

Virginia GFOA

Other Post-Employment Benefits (OPEB) Presentation

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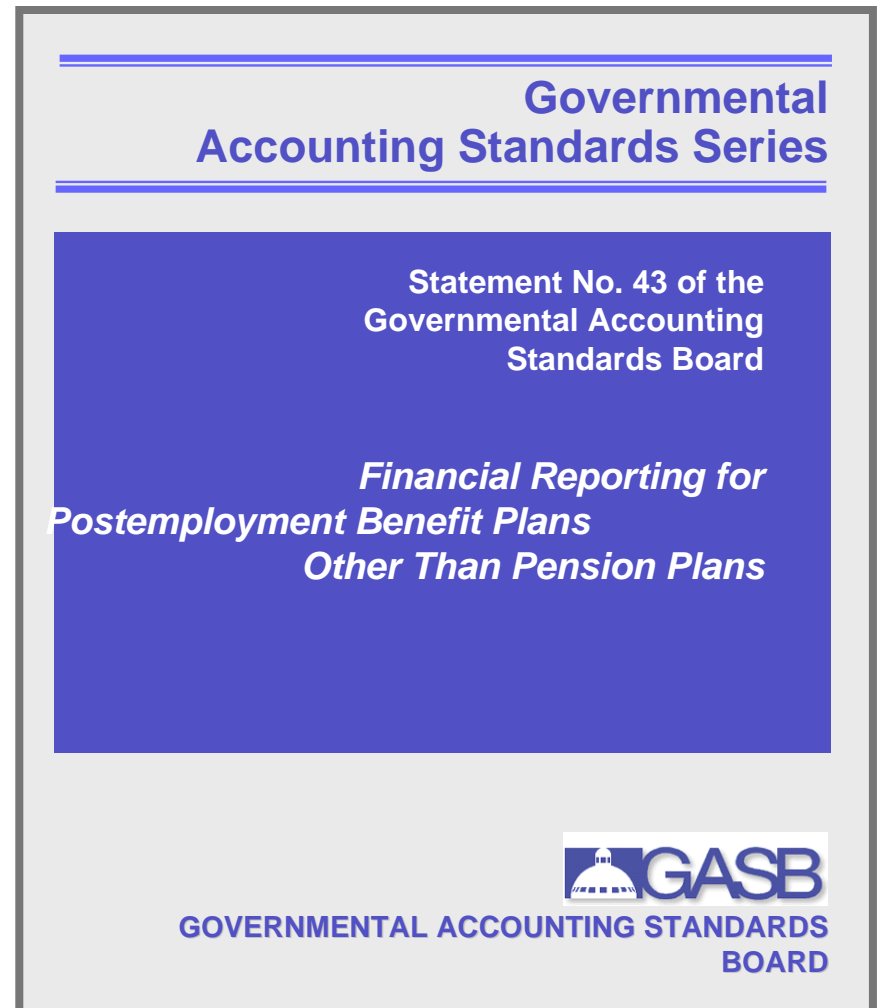


GASB Statements 43 & 45



GASB 43

- Issued April 2004
- Supersedes Statement No. 26, *Financial Reporting for Postemployment Healthcare Plans Administered by Defined Benefit Pension Plans*
- Focused on the asset side of equation
- Defines terms for measurement and financial reporting of assets in trusts or agency funds

