

CLOSING THE DIGITAL DIVIDE

Oregon Broadband Council
Thursday, April 22, 2021



Introductions

Skip Newberry,
President & CEO



Cara Turano,
COO



TECHNOLOGY
ASSOCIATION
OF OREGON

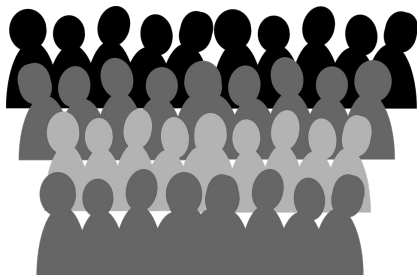


TAO Background

CORE PURPOSE:

Drive technology enablement to create an inclusive, world-class innovation economy in Oregon and SW Washington.

STRATEGIC INITIATIVES:



Deliver Extraordinary
Value to Our
Members



Drive Innovation &
Digital
Transformation



Build Economic
Competitiveness via
Technology



Economics of Technology | U.S.

KEY FINDINGS



12.4 million

Projected 2021 net tech employment in the U.S.



\$2.0 trillion

Estimated directed economic output of the U.S. tech industry, representing 10.5% of the national economy.



245,500

Projected 2021 net new tech jobs.



2x

Median tech occupation wage is nearly double the median national wage.



57

Diversity Index score of U.S. tech workforce vs. an overall U.S. workforce score of 56.



585,000

Number of tech business establishments in the U.S.



3.9 million

Number of employer job postings for tech occupation job openings during 2020; over 20% occurring in emerging tech roles or skills.



+31%

Projected growth rate for cybersecurity job roles over the next decade; the fastest rate among tech occupations.

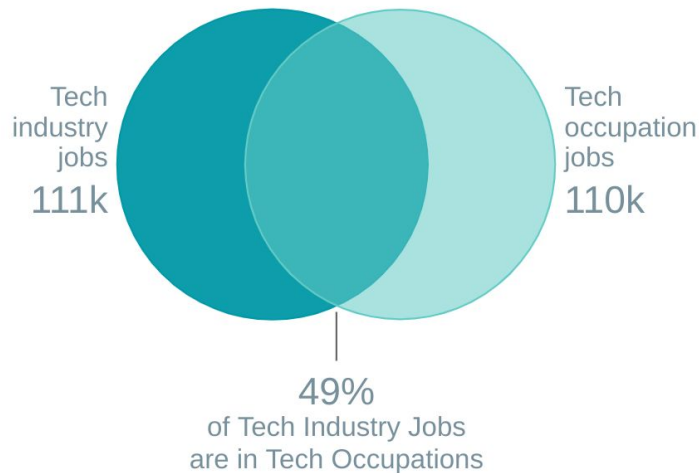


Economics of Technology | Oregon

- Net Tech Employment = 166,862
- Net Tech Employment Rank = 23
- Net Tech Jobs Added* = 29

