



Workforce Supply & Demand Analysis

Occupations that are Undersupplied & Oversupplied

November 2025



Background

This document was developed under the direction of the Governor's Workforce Board to compare local occupational demand data to the annual talent output from local institutes of higher education (both public and private).

The purpose of the exercise is to identify occupational areas where new or expanded programming is likely needed to increase the supply of skilled talent. More specifically, to identify areas where the annual talent output is too low even if every graduate stayed in state AND entered a career related to their field of study.

NOTES

1. This exercise is solely focused on occupations that typically require some level of post-secondary training, degree, or credential.
2. To complete the analysis, a series of reasonable assumptions were made to map IPEDS data with related SOC codes.
3. The analysis does not account for graduates who enter a career unrelated to their field of study.
4. The analysis does not account for the inward or outward migration of graduates.

What this document is:

- A list of specific occupations we believe require additional annual output from Rhode Island institutes of higher education and/or workforce training providers.
- An imperfect, but reasonable analysis based on the best data sets available.

What this document is NOT:

- Perfect.
- Focused on occupations that do not typically require some form of training, post-secondary degree, or credential.
- A policy statement.
- An indication that all other occupations are adequately supplied.

- **This Mapping Exercise compares estimated 1-year Rhode Island demand for occupations by 5-digit Standard Occupation Code (SOC), with estimated supply as produced by RI higher education programs in an average academic year.**

- **Higher Ed data used in this exercise includes all degrees/certificates awarded in Academic Year 2023-24 from:**

- Brown University
- Bryant University
- Johnson & Wales University
- New England Institute of Technology
- New England Tractor Trailer Training School
- Providence College
- Rhode Island College
- Community College of RI
- University of RI
- Rhode Island School of Design
- Roger Williams University
- Salve Regina University
- Empire Beauty School
- Lincoln Technical Institute
- IYRS School of Technology & Trades
- Paul Mitchell the School
- Toni & Guy Hairdressing Academy
- MotoRing Technical Training Institute

- **The supply estimates do not include:**

- People trained in other postsecondary education programs, such as the workforce training activities offered by Real Jobs RI. This supply data is not currently available at the 5-digit occupation level, but for many occupations supply in an average year is higher due to such programs.
- People in a Registered Apprenticeship (RA) (Registered Apprentices are employed while in training and are already accounted for in the DLT's demand estimates within each occupation).

- **We have not adjusted for the supply (trained individuals) that leave the state of RI after obtaining their degree or certificate.**
 - 2022 NBER Working Paper estimates that ~63% of graduates from 4-year IHEs in the Northeast region are retained in-state after graduation.
- **The supply available to Teaching Occupations is large, although most individuals with basic qualifications to become a secondary or postsecondary teacher do not enter the occupation.**
 - We looked into each CIP which crosswalks to an Education, Library, & Training Occupations SOC to see if there were teaching-related second majors produced (i.e., Teaching Certificate). None of the graduates from these CIPs also had a teaching-related second major.
 - This suggests that in an average year, few graduates are actually preparing/intending to go into a teaching occupation. The supply available to Teaching Occupations is likely much lower than our findings indicate.
- **“Experience/Preparation Needed” is drawn from O*Net Job Zones data.**
 - A Job Zone is a group of occupations that are similar in how much education, related experience, and on-the-job training people need to do the work.
 - The Five (5) Job Zones are:
 - 1 – occupations that need little or no preparation
 - 2 – occupations that need some preparation
 - 3 – occupations that need medium preparation
 - 4 – occupations that need considerable preparation
 - 5 – occupations that need extensive preparation

