



Vantage

Building Value for Public Pensions

Lapp ^{strong & secure} 60 _{years}
AIMCo



Social and Economic Value of Public Pensions in Alberta



Research Objectives

The research consisted of two parallel projects:

Economic Contributions of Public Pension Plans in Alberta

Objective: Quantify the contribution that Public Pension Plans make to the Albertan economy including:

- Jobs supported and profile of those employed in the jobs,
- Economic activity across different industries,
- Tax revenue supported

Social Value Benefits of Public Pension Plans in Alberta

Objective: Quantify the social value that public pension plans generate for their members including:

- A comparison between defined benefit and defined contribution plans
- Impact of social value for members on employers



Canadian Centre for Economic Analysis (CANCEA)

We are:

- An independent research organization

We provide:

- Objective, evidence-based analysis

We use:

- Modern techniques in data science, including agent-based modelling and machine learning

Our interdisciplinary group of analysts and researchers serve:

- Municipalities,
- Provincial and federal agencies,
- Non-for-profits, and
- Private industries



Participating Pension Plans

Local Authorities Pension Plan (LAPP)

- Established in 1962 for health care sector, cities, towns, villages, municipal districts, colleges, school boards and other affiliated public sector entities.
- Membership of the plan includes 274,000 active, retired and deferred members

Alberta Teachers' Retirement Fund (ATRF)

- Since 1939, the trustee, administrator, and custodian of the pension assets of the Teachers' Pension Plan as well as the Private School Teachers' Pension Plan.
- Membership of the plan includes 84,400 members
- Participated in Economic Contribution Study only

Public Service Pension Plan (PSPP)

- For employees of the Alberta government and other public service organizations, since 1947
- Membership of the plan includes 85,000 active, retired and deferred members.

Special Forces Pension Plan (SFPP)

- Established in 1979 as a pension plan for Alberta municipal police officers, including police chiefs and deputy police chiefs
- Includes 7,300 active, retired and deferred members



**Special Forces
Pension Plan**

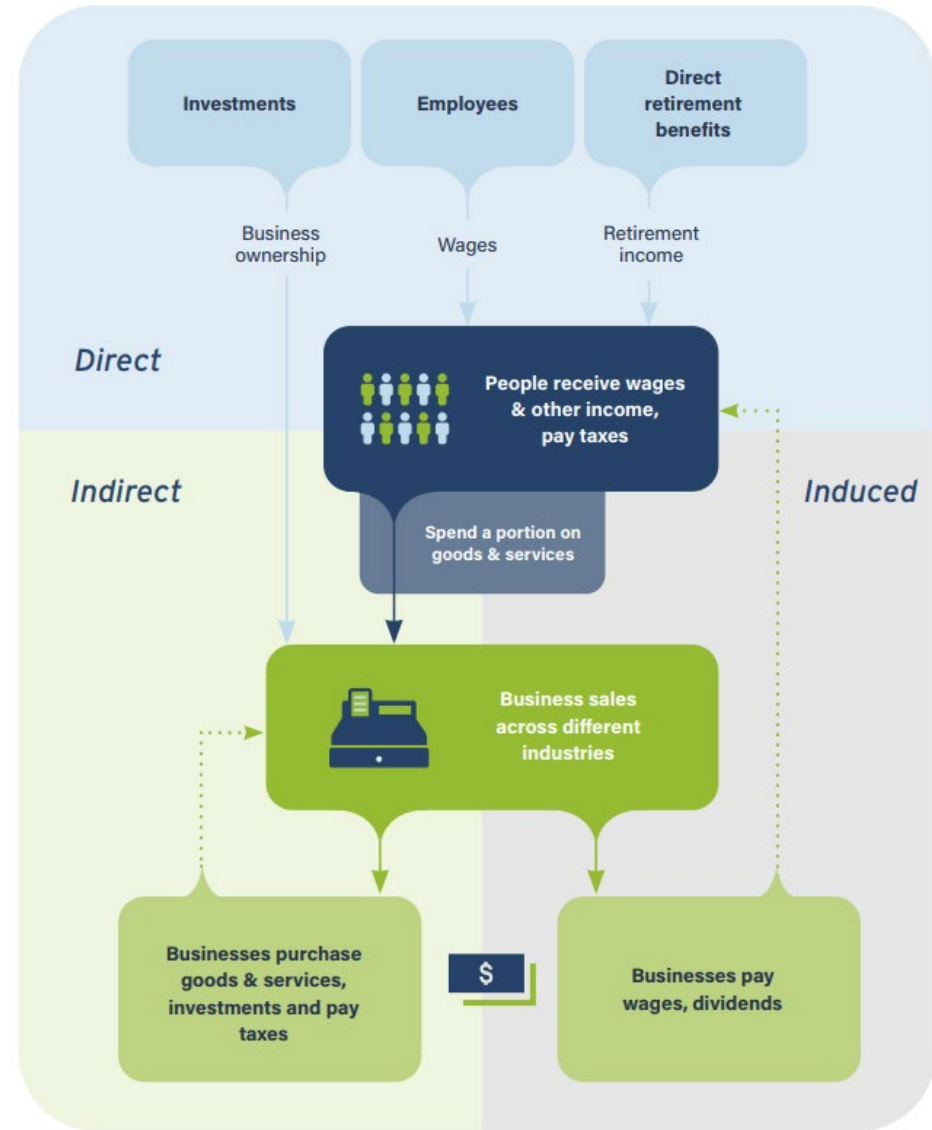
What is Economic Contribution?

The role that the pension plans play in the Albertan economy

- **Retirees:** Receive pension payments which they spend in the community
- **Employees of the Plans:** Receive wages which are also spent (includes some employees of APS and AIMCO)
- **Investments in Alberta:** Employ people and provide infrastructure for other businesses to operate

Economic effects includes the:

- **Direct Contribution:** Initial spending by retirees and employees of the Plans
- **Indirect Contribution:** Economic activity associated with the supply chain to support the direct activity
- **Induced Contribution:** Effect of employees of direct and indirect businesses spending their wages



Overview of the Plans

About The Plans

The four plans (the 'Plans') have:

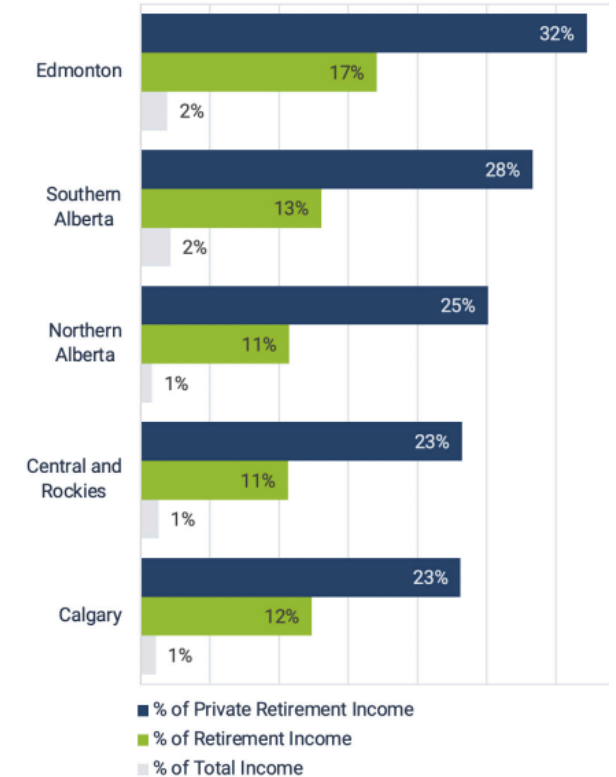
- 401,500 members living in Alberta
- Provided over \$3 billion in annual pension payments – accounting for 27% of Alberta's private retirement income
- Over \$2.5 billion invested in the province (only a small portion of their total portfolio)
- Employ 770 people directly or through associated organizations (a portion of Alberta Pension Services and AIMCO)

