PUBLIC FUNDS INVESTING 101
CAL CITIES ANNUAL CONFERENCE

Bob Shull
Senior Director, Investment Services
California CLASS / PTMA Financial Solutions

Brian Hextell
SVP, Institutional Portfolio Manager
PTMA Investment Advisors

SEPTEMBER 24, 2026

TODAY'S SPEAKERS

Bob Shull
Senior Director, Investment Services
California CLASS

Brian Hextell
SVP, Institutional Portfolio Manager
PTMA Investment Advisors

GOALS

California CLASS

Compliance	Safety	Strategy
Know and understand the California Government Code sections that govern public funds investing	Discuss best practices and key investment risks for public funds	Review common fixed income investment strategy concepts

Please refer to the disclaimer for important information about this presentation and/or data.

COMPLIANCE: THE "LAW"

WHAT IS "THE LAW?"

California Government Code

Local Agencies §50001-57607

§53600-53610 Investment of Surplus

§53630 – Deposit of Funds

§53600 – WHO DOES THIS APPLY TO?

Defines “local agency” to include:

- County
- City
- City and county
- School district
- Community college district
- Public district
- County board of education
- County superintendent of schools
- Public or municipal corporation

§53600.3 STANDARD OF PRUDENCE

Prudent Investor Standard

"When investing, reinvesting, purchasing, acquiring, exchanging, selling, or managing public funds, a trustee shall act with care, skill, prudence, and diligence under the circumstances then prevailing, including, but not limited to, the general economic conditions and the anticipated needs of the agency, that a prudent person acting in a like capacity and familiarity with those matters would use in the conduct of funds of a like character and with like aims, to safeguard the principal and maintain the liquidity needs of the agency."

§53600.3 OBJECTIVES

- **Safety of Principal**: Safety of principal is the foremost objective of the investment program. Investments shall be undertaken in a manner that seeks to ensure the preservation of capital in the overall portfolio. To attain this objective, **diversification** of security types, sectors, issuers, and maturities is necessary in order that potential losses on individual securities do not exceed the income generated from the remainder of the portfolio.

- **Liquidity**: The investment portfolio **shall be structured to timely meet expected cash outflow needs and associated obligations which might be reasonably anticipated.** This objective shall be prioritized by matching investment maturities with forecasted

- **Investment Income**: The investment portfolio shall be designed to **earn a market rate of investment income** in relation to prevailing budgetary and economic cycles, while taking into account investment risk constraint, and liquidity needs of the portfolio.

§53601 AUTHORIZED INVESTMENTS

Demand Deposit or Cash Equivalent Accounts

Transactional Checking Accounts

- Payroll, A/P

Earnings Credit Rate

- Rates applied to non-interest-bearing balances to offset service charges
- Used to calculate compensating balance
- Typically settles monthly

SEC Registered Money Market Funds

- Various styles
  - Prime
  - Government
  - Muni
- Market-based daily rate
- Safety and liquidity focused
- Easy to use
- Not a bank deposit; not FDIC insured

§53601 AUTHORIZED INVESTMENTS

California CLASS

Local Government Investment Pools (LGIPs)

- Pooling resources to potentially achieve higher rates of return
- Various styles
  - Prime (including corporates)
  - Government
- Own shares of beneficial interest in the pool/fund
- Not a bank deposit; not FDIC insured
- Professional Management

Stable NAV

- Maintain $1 in/$1 out
- Highest S&P rating is "AAAm"
- Short-term
- WAM to Reset < 60 days

Variable NAV

- Fluctuating NAV
- Add Interest Rate Risk
- Designed to outperform over time
- Highest S&P rating is "AAAf/S1"
- Short to Intermediate
- WAM for bond fund > 90 days

§53601 AUTHORIZED INVESTMENTS

California CLASS

US Treasuries

- Direct Obligations of the Federal Government
- Now rated AA+
- Treasury Bills, Notes, Bonds
- Bills sold at a discount
- Notes and Bonds pay a coupon and mature on the 15th or last day of the month

Federal Agency or GSE Bonds

- Agency bonds are obligations of the Federal Government
    - GNMA
- GSEs are implicit obligations of the U.S.
    - FHLB, FNMA, FHLMC, FFCB
- Structures include Callables and MBS

