



Where Life is Sweet

CITY COUNCIL

Regular Meeting Minutes

July 24, 2023

Mayor Drotzmann called the regular meeting to order at 7:00pm. Present were Councilors Primmer, Myers, Barron, McCarthy, Linton, Hardin, and Peterson. Councilor Duron was excused. In attendance was Municipal Court Judge Cameron Bendixsen (excited at 7:32pm) and City Staff to include: Assistant City Manager Mark Morgan, City Attorney Rich Tovey, Finance Director Mark Krawczyk, Chief Edmiston, Planning Director Clint Spencer, Court Administrator Jillian Viles, Assistant City Recorder Heather La Beau, and City Recorder Lilly Alarcon-Strong. The pledge of allegiance was given.

Presentation- Amazon Web Services (AWS)

AWS External Affairs Manager Kalie Davis presented the Council with information (PowerPoint and handouts attached) regarding AWS's new economic analysis report specifically related to AWS employees in Eastern Oregon and how AWS has changed their lives through their education and career programs as shown in the video played during the meeting <https://www.aboutamazon.com/news/aws/aws-helped-me-learn-how-to-build-a-computer-from-scratch-heres-how-you-can-do-the-same> , as well as information regarding data centers and cloud computing. Ms. Davis also thanked the Council, staff, and community for being so welcoming of AWS in the community.

Citizen Input on Non-Agenda Items

None given.

Consent Agenda Items

Councilor Primmer asked to remove Consent Agenda Item C; Councilor Primmer moved and Councilor McCarthy seconded to approve Consent Agenda items A, B, & D, to include:

- A. Committee Vacancy Announcements
- B. Major Partition- 4N2823 Tax Lot 200 Amazon Data Services 908 E Penney Ave
- D. Minutes of the July 10th City Council Regular Meeting

Motion carried unanimously.

Items Removed from Consent Agenda

- C. Initiate annexation proceedings 4N2815CB TL 1907- 910 W Angus Ave

Councilor Primmer stated he removed this item as he would like further information regarding this annexation.

City Planner Spencer stated the annexation is being considered as an emergency to connect to sewer. Approval of this item would allow staff to start the annexation process.

Councilor Hardin moved and Councilor Primmer seconded to approve consent agenda item C. Motion carried unanimously.

(Municipal Judge Bendixsen exited the meeting at 7:32pm)



Where Life is Sweet

CITY COUNCIL

Regular Meeting Minutes

July 24, 2023

Ordinance No. 2347- Creating the North Hermiston Urban Renewal Area (NURA)

Planning Director Clint Spencer and Elaine Howard from Elaine Howard Consulting, LLC, presented information and answered questions regarding the proposed formation of the North Hermiston Urban Renewal Area (NURA) as discussed at the previous City Council meeting.

Mayor Drotzmann requested that the first reading be by title only. Hearing no opposition, City Attorney Tovey read the ordinance by title only. Mayor Drotzmann requested that the ordinance be put on for final adoption at this meeting and that the second reading be by title only. After City Attorney Tovey read the ordinance by title only for the second reading, Council Barron moved and Councilor Myers seconded to adopt Ordinance No. 2347 and become effective 90 days after its passage by City Council. Motion carried unanimously.

June 2023 Financial Report

Councilor Linton moved and Councilor McCarthy seconded to accept the June 2023 Financial Report as presented by Finance Director Mark Krawczyk. Motion carried unanimously.

Committee Reports

Public Safety Committee- Councilor Primmer spoke regarding Police Department and Municipal Court updates as presented by Chief Edmiston and Court Administrator Viles at today's meeting and specifically spoke regarding the PD's increased training budget since City Manager Smith has been with the City which has been greatly appreciated, National Night Out, crime report, increase in transient call load, and more.

Parks and Recreation Advisory Committee- Councilor Myers gave updates regarding: the \$50,000 Ford Foundation grant given for the Harrison Park improvements, Skate Park construction, and Aquatic Center.

Recreation Projects Fund Advisory Committee- Councilor Barron stated the Committee will meet next week to review the late applications submitted.

Hispanic Advisory Committee- Mayor Drotzmann congratulated Committee Chair Jose Garcia as he recently became a committee member of the Lower Umatilla Groundwater Management Area Committee (LUGMA) and stated Mr. Garcia is doing a lot of good work in the community and would like to give him recognition at an upcoming City Council meeting.

Mayor's Report

Mayor Drotzmann spoke regarding:

- Gave information regarding the LOC Small Cities Meeting on July 19th in Boardman and spoke regarding the legislative process and measures.

Council Reports

Councilor Linton stated Umatilla County Fire District #1 is short staffed by 12 fire officials.

Councilor Barron and Peterson asked that the City look into scholarship opportunities for the Council to attend conferences either in person or virtually.

Councilor McCarthy gave information regarding the Umatilla County Fair and Parade, Farm City Pro-Rodeo, and MelonFest.



Where Life is Sweet

CITY COUNCIL

Regular Meeting Minutes
July 24, 2023

Youth Advisory Report

Youth Advisors were not in attendance.

Assistant City Manager’s Report

None given.

Adjourn City Council Meeting

Mayor Drotzmann adjourned the City Council Meeting at 8:17pm as there was no other City business.

SIGNED:

Dr. David Drotzmann, Mayor

ATTEST:

Lilly Alarcon-Strong, City Recorder

DRAFT



HERMISTON CITY COUNCIL

Stories of Economic Mobility in Eastern Oregon

Kalie Davis

Manager, External Affairs
Amazon Web Services

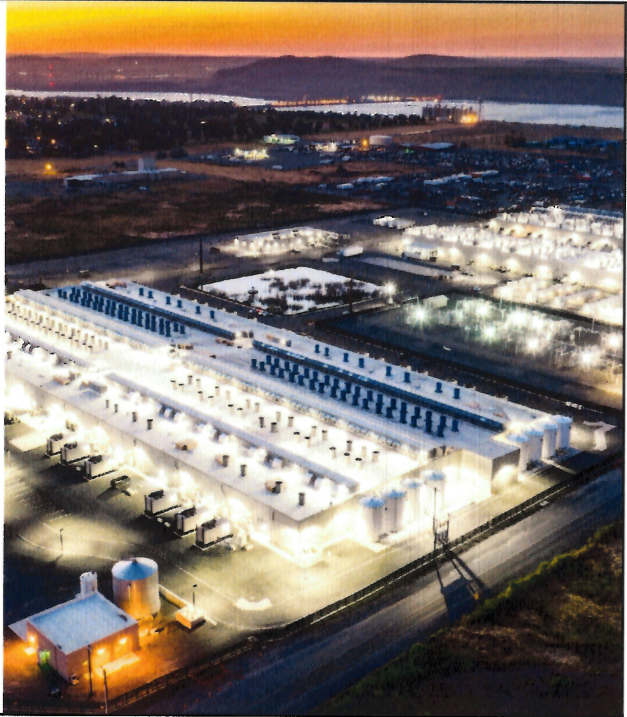
© 2021, Amazon Web Services, Inc. or its affiliates.

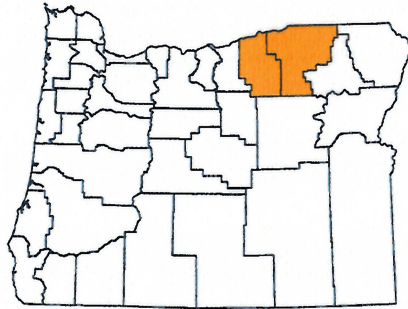
STORIES OF ECONOMIC MOBILITY IN EASTERN OREGON

The Cloud and Cloud Computing – An Overview



© 2021, Amazon Web Services, Inc. or its affiliates.





AWS-Growing in Eastern Oregon



© 2023, Amazon Web Services, Inc. or its affiliates.

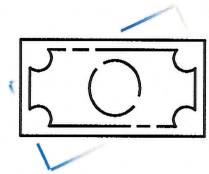
AWS announced the opening of the US West (Oregon) Region in November 2011



\$15.6B in capital investment made by AWS in Eastern Oregon between 2012-2021



Over 4,711 jobs were created or retained in 2021



Contributed over \$41M in tax and fee payments in Morrow and Umatilla Counties in 2021



AWS is the largest taxpayer in both Umatilla and Morrow County



© 2023, Amazon Web Services, Inc. or its affiliates.



How do these investments directly impact residents in Eastern Oregon?



© 2023, Amazon Web Services, Inc. or its affiliates.

STORIES OF ECONOMIC MOBILITY IN EASTERN OREGON

AWS Research and Analysis Team



Daniela Muhaj
Senior Research Manager,
AWS Economic Development

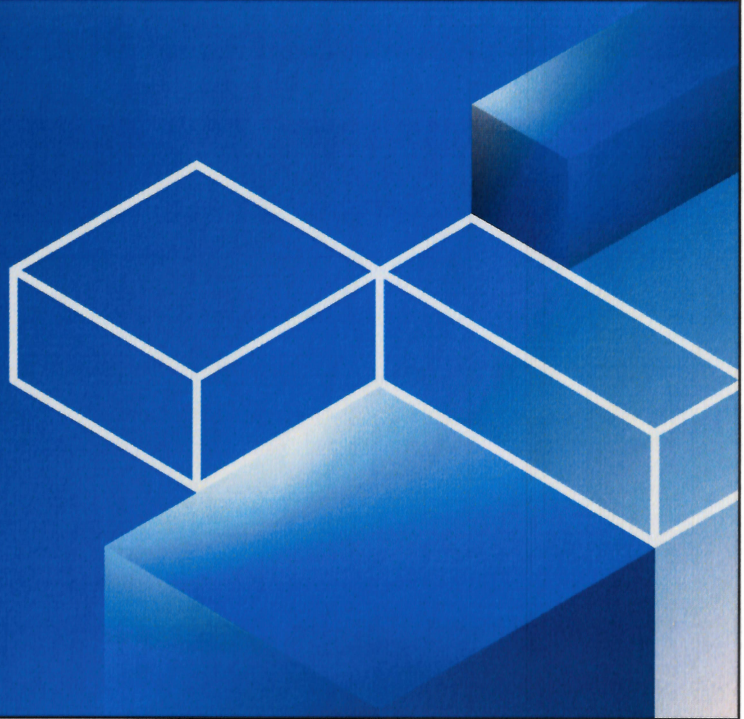


Mofeng Yang
Graduate Intern,
AWS Economic Development



© 2023, Amazon Web Services, Inc. or its affiliates.

