

Test Drive Your Retirement Portfolio...

**AAll National Webinar
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**Will my portfolio balance decline
during retirement?**

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during retirement?**

**Will I run out of money
in retirement?**

**These two questions were answered using the Retirement Portfolio Analyzer (RPA)
using historical performance data over the past 99 years (from 1926-2024)**

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Analysis of 75 Rolling 25-Year Retirement Periods
by Craig L Israelsen, Ph.D.
www.7TwelvePortfolio.com

Retirement Portfolio Analyzer (RPA) --- February 10, 2025 release date

ENTER YOUR DATA IN THE BRIGHT YELLOW CELLS

Current Year

2025

Retirement Portfolio Account Balance

\$1,000,000

Your Current Age

73

Your Age When Portfolio Withdrawals Begin

73

Portfolio Asset Allocation (% per asset)

During Retirement

Large US stock allocation

40.00%

Small US stock allocation

20.00%

US Bonds allocation

30.00%

Cash allocation

10.00%

Total Allocation

100.00%

Guaranteed portfolio return? Y/N

N

Total Portfolio cost in basis points (as a Negative)
(Expense Ratio + Advisory Fee) such as .60, etc.

-50

Four Ways to Withdraw Money From Portfolio
Enter "% Number", "RMD", "CUSTOM", or a Zero "0"

Cell C22 below

RMD

Minimum RMD age is 72

Information and ERROR Messages Below

Raw Index Returns 1926-2024

10.42%

Raw Index Std Dev 1926-2024

19.67%

Historical Performance Adjuster (bps)

0.00

Adjustment YOU entered

None

11.03%

30.54%

0.00

None

4.99%

5.85%

0.00

None

3.26%

2.99%

0.00

None

Enter in basis points

Four ANNUAL withdrawal options in cell C22:
% number or RMD or CUSTOM or 0

99-Year Retirement Portfolio Analyzer from 1926-2024

Your Portfolio Return (1926-2024)
(Minus portfolio costs & historical adjustments)

8.45%

Your Portfolio Standard Deviation (1926-2024)
(Std Dev of annual returns)

13.52%

The results BELOW are based on 75 rolling 25-year RETIREMENT periods between 1926-2024

Estimated Total Accumulated Capital after 25 Years

\$3,023,692

(Dependent on "BUDGET" data)

Average WITHDRAWAL from Portfolio (over 25 years)

Annual Average

\$123,526

\$10,294

Monthly

How Often Annual Withdrawals Increased Year-over-Year?

73.3%

Annual Increase

How Often Annual Withdrawals Kept Up with Inflation?

92.4%

% of Time Beat Inflation

Average Retirement Portfolio BALANCE After 25 Withdrawals

\$1,831,040

After 25 Years

How Often the Balance Grew? (after 25 years of withdrawals)

90.7%

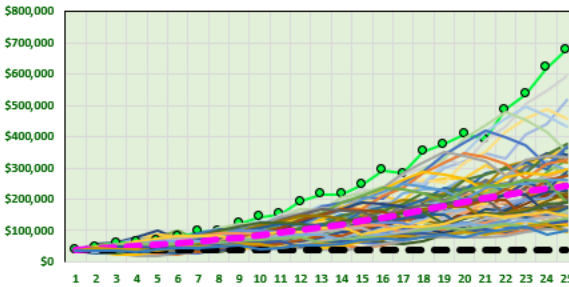
% of Time Larger After 25 Years

Success Rate (How often portfolio survived at least 25 years)

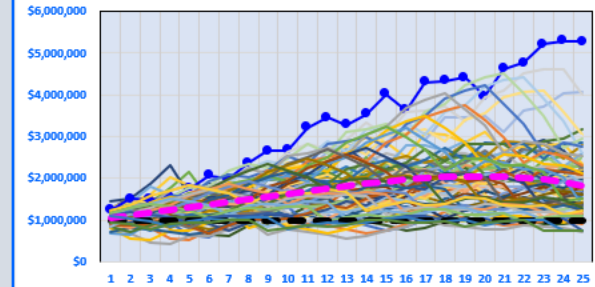
100.0%

Success Rate (90% threshold)

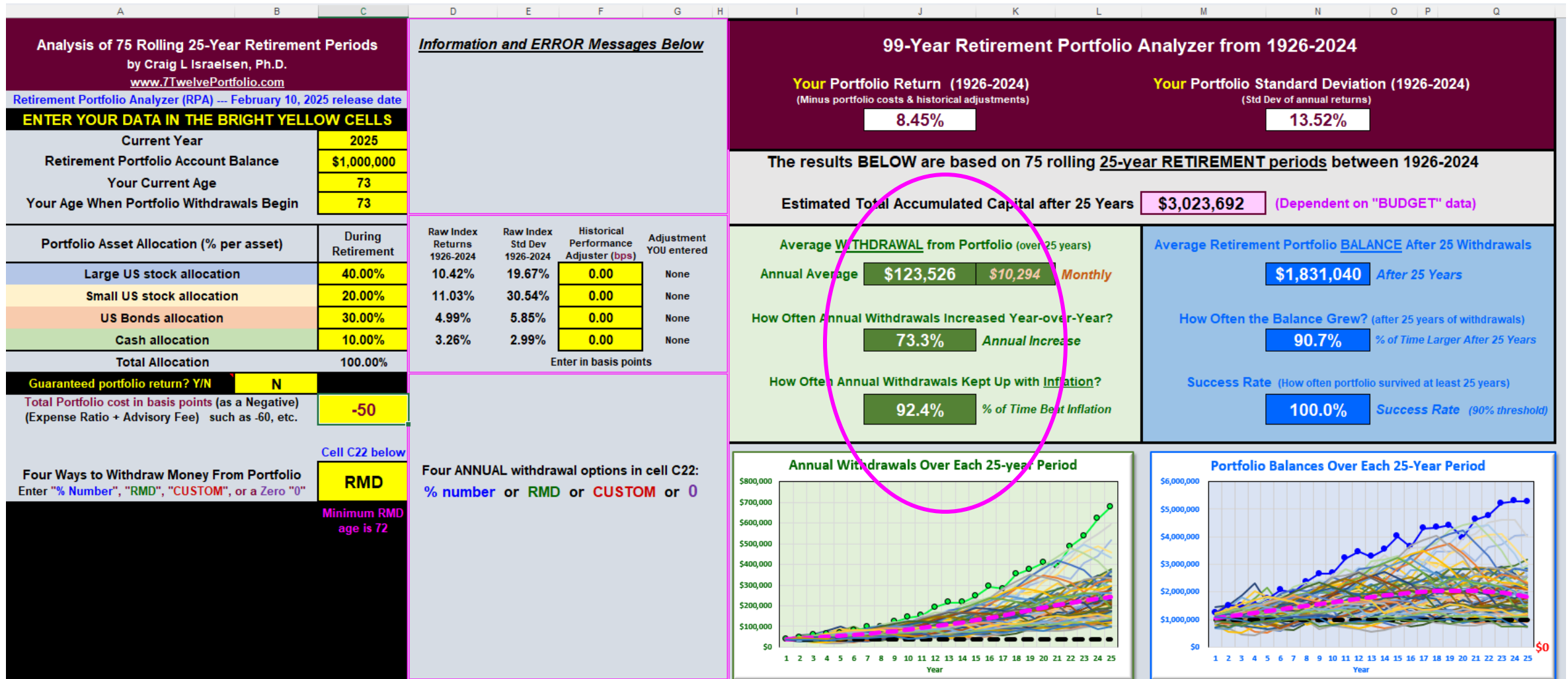
Annual Withdrawals Over Each 25-year Period



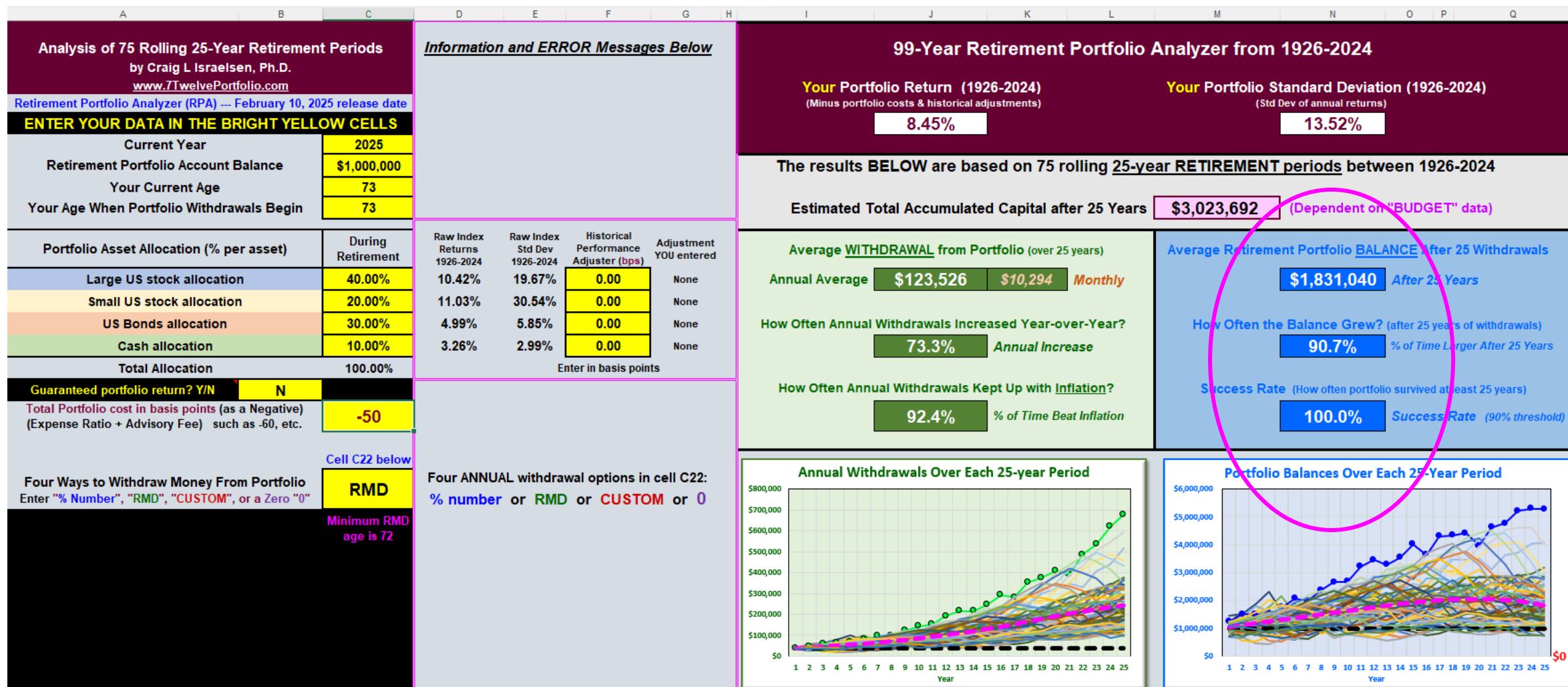
Portfolio Balances Over Each 25-Year Period



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How does the RPA work?

From 1926 to 2024 there have been 75 rolling 25-year periods. The first 25-year period was 1926-1950, the second from 1927-1951, and so on.

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Let's assume that each of those 25-year periods represents a 25-year retirement "window" for 75 different retirees from the age of 73 to 98. Each retiree annually withdraws money.

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How often was a 60% equity/40% fixed income retirement portfolio larger at age 98 than the starting balance at age 73? Portfolio cost = 125 bps.

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We are now analyzing sequence-of-returns risk by analyzing outcomes over 75 rolling 25-year periods.

How often was a 60% equity/40% fixed income retirement portfolio larger at age 98 than the starting balance at age 73? Portfolio cost = 125 bps.

RMD annual withdrawal: 81.3% of the time.

4% annual withdrawal: 100% of the time.

How Often Was a Retirement Portfolio Larger Than the Starting Balance After 25 Years of Withdrawals?

Overall Asset Allocation	Sub Allocations	RMD From age 73-98	4% Annual Withdrawal	5% Annual Withdrawal
60% Equity 40% Fixed	40% Large Stock 20% Small Stock 30% Bonds 10% Cash	81.3%	100%	

Analysis of 75 rolling 25-year periods from 1926 to 2024

Large-cap US stock was represented by the S&P 500 Index.

Small-cap US stock was represented by the Ibbotson Small Companies Index from 1926-1978 and the Russell 2000 Index from 1979-2024.

U.S. bond returns were represented by SBBI US Intermediate Government Bonds from 1926-1975 and the Bloomberg Aggregate Bond Index from 1976-2024.

Cash was represented by the annual returns of the 3-month US Treasury Bill from 1926-2024.

Assumed portfolio cost was 125 bps

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80% Equity 20% Fixed	50% Large Stock 30% Small Stock 15% Bonds 5% Cash	92.0%	100%	100%

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Point #1:

**If the RMD governs your withdrawals
AND
you want your portfolio to grow...**

**You will need to have a
large equity allocation.**

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How Often Was a Retirement Portfolio Larger Than the Starting Balance After 25 Years of Withdrawals?

Overall Asset Allocation	Sub Allocations	<u>Point #2</u> If you are using a 4% or 5% withdrawal rate AND you want your portfolio to grow... The asset allocation is not as critical... meaning you can be conservative without guilt!	4% Annual Withdrawal	5% Annual Withdrawal
40% Equity 60% Fixed	25% Large Stock 15% Small Stock 45% Bonds 15% Cash		98.7%	90.7%
60% Equity 40% Fixed	40% Large Stock 20% Small Stock 30% Bonds 10% Cash		100%	94.7%
80% Equity 20% Fixed	50% Large Stock 30% Small Stock 15% Bonds 5% Cash		100%	100%

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How Often Was a Retirement Portfolio Totally Depleted After 25 Years of Withdrawals?

Overall Asset Allocation	Sub Allocations	RMD From age 73-98	4% Annual Withdrawal	5% Annual Withdrawal
40% Equity 60% Fixed	25% Large Stock 15% Small Stock 45% Bonds 15% Cash	Never	Never	Never
60% Equity 40% Fixed	40% Large Stock 20% Small Stock 30% Bonds 10% Cash	Never	Never	Never
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How Often Was a Retirement Portfolio Totally Depleted After 25 Years of Withdrawals?

Overall Asset Allocation	Sub	RMD	4% Annual	5% Annual Withdrawal
40% Equity 60% Fixed	<u>Point #3:</u> Stop worrying about running out of money. If the portfolio is prudently built and rebalanced annually AND your withdrawals are reasonable... You won't deplete the portfolio within 25 years. And likely not within 35 years.			Never
60% Equity 40% Fixed				Never
80% Equity 20% Fixed				Never
	5% Cash			

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Assumed portfolio cost was 125 bps

The Impact of Controlling Portfolio Expenses

How Often Was a Retirement Portfolio Larger Than the Starting Balance After 25 Years of RMD Withdrawals? (from age 73-98)

Overall Asset Allocation	Sub Allocations	125 bps Portfolio Cost	100 bps Portfolio Cost	75 bps Portfolio Cost	50 bps Portfolio Cost
60% Equity 40% Fixed	40% Large Stock 20% Small Stock 30% Bonds 10% Cash	81.3%	82.7%	89.3%	90.7%

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Point #4:

Lowering the cost of your portfolio
is more important when the asset allocation
is more conservative.

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The Retirement Portfolio Analyzer (RPA) is a powerful spreadsheet that is available to AAI members for a discounted price of \$100.

Normal price is \$150.

Contact Craig Israelsen at craig@aaii.com

Let's test drive your retirement portfolio!

Fire up the *Retirement Portfolio Analyzer* spreadsheet.