Top 20 Undersupplied Occupations



Occupation	Median Hourly Wage	Typical Education	Experience/ Preparation Needed	% of Demand Currently Met Through Higher Ed	Additional Annual Supply Needed
Cooks^	\$19.12	No formal educational credential	L2: Some	10%	1500
Office Clerks, General	\$22.41	High school diploma	L2: Some	0%	1050
Driver/Sales Workers and Truck Drivers^	\$23.45	Various	L2: Some	40%	875
Secretaries & Administrative Assistants^	\$25.66	High school diploma	L2: Some	<5%	760
Supervisors of Sales Workers^	\$29.66	High school diploma	Some to Considerable	0%	700
Miscellaneous Healthcare Support Occupations^	\$22.37	Postsecondary non-degree award	L3: Medium	20%	700
Sales Representatives, Wholesale & Manufacturing^	\$38.71	Various	L4: Considerable	<5%	615
Supervisors of Food Preparation & Serving Workers^	\$23.56	High school diploma	L2: Some	35%	490
Recreation & Fitness Workers^	\$19.44	High school diploma	Medium to Considerable	<5%	475
Barbers, Hairdressers, Hairstylists, & Cosmetologists	\$14.67	Postsecondary non-degree award	L3: Medium	10%	460
Supervisors of Office & Administrative Support Workers	\$36.50	High school diploma	L3: Medium	0%	420
Accountants & Auditors	\$43.29	Bachelor's degree	L4: Considerable	30%	385
Management Analysts	\$42.85	Bachelor's degree	L4: Considerable	15%	385
Automotive Technicians & Repairers^	\$25.59	Various	L2: Some	15%	345
Teaching Assistants^	\$15.57	Postsecondary non-degree award	L3: Medium	25%	285
Electricians	\$33.73	High school diploma	L3: Medium	<5%	275
Market Research Analysts & Marketing Specialists	\$37.32	Bachelor's degree	L4: Considerable	35%	270
Welding, Soldering, & Brazing Workers^	\$26.87	Various	L2: Some	<5%	260
Health Practitioner Support Technologists & Technicians^	\$20.74	Associate's degree	L3: Medium	25%	255
Pipelayers, Plumbers, Pipefitters, & Steamfitters	\$31.07	High school diploma	L3: Medium	<5%	250

^Weighted Median Hourly Wage

Undersupplied Occupations (by Group)

Business & Financial Occupations

Occupation	Median Hourly Wage	Typical Education	Experience/Preparation Needed	% of Demand Currently Met Through Higher Ed	Additional Annual Supply Needed
Accountants and Auditors	\$43.29	Bachelor's degree	L4: Considerable	30%	385
Management Analysts	\$42.85	Bachelor's degree	L4: Considerable	15%	385
Market Research Analysts & Marketing Specialists	\$37.32	Bachelor's degree	L4: Considerable	35%	270
Human Resources Workers*	\$33.83	Bachelor's degree	L4: Considerable	25%	220
Miscellaneous Business Operations Specialists	\$41.77	Bachelor's degree	L4: Considerable	25%	135
Logisticians & Project Management Specialists^	\$47.72	Bachelor's degree	L4: Considerable	55%	125
Credit Counselors & Loan Officers^	\$36.58	Bachelor's degree	L4: Considerable	20%	120
Buyers & Purchasing Agents	\$37.55	Various	L4: Considerable	<5%	120
Training & Development Specialists	\$34.91	Bachelor's degree	L4: Considerable	10%	90
Claims Adjusters, Appraisers, Examiners, & Investigators**	\$40.08	Various	L4: Considerable	<5%	70
Fundraisers	\$32.40	Bachelor's degree	L4: Considerable	40%	45
Financial Examiners	\$41.80	Bachelor's degree	L4: Considerable	15%	45

*This broad occupation includes the following detailed occupations: Human Resources Specialists; Farm Labor Contractors; Labor Relations Specialists.

**This broad occupation includes the following detailed occupations: Claims Adjusters, Examiners, & Investigators; Insurance Appraisers-Auto Damage.

Undersupplied Occupations (by Group)



Architecture & Engineering Occupations

Occupation	Median Hourly Wage	Typical Education	Experience/Preparation Needed	% of Demand Currently Met Through Higher Ed	Additional Annual Supply Needed
Industrial Engineers, Including Health & Safety*	\$53.11	Bachelor's degree	L4: Considerable	30%	50
Electrical & Electronics Engineers^	\$58.07	Bachelor's degree	L4: Considerable	35%	50
Civil Engineers	\$53.96	Bachelor's degree	L4: Considerable	50%	40
Mechanical Engineers	\$55.42	Bachelor's degree	L4: Considerable	55%	35

*This broad occupation includes the following detailed occupations: Health & Safety Engineers Except Mining Safety; Industrial Engineers.

Arts, Entertainment & Recreation Occupations

Occupation	Median Hourly Wage	Typical Education	Experience/Preparation Needed	% of Demand Currently Met Through Higher Ed	Additional Annual Supply Needed
Athletes, Coaches, Umpires & Related Workers*	\$23.62	Various	L2: Some	10%	100
Designers**^	\$28.20	Various	L4: Considerable	60%	90

*This broad occupation includes the following detailed occupations: Athletes & Sports Competitors; Coaches & Scouts; Umpires, Referees, & Other Sports Officials.

**This broad occupation includes the following detailed occupations: Commercial & Industrial Designers; Fashion Designers; Floral Designers; Graphic Designers; Interior Designers; Merchandise Displays & Window Trimmers, Set & Exhibit Designers and All Other Designers.

