

Maximizing wealth transfer

Planning strategies for high-net-worth clients

EXECUTIVE SUMMARY

Along with considerable wealth, high-net-worth clients may have special financial needs and goals relating to wealth preservation, tax efficiency, diversifying investments, and estate and succession planning for their wealth. Due to the complex and diverse composition of their financial assets, these clients require specialized financial and estate plans to achieve their goals as well as expert advisors who have knowledge and experience with these complex issues.

High-net-worth clients can generate sufficient retirement income with little concern about running out of assets. Rather than focusing on retirement income, these clients may instead focus on managing the impact of taxes during their lifetime and maximizing after-tax legacy. The purpose of this research is to explore whether insurance products such as income annuities and whole life insurance can enhance high-net-worth clients' tax efficiency when using assets to generate income during their lifetime in addition to maximizing after-tax wealth transfer at death.

Income annuities can provide lifetime guaranteed income that acts as a hedge against outliving assets in retirement. They can also act as an alternative for bond income, allowing a client to invest for potential growth and take advantage of a greater equity position over the long term. Deferred annuities can offer tax-deferred growth that allows money to accumulate for retirement, with a lifelong retirement income stream starting later. Participating income annuities allow for income payments that can grow through the potential for dividends paid by an insurance company. A participating deferred income annuity (participating DIA) combines these traits. The result is predictable income that can go up (and will not go down in most cases), and the recipient of the income stream cannot outlive it.

An individual can purchase a whole life insurance (WL) policy if they have a need for the death benefit coverage. WL provides three guarantees: premium, death benefit, and guaranteed cash value. It provides insurance coverage for life, as long as premiums are paid. The death benefit is generally income-tax-free to beneficiaries and can protect human capital in the event of death so that loved ones are not deprived of future income that the deceased would have provided. The death benefit can also aid in business and estate planning, providing liquidity at exactly the time it is needed for the transition of business ownership or to pay estate taxes. These needs may be especially important to the high-net-worth market. WL cash value grows tax-deferred over time and can be accessed during life for any reason, often without tax consequences.¹ A 10 Pay WL policy delivers all the benefits and flexibility of WL with premiums that are payable on an accelerated timeline for 10 years. This limited pay product

This research is intended to be educational in nature and is not an offer to provide investment advisory services with respect to securities.

¹ See the **Important Disclosures** section at the end of this paper for impacts to WL when used during life.

EXECUTIVE SUMMARY CONTINUED

can provide high-net-worth clients with several desirable attributes relative to traditional WL policies, including more long-term value potential, higher cash values, and maximum funding. These features of 10 Pay WL provide an optimal balance of increased flexibility, especially during retirement, and maximum wealth transfer.

This research documents the improvements in outcomes provided by combining the strengths of these products as part of a high-net-worth client's financial plan.

- For the same level of spending, strategies that combine investments with a 10 Pay WL policy and/or a participating DIA result in larger legacies than an investment-only strategy.
- For the same probability of success, strategies that combine investments with a 10 Pay WL policy and/or a participating DIA provide more income and larger legacies than an investment-only strategy, consistent with the results of prior research on typical, non-high-net-worth clients.²
- Strategies that combine investments with a 10 Pay WL policy and/or a participating DIA perform better and are more tax efficient than an investment-only strategy.

Methodology and Assumptions

This research uses Monte Carlo analysis to model 1,000 scenarios, each of which contains a time series of interest rates, inflation rates, equity returns, and fixed income returns across the planning horizon. This method simulates randomness in variables whose behavior is uncertain to obtain a range of possible outcomes that are then used to assess the likelihood that a particular outcome (or set of outcomes) will occur.

Outcome metrics from the simulations are then analyzed using two tests. The first test uses a specified retirement income need, and the output includes the following for every scenario: assets at retirement, legacy value, and taxes paid both up to retirement and up to death. The next test uses a specified probability of success, and it reports the same metrics as well as the after-tax retirement income that can be sustained at the stated probability of success. A trial is deemed successful if the portfolio could maintain the inflation-adjusted level of income throughout the client's retirement.

Investment returns are based on Northwestern Mutual 2022 Capital Market Assumptions (CMAs).³ The CMAs forecast asset class rates of return over the next 80 years and provide expectations of risk-return profiles for the asset classes. The dividend interest rate (DIR) applied to the WL is modeled using a formula that is a weighted

² EY's 2021 paper, "Benefits of integrating insurance products into a retirement plan", found at https://www.ey.com/en_us/insurance/how-life-insurers-can-provide-differentiated-retirement-benefits, shows that typical clients can generate more retirement income and leave larger legacies when they include WL and annuities along with investments as compared to an investment-only strategy.

³ See the Appendix at the end of this paper for details regarding the Capital Market Assumptions.

average of the prior year's DIR and 10-year Treasury return to simulate the impact of different economic scenarios.⁴

This research analyzes three hypothetical 35-, 45-, and 55-year-old married couples and highlights results for the 55-year-olds. All retire at age 65 and live to age 95, modeling a 30-year retirement. High income and substantial assets, outlined below, place the couples in the high-net-worth market. Each initially earns \$1 million annually (increasing at 2.5% annually) and puts 25% of annual gross income toward retirement goals. The following strategies are compared. While current assets could cover life insurance needs, the couples wish to have income-tax-free death benefit protection in place.

Strategies⁵

- **Investment-only:** Invests in equity and fixed income only.
- **Participating DIA:** Purchases a hypothetical participating deferred income annuity (participating DIA) using \$5 million of taxable assets at age 55. The joint life (100% to survivor) payout begins at age 65.
- **10 Pay WL:** Purchases a hypothetical whole life insurance (WL) policy with **annual premiums of \$250K or \$500K** for 10 years for the healthy male client at his initial age (i.e., 35, 45, or 55).⁶ Non-guaranteed dividends are used to purchase paid-up additions. Any remaining budgeted contributions are invested in equity and fixed income.
 - The policy with \$250K annual premiums is purchased entirely from cash flow.
 - The policy with \$500K annual premiums is purchased using cash flow for 57% of the premiums and by repositioning taxable assets for the remaining 43% of the premiums.
- **Integrated:** Combines the \$5M participating DIA with a 10 Pay WL policy with annual premiums of either \$250K or \$500K.

