



Future Ready Oregon – Technology Industry Consortium

House Bill 3306 (2023) Occupation and Wage Data Overview

February 25, 2025

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Higher Education Coordinating Commission (HECC)

House Bill (HB) 3306

Next Steps in Implementation

Review Legislative Mandate and Definitional Decisions

- ***Locality, Skilled Occupation***
- ***Industry Sector Definitions***

Technology Sector Overview

Oregon Employment Department (OED), Bureau of Labor and Statistics (BLS), and US Census Bureau

- Oregon Technology Sector Information

High-Skill Technology Occupations

OED:

- Oregon Technology Occupation and Wage Data
- OED STEM occupational data
- Oregon High-Wage, High-Demand, High-Skill Occupational data

Sample Occupation Profile Review

Next Steps

Data Presentation Feedback, Questions, and Discussion

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Legislative Task and Definitional Recap

In 2023 the Oregon Legislature passed HB 3306, amending the duties of the Industry Consortia as specified in ORS 660.410 to include a mandate to:

"Establish wage rate standards, varied by **locality**, for **each skilled occupation** within each of the [manufacturing, technology, and healthcare] sectors…Once every two years, each Industry Consortium established under this section shall:

(a) Recalculate the wage rate standards described in subsection (2)(b)(F) of this section using relevant economic and employment data made available by the [Oregon] Employment Department.**"** (Sec 5(F))

Definitional Decisions:

"Locality" - Local Workforce Development Board Regions

"Skilled occupation" – Oregon Employment Department 'High-Skill' Occupations

Industry Sector Scope:

HECC staff have aligned industry sector definitions for the purpose of this statute with those used by OED in their analyses of the manufacturing, technology, and healthcare industries. OED uses the North American Industry Classification System (also known as NAICS) for their analyses of each industry sector.

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What Makes 'High Tech' High Tech?

- Classification is ***based on*** the percentage of jobs in an industry that are in Science, Technology, Engineering, or Math (STEM).
- The average STEM concentration of an industry in the United States is around 6%.
- Industries with a concentration **5 times above and higher** were designated as **core high tech**, and industries with a concentration **2.5 times and above this level** were designated as **peripheral high tech**.

High Tech in Oregon, OED Technology Industry Consortium presentation, November 13, 2023

Oregon Core High-Tech Industry Sectors

Core high tech makes up 6.1% of total privates sector employment in Oregon, and 12.4% of total payroll. Wages are twice the statewide average.

NAICS Code	Industry Title
3254	Pharmaceutical and Medicine Manufacturing
3341	Computer and Peripheral Equipment Manufacturing
3342	Communications Equipment Manufacturing
3343	Audio and Video Equipment Manufacturing
3344	Semiconductor and Other Electronic Component Manufacturing
3345	Navigational, Measuring, Medical and Control Instruments Manufacturing
3364	Aerospace Product and Parts Manufacturing
5132	Software Publishers
5413	Architectural, Engineering, and Related Services
5415	Computer Systems Design and Related Services
5417	Scientific Research and Development Services

High Tech in Oregon, OED Technology Industry Consortium presentation, November 13, 2023

OED Definitions

High Demand Occupations

"Occupations having more than the median number of total (growth plus replacement) openings statewide or for a particular area;"

High Wage Occupations

"Occupations paying more than the all-occupation, all-ownership median wage … statewide or for a particular area."

High-Skill Occupations

- "Occupations with a typical educational level needed for entry of postsecondary training (non-) or higher
  OR
- Occupations with an apprenticeship as the 'typical on-the-job training' level
  OR
- Occupations typically needing related work experience or long-term on-the-job-training for entry and postsecondary training (non-) or above as competitive;"

Source: Oregon Employment Department, *Oregon High-Demand, High-Skill, and High-Wage Occupations, 2023-2033*

HB 3306: High-Demand, High-Wage, High-Skill Occupations

Selection of Initial Occupations:

- We cross-referenced OED's list of STEM occupations with OED's list of High-Wage, High-Demand, High-Skill Occupations.
- Occupations on the list included require post-secondary education or training either traditional four-year degrees, associates degrees, apprenticeships, work-based learning, and internship opportunities.