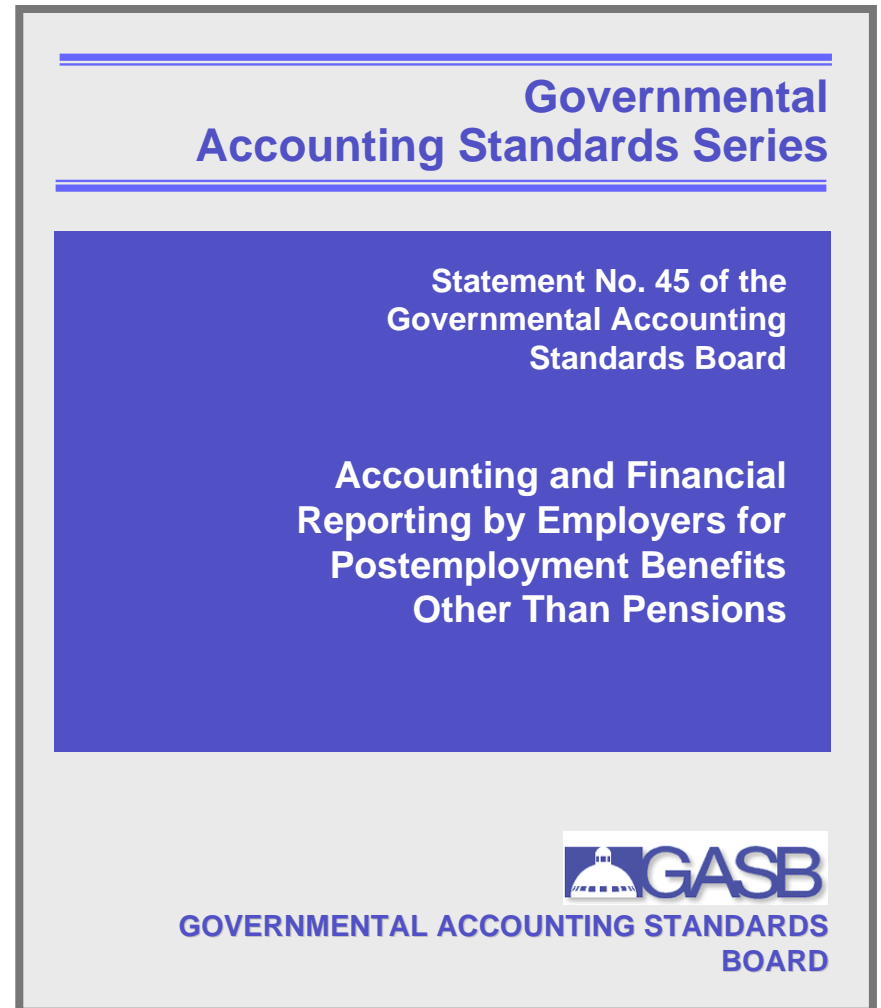


GASB 43 Reporting Requirements

- Public entities that set aside assets for addressing OPEB liabilities must begin to report those assets based on the following schedule (trust structures)
 - Phase 1: Revenues > \$100M 1st FY after 12/15/05
 - Phase 2: Revenues \$10M - \$100M 1st FY after 12/15/06
 - Phase 3: Revenues < \$10M 1st FY after 12/15/07

GASB 45

- Issued June 2004
- Focused primarily on liability side equation
- Inclusive of a wide variety of benefits unless the retiree is paying 100% of the true cost of the benefit
- Covers medical, dental and other benefits
- Accrual-based accounting for expense is now required as well as measurement and disclosure of funding status



GASB 45 Reporting Requirements

- Public entities must recognize OPEB costs over active service life of employees rather than on pay-as-you-go basis (GASB 45)
 - Phase 1: Revenues > \$100M 1st FY after 12/15/06
 - Phase 2: Revenues \$10M - \$100M 1st FY after 12/15/07
 - Phase 3: Revenues < \$10M 1st FY after 12/15/08
- New line item on balance sheet – *Net OPEB Obligation*
- Failure to comply could prevent auditors from providing a “clean” audit opinion on financial statements
- Requires actuarial valuation no less than biennially for public employers with more than 200 employees, retirees and terminated employees with vested benefits
- Requires actuarial valuation no less than triennially for public employers with less than 200 employees, retirees and terminated employees with vested benefits

Accounts, Trusts and Equivalent Arrangements



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Account Structures

| | <i>PAYGO</i> | <i>Dedicated Fund Balance</i> | <i>Trust</i> |
|---|----------------------------|--------------------------------------|---------------------------------------|
| Structure | Maintain current procedure | Earmark assets in General Fund | Set aside assets in irrevocable trust |
| Requires Separate Account | x | ? | ☑ |
| Addresses Concerns of External Financial Statement Users | x | ? | ☑ |
| Provides Balance Sheet Offset to OPEB Liability | x | x | ☑ |
| Allows for Use of Relatively Higher Discount Rate | x | x | ☑ |
| Allows Cash Flow Flexibility and Use for Non-OPEB Expenses | ☑ | ☑ | x |

Common Trust Types

- **VEBA** Voluntary Employees' Beneficiary Association
 - Life, sickness, accident or other benefits
 - Non-discrimination requirements can be cumbersome
- **401(h)** Separate account under a pension plan
 - Medical benefits for retired employees and beneficiaries
 - OPEB contribution may be no more than 1/3 of annual pension contribution
- **Section 115** “Integral part” or “essential government function” trusts
 - Most flexible trust option
 - Used for a government purpose

Trust Structures

| | VEBA | 401(h) | Section 115 |
|--|---------------------------------|--------------------------------------|------------------------------------|
| Structure | Voluntary adoption by employers | Separate account under pension trust | Integral Part Trust - Governmental |
| No IRS Approval Required | x | x | ☑ |
| No IRS Annual Filings | x | x | ☑ |
| No Contribution Caps | x | x | ☑ |
| Accounting and Non-discrimination Flexibility | x | x | ☑ |
| Investment Earnings Non-taxable | ☑ | ☑ | ☑ |
| Benefits Non-taxable | ☑ | ☑ | ☑ |

OPEB Trust Approaches

Association Model

Group Model

Individual Client Model

Group or Multi-Employer Trust

Individual Trust

No direct employer control of assets

- Requires a sponsoring body to oversee Trust
- Restrictions are developed by the Sponsor
- Can be low cost
- No ability to customize by client

- Requires constitution of a Board to oversee Trust
- Restrictions are developed by the Board
- Some ability to customize by client

- Requires development of an individual Trust
- No specific investment or withdrawal restrictions
- Full ability to customize by client

Virginia Code



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Virginia Code

- Allows for the establishment of local trusts to fund non-pension post employment benefits
- Validates previously established trusts or equivalents that are consistent with the Act

15.2-1544

- Counties, cities, towns, school divisions, and certain political subdivisions (governing bodies) may establish local trust or equivalent arrangement
- Equivalent arrangement is fund or similar arrangement that is Irrevocable, segregated, dedicated to providing benefits to retirees
- Governing body can use trust established by another governing body
- Schools can create independent trust
- Benefits can be revised and discontinued