^Weighted Median Hourly Wage

Undersupplied Occupations (by Group)

Community & Social Service Occupations

Occupation	Median Hourly Wage	Typical Education	Experience/ Preparation Needed	% of Demand Currently Met Through Higher Ed	Additional Annual Supply Needed
Misc. Community & Social Service Specialists*	\$25.03	Various	L4: Considerable	45%	210
Social Workers**^	\$33.19	Master's degree	L5: Extensive	45%	145
Counselors***^	\$28.58	Master's degree	L5: Extensive	75%	55

*This broad occupation includes the following detailed occupations: Health Education Specialists; Probation Officers & Correctional Treatment Specialists; Social & Human Service Assistants; Community Health Workers; Community & Social Service Specialists—All Other.

**This broad occupation includes the following detailed occupations: Child, Family, and School Social Workers; Healthcare Social Workers; Mental Health & Substance Abuse Social Workers; Social Workers—All Other.

***This broad occupation includes the following detailed occupations: Educational, Guidance, & Career Counselors; Marriage & Family Therapists; Rehabilitation Counselors; Substance Abuse, Behavioral Disorder, & Mental Health Counselors; Counselors—All Other.

Computer & Mathematical Occupations

Occupation	Median Hourly Wage	Typical Education	Experience/ Preparation Needed	% of Demand Currently Met Through Higher Ed	Additional Annual Supply Needed
Computer Support Specialists**^	\$28.57	Various	L4: Considerable	35%	145
Computer & Information Analysts**	\$53.70	Bachelor's degree	L4: Considerable	30%	135

*This broad occupation includes the following detailed occupations: Computer Network Support Specialists; Computer User Support Specialists

**This broad occupation includes the following detailed occupations: Computer Systems Analysts; Information Security Analysts.

^Weighted Median Hourly Wage

Undersupplied Occupations (by Group)



Education, Training & Library Occupations

Occupation	Median Hourly Wage	Typical Education	Experience/Preparation Needed	% of Demand Currently Met Through Higher Ed	Additional Annual Supply Needed
Teaching Assistants [^]	\$15.57	Postsecondary non-degree award	L3: Medium	25%	285
Elementary & Middle School Teachers [^]	\$42.26	Bachelor's degree	L4: Considerable	60%	195
Self-Enrichment Teachers	\$20.53	High school diploma	L3: Medium	<5%	180
Preschool & Kindergarten Teachers [^]	\$21.66	Various	L4: Considerable	20%	165
Librarians & Media Collections Specialists	\$35.01	Master's degree	L5: Extensive	15%	60
Archivists, Curators and Museum Technicians [^]	\$32.95	Master's degree	L5: Extensive	15%	35

Transportation & Material Moving Occupations

Occupation	Median Hourly Wage	Typical Education	Experience/Preparation Needed	% of Demand Currently Met Through Higher Ed	Additional Annual Supply Needed
Drivers/Sales Workers & Truck Drivers ^{*^}	\$23.45	Various	L2: Some	40%	875
Passenger Vehicle Drivers ^{**^}	\$21.98	High school diploma	L2: Some	45%	230

*This broad occupation includes the following detailed occupations: Driver/Sales Workers; Heavy & Tractor-Trailer Truck Drivers; Light Truck Drivers.

**This broad occupation includes the following detailed occupations: School Bus Drivers; Transit & Intercity Bus Drivers; Shuttle Drivers & Chauffeurs; Tax Drivers.

[^]Weighted Median Hourly Wage

Undersupplied Occupations (by Group)

Healthcare Practitioners & Technical Occupations

Occupation	Median Hourly Wage	Typical Education	Experience/Preparation Needed	% of Demand Currently Met Through Higher Ed	Additional Annual Supply Needed
Health Practitioner Support Technologists & Technicians [^]	\$20.74	Associate's degree	L3: Medium	25%	255
Nurse Practitioners	\$62.84	Master's degree	L5: Extensive	10%	130
Misc. Healthcare Diagnosing or Treating Practitioners ^{**^}	\$40.87	Associate's degree	L5: Extensive	10%	90
Pediatricians, General	\$101.07	Doctoral or professional degree	L5: Extensive	0%	85
Diagnostic Related Technologists & Technicians ^{***^}	\$44.61	Associate's degree	L3: Medium	40%	70
Clinical Laboratory Technologists & Technicians	\$39.05	Various	L4: Considerable	25%	60
Misc. Health Technologists & Technicians ^{****^}	\$26.84	Bachelor's degree	L5: Extensive	10%	55
Emergency Medical Technicians & Paramedics [^]	\$25.31	Postsecondary non-degree award	L3: Medium	10%	40

^{*}This broad occupation includes the following detailed occupations: Dietetic Technicians; Pharmacy Technicians; Psychiatric Technicians; Surgical Technologists; Veterinary Technologists & Technicians.

