



**Social Value Generation and
OMERS Defined Benefit Pension Plan**
Research Report
November 2017



Executive Summary

OMERS Defined Benefit Pension Plan engaged Deloitte to conduct a research study to investigate if the greater certainty of retirement income that comes with an OMERS Defined Benefit Pension Plan generates social value for local community members and governments.

For the purposes of the research, 'social value' was defined and measured using four key indicators: management of health, community engagement, financial stability & contributions, and self-reliance.

Through a mixed-methods research approach that involved both a survey with almost 1,000 respondents, as well as in-depth, in-person interviews with select participants, it was found that OMERS Defined Benefit Pension Plan, and the greater certainty of retirement income it provides to its members does generate increased social value for communities in Ontario across all four indicators of social value.

OMERS members are more likely to:

- Feel healthier overall and stay more active in retirement
- Be active community participants
- Be financially resilient
- Show more self-reliance, both financially and non-financially

These findings confirmed that OMERS Defined Benefit Pension Plan generates social value and benefits local community members and governments across Ontario.

Deloitte was commissioned by OMERS to review secondary research sources (referenced in Appendix B) and conduct quantitative and qualitative interviews to produce the information contained in this report. Deloitte is not, by means of this report, rendering any professional advice, opinion or services. Deloitte shall not be liable for any loss sustained by any person or entity who relies on the information contained in this report or its research, including the accuracy and completeness thereof.



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Introduction

Historically, amongst public policy circles, there has been a belief that individuals with more reliable, stable retirement income may be more likely to make positive contributions to their communities. Theoretically, given they may spend less time worrying about money, these individuals could choose to spend their energy on bettering themselves or the community around them instead—whether that’s through volunteering with a local organization or spending more time managing one’s health to remain active in the community.

However, to date, this relationship between greater certainty of retirement income and the social value that arises through increased contributions to the community has not been directly proven with fact-based evidence. Existing research suggests defined benefit pension plans reduce worry and concern and provide economic benefits such as increased buying power as well as job creation and capital deployment, but little evidence exists on the broader concept of social value. Therefore, this report set out to make this connection with specific focus on OMERS Defined Benefit Pension Plan members (“OMERS members”).

The objective of this research report is to prove whether OMERS Defined Benefit Pension Plan (“the Plan”) generates social value for the community with fact-based evidence and personalized stories from OMERS retirees and near-retirees compared to those without a defined benefit plan.

RESEARCH QUESTION

The research effort for this report began with a question: *are people with greater certainty of retirement income*

more likely to generate social value in their communities? For the purposes of this study, those with greater certainty of retirement income were defined as OMERS members—including current retirees, those transitioning into retirement, and those planning to retire within ten years—given defined benefit pension plans are viewed as stable, reliable forms of retirement income. OMERS members were compared against a group of similar retirees, transitioning retirees, and near-retirees that did not have any defined benefit pension plan as part of their current or planned retirement income.

The aim was to understand how the presence of the Plan, and the certainty of retirement income it provides to its members, might translate into social value for local communities and governments.

REVIEW OF EXISTING RESEARCH

The study began by reviewing the existing body of research on social value and how defined benefit pension plans may play a role. A number of sources were reviewed (see Appendix B) covering academia, government, news, think tanks, and industry reports.

Existing research shows that components of social value related to volunteering and charitable giving are driven by income level and financial stability, but these studies do not account for the presence of any defined benefit pension plan. Separately, for defined benefit pension plans, studies indicate that defined benefit pension plan income supports cash flow stability and reduces financial worry and concern for defined benefit pension plan recipients.

However, this research does not tell

the full story on social value generation from defined benefit pension plans. Gaps in the research did exist, specifically that studies on social value and financial stability did not contemplate the impact of defined benefit pension plans. Conversely, studies that were defined benefit-specific did not control for income level, which was found to be a key driver of social value generation. The research was also lacking on non-economic factors including community engagement and self-reliance as they relate to social value and defined benefit pension plans.

This report set out to address those gaps with income-controlled, fact-based evidence—supported by personalized stories from both OMERS members and people without a defined benefit plan—to test the hypothesis that those with greater certainty in retirement income will generate more social value to the benefit of local community members.





Defining Social Value

The review of existing research also informed how this report would define and categorize ‘social value’. After completing the research review, social value was defined and measured through four key indicators: management of health, community engagement, financial stability & contributions, and self-reliance.

These four indicators form the basis of social value against which this research measures the reported outcomes from OMERS members and those without a defined benefit plan. Observed differences across these indicators provide new, fact-based evidence to support the initial belief around social value generation.

It is important to note that the focus for social value was on the individual's impact on their community, and the resulting social value that it generated. The scope of this report does not include the macroeconomic lens—for example, gross domestic product growth in areas with especially high populations of OMERS members. This report's aim was to bring new evidence to light on social value, with focus on the individual and emphasis on their impact to the community.