Asset allocation follows a moderately aggressive glide path of 70% equity and 30% safer assets until age 55, when it shifts to 60% equity and 40% safer assets. Annual rebalancing considers participating DIA implied account value and WL cash value to be fixed income alternatives when present, so the overall 60/40 allocation has 40% in a combination of fixed income and any participating DIA implied account value and WL cash value.⁷ This comprehensive asset allocation shifts some fixed income to equity, aligns all assets with the client's risk tolerance, and results in the same equity exposure as the investment-only strategy.

⁴ The dividend interest rate (DIR) correlates to but lags changes in bond rates. The DIR starts at 5% and is based on this formula: $DIR(d) = 1 + ((0.09 + (88.43 * (DIR(d-1) - 1))) + (12.3 * 10\text{-Yr Treasury}(d-1))) / 100$. The 80-year projected average for the DIR is 4.5% with a 2.0% standard deviation. The 10-year Treasury has a projected average of 3.0% with a 2.3% standard deviation over the same period.

⁵ Both the WL and participating DIA discussed herein are hypothetical and dividend-paying and assume industry average mortality and expenses. See **Important Disclosures** section at the end of this paper for further details.

⁶ In real life, both clients would purchase insurance for death benefit needs, but for ease of calculation, only one policy is purchased on the healthy male here. This is a conservative assumption due to the shorter life expectancy of males and hence higher premiums.

⁷ This is not to say that participating DIA implied account value or WL cash value are the same thing as a fixed income investment. WL provides a death benefit and is a long-term financial asset. There are also important differences in liquidity, guarantee of principal, immediate access to income, and underlying risk. WL and a participating DIA can be considered safer assets because the insurance company's general account portfolio smooths short-term volatility over time, allowing better efficiency in terms of growth relative to risk.

Implied account value represents the present value of future expected income payments under a participating DIA, which has no cash value or withdrawal rights and cannot be surrendered or exchanged for another contract. In this research, WL cash value means the policy's cash value, which may include extra cash value from paid-up additions purchased with dividends. Dividends paid on a WL policy are not guaranteed.

Beyond comprehensive asset allocation, there are two additional planning considerations modeled when WL is present. The first, down market management, is the option to use WL cash value to meet retirement income needs in the year following a down market in lieu of liquidating depressed investment assets. The second is the ability to use WL cash value to meet retirement income needs when the invested assets have been fully depleted and other income sources, including any participating DIA income, do not fully meet the need. In both, accessing the WL cash value is accomplished through surrenders of additions to the policy's cost basis (equivalent to the amount of premiums paid) followed by policy loans. With down market management, loans are repaid with taxable assets if possible, based on subsequent positive market performance. Surrenders and any outstanding policy loans reduce the policy's death benefit.

Each couple's initial assets and WL death benefits (for the 10 Pay WL and Integrated strategies) are shown in **Table 1**. The **Appendix** includes additional assumptions.

Table 1. Initial Assets and Insurance Coverage

Initial Amount	Age 35	Age 45	Age 55
Qualified Assets	\$250,000	\$500,000	\$1,000,000
Taxable Assets	\$14,250,000	\$18,750,000	\$22,750,000
+ Cash	\$500,000	\$750,000	\$1,250,000
Total Assets	\$15,000,000	\$20,000,000	\$25,000,000
	Initial WL Death Benefit		
\$250K/year premium	\$4,540,500	\$3,783,865	\$3,132,440
\$500K/year premium	\$9,081,000	\$7,567,730	\$6,264,880

Results

IMPORTANT: The projections or other information generated by the Monte Carlo analysis regarding the likelihood of various outcomes are hypothetical in nature, do not reflect actual investment or insurance results, and are not guarantees of future results. Results may vary with each use and over time.

The first section reports the amount of assets at retirement by strategy. Rather than being a key outcome in the analysis, the variation across the ages helps to explain the net legacy results presented next. Later, the analysis of tax efficiency during accumulation uses these amounts for better comparison of pre-retirement taxes. The second section shows the net estate resulting from spending a specified income of \$500,000 in retirement (in today's dollars). The third section shows retirement income and the net estate for a specified probability of success equal to 90%. The last two sections analyze tax efficiency during accumulation and throughout the plan.

Assets at Retirement

The total amount of assets at retirement varies for each of the 1,000 Monte Carlo scenarios and by strategy. Yet it is the same for both the test of specified income and the test of specified probability of success, presented in the following two sections. This variable helps to explain the retirement and tax results below. In addition, it confirms that, subject to the assumptions used in this analysis, following a strategy that includes insurance assets will lead to a total value of accumulated assets at the start of retirement that is at least as large, if not larger, than following an investment-only strategy.

Table 2 shows median assets at retirement (in future dollars) by strategy. Assets are highest for the 35-year-olds for all strategies because, even though they start with fewer assets, they have a longer runway to retirement. This is simply due to the design of initial assets by age.

Table 2. Median Assets at Age 65 and % Change from Investment-Only Strategy

Strategy	Age 35		Age 45		Age 55	
Investment-Only	\$69,907,479	—	\$51,600,477	—	\$37,790,796	—
Participating DIA	\$70,163,281	0%	\$52,151,681	1%	\$38,654,603	2%
10 Pay WL – \$250K	\$72,899,975	4%	\$52,598,158	2%	\$37,783,248	0%
10 Pay WL – \$500K	\$75,065,393	7%	\$53,466,735	4%	\$37,867,132	0%
Integrated – \$250K	\$72,928,685	4%	\$53,143,368	3%	\$38,646,087	2%
Integrated – \$500K	\$75,261,962	8%	\$53,951,344	5%	\$38,680,604	2%

Assets at retirement include equity and fixed income plus any cash, participating DIA implied account value, and WL cash value. The composition of assets at retirement also depends on the scenario and strategy. For the 35-year-olds following the participating DIA strategy, assets at retirement include 9% participating DIA implied account value at the median. Since each age group purchased a \$5 million participating DIA at age 55, the ratio of participating DIA implied account value to all assets at retirement is greater for the older ages. It accounts for 12% for the 45-year-olds and 16% for the 55-year-olds at the median. For the 10 Pay WL strategies, assets at retirement include nearly 7% WL cash value at the median for each age group for the smaller policy and around 13% for the larger policy. For the integrated strategy with the smaller (larger) policy, the 35-year-olds' assets at the median include a total 15% (21%) of participating DIA implied account value and WL cash value combined. That percentage increases for the older ages. It totals 18% (25%) for the 45-year-olds and 22% (29%) for the 55-year-olds.