Bankers Acceptances / CDs

- Max 30% of assets
- BAs: Short-term, bank financial instrument
    - Facilitate transactions
    - Discount notes
- CDs: Savings notes issued by bank
    - Deposit securities
    - Pay interest

§53601 AUTHORIZED INVESTMENTS

California CLASS

Municipal Securities

- Obligation of a state, county, city, village, school district, or other special purpose district
- General Obligation
  - Backed by the full faith & credit of the issuing entity – and its taxing power
- Revenue
  - Financed by a specific revenue source (i.e. tolls on a highway)

§53601 AUTHORIZED INVESTMENTS

Commercial Paper

- Short-term unsecured promissory note
  - US Corporation with assets of $500mm or more
  - Prime quality A-1
  - Max 397 days
- Default risk present
- Industrial, financial firm issuers
- Typically a higher return, with slightly higher risk
- Max 25% of assets (for most cities)

Corporate Bonds/Notes

- Similar to CP, but with maturities > 1 year
- Medium Term Notes
- Rating category of A or better required
- Max 30% of assets (for most cities)
- Higher returns compared to government securities
- Default risk present
- Greatly varied risk and return

§53601 AUTHORIZED INVESTMENTS

Repurchase Agreements

- Short-term (overnight to 6 months) secured loan
- Collateralized at 102%

Mortgage Pass-throughs, CMOs, MBS

- Investments secured by a collection of financial products – mortgages
  - Rated AA or better
  - Maximum maturity of 5 years or less
  - Max 20% assets if not issued by an Agency or GSE
- Most frequently issued by Federal Agencies or GSE's

§53601 ENTITIES

Bank Trust / Custody: Securely holds and safeguards your securities (e.g. bonds, cash) to prevent loss or theft. They act as an independent third-party separating asset safekeeping from investment management, providing trade settlement, income collection, and detailed tax reporting.

Investment Managers: A financial professional or firm hired to handle an investor's portfolio, executing trades and making strategic decisions to grow assets. Also a fiduciary – legally obligated to put your best interests first.

Brokers: A licensed professional or firm that acts as a middleman, allowing you to buy and sell securities like stocks, bonds, and ETFs on financial markets

Counterparties: The other entity on the opposite side of a financial transaction

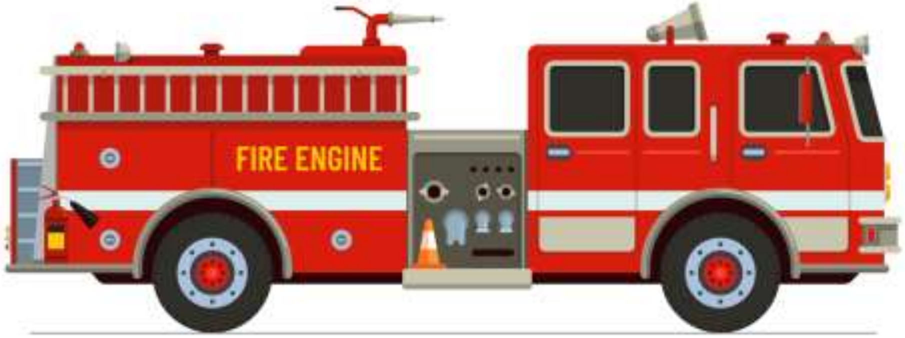
§53601.5 AUTHORIZED FINANCIAL INSTITUTIONS

- Issuer
- State Licensed Broker/Dealer
- Federally Regulated Securities Firm
- National or State Chartered Bank
- Savings or Federal Association
- Primary Dealers
  - Ex. Barclays Capital, BofA Securities, etc.
  - https://www.newyorkfed.org/markets/primarydealers

§53601.6 PROHIBITED INVESTMENTS

- Inverse floaters
- Range notes
- Mortgage-derived, interest-only strips
- Any security that could result in zero-interest accrual if held to maturity
  - EXCEPTION for mutual funds and U.S. government securities
  - U.S. government securities exception sunsets January 1, 2031

SAFETY: THE "PROTECTION"



Please refer to the disclaimer for important information about this presentation and/or data.

