

SWPA Educational Index

Overview

A major portion of the Community Audit Grant was used to contract with the Corporation for a Skilled Workforce (CSW), to develop methods by which the Three Rivers Workforce Investment Board (TRWIB) and its partners could better monitor information on workforce supply and demand in the SWPA region. As part of this work, CSW developed the “SWPA educational index.” By comparing data available on the pipeline of individuals coming through education and training programs¹ in SWPA to the demand for workers in related occupations in the region², the “educational index” aims at predicting an “over-supply” or “under-supply” of trained individuals for the region’s occupations. Information about “over-supply” or “under-supply” is meant to be useful in:

- 1) Informing the decisions of individuals considering education and training opportunities;
- 2) Helping education and training institutions evaluate the programs they offer;
- 3) And, identifying characteristics of the workforce that could be used to market the region to new employers.

To create the “SWPA educational index” CSW:

- Obtained data on completers of education and training programs from the Pennsylvania Department of Labor and Industry’s Center for Workforce Information and Analysis (CWIA);
- Mapped each of these education and training programs by degree type to a specific occupational category;
- Validated this mapping in a session with approximately 40 representatives of local education and training programs;
- Developed a matrix comparing the number of trained individuals to demand for workers by occupation.

There are some challenges with the data that the TRWIB is working through to make this “educational index” more accurate for the applications mentioned above. For example, one major challenge is that comprehensive data about regional out-migration of the completers of these education and training programs or about regional in-migration of trained individuals is not readily available to factor into the supply-side of the equation. TRWIB staff has been working with representatives from Workforce Connections, CORO and the Center for Economic Development to develop a strategy for obtaining better data on student retention. TRWIB staff also plans to modify the educational index to factor annual openings into the analysis and to develop information about specific occupations that will be useful to customers of the CareerLink system. A summary of the “educational index” based on broad occupational categories is included on the following page.

¹ Measured through annual data about completers of education and training programs.

² Measured by total employment and projected annual growth.

Educational Index: Mapping Supply vs. Demand

	SWPA Completers (Supply)	2001 MSA Employment	SWPA Projected Annual Growth, 19980-2008	% of Total Supply	% of Total Demand	Difference, % of Supply vs. % of Demand	Supply / Annual Growth	Supply as % of Demand	Supply as % of Demand vs. Average Supply as % of Average Demand
Management Occupations	3,995	68,100	388	11.0%	6.3%	4.7%	10.3	5.9%	2.5%
Business and Financial Operations Occupations	2,206	33,490	103	6.1%	3.1%	3.0%	21.4	6.6%	3.2%
Computer and Mathematical Occupations	1,966	21,730	1,053	5.4%	2.0%	3.4%	1.9	9.0%	5.7%
Architecture and Engineering Occupations	2,396	22,860	80	6.6%	2.1%	4.5%	30.0	10.5%	7.1%
Life, Physical, and Social Science Occupations	5,233	9,400	36	14.4%	0.9%	13.5%	145.4	55.7%	52.3%
Community and Social Services Occupations	891	12,340	222	2.5%	1.1%	1.3%	4.0	7.2%	3.8%
Legal Occupations	506	8,600	113	1.4%	0.8%	0.6%	4.5	5.9%	2.5%
Education, Training, and Library Occupations	3,473	58,020	681	9.6%	5.4%	4.2%	5.1	6.0%	2.6%
Arts, Design, Entertainment, Sports, and Media Occupations	1,420	9,090	141	3.9%	0.8%	3.1%	10.1	15.6%	12.2%
Healthcare Practitioners and Technical Occupations	2,980	62,620	752	8.2%	5.8%	2.4%	4.0	4.8%	1.4%
Healthcare Support Occupations	933	29,700	452	2.6%	2.8%	-0.2%	2.1	3.1%	-0.2%
Protective Service Occupations	761	17,730	234	2.1%	1.6%	0.4%	3.3	4.3%	0.9%
Food Preparation and Serving Related Occupations	1,596	88,430	-10	4.4%	8.2%	-3.8%	-159.6	1.8%	-1.6%
Building and Grounds Cleaning and Maintenance Occupations	18	33,650	119	0.0%	3.1%	-3.1%	0.2	0.1%	-3.3%
Personal Care and Service Occupations	2,178	24,450	390	6.0%	2.3%	3.7%	5.6	8.9%	5.5%
Sales and Related Occupations	477	115,500	557	1.3%	10.7%	-9.4%	0.9	0.4%	-3.0%
Office and Administrative Support Occupations	1,551	201,260	-67	4.3%	18.7%	-14.4%	-23.1	0.8%	-2.6%
Farming, Fishing, and Forestry Occupations	8	480	0	0.0%	0.0%	0.0%	0.0	1.7%	-1.7%
Construction and Extraction Occupations	547	55,930	6	1.5%	5.2%	-3.7%	91.2	1.0%	-2.4%
Installation, Maintenance, and Repair Occupations	1,982	44,890	32	5.5%	4.2%	1.3%	61.9	4.4%	1.0%
Production Occupations	398	79,120	-231	1.1%	7.4%	-6.3%	-1.7	0.5%	-2.9%
Transportation and Material Moving Occupations	786	77,740	177	2.2%	7.2%	-5.1%	4.4	1.0%	-2.4%
Total	36,301	1,075,130						3.4%	

Data Source: 1999 program completers from PA Department of Education collected by the Center for Workforce Information and Analysis; Analysis conducted by the Corporation for a Skilled Workforce.