Washington Covid-19 Identifying Occupation Transition Pathways

WASHINGTON

Workforce
Training & Education Coordinating
Board

Approach Outline

1. Identify projected in-demand industries and occupations, filtered by expected job demand and income level.

2. Identify vulnerable industries and occupations, filtered by high-UI claims, ESD classification of "distressed occupations", and significant susceptibility to automation in the future.

3. Identify career pathways between the two based on similarities in knowledge, skills, & abilities (KSAs).

Future Demand Industries

Industries in the US that are projected by the Bureau of Labor Statistic to add more workers and are relatively higher paying align with estimates from academia, think tanks and other future of work subject matter experts. The industries most likely to thrive in the future include:

1. Health Care and Wellness
2. Information and Technology
3. Business Services
4. Construction/ Engineering
5. Production and Robotics

Future Demand Occupations

Using this criteria, some of the occupations fit into these industry categories would include:

1. Registered nurses
2. Application software developers
3. Information security analyst
4. Financial managers
5. Plumbers, pipefitters and steamfitters
6. Market research analysts and marketing specialists
7. Machine tool programmer
8. Medical and health services managers
9. Physical Therapists
10. Computer and information systems managers

Not all jobs are equal

- Within these selections of industry sectors, there are significant numbers of "positive outlook" jobs, but many occupations that are not:

Industry Cluster	Number of jobs	% of total WA workforce
Health Care and Wellness	477,091	13.5%
Information Technology	132,327	3.8%
Business Services	209,187	5.9%
Construction / Engineering	212,976	6.0%
Production and Robotics*	19,705	0.6%
Total	1,051,286	29.8%

Not all jobs are equal

- Jobs are not homogenous within these targeted industry sectors.

Occupations	Industries with Positive Outlook	
	Number of workers in Washington	**% of occupation**
Construction and Extraction Occupations	147,178	85
Healthcare Practitioners and Technical Occupations	137,389	80
Computer and Mathematical Occupations	112,509	60.2
Management Occupations	62,000	33.3
Food Preparation and Serving Related Occupations	15,368	5

Pathways to "positive outlook" careers

- Hundreds of viable occupations with a "positive outlook" within the five target industry sectors.
- Significant overlap of skills and occupations across industries (e.g. IT workers in leisure and hospitality, or business service workers in health care)
- Top target occupations contained:

1. Higher percentage of target occupations within an occupational group or industry.
2. Greater number of jobs in Washington compared to other occupations.
3. Lower educational barriers to entry.

Workers in vulnerable industries

There is considerable overlap in industry groups in Washington that are (1) major employers in the state (2) have a high degree of automation potential, and (3) are among the highest industries in COVID-related unemployment claims.

Industry	Occupation group	% of tasks automatable
Professional and business services	Office and Administrative Support	63%
	Business and financial operations	16%
Retail trade	Sales and Related	42%
Education and health services	Health care practitioners and technical occupations	32%
	Education, training and library occupations	18%
	Health care support	40%
Construction	Construction and Extraction	53%
Leisure and hospitality	Food Preparation and Serving Related	69%

Pathways to "positive outlook" careers

- Focus on the hundreds of viable occupations with a "positive outlook", rather than the most easily-attainable available job.
- Identifying occupations with similar KSAs can lead to pathways to greater opportunities in different occupations.

  - Personal Care Aide (average salary of $27,000 per year)
    - Similar KSAs to:
      a) Cardiovascular Technologists and Technicians ($60,000)
      b) Occupational Therapy Assistants ($60,000)
      c) Licensed Practical and Licensed Vocational Nurse ($53,000)
      d) …
      e) …
      f) Nurse Practitioner ($115,000)

Positive outcomes

1. Identify projected in-demand industries and occupations that provide family-wage jobs, or pathways to family-wage jobs.

2. Chart education, training and upskilling options to transition from vulnerable or distressed occupations into positive outcome careers.