Stories of Economic Mobility



© 2021 Amazon Web Services, Inc. or its affiliates.

Ray's story



© 2021 Amazon Web Services, Inc. or its affiliates.

Ray's journey

- From Hermiston, OR
- Prior to AWS
 - Worked for a local retail chain.
 - Made \$13/hr after 7 years.
- Joined AWS in 2016
 - Began as a temporary employee making \$20.00/hr.
 - He was asked to participate in a manager training program.
 - Promoted to Manager of Data Center Operations in 2021.
 - Ray has tripled his annual income during his time with AWS.



© 2023, Amazon Web Services, Inc. or its affiliates.



In Ray's own words:

“

Ray shared that there was not a lot of [income] growth before AWS, but that changed once he started his data center career. *“We were able to buy a house last summer, and can now afford to pay a private therapist for members of our family who needed long-term healthcare support. This job has helped break generational curses for my kids.”*



© 2023, Amazon Web Services, Inc. or its affiliates.

Uppa's story



© 2023, Amazon Web Services, Inc. or its affiliates.

STORIES OF ECONOMIC MOBILITY IN EASTERN OREGON

Uppa's journey

- Lives in Hermiston, OR
- Prior to AWS
 - Raised her two young daughters and worked as a certified nursing assistant.
- Joined AWS in 2019
 - Leading a team and mentoring new hires.
 - Worked her way up from Data Center Technician to DCO Lead.



© 2023, Amazon Web Services, Inc. or its affiliates.



In Uppa's own words:

“

I was the only woman in my cohort, and this was a totally different field for me. With no previous background in IT, I thought I was not going to be able to make it. The mentor I was assigned to was really patient, and I soon started building both my skills and confidence. The BMCC program taught us the basics about computers, servers, security, and networking. I've been expanding that knowledge at work ever since. The field is changing so fast. You are constantly learning new things. It's not like other jobs where you might do the same tasks every day.”



© 2023, Amazon Web Services, Inc. or its affiliates.

Ben's story



© 2023, Amazon Web Services, Inc. or its affiliates.

Ben's journey

- Grew up in Hermiston, OR
- Prior to AWS
 - Worked in construction and as a forklift operator.
 - He got his foot in the door working security for a local contracting company where he learned about AWS' Grow Our Own Talent Program.
- Joined AWS in 2019
 - Began as an entry level Data Center Technician.
 - Now he is a Data Center Operations Lead, responsible for operating and maintaining specialized equipment.



© 2023, Amazon Web Services, Inc. or its affiliates.



In Ben's own words:

“

When I started working as a data center employee, I found myself more and more able to significantly contribute to my family. I can pay for entire family trips and help support my kids and ex-wife more than I ever could before. My son and youngest daughter are now able to concentrate on school instead of having to get a job to pay for their extracurricular expenses. Working with AWS has been the single best thing in our lives, both monetarily and otherwise.”



© 2023, Amazon Web Services, Inc. or its affiliates.

Building the Future Together



© 2023 Amazon Web Services, Inc. or its affiliates.

STORIES OF ECONOMIC MOBILITY IN EASTERN OREGON

Cloud Computing vs. Cloud Infrastructure



© 2023 Amazon Web Services, Inc. or its affiliates.

Pathways to Employment



Blue Mountain Community College

- Data Center Technician Program
- Industrial Systems Technology Program



AWS Grow Our Own Talent Program

- 12-week paid On-the-Job Training (OJT) program
- Transition to full time if successfully completed



AWS Internships

- Data Center Managers
- Data Center Technicians
- Data Center Engineering Operators
- Data Center Security



© 2023, Amazon Web Services, Inc. or its affiliates.

Q&A Questions/Discussion



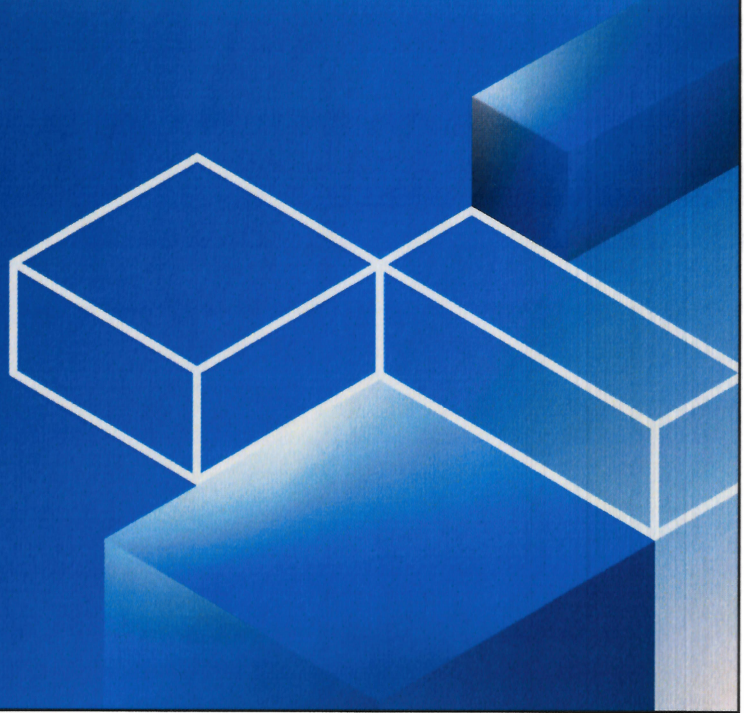
© 2023, Amazon Web Services, Inc. or its affiliates.



Thank you!

Kalie Davis

kaliend@amazon.com



© 2012, Amazon Web Services, Inc. or its affiliates.



Amazon Web Services in Eastern Oregon

Amazon Web Services (AWS) pioneered cloud computing in 2006 with its first clusters of data centers in the United States. In November 2011, AWS announced the opening of the US West (Oregon) Region. AWS has **invested more than \$15 billion to develop world-leading cloud infrastructure** in Oregon's Morrow and Umatilla counties, contributing an estimated **\$1.15 billion in gross domestic product (GDP)** and supporting an average of **1,807 full-time equivalent (FTE) jobs** annually in the region between 2012–2021.



\$48 million

Property taxes and fees in 2022, making AWS the largest taxpayer in both Umatilla and Morrow counties.

The economic activity generated by AWS's investments in eastern Oregon also results in additional positive fiscal impacts. In 2022, AWS was already the largest taxpayer in both Umatilla¹ and Morrow² counties, resulting in more than \$48 million payments of property taxes and fees. This fiscal impact of AWS and its suppliers has significantly increased the total budget that can be allocated by the counties, which can enable improved services for local community development.

What is Amazon Web Services (AWS)?

AWS is the world's most comprehensive and broadly adopted cloud offering, with millions of global users depending on it every day. Cloud computing enables millions of AWS customers to run critical information technology (IT) workloads spanning industries such as health care and life sciences, manufacturing, telecommunications, financial services, and many more. For example, Verizon used AWS to accelerate the launch of its 5G network nationwide. Netflix also relies on AWS to help it innovate with speed and consistently deliver best-in-class entertainment.

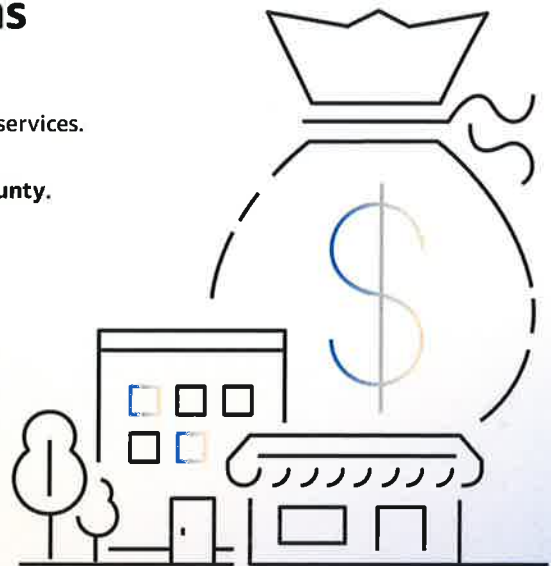
Fiscal benefits to local organizations

The fiscal impact of AWS's investment directly benefits the lives of eastern Oregonians by providing additional funding for key government and public services.

In 2022, AWS paid \$31.5 million in property taxes and fees to Morrow County.

The increased tax revenue has supported improved services, such as better infrastructure, education, health care, and transportation.

In Umatilla County, AWS made \$17 million in payments of property taxes and fees in 2022. The tax revenue going into the county has directly improved the community's safety by helping to fund an increase in the patrol units. According to Umatilla County Commissioner John Shafer, the county previously had seven patrol units, and now it has 21–23 patrol units. "Now our communities are safer, and we can provide more services," said Shafer.



