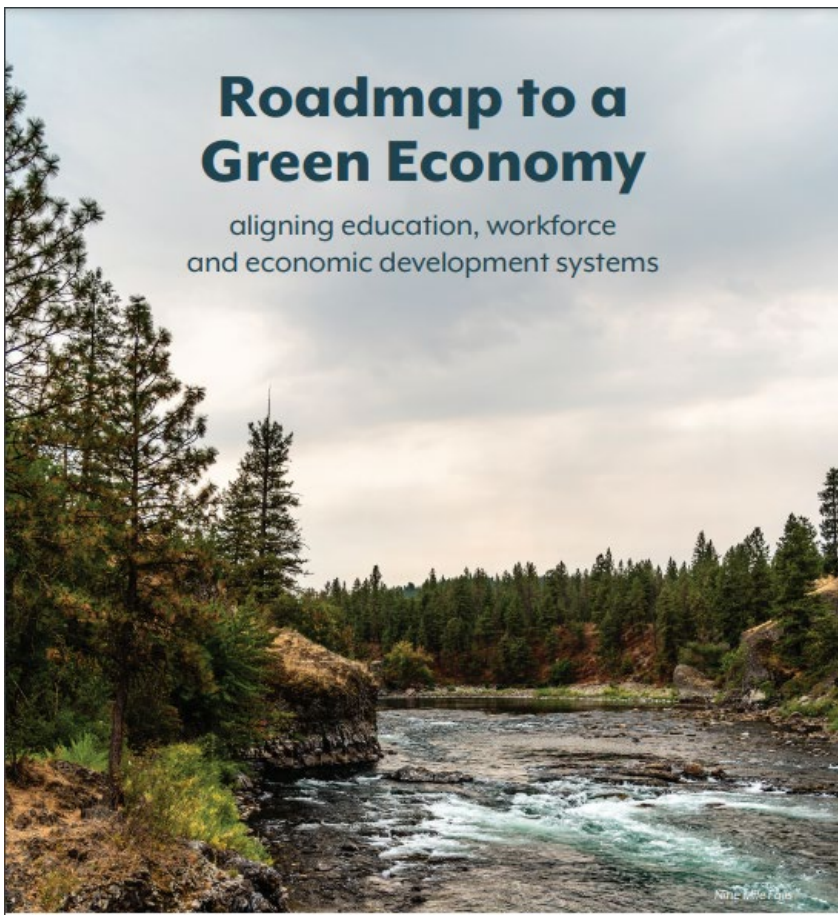


# Roadmap to a Green Economy

aligning education, workforce and economic development systems



The Governor's Policy Office for Education and Workforce Development provided funding to The Pacific Education Institute and E3 Washington to complete this report



## Educating for a Green Economy



**PEI** PACIFIC EDUCATION INSTITUTE



**Agriculture & Natural Resource**  
Center of Excellence



Shelton School District



# Workforce Study

## SB 5285 (2017)



...conduct a study of employment opportunities intended to provide educators with information needed to inform and prepare students for opportunities in field-based, skilled mid-level science, technology, engineering, and mathematics (STEM) oriented occupations in the agriculture, natural resources, environment, and outdoor recreation sectors.

