

# WHAT DO ONLINE JOB POSTINGS REVEAL ABOUT THE YORK REGION & BRADFORD WEST GWILLIMBURY'S LABOUR MARKET?



OF YORK REGION & BRADFORD WEST GWILLIMBURY

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### INTRODUCTION

When it comes to the labour market, a lot of effort is placed on improving the supply-side of the labour market equation, through encouraging individuals to reach higher levels of education, develop vocational skills and acquire the kinds of soft skills that are necessary in today's workplace. In addition, we gather considerable information about the supply-side, assembling demographic data about the employed and the unemployed, by age, gender, educational attainment, field of study, and so on. However, we often lack detailed information regarding the demand-side, especially at a local level. More than anything, job seekers, educators and career counsellors wish to know what jobs are available, with as much detail about those jobs as possible.

Starting in 2011, Statistics Canada began collecting data on labour demand, producing a count of vacant positions and job vacancy ratios by industry (number of vacancies per number of jobs). However, these Job Vacancy statistics were only available at the national and provincial levels and for very broad industry categories. More recently, Statistics Canada introduced an improved measurement, the Job Vacancy and Wage Survey, which provides far more detailed industry and occupation data. The data is available at the Economic Region level (in the case of York Region, this means the Toronto Economic Region, which covers York Region, Durham Region, the City of Toronto, Peel Region, and Halton Region minus the City of Burlington).

As useful as these improvements have been, they still do not tell us much about specific job openings in York Region and Bradford West Gwillimbury. However, there are other ways to access such information. One approach is to engage in intensive surveying of employers, asking them questions regarding their current openings. Another approach involves making use of commercial services that collect all the local job postings that are posted online for a given area.

The latter strategy is what the Workforce Planning Board of York Region and Bradford West Gwillimbury undertook. The Workforce Planning Board of York Region and BWG purchased a data set from job boards that collected information on online job postings about jobs located in York Region or Bradford West Gwillimbury. This data was acquired for two quarters, the second and third quarters of 2015.

The report analyzes this data and seeks to answer five questions:

- 1) How representative might the online job board data be of all local job openings?
- 2) How do the online job board openings compare in terms of the level of education required to fill that job?
- 3) How do the local job openings match the education profile of local residents?
- 4) What else does this data tell us about the job openings posted online?
- 5) How do these job postings match up with the career aspirations of local youth?

### HOW REPRESENTATIVE ARE ONLINE JOB POSTINGS OF ALL JOB OPENINGS?

The online job data represents a very large data set. Data analysis indicates that there were 26,751 job openings in Quarter 2 and 26,509 job openings in Quarter 3. It is likely that some job postings in Quarter 2 are the same as in Quarter 3. Although this might be considered duplication, it reflects the job openings as they existed in each quarter.

The Job Vacancy and Wage Survey collects information from employers about what methods they use to recruit new employees. Overall, in Ontario, around two-thirds of employers make use of online job boards when recruiting (this data is only available at the provincial level; 68% represents the average response over Quarters 2, 3 and 4 in 2015). This gives us considerable comfort that data from online job boards provides a healthy sample of what is happening in the job market.

It also appears that there is only limited variation in the reliance on job boards when one analyzes the data from the Job Vacancy and Wage Survey by occupation. Table 1 shows the proportion of job openings that are publicized via online job boards in 2015 in Ontario (the figures are the average for Quarters 2, 3 and 4).

Table 1: Percentage of job openings advertised through online job boards by main occupational categories, average for Quarters 2, 3 and 4, 2015, Ontario

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	Management occupations	Business, finance and administration	Natural and applied sciences occupations	Health occupations	Education, law and social, government	Sales and service occupations	Trades, transport and equipment operators	Natural resources, agriculture	Manufacturing and utilities occupations
Online job boards	75%	71%	77%	64%	67%	64%	66%	68%	65%

Note: These are the standard occupational categories used in the National Occupational Classification. Management occupations have their own distinct category.