INVESTMENT RISKS

Prudently Navigate Risk

1. Interest Rate Risk: Value fluctuations as rates change
2. Reinvestment Risk: Risk of lower yields when reinvesting proceeds
3. Credit Risk: Risk of issuer downgrade or default
4. Market Risk: Risk that broad economic or market events lowers securities values
5. Liquidity Risk: The inability to sell a security quickly without taking a price cut or paying an early withdrawal penalty
6. Headline Risk: Public perception driven by news or political developments

Please refer to the disclaimer for important information about this presentation and/or data.

INVESTMENT RISKS

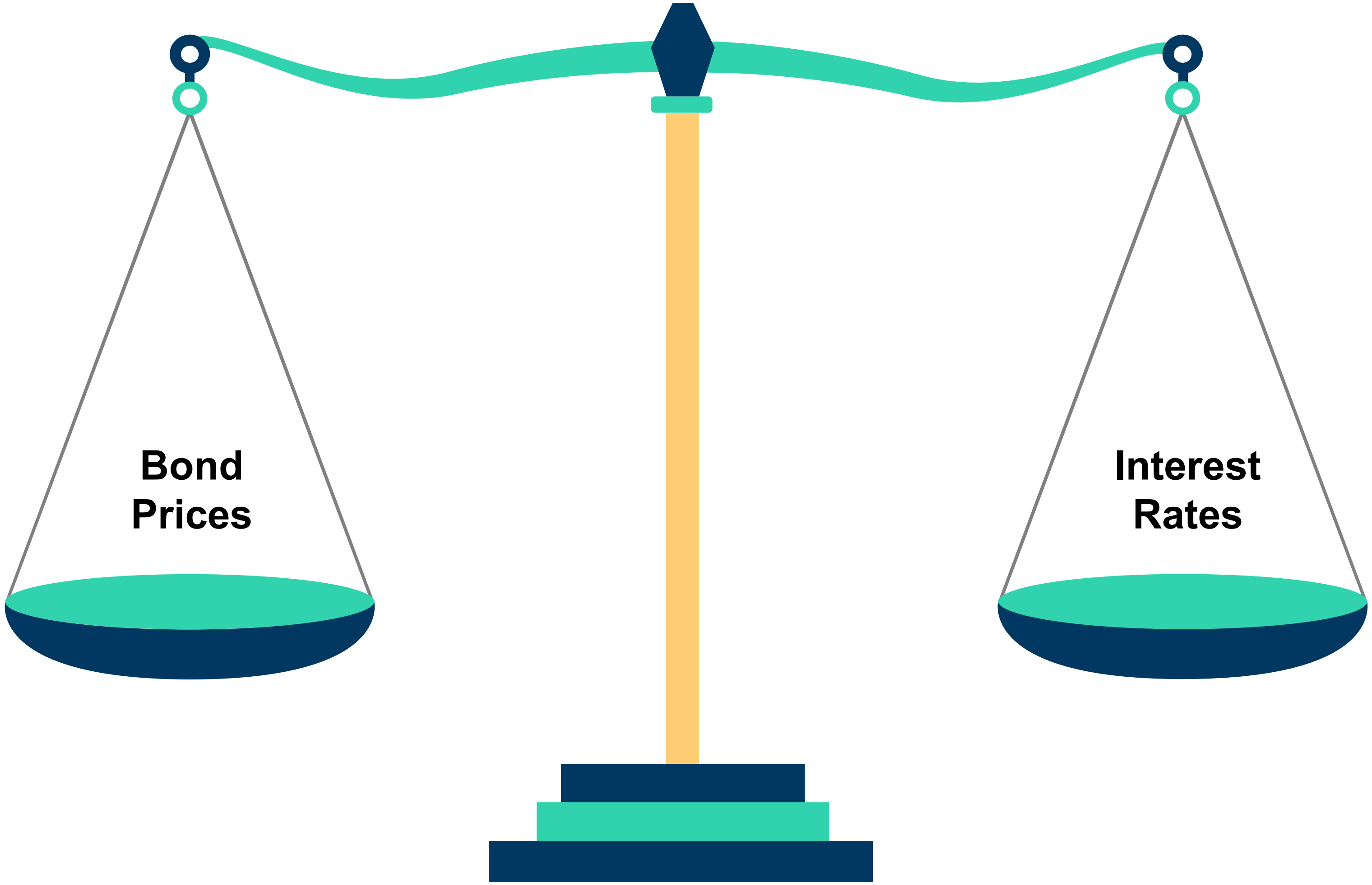
Interest Rate Risk

- Rising interest rates can lower bond prices creating unrealized losses
- Higher duration increases interest rate risk
- Changes in the shape of the yield curve can impact portfolio market values and returns

Reinvestment Risk

- Yields could be lower when reinvesting cash flows – market timing risk
- Callable bonds are called when interest rates fall resulting in reinvestment risk
- Investing to a shorter maturity than needed increases reinvestment risk

BOND PRICES AND CHANGES IN INTEREST RATES



Please refer to the disclaimer for important information about this presentation and/or data.

