TARGETING ANALYSIS

TARGETING ANALYSIS INTRODUCTION



While benefiting from a diverse industry base, the Spokane economy can take advantage of a select group of target sectors that have a strong presence in the region. Spokane's target industries closely mirror those of Washington State, shedding light on how important Spokane's economy is to the state. Businesses that comprise Spokane County's target sectors range from microenterprises with just a few employees to the region's largest employers. Traded sector businesses—enterprises where most of the goods and services are sold outside of the region-tend to make up the majority of companies in the clusters. However, local businesses, especially in the healthcare sector, may also be encompassed in the target sectors. Successful industry clusters must include more than a high concentration of businesses. Strong workforce training, entrepreneurial support, and robust infrastructure systems are essential to cultivate target sector growth. Furthermore, deep ties between clusters, such as those found between agribusiness and life sciences or aerospace and manufacturing, will also strengthen clusters.

The area has a long history supporting **agribusiness** and can continue that momentum by expanding agricultural exports and food manufacturing, as well as the growing local food movement. Meanwhile, the COVID-19 pandemic exposed an accelerating need to strengthen certain sectors, like **energy infrastructure and technology** and **logistics**, to limit supply chain risks and fortify an interconnected economy.

Fostering growth in the **health and life sciences** by building on the strong foundation provided by the region's higher educational institutions, the central University District, and local healthcare industry, will continue to advance the economy. Additionally, the region's robust **aerospace and aviation** assets find close alignment with the **manufacturing and materials** sector. Combined, these target industries capitalize on the region's creative talent pool to drive innovative growth.

The six sectors identified by this analysis demonstrate significant future potential to generate new investment. Focusing business development efforts within these sectors, and across sectors, will continue to build on the region's successful companies, innovative talent, and high quality of place to support equitable economic growth.

FIGURE 1. THE TARGETING APPROACH



In identifying target sectors, our team examined detailed data to identify which industries are well-established in the region, how they performed in recent years, and how they are expected to perform in the near term. For this analysis, we looked at factors including strategic assets, existing initiatives, critical mass, competitive advantage, growth prospects, and cross-sector synergies.

FIGURE 2. THE TARGETING PROCESS

Which **STRATEGIC ASSETS** do we have to give us a competitive edge?

What does the **RELATIVE SIZE** of our employment sectors tell us about the local economy?

In which sectors can we anticipate the strongest **JOB GROWTH**?

What do we know about local employers' **HIRING NEEDS**?

How does this help us shape and focus our **TARGET FRAMEWORK**?

ABOUT THE DATA

In the first phase of this project TIP strsategies reviewed employment using standard NAICS industry classifications. For the targeting analysis, we take this a step further by filtering employment within an industry cluster framework developed by the US Economic Development Administration in conjunction with the Institute for Strategy and Competitiveness at Harvard Business School (www.clustermapping.us).

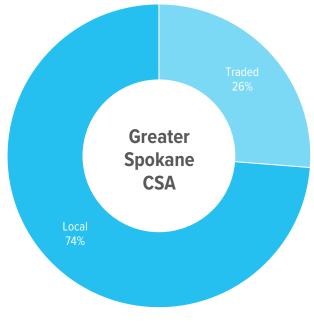


WHY IT MATTERS

Increasing the ratio of traded-to-local clusters is a common strategy for enhancing economic prosperity. Traded clusters are emphasized by economic developers because they include industries and firms that typically produce goods and services for customers beyond the local region. These traded activities are thus more likely to produce externally generated revenues which can, in turn, help boost local tax coffers. As an example, a dental office might serve local plant, a data center, or a hotel would typically serve paying customers beyond the local area. The ability of traded clusters to serve larger markets also presents greater opportunity for employment growth, whereas a dental office might face more finite geographic limits to

Sources: US Bureau of Labor Statistics; Emsi 2020.3– QCEW Employees, Non-QCEW Employees, and Self-Employed; U.S. Economic Development Administration; Institute for Strategy and Competitiveness, Harvard Business School; TIP Strategies, Inc. Note: The cluster methodology developed at Harvard Business School has been adjusted by TIP Strategies to align with the 6-digit NAICS classifications used by Emsi.

FIGURE 3. EMPLOYMENT CLUSTERS — TRADED VS LOCAL EMPLOYMENT IN 2020 BASED ON CLUSTER TYPE



LOCAL CLUSTERS

- Primarily serve local markets.
- Present in virtually every market.
- Location is not dependent upon competitive advantage.

TRADED CLUSTERS

- Serve outside markets.
- Free to choose where they locate.
- Tend to be highly concentrated in a few regions that have specific advantages.

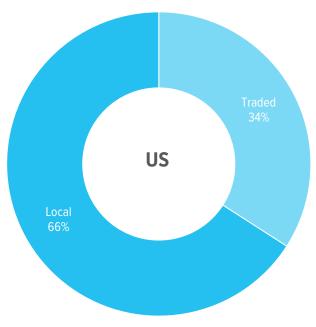


FIGURE 4. EMPLOYMENT CLUSTERS — WEIGHT (SIZE & CONCENTRATION) TRADED CLUSTERS EMPLOYING THE MOST WORKERS LOCALLY IN 2020

LOCATION QUOTIENTS	BELOW AVG			ABOVE AVG
	US		GREATER SPOKANE CSA	
	% of nation	al employment	% of local employment	LQ
Business Services	6.3%	4.2%	0	0.67
Education & Knowledge Creation	4.2%	3.3%	0	0.78
Distribution & E-commerce	3.9%	2.4%	6	0.62
Hospitality & Tourism	1.6%	1.7%	6	1.10
Federal Government (military)	1.2%	1.5%	6	1.23
Federal Government (civilian)	1.5%	1.4%	6	0.90
Transport. & Logistics	1.3%	1.2%	, b	0.91
Insurance Services	1.0%	1.1%	6	1.11
Financial Services	1.3%	0.9%	ó	0.68
Agricultural Inputs & Services	1.2%	0.7%	6	0.62
Marketing, Design, & Publishing	1.1%	0.7%	, b	0.60
Construction Products & Services	0.6%	0.5%	6	0.85
Plastics	0.4%	0.5%	6	1.24
Wood Products	0.2%	0.5%	6	2.01
IT & Analytical Instruments	0.9%	0.5%	6	0.54
OTHER TRADED CLUSTERS	7.3%	5.1%	0	
ALL LOCAL CLUSTERS	65.9%	73.8%	/ 0	
Total	100.0%	100.0%	/ o	