For the 55-year-olds, the median amount of assets at retirement is similar across strategies. It is 2% higher than the investment-only strategy for the participating DIA strategy as well as for the integrated strategies. For the WL strategies, assets are approximately equivalent to the investment-only strategy because the WL policies were purchased only 10 years before retirement. Expenses on WL policies tend to be higher early in the life of the policy and fall over time. Those higher expenses are reflected as lower WL cash value in the early years of a contract. Also, the 55-year-olds will pay premiums for 10 years leading up to retirement, and their budget for additional investing will either be zero (in the case of the policy with \$500K premiums) or very low (after the first year for the policy with \$250K premiums). The next sections show that, despite little or a small change in assets at retirement, retirement outcomes are improved for strategies that include a participating DIA or 10 Pay WL or both compared to investment-only.

For the younger ages, the strategies that contain WL provide a greater lift to the assets at retirement in comparison to investment-only due to their longer time horizon to retirement. Once the duration is long enough to show a lift, the larger policy provides a greater lift. In these cases, the WL cash value has more time to experience compounding growth. The cost of insurance is also lower for younger ages, meaning the policies have lower expenses. As the WL cash value grows relative to all assets, these strategies benefit from an expected dividend interest rate that exceeds expected fixed income returns.⁸ In comparison to the 55-year-olds, the younger ages also have 10 or 20 additional years to invest after paying premiums on the WL policy before they reach retirement. For these reasons, the 35-year-olds see a 4% (7-8%) increase in assets at retirement for strategies that contain the smaller (larger) WL policy versus the investment-only strategy. The participating DIA provides less lift for the younger clients than for the older clients because it accounts for a smaller portion of assets.

Specified Retirement Income: Net Estate

Retirement outcomes from specifying the retirement income for the 55-year-olds are shown in **Table 3**. Results for the other ages are in the **Appendix**. Here, all strategies use an annual after-tax retirement income of \$500,000 in today's dollars. Up to retirement, that income need is inflated at 2.5%, resulting in a retirement income need of \$640,042 at age 65. Once retirement starts, however, retirement income varies dynamically based on the path of inflation modeled in each of the 1,000 Monte Carlo scenarios. The median net estate (reported in future dollars) is the median legacy at age 95 minus approximate federal estate tax.⁹

Table 3. Median Net Estate Resulting From Spending \$500,000 per year in Today's Dollars in Retirement

Strategy	Age 55			
	Retirement Income		Net Estate (Median)	% Change from Investment-Only
	Present Value	At Age 65		
Investment-Only	\$500,000	\$640,042	\$56,050,985	—
Participating DIA	\$500,000	\$640,042	\$61,502,001	10%
10 Pay WL – \$250K	\$500,000	\$640,042	\$60,318,558	8%
10 Pay WL – \$500K	\$500,000	\$640,042	\$62,976,708	12%
Integrated – \$250K	\$500,000	\$640,042	\$65,083,633	16%
Integrated – \$500K	\$500,000	\$640,042	\$67,340,569	20%

Note that high-net-worth clients often incorporate estate planning strategies such as living gifts to trusts to allow asset growth to occur outside the taxable estate. However, this analysis does not assume these types of more sophisticated asset transfers in order to allow for a more direct comparison of results. Every situation is different, and there may be opportunities for high-net-worth clients to improve their plans by meeting with an expert in estate planning.

⁸ While this analysis uses a diversified fixed income portfolio based on the Barclays Aggregate bond index, a financial advisor to a high-net-worth client may employ planning strategies to maximize the after-tax expected rate of return (i.e., the effective return) of fixed income by investing in municipal bonds rather than bonds that are subject to federal income tax.

⁹ At death, legacy totals any cash, taxable assets, qualified assets (minus an assumed 25% beneficiary tax rate), and WL death benefit. The estate tax exemption assumes the Tax Cuts and Jobs Act sunsets in 2025. For the 55-year-olds (who are modeled to die at the same time), it is based on half the exemption for a married filing jointly couple (\$25,840,000 in 2023, divided by two) inflated for 40 years (to age 95) at a constant rate of 3%. Estate tax is calculated as \$345,800 on the first million dollars plus 40% of the difference of legacy minus exemption minus the first million dollars.

MAXIMIZING WEALTH TRANSFER – PLANNING STRATEGIES FOR HIGH-NET-WORTH CLIENTS

For the 55-year-olds, adding a participating DIA results in a 10% lift to the approximate net estate over that of the investment-only strategy. Participating DIA income starts at retirement and provides a large enough portion of the income need – covering 38% of the total retirement income need at the median – that it allows the rest of the portfolio to grow more than it would in the absence of the annuity income. Furthermore, as participating DIA implied account value makes up 16% of assets at retirement (at the median), comprehensive asset allocation means that the 60/40 allocation has around 60% equities, 24% fixed income, and 16% participating DIA implied account value. Therefore, the invested assets are allocated approximately 70/30 (i.e., 60/84=71% equity) at that point in time. (Note that the composition of assets will vary over time and across the distribution, and annual rebalancing will continually adjust the portfolio to the target allocation.) Additionally, the participating DIA payout modeled in this analysis is generally higher than the expected fixed income return from the CMAs.

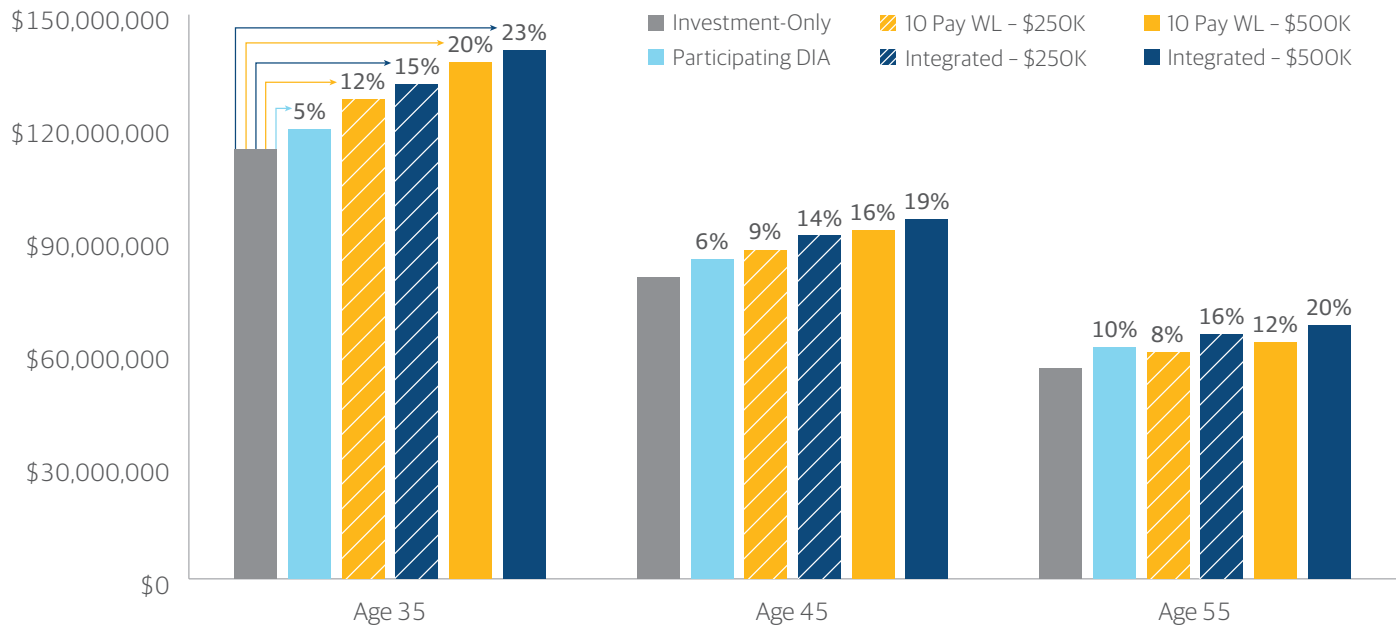
For the same retirement income, strategies that include a participating DIA or 10 Pay WL or both have higher net estates than investment-only for every age group.