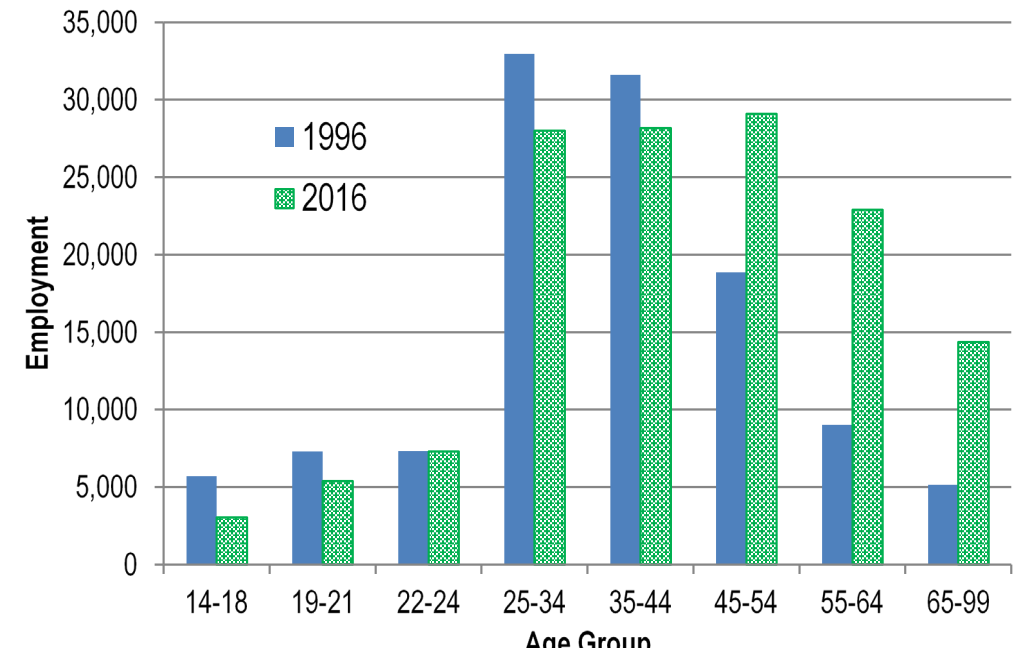
# Workforce Study: Key Findings

## Publicly available data sources alone are insufficient

- Some jobs don't show up
- Difficult to define clear sector parameters
- Increasing rates of attrition is not a factor in calculations
- Future Innovation can't be included



Chart 1: Changing Age Patterns in Agricultural Employment  
Washington State, 2006 & 2016





# Workforce Study: Key Findings

## Statewide Data is not meaningful

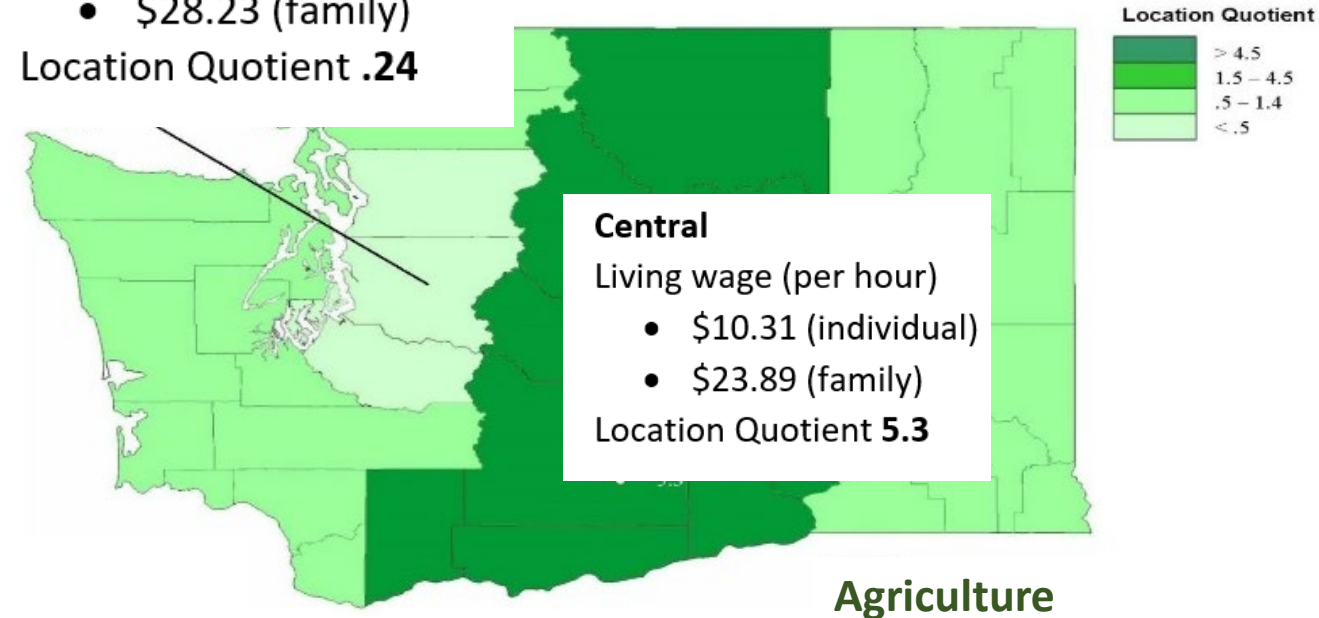
- Economic characteristics differ across regions
- “critical demand” jobs vs “high demand”
- Location Quotients & Living Wage differences matter