Table 1 indicates that there is little variation in the use of online job boards by occupation, from a high of 77% (Natural & Applied Sciences Occupations) to a low of 64% (Health Occupations and Sales & Service Occupations). When reviewing the online job board numbers, the data listed for each job posting varies considerably. The acquired data set had information for the occupation being posted (categorized by the National Occupational Classification), the job type (for example: permanent or temporary; full-time or part-time), the municipality in which the job was located, the date when the job was posted, and the job board where the job was posted. Almost all job postings had a job title or name. Far fewer job postings listed the industry in which the job could be found or what qualifications were expected for the job, in terms of certifications, hard skills and/or soft skills.

How can we determine the degree to which this job board data represents all job openings in the local area? One way is to compare the distribution of job openings by major occupational categories to other data sets for the distribution of occupations.

Table 2 presents the combined job postings for Quarters 2 and 3. This distribution is compared to two data sets: the actual distribution of all jobs by occupational category for York Region and Bradford West Gwillimbury in 2011 and the distribution of all vacant jobs by occupational category for the Toronto Economic Region in 2015.

Table 2: Percentage distribution by occupational categories of job postings, actual jobs and job vacancies, by occupational categories

	Management occupations	Business, finance, administration	Natural and applied sciences	Health occupations	Education, law, social, government	Art, culture, recreation and sport	Sales and service occupations	Trades, transport, equipment operators	Primary occupations (natural resources)	Manufacturing + Utilities occupations
ALL POSTINGS	5.4%	15.9%	10.0%	5.2%	6.7%	1.7%	28.4%	18.8%	0.8%	7.2%
ACTUAL 2011	13.4%	19.1%	9.6%	4.1%	10.1%	2.6%	24.1%	9.4%	0.9%	6.8%
VACANCIES 2015	8.5%	15.6%	9.1%	3.9%	5.2%	2.0%	37.1%	11.8%	2.1%	4.7%

Note: The formal names for many of the occupational categories are much longer, but have been abbreviated to fit into the tables.

As would be expected, the distribution by occupational categories of the job postings more closely follows the job vacancy data as opposed to the actual jobs. Certain jobs have higher rates of turnover and so there would be more vacancies. This is especially clear in the case of Sales and Service Occupations, which make up 37.1% of all job vacancies, but only 24.1% of the jobs present in the local area.

Job postings, especially in the Trades, Transport and Equipment Operators and Related Occupations field are more likely to be posted online, at a rate even greater than their share of job vacancies. Evidently, employers seeking job candidates for these occupations make greater use of online job boards. This is a field where a job candidate is more likely to be evaluated on the basis of a specific credential or certificate and a requisite amount of work experience. On the other hand, the opposite situation arises with respect to Management Occupations: not only are they less likely to be vacant (8.5%) compared to their share of all jobs (13.4%), they are also less likely to be posted online (5.4%). It is possible that employers rely on other recruitment methods to seek out candidates for management positions, by either posting internally or going through an executive search firm. Job openings in the Sales and Services Occupations are less likely to be posted online, the most likely reason is that employers rely on other methods such as window postings or word of mouth for retail salespersons, food servers or food counter attendants. Another way to assess how representative the online job board data might be is by examining the distribution of job openings by industry sectors.

A considerably smaller portion of job openings have an identified industry category, being slightly more than one out of five (24% in Quarter 2 and 21% in Quarter 3).

Table 3 provides the breakdown of the classified job postings by industry category for each of Quarters 2 and 3 and compares it to the distribution of actual jobs in 2011.

