CDIAC and CMTA

Advanced Public Funds Investing Case Study

January 18, 2018

Jeff Probst, CFA
VP, Portfolio Manager

Ned Connolly, CCM
SVP, Relationship Manager

Value of an Investment Plan

- Provides discipline in managing risk
- Helps manage return expectations
- Establishes accountability
- Promotes communication

Portfolio Management Considerations

1. What are the objectives of the investment program

2. What are the investment constraints
    a. State Statutes and/or Code
    b. Investment Policy
    c. Government's risk tolerances
    d. Investment staff experience

3. What strategies can be implemented that achieve stated objectives and are compliant with constraints

Determining Portfolio Structure

1. Cash Flow Analysis

   a. Identifies near-term (6-12 months) funding needs, trends for high and low balances and seasonal patterns

2. Liquidity Portfolio

   a. Often expressed as percentage (e.g. 10-20%) of total portfolio

   b. Typically invested in:

      I. Liquidity accounts: LGIPs, MMMFs, Bank Accounts

      II. Money market instruments: T-Bills, Discount Notes, Commercial Paper

3. Core/Reserve Portfolio(s)

   a. Invested longer-term and more diversified for potential for higher earnings and principal growth

Determining Appropriate Strategies

1. Passive or Active
2. Interest Rate Exposure
   a. Maximum maturity
   b. Weighted average maturity
   c. Weighted average duration
3. Credit Exposure (asset classes)
   a. Treasuries, agencies, corporate securities, municipal securities, etc.
4. Benchmark Selection
   a. Total return market benchmarks
   b. Similar risk profile to investment style selected

Managing Risk

1. Interest Rate/Market Risk
    a. Portfolio duration
        i. Equal to; longer than; shorter than benchmark duration
    b. Maturity structure
        i. Ladder; Barbell; Bullet
2. Credit Risk
    a. Allocation limits to asset classes and issuers
    b. Minimum credit ratings
    c. Ongoing credit analysis and monitoring
3. Prepayment Risk
    a. Callable securities
    b. Amortizing securities
4. Liquidity Risk

External Factors

1. Economic Environment
   a. Expanding/contracting
   b. Employment
   c. Inflation
   d. Monetary Policy
   e. Fiscal Policy

2. Market Environment
   a. Shape of yield curve
   b. Interest rate expectations
   c. Spread analysis

3. Global Environment
   a. Economic
   b. Markets
   c. Geo-political

Oversight, Evaluation, Rebalancing

1. Ongoing Compliance Monitoring
2. Reporting
    a. Monthly accounting for investments
    b. Performance
        i. Weighted average yield
        ii. Total return
        iii. Comparison to benchmark total return
3. Rebalancing
    a. Bring back in line with duration target
    b. Reallocate sector percentages

Biographies

Jeff Probst, CFA
Vice President,
Portfolio Manager

Jeff Probst is a Vice President and Portfolio Manager at Chandler Asset Management, and is responsible for portfolio and fixed income research, implementing portfolio strategy, and trading securities for client accounts. Jeff joined Chandler as an Assistant Portfolio Manager in 2012. Prior to joining the firm, Jeff worked at BOFI Federal Bank in San Diego as an Investment Analyst where he analyzed mortgage backed securities and structured debt. He started his career at Western Asset Management as a mutual fund treasury administrator in their proprietary funds division.

Jeff earned his B.S. in Managerial Economics, as well as his M.S. in Agricultural and Resource Economics, from the University of California, Davis.

Jeff is an adjunct instructor in the Finance Department at San Diego State University, where he teaches courses in Managerial Economics and Portfolio Management. He holds the designation of Chartered Financial Analyst.

Ned Connolly, CCM
Senior Vice President,
Relationship Manager

Ned Connolly is Senior Vice President and Relationship Manager. He is a member of the firm's Relationship Management team which develops client relationships and coordinates the delivery of services related to the review and implementation of recommended practices. Ned works with public agencies in writing and revising investment policies and procedures, developing cash flow projections and providing investment education for finance staff.

Ned joined the firm in 2004. He has 33 years of experience in the investment industry in the areas of institutional fixed-income investing and portfolio management. Ned has been a member of the Government Finance Officers Association's (GFOA) Committee on Treasury and Investment Management. He has spoken on a variety of investment topics before numerous regional and national organizations.

Ned received his B.A. from Boston College and holds the designation of permanent Certified Cash Manager (CCM) through the Association for Financial Professionals.

Disclosure

The information herein is provided for informational purposes only and should not be construed as a recommendation of any security, strategy or investment product, nor an offer or solicitation for the purchase or sale of any financial instrument. References to asset classes, securities, portfolio structure, or strategies are for informational purposes and do not imply that managing portfolios with those securities will achieve comparable returns. Past performance is not indicative of future results. Unless otherwise noted, Chandler is the source of data contained in this presentation.

Fixed income investments are subject to interest, credit and market risk. Interest rate risk: the value of fixed income investments will decline as interest rates rise. Credit risk: the possibility that the borrower may not be able to repay interest and principal. Low rated bonds generally have to pay higher interest rates to attract investors willing to take on greater risk. Market risk: the bond market in general could decline due to economic conditions, especially during periods of rising interest rates.