



RETIREMENT INSIGHTS

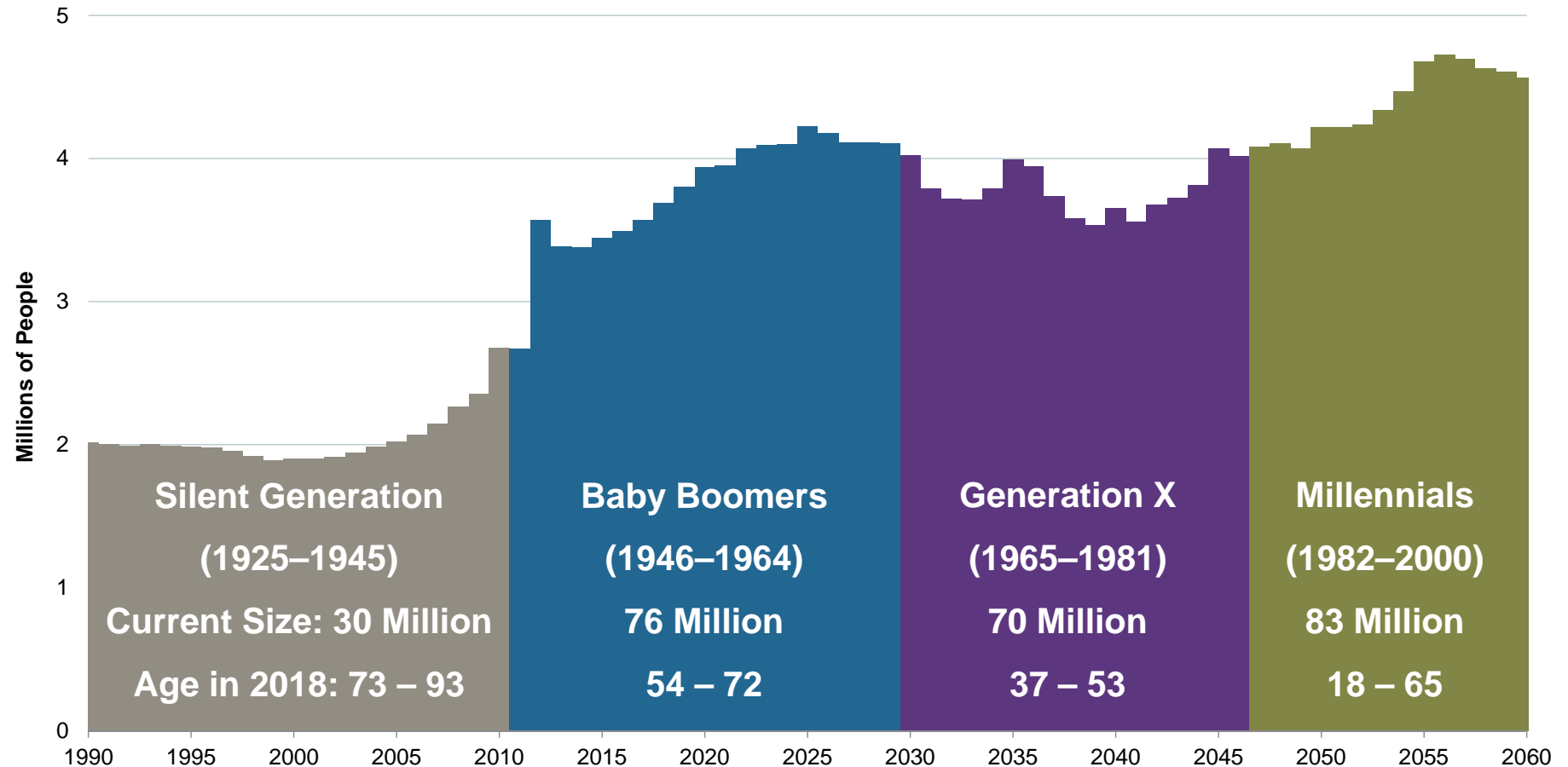
Guide to RetirementSM

2018 “On the Bench”

J.P. Morgan

J.P.Morgan
Asset Management

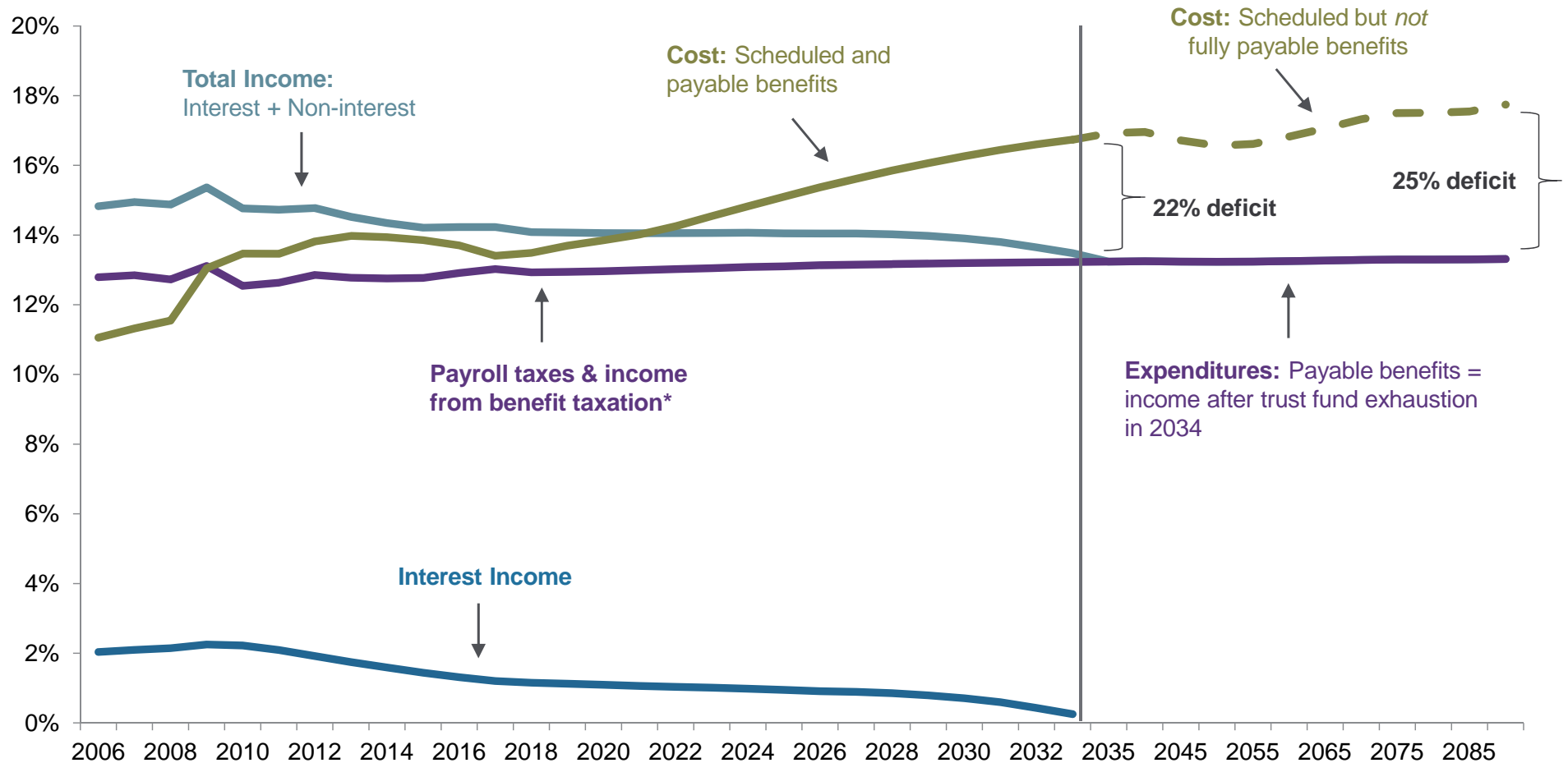
The number of people turning 65-years-old



Source: U.S. Census Bureau, J.P. Morgan Asset Management. The Census graph data does not reflect the full size of the Millennial generation, which would extend out to 2065. The Census estimates the size of the Millennial generation at 83 million.

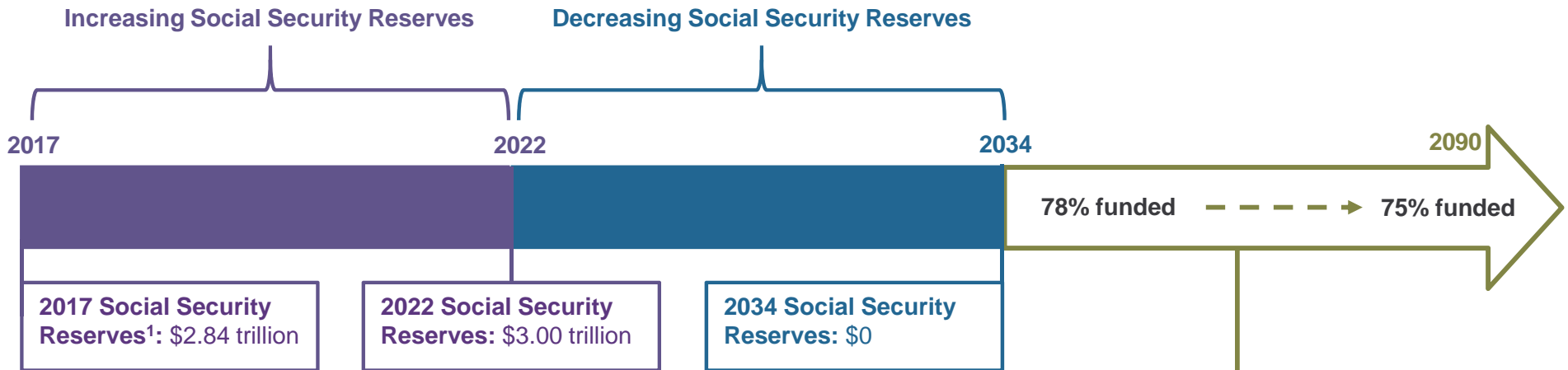
OASDI income, cost and expenditures as percentages of taxable payroll

Under Intermediate Assumptions

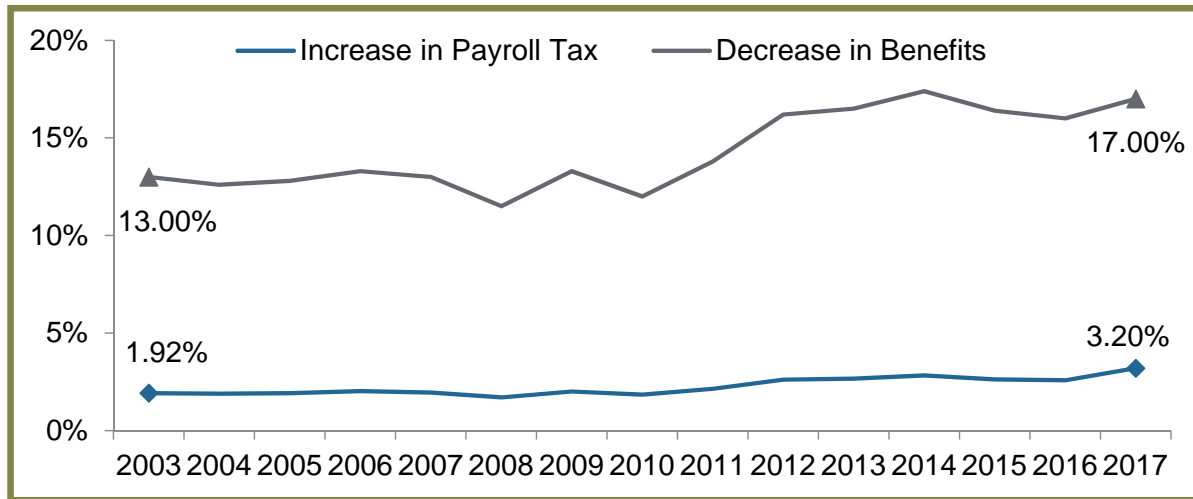


* Net of administrative expenses. A portion of the taxation of Social Security benefits is used to fund Social Security benefits and a portion is used to fund Medicare benefits. Includes reimbursements from the general treasury for temporary payroll tax reductions. Source: 2017 OASDI Trustees Report, J.P. Morgan Analysis.