WHY IT MATTERS

While local clusters (such as dental offices) typically account for a similar share of employment across communities of varying size, the share of total employment represented by traded clusters (such as automotive assembly plants) may differ dramatically from one community to the next. Traded clusters that account for a larger-than-average share of total advantage. This figure compares the distribution of employment by cluster in the US (first column) with the local area (second column). The third column uses location quotients (LQs) to convey the intensity of employment locally relative to the US. If a traded cluster represents 1 percent of US employment and 5 percent of local employment, its LQ would be 5.00, meaning that the traded cluster in the local area is 5 times as large as would be expected based on national patterns.

Sources: US Bureau of Labor Statistics; Emsi 2020.3– QCEW Employees, Non-QCEW Employees, and Self-Employed; US Economic Development Administration; Institute for Strategy and Competitiveness, Harvard Business School; TIP Strategies, Inc. Note: The cluster methodology developed at Harvard Business School has been adjusted by TIP Strategies to align with the 6-digit NAICS classifications used by Emsi.

WHY IT MATTERS

Understanding anticipated job growth in traded clusters is an essential element of the targeting process. This figure compares projected net job gains in percentage terms over a fiveyear horizon for the US (first column) and the local area (second column). The column on the far right shows projections (in numeric terms) for local net job gains in traded clusters in descending order. The last three rows of the exhibit—showing projected job growth aggregated for traded clusters, local clusters, and total employment—can help inform strategic discussions and refine goals for the future.

Sources: US Bureau of Labor Statistics; Emsi 2020.3– QCEW Employees, Non-QCEW Employees, and Self-Employed; US Economic Development Administration; Institute for Strategy and Competitiveness, Harvard Business School; TIP Strategies, Inc. "Note: The cluster methodology developed at Harvard Business Schoo has been adjusted by TIP Strategies to align with the 6-digit NAICS classifications used by Emsi.

FIGURE 5. EMPLOYMENT CLUSTERS — PROJECTED GROWTH TRADED CLUSTERS WITH THE HIGHEST PROJECTED LOCAL JOB GAINS, 2020-2025

	US	GREATER SPOKANE CSA	
	5-year % change in national employment	5-year % change in local employment	net gain
Agricultural Inputs & Services	1.8%	30.8%	+750
Business Services	9.3%	3.6%	+512
Federal Government (military)	1.1%	5.1%	+262
Metalworking Technology	-1.3%	16.8%	+202
Hospitality & Tourism	-4.2%	3.1%	+178
Textile Mfg.	-7.7%	55.0%	+154
Financial Services	3.8%	4.6%	+142
Automotive	2.5%	10.0%	+126
Distribution & E-commerce	5.3%	1.5%	+123
Recreational & Small Goods	2.9%	21.5%	+111
Furniture	-3.3%	8.3%	+94
Construction Products & Services	3.3%	4.9%	+83
Paper & Packaging	-1.0%	21.6%	+83
Marketing, Design, & Publishing	4.2%	3.5%	+77
Biopharmaceuticals	7.6%	7.5%	+59
Aerospace Vehicles & Defense	2.7%	6.4%	+53
Downstream Metal Products	2.1%	3.7%	+49
Federal Government (civilian)	1.5%	1.0%	+49
ALL TRADED CLUSTERS	3.9%	2.9%	+2,619
ALL LOCAL CLUSTERS	3.4%	6.4%	+16,114
All Clusters	3.6%	5.5%	

FIGURE 6. TALENT DEMAND INDICATORS

ANALYSIS OF UNIQUE LOCAL JOB POSTINGS DURING CALENDAR YEAR 2020

LOCATION QUOTIENTS	BELOW AVG 🕨		ABOV			
	HIGH-DEMAND LOCAL OCCUP	ATIONS	HIGH-DEMAND LOCAL	SKILLS		
	location q	uotient	location of	quotient		
Laborers & F	reight, Stock, & Material Movers, Hand	1.67	Social Work	1.94		
	Social & Human Service Assistants	1.60	Loans	1.69		
	Nursing Assistants	1.55	Cardiopulmonary Resuscitation (CPR)	1.65		
	Registered Nurses	1.48	Basic Life Support	1.62		
	Stockers & Order Fillers	1.47	Personal Protective Equipment	1.57		
ales Reps, Wholesale & Manufactur	ing, Except Tech & Scientific Products	1.36	Warehousing	1.51		
Licensed	Practical & Licensed Vocational Nurses	1.35	Medical Records	1.41		
	Medical & Health Services Managers	1.32	Nursing	1.39		
	Light Truck Drivers	1.31	Rehabilitation	1.39		
	Customer Service Representatives	1.26	Billing	1.32		
	Insurance Sales Agents	1.23	Merchandising	1.09		
	Cashiers	1.13	Food Safety	1.08		
First-Line Supervisors of O	ffice & Administrative Support Workers	1.11	Food Services	1.07		
	Home Health & Personal Care Aides	1.09	Selling Techniques	1.07		
	Fast Food & Counter Workers	1.09	Inventory Management	1.01		
Μ	aintenance & Repair Workers, General	1.06	Cash Handling	0.97		
First-Line Supervisors of	of Food Preparation & Serving Workers	1.05	Cash Register	0.97		
	Retail Salespersons	1.02	Purchasing	0.97		
First-Li	ne Supervisors of Retail Sales Workers	0.94	Strategic Planning	0.97		
	Heavy & Tractor-Trailer Truck Drivers	0.73	Restaurant Operation	0.94		