242,000
active members

and

117,000
retired members

living in
Alberta



Economic Contribution: Employment

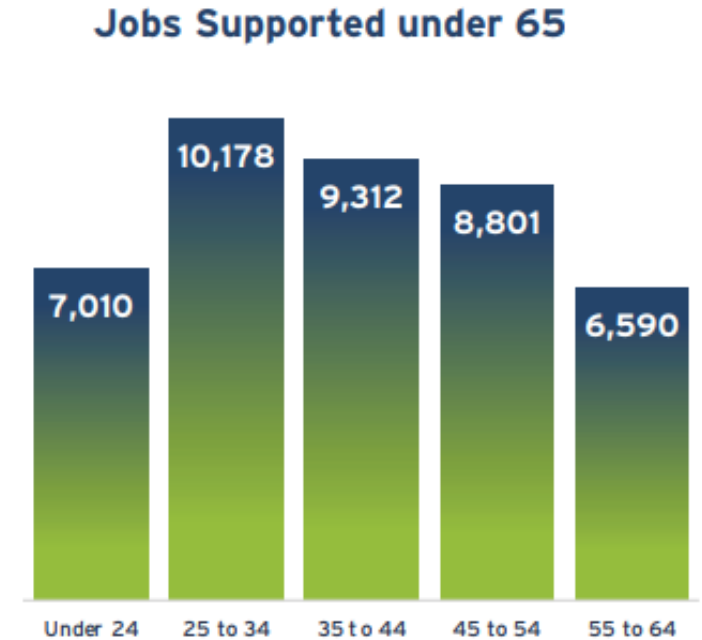
The Plans support **43,700 jobs** across Alberta through:

- Pension payments made to retirees,
- Wages to employees, and
- Investments

Just over 12,000 of the jobs are likely to be filled by a person under 30 years old

Almost 40,000 households are affected by the Plans through supported wages

- 49% are households with children



Economic Contribution: GDP

Through its members, investments and operations, the Plans supported **\$4.8 billion** of economic activity in 2021

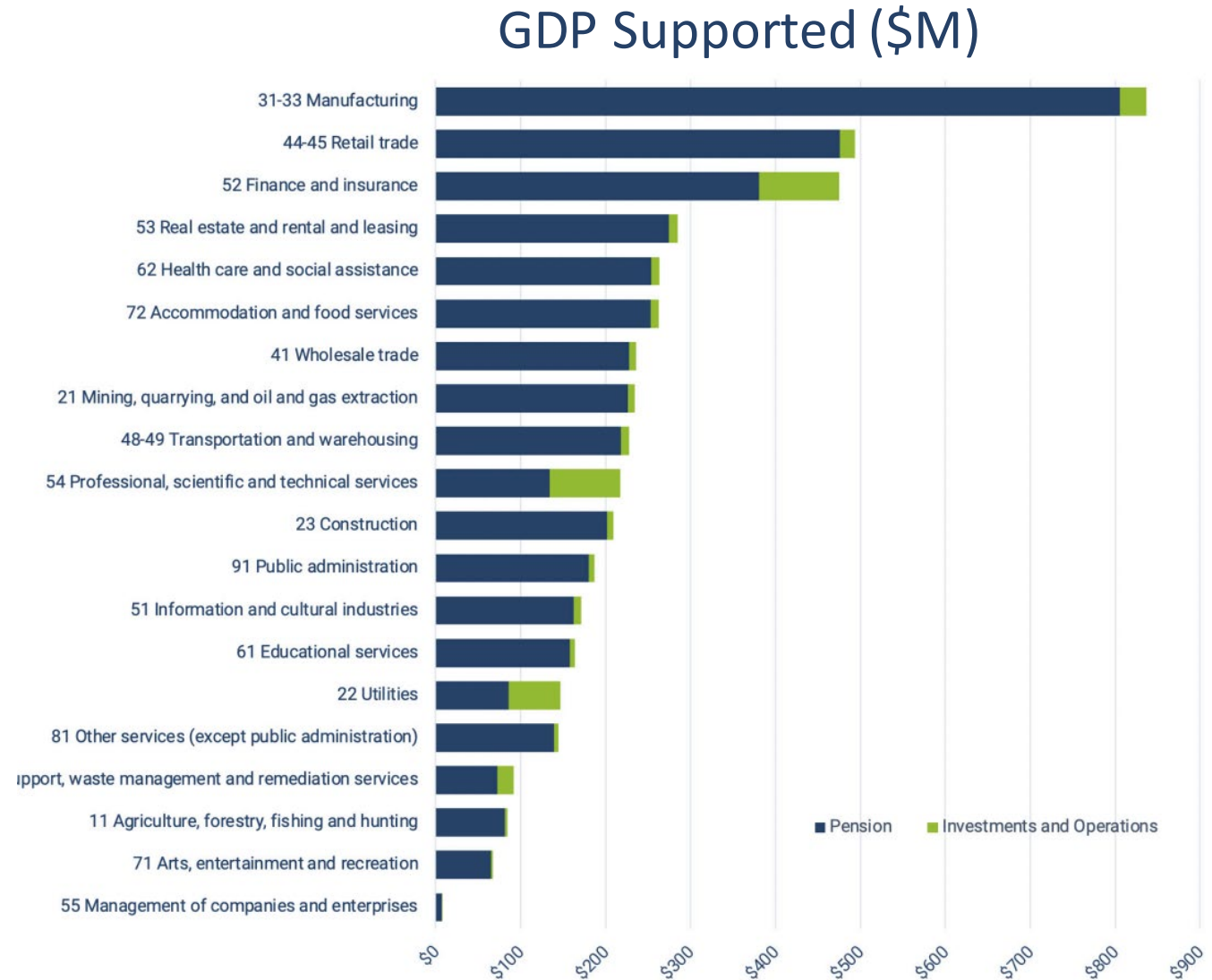
- 92% of the economic activity (and 94% of the jobs) are supported by the pension payments that retirees receive

The top industry sectors supported by GDP include:

- Manufacturing, which includes staples such as food and drink products (17%)
- Retail trade (10%)

The top industry sectors supported by number of jobs include:

- Retail trade (18%)
- Food and accommodation (12%)



Economic Capacity of Investments

Investments in the province total \$2.5 billion

These investments support:

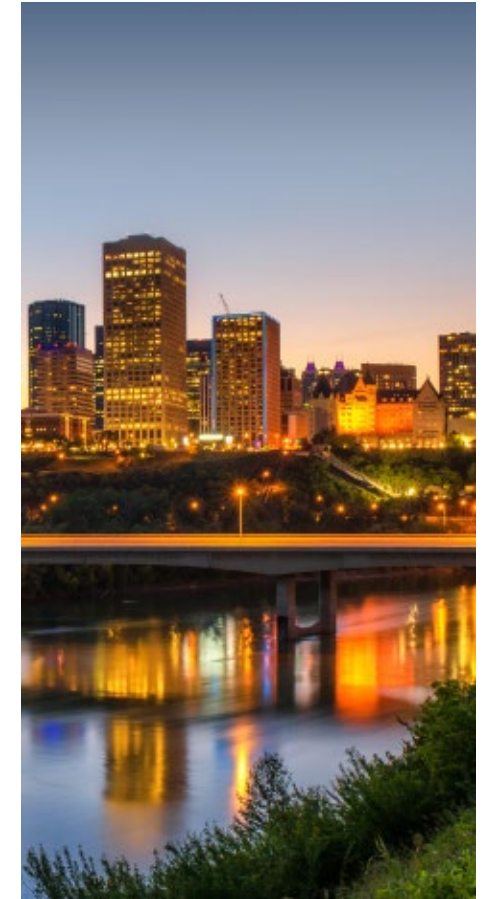
- Over 8 million square feet of office and retail space supporting almost 30,000 employees and 4,000 businesses
- About 6.5 million square feet of industrial space supporting 12,000 employees and 425 businesses
- About 2,700 apartment units providing housing for 3,900 people



Provides space for **4,500** businesses employing **41,800** people



2,700 homes,
8.3 million sq. ft. of office and retail properties and
6.5 million sq. ft. of industrial properties



