

Why we need to reincarnate *LifePaths* – and how government can help

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Imagine being able to track the fortunes of every Canadian over their lifetime. Some will die young and some will live to 100. Some will have high-paying jobs and some will have sporadic employment. Some will save regularly for retirement or participate in workplace plans and some will not. This is essentially what LifePaths aims to do: to track all Canadians in order to understand their past and project where they will be at a future date. Developed by Statistics Canada over 25 years, LifePaths brings together Statistics Canada's vast amount of data to shed light on the socio-economic experiences of Canadians. Obviously, this micro-simulation tool has to make some simplifying assumptions, especially where data is not available. Still, the end result is a powerful projection tool. Morneau Shepell (2016, pg. 6)¹

For 25 years, Canada invested some of its best resources in a large-scale, policy-oriented population micro-simulation model: Statistics Canada's *LifePaths* model.

LifePaths gives analysts an important tool to test the implications of public policy options and trends, using actual projected "life paths" of current and future Canadian individuals and families. Over the years, *LifePaths* has been used to provide critical support and analysis on a diverse range of Canadian public policy issues – such as retirement income security, taxation, financial markets, disability and caregivers, divorce and parenthood, social indicators, unemployment insurance, immigration and student loans. But, in 2014, funding for *LifePaths* was ended due to budget cuts.

Recognizing its value, independent analysts outside of government have kept *LifePaths* on

¹ <http://www.morneaushepell.com/sites/default/files/documents/5094-canada-pension-plan/13768/cpppaperpart2enfinal.pdf>

“life support” for projects such as investigating Canada Pension Plan (CPP) enhancements, implications of the changing retirement landscape for Canadians and prospective changes for provincial long-term care programs. But without funding, *LifePaths* is becoming outdated. For example, it is no longer being updated with new sources of data and changes within the Canadian system of taxes and government transfers. Soon, it will become obsolete.

LifePaths can be downloaded on any ordinary computer – and although it is vast and complex, its users have been wide and diverse. In addition to the federal government (Statistics Canada, Health Canada and ESDC, in both internal government briefings and publicly available reports and studies), many groups have carried out analysis using *LifePaths* and found it a tremendously powerful and informative tool. Its users include the provincial government (Ontario); Canada’s federal tri-council agencies for research (CIHR, SSHRC and NSERC); private industry (Morneau Shepell, CIBC and TD Bank); large Canadian pension plans (HOOPP); think-tanks (CD Howe and IRPP); professional organizations (Society of Actuaries and Canadian Institute of Actuaries); and university academics from Dalhousie, Waterloo, Laval, University of Ottawa, University of Toronto, among others.

The urgent need for sophisticated population micro-simulation models

Models like *LifePaths* are standard tools in industrial countries around the world. Without them, analysts wishing to understand the implications of policy changes need to identify the necessary data for their study, build the appropriate model and make their own assumptions – all before they can carry out their own analysis. Not only is this extremely inefficient and time-consuming, but it also means their models will lack external credibility and authority. This approach also creates a lack of consistency between studies, which makes it harder for analysts to build on previous research.

For these reasons, different studies often lead to varied (and conflicting) results: differences that can’t be reconciled, which makes it difficult to draw meaningful insights. Unfortunately, this also means debates tend to focus on data and methods, rather than on the *impact* of policy options and trends.

The end of government funding for *LifePaths* has created a void in the ability of Canadian researchers and analysts to support their theories with credible data. Without an analytical tool, it becomes very difficult to identify, understand and manage the diverse, complex, subtle and potentially costly implications of changes to public policies and trends – particularly those relating to Canada’s aging population and retirement income system.

As Isaac Newton said, “If I have seen a little further, it is by standing on the shoulders of Giants.” Science and research can only progress by building on the collective work of others. Canadians have questions that require meaningful, authoritative answers – and without an

adequate model that can be shared by analysts, the answers will be disjointed and incomplete, producing confusion rather than informing healthy policy debate.

Next generation of analysis

But there's also an opportunity to create a new and more valuable *LifePaths* system: *LifePathsPlus*. *LifePaths* has always appealed to a wide range of analysts; *LifePathsPlus* would significantly strengthen this focus, with the explicit purpose of attracting and supporting the collaboration of academics and industry professionals across Canada.

The new *LifePathsPlus* would be an even more powerful and relevant tool, drawing on diverse and rich expertise within industry and academia. This type of initiative is critical and timely as baby boomers transition into retirement, and national interest grows in creating better government and commercial solutions for Canada's aging population. The National Pension Hub² and the National Institute on Ageing at Ryerson University are two recent examples of emerging initiatives that would welcome, support and benefit from *LifePathsPlus*.

With this explicitly wider mandate, *LifePathsPlus* would significantly bolster the efforts of analysts across Canada by giving them access to an already-developed and tested modeling tool. What's more, *LifePathsPlus* would continually evolve and be strengthened by new sources of data from future research partnerships and collaborations among industry leaders, government analysts, academics, public policy thinkers and others. Uptake and use would be high and almost immediate, as the tool will:

- save analysts time and resources in carrying out their own analyses;
- enable them to cite an authoritative model; and
- free up time and resources to extend the value and relevance of their findings.

Only through partnership with government can *LifePathsPlus* become a feasible option. To move forward with *LifePathsPlus*, I am requesting funding for two full-time equivalent government analysts, for a minimum three-year term. Ideally, a more substantial and ongoing investment is required.

Of course, there are other options: for example, Employment and Social Development Canada (ESDC) is currently exploring the development of a new model for policy analysis. But such work will take five or 10 years – and we need effective solutions and policy insights *now*. *LifePathsPlus* would provide an excellent tool for ESDC and the government in the interim.

² <https://beta.theglobeandmail.com/report-on-business/streetwise/gri-gets-big-backers-for-new-pension-research-hub/article36480579/?ref=http://www.theglobeandmail.com&>

A collaborative effort to move forward

LifePaths was developed to test “what-if” scenarios, using a comprehensive, integrated perspective on the entire Canadian population and its economic systems, to assess Canadian public policy options. It was developed over nearly a quarter of a century by some of the world’s best micro-simulation modeling experts. *LifePathsPlus* would be a unique and collaborative effort, bringing together leading minds from Canadian government and industry to produce a robust tool that will support the government by informing public policy implications.

As the longstanding motto of the Society of Actuaries advocates: “The work of science is to substitute facts for appearances, and demonstrations for impressions” (John Ruskin). A **National Seniors Strategy** requires an authoritative model that experts can trust, and gain insights from, to inform the discussion. *LifePathsPlus* can be that model – and a crucial resource to evaluate the implications of policy reform.