INVESTMENT RISKS

Credit Risk

- Downgrades in credit ratings
- Default Risk
- Wider credit spreads reducing a bond's market price
- Shifts in economic conditions
- Changes in an issuer's financial position

Default Risk

- Risk of an issuer failing to make timely payments
- Rare for investment grade securities
- Security downgrade is more likely than a default
- Monitor security credit quality and ratings continuously

BOND CREDIT RATINGS

<table>
<tr><th colspan="2">Moody's</th><th colspan="2">S&P</th><th colspan="2">Fitch</th><th colspan="2" rowspan="2">Rating description</th></tr>
<tr><th>Long-term</th><th>Short-term</th><th>Long-term</th><th>Short-term</th><th>Long-term</th><th>Short-term</th></tr>
<tr><td>Aaa</td><td rowspan="6">P-1</td><td>AAA</td><td rowspan="4">A-1+</td><td>AAA</td><td rowspan="4">F1+</td><td>Prime</td><td rowspan="10">Investment-grade</td></tr>
<tr><td>Aa1</td><td>AA+</td><td>AA+</td><td rowspan="3">High grade</td></tr>
<tr><td>Aa2</td><td>AA</td><td>AA</td></tr>
<tr><td>Aa3</td><td>AA−</td><td>AA−</td></tr>
<tr><td>A1</td><td>A+</td><td rowspan="2">A-1</td><td>A+</td><td rowspan="2">F1</td><td rowspan="3">Upper medium grade</td></tr>
<tr><td>A2</td><td>A</td><td>A</td></tr>
<tr><td>A3</td><td rowspan="2">P-2</td><td>A−</td><td rowspan="2">A-2</td><td>A−</td><td rowspan="2">F2</td></tr>
<tr><td>Baa1</td><td>BBB+</td><td>BBB+</td><td rowspan="3">Lower medium grade</td></tr>
<tr><td>Baa2</td><td rowspan="2">P-3</td><td>BBB</td><td rowspan="2">A-3</td><td>BBB</td><td rowspan="2">F3</td></tr>
<tr><td>Baa3</td><td>BBB−</td><td>BBB−</td></tr>
</table>

Please refer to the disclaimer for important information about this presentation and/or data.

INVESTMENT RISKS

California CLASS

Liquidity Risk

- Can you sell a security? At what price?
- Factors include low trading volume, market disruptions, economic conditions, etc.
- Inadequate available cash to meet cash needs
- Early withdrawal penalties for CD’s

Headline Risk

- News can negatively affect investment performance
- Information spreads through various channels faster than ever
- Recent example: Silicon Valley Bank

INVESTMENT POLICY: WHAT AND WHY

- A written investment policy is the single most important element in a public funds investment program
  - Defines primary objectives: safety, liquidity, and yield/income
  - Sets forth types and characteristics of eligible instruments, the investment process, and the management of the portfolio

- Can improve the quality of decisions and demonstrates a commitment to the fiduciary care of public funds, with emphasis on balancing safety of principal and liquidity with yield/income

- Adherence to an investment policy signals that an entity is well managed and is earning interest income suitable to its situation and economic environment

-GFOA Creating an Investment Policy Best Practices

Source: www.gfoa.org

California CLASS

Risk and Diversification

Investments held should be diversified to the extent practicable to control the risk of loss resulting from overconcentration of assets

Diversification ensures your portfolio composition structure actually results in a well-balanced, resilient portfolio