Regional Economic Contribution

The Plans' contribution to the Alberta economy extends across the province

- Retirees live in all regions of the province, though the locations differ by individual plan
 - For example PSPP retirees tend to be concentrated in Edmonton, while ATRF retirees are more distributed across the province
- The Plan contribute at least **23% of private retirement income**, and over 2% of total income in Southern Alberta

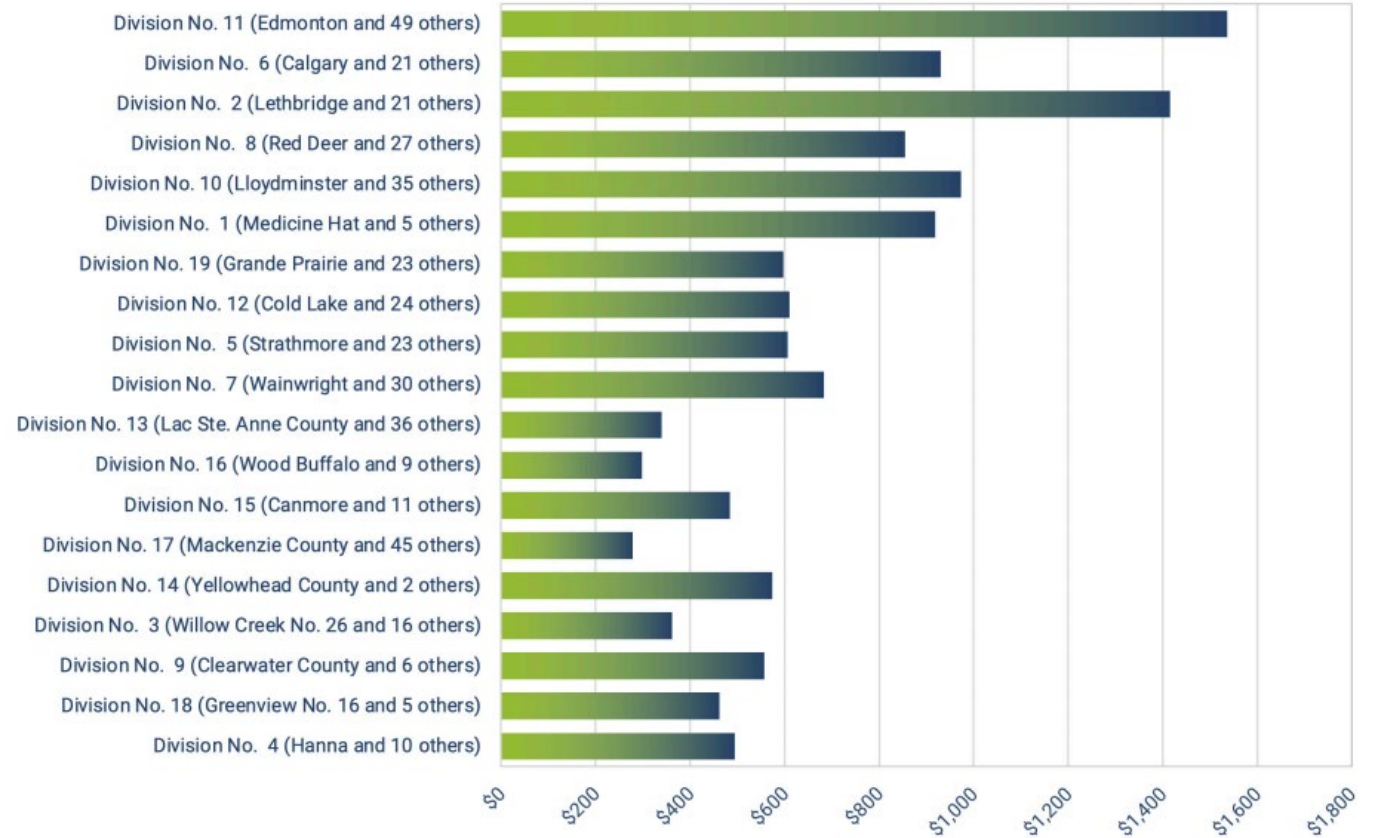
	Calgary	Central and Rockies	Edmonton	Northern Alberta	Southern Alberta
# of Members living in Alberta	130,400	34,900	175,400	28,700	32,000
	94,400 active & deferred	23,600 active & deferred	124,300 active & deferred	21,500 active & deferred	20,700 active & deferred
	36,000 retired	11,300 retired	51,100 retired	7,200 retired	11,300 retired
Retirement Benefits Paid (\$M)	\$950M	\$270M	\$1,360M	\$170M	\$300M
	23% of private retirement income	23% of private retirement income	32% of private retirement income	25% of private retirement income	28% of private retirement income
	1.1% of total regional income	1.3% of total regional income	1.9% of total regional income	0.8% of total regional income	2.1% of total regional income
Jobs supported	14,000	3,400	20,900	1,800	3,700
	\$690M in wage income	\$160M in wage income	\$1,060M in wage income	\$90M in wage income	\$180M in wage income
GDP Supported	\$1,500M	\$400M	\$2,300M	\$200MM	\$400M
	\$15.06 of pension-supported GDP per \$10 of pension payments	\$13.38 of pension-supported GDP per \$10 of pension payments	\$15.00 of pension-supported GDP per \$10 of pension payments	\$10.87 of pension-supported GDP per \$10 of pension payments	\$12.95 of pension-supported GDP per \$10 of pension payments

Regional Economic Contribution

Expanding the geographic groups show that the economic contributions of the Plans extend across the province

- Retirees of the Plans live in every region of the province
- Basic staples tend to be purchased close to where people live
- The regular pension payments received by retirees play an important role in the economy of many more rural communities, in addition to the larger cities

GDP Supported per Capita (\$)



What is Social Value?

Social Value is a non-economic value that arises from improving peoples' quality of life.

- This value is not captured on traditional balance sheets or financial transaction records
- Depends on the relative importance that individuals place on different quality of life factors
- Quality of life factors vary from person to person.

Social Value is not the economic benefits that arise to government, a business, or a community.

To accurately assess social value, a **survey** of individuals in the population of interest is required:

- CANCEA and the Plans reached out to over 5,800 plan members as well as members of the general Alberta public
- About 40 questions specifically designed to understand the social value of pension plans
- Received 1,350 anonymized responses



Social Value: Retirees

The survey asked participants to rate their overall satisfaction with life on a scale from 0 to 10.

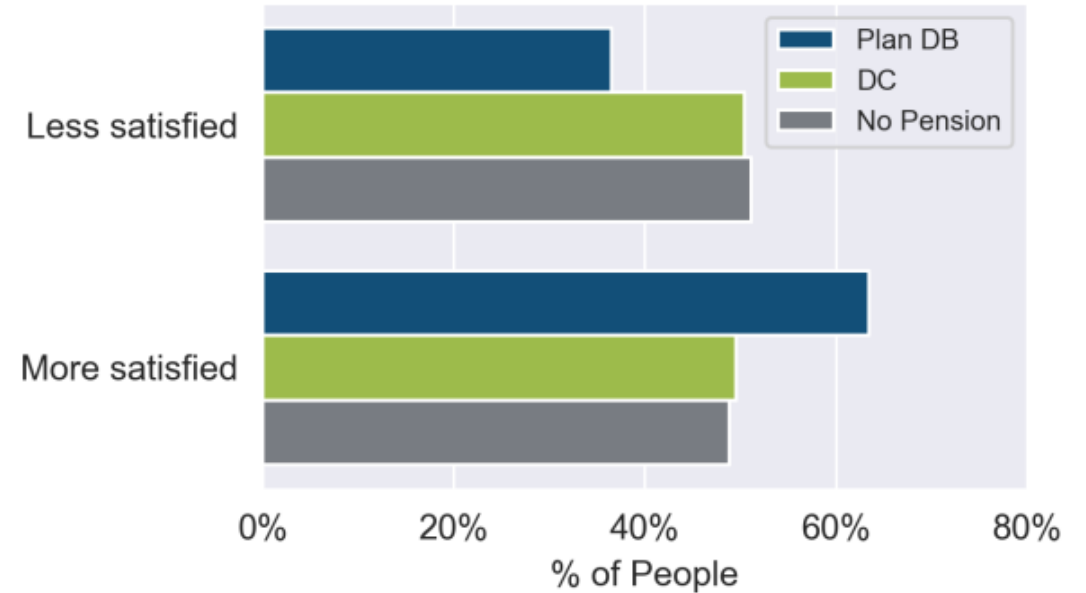
On average, DB Plan retirees' satisfaction with life was:

- 24% higher than no pension
- 9% higher than those with a DC pension

Retirees who are members of the Plans are:

- 34% more likely to report higher satisfaction with life than retired Albertans with no pension, and
- 15% more likely to report higher satisfaction with life than retired Albertans with a DC pension

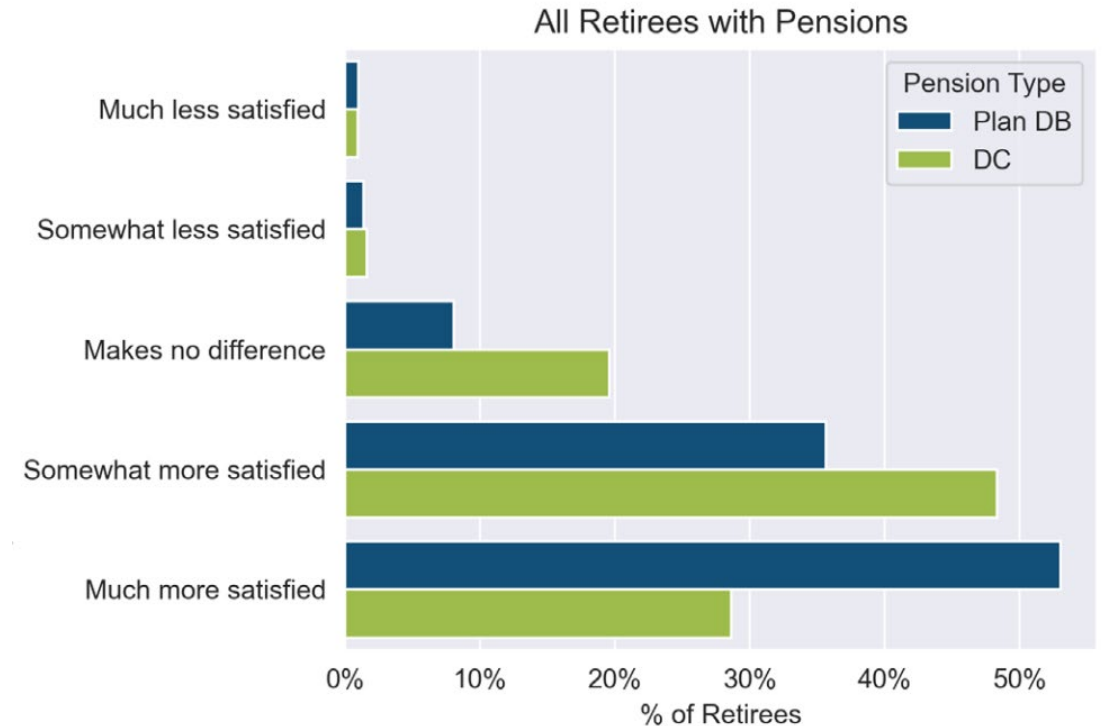
Satisfaction with Life



Social Value: Retirees

The survey directly asked how much their pension plan contributes to a retiree's satisfaction with life

- 89% of DB Plan retirees reported that their pension plan makes them somewhat or much more satisfied with life
- For DC Plan retirees, 77% reported the same
- DB Plan retirees are twice as likely to report their pension makes them much more satisfied than DC retirees



Satisfaction With Life

Many **inter-dependent factors** contribute to a retiree's overall satisfaction with life

For example:

- Better health allows more community involvement and recreation
- Greater financial security can reduce stress and as a consequence improve health

Additional factors may contribute for people who are currently working such as:

- Job security
- Type of work



Financial Security

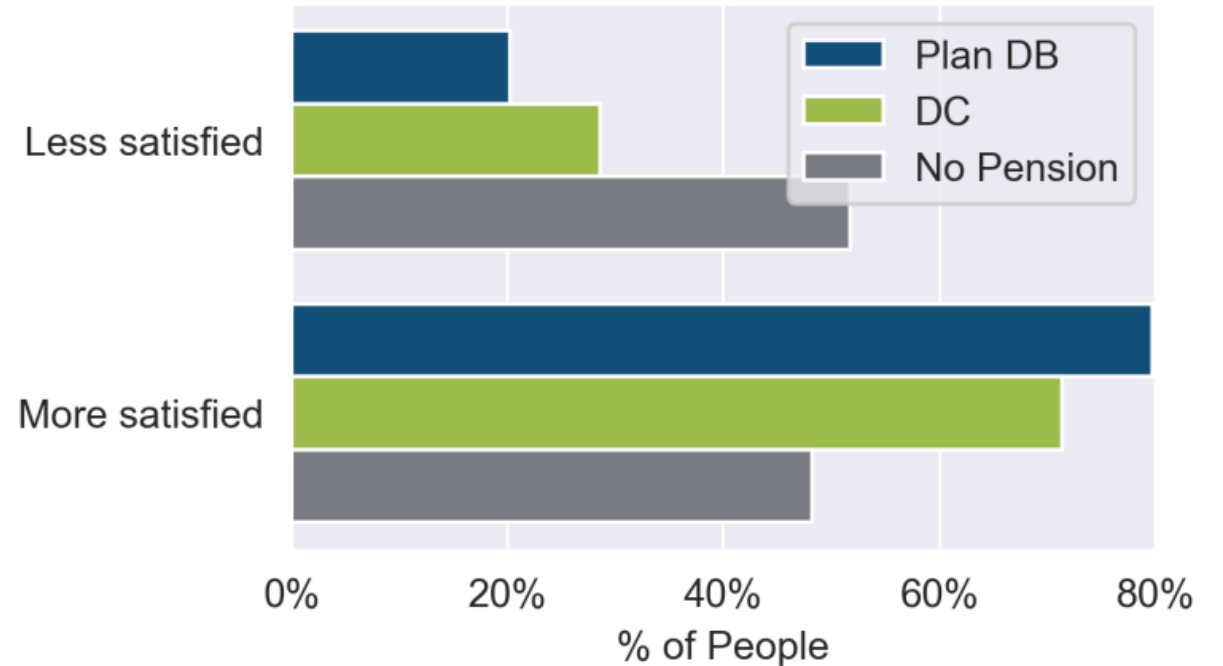
A key contribution to the overall difference in satisfaction with life between DB and DC pension plans is the level of **financial security** provided

Compared to no pension plan

- Retired members of the DB Plans are **over 50% more likely** to be more satisfied with their financial security
- Retired members of DC plans are just 25% more likely

This persists across all incomes, with both higher and lower income DB retirees report greater satisfaction with financial security than similar DC or no pension retirees