Table 3: Percentage distribution by industry of job postings for Quarters 2 and 3, 2015 and actual jobs, 2011, York Region and Bradford West Gwillimbury

	Q2 Job Postings	Q3 Job Postings	Actual Jobs
Agriculture, forestry, fishing and hunting	0.0%	0.0%	0.6%
Mining, quarrying, and oil and gas extraction	0.0%	0.0%	0.1%
Utilities	0.1%	0.0%	0.4%
Construction	4.4%	4.5%	5.0%
Manufacturing	16.5%	16.2%	14.6%
Wholesale trade	10.0%	9.7%	9.3%
Retail trade	15.3%	17.5%	13.0%
Transportation and warehousing	2.4%	2.4%	3.2%
Information and cultural industries	2.1%	1.7%	2.3%
Finance and insurance	4.8%	2.7%	5.3%
Real estate and rental and leasing	2.1%	1.5%	2.4%
Professional, scientific and technical services	9.3%	8.7%	10.7%
Management of companies and enterprises	0.2%	0.3%	0.2%
Administrative and support, waste management	13.2%	16.0%	3.6%
Educational services	1.6%	1.4%	6.7%
Health care and social assistance	6.7%	4.8%	7.4%
Arts, entertainment and recreation	1.6%	1.9%	2.0%
Accommodation and food services	3.5%	5.2%	5.5%
Other services (except public administration)	2.7%	3.4%	4.5%
Public administration	3.6%	2.1%	3.0%

By far, the greatest discrepancy in terms of industry categories between the job postings and actual jobs is found in the Administrative and Support, Waste Management and Remediation Services<sup>1</sup> (this industry makes up 3.6% of actual jobs, while in Quarter 3 it made up 16.0% of all job postings). When these job postings are examined by detailed industry sub-category, it turns out that a considerable majority of these postings are found among Employment Placement Agencies and Executive Search Services. This is curious for the following reason: if a position is posted by a temp agency, the individual, even when placed with a client, remains an employee of the temp agency. For that reason, one would expect the industry classification of the occupation to be in Administrative and Support. But in the case of Employment Placement Agencies and Executive Search Services, these operations are acting on behalf of a client who themselves would be hiring the job seeker and so one would have expected the industry classification to be that of the client, not the agency. One possible explanation is that these agencies are seeking to assemble a stable of potential job seekers that would meet the needs of their clients.

How representative are the online job postings of all job openings? The online job board data is not drastically outof-portion in terms of occupational categories compared to actual job vacancy data. There are two notable discrepancies: a smaller proportion of Sales and Services Occupations compensated by a larger proportion of jobs among Trades, Transport and Equipment Operators and Related Occupations. The next biggest discrepancy is the proportionally smaller share of Management Occupations among the job postings.

When examined in comparison to industry categories, the job postings have a higher proportion of listings in the Administrative and Support sector. Other than that, there is a smaller proportion of job listings among Educational Services, and slightly higher proportions of job listings in Manufacturing and in Retail Trade.

The online job board data does not perfectly match the actual job openings available, but it comes close, thus providing intelligence about the job categories that may be somewhat over or under-represented.

<sup>&</sup>lt;sup>1</sup> The full occupation name has been abbreviated in the table.

## 2. HOW DO THE ONLINE JOB BOARD OPENINGS COMPARE IN TERMS OF THE LEVEL OF EDUCATION REQUIRED TO PERFORM THAT JOB?

The National Occupational Classification identifies the typical level of education usually required for a given job. It establishes five levels of jobs according to these criteria:

- Management occupations, typically requiring a university degree
- Jobs usually requiring a university degree
- Jobs usually requiring a college diploma or a trades certificate
- Jobs usually requiring a high school diploma or occupation-specific training
- Jobs usually relying on on-the-job training.

At first glance it may appear unusual that there are two categories of jobs that each require a university degree: Management occupations versus other jobs usually requiring a university degree. On the other hand, this does allow us to distinguish two separate categories and to see whether one or the other of these categories has different characteristics when it comes to job vacancies and how these are posted. Using these categories, we can make comparisons against a number of different benchmarks.

