

# Pennsylvania Retirement Savings

## Economic and Fiscal Impact Analysis

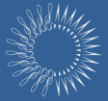
### Key Findings – September 2022

# Report Background

- This analysis is prepared by Econsult Solutions, Inc. (ESI) for The Pew Charitable Trusts
- ESI provided a 2018 analysis of the economic and fiscal impact of insufficient retirement savings in Pennsylvania from 2015 - 2030 for the PA Treasury Retirement Savings Task force
  - Subsequent analysis of County-level impacts was undertaken by ESI for Pew in 2020
- This report updates the findings of the statewide impacts of insufficient savings to cover the time period from 2020-2035
  - Analysis methods are consistent with the prior study, as well as similar studies undertaken by ESI in Colorado, Virginia and Hawaii
  - Program impacts in 2020 specific to the COVID-19 pandemic are excluded in order to provide a basis to estimate more typical activity levels anticipated over the 15-year period.
- This report provides key findings from ESI's statewide analysis, which will be supplemented with further findings, documentation and county-level analysis in future reporting

# Analysis Outline

- Demographic Change
- Savings Shortfalls
- Fiscal Impacts from Insufficient Savings
- Household Spending Impacts from Insufficient Savings



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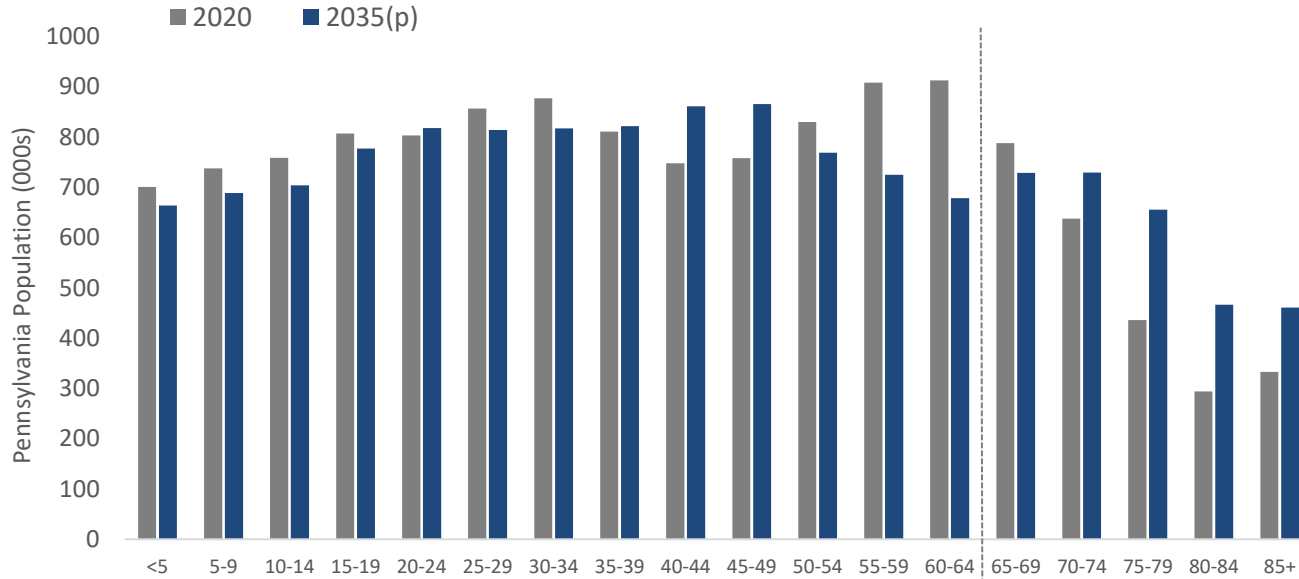
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# Demographic Change

## Pennsylvania's Aging Population

# Population Change by Age

Projected Pennsylvania Population, 2020-2035



- Pennsylvania's elderly (age 65+) population is projected to grow from 2.49 M in 2020 to 3.04 M in 2035
- Among the elderly, the share 75+ is projected to grow from 43% in 2020 to 52% in 2035

Source: Census 2020, PA IFO / ESI projections (2035)

