



East Cascades Works

Board Meeting Agenda

October 23, 2019 11:30 am - 1:30 pm

In Person Locations:

Klamath Community College

7390 South 6th Street

Klamath Falls, OR 97603

Conference Center- Building 7

East Cascades Works

404 SW Columbia St. Suite 200

Bend, OR 97702

Columbia Gorge Community College

400 E Scenic Drive, The Dalles, OR 97058

Instructional Services Room- Building 2

Video conference option: <https://zoom.us/j/566104853>

Phone call-in option: 1 (646) 876-9923; Meeting ID: 566104853

Please grab lunch upon arrival. Lunch will be served for Board Members, COWC and Staff.

11:30am-11:50pm

Welcome – Lisa Dobey, EC Works Chair

- Introductions
- Consent Agenda:
 - Meeting Minutes from July 24, 2019- Vote Required
- Announcements:
 - Welcome New Board Members:
 - Dr. Marta Cronin, President of Columbia Gorge Community College
 - Teri Hockett, Vice President of Technology Association of Oregon
 - Jon Irvine, Labor Liaison, AFL-CIO
 - Welcome Mel Barrett, Program Manager EC Works
 - Congratulations to Stefanie Siebold on her 2 Year Anniversary at EC Works today
 - Umatilla and Morrow Counties Update

11:50am – 12:10pm

Regional Economic Snapshot – Kale Donnelly, Workforce Analyst, Oregon Employment Department

- Update on East Cascades Slowing Job Growth

12:10pm-12:25pm

Incumbent Worker Training Grant Results- Jessica Fitzpatrick, EC Works Staff

- Overview of opportunity and historical success and challenges
- Announce round one-recipients

12:25pm – 12:55pm

EC Works Accountability Report – Lisa Dobey, EC Works Chair and Heather Ficht, Executive Director

- Review draft EC Works' Accountability Report

12:55pm – 1:05pm

Board Member Responsibilities – Lisa Dobey, EC Works Chair & Heather Ficht, Executive Director

- Review draft Board Member Assignments and Affiliations

1:05pm- 1:25pm

General Updates

- WORKing Together Conference- Jennifer Newby, Executive Committee Member
- Autonomous Vehicles Report- Heather Ficht, Executive Director
- Workforce and Talent Development Board Strategic Plan – Heather Ficht, Executive Director
- Endless Summer Nights Event - Gary North, Vice Chair Member

1:25pm- 1:30pm

Public Comment & Closing

Attachments & Handouts

- July Board Meeting Minutes
- *Regional Economic Snapshot *distributed day of*
- Incumbent Worker Report
- Accountability Report
- Board Member Responsibilities
- Autonomous Vehicles Report
- Workforce and Talent Development Board Strategic Plan

Board Meeting Minutes- DRAFT

July 24, 2019 11:30 am - 1:30 pm

Columbia Gorge- Primary meeting location: Columbia Gorge Community College; 400 E Scenic Drive, The Dalles, OR 97058; Building 1, Board Room

Attendees:

Board Members: Lisa Dobey (chair), Mark Warne, Martin Campos-Davis, Lisa Farquharson, Jennifer Newby, Steve Kramer (COWC, ex-officio)

Public: John Asher (HECC), Barbara Byrd (AFL-CIO), Marta Cronin (CGCC), Rick Leibowitz (CGCC)

Staff: Heather Ficht, Jessica Fitzpatrick

Central Oregon: WorkSource Bend; 1645 NE Forbes Rd.; Bend, OR 97701

Attendees:

Board Members: Michelle Alvarado, Gary North, Nicole Hough, David Burger, Robbie Smith

Public: Penny Newton (WorkSource), Christian Moller-Anderson (WorkSource), Teri Hockett (TAO), Dana Dunlap (WorkSource)

Staff: Jamie Kendellen

Klamath Basin: WorkSource Klamath; 801 Oak Ave.; Klamath Falls, OR 97601

Attendees:

Board Members: Julie Matthews, Amy Gibbs

Public: Erica Dow (KCC), Michelle Horne (WorkSource), Kim Laugsand (WorkSource), Randy Norris (WorkSource)

Staff: Stefanie Siebold

Video conference call-in option: <https://zoom.us/j/376628509>

Quorum reached and meeting called to order by Lisa Dobey at 11:39am.

Topic	Time	
Welcome & Consent Agenda	11:30am-11:50pm	<p>Welcome – Lisa Dobey, EC Works Chair</p> <ul style="list-style-type: none"> • Introductions & Ice Breaker • Consent Agenda: <ul style="list-style-type: none"> ○ Meeting Minutes from April 24, 2019 - <i>vote required</i> ○ Ratify Program Year 2019 Budget – <i>vote required</i> • Announcements: <ul style="list-style-type: none"> ○ Welcome EC Works new Program Manager, Melissa Barrett – start date August 1

		<ul style="list-style-type: none"> ○ WORKing Together Conference in Eugene September 25-26th – Heather Ficht ○ Endless Summer Nights in Bend September 7th – Gary North ○ Incumbent Worker Request for Proposals – Jessica Fitzpatrick
		<p>Discussion: Reminder that there are several sponsorship opportunities for Endless Summer Nights.</p> <p>Heather encourages all board members to attend the WORKing Together Conference. EC Works will cover the cost of registration- please contact Heather for further information.</p> <p>Jessica announced the success of the Incumbent Worker program and advocated for the board to continue encouraging businesses to apply. The next round of applications will be due by the end of August.</p> <p>Dr. Cronin, CGCC President - announced the groundbreaking for the Skills Center on Campus for April. Aviation Maintenance. Diesel Mechanics, Construction Trades, housing that will allow for commuters to stay on campus.</p>
		<p>Motions:</p> <p>Gary moves to approve the consent to items as presented, Nicole seconds, Unanimously approved.</p>
Strategic Planning – Target Populations	11:50am – 12:25pm	<p>Strategic Planning & Target Populations continued</p> <ul style="list-style-type: none"> • Second Chance/Ex-offenders – Mark Warne – <i>vote required</i> • Next steps for English Language Learners plan development – Martin Campos-Davis
		<p>Discussion:</p> <p>Mark Warne presented on “Second Chance/Ex-offender” population. Mark himself developed a passion for working with offenders and formerly incarcerated individuals while he was in Colorado. Before moving to Oregon, he saw work programs working; reducing recidivism and getting people to work.</p> <p>The biggest return on investment that Mark saw was when the individual has a connection not just to parole and probation, but also someone that will guide them through the process of getting employed.</p> <p>While the prison system has the largest budget next to education, programs fail when they do not support the individual in the transition to work. Mark himself implementing “First Chance” and “Ready Set Go” programming in Colorado’s Coffee Creek prison. He will share this programming with the board.</p> <p>Jenni and Erica shared that COCC and KCC both offer training at Warner Creek and Deer Ridge, with a major success rate.</p>