Table 4 illustrates the percentage distribution of these online job board postings by educational requirements. For comparison, Table 4 also includes two points of reference:

- 1) The distribution by education level of jobs located in the York Region + Bradford West Gwillimbury area according to the 2011 National Household Survey;
- 2) The distribution by education level of vacant jobs in the Toronto Economic Region.<sup>2</sup>

Table 4: Percentage distribution of jobs by level of education required for that job, actual jobs, vacant jobs and job postings

Level of education required for job	Actual Jobs 2011	Toronto Economic Region Vacant jobs Q1+Q2+Q3, 2015	Job postings Q2+Q3, 2015
Management	13.4%	8.2%	5.4%
University	18.5%	16.7%	12.0%
College or Trade	29.0%	24.9%	36.5%
High School	29.7%	31.9%	34.5%
None	9.4%	18.3%	11.7%

<sup>&</sup>lt;sup>2</sup> This data is from Statistics Canada's Job Vacancy and Wage Survey. As noted earlier, the Toronto Economic Region represents the City of Toronto, and the Regions of York, Durham, Peel and Halton (minus Burlington). The vacant job data represents the average figures across the first three quarters of 2015. This is not a precise comparison, but it is a close comparison.

Comparing the percentage distribution of jobs by the level of education required for that job shows a fair amount of similarity across actual jobs, vacant jobs and job postings. It is where these figures are different that we can propose some explanations.

The vacant jobs data is more reflective of the actual jobs distribution, except in two categories: management positions and those jobs that do not require an educational certificate. In the case of management jobs, it is likely that there are fewer turnovers among management jobs, while in the case of jobs requiring no certificate, there is likely more turnover. The discrepancy in relation to jobs requiring a college diploma or a trade's certificate might also suggest fewer turnovers.

The job posting data should reflect the job vacancy data, but even here there are discrepancies, notably fewer postings for jobs requiring no educational certificate (11.7% of the postings and 18.3% of the vacancies), likely because, as previously noted, many of these jobs can easily be advertised by a sign in the window of the establishment or by word-of-mouth. There are also fewer management positions posted (5.4% of the postings compared to 8.2% of the vacancies), likely because employers rely on other means to recruit management, such as executive search firms.

Jobs requiring a college diploma or a trade's certificate make up the majority of postings as compared to jobs at the other two ends of the education range.

## 3. HOW DO THE LOCAL JOB OPENINGS MATCH THE EDUCATION PROFILE OF LOCAL RESIDENTS?

How well do local residents match up with local job vacancies, as far as levels of educational attainment? Before we answer that question, let us first look at the education levels of residents and see how that compares to the jobs that are actually present in York Region and Bradford West Gwillimbury.

Table 5 displays the educational attainment levels of residents that are in the labour force (i.e. either employed or else unemployed and looking for work), as well as only residents that are employed. These figures are compared with the level of education required for the jobs that are present locally. The geography for Table 5 is York Region and Bradford West Gwillimbury, and the timeframe is 2011.

Table 5: Percentage distribution of jobs by level of education required and distribution of labour force and of employed residents by educational attainment, York Region and Bradford West Gwillimbury, 2011

LEVEL OF EDUCATION REQ	R JOB	LEVEL OF EDUCATIONAL ATTAINMENT				
	Percent	of actual	Resid			
	Jobs 2011		Percent of labour force	Percent of employed		
Management	13.4%				University	
University	18.5%	31.9%	41.7%	42.5%		
College or Trade		29.0%	26.0%	26.5%	College or trade	
High School		29.7%	23.5%	22.6%	High school	
None		9.4%	8.8%	8.3%	No certificate	

By either measure, be it the labour force or only residents who are employed, it appears that residents of York Region and Bradford West Gwillimbury have higher levels of educational attainment than the jobs present in the same area require. In particular, the largest discrepancy is among jobs that would require a university education. Management jobs and jobs that typically required a university education made up 31.9% of all jobs in 2011. Meanwhile, the proportion of residents with a university education was considerably higher: among the labour force, the figure was 41.7%, and among the employed, it was 42.5%.

On the other hand, the proportion of residents that have a college diploma, a trade's certificate, a high school diploma or no certificate is smaller than the proportion of jobs for each of these levels of education. This would result in one of two outcomes: university-educated local residents are taking local jobs that are below their level of educational achievement, or else they are commuting outside the region for employment, and these lower-level jobs in the region are being filled by commuters coming from outside the area. While the numbers are different, the same pattern holds when we compare job openings and the unemployed.

