

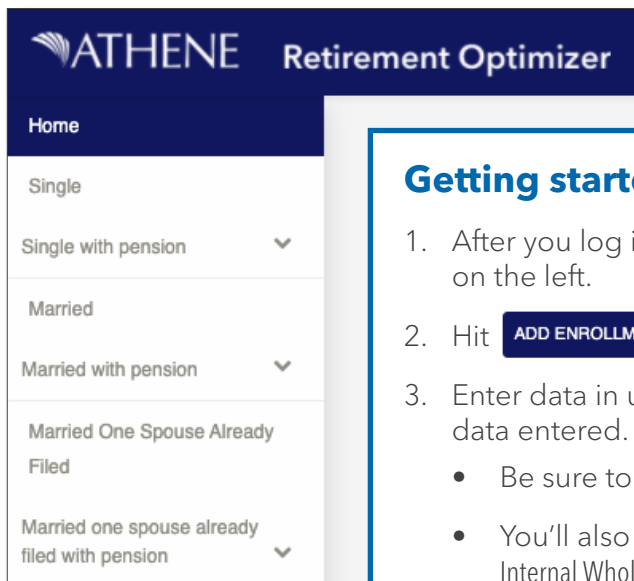


Athene Retirement Optimizer Instructions



Athene Retirement Optimizer (ARO) is a proprietary software application that can help you quantify a capital-efficient retirement income strategy that leverages guaranteed income and positions assets for future needs. The following will help you get started using the tool and provide helpful information about the output data.

Pro Tip: The power of using the Athene Retirement Optimizer tool is your ability to adjust assumptions and show clients the impact of different scenarios as you discuss retirement plans. Consider adding information to the tool before meeting, then reviewing the output on screen with the client. The data you'll need varies depending on your client, but generally includes date of birth, expected income in retirement, and Primary Insurance Amount from Social Security. Use the ARO Input Form (22958) to help gather data.



Getting started is easy.

1. After you log in, choose the type of scenario you want to run from the menu on the left.
2. Hit **ADD ENROLLMENT** in the upper right corner to enter client information.
3. Enter data in unshaded boxes. Shaded boxes are populated based on data entered.
 - Be sure to use the calendar to add date of birth, rather than type in data.
 - You'll also need to run an annuity illustration (or request one from your Athene Internal Wholesaler) to answer a few product questions.
4. You only need to input data on the Intake Data screen. The remaining screens (detailed on the following pages) compare and highlight different scenarios.

Pro Tip: The time has never been better to help clients maximize their Social Security income and develop a capital-efficient income strategy. Research shows that while baby boomers are building significant wealth in their 401(k) plans, most "do not connect their account balances to the creation of sustainable retirement income." Nearly seven in 10 participants plan to simply withdraw money as needed.

Additionally, consumers are eager to hear about guaranteed retirement income solutions. "Depending on age, 88% to 95% of consumers are very or somewhat interested in guaranteed lifetime income as a feature of annuities."

IRI Retirement Fact Book 2020. (C) 2020 Insured Retirement Institute.

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22959

(06/07/21)

| Current Plan | Spouse 1 | Spouse 2 |
|---|--------------|-----------|
| Primary Insurance Amount | \$ 31,800 | \$ 24,000 |
| Desired Retirement Age | 66 | 66 |
| Spousal benefit, if any | \$ 0 | \$ 0 |
| Age Social Security Benefits Will Begin | 66 | 66 |
| Benefit Amount at That Age | \$ 31,800 | \$ 24,000 |
| Annual Household Income Goal | \$ 85,000 | |
| Annual Household Social Security Benefits | \$ 55,800 | |
| Pension Benefits | \$ 0 | |
| Other Guaranteed Income | \$ 0 | |
| Annual Income Gap | \$ 29,200 | |
| Safe Withdrawal Rate Selected | 2.40 | |
| Capital Required to Close Gap | \$ 1,216,667 | |
| Bridge Capital Required | \$ 0 | |
| Total Capital Required | \$ 1,216,667 | |

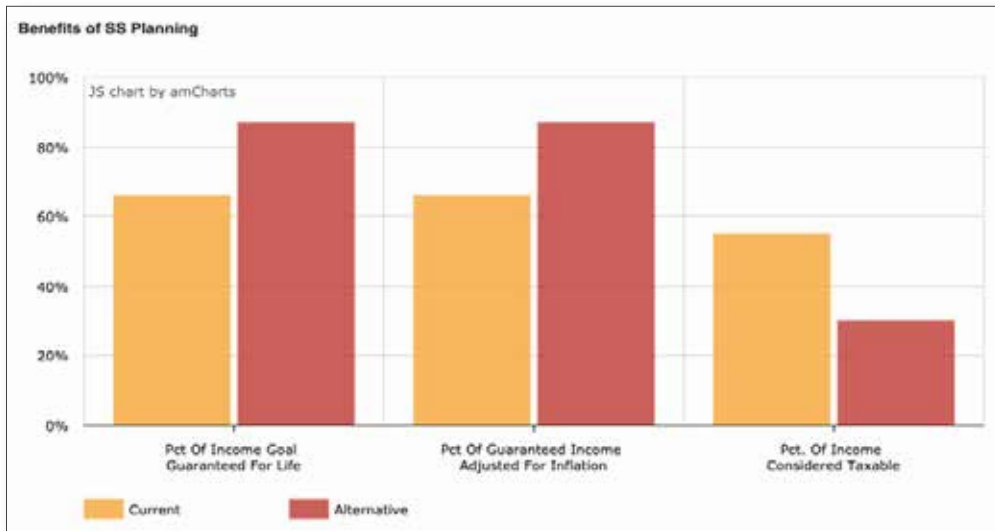
| Alternative Plan | Spouse 1 | Spouse 2 |
|--|------------|-----------|
| Primary Insurance Amount | \$ 31,800 | \$ 24,000 |
| Desired Retirement Age | 66 | 66 |
| Spousal benefit, if any | \$ 0 | \$ 0 |
| Age Social Security Benefits Will Begin | 70 | 70 |
| Benefit Amount at That Age | \$ 41,976 | \$ 31,680 |
| Annual Household Income Goal | \$ 85,000 | |
| Annual Household Social Security Benefits | \$ 73,656 | |
| Pension Benefits | \$ 0 | |
| Other Guaranteed Income | \$ 0 | |
| Annual Income Gap | \$ 12,522 | |
| Safe Withdrawal Rate Selected | 2.72 | |
| Capital Required to Close Gap | \$ 460,355 | |
| Bridge Capital Required | \$ 352,964 | |
| Less Spousal Benefits Received from Restricted App | \$ 0 | |
| Total Capital Required | \$ 813,319 | |

Current Inputs

The comparison on this page breaks down how the capital required to meet the plans objectives (income goal, time horizon and probability of success) is calculated.

- The Current Scenario shows the clients’ current plan and illustrates as a stress test.
- The Alternative Scenario shows the impact of taking benefits at a different time.

| Capital Requirements | | | |
|---|----|-----------|------------|
| Capital Required to Close Gap | \$ | 1,216,667 | \$ 460,355 |
| Bridge Capital Required | \$ | 0 | \$ 352,964 |
| Less Spousal Benefits Received from Restricted App | \$ | 0 | \$ 0 |
| Total Capital Required To Complete Plan | \$ | 1,216,667 | \$ 813,319 |



SS Planning

The SS Planning page shows how the Current and Alternative scenarios compare based on:

- Amount of plan income that is guaranteed, inflation adjusted and taxable
- Amount of income remaining for surviving spouse.

This page also details the capital required to fund each scenario.

| Client Information | Spouse 1 | Spouse 2 |
|--|---|-----------|
| Primary Insurance Amount | \$ 31,800 | \$ 24,000 |
| Desired Retirement Age | 66 | 66 |
| Spousal Benefit, if any | \$ 0 | \$ 0 |
| Recommended Age to Take Social Security Benefits | 70 | 70 |
| Benefit Amount at That Age | \$ 41,976 | \$ 31,680 |
| Annual Household Income Goal | \$ 85,000 | |
| Annual Household Social Security Benefits | \$ 73,656 | |
| Pension Benefits | \$ 0 | |
| Other Guaranteed Income | \$ 0 | |
| Annual Income Gap | \$ 12,522 | |
| Deferred Annuity with Income Rider (DAIR) Premium | \$ 250,000 | |
| Bridge Capital Required | \$ 352,964 | |
| Less Spousal Benefits Received from Restricted App | \$ 0 | |
| Total Capital Required | \$ 602,964 | |
| Product Information | | |
| Insurance Benefit Type | Deferred Annuity with Income Rider (DAIR) | |
| Deferred Annuity with Income Rider (DAIR) Premium | \$ 250,000 | |
| Deferred Annuity with Income Rider (DAIR) Payout | \$ 12,522 | |
| Deferred Annuity with Income Rider (DAIR) Inflation Adj. | Yes | |
| Deferred Annuity with Income Rider (DAIR) Account Type | Joint | |

Optimized Inputs

The Optimized Input Page details the data utilized in the Optimized scenario. Specifically, it shows the Income Gap and the Capital Required to close the Income Gap under the Optimized scenario.

- The Capital Required has two potential components: Bridge Capital and capital required to close the remaining income gap once Social Security benefits begin.
- In the Optimized scenario the total Capital Required is represented by the Annuity Premium in addition to the Bridge Capital.

| Option | Optimized Plan | | Alternative Plan | |
|--|----------------|---------|------------------|---------|
| Benefits of Social Security Planning | | | | |
| Pct of Income Goal Guaranteed for Life | 100 | % | 87 | % |
| Pct of Guaranteed Income Adjusted for Inflation | 87 | % | 87 | % |
| Pct of Income Considered Taxable | 30 | % | 30 | % |
| Guaranteed Survivor Benefits | \$ | 54,498 | \$ | 41,976 |
| Income Analysis | | | | |
| Annual Household Income Goal | \$ | 85,000 | \$ | 85,000 |
| Annual Household Social Security Benefits | \$ | 73,656 | \$ | 73,656 |
| Pension Benefits | \$ | 0 | \$ | 0 |
| Other Guaranteed Income | \$ | 0 | \$ | 0 |
| Annual Income Gap | \$ | 12,522 | \$ | 12,522 |
| Capital Requirements | | | | |
| Capital Required to Close Gap | \$ | 185,000 | \$ | 460,355 |
| Bridge Capital Required | \$ | 352,964 | \$ | 352,964 |
| Less Spousal Benefits Received from Restricted App | \$ | 0 | \$ | 0 |
| Total Capital Required To Complete Plan | \$ | 537,964 | \$ | 813,319 |

Optimized Output

The Optimized Output page compares how the Current and Optimized scenarios compare based on:

- Amount of plan income that is guaranteed, inflation adjusted, taxable and remains for the surviving spouse.
- The capital required to fund each scenario.

Plan Comparison

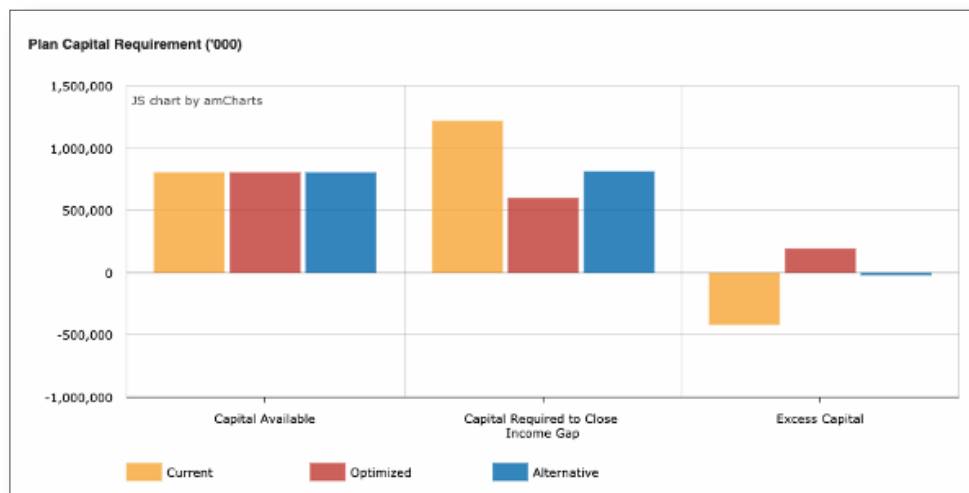
The Plan Comparison page allows you to compare and contrast the three different strategies/scenarios entered on the Input page.

The top of the comparison page shows how each strategy compares in relation to the amount of income that is guaranteed, inflation adjusted, taxable and transferrable to the surviving spouse.

This page also shows how the income gap was calculated, then the capital required to meet the plans overall objectives vs. the capital available.

Also, if any of the strategies result in "Excess Capital" (ie capital not needed to fully fund the plan) this page shows a future value calculation on that amount in 10, 20 and 30 years. This future value calculation is based upon an assumed rate of return chosen on the input page and called out below the future value calculation section.

| Options | Current | Optimized | Alternative |
|---|--------------|-------------|-------------|
| Benefits of Social Security Planning | | | |
| Pct of Income Goal Guaranteed for Life | 66 % | 100 % | 87 % |
| Pct of Guaranteed Income Adjusted for Inflation | 66 % | 100 % | 87 % |
| Pct of Income Considered Taxable | 55 % | 30 % | 30 % |
| Guaranteed Survivor Benefit | \$ 31,800 | \$ 54,499 | \$ 41,975 |
| Income Analysis | | | |
| Annual Income Goal | \$ 85,000 | \$ 85,000 | \$ 85,000 |
| Annual Household Social Security Benefit | \$ 55,800 | \$ 73,656 | \$ 73,656 |
| Pension Benefits | \$ 0 | \$ 0 | \$ 0 |
| Other Guaranteed Income | \$ 0 | \$ 0 | \$ 0 |
| Annual Income Gap | \$ 29,200 | \$ 12,522 * | \$ 12,522 * |
| Plan Capital Requirement | | | |
| Capital Available | \$ 800,000 | \$ 800,000 | \$ 800,000 |
| Capital Required to Close Income Gap | \$ 1,216,667 | \$ 502,964 | \$ 813,319 |
| Excess Capital | \$ -416,667 | \$ 197,036 | \$ -13,319 |
| Future Value of Excess Capital ** | | | |
| Year 10 | \$ 0 | \$ 320,951 | \$ 0 |
| Year 20 | \$ 0 | \$ 522,796 | \$ 0 |
| Year 30 | \$ 0 | \$ 851,579 | \$ 0 |
| * Inflation Adjusted | | | |
| ** Based on assumed annual rate of return of 5.0% | | | |



Income Planning

This page summarizes how the plans compare based on an analysis of income, tax impact, and capital required.

| | | | |
|---|----------------|--------------------|---------------|
| Social Security filing strategy | Curri ▾ | Alter ▾ | |
| Age Spouse One Files for Benefits | 66 | 70 | |
| Age Spouse Two Files for Benefits | 66 | 70 | |
| Income Analysis | Current | Alternative | Impact |
| Annual Income Goal | \$ 85,00 | \$ 85,00 | \$ 0 |
| Guaranteed Annual Household Income | \$ 55,80 | \$ 73,65 | \$ 17,85 |
| Additional Household Income Required | \$ 29,20 | \$ 12,52 | \$ -16,67 |
| Guaranteed Survivor Income | \$ 31,80 | \$ 41,97 | \$ 10,17 |
| Tax Analysis | Current | Alternative | Impact |
| Total Household Social Security Income | \$ 55,80 | \$ 73,65 | \$ 17,85 |
| Taxable Social Security Income | \$ 17,13 | \$ 13,79 | \$ -3,33€ |
| Additional Fully Taxable Income | \$ 29,20 | \$ 12,52 | \$ -16,67 |
| Total Taxable Income | \$ 46,33 | \$ 26,31 | \$ -20,01 |
| Capital Analysis | Current | Alternative | Impact |
| Capital Available | \$ 800,0 | \$ 800,0 | - |
| Capital Required to Complete Plan | \$ 1,216 | \$ 813,3 | \$ -403,€ |
| Capital Excess or Deficiency | \$ -416,€ | \$ -13,31 | \$ 403,3 |

Pro Tip: In this example we used a product with a performance-based income structure so we checked "yes" on the Intake Data screen for the question "DAIR inflation adjusted."

If you choose a product without a performance-based income structure, answer "no" to that question. By answering "no," the Cost of Income page will add in additional capital required to cover the impact of inflation. This will impact the Capital Plan Requires per Dollar of Income Need.

Cost of Income

Breaks down cost of income based upon following formula:

$$\frac{\text{(A) Capital required to close annual income gap}}{\text{(B) Aggregate income plan is expected to deliver}} = \text{(C) Amount of capital the plan requires per dollar of income need}$$

Annual income gap increased by 2.5% per year to provide an inflation hedge for time period income is required.

| Plan Options | Current | Optimized | Alternative |
|--|--------------|------------|-------------|
| Amount of Income | | | |
| Annual Income Gap | \$ 29,200 | \$ 12,522 | \$ 12,522 |
| Time Period in which Income is Required | 30.00 | 26.00 | 26.00 |
| (B) Aggregate Income Plan Provides During Time Period | \$ 1,281,959 | \$ 450,926 | \$ 450,926 |
| Cost of Income | | | |
| (A) Capital Required to Close Annual Income Gap | \$ 1,216,667 | \$ 250,000 | \$ 460,355 |
| Amount of Plan Income Attributable to Inflation | - | \$ 0 | - |
| Total Amount of Income plan is Required to Provide | \$ 1,281,959 | \$ 450,926 | \$ 450,926 |
| (C) Capital Plan Requires per Dollar of Income Need | 0.95 | 0.55 | 1.02 |

Save data and generate report

Click update and continue to save information or generate a report.

GENERATE REPORT

UPDATE & CONTINUE

Learn more about how to get the most impact out of discussing Social Security options with your clients. Check out our extensive library of resources at [Athene.com/SSToolkit](https://athene.com/SSToolkit).

For additional questions, contact the best Sales Desk in the business at **888-ANNUITY (266-8489)** or visit [Athene.com/Connect](https://athene.com/Connect).

The quantitative analysis conducted within the ARO software is based on a formula where the sum of all independent variables equals the dependent variable:

Independent Variables: Time horizon, Probability of success, Social Security, Income, Inflation assumption, Portfolio construct and Other guaranteed income

Dependent Variable: Plans capital requirement

This material is provided by Athene Annuity and Life Company (61689) headquartered in West Des Moines, Iowa, which issues annuities in 49 states (excluding NY) and in D.C., and Athene Annuity & Life Assurance Company of New York (68039) headquartered in Pearl River, New York, which issues annuities in New York.

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