Virginia Code

15.2-1545

- Defines OPEB in Virginia
 - Not a pension and may include medical, dental, and life insurance
 - Is defined by the governing body and must be strictly defined
 - May purchase insurance or be self insurance

15.2-1546

- Trust or equivalent arrangement assets
 - Exempt from state and local taxes
 - Not attachable

Virginia Code

15.2-1547 &-1548

- Designation of Trustee
 - Finance Board and membership thereof
 - Pension Board
 - Board members generally held harmless for investment losses
- Investment Manager required
 - May serve as Trustee
 - Selection not subject to Virginia Public Procurement Act

15.2-1549

- Prudent person standard used as investment guidelines for funds not necessary to pay immediate benefits
- Not limited by 2.2-4500

Funding Case Studies



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Case Study

Parameters

- OPEB Present Value of Benefits (PVB) Liability of:
 - \$29.7 million at 4% discount rate
 - \$12.3 million at 7% discount rate
- Annual Required Contribution (ARC)
 - \$2.1 million at 4% discount rate
 - \$1.0 million at 7% discount rate
- Estimated Benefit Payments over 30 Years:
 - \$30 million
- Asset Allocation assumes:
 - Current year benefits held in cash
 - Remaining portfolio is allocated 50% to equities and 50% to fixed income

Case Study

Scenarios

Low Relative Valuation Rates of Return

- PAYGO – no investment earnings

Normalized Relative Valuation Rates of Return

- Constant ARC – investment earnings
- 50% of PVB Prefund / 50% ARC – significant investment earnings

Scenario Residual Comparison

At Year 30

| | PAYGO | Constant ARC | 50% Prefund / 50% ARC |
|----------------------|----------------|--------------|-----------------------|
| Contributions | \$30 million | \$30 million | \$21 million |
| Benefits Paid | \$30 million | \$30 million | \$30 million |
| NOO | (\$72 million) | \$3 million | \$9 million |
| Residual Trust Value | None | \$30 million | \$27 million |

Asset Allocations

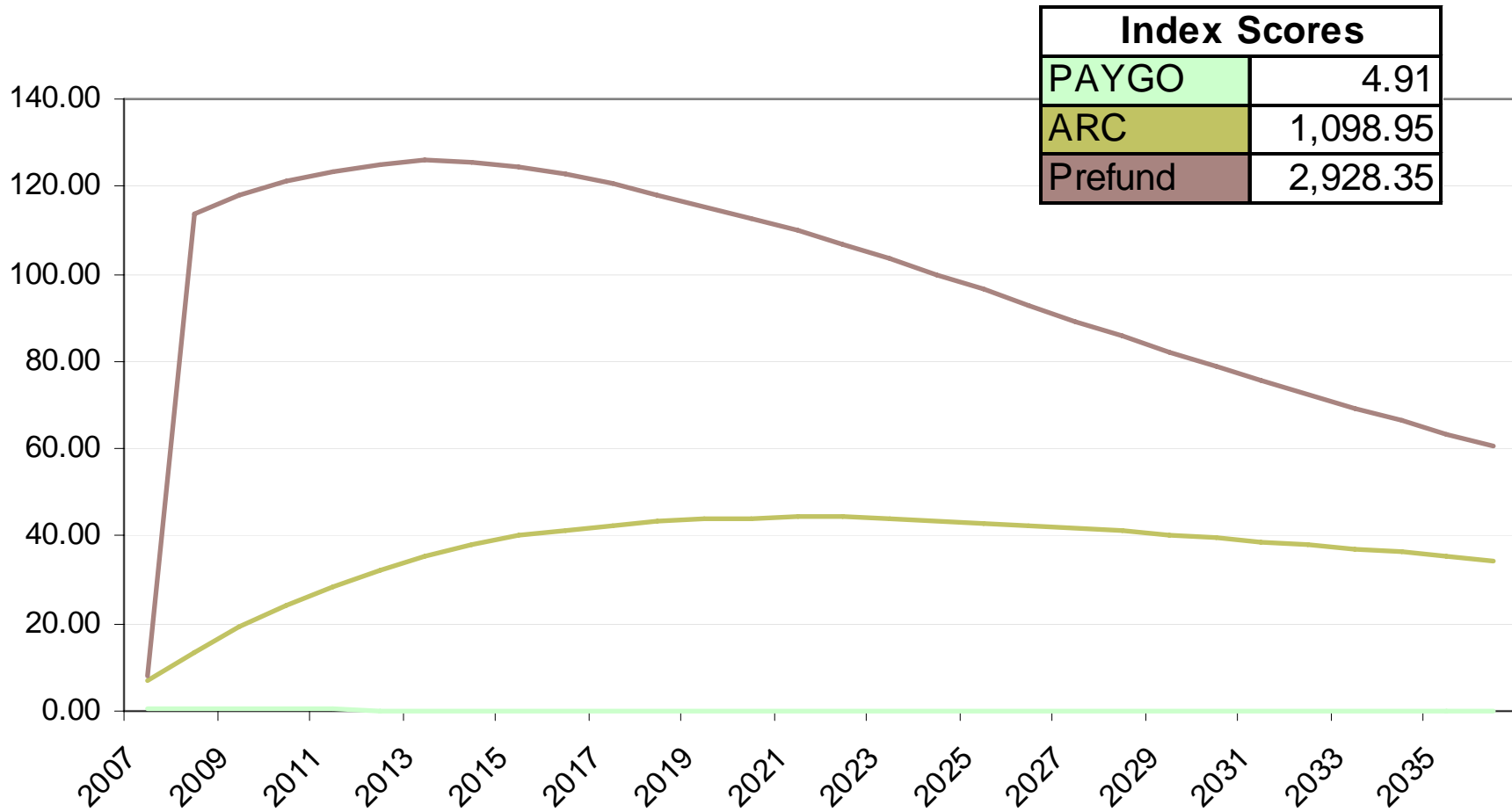
| | PAYGO | Constant ARC | 50% Prefund / 50% ARC |
|----------------|---------|--------------|-----------------------|
| Initial | 0/0/100 | 42/42/14 | 49/49/2 |
| After 10 Years | 0/0/100 | 44/44/12 | 45/45/10 |