^{**}This broad occupation includes the following detailed occupations: Acupuncturists; Dental Hygienists; Healthcare Diagnosing or Treating practitioners--All Other.

^{***}This broad occupation includes the following detailed occupations: Cardiovascular Technologists & Technicians; Diagnostic Medical Sonographers; Nuclear Medicine Technologists; Radiologic Technologists & Technicians; MRI Technologists; Medical Dosimetrists.

^{****}This broad occupation includes the following detailed occupations: Orthotists & Prosthetists; Hearing Aid Specialists; Health Technologists & Technicians--All Other.

[^]Weighted Median Hourly Wage

Undersupplied Occupations (by Group)

Healthcare Support Occupations

Occupation	Median Hourly Wage	Typical Education	Experience/ Preparation Needed	% of Demand Currently Met Through Higher Ed	Additional Annual Supply Needed
Miscellaneous Healthcare Support Occupations*	\$22.37	Postsecondary non-degree award	L3: Medium	20%	700
Occupational Therapy Assistants & Aides	\$30.57	Associate's degree	L3: Medium	<5%	80
Physical Therapist Assistants & Aides^	\$26.54	Various	Some to Medium	35%	65

*This broad occupation includes the following detailed occupations: Dental Assistants, Medical Assistants, Medical Equipment Preparers, Medical Transcriptionists, Pharmacy Aides, Veterinary Assistants, Phlebotomists, Endoscopy Technicians.

Construction & Extraction Occupations

Occupation	Median Hourly Wage	Typical Education	Experience/ Preparation Needed	% of Demand Currently Met Through Higher Ed	Additional Annual Supply Needed
Electricians	\$33.73	Postsecondary non-degree award	L3: Medium	<5%	275
Pipelayers, Plumbers, Pipefitters, & Steamfitters	\$31.07	Various	L3: Medium	<5%	250
Supervisors of Construction & Extraction Workers	\$46.30	Various	L3: Medium	10%	205

^Weighted Median Hourly Wage

Undersupplied Occupations (by Group)

Installation, Maintenance, & Repair Occupations

Occupation	Median Hourly Wage	Typical Education	Experience/ Preparation Needed	% of Demand Currently Met Through Higher Ed	Additional Annual Supply Needed
Automotive Technicians & Repairers [^]	\$25.59	Various	L2: Some	15%	345
Supervisors of Mechanics, Installers & Repairers	\$38.51	Various	L3: Medium	<5%	135
Misc. Installation, Maintenance & Repair Workers ^{**^}	\$23.99	No Information	L2: Some	5%	70
Heating, A/C & Refrigeration Mechanics & Installers	\$30.57	Postsecondary non-degree award	L3: Medium	65%	55

^{*}This broad occupation includes the following detailed occupations: Automotive Body & Related Repairers; Automotive Glass Installers & Repairers; Automotive Service Technicians & Mechanics.

^{**}This broad occupation includes the following detailed occupations: Coin, Vending, & Amusement Machine Servicers & Repairers; Commercial Divers; Locksmiths & Safe Repairers; Manufactured Building & Mobile Home Installers; Riggers; Signal & Track Switch Repairers; Installation, Maintenance, & Repair Helpers.

Legal Occupations

Occupation	Median Hourly Wage	Typical Education	Experience/ Preparation Needed	% of Demand Currently Met Through Higher Ed	Additional Annual Supply Needed
Paralegals & Legal Assistants	\$26.22	Associate's degree	L3: Medium	25%	105

[^]Weighted Median Hourly Wage

Undersupplied Occupations (by Group)

Production Occupations

Occupation	Median Hourly Wage	Typical Education	Experience/ Preparation Needed	% of Demand Currently Met Through Higher Ed	Additional Annual Supply Needed
Welding, Soldering & Brazing Workers [^]	\$26.87	Various	L2: Some	<5%	260
Supervisors of Production & Operating Workers	\$38.94	Various	L3: Medium	<55%	245
Bakers	\$17.27	No formal educational credential	L3: Medium	15%	190
Painting Workers [*]	\$23.96	High school diploma	L2: Some	<5%	60
Printing Workers ^{**}	\$23.23	Various	Some to Medium	0%	60

^{*}This broad occupation includes the following detailed occupations: Painting, Coating, & Decorating Workers; Coating, Painting, & Spraying Machine Setters, Operators, & Tenders.

^{**}This broad occupation includes the following detailed occupations: Prepress Technicians & Workers; Printing Press Operators; Print Binding & Finishing Workers.

Protective Service Occupations

Occupation	Median Hourly Wage	Typical Education	Experience/ Preparation Needed	% of Demand Currently Met Through Higher Ed	Additional Annual Supply Needed
Police Officers ^{*^}	\$37.15	High school diploma	L3: Medium	10%	130
Firefighters	\$33.41	Postsecondary non-degree award	L3: Medium	5%	125
Supervisors of Firefighting & Prevention Workers	\$40.46	Postsecondary non-degree award	L3: Medium	<5%	55

^{***}This broad occupation includes the following detailed occupations: Police & Sheriff's Patrol Officers; Transit & Railroad Police

Undersupplied Occupations (by Group)

Personal Care Occupations

Occupation	Median Hourly Wage	Typical Education	Experience/Preparation Needed	% of Demand Currently Met Through Higher Ed	Additional Annual Supply Needed
Recreation & Fitness Workers ^{*^}	\$19.44	High school diploma	Medium to Considerable	<5%	475
Barbers, Hairdressers, Hairstylists & Cosmetologists	\$14.67	Postsecondary non-degree award	L3: Medium	10%	460

*This broad occupation includes the following detailed occupations: Exercise Trainers & Group Fitness Instructors; Recreation Workers.

Food Preparation & Serving Related Occupations

Occupation	Median Hourly Wage	Typical Education	Experience/Preparation Needed	% of Demand Currently Met Through Higher Ed	Additional Annual Supply Needed
Cooks ^{*^}	\$19.12	No formal educational credential	L2: Some	10%	1500
Supervisors of Food Preparation & Serving Workers ^{**}	\$23.56	High school diploma	L2: Some	35%	490

*This broad occupation includes the following detailed occupations: Fast Food Cooks, Institution & Cafeteria Cooks, Private Household Cooks, Restaurant Cooks, Short Order Cooks, Cooks—All Other.

**This broad occupation includes the following detailed occupations: Chefs & Head Cooks; Supervisors of Food Preparation & Serving Workers.

Undersupplied Occupations (by Group)

Office and Administrative Support Occupations

Occupation	Median Hourly Wage	Typical Education	Experience/ Preparation Needed	% of Demand Currently Met Through Higher Ed	Additional Annual Supply Needed
Office Clerks, General	\$22.41	High school diploma	L2: Some	0%	1050
Secretaries & Administrative Assistants^	\$25.66	High school diploma	L2: Some	<5%	760
Supervisors of Office & Administrative Support Workers	\$36.50	High school diploma	L3: Medium	0%	420
Eligibility Interviewers, Government Programs	\$30.13	High school diploma	L3: Medium	<5%	60
Insurance Claims & Policy Processing Clerks	\$24.40	High school diploma	L2: Some	0%	55
Data Entry & Information Processing Workers**^	\$23.12	High school diploma	L2: Some	0%	50

*This broad occupation includes the following detailed occupations: Data Entry Keyers; Word Processors & Typists.

Sales and Related Occupations

Occupation	Median Hourly Wage	Typical Education	Experience/ Preparation Needed	% of Demand Currently Met Through Higher Ed	Additional Annual Supply Needed
Supervisors of Sales Workers^	\$29.66	High school diploma	Some to Considerable	0%	700
Sales Representatives, Wholesale & Manufacturing^	\$38.71	Various	L4: Considerable	<5%	615
Securities, Commodities, & Financial Services Sales Agents	\$37.77	Bachelor's	L4: Considerable	10	140

^Weighted Median Hourly Wage

Possible Oversupplied Occupations

Recent college graduates may be struggling to find jobs in these areas.

Occupation	Median Hourly Wage	Typical Education	Experience/ Preparation Needed	% of Demand Currently Met Through Higher Ed	Estimated Annual Oversupply
Biological Scientists*^	\$45.13	Bachelor's - Doctoral	Extensive	3572%	220
Psychologists**^	\$47.88	Masters - Doctoral	Extensive	243%	165
Drafters***^	\$32.40	Associate's	Medium	389%	85
Medical Scientists including Epidemiologists^	\$49.97	Masters - Doctoral	Extensive	288%	75
Biological Technicians	\$20.86	Bachelor's	Considerable	619%	65

*Includes the following detailed occupations: Biochemists and Biophysicists, Microbiologists, Zoologists and Wildlife Biologists, Biological Scientists, All Other

**Includes the following detailed occupations: Industrial-Organizational Psychologists, Clinical and Counseling Psychologists, School Psychologists, Psychologists, All Other

***Includes the following detailed occupations: Architectural and Civil Drafters, Electrical and Electronics Drafters, Mechanical Drafters, Drafters, All Other