¹ https://www.co.umatilla.or.us/fileadmin/user_upload/AT/SAL_Reports/2022/TOP_20_COUNTY.pdf

² https://www.co.morrow.or.us/sites/default/files/fileattachments/assessment_amp_tax/page/3791/2022-23_top_tax_payers.pdf



Ripple Effects in the Community

Improved services in rural communities are associated with greater community stability and a higher rate of population retention—improved safety, better school facilities, new roads and transportation, increased access to roads and transportation, and other local benefits have a positive impact on the quality of life of rural residents, which encourages people to stay and invest in their community.³ Additionally, enhanced services can also create job opportunities in the community, which can further contribute to community retention by providing greater economic stability and social support.

Case Study 1



The Columbia River Enterprise Zone

The Columbia River Enterprise Zone (CREZ) is part of an economic development program in Morrow County. It is intended to stimulate job creation and business investment in the area. The program is administered by the Oregon Business Development Department and requires businesses to meet certain criteria, including job creation, to be eligible for tax incentives. AWS participates in CREZ and contributed more than 95% of the \$12 million disbursed by CREZ II in 2022.

CREZ disbursements support initiatives like the Home Buyers Incentive Grant program, which started in March 2015 with 54 applicants. To date, 449 applicants have submitted grant requests, with a total payout of more than \$2 million. In 2022, 64% of the applications were for new construction, 49% were new Boardman residents, and 50% have children that are younger than three years old.

Case Study 2



Umatilla Electric Cooperative

Umatilla Electric Cooperative (UEC) operates on a not-for-profit basis. All funds collected that exceed the cost of operation, termed margins, are allocated to its members in the form of **Capital Credits**. Each year, the board of directors, who are elected by UEC members, reviews the cooperative's financial position and determines the most financially prudent amount of capital credits for distribution. This program applies to all UEC utility members, including AWS, which was eligible for a refund in 2020. During the COVID-19 pandemic, AWS collaborated with UEC and Hermiston Energy Services (HES) to donate the funds back to the Umatilla and Morrow communities.

In this collaborative effort, UEC, HES, and AWS consulted with community stakeholders to strategically identify and direct more than \$500,000 in Capital Credits to local organizations, providing essential support to individuals and families who faced hardships during the pandemic. The supported organizations included local food banks, school districts, and community programs that provide meals to senior citizens.

³ <https://www.mckinsey.com/industries/public-and-social-sector/our-insights/rural-rising-economic-development-strategies-for-americas-highland>



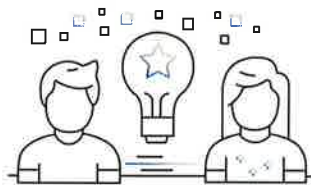
Catalyzing Community Development in Eastern Oregon

Amazon Web Services in Eastern Oregon

Amazon Web Services (AWS) pioneered cloud computing in 2006 with its first clusters of data centers in the United States. In November 2011, AWS announced the opening of the US West (Oregon) Region. AWS has invested more than \$15 billion to develop world-leading cloud infrastructure in Morrow and Umatilla counties, contributing an estimated \$1.15 billion in gross domestic product (GDP) and supporting an average of 1,807 full-time equivalent (FTE) jobs annually in the region between 2012–2021.



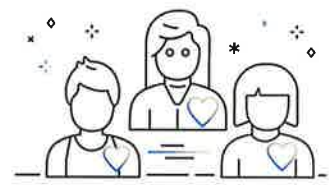
STEAM Education, Access, and Equity



Local Tech Upskilling



Environmental Stewardship



Hyperlocal Programs

About AWS InCommunities

AWS is committed to being a good neighbor in the communities where we build and operate our data center infrastructure. To make a positive impact in local communities, AWS established a program called AWS InCommunities, which launches long-term innovative programs that will have a lasting impact in data center regions. **AWS InCommunities** in eastern Oregon has invested in **science, technology, engineering, arts, and math (STEAM) education, equity, and access; local tech upskilling; environmental stewardship initiatives; and hyperlocal needs.** AWS InCommunities also drives a collection of programs that aim to inspire future leaders and builders, especially those from underrepresented and underserved communities. In eastern Oregon, these programs include the AWS CloudRoom, Think Big Spaces, Girls’ Tech Day, and more.

What is Amazon Web Services (AWS)?

AWS is the world’s most comprehensive and broadly adopted cloud offering, with millions of global users depending on it every day. Cloud computing enables millions of AWS customers to run critical IT workloads spanning industries such as healthcare & life sciences, manufacturing, telecommunications, financial services, and many more. For example, Verizon used AWS to accelerate the launch of its 5G network nationwide. Netflix also relies on AWS to help it innovate with speed and consistently deliver best-in-class entertainment.

Helping Communities Thrive

As AWS increased its presence in eastern Oregon, it continued to expand community-focused efforts working in close collaboration with local stakeholders and organizations. In 2022, AWS donated \$2 million to local area nonprofits and organizations, as well as established community funds to collectively donate \$320,000 to local projects across Morrow and Umatilla counties. Our donations support programs across the main areas of focus including hyperlocal community needs, such as food insecurity, homelessness, veteran services, and other crucial initiatives.

Figure 1: AWS InCommunities Donations and Sponsorships by Type of Program in 2022

Program Theme	Grant Value
Hyperlocal community needs	\$800,000
STEAM education, equity, and access	\$800,000
AWS InCommunities Community Funds	\$320,000
Environmental stewardship programs	\$250,000
Tech upskilling programs and on-the-job training	\$150,000

Case Study



Supporting a Local Food Bank to Meet Community Needs

The Eastern Oregon Mission (EOM) is one of more than 40 organizations that benefited from the AWS InCommunities funding. For the past 36 years, the EOM has been the community food bank for greater Hermiston, Oregon. It plays a critical role serving the area's most vulnerable residents, including the elderly, children, low-income individuals, single-parent families, homeless, and recently unemployed. But requests for food assistance keep growing, and the organization is facing challenges.

Thanks to a grant from AWS InCommunities, EOM bought a much-needed pickup truck and trailer. According to Mark Gomolski, EOM executive director, the grant will help them reduce maintenance costs, which means they can allocate those funds elsewhere.

"The vehicles we use to do the essential work of picking up daily donations are more than 17 years old and have been constantly breaking down, which means we are spending more of our precious funds just on keeping things moving, rather than continuing to help people improve their lives," said Gomolski.

The grant will also fund EOM's Weekend Backpack Program, which feeds 275 food-insecure students each week when schools are closed.

Giving back through volunteering

AWS employees take on causes and organize community events with one goal in mind: making a positive impact in the places where we live and work. In 2022, AWS teams contributed more than 2,320 volunteer hours across eastern Oregon. AWS InCommunities encourages AWS employees to Take On A Cause (TOAC) and volunteer for initiatives that they are passionate about in their communities. TOAC initiatives range from veterans' services and food pantries to humane societies, career presentations, road cleanups, and more.



Tyler Stephens, rack decommission data center technician, is passionate about helping foster children, so he led an effort to collect donations from our data centers to create supply bags for foster students. He also helped organize dozens of employees to stuff the bags for the foster students, and more than 75 students received new bags and supplies.



Ryan Neubig, data center engineering operations facility manager, is dedicated to the environment and the local Boardman, Oregon, community. He contacted the Oregon Transportation Authority to help AWS participate in Oregon's Adopt-A-Highway program for Boardman. He has continued to organize community cleanup days, and local AWS teams have filled hundreds of bags of garbage since the initiative was launched.

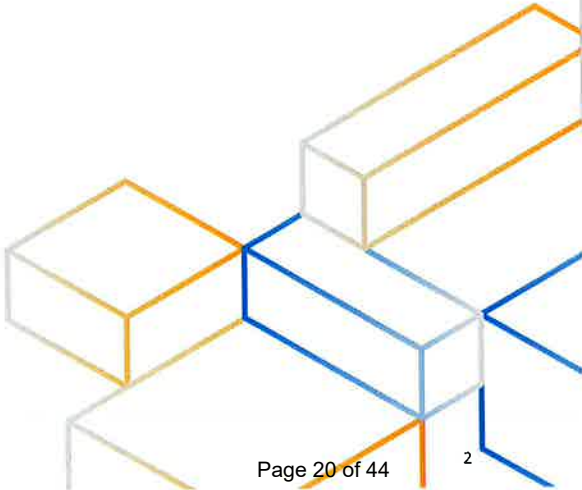


ECONOMIC TRANSFORMATION ANALYSIS REPORT

Stories of Economic Mobility in Eastern Oregon

Contents

- Executive Summary 3
- Introduction. 4
- Stories of Economic Mobility 6
 - Ray’s Wage Growth Story 6
 - Uppa’s Path to Changing Careers 10
 - Ben’s Experience With On-the-Job Training 13
 - Clint’s Journey to Staying Local 16
- Scaling Pathways to Prosperity 19
 - Training and Reskilling Opportunities for Job Seekers 20
 - Experiential Learning Opportunities for K–12 23
- Building the Future Together 25



Executive Summary

The accessibility of skilled technical jobs related to cloud infrastructure can be transformative for rural communities, families, and individuals. This report provides an economic transformation analysis (ETA), examining how AWS's data center investments have impacted skilled technical workers and their long-term economic prospects in eastern Oregon, where AWS has operated data centers since 2011.

More than 5,000 workers at AWS and a variety of external businesses currently support data center construction, connection, operation, and maintenance. This workforce includes data center technicians, engineers, electricians, mechanics, construction workers, security guards, and heating, ventilation, and air conditioning (HVAC) technicians. The report highlights how AWS's infrastructure investments have ripple effects, which catalyze economic opportunities and mobility for individuals and the broader community.