The following occupation and wage information represents a snapshot of High-Wage, High-Demand STEM occupations and should not be considered exhaustive.

High-Demand, High-Wage, High-Skill Occupations

Occupation Code	Occupation Title	Employment 2023	Projected Employment 2033	Percent Change	Projected Total Openings
15-1252	Software Developers	21,977	28,444	29.4%	19,415
11-3021	Computer and Information Systems Managers	7,321	8,620	17.7%	6,565
15-1232	Computer User Support Specialists	8,738	9,163	4.9%	6,064
17-2051	Civil Engineers (includes transportation engineers, waste/wastewater engineers)	4,591	5,365	16.9%	3,694
19-4021	Biological Technicians	2,786	2,976	6.8%	3,451
11-9041	Architectural and Engineering Managers (includes biofuels/biodiesel technology & product development managers)	4,337	4,817	11.1%	3,412
15-1211	Computer Systems Analysts (includes health informatics specialists)	5,025	5,435	8.2%	3,391
17-2112	Industrial Engineers (includes human factors engineers & ergonomists, validation engineers, & manufacturing engineers)	4,049	4,809	18.8%	3,384
13-1081	Logisticians (includes logistics engineers & logistics analysts)	2,645	3,175	20.0%	2,943
15-2051	Data Scientists (includes business intelligence analysts & clinical data managers)	2,714	3,635	33.9%	2,714
17-3023	Electrical and Electronic Engineering Technologists and Technicians	2,651	2,764	4.3%	2,571
17-2141	Mechanical Engineers (includes fuel cell engineers & automotive engineers)	3,190	3,833	20.2%	2,537
15-1244	Network and Computer Systems Administrators	4,410	4,568	3.6%	2,504
17-3026	Industrial Engineering Technologists and Technicians (includes nanotechnology engineering technologists & technicians)	2,432	2,641	8.6%	2,346

*Projected Total Openings = Employment Change + Replacement Openings

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Sample Occupation Profile: Data Scientists (152051)

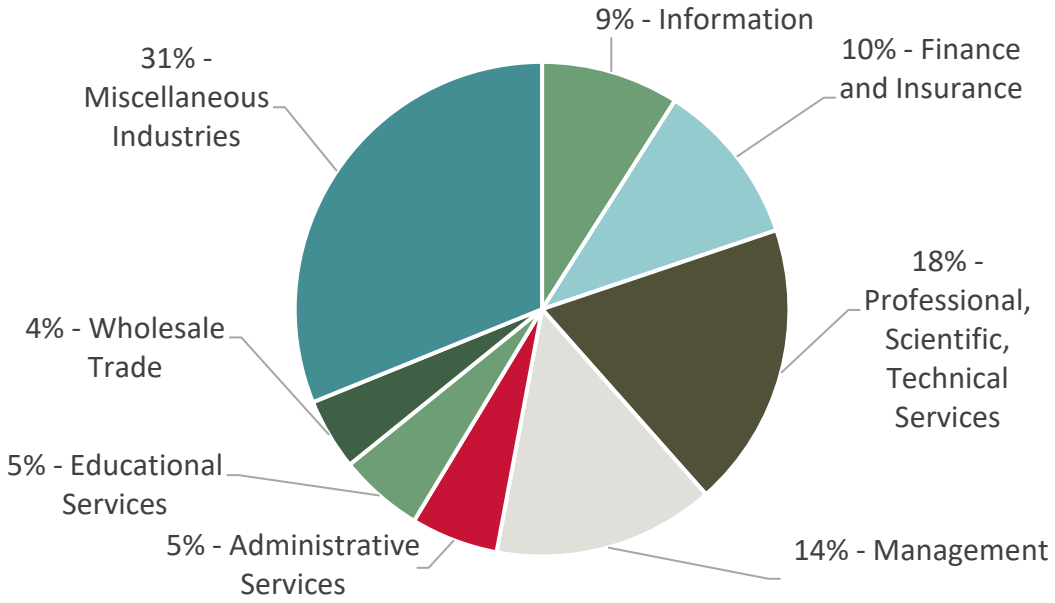
Occupation Description:

"Develop and implement a set of techniques or analytics applications to transform raw data into meaningful information using data-oriented programming languages and visualization software. Apply data mining, data modeling, natural language processing, and machine learning to extract and analyze information from large structured and unstructured datasets. Visualize, interpret, and report data findings. May create dynamic data reports.
Illustrative examples: Business Intelligence Developer, Data Analytics Specialist, Data Mining Analyst, Data Visualization Developer" (BLS, SOC)

Education Requirements:

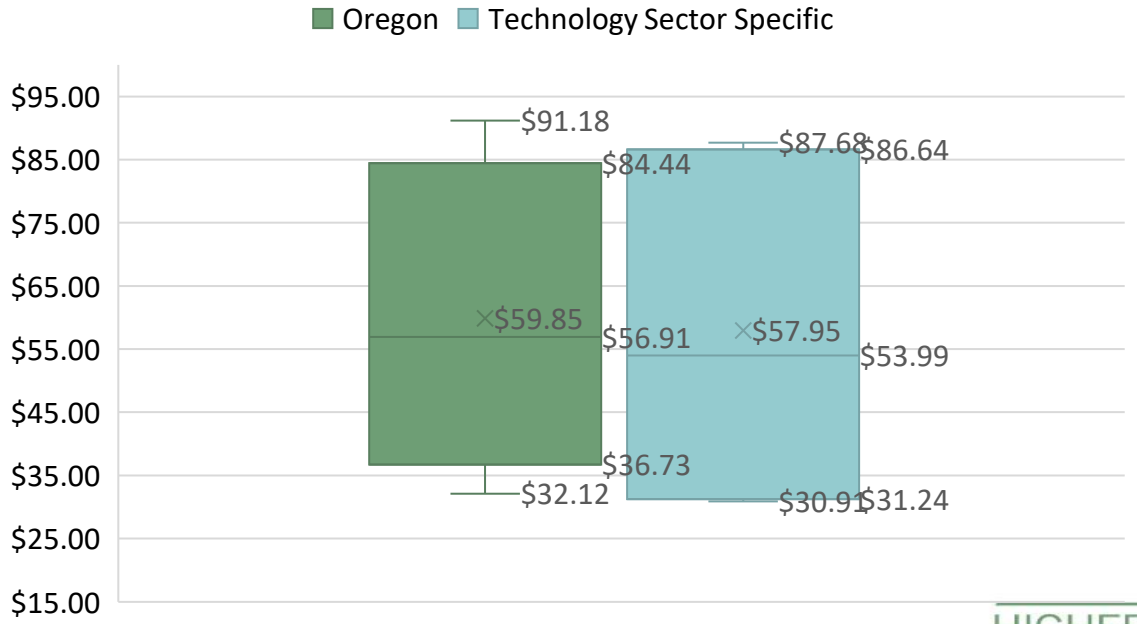
Minimum: Bachelor's Degree
Competitive: Bachelor's Degree
Credentials and Certifications: No statewide license required

Oregon Top Industries of Employment*



*Total Oregon employment of 2,714 (2023)

