

# Zephyr Style Advisor 2003 Client Conference

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The Lynde and Harry Bradley  
Foundation

# Foundation Background

- Conservative, private grant-making foundation
- Founded in 1942
- Major contributions received in 1985
- Devoted to strengthening American democratic capitalism and the institutions, principals and values that sustain and nurture it

# Statistical Information

- \$500 Million in assets
- All assets managed externally
- 15 year average grant budget is 5.83% of assets
- Investment fees, taxes & administrative expenses average 1.5% of assets

# Spending Policy

- Studies show no absolute payout percentage that provides for corpus preservation
- Function of payout ratio and asset allocation
- Current law requires a 5% minimum of average assets to be distributed annually
- A November 2001 study by Goldman Sachs indicated that it is very difficult to balance this 5% payout ratio and preserve the corpus while maintaining stable spending levels
- A Monte Carlo simulation model was used in the Goldman Sachs study

# Bradley Foundation Analysis

- Using the Zephyr Allocation Advisor Monte Carlo tool, we prepared our own spending analysis
- The terms included
  - 15 year time frame
  - Actual 12/31/02 asset value as starting point
  - Inflation = 2.50%
  - Alternative grant payout ratios  
4.50%/5.50%/6.50%
  - Investment expenses .70%
  - Administrative expenses \$4.5 M adjusted annually for inflation

# Bradley Foundation Analysis

- Return (11.5%) and deviation (13.44%) inputs were calculated by Allocation Advisor using our actual asset allocation based on historical return data for the asset classes
- Return estimate may seem bullish, but we also used other return and deviation rates to show how different asset allocations would affect the results
- Based on current asset base, the 15 year wealth goal would be around \$740 Million based on 2.50% annual inflation

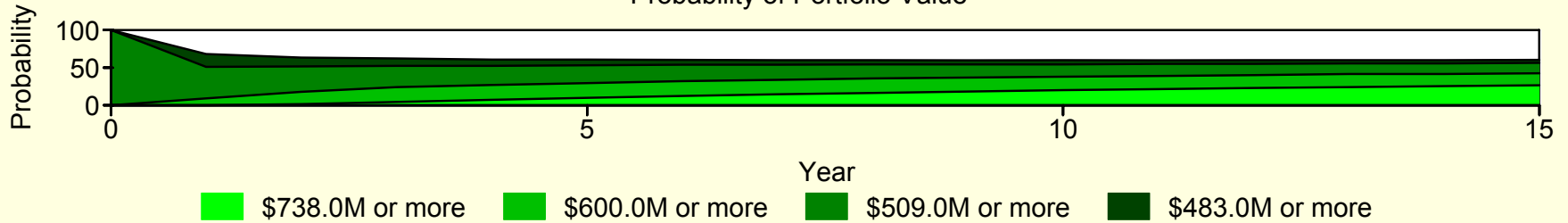
# Monte Carlo Simulation

Zephyr AllocationADVISOR: Bradley Foundation, Inc.

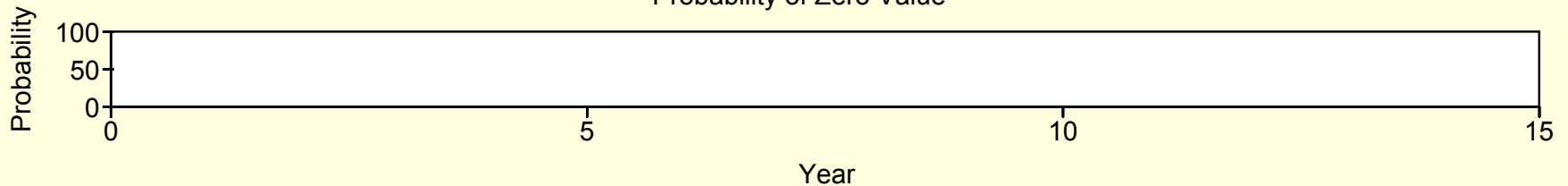
Case: Detail Indices Initial Value: \$509,000,000 Wealth Goal: \$738,000,000 Targets inflation adjusted Inflation Rate: 2.50%

## Simulation Probabilities

### Probability of Portfolio Value



### Probability of Zero Value



## Simulation Probabilities

Case: Detail Indices Initial Value: \$509,000,000 Wealth Goal: \$738,000,000 Targets inflation adjusted Inflation Rate: 2.50%

### Portfolio Probabilities

|   |                  | <u>Year 5</u> | <u>Year 10</u> | <u>Year 15</u>  |
|---|------------------|---------------|----------------|-----------------|
| <u>Probability of:</u><br>\$738,000,000 | Inflated Target: | \$834,979,264 | \$944,702,400  | \$1,068,844,032 |
|   | Probability:     | 10%           | 20%            | 27%             |
| \$600,000,000                           | Inflated Target: | \$678,844,928 | \$768,050,752  | \$868,978,880   |
|   | Probability:     | 30%           | 38%            | 43%             |
| \$509,000,000                           | Inflated Target: | \$575,886,784 | \$651,563,008  | \$737,183,744   |
|   | Probability:     | 53%           | 54%            | 56%             |
| \$483,000,000                           | Inflated Target: | \$546,470,144 | \$618,280,832  | \$699,528,000   |
|   | Probability:     | 61%           | 60%            | 61%             |
| <u>Probability of Zero Value:</u>       | Probability:     | 0%            | 0%             | 0%              |

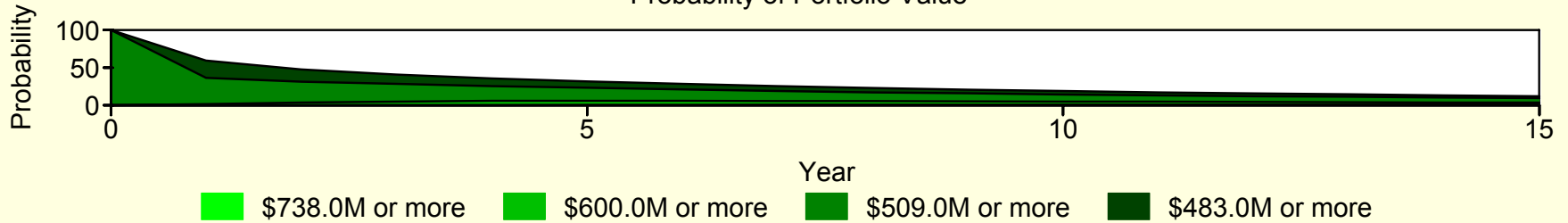
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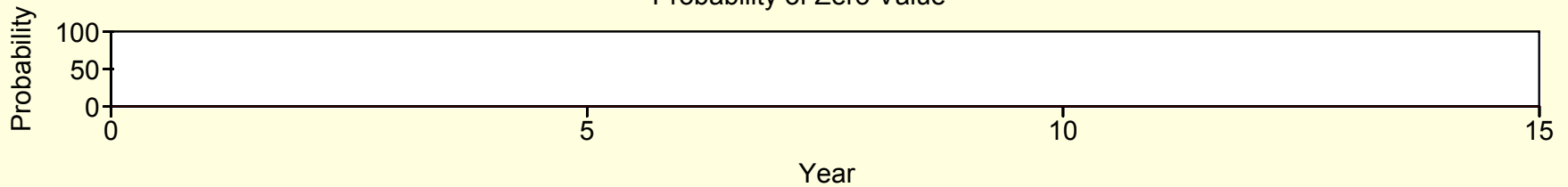
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## Simulation Probabilities

### Probability of Portfolio Value



### Probability of Zero Value



## Simulation Probabilities

Case: Detail Indices Initial Value: \$509,000,000 Wealth Goal: \$738,000,000 Targets inflation adjusted Inflation Rate: 2.50%

### Portfolio Probabilities

|   |                  | <u>Year 5</u> | <u>Year 10</u> | <u>Year 15</u>  |
|---|------------------|---------------|----------------|-----------------|
| <u>Probability of:</u><br>\$738,000,000 | Inflated Target: | \$834,979,264 | \$944,702,400  | \$1,068,844,032 |
|   | Probability:     | 0%            | 1%             | 1%              |
| \$600,000,000                           | Inflated Target: | \$678,844,928 | \$768,050,752  | \$868,978,880   |
|   | Probability:     | 6%            | 5%             | 4%              |
| \$509,000,000                           | Inflated Target: | \$575,886,784 | \$651,563,008  | \$737,183,744   |
|   | Probability:     | 23%           | 14%            | 10%             |
| \$483,000,000                           | Inflated Target: | \$546,470,144 | \$618,280,832  | \$699,528,000   |
|   | Probability:     | 32%           | 19%            | 12%             |
| <u>Probability of Zero Value:</u>       |                  |               |                |                 |
|   | Probability:     | 0%            | 0%             | 0%              |

# Summary of Analysis – Allocation 1

Grant Payout  
Alternatives

Probability  
of Attaining  
Wealth Goal

Grant Payout  
amount in year 15

|       |     |          |
|-------|-----|----------|
| 4.50% | 68% | \$44.5 M |
| 5.50% | 55% | \$46.6 M |
| 6.50% | 41% | \$46.8 M |

# Summary of Analysis – Allocation 2

Grant Payout  
Alternatives

Probability  
of Attaining  
Wealth Goal

Grant Payout  
amount in year 15

|       |     |          |
|-------|-----|----------|
| 4.50% | 20% | \$25.9 M |
| 5.50% | 10% | \$27.1 M |
| 6.50% | 4%  | \$27.0 M |

# Points to Consider

- Asset allocation and Payout ratio are paramount to spending analysis and key in determining likelihood of attaining wealth goal
- Higher spending patterns require more aggressive asset allocations to sustain principal preservation
- Aggressive asset allocations require disciplined budget planning for swings in spending in the short run