Introduction

Cloud computing is today's backbone of digital innovation, enabling people to connect with friends and family; work remotely; shop online; stream movies, TV shows, music, and video games; and experiment with new technologies. The success of cloud computing relies on data centers, which are facilities that house information technology (IT) infrastructure. The efficient construction, connection, operation, and maintenance of data centers necessitates a skilled workforce for technical jobs. These skilled technical jobs can be accessible with some training, but don't always require a bachelor's degree.¹

¹<https://nap.nationalacademies.org/catalog/23472/building-americas-skilled-technical-workforce>
<https://www.nsf.gov/nsb/publications/2019/nsb201923.pdf>

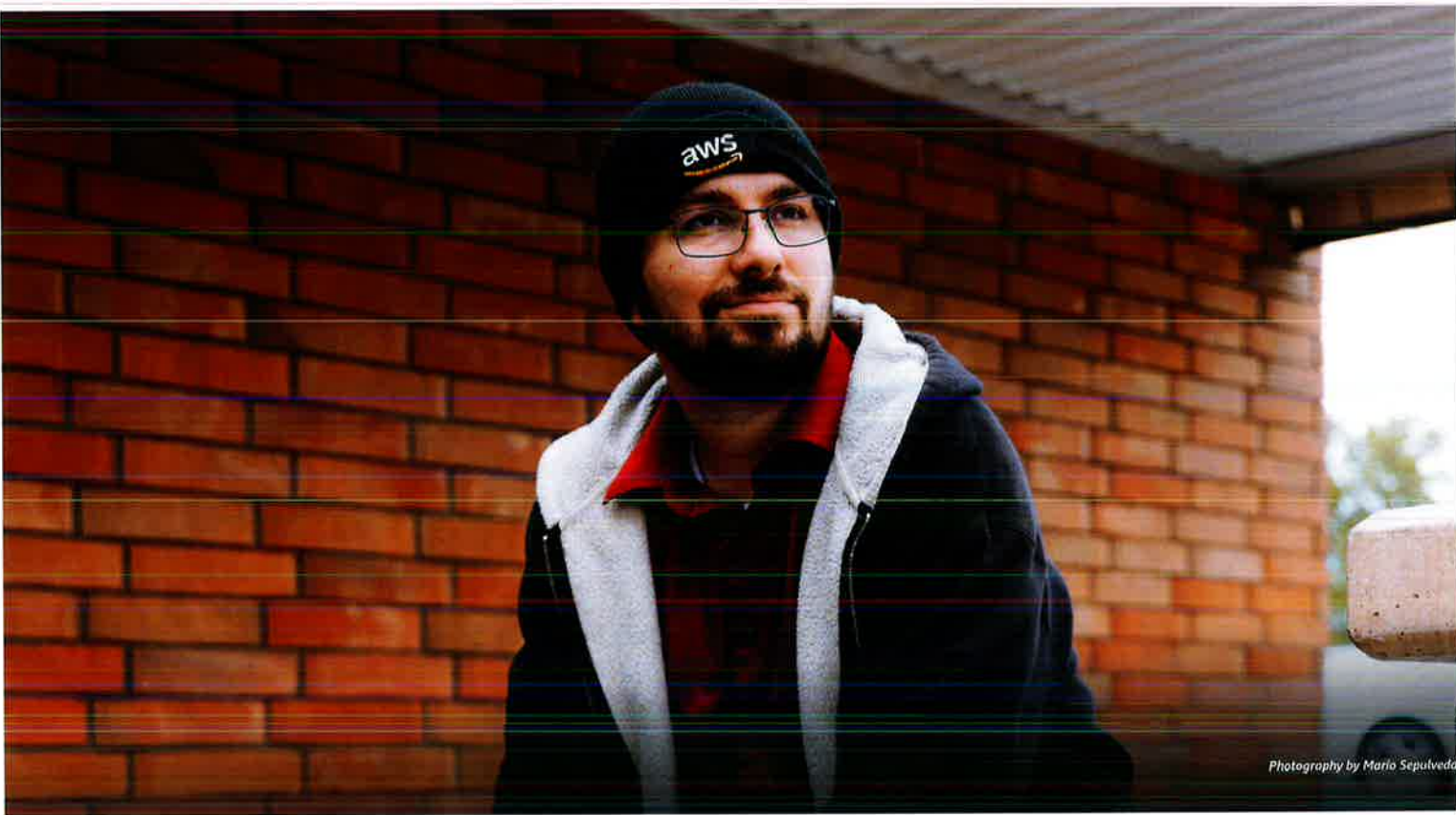


The availability of cloud infrastructure-related technical jobs can unlock transformative opportunities in rural communities. These skilled tech jobs offer hands-on tech career opportunities beyond traditionally recognized tech professions in urban settings. The demand for cloud computing has also increased the demand for these types of jobs, which in turn can enable family-sustaining careers.² According to the World Bank, economic transformation³ involves changing the nature of jobs, where people work, what they do, and how they do it. AWS's investments in data centers have increased the demand for, and accessibility of, skilled technical jobs, unlocking long-term economic opportunities.

In eastern Oregon, where AWS has been operating data centers since 2011, the current workforce supporting data center construction and operation includes more than 5,000 local workers at AWS and a variety of external businesses. These jobs, ranging from security guards and construction workers to electricians and HVAC technicians, continue to diversify employment opportunities on the back of a strong agriculture economy.

² This report follows the Brookings definition of family-sustaining careers: <https://www.brookings.edu/essay/how-family-sustaining-jobs-can-power-an-inclusive-recovery-in-americas-cities/>

³ <https://ida.worldbank.org/en/topics/theme/jobs-and-economic-transformation>



Stories of Economic Mobility

Ray's Wage Growth Story

Ray is a Hermiston native who found his way back to eastern Oregon after moving away at a young age.

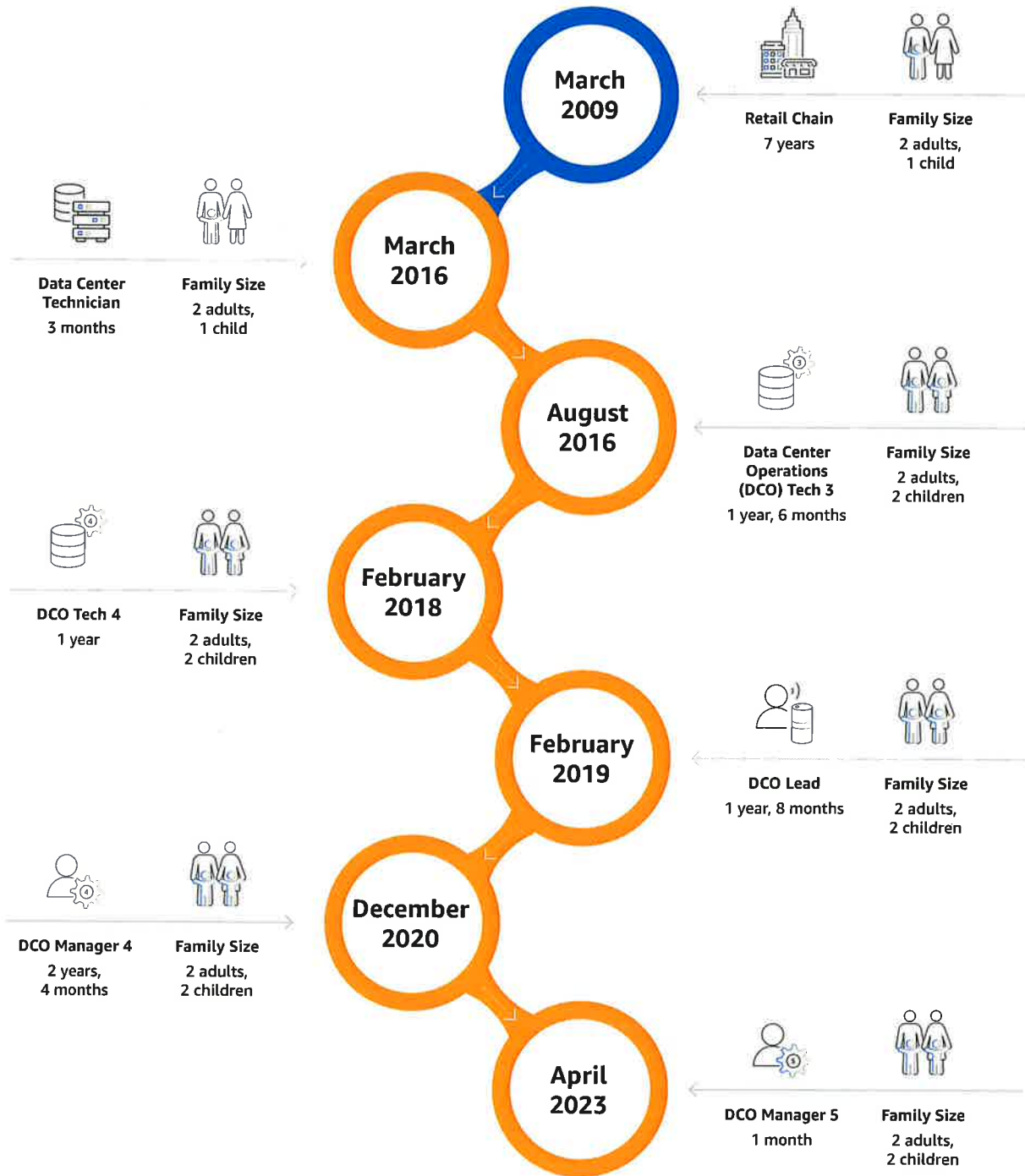
"I was born in Hermiston, but I moved to Arizona when I was four years old," said Ray. After my parents divorced when I was seven years old, we moved back. After completing high school, I returned to Arizona where I completed my entry-level certifications in technical support, networking, and IT operations and infrastructure. I came back to Hermiston to get married to my high school girlfriend. Before joining AWS, I was working for a local retail chain here in town. After seven years on the job, I went from getting paid \$10 to just \$13 per hour."