The 10 Pay WL strategies give the 55-year-olds an 8% lift for the smaller policy and a 12% lift for the larger policy over the investment-only strategy. There are several reasons for these improved outcomes. The income-tax-free death benefit from WL – which accounts for 5-6% (10-11%) of the legacy (before accounting for estate taxes) for strategies containing the smaller (larger) 10 Pay WL policy – produces a lift to legacy. WL cash value can be used as a volatility buffer during retirement to manage the impact of down markets, and it can also be accessed as needed to meet retirement income needs. Comprehensive asset allocation considers WL cash value an alternative to fixed income and allows clients to hold more equities and less fixed income. At the median, WL cash value makes up 7% (14%) of assets at retirement for the smaller (larger) 10 Pay WL policy. The 60/40 allocation will have 60% equities, 33% fixed income and 7% WL cash value for the smaller policy, resulting in an invested asset allocation closer to 65/35. For the larger policy, the allocation is around 70/30. Additionally, the growth of the policy modeled in this analysis generally exceeds the expected fixed income return from the CMAs.

The lifts for the integrated strategies are roughly equivalent to combining the lifts of the participating DIA and WL strategies, a pattern that is repeated for each age group, likely because they simply combine the forces that are driving the improvements. See **Figure 1**. For the 55-year-olds, the integrated strategies result in a 16% (20%) lift with the smaller (larger) policy. The sum of participating DIA implied account value and WL cash value makes up 22% (29%) of assets at retirement at the median. With comprehensive asset allocation, the invested asset allocation is around 77% (85%) equities.

For the younger ages, the results show less lift for participating DIA and more lift for WL in comparison to the 55-year-olds. The \$5M participating DIA makes up a smaller portion of total assets at retirement for the 35-year-olds (9% at the median) and 45-year-olds (12% at the median) compared to the 55-year-olds (16% at the median). This is due to the initial assets that have a longer time horizon to grow before the participating DIA is purchased. Thus, the participating DIA has a smaller impact and provides less benefit at the younger ages.

Figure 1. Median Net Estate Results with % Changes Relative to the Investment-Only Strategy



Conversely, the WL lift is highest for the 35-year-olds. All ages ended up with about the same death benefit relative to total legacy of 5-6% for the smaller policy (10-11% for the larger policy) before accounting for estate taxes. They also all have about the same amount of WL cash value relative to asset at retirement (7% for the smaller policy and 13-14% for the larger policy). The greater lift may be attributable to the higher amount of total assets at retirement for the younger ages that enjoys the benefits of comprehensive asset allocation for a longer time.

The lifts from the participating DIA and from the WL trend in opposite directions across the ages, so the combined lift for the integrated strategy with the smaller policy is highest for the 55-year-olds, with the participating DIA more heavily influencing its lift. For the larger policy, the combined lift for the integrated strategy is highest for age 35, with the WL policy dominating its lift.

Specified Probability of Success: Retirement Income and Net Estate

Next, solving for the income achievable at 90% probability of success allows for comparison of both retirement income and net estate variations across strategies. **Table 4** reports those outcomes. Results for the other ages are shown in the **Appendix**.

Table 4. Retirement Income Achievable at 90% Probability of Success and Median Net Estate

Strategy	Age 55				
	Retirement Income		% Change from Investment-Only	Net Estate (Median)	% Change from Investment-Only
	Present Value	At Age 65			
Investment-Only	\$705,703	\$903,359	—	\$43,770,085	—
Participating DIA	\$768,565	\$983,828	9%	\$45,011,722	3%
10 Pay WL – \$250K	\$737,134	\$943,594	4%	\$45,544,747	4%
10 Pay WL – \$500K	\$737,134	\$943,594	4%	\$47,801,330	9%
Integrated – \$250K	\$774,851	\$991,875	10%	\$48,119,379	10%
Integrated – \$500K	\$768,565	\$983,828	9%	\$50,733,558	16%

Here, retirement income varies by strategy rather than being specified. Furthermore, the income achievable is 41-55% higher than the \$500,000 (in today's dollars) used in the specified income analysis reported in the previous section, where all strategies had >90% probability of success. As expected, these higher retirement incomes lead to 22-27% lower net estate values than those reported in the specified income analysis.

A participating DIA is beneficial because it drives income, which is reflected in a 9% higher retirement income relative to an investment-only strategy. However, this ability to spend more results in a smaller lift to net legacy (3%) when compared to the lift from WL (4% for the smaller policy and 9% for the larger one), which is designed to provide a death benefit rather than drive income. Still, due to the ability to leverage WL cash value during life, WL still provides a 4% lift to retirement income.

When solving for retirement income achievable at 90% probability of success, strategies that include a participating DIA or 10 Pay WL or both have higher incomes and higher net estates than investment-only for every age group.

The integrated strategies yield the benefits of both the participating DIA and the WL, with income 9-10% and median estate 10-16% higher in comparison to the investment-only strategy. The larger WL policy results in a slightly lower income lift than the smaller one (due to a lower amount of invested assets at retirement from repositioning of assets to pay WL premiums) and a greater legacy lift from the larger death benefit. Results for the younger ages in **Figures 2 and 3** show a similar pattern of income and legacy lifts.