		<p><u>Mark recommends</u> that the board vote to include Ex-offenders as a Target Population in the Strategic Plan because “work programs work; getting people into work keeps them out of trouble.”</p> <p>Lisa D- what does a vote on a target population mean? What are we committing ourselves to?</p> <p>Heather- this guides the staff direction and lets us know where we need to devote energy. This also means that we will continue to seek funding to support the work. It will also be part of our strategic plan.</p> <p>Nicole- what would the partnerships be? Would we be collaborating with other Workforce Boards in the State?</p> <p>Heather- Yes, for example we would look to WorkSource and leverage program delivery. We will also plan to pilot this work in our region and engage the other boards in continued discussion as we look to expand to other areas as the prisons in our region are the “releasing” prisons for the state.</p> <p>Martin asks for board and community members to join his action team on LEP. Jenni and Dr. Cronin would like to join. If there are others who would like to join the LEP action team and further assess the needs and the resources available in our region to be included in the Strategic Planning, please reach out to Martin or Heather.</p>
		<p>Motion: Martin moves to add Ex-Offenders to the Board’s Target Populations. Jenni seconds. Unanimous Approval.</p> <p>Comment: Steve Kramer thanks the group for being involved in such important work.</p>
The Future of Work	12:25-1:25pm	<p>The Future of Work – Heather Ficht</p> <ul style="list-style-type: none"> HBO Vice News Special Report – Future of Work – <i>focus on automation and workforce funding</i> <p>McKinsey Global Institute, The future of work in America: People and places, today and tomorrow</p> <p>Independent Task Force Report No. 76 The Work Ahead: Machines, Skills, and US Leadership in the Twenty-First Century</p>
		<p>Discussion:</p> <p>Each location separately viewed two Vice News clips and were prompted with a series of questions before coming back together for key-takeaways.</p> <p><u>Video 1-Autonomous Vehicles</u></p> <p>According to the first video, trucking is a \$700 Billion/year industry that employs 1.8 Million people. More broadly transportation/logistics employs nearly 10 million, according to the clip. The most accessed Individual Training Account (scholarship) in WorkSource for the past several years has been for Commercial Driver’s Licenses. We think this is for several reasons including:</p> <ul style="list-style-type: none"> Low barriers to entry – criminal history, entry level, light customer contact, etc.

- People who earn their commercial driver's license get jobs!
- Rapid employment – the training is quick and relatively cost effective

In WorkSource we see people like the “Steeler’s fan” truck driver from the video. What do we tell him in 5 years when his job is gone? We need help figuring out how to identify what the next best bet is for him and others.

- 1) In Oregon, the state’s Talent Plan calls out the importance of focusing on building skills, but we do not have a data system that tracks “skills”. How might we begin identifying skill sets that matter in the Future of Work?
- 2) How do we identify or create more reskilling training opportunities that allow adults to retool more quickly at a reasonable cost?
- 3) How do we identify the transferable skills that will be valued? Are there related credentials?

Video 2- Resource Challenges and Who is Left Behind?

This clip was focused on who may be left behind in the future of work and we believe a large segment of the population was overlooked – **rural Americans**. Further, they highlighted the fact that funds to support workforce development have only diminished in the past 20 years.

Based on research by McKinsey Global Initiative, they recommend specific strategies based on local factors to prepare for the future of work. The majority of East Cascades workforce area is considered *Americana* or *Distressed Americana*; with one exception – Deschutes County is considered a *Niche – Small Powerhouse*. See attached map for more context.

- 1) Based on McKinsey’s recommendations, what are potential strategies that leverage a community’s strengths?
- 2) What action will you take to advocate for workforce investments to help prepare for the future of work?

Key Take-aways on Video 1-

- 1) We should focus on the companies that are currently exploring automation and further understand what they plan to do with their current workforce, what jobs they are being trained on and what skills they need within their workforce.
- 2) We should learn from industries that have suffered at the hands of automation and engage with economic development. What can we anticipate and prepare for? What skills can we train the workforce on now that will help sustain through the tech revolution?
- 3) Engage with the State Taskforce on Autonomous Vehicles to learn more about what they are anticipating and preparing for. **Action:** Barbara Byrd to send Heather the contact information for the taskforce.

	<p>4) Most development will happen in the urban areas. We have to be careful not to overprepare or become too reactive and pigeonhole or put people out of work by preparing for something that may not come.</p> <p><u>Key Take-aways on Video 2-</u></p> <p>1) We should explore the resources and strengths of our rural areas.</p> <p>2) We should remember that rural Deschutes County is as a whole left out of conversations that are really about Bend/Redmond.</p> <p>3) We really need to have commitment from business in providing training in house. Our support should focus also on smaller companies to put small and short-term curriculum in place. Somewhere we forgot about the “learn from the master”/ apprenticeship format, where at the turn of the 20th century, we would train by doing.</p> <p>4) We need to understand who is advocating where and to what groups so that we can better prepare the board and team with talking points.</p> <p>Action: Take inventory of who is advocating in DC and the state and to what group. Create talking points for advocacy meetings.</p>
Public Comment	<p>1:25-1:30pm</p> <p>1) Martin Campos-Davis- Farm Worker Appreciation Day is August 11, with events happening throughout the State of Oregon.</p> <p>2) David Burger- Thank you and a shout-out for the Teacher Externship opportunity EC Works funded through our partnership with High Desert ESD and Association for General Contractors. Our support provided externship opportunities, within the Building Trades, for 20 educators from Central Oregon and 10 from the Gorge. David believes that they really will be able to educate their kids on opportunities that really are out there. Please do it again!</p> <p>3) Steve Kramer- Senator Bentz and Rep. Bonham will hold a town hall meeting to discuss the Cap and Trade Bill and its impact on reducing carbon. July 29- in Sisters at 6pm at the Five Pine Lodge, and July 30 in The Dalles at 6pm at Fort Dalles Readiness Center, 402 E. Scenic Drive.</p> <p>4) Mark Warne- Thank you to Robbie and David for your leadership in representing the Union Trades; and to Heather Ficht for her leadership of the organization.</p> <p>5) Go To WORKing Together!!!</p>

Meeting Adjourned by Lisa Dobey at 1:29pm

Minutes Approved:

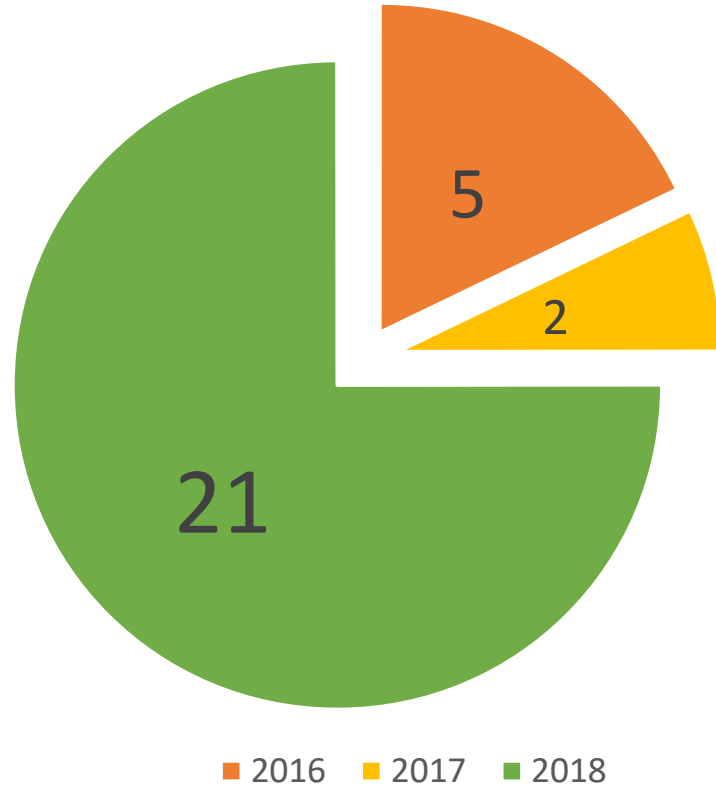
"No one has ever heard of an 'industrial sewist', let alone funded training for one." – Renewal Workshop

"We are so grateful for the support from East Cascades Works! The application instructions and process was straight-forward, and the funding will allow us to expand the manufacturing, continuous improvement, and troubleshooting skill sets of our employees while also expanding our manufacturing capability." - Grace BioLabs

Incumbent Worker Training Grant Program

2016- Q1 of 2019

Applicants Per Year



"We are thrilled to be a recipient of the East Cascades WORKS' Employer Training Fund grant. The application process was remarkably comprehensive and easily understood. East Cascades WORKS core support has enabled us to continue increasing our systematic process and stimulated our planning course for high quality healthcare services." - Cascade Comprehensive Care, Inc.