In 2016, Ray joined AWS as a data center technician on a temporary contract starting at \$20 per hour. Ray progressively advanced his career to a full-time data center operations technician, and he received coaching through an internal program to become a manager. At the end of 2020, he was promoted to manager of data center operations. Ray's career trajectory has resulted in him nearly tripling his annual earnings.

According to the Massachusetts Institute of Technology (MIT) Living Wage Calculator, Ray's current wage is 59% higher than the wage needed to support himself and his family in Umatilla County. Figure 1 illustrates Ray's wage growth story through his career progression as a data center employee.

Figure 1: Ray's Wage Growth Story

3X Ray's annual income has nearly tripled throughout his career trajectory with AWS.



● Before Joining AWS ● After Joining AWS



Ray's hard work improved his family's quality of life and enables him to provide access to better opportunities for his children.

Ray shared that there was not a lot of income growth before AWS, but that changed once he started his data center career.

"We were able to buy a house last summer, and since I'm working for AWS, I am able to afford to pay a private therapist for members of our family who needed long-term healthcare support," said Ray. "This job has helped break generational curses for my kids. I am living in a brand-new development, we could make choices for our family that we didn't have access to before, and although I did not qualify for paid paternity leave for our last child, I do for our next. This job with AWS allows for all of this to happen."



The Impact of Parental Leave and Work-Family Balance on Children's Outcomes

Parental leave has been shown to have significant benefits for children's economic outcomes. Research suggests that parental leave can promote early childhood development, improve educational outcomes, and increase earnings potential in adulthood. One study found lasting favorable effects of paid maternity leave.⁴ Another study shows that parental leave is associated with higher rates of college attendance and graduation as well as increased earnings in adulthood. These findings suggest that parental leave can have a positive impact on children's economic outcomes by promoting their early development and setting them on a path toward greater success later in life.⁵

⁴ <https://www.nature.com/articles/s41599-022-01340-z>

⁵ <https://www.ncbi.nlm.nih.gov/pmc/articles/PMC3207253/>

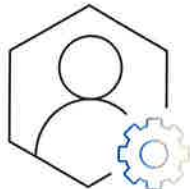
Higher wages can lead to a beneficial cycle of advancement for individuals, families, and communities. Ray hopes that others in his community can also benefit from similar career opportunities. At the end of 2021, AWS data centers in eastern Oregon directly employed 937 regular full-time employees. These jobs paid a median annual salary of \$74,000 or more, exceeding the median household income in the area by more than \$12,000.

The earning potential for high-demand skilled technical jobs increases with level of experience and career progression. AWS is committed to making these family-sustaining jobs accessible to eastern Oregonians. Figure 2 provides examples of some of these in-demand jobs.

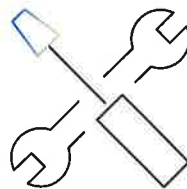
Figure 2: In-Demand Jobs Related to Data Centers



Data Center Technician



Commissioning Engineer



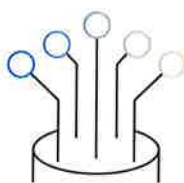
Construction Manager



Controls Technician/Engineer



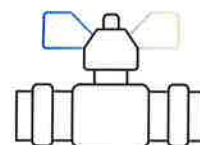
Electrician



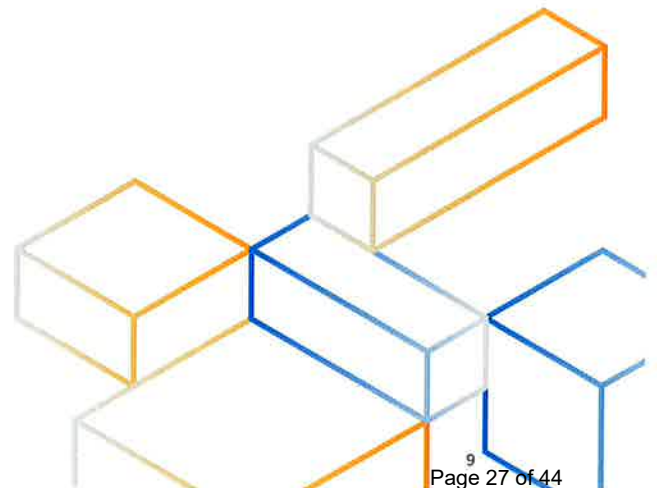
Fiber Technician



Framing & Dry Wall



HVAC & Plumbing





Photography by Mario Sepulveda

Uppa's Path to Changing Careers

Uppa was raising her two young daughters and working as a certified nursing assistant (CNA) to support her family when she heard about the Data Center Technician Training Program at Blue Mountain Community College (BMCC).

She moved to Oregon with her husband from Kathmandu, Nepal, nearly 13 years ago. She found the program's part-time structure helpful, as it allowed her to keep her day job while studying.

"I have always wanted to work in technology, but I didn't have a background in it," she said. "The first month of the program was challenging, because I didn't have the experience, but I never gave up. I just kept telling myself that I was going to finish it."

“

I worked as a CNA for two years in a hospital and senior care center, but I wasn't satisfied with my income. I also had a hard time balancing work and family life due to inconsistent work hours and schedule.”

**Uppa,
Hermiston, Oregon**

Uppa's determination paid off. After a few months, she became more confident, and—like the majority of students that complete the program—she had already secured a role in an AWS data center before graduating. The first week of orientation in the data center was exciting.

"I was the only woman in my cohort, and this was a totally different field for me," said Uppa. "With no previous background in IT, I thought I was not going to be able to make it. The mentor I was assigned to was really patient, and I soon started building both my skills and confidence. The BMCC program taught us the basics about computers, servers, security, and networking. I've been expanding that knowledge at work ever since. The field is changing so fast. You are constantly learning new things. It's not like other jobs where you might do the same tasks every day."

For Uppa, the opportunities the program brings are endless (Figure 3). "There's so much scope to switch careers within AWS—so many opportunities to develop, and so many available learning resources. Someone is always there to help if you have questions or run into issues," she said.

Uppa is now a lead for data center operations managing a team and mentoring new hires, including other women. She encourages them to get out of their comfort zone and ask a lot of questions. But she isn't going to stop there.

"Being a lead made me realize that I really enjoy working with people, and I'm now working toward a management role," said Uppa. "I also tell my daughters a lot of stories from work, about my successes and my challenges. I want them to know that they can be strong and pursue their ambitions, no matter what."

Uppa's daughters have participated in AWS Think Big Spaces, which are labs designed to provide a place beyond the classroom for students to explore and cultivate an interest in science, technology, engineering, arts, and math (STEAM) disciplines.



The Impact of Peer Mentors and Role Models in STEAM Careers for Women

The shortage of skilled workers is exacerbated by the underrepresentation of women and racial ethnic minorities.⁶ Same-gender peer mentoring increases confidence and retention of women in STEAM while promoting their career aspirations.⁷ The more women interested and working in STEAM, the more they can also serve as role models for the next generation. Girls who know a woman in a STEAM profession are substantially more likely to feel empowered when they engage in STEAM activities (61%) than those who don't (44%).⁸ Ultimately, the presence of peer-mentors and role models can help increase diversity, representation, and gainful employment in STEAM fields for women.⁹

⁶ <https://www.uschamberfoundation.org/blog/post/addressing-stem-workforce-shortage>

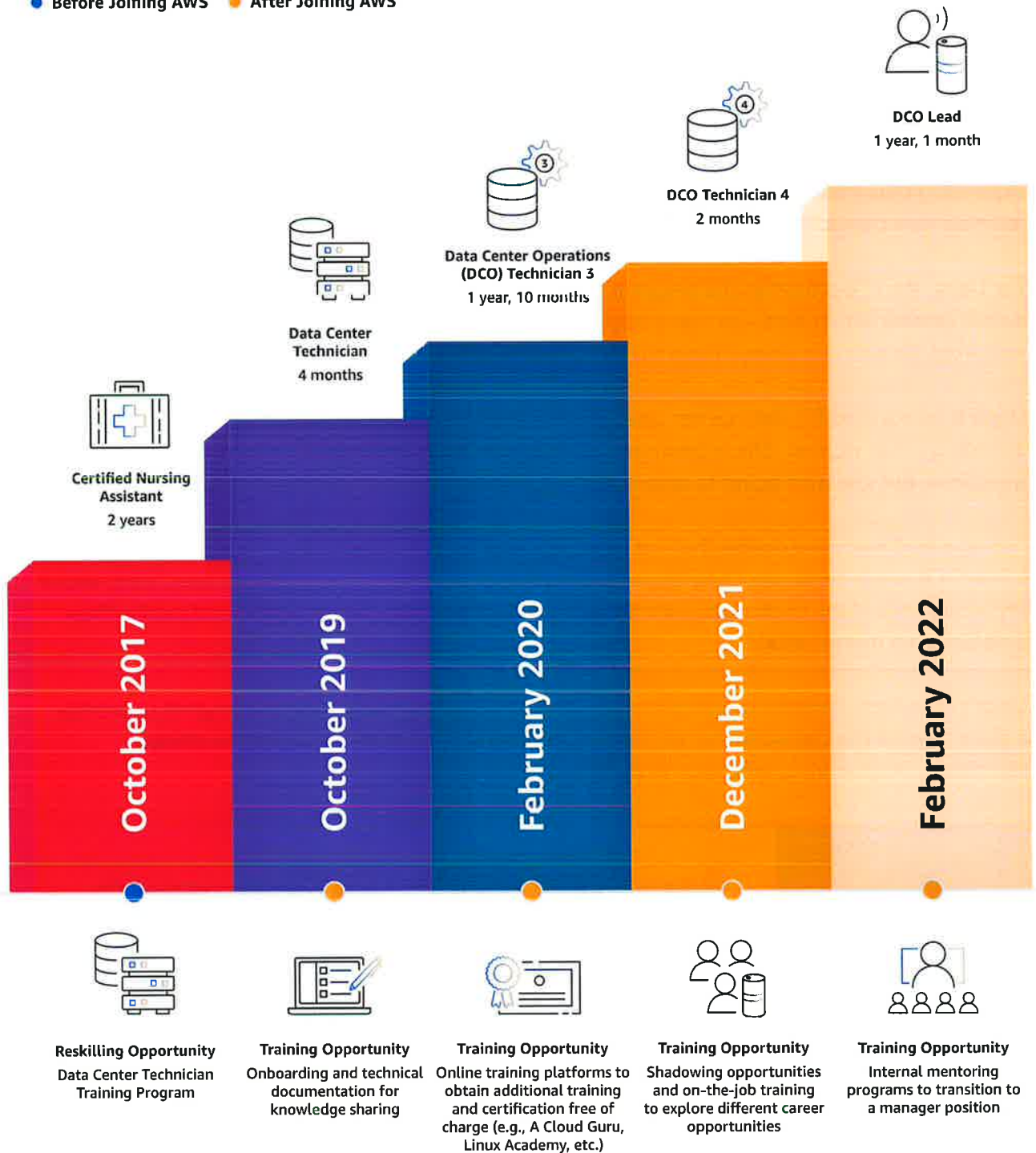
⁷ <https://www.pnas.org/doi/10.1073/pnas.1613117114>

