



Transferable Skills Index for Computer Support Specialists in Burlington, VT

Prepared for **Company X**

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What do you do?



Transferable Skills Analysis

Transferable skills are those abilities of job seekers in any one occupation that could be used to successfully perform the duties required in a different occupation. They are identified by a proprietary modeling technique developed by a third-party data provider Electronic Modeling Specialists, Inc. (EMSI).

Transferable skills analysis is used to identify other jobs, and therefore estimates of job seekers, who are most likely to have the skills necessary to do the work required for the selected occupations. Identifying the number of jobs requiring transferable skills enables one to make assumptions about an expanded labor pool. This is especially useful when considering relatively small markets that may appear to have low numbers of the selected occupations do to small levels of industry participation or demand for the selected occupations.

While the compatibility index score identifies overall compatibility based on skill, local market factors must also be considered to determine top source occupations for recruitment and up-skilling purposes. To identify the top transferable occupations, the following factors were taken into consideration:

1. Earnings must be at or below that of target occupation as higher paying individuals will not be motivated to transition into a lower paying occupation.
2. Growth within the sourced occupation must be either negative or not overly high. Job growth implies a high demand for the source occupation with initial difficulty to fill and would thus also be difficult to recruit into the target occupation.
3. Size of source occupation (based on number of jobs) should be over 500 for large metros or 100 at for small metros as that implies a larger labor pool from which to recruit for the target occupation.
4. The Job Zone of the source occupation should be within one level of the target occupation. The Job Zone is a system created by O*NET to classify how much preparation and education an occupation requires. Job Zones are scored with a number from 1 to 5 where 1 equals no education and little preparation while a 5 equals a high level of education, usually postgraduate, and an extensive amount of preparation.

For this analysis, the Burlington, VT Metropolitan Statistical Area (MSA), along with the surrounding counties, defines the region: Addison, Vermont (50001), Caledonia, Vermont (50005), Chittenden, Vermont (50007), Franklin, Vermont (50011), Grand Isle, Vermont (50013), Lamoille, Vermont (50015), Washington, Vermont (50023)

Compatible Jobs to Computer Support Specialists

Target Occupation	
O*NET Occupation	15-1041.00 - Computer Support Specialists
	Provide technical assistance to computer system users. Answer questions or resolve computer problems for clients in person, via telephone or from remote location. May provide assistance concerning the use of computer hardware and software, including printing, installation, word processing, electronic mail, and operating systems.
2009 Size	1,023 jobs
2009-2012 Job Change	39 jobs
2009 Hourly Earnings	\$19.61
Job Zone	3
Yearly Turnover	32

Source Occupations	
2009 Potential Labor Pool	3,654 jobs
2009-2012 Labor Pool Change	58 jobs
2009 Median Hourly Earnings	\$18.80
Average Job Zone	3