### West Urban

Living wage (per hour)

- \$13.55 (individual)
- \$28.23 (family)

Location Quotient .24



Poor data disproportionately affects our rural and remote communities

# EGE Established in December 2018

## Areas of Work

- **Assessment of “Green Job” definitions and Washington State legislative history**
  - Focus on 3 sectors: Ag., Forestry and forest products, and clean energy
- **Regional Site Visits and Employer/CTE Panels**
  - Need: integration of sector content with technology
  - Competency-based learning
- **Advisory Panel input and Discussions**
  - Guided Project work and Roadmap



# Advisory Panel

## EGE Advisory Panel Members:



John Aultman, Senior Policy Advisor, Higher Ed. & Workforce Development	Governor's Office
Ignacio Marquez, Regional Assistant to the Director	Department of Agriculture
Lynn Longan, Rural Strategies Manager	Department of Commerce
Alan Hardcastle, Senior Research Manager	WSU Energy Program
Deena Alley, Director of Academies K-12	Shelton School District
Lance Wrzesinski, Program Supervisor Business & Marketing	Office of the Superintendent of Public Instruction
Jenny Capella, Outreach Coordinator	WorkSource / Res Care
Roberta McFarland, Director Waskowitz Outdoor School	Highline School District
Dr. Kareen Borders, Director STEM Programs & Outreach	West Sound STEM Network
William Westmoreland, Director	Center of Excellence for Clean Energy
Teri Pablo, Director of Career and Technical Education	Yelm School District
Rachel McAloon, Workforce Development Director	Washington State Labor Council
Lisa Perry, Community Relations-Washington	Sierra Pacific Industries
Paul Williams, Shellfish Management Policy Advisor	Suquamish Tribe
Mary Catharine McAleer, Public Affairs Manager	Weyerhaeuser
M'Liss DeWald, Director of Education	Quinault Indian Nation
Don Welander, Director of Career and Technical Education	Shelton School District
Lindsey Williams, Director	Agriculture and Natural Resource Center of Excellence
Anna Nikolaeva, Career Connect Washington Manager	Career Connect WA
Denny Wallace, CTE Program Supervisor Agriculture/FFA	Office of the Superintendent of Public Instruction
Lucas Rucks, Dean for Workforce Education	Grays Harbor College
Nova Gattman, Legislative Director	Workforce Training & Ed. Coordinating Board
Cheryl Fambles, Executive Director	PacMtn Workforce Development Council
Jason Selwitz, Dean	South Puget Sound Community College
Dave Wallace, Research Unit Manager	Workforce Training & Ed. Coordinating Board
Gilda Wheeler, Program Director	WA STEM