⁸ <https://query.prod.cms.rt.microsoft.com/cms/api/am/binary/RE1UMWz>

⁹ <https://www.brookings.edu/blog/the-avenue/2020/09/09/the-labor-market-doesnt-have-a-skills-gap-it-has-an-opportunity-gap/>

Figure 3: Uppa's Path to Career Change

● Before Joining AWS ● After Joining AWS





Photography by Mario Sepulveda Films

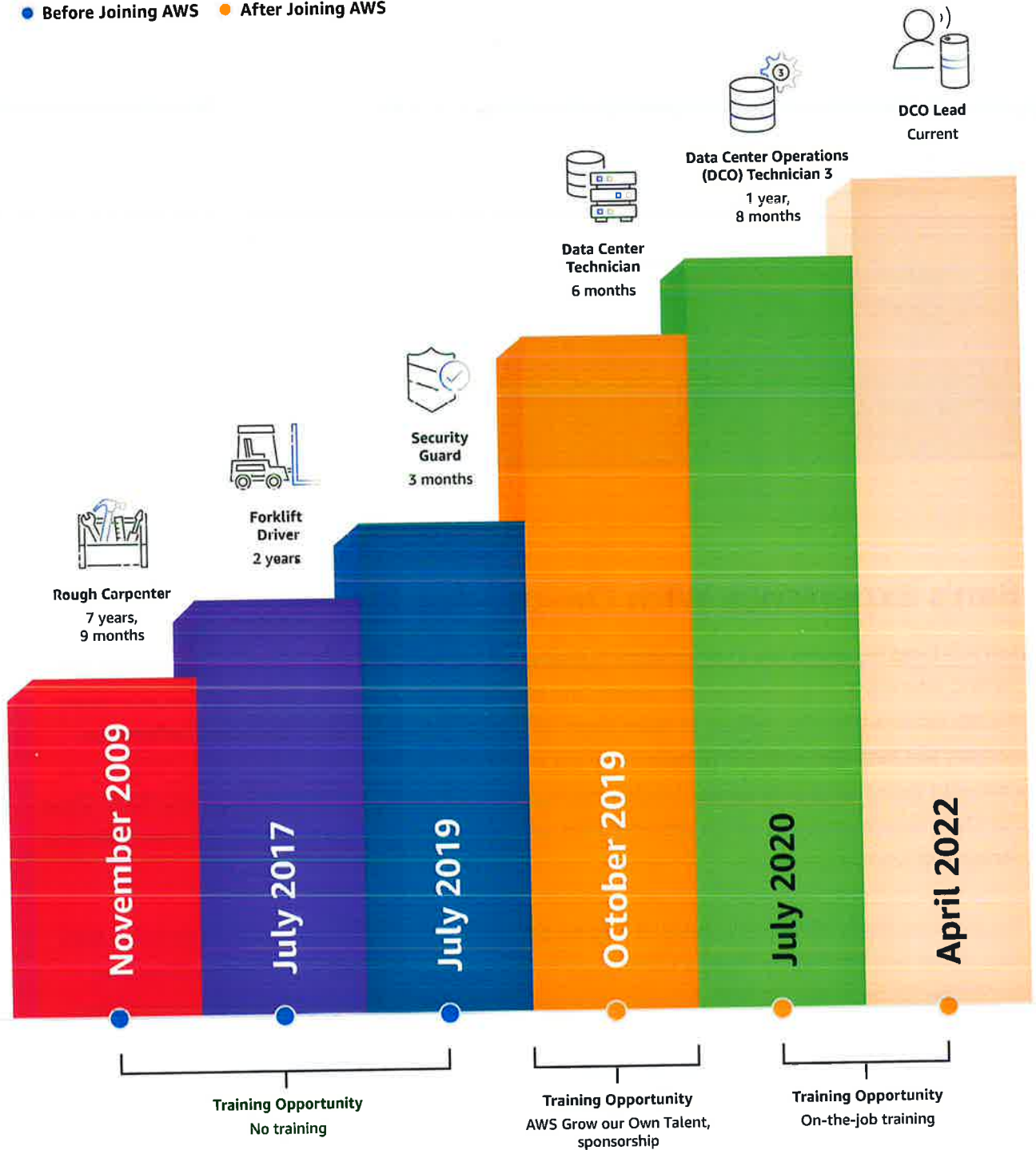
Ben's Experience With On-the-Job Training

Ben has lived his entire life in Hermiston. Growing up, he had a passion for fixing computers, but his first jobs were as a construction worker and later a forklift driver. In 2020, Ben became aware of data centers and was curious to learn more about what opportunities they could afford for workers like him. Ben decided to take a pay cut and was hired by a local contracting company as a security guard for a data center. While working as a contractor, he learned about the AWS' Grow Our Own Talent program, which provides paid on-the-job training for workers with nontraditional backgrounds and experience.

The program enabled Ben to transition into an entry-level data center technician role in an AWS data center and ultimately make a career pursuing his passion for fixing computers (Figure 4). Ben is now an experienced, skilled technical worker responsible for operating and maintaining specialized equipment at an AWS data center facility in Umatilla County. In less than three years working in a data center, Ben's annual income has more than doubled.

Figure 4: Ben's Career-Development Trajectory

● Before Joining AWS ● After Joining AWS



Ben's career progression at the data center, enabled by ongoing training opportunities, has had a significant impact on him and his family.

"When I started working as a data center employee, I found myself more and more able to significantly contribute to my family," said Ben. "I can pay for entire family trips and help support my kids and ex-wife more than I ever could before. My son and youngest daughter are now able to concentrate on school instead of having to get a job to pay for their extracurricular expenses. Working with AWS has been the single best thing in our lives, both monetarily and otherwise."



The Role of Tailored Training Programs in Accessing Quality Jobs

Sectoral employment programs train job seekers for high-quality employment, or employment in specific industries considered to have strong labor demand and opportunities for career growth. They offer a promising pathway to higher-wage jobs for workers who may face barriers to employment, typically those without college degrees.¹⁰ Multiple evaluations of sectoral employment programs, including on-the-job training, have demonstrated substantial, positive results for participants, with earnings gains (11%–40%) among the largest found in any evaluation of a U.S. training and employment services program.¹¹

¹⁰ https://www.povertyactionlab.org/sites/default/files/publication/Evidence-Review_Sectoral-Employment_2222022_0.pdf
<https://www.brookings.edu/research/do-sectoral-training-programs-work-what-the-evidence-on-project-quest-and-year-up-really-shows/>

¹¹ Lawrence F. Katz & Jonathan Roth & Richard Hendra & Kelsey Schaberg, 2022. "Why Do Sectoral Employment Programs Work? Lessons from WorkAdvance," *Journal of Labor Economics*, vol 40(S1), pages S249-S291.



Clint's Journey to Staying Local

Clint, born and raised in Boardman, Oregon, shared that a 20-minute drive to Hermiston in Umatilla County is a big move. At 19, he decided that college wasn't the right path for him and instead seized the opportunity to work at the Umatilla Chemical Depot.

After dedicating 12 years of his life to the depot, Clint faced a significant decision in 2013—should he follow his job and relocate to Colorado or reenter the local job market? He tried various jobs in his local area, including working for an agriculture cooperative, a craft beer tap house, a beer magazine as a subcontractor, and a brewery.

“I wanted to stay local because all of my and my wife's family are here in eastern Oregon. I grew up here, I appreciate the eastern Oregon environment, and I want to stick with it.”

**Clint,
Boardman, Oregon**

Clint had a chance encounter with an AWS employee at a local restaurant. During their conversation, Clint's interest in AWS was sparked, prompting him to inquire further. In 2017, Clint began his journey with AWS as a cable engineer through a contracting company, which enabled him to stay in his community. After working in that role for three years, he became a full-time AWS employee in data center operations. Clint earned a promotion to a manager position through an internal coaching program (Figure 4). Since joining AWS as a contractor more than five years ago, Clint's income has quadrupled.

