







CareerWise Colorado's bold vision is to create a state-wide youth apprenticeship system

Our mission:

CareerWise Colorado's mission is to create opportunities for youth and businesses across Colorado by developing and supporting an innovative, sustainable youth apprenticeship program. Through this business-led, student-centered model, CareerWise Colorado brings together public and private stakeholders to ensure that students have access to the skills and knowledge they need for financial and academic success, and that businesses have access to highly-trained talent.

By serving as an intermediary across key Colorado stakeholders, CareerWise Colorado aims to:

- Create 2-4 year apprenticeships in advanced, high-demand jobs for 20,000 Colorado high schoolers over the next 10 years – creating robust education & career pathways for 10% of our state's 11th & 12th graders
- Equip students with 21st Century skills, along with meaningful exposure to the workplace all while allowing students to earn post-secondary credits and, in some cases, an Associate's degree in 13th or 14th years of school
- Develop an innovative, high-skilled talent pipeline to support Colorado's fastest growing industries, along with forward-looking training programs that businesses can adopt to support their workforce development needs



CareerWise Colorado is student-centered & business-led

CareerWise gives youth their "shot" in life...



...While providing real value to business

Benefits to youth:

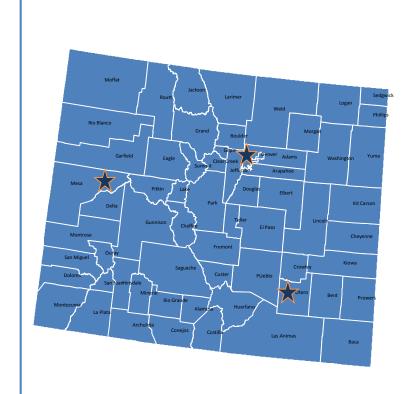
- Exposure to workplace & possible career at early age
- Relevant skills in high-demand jobs
- Cumulative earnings of up to ~\$50k-60k during the apprenticeship, while in school
- College credit, with potential to earn
 Associates Degree in 13th or 14th years
- Highly-valued industry credentials
- Automatic entry into college upon completion
- Increased job security & earnings over lifetime

Benefits to business:

- Productive employees that provide positive return on wage investment
- Potential full-time hires trained to company standards, reducing hiring costs
- Robust training programs that can inform & support broader company training
- Infusion of new ideas from next generation
- Increased engagement by employees who enjoy mentoring
- Loyal future customer & ambassador
- · Brand benefit for community engagement



We're launching our 2017 pilot with a handful of innovative, forward-thinking business & education partners across the state



• Front Range 2017 program scope

- Confirmed school: DPS, Cherry Creek, JeffCo, Private / Charter partners, and others
- Functional focus: IT, customer service, financial services, and manufacturing

Western Slope 2017 program scope

- Confirmed schools: Mesa County District 51
- Functional focus: Manufacturing, IT, and Business Operations

Southern Colorado 2017 program scope

- Target school districts: East Otero / TBD
- Functional focus: Manufacturing

Partnerships, students served, and program offerings will evolve throughout the summer and fall of 2016



Apprenticeship training will occur in three primary settings

Student continues in career or with 2- or 4- year degree

At school

Core academic courses at high school (e.g., math), some community college coursework

2-3 days/week

At a training center

Training in professional basics and pathway-specific skills

Summer courses + 2 Saturdays/week

On-the-job

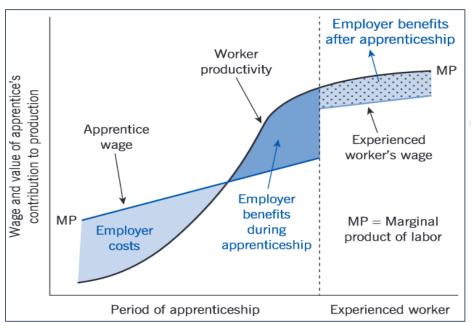
On the job training, in form of occupation, rotation or projects

2-3 days/week



Companies that hire CareerWise CO apprentices pay wage and training costs, but in return receive productive work throughout the program resulting in a B/E or + ROI

Prof. Stefan Wolter of the University of Bern was able to prove a positive Return on Investment for businesses that host apprenticeships structured appropriately:



- Other benefits:
 - reduced turn-over
 - increased loyalty
 - increased innovation and productivity
 - · enhanced team atmosphere



- Wage and time are the variables in this model, when structured appropriately,
- There is an ROI to industry because apprentices perform productive work as they become increasingly skilled

Table 11.3 Gross cost, benefit, and net cost of training in Swiss firms, 2000, €

	Gross Cost	Benefit	Net Cost
Training Firms	58,295	61,276	-4,116
Nontraining Firms	72,427	31,524	28,263

Note. All values are predicted econometrically, so net costs for training firms differ somewhat from the survey-based estimates in Table 11.1.