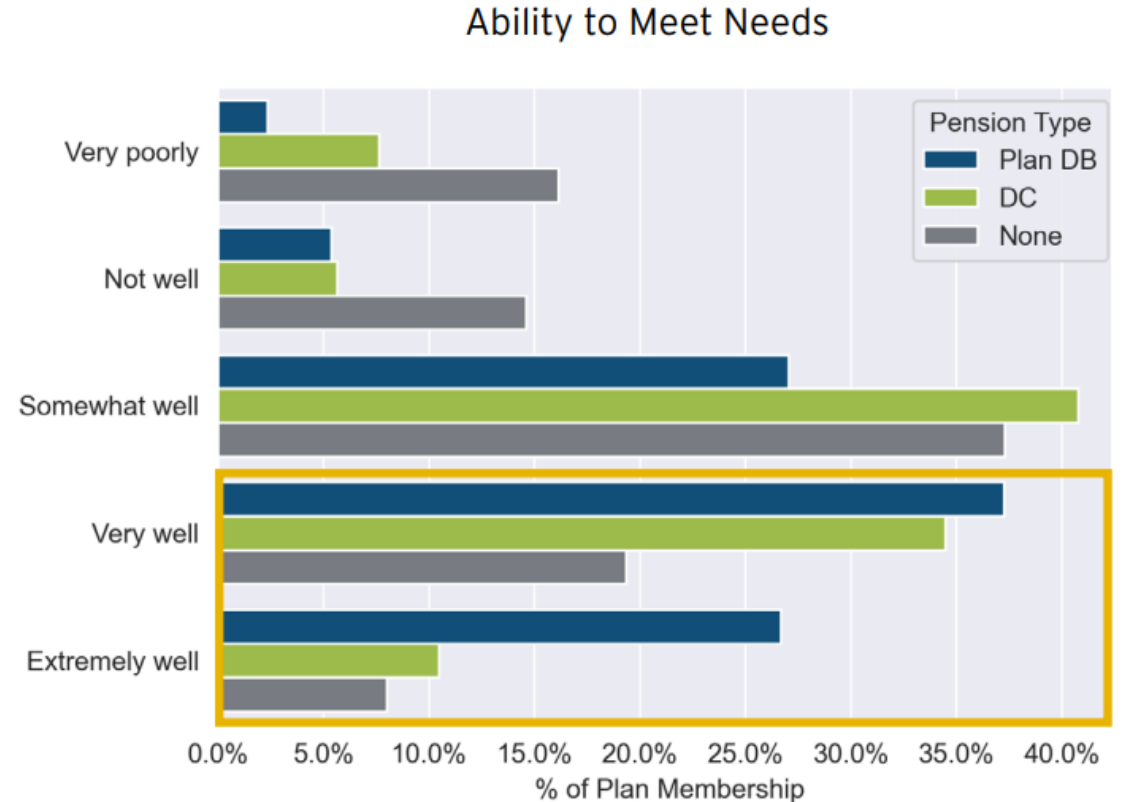
Satisfaction with Financial Security



Financial Security

Many factors contribute to overall satisfaction with financial security:

- 64% of DB Plan retirees report meeting their retirement needs very or extremely well
- 23% more likely to be prepared for unexpected expenses than DC retirees, and twice as likely for those with no pension
- 83% of DB Plan retirees reported that their pension plan contributed significantly to their retirement plans, compared to 69% of DC retirees



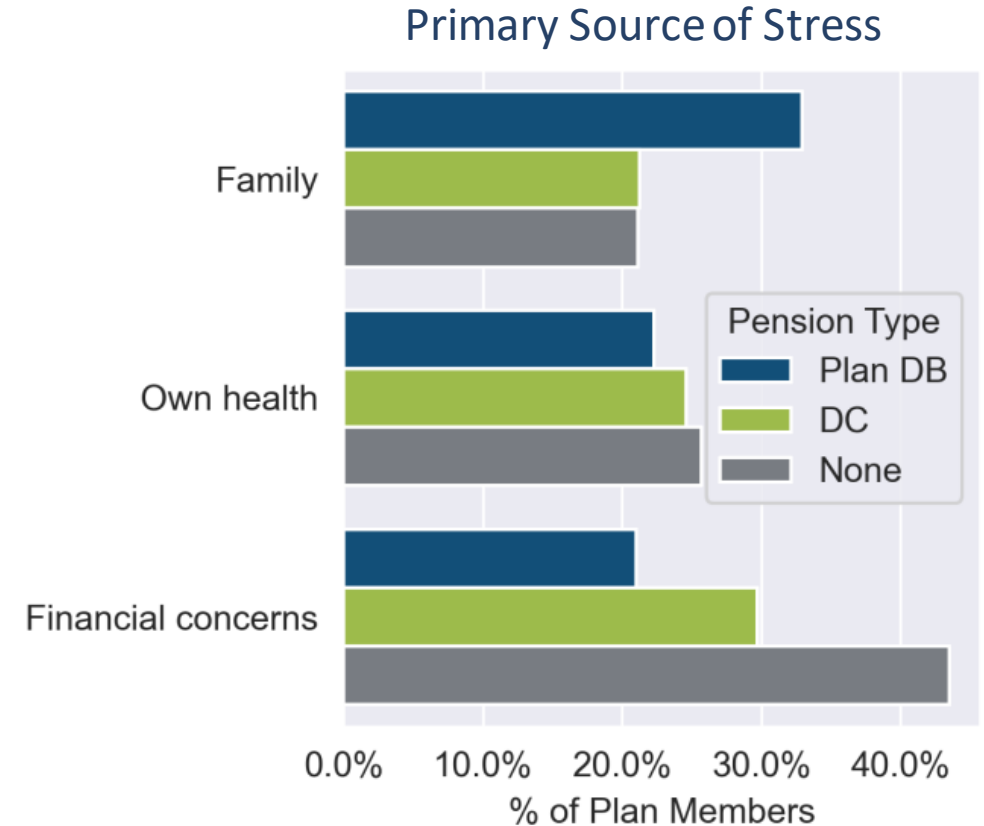
Sources of Stress

Overall, both DB retirees and DC retirees report relatively little stress

- 55% of DB and DC retirees report little or no stress
- Among those who do have stress, DC plan members are 46% more likely to report higher levels

However, among retirees who reported stress, DB plan retirees were least likely to report financial concerns

- DC retirees are 41% more likely to report financial concerns as their primary source of stress
- Retirees no pension are 207% more likely to report financial concerns as their primary source of stress



Health and Community

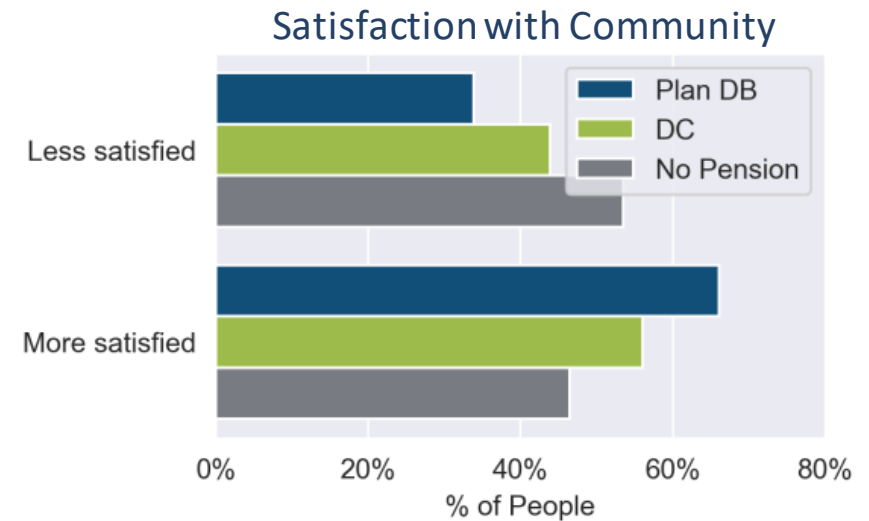
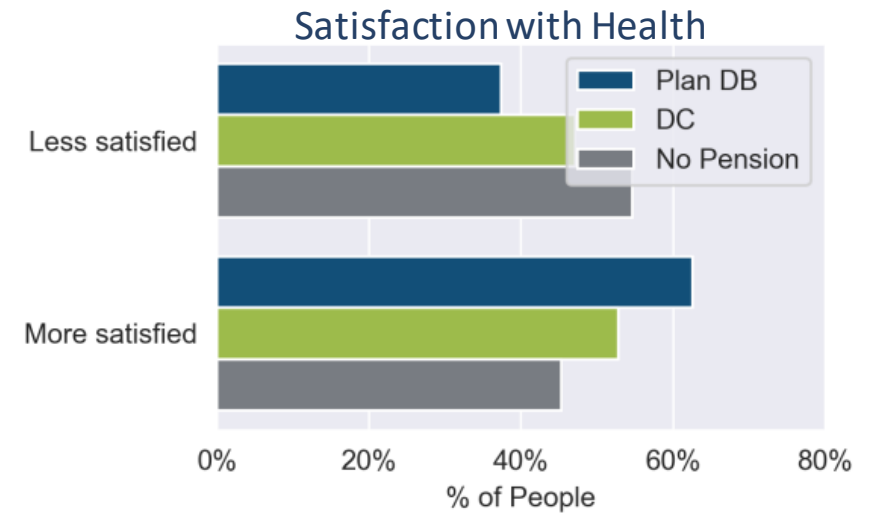
Retirees with DB plans report greater satisfaction with health and community engagement