The four social value indicators were defined as:

Management of health: The degree to which an individual manages their mental and physical health, and their self-reported feelings towards their current state of mental and physical health.

Good mental and physical health is viewed as a prerequisite condition for being an active community participant. Those who are able to stay healthy may

be more likely to contribute to their community and help others around them, while also having the added benefit of not drawing down on publicly-funded healthcare programs and services.

Community engagement: The time, money, and effort an individual expends on helping others in their community, and the degree of belonging one feels within that community.

Engaging in the community is the most direct measure of social value across the four indicators. Individuals who volunteer their time, donate their money, and feel connected within their communities are directly impacting the lives of the people around them, and therefore are generating social value for others.

Financial stability & contributions: The degree to which an individual can remain financially secure and withstand unexpected financial impacts over the long run; also, the basket of economic goods on which an individual spends their income and the amount of paid work in retirement they perform.

Regardless of the sources of financial income, individuals who can more securely rely on a steady cash flow to support their living expenses may be better positioned to engage in community-improving activities. Also, increased financial stability may reduce the likelihood that an individual needs to draw on external sources of income, such as government support. Lastly, spending on economic goods and performing paid work in retirement can indicate the degree to which an individual has disposable income and therefore be a measure of stability.

Self-reliance: The amount and type of financial and non-financial support an individual receives from external sources, such as family, friends, community organizations, and / or governments.

Related to but separate from the financial stability indicator, self-reliance looks at how much an individual needs to rely on others for support and care. This includes both financial support, such as an adult child helping to pay the bills, and non-financial support, such as receiving meals from a community organization.

Methodology

This study followed a mixed-methods approach to generate research results: it combined a quantitative survey with qualitative, in-depth interviews. This approach allowed the generation of fact-based evidence through the survey that set out to answer the research question, while also providing deeper context and clarity to the survey data through in-depth interviews with retirees and near-retirees that explore the behaviours and attitudes behind the numbers.

The presented quantitative data in this report is also controlled—via a standard statistical approach—for certain variables including income, age, and gender to ensure the results more closely reflect the differences between being an OMERS member and a person without a defined benefit pension. Existing research stated that income level could be a key driver of social value, therefore by controlling for this variable and others, the results can more confidently conclude that differences between the two groups are less likely to be driven by these factors. This means that if either group has higher average annual income, the study aimed to reduce the impact on the findings by controlling the data for this variable.

THE QUANTITATIVE SURVEY

The survey acted as the leading piece of research that shaped the narrative of the findings. To address the gaps in existing research on developing fact-based evidence to support the question of social value generation, a survey was required to ensure statistically significant data was produced. To be considered for the survey, respondents had to either be retired, transitioning into retirement (defined as having begun

to reduce working hours in preparation for retirement), or planning to retire or transition into retirement in the next ten years. There were two groups totaling almost 1,000 participants—447 in the OMERS members group (“Test group”), and 500 in the group of people without a defined benefit plan (“Control group”).

As with any survey, it has been noted that there will be limitations with the interpretation of results. Primarily, given this was a digital, online survey, the participating respondents needed to be computer-literate, have the wherewithal to operate a computer, and the ability to access one with an internet connection.

THE QUALITATIVE IN-DEPTH INTERVIEWS

This study interviewed eight OMERS members and three people without a defined benefit plan to better understand the attitudes and behaviours behind the trends found in the survey. The goal was not to create statistically relevant facts, but instead to understand more deeply how individuals think about, perceive and act in retirement, their financial situation, their health, and their involvement in their community and social networks.

These first-hand accounts of relevant experiences have been leveraged throughout this report to differentiate how the findings are presented and bring a personalized lens to the evidence.

See Appendix A for more details on the research methodology.



