

# City of San Mateo

## *Investment Advisory Services*

January 9, 2020

**Jayson Schmitt, CFA**  
*Executive Vice President,  
Portfolio Manager*

**Jeff Probst, CFA**  
*Vice President,  
Portfolio Manager*

**Carlos Oblites**  
*Senior Vice President,  
Portfolio Strategist*





## **SECTION 1**

**Partnering with Chandler Asset Management**

## **SECTION 2**

**Addressing the City's Questions**

## **SECTION 3**

**Client Service, Compliance & Reporting**

## **SECTION 4**

**Supplemental**

## **SECTION 5**

**Biographies & Disclosures**

## Section 1 | Partnering with Chandler Asset Management



*“We believe if we do what is right for our clients, our own success will follow.”*

## ■ *California Based, Independent & Employee-Owned*

- Fixed income investment specialist since 1988
- Founded by public investment professionals
- Serve 145 public entities including over 60 cities
- Headquartered in Southern California, local office in Marin County

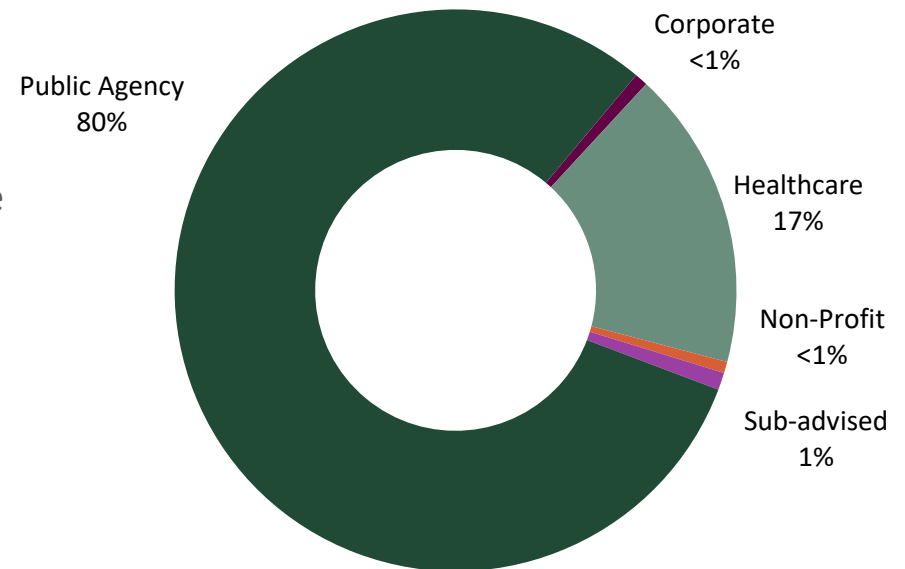
## ■ *Custom Investment Programs*

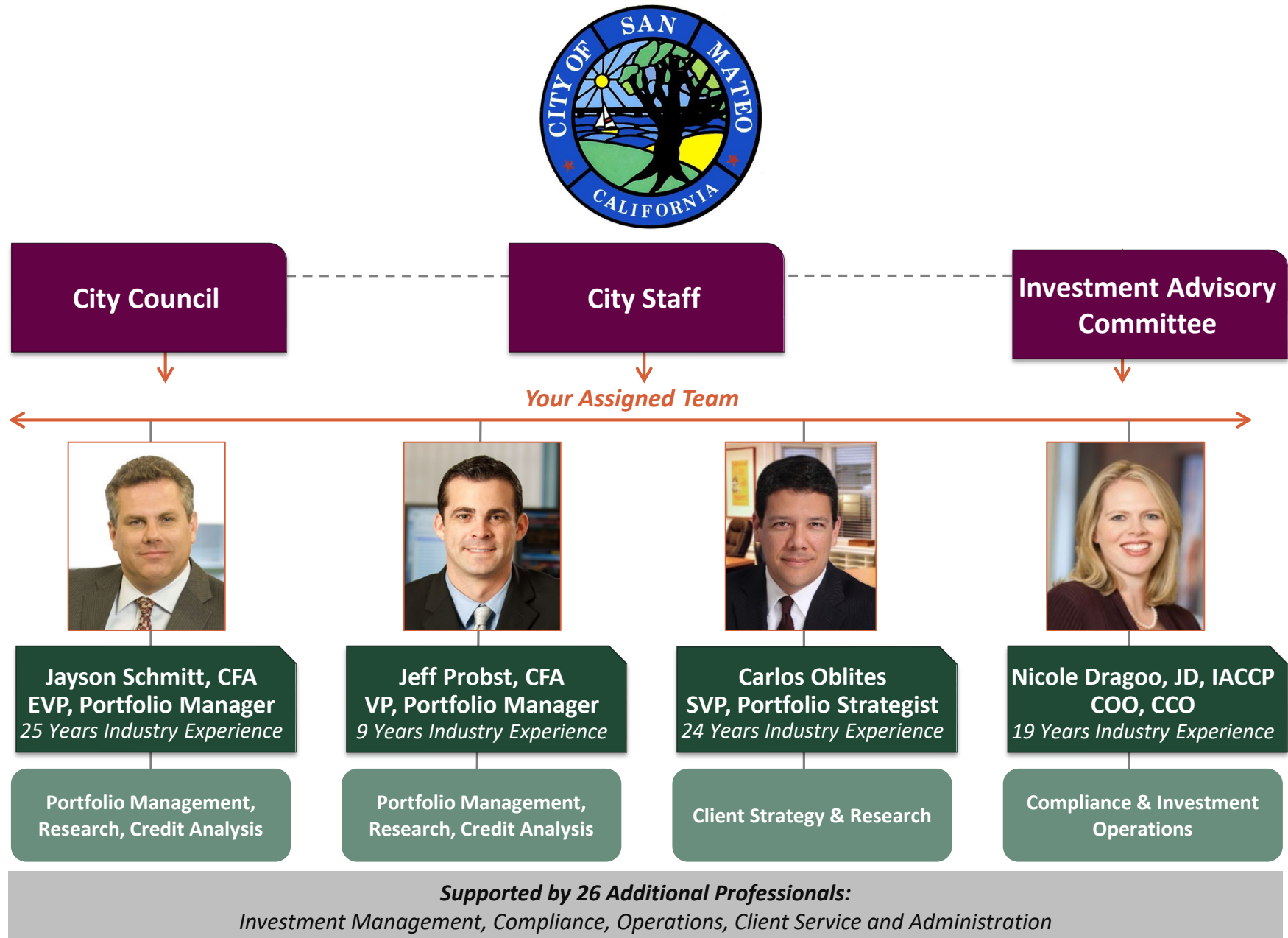
- Investment solutions based on the City’s risk profile and return goals
- Direct contact with investment management team
- Strategies for operating, short, and long-term reserves

## ■ *Stable Team of Investment Professionals*

- Team of investment professionals average over 21 years portfolio management experience
- Continuity provided through team approach
- Disciplined, repeatable investment process
- Proprietary investment analysis