Table 6 presents the job vacancy data (both the job vacancies for the Toronto Economic Region and the job postings for York Region and Bradford West Gwillimbury, each for 2015) and the educational attainment levels of unemployed local residents (this figure is from the 2011 census, however, it is not likely that there would be a great change in the distribution of unemployed by education).

Table 6: Distribution of job openings (job vacancies and job postings, 2015) and distribution of the unemployed (2011)

LEVEL OF EDU	JCATION R	LEVEL OF EDUC	ATIONAL ATTAINMENT					
	Percent of job vacancies		Percent of job postings		Percent of unemployed			
Management	8.2%	24.9%	5.4%	17.4%	31.0%	University		
University	16.7%		12.0%					
College or Trade		24.9%		24.9%		36.5%	20.1%	College or trade
High School	31.9%			34.5%	34.0%	High school		
None		18.3%	11.7%		14.9%	No certificate		

The proportion of job openings requiring a university education, both across the broader Toronto Economic Region, or York Region and Bradford West Gwillimbury, is considerably below the proportion of unemployed local residents who have a university education for both vacancies. It is especially so for the job postings data, at 17.4%.

# 4. WHAT ELSE DOES THIS DATA TELL US ABOUT THE JOB OPENINGS POSTED ONLINE?

The online job posting data provides several other insights. We will elaborate on three features:

- 1) What type of employment is being offered to job seekers?
- 2) What soft skills are employers looking for?
- 3) How do specific online job boards differ in the kinds of occupations that are posted with them?

## Type of employment

Jobs come in many forms: permanent or temporary, full-time or part-time, contract, internship, and a dizzying array of different combinations of these variables – for example, there are job postings for "temporary, contract, internship, full-time."

Table 7 illustrates the most common types of employment posting for each of the two quarters and their share of the total postings. Permanent, Full-Time jobs dominate the postings, accounting for at least seven out of ten jobs in each of the two quarters. Permanent Part-Time jobs are the second largest category, accounting for roughly one out of eight job postings. One category, Permanent, Full-Time, Part-Time (it may be that these jobs vary from being part-time to being full-time, depending on the season), straddles these two categories, and account for another 4.5-4.7% of the postings.

Table 7: Types of employment posted, Q2 and Q3, 2015

_	NUN	ИBER	PER (	CENT
	Q2	Q3	Q2	Q3
Permanent, Full-Time	19,357	18,693	72.4%	70.5%
Permanent, Part-Time	3,319	3,441	12.4%	13.0%
Permanent, Full-Time, Part-Time	1,210	1,234	4.5%	4.7%
Temporary, Full-Time	964	1,039	3.6%	3.9%
Contract, Full-Time	777	787	2.9%	3.0%
SUB-TOTAL	25,627	25,194	95.8%	95.1%
TOTAL POSTINGS	26,751	26,509	100.0%	100.0%

The majority of jobs posted in Q2 and Q3 are permanent full-time at 72.4% and 70.5% respectively.

### What soft skills are employers looking for?

The online job postings sometimes include reference to the soft skills that are a desirable qualification for the position. Taking the two quarters of data, around six in ten (59%) of the job postings reference at least one (and often more than one) soft skill that is part of the expected package of qualifications. Not all of the selected items truly qualify as soft skills. Some, such as "Marketing" or "Microsoft Office" really qualify as a hard skill.

Table 8 lists the top ten soft skills, together with the percentage of times that skill is mentioned in a job posting (but only among those postings that cite a soft skill). As well, several of the hard skills that were in the same percentage range are also including at the bottom of the table.

Table 8: Prominent soft skills sought by employers (and a few hard skills)

Soft skills	Percent	
Oral and written communication skills	28%	
Detail oriented	23%	
Problem solving	21%	
Soft skills	Percent	
Customer service oriented	12%	
Critical thinking	10%	
Numeracy	10%	
Self-starting / Self-motivated	9%	
Work independently	8%	
Time management	7%	
Continuous learning	7%	
Hard skills	Percent	
Marketing	13%	
Microsoft Office	12%	
Sales and operations planning	10%	

The responses can be grouped into several clusters. A set of highly-demanded soft skills (at least one in five employers selecting them) is led by *oral and written communication skills* followed by *detail oriented* and *problem solving*.