For health, DB Plan retirees are:

- 38% more likely to be satisfied with their overall health compared to those with no pensions.
- 27% more likely to be more satisfied with their health than retirees with a DC pension plan

For community and leisure, DB Plan retirees

- twice as likely to be very active or extremely active with recreational activities compared to those with no pension
- 23% more likely to volunteer than those with no pension



Social Value: Financial Equivalent

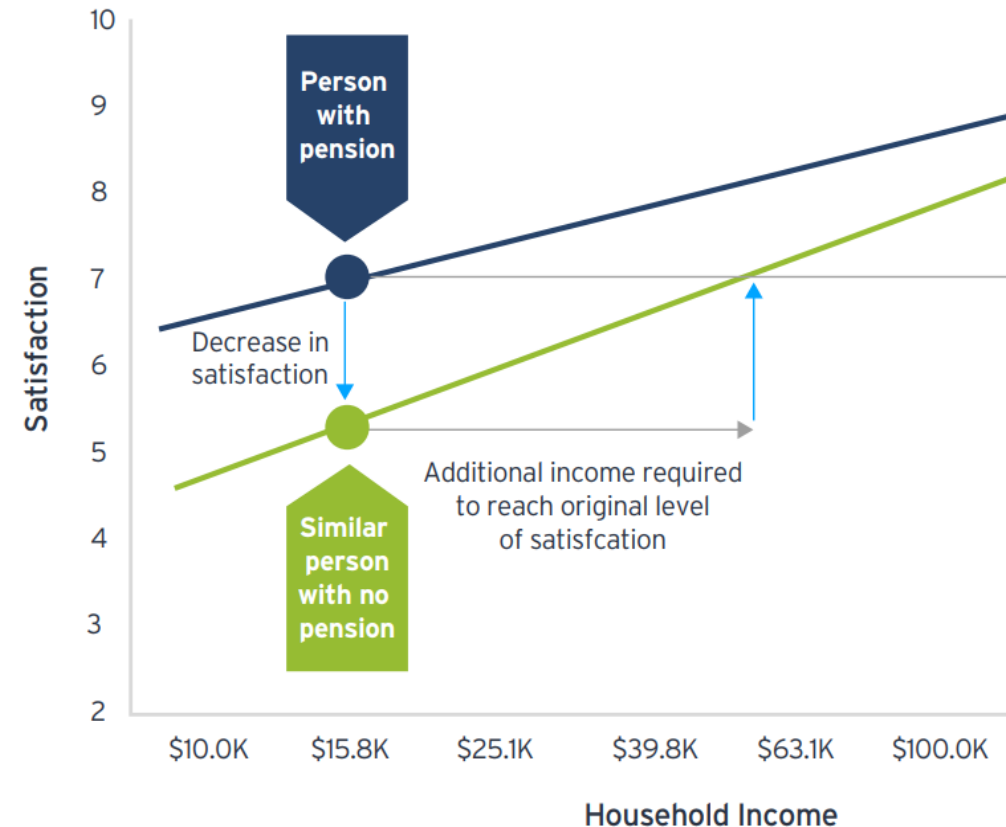
Ideally, one would like to evaluate a policy or organization from a combined economic and social value point of view

Problem:

- Economic benefit is measured in dollars
- Social value is measured on the subjective scale of satisfaction with life

Solution: Well-Being Valuation Approach

- Converts the differences in satisfaction with life into financial equivalents
- Used extensively in the UK and other places to incorporate social value into policy decisions
- Extensively supported by academic literature and case studies



Valuation of Social Benefits for Retirees

The valuation of the social benefits for retirees amounts relative to no pension to

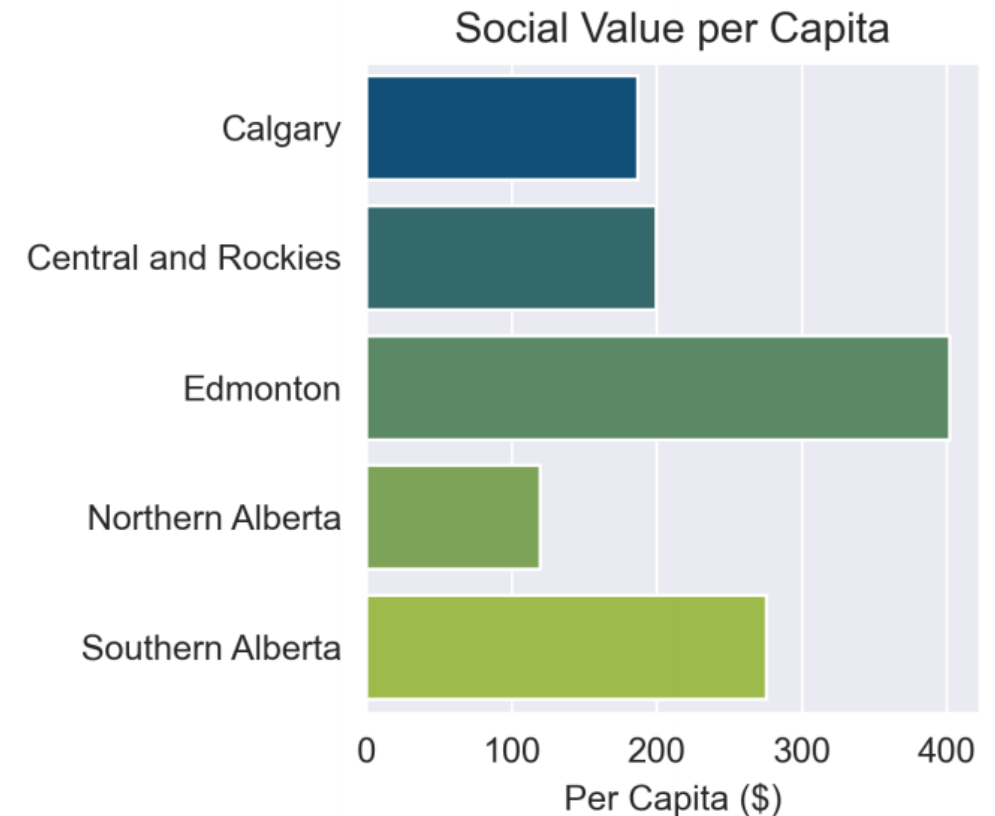
- \$1.2 billion annually, or **\$12,800 per retiree**
- Equivalent to a 56% increase on the average retirement benefit that a retiree receives

Relative to DC plans, the additional social value of the DB plan for retirees is values at

- \$5,200 per retiree every year

Across the province;

- Half (\$600M) of the aggregate social value is realized in the Edmonton region due to the large number of retired members in the region
- When corrected for population, the social value is significant in all regions of the province