Figure 2. Retirement Income at Age 65 with % Changes Relative to Investment-Only

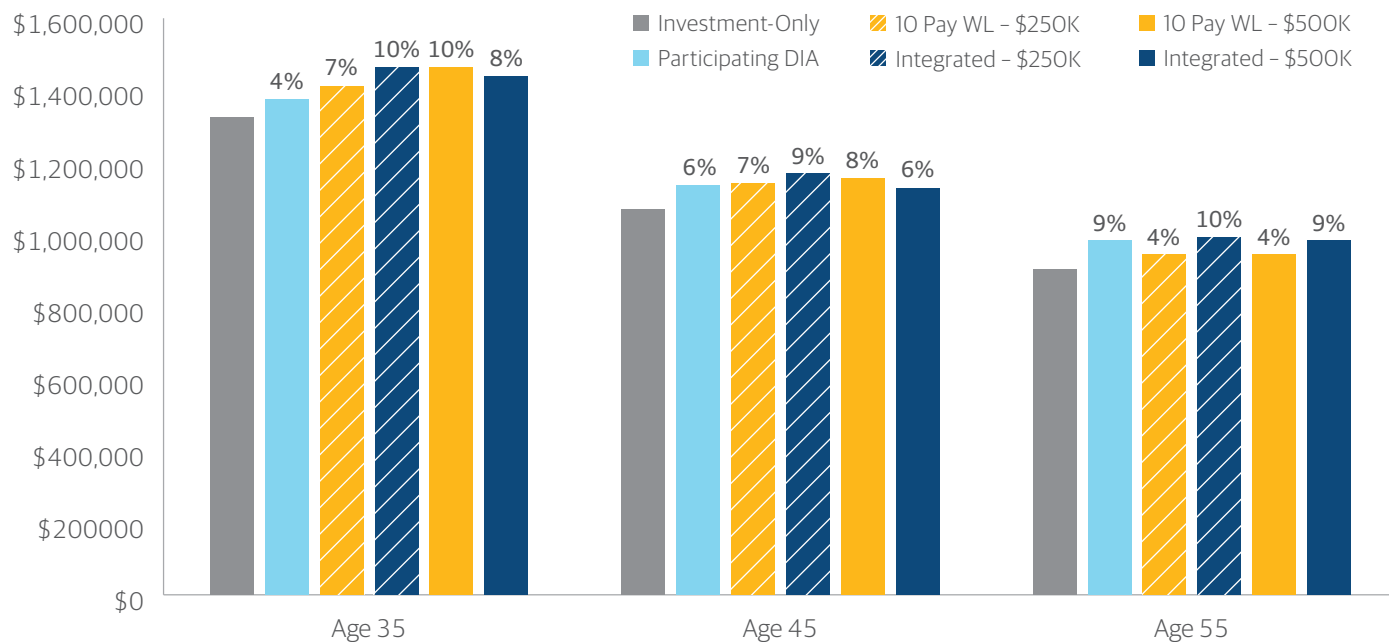
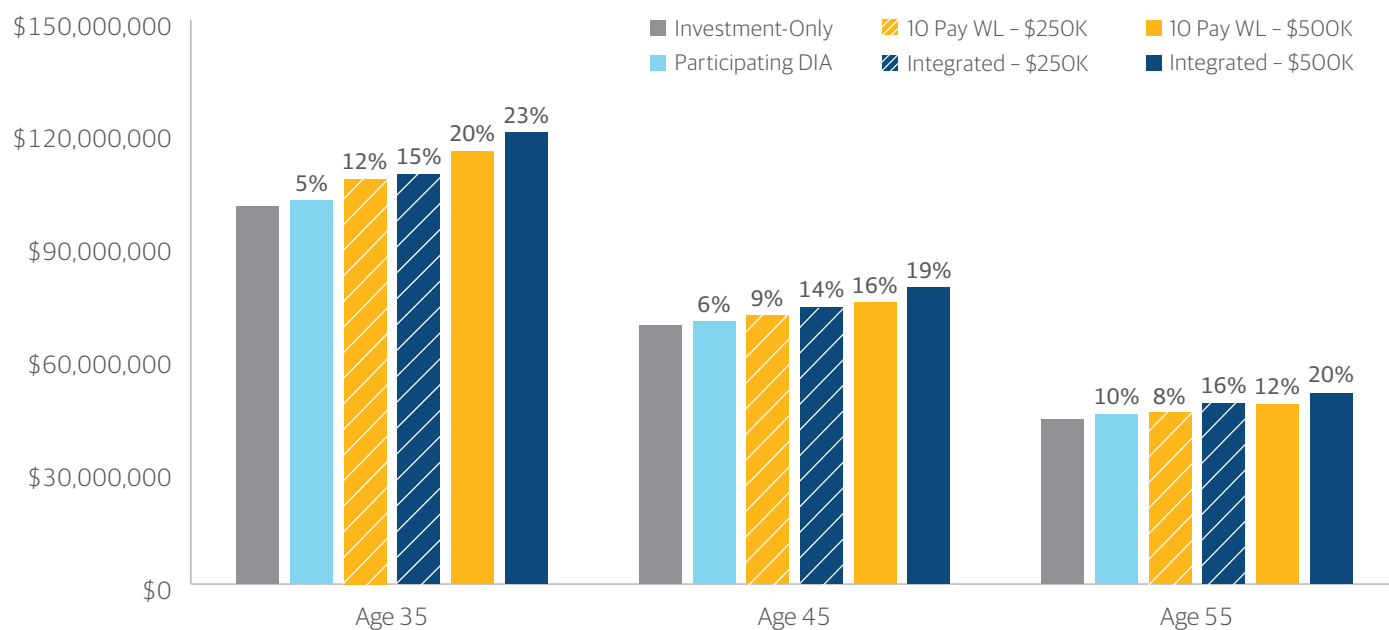


Figure 3. Median Net Estate with % Changes Relative to Investment-Only



Tax Efficiency During Accumulation

Table 5 reports the total of all taxes paid from the age 55 to age 65 and shows pre-retirement tax efficiency. Results for the other ages are shown in the **Appendix**. Taxes paid during accumulation are lower for strategies with a participating DIA, WL, or both. The participating DIA purchase lowers taxes by repositioning \$5M from taxable assets – which have taxable growth each year – to the participating DIA that has tax deferral until income starts. Strategies containing WL show lower taxes due to fewer taxable assets since all or a portion of the budget is used to pay WL premiums rather than investing in additional taxable assets. For the 10 Pay WL – \$500K strategy, the repositioning of taxable assets to pay for premiums further reduced the balance of taxable assets, also lowering taxes.