## Assets Under Management \$18.3 Billion





# Partnering with the Chandler Team



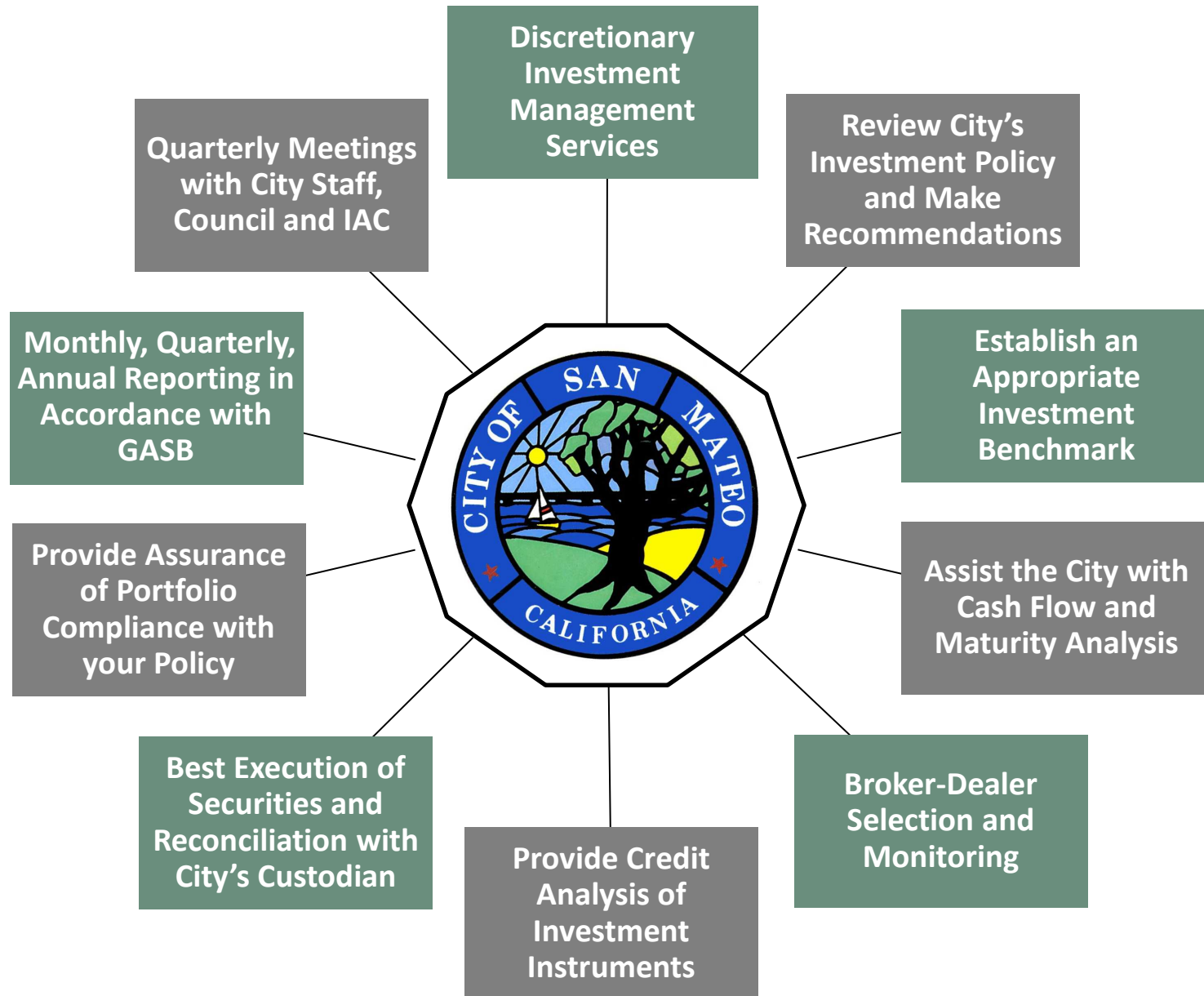
Investment Professionals	Responsibility	Industry Experience	Firm Tenure
Martin Cassell, CFA CEO, Chief Investment Officer	Leads the investment team, firm oversight	1987	1991
William Dennehy II, CFA EVP, Portfolio Manager	Implements portfolio strategies, performs credit analysis; Co-Chair of Credit Committee and Economic and Market Analysis Committee	1992	2011
Scott Prickett, CTP EVP, Portfolio Strategist	Implements portfolio strategies, monitors alignment with client objectives; Co-Chair of Economic and Market Analysis Committee	1987	2014
Jayson Schmitt, CFA EVP, Portfolio Manager	Implements portfolio strategies, performs credit analysis; Co-Chair of Quantitative Analysis Committee, Sector Committee and Multi-Asset Class Committee	1994	1995
Julie Hughes SVP, Portfolio Strategist	Implements portfolio strategies and monitors alignment with client objectives and policies	1993	2014
Christopher McCarry, AIF SVP, Portfolio Strategist	Implements portfolio strategies and monitors alignment with client objectives and policies	2001	2013
Carlos Oblites SVP, Portfolio Strategist	Implements portfolio strategies and monitors alignment with client objectives and policies; Co-Chair of Multi-Asset Class Committee	1995	2017
Ted Piorkowski, CFA SVP, Portfolio Manager	Implements portfolio strategies, performs credit analysis	1987	1999
Shelly Henbest, CFA VP, Credit Analyst	Research and credit analysis; Co-Chair of Credit Committee	2000	2009
