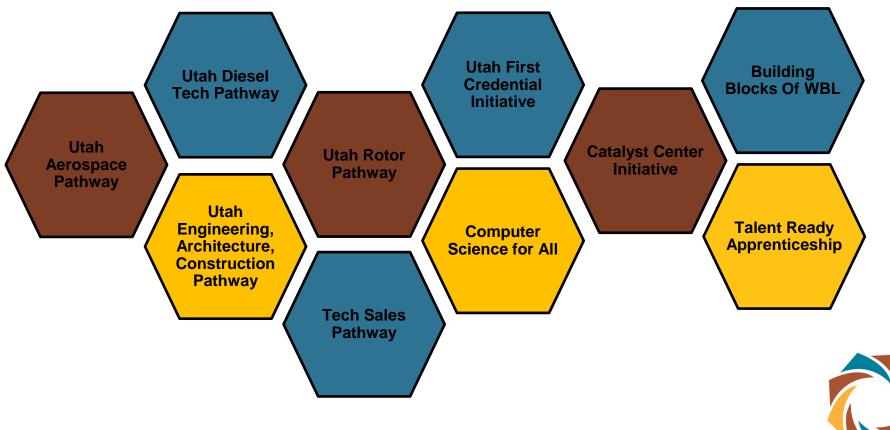
#### **Advanced CEMETS- September**

- Teams from 7 states (Alabama, California, Colorado, Indiana, Maryland, North Carolina and Utah)
- Top Priority: Employer engagement
- Funder Forum with PAYA, Strada
   Education, Richard Fairbanks,
   Bloomberg, Koch foundation, etc.
  - Launch a US based <u>CEMETS</u>
     Institute

Talent Ready Utah Higher Education Initiatives



## Talent Ready Utah K12 Education Initiatives



## TRU Impacts - 53B-34

#### K-12

CS for all, TRAC, Pathways Students served: 560,000+

#### **Higher Education**

Programs funded: 530+ Students served: 45,000+

#### **Industries Served**

Industry clusters: 9
Companies: 650+



## Targeted Workforce Accelerator

**ENERGY** • ARTIFICIAL INTELLIGENCE • DEEP TECH



## **Energy Accelerator**



## Workforce **Pain Points**

- Volume of Workers
- Low Unemployment
- Inner Cluster Talent Thievery
- 200+ Occupations
- External Cluster Talent Demands
- Low Volume of Talent Pipeline
- Low Awareness of/and Shortage of Programs
- Lack of Upskilling & Professional Development
- Perception of the Energy Cluster



# Nuclear Workforce Upskilling

#### **Compliance Matrix: Regulatory Qualifications for Nuclear Plant Roles**

This matrix outlines the regulatory qualifications for key nuclear plant roles based on NRC regulations (10 CFR Parts 50 and 55) and ANSI/ANS-3.1 standards.

Role	Education	Experience	Training/Certification	Regulatory Reference
Plant Manager	Bachelor's in	10+ years in	Leadership,	ANSI/ANS-3.
	Engineering or	nuclear	regulatory	1, RG 1.8
	equivalent	operations	compliance	
Operations	Bachelor's in	8+ years in	Operations	ANSI/ANS-3.
Manager	Engineering or	operations	leadership, SAT-based	1
	technical field	management	training	
Shift	Licensed	5+ years in	Emergency response,	10 CFR 55,
Supervisor	Senior Reactor	plant	leadership	ANSI/ANS-3.
	Operator	operations		1
Reactor	High school	3+ years in	NRC license,	10 CFR 55
Operator	diploma +	reactor	simulator training	
	technical	operations		
	training			
Senior	Same as	Additional	NRC license,	10 CFR 55
Reactor	Reactor	experience	advanced simulator	
Operator	Operator +	directing	training	
	leadership	operations		
	training			
Shift Technical	Bachelor's in	2+ years in	STA training program	RG 1.8,
Advisor	Engineering or	reactor		ANSI/ANS-3.
	Physical	engineering or		1
D 11	Sciences	physics	4 100	1339733404
Radiation	Technical	2+ years in	Structured RP	ANSI N18.1,
Protection	training in	radiation	training program	RG 1.8
Technician	health physics	protection	0 11	13707 374 0 4
Chemistry	Technical	2+ years in	Structured chemistry	ANSI N18.1,
Technician	training in	chemistry	training program	RG 1.8
	chemistry or	specialty		
Maintenance	radiochemistry	۲ i	C	ANICI (ANIC 2
Maintenance	Technical	5+ years in nuclear	Supervisory and	ANSI/ANS-3.
Supervisor	degree or		safety training	1
Instrument &	equivalent Technical	maintenance	SAT-based I&C	10 CFR
Control	training in I&C	2+ years in instrumentation	training	50.120,
Technician	systems	and control	u allillig	ANSI/ANS-3.
recilifician	Systems	and control		1
Electrical	Technical	2+ years in	SAT-based electrical	10 CFR
Maintenance	training in	electrical	training	50.120,
Technician	electrical	maintenance	- Gaming	ANSI/ANS-3.
Teeminetan	systems	mamiculance		1
	J 5 5 COLLIS			-