# Elderly Population Growth

Projected Pennsylvania Population, 2020-2035

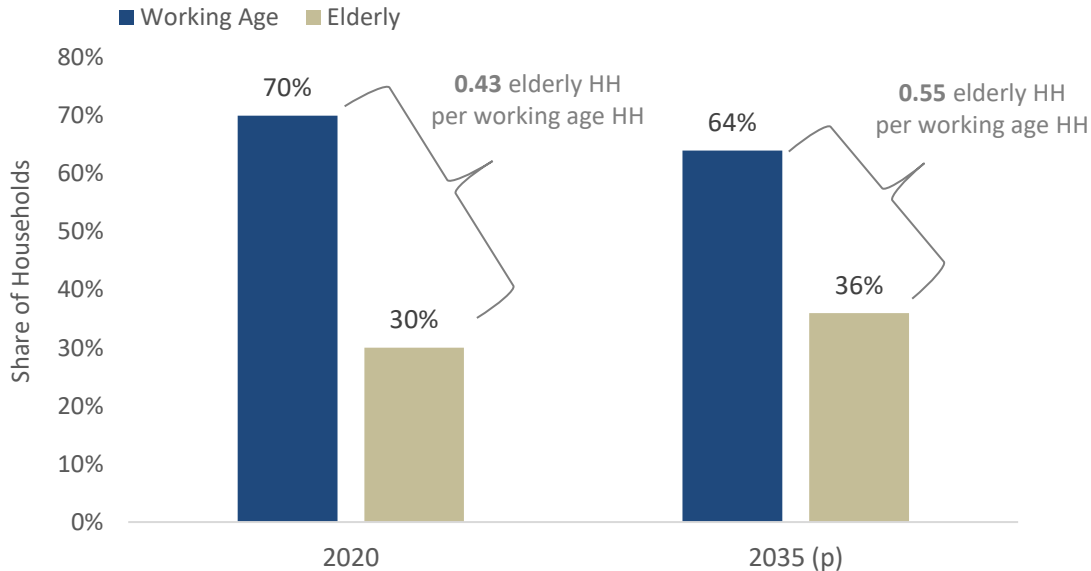
	2020	2035 (p)
Pennsylvania Population	13.00 M	13.05 M
Elderly Population (65+)	2.49 M	3.04 M
<b>Elderly Population Share</b>	<b>19%</b>	<b>23%</b>
Pennsylvania Households	5.21 M	5.36 M
Elderly Households (65+)	1.56 M	1.91 M
<b>Elderly HH Share</b>	<b>30%</b>	<b>36%</b>

- Pennsylvania's elderly population is expected to grow by more than 550,000 in the next 15 years, increasing from 19% to 23% of the state's population
- The share of Pennsylvania households headed by an elderly resident is projected to increase from 30% in 2020 to 36% by 2035

Source: Census 2020, PA IFO / ESI projections (2035)

# Elderly Dependency Ratio

## Pennsylvania Household Shares, 2020-2035



The “dependency ratio” describes the number of elderly households for each working age household:

- Pennsylvania’s dependency ratio is projected to increase from 0.43 in 2020 to 0.55 in 2035
- Working age households are major drivers of tax base
- Therefore, this change in ratio creates fiscal pressure