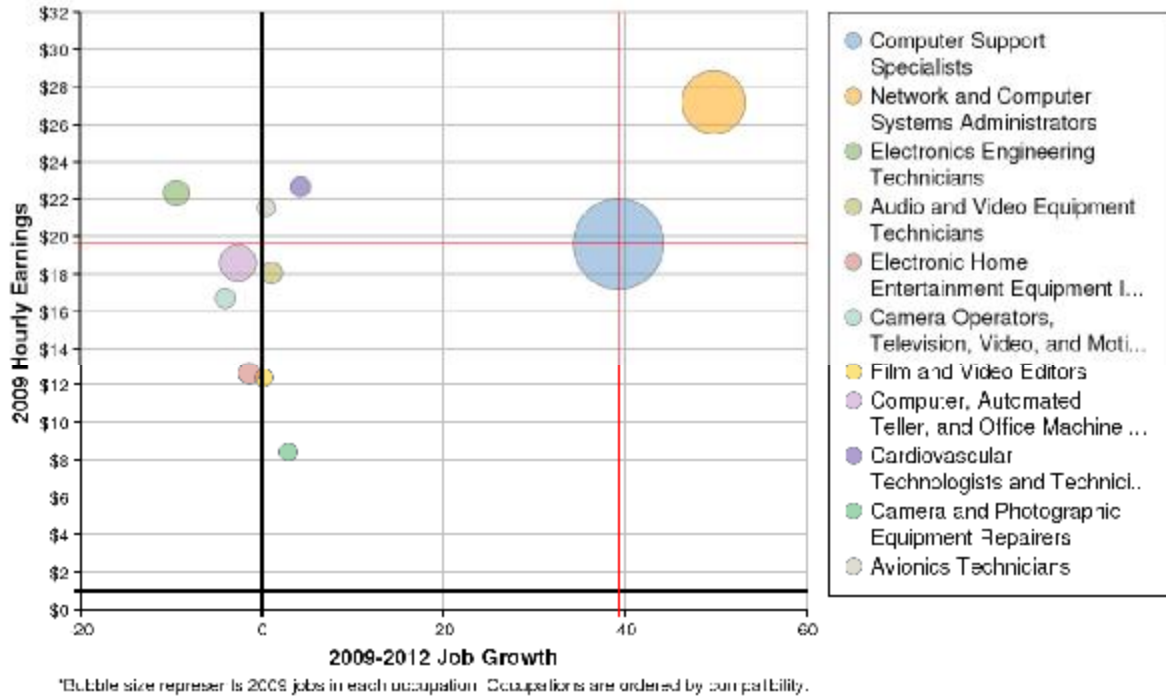
Source: EMSI Covered Employment - Spring 2009

Analysis:

As the number of Computer Support Specialists in the Burlington VT area is not extremely large and may not be able to support a large facility for the company, it may be beneficial to look at up-skilling several jobs that may be prevalent within the area. The above data indicates that the region houses a potential labor pool of 3,654 jobs, which are at least 90% compatible with the skills necessary to perform Computer Support duties. That figure includes the 1,023 Computer Support jobs currently within the region as well as the top 20 most compatible positions. Of these positions, the average earnings are slightly less than Computer Support wages and the Job Zone (education and experience) is equal overall, indicating that most of the compatible jobs are similar skilled, have similar education and preparation levels but are paid, on average, \$0.80 less.

The list on the next page outlines the most compatible jobs to Computer Support Specialists based on knowledge, skill and ability. Thus, Audio/Video Equipment Techs are 92% compatible based on skills. The tool also takes into account hourly pay rates as well as growth so when trying to estimate which job or jobs can be up-skilled to become a Computer Support Specialist, jobs which are also in high demand or those with higher pay rates are not chosen as recruiting will be an issue. Based on this premise, we can take a look at jobs such as Prepress Technicians and Camera Operators, as these jobs have a lower or similar wage to that of Computer Support Specialists and are not growing as fast as other jobs, indicating that there may be a supply of these positions. Additionally, there are a larger number of these jobs to pull from than others.

Compatible Occupations – Computer Support Specialists



O*NET Code	Title	2009 Jobs	2009-2012 Growth	2009 Hourly Earnings	Yearly Turnover	Compatibility Index
15-1041.00	Computer Support Specialists	1,023	39	\$19.61	32	100
17-3023.01*	Electronics Engineering Technicians*	122	-9	\$22.37	2	93
27-4011.00	Audio and Video Equipment Technicians	61	1	\$18.09	2	92
49-2097.00	Electronic Equipment Installers/Repairers	75	-1	\$12.68	0	91
27-4031.00	Camera Operators	38	-4	\$16.75	0	91
27-4032.00	Film and Video Editors	18	0	\$12.43	0	91
49-2011.00	Computer, ATM, and Office Machine Repairers	268	-3	\$18.61	2	91
29-2031.00	Cardiovascular Technologists and Technicians	41	4	\$22.70	1	91
49-2091.00	Avionics Technicians	13	0	\$21.58	0	91
51-5022.00	Prepress Technicians and Workers	93	-14	\$17.88	3	91
27-4012.00	Broadcast Technicians	72	-6	\$9.73	2	91
17-3031.02*	Mapping Technicians*	84	1	\$14.93	1	90
25-4031.00	Library Technicians	241	4	\$13.18	11	90
11-3021.00	Computer and Information Systems Managers	274	13	\$40.14	4	90
53-2022.00	Airfield Operations Specialists	12	0	\$17.94	0	90

Source: EMSI Covered Employment - Spring 2009

* The selected O*NET occupation does not map directly to SOC labor market data. For this reason, jobs, earnings, and growth data for this occupation include other, related O*NET occupations. These numbers, therefore, should be seen as estimates only - the jobs and job change values are probably overstated.