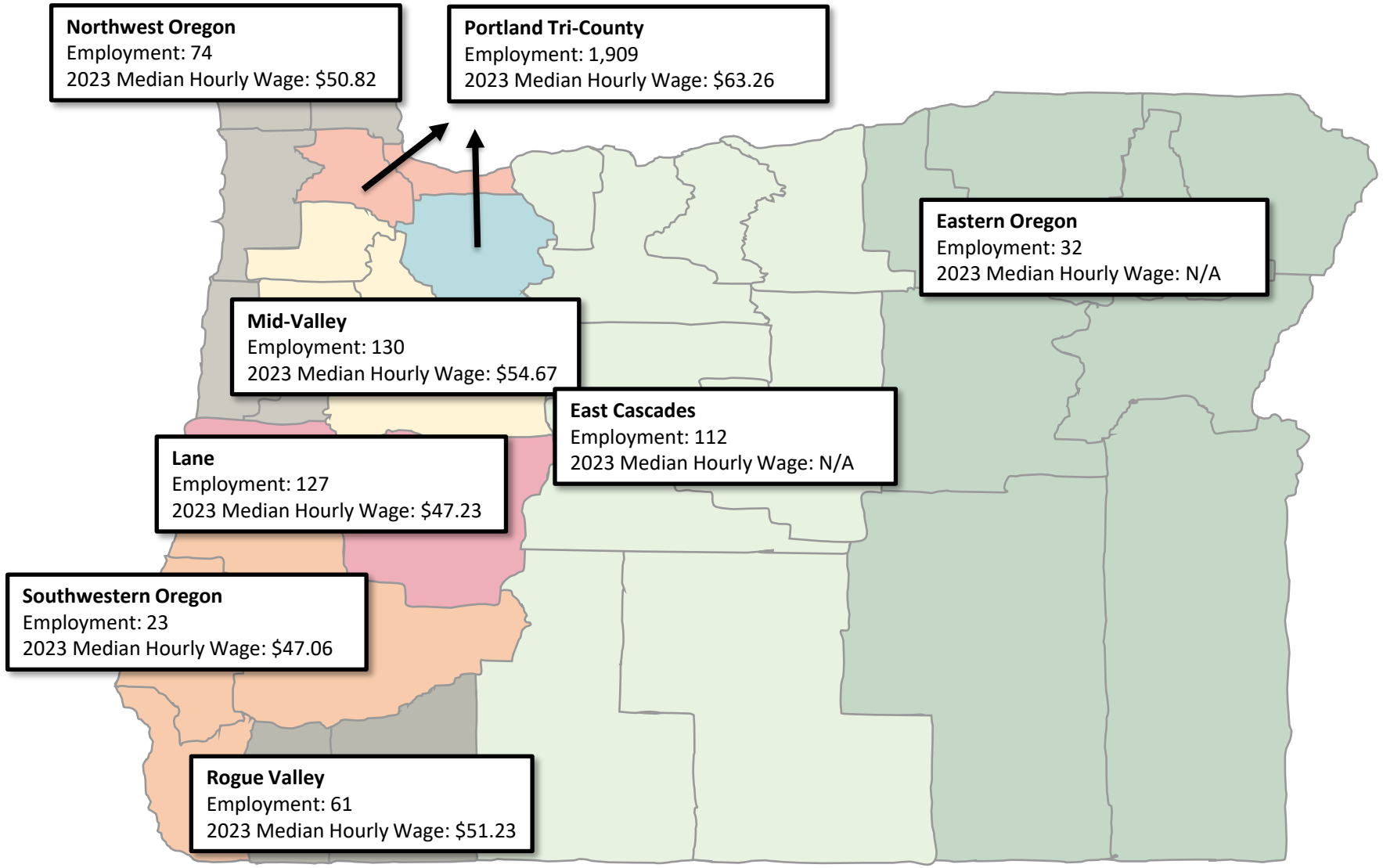
Hourly Wage Range:



Source: Oregon Employment Department, Occupation Profiles, Data Scientists (152051)

Sample Occupation Profile: Data Scientists (152051)