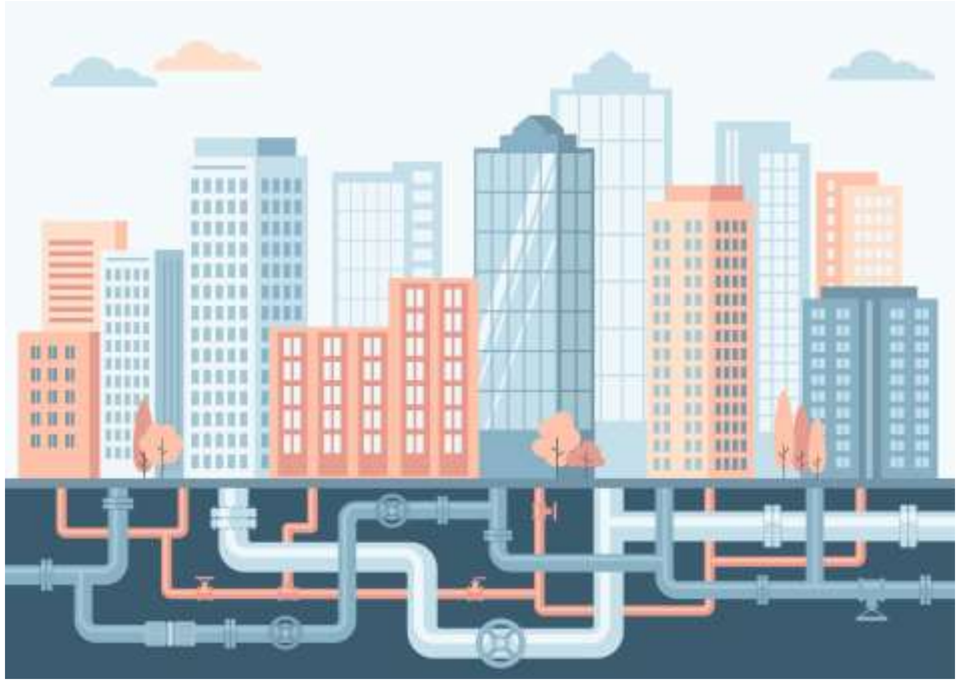
Ongoing review and adjustment - for example: A particular corporate issuer gets downgraded to the lowest allowable credit rating under policy

Risk & Diversification asks: Even though we are still in compliance, should we proactively reduce exposure to this issuer before further deterioration?

MANAGING INVESTMENT RISKS

1. Effective Investment Planning is the best way to manage risks
2. Match assets and liabilities
3. Diversify
4. Limit investments to types you thoroughly understand
5. Don’t try to time the market
6. Monitor credit ratings and/or utilize a Registered Investment Advisor

STRATEGY: THE "IDEAS"



YIELD AND RETURN

- Yield to Maturity (YTM) – Forward looking with assumptions
  - A bond’s anticipated rate of return based on the bond’s projected cash flows and price.
  - Mathematically, it is the discount rate at which the sum of all future cash flows (from coupons and principal repayment) equals the price of the bond.
- Book Yield
  - The yield at maturity at time of purchase
- Return – Backward looking based on results
  - The total amount of gain or loss on your investment for a period, expressed as a percent
  - Total return can be broken into income and price returns

INVESTMENT PLANNING PROCESS

Goals and Objectives	State Statute Safety, Liquidity, Return
Cash Flow Forecast	Asset-Liability Matching Identify Reserves
Investment Strategy Development	Investment Ladder Active Management
Diversification	Utilize Full Spectrum of Allowable Investments
Invest with a Purpose	Reduce Risk Enhance Returns

INVESTMENT CONCEPTS

Now that we have a better understanding of the law, and we have investment policy established...

01 How much can I invest?

02 How do I know how to choose maturity horizons?

03 How do I make payroll and have enough cash to cover debt service?

Cash Flow Forecasting

Please refer to the disclaimer for important information about this presentation and/or data.

CASH FLOW FORECAST OBJECTIVES

- Aim to increase investment earnings
- Reduce idle cash
- Reduce liquidity risk
- Reduce reinvestment risk

UNDERSTANDING CASH FLOW

History doesn't repeat itself...but it often does

How will projected cash flows change with the economic environment?

Do you have enough liquidity to meet expected outflows within the year?

Additional liquidity for a "what if?" scenario

Poor cash flow data can hurt

Too much liquidity can be costly

Please refer to the disclaimer for important information about this presentation and/or data.