Awarded Recipients

2016

1. Keith (Manufacturing/Central)
2. BasX (Manufacturing/Central)
3. Renewal Workshop (Manufacturing/North)

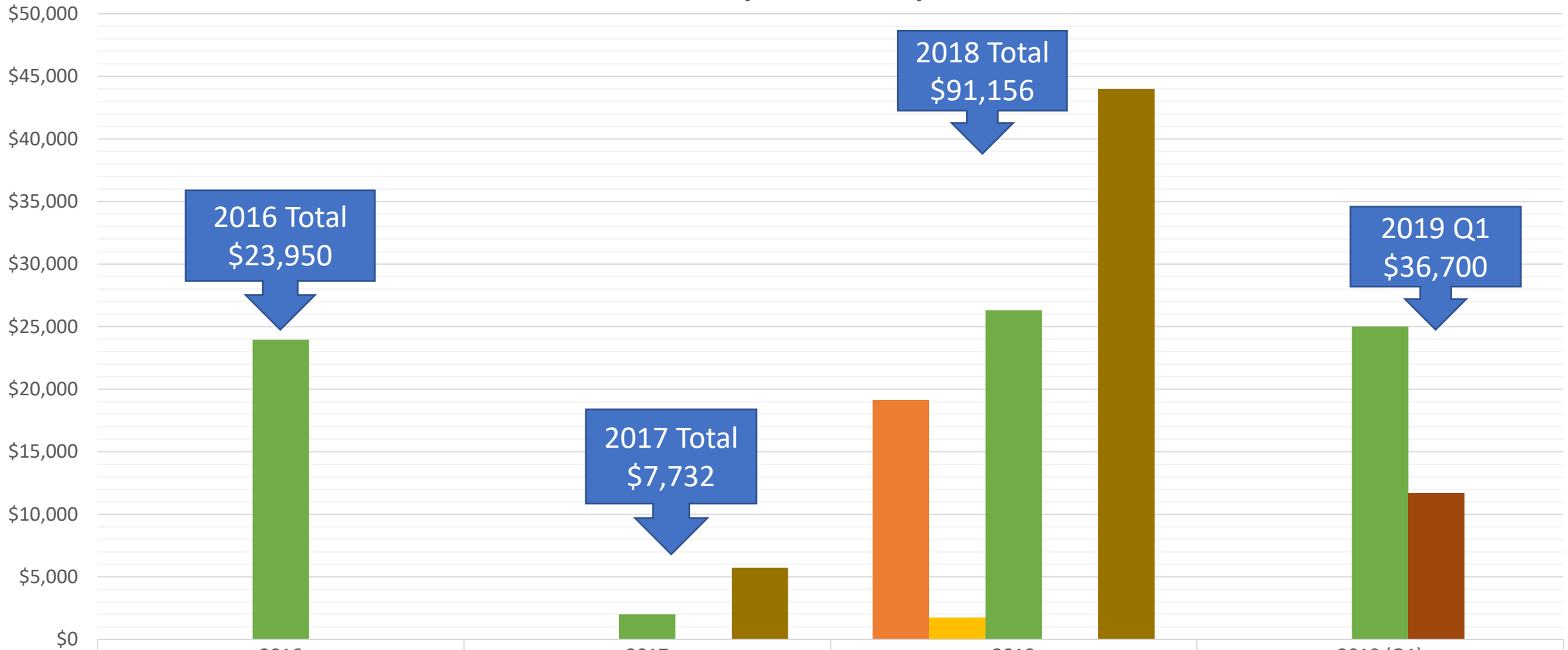
2017

1. REACH (Non-Profit/South)
2. Collins Products (Manufacturing/South)

2018

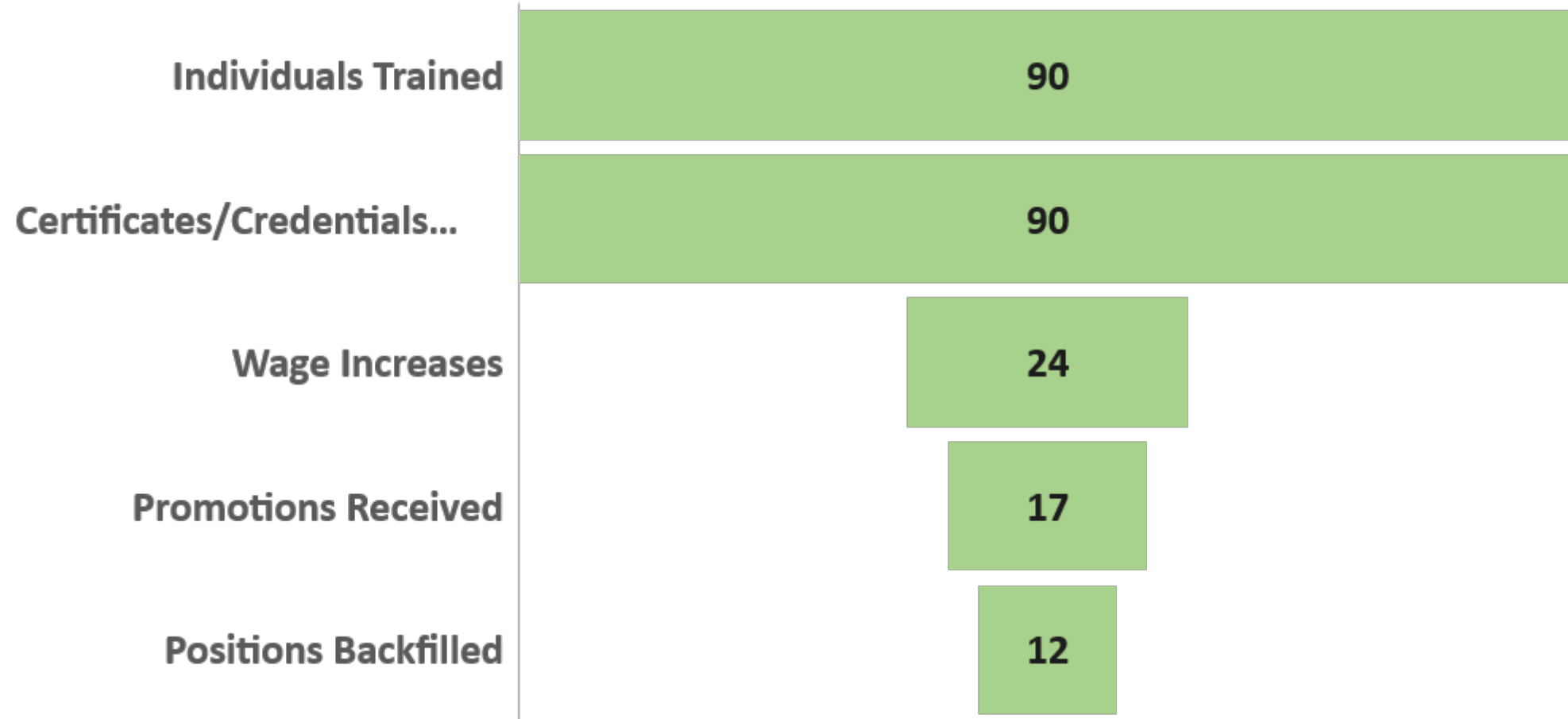
1. Cascade Comprehensive Care (Healthcare/South)
2. Abilitree (Healthcare/Central)
3. Deschutes Brewery (Manufacturing/Central)
4. Grace Bio Labs (Manufacturing/Central)
5. Hage Electric (Construction/North)
6. Medline ReNewal (Healthcare/Central)
7. Neighbor Impact (Non-profit/Central)
8. Redmond Proficiency Academy (Non-profit/Central)