Table 5. Median Taxes Paid to Age 65 Relative to Median Assets at Retirement

Strategy	Age 55			
	Taxes to Age 65 (Median)	% Change from Investment-Only	Assets at Retirement (Median)	Taxes as a % of Assets at Retirement
Investment-Only	\$2,936,145	—	\$37,790,796	8%
Participating DIA	\$2,422,644	-17%	\$38,654,603	6%
10 Pay WL – \$250K	\$2,779,646	-5%	\$37,783,248	7%
10 Pay WL – \$500K	\$2,655,029	-10%	\$37,867,132	7%
Integrated – \$250K	\$2,264,088	-23%	\$38,646,087	6%
Integrated – \$500K	\$2,148,380	-27%	\$38,680,604	6%

Comparing across age cohorts, because the participating DIA accounts for a smaller portion of assets for the younger ages, the participating DIA strategy has less impact on taxes relative to investment-only for the 35-year-olds (-7%) than the 55-year-olds (-17%). Conversely, WL strategies have bigger impacts on taxes due to the longer time horizons for the benefits to compound. Budgeted contributions to retirement are redirected from taxable assets earlier to purchase WL for the smaller policy, and taxable assets are also repositioned earlier for the larger policy. In other words, WL has a bigger impact on taxes for the 35-year-olds than for the 55-year-olds (-9% versus -5% for the smaller policy and -18% versus -10% with the larger policy, respectively).

Taxes paid during accumulation are lower for strategies that include a participating DIA or 10 Pay WL or both for every age group.

Furthermore, the ratio of taxes paid during accumulation as a percentage of assets at retirement is highest for the investment-only strategy for every age group. That ratio declines when either a participating DIA or WL are part of the strategy, and it is lowest for the integrated strategies. A lower percentage is favorable in that it indicates less tax is paid during accumulation relative to the amount of assets at retirement.

Tax Efficiency Over the Life of the Strategy

Tax efficiency of the various strategies across both accumulation and retirement is examined using the analysis of the specified \$500K retirement income (rather than the income at 90% probability of success). Using the same retirement income for all strategies allows a comparison of the tax efficiency for high-net-worth clients who are focused on both managing the impact of taxes and maximizing legacy rather than maximizing retirement income.

Table 6 shows median taxes paid throughout the plan relative to the median net estate. Results for the other ages are shown in the **Appendix**.

Median taxes to age 95 include taxes paid during accumulation and retirement. The net estate considers both the tax on any remaining qualified balances at death that would be paid by beneficiaries as well as any applicable estate taxes. The tax to net estate variable – shown in the right column – allows comparison of the taxes paid to the resulting assets. A lower percentage indicates fewer lifetime taxes paid relative to the net estate, which is a desirable attribute to high-net-worth clients.

Table 6. Median Taxes to Age 95 Relative to Median Net Estate

Strategy	Age 55			
	Taxes to Age 95 (Median)	% Change from Investment-Only	Net Estate (Median)	Taxes as a % of Net Estate
Investment-Only	\$21,291,946	—	\$56,050,985	38.0%
Participating DIA	\$23,109,828	9%	\$61,502,001	37.6%
10 Pay WL – \$250K	\$20,663,826	-3%	\$60,318,558	34.3%
10 Pay WL – \$500K	\$19,254,492	-10%	\$62,976,708	30.6%
Integrated – \$250K	\$22,181,653	4%	\$65,083,633	34.1%
Integrated – \$500K	\$20,572,759	-3%	\$67,340,569	30.6%

The participating DIA strategy shows 9% higher taxes along with a 10% higher net estate than investment-only. The higher taxes result from the different tax type. While increases in the participating DIA value above the premium are subject to ordinary income tax,¹⁰ gains in the invested assets that generate retirement income in the investment-only strategy would be taxed at lower long-term capital gains rates.

The smaller and larger WL strategies not only provide higher net estates (8% and 12%, respectively), but they also result in 3% and 10% less tax paid over the 40-year plan for the 55-year-olds. Lower taxes for the WL strategies are likely due to lower taxable asset balances that result from purchasing WL. Therefore, the larger policy sees a greater decrease in taxes. The death benefit helps to boost the net estate. While the death benefit is subject to estate taxes, it is income-tax-free. At the median, it accounts for 5-6% of legacy (before considering estate taxes) for the smaller policy and 10-11% of legacy for the larger policy.

¹⁰ When participating DIA payments are distributed, they are taxed based on an exclusion ratio determined by the portion that is gains versus basis because the participating DIA was purchased using taxable assets. Once the cost basis is returned, payments are fully taxable.

For all age groups, taxes are higher than investment-only for the participating DIA strategy and lower than investment-only for the WL strategies, and the impact is greatest for the 55-year-olds. When the participating DIA and WL products are combined in an integrated strategy, the resulting impact on taxes is nearly equal to the sum of their individual impacts. Therefore, taxes for the integrated strategy may be higher or lower than for the investment-only strategy. Still, the integrated strategies perform better (i.e., have higher net estates) and provide tax efficiency when considering the lower ratio of taxes to net estate. The ratio is practically equivalent for the strategies containing WL, regardless of whether they also include a participating DIA. In other words, the larger policy results in the lowest ratio for both the 10 Pay WL – \$500K strategy and the Integrated – \$500K strategy. These results are similar across the three age cohorts.

All strategies that include a participating DIA or 10 Pay WL or both perform better and have a lower ratio of taxes to net estate than the investment-only strategy for every age group.

CONCLUSIONS

Including WL and a participating DIA may lead to higher legacies and net estates than an investment-only strategy at a given retirement income need. Similarly, when solving for a given probability of success, strategies containing WL and a participating DIA may provide both more income and higher legacies than an investment-only strategy.

In this analysis, taxes paid up to retirement are lower for strategies that include a participating DIA or WL than they are for investment-only. Moreover, tax efficiency throughout the plan, including both accumulation and retirement, is improved by including a participating DIA or WL.

High-net-worth clients' financial plans may benefit from combining insurance products with investments. Income annuities and whole life insurance can improve tax efficiency, maximize after-tax wealth transfer, and help meet the distinctive needs and goals of these clients.

Important Disclosures

All investments carry some level of risk, including the loss of principal. No investment strategy can guarantee a profit or protect against a loss.