Asset Allocations represent equities/fixed income/cash

Option Comparison

PFM OPEB Funding Index

% of Benefits Funded / Total Annual Cost



| Index Scores | |
|--------------|----------|
| PAYGO | 4.91 |
| ARC | 1,098.95 |
| Prefund | 2,928.35 |

Investment Considerations



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OPEB Asset Allocation Questions

- Will the Trust be used to pay benefits?
- What percentage of total fund will be in demand to pay benefits immediately?
- Without initial over funding, will a pension-like strategy work or will it be too risky?
- What is the level of certainty regarding growth of benefits?
- What asset allocation will be required to meet your actuarial discount rate assumptions?
- Is the plan a terminal funding plan, thus having different asset allocation needs than “perpetual” or living plans?
- Asset allocation will influence probability of meeting actuarial discount rate

Diversification: There is no substitute

Annual Index Returns (1992-2006)

| 1992 | 1993 | 1994 | 1995 | 1996 | 1997 | 1998 | 1999 | 2000 | 2001 | 2002 | 2003 | 2004 | 2005 | 2006 |
|---------------------------|---------------------------|---------------------------|---------------------------|---------------------------|---------------------------|---------------------------|---------------------------|---------------------------|---------------------------|---------------------------|---------------------------|---------------------------|---------------------------|---------------------------|
| Russell 2000 Value | MSCI EAFE | MSCI EAFE | Russell 1000 Value | NAREIT Equity | Russell 1000 Value | Russell 1000 Growth | Russell 2000 Growth | NAREIT Equity | Russell 2000 Value | Lehman Brothers Aggregate | Russell 2000 Growth | NAREIT Equity | MSCI EAFE | NAREIT Equity |
| 29.15% | 32.57% | 7.78% | 38.36% | 35.27% | 35.18% | 38.71% | 43.09% | 26.36% | 14.03% | 10.27% | 48.54% | 30.69% | 13.54% | 35.06% |
| NAREIT Equity | HFRI Fund of Funds | NAREIT Equity | S&P 500 Index | Russell 1000 Growth | S&P 500 Index | S&P 500 Index | Russell 1000 Growth | Russell 2000 Value | NAREIT Equity | NAREIT Equity | Russell 2000 Value | Russell 2000 Value | NAREIT Equity | MSCI EAFE |
| 14.59% | 26.32% | 3.17% | 37.58% | 23.12% | 33.36% | 28.58% | 33.16% | 22.83% | 13.93% | 3.81% | 46.03% | 22.25% | 12.17% | 26.34% |
| Russell 1000 Value | Russell 2000 Value | Russell 1000 Growth | Russell 1000 Growth | S&P 500 Index | Russell 2000 Value | MSCI EAFE | MSCI EAFE | Lehman Brothers Aggregate | Lehman Brothers Aggregate | HFRI Fund of Funds | MSCI EAFE | MSCI EAFE | HFRI Fund of Funds | Russell 2000 Value |
| 13.58% | 23.86% | 2.62% | 37.18% | 22.96% | 31.78% | 20.00% | 26.96% | 11.63% | 8.42% | 1.02% | 38.59% | 20.25% | 7.49% | 23.48% |
| HFRI Fund of Funds | NAREIT Equity | S&P 500 Index | Russell 2000 Growth | Russell 1000 Value | Russell 1000 Growth | Russell 1000 Value | HFRI Fund of Funds | Russell 1000 Value | HFRI Fund of Funds | Russell 2000 Value | NAREIT Equity | Russell 1000 Value | Russell 1000 Value | Russell 1000 Value |
| 12.33% | 19.65% | 1.32% | 31.04% | 21.64% | 30.49% | 15.63% | 26.47% | 7.02% | 2.80% | -11.43% | 38.47% | 16.49% | 7.05% | 22.21% |
| Russell 2000 Growth | Russell 1000 Value | Russell 2000 Value | Russell 2000 Value | Russell 2000 Value | NAREIT Equity | Lehman Brothers Aggregate | S&P 500 Index | HFRI Fund of Funds | Russell 1000 Value | Russell 1000 Value | Russell 1000 Value | Russell 2000 Growth | Russell 1000 Growth | S&P 500 Index |
| 7.77% | 18.07% | -1.55% | 25.75% | 21.37% | 20.26% | 8.67% | 21.04% | 4.07% | -5.59% | -15.52% | 30.02% | 14.31% | 5.27% | 15.79% |
| S&P 500 Index | Russell 2000 Growth | Russell 1000 Value | Lehman Brothers Aggregate | HFRI Fund of Funds | HFRI Fund of Funds | Russell 2000 Growth | Russell 1000 Value | S&P 500 Index | Russell 2000 Growth | MSCI EAFE | Russell 1000 Growth | S&P 500 Index | S&P 500 Index | Russell 2000 Growth |
| 7.62% | 13.37% | -1.98% | 18.48% | 14.39% | 16.20% | 1.23% | 7.35% | -9.10% | -9.23% | -15.94% | 29.75% | 10.88% | 4.91% | 13.35% |
| Lehman Brothers Aggregate | S&P 500 Index | Russell 2000 Growth | NAREIT Equity | Russell 2000 Growth | Russell 2000 Growth | HFRI Fund of Funds | Lehman Brothers Aggregate | MSCI EAFE | S&P 500 Index | S&P 500 Index | S&P 500 Index | HFRI Fund of Funds | Russell 2000 Value | HFRI Fund of Funds |
| 7.40% | 10.08% | -2.44% | 15.27% | 11.32% | 12.93% | -5.11% | -0.83% | -14.17% | -11.88% | -22.09% | 28.69% | 6.86% | 4.70% | 10.44% |
| Russell 1000 Growth | Lehman Brothers Aggregate | Lehman Brothers Aggregate | MSCI EAFE | MSCI EAFE | Lehman Brothers Aggregate | Russell 2000 Value | Russell 2000 Value | Russell 1000 Growth | Russell 1000 Growth | Russell 1000 Growth | HFRI Fund of Funds | Russell 1000 Growth | Russell 2000 Growth | Russell 1000 Growth |
| 4.99% | 9.75% | -2.92% | 11.21% | 6.05% | 9.68% | -6.46% | -1.48% | -22.42% | -20.42% | -27.88% | 11.61% | 6.30% | 4.14% | 9.09% |
| MSCI EAFE | Russell 1000 Growth | HFRI Fund of Funds | HFRI Fund of Funds | Lehman Brothers Aggregate | MSCI EAFE | NAREIT Equity | NAREIT Equity | Russell 2000 Growth | MSCI EAFE | Russell 2000 Growth | Lehman Brothers Aggregate | Lehman Brothers Aggregate | Lehman Brothers Aggregate | Lehman Brothers Aggregate |
| -12.18% | 2.87% | -3.48% | 11.10% | 3.61% | 1.78% | -17.50% | -4.62% | -22.43% | -21.44% | -30.26% | 4.10% | 4.34% | 2.53% | 4.33% |

Source: Ibbotson Associates

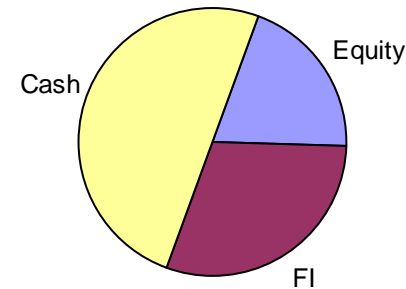


Low Initial Funding

- 20/80 overall asset allocation

- Very high liquidity requirement
- Very conservative risk profile

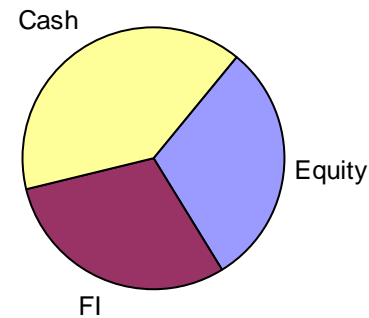
20/30/50 Allocation



- 30/70 overall asset allocation

- High liquidity requirement
- Conservative risk profile

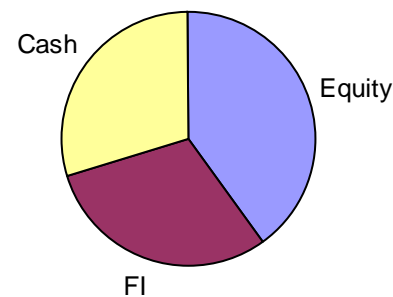
30/30/40 Allocation



- 40/60 overall asset allocation

- Moderate liquidity requirement
- Moderate risk profile

40/30/30 Allocation

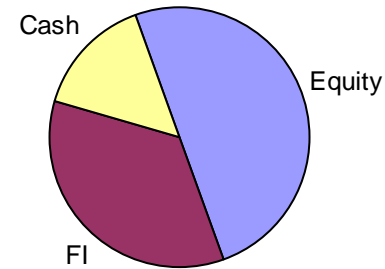


Moderate to High Initial Funding

- 50/50 overall asset allocation

- Moderate liquidity requirement
- Moderate risk profile

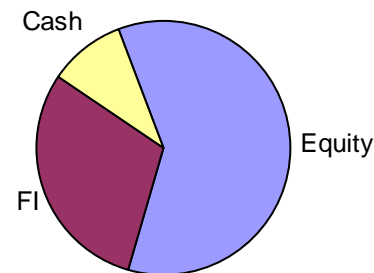
50/35/15 Allocation



- 60/40 overall asset allocation

- Moderate to low liquidity requirement
- Moderate risk profile

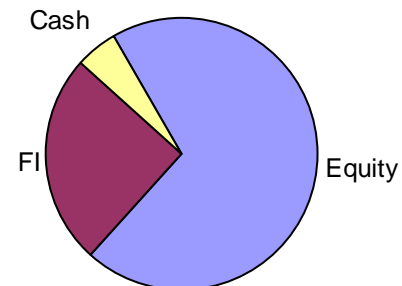
60/30/10 Allocation



- 70/30 overall asset allocation

- Low liquidity requirement
- Moderately high risk profile

70/25/5 Allocation



Historical Probability of Success

| <i>Equity / Fixed Income / Cash*</i> | <i>20 / 30 / 50</i> | <i>30 / 30 / 40</i> | <i>40 / 30 / 30</i> | <i>50 / 35 / 15</i> | <i>60 / 30 / 10</i> | <i>70 / 25 / 5</i> |
|--|---------------------|---------------------|---------------------|---------------------|---------------------|--------------------|
| Geometric Mean (%) - Annualized | 8.18 | 8.73 | 9.25 | 9.82 | 10.21 | 10.57 |
| Standard Deviation (%) - Annualized | 4.26 | 5.76 | 7.35 | 9.13 | 10.65 | 12.22 |
| 1 Year Rolling Periods | | | | | | |
| # of 1 Year Periods | 409 | 409 | 409 | 409 | 409 | 409 |
| # of Positive Periods | 394 | 378 | 364 | 354 | 338 | 331 |
| # of Negative Periods | 15 | 31 | 45 | 55 | 71 | 78 |
| Best 1 Year Period % annualized return | 25.56% | 30.35% | 35.30% | 41.56% | 45.73% | 50.02% |
| Worst 1 Year Period % annualized return | -5.21% | -10.05% | -14.82% | -20.07% | -24.17% | -28.20% |
| Achieved Return > 7.0% annualized return | 58.92% | 61.12% | 61.86% | 63.81% | 64.06% | 64.55% |
| 5 Year Rolling Periods | | | | | | |
| # of 5 Year Periods | 361 | 361 | 361 | 361 | 361 | 361 |
| # of Positive Periods | 361 | 361 | 361 | 361 | 361 | 360 |
| # of Negative Periods | 0 | 0 | 0 | 0 | 0 | 1 |
| Best 5 Year Period % annualized return | 15.67% | 17.15% | 19.24% | 21.72% | 23.46% | 25.21% |
| Worst 5 Year Period % annualized return | 3.08% | 2.70% | 2.17% | 1.83% | 0.88% | -0.14% |
| Achieved Return > 7.0% annualized return | 75.07% | 76.18% | 76.73% | 76.18% | 76.45% | 76.18% |
| 10 Year Rolling Periods | | | | | | |
| # of 10 Year Periods | 301 | 301 | 301 | 301 | 301 | 301 |
| # of Positive Periods | 301 | 301 | 301 | 301 | 301 | 301 |
| # of Negative Periods | 0 | 0 | 0 | 0 | 0 | 0 |
| Best 10 Year Period % annualized return | 12.63% | 13.44% | 14.24% | 15.54% | 16.38% | 17.22% |
| Worst 10 Year Period % annualized return | 5.65% | 6.16% | 6.50% | 6.03% | 5.84% | 5.55% |
| Achieved Return > 7.0% annualized return | 83.06% | 92.36% | 95.35% | 96.68% | 96.68% | 96.68% |

Source: Ibbotson

Data from 1/1972 through 12/2006

* Analysis is based upon historical returns for the S&P 500 Index (Equity), Lehman Brothers Aggregate (Fixed-Income), and the Ibbotson 1 Month Treasury Bill Index for 1972 – 1977 and the Merrill Lynch 3 Month Treasury Bill Index from 1977 – present (Cash).



Commonwealth OPEB Management Program



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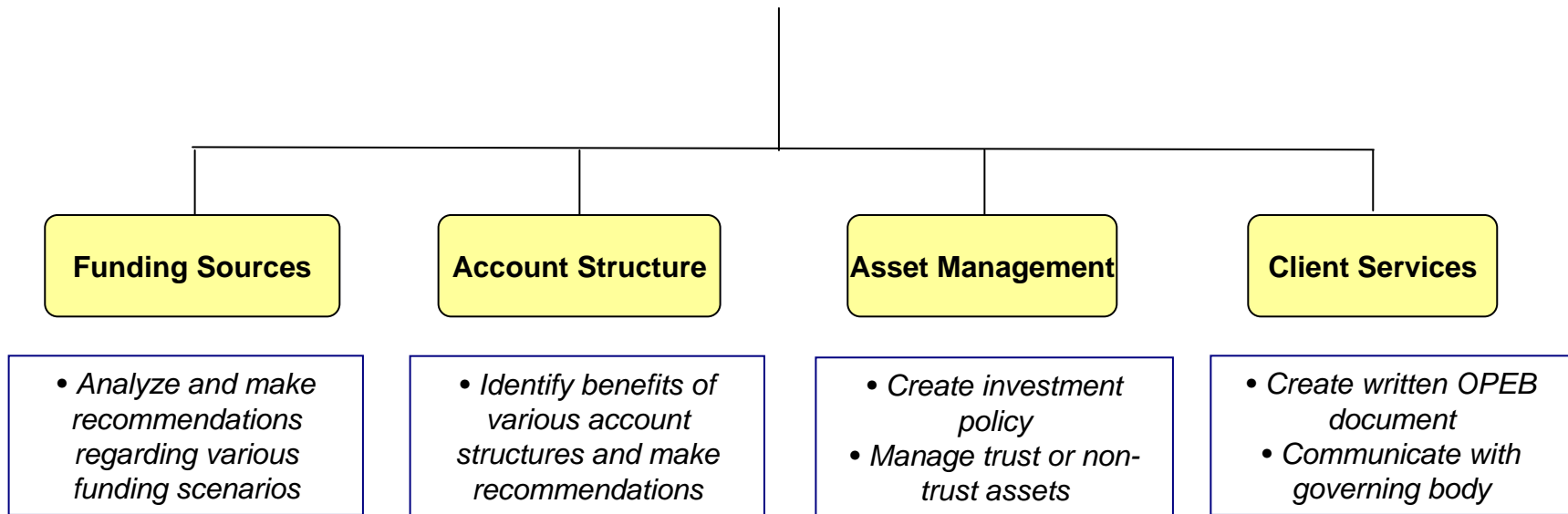
Comprehensive Solutions



Trust Sponsor



Commonwealth OPEB
Management Program



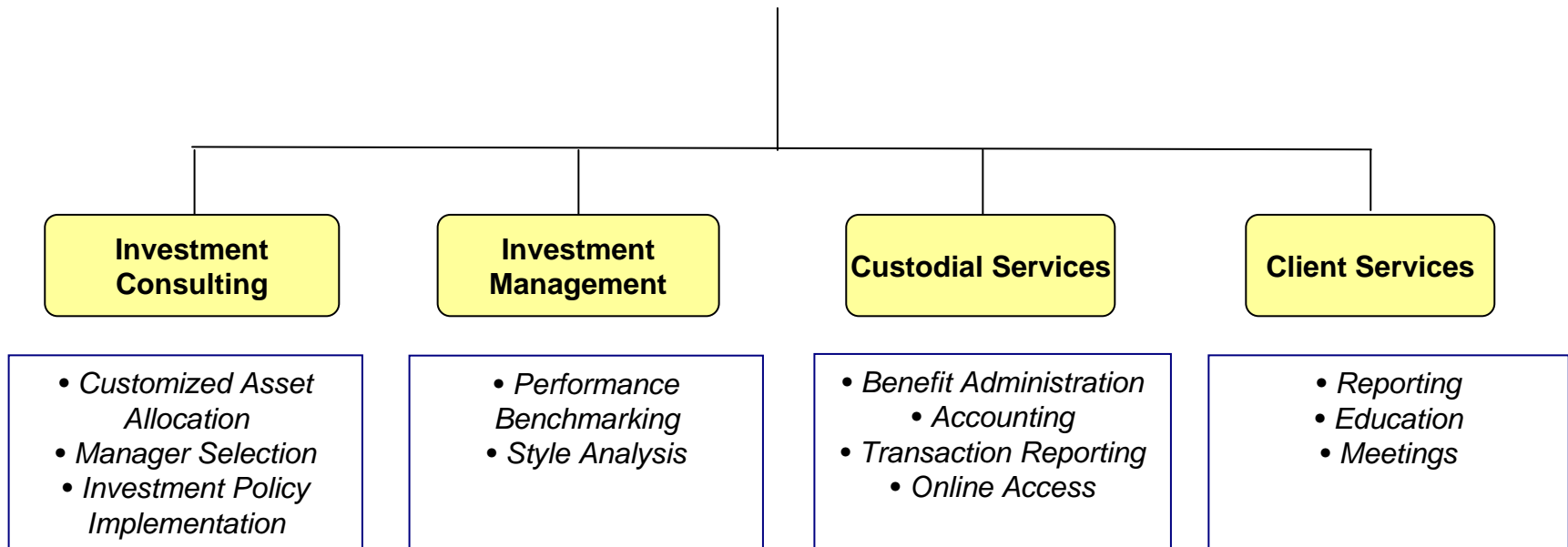
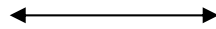
Asset Management



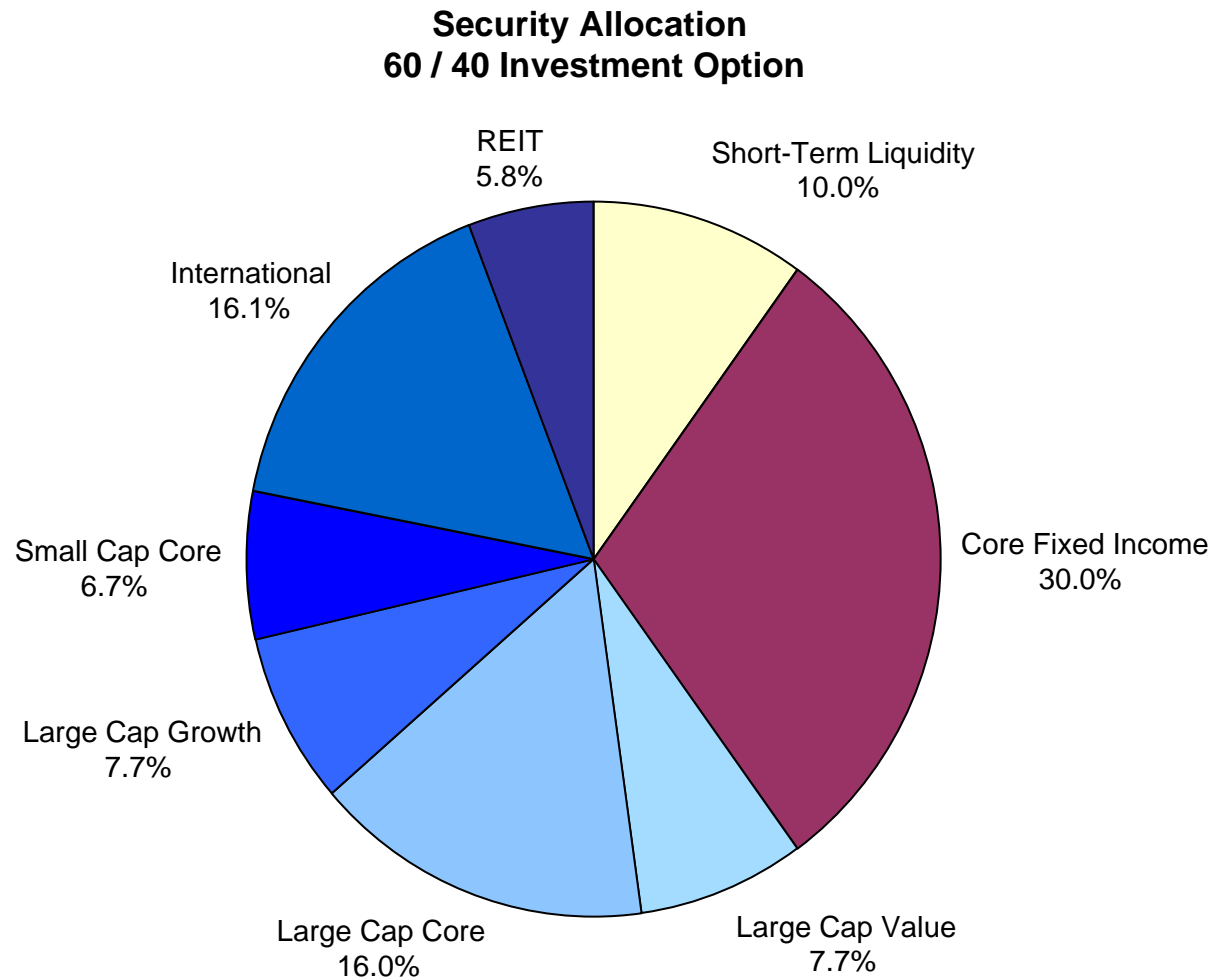
Trust Sponsor



Commonwealth OPEB
Management Program



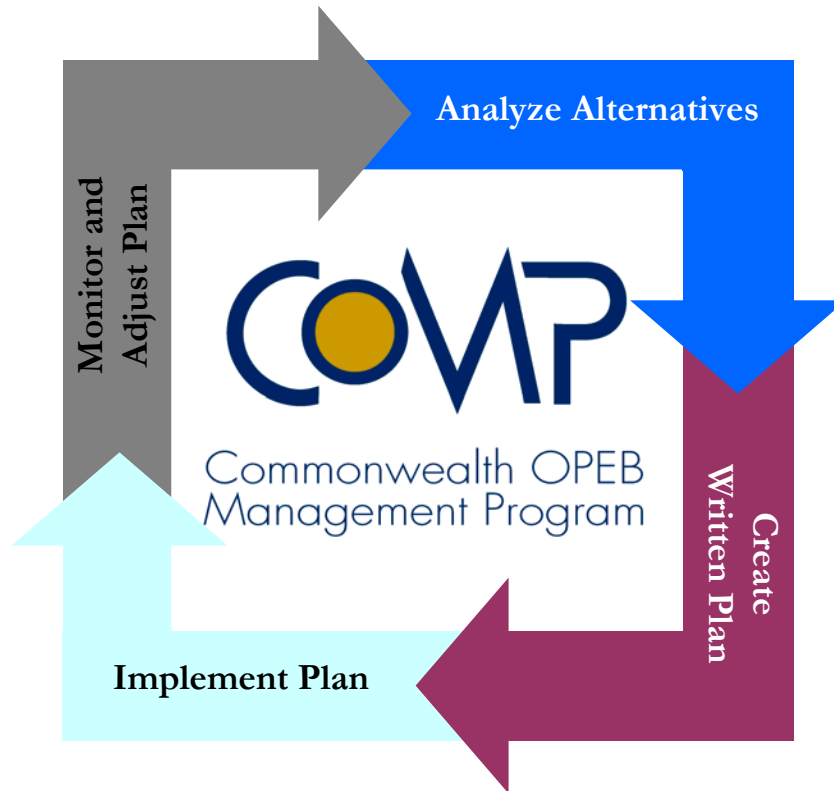
Sample Security Allocation



Scope of Services

- Create the decision-making process and timeline
- Produce OPEB Program Management Report
- Setup OPEB Fund
- Develop investment management framework
- Invest the funds
- Provide ongoing services

Comprehensive OPEB Management Services



Disclaimers

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