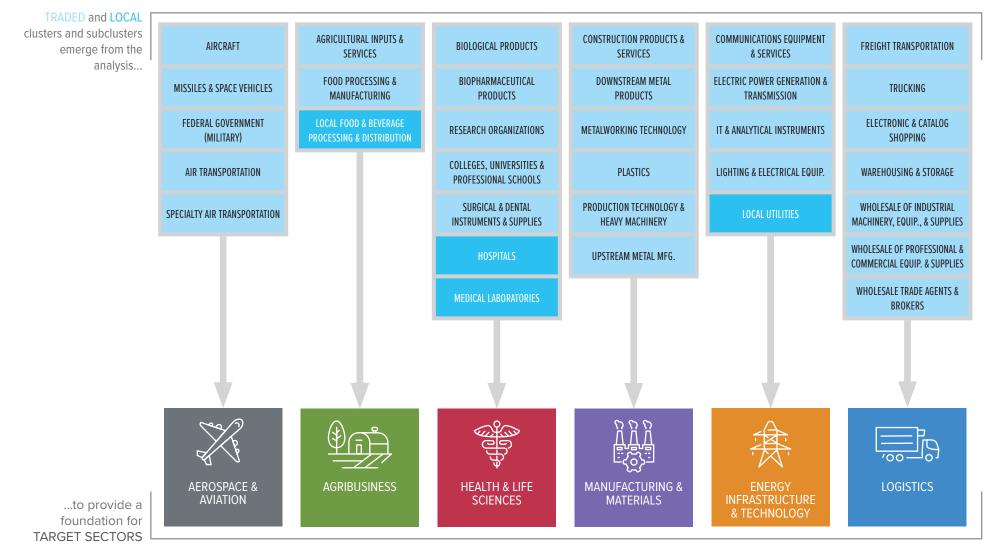
WHY IT MATTERS

An analysis of job postings can help reframe our understanding of the local job market from the employer's perspective rather than simply through the lens of government statistics. This back-of-the-envelope analysis uses job postings from the prior calendar year to identify the most sought-out occupations (first column) and the most frequently occurring words and phrases (second column). LQs are used to approximate the local intensity of recruiting efforts and skills. A help wanted ad that appears locally at 5 times the relative rate as the US would have an LQ of 5.00; likewise a specific skill that appears more frequently in local postings than the national average would have an LQ greater than 1.00, suggesting higher demand in the local market. The results should prompt strategic questions about the alignment of the region's talent pipeline with the needs of employers and with target (traded) clusters.

Sources: Emsi 2020.3; TIP Strategies, Inc.

TARGETING ANALYSIS

FIGURE 7. TARGETING FRAMEWORK



Sources: US Economic Development Administration; Institute for Strategy and Competitiveness, Harvard Business School; TIP Strategies, Inc.

TARGETING ANALYSIS INDUSTRY TRENDS

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INDUSTRY TRENDS AEROSPACE & AVIATION

TARGET SNAPSHOT

GREATER SPOKANE	TOTAL	TARGET
2020 Establishments	24,325	43
2020 Employment	339,676	6,854
Net Change, 2010–2020	+38,964	+33
Percent Change, 2010–2020	+13.0%	+0.5%

FIGURE 8. TARGET CONCENTRATION LOCATION QUOTIENT TREND

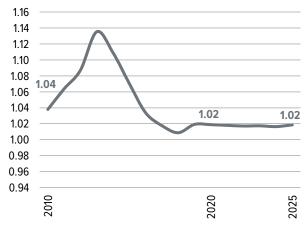


FIGURE 9. TARGET GROWTH

ANNUAL PERCENT CHANGE IN EMPLOYMENT

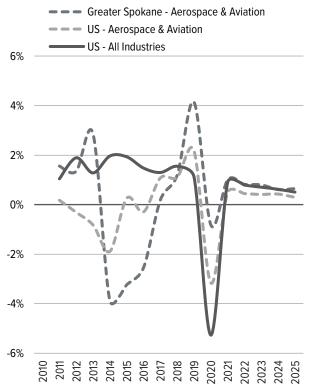


FIGURE 10. EMPLOYMENT OUTLOOK

US OVERALL	TOTAL	TARGET
Net Change, 2020–2025	+5,652,930	+65,298
Percent Change, 2020–2025	+3.6%	+2.1%
GREATER SPOKANE	TOTAL	TARGET
Net Change, 2020–2025	+18,646	+270

FIGURE 11. TARGET COMPONENTS ANNUAL EMPLOYMENT

8,000 —

 Fed. Government (Military) Air Transport.
■ Aircraft
Missiles & Space Vehicles
Specialty Air Transport.

