

The Economics Approach to Financial Planning

a Five-Part Presentation to Dimensional Fund Advisors

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Outline of Talks

1. Consumption Smoothing
2. MaxiFi Planner – Illustrating the Economics Approach
- 3 . Pricing Lifestyle Decisions – An Example: When Can I Retire?
4. Secrets to Maximizing Lifetime Social Security Benefits
5. Finding Alpha – Raising Households' Living Standards at No Risk

Maxifi Planner Implements the Economics Approach

The Economics Approach	Maxifi Planner
Consider full life span in financial decisions	✓
Calculate living standard path subject to lifetime budget and cash-flow constraints	✓
Find safe ways to raise the living-standard path	✓
Price lifestyle decisions in terms of their living standard impact	✓
Calculate insurance needed to protect survivors' living standards	✓
Analyze living-standard upsides and downsides from investing at risk	Economics-Based Investment / Spending Risk Analysis
Find portfolio that maximizes average (expected) path of lifetime happiness (utility)	

MaxiFi incorporates all your financial data to create a highly detailed lifetime financial plan



Shows you the fixed and discretionary spending level you can sustain for life based on your current and expected resources



Provides a savings and life insurance coverage plan for protecting and maintaining that spending level



Optimizes your plan to show you ways to get the most out of Social Security and your retirement accounts



Incorporates detailed Federal, State and FICA tax calculations as well as Social Security benefits and Medicare Part B premiums



Powerful Monte Carlo analysis allows you to assess risk and reward of different investment strategies and spending behavior



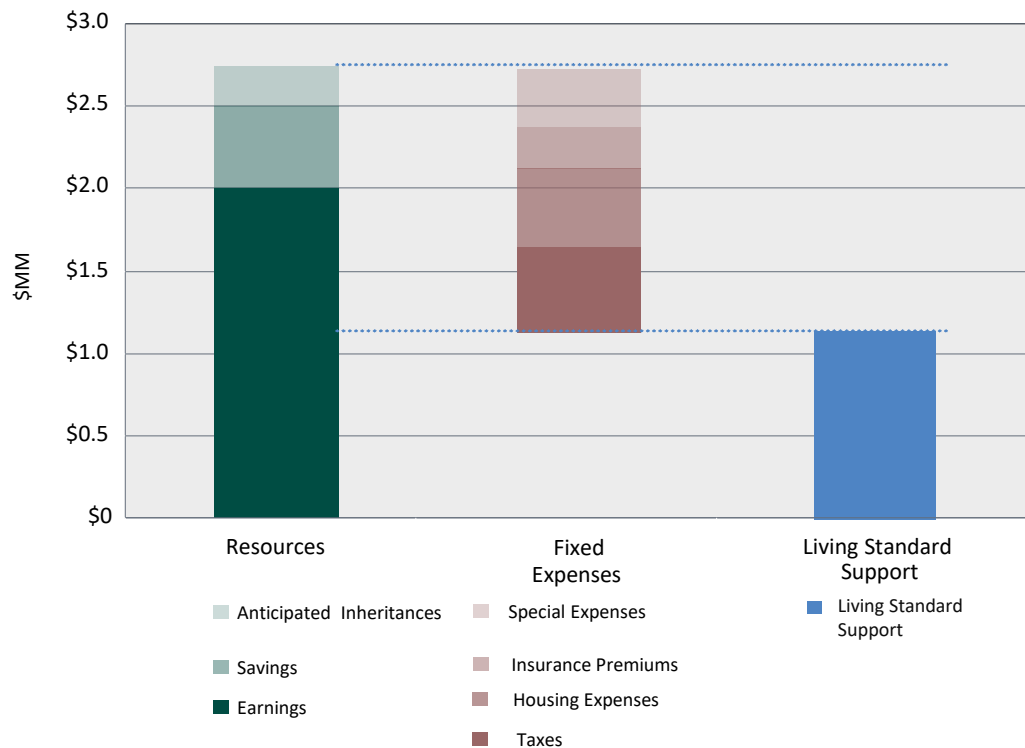
Provides insight into career choices, housing decisions, retirement planning and other financial decisions at any age and stage

