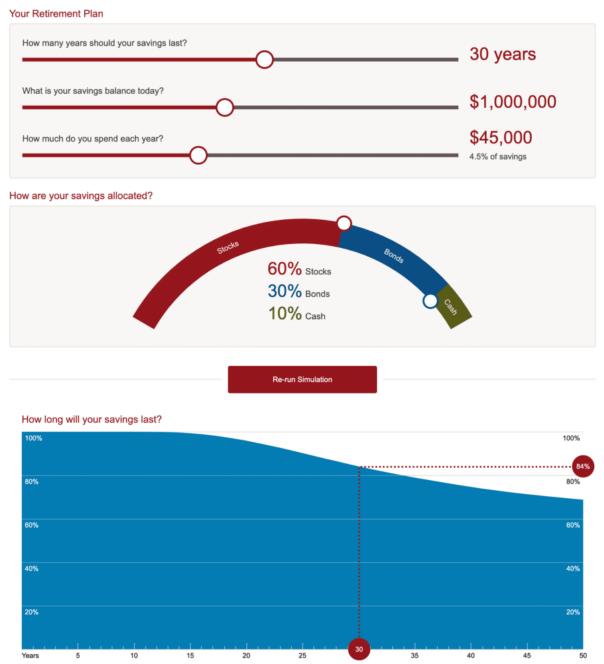
# Visualizing Retirement Income Strategies

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# What does an 84% probability of success mean?



#### Creating a Goal-Based Retirement Income Plan



Allocate between lifestyle & legacy



Determine spending flexibility

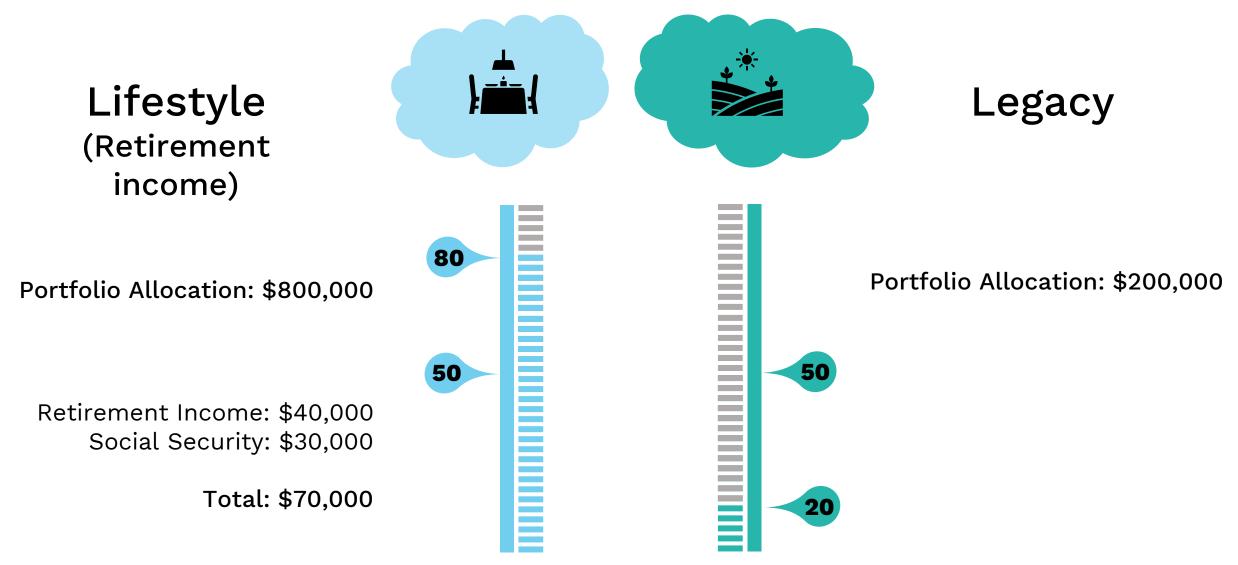


Role of equity risk



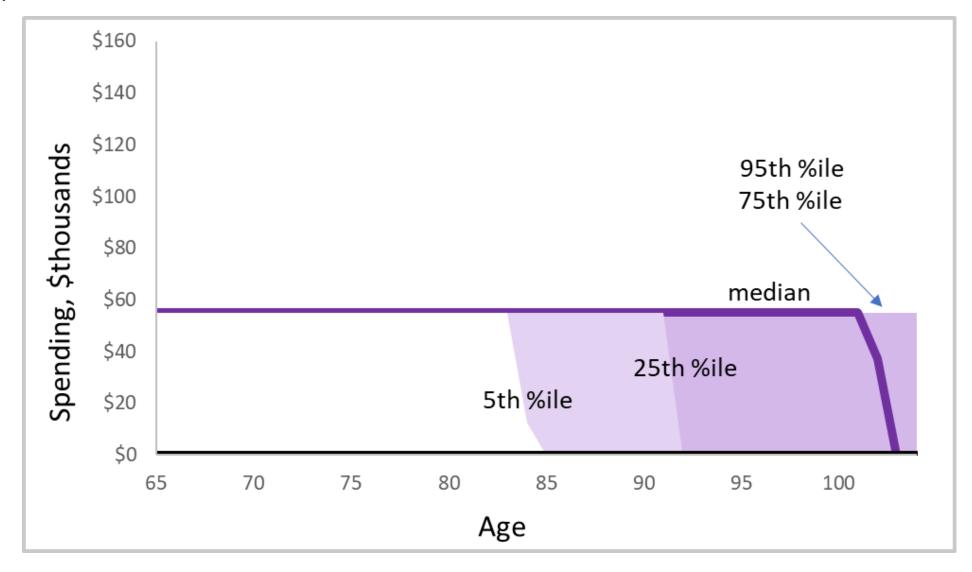
Value of lifetime income in reducing idiosyncratic risk

#### Setting Lifestyle and Legacy Goals

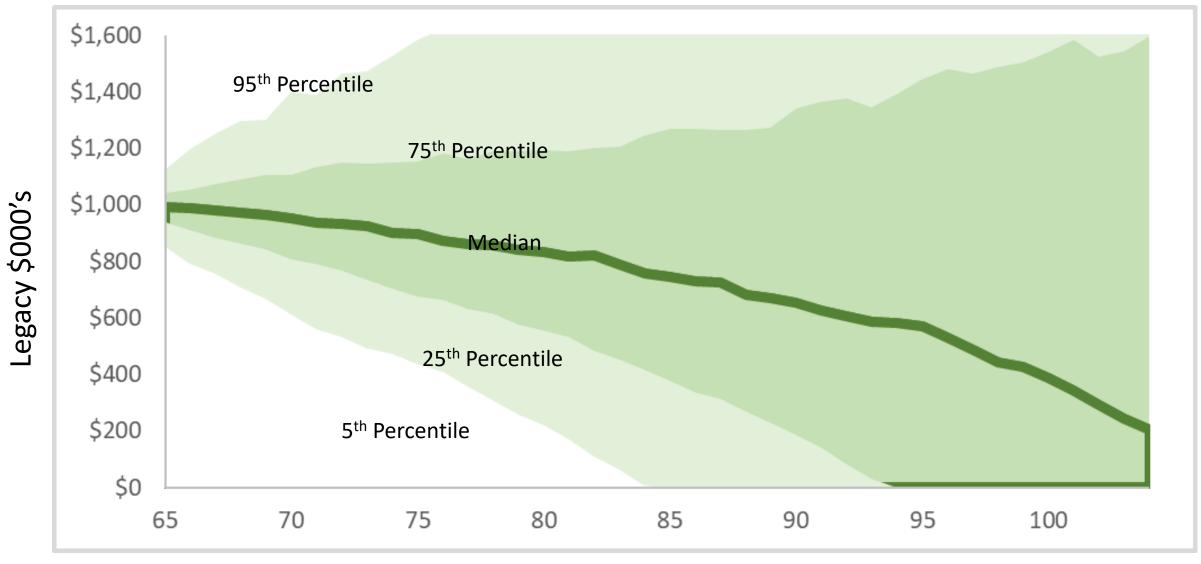


#### Illustration of a fixed withdrawal rate rule

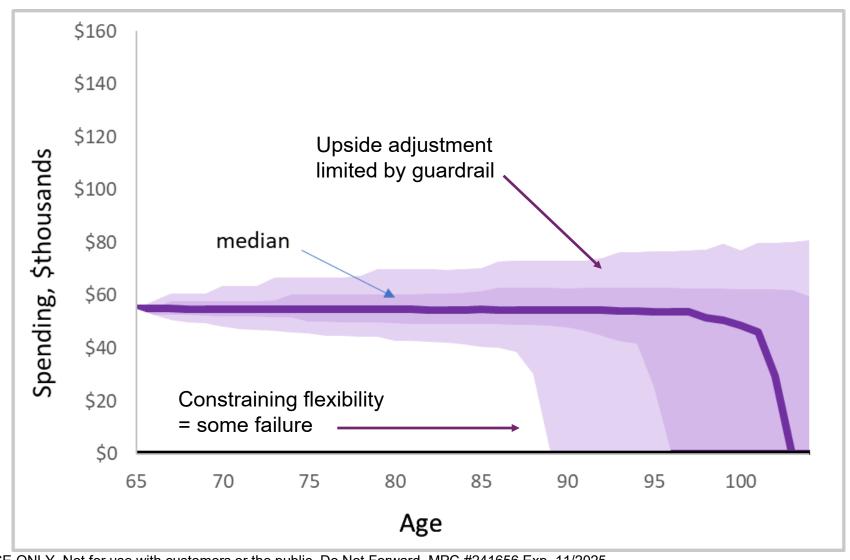
\$1m portfolio, \$55k income, 40/60 allocation, 1% AUM



#### Legacy values with a fixed withdrawal rate rule



## Modest Guardrail (Cap and Floor) Strategy Adjust spending to 5% total change depending on asset returns



#### Longevity risk with an investment portfolio

Healthy 95-year old woman

Age 95

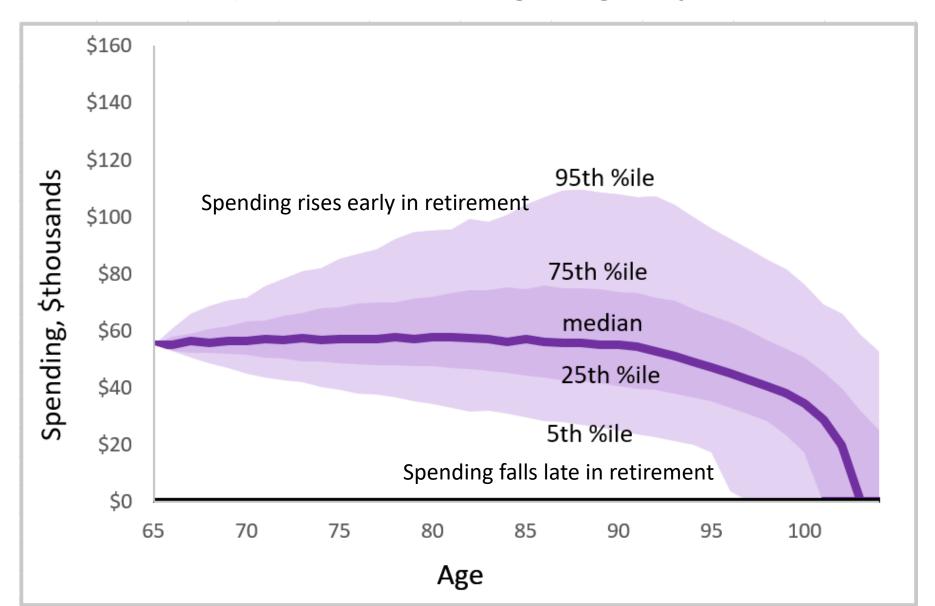
\$500,000 wealth for income goal

How do you allocate the \$500,000?

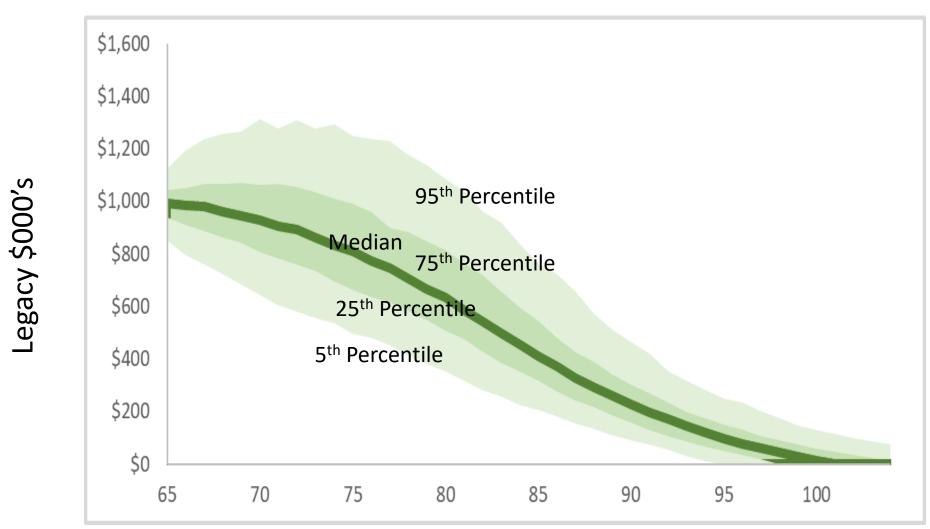
Age 96, 81% still alive

- Age 97, 64% still alive
- Age 98, 49% still alive
- Age 99, 36% still alive
- Age 100, 25% still alive
- Age 101, 17% still alive

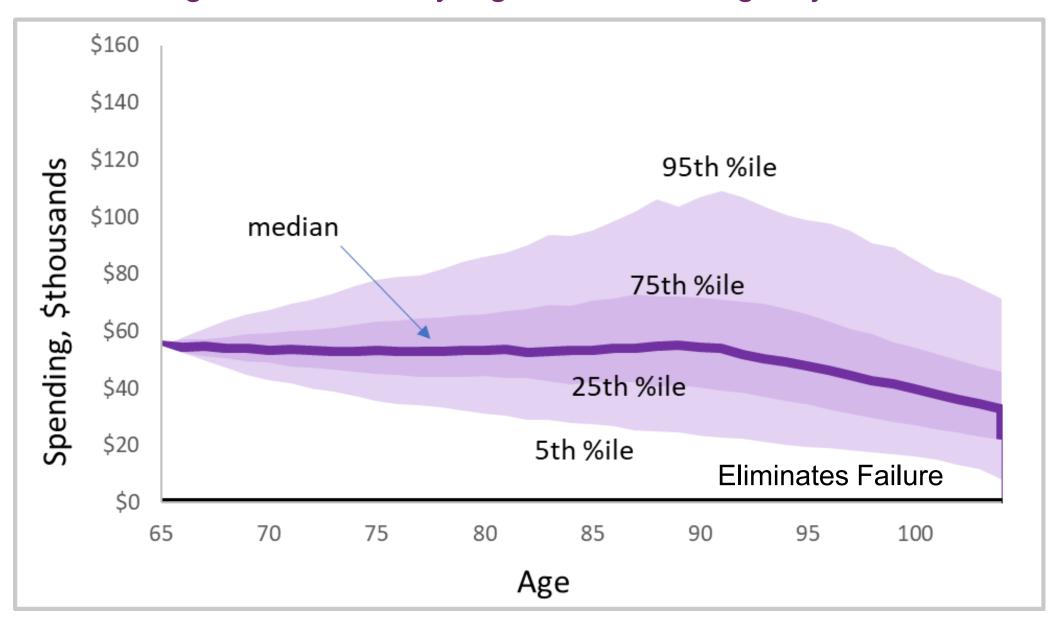
# Unconstrained Annual Adjustment (RMD-style) Current balance/expected remaining longevity



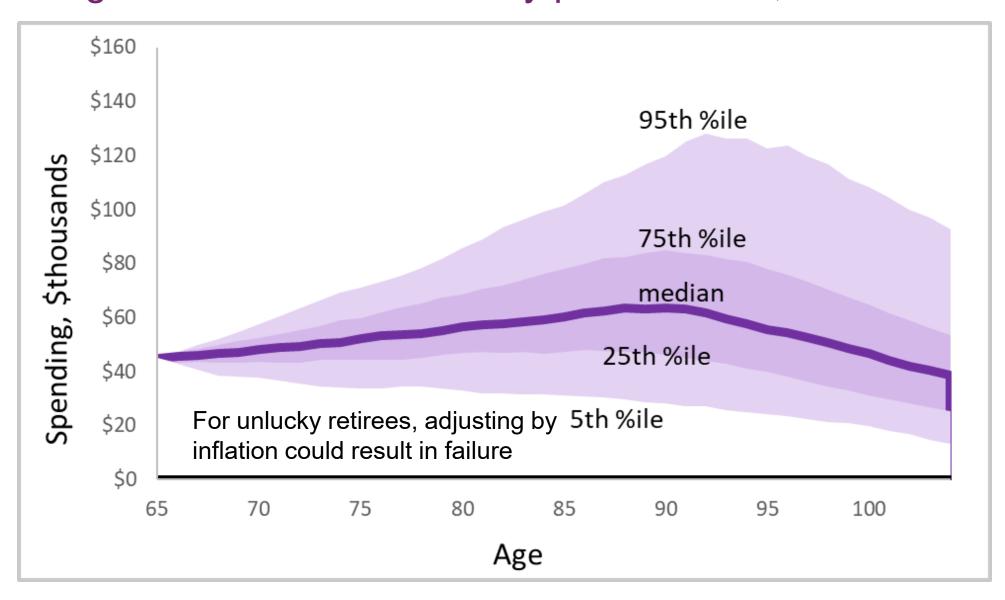
# Unintended bequests and withdrawal method If the purpose of this wealth is income, RMD method is pretty efficient



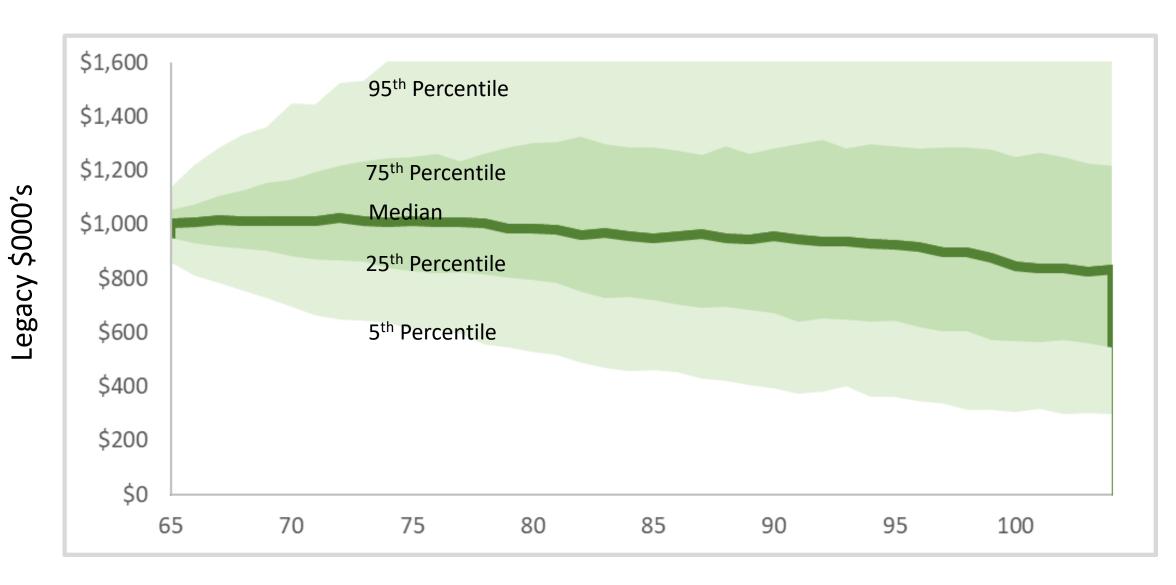
5% Annual Spending Constraint (unlimited lifetime constraint)
Annual change determined by algo based on longevity and assets



# Lower Initial Spending Goal (4.5%) Increases Spending Slope Spending increases determined by performance, not inflation



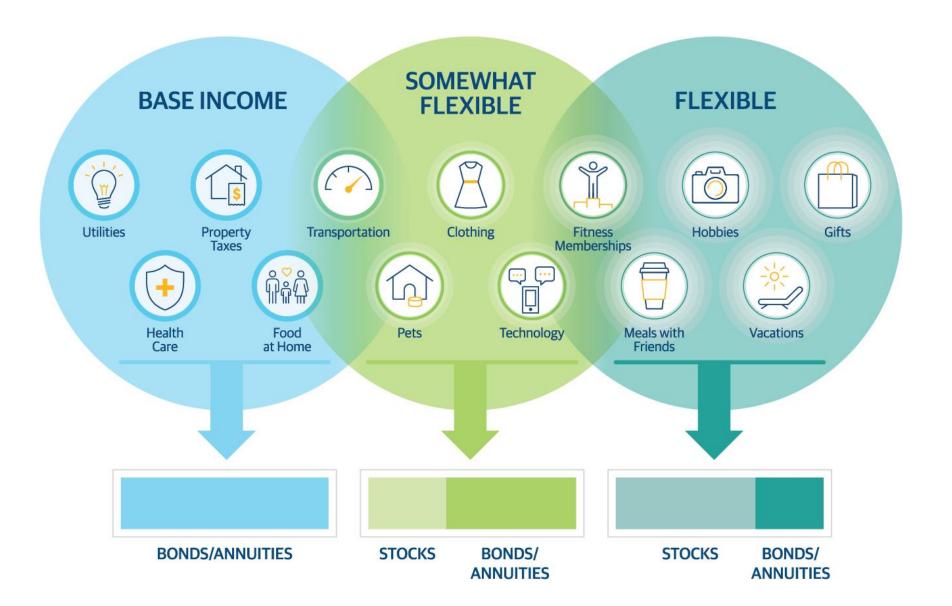
# Lower initial income increases legacy values Or, leads to higher unintended bequest



#### Matching income risk to a lifestyle

## **Flexibility** Retirement Spending Sharing **Splurges** Everyday Enjoyment **Essentials**

#### Matching investment risk to lifestyle flexibility

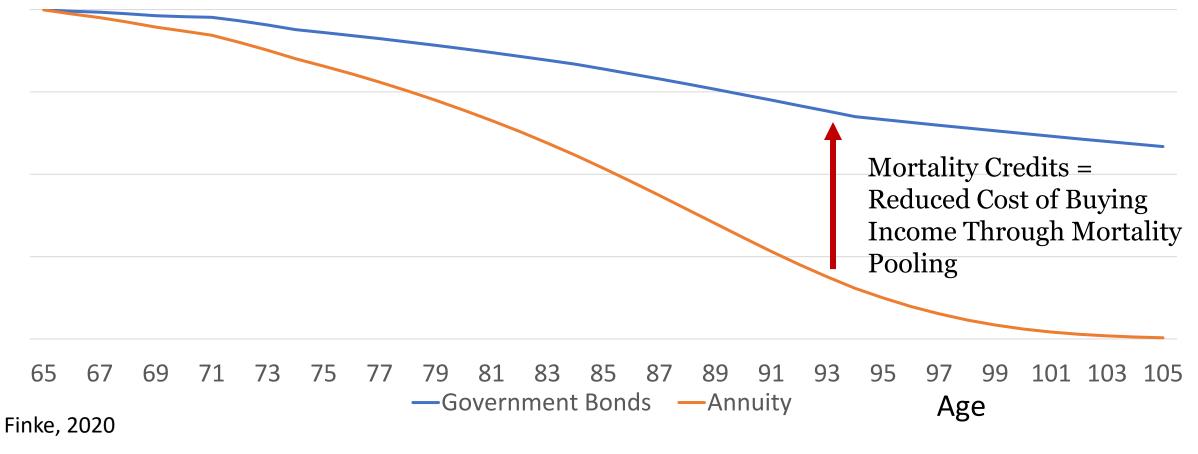


#### The Birthday Cake Problem



#### Cost of Doing it Yourself Vs. Mortality Pooling





#### **Basic Retirement Income Choices**

- Visualize investment risk and annuity allocation
- Move the dials to choose the income path you want



#### **Asset Allocation and annuities**

Investments-only Asset Allocation

Stocks 40%

Bonds 60%

Remaining investment portfolio = 67% stocks, 33% bonds

Blended fixed income allocation

Partial Annuity
Asset Allocation

Stocks 40%

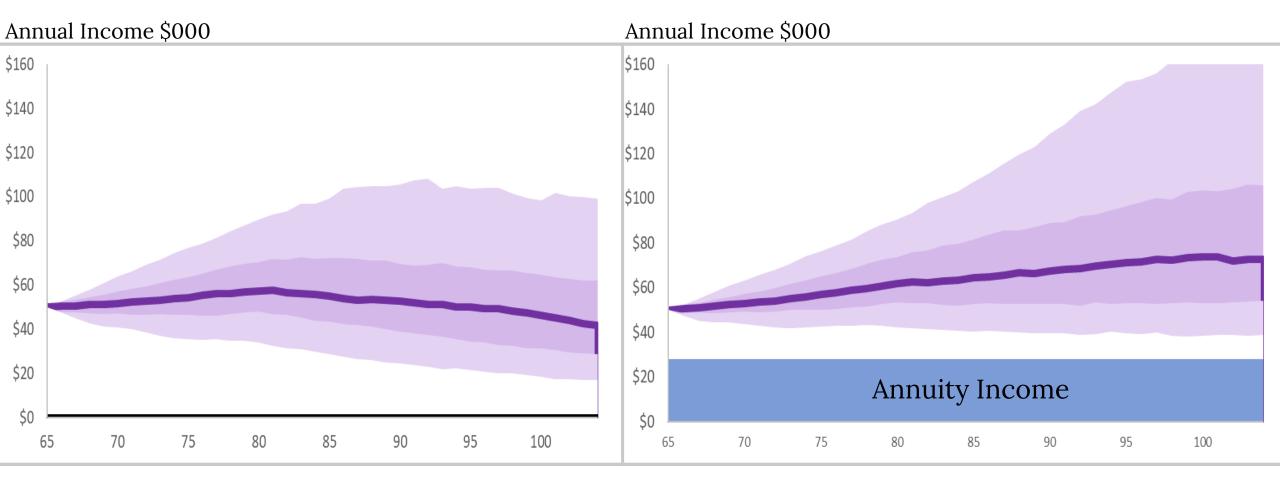
Annuity 40%

Bonds 20%

#### How transferring longevity risk affects income paths

Example 40/60 allocation, use \$400k of bonds to buy annuity, 67/33 allocation remaining assets

\$400,000 annuity generates \$26,000 of \$50,000 goal vs. \$20,000 at 5% withdrawal



#### What mortality risk pooling allows you to do

- Spend more from longevity-protected bond portfolio (annuity)
- Spend less from remainder of portfolio to meet income goal
- Take more optimal investment risk with remaining portfolio
- Example \$400,000 annuity with 6.5% payout rate = \$26,000 of \$50,000 goal

Vs. taking 5.5% of \$400,000 bond portfolio (\$26k - \$22k = \$4k less from remainder)

#### Fund Inflexible Expenses Age 60 Example

- \$200,000 today in CDs
- 40% combined state and federal marginal tax bracket between 60 & 65
- Retire at 65

#### Choice 1:

Buy a 5-year CD at 5% At 65, invest in bonds that provide income with a 90% chance of success\*

\* Probability of not outliving savings according to Society of Actuaries annuity mortality table

Choice 2:

At 65, buy an income annuity

Choice 3:

Buy a 5-year CD at 5% Buy an annuity with a roll-up on income base and a guaranteed lifetime withdrawal benefit (GLWB)

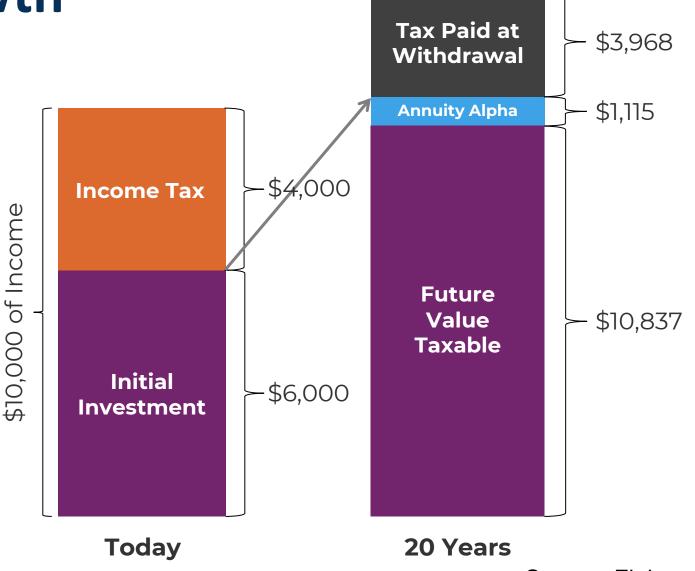
#### **ANNUITY ADVANTAGE #1:**

**Tax Deferred Growth** 

Annuity (20 year, 5% return) Vs. Annually Taxable Bond

Gross Return = 5%
Net Return Bonds = 3%
Net Return Annuity = 3.51%

51 basis point improvement



bonds

Red area represents added

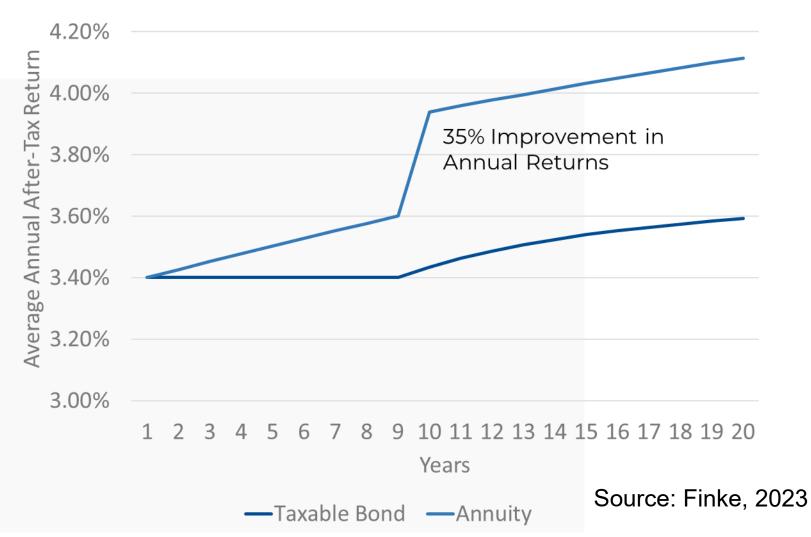
after-tax growth of assets within

an annuity vs. annually taxable

Source: Finke,

#### Total Net Return & Differential Taxation

- 32% Ordinary Income Age 55-64
- 25% Age 65-74
- 5% Gross Return



#### **ANNUITY ADVANTAGE #2:**

#### **Tax Deferred Growth**

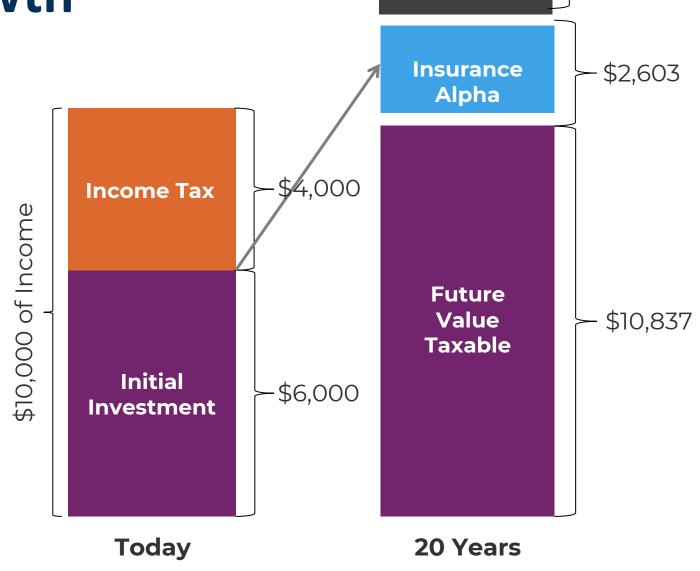
Withdraw at Lower Future Tax Rate (**40%** today, **25%** at retirement)

Gross Return = 5%

Net Return Bonds = 3%

Net Return Annuity = 4.12%

112 BP Improvement

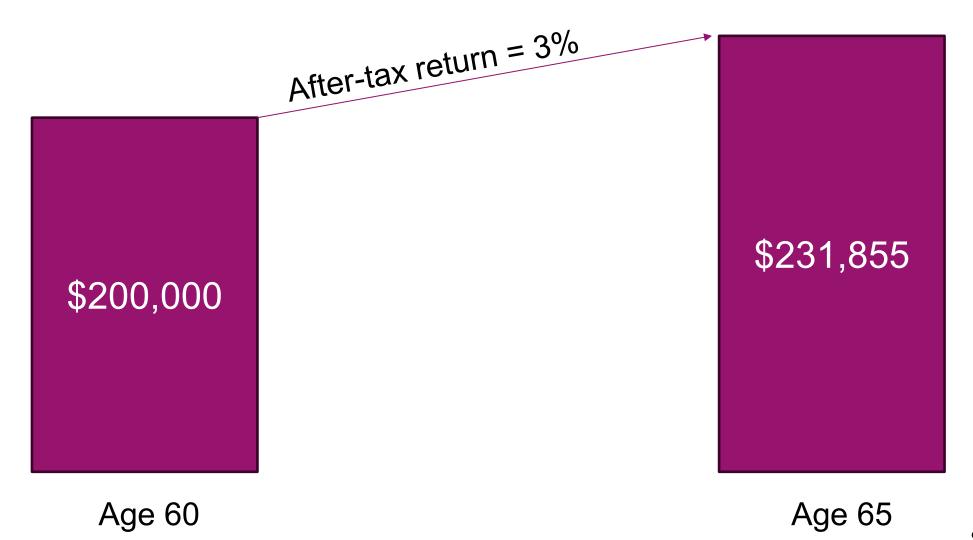


Tax Paid at

Withdrawal

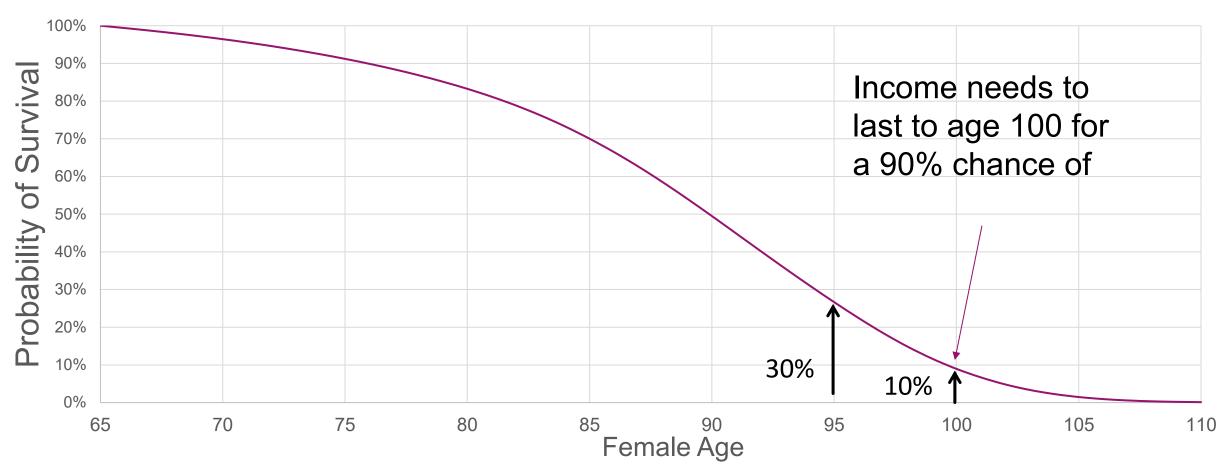
\$2,480

#### 5-Year CD with Bonds at Retirement 40% combined state/federal marginal tax rate

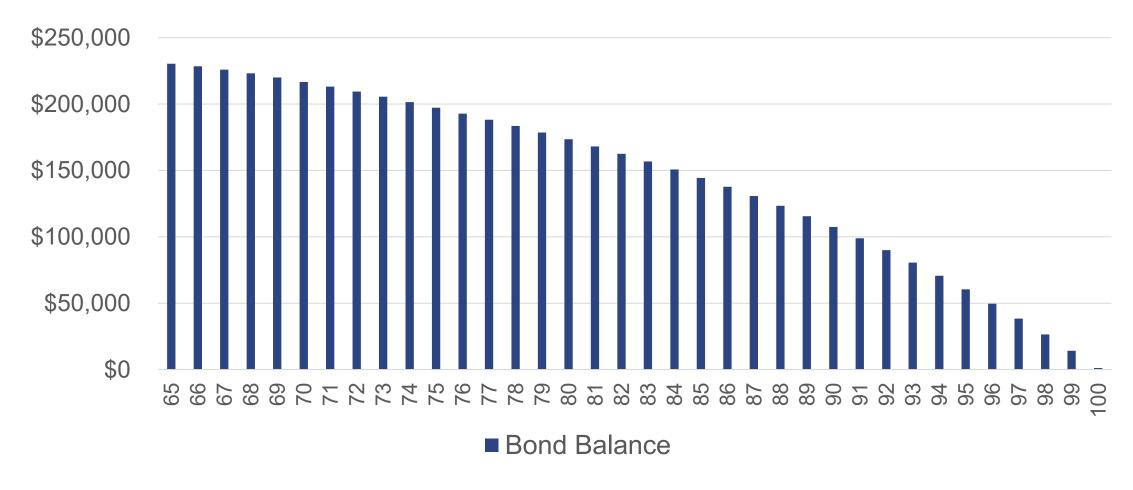


Source: Finke, 2024

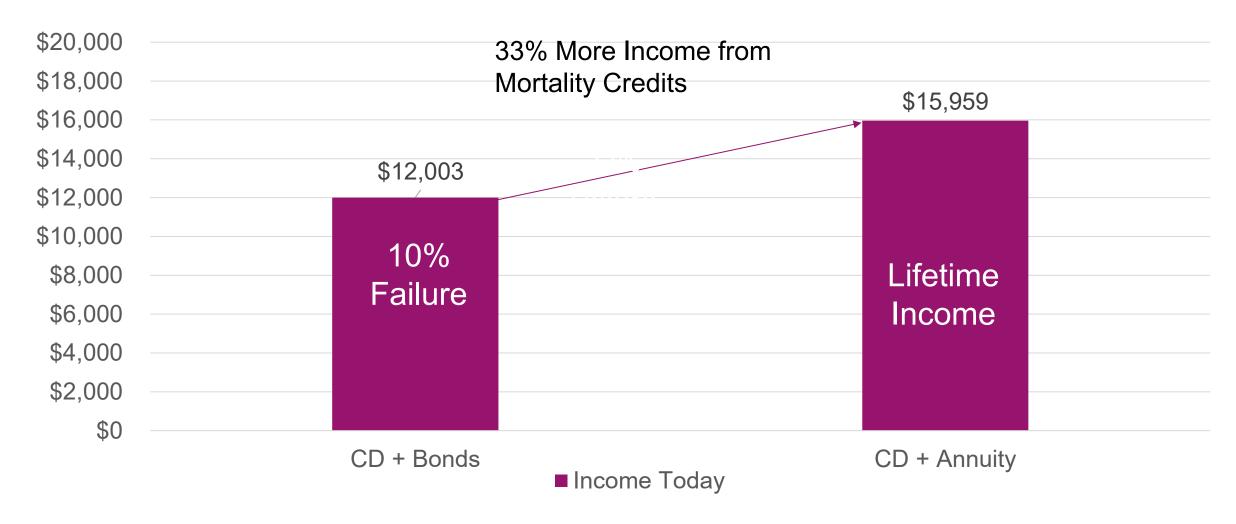
What is an acceptable failure rate? Longevity of a 65-year old healthy woman, 2012 Society of Actuaries mortality table with improvement to 2024



# \$231,855 at 65 can produce \$12,003 of income Treasury bond ladder at August 28, 2024 rates



#### The Retiree's Choice to Fund Safe Income Invest in 5-year CD and buy bonds at 65 or Purchase an income annuity with a 10-year period certain



## Option 3: Buy a Deferred Annuity at 60 with a GLWB

Growth is untaxed until withdrawn

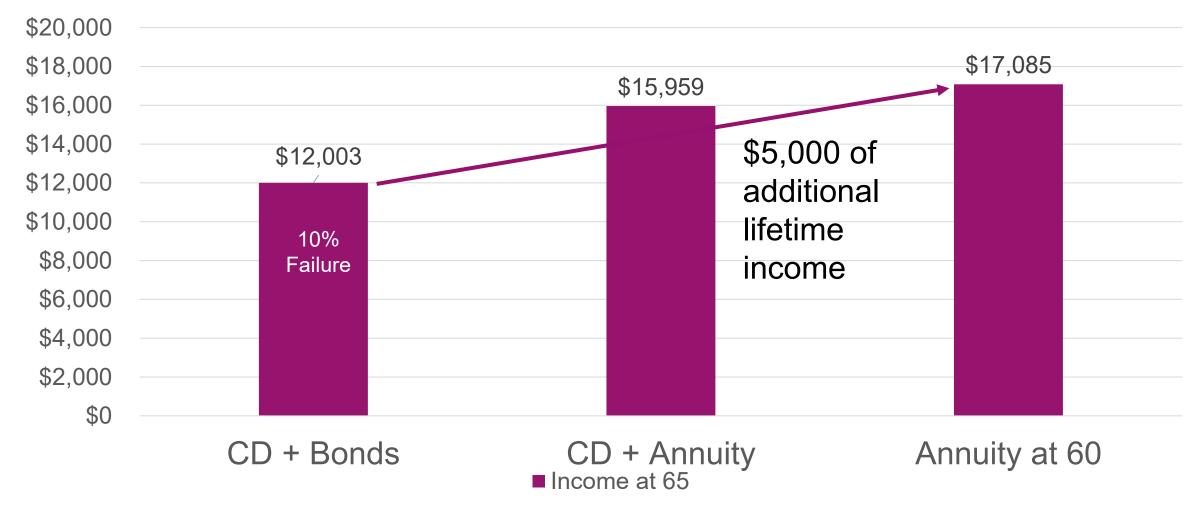
\$200,000

Age 60

**Income Base** 

Age 65

#### Option 3: Buy an Annuity with a Roll Up Investment only vs. Investment + Annuity vs. Deferred Annuity



Source: Finke, 2024. Annuity income from GLWB based on average from top 4 quotes on October 4,



# Want to connect with this month's presenter?

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