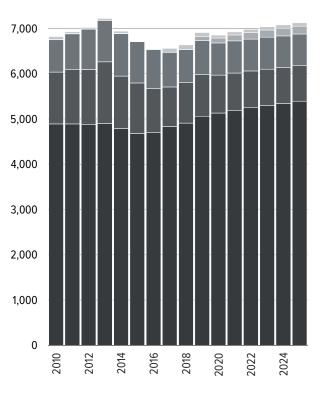


FIGURE 12. TARGET STAFFING PROFILE

LQs & RE	LATIVE EARNINGS BELOW AVG					BOVE AVG
STANDAR	D OCCUPATIONAL CLASSIFICATION		EMPLOYME	NT	EAR	NINGS
					Local	Relative
		2020	% of	LQ	Hourly	to US
Code	Description	Jobs	Target	(US= 1.00)	Median	(US=1.00)
55-9999	Military-only	2,618	38.2%	1.20	20.79	1.23
49-3011	Aircraft Mechanics & Service Technicians	306	4.5%	0.95	24.82	0.78
53-2012	Commercial Pilots	153	2.2%	2.04	37.84	0.85
53-2011	Airline Pilots, Copilots, & Flight Engineers	138	2.0%	0.54	80.05	
53-7062	Laborers & Material Movers, Hand	137	2.0%	0.89	15.49	1.04
51-2011	Aircraft Structure & Systems Assemblers	133	1.9%	1.84	22.11	0.87
33-3051	Police & Sheriffs Patrol Officers	106	1.5%	1.20	36.45	1.16
49-2091	Avionics Technicians	101	1.5%	1.32	25.36	0.78
13-1071	Human Resources Specialists	98	1.4%	1.14	25.93	0.85
13-1198	Business Operations Specialists, All Other	83	1.2%	0.97	33.26	0.89
17-2131	Materials Engineers	82	1.2%	12.34	55.89	1.22
49-9071	Maintenance & Repair Workers, General	81	1.2%	1.10	19.33	
51-2031	Engine & Other Machine Assemblers	76	1.1%	15.29	18.70	0.85
43-4181	Reservation & Ticket Agents	74	1.1%	0.49	16.04	0.85
13-1081	Logisticians	72	1.0%	0.88	28.81	0.79
11-9198	Personal Service & Recreation Managers, All Other	68	1.0%	1.03	35.63	0.89
11-1021	General & Operations Managers	58	0.8%	1.09	41.98	0.85
43-4051	Customer Service Representatives	56	0.8%	1.07	16.67	0.97
49-1011	First-Line Supervisors of Mechanics & Repairers	56	0.8%	1.10	34.35	
53-7065	Stockers & Order Fillers	50	0.7%	1.08	15.24	1.09
29-2041	Emergency Medical Technicians & Paramedics	45	0.7%	1.20	19.05	1.08
43-9061	Office Clerks, General	45	0.7%	1.26	17.76	
17-2141	Mechanical Engineers	45	0.7%	1.19	41.39	
51-4041	Machinists	44	0.6%	0.94	20.34	0.93
25-3097	Tutors & Teachers & Instructors, All Other	41	0.6%	1.20	27.82	1.39

WHY IT MATTERS

Each target industry is underpinned by its workforce, making the occupational composition of each target worthy of further analysis. This table shows each target's largest occupational contributors. The number of local jobs for each occupation is shown along with the occupation's weight (in percentage terms) within the target. The LQ compares the occupation's local weight to its national weight within this target. An LQ that exceeds 1.00 indicates a local occupation employed more heavily by the local target industry than national patterns might imply, while an LQ below 1.00 indicates relatively lighter local reliance on the occupation. Median local hourly earnings accompany the occupations shown in the exhibit. Wage ratios exceeding 1.00 indicate higher pay while ratios below 1.00 suggest relatively lower

Sources: US Bureau of Labor Statistics; Emsi 2020.3—QCEW Employees, Non-QCEW Employees, and Self-Employed; US Economic Development Administration; Institute for Strategy and Competitiveness at Harvard Business School; TIP Strategies, Inc.

Note: The cluster methodology developed at Harvard Business School has been adjusted by TIP Strategies to align with the six-digit NAICS classifications used by Emsi.



INDUSTRY TRENDS AGRIBUSINESS

TARGET SNAPSHOT

GREATER SPOKANE	TOTAL	TARGET
2020 Establishments	24,325	838
2020 Employment	339,676	14,734
Net Change, 2010–2020	+38,964	+3,552
Percent Change, 2010–2020	+13.0%	+31.8%

FIGURE 13. TARGET CONCENTRATION LOCATION QUOTIENT TREND

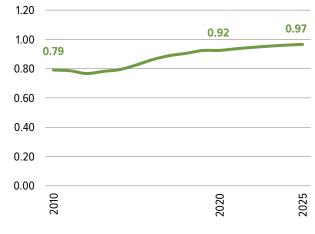


FIGURE 14. TARGET GROWTH

ANNUAL PERCENT CHANGE IN EMPLOYMENT

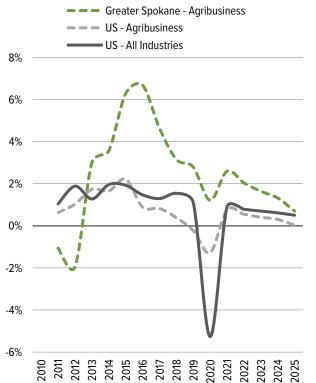


FIGURE 15. EMPLOYMENT OUTLOOK

US OVERALL	TOTAL	TARGET
Net Change, 2020–2025	+5,652,930	+153,982
Percent Change, 2020–2025	+3.6%	+2.1%
GREATER SPOKANE	TOTAL	TARGET
Net Change, 2020–2025	+18,646	+1,262
Percent Change, 2020–2025	+5.5%	+8.6%

FIGURE 16. TARGET COMPONENTS ANNUAL EMPLOYMENT

- Food Processing & Mfg.
- Agricultural Inputs & Services
- 18,000 Local Food & Beverage Processing & Distribution