\$ Funded By Industry



	2016	2017	2018	2019 (Q1)
Healthcare	\$0	\$0	\$19,100	\$0
Construction	\$0	\$0	\$1,750	\$0
Manufacturing	\$23,950	\$2,000	\$26,306	\$25,000
Technology	\$0	\$0	\$0	\$11,700
Non-Profit	\$0	\$5,732	\$44,000	\$0

Outcomes



"The East Cascades WORKS Employer Training Fund Program was a great benefit for our company in seeking the training we needed in a very distinct and specialized field of study, that we may not have had an opportunity for otherwise. This was a great asset to our company and the training we received will benefit us greatly in expanding our business capabilities" - Hage Electric

Overarching Goal	Comprehensive Initiatives	Sub-Initiatives	General Description of Work	Partners	Target	Results	Status
Sector Partnership	Columbia Gorge	Target Sector Not Yet Defined	Existing and expanding relationship with CGCC around industry led training. Existing, but weak relationships with MCEDD and GTA. Strong and ongoing relationship with Arlington TV-Coop and HonkerTech to support industry internships	<i>Funding Partners</i> : CGCC (skills center) <i>Industry Partners</i> : Arlington TV Co-op <i>Support Partners</i> : WorkSource, CGCC, Arlington School District, MCEDD, GTA	Launch Sector Partnership by spring 2020	3 youth wages supported to date for summer career exploration in Tech. Cohort trainings offered to business.	
	Central Oregon	Construction Industry Workforce Collaborative	Existing industry led group meeting regularly and focused on addressing key pipeline and training goals for the construction trades in Central Oregon. Continuing to meet with K-12, trades and Higher Ed, as well as area youth providers to explore aligning curriculum in order to create true career pathways into the trades that starts within the K-12 system and directly aligns with area programs and training institutions	<i>Funding Partners</i> : R&H, Kirby Neiglehout, SunWest Builders, Skanska <i>Industry Partners</i> : 20+ <i>Support Partners</i> : HDESD-CTE, COCC, WorkSource, Heart of Oregon Corps, COBA, AGC, City of Bend, Business Oregon, Regional Solutions, BLP & Crook County School Districts	Get Pre-apprenticeship programs in CO to be BOLI certified with direct entry to the Building Trades JATC's Launch a communications/marketing sub-committee of the Collaborative	Funded Pilot Cohort Training Program at COCC that is currently underway and training individuals for entry level positions in the construction trades. All will earn their NCCER credential and be ready to hire. Beneficiary Endless Summer Nights fund raiser with R&H Construction for the 2nd year; raised \$20k to support CICW Initiatives	
		Healthcare Workforce Collaborative	Existing industry led group meeting regularly and focused on 4 goals: Diversifying the HC Workforce, Reducing the cost of Healthcare Education and Certifications, Recruitment of HC Professionals into current programs, Mental Health and Substance Abuse Health Workers Pipeline	<i>Funding Partner</i> : CO Health Council <i>Industry Partner</i> s: 12+ <i>Support Partners</i> : WorkSource, COCC, AHCC, STEM Hub, HDESD - CTE, OCN, COHC	Launch sub-committees in priority areas identified by collaborative	Co-funded, with COHC, a half time Allied Health Recruiter position at COCC to increase enrollment in COCC's Allied Health Programs	
		Technology	Expanding existing relationship with Technology Association of Oregon	<i>Funding Partners</i> : Department of Labor (Apprenti), HECC <i>Support Partners</i> : TAO, WorkSource, COCC <i>Industry Partners</i> : 5 Talent, Navis, BMS Technologies, SMARTs, CBT Nuggets, GL Solutions	Complete Convener Training - Dec 2019 Launch Sector Partnership winter 2019-20	Just launched the 3rd Apprenti Cohort Established Dev Station with COCC	
		Emerging: Manufacturing	Currently exploring opportunities for leveraging existing relationships in industry	TBD - REDI or EDCO	Complete Convener Training - Dec 2019 Launch Sector Partnership winter 2019-20	None to date	
	Klamath Basin	Target Industry Not Yet Defined	Engaging with Klamath County Economic Development Association to identify and convene industry	<i>Funding Partners</i> : TDB <i>Support Partners</i> : KCEDA, WorkSource, KCC, Klamath Chamber <i>Industry Partners</i> : TBD	Complete Convener Training - Dec 2019 Launch Sector Partnership winter 2019-20	Target Industry Not Yet Defined	

Overarching Goal	Comprehensive Initiatives	Sub-Initiatives	General Description of Work	Partners	Target	Results	Status
Target Populations	Justice System Involved/Impacted	Essential Connections Opportunity (ECO) System	Implementation of WorkSource and Training related services within the prison system to prepare justice system involved/impacted individuals for the transition into mainstream society post incarceration.	<i>Funding Partners</i> : OED <i>Support Partners</i> : OED, COIC, Changing Patterns, Community Corrections, Deer Ridge, Warner Creek	Establish WorkSource Express Center in Deer Ridge and Warner Creek - by spring 2020 Align post-secondary training offerings with jobs in East Cascades - ongoing	WorkSource services, training and education currently being implemented in Warner Creek and Deer Ridge	
	Youth/Emergent Workforce	Youth Career Connect	Regional initiative to connect young people (16-24) to meaningful internship opportunities with local employers. Coordinators currently hired in the Columbia Gorge, Redmond and Prineville. Currently exploring new ways to provide deeper engagement and career pathways for young people.	<i>Funding Partners</i> : Better Together <i>Partners</i> : Better Together, HDESD, Bend-LaPine School District, Heart of Oregon Corps, Bend Chamber of Commerce, The Dalles Chamber of Commerce, EDCO, REDI, Sisters School District, Redmond School District, OSU Cascades, COCC, Madras Chamber, Prineville Chamber, Crook County School District, Columbia Gorge Community College	Stabilize the YCC model in CO - ensure all Internship Coordinators are effective and in place Seek additional funding for sustainability	264 Interns Placed with Local Employers (as of Sept 1) 114 participants completed 65+ hours 68% are paid internships	
	English Language Learners	TBD	Identified by the board as a target populations. Initial workgroup of the board identified and chaired by Martin Campos-Davis	<i>Potential Partners</i> : LCA, MSFW-OED, COCC, KCC, CGCC	Launch workgroup to map services and identify gaps - winter 2019-20	Presentation at the April 2019 Meeting	

Overarching Goal	Comprehensive Initiatives	Sub-Initiatives	General Description of Work	Partners	Target	Results	Status
Workforce Innovation & Opportunity Act	Youth	Title 1 B Contracted Services	Workforce Development Services to Workforce Innovation & Opportunity Act eligible youth; includes outreach, recruitment, enrollment, eligibility, intensive/wrap-around program elements, retention and advancement.	<i>Contracted Providers :</i> Columbia Gorge Community College Central Oregon Intergovernmental Council Klamath Community College	Meet or exceed negotiated quarterly performance measures	Best practice models identified: CGCC GED/Youth enrollment-excellent use of resource and leveraged funds with Title II. State best practice in GED Wrap-Around Services at COIC	
	WorkSource	Title 1 B Contracted Services Regional Business Services "Ready to Hire"	Workforce Development Services to Workforce Innovation & Opportunity Act eligible Adults and Dislocated Workers, including Training and Career Services delivered in the WorkSource. Dedicated industry leads responsible for understanding and meeting the needs of local employers. Standard developed to measure a participants "readiness" for a job placement.	<i>Contracted Providers :</i> Columbia Gorge Community College Central Oregon Intergovernmental Council Klamath Community College	Meet or exceed negotiated quarterly performance measures	Best Practice RBS Model All meeting or exceeding negotiated performance measures.	
	Employer Engagement	Employer Training Grant Cross-Gorge Employer Training Grant	\$75,000 per year to support employer requests for training of incumbent workers. Partnership with South Central WA Workforce to support a Cross-Gorge ETG at a rate of \$10k each	<i>Funding Partners :</i> SCWC	50% of awardees promote staff or increase staff wages as a result of training 25% of awardees backfill positions through WorkSource	Open procurements running now. \$112k in requests currently. Over \$90k funded to date. 90 individuals trained, 90 certs received, 24 wage increases, 17 promotions and 12 backfilled positions	