Next, considerably further back is another set of skills: *customer service oriented*, *critical thinking* and *numeracy* (the latter was included in the soft skills category as part of the essential skills related to employment). Finally, a further cluster, not far behind the second-tier of expected soft skills, includes *self-starting/self-motivated*, *work independently*, *time management* and *continuous learning*.

Almost all of these skills involve a certain degree of *self-management* – figuring things out with limited direction from others and learning on one's own, together with two outward-facing soft skills: *oral and written communication skills* and *customer service oriented*. Three hard skills that were in the same range as the second-tier cluster of soft skills were: *marketing, Microsoft Office*, and *sales and operations planning*.

Communications skills, attention to detail and the ability to problem solve are the most preferred soft skills by employers.

#### Which job boards are used for different kinds of occupations?

Quite a number of online job boards are used to collect the information for the data set analyzed in this report. The results for Quarter 2 were used to analyze whether there was a difference in the profile of occupations posted on the more prominent job boards. Table 9 lists the seven most frequently used online job boards that were part of this analysis.

Table 9: Job boards with the most individual job postings, Quarter 2

Job board	Number of postings	Percent of all postings
Craigslist	2,773	10.4%
Eluta	3,070	11.5%
JobBank.gc.ca	3,253	12.2%
Kijiji	9,499	35.5%
LinkedIn	4,225	15.8%
Monster	985	3.7%
Workopolis	2,644	9.9%

Kijiji is by far the job board used most frequently by employers posting jobs, accounting for slightly over a third (35.5%) of all jobs posted. It should be noted that many of the jobs end up being posted on more than one board. What occupations get posted on which online job boards varies.

Table 10 displays the job postings results by major occupational categories. The figures represent the greater or lesser likelihood of that occupational category using a particular job board compared to that job board's average usage. For example, if a particular occupational category is twice as likely to be posted on Job Board A than that job board's share of all postings, the value would be 2.0. If an occupational category is half as likely to be posted on Job Board A, then the value is 0.5.

Table 10: Likelihood of posting on a job board, by occupational category, Quarter 2

	Craigslist	Eluta	JobBank.gc.ca	Kijiji	LinkedIn	Monster	Workopolis
Management occupations	0.42	2.20	0.44	0.33	<u>2.16</u>	1.76	1.78
Business, finance and administration occupations	0.88	1.16	0.74	0.75	1.37	1.31	1.63
Natural and applied sciences and related occupations	0.57	1.81	0.77	0.65	1.61	2.15	1.25
Health occupations	0.74	1.45	0.92	1.43	0.51	0.08	0.72
Occupations in education, law, social, community, government	0.89	0.83	2.03	0.99	0.74	<u>0.34</u>	0.56
Occupations in art, culture, recreation and sport	1.44	0.81	1.21	1.02	0.86	0.80	<u>0.46</u>
Sales and service occupations	1.07	1.02	0.64	1.16	0.84	0.94	0.99
Trades, transport, equipment operators and related occupations	1.08	0.23	1.41	1.36	0.57	<u>0.36</u>	<u>0.47</u>
Natural resources, agriculture and related occupations	0.60	0.29	1.54	1.73	0.30	0.00	0.24
Occupations in manufacturing and utilities	2.24	<u>0.16</u>	1.85	0.78	0.61	1.12	0.68

Note: Green represents values greater than 2.0 and orange represents values less than 0.5.

