



Conseil des ministres
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Ministers' Council
on the Canadian
Francophonie

Working Towards a National Portrait of the Unmet Needs for a Bilingual Workforce

*Feasibility Study for the
Ministers' Council on the Canadian Francophonie*

French Language Services Committee
Intergovernmental Network on the Canadian Francophonie
March 2021

Purpose of the report

Report on the possibility/feasibility of obtaining a national portrait of unmet needs or shortages for a bilingual workforce.

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1. Background

Recently, minister-members of the Ministers' Council on the Canadian Francophonie (MCCF) expressed concern that unmet needs for a bilingual workforce could undermine post-pandemic economic recovery. The MCCF is paying particular attention to shortages that could affect the delivery of services to Francophone minority communities or impede the economic development of businesses employing members of those same communities. Although certain sectors of the Canadian economy are severely affected by the pandemic, leading to substantial job losses, other sectors are experiencing sustained growth. Many employers say they are struggling with recruitment and with meeting their workforce needs.

A limited ability to compile a portrait of the needs for bilingual workers has also been observed because of a lack of evidence. Testimonies collected from certain employers about their difficulties recruiting staff, whether in a minority setting or elsewhere, are sporadic and anecdotal and do not make it possible to systematically track how the situation is evolving in all regions of the country. The various levels of government must therefore attempt to correct potential shortage problems without being fully aware of the extent of the problem or knowing which industrial sectors are affected or which regions and localities are experiencing these shortages.

During their December 4, 2020 videoconference, the ministers agreed to explore solutions to address this lack of information. They tasked Intergovernmental Network on the Canadian Francophonie (the Network) officials with the mandate to carry out a feasibility study as the first step in a project to determine the tools necessary to establish a national portrait of bilingual workforce needs. Such a portrait should make it possible to identify unmet needs (or shortages) at the local level in each jurisdiction, whether in the public and parapublic sector,

community organizations or private businesses. The information should also be available on a frequent enough basis to make it possible to detect changes in both trends and the labour market.

This report describes the approach and work undertaken by Network officials in response to the MCCF's request. It documents the result of discussions with leading pan-Canadian organizations that have developed cutting-edge expertise in labour market information, notably the Labour Market Information Council (LMIC), the Labour Market Information Directorate of Employment and Social Development Canada (ESDC) and Statistics Canada.

It should be mentioned that the ministers' request comes at a time conducive to searching for ways to improve the data available on bilingualism. In February 2021, the Government of Canada released its vision and intentions for reforming the *Official Languages Act*. In addition to emphasizing the importance of bilingualism in the country and recognizing the need to protect linguistic minorities, the proposed reform includes several concrete legislative and administrative measures, including one to "provide for the commitment by federal institutions and Statistics Canada to collaborate on the collection and production of data and public opinion research on official language minority communities and official languages."¹

2. Approach

After receiving the mandate from the MCCF, the Network's French-language Services Committee enlisted the services of Jean-Pierre Voyer, a consultant specializing in labour market issues, who completed an initial document presenting a report on the consequences of unmet needs for a bilingual workforce and a preliminary overview of the various data sources available documenting labour shortages. This document was shared with each of the three organizations mentioned above, resulting in fruitful discussions.

Following these discussions, the LMIC committed to producing a feasibility study on the potential expansion of existing data sources on job vacancies to include language information. By virtue of its mandate and governance, the LMIC was the organization best positioned to undertake such a study.²

A full version of the LMIC report can be found in Appendix A. Although this report has been the subject of numerous discussions with French-language Services Committee members, ESDC and Statistics Canada, it establishes commitments for the LMIC only.

The remainder of this document provides a summary of the reflections of the French-language Services Committee and its expert, formulated after reading the LMIC report and after numerous exchanges with each of the organizations consulted. First, we briefly summarize known information on bilingualism and the Canadian labour market. Then, we look at the concept of labour shortages and explore why it is important to collect information on unmet needs for bilingual staff to more precisely determine the desirable characteristics of the statistical information sought. As a third step, we propose possible improvements to existing data

¹ Canadian Heritage, *English and French: Towards a substantive equality of official languages in Canada*, February 2021, p.18

² The Labour Market Information Council was created in June 2016 by the Forum of Labour Market Ministers with the mandate of improving the timeliness, reliability and accessibility of labour market information in Canada. It is incorporated as a non-profit corporation, and its board of directors consists of 15 senior officials representing each province and territory as well as the federal government (Employment and Social Development Canada) and Statistics Canada.

sources based on a detailed review of the LMIC report. The report concludes with a few recommendations that ministers can consider moving forward.