Source: ESI Analysis

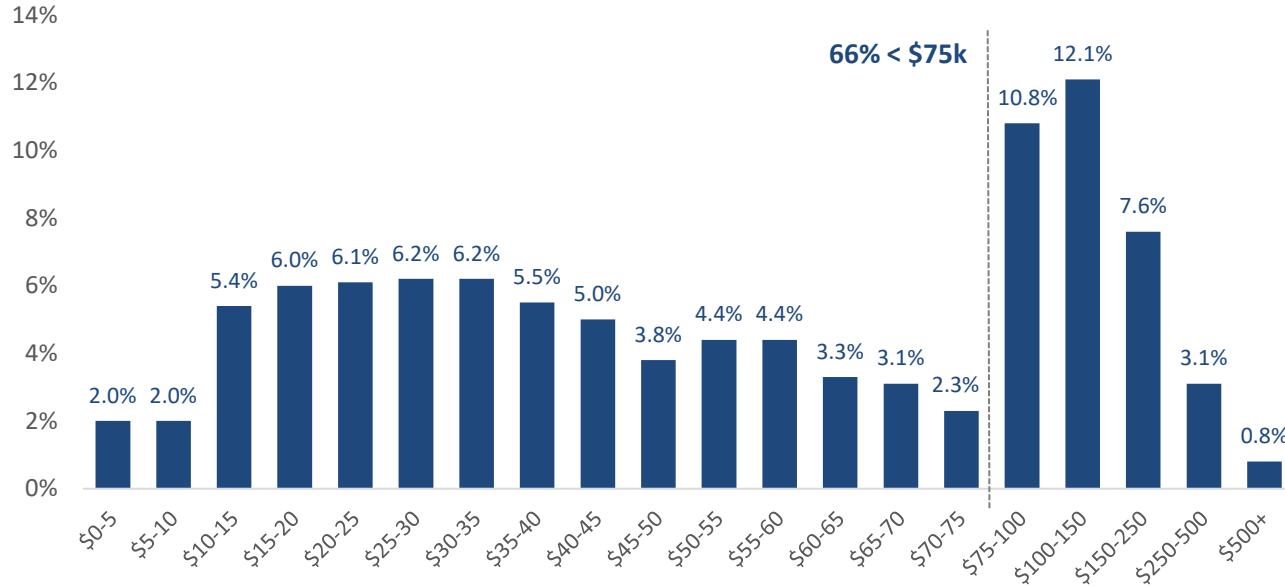
# Savings Shortfalls

## Income Gaps for Pennsylvania's Elderly



# Pennsylvania Elderly Incomes (2020)

Estimated Income Distribution of Pennsylvania's Elderly, 2020 (\$000s)



- Roughly two-thirds of Pennsylvania's elderly are estimated to have household incomes <\$75k
- Almost 400,000 elderly Pennsylvania residents have incomes <\$20k

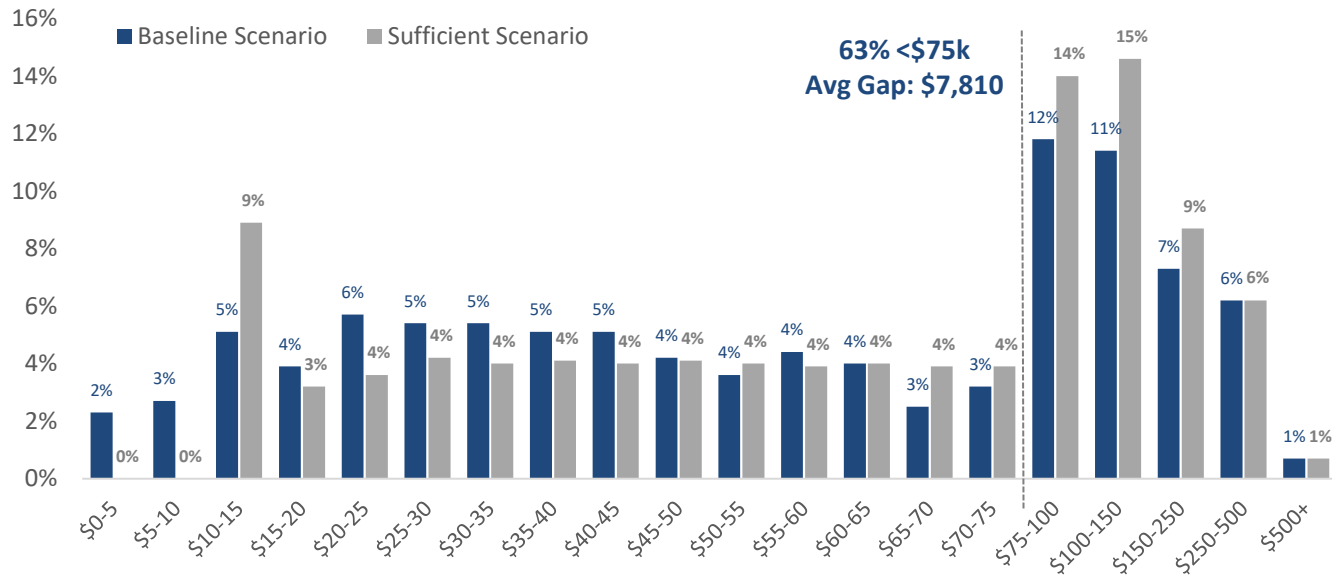
Source: ESI Analysis of Current Population Survey (CPS) Data