Regardless of their total number of job postings, there is a greater likelihood that the following boards would have a higher concentration of postings among these occupational categories:

- Craigslist: jobs in manufacturing and utilities
- Eluta: management occupations
- JobBank.gc.ca: occupations in education, law and social, community and government services;
- LinkedIn: management occupations
- Monster: Natural and applied sciences and related occupations

Similarly, the following occupations are represented in smaller proportions on these job boards:

- Management occupations: Craigslist; JobBank.gc.ca; Kijiji
- Health occupations: Monster
- · Occupations in education, law and social, community and government services: Monster
- Occupations in art, culture, recreation and sport: Workopolis
- Trades, transport, equipment operators and related occupations: Eluta; Monster; Workopolis
- Natural resources, agriculture and related occupations: Eluta; LinkedIn; Monster; Workopolis
- Occupations in manufacturing and utilities: Eluta

The same kind of analysis can be done sorting the job boards by the education-level typically expected of the occupation being posted.

Table 11: Likelihood of posting on a job board, by education-level required for the occupation, Quarter 2

	Craigslist	Eluta	JobBank.gc.ca	Kijiji	LinkedIn	Monster	Workopolis
Occupations requiring a university degree (including management)	0.52	<u>2.24</u>	<u>0.50</u>	0.39	1.96	1.97	1.64
Occupations requiring a college diploma or trades certificate	0.89	0.94	1.11	1.05	0.84	0.85	0.90
Occupations requiring a high school diploma	1.22	0.60	1.23	1.10	0.79	0.81	0.92
No certificate required	1.58	<u>0.17</u>	0.81	1.62	<u>0.44</u>	<u>0.34</u>	<u>0.46</u>

There is a certain amount of polarization among the kinds of jobs posted by job board:

- Eluta has a considerably higher proportion of jobs that require a university degree (and LinkedIn and Monster are also very close to the 2.0 cut-off); meanwhile, JobBank.gc.ca and Kijiji have a considerably lower proportion of such jobs, and Craigslist is also very close to the 0.5 cut-off;
- A much smaller proportion of jobs requiring no educational certificate is found on Eluta, and similarly smaller proportions on LinkedIn, Monster and Workopolis.

Even though Kijiji contains around 35% of all job postings and Eluta around 12%, when it comes to job postings for management occupations, Kijiji has 190, and Eluta has over double that amount, at 405. For all job postings requiring a university degree, Kijiji has 724, and Eluta has 1338 such postings.

# 5. HOW DO THESE JOB POSTINGS MATCH UP WITH THE CAREER ASPIRATIONS OF LOCAL YOUTH?

In late 2015, the Workforce Planning Board of York Region and Bradford West Gwillimbury released a report regarding the educational pathways, employment experience and career aspirations of local youth aged 20 to 29 years of age. Much of the data was based on face-to-face surveys undertaken with youth in the summer of 2015. Among the questions asked in the survey was the following: what is your ideal job/career? Of the 1384 youth who participated in this survey, 1269 provided an answer for this question. Overall, local youth expressed fairly traditional views regarding possible careers, in many cases citing fairly standard-type jobs and, even more so, often adhering to traditional gender stereotypes regarding their ideal employment. Table 12 lists the top 15 occupations (by total number of mentions), and specifies the number of responses by gender, including giving the percentage breakdown by gender.

Table 12: Top 15 ideal/jobs/careers, Jobs for Grads Career Path Survey, 2015

	NUMBER			PERCENT	
	Females	Males	TOTAL	Females	Males
Computer and IT-related occupations	11	64	75	15%	85%
Management/manager	35	34	69	51%	49%
Engineering	12	39	51	24%	77%
Entrepreneur	14	35	49	29%	71%
Doctor	18	20	38	47%	53%
Accountant	15	21	36	42%	58%
Nursing	33	3	36	92%	8%
Teacher	28	6	34	82%	18%
Marketing	13	14	27	48%	52%
Lawyer	12	14	26	46%	54%
Business	5	15	20	25%	<b>75</b> %
Finance/financial advisor/planner	6	14	20	30%	70%
Human resources	11	9	20	55%	45%
Police officer	3	15	18	17%	83%
Banker/banking	3	14	17	18%	82%

A few of the occupations have been collapsed into one over-arching occupation. This is particularly the case with the "Computer and IT-related occupations," category which includes such functions as: app developer; computer analyst; computer engineering; computer programmer; computer science; IT; IT systems management; software engineer, and so on. Similarly, the "Engineering" category includes all branches of engineering, such as civil engineering or electrical engineering, where such details were provided.