East Cascades Workforce Investment Board Seated Board Members - Affiliations & Member Responsibility

Name	CO	Business Name	Industry/ Sector	Affiliations	Responsibility Area
Heather Tramp, Secretary Treasurer *Ex-Com	KL	President of Klamath County Chamber of Commerce	Multi		Basin
Lisa Farquharson	WA	President of The Dalles Chamber of Commerce	Multi		Youth Internship
Lisa Dobey, Chair *Ex-Com	DE	St. Charles Health System Exec Director, Community & Philanthropy	Healthcare		DEI Biz plan
Sam Meier	DE	Composite Approach, General Manager	Mfg		Youth Internship
Gary North, Vice Chair *Ex-Com	DE	R&H Construction VP	Construction		ECW Business Plan
Michelle Alvarado	DE	Wahoo Films! Owner/Operator	Communications		Communications
Nicole Hough	DE	LindahI Reed, CEO	Professional Services		WSO delivery system
Amy Gibbs	All	WSO Oregon Employment Dept., Senior Manager	Employment/ WorkSource		MSFW
Marta Cronin	Gorge	Community College President	Public-Education		English Language Leaners/Gorge
Jennifer Newby *Ex-Com	DE	Central Oregon Community College, Instructional Dean	Public -Adult Basic Education		Formerly Incarcerated
Terri Hockett	CO	Technology Association of Oregon	Technology		Tech Ind. and Non- traditional Apprenticeships
David Burger	DE	UA 290 Steamfitters/Plumbers Training Program	Union/ Apprenticeships		Building Trades, Apprenticeship and Pre-apprenticeship
Jon Irvine	All	AFL-CIO Workforce Labor Liaison Rapid Response Liaison	Union Rep		Apprenticeship
Molly Joubert	DE, CR, JF, KL, LK	Central Oregon Branch Manager Vocational Rehabilitation	Voc. Rehab.		People experiencing disabilities

Robbie Smith	DE, CR, JF	IBEW280	Union Rep		Electricians' Apprenticeship
Julie Matthews *Ex-Com	KL	Klamath County Ec Dev Assoc Office/Project Manager	Economic Development		Basin and Target Sector - TBD
Martin Campos- Davis	DE, CR, JF	Oregon Human Development Corp. Executive Director	Community Based Organization		English Language Learners & Migrant Farm Workers
<i>Steve Kramer</i>	WA	Wasco County Commissioner	CLEO		Advocacy/Gorge
<i>Wayne Fording</i>	JE	Jefferson County Commissioner	Co-Vice Chair		Jefferson County
<i>Derrick DeGroot</i>	KL	Klamath County Commissioner	Co-Vice Chair		Advocacy/Basin

Contact:[Gail Kiles Krumenauer](#)

503-947-1268

Occupations Affected by Autonomous Vehicle Adoption in Oregon

In 2018, HB 4063 established the Oregon Department of Transportation (ODOT) as the lead agency for automated vehicle (AV) policy in the state. HB 4063 also requires ODOT to convene and facilitate a Task Force on Autonomous Vehicles.

Oregon's AV Task Force consists of leaders and experts from various state agencies, labor organizations, private employers, and state lawmakers. The Task Force is currently in its second phase, working primarily through six subcommittees to develop recommendations for the Oregon Legislature related to AV adoption.

Each subcommittee focuses on one subject area related to autonomous vehicles: road and infrastructure design; public transit; vehicle code amendments and public safety; cybersecurity and privacy; land use; and workforce changes. This summary provides labor market information related to occupations most likely to see workforce reductions associated with autonomous vehicle adoption over the next 20 to 30 years in Oregon.

Measuring Employment in Oregon's AV-Affected Occupations

A 2017 paper from economists in the U.S. Department of Commerce Economics and Statistics Administration¹ identifies primary driving and other on-the-job driving-related (or "secondary") occupations most likely to be affected by AV adoption in the U.S. Primary driving occupations include light and heavy-duty drivers, whose primary responsibilities include driving cars, vans, small trucks or heavy-duty commercial vehicles on the road.² Secondary occupations include those where driving is not

Defining "Affected" Occupations and Timelines

Affected occupations are not synonymous with lost jobs. Some jobs in AV-affected occupations may be eliminated, while others will change substantially over the next 20 to 30 years, but still exist. In other areas of the economy, new jobs and entirely new occupations will also be created due to mainstream AV adoption.

Timelines are also important. One study prepared by the UC-Berkeley Labor Center suggests widespread AV adoption will take between 25 and 30 years for commercial trucks. Another study prepared for Securing America's Future Energy estimates widespread household AV adoption starting around the year 2030, and full commercial truck automation occurring through the 2040s.

the primary responsibility, but often required, and some jobs could be eliminated by AVs.

Estimates from the Oregon Employment Department's long-term occupational projections show nearly 95,000 jobs statewide in AV-affected occupations in 2017. That accounts for 5 percent of all employment, with 56,000 jobs across the eight primary driving occupations, and 39,000 jobs in the 14 secondary AV-affected occupations.

Among primary driving occupations, the median (or middle among all jobs) hourly wage in 2019 ranged from a low of \$13.56 for taxi drivers and chauffeurs to a high of \$25.36 for transit and intercity bus drivers. For secondary affected occupations, median hourly wages varied from \$12.31 for service station attendants to \$48.80 for supervisors and managers of police and detectives. By comparison, the median wage for all occupations in Oregon was \$19.46 per hour.

Employment and Wages for Autonomous Vehicle-Affected Occupations in Oregon		
Standard Occupational Classification Title	2017 Employment	2019 Median Hourly Wage
Total, All Occupations	2,045,907	\$19.46
All Autonomous Vehicle-Affected Occupations	94,776	-
Truck Drivers, Heavy and Tractor-Trailer	24,289	\$22.82
Truck Drivers, Light or Delivery Services	10,532	\$17.10
Driver/Sales Workers	7,282	\$15.24
Bus Drivers, School or Special Client	6,634	\$17.44
Taxi Drivers and Chauffeurs	2,795	\$13.56
Bus Drivers, Transit and Intercity	2,326	\$25.36
Motor Vehicle Operators, All Other	2,167	\$14.47
Ambulance Drivers and Attendants, Except Emergency Medical Technicians	77	\$12.71
Security Guards	8,527	\$13.31
Automotive Service Technicians and Mechanics	7,423	\$21.19
Service Station Attendants	5,912	\$12.31
Police and Sheriff's Patrol Officers	5,289	\$35.57
Postal Service Mail Carriers	3,496	\$22.90
Refuse and Recyclable Material Collectors	2,199	\$22.43
Automotive Body and Related Repairers	1,971	\$18.81
Couriers and Messengers	1,406	\$16.43
Supervisors and Managers of Police and Detectives	1,293	\$48.80
Parking Lot Attendants	745	\$12.81
Automotive Glass Installers and Repairers	271	\$15.82
Travel Guides	82	\$15.81
Electronic Equipment Installers and Repairers, Motor Vehicles	60	\$20.10
Insurance Appraisers, Auto Damage	-s-	\$35.96