3. Bilingualism and the Canadian labour market

According to data from the last census in 2016, more than one fifth of Canadian workers considered themselves bilingual. Most bilingual Canadian workers live in Quebec (60%), but they are also very present in New Brunswick, where they represented 38% of workers. In the other provinces, rates varied between 4% and 12% of the workforce. In total, there were 4.2 million bilingual workers in Canada at the time of the last census. Outside of Quebec, this population was 1.6 million, or about 10% of the total workforce.³

Data from the latest census also indicates the sectors of activity where bilingual workers are concentrated. Nationwide, bilingual workers seem to be employed primarily in health care and social assistance (10.3% of bilingual workers in 2016), retail trade (10.5%), educational services (9.4%), public administration (8.8%) and professional, scientific and technical services (8.1%). Outside Quebec, there is a similar distribution, with 12.1% of bilingual workers working in educational services, 10.3% in health care and 11.2% in public administration.

To provide a different perspective, let us examine the weight of bilingual workers by industry. While the average proportion of bilingual workers within the entire workforce in Canada was 20.4% in 2016, bilingual workers made up more than 30% of the public administration workforce. Bilingual workers were also over-represented in the arts, recreation and entertainment, educational services, professional, scientific and technical services, finance and insurance, cultural industries and wholesale trade sectors.

This data, all taken from the census, reflects Canadians' responses on their language skills. That said, declaring oneself bilingual does not necessarily indicate that the positions occupied by these workers require bilingualism. No information is available on the total number of positions in Canada requiring bilingualism. The indicator that comes closest is also found in the census and provides information on the proportion of Canadian workers who report using both official languages at work. Although this information comes from workers and not from employers, we can deduce that these are positions which, without necessarily requiring knowledge of both official languages, reflect situations where bilingualism is at least present, even if not required. In 2016, 4.6% of workers working outside Quebec used French at work at least regularly.⁴ Arguably, then, a little less than half of the people who consider themselves bilingual outside Quebec used both official languages at work.⁵

³ Diaz, Henri A. *English-French Bilingualism Outside Quebec: An Economic Portrait of Bilinguals in Canada*, Conference Board of Canada, 2018.

⁴ Statistics Canada, *Languages used in the workplace in Canada*, November 2017

⁵ This remains a rather rough approximation, since a unilingual francophone person in New Brunswick or in Ontario could report using French at work without necessarily being among those who consider themselves bilingual.

4. The concept of shortage and the importance of data

a) What is a shortage?

The ministers' request stems from a desire to counter labour or skills shortages in order, among other objectives, to not delay economic recovery or development.⁶ But is an unmet need synonymous with a shortage? Any employer will complain of a "shortage" if an unmet need for labour persists over time. It is difficult recruiting and a persistent need that turn an unmet need into a "shortage." The concept remains vague nonetheless. How long must a position remain vacant for a "shortage" to be reported? The economic literature only sheds partial light on this question, as evidenced by the following extract:

[translation] According to economic theory, faced with adjustment costs, labour shortages and surpluses are a permanent feature of decentralized labour markets. [...] In a competitive labour market, when there is no major obstacle to the free choice of adjustment measures and no external effects, these imbalances should practically eliminate themselves over time.⁷

Shortages, therefore, eventually resolve themselves. There are many adjustment mechanisms: increasing wages or improving working conditions to attract new workers, accelerated training, interprovincial mobility, inter-occupational mobility, and in the case at hand, learning French or English as a second language or international immigration. However, market imbalances can take a long time to resolve on their own, prompting governments to act to accelerate these adjustments. When information is available on imbalance situations that are either emerging or that may arise, all economic stakeholders are able to make the necessary adjustments more quickly.

For long-term planning purposes, the use of economic forecasting models on labour supply and demand will be encouraged to identify potential labour market imbalances. These forecasting models are accurate enough to predict major long-term trends but are often unable to detect imbalances resulting from hard-to-predict external impacts, such as the oil market collapse, COVID-19, or the immigration of Syrian refugees. Simpler indicators or signals must be relied upon for information based on the realities of today. That is why persistent unmet needs can be seen as an important indicator of potential shortages. Information on unmet needs can be obtained from statistics on reported job vacancies. The vacancy duration threshold indicating that a vacant position reflects a potential shortage remains to be determined: two months, three months, six months? This empirical question is difficult to quantify, but those responsible for analyzing the labour market should be able to draw useful conclusions about the tensions observed in the market from data providing information on not only the number of vacant positions, but also the duration of the vacancy.