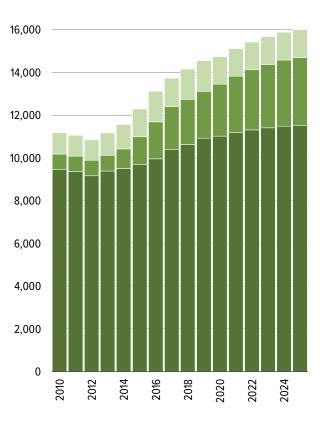


FIGURE 17. TARGET STAFFING PROFILE

STANDAR	D OCCUPATIONAL CLASSIFICATION		EMPLOYME	NT	EAR	NINGS
					Local	Relative
		2020	% of	LQ	Hourly	to US
Code	Description	Jobs	Target	(US= 1.00)	Median	(US=1.00)
41-2011	Cashiers	1,762	12.0%	0.93	14.29	
53-7065	Stockers & Order Fillers	1,329	9.0%	1.02	15.24	
45-2092	Farmworkers, Crop, Nursery, & Greenhouse	703	4.8%	0.57	17.67	1.28
41-2031	Retail Salespersons	649	4.4%	1.31	14.55	
41-1011	First-Line Supervisors of Retail Sales Workers	557	3.8%	1.23	19.06	
35-3023	Fast Food & Counter Workers	526	3.6%	1.66	13.83	
41-4012	Sales Reps, Non-Technical and Scientific Products	521	3.5%	1.78	27.67	0.93
11-9013	Farmers, Ranchers, & Other Agricultural Managers	512	3.5%	0.49	32.08	1.56
53-7062	Laborers & Material Movers, Hand	439	3.0%	1.22	15.49	1.04
53-7064	Packers & Packagers, Hand	429	2.9%	1.10	14.66	
35-2021	Food Preparation Workers	414	2.8%	0.98	13.94	
53-3032	Heavy & Tractor-Trailer Truck Drivers	407	2.8%	1.71	25.14	
51-3011	Bakers	382	2.6%	1.53	14.63	1.05
51-3092	Food Batchmakers	341	2.3%	1.29	22.29	1.42
53-3031	Driver/Sales Workers	333	2.3%	1.85	17.97	1.34
43-4051	Customer Service Representatives	320	2.2%	1.21	16.67	0.97
45-2093	Farmworkers, Farm, Ranch, & Aquaculture	281	1.9%	0.89	14.99	
51-3021	Butchers & Meat Cutters	262	1.8%	1.07	18.26	
53-3033	Light Truck Drivers	212	1.4%	1.53	17.99	1.01
43-9061	Office Clerks, General	197	1.3%	1.46	17.76	
11-1021	General & Operations Managers	195	1.3%	1.00	41.98	0.85
51-9111	Packaging & Filling Machine Operators & Tenders	162	1.1%	0.49	15.16	0.97
41-9091	Door-to-Door Sales, News Vendors, & Street Vendors	160	1.1%	1.86	13.68	
45-2099	Agricultural Workers, All Other	148	1.0%	1.04	16.85	
53-1047	First-Line Supervisors of Transportation Workers	138	0.9%	1.14	26.63	

LQs & RELATIVE EARNINGS

BELOW AVG

ABOVE AVG

 ∇

Sources: US Bureau of Labor Statistics; Emsi 2020.3—QCEW Employees, Non-QCEW Employees, and Self-Employed; US Economic Development Administration; Institute for Strategy and Competitiveness at Harvard Business School; TIP Strategies.

Note: The cluster methodology developed at Harvard Business School has been adjusted by TIP Strategies to align with the six-digit NAICS classifications used by Emsi.



INDUSTRY TRENDS HEALTH & LIFE SCIENCES

TARGET SNAPSHOT

GREATER SPOKANE	TOTAL	TARGET
2020 Establishments	24,325	192
2020 Employment	339,676	27,916
Net Change, 2010–2020	+38,964	+2,136
Percent Change, 2010–2020	+13.0%	+8.3%

FIGURE 18. TARGET CONCENTRATION LOCATION QUOTIENT TREND

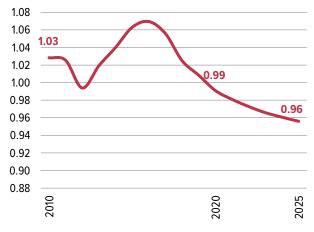


FIGURE 19. TARGET GROWTH

6%

- ANNUAL PERCENT CHANGE IN EMPLOYMENT
 - ---- Greater Spokane Health & Life Sciences
 - US Health & Life Sciences

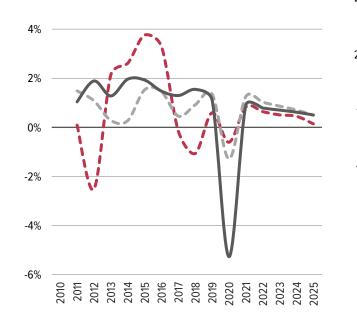


FIGURE 20. EMPLOYMENT OUTLOOK

US OVERALL	TOTAL	TARGET
Net Change, 2020–2025	+5,652,930	+580,546
Percent Change, 2020–2025	+3.6%	+4.4%
GREATER SPOKANE	TOTAL	TARGET
Net Change, 2020–2025	+18,646	+729

FIGURE 21. TARGET COMPONENTS ANNUAL EMPLOYMENT

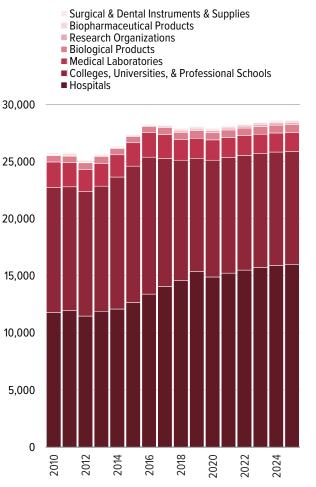


FIGURE 22. TARGET STAFFING PROFILE

STANDAR	TANDARD OCCUPATIONAL CLASSIFICATION EMPLOYMENT		EARNINGS			
					Local	Relative
		2020	% of	LQ	Hourly	to US
Code	Description	Jobs	Target	(US= 1.00)	Median	(US=1.00)
29-1141	Registered Nurses	4,887	17.5%	1.21	41.51	1.15
25-1099	Postsecondary Teachers	3,309	11.9%	0.91	30.88	0.84
31-1131	Nursing Assistants	923	3.3%	1.03	16.06	
29-2018	Clinical Laboratory Technologists & Technicians	898	3.2%	1.65	28.25	
43-9061	Office Clerks, General	858	3.1%	1.22	17.76	
43-6014	Secretaries & Administrative Assistants, All Other	633	2.3%	0.96	18.81	1.01
37-2011	Janitors & Cleaners, Except Maids & Housekeeping	550	2.0%	1.16	15.97	
43-4051	Customer Service Representatives	384	1.4%	1.42	16.67	0.97
11-9033	Education Administrators, Postsecondary	384	1.4%	1.00	47.35	1.02
29-2098	Medical Records & Health Technicians, All Other	364	1.3%	1.34	21.89	
27-2022	Coaches & Scouts	357	1.3%	2.48	16.75	0.95
29-1051	Pharmacists	335	1.2%	1.78	63.30	
29-2034	Radiologic Technologists & Technicians	331	1.2%	1.08	31.78	
29-2055	Surgical Technologists	303	1.1%	1.76	27.42	
29-1126	Respiratory Therapists	295	1.1%	1.25	34.58	
13-1198	Business Operations Specialists, All Other	287	1.0%	0.87	33.26	0.89
31-9092	Medical Assistants	283	1.0%	1.04	18.25	
11-9111	Medical & Health Services Managers	278	1.0%	0.81	46.27	0.93
43-1011	First-Line Supervisors, Office & Administrative	278	1.0%	1.07	27.47	
21-1012	Career Counselors & Advisors	275	1.0%	1.02	32.40	
29-1123	Physical Therapists	257	0.9%	1.79	39.06	0.90
43-6013	Medical Secretaries & Administrative Assistants	248	0.9%	0.64	18.39	1.02
43-4111	Interviewers, Except Eligibility & Loan	246	0.9%	1.18	18.09	
31-9097	Phlebotomists	244	0.9%	1.23	17.71	
37-2012	Maids & Housekeeping Cleaners	243	0.9%	1.07	13.71	