All depicted WL policies are hypothetical products and reflect industry-average mortality and expenses and a dividend interest rate that correlates to but lags changes in interest rates. They do not represent or approximate any actual policies sold by Northwestern Mutual. Growth in the cash value and/or death benefit of any hypothetical WL policy is based on assumed policy guarantees and the payment of non-guaranteed dividends. WL insurance is not an investment or fixed income investment and is purchased to meet death benefit needs.

Using the cash value through policy loans, surrenders, or cash withdrawals will reduce both the death benefit and surrender value of the policy, may necessitate a greater premium outlay than anticipated, and may result in an unintended policy lapse and/or an unexpected taxable event.

Generally, the death benefit of life insurance policies that have not been transferred for value is received free from ordinary income tax. Estate taxes may apply. Partial surrenders of life insurance policies are treated first as tax-free distributions of the investment in the contract up to the cost basis followed by taxable distributions of gain once all the cost basis has been distributed. Policy loans are not treated as taxable distributions at the time they are taken. Unpaid loan interest is capitalized to the loan principal, and the loan balance may grow large enough to cause the policy to lapse. If a policy lapses or is surrendered prior to the insured's death, the loan will be repaid from the policy's cash value and taxed as a distribution, subject to ordinary income taxation to the extent the loan exceeds the cost basis.

Implied account value represents the present value of future expected income payments from a participating DIA, which has no cash value or withdrawal rights and cannot be surrendered or exchanged for another contract. Income payments are not available until retirement. An assumed sales load of 10% is subtracted from the participating DIA premium. Then, an industry mortality table is used to calculate the payments and implied account value. Participating DIAs depicted herein are hypothetical and dividend-paying and assume industry-average mortality and expenses and a dividend interest rate that correlates to but lags changes in interest rates. They do not represent or approximate any actual policies sold by Northwestern Mutual. Dividends are not guaranteed.

This publication is not intended as legal or tax advice. Northwestern Mutual and its representatives do not render tax advice. Consult with a tax professional for tax advice that is specific to your situation.

APPENDIX

Table A.1. Other Assumptions

Advisory Fees	0.75%
Investment Management Fees	0%
Taxes	2023 Federal income tax brackets + 6% state income tax
Beneficiary Tax Rate	25%
Annual Turnover	25%
Initial Basis for Taxable Equity	50%
Taxable Annual Turnover	15%
10 Pay Whole Life Policy	Hypothetical whole life purchased at initial age (35, 45, or 55) by a healthy male. Non-guaranteed dividends used to purchase paid-up additions.
Participating Deferred Income Annuity (participating DIA)	Hypothetical participating deferred income annuity (joint life, 100% to survivor) purchased at age 55 with taxable assets. An assumed sales load of 10% is subtracted from the DIA premium. 100% of dividends purchase additional income until age 65, when income starts. Then, 50% of dividends purchase future income and 50% are taken as cash distributions for current income. The annuity pays out for annuitant's entire lifetime.

Table A.2. Median Net Estate Resulting From Spending \$500,000 in Today's Dollars in Retirement

Strategy	Age 45			
	Retirement Income		Net Estate (Median)	% Change from Investment-Only
	Present Value	At Age 65		
Investment-Only	\$500,000	\$819,308	\$80,169,443	—
Participating DIA	\$500,000	\$819,308	\$84,953,792	6%
10 Pay WL – \$250K	\$500,000	\$819,308	\$87,452,110	9%
10 Pay WL – \$500K	\$500,000	\$819,308	\$92,728,430	16%
Integrated – \$250K	\$500,000	\$819,308	\$91,274,207	14%
Integrated – \$500K	\$500,000	\$819,308	\$95,690,602	19%

Strategy	Age 35			
	Retirement Income		Net Estate (Median)	% Change from Investment-Only
	Present Value	At Age 65		
Investment-Only	\$500,000	\$1,048,784	\$114,293,749	—
Participating DIA	\$500,000	\$1,048,784	\$119,438,592	5%
10 Pay WL – \$250K	\$500,000	\$1,048,784	\$127,569,921	12%
10 Pay WL – \$500K	\$500,000	\$1,048,784	\$137,437,719	20%
Integrated – \$250K	\$500,000	\$1,048,784	\$131,436,630	15%
Integrated – \$500K	\$500,000	\$1,048,784	\$140,584,256	23%

Table A.3. Retirement Income Achievable at 90% Probability of Success and Median Net Estate

Strategy	Age 45				
	Retirement Income		% Change from Investment-Only	Net Estate (Median)	% Change from Investment-Only
	Present Value	At Age 65			
Investment-Only	\$652,465	\$1,069,141	—	\$68,663,043	—
Participating DIA	\$692,991	\$1,135,547	6%	\$69,733,059	2%
10 Pay WL – \$250K	\$697,044	\$1,142,188	7%	\$71,414,638	4%
10 Pay WL – \$500K	\$705,149	\$1,155,469	8%	\$74,750,971	9%
Integrated – \$250K	\$713,254	\$1,168,750	9%	\$73,495,411	7%
Integrated – \$500K	\$688,939	\$1,128,906	6%	\$78,834,474	15%

Strategy	Age 35				
	Retirement Income		% Change from Investment-Only	Net Estate (Median)	% Change from Investment-Only
	Present Value	At Age 65			
Investment-Only	\$631,684	\$1,325,000	—	\$100,334,752	—
Participating DIA	\$655,521	\$1,375,000	4%	\$101,951,276	2%
10 Pay WL – \$250K	\$673,399	\$1,412,500	7%	\$107,691,076	7%
10 Pay WL – \$500K	\$697,236	\$1,462,500	10%	\$114,979,409	15%
Integrated – \$250K	\$697,236	\$1,462,500	10%	\$108,986,156	9%
Integrated – \$500K	\$685,318	\$1,437,500	8%	\$120,064,690	20%

Table A.4. Median Taxes Paid to Age 65 Relative to Median Assets at Retirement

Strategy	Age 45			
	Taxes to Age 65 (Median)	% Change from Investment-Only	Assets at Retirement (Median)	Taxes as a % of Assets at Retirement
Investment-Only	\$7,369,358	—	\$51,600,477	14%
Participating DIA	\$6,552,473	-11%	\$52,151,681	13%
10 Pay WL – \$250K	\$6,756,400	-8%	\$52,598,158	13%
10 Pay WL – \$500K	\$6,188,656	-16%	\$53,466,735	12%
Integrated – \$250K	\$6,014,483	-18%	\$53,143,368	11%
Integrated – \$500K	\$5,506,143	-25%	\$53,951,344	10%

Strategy	Age 35			
	Taxes to Age 65 (Median)	% Change from Investment-Only	Assets at Retirement (Median)	Taxes as a % of Assets at Retirement
Investment-Only	\$12,452,514	—	\$69,907,479	18%
Participating DIA	\$11,609,738	-7%	\$70,163,281	17%
10 Pay WL – \$250K	\$11,322,789	-9%	\$72,899,975	16%
10 Pay WL – \$500K	\$10,219,163	-18%	\$75,065,393	14%
Integrated – \$250K	\$10,509,493	-16%	\$72,928,685	14%
Integrated – \$500K	\$9,472,305	-24%	\$75,261,962	13%

Table A.5. Median Taxes to Age 95 Relative to Median Net Estate

Strategy	Age 45			
	Taxes to Age 95 (Median)	% Change from Investment-Only	Net Estate (Median)	Taxes as a % of Net Estate
Investment-Only	\$34,425,791	—	\$80,169,443	43%
Participating DIA	\$35,400,275	3%	\$84,953,792	42%
10 Pay WL – \$250K	\$33,285,333	-3%	\$87,452,110	38%
10 Pay WL – \$500K	\$31,575,786	-8%	\$92,728,430	34%
Integrated – \$250K	\$34,136,153	-1%	\$91,274,207	37%
Integrated – \$500K	\$32,755,930	-5%	\$95,690,602	34%

Strategy	Age 35			
	Taxes to Age 95 (Median)	% Change from Investment-Only	Net Estate (Median)	Taxes as a % of Net Estate
Investment-Only	\$52,000,286	—	\$114,293,749	45%
Participating DIA	\$53,032,342	2%	\$119,438,592	44%
10 Pay WL – \$250K	\$51,124,178	-2%	\$127,569,921	40%
10 Pay WL – \$500K	\$48,737,303	-6%	\$137,437,719	35%
Integrated – \$250K	\$51,850,293	0%	\$131,436,630	39%
Integrated – \$500K	\$49,285,015	-5%	\$140,584,256	35%

The participating DIA payout relative to all retirement withdrawals is 30% at the median for the 45-year-olds and 24% at the median for the 35-year-olds.

Capital Market Assumptions

CMAs, including standard deviations and correlations, are from Northwestern Mutual's Investment Risk & Operations. The CMAs are based on forecasts of asset class returns over the next 80 years, and the table below includes both expected geometric mean returns and expected arithmetic mean returns.

CMAs are based on the averages derived from 1,000 trials over an 80-year time period. For purposes of performing any probability analysis, CMAs are calculated for each year, which vary over time. The model for simulating asset class returns assumes that risk factors in the economy (such as nominal and real interest rates, investment-grade corporate spreads and equity factors) are the drivers of asset class returns. Based on the historical correlation between these risk factors and the prices and performance of asset classes, a statistical model is constructed that could explain the prices of asset classes over time. Current valuation levels of asset classes are also considered.

In each of the 1,000 trials, the economic risk factors are randomized to create a possible future path of the economy, and asset prices and returns are calculated each year based on the randomized risk factors. For example, if the risk factors show the economy in a recession, higher corporate spreads correspond to the lower equity returns. The risk factors are randomized using a time series model with mean reversion, meaning that the values in one year are the starting point for determining the values in the next year, and that over time risk factors revert to the economic assumptions that underlie the CMAs and not necessarily historical averages. NM CMAs are intended to put into perspective realistic expectations of investment risk-return profiles of various asset classes and to reflect the relative behavior of the asset classes over the long term. The development of the CMAs combines two forecasting approaches: (1) quantitative empirical modeling to capture historical data relationships and (2) forward-looking adjustments that reflect judgment and insight from internal asset managers and third-party CMA providers.

The models to randomize risk factors consider present asset prices and current economic conditions as the starting point for simulations. The mean reversion within the model means that each year the average of risk factors changes, and the returns of asset classes are different and shift over time.

The simulation considers present asset values as its starting point. Compared to historical averages, at the time these simulations were done, equity asset classes were assumed to be richly valued. Thus, in the short term, equity asset classes have lower average returns as valuation levels return to historical averages. In the longer-term, equity asset classes' average returns increase as the importance of current valuation levels diminishes. The model also considers current interest rates, which are low by historical standards. The simulations assume that over time real interest rates will increase as they revert to historical averages. Cash and fixed income have lower short-term rates of return, due to current interest rates, but average returns increase with the assumption that real interest rates will increase as well.

Limitations of This Analysis

The results of this analysis are based on assumptions that may differ significantly from your own facts and circumstances. Results may vary based on differing assumptions regarding net worth, time horizon, salary, and other variables. This analysis also uses an assumed portfolio that may not be appropriate for you depending on your risk tolerance and investment objectives. Use of a different assumed portfolio may cause results to differ. This analysis does not project the results of any actual investments or holdings and should not be interpreted as a recommendation of any particular investment or investment strategy.

Asset Class	Expected Return - Geometric	Expected Return - Arithmetic	Standard Deviation
US Equity – Large Cap	6.58%	7.73%	15.48%
US Equity – Mid Cap	7.08%	8.54%	17.38%
US Equity – Small Cap	7.57%	9.53%	20.32%
Int'l Developed Markets	6.79%	8.05%	16.33%
Int'l Emerging Markets	7.75%	9.89%	21.43%
Real Estate Securities	6.42%	8.12%	19.18%
Commodities	3.14%	4.53%	17.33%
Fixed Income	2.94%	3.05%	4.82%
Cash	2.18%	2.19%	2.32%

Asset Class	US Equity – Large Cap	US Equity – Mid Cap	US Equity – Small Cap	Int'l Developed Markets	Int'l Emerging Markets	Real Estate Securities	Commodities	Fixed Income	Cash
US Equity – Large Cap	1.00	0.96	0.89	0.86	0.72	0.70	0.45	0.08	0.15
US Equity – Mid Cap		1.00	0.95	0.85	0.73	0.73	0.47	0.06	0.13
US Equity – Small Cap			1.00	0.75	0.65	0.69	0.39	0.01	0.11
Int'l Developed Markets				1.00	0.85	0.63	0.53	0.12	0.14
Int'l Emerging Markets					1.00	0.51	0.60	0.16	0.11
Real Estate Securities						1.00	0.27	0.30	0.12
Commodities							1.00	0.05	0.14
Fixed Income								1.00	0.50
Cash									1.00

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