⁶ For a distinction between labour shortage and skills shortage, see the LMIC report in Appendix A.

⁷ Roy, R., Henson, H. & Lavoie, C. *A Primer on Skill Shortages in Canada*, Ottawa: Human Resources Development Canada, 1996, p. 3.

b) The consequences of bilingual staff shortages

For businesses in the private sector, the lack of bilingual staff—when bilingualism is considered a necessary skill for the position or function—can constitute an obstacle to growth or lead to reduced competitiveness. Labour shortages can affect businesses in different ways: gaps in the services provided, loss of customers or lost contracts, investments not made, etc.⁸

As for the government, unmet needs for bilingual staff affect the government's ability to serve the public in Canada's two official languages. However, almost all Canadian provinces and territories have adopted laws or policies to allow Francophone communities in their regions to receive services in French. One of the obstacles frequently cited to justify non-compliance with these laws or policies is the lack of bilingual staff to meet the needs of Francophones. These shortcomings undermine the success of government initiatives and the credibility of these governments.

Bilingual staff shortages also have a negative impact on many community sector organizations that must serve a diverse clientele. Today, the community sector plays a key role in service delivery. Whether it is welcoming new immigrants, or managing food banks, cultural and artistic activities or providing help to the homeless, the front-line services offered by these organizations must be able to rely on paid staff or volunteers to communicate in both of Canada's official languages, especially in minority language communities.

c) The importance of being aware of the bilingual staff shortage situation

How is better information on unmet labour needs or shortages really useful? What do we gain from knowing the shortage situation? How can Canadian workers, employers and decision-makers use this information? In what form should this information be presented: by occupation, by industry, by geographic area? How often should we get this information? Is it enough to have an annual portrait or is identifying upward or downward trends from monthly or quarterly data required? By briefly reviewing intended uses, we can better identify the desirable characteristics of the information sought.

Promoting efficient resource allocation

Information on labour shortages can be used to direct bilingual job seekers to available positions where their language skills will be valued and where they can reach their full potential. Misaligning skills with available jobs is recognized as causing a potential loss of output for companies and a potential loss of income for workers. In other words, these unrealized productivity gains affect the value of our domestic production.

Even though job seekers are generally satisfied with looking at the most recent list of vacant positions, potential shortages lead some workers to move to other regions or to plan to take refresher training (e.g. beneficiary attendants), or lead economic immigrants to favour certain regions over others.

To be useful to job seekers, the information available should have certain characteristics:

⁸ Cocolakis-Wormstall, M. *Labour Shortage: Here to Stay*, Business Development Bank of Canada, 2018.

- Be sufficiently recent to increase the chances that the information available reflects the actual situation at the time of the job search.
- Be available by industry or occupation, given that job seekers tend to conduct searches corresponding with their training, experience or preferences.
- Be available by geographic location, given that where people work will also determine where they live.

For employers, a shortage situation signals that an adjustment is necessary in terms of efforts to recruit or retain workers through a wage increase or changes to working conditions. For potential investors, a shortage may suggest that projects will be delayed or that a business plan will be dropped to avoid bankruptcy.⁹

Guiding immigration policies

Francophone immigration not only plays a role in preserving the vitality of Francophone and Acadian communities across Canada, but also helps meet the needs of the labour market and preserve the bilingual character of Canada. The ministers responsible for immigration and their counterparts responsible for the Canadian Francophonie agreed in 2017 to cooperate in order to double their efforts in support of Francophone immigration. The Federal/Provincial/Territorial Action Plan for Increasing Francophone Immigration Outside of Quebec adopted on March 2, 2018, recognizes the need for increased efforts to attract, select, integrate, and retain French-speaking immigrants.¹⁰ As part of the implementation of the Action Plan, the ministers committed to deploying concerted efforts, in particular with regard to alleviating labour shortages and the effect of an ageing population. Enriched information on the prevalence of bilingual staff shortages would facilitate immigration policy decisions on the number and location of new Francophone immigrants.