LQs & RELATIVE EARNINGS

BELOW AVG

ABOVE AVG

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Sources: US Bureau of Labor Statistics; Emsi 2020.3—QCEW Employees, Non-QCEW Employees, and Self-Employed; US Economic Development Administration; Institute for Strategy and Competitiveness at Harvard Business School; TIP Strategies.

Note: The cluster methodology developed at Harvard Business School has been adjusted by TIP Strategies to align with the six-digit NAICS classifications used by Emsi.



INDUSTRY TRENDS MANUFACTURING & MATERIALS

TARGET SNAPSHOT

GREATER SPOKANE	TOTAL	TARGET
2020 Establishments	24,325	313
2020 Employment	339,676	8,421
Net Change, 2010–2020	+38,964	+779
Percent Change, 2010–2020	+13.0%	+10.2%

FIGURE 23. TARGET CONCENTRATION LOCATION QUOTIENT TREND

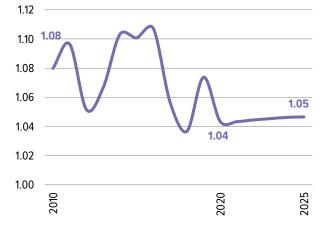


FIGURE 24. TARGET GROWTH

ANNUAL PERCENT CHANGE IN EMPLOYMENT



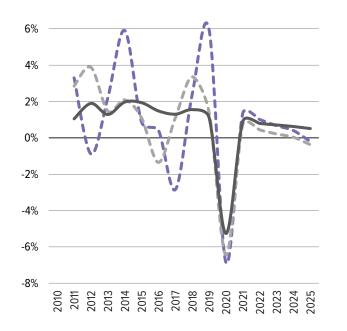


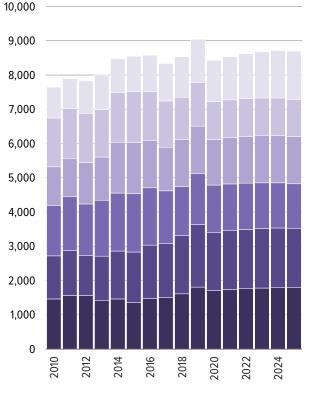
FIGURE 25. EMPLOYMENT OUTLOOK

US OVERALL	TOTAL	TARGET	
Net Change, 2020–2025	+5,652,930	+40,279	
Percent Change, 2020–2025	+3.6%	+1.1%	
GREATER SPOKANE	TOTAL	TARGET	
Net Change, 2020–2025	+18,646	+275	
Percent Change, 2020–2025	+5.5%	+3.3%	

FIGURE 26. TARGET COMPONENTS ANNUAL EMPLOYMENT

Metalworking Technology

- Production Technology & Heavy Machinery
- Downstream Metal Products
- Upstream Metal Mfg.
- Plastics
- Construction Products & Services



STANDAR	D OCCUPATIONAL CLASSIFICATION	E	MPLOYME	NT	EAR	NINGS
					Local	Relative
		2020	% of	LQ	Hourly	to US
Code	Description	Jobs	Target	(US= 1.00)	Median	(US=1.00)
51-2098	Miscellaneous Assemblers & Fabricators	574	6.9%	0.95	15.93	0.99
51-4041	Machinists	385	4.6%	1.43	20.34	0.93
51-1011	First-Line Supervisors, Production & Operations	373	4.4%	1.28	28.36	0.94
51-4072	Molding Machine Operators, Metal & Plastic	347	4.1%	1.72	18.27	1.15
51-4121	Welders, Cutters, Solderers, & Brazers	335	4.0%	0.97	21.07	1.00
51-2041	Structural Metal Fabricators & Fitters	251	3.0%	3.19	19.55	0.97
51-4031	Cutting & Press Machine Operators, Metal & Plastic	246	2.9%	1.22	17.09	0.96
47-2061	Construction Laborers	224	2.7%	0.80	17.69	1.02
53-7062	Laborers & Material Movers, Hand	207	2.5%	1.07	15.49	1.04
51-9061	Inspectors, Testers, Sorters, Samplers, & Weighers	183	2.2%	0.85	21.62	1.11
41-4012	Sales Reps, Non-Technical and Scientific Products	178	2.1%	1.13	27.67	0.93
49-9041	Industrial Machinery Mechanics	178	2.1%	1.14	25.03	0.94
43-5071	Shipping, Receiving, & Inventory Clerks	156	1.9%	1.08	17.20	1.02
43-9061	Office Clerks, General	154	1.8%	1.16	17.76	1.05
11-1021	General & Operations Managers	153	1.8%	0.96	41.98	0.85
51-9124	Coating, Painting, & Spraying Machine Operators	138	1.6%	1.57	17.75	0.95
51-4033	Grinding Machine Tool Operators, Metal & Plastic	135	1.6%	1.66	17.31	0.98
53-7064	Packers & Packagers, Hand	132	1.6%	1.61	14.66	1.09
49-9071	Maintenance & Repair Workers, General	130	1.6%	1.05	19.33	0.99
51-9161	Computer Numerically Controlled Tool Operators	112	1.3%	0.79	17.94	0.88
47-2031	Carpenters	111	1.3%	1.27	22.51	1.03
51-4193	Plating Machine Operators, Metal & Plastic	110	1.3%	1.68	16.21	0.97
51-4051	Metal-Refining Furnace Operators & Tenders	105	1.3%	4.19	23.68	1.10
17-2141	Mechanical Engineers	105	1.2%	0.82	41.39	0.95
51-4021	Extruding Machine Operators, Metal & Plastic	99	1.2%	0.82	21.91	1.21