Source: Wolter et al. (2006); converted from Swiss francs at 1€: 1.5CHF.



In our pilot year, we will develop apprenticeships across 4 primary pathways, leading to a variety of occupations

Pathways

	Advanced Manufacturing	Information Technology	Financial Services	Business Operations
Type of businesses useful for	Advanced Manufacturing, Construction	Tech, Banking, Insurance, Hospitality, Health Care, Advanced Manufacturing	Accounting, Banking, Insurance, Hospitality, Health Care	Hospitality, Retail, Banking, Insurance, Tech, Health Care
Sample business partners	Mikron, Pilatus Business Aircraft, Intertech Plastics, RK Mechanical, Research Electro- Optics	Pinnacol Assurance, HomeAdvisor.com, Vectra Bank, Kaiser Permanente, DaVita, Stonebridge Companies	Pinnacol Assurance, EKS&H, Vectra Bank, First Bank	Stonebridge Companies, Vectra Bank, DaVita, Pinnacol Assurance
Sample Resulting Occupations	CNC programmer, Machinist, Quality Control Engineer, Logistics manager	Software developer, Network Administrator, Database Administrator, Network Architect	Underwriter, Compliance Analyst, Loan officer, Claims representative, Bookkeeper	Sales manager, Operations manager, HR manager
Year 1 Training – Sample topics	Professional skills, Quality assurance, Manual and machine manufacturing methods	Professional skills, Customer service, IT support, Hardware installation, Basic database applications	Professional skills, Customer service, Financial concepts, Accounting	Professional skills, Business concepts, Customer service
Year 2 Training – Sample topics	Lean manufacturing, Assembly methods, Measuring & testing methods	Basic programming, Advanced hardware training, Advanced database applications	Underwriting, Compliance, Accounting	Financial concepts, Sales techniques, Logistics
Year 3 (& 4) Training – Sample topics	CAD methods, Automation, Electrical manufacturing	Advanced programing, network administration	Risk analysis, Advanced concepts in underwriting and accounting	Management concepts, Operations



September 2016 Launch Event



Over 300 guests witnessed Governor Hickenlooper and Secretary Perez announce \$9.5M in funding from Bloomberg Philanthropies and JPMorgan Chase. Media coverage has been better than anticipated with coverage from The Denver Post, CPR, Denver Business Journal, Chanel 9 News, NBC News Radio, Univision, and Chalkbeat.



Salt Lake City LEX 2016

Workforce Development Strategies
Stephen M. Jordan, Ph.D.
MSU Denver President

What's the Big Idea?



Aerospace and Engineering Sciences Advisory Council



Asked Two Questions



Unique Curriculum Structure









Colorado Summit

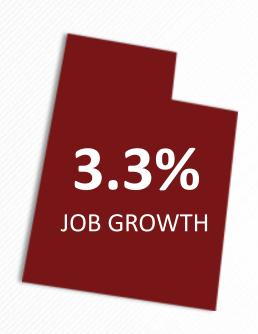
Ben Hart
Managing Director, Business Services

Deneise Lacy
Human Resource Manager, Boeing Salt Lake



Sept. 23, 2016

Utah: Economic Leadership





#3 Most Diverse Economy in the U.S. #1 Economic Outlook since 2008

Sources: DWS and ALEC.org



Utah Cluster Acceleration Partnership



\$2.8 million contributed to manufacturing training programs in the last 3 years



National Governor's Association

- Utah is one of six states identified to develop best practices
- \$100,000 was given to help further Work-Based Learning in Utah