* In 2020

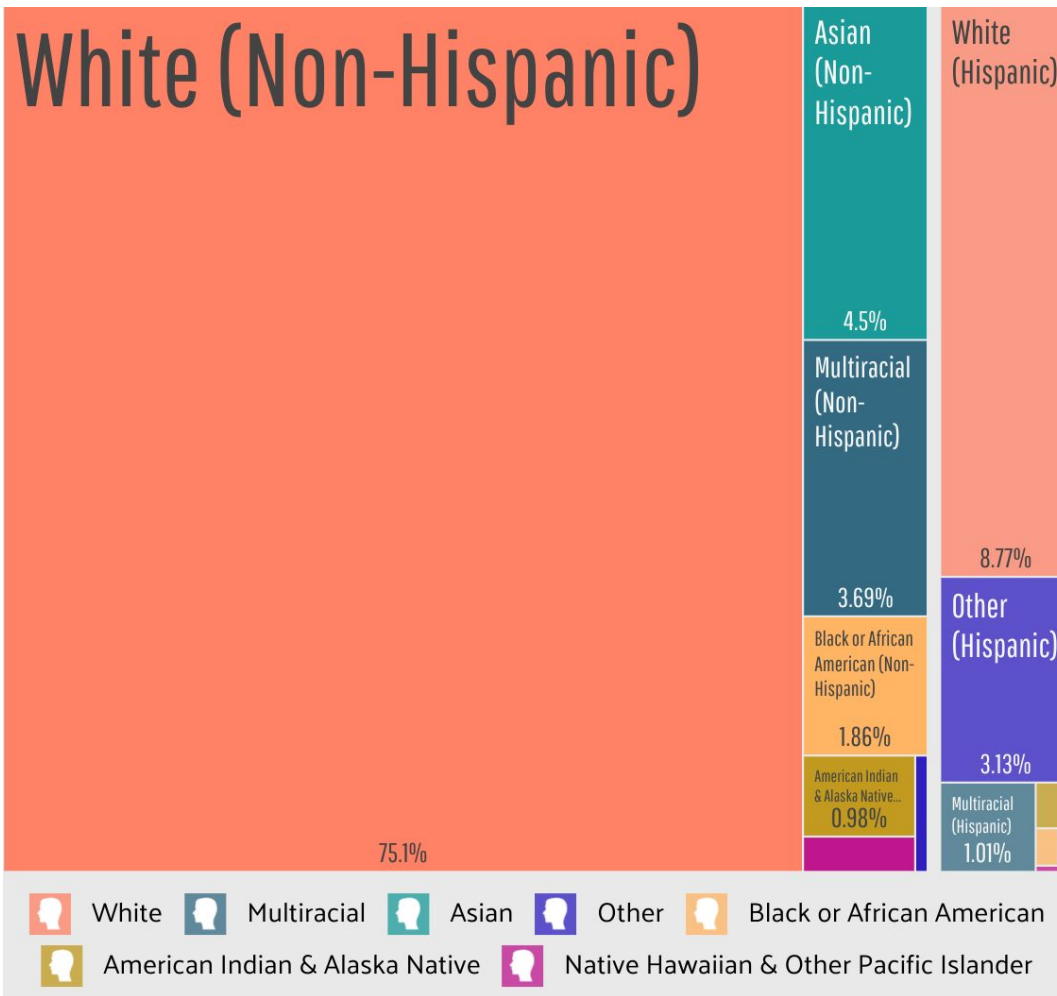
INTERSECTION OF TECH INDUSTRY & TECH OCCUPATION EMPLOYMENT





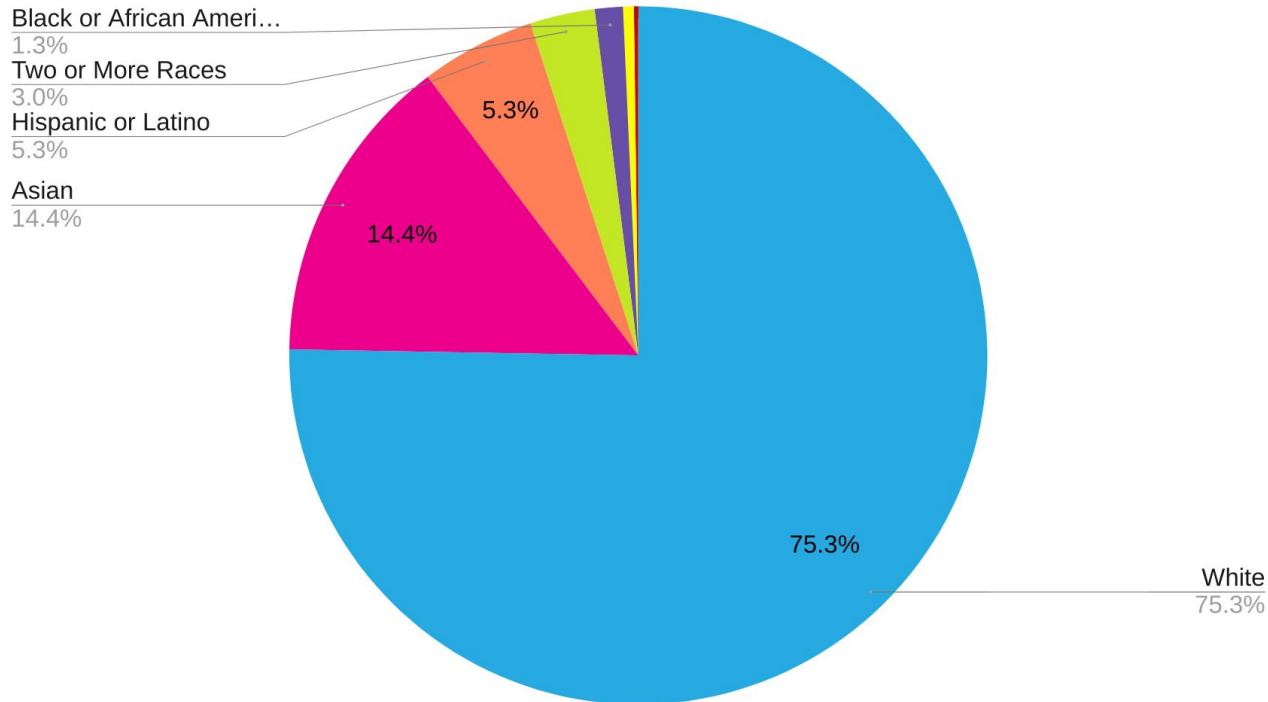
Diversity in Oregon

White (Non-Hispanic)



Diversity in Tech in Oregon

STEM Worker Diversity



TAO's Commitment to Diversity



Technology Association of Oregon (TAO) strives to cultivate a welcoming, supportive environment for all races, ethnicities, genders, sexual orientation, abilities and disabilities, ages, and other factors that shape creative perspective and professional experience.

As an association representing a large and ever-changing industry in our region, we know that work towards an equitable and inclusive workforce and work environments is an ongoing process. We look forward to driving contributions related to diversity and inclusiveness of our tech community and ecosystem.

Through transparency and accountability Technology Association of Oregon strives to:

- Reflect, welcome, and benefit from a diverse and inclusive environment.
- Support the development of technology that reflects and engages the diversity within the global community.
- Advance social inclusion through advocacy efforts at the local, regional and national level.
- Engage diverse thought leaders, business partners and attendees in our events and programming
- Foster positive and open discussions amongst community members.