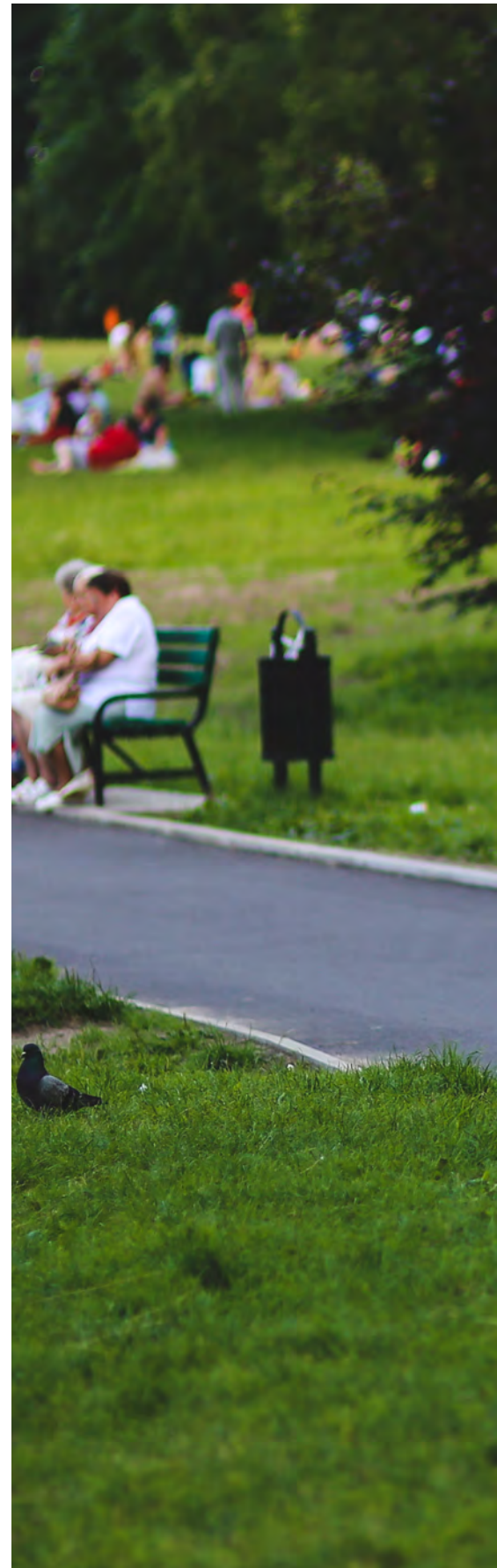


Findings

The research question was answered across all four indicators, with fact-based evidence that addressed the gaps in previous research: OMERS retirees and near-retirees generate more social value in their communities than people without a defined benefit plan, leading to social benefits for local communities and governments.

- OMERS members are more likely to feel healthier overall, enabling them to stay more active in retirement, which could impact their use of public healthcare services and their ability to care for aging or dependent family and friends
- OMERS members are more likely to be active community participants—they feel a better sense of belonging in their community, donate money more often to charity, and volunteer more
- OMERS members are less likely to become financially dependent as they feel more prepared for unexpected expenses, better saved for retirement, and engage less in paid work in retirement
- OMERS members show more self-reliance, both financially and non-financially, as they rely less on government support such as the Guaranteed Income Supplement, they rely less on family and friends for help at home, and they are more likely to own their own home

To summarize, OMERS members are contributors to their communities, better able to help others, manage their own health, and remain physically and financially independent. The presence of OMERS members in the community leads to positive social value for society.





Management of Health

As a core requirement to generating social value, individuals must be personally healthy enough to engage in activities where they can contribute to the betterment of their communities. With this in mind, management of health was tested as an amalgamation of both physical and mental health. Questions were asked about overall health (a self-assessment of physical and mental health together), participation in physical activity, importance of diet and exercise, stress, anxiety, addictions, and work days lost to mental health issues.

The findings showed strong evidence of better overall health and more physical activity—OMERS members are 28% more likely to report excellent or very good overall health (Figure 1) and 31% more likely to be extremely or very physically active (Figure 2), specifically in sports and physical exercise, where 63% of OMERS members are active

versus 46% of people without a defined benefit plan.

In addition, OMERS members are better able to manage their health with 97% reporting they have a family doctor versus 92% of people without a defined benefit plan, and 93% reporting no difficulty in affording prescription medication versus 86% of people without a defined benefit plan.

Further, OMERS members are 18% more likely than people without a defined benefit plan to place extremely high or very high importance on diet and nutrition, meaning not only are they physically healthier, but they also take more care to eat healthy foods and maintain their physical health.