Strategic Workforce Initiative

\$1.5 Million of Ongoing Funding







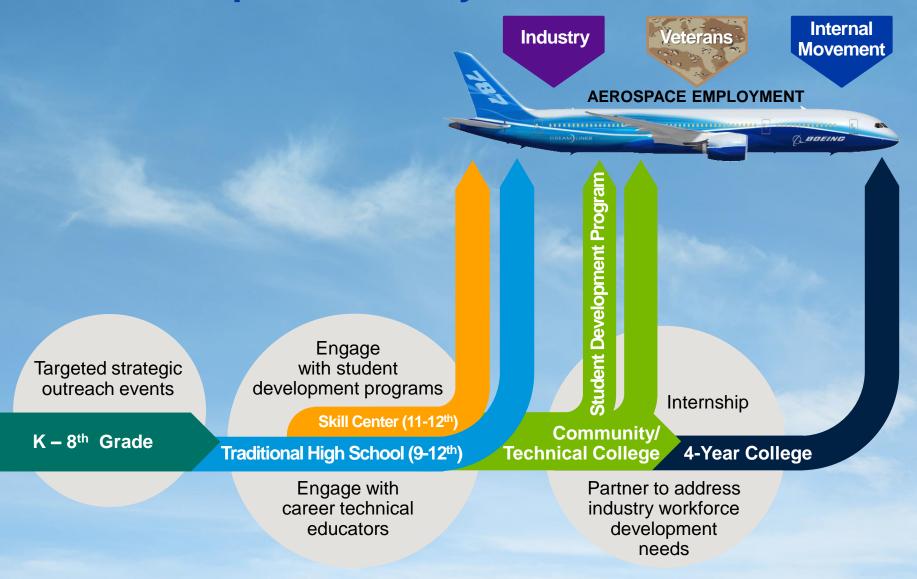
Utah Aerospace Pathways







Utah Aerospace Pathways



Developing the Future Manufacturing Workforce

Workforce Ecosystem Development

How Utah supports the industry



Utah Aerospace Partners















Utah Aerospace Supporters



















UAP Approach

Introduction/Core Requirements – 60 hours





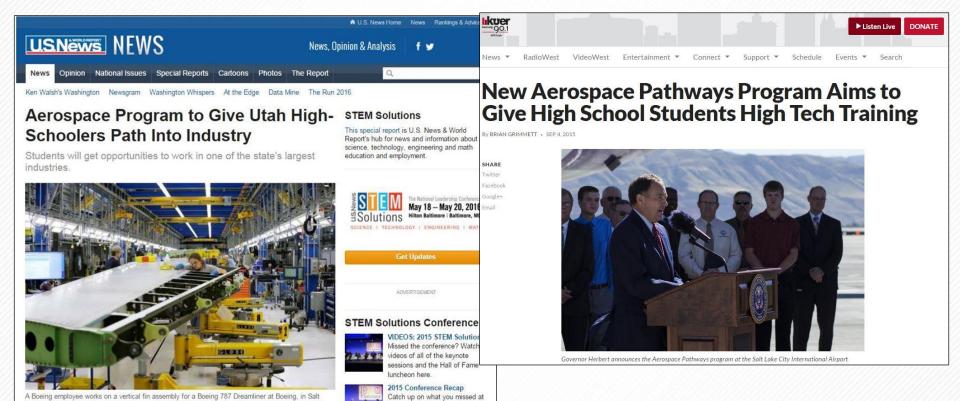
Aerospace Composite and Metals Content – 48 hours





3. Student Externship Experience— 48 hours

Traction



the U.S. News STEM Solutions

conference.

Lake City. When Utah students graduate, they could be building parts for the F-35 fighter jet, rocket

engines with Orbital ATK or Boeing 757s.



UAP Expansion to Iron County



SYBERJET

METALCRAFT



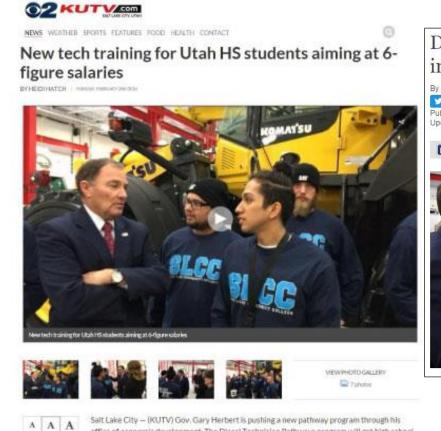








Replication



office of economic development. The Diesel Technician Pathways program will get high school students into a field where they can make six figures- five years after graduation.





Career Pathways





Announced Sept. 2015

Announced Feb. 2016















Which industry will step up next?

