# Defining Retirement Adequacy

- “Sufficient Scenario”: retirees achieve recommended replacement rates of working-age income
  - Targeted replacement rate 75% of income (inflation adjusted) from when the same cohort was nearing retirement (ages 45-64)
  - Minimum adequate income set at the Federal Poverty Level
  - Retiree incomes >\$75k considered sufficient regardless of replacement level
- Baseline scenario for 2035 assumes continuation of income replacement trends observed from previous cohort of retirees (2005-2020)
- Differential between observed (2020) / baseline (2035) scenarios and sufficient savings scenario is a measurable “savings gap”

# Retirement Income Gap (2035)

Income Adequacy of Pennsylvania's Elderly Households, 2035 (in \$2020)



- Under current savings trends, 63% of Pennsylvania's elderly population is projected to have incomes <\$75k in 2035
- The average shortfall among these households relative to recommended income replacement level is estimated at \$7,810

Source: ESI Analysis of Census Bureau Income Data and Financial Modeling

# Savings to Address Income Gap

Annual Savings to Fill Retirement Income Gap, Pennsylvania HH <\$75k (in \$2020)

	2035
Total Elderly Households	1.91 M
Households with <\$75k Annual Income	1.20 M
Share of HH <\$75k	63%
Avg Income HH<\$75k	\$36,890
Average Income Differential (HH <\$75k)	\$7,810
Avg Lump Sum Savings Needed	\$173,600
<b>Annual Savings Needed to Fill Savings Gap</b>	<b>\$1,890</b>
Monthly Savings Needed	\$157

- The level of annual savings that would be required to address the income gap under typical financial assumptions represents a “savings gap”
- At a typical rate of return, additional savings of \$1,890 per year (or \$157 per month) over 30 years would close retirement income gap for avg HH <\$75k
- At lower contribution levels, savers can still enjoy greater financial security and improved quality of life in retirement

Source: ESI Analysis of Census Bureau Income Data and Financial Modeling

# Fiscal Impacts

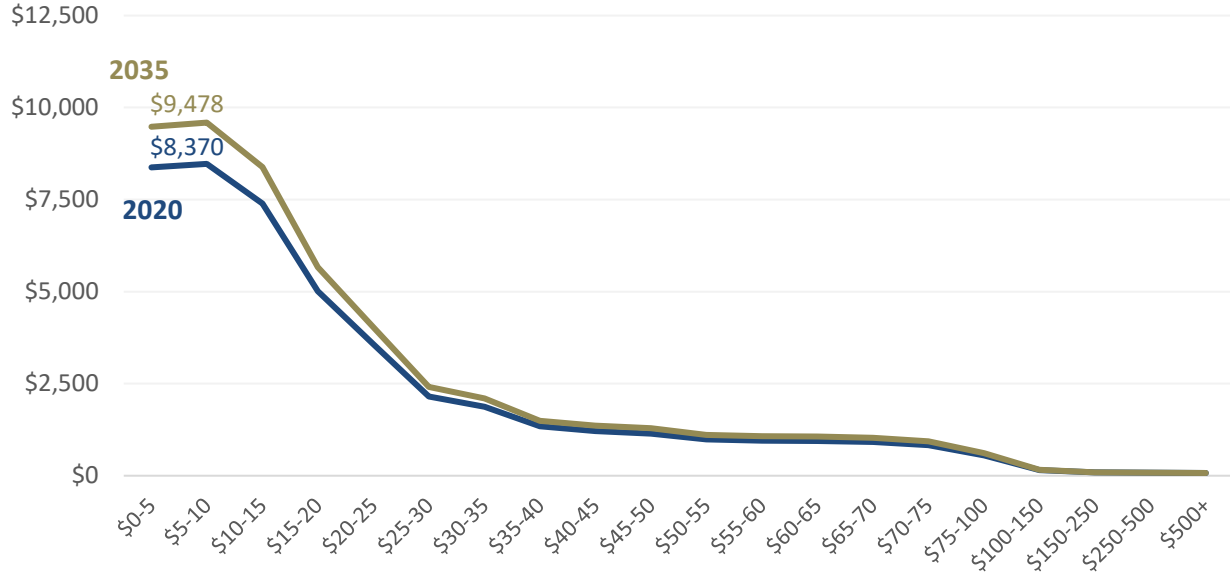
## Government Cost Growth due to Insufficient Savings

# Benefit Program Impacts

- Pennsylvania operates several benefit programs for elderly residents that are means-tested for either eligibility or benefit levels
- Reductions in elderly incomes from insufficient savings increase the rate of growth in state program costs
- Modeled programs;
  - Medicaid (including Community HealthChoices)
  - PennCARE
  - Housing Rebates
  - PACE
  - Free and Reduced Transit