Social Value: Employees

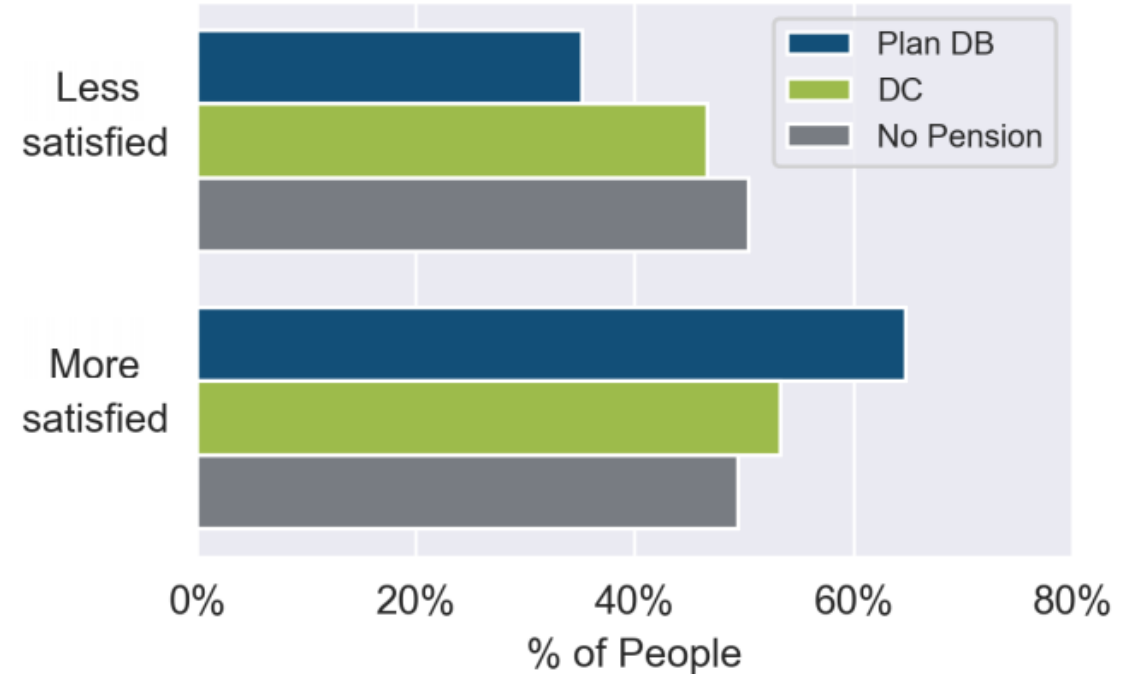
Current employees with a DB pension plan also show greater satisfaction with life than those a DC or no pension plan

- Employees with DB pension plan are **50% more likely** to be more satisfied with life compared others
- Across all ages, **80% of employees** with a DB pension report that it contributes to their satisfaction with life, compared to 67% of those with a DC plan

Note that for current employees, other factors contribute to satisfaction with life including:

- Job security
- Family status
- Type of work

Satisfaction with Life



Social Value: Employees

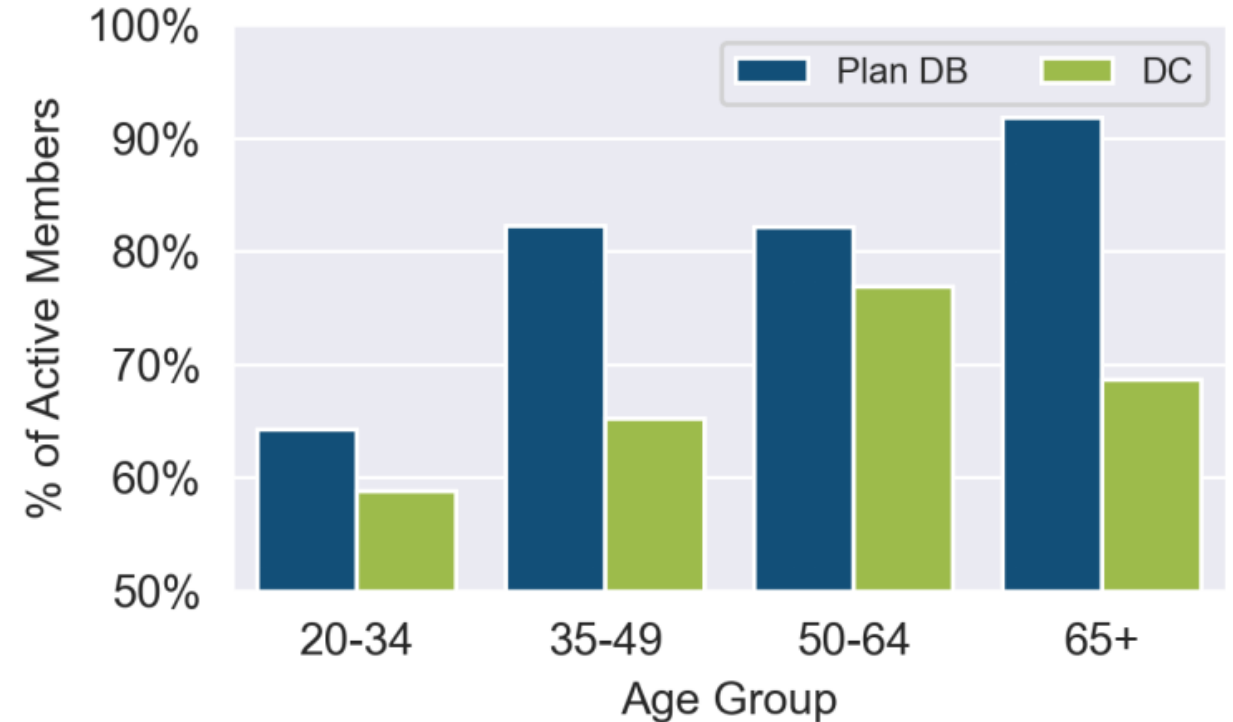
The social value of pension plans increase with age of an employee

- DB plans contribute more to satisfaction with life than DC plan, particularly among those 35 to 49

Aligns with the fact results that DB plans, relative to DC plans,

- play a greater role in retirement planning
 - Pension contributes significantly to **82% of DB** members retirement plans, compared to 64% of DC members, and
- members have less financial stress
 - **87% of DB members'** primary source of stress is **non-financial**, compared to 57% for DC members

Pension Contributes to Satisfaction with Life



Other Benefits: Employers

Retention of Employees

Pension plans, and DB pension plans in particular play a role in retaining employees

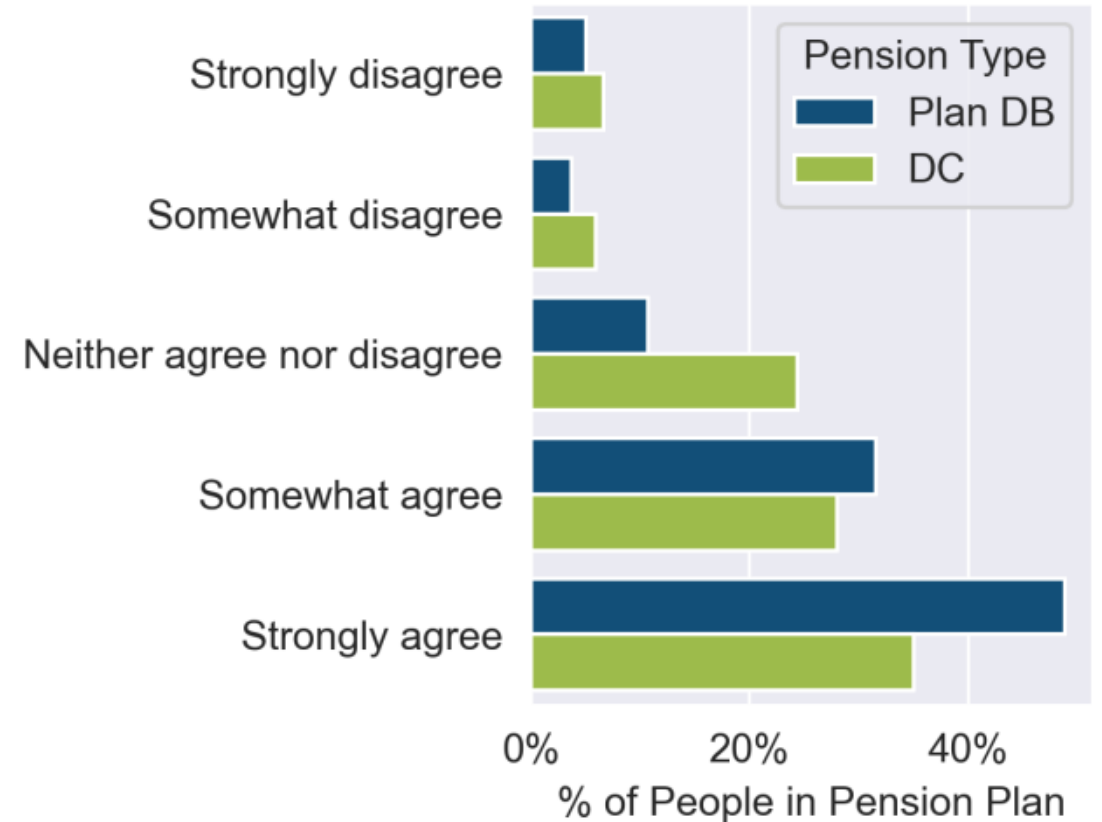
- Over 80% of DB plan members agreed (somewhat or strongly) that their pension plan contributes to remaining with their employer
- For those with a DC plan, it is less than 60%