## **Energy Workforce Accelerator**

2,600+

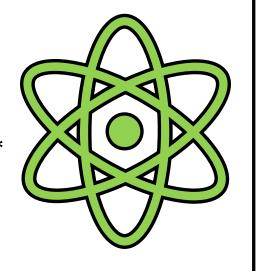
Projected Annual Energy Workforce Growth.\*\*

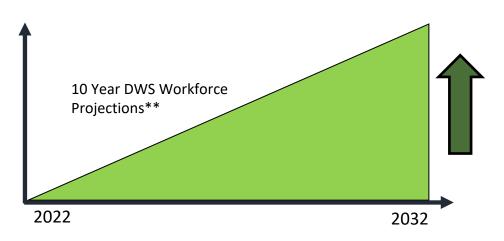
100%

Increase In Energy Capacity is Needed for Utah's Future.\*\*\*

80%

Of Nuclear Jobs Will Require College-Level Credentials.\*





#### 26K+ Jobs

Excluding Emerging
Nuclear & Geothermal.
Projections could cause
major workforce gaps.

#### **INVESTMENTS FOR:**

- 1 Students with a foundational energy credential, opening doors to both industry careers and higher education.
- Higher Education Energy
  Credentials: Create and expand
  Energy certificates, apprenticeships,
  and degrees aligned to regional
  demand.
- **Emerging Energy Workforce:** Grow and enhance the energy workforce to meet the demands of emerging industries and future energy solutions.

## Al Accelerator



## OpenAl Academy:

Implementing AI in Government, Industry & Education

Salt Lake City, Utah



## **Artificial Intelligence Accelerator**

90%

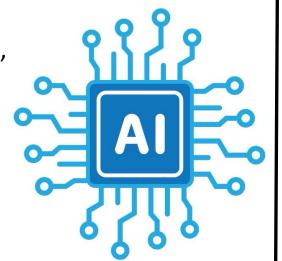
Of Utah Employers Identified AI, Machine Learning, & Automation, as Critical Worker Skills \*\*

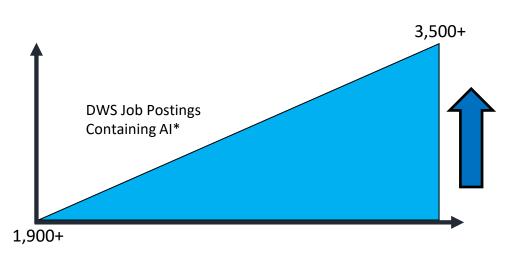
**67%** 

Of Utah Employers Adding Jobs That Require AI Skills\*\*

44%

Of Core Workforce skills will transform in the next 5 years\*\*\*





#### 84%+ Increase

In Jobs Postings
Requiring AI
Competencies
from 2023-2025

\*Source: DWS

\*\*Source: Cicero Workforce Study

\*\*\* Source: World Economic Forum

#### **INVESTMENTS FOR:**

- 1 K12 CTE Pathways: Develop An AI CTE Pathway, Explorer Courses, & Teacher Endorsements.
- Higher Education Credentials: Create and expand certificates, apprenticeships, & degrees aligned to regional demand.
- 3 Student Commercialization & Research:
  Nucleus Institute partnerships to
  commercialize AI tech & advance highimpact student research & projects.
- 4 Emerging AI Workforce: AI User & AI Builder credentials and AI Bootcamps to Accelerate Incumbent Workforce Upskilling.
- Modernizing AI Curriculum: Expedited
  AI integration into curriculum and
  assessments aligned to Targeted
  Industry Clusters.

## Deep Tech Accelerator



# Deep Tech solutions have the potential to bring about transformative changes in various industries and products that have a significant impact on society.

Biotechnology

Nanotechnology

**Precision Genomics** 

Quantum computing

**Robotics** 

**Advanced Materials** 

**Alternative Energy** 

Artificial Intelligence

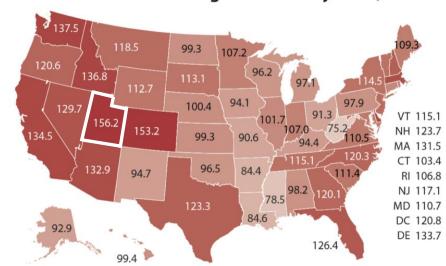
Augmented and Virtual Reality

**Autonomous Vehicles** 

## **Deep Tech Workforce Accelerator**



#### Innovation Intelligence Index by State, 2023



Source: Indiana Business Research Center, 2024



Quantum Computing



Advanced Robotics



Biotech Research



Precision Genomics



Artificial Intelligence



Secure Computing



Emerging Energy



Advanced Materials



Nanotechnology

#### **INVESTMENTS LEAD TO:**

Talent Development: Cuttingedge programs produce a workforce of the future in critical technologies to grow the state's targeted industry sectors.

Talent Attraction: A thriving deep tech ecosystem attracts top talent from around the world, enhances research and development efforts, and drives advancements in emerging technologies.

Attract and Retain Organizations:
The success and growth of Utah's deep tech ecosystem catalyzes advancements in leading technologies while attracting and retaining companies.