Cells with "-s-" suppressed for confidentiality or data quality

Sources: Oregon Employment Department, 2017-2027 Employment Projections
2019 Occupational Wage Information

primary driving occupation

secondary affected occupation

Projected Employment Changes for AV-Affected Occupations

Oregon's current long-term projections estimate employment changes through 2027, which falls before the window of mainstream AV adoption identified in academic studies.^{1,2} Between 2017 and 2027, Oregon will add 246,000 jobs, a growth rate of 12 percent (Table 2). Primary driving occupations are also projected to grow by 12 percent,

adding 6,500 new jobs over the decade. The fastest growth among this set of occupations is expected for light truck drivers and taxi drivers and chauffeurs (17% each). *Note these projections include self-employment.*

Secondary AV-affected occupations will add 2,900 jobs (8%). Couriers and messengers' employment will grow 14 percent by 2027, the fastest among this set of occupations. Meanwhile, two others – postal service mail carriers, and motor vehicle electronic equipment installers and repairers – will see employment declines by 2027.

Across all occupations in Oregon, for every one new job created, there will also be roughly nine job openings requiring newly trained workers to replace those who leave the labor force (largely due to retirement) or make major occupational changes. Among primary driving occupations, that ratio will be 10-to-1, and among secondary affected occupations, projections show 15 replacement openings for every one new job by 2027. Overall, primary driving and secondary AV-affected occupations will account for 117,500 of Oregon's 2.6 million total job openings.

2017-2027 Employment Projections for Primary Driving and Secondary AV-Affected Occupations in Oregon

Occupation Title	2017 Employment	2027 Employment	Percent Change	Employment Change	Replacement Openings	Total Openings
Total, All Occupations	2,045,907	2,291,921	12%	246,014	2,383,309	2,629,323
Primary Driving Occupations	56,102	62,641	11.7%	6,539	65,168	71,707
Ambulance Drivers and Attendants, Except Emergency Medical Technicians	77	88	14%	11	117	128
Bus Drivers, Transit and Intercity	2,326	2,571	11%	245	2,921	3,166
Bus Drivers, School or Special Client	6,634	7,297	10%	663	8,309	8,972
Driver/Sales Workers	7,282	7,650	5%	368	7,856	8,224
Truck Drivers, Heavy and Tractor-Trailer	24,289	26,988	11%	2,699	26,977	29,676
Truck Drivers, Light or Delivery Services	10,532	12,347	17%	1,815	12,036	13,851
Taxi Drivers and Chauffeurs	2,795	3,270	17%	475	3,028	3,503
Motor Vehicle Operators, All Other	2,167	2,430	12%	263	3,924	4,187
Secondary Affected Occupations	38,674	41,564	7.5%	2,890	42,908	45,798
Insurance Appraisers, Auto Damage	-s-	-s-	-s-	-s-	-s-	-s-
Supervisors and Managers of Police and Detectives	1,293	1,376	6%	83	784	867
Police and Sheriff's Patrol Officers	5,289	5,663	7%	374	3,456	3,830
Security Guards	8,527	9,544	12%	1,017	11,732	12,749
Travel Guides	82	91	11%	9	148	157
Couriers and Messengers	1,406	1,597	14%	191	1,344	1,535
Postal Service Mail Carriers	3,496	3,354	-4%	-142	2,288	2,146
Electronic Equipment Installers and Repairers, Motor Vehicles	60	59	-2%	-1	57	56
Automotive Body and Related Repairers	1,971	2,131	8%	160	1,932	2,092
Automotive Glass Installers and Repairers	271	289	7%	18	266	284
Automotive Service Technicians and Mechanics	7,423	7,854	6%	431	7,019	7,450
Parking Lot Attendants	745	764	3%	19	1,107	1,126
Service Station Attendants	5,912	6,473	9%	561	10,077	10,638
Refuse and Recyclable Material Collectors	2,199	2,369	8%	170	2,698	2,868

Cells with "-s-" suppressed for confidentiality or data quality

Source: Oregon Employment Department, 2017-2027 Employment Projections

Primary and secondary occupations as defined by Chief Economist Office, Economics and Statistics Administration, U.S. Dept. of Commerce

Potential Job Effects from Mainstream AV Adoption

A 2018 report prepared by Groshen, Helper, MacDuffe, and Carson for Securing America's Future Energy (SAFE) outlines a framework for determining the shares of jobs in primary driving and secondary AV-affected occupations under four different autonomous vehicle adoption scenarios.³ The report assumes household and

commercial AV adoption occur separately from one another, on slightly different timeframes.

The report identifies two household AV adoption scenarios.⁴ In one scenario, most households own their autonomous vehicle ("Cars Personal"). The other household scenario involves the use of AVs through a shared fleet of vehicles owned by a company ("Cars Fleet"). Both scenarios assume household AV adoption begins around 2020, and rapid adoption starts near 2030.

The SAFE report also identifies two commercial AV adoption scenarios.⁵ Under "Trucking slow" adoption, Level 1/2 automation becomes mainstream in the 2020s, Level 3/4 automation goes mainstream in the 2030s, and advanced Level 4/5 starts becoming available in the 2040s. Their "Trucking Fast" scenario uses the same progression, and assumes roughly 10 years faster timeline, with Level 4/5 full automation nearly complete in the 2040s.

Under each of these scenarios, the SAFE report estimates the share of jobs affected in primary driving and secondary AV-affected occupations (see Appendix A).⁶ The 2027 employment estimates for primary driving and secondary AV-affected occupations in Oregon combined with the SAFE shares of affected jobs in those occupations create a foundation for additional analysis. Using these numbers, we can make rough estimates of the number of Oregon jobs affected by the 2040s under each combination of household and commercial AV adoption scenarios (see Appendix B for more details).

Oregon's primary driving occupations and secondary AV-affected occupations will still account for 5 percent of total employment with 104,000 jobs in 2027. Over the following 10 to 15 years, the household AV adoption scenarios could affect between 11,700 and 14,700 jobs. That totals between 11 percent and 14 percent of all jobs in those occupations. Commercial trucking scenarios could affect between 29,800 and 32,600 jobs in these occupations looking into the 2040s. Those impacts would be felt for between 29 and 31 percent of all jobs in primary driving and secondary affected occupations.

Estimates of Oregon Jobs Affected by 2040s Under Various Household and Commercial Autonomous Vehicle Adoption Scenarios

Combined Household and Commercial Scenario	Jobs Affected*
Personal cars + slow trucking	41,500
Fleet cars + slow trucking	44,400
Personal cars + fast trucking	44,300
Fleet cars + fast trucking	47,200

**Affected does not always equal "lost." Some affected occupations may still exist, with notably different skills and responsibilities on the job.*

Sources: Oregon Employment Department calculations using framework from Preparing U.S. Workers and Employers for an Autonomous Vehicle Future, Groshen et al., June 2018

Taken together, the various combinations of personal and commercial AV adoption scenarios could affect between 41,500 and 47,200 jobs in Oregon, starting around the