The future of Social Security



The longer we wait, the greater the pain²



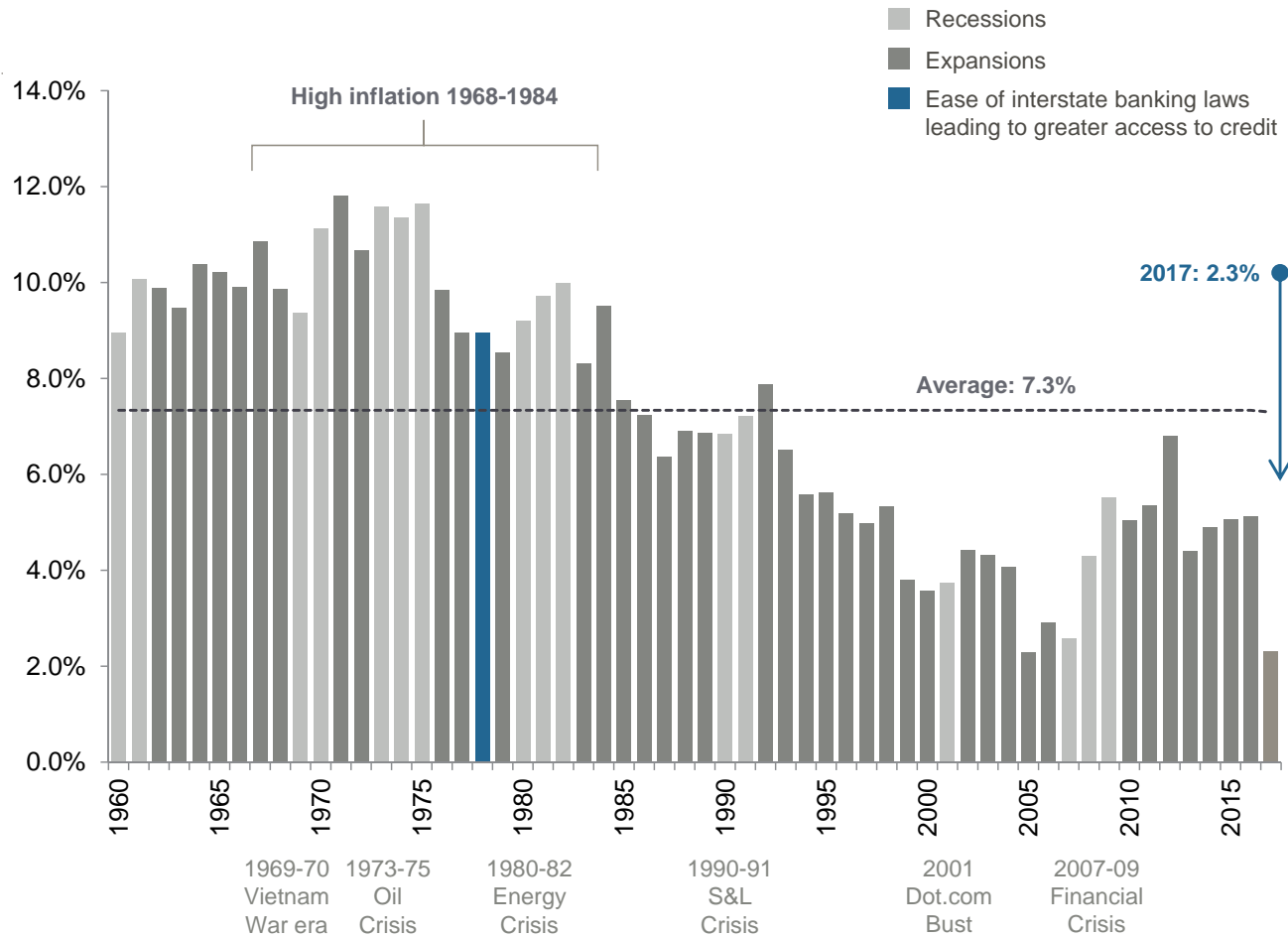
Source: 2003 - 2017 OASDI Trustees Reports.

¹ Reserves represent values at the start of given year

² The increase in payroll tax would bring the trust funds to fully funded for the entire 75-year period. The % value differs from the actuarial deficit value as the actuarial deficit value requires 1 year of SS costs to be retained in reserve.

Personal savings rate

Annual, % of gross income

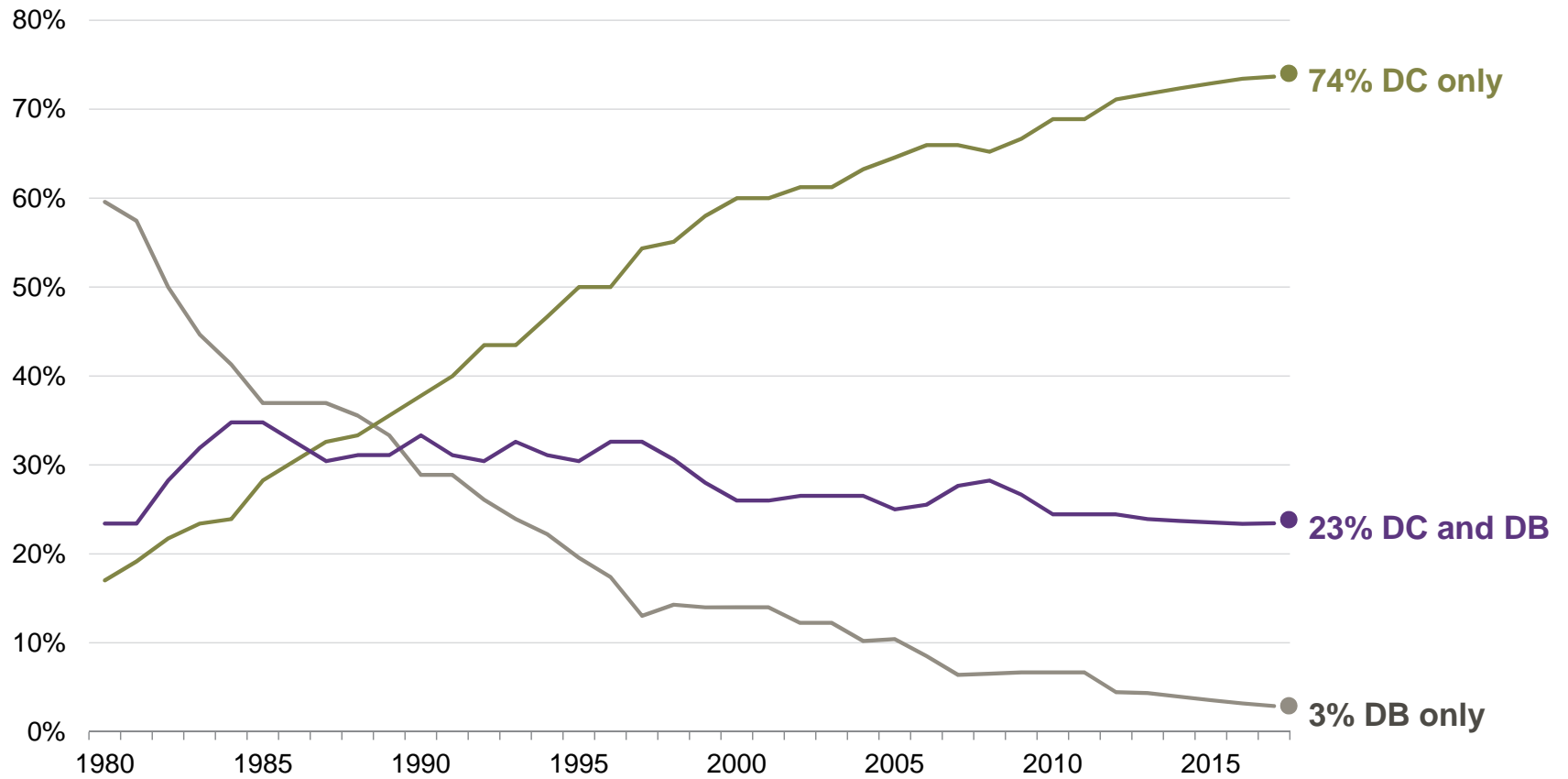


BEWARE THE WEALTH EFFECT

During economic expansions when the value of stocks and homes increase, Americans tend to save less than during recessions. On average, Americans are saving well below the 10%-15% consistent annual savings rate required to successfully fund retirement.*

*Recommended savings rates are based on J.P. Morgan analysis of median and affluent households.
 Source: J.P. Morgan Asset Management, Bureau of Economic Analysis, National Bureau of Economic Research. Personal savings rate is calculated as personal savings (after-tax income minus personal outlays) divided by gross income. Employer and employee contributions to retirement funds are included in after-tax income but not in personal outlays, and thus are implicitly included in personal savings. Savings rate data as of December 31, 2017.

Distribution of those participating by plan type 1980-2017



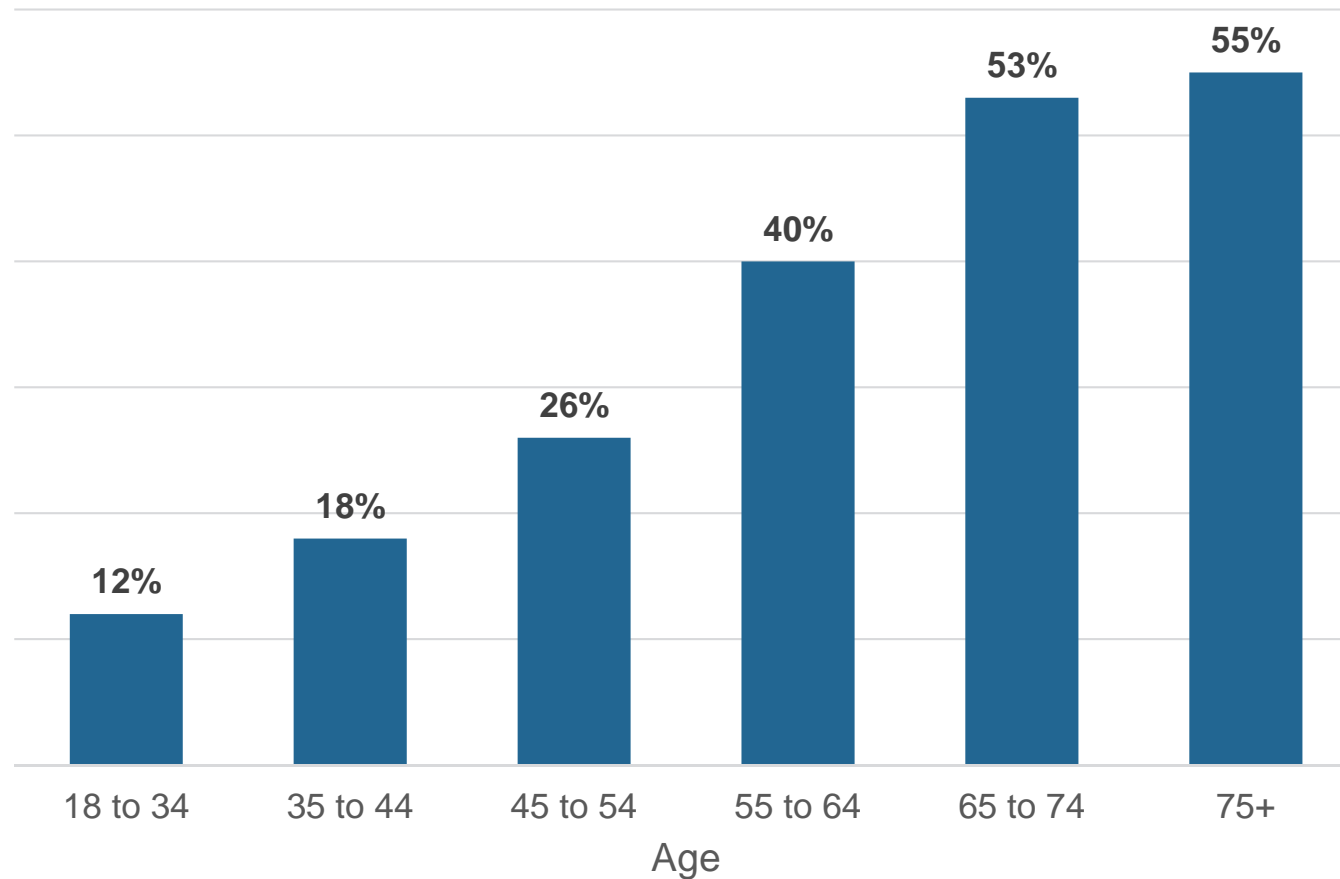
“Workers with access” and “Workers participating” refers to private sector wage and salary workers ages 21-64 in regards to retirement plans: defined benefit and defined contribution

Left: U.S. Census Bureau, Bureau of Labor Statistics, Employee Benefit Research Institute

Right: U.S. Department of Labor Form 5500 Summaries through 1998; EBRI estimates 1999-2012 using Pension Benefit Guaranty Corporation, Current Population Survey; J.P. Morgan estimate thereafter

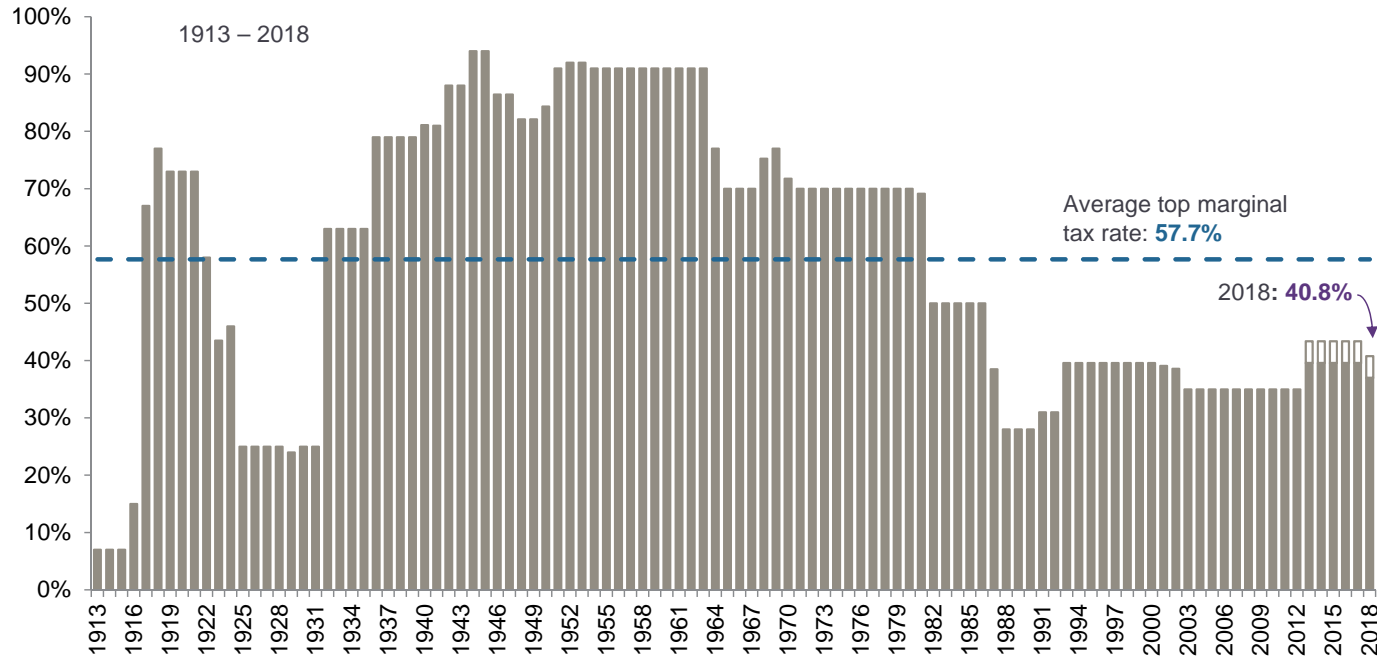
Percentage of households with a Defined Benefit plan

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LIMRA Secure Retirement Institute analysis of 2013 *Survey of Consumer Finances*, Federal Reserve Board, 2014. For married couples, age group assignment based on age of oldest spouse in 2013. Data represents only household with zero-plus financial assets.

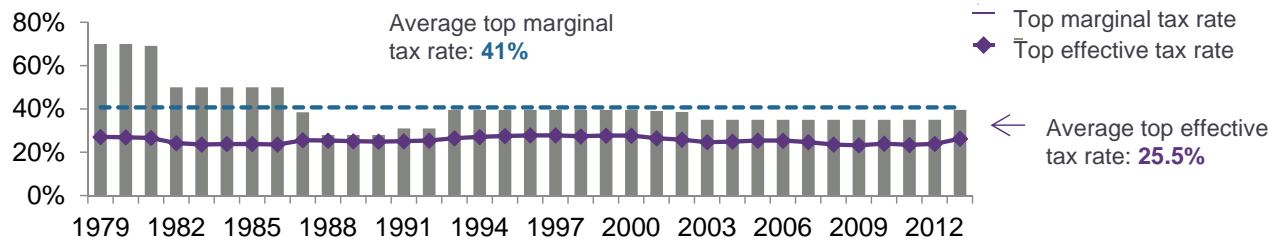
Top marginal federal income tax rate



IMPORTANCE OF INCOME TAX PLANNING

The top marginal bracket of 37%, when combined with the 3.8% Medicare surtax, puts high earners at a 40.8% rate for each additional dollar of unearned (non-wage) income over the income threshold*, which is below the long-term historical average. High earners pay on average almost 26 cents of every dollar of income to federal income taxes.

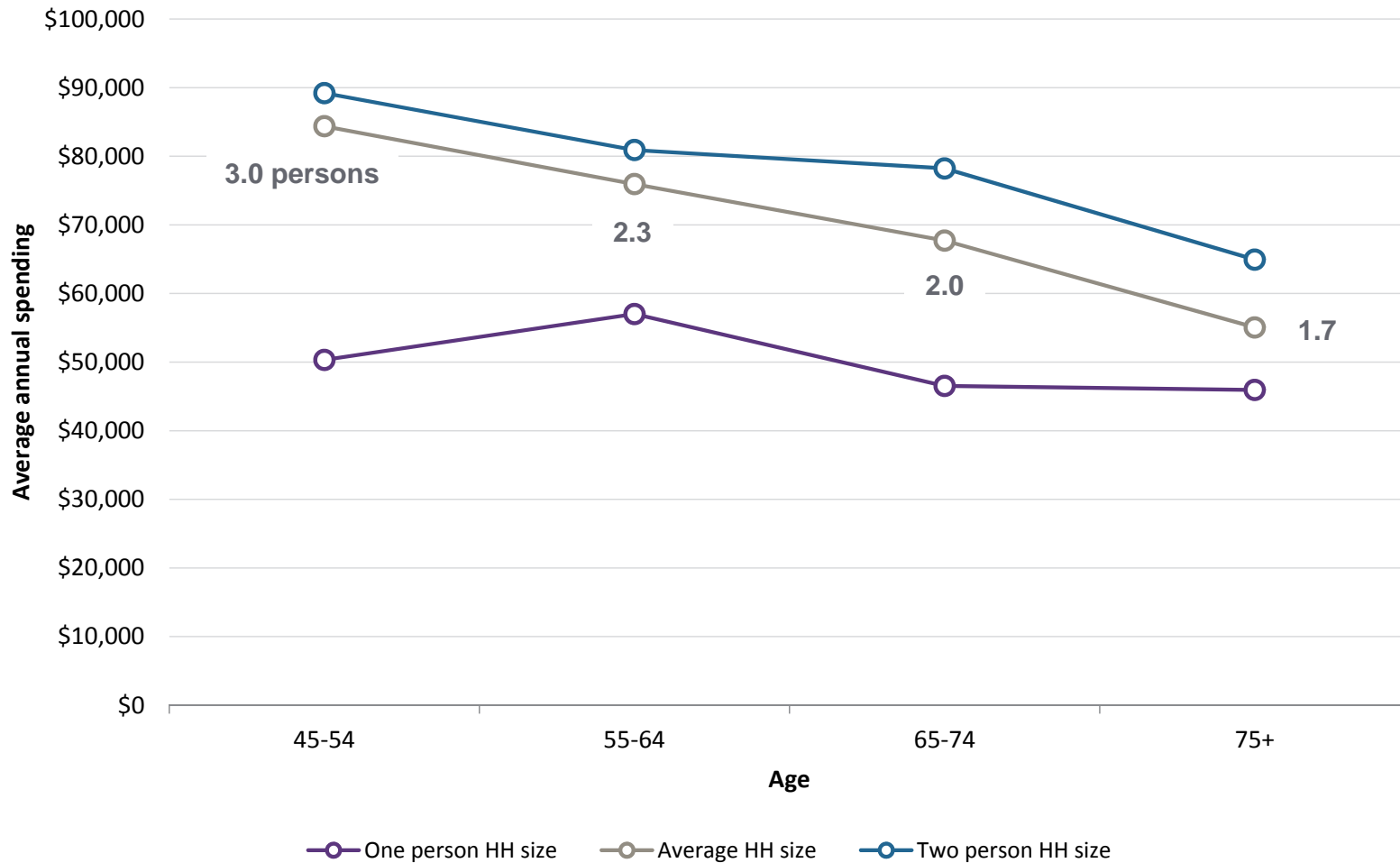
Historical view of top income tax rate vs. top effective tax rate



*The Medicare Surtax applies to investment/unearned income over \$200,000 MAGI for singles/\$250,000 MAGI for couples filing jointly. Source: IRS, The Tax Foundation, J.P. Morgan Asset Management. Data as of January 31, 2018. Average top effective tax rate based on highest household income quintile, 1979-2013, CBO Publication 51361. The presenter of this slide is not a tax or legal advisor. Clients should consult a personal tax or legal advisor prior to making any tax- or legal-related investment decisions

Average spending patterns by household size

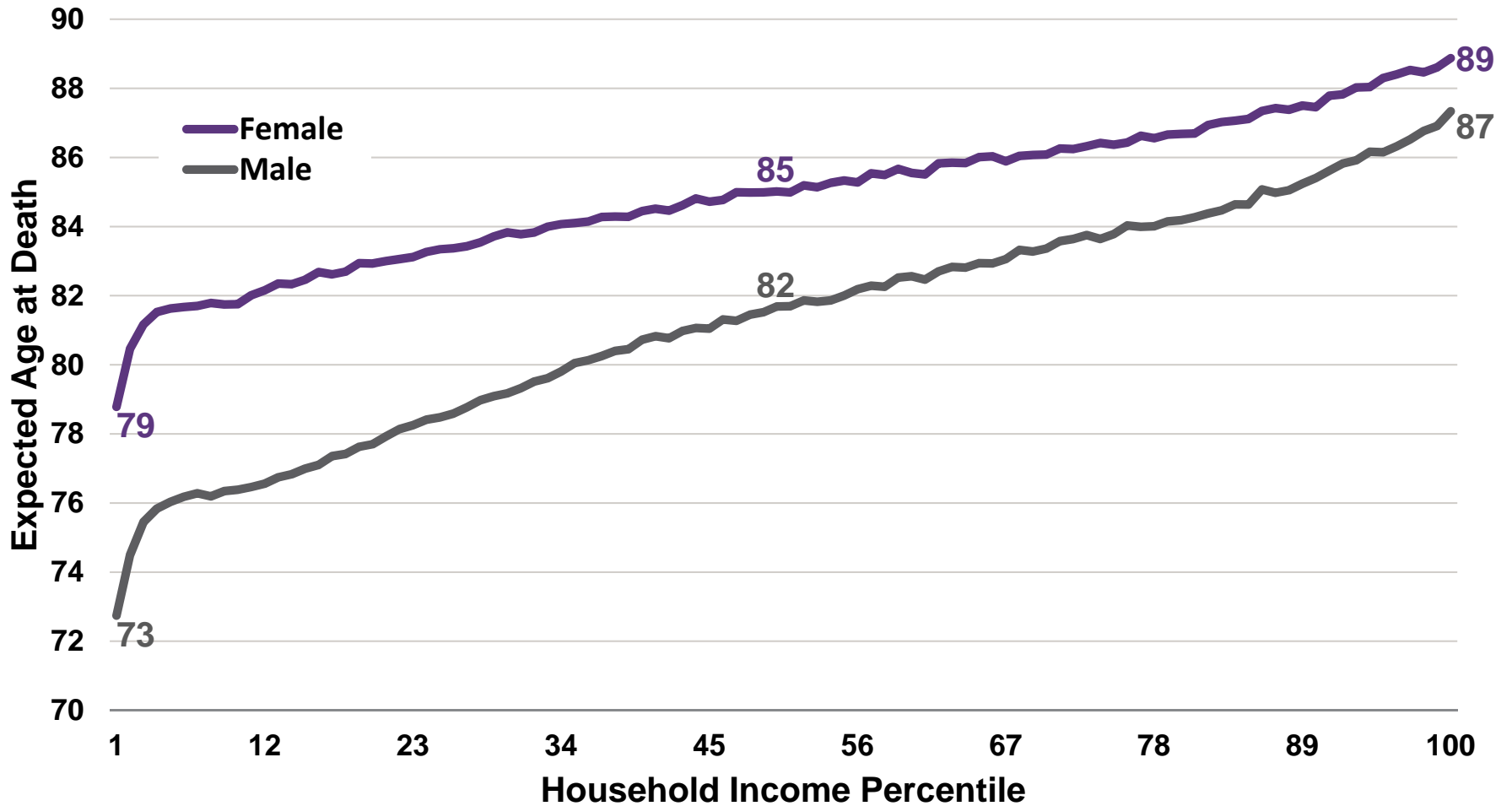
For those with a bachelor's degree or higher



Estimates based on average consumer expenditure from the 2016 Consumer Expenditure Survey (BLS) for each age group. Source: J.P. Morgan Asset Management.

The more income you have...the longer you live

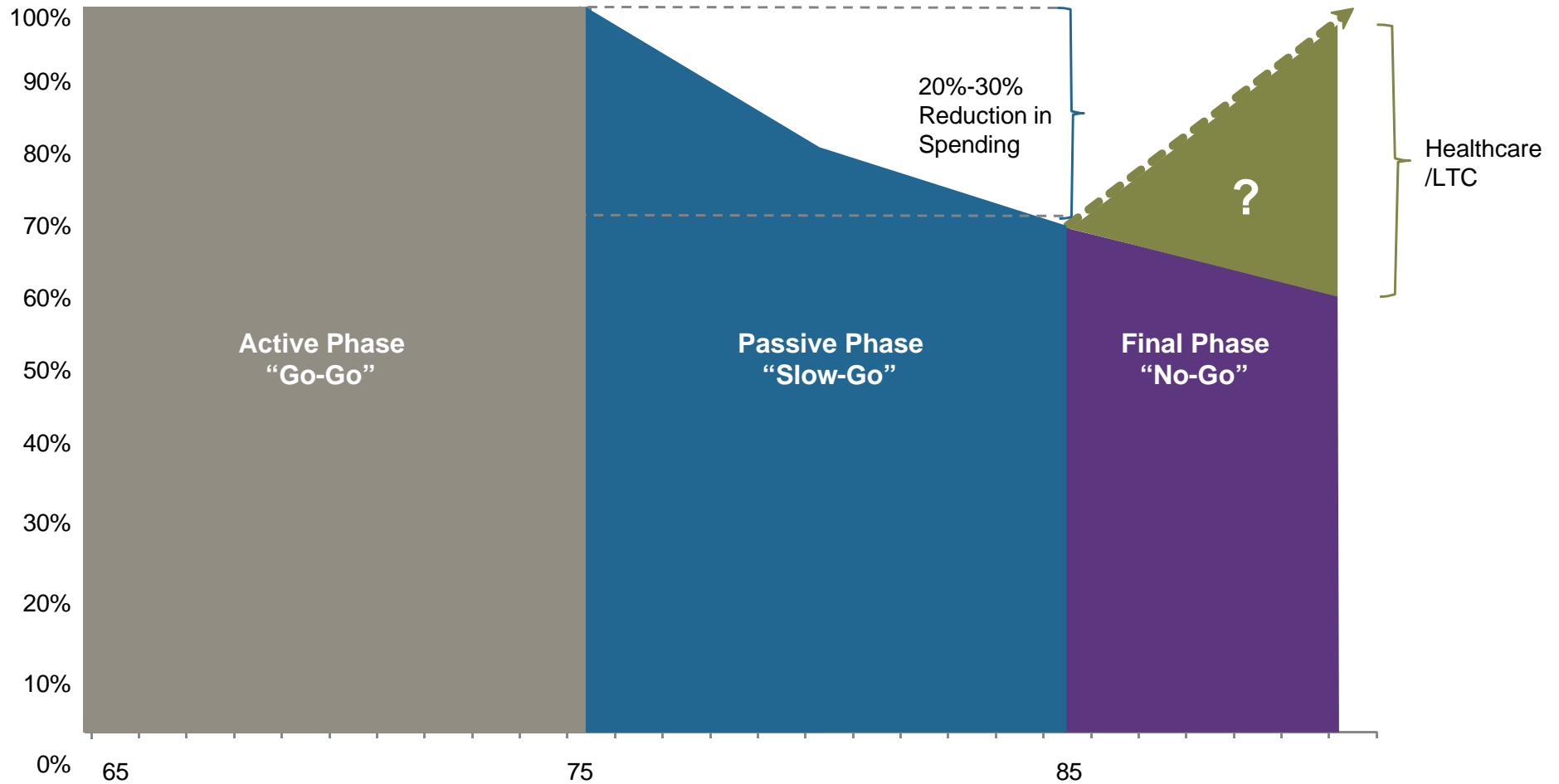
Expected Age at Death by Household Income Percentile at Age 40 2001 - 2014 pooled



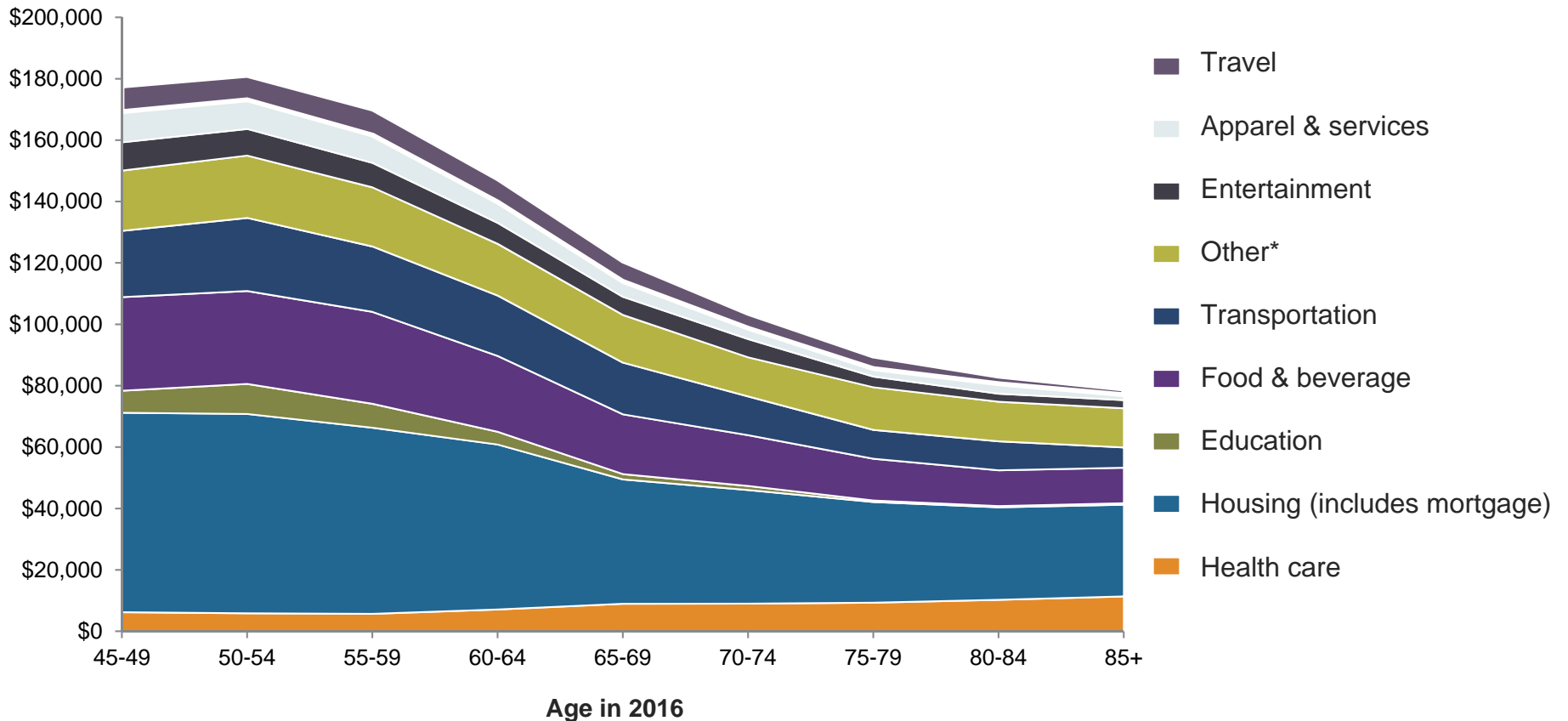
Source: The Health Inequality Project, <https://healthinequality.org/data/> as April 6, 2017