"I was definitely looking at the big picture and seeking more stable employment," said Clint. "Now, I have the option to turn my current job into a lifelong career and potentially retire at AWS someday. Thanks to AWS, I can have a job that allows me to stay local and work for a company that provides the stability I was looking for."



Impact of Employment Opportunities on Community Retention

Employment has been shown to have a significant impact on rural community development in the United States. Families on small to mid-sized farms often depend on nonagricultural jobs in their local economies as off-farm sources of income.¹² Research by the United States Department of Agriculture (USDA) Economic Research Service finds that rural counties with lower unemployment rates experience higher levels of income growth and lower levels of poverty.¹³ Furthermore, sustainable employment opportunities in rural communities can promote economic opportunity, population growth, and a more diverse and vibrant community.¹⁴ Additionally, job creation in rural areas can lead to the development of supporting industries and infrastructure, further stimulating economic growth.¹⁵

¹² <https://www.ers.usda.gov/webdocs/publications/105155/eib-246.pdf?v=7020.8>

¹³ <https://www.ers.usda.gov/topics/rural-economy-population/rural-poverty-well-being/>

<https://www.ers.usda.gov/amber-waves/2022/february/persistently-poor-rural-counties-experienced-lower-employment-impacts-from-the-coronavirus-covid-19-pandemic-but-have-higher-cumulative-covid-19-case-rates/>

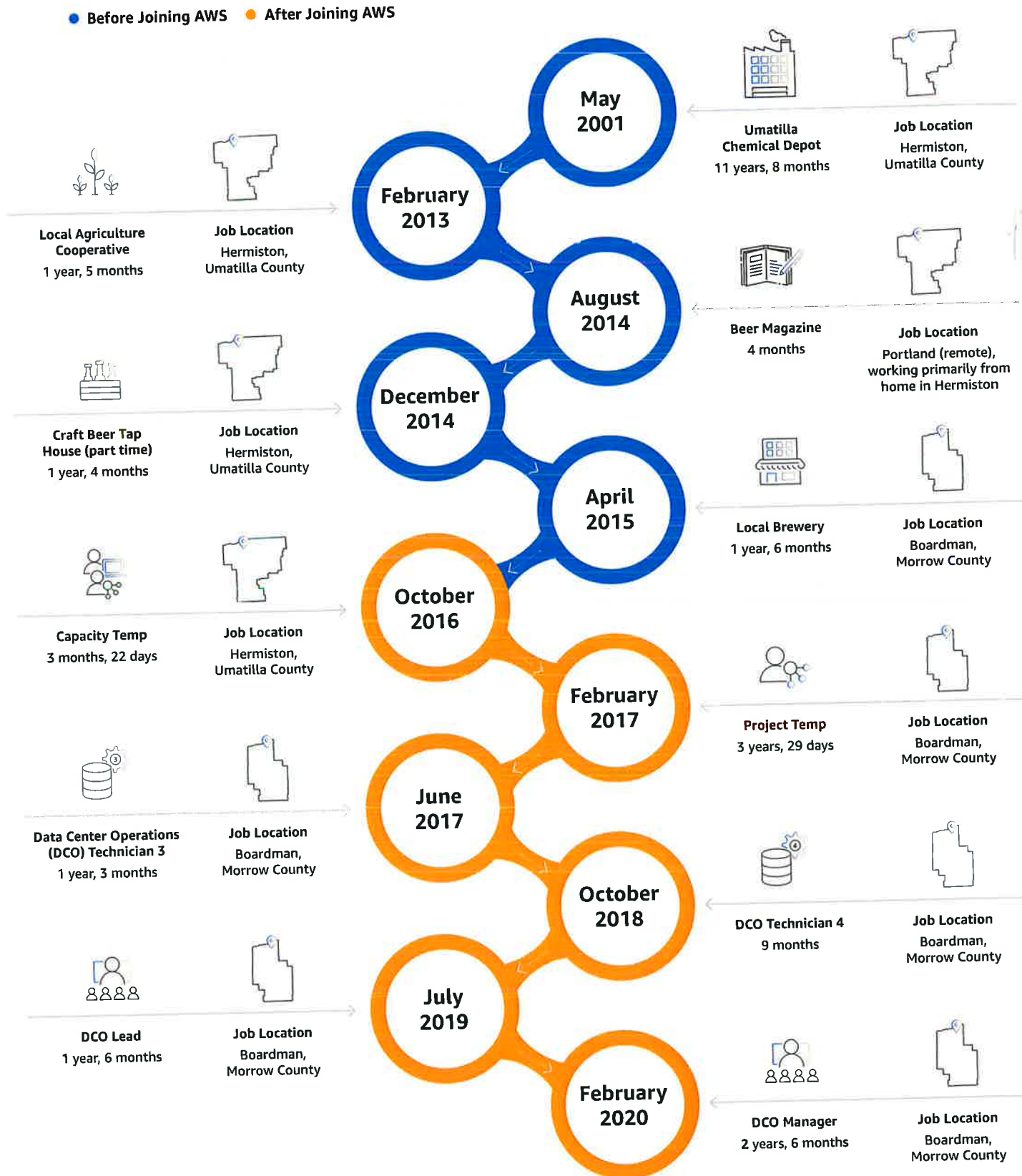
<https://www.census.gov/library/stories/2018/12/differences-in-income-growth-across-united-states-counties.html>

https://www.ers.usda.gov/webdocs/publications/45361/52906_err185.pdf?v=0

https://research.upjohn.org/cgi/viewcontent.cgi?article=1020&context=up_policypapers

¹⁵ <https://www.mckinsey.com/industries/public-and-social-sector/our-insights/rural-rising-economic-development-strategies-for-americas-heartland>
<https://www.conference-board.org/pdf/download.cfm?masterProductID=39541>

Figure 5: Clint's Journey to Staying Local





Scaling Pathways to Prosperity

Working with local collaborators, AWS is dedicated to creating scalable pathways to prosperity for the diverse local community through workforce development programs.

Torrie Griggs, the executive director for Boardman's Chamber of Commerce, said, "We truly believe in the grow-our-own theory."

Through a talent life-cycle approach, AWS's programs meet current and potentially future employees where they are in their journey. The programs include training, upskilling, and reskilling opportunities to enable job seekers like Ray, Uppa, Ben, and Clint to land a data center job and develop long-term careers. In parallel, AWS provides STEAM experiential learning and training opportunities for future generations of eastern Oregonians. These opportunities include classes and workshops starting at the middle school level and continuing through high school and beyond.

Training and Reskilling Opportunities for Job Seekers

AWS, in collaboration with BMCC, provides a number of training and reskilling pathways (Figure 6) to data center jobs for local workers in eastern Oregon. The **Data Center Technician**, **Industrial Systems Technology**, and **AWS Grow Our Own Talent** programs provide technical classes, internships, and paid on-the-job training to help local workers transition to a data center technician or engineering operations role.

Figure 6: Tailored Workforce Development Programs for Data Center Jobs

Programs Developed/ Supported by AWS	Local Organization	Target Audience	Opportunity
AWS Grow Our Own Talent	AWS on-the-job-training and BMCC	The program is open to people with little or no directly relevant work experience, and no college degree is required.	The program helps individuals with nontraditional experience and backgrounds develop skills in data center roles through a combination of paid on-the-job training for up to three months and placement opportunities (e.g., data center technicians, engineering operations technicians).
Data Center Technician Training	BMCC	The program is open to anyone, regardless of their background or skills, and prepares them for employment in data centers and the broader IT sector.	A one-year upskilling certificate program created by AWS and BMCC to prepare technicians to work on installing, maintaining, and repairing computer and network systems.
Fiber Optic Fusion Splicing Training	BMCC	The course is designed for anyone who wants to enter the fiber optic industry and professionals who want to learn the fusion splicing skill.	A two-day no-cost course for students to learn how to install and repair fiber optics. The program offers a career networking session to meet local employers.
Industrial Systems Technology	BMCC	Prepares students for a rewarding and challenging career related to insulation, repair, and maintenance of a wide range of industrial machinery and systems including those in data centers.	The program offers courses with hands-on training at BMCC's Workforce Training Center in Boardman, Oregon.



AWS has worked with local educators to ensure the alignment of these training programs with industry standards. Additionally, AWS provided BMCC with a \$150,000 grant to purchase lab and training equipment in order to serve more students.

From 2020 through 2022, a total of 354 workers have participated in the AWS Grow Our Own Talent program in eastern Oregon, and 278 workers (nearly 80% of total participants) have been hired by AWS to date.

According to Peter Hernberg, a teacher at BMCC, around 12 students complete the Data Center Technician Training Program each year, and more than 90% of them find an entry-level data center role.

“AWS is willing to give people a chance to enter the data center career path,” said Hernberg. “The bar for giving students a try for three or six months is reachable with basic skills, and that’s a good way to give students opportunities.”