Case Study

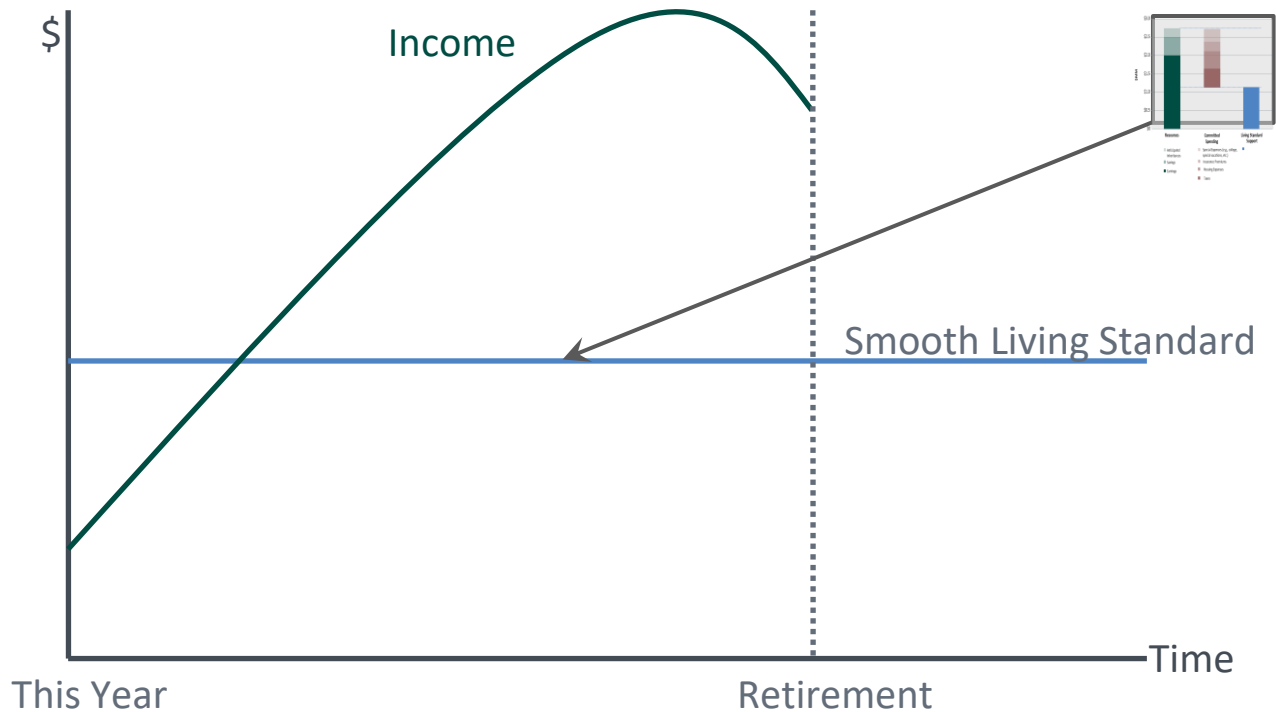
Jack and Sarah are both 52. They have 2 children: Jane (17) and Alex (15). Jack earns \$50K annually, while Sarah earns \$100K. Both plan to retire and take Social Security at 62.

- Live in Kentucky in a \$500K home.
 - \$400K Mortgage, 20 years, \$2,320/month
 - \$5K Property Tax, \$5K Insurance, \$5K Maintenance
- 401(k)s:
 - Jack - \$300K, Sarah - \$500K
 - Both contribute 3% with a 3% match
- \$50K in regular assets

Living standard: lifetime resources - lifetime fixed expenses...



... spread over one's lifetime



Lifetime Budgeting

Lifetime Balance Sheet

Lifetime Income

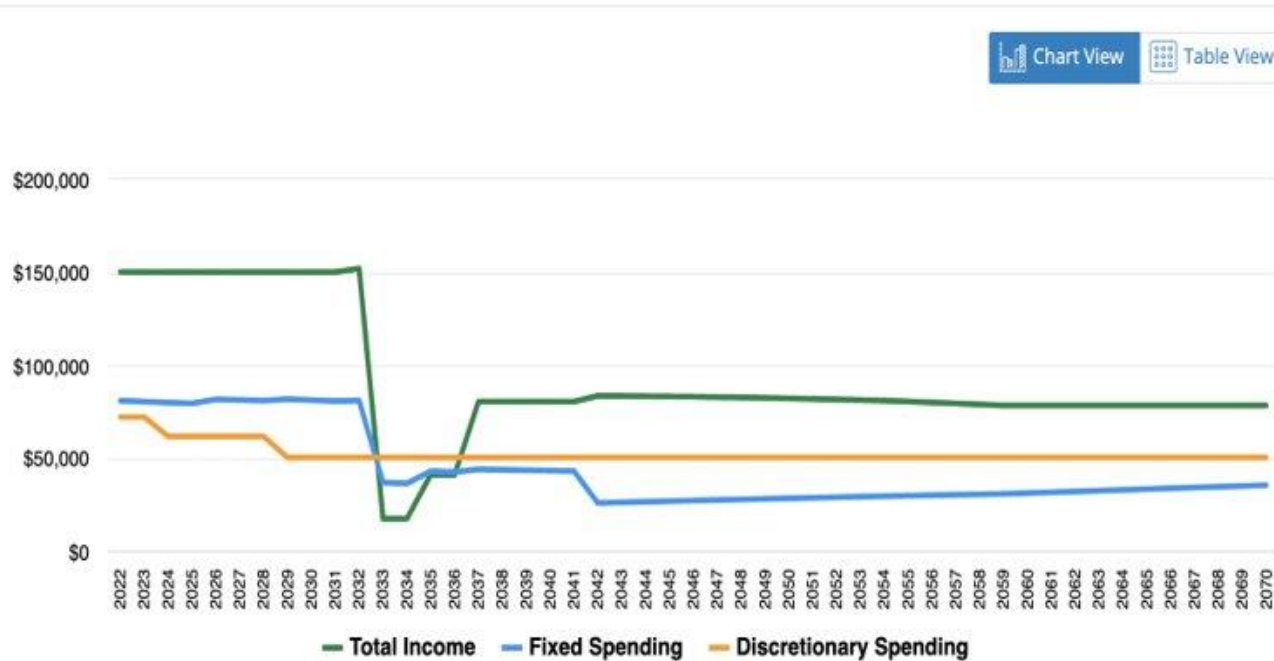
Labor Earnings	\$1,691,144
Social Security Benefits	\$2,064,550
Pensions and Annuities	\$0
Retirement Account Withdrawals	\$847,822
529 Account Withdrawals	\$0
Reserve Fund Assets	\$0
Real Estate Income	\$0
Special Receipts	\$0
Regular Assets	\$203,500
<hr/>	
TOTAL	\$4,807,016

Lifetime Spending

Housing Expenses	\$1,303,313
Other Expenses	\$0
Federal and State Taxes	\$533,738
Retirement Account Contributions	\$16,911
529 Contributions and Expenses	\$0
Ending Reserve Fund	\$0
Medicare Part B Premiums	\$447,830
Life Insurance Premiums	\$4,314
Discretionary Spending	\$2,500,908
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TOTAL	\$4,807,014

Consumption Smoothing – Discretionary Spending

Annual Income and Spending



Consumption Smoothing

A Household's Annual Living Standard

Equals

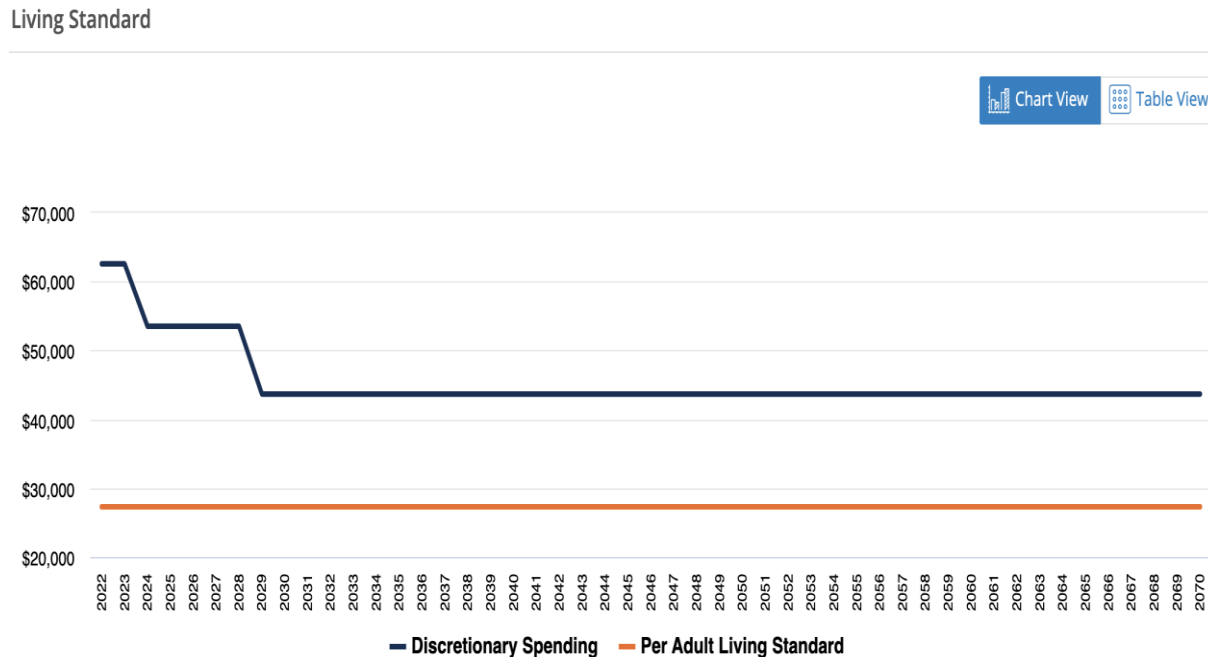
Its Annual Discretionary Spending

Per Household Member

Adjusted for Economies in Shared Living and Lower Cost of Kids

Consumption Smoothing – Living Standard

- Annual discretionary spending accounts for household demographics.
- Declines when children leave home.
- Per adult living standard remains the same.



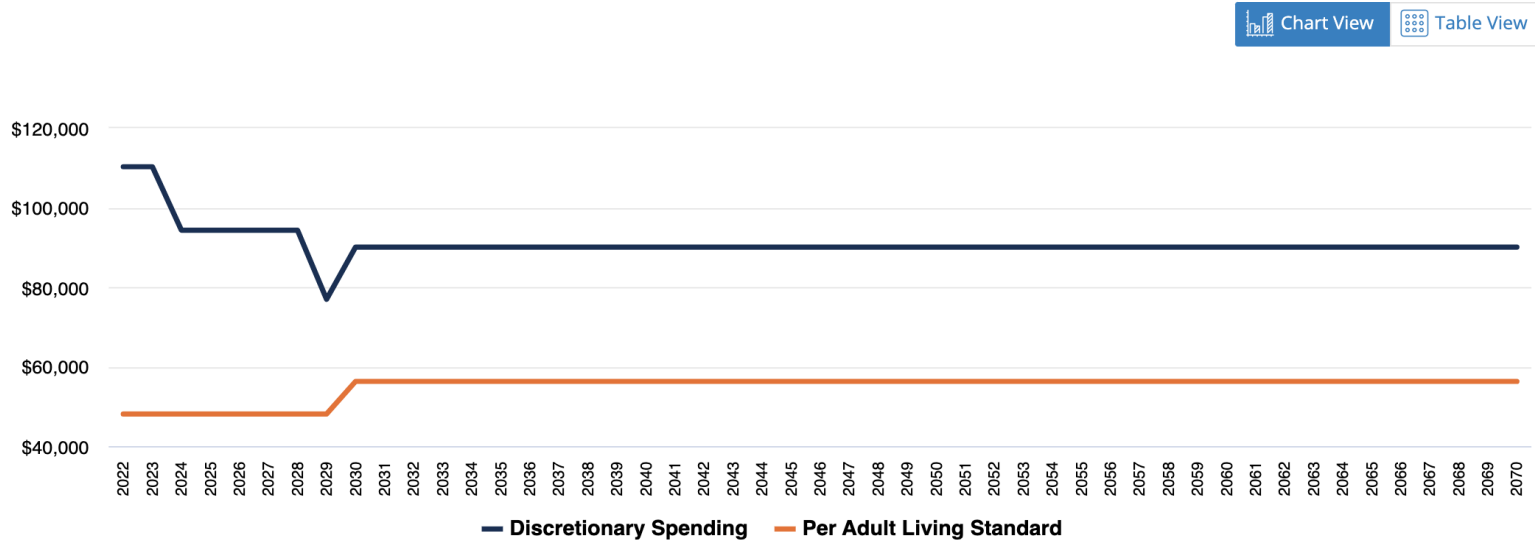
Consumption Smoothing

- Living Standard Path Has to Abide By Cash Constraints
- Suppose Couple Will Receive a \$5 Million Gift at Age 60, Then ...

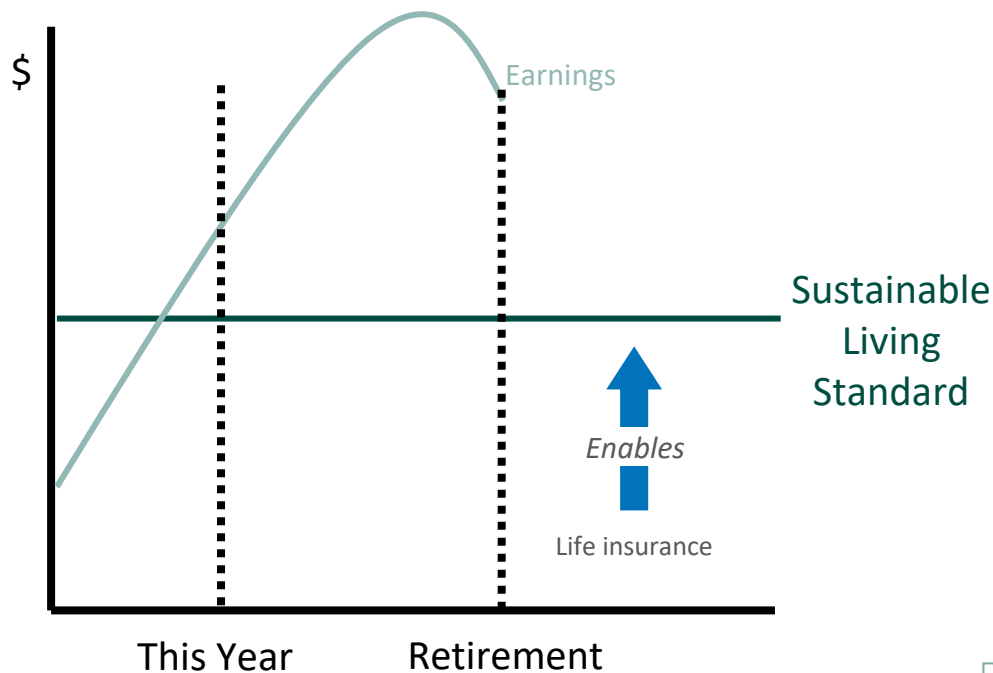
Cash Constraints:

Jack and Sarah's Living Standard Rises After Receipt of Inheritance

Living Standard



Life insurance maintains survivors' living standard



Sarah Needs Life Insurance, Jack Does Not

Life Insurance Suggestions

 Chart View  Table View

Year	Jack's Age	Sarah's Age	Jack's Life Insurance	Sarah's Life Insurance	Jack's Life Insurance (Face Value)	Sarah's Life Insurance (Face Value)	Premium
2022	52	52	\$30,780	\$274,641	\$30,780	\$274,641	\$721
2023	53	53	\$27,636	\$248,142	\$28,258	\$253,725	\$702
2024	54	54	\$22,145	\$221,964	\$23,152	\$232,065	\$669
2025	55	55	\$17,362	\$196,485	\$18,560	\$210,048	\$631
2026	56	56	\$12,989	\$165,955	\$14,199	\$181,403	\$564
2027	57	57	\$11,447	\$135,755	\$12,794	\$151,730	\$499
2028	58	58	\$1,365	\$92,061	\$1,559	\$105,209	\$331
2029	59	59	\$0	\$36,489	\$0	\$42,638	\$139
2030	60	60	\$0	\$0	\$0	\$0	\$0
2031	61	61	\$0	\$0	\$0	\$0	\$0
2032	62	62	\$0	\$0	\$0	\$0	\$0
2033	63	63	\$0	\$0	\$0	\$0	\$0

Sarah is the higher earner and needs more insurance

Raising Lifetime Spending – Taking Social Security at 70

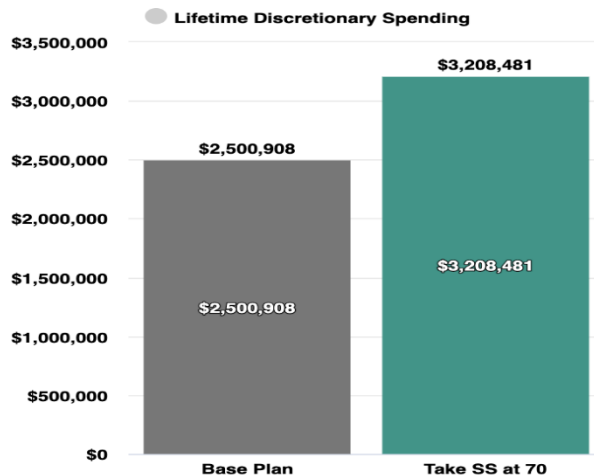
Lifetime Changes

This report shows differences in [lifetime present values](#) between **Base Plan** and **Take SS at 70**.



\$707,573

Lifetime Discretionary Spending increased by \$707,573 in **Take SS at 70** compared with **Base Plan**



What Went Up? ↑

- Social Security Benefits increased by \$780,837.
- Federal and State Taxes increased by \$49,346.
- Medicare Part B Premiums increased by \$53.
- Life Insurance Premiums increased by \$23,866.

What Went Down? ↓

No values decreased.

Impact of 20% Federal Income Tax Hike Starting 2030

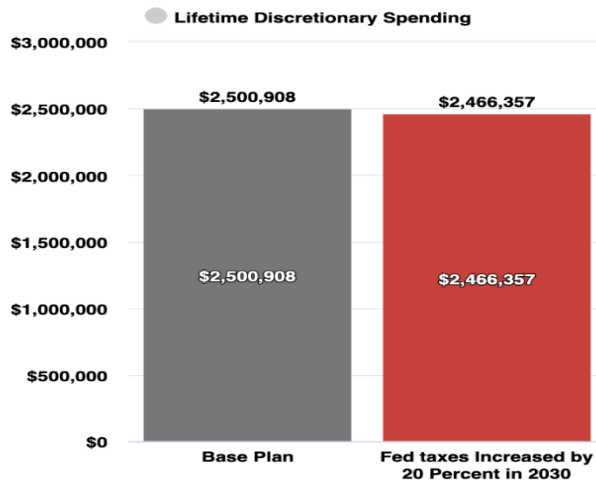
Lifetime Changes

This report shows differences in [lifetime present values](#) between Base Plan and Fed taxes Increased by 20 Percent in 2030.



(\$34,551)

Lifetime Discretionary Spending decreased by (\$34,551) in **Fed taxes Increased by 20 Percent in 2030** compared with Base Plan



What Went Up? ↑

Federal and State Taxes increased by \$33,606.
Life Insurance Premiums increased by \$946.

What Went Down? ↓

No values decreased.

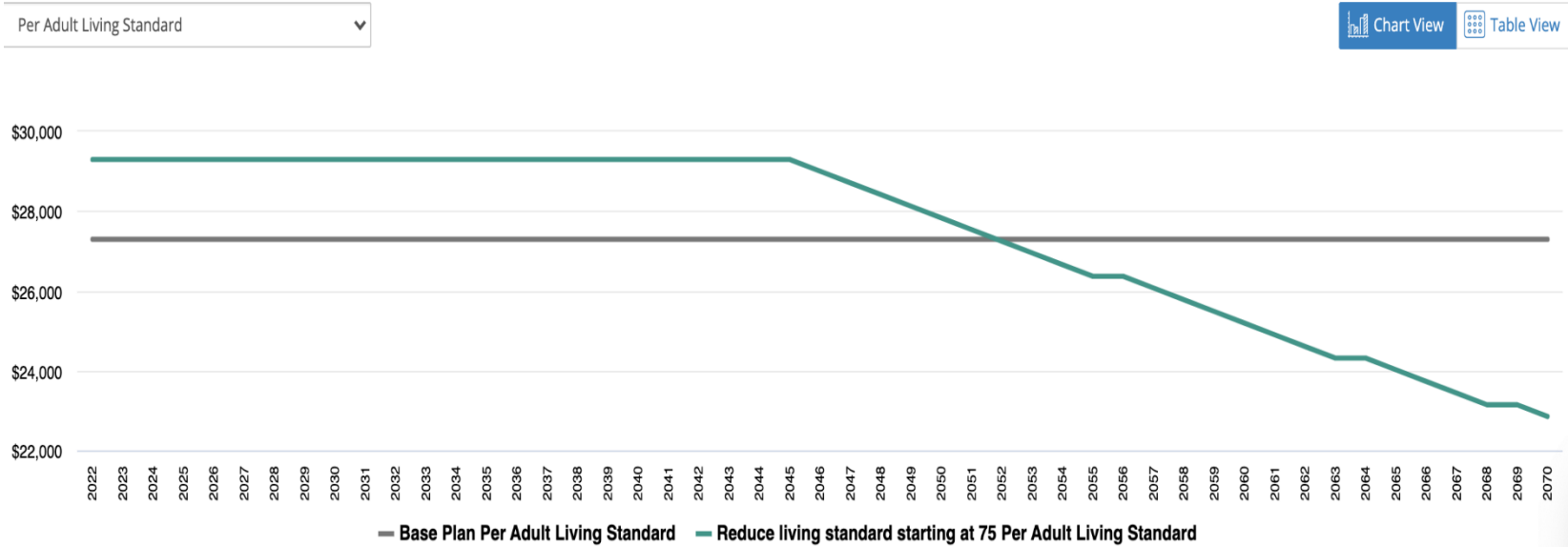
Pricing Lifestyles and Other Decisions

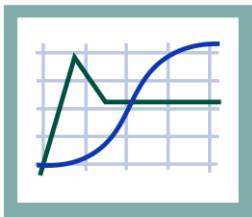
Change	Direction	Discretionary Spending Impact		
		Lifetime	Annual	Percentage
Move to Texas	Raises	\$61,028	\$1,271	+ 2.4%
Downsize Home by Half in 3 years	Raises	\$551,791	\$11,496	+ 21.5%
Putting the Kids Through College at \$75K per Year	Reduces	\$594,141	\$12,378	- 23.2%
Jane Works Half Time	Reduces	\$402,947	\$6,552	-15.0%

Choosing Your Age-Living Standard Profile

Base Plan vs. Reduce living standard starting at 75

Choose a criteria from the drop-down list to see a side-by-side comparison between Base Plan amounts and Reduce living standard starting at 75 amounts. You can view as a table or chart by clicking the appropriate button.





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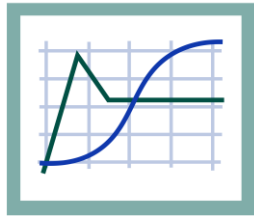
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