LQs & RELATIVE EARNINGS

BELOW AVG

ABOVE AVG

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Sources: US Bureau of Labor Statistics; Emsi 2020.3—QCEW Employees, Non-QCEW Employees, and Self-Employed; US Economic Development Administration; Institute for Strategy and Competitiveness at Harvard Business School; TIP Strategies.

Note: The cluster methodology developed at Harvard Business School has been adjusted by TIP Strategies to align with the six-digit NAICS classifications used by Emsi.

FIGURE 27. TARGET STAFFING PROFILE



INDUSTRY TRENDS ENERGY **INFRASTRUCTURE & TECHNOLOGY**

TARGET SNAPSHOT

GREATER SPOKANE	TOTAL	TARGET
2020 Establishments	24,325	328
2020 Employment	339,676	4,678
Net Change, 2010–2020	+38,964	-177
Percent Change, 2010–2020	+13.0%	-3.6%

FIGURE 28. TARGET CONCENTRATION LOCATION QUOTIENT TREND



FIGURE 29. TARGET GROWTH

ANNUAL PERCENT CHANGE IN EMPLOYMENT

- ---- Greater Spokane Energy Infrastructure & Technology --- US - Energy Infrastructure & Technology
- US All Industries

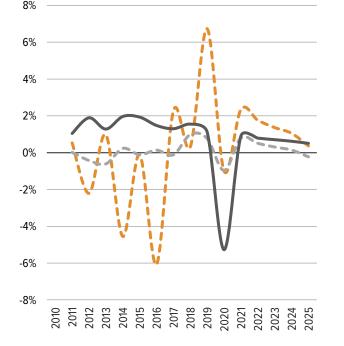


FIGURE 30. EMPLOYMENT OUTLOOK

US OVERALL	TOTAL	TARGET
Net Change, 2020–2025	+5,652,930	+49,582
Percent Change, 2020–2025	+3.6%	+1.5%
GREATER SPOKANE	TOTAL	TARGET
GREATER SPOKANE Net Change, 2020–2025	TOTAL +18,646	TARGET +330

FIGURE 31. TARGET COMPONENTS ANNUAL EMPLOYMENT

- Electric Power Generation & Transmission Lighting & Electrical Equip. Communications Equip. & Services Information Technology & Analytical Instruments

 - Local Utilities



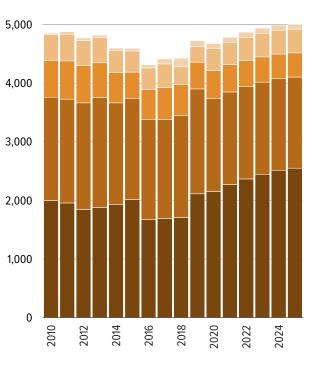


FIGURE 32. TARGET STAFFING PROFILE

STANDAR	D OCCUPATIONAL CLASSIFICATION	EMPLOYMENT		EAF	RNINGS	
					Local	Relative
		2020	% of	LQ	Hourly	to US
Code	Description	Jobs	Target	(US= 1.00)	Median	(US=1.00)
49-2022	Telecom Equipment Installers & Repairers	420	9.0%	2.22	23.08	0.79
51-2028	Electrical, Electronic, & Electromechanical Assemblers	251	5.4%	1.06	17.67	1.01
43-4051	Customer Service Representatives	250	5.4%	1.31	16.67	0.97
15-1256	Software Developers, Analysts, & Testers	248	5.3%	0.66	42.07	0.80
49-9051	Electrical Power-Line Installers & Repairers	163	3.5%	1.99	50.45	
51-9141	Semiconductor Processing Technicians	160	3.4%	3.78	17.52	0.90
41-3091	Sales Reps, Miscellaneous Services	119	2.5%	0.92	26.92	
49-9052	Telecommunications Line Installers & Repairers	117	2.5%	1.02	27.69	0.99
17-2071	Electrical Engineers	105	2.3%	1.36	48.39	1.00
11-1021	General & Operations Managers	101	2.2%	1.04	41.98	0.85
51-2098	Miscellaneous Assemblers & Fabricators	99	2.1%	1.05	15.93	0.99
17-2072	Electronics Engineers, Except Computer	93	2.0%	1.23	45.45	0.88
13-1198	Business Operations Specialists, All Other	92	2.0%	0.85	33.26	0.89
47-4071	Septic Tank Servicers & Sewer Pipe Cleaners	87	1.9%	6.02	18.86	0.96
17-3023	Electrical & Electronic Engineering Technicians	86	1.8%	1.73	31.96	
51-2021	Coil Winders, Tapers, & Finishers	75	1.6%	6.17	23.31	
15-1232	Computer User Support Specialists	74	1.6%	0.96	23.51	0.93
43-9061	Office Clerks, General	73	1.6%	1.43	17.76	1.05
53-3032	Heavy & Tractor-Trailer Truck Drivers	56	1.2%	1.77	25.14	
15-1231	Computer Network Support Specialists	56	1.2%	1.26	35.57	
51-1011	First-Line Supervisors, Production & Operations	51	1.1%	0.86	28.36	0.94
49-1011	First-Line Supervisors of Mechanics & Repairers	50	1.1%	0.91	34.35	1.02
43-1011	First-Line Supervisors, Office & Administrative	49	1.0%	1.05	27.47	0.98
53-7062	Laborers & Material Movers, Hand	49	1.0%	1.10	15.49	1.04
51-9061	Inspectors, Testers, Sorters, Samplers, & Weighers	44	0.9%	0.71	21.62	

LQs & RELATIVE EARNINGS

BELOW AVG

ABOVE AVG

Sources: US Bureau of Labor Statistics; Emsi 2020.3—QCEW Employees, Non-QCEW Employees, and Self-Employed; US Economic Development Administration; Institute for Strategy and Competitiveness at Harvard Business School; TIP Strategies.

Note: The cluster methodology developed at Harvard Business School has been adjusted by TIP Strategies to align with the six-digit NAICS classifications used by Emsi.



INDUSTRY TRENDS LOGISTICS

TARGET SNAPSHOT

GREATER SPOKANE	TOTAL	TARGET
2020 Establishments	24,325	601
2020 Employment	339,676	6,808
Net Change, 2010–2020	+38,964	+590
Percent Change, 2010–2020	+13.0%	+9.5%

FIGURE 33. TARGET CONCENTRATION LOCATION QUOTIENT TREND

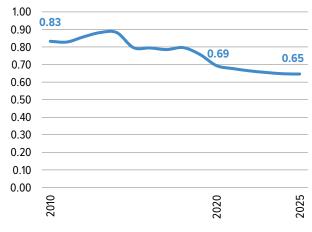


FIGURE 34. TARGET GROWTH

-8%

ANNUAL PERCENT CHANGE IN EMPLOYMENT

Greater Spokane - Logistics
 US - Logistics

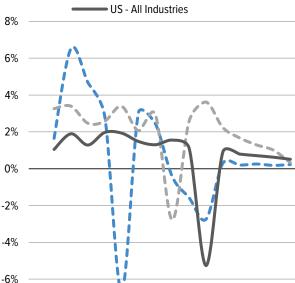


FIGURE 35. EMPLOYMENT OUTLOOK

US OVERALL	TOTAL	TARGET
Net Change, 2020–2025	+5,652,930	+305,335
Percent Change, 2020–2025	+3.6%	+6.7%
GREATER SPOKANE	TOTAL	TARGET
GREATER SPOKANE Net Change, 2020–2025	TOTAL +18,646	TARGET +78

FIGURE 36. TARGET COMPONENTS ANNUAL EMPLOYMENT

Warehousing & Storage
Electronic & Catalog Shopping
Wholesale of Industrial Machinery, Equip., & Supplies
Wholesale Trade Agents & Brokers
Freight Transport.
Wholesale of Professional & Commercial Equip. & Supplies
Trucking
8,000
7,000
6,000
5,000

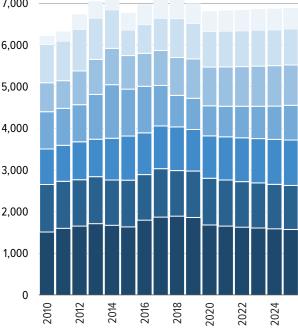


FIGURE 37. TARGET STAFFING PROFILE

STANDAR	D OCCUPATIONAL CLASSIFICATION	EMPLOYMENT		EARNINGS		
					Local	Relative
		2020	% of	LQ	Hourly	to US
Code	Description	Jobs	Target	(US= 1.00)	Median	(US=1.00)
53-3032	Heavy & Tractor-Trailer Truck Drivers	1,181	17.3%	1.41	25.14	
41-4012	Sales Reps, Non-Technical and Scientific Products	508	7.5%	1.21	27.67	
53-7062	Laborers & Material Movers, Hand	417	6.1%	0.57	15.49	
43-4051	Customer Service Representatives	296	4.3%	1.15	16.67	
43-9061	Office Clerks, General	196	2.9%	1.46	17.76	
53-7065	Stockers & Order Fillers	194	2.9%	0.39	15.24	
53-4031	Railroad Conductors & Yardmasters	192	2.8%	3.21	33.52	
53-4011	Locomotive Engineers	171	2.5%	3.22	40.52	
11-1021	General & Operations Managers	166	2.4%		41.98	0.85
41-2031	Retail Salespersons	147	2.2%	1.70	14.55	
53-3033	Light Truck Drivers	123	1.8%	1.12	17.99	1.01
43-5071	Shipping, Receiving, & Inventory Clerks	112	1.6%	0.64	17.20	
43-3031	Bookkeeping, Accounting, & Auditing Clerks	108	1.6%	1.39	19.71	
53-1047	First-Line Supervisors of Transportation Workers	100	1.5%	0.76	26.63	
49-3042	Mobile Heavy Equipment Mechanics, Except Engines	96	1.4%	2.04	28.02	
41-4011	Sales Reps, Technical and Scientific Products	94	1.4%	0.67	30.97	0.75
43-4151	Order Clerks	93	1.4%	1.51	17.44	
41-1011	First-Line Supervisors of Retail Sales Workers	93	1.4%	1.94	19.06	
49-3031	Bus & Truck Mechanics & Diesel Engine Specialists	91	1.3%	1.83	23.42	
15-1256	Software Developers, Analysts, & Testers	87	1.3%	0.88	42.07	0.80
43-1011	First-Line Supervisors, Office & Administrative	77	1.1%	0.85	27.47	
43-6014	Secretaries & Administrative Assistants, All Other	74	1.1%	1.17	18.81	
53-7064	Packers & Packagers, Hand	68	1.0%	0.47	14.66	
49-9041	Industrial Machinery Mechanics	67	1.0%	1.35	25.03	
13-1198	Business Operations Specialists, All Other	65	1.0%		33.26	0.89

LQs & RELATIVE EARNINGS

BELOW AVG

ABOVE AVG

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Sources: US Bureau of Labor Statistics; Emsi 2020.3—QCEW Employees, Non-QCEW Employees, and Self-Employed; US Economic Development Administration; Institute for Strategy and Competitiveness at Harvard Business School; TIP Strategies.

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