# State Benefit Program Expenditures by Income Band

State Benefit Program Expenditures per Elderly HH by Income Band (in \$2020)

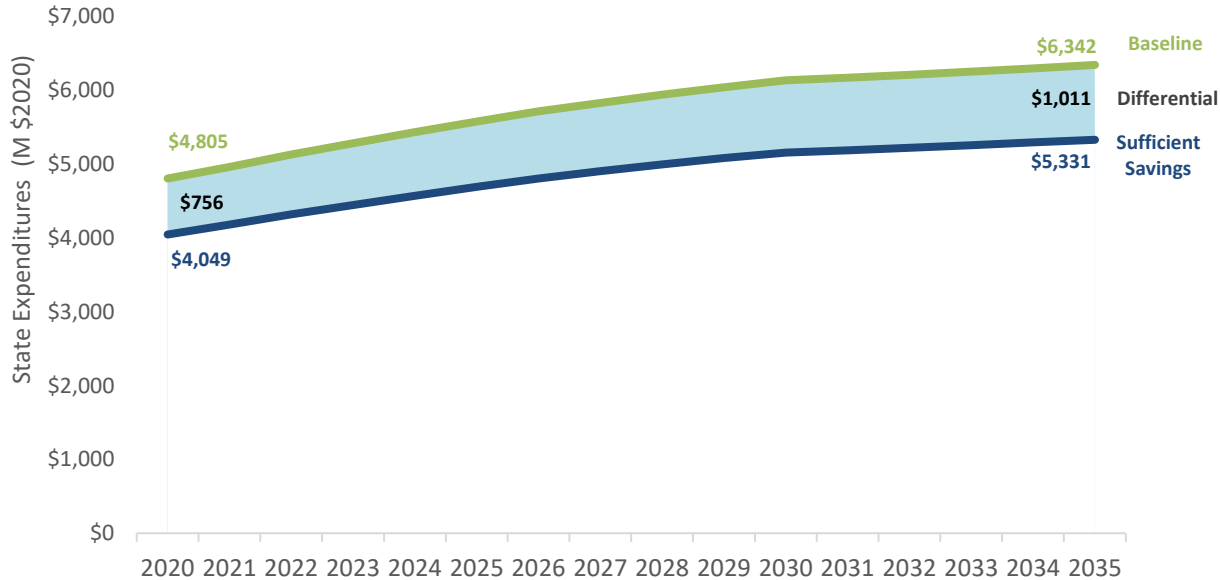


- Program expenditures decline significantly as HH income grows (due to means-testing)
- Medicaid (including Community HealthChoices) is the key driver of state program spending for low-income elderly residents
- Excess medical cost growth is anticipated to drive medical costs higher across income bands in real terms

Source: ESI Analysis of Pennsylvania Medicaid and Demographic Data

# Government Expenditure Growth by Scenario

State Benefit Program Expenditures for the Elderly - Differential by Scenario (in \$2020 M)



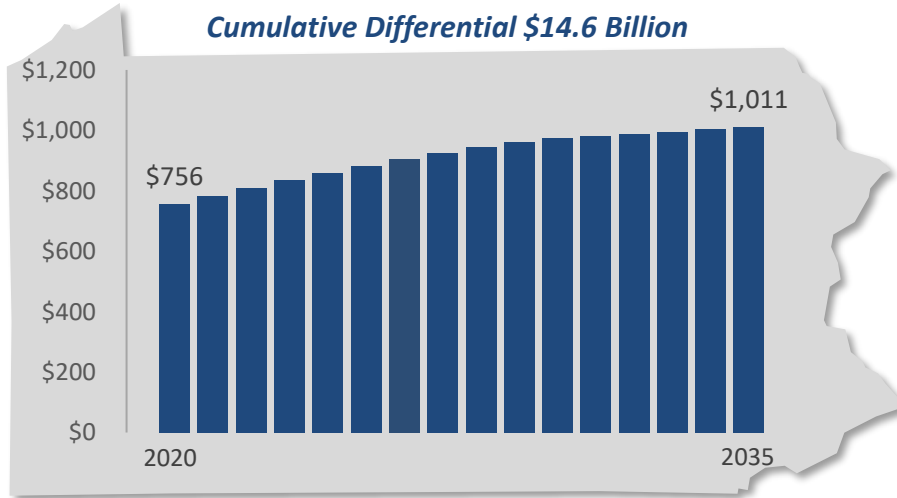
- State expenditures on the elderly within the analyzed programs are estimated at \$4.8 B in 2020
- Expenditures are estimated to rise to rise in the baseline scenario to \$6.3 B due by 2035 due the aging population and expected medical cost growth
- The differential between scenarios represents additional state costs from insufficient savings
  - 2020: \$756 million
  - 2035: \$1.01 billion

Source: ESI Analysis



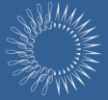
# State Expenditure Growth from Insufficient Savings

State Expenditures for the Elderly – Differential between Baseline and Sufficient Savings (\$in 2020 M)



- Across the period from 2020-2035, additional state cost growth from insufficient savings totals \$14.6 billion
- Additional costs accelerate over time due to demographic change and excess medical cost growth

Source: ESI Analysis



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# Household Spending Impacts

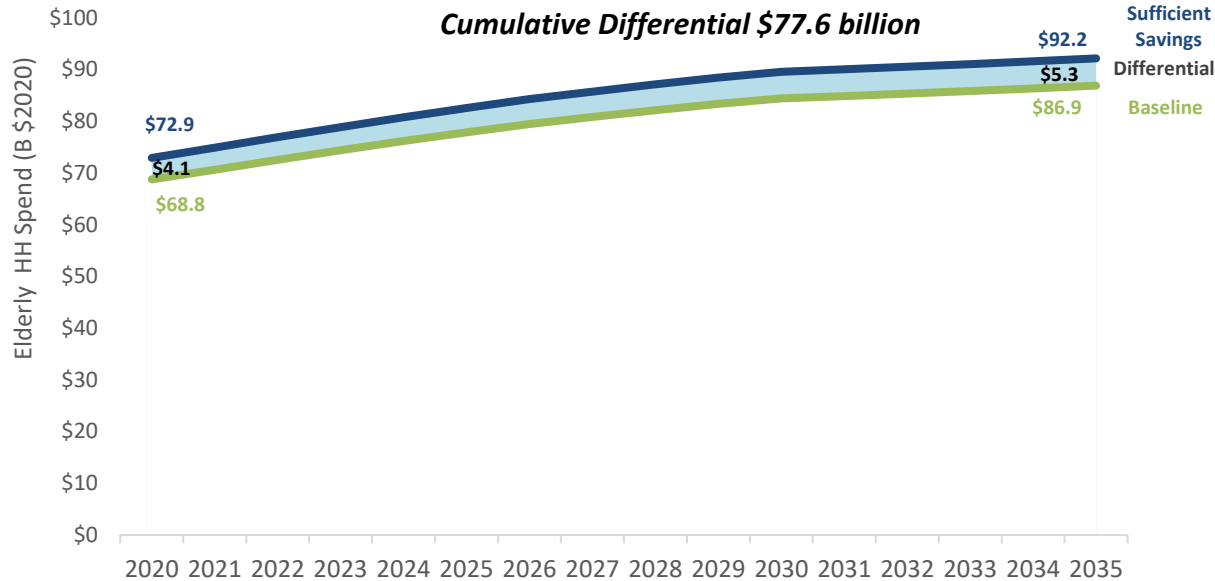
## Economic Activity Loss due to Insufficient Savings

# Household Spending Impacts

- Elderly households are a major source of spending power on goods and services that support the state's economy and job base
- Household spending levels are correlated with income, meaning that shortfalls in retirement savings reduce the spending level of elderly households
- Modeling accounts for non-linear effects in household spending
  - Spending does not increase proportionally with income (share of income spent is lower for higher income households)
  - Spending patterns vary by goods (fixed goods like food have a low variance with income; discretionary goods like travel have a high variance)

# Household Spending Growth by Scenario

Elderly Household Expenditures - Differential by Scenario (in \$2020 B)



- Pennsylvania's elderly households spent an estimated \$69 B in 2020, a figure projected to grow to \$87 B by 2035
- It is estimated that these elderly households would have spent an additional \$4.1 B in 2020 with sufficient savings, growing to \$5.3 B in 2035
- This differential totals \$78 B in reduced household spending over the 2020-2035 period