INVESTMENT APPROACHES

Investment Approaches

- Buy and Hold:
  - Purchase high-quality securities and hold to maturity
  - Simplifies accounting and reduces reinvestment risk
  - Prioritizes stability and predictability

- Active Management:
  - Continuously evaluate market conditions and yield opportunities
  - Sell securities before maturity to take advantage of price appreciation
  - Adjust duration and sector exposures to align with economic trends
  - Requires more oversight but if done correctly offers the opportunity to capitalize on volatile markets

ONE APPROACH: LADDERING

A Time-Tested Framework for Public Funds

- Distribute maturities evenly over time to create regular reinvestment opportunities
- Reduces exposure to interest rate timing and provides consistent liquidity
- Can be effective in all rate environments:
  - Rates Fall: Locked in higher yields in longer maturities
  - Rates Stable: Longer maturities will enhance yield
  - Rates Rise: Reinvest at higher yields as bonds mature

DON'T LEAVE MONEY ON THE TABLE

Are You Optimizing Your Investment Program?

- Are my investment maturities aligned with projected liabilities?
- Does my current strategy optimize results across different economic and market scenarios?
- Do I have a process for regularly reviewing and rebalancing the portfolio?
- Am I maintaining excess liquidity that's reducing my overall return?

TIME VALUE OF MONEY

Should I wait to invest until rates rise?

- Time in the market is more important than timing the market
- Investment Amount: $10,000,000

Term	Rate	Income
1-Year	4.08%	$408,000
6-Month	3.97%	$198,500
Breakeven	4.19%	$209,500

For illustrative purposes only. Does not represent actual or expected performance.

DIVERSIFICATION MATTERS`

Mitigates Interest Rate Risk

As interest rates drop, existing fixed income securities with higher coupon rates become more valuable, but new issuances will offer lower yields. Diversifying across various fixed income instruments helps public governments manage and mitigate the risk of lower returns on new investments and potential capital losses on existing ones.

Enhances Yield Opportunities

Diversification into different types of fixed income securities (e.g., corporate bonds, municipal bonds, inflation-protected securities) allows governments to take advantage of varying interest rate environments and credit spreads, potentially improving overall yield in a declining rate environment.

Reduces Concentration Risk

Relying too heavily on a single type of fixed income security or issuer can expose public governments to significant risk if that segment underperforms. Diversification across multiple sectors, credit qualities, and maturities helps to spread risk and reduce the impact of any single investment's poor performance.

Please refer to the disclaimer for important information about this presentation and/or data.

DIVERSIFICATION MATTERS

Improves Liquidity Management

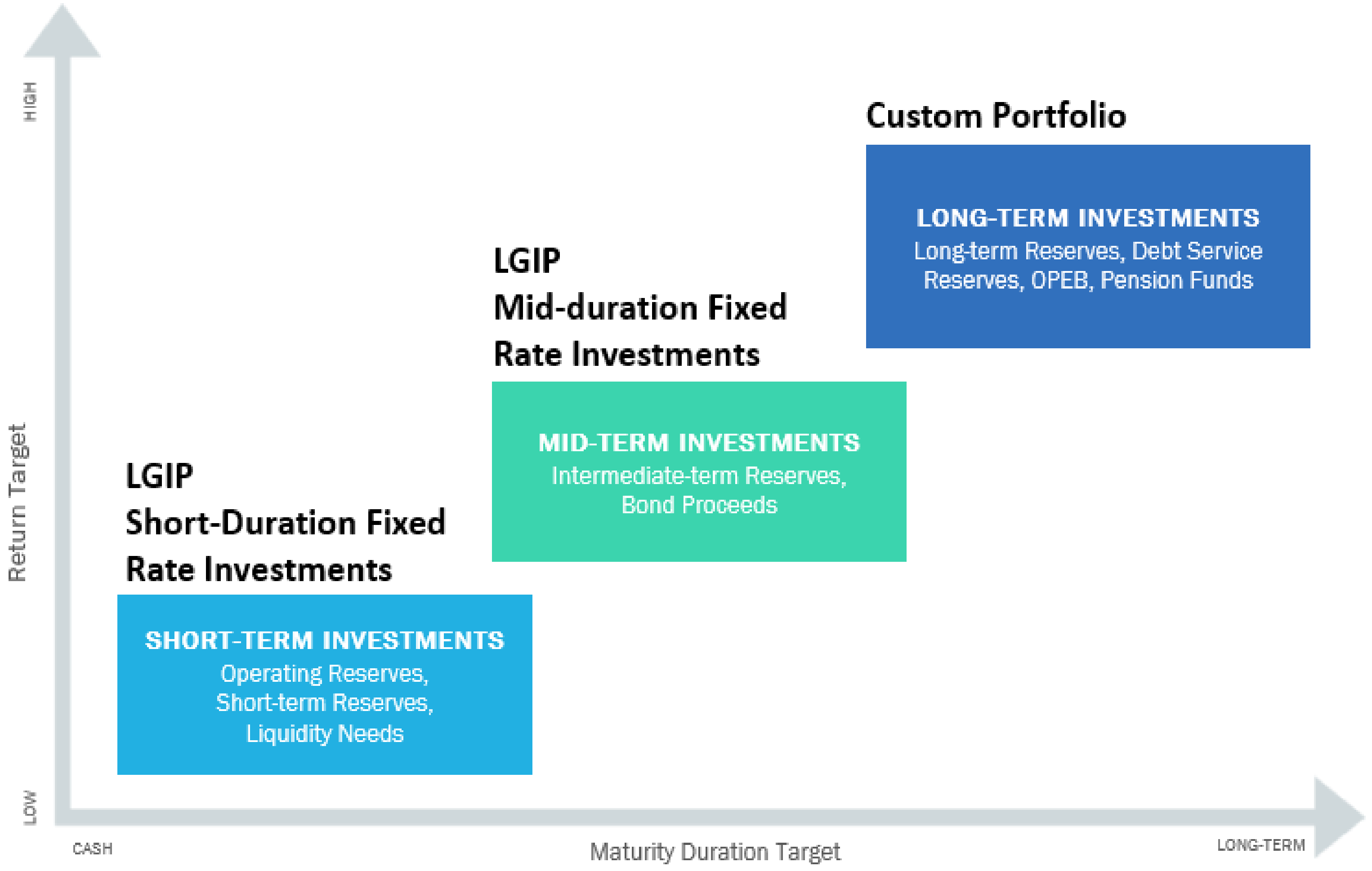
A diversified fixed income portfolio typically includes a mix of short-term and long-term securities, as well as varying credit qualities. This helps ensure that public governments can manage their liquidity needs effectively while still benefiting from potential returns as rates decline.

Facilitates Long-Term Stability

In a declining interest rate environment, longer-duration bonds may become more sensitive to rate changes. By diversifying across various durations and fixed income types, public governments can achieve a more balanced portfolio that provides stability and consistency in income, even as the rate environment evolves.

Please refer to the disclaimer for important information about this presentation and/or data.

INVEST WITH A PURPOSE



Please refer to the disclaimer for important information about this presentation and/or data.

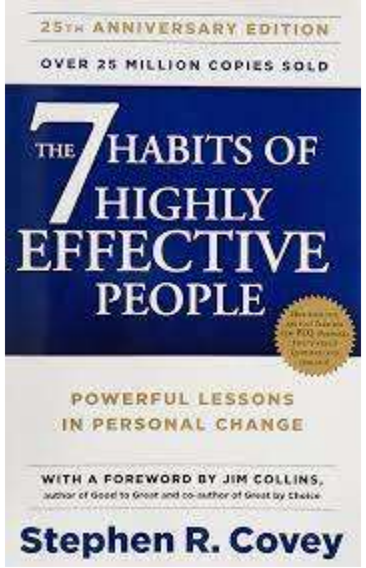
MATCHING INVESTMENTS WITH PURPOSE

Operating Funds: *(0-12 Months)*	• Treasury Bills • Agency Discount Notes • CDs • Commercial Paper • LGIPs
Intermediate-Term Reserves: *(1-3 Years)*	• CDs • Treasury Notes • Agency Notes • Taxable Municipal Bonds • Agency Mortgage-Backed Securities • Corporate Notes
Long-Term Investments: *(>3 Years)*	• Treasury Notes • Agency Notes • Taxable Municipal Bonds • Agency Mortgage-Backed Securities • Corporate Notes

Please refer to the disclaimer for important information about this presentation and/or data.

THE SEVEN HABITS OF HIGHLY EFFECTIVE INVESTMENT PROGRAMS

- Have a Detailed Asset/Liability Matching Model (aka: Cash Flow Model)
- Have a Responsible Amount of Interest Rate Risk and Credit Risk
- Don’t Try to Time the Market (Unrealized vs. Realized Gains and Losses)
- Have an Informed Opinion on Market Conditions
- Benchmark Your Investment Program and Portfolio
- Provide Quality, Timely, Transparent Reporting



The Investment Portfolio is One of the Only Areas of State and Local Governments Where Income Can Be Generated Without Charging Taxes or Fees to the Citizenry.

THANK YOU!

Bob Shull
Senior Director, Investment Services
California CLASS
bob.shull@californiaclass.com
(213) 378-2070

Brian Hextell
SVP, Institutional Portfolio Manager
PTMA Investment Advisors
brian.hextell@ptma.com
(630) 657-6485

DISCLAIMER

This presentation is for informational purposes only. The information contained herein has been obtained from sources that we believe to be reliable, but its accuracy and completeness are not guaranteed. The materials in the attached are opinions of PTMA and should not be construed as investment advice. Many factors affect performance including changes in market conditions and interest rates and in response to other economic, political, or financial developments. Performance comparisons will be affected by changes in interest rates. Investing involves risk including the possible loss of principal. The presentation is not a recommendation to buy, sell, implement, or change any securities or investment strategy, function, or process. Any financial and/or investment decision should be made only after considerable research, consideration, and involvement with an experienced professional engaged for the specific purpose. All comments and discussion presented are purely based on opinion and assumptions, not fact. These assumptions may or may not be correct based on foreseen and unforeseen events. All calculations and results presented and are for discussion purposes only and should not be used for making and calculations and/or decisions. PTMA is not a bank and your investment with PTMA is not insured or guaranteed by the Federal Deposit Insurance Corporation or any other government agency. **Past performance is not an indication of future performance. Any financial and/or investment decision may incur losses.**

Public Trust Advisors, LLC, PMA Financial Network, LLC, PMA Securities, LLC and PMA Asset Management, LLC are under common ownership as part of PTMA Financial Solutions, LLC ("PTMA"). Public Trust Advisors, LLC and PMA Asset Management, LLC, are two separate SEC registered investment advisers, both doing business as PTMA Investment Advisors. PMA Securities, LLC is a broker-dealer and municipal advisor registered with the SEC and MSRB and is a member of FINRA and SIPC. Registration with the SEC does not imply a certain level of skill or training. Marketing, securities, institutional brokerage services and municipal advisory services are offered through PMA Securities, LLC. PTMA Investment Advisors provides investment advisory services to local government investment pools ("Funds") and separate accounts. All other products are provided by PMA Financial Network, LLC.

There is no guarantee that investment strategies will achieve the desired results under all market conditions, and each investor should evaluate its ability to invest long-term, especially during periods of a market downturn. This information may contain statements, estimates, or projections that constitute “forward-looking statements” as defined under U.S. federal and other jurisdictions’ securities laws. Any such forward looking statements are inherently speculative and are based on currently available information, operating plans, and projections about future events and trends. As such, they are subject to numerous risks and uncertainties.

LEGAL DISCLAIMER

The information provided in this presentation does not, and is not intended to, constitute legal advice; instead, all information, content, and materials discussed herein are for general informational purposes only. Information in this presentation may not constitute the most up-to-date legal or other information. Viewers of this presentation should contact their attorney to obtain advice with respect to any particular legal matter. No reader, user, or audience member should act or refrain from acting on the basis of information in this presentation without first seeking legal advice from counsel in the relevant jurisdiction. Only your individual attorney can provide assurances that the information contained herein – and your interpretation of it – is applicable or appropriate to your particular situation.

The views expressed at, or through, this presentation are those of the presenter(s) in their individual capacities only – not those of their respective employers, PTMA Financial Solutions (“PTMA”), or affiliates of PTMA. All liability with respect to actions taken or not taken based on the contents of this presentation are hereby expressly disclaimed. The content in this presentation is provided "as is;" no representations are made that the content is error-free.

The information presented should not be used in making any investment decisions. This material is not a recommendation to buy, sell, implement, or change any securities or investment strategy, function, or process. The foregoing is for informational purposes only and should not be considered a solicitation of investment advisory services.