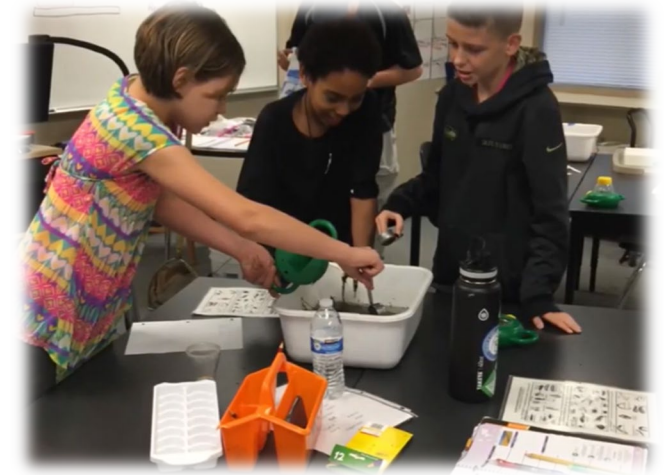




# *Goal 1: Build and incentivize equitable PreK-12 and post-secondary braided pathways for green jobs.*

## **Recommendations:**

- Fund the FieldSTEM proviso with an additional \$250,000 per year to align Career and Technical Education (CTE) to Community and Technical College (CTC) guided pathways, and career launch opportunities with Career Connect Washington.
- Fund Centers of Excellence to support equitable CTE Dual Credit agreements for consistent green career pathways across Washington.



**Earlier  
More often  
More ways**

**Competency-based**



## *Goal 2: Strengthen criteria for workforce development projects to diversify the workforce, reach marginalized communities, serve remote and rural community needs, and engage the next generation of natural resource stewards.*

### **Recommendations:**

- Fund a green jobs grant program through OSPI or Career Connect Washington to increase **paid** opportunities for youth age 15-17: Set minimum participation criteria
  - “critical demand,” jobs
  - remote and small rural (communities under 10,000 residents).
  - for Black, Indigenous, People of Color (BIPOC) youth
  - collaborations with Open Doors Youth Reengagement and alternative 9-12 secondary programs.
- Incentivize community-based workforce and economic development projects that lead to green jobs across the state.







## Goal 3: Provide green economy, project-based professional learning for educators using materials available in the OSPI Open Education Resources (OER) portal.

### Recommendations:

- Engage industry / agencies to inform pathways into green jobs,
- Strengthen professional learning funding for educators and counselors,
- Continue legislative proviso funding for equitable climate science education
  - Support proviso 4 million annually in Governor's Budget.
  - Set a requirement that projects demonstrate how learning will help individuals and communities mitigate and adapt to climate impacts,



## Goal 4: Increase “green economy” visibility

### Recommendations:

- Develop standard criteria for “green job” designation at the occupation level.
- Market a standard icon to use for course listings, interactive career and job websites, job applications, and other outreach media.
- Support a re-work of a central, youth friendly website to include searchable green economy jobs.
- Support a re-work of career interest assessments adding in a value for sustainable green jobs.

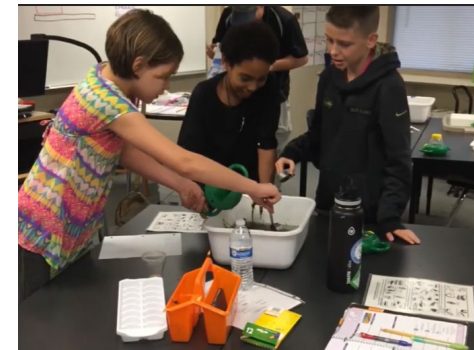




# Goal 5: Collect and disseminate job information based on data that reflects current and future green jobs

## Recommendations:

- Support Employment Security Department and the Workforce Training and Education Coordinating Board (WTECB) to work with Workforce Development Councils and green economy sector employers to provide cross-sector occupational demand numbers for green jobs that include local job openings predicted due to emerging trends, retirements and potential for green innovation. ([2020 HB 2308](#))
- Identify currently unaccounted and under-accounted occupations for inclusion in workforce data.





# Questions for the Alliance

- How can we ensure we are preparing youth for “critical demand” jobs in STEM fields which are important to our future?
- How can we dedicate STEM funding for programming that leads to a green and just future?
- How can we make sure we have sufficient data for STEM workforce decision making?
- Your Questions?