- Promote content and experiences that encourages inclusive representation.

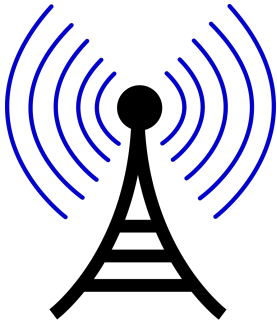
Digital Divide Defined

digital divide noun



Definition of *digital divide*

: the economic, educational, and social inequalities between those who have computers and online access and those who do not





P-20 Education

One of the issues discussed at January's meeting revolved around student engagement. Around the state, students shared a similar sentiment: teachers are the determining factor of student engagement. Despite having the same materials and curriculum, different teachers can be a make or break for a student's STEM experience.

Emily Zou is a sophomore at Lakeridge High School and serves as the Co-Executive Director of Recruitment and Trainings for Oregon Student Voice, a student-led organization that empowers all students to be authentic partners in making decisions that affect their K-12 education.

Urban Tech Inequity



5:30PM-7:30PM
Uncorked Studios

811 SE Stark Street #300
Portland, OR 97214

COMMUNITY COLLABORATIVE PROBLEM-SOLVING EVENT

The aim is to break some of the barriers that exist among organizations that specifically serve people of color and the broad, local tech community. Partnering together gives us a platform to bridge the gap between the two and provide opportunities for Community-Based Organizations (CBO's) to become more efficient and effective in their targeted service delivery.