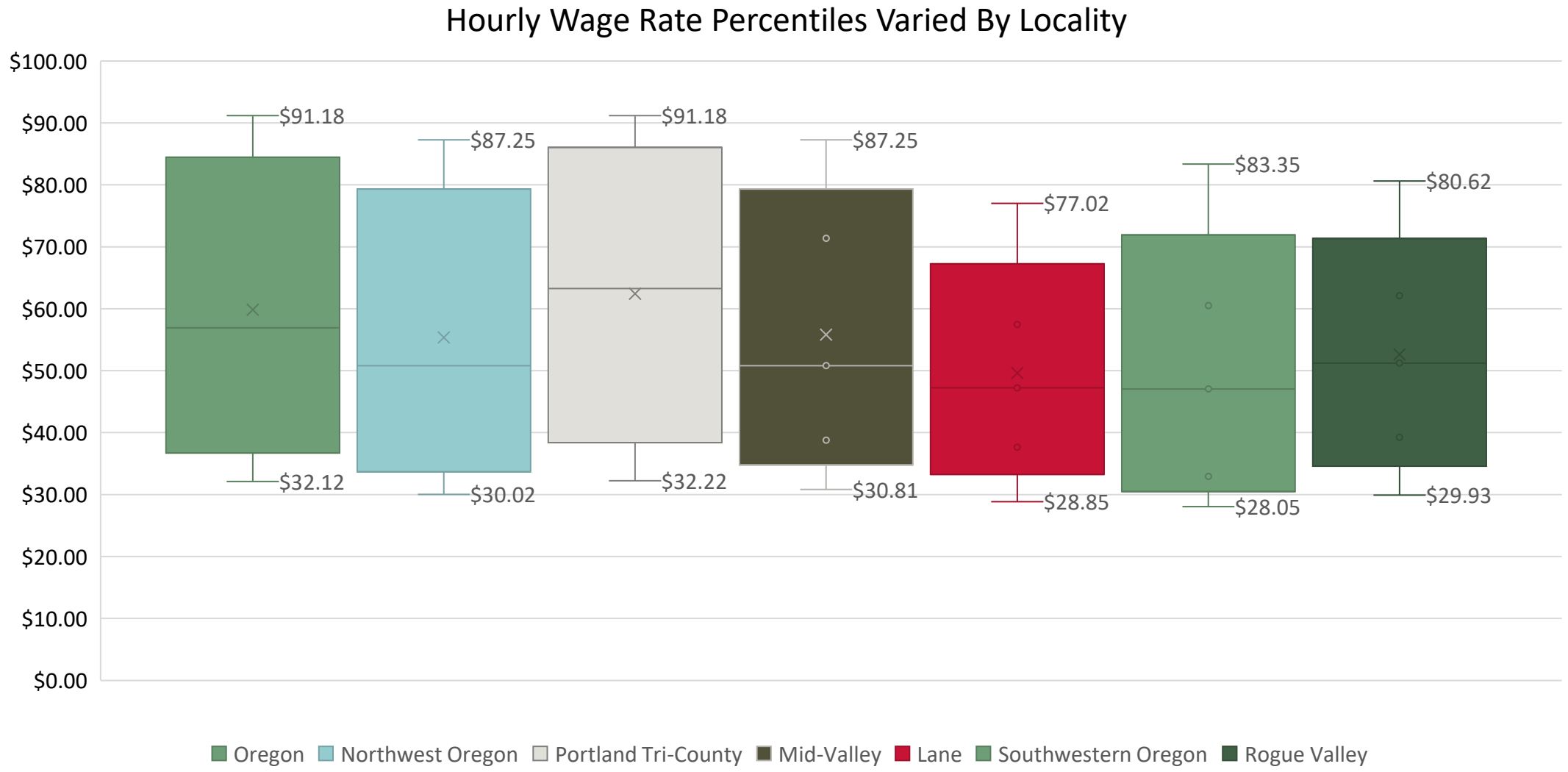
Wage and Employment Varied by Locality:



Source: Oregon Employment Department, Occupation Profiles, Data Scientists (152051)

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Sample Occupation Profile: Data Scientists (152051)



Source: Oregon Employment Department, Occupation Profiles, Data Scientists (152051)

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Discussion and Next Steps

Questions for the Consortium:

- Are there methods of presentation/formatting that would make this data more accessible or easier to understand for a broad audience?
- Beyond meeting the statutory requirements of HB 3306, how might this wage and occupation data be used to advance the objectives of the Consortium?

Quarterly Meeting Schedule to Approve Wage Data:

- Manufacturing – April 2nd
- Healthcare – April 22nd
- Technology – May 13th

We will bring the comprehensive list of all 151 high-skill occupations in technology, associated wage data, and a summary research methodology document for this consortium to review and approve at your Q2 meeting.

References

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