Genny Lynkiewicz, CFA VP, Portfolio Manager	Implements portfolio strategies, performs credit analysis; Co-Chair of Sector Committee	2000	2015
Jeff Probst, CFA VP, Portfolio Manager	Implements portfolio strategies, performs credit analysis; Co-Chair of Quantitative Analysis Committee	2010	2012
Devin Weinstein, CFA Portfolio Management Associate	Assists with implementation of portfolio strategies	2015	2018
Client Service and Operations	Responsibility	Industry Experience	Firm Tenure
Nicole Dragoo, IACCP COO, Chief Compliance Officer	Responsible for regulatory compliance, directly manages investment operations and oversees firm's administrative functions	2000	2001
Don Penner EVP, Business Development	Leads the marketing and relationship management team	2001	2010
Kara Raynor-Sanchez VP, Client Service Director	Head of Client service	2012	2012

## Northern California Clients

City of Alameda	First 5 Santa Clara County
Alameda County Water District	Marin Schools Insurance Authority
Amador County	Mendocino County
City of American Canyon	City of Merced
City of Arcata	City of Monterey
Bay Cities JPIA	City of Mountain View
Big Independent Cities Excess Pool	City of Napa
Calaveras County	City of Orinda
California Earthquake Authority	City of Pittsburg
CJPRMA	City of Pleasant Hill
CSAC Excess Insurance Authority	Redwood Empire Municipal Insurance Fund
CSJVRMA	Sacramento Regional Transit District
City of Cupertino	City of South San Francisco
Town of Danville	City of Sunnyvale
City of Dublin	City of Tracy
City of Fairfield	City of Vallejo
First 5 Alameda County	Yolo County Public Agency Risk Mgmt. Insurance Auth.