Sense of Belonging

Almost two-thirds of DB and DC plan members reported a sense of belonging to their organization

Only 40% those with no pension reported the same sense of belonging

Pension Plays a Role in Retention



Conclusions

Economic Contribution

The Plans support:

- A total of \$4.8 billion of economic activity (Equivalent to 1.5% of Alberta's provincial GDP)
- \$1.58 of economic activity for every dollar of pension paid
- 43,000 jobs across all regions of Alberta, including 17,000 jobs for those under 35 years
- 27% of the private retirement income in the province (and 1.4% of the total provincial income)

The Plans support jobs across all ages including over 25% for those under 30

Economic contributions spread through all industry sectors of the economy.

Social Value Benefits

Retirees have a:

- 34% greater likelihood of being more satisfied with life compared to those who do not have a pension
- 15% greater likelihood than those who have a DC pension.

The value associated with these outcomes is equivalent to:

- \$1.2 billion annually, or \$12,800 per retiree
- An incremental value of DB Plan membership over DC membership of \$5,200 per retiree every year

Active DB members report:

- a 50% greater likelihood of being more satisfied with life compared to those with no pension plan
- 81% of active DB Plan members agreed that their DB plan plays a role in retention

Questions

Canadian Centre for
Economic Analysis (CANCEA)

www.cancea.ca

david.stiff@cancea.ca

Local Authorities Pension Plan

www.lapp.ca

Alberta Teachers' Retirement
Fund

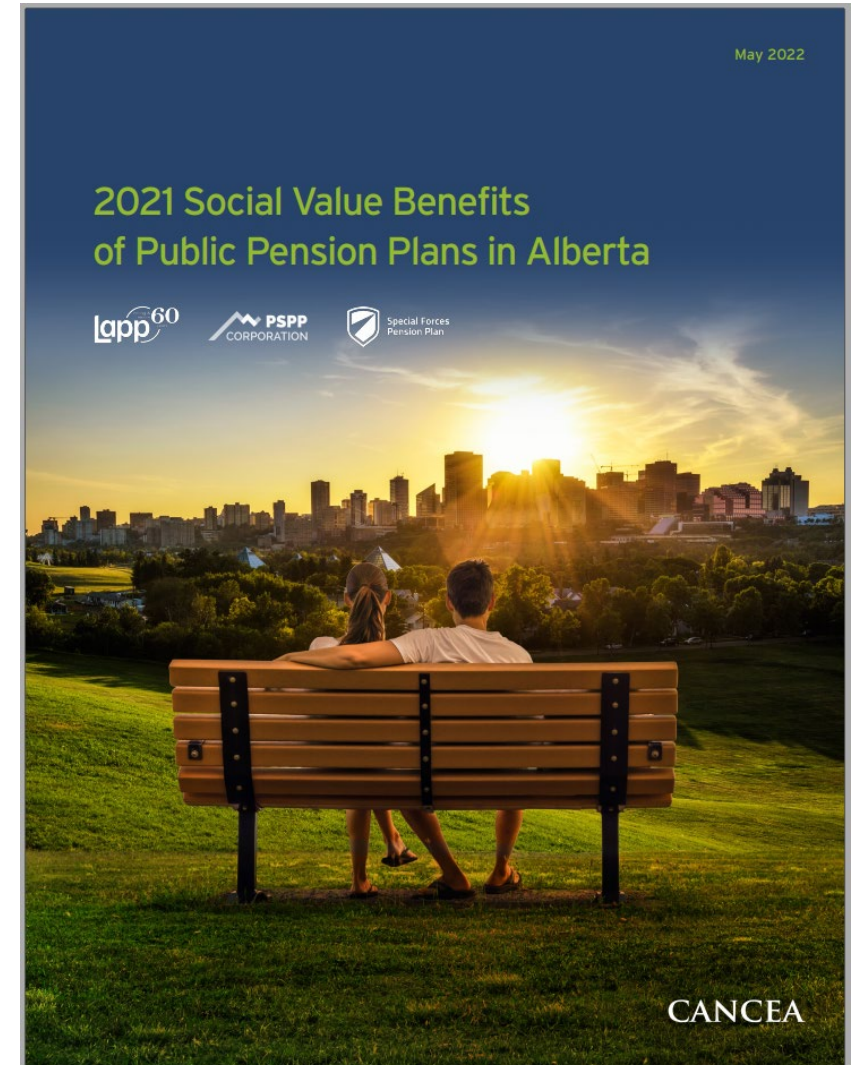
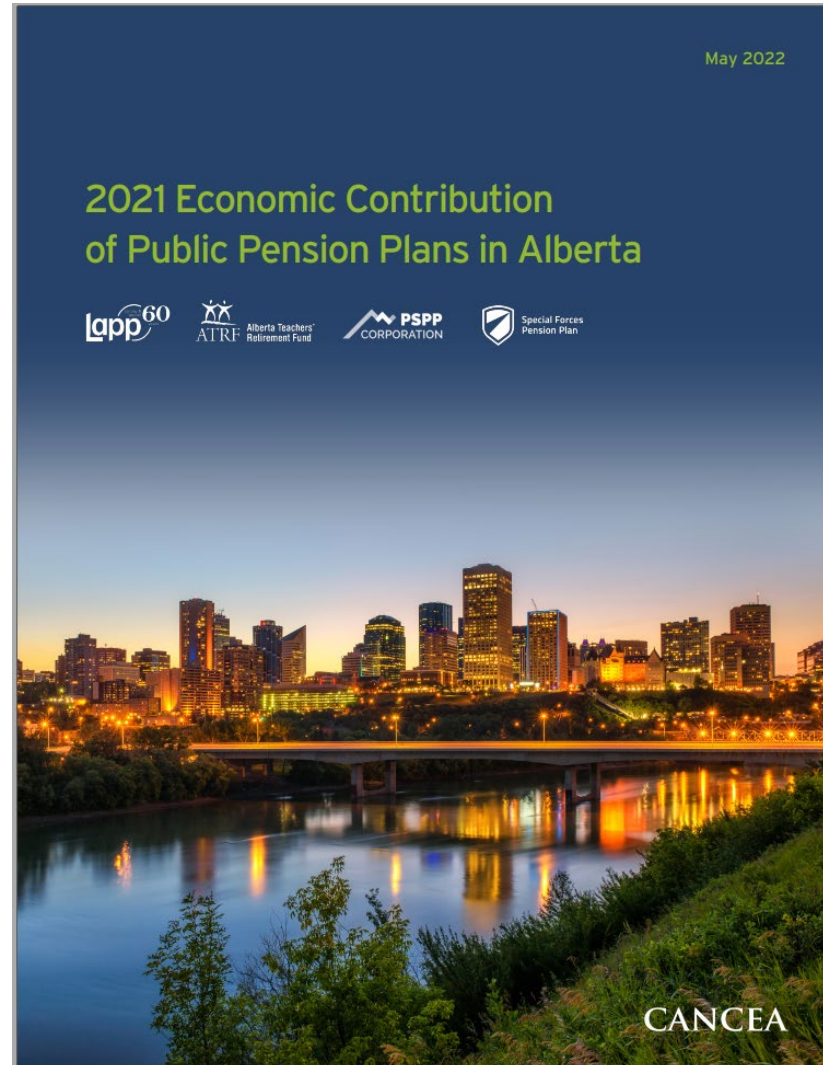
www.atrf.com

Public Service Pension Plan

www.pspp.ca

Special Forces Pension Plan

www.sfpp.ca



Both reports will be released later in June