This list consists of many standard occupations, such as doctor, teacher, nurse and lawyer. There were vague catch-all categories such as "Management/manager," "Entrepreneur" and "Business." While some of the youth responses had more detail, in most cases only a generic title was offered. Compared to the specificity of the online job boards (detailed 4-digit National Occupational Classification level), one wonders the extent to which youth appreciate the range of options that exists in the job market.

There were a number of occupations where there was close-to-equal representation for males and females, such as accountant, doctor, human resources, lawyer, manager and marketing. In the majority of occupations, the gender split followed gender stereotypes: females choosing nursing and teaching, and males opting to work in it, policing, banking and engineering, or to be entrepreneurs, in business or in finance.

These findings may be somewhat impressionistic, but they suggest certain questions:

- 1) Are students getting sufficient detailed labour market information to help them make appropriate decisions regarding their post-secondary education choices and their career pathways?
- 2) Are students acquiring sufficient depth of understanding regarding the intricacies of specific occupations and the variety of industry possibilities?
- 3) Are students being given enough guidance and motivation to look beyond traditional occupations and gender-typical roles, when it comes to career choices?

## **IN SUMMARY**

What have we learned about jobs that are posted online? Most employers nowadays use online job boards. When surveyed about their use of online job boards, employers say they are especially likely to use them to advertise for jobs related to Natural & Applied Sciences Occupations, and somewhat less likely to rely on them when recruiting for Health Occupations or Sales & Service Occupations.

The story is slightly different when the actual online job board data is analyzed for York Region and Bradford West Gwillimbury. It is indeed the case that there are fewer postings for Sales & Service Occupations, compared to their share of all job vacancies. It is also the case that there are fewer postings seeking candidates for Management Occupations. As well, online job boards have a much higher proportion of postings for jobs among the Trades, Transport and Equipment Operators and Related Occupations.

When the postings are analyzed by industry, there is one significant anomaly. A much higher proportion of jobs belonging to Administrative and Support, Waste Management and Remediation Services, in particular involving Employment Placement Agencies and Executive Search Services are posted on line. It appears that these services are using online job boards to attract candidates on behalf of their clients.

When one analyzes all the job postings according to the level of education typically required for that occupation, an interesting phenomenon emerges: Management Occupations as well as jobs that require no educational certificate both have a smaller share of the online postings than their share of all job vacancies. In the case of Management Occupations, it is likely that employers use personal networks or executive search firms to find appropriate candidates, while basic entry-level jobs are likely filled by word-of-mouth and/or a sign in the establishment window.

What is noteworthy about both the job vacancy data and the job opening data is that there are far more local residents with university degrees than there are openings for jobs that require a university degree. This applies not only to residents who are already employed but also to the unemployed. Around six in ten (59%) of the job postings reference at least one (and often more than one) soft skill that is part of the expected package of qualifications. The three most highly-demanded soft skills (at least one in five employers selecting them) are "oral and written communication skills," "detail oriented" and "problem solving."

Kijiji is by far the job board used most frequently by employers posting jobs, accounting for slightly over a third (35.5%) of all jobs posted. It should be noted that many of the jobs end up being posted on more than one board, and what occupations get posted on which online job boards varies. Grouping the job postings by level of education expected, one finds that Eluta has a considerably higher proportion of jobs that require a university degree (with LinkedIn and Monster also having a high proportion of these jobs); meanwhile, JobBank.gc.ca and Kijiji have a considerably lower proportion of such jobs, and Craigslist also scores lower in this category.

Considering the wealth of information available among these online job postings, and having regard for what youth express as their career aspirations, it appears that youth would benefit from more and better labour market information. This kind of information would, provide them a more nuanced and detailed understanding of the world of work and assist them in making better future educational and career choices.