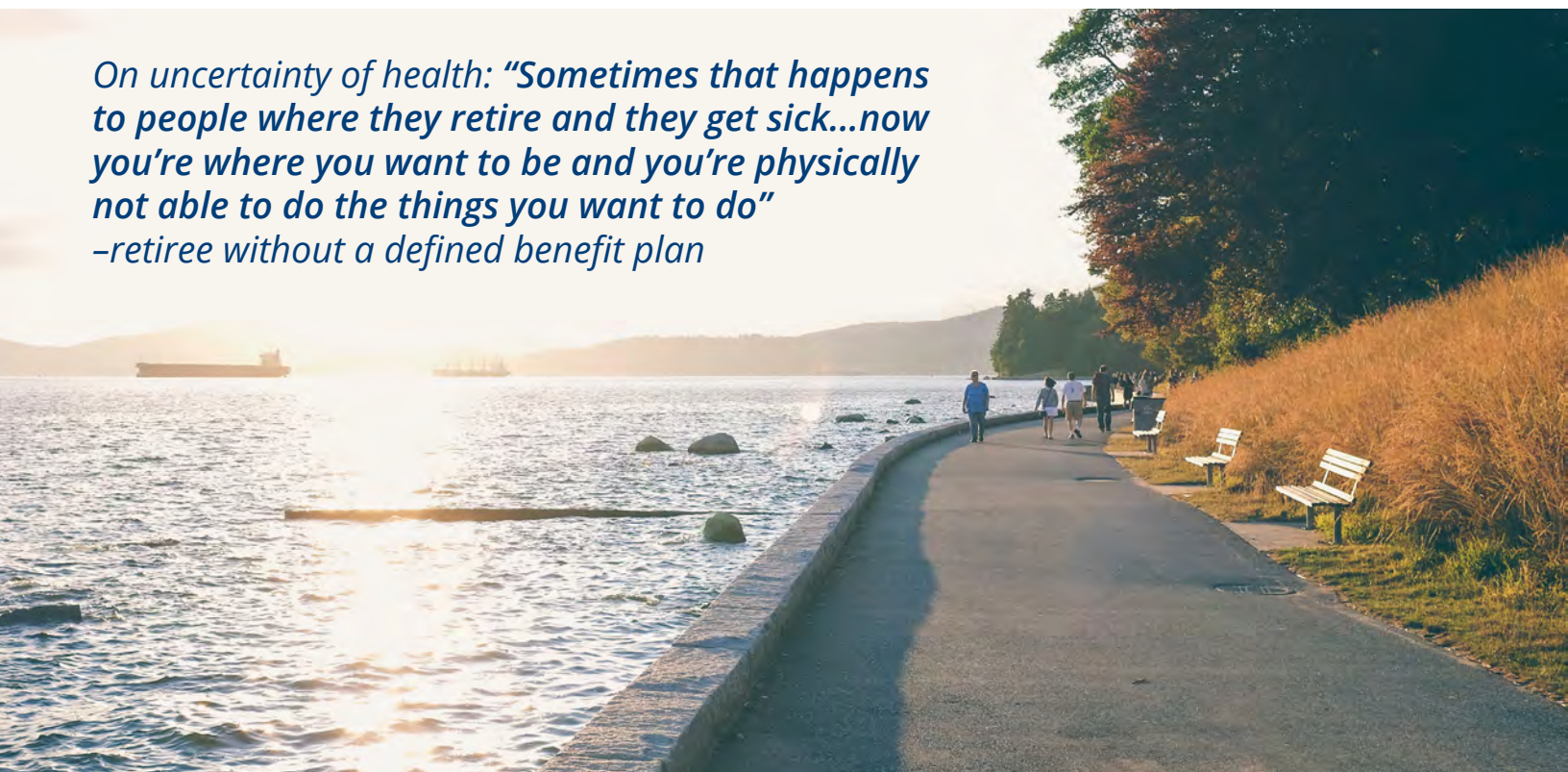
When speaking with interviewees, management of health was a key decision factor in retirement planning. Individuals tended to view retirement as a balance between maximizing good

years of health and optimizing their savings. The findings support the notion that OMERS members are better able to engage more fully in managing their own physical health in and leading up to retirement, allowing them to maximize their good years and be productive members of the community.

On mental health, there was no significant difference between the Test and Control groups. Measures such as addiction, stress, anxiety, work days lost due to mental health, and overall satisfaction with life are impacted by more than simply whether or not someone has a defined benefit pension plan.

Overall, it can be concluded that OMERS members are more physically able to engage in social value generation—whether that's caring for others or limiting frequency of reliance on public healthcare services.

On uncertainty of health: "Sometimes that happens to people where they retire and they get sick...now you're where you want to be and you're physically not able to do the things you want to do"
—retiree without a defined benefit plan





On taking care of one's health: "This is my top priority: taking care of my health. When I was working, I could not always fit my exercises in. In retirement, I can focus on it"
 –OMERS retiree

fig. 1

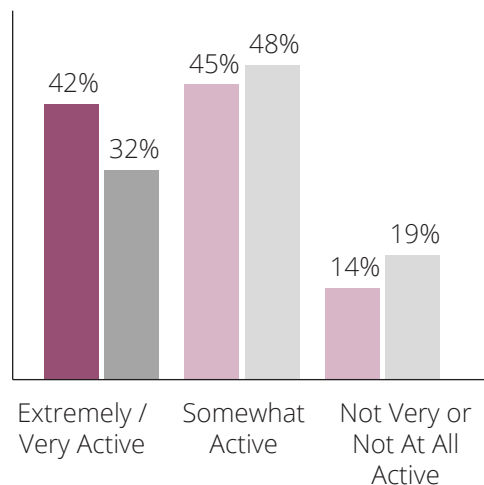
How would you describe your current state of health?



■ OMERS members, n = 447
 ■ People without a defined benefit plan, n = 500

fig. 2

How active would you say you are with recreational activities and interests?



Community Engagement

Community engagement was of key importance to test the premise that OMERS members generate more social value. It was measured through the volunteering of one's time, charitable donations, sense of belonging in one's community, and willingness to help others.

The findings showed that OMERS members are more engaged in the community. They are 41% more likely than people without a defined benefit plan to say they volunteer (Figure 3)—including charitable volunteering, mentoring a small business, volunteering on a Board, or caring for others. Specifically, 36% of OMERS members said they tend to focus their volunteering mostly on skills-transferring activities such as mentoring and unpaid Board participation, versus 22% of people without a defined benefit plan.