- 2020 Smart 50 Award for inclusive community building
- Invest \$75,000 to Community Based Organizations supporting Portland's Black and Brown Residents
- Over 100 people participated with a 50/50 racially diverse audience

Who's Involved



Rural vs Urban

- 2020 funded by the City of Independence with 80 participants nationwide
- 2021-22 funded by an EDA grant as part of a larger NW Ag Innovation Hub
- Goal of continued ecosystem building to create economic growth by bridging the gap between farmers and technologists



Digital Transformation

Agriculture's connected future: How technology can yield new growth

October 9, 2020 | Article

By [Lutz Goedde](#), [Joshua Katz](#), [Alexandre Ménard](#), and [Julien Revelant](#)



One of the oldest industries must embrace a digital, connectivity-fueled transformation in order to overcome increasing demand and several disruptive forces.

The agriculture industry has radically transformed over the past 50 years.

Advances in machinery have expanded the scale, speed, and productivity of farm equipment, leading to more efficient cultivation of more land. Seed, irrigation, and fertilizers also have vastly improved, helping farmers increase yields. Now, agriculture is in the early days of yet another revolution, at the heart of which lie data and connectivity. Artificial intelligence, analytics, connected sensors, and other emerging technologies could further increase yields, improve the efficiency of water and other inputs, and build sustainability and resilience across crop cultivation and animal husbandry.

DOWNLOADS

[Article \(10 pages\)](#)

Sidebar

The future of connectivity



Without a solid connectivity infrastructure, however, none of this is possible. If connectivity is implemented successfully in agriculture, the industry could tack on \$500 billion in additional value to the global gross domestic product by 2030, according to our research. This would amount to a 7 to 9 percent improvement from its expected total and would alleviate much of the present pressure on farmers. It is one of just seven sectors that, fueled by advanced connectivity, will contribute \$2 trillion to \$3 trillion in additional value to global GDP over the next decade, according to [research by the McKinsey Center for Advanced](#)

[Connectivity](#) and the [McKinsey Global Institute](#) (MGI) (see sidebar "The future of connectivity").



Selected Advocacy Initiatives (State)

HB 2411 - ODOT and Telecom Coordination related to Statewide Transportation Improvement Program

HB 2508 - Requires Oregon Health Authority to ensure reimbursement of health services delivered using telemedicine.

HB 2560 - Requires governing body of public body, to extent reasonably possible, to make all meetings accessible remotely through technological means and provide opportunity for members of general public to remotely submit oral and written testimony during meetings to extent in-person oral and written testimony is allowed.

HB 2654 - Authorizes electric utility to use or allow for use of electric easement in provision of broadband services.

HB 2820 - Establishes Prosperity 1,000 Pilot Program to provide career coaching, occupational training and job placement services for at least 1,000 low-income job seekers residing in areas of concentrated poverty.

HB 3010 - Requires media production companies seeking reimbursement under Oregon Production Investment Fund programs to perform certain actions related to diversity, equity and inclusion with respect to production for which reimbursement is sought.

SB 615 - Establishes Low Income Broadband Bill Payment Assistance Fund.

SB 623 - Workforce Modernization Act



Selected Advocacy Initiatives (Local)

TAO partnered with FreeGeek as part of its drive last year to drive donations of tech devices to be refurbished and distributed to area schools and residents in need.

TAO's office in Eugene engaged TAO member companies for purposes of raising money to purchase Chromebooks for one of the schools impacted by the wildfires.

Pilot project w/ City of Portland (SmartCityPDX, Office of Community Technology), PSU/CETI Institute, TAO Foundation's Center for Inclusive Innovation and TAO regarding digital connectivity in marginalized communities. Pilot project involves research, deployment and testing of potential solutions, and report-out on findings to inform development of effective and equitable policy at the local level.

TAO is consulting with the City of Bend on the development of an equitable data strategy.



Questions & Final Thoughts



*Thoughts
are free!*