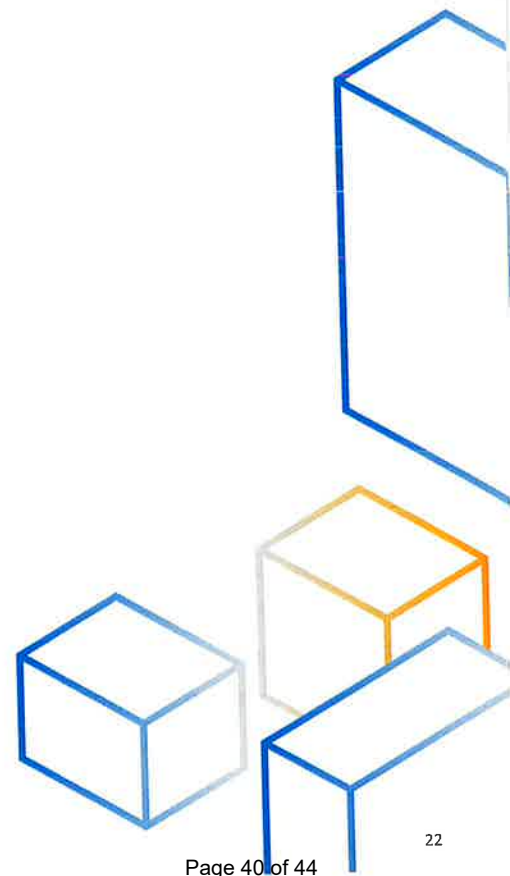
AWS contributes \$100,000 annually in scholarships for local students enrolled in the BMCC data center-related programs. A scholarship allows a student to focus on academics and gives them the option to complete the program on a part-time basis. Hernberg said that AWS’s scholarship support has empowered students to launch careers regardless of whether they pursue employment with AWS, which would not have been possible without this financial support.

"There is no magic here," said Hernberg. "It is simply that AWS is hiring a lot in this community, and AWS is hiring my students every year."

In addition to established programs that provide semester-long education for the data center industry, AWS hosts **AWS Fiber Optic Fusion Splicing Certificate Course** programs at BMCC. In 2022, two workshops attracted a total of 55 learners and seven employers in eastern Oregon. These trainings are important because they equip local workers with certified technical skills that can open doors to technical entry-level jobs with other businesses in the area and make the learners more competitive in the labor market. A growing number of people who have already worked in the field use the training as an upskilling opportunity. Participation in this hands-on training results in an increased ability to take on more complex jobs with employers. For instance, **Team Fishel**, which specializes in utility engineering, construction, and network installation services, has hired graduates directly out of the fusion splicing program.

Craig Mathes, the vice president of Safety and Human Resources at Team Fishel, said, "The opportunity to collaborate with AWS in the area of career development is attracting more people to the field and these types of careers. Team Fishel has hired a number of our teammates through these workshops. Participation in the workshops has led to faster onboarding. The hands-on trainings help individuals seeking an exciting, well-paying career get a head start."

In the words of Umatilla County Commissioner Dan Dorrn, "Our youth is our biggest asset when it comes to workforce development. If we can retain 20% of the kids in the community, then we can have a self-sustaining workforce. Identifying progressive types of opportunities, such as the fusion splicing program, makes me smile ear to ear."

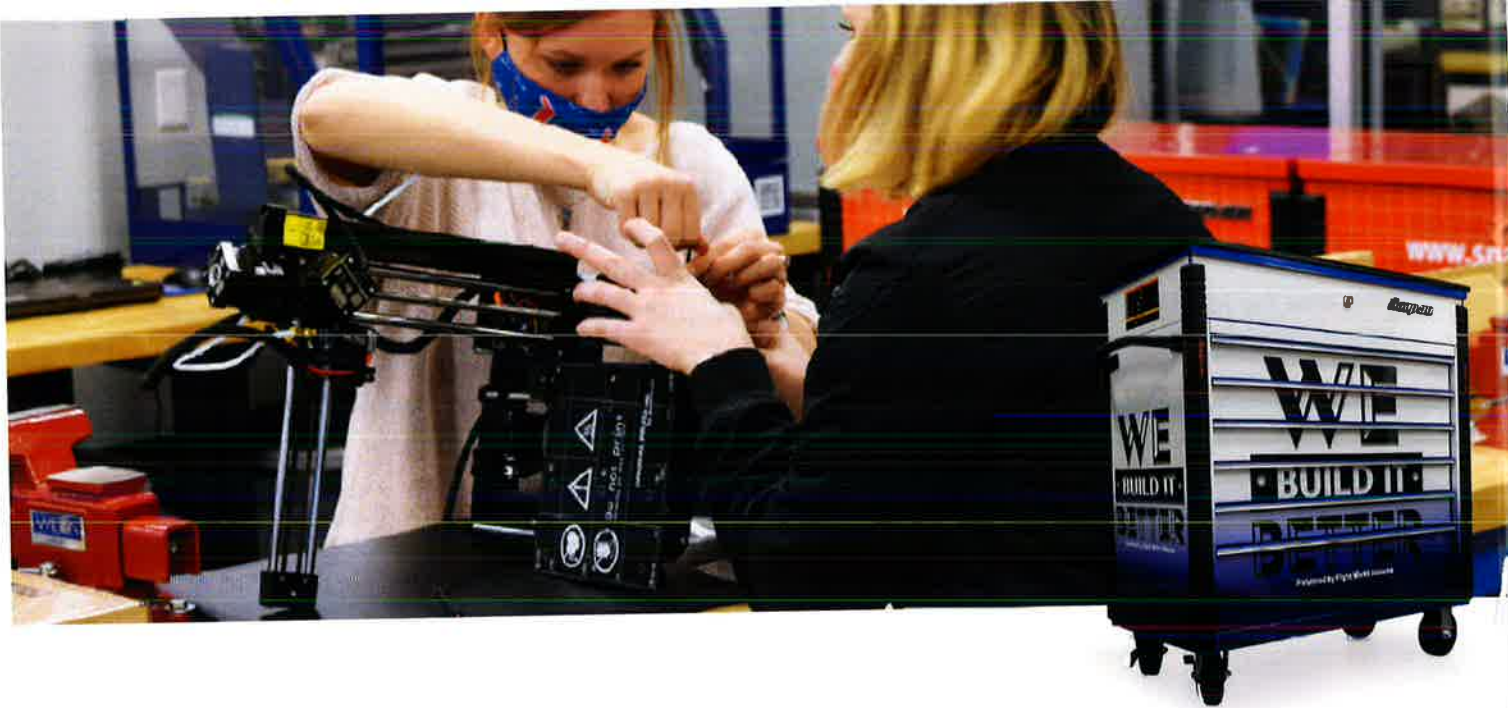


Experiential Learning Opportunities for K-12

In collaboration with local entities and school districts, AWS provides a number of diverse programs for local middle and high school students (Figure 7). These programs provide targeted training in STEAM topics through experiential learning opportunities as well as exposure to STEAM careers for the future eastern Oregonian workforce.

Figure 7: Experiential STEAM Learning Opportunities and Career Awareness Programs

Programs	Local Organization	Target Audience	Opportunity
AWS CloudRoom	Local schools	Students ages 9–14	Provides students with learning experiences focused on the cloud and emerging cloud technologies.
Girls' Tech Day	Morrow County School District, Hermiston School District, Umatilla School District, Confederated Tribes of Umatilla Indian Reservation (CTUIR)	High school students	Educates, inspires, and empowers girls and young women ages 8 through 24 to pursue careers in technology.
Think Big Spaces	Morrow County School District, Hermiston School District, Umatilla School District, CTUIR	Elementary, middle, and high school students	Provides a place beyond the standard classroom for students to explore and cultivate an interest in STEAM topics and STEAM-related careers. These labs encourage a hands-on approach where students think big to solve real-world problems.
We Build It Better	Local schools	Middle and high school students	An all-inclusive 18-week, industry-designed, educator-developed, curricular experience that engages students in a work-like STEAM environment.



The **We Build It Better** program, which helps middle school students gain exposure to a work-like STEAM environment through an 18-week workshop, has served over 1,200 students across seven local schools in eastern Oregon. AWS invests about \$200 for each student by purchasing materials and organizing the workshops. The program helps shape students and teaches outcomes in four areas: 1) soft skills development (teamwork, creativity, etc.), 2) STEAM technical skill development, 3) shaping career aspirations, and 4) teacher support and development.

One middle school student shared that they're excited to have a class that they find engaging and said, "We learn skills that will help us later in life."

Teachers value the diverse lessons that teach applicable real-life skills. Students at the middle school level are provided an opportunity to get a taste of what they could do in their future career paths or potential focus areas at the high school level.

A teacher at Armand Larive Middle School in Hermiston said they have been impressed with the We Build It Better program's curriculum and that their students are engaged and excited. The idea of having a class that doesn't penalize them for making mistakes is exciting for the kids and teachers. The teacher also spoke about how the program makes critical STEAM skills accessible to students.

Other programs, like **AWS Cloud Room**, **AWS Think Big Spaces**, and **AWS Girls' Tech Day**, served more than 4,300 eastern Oregon students via 27,300 interactions from 2022 through the first quarter of 2023. These programs inspire and prepare future-ready students as they develop into well-rounded and creative problem solvers.

AWS also supports existing STEAM focused programs in the community such as the Umatilla Robotics team. Heidi Sipe, superintendent of the Umatilla School District, said, "The way AWS supports the robotics team, that's ideal. When the robotics team needs something, they ask. AWS provided \$9,000 in travel funding plus T-shirt branding for our team to attend the world finals."



Building the Future Together

The demand for skilled technical jobs supporting data centers can be transformative for rural communities, offering career opportunities that open pathways for economic mobility for individuals and families in Morrow and Umatilla counties. Many of these jobs are attainable with a few weeks of training. They do not require completing a college degree and taking on the related onerous student debt. In collaboration with local businesses, AWS will continue to invest in the regional economy to catalyze inclusive and long-term economic transformation, for generations to come, through tailored education, training, and reskilling opportunities to build the future together.



Learn More and Join the Journey

Many pathways to economic opportunity and mobility are available through skilled technical jobs related to data centers. Learn more and join the journey to building a more prosperous future together:

- Blue Mountain Community College – [Data Center Technician Program](#)
- Blue Mountain Community College – [Industrial Systems Technology Data Center Operations](#)
- AWS' Grow Our Own Talent – [Work Based Learning and AWS Internships](#)