Data Sources and Calculations

Compatible Skills Data

In order to capture a complete picture of industry employment, Manpower's partner company combines covered employment data from Quarterly Census of Employment and Wages (QCEW) produced by the Department of Labor with total employment data in Regional Economic Information System (REIS) published by the Bureau of Economic Analysis (BEA), augmented with County Business Patterns (CBP) and Nonemployer Statistics (NES) published by the U.S. Census Bureau. Projections are based on the latest available industry data, 15-year past local trends in each industry, growth rates in statewide and (where available) sub-state area industry projections published by individual state agencies, and (in part) growth rates in national projections from the Bureau of Labor Statistics.

Compatibility Calculations

The Compatible Skills Index calculates the compatibility of occupations by comparing their O*NET competency profiles, which include three categories: knowledge, skills and abilities. *Knowledge* refers to academic attainment in various subjects such as math, science, biology, English, and so on. *Skills* refer to areas of applied and experiential knowledge, such as "time management," "reading comprehension," or "critical thinking." *Abilities* are cognitive, physical, and psychomotor competencies that are more basic, enduring, and possibly innate, such as "inductive reasoning," "speech clarity," "near vision," and "gross body coordination". The index contains two scores for each competency element (e.g. Biology knowledge): the attainment level and the importance level. The calculation uses the differences between competency levels, weighted by importance levels, to determine the compatibility of occupations. The following assumptions are made in the calculation:

- Ø The O*NET categories of Knowledge, Skills, and Abilities are sufficient to determine compatibility between occupations.
- Ø The desirability of transitioning workers from one occupation to another decreases exponentially as the distance increases between a source occupation's O*NET score in one category and the target occupation's score in that category.
- Ø Over-qualification is just as much of a problem as under-qualification for a worker moving from one job to another.

The compatibility formula first adds up squared differences in every competency category and weights each difference according to its importance to the target occupation's job requirements. This number is the competency divergence. Only occupations with a divergence in the lowest quartile are considered compatible, and the maximum divergence number is used to create the scale of the compatibility index, which is a number from 0 (not compatible) to 100 (perfectly compatible).

Process for Evaluating Most Compatible Occupations

This section of the analysis calculates the most compatible source occupations to each of the specified target occupations identified by Ameritox. The calculation is based on the compatibility index score of 85 or better for each compatible source occupation to the target occupation based on O*NET skill and knowledge profiles. The score reflects the level of compatibility (0 is not compatible and 100 is perfectly compatible) and takes into account the levels and importance of skills and knowledges inherent to each job (see the Data and Calculations page for in depth review of this process).

While the compatibility index score identifies overall compatibility based on skill, local market factors must also be considered to determine top source occupations for recruitment and upskilling purposes. To identify the top three source occupations for each Ameritox target occupation, the following factors were taken into consideration:

1. Earnings must be at or below that of target occupation as higher paying individuals will not be motivated to transition into a lower paying occupation.
2. Growth within the sourced occupation must be either negative or not overly high. Job growth implies a high demand for the source occupation with initial difficulty to fill and would thus also be difficult to recruit into the target occupation.
3. Size of source occupation should be over 500 jobs for large metros or 100 jobs for small metros as that implies a larger labor pool from which to recruit for the target occupation.
4. The Job Zone of the source occupation should be within one level of the target occupation. The Job Zone is a system created by O*NET to classify how much preparation and education an occupation requires. Job Zones are scored with a number from 1 to 5 where 1 equals no education and little preparation while a 5 equals a high level of education, usually postgraduate, and an extensive amount of preparation.