

## AUTOMATION ACROSS THE NATION: WHAT RAPIDLY ADVANCING TECHNOLOGY MEANS FOR CANADIAN REGIONAL ECONOMIES

*Brookfield Institute for Innovation + Entrepreneurship releases new data insights report identifying regional economies most susceptible to automation, such as Woodstock, Ont., and Quesnel, B.C.*

TORONTO, June 8, 2017 – Canada’s complex and varied economy means that the effects of automation will not be evenly distributed across the country, according to a new report entitled *Automation Across the Nation: Understanding the potential impacts of technological trends across Canada* from the Brookfield Institute for Innovation + Entrepreneurship (BII+E).

This report provides a new lens to understand the regional effects of automation, following BII+E’s highly cited study *The Talented Mr. Robot: The impact of automation on Canada’s workforce*, which indicates that nearly 42 percent of the Canadian labour force is at risk of being affected by automation in the future.

As technology rapidly advances, it drives economic growth, but simultaneously poses potential risks for workers in industries such as food services, manufacturing, transportation, agriculture, and oil and gas extraction, within which a growing number of tasks can be automated.

The report states that smaller regional economies specializing in mining or manufacturing are most vulnerable to automation. These economies are primarily concentrated in southwestern Ontario, southern Quebec and the Canadian Prairies. Small regional economies with a large hospital, post-secondary institution or public sector presence, however, are less vulnerable. Larger regional economies, like big cities, with diversified economies and large pools of highly skilled labour may also be cushioned from the effects of automation; however, for most, a sizable portion of their labour force is still highly susceptible.

Report Key Findings:

- Small regional economies specializing in manufacturing or mining, quarrying, and oil and gas extraction are most susceptible to automation, including Woodstock, Ont., Tillsonburg, Ont., and Quesnel, B.C.
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- Areas less susceptible to automation include cities and towns with a large hospital, post-secondary institution or public sector presence, for example, Petawawa, Ont., Ottawa-Gatineau, Ont., and Fredericton, N.B.
- Industries with the highest proportion of automatable work activities include: accommodation and food services; manufacturing; transportation and warehousing; agriculture, forestry, fishing and hunting; and mining, quarrying, and oil and gas extraction. About 62 percent of work activities could be automated within these industries.
- Applied to 2011 Canadian census data, about 46 percent of work activities have the potential to be automated, across all Canadian industries. This does not mean that 46 percent of jobs could be automated. Most jobs comprise a mix of work activities, only some of which are automatable; however, the proportion of work activities that could be automated is significant - equivalent to about 7.7 million jobs across the country.
- Even Canada's largest cities are not immune to the effects of automation; in Toronto, Montreal and Vancouver, about 46 percent of work activities have the potential for automation.
- The diversity of a local economy, which varies across Canadian cities and towns, can influence the potential impacts of automation. Highly specialized cities and towns in which a high proportion of work activities have the potential to be automated may be the most vulnerable.

Also included as part of the report is a [data visualization map](#), which shows the susceptibility of Canadian cities and towns to automation impacts.

The findings contained within *Automation Across the Nation: Understanding the potential impacts of technological trends across Canada* are based on data from management consulting firm, McKinsey & Company, mapped against local employment data from Statistics Canada's National Household Survey for the first time.

*The Brookfield Institute for Innovation + Entrepreneurship (BII+E) is a new, independent and nonpartisan institute, housed within Ryerson University, that is dedicated to making Canada the best country in the world to be an innovator or an entrepreneur. BII+E supports this mission in three ways: insightful research and analysis; testing, piloting and prototyping projects; which informs BII+E's leadership and advocacy on behalf of innovation and entrepreneurship across the country. For more information, visit [brookfieldinstitute.ca](http://brookfieldinstitute.ca).*

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- 30 -

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