To guide the allocation of immigrants in minority communities outside Quebec, it is useful to know what jobs will be available to accommodate these immigrants upon their arrival. It is important to know the need for professionals in the health or education sectors, for example, and to know where communities with positions requiring French or bilingualism are located.

Given the delays incurred in the immigration process, the destinations chosen should be based on information demonstrating not only the current situation, but also the expected situation in the years to come. Ideally, the economic forecasting models mentioned above will be used to predict medium- and long-term trends. These models, however, require data on total labour demand (number of already filled and vacant positions) and on supply (the local population who can fill this demand). As previously indicated, there is no data on labour demand or total employment by language skills.

That said, data on unmet needs reported by employers can be a valid and useful indicator in the absence of more complete information from an economic forecasting model. Unmet needs that persist for several months may indicate a structural problem that could benefit from increased immigration. To guide international immigration, it is therefore useful to have data on the prevailing unmet needs in communities of interest and their surroundings, on their duration, preferably by occupation, and on their language requirements.

⁹ Shortages are never welcome among employers, and they may at times be the subject of complaints from governments without very solid foundations, hence the importance for policy makers to go beyond private conversations and to use diagnostics based on evidence.

¹⁰ Immigration, Refugees and Citizenship Canada, *FPT Action Plan for Increasing Francophone Immigration Outside of Quebec*, 2018

Guiding the training and education offered

The availability of information on the needs for a bilingual workforce can also be used to guide French-speaking higher education institutions outside of Quebec in the curriculum they offer to students. Regardless of opinions on the economic function of educational institutions, these institutions cannot ignore the needs of the labour market, the expectations of local employers and the communities in which they operate when planning the range of educational programs they will offer. To meet the needs of the labour market and the expectations of employers, institutions must be aware of these needs and periodically inform themselves of changes occurring in their environment.

Data on bilingual workforce needs in education also provides key information to international students who might consider applying for permanent residency in Canada at the end of their studies. These students are increasingly recognized as an important source of new qualified immigrants, in particular for official language minority communities (OLMCs). Relevant information must be available in a timely manner to enable these students to assess local labour market conditions and make informed decisions about their migration.

As in the case of immigration policies, the information needs of educational institutions and international students would be best served by three-to-five-year forecasts using occupational forecasting models. These models are complex, however, and for the time being cannot provide information on the jobs that will or will not require proficiency in French or bilingualism. Data on unmet needs, specifying the language skills required, is once again very useful information, even though it is incomplete.

In summary

The information sought on unmet workforce needs should include the following characteristics to meet the needs of job seekers, to guide immigration policies and to support educational institutions in the courses they offer:

- Be location-specific, according to communities of interest, in this case each province or territory, but more specifically by OLMC.
- Be available by large occupation groups, at the very least.
- Provide details on the duration of unmet needs to properly assess how long they have persisted.
- Be available on a regular (monthly or quarterly) basis to provide information on the prevailing situation at the time of decision-making and to be able to detect rises and falls.
- Be available for all economic sectors and thereby be representative of the demand from governments, the community sector and private companies.

5. Suggestions for possible improvements to existing data sources

The LMIC document in Appendix A provides a review and analysis of the available information sources and tools regarding unmet needs or shortages nationally and assesses the possibility of deriving information on the language skills required by employers. Three sources of information are referenced: the 2016 census, Statistics Canada's Job Vacancy and Wage Survey (JVWS) and data extracted from online job vacancies. Below are the main observations of the LMIC document on each of these sources, along with proposals for possible improvements based on our own research and consultations.

1. Census

The census provides some information on the working language of workers. It does not indicate the language requirements of employers. In addition, data is available every five years, with the most recent information already dating back to 2016.

Possible improvement: *no suggestions.* The census is a key instrument for analyzing the progress of official languages in the country but is not a useful tool for the timely analysis of the prevailing labour market situation.

2. Job Vacancy and Wage Survey (JVWS)

Since February 2015, Statistics Canada has been conducting this survey with a sample of 100,000 locations quarterly. The JVWS sampling framework uses the Business Register, a central repository of data on approximately 900,000 businesses and institutions in Canada. This survey makes it possible to produce statistically representative estimates of job vacancies by economic region and by occupation. This is very reliable information. However, the survey does not include a question about the skills required, such as bilingualism.

Possible improvement: *adding a question to the JVWS to include the language requirements of positions reported as vacant.* This proposal, even if it resulted in lengthening the response time of the questionnaire submitted to employers by a few seconds, should not adversely affect how the survey is conducted, and any additional costs incurred would be negligible.¹¹

The survey also has a few other shortcomings. Federal, provincial and territorial governments are excluded from the survey. When the survey was launched in 2015, Statistics Canada stopped collecting data from federal and provincial governments because of the technical difficulties experienced by some jurisdictions in successfully completing the questionnaire. Part of the problem is related to the recruitment methods used in the public service, which differ from private sector practices. Several jurisdictions recruit on an occasional basis and establish eligibility lists that are used as positions become vacant. In addition, unlike the private sector, recruitment decisions are not always centralized within a single human resources department.

Even if the public administration sector mainly includes the public service and not the parapublic sectors of health and education, it remains one of the major employers of bilingual workers. The census indicates that outside Quebec, 11.2% of workers who considered themselves bilingual worked in public administration, while 16.2% of workers who said they used French at work were in this same sector.¹²

Public administration positions can be expected to be more stable and less subject to cyclical changes associated with a rapid economic recovery or recession, for example. Fluctuations in employment are much smaller and easier to predict. Although the exclusion of federal, provincial and territorial governments is unlikely to skew the interpretation of upward or downward trends in labour shortages, this exclusion remains a significant gap in the survey and is likely to affect the interpretation of the prevailing labour market conditions in communities with a strong government office presence.

¹¹ Through Employment and Social Development Canada, the Government of Canada contributes approximately \$11 million annually to conduct the JVWS and publish the results.

¹² Statistics Canada, *Census of Population*, 2016 and author's calculations.

Possible improvement: fill in the missing information on vacant positions in public administration by reactivating this portion of the survey or use other sources of information to fill this gap. Two approaches worth considering: (1) Statistics Canada could be asked to resume data collection from federal, provincial and territorial governments. In return, MCCF member-ministers would commit to putting pressure on their respective governments to ensure that the data collection carried out by Statistics Canada is successfully completed. Statistics Canada could publish the data made available and omit the jurisdictions for which the information is still missing. The national portrait would be incomplete, but the provinces and territories that have successfully completed the questionnaire would nevertheless obtain an overall idea of the situation in their jurisdiction. (2) Information on vacant positions in federal, provincial and territorial public administrations could come from another data source: data extracted from positions posted by the various public services on the Job Bank site administered by ESDC. This data could not be part of the JVWS itself but would allow labour market analysts to complete the picture of the country's shortage situation. Each position posted online on the Job Bank site includes a description of the desired working language. During our conversations with ESDC, departmental representatives confirmed that all provinces and territories publish their job offers on the Job Bank site. All that would remain to be done would be to entrust the data extraction task to a qualified organization; this would include programming the necessary algorithms to organize the data and conducting regular monitoring for publication purposes.

Another important gap in the JVWS is the lack of published data to target geographic regions smaller than "economic regions." In the Statistics Canada lexicon, an economic region corresponds to a precise geographical classification. Economic regions are made up of a group of entire census divisions. For example, Ontario has 11 economic regions, Nova Scotia, 5, Manitoba has 6 and Newfoundland, 3. As it stands, the published data does not provide us with any information on the specific situation of OLMCs. For example, the economic region of Winnipeg contains three OLMCs that are relatively close to each other geographically, but the region of northeastern Ontario has 50, some of which are separated by nearly 300 kilometers (e.g. Sudbury and Timmins)¹³.

Possible improvement: data collected through the survey could be grouped according to geographic areas that better correspond to the specific reality of OLMCs. OLMCs are places defined based on census sub-divisions, according to the density of people reporting French (or English in Quebec) as their native language. The JVWS makes it possible to locate respondents using their postal codes, meaning technically it is possible to reorganize tables of vacant positions according to geographic areas corresponding to OLMCs and their adjacent areas.¹⁴

This would involve grouping data according to census sub-divisions and redefining the area of each OLMC. This approach would not cause any additional changes in the survey as such and would only affect how tables published by Statistics Canada are presented. The main challenge with this suggestion is that pursuant to the *Statistics Act*, Statistics Canada may not make any data public that is likely to reveal the information obtained and that relates to any recognizable person, company or organization without their knowledge or without their prior written consent. In the case of the JVWS in particular, estimates are

¹³ Canadian Heritage designates official language minority communities (OLMCs) based on residents' first official language spoken (FOLS) and the presence of at least one minority school.

https://crtc.gc.ca/fra/5000/lo_ol/pch%202011%20closm%20map_list_11x17_b.pdf

¹⁴ It is important to recognize that labour markets can extend several kilometers beyond places of residence. The residential community of OLMCs may not correspond exactly to its accessible labour market.

deleted to prevent the direct disclosure or cross-referencing of data that could identify a company. The application of these confidentiality rules means that most of the tables indicating vacant positions by areas representing OLMCs may be redacted beyond measure, making the exercise futile.

Another gap in the JVWS is the delay in publication. Data is available on a recurring, quarterly basis, but the time spent collecting and cleaning the data results in a publication delay of a few months. For example, before the pandemic, data for the first quarter of 2018 was collected in January, February and March, but the results were not published until three months later, in June 2018.¹⁵

Possible improvement: no suggestions. This publication delay is not critical: it should not affect decision-making on immigrant allocation or education provision, although it may be less optimal for some job seekers.

A final remark concerning the JVWS aims to highlight the underutilization of part of the survey. The survey questionnaire can be used to identify the duration of vacancies, thus allowing analysts to apply a persistence standard when interpreting data. As discussed earlier, advertising a job vacancy is a sign of a potential shortage only if that vacancy persists over time. The survey can be used to associate an approximate duration for each of the positions reported vacant, according to different periods of time, the longest category being 120 days or more. However, data made public on vacancy duration is limited to large occupational groups and to provinces and territories. This data is not available by economic region.

Possible improvement: make data on the duration of vacancies available by economic region, at the very least. Once again, a lot of data could be deleted because of privacy rules, but a trade-off would be to group duration data into two large groups for publication purposes: below threshold and above threshold. Stakeholders should reach a consensus on this vacancy duration threshold before it is proposed to Statistics Canada.¹⁶

3. **Extracting data from online job postings**

The third information tool cited by the LMIC is extracting data from online sites. The LMIC document provides a comprehensive description. The document highlights several advantages: job vacancies can be observed in real time, information is available for small geographic areas, details are provided on occupations, and positions advertised by public administrations are included. As a bonus, the advertised positions already include information on the language skills required.

One of the most well-known online sites is the Job Bank site administered by ESDC on behalf of the Canada Employment Insurance Commission, in collaboration with provincial and territorial governments.¹⁷ Over 150,000 Canadian employers advertise job postings directly on Job Bank. The underlying database is updated monthly and includes detailed information on each post. For example, accounting clerk positions posted from Sudbury to Whitby (which require knowledge of French and English) can be viewed at any time.

In August 2020, the LMIC announced the launch of a new interactive dashboard allowing users to have a detailed overview of online job postings and their professional requirements. Knowledge of the French

¹⁵ Statistics Canada now publishes data on a monthly basis using 1/3 of the quarterly sample each month. That said, this data is also published with a two-month delay and contains less useful information than quarterly data.

¹⁶ For example, it could be agreed that a position advertised for 90 days or more reflects recruitment difficulties and potential shortages.

¹⁷ <https://www.jobbank.gc.ca>

language, knowledge of the English language, and even bilingualism are included in the requirements listed for certain positions and locations.¹⁸ The site cannot currently be used to locate positions outside the economic region, but the underlying data could provide a more precise location corresponding to OLMCs, for example. Dashboard data is collected from thousands of websites across Canada, through a Canadian company specializing in metadata analysis and Internet search technologies.

The LMIC document serves as a reminder that results from online job sites are subject to several caveats. First, these kinds of findings do not use a representative sample—not all employers post their jobs on Job Bank, Indeed or Monster, for example. These sites tend to over-represent large employers. In addition, online data presents data quality challenges, including proper classification of information and elimination of duplicate postings. Posted positions do not include any information on the duration of the vacancy in question, although it is technically possible to determine how long a vacant position has been posted. Finally, it should be noted that this is data that belongs to the owners of the job posting sites, meaning that governments do not have much say on the way information is collected or assembled, unless they enter into agreements with these suppliers.

Nevertheless, we share the LMIC's enthusiasm regarding the potential offered by online sites. This is an innovative and very promising solution. This approach offers the advantage of providing a diagnosis of the prevalence of vacant positions almost in real time. It is not subject to the confidentiality constraints imposed by the *Statistics Act* while saving a great deal of resources compared to traditional surveys.