OMERS members also donate money more often to charities, with 71% stating they donated money to a charity in the past three years against 59% of people without a defined benefit plan. Further, they are 8% more likely to have donated more than \$100 in the past year than people without a defined benefit plan (Figure 4), even after controlling for income.

Lastly, OMERS members—47%—are 21% more likely than those without a defined benefit plan—38%—to feel a greater sense of belonging in their communities, meaning they have deeper ties to those around them.

While some might ask if people who have devoted their careers to public service are more likely to have the inclination to support others in their communities, in fact, it was found that there were equal levels of empathy and

intent between OMERS members and the Control group. However, with the certainty of income, OMERS members have more ability to act on their intent.

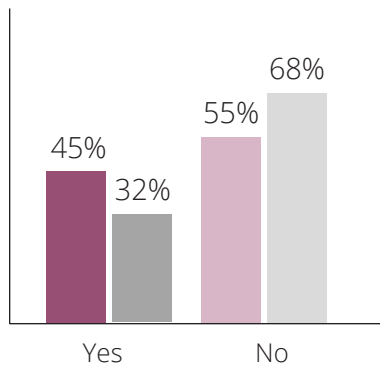
Similarly, during the interviews, it was almost a universal desire across both OMERS members and those without a defined benefit plan to treat retirement as their chance to give back to the community—both financially and through volunteering. However, these findings suggest that in practice, OMERS members are more able to fulfill their desire to give back to the community as shown through their increased rates of volunteering and donation.

Not only are OMERS members healthier and better equipped to be active community participants, they show more engagement in the community through volunteering, charitable donations, and a greater sense of belonging.

"I'm president of the Board for a women's addiction program, I sit on the parish advisory committee at church, and help out in a number of other volunteer or small organizations in any way that I can"
—OMERS retiree

fig. 3

Do you volunteer, provide care for others, or mentor others in the community?

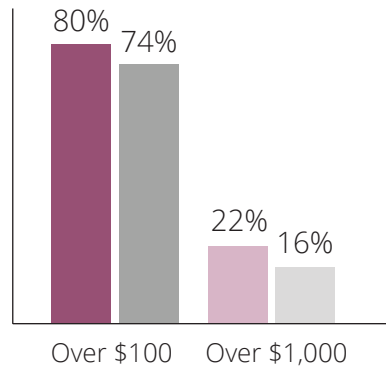


OMERS members, n = 447

People without a defined benefit plan, n = 500

fig. 4

How much, per annum, do you donate to charities?



On charitable giving: “But when the time comes, it would be nice to be able to say that part of our savings goes to the hospital for the work they’ve done for us” –OMERS retiree



Financial Stability and Contributions

The degree to which an individual is resilient to changes in the economy and maintains a stable financial situation can not only mean that person is better able to contribute to their community, it can also mean they are less likely to become dependent on others. As such, financial stability and contributions were measured through one's ability to absorb unexpected expenses, the feeling of being well-saved for retirement, spending on a basket of economic goods, how much paid work one does in retirement, and whether one supports others financially.

OMERS members are 43% more likely than people without a defined benefit plan to report feeling better prepared for an unexpected expense of \$10,000 (Figure 5), meaning they can more easily absorb shocks in the economy and remain financially stable.

They are 63% more likely to report feeling better saved for retirement (Figure 6). Interestingly, this finding only appears after people retire, as near-retirees between the Test and Control groups showed no difference on their feeling of being well-saved for their future retirement. However, after retirement, OMERS members show an increased feeling of being well-saved whereas people without a defined benefit plan do not show the same increased peace of mind.

Lastly, although OMERS members and people without a defined benefit plan financially support their family members in equal amounts, 40% of people without a defined benefit plan say they engage in paid work in retirement against 26% of OMERS members. Amongst people that perform paid work from both groups, 39% of people

without a defined benefit plan are working full time in retirement—over twice as many as OMERS members at only 18%. Furthermore, people without a defined benefit plan—62%—are four times more likely to say that their paid work in retirement is necessary to cover regular expenses including groceries and bills.

From the in-depth interviews, it was found that regardless of whether someone was an OMERS member or person without a defined benefit plan, a variety of mindsets and approaches existed for financial planning for retirement. They ranged from the unprepared, hands-off type to the highly informed, meticulous planner. There did not appear to be a common mindset amongst OMERS members that made them better plan for retirement. Therefore, the data suggests that the presence of their defined benefit plan, and the education (e.g., courses on defined benefit pensions and financial literacy) that comes with it, makes OMERS members more financially stable.

From these findings, it can be concluded that OMERS members are more financially stable and less likely to become financially dependent on others.

*On having a safety cushion: “But, we’re not relying on just my pension to live our lives. Because of our lifestyle, our philosophy, we have assets that provide us with money so that we can live the way we want to live”
–OMERS retiree*



fig. 5

How prepared are you for an unexpected expense of \$10K?

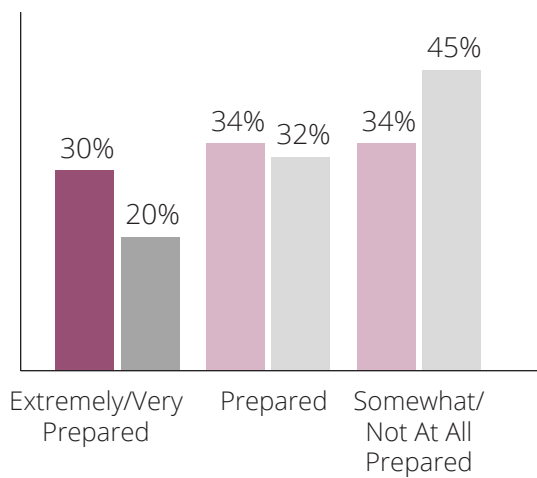
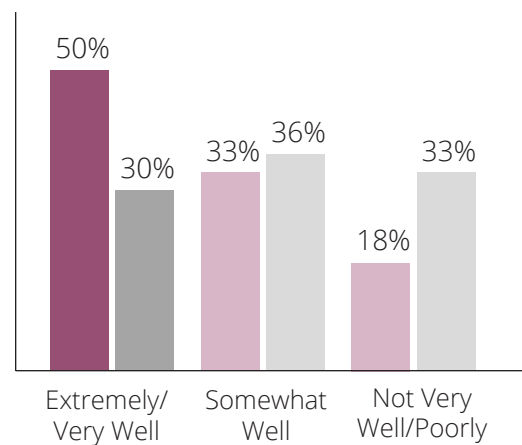


fig. 6

How well do you feel saved to meet your retirement income needs?



■ OMERS members, n = 447
■ People without a defined benefit plan, n = 500

Self-Reliance

Related to but separate from financial stability, self-reliance is a measure of the financial and non-financial support that individuals receive from family, friends, community organizations, and the government. Financial support comes in the form of retirement benefits from the government, such as the Guaranteed Income Supplement, and payments from family and friends to cover expenses. Non-financial support can come from family and friends in the form of chores or caregiving, and from community organizations such as meal delivery services.

To best measure government support, which is provided to individuals based on their income threshold, the study did not control for income when looking at responses to reliance on the Guaranteed Income Supplement (the Guaranteed Income Supplement is provided to

retirees who make less than \$17,688 a year in Canada) since this measure is itself reliant on the income an individual makes. With this, the results showed that 4% of OMERS members rely on the Guaranteed Income Supplement, whereas 21% of people without a defined benefit plan do (Figure 7), meaning OMERS members are less likely to depend upon government support.

When looking at financial support from family and friends, there was little difference between groups, however 2% of OMERS members say they rely on family and friends for non-financial support such as helping around the house versus 5% of people without a defined benefit plan.

Additionally, OMERS members were 15% more likely to report owning their own home (Figure 8), providing them

with a source of equity and allowing them to live more independently as opposed to with family.

In interviews, OMERS members viewed their defined benefit pension plan as a cushion and safety net that could protect them from having to rely on others for support. Conversely, people without a defined benefit plan did not have this same peace of mind and worried more about eventually needing support from others.

These findings reinforce the idea that OMERS members are more able to provide and care for themselves, with less reliance on others and governments for external support. OMERS members are more independent and self-sufficient members of the community that are better positioned to be the ones providing care and support instead of receiving it.





On relying on others: “I’m going to come to my kids someday for financial support and say, ‘Okay, it’s your turn’” –retiree without a defined benefit plan

fig. 7

Do you rely on the Guaranteed Income Supplement?

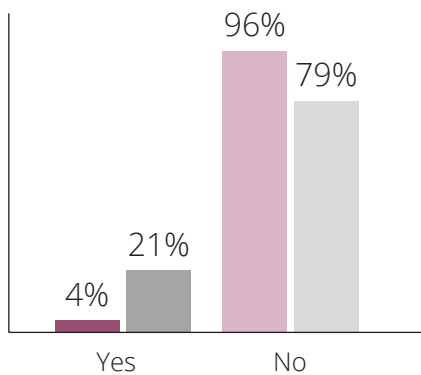
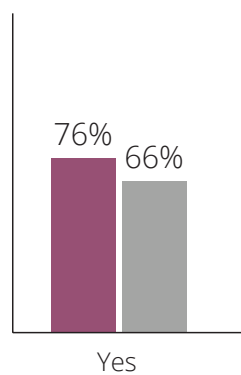


fig. 8

Do you currently own your home?



■ OMERS members, n = 447
■ People without a defined benefit plan, n = 500



Conclusion

OMERS Defined Benefit Pension Plan and Deloitte set out to test whether greater certainty of retirement income generates social value for communities and governments. Across the four indicators tested that comprised social value—management of health, community engagement, financial stability & contributions, and self-reliance—the survey data and in-depth interviews positively answered the research question: OMERS Defined Benefit Pension Plan generates social value for local communities and governments.

These findings address key gaps in existing research on defined benefit pension plans and their impact on Ontarians. For the first time, a quantitative evidence base has been presented that confirms the connection between greater certainty of retirement income and social value. It has been concluded that OMERS Defined Benefit Pension Plan enable retirees and near-retirees to engage more in the community and generate value for others through their actions. Both members of the community and the levels of government that support them benefit from the presence of OMERS Defined Benefit Pension Plan.



Appendix A

Additional details on research methodology

THE QUANTITATIVE SURVEY

The OMERS members group ("Test group")—447 participants in sample:

To be considered a part of the Test group, respondents must have selected that they do or will in the future rely on at least some retirement income from an OMERS Defined Benefit Pension Plan. This pension income, upon which they could rely, could be under their name or that of a household spouse or partner.

Participants were randomly selected from a database of retired and near-retired OMERS members and contacted through a third-party survey company, m-panels, on behalf of Deloitte and OMERS. Participants were compensated for completing the survey.

A broad spectrum of members participated to represent the diversity of the OMERS member base. Participants ranged in age from 52 to 86 years old, with 56% retired or transitioning into retirement and 44% within 10 years of retiring, 83% living in urban areas and 17% living in rural areas, 50% male and 50% female, 96% either currently or formerly working full time and 4% either currently or formerly working part time or ad hoc, and 74% were union members and 26% were non-union. The survey included representation from:

Unions:

- Canadian Union of Public Employees (CUPE)
- Police Association of Ontario (PAO)
- Ontario Secondary School Teachers' Federation (OSSTF)
- Ontario Professional Fire Fighters Association (OPFFA)
- Ontario Public Service Employees Union (OPSEU)
- Amalgamated Transit Union (ATU)

Sectors:

- Municipalities
- School Board
- Police Services Board
- Children's Aid Society
- Local Electricity Distributor
- Transit Authority
- Library Board
- Health Unit
- Home of the Aged
- Housing Authority
- Social Services Agency

The group of people without a defined benefit plan ("Control group")—500 participants in sample:

To be considered a part of the Control group, respondents must have indicated that they do not or will not in the future rely on any retirement income from any defined pension plan, whether OMERS or any other defined benefit pension plan provider. This was done to ensure the study was comparing the social value generated by OMERS Defined Benefit Pension Plan against a general population of retirees and near-retirees, instead of against other defined benefit pension plans in Ontario.

Participants were randomly selected from a panel of individuals living in Ontario hosted by a third-party survey company, m-panels, on behalf of Deloitte and OMERS. Participants were compensated for completing the survey.

A broad spectrum of people participated to represent the diversity of people within Ontario who do not have a defined benefit plan. Participants ranged in age from 52 to 86 years old, with 50% retired or transitioning into retirement and 50% within 10 years of retiring, 85% living in urban areas and 15% living in rural areas, 55% male and 45% female, 76% either currently

or formerly working full time and 24% either currently or formerly working part time or ad hoc, and representation from a broad range of sectors.

Controlling for income and other variables:

The data is controlled for the following variables, known as 'confounding variables':

- Personal income
- Household income
- Retired status (i.e., retired, transitioning into retirement, or within ten years of retiring)
- Geography (i.e., living in an urban area or rural area)
- Gender
- Age
- Marital status
- Number of children

The data controlling approach that was used is called multiple logistic regression, a standard statistical approach to control data for confounding variables between two sample populations.

To do this, a series of statistical models were built on the relationship between the confounding variables and the responses to the survey questions. The model adjusts the confounding variable values from the Test group to equal the same value as the Control group, and calculates both the statistical significance and estimates the percentage difference between the two groups' aggregate responses. Throughout the research, unless otherwise stated, the adjusted estimates are compared and presented instead of the raw survey responses to reflect the data controlling that was performed. This helps to ensure that

the differences between the Test and Control groups were less influenced by variations in the confounding variables.

In all cases, the data controlling process used did not reverse any results. For example, if OMERS members responded higher on a given question in the raw survey results, after controlling for the confounding variables the same trend was still observed.

Significance and confidence level:

The results shown in this report are to a confidence level of 95% ($p \leq 0.05$) and are statistically representative of the total OMERS population and people without a defined benefit plan population in Ontario.

QUALITATIVE IN-DEPTH INTERVIEWS:

Interview participants were selected with the help of an external recruitment firm based on certain demographic characteristics to ensure diversity across a spectrum of incomes, geographies, and ages to best reflect our Test and Control groups. Within the OMERS member group, a broad range of memberships were covered as well, including: a CUPE member, an OPSEU member, a police officer, a fire fighter, a school Board employee, a library employee, and two non-union city employees.

The sample group for these interviews is purposely small, as the depth and amount of insight that is generated in any one interview can be very dense and provides strong guidance into how an individual thinks. Interviewees are not asked yes or no questions based on their preferences, but instead are asked to complete exercises that allow them to speak about their experiences related to topics in which the study is interested.

For instance, participants are asked to write people's names with whom they have a personal relationship onto different 'social circles' that represent very close relationships and more distant relationships. With this exercise, the goal is to understand who the individual may rely on for support and who the individual may provide support to by asking about the nature of their relationship with different people across the 'social circles'.

From this exercise and others like it, insights are developed that provide context and depth to the survey findings.

Appendix B

Select sources reviewed from secondary research

Baldwin, Bob. "Assessing the Retirement Income Prospects of Canada's Future Elderly: A Review of Five Studies" *CD Howe Institute*, 2016.

- This study summarizes five key reports on retirement income and finds the common conclusion to be that participants in workplace pensions have greater likelihood of being able to maintain their pre-retirement living standards
- This study informs current understanding of differences in replacement rates in retirement between different income bands and pension types

Bond, Tyler. "Why Pensions Matter." *National Public Pension Coalition*, 2017.

- This is a public pension advocacy group's publication describing the history of public pensions and defined benefit pensions in the United States and why, despite a private sector move away from pensions, they have contributed to growing retirement insecurity, and argues that more defined benefit pensions are necessary to address the systemic problem
- This article provides an American context for defined benefit pensions and provides general lines of reasoning used in defined benefit advocacy work

Brown, Robert L., and Craig McInnes. "Shifting Public Sector DB Plans to DC: The experience so far and implications for Canada." *OPTrust*, 2014.

- This paper draws from the literature and theory to anticipate issues and implications that would arise from converting major pension systems to defined contribution. It also reviews the experience and history in other jurisdictions where large public-sector pension plans have been converted to defined contribution and concludes that the perceived advantages of closing defined benefit pension plans in the private sector do not translate to the public sector
- This study informs context of anti-defined benefit sentiments and their motivations, and provides economic comparisons at a macro level between defined benefit and defined contribution plans

Choi, Namkee and Rita Chou. "Time and Money Volunteering Among Older Adults: The Relationship Between Past and Present Volunteering and Correlates to Change and Stability." *Aging & Society*. Vol. 128, 2010. Pp. 439-466

- This paper examines the relationship between change or stability in volunteering with various socio-demographic attributes of survey respondents and their measures of financial, cultural and social capital. Previous volunteering, level of education, social network size and religious affiliation were found as predictors of volunteering later in life
- This paper informs the control of variables for measuring the community engagement social indicator

"Housing a senior population—the economic and social benefits of seniors in your community." *Canada Mortgage and Housing Corporation*, 2017.

- This report states the economic and social benefits a community receives by attracting and retaining older residents, and advocates for "age friendly" communities through investing in more community services
- This report informs the characterization of different social and financial contributions retirees make in their communities, and thus the social and economic indicators

Larrabee, Matt and Jennifer E. Brown. "Decisions, Decisions: An Update on Retirement Plan Choices for Public Employees and Employers." *National Institute on Retirement Security*, 2017.

- A U.S.-specific view on defined benefit pension plans in comparison to defined contribution provided by a retirement-specific research centre. This report mainly focuses on the cost-benefit debate of the defined benefit plan and less on social value
- This article informs comparison points between defined benefit and defined contribution pensions

Marshall, Katherine. "Retiring With Debt." *Statistics Canada*, vol.23 no. 2, 2011.

- This study showed how financially prepared Canadians are for retirement, financially planning activities, and the impact of carrying debt in retirement
- This study informs the in-depth interview protocol with respect to understanding how near-retirees plan financially for retirement and the impacts of debt to standard of living and management of health indicators

Oakley, Diane, and Kelly Kenneally. "Retirement Security 2017: A Roadmap for Policy Makers Americans' Views of the Retirement Crisis and Solutions." *National Institute on Retirement Security*, 2017.

- This public opinion research project was published to understand individuals' sentiments regarding retirement
- This article captures the public's views on retirement through an American lens and illustrates the gap of defined benefit-specific research in existing body of research

Shillington, Robert. "An Analysis of the Economic Circumstances of Canadian Seniors" *Broadbent Institute*, 2016.

- This research report by Broadbent highlights while Canadians are better off compared to other developed countries, poverty rates have been increasing and people without pension plans have inadequate retirement savings. In particular, senior single women are the most vulnerable segment of the population
- This article informs understanding of differences in replacement rates and behavioural differences between people with and without pension plans

"Target-Benefit Pension Plans" *Canadian Labour Congress*, 2014.

- This submission by a union advocacy group to the Department of Finance Consultation voices concern and objections to the exploration of target benefit plans over the potential governance and solvency requirements of defined benefit plans
- This report provides a Canadian context on target benefit plans, and how their implementation would affect existing publicly funded defined benefit plans