*The list includes Northern California clients as of 9/30/2019 listed alphabetically and only includes clients that have given permission to be listed. It is not known whether the clients listed approve or disapprove of Chandler Asset Management and the investment advisory services provided. Includes discretionary and non-discretionary relationships.*

# We work with You on All Aspects of Your Program





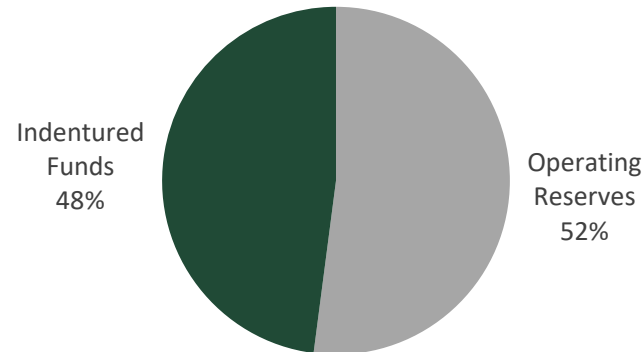
## Section 2 | Addressing the City's Questions





*The City currently manages  $\frac{3}{4}$  of its investment portfolio, while the investment advisor manages the remainder. Describe your firm's approach if the City were to consider revisiting this division of labor, from an ROI perspective, assuming that the majority of the City's investment transactions purchase federal agencies from broker/dealers and considering potential amendments to the City's investment policy.*

# The City of San Mateo's Investment Program *As of September 30, 2019*



		Market Value	Average Maturity	Yield
<b>City of San Mateo Operating Reserves</b>				
	Money Market Account	\$186,225	1	1.84%
	Local Agency Investment Fund	\$42,737,586	185	2.28%
	SM County Pool	\$57,787,586	600	2.19%
	CAMP	\$21,628,794	35	2.22%
	Internally-managed Securities Portfolio	\$78,560,002	680	2.15%
	Externally managed Securities Portfolio	\$52,550,705	977	2.26%
	<b>Total:</b>	<b>\$253,450,736</b>	<b>584</b>	<b>2.21%</b>
<b>City of San Mateo Indentured Funds</b>				
	Various Construction Funds	\$4,387	185	2.28%
	JPFA Clean Water Collection System 2019	\$157,436,793	1	2.28%
	JPFA Clean Water Wastewater 2019	\$74,217,946	1	2.28%
	Various Reserve Funds	\$1,716,051	1	0.92%
	<b>Total</b>	<b>\$233,375,177</b>	<b>1</b>	<b>2.27%</b>
<b>Grand Total:</b>		<b>\$486,825,913</b>		

Source : City of San Mateo Investment Advisory Meeting Agenda, November 14<sup>th</sup>, 2019. Data as of September 30, 2019..

## *Four Crucial Factors Before Management*

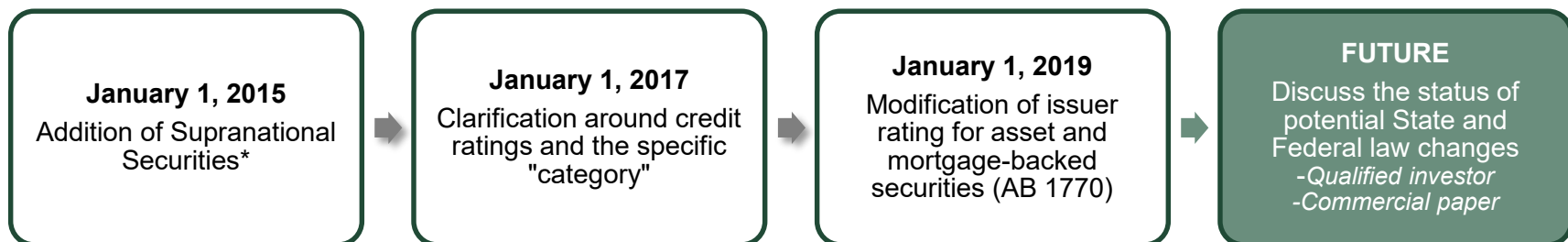


## *Ongoing Portfolio Management*

- Credit analysis of security issuers and financial institutions
- Asset-liability management
- Broker/dealer due diligence and relations
- Consistent application of a disciplined, conservative investment process. Our approach focuses on:
  - Safety of principal\*
  - Compliance with legal
  - Appropriate levels of liquidity
  - Generating market yield and return
  - Diversification of risk

\*While Chandler focuses on safety of principal by investing in conservative investment-grade quality bonds, investors should be aware that bonds and other fixed income securities do carry some degree of risk and we cannot ensure a profit nor guarantee against loss.

- The City's Investment Policