Retirement Income Adequacy for Gen Xers: Who Is Going to Run Short of Money in Retirement and What Can Be Done to Prevent It?

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Outline of presentation

- Baseline simulations
  - Very quick introduction to the EBRI Retirement Security Projection Model®
  - Probability of a successful retirement by age
  - Aggregate retirement deficits and average retirement deficits by age
  - Impact of Social Security reductions
  - Deficits by various categories
- What can be done?
  - Universal defined contribution
  - Automatic enrollment with auto-escalation
  - Impact of auto portability
  - Impact of QLAC purchases
- Impact of State-Specific Automatic IRAs on retirement deficits
- Appendix (Additional information on the simulation model)

EBRI Retirement Security Projection Model®

- Accumulation phase
  - Simulates retirement income/wealth for households currently ages 35-64 from defined contribution, defined benefit, IRA, Social Security and net housing equity
    - Pension plan parameters coded from a time series of several hundred plans.
    - 401(k) asset allocation and contribution behavior based on individual administrative records
      - Annual linked records dating back to 1996
      - More than 27 million employees in 110,000 plans
    - More than 25 million IRA accounts owned by 20 million unique individuals
- Retirement phase
  - Simulates 1,000 alternative life-paths for each household, starting at 65
  - Deterministic modeling of costs for food, apparel and services, transportation, entertainment, reading and education, housing, and basic health expenditures.
  - Stochastic modeling of longevity risk, investment risk, nursing facility care and home based health care.
- Produces the following output metrics:
  - Retirement Readiness Rating (RRR) = Percentage of simulated life-paths that do NOT run short of money in retirement
  - Retirement Savings Shortfalls (RSS) = Present value of deficits for those who run short of money in retirement

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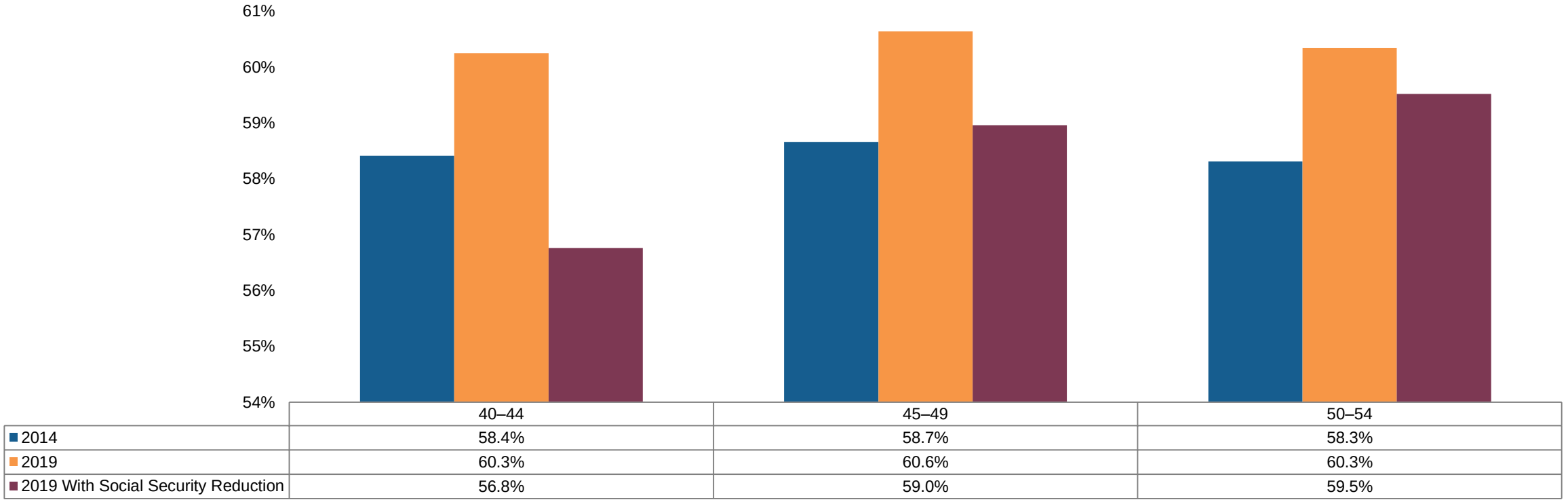
For a list of approximately 45 studies using RSPM please see: bit.ly/ebri-rspm

Probability of a successful retirement by age

Average Retirement Readiness Rating, by Age Cohort: 2014, 2019 Baseline, and 2019 Adjusted for Social Security Reduction

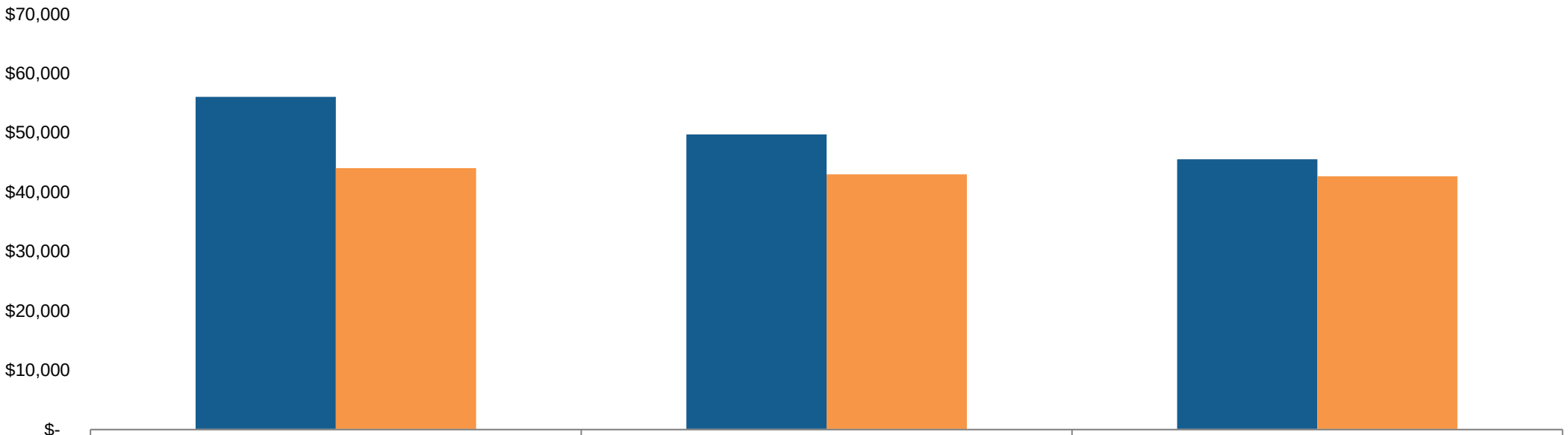


	40–44	45–49	50–54
2014	58.4%	58.7%	58.3%
2019	60.3%	60.6%	60.3%
2019 With Social Security Reduction	56.8%	59.0%	59.5%

Sources: EBRI Retirement Security Projection Model® versions 1995, 3458, and 3465.

Average retirement deficits by age

Average Retirement Savings Shortfalls,* by Age Cohort: 2019 vs. 2014 (Adjusted for Inflation)

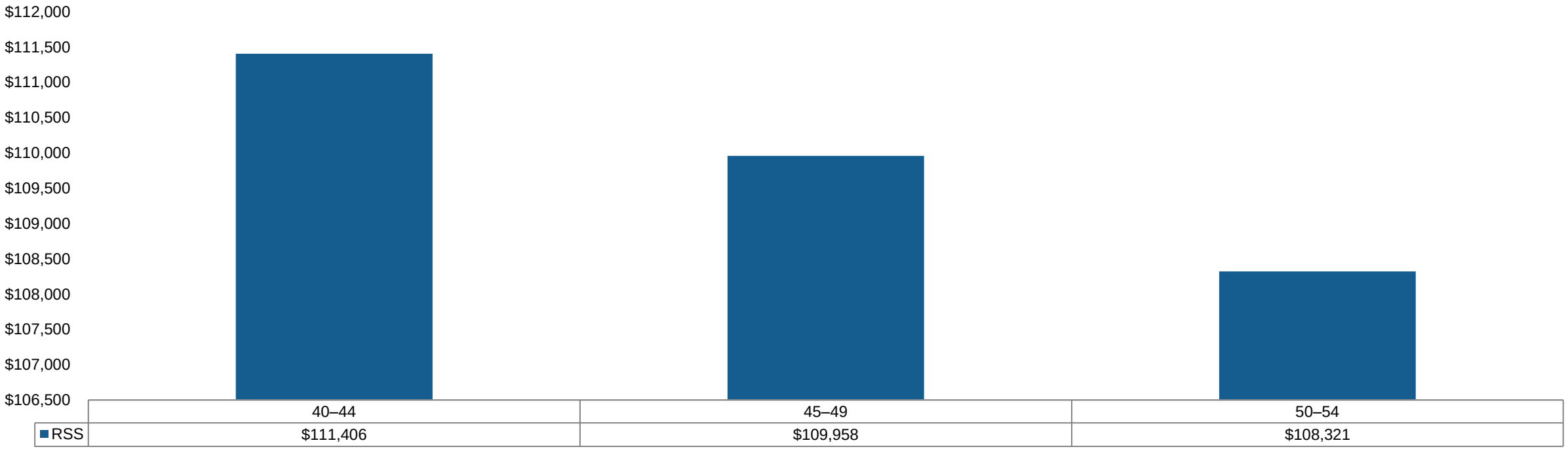


	40–44	45–49	50–54
2014 (Adjusted for Inflation)	$56,054	$49,740	$45,539
2019	$44,052	$43,004	$42,681

Sources: EBRI Retirement Security Projection Model® versions 2163 and 3459.
* The Retirement Savings Shortfalls (RSS) are determined as a present value of retirement deficits at age 65.

Average retirement deficits for those with a deficit

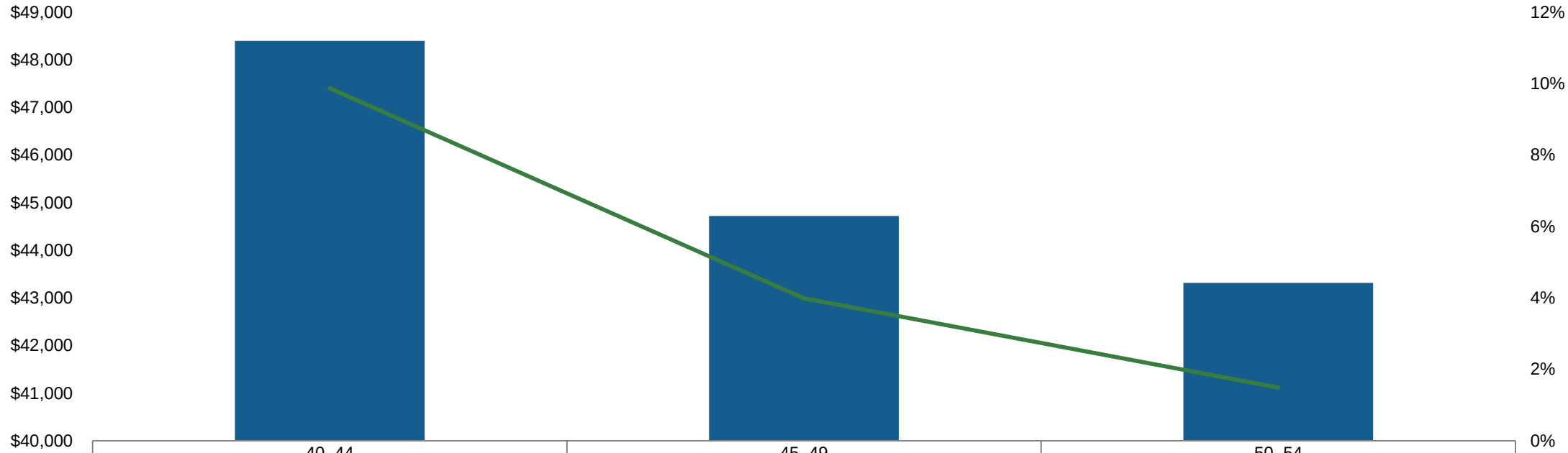
Average 2019 Retirement Savings Shortfalls* for Those Households With a Deficit, by Age Cohort



Source: EBRI Retirement Security Projection Model® version 3459.
* The Retirement Savings Shortfalls (RSS) are determined as a present value of retirement deficits at age 65.

Impact of Social Security reductions

2019 Retirement Savings Shortfalls* and Percent Increase Relative to Baseline, by Age Cohort: Assumes Pro Rata Reduction in Social Security Retirement Benefits (Starting in 2034)

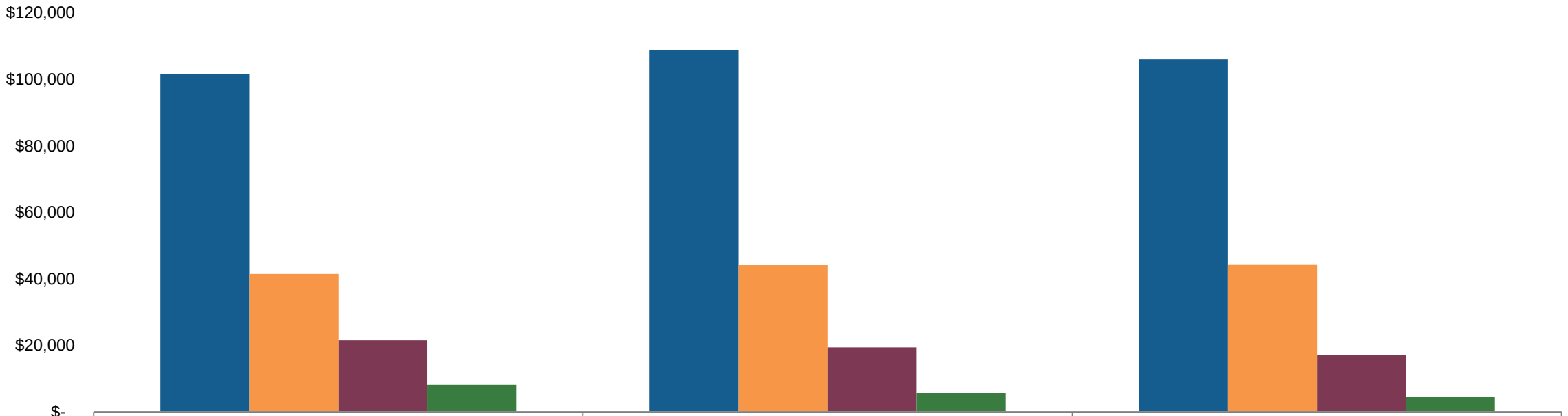


	40–44	45–49	50–54
RSS	$48,402	$44,719	$43,315
Percent Increase	10%	4%	1%

Source: EBRI Retirement Security Projection Model® version 3461.
* The Retirement Savings Shortfalls (RSS) are determined as a present value of retirement deficits at age 65.

Deficits by age and pre-retirement income

2019 Retirement Savings Shortfalls,* by Age Cohort and Preretirement Income Quartile

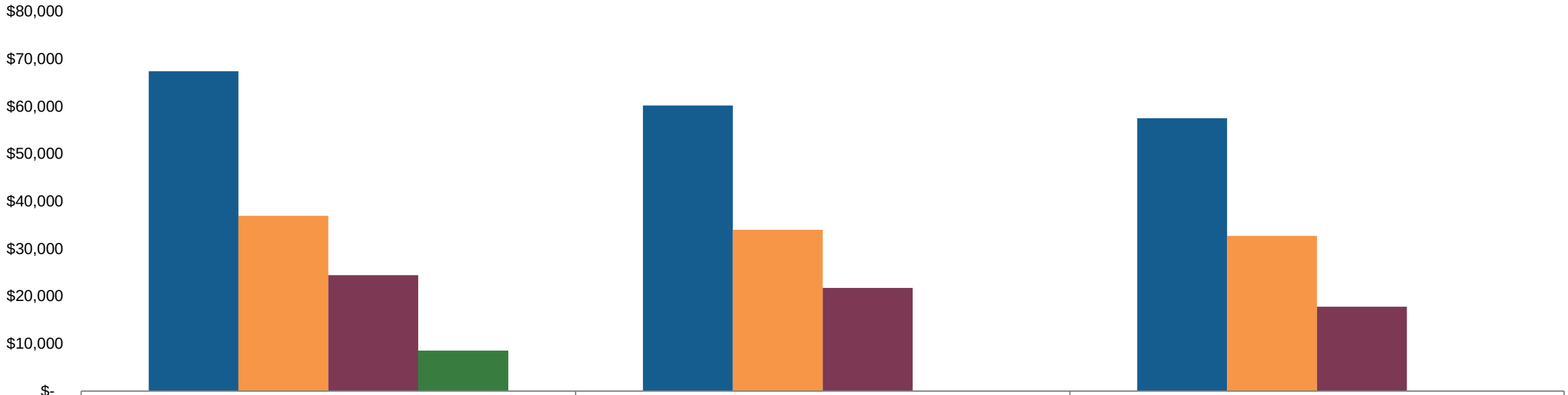


	40–44	45–49	50–54
Lowest Quartile	$101,578	$108,914	$106,036
Second Quartile	$41,506	$44,123	$44,203
Third Quartile	$21,533	$19,429	$17,029
Highest Quartile	$8,176	$5,641	$4,465

Source: EBRI Retirement Security Projection Model® version 3459.
* The Retirement Savings Shortfalls (RSS) are determined as a present value of retirement deficits at age 65.

Deficits by age and DC eligibility

2019 Retirement Savings Shortfalls,* by Age Cohort and Years of Future Eligibility in Defined Contribution Plans

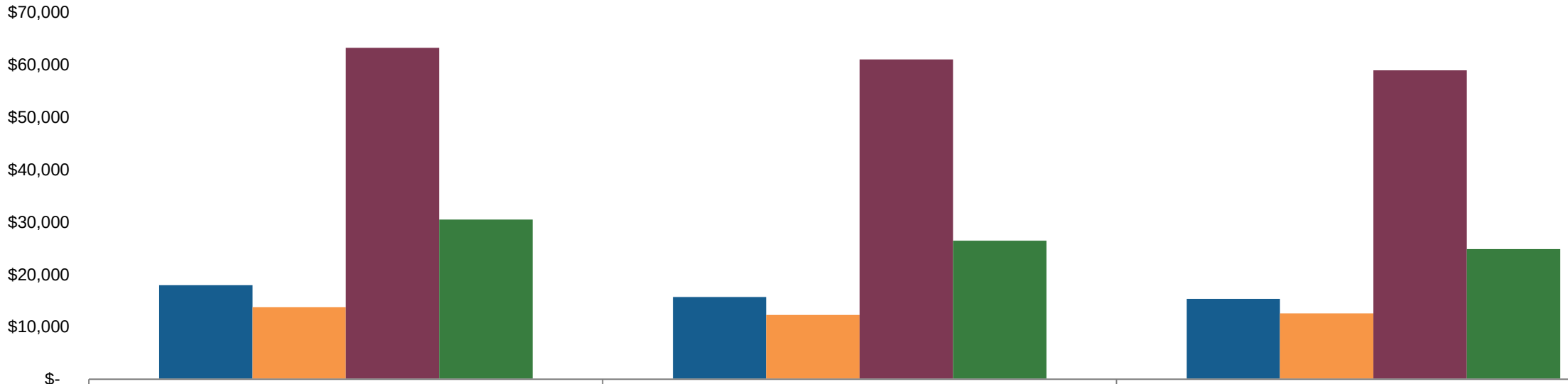


	40–44	45–49	50–54
0	$67,365	$60,164	$57,500
1–9	$36,943	$33,961	$32,690
10–19	$24,412	$21,757	$17,807
20+	$8,479		

Source: EBRI Retirement Security Projection Model® version 3459.
* The Retirement Savings Shortfalls (RSS) are determined as a present value of retirement deficits at age 65.

Deficits by age and marital status/gender

2019 Retirement Savings Shortfalls,* by Age Cohort and Marital Status/Gender

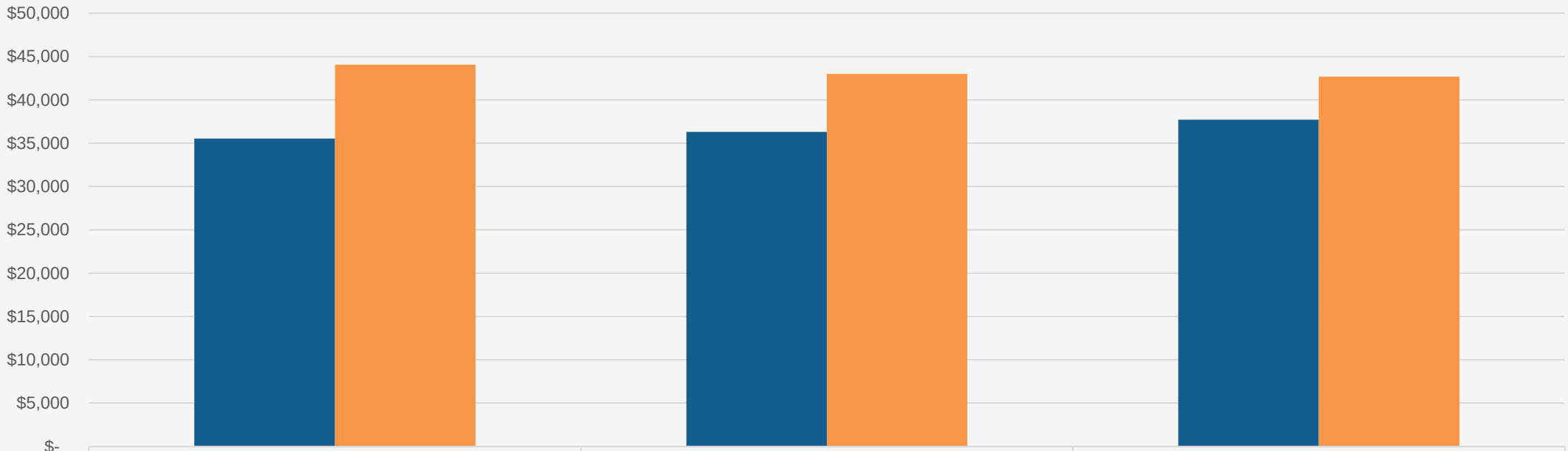


	40–44	45–49	50–54
Widow	$17,964	$15,703	$15,356
Widower	$13,745	$12,268	$12,591
Single Female	$63,251	$61,042	$58,964
Single Male	$30,471	$26,452	$24,827

Source: EBRI Retirement Security Projection Model® version 3459.
* The Retirement Savings Shortfalls (RSS) are determined as a present value of retirement deficits at age 65.

Universal defined contribution (similar to plan design of plan sponsors of the same size)

2019 Retirement Savings Shortfalls,* by Age Cohort

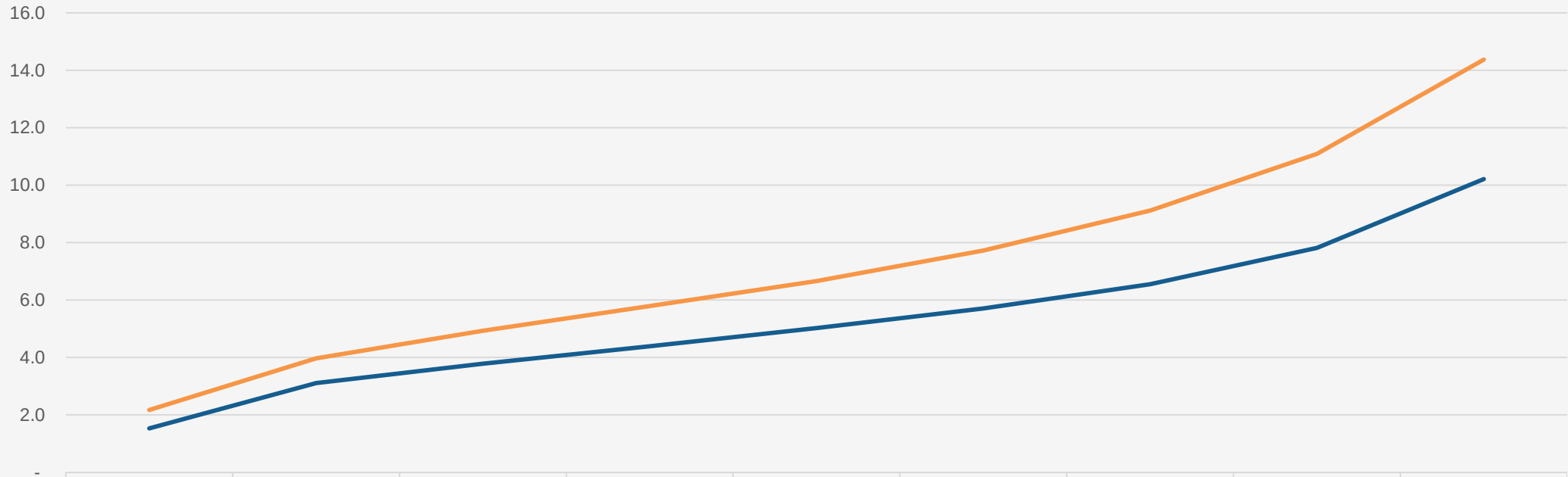


	40-44	45-49	50-54
Universal DC coverage	$35,519	$36,299	$37,698
baseline	$44,052	$43,004	$42,681

Source: EBRI Retirement Security Projection Model® version 3459 and 3512.

Automatic Enrollment with Auto-Escalation vs Voluntary Enrollment
Projected Multiples of Earnings

401(k) participants currently 25-29 who are assumed to always work for an employer who sponsors a plan

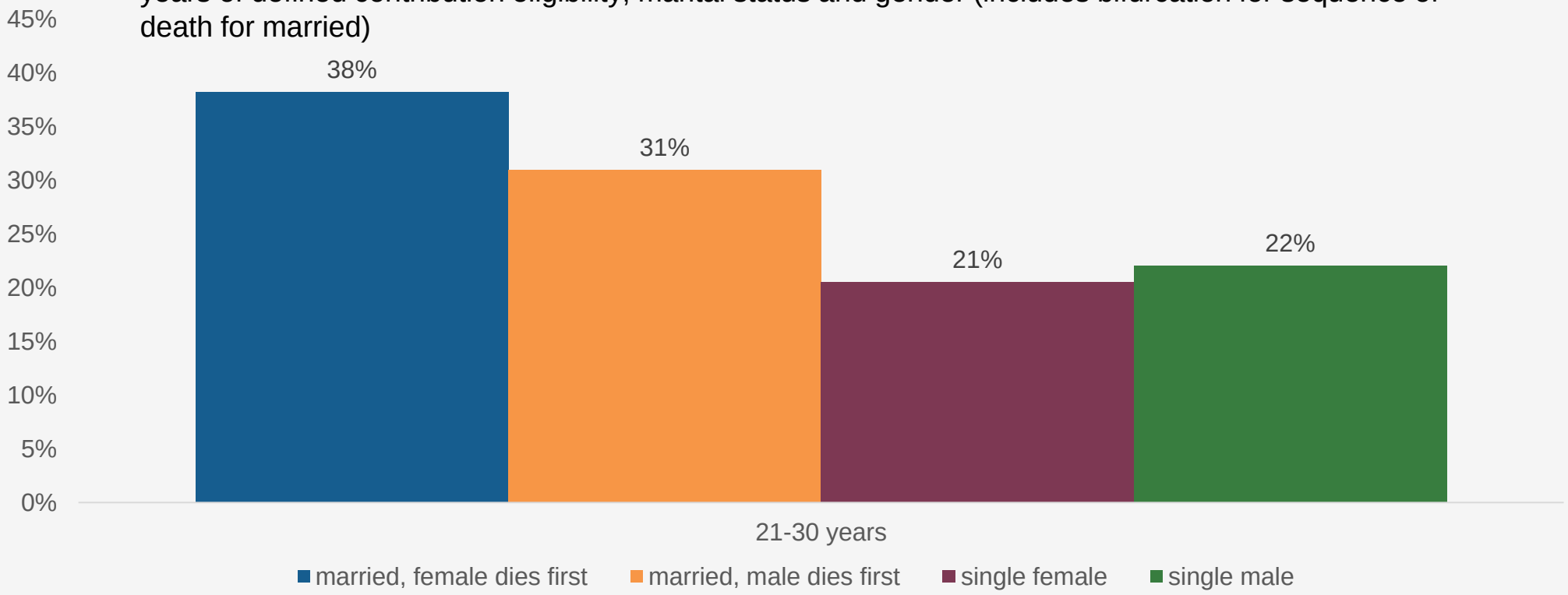


	p10	p20	p30	p40	Median	p60	p70	p80	p90
Voluntary enrollment	1.5	3.1	3.8	4.4	5.0	5.7	6.5	7.8	10.2
Automatic enrollment with escallation	2.2	4.0	4.9	5.8	6.7	7.7	9.1	11.1	14.4

Source: EBRI Retirement Security Projection Model® versions 2580 and 2554a.
Note that Voluntary Enrollment means no auto features; Automatic Enrollment means auto enrollment according to existing defaults in EBRI's model. The multiples expressed above are medians.

Impact of auto portability: ONLY THOSE WITH MORE THAN 20 YEARS OF ELIGIBILITY

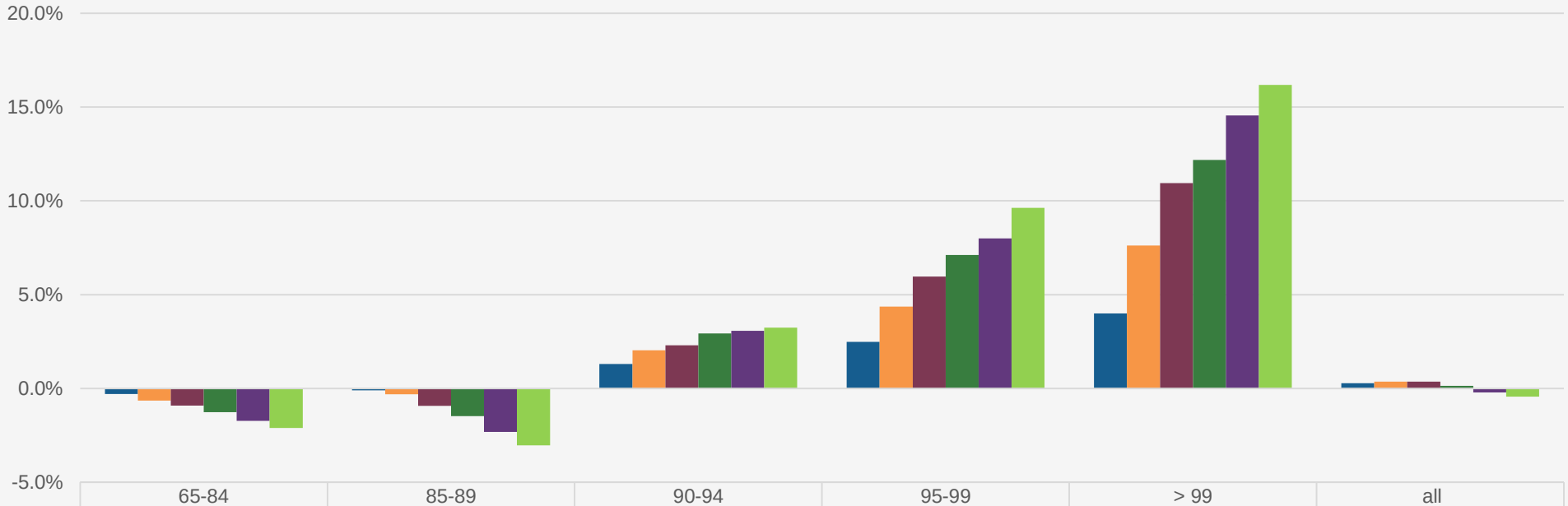
Reduction in Retirement Savings Shortfalls from the introduction of Auto Portability for Gen Xers by future years of defined contribution eligibility, marital status and gender (includes bifurcation for sequence of death for married)



Source: Jack VanDerhei. "How Retirement Readiness Varies by Gender and Family Status: A Retirement Savings Shortfall Assessment of Gen Xers." EBRI Issue Brief, no. 471 (Employee Benefit Research Institute, January 17, 2019).

Impact of QLAC purchases by age at death

Percentage change in EBRI Retirement Readiness Ratings from various DIA purchases at retirement by age at death*

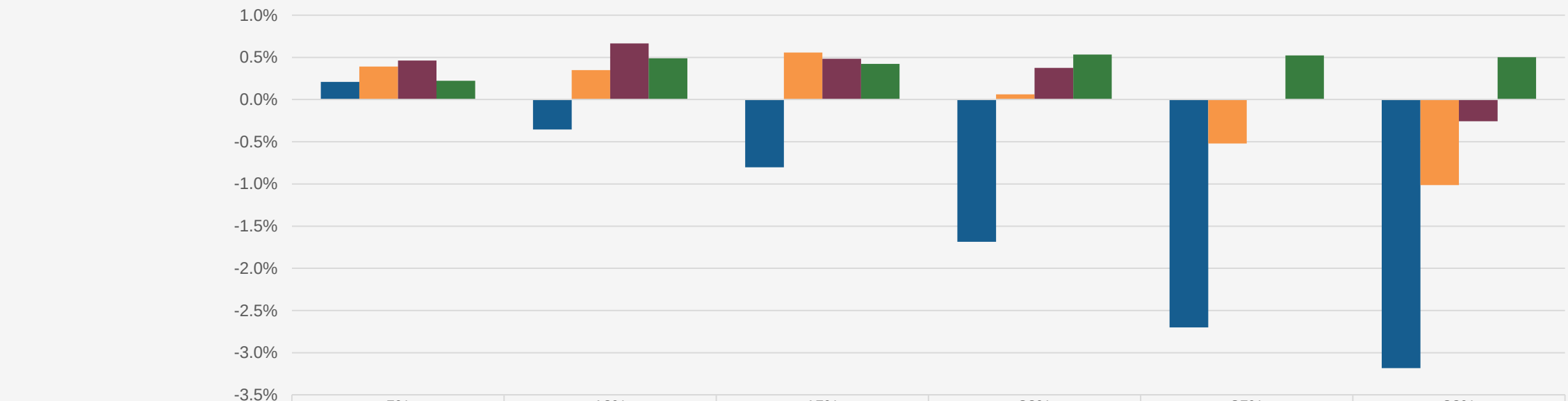


Percentage of 401(k) balance at age 65 used to purchase a DIA deferring 20 years (no death benefit)	65-84	85-89	90-94	95-99	> 99	all
5%	-0.3%	-0.1%	1.3%	2.5%	4.0%	0.3%
10%	-0.6%	-0.3%	2.0%	4.4%	7.6%	0.4%
15%	-0.9%	-0.9%	2.3%	6.0%	10.9%	0.4%
20%	-1.3%	-1.5%	2.9%	7.1%	12.2%	0.1%
25%	-1.7%	-2.3%	3.1%	8.0%	14.6%	-0.2%
30%	-2.1%	-3.0%	3.2%	9.6%	16.2%	-0.4%

For households currently ages 35-64 who have a 401(k) balance at retirement age (65).
Source: EBRI Retirement Security Projection Model® Version 3427
* second death for couples

Impact of QLAC purchases by age-specific wage quartiles

Percentage change in EBRI Retirement Readiness Ratings from various DIA purchases at retirement by age-specific wage quartiles



	5%	10%	15%	20%	25%	30%
lowest age-specific income quartile	0.2%	-0.4%	-0.8%	-1.7%	-2.7%	-3.2%
second	0.4%	0.3%	0.6%	0.1%	-0.5%	-1.0%
third	0.5%	0.7%	0.5%	0.4%	0.0%	-0.3%
highest age-specific income quartile	0.2%	0.5%	0.4%	0.5%	0.5%	0.5%

Percentage of 401(k) balance at age 65 used to purchase a DIA deferring 20 years (no death benefit)

For households currently ages 35-64 who have a 401(k) balance at retirement age (65).
Source: EBRI Retirement Security Projection Model® Version 3427

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IMPACT OF STATE-SPECIFIC AUTOMATIC IRAS ON RETIREMENT DEFICITS

OregonSaves parameters

- **Does my contribution rate increase over time?**
- Yes, your contribution rate automatically increases by 1 percent each year, until it reaches 10 percent, unless you opt out of automatic increases.
- **Can I choose a different savings rate than 5 percent?**
- Yes, you can choose a savings rate of as little as 1 percent and as much as 100% of your gross pay, at 1 percent increments and up to annual Roth IRA contribution limits. Please note that contributions are made post-tax, and your employer can't deduct more than the amount of available compensation after they have made any other payroll deductions that have higher preference as required by law. You can make changes to your contribution rate online or by phone.
- **Is the contribution made pre-tax or post-tax?**
- For Roth IRAs, contributions are made on a post-tax basis.
- **Is there a limit to how much I can contribute?**
- Yes, contribution limits for Roth IRAs are set by the federal government. For 2018, you can save up to $5,500 per year if you're younger than 50 and $6,500 per year if you're 50 or older, as long as you have that much in compensation and are under certain income levels based on your modified adjusted gross income.

- ASSUMING NO SIZE EXEMPTION FOR CURRENT RUNS

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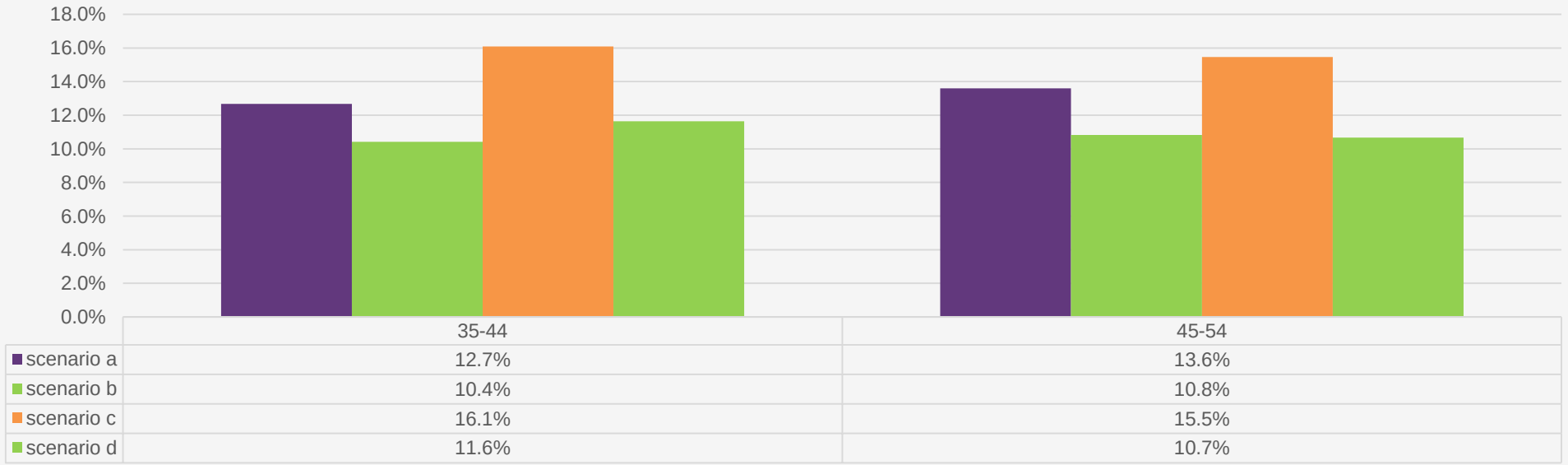
Source: https://www.oregonsaves.com/home/overview/faqs.html

Reduction in Average Retirement Savings Shortfalls, by Age, from Introducing OregonSaves as a Function of Various Assumptions



	35-44	45-54
scenario a	12.7%	13.6%
scenario b	10.4%	10.8%
scenario c	16.1%	15.5%
scenario d	11.6%	10.7%

Source: RSPM version 2258
Scenario descriptions:
a, no optout, no auto escalation
b, 25 percent optout, no auto escalation
c, 25 percent optout initially, auto escalation up to 10 percent, no opt out on escalation
d, 25 percent optout initially, auto escalation up to 10 percent, opt out on escalation and reduction from initial 5 percent from VanDerhei (2007)

Source: VanDerhei, J. (September 2007). *The Expected Impact of Automatic Escalation of 401(k) Contributions on Retirement Income* EBRI Notes.

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THANK YOU!

For additional information please visit us at www.ebri.org or send me an email at vanderhei@ebri.org

Appendix

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ADDITIONAL INFORMATION THE SIMULATION MODEL

When is a household considered to run short of money in EBRI's simulation model?

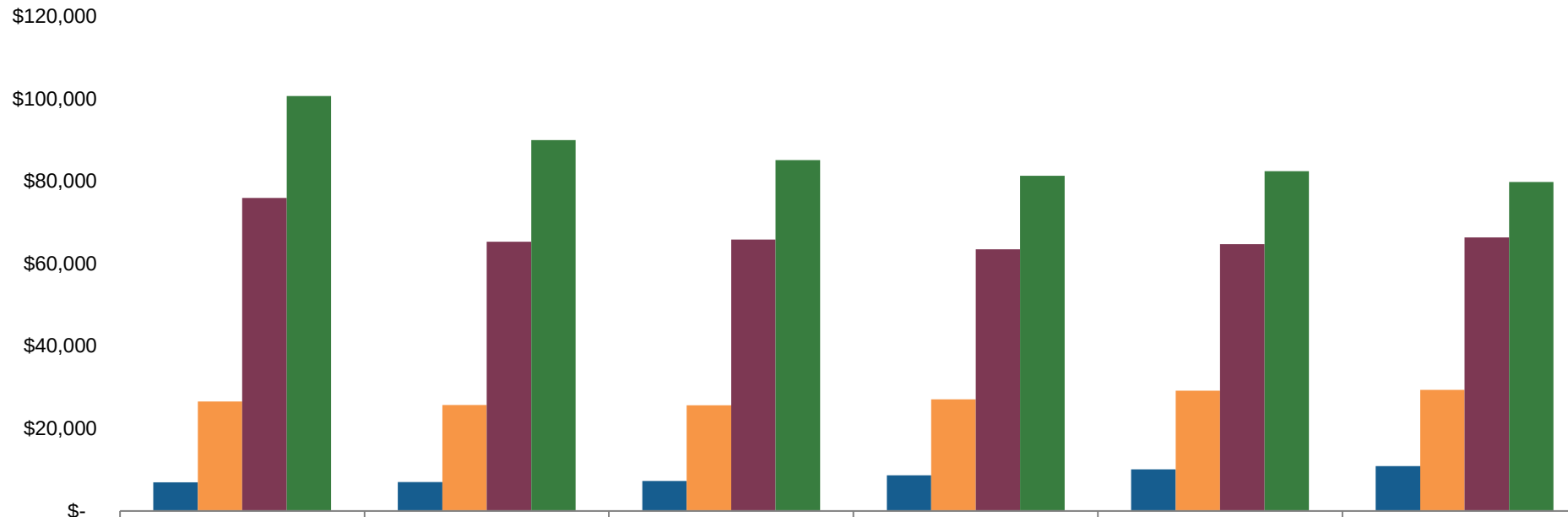
- If aggregate resources in retirement are not sufficient to meet average retirement expenditures
  - This version of the model is constructed to simulate retirement income adequacy
  - Alternative versions of the model allow similar analysis for replacement rates, standard-of-living calculations, and other ad hoc thresholds.
- The baseline version of the model used for this analysis assumes all workers:
  - retire at age 65
  - that they immediately begin drawing benefits from Social Security and defined benefit plans (if any)
  - to the extent that the sum of their expenses and uninsured medical expenses exceed the projected after-tax annual income from those sources
    - They immediately begin to withdraw money from their individual accounts (defined contribution and cash balance plans, as well as IRAs).

When is a household considered to run short of money (continued)?

- If there is sufficient money to pay expenses without tapping into the tax-qualified individual accounts
  - those balances are assumed to be invested in a non-tax-advantaged account where the investment income is taxed as ordinary income.
- Individual accounts are tracked until the point at which they are depleted.
  - At that point, any net housing equity is assumed to be added to retirement savings in the form of a lump-sum distribution (not a reverse annuity mortgage (RAM)).
- If all the retirement savings are exhausted and if the Social Security and defined benefit payments are not sufficient to pay expenses, the household is designated as having run short of money at that point.

Retirement deficits by age and longevity

2019 Retirement Savings Shortfalls,* by Age Cohort and Relative Longevity Quartile

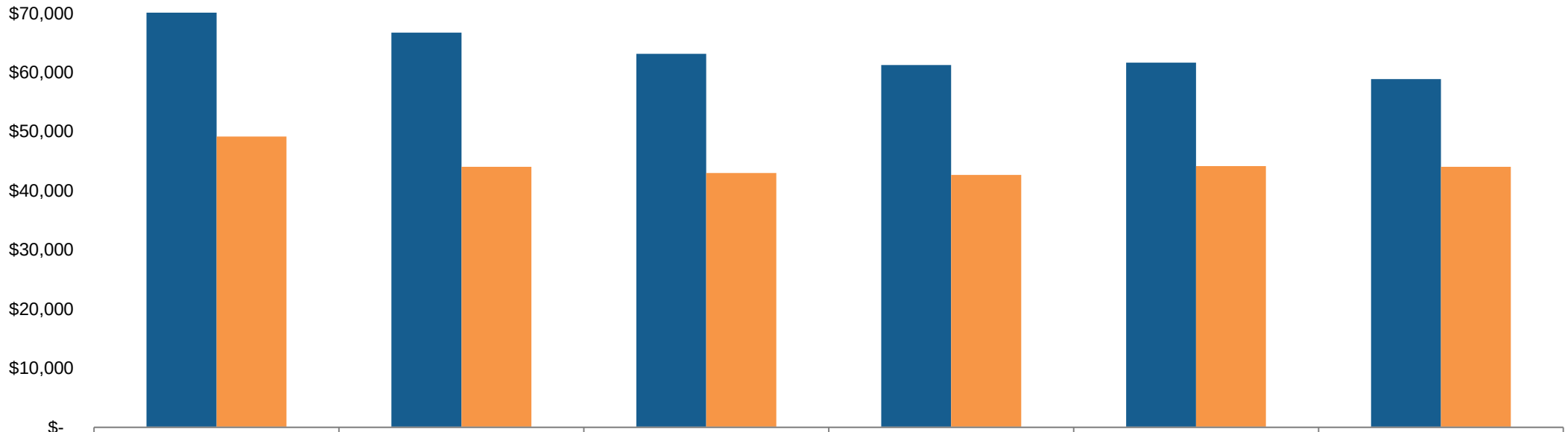


	35–39	40–44	45–49	50–54	55–59	60–64
Least Relative Longevity Quartile	$6,989	$7,055	$7,279	$8,648	$10,104	$10,911
Second Relative Longevity Quartile	$26,563	$25,690	$25,658	$27,080	$29,149	$29,359
Third Relative Longevity Quartile	$75,892	$65,277	$65,808	$63,438	$64,697	$66,350
Greatest Relative Longevity Quartile	$100,636	$89,922	$85,118	$81,303	$82,412	$79,775

Source: EBRI Retirement Security Projection Model® version 3459.
* The Retirement Savings Shortfalls (RSS) are determined as a present value of retirement deficits at age 65.

Impact of IRA rollovers on retirement deficits

Average 2019 Retirement Savings Shortfalls,* by Age Cohort: Baseline vs. No IRA Rollovers



	35–39	40–44	45–49	50–54	55–59	60–64
2019 without IRA rollovers	$71,786	$66,751	$63,145	$61,268	$61,666	$58,893
2019	$49,182	$44,052	$43,004	$42,681	$44,186	$44,055

Sources: EBRI Retirement Security Projection Model® versions 3501 and 3459.
* The Retirement Savings Shortfalls (RSS) are determined as a present value of retirement deficits at age 65.