“The Prosperous Retirement” – theoretical spending profile

Percent of pre-retirement spending



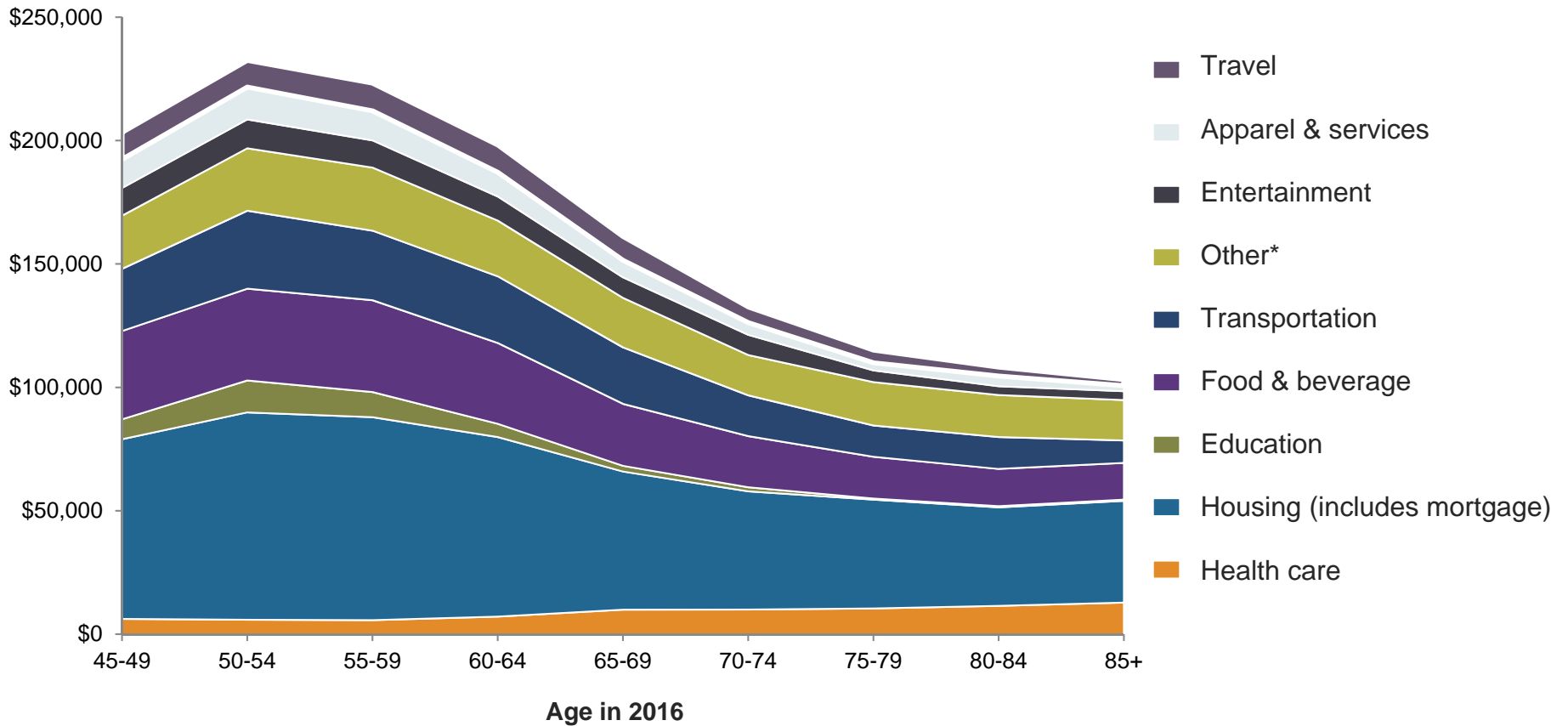
Median spending: Chase data with estimated categorization of checks and cash



*Other includes: gifts & donations, gambling, personal care, tax payments, insurance and uncategorized items.

Source: Total spending and all category sub-totals except checks, cash and health care costs: Chase data including aggregated and de-identified Chase credit card, debit card, electronic payment, ATM withdrawal and check transactions from January 1 – December 31, 2016; J.P. Morgan analysis. Health care costs age 65+: Employee Benefit Research Institute (EBRI) data as of December 31, 2016; SelectQuote data as of January 16, 2017; J.P. Morgan analysis. Health care costs pre-age 65 and check and cash distribution excluding health care costs after age 65: 2016 Consumer Expenditure Survey, College Educated; J.P. Morgan analysis. Information that would have allowed identification of specific customers was removed prior to the analysis.

Median spending: Chase data with estimated categorization of checks and cash



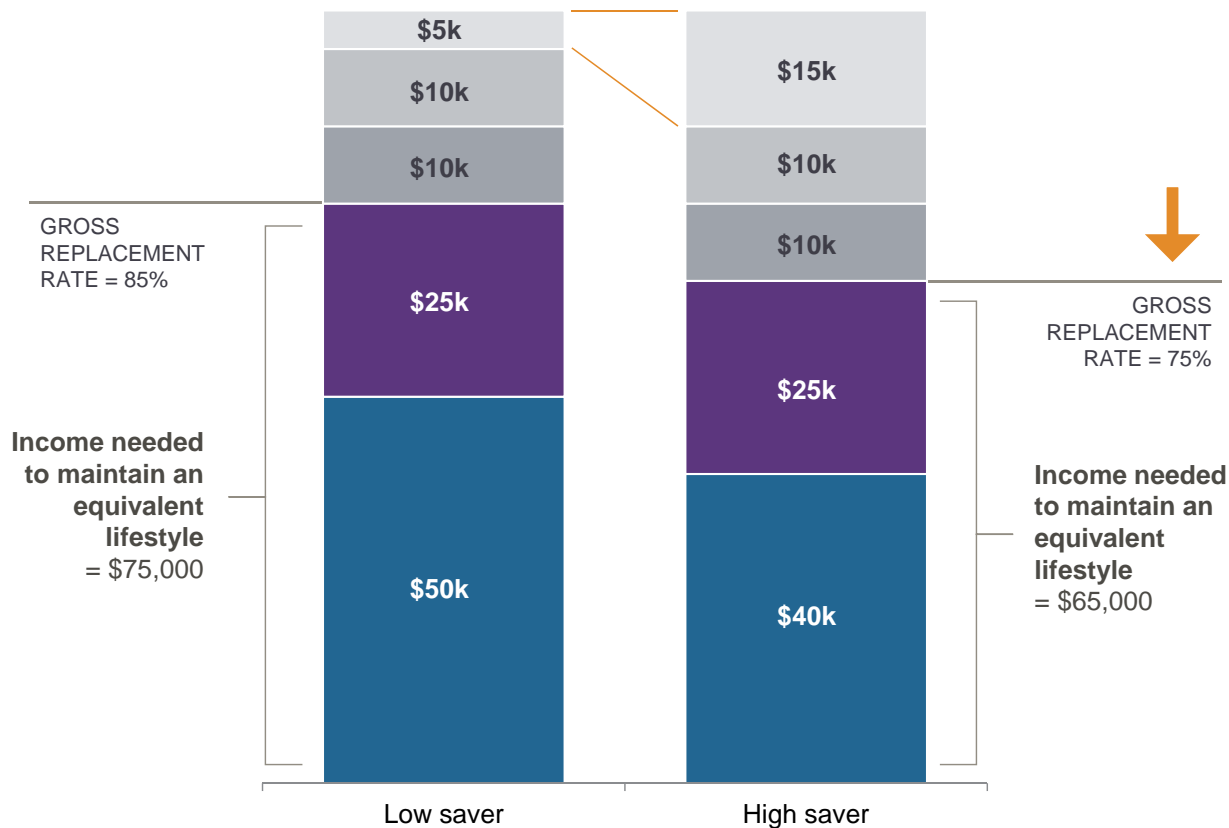
*Other includes: gifts & donations, gambling, personal care, tax payments, insurance and uncategorized items.

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Savings rate effect on income replacement needs in retirement

Additional savings today results in a lower lifestyle needs in retirement

Example of \$100,000 pre-retirement income

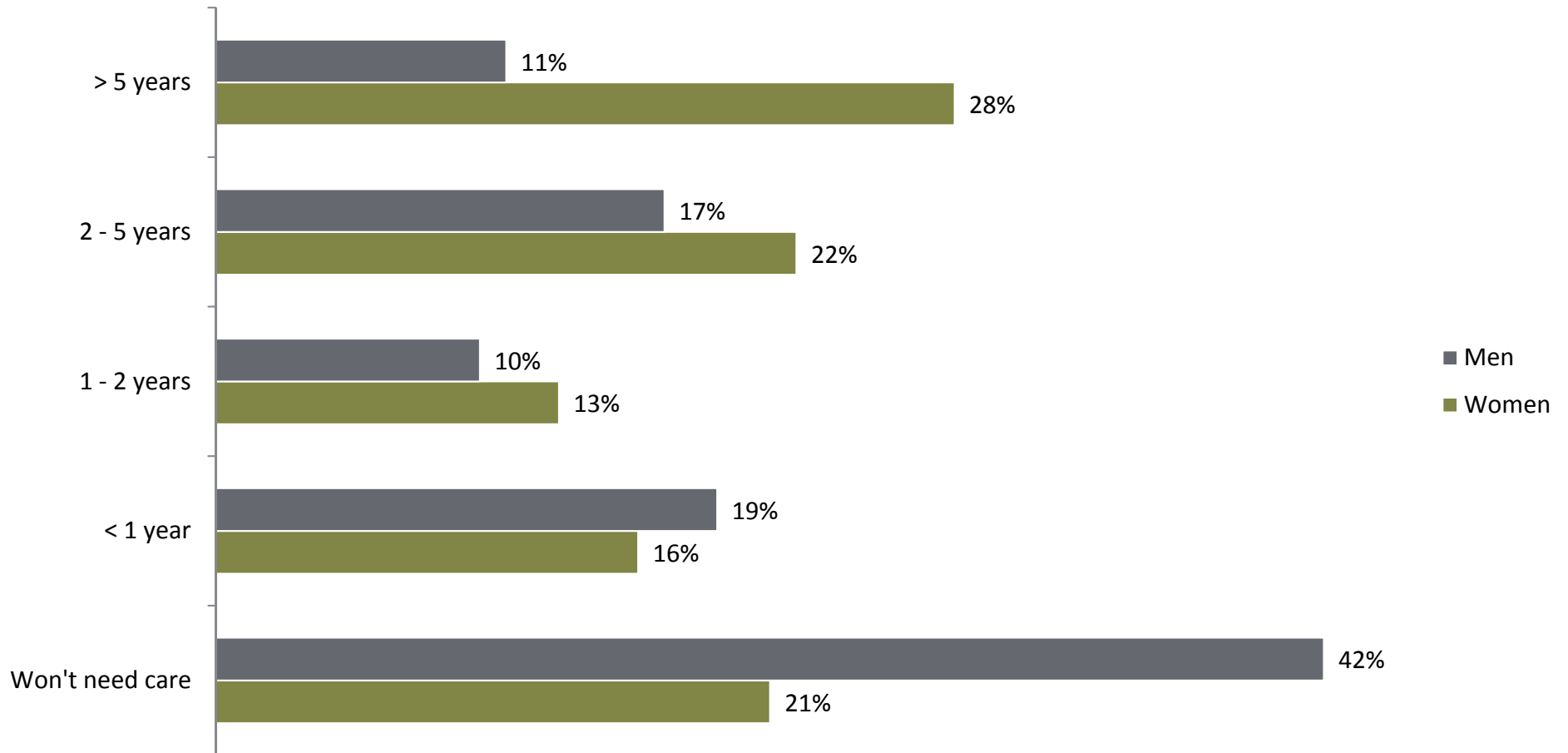


SAVING MORE LEADS TO REQUIRING LESS IN RETIREMENT

Contributing more towards your retirement plan has dual benefits. In addition to providing more income in retirement, a higher savings rate lowers your required replacement rate because you become accustomed to a more frugal standard of living.

Many individuals will need at least some assistance

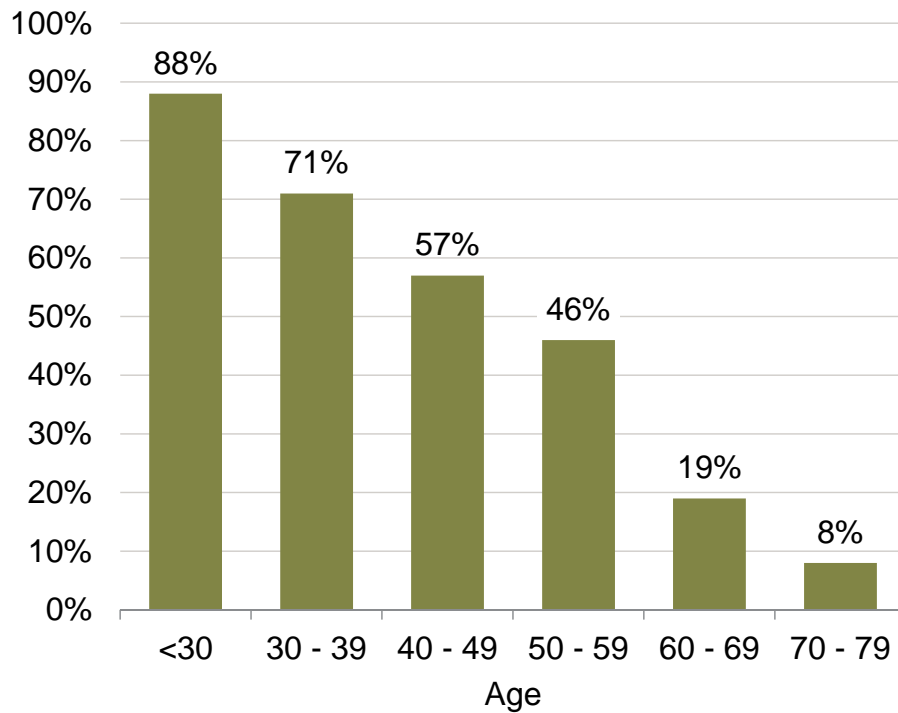
Lifetime chance of needing some assistance: age 65



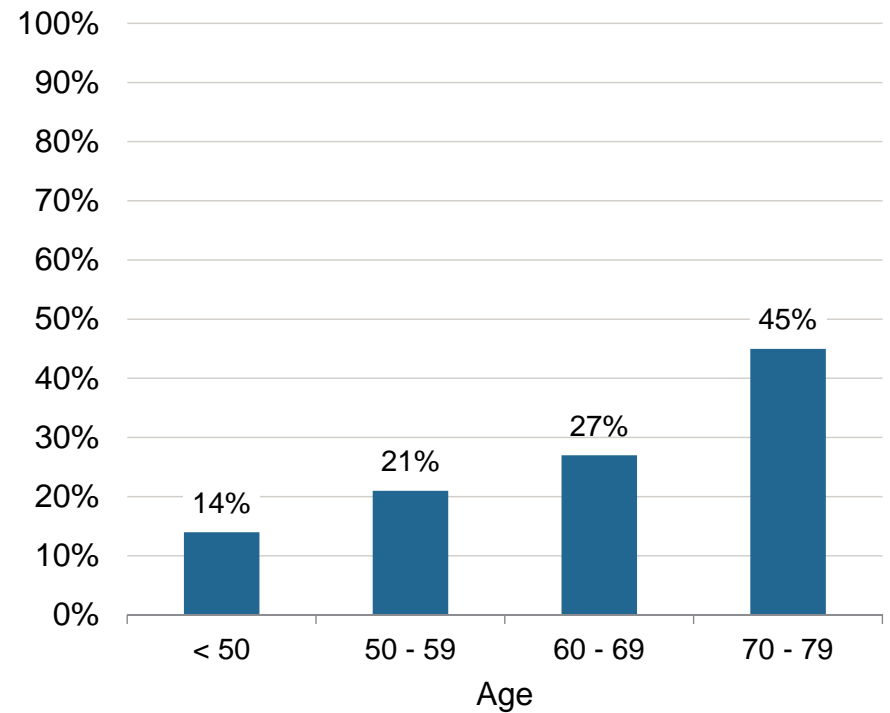
1.) Includes needing help with 1 activity of daily living or 4 or more instrumental activities of daily living such as using the phone, paying bills, shopping for groceries, managing medication, cooking, and driving or using public transportation or having a long-term care claim

Source: Long-term care over an uncertain future; what can current retirees expect? Winter 2005 – 2006. Peter Kemper, Harriett L. Komisar, Lisa Alecxih.

Purchasers of LTC insurance who qualify for good health discounts



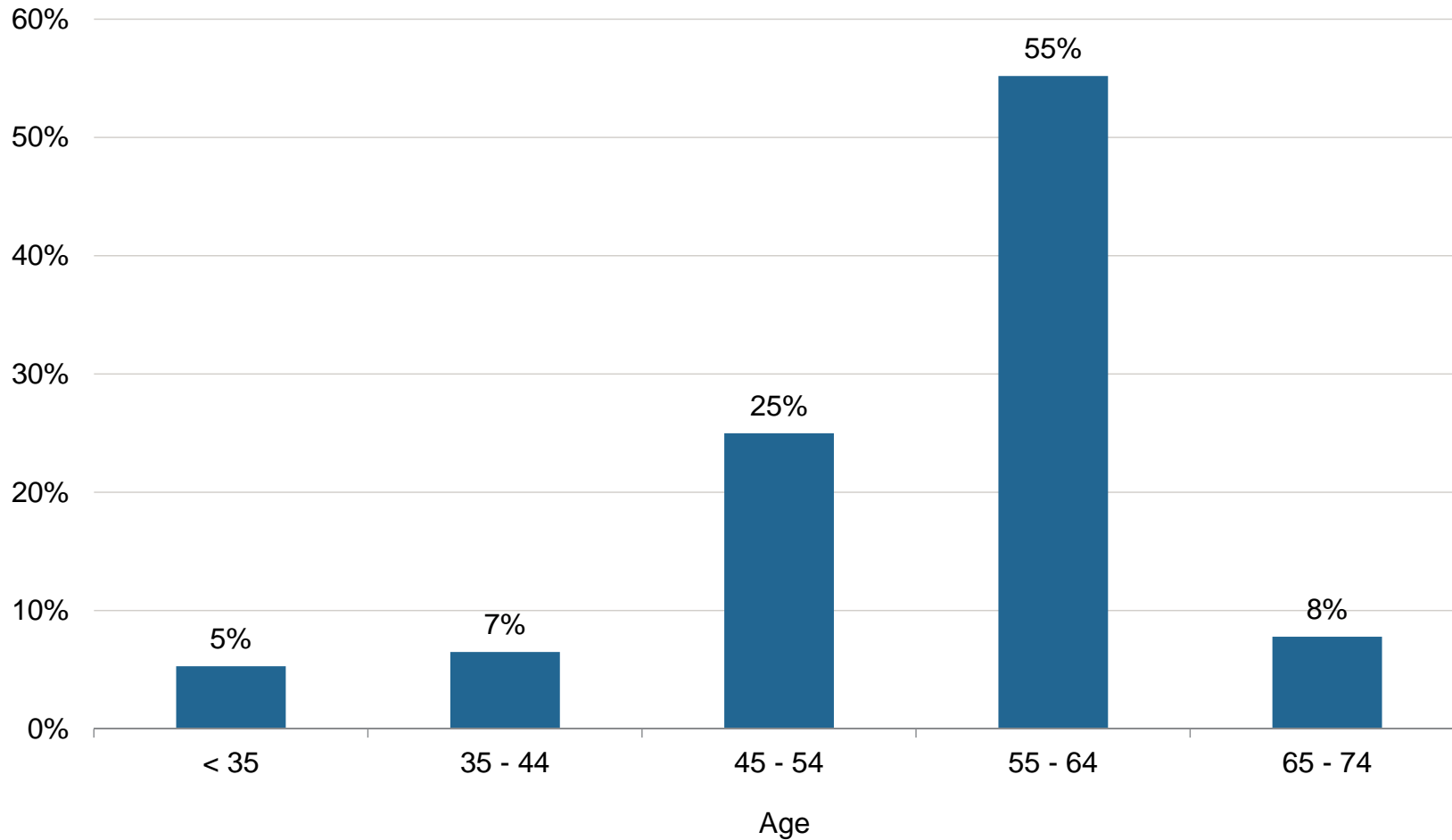
Percent of applicants denied coverage, individual policies



Keep in mind: Many people who consider themselves to be in poor health do not apply.

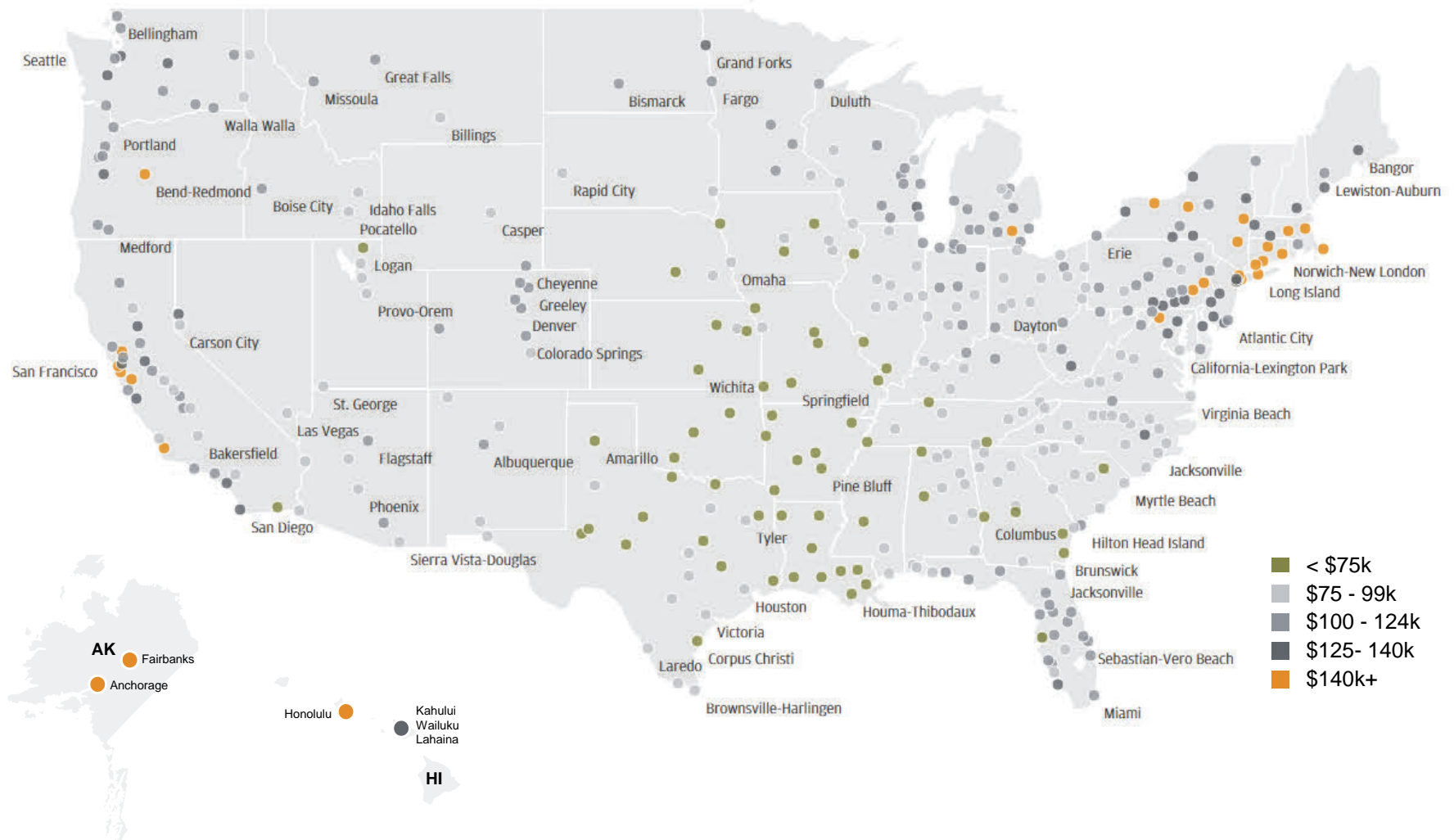
When do people buy long-term care coverage?

The median age range when people buy long-term coverage is 55 - 64



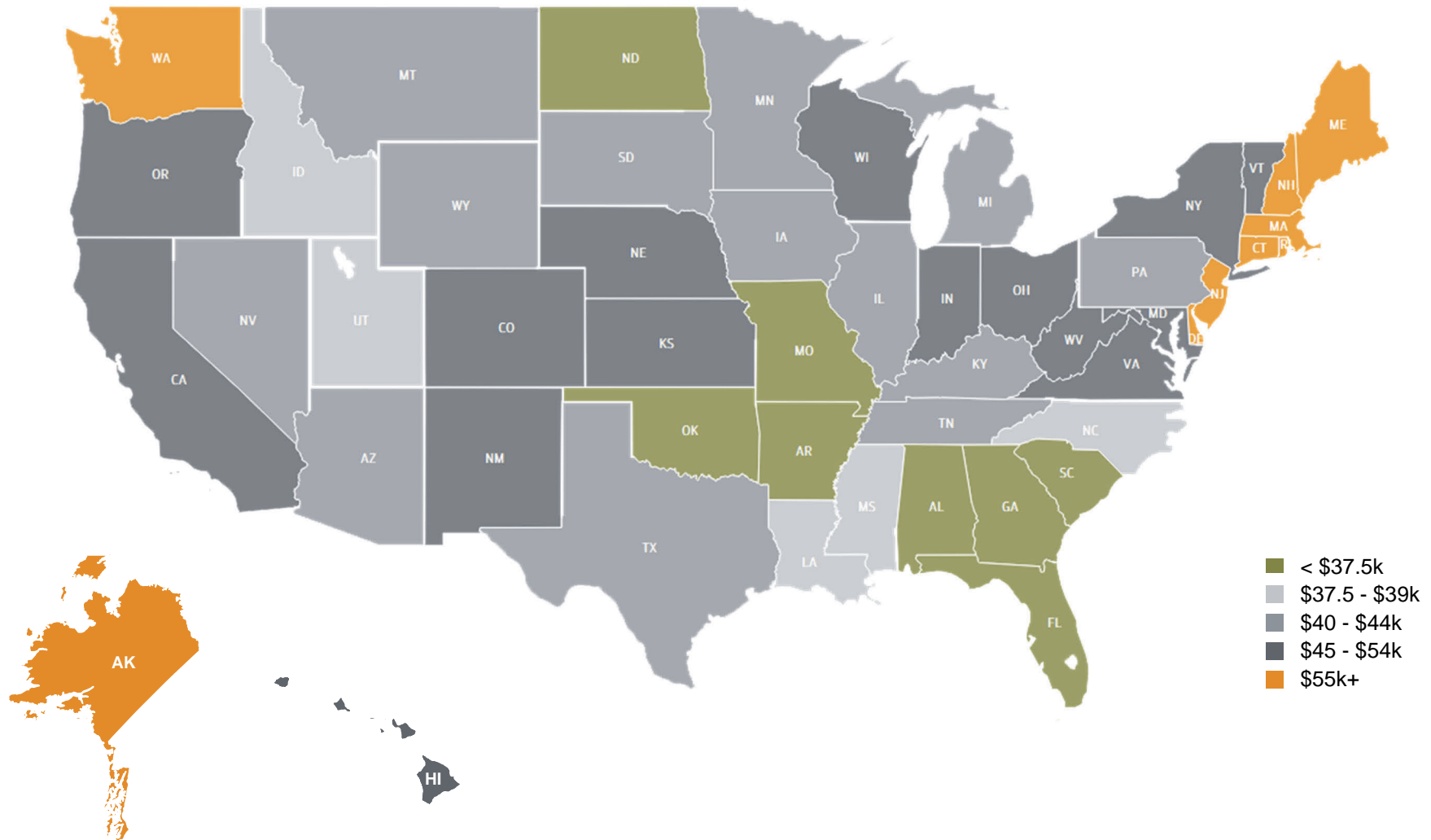
Source: American Association of Long-Term Care Insurance, 2015, LTCi Sourcebook.

Annual cost of nursing home care (private room)



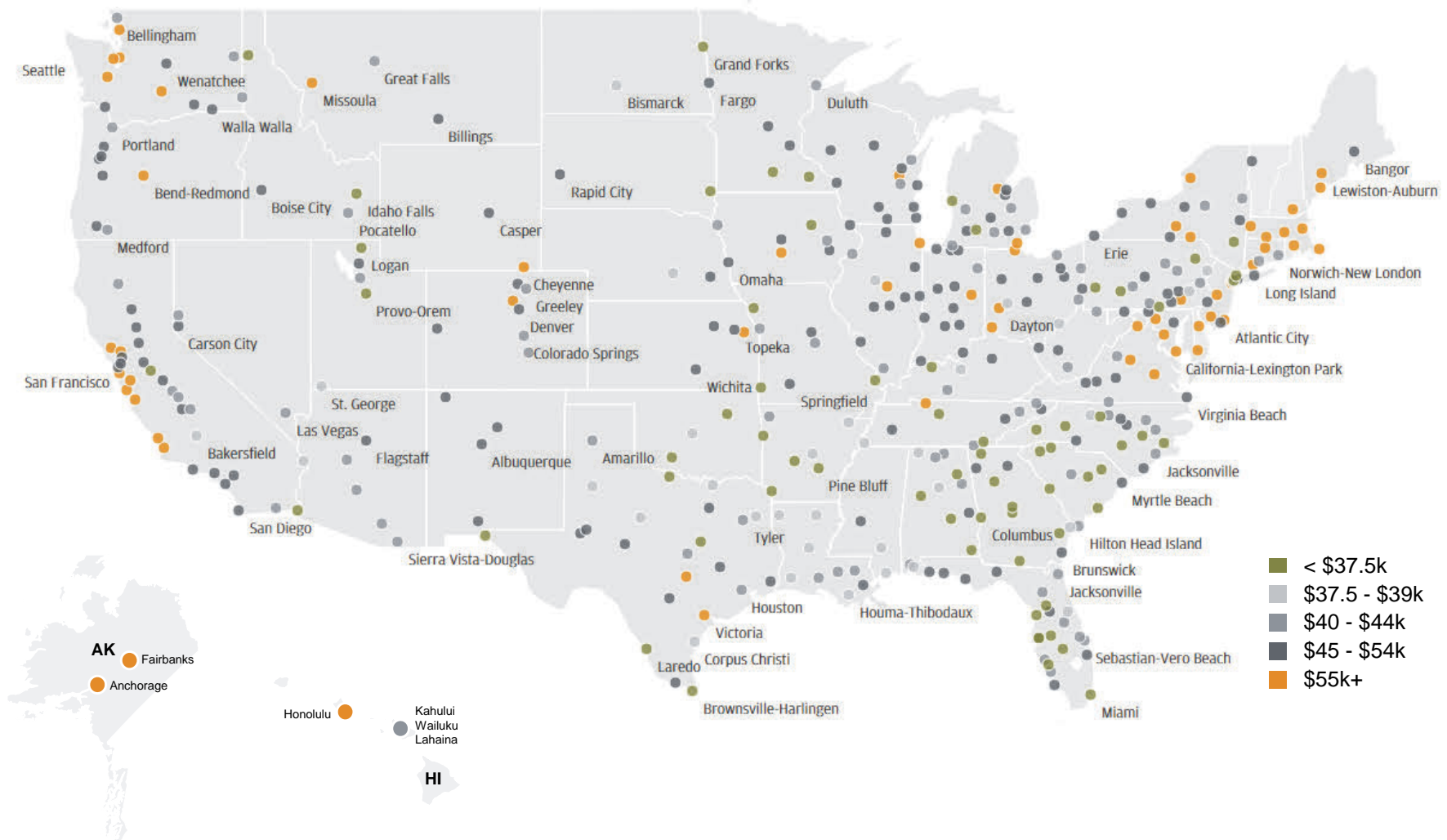
Methodology document: https://www.genworth.com/dam/Americas/US/PDFs/Consumer/corporate/cost-of-care/48590_081417.pdf
 For more information on cost of care from Genworth see: <https://www.genworth.com/about-us/industry-expertise/cost-of-care.html>
 Source: Genworth 2017 Cost of Care Survey, conducted by CareScout®, June 2017. Annual median costs based on 365 days of care.
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Median annual cost of assisted living facility (1 bedroom)



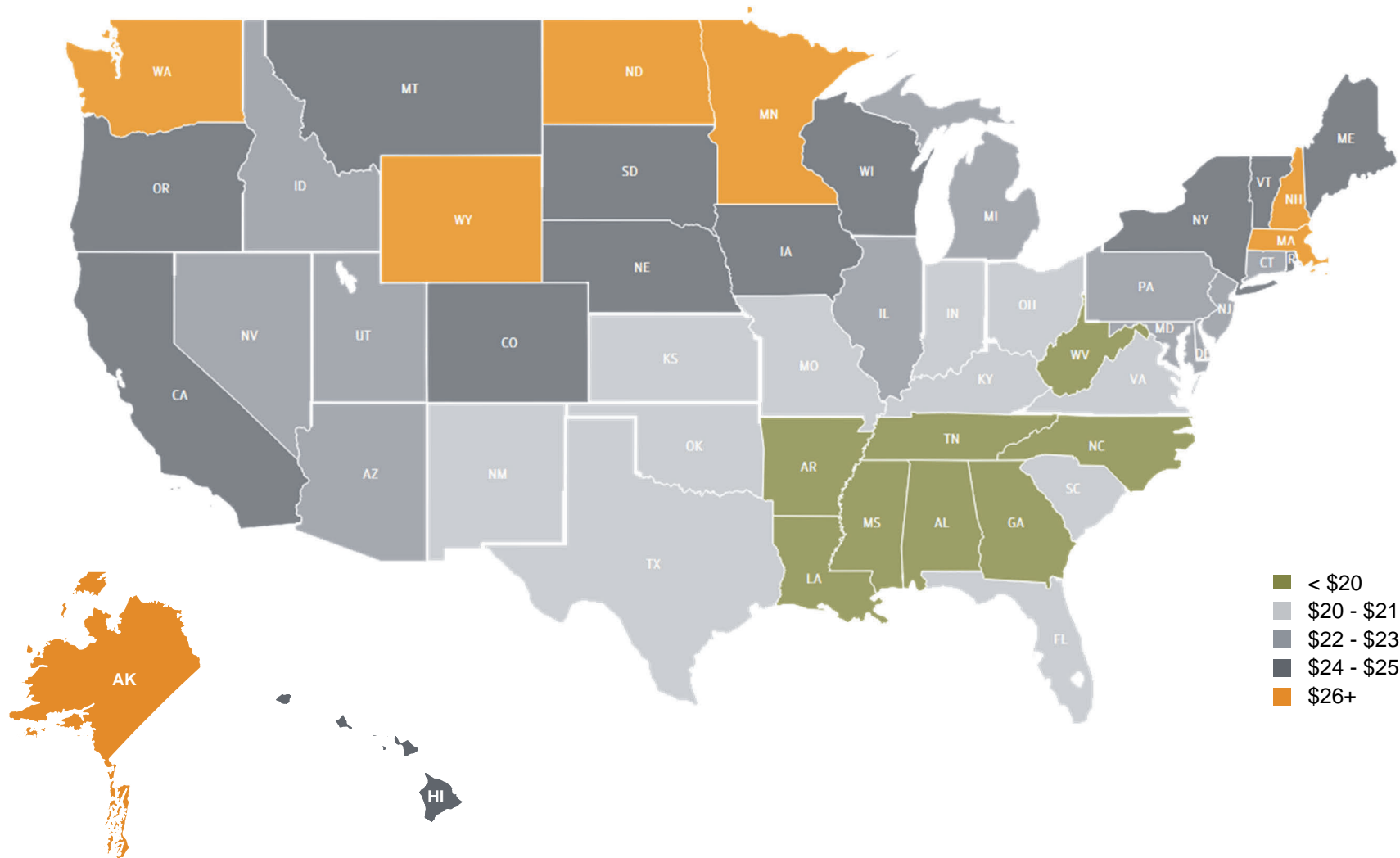
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 Source: Genworth 2017 Cost of Care Survey, conducted by CareScout®, June 2017. Annual median costs based on 365 days of care.
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Median hourly cost of home health care provider (home health aide) | B



Note: Hourly rates are rounded to the nearest whole dollar.

Methodology document: https://www.genworth.com/dam/Americas/US/PDFs/Consumer/corporate/cost-of-care/48590_081417.pdf

For more information on cost of care from Genworth see: <https://www.genworth.com/about-us/industry-expertise/cost-of-care.html>

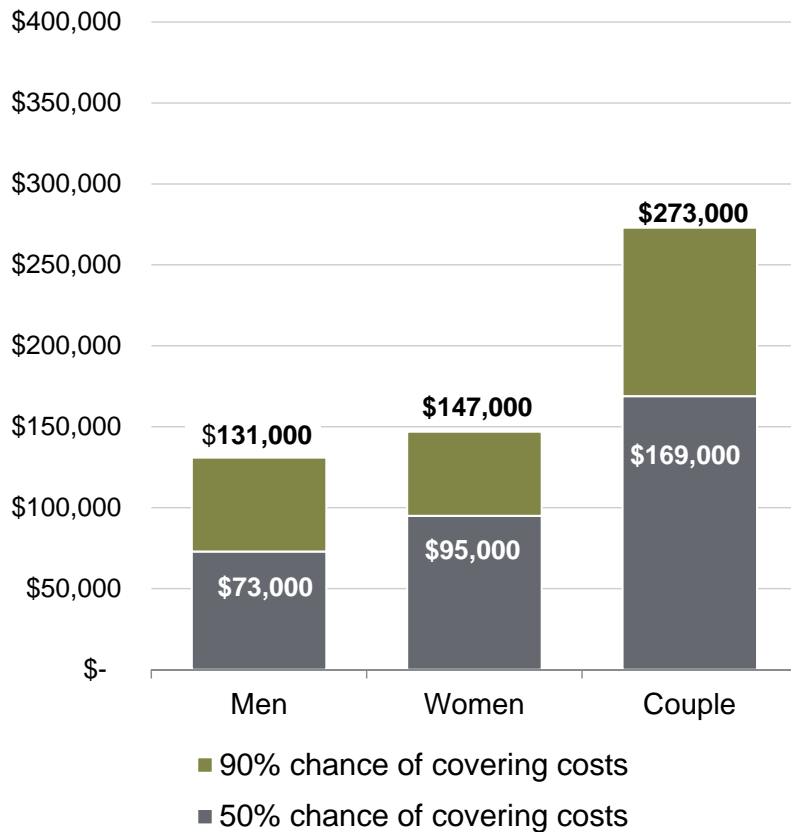
Source: Genworth 2017 Cost of Care Survey, conducted by CareScout®, June 2017. Annual median costs based on 365 days of care.

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Many individuals underestimate the cost of health care in retirement

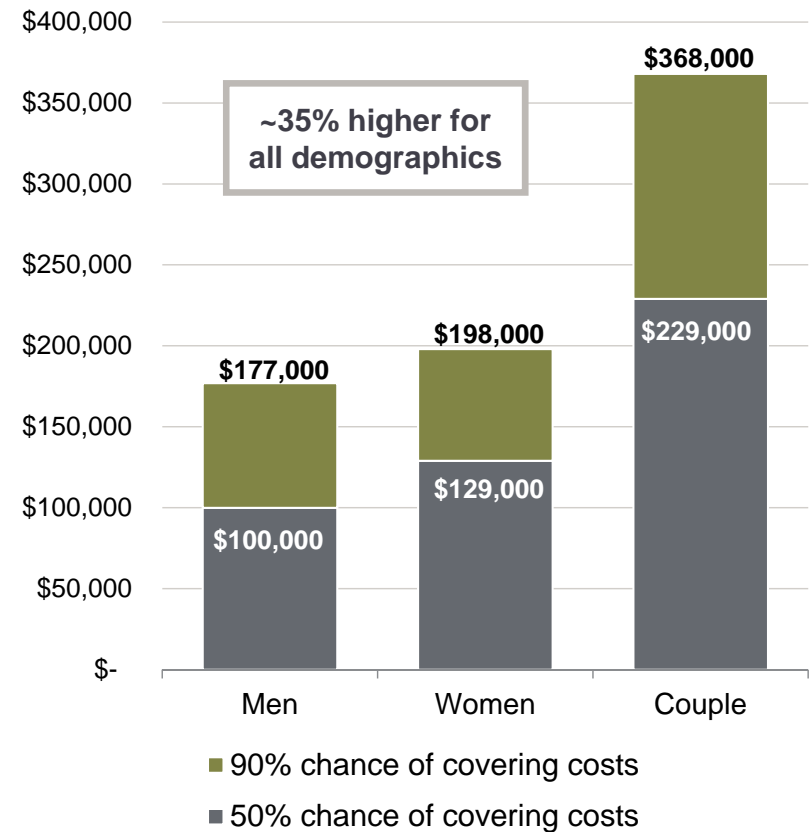
Present value of savings needed to fund out-of-pocket health care costs

Median Prescription Expenses (2017)



Present value of savings needed to fund out-of-pocket health care costs

High prescription expenses (2017)



Source: Employee Benefit Research Institute. Notes Vol. 38, No.10, December 20, 2017. Monte Carlo simulation analysis performed to calculate values that a retiree will have a 50%, and 90% chance of enough savings to cover medical costs for Medigap, Medicare Part B Premiums, Medicare Part D premiums and out-of-pocket prescriptions expenses if retiring at age 65, assuming median prescription costs and high prescription drug costs (prescription costs that are expected to be experienced by 1 out of 10 Medicare beneficiaries). Please note that this simulation is for illustrative purposes only. There is no guarantee that the figures shown would be sufficient to cover out-of-pocket medical expenses.

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This world-renowned index includes a representative sample of 500 leading companies in leading industries of the U.S. economy. Although the S&P 500 Index focuses on the large cap segment of the market, with approximately 75% coverage of U.S. equities, it is also an ideal proxy for the total market. An investor cannot invest directly in an index.

The **Barclays Capital U.S. Aggregate Index** represents securities that are SEC-registered, taxable and dollar denominated. The index covers the U.S. investment-grade fixed rate bond market, with index components for government and corporate securities, mortgage pass-through securities and asset-backed securities. These major sectors are subdivided into more specific indexes that are calculated and reported on a regular basis.

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