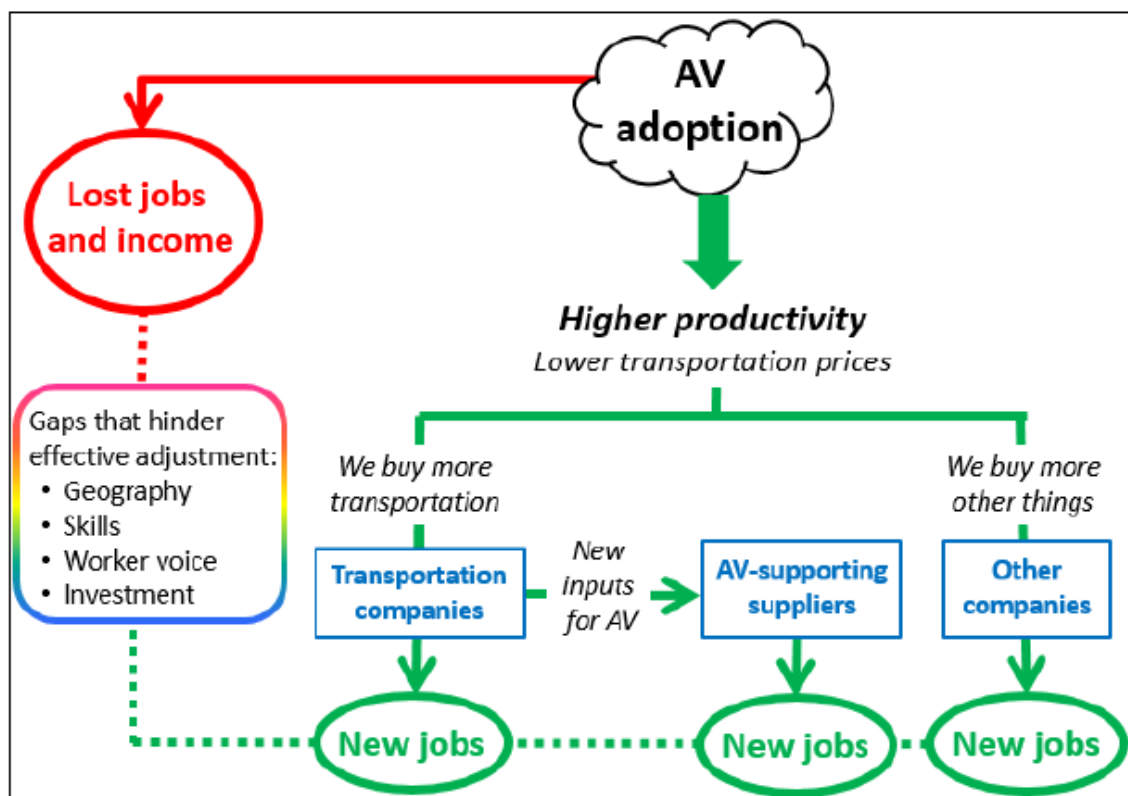
year 2030 (see Appendix B). The largest impacts would occur for heavy and tractor-trailer truck drivers under the commercial scenarios, where 16,200 to 17,500 jobs could be affected. Under the household AV adoption scenarios, estimated job effects are largest for automotive service technicians and mechanics (4,000) and service station attendants (2,600 to 3,900).

Additional Considerations

Workers in primary driving jobs affected by AV adoption are slightly more likely to be workers nearing retirement. While one out of every four jobs in Oregon is held by a worker age 55 or older, about one-third of workers in primary driving jobs are at least 55 years old (see Appendix C).

The mainstream adoption of autonomous vehicles will also create new jobs and entirely new occupations in transportation, in supplier and support activities related to AVs, and in other areas of the economy. Future research efforts can more fully capture workforce effects by including an analysis of new and emerging occupations related to autonomous vehicles.

In addition, we currently only have the capacity to discuss net employment changes beyond 2027. Yet net employment growth accounts for approximately one-tenth of total job openings. We expect autonomous vehicles to disrupt the pattern of replacement job openings, which account for the bulk of total openings. We currently lack a framework to quantify that change.



Source: *Securing America's Future*

References

¹Beede, Powers, and Ingram. August 2017. "The Employment Impact of Autonomous Vehicles." Office of the Chief Economist, Economics and Statistics Administration, U.S. Department of Commerce. ESA Issue Brief #05-17.

²Groshen, Helper, MacDuffe, and Carson. June 2018. "Preparing U.S. Workers and Employers for an Autonomous Vehicle Future." Prepared for Securing America's Future Energy.

³Ibid, p.32-33

⁴Ibid, p.31-32

⁵Ibid, p.34

⁶Ibid, p.37

Appendix A: Shares of Jobs Affected by Occupation and Autonomous Vehicle Adoption Scenario

Occupation	Employment Level in thousands, 2016	Share of jobs eliminated under full implementation of scenario				Number of jobs eliminated under full implementation of scenario			
		Trucking-Fast	Trucking-Slow	Cars-Fleet	Cars-Personal	Trucking-Fast	Trucking-Slow	Cars-Fleet	Cars-Personal
Primary Driver Occupations									
Heavy and Tractor-Trailer Truck Drivers ³⁸	1,532	0.65	0.6	0	0	996	919		
Light Truck or Delivery Services Drivers ³⁹	781	0.55	0.45	0	0	430	351		
Bus Drivers, School or Special Client	212	0.5	0.5	0	0	106	106		
Driver/Sales Workers	383	0	0	0.2	0.2			77	77
Taxi Drivers and Chauffeurs	300	0	0	0.7	0.2			210	60
Bus Drivers, Transit and Intercity ⁴⁰	75	0.75	0.7	0	0	56	53		
Ambulance Drivers and Attendants, Except Emergency Medical Technicians	10	0.05	0.05	0.05	0.05	1	1	1	1
Primary Driver Total (percent of total jobs)	3,293					1,588 (48%)	1,430 (43%)	287 (9%)	137 (4%)
Other On-The-Job Driver Occupations									
Security Guards	646	0.024	0.024	0.024	0.024	16	16	16	16
Police and Sheriff's Patrol Officers	673	0.05	0.04	0.05	0.05	34	27	34	34

³⁸ Assumes wider penetration under fast scenario.

³⁹ Assumes wider penetration under fast scenario.

⁴⁰ Assumes wider penetration under fast scenario.

Automotive Service Technicians and Mechanics	711	0.1	0.1	0.5	0.5	71	71	356	356
Postal Service Mail Carriers	271	0	0	0.2	0.2			54	54
Parking Lot Attendants	48	0	0	0.5	0.5			24	24
Automotive Body and Related Repairers	116	0.05	0.05	0.5	0.5	6	6	58	58
Refuse and Recyclable Material Collectors	64	0.5	0.5	0.0	0.0	32	32		
Automotive and Watercraft Service Attendants ⁴¹	57	0	0	0.6	0.4			34	23
First-Line Supervisors of Police and Detectives	103	0.05	0.05	0.05	0.05	5	5	5	5
Couriers and Messengers	143	0	0	0.02	0.02			28	28
Automotive Glass Installers and Repairers	15	0	0	0.25	0.25			4	4
Insurance Appraisers, Auto Damage	14	0.3	0.2	0.25	0.25	4	3	4	4
Electronic Equipment Installers and Repairers, Motor Vehicles	7	0	0	0.5	0.5			4	4
Travel Guides	1	0	0	0.5	0.5			1	1
Total, Other On-The-Job Driver Occupations (percent of total jobs)	2,869					167 (6%)	159 (6%)	620 (22%)	608 (21%)
Grand Total (percent of total jobs)	6,162					1,756 (28%)	1,589 (26%)	907 (15%)	745 (12%)

Notes: 1. For Phase II of Truck scenarios we use 0.1*full implementation job losses. 2. For combined AV scenarios (such as the "Trucking-Fast" Scenario combined with the Cars-Fleet scenario) the shares displaced are added together. Sources: Occupational employment: Bureau of Labor Statistics Occupational Employment Survey 2015. Share of jobs eliminated based on consultation with industry experts.

⁴¹ Assumes more electric vehicles in fleets.

Appendix B: Estimates of Affected Jobs in Primary Driving and Secondary Occupations in Oregon

Estimates of Oregon Jobs Affected by 2040s Under Various Household and Commercial Autonomous Vehicle Adoption Scenarios

SOC Code	Standard Occupational Classification Title	Household Scenarios		Commercial Scenarios	
		Cars Personal	Cars Fleet	Trucking Slow	Trucking Fast
53-3011	Ambulance Drivers and Attendants, Except Emergency Medical Technicians	4	4	4	4
53-3021	Bus Drivers, Transit and Intercity	0	0	1,800	1,928
53-3022	Bus Drivers, School or Special Client	0	0	3,649	3,649
53-3031	Driver/Sales Workers	1,530	1,530	0	0
53-3032	Truck Drivers, Heavy and Tractor-Trailer	0	0	16,193	17,542
53-3033	Truck Drivers, Light or Delivery Services	0	0	5,556	6,791
53-3041	Taxi Drivers and Chauffeurs	654	2,289	0	0
53-3099	Motor Vehicle Operators, All Other	122	122	0	0
13-1032	Insurance Appraisers, Auto Damage	n/a	n/a	n/a	n/a
33-1012	Supervisors and Managers of Police and Detectives	69	69	69	69
33-3051	Police and Sheriff's Patrol Officers	283	283	227	283
33-9032	Security Guards	229	229	229	229
39-7010	Tour and Travel Guides	46	46	0	0
43-5021	Couriers and Messengers	32	32	0	0
43-5052	Postal Service Mail Carriers	671	671	0	0
49-2096	Electronic Equipment Installers and Repairers, Motor Vehicles	30	30	0	0
49-3021	Automotive Body and Related Repairers	1,066	1,066	107	107
49-3022	Automotive Glass Installers and Repairers	72	72	0	0
49-3023	Automotive Service Technicians and Mechanics	3,927	3,927	785	785
53-6021	Parking Lot Attendants	382	382	0	0
53-6031	Service Station Attendants	2,589	3,884	0	0
53-7081	Refuse and Recyclable Material Collectors	0	0	1,185	1,185
		11,706	14,636	29,804	32,572
Combined Household and Commercial Scenario		Jobs Affected*			
Personal cars + slow trucking		41,510		primary driving occupations	
Fleet cars + slow trucking		44,440		secondary affected occupations	
Personal cars + fast trucking		44,278			
Fleet cars + fast trucking		47,208			

Sources: Preparing U.S. Workers and Employers for an Autonomous Vehicle Future, Groshen et al., June 2018, and Oregon Employment Department

Notes and Assumptions:

***Affected does not always equal "lost." Some affected occupations may still exist, with notably different skills and responsibilities on the job.**

Affected occupations identified by U.S. Dept. of Commerce Office of Chief Economist; shares of affected jobs in occupations identified by Groshen et al. (p.36-37)

Per report (p.31-32): "In both the fleet and personal ownership light duty scenarios, most AV are initially shared, with initial deployment around 2020, and an inflection point into rapid adoption around 2030." "Cars personal" means a scenario where most households own their own AV, "Cars fleet" means most households use shared AV fleet owned by a company.

Per report (p.33-34): "Trucking slow" means Level 1/2 automation mainstream in 2020s, Level 3/4 automation mainstream in 2030s, and advanced Level 4/5 becoming available in 2040s. "Trucking fast" uses the same progression, and assumes roughly 10 years faster timeline, so Level 4/5 automation is nearly completed in the 2040s.

Appendix C: Shares of Workers Ages 55 and Older in AV-Affected Occupations

Oregon Workers Ages 55 and Older in Autonomous Vehicle-Affected Occupations, 2013-2017

	55 or Older	All Workers	% Ages 55 and Older
All Workers	416,750	1,886,042	22%
All AV-affected occupations	25,568	93,390	27%
Primary driving occupations	17,721	51,141	35%
Other on-the-road driving-related occupations	7,847	42,249	19%

Source: U.S. Census Bureau, American Community Survey, using IPUMS USA, <https://usa.ipums.org>

U.S. Workers Ages 55 and Older in Autonomous Vehicle-Affected Occupations, 2018

	55 or Older	All Workers	% Ages 55 and Older
All Workers	36,270,000	155,761,000	23%
All AV-affected occupations	2,283,000	8,239,000	28%
Primary driving occupations	1,589,000	5,000,000	32%
Other on-the-road driving-related occupations	694,000	3,239,000	21%

Source: Current Population Survey

Oregon Workforce and Talent Development Board (WTDB)

2020–2021 Strategic Plan

Vision	Mission	Position	Values	Reputation
Equitable prosperity for all Oregonians	Advance Oregon through meaningful work, training, and education by empowering people and employers	<p>The Oregon Workforce and Talent Development Board (WTDB) enables meaningful work for all Oregonians by:</p> <ul style="list-style-type: none">• Leading and communicating a long-term vision for Oregon that anticipates and acts on future workforce needs;• Advising the Governor and the legislature on workforce policy and plans;• Aligning public workforce policy, resources, and services with employers, education, training and economic development;• Identifying barriers, providing solutions, and avoiding duplication of services;• Promoting accountability among public workforce partners; and• Sharing best practices and innovative solutions that are scalable statewide and across multiple regions	<ul style="list-style-type: none">• Inclusive – We invite and represent all voices to strengthen our workforce system• Collaborative – We proactively engage all stakeholders as a hub for consensus-building• Bold – We courageously take risks to influence and persuade action	<ul style="list-style-type: none">• National leaders – We are innovative role models who set and share best practices• Conveners – We bring all stakeholders together to solve our most pressing challenges• Connectors – We anticipate and respond to all of Oregon's communities (tribal, rural, urban, and others)• Results – We connect our initiatives to outcomes• Accountable – We communicate transparently with easy to understand and agreed upon metrics

Imperatives	Objectives	Initiatives
Create a culture of equitable prosperity	<ul style="list-style-type: none">• Increase participation in all programs• Increase upward mobility including true wage	<ul style="list-style-type: none">• Identify and provide resources to organizations that are already successfully moving underrepresented groups into the workforce• Create a true wage calculator indexed by region• Utilize disaggregated data to drive policy decisions and improve impactful results• Develop a plan to increase problem-solving and critical thinking skills in response to the Oregon Talent Assessment
Increase understanding and utilization of the system	<ul style="list-style-type: none">• Increase user (individual, employer, stakeholder/organization, and local board) awareness• Increase utilization by workers and employers	<ul style="list-style-type: none">• Update the definition of the “system” to better reflect current and future needs• Coordinate and streamline our system so job seekers and employers find what they need more efficiently• Deepen engagement and improve consistency with local workforce boards' initiatives
Position Oregon as a national leader	<ul style="list-style-type: none">• Increase number of speaking engagements at national conferences• Increase state-wide convening meetings• Increase progress toward achieving Adult Attainment Goal	<ul style="list-style-type: none">• Expand state-wide convenings to include more targeted follow-up and sharing of best practices that promote action• Increase engagement with other boards including HECC and the Board of Education• Create and recognize industry-driven certifications, including essential employability skills
Identify and align strategic investments	<ul style="list-style-type: none">• Increase public-private partnerships• Increase funding	<ul style="list-style-type: none">• Identify all resources available in the system, including those that support underrepresented populations, and align for greater results• Align K-12, community colleges, universities, workforce, and employers with legislative strategy and changes, including essential employability skills
Create a Board culture that is resilient, and adaptable and flexible to a changing economy	<ul style="list-style-type: none">• Increase Board participation in meetings• Increase Board engagement	<ul style="list-style-type: none">• Align Board structure, including existing committees and future task forces with strategic plan• Assign each Board member to a local board and a committee or high impact task force