Source: ESI Analysis

# Economic Output Loss from Reduced Elderly Spending

Economic Impact Losses within the Pennsylvania Economy

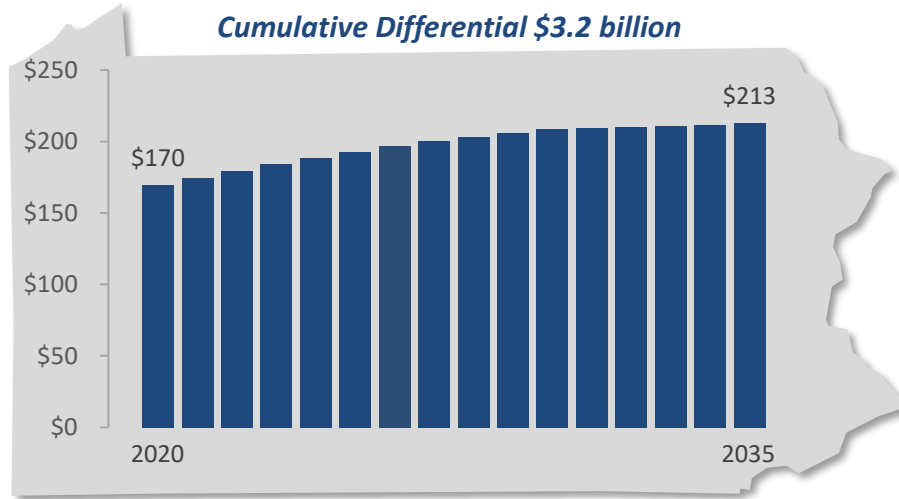
	2020	2035	Cumulative 2020-2035
Direct Spending	\$4.13 B	\$5.29 B	\$77.6 B
Economic Output	\$6.22 B	\$7.96 B	\$117.5 B
Employment (FTE)	45,760	58,690	864,140 job-years
Earnings	\$2.11 B	\$2.62 B	\$39.0 B

- Direct spending flows through the state economy, with spillover impacts throughout the supply chain (indirect impacts) and as labor income (induced impacts)
- Reductions in household spending result in a decrease in statewide economic activity from 2020-2035 of:
  - \$118 billion in economic output
  - 864,000 job-years of employment
  - \$39 billion in earnings

Source: ESI Modeling using IMPLAN

# State Tax Revenue Loss

Annual Pennsylvania Tax Revenue Loss from Reduced Elderly Household Spending due to Insufficient Savings (in \$2020 M)



- Reductions in economic activity and employment translate into reductions in state tax revenue collections
- State tax revenue losses grow from \$170 million in 2020 to \$213 million in 2035
- Cumulative tax revenue losses total \$3.2 billion over the period from 2020-2035

Source: ESI Analysis

# Key Findings

## The Impacts of Insufficient Retirement Savings in Pennsylvania, 2020-2035

# Key Findings: Demographic and Savings

## Demographic Change

- Pennsylvania's elderly (65+) population is projected to grow from 2.49 million in 2020 to 3.04 million in 2035
- The state's dependency ratio is projected to grow from 0.43 elderly households for each working age household in 2020 to 0.55 in 2035, increasing fiscal and economic challenges for the state

## Savings Shortfalls

- Based on current savings and demographic trends, many Pennsylvania households are expected to fall short of recommended income replacement rates in retirement
- Retiree incomes in 2035 are projected to fall short of recommended replacement rates by an average of around \$7,800 in 2035 for the 1.2 million elderly households making <\$75k
- At a standard market return, enhanced savings of around \$160 per month (or around \$1,900 per year) over 30 years would generate sufficient additional income to address this average gap



# Key Findings: Economic and Fiscal Impacts

## State Benefit Program Impacts

- Program expenditures for elderly Pennsylvanians are expected to grow significantly due to the aging population and excess medical cost growth
- Cumulative state cost growth from insufficient savings is estimated to total \$14.6 billion over the period from 2020-2035

## Elderly Household Spending Impacts

- Shortfalls in elderly income from insufficient savings are estimated to reduce elderly household spending by a cumulative \$78 billion over the period from 2020-2035
- This reduction in spending translates to a cumulative (2020-2035) loss of \$118 billion in economic output, 864,000 job-years of employment and \$39 billion in earnings flowing through the state economy
- The lost economic activity also translates to an estimated reduction of \$3.2 billion in state tax revenue collections over the period from 2020-2035

# Pennsylvania Retirement Savings

## Key Findings Report – Sept. 2022