Possible improvement: use techniques for extracting data from online sites to develop monthly indicators that can provide information on the evolution of vacant positions requiring bilingualism in the provinces, economic regions and OLMCs. In short, this involves using the technologies and metadata sources already available to compile information that corresponds to the characteristics outlined earlier at the end of the section entitled *The importance of being aware of the bilingual staff shortage situation*. The LMIC has already made strides in this regard, as has the Labour Market Information Directorate at ESDC.¹⁹

6. A more comprehensive approach and ministerial recommendations

Statistics on unmet needs will always consist of partial information in understanding the economic health of a particular region or community. As mentioned in the LMIC document, this data makes it possible to report a *risk* of shortages at most, and there is currently no quantitative consensus standard on the concept of shortage. In addition, the unmet needs or shortages indicator is only one of the important variables to guide decisions regarding immigration targets or training programs to be offered. Other labour market statistics, such as the unemployment rate, employment rate and demographic composition should also be considered. The industrial environment and the prevailing institutional context in communities of interest must also be taken into account. That is why a more systematic approach consisting of analyzing several factors simultaneously within the communities concerned may prove to be the ideal way to obtain a complete diagnosis of the workforce needs of the future. Ideally, this kind of analysis should be based on the analysis of professionals and economic stakeholders working within these communities.

¹⁸ Labour Market Information Council, 2020, <https://lmic-cimt.ca/canadian-online-job-posting-dashboard/>.

¹⁹ Although the LMIC works with Vicinity Jobs, a Canadian company based in Vancouver, to analyze and compile online data, ESDC has a similar contractual agreement with Gartner Talent Neuron (GTN), which also provides this kind of service. ESDC is exploring the possibility of combining Job Bank data with that provided by GTN to obtain a better geographic and occupational distribution of vacant positions.

Such an attempt is underway, namely an initiative announced in December 2020 by the Association des collèges et universités de la francophonie canadienne (ACUFC), the Fédération des communautés francophones et acadienne du Canada (FCFA) and the Réseau de développement économique et d'employabilité (RDÉE Canada).²⁰ These three organizations are currently working on a one-time study to collect data on labour needs in Francophone and Acadian communities across the country. This study will undoubtedly be confronted with the chronic lack of current data on labour needs by language of work. It will be interesting to learn about their approach and see how much this information gap will affect the quality of their diagnosis.

Conclusion

Despite the importance of using both official languages in the country and the significant contribution of bilingual workers to the economic prosperity and the provision of services to the population, information on vacant positions requiring knowledge of both official languages is practically non-existent. Some improvements to the structure of existing tools can be made to fill this gap. The LMIC review and our review of recent developments indicate that extracting data from online sites is the way of the future, but we believe that minor improvements to Statistics Canada's Job Vacancy and Wage Survey (the JWWS) are nevertheless worth undertaking..

Based on these observations, we recommend that the ministers:

1. Invite ESDC, as sponsor of the JWWS, to add a question to the survey regarding the language(s) required for positions reported vacant.
2. Request that ESDC and Statistics Canada conduct simulations of the proposed improvements concerning the organization of survey data and publish information on positions according to the duration of the vacancy and according to geographical areas reflecting the labour market situation of OLMCs outside of Quebec.
3. Request that ESDC conduct an analysis of job vacancies (posted positions) in federal, provincial and territorial public administrations using Job Bank data to create a measure that complements the results of the JWWS, counting on the full collaboration of each province and territory to advance this work.
4. Invite the LMIC and ESDC to continue their respective research work to exploit the possibilities offered by the data extraction technique and to provide data on positions according to the duration of vacancies and according to geographical areas reflecting the labour market situation of OLMCs outside of Quebec.

²⁰ The three organizations obtained funding from Innovation, Science and Economic Development Canada (ISED), Immigration, Refugees and Citizenship Canada (IRCC) and Employment and Social Development Canada (ESDC) to carry out this collaborative study.

<https://acufo.ca/communiqués/immigration-francophone-lacufo-la-fcfa-et-rdee-canada-sunissent-pour-une-etude-sur-les-besoins-en-main-doeuvre/> (in French only)

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7. Appendix A – Under Pressure: Estimating the demand and supply for bilingual workers in Canada

The LMI Insight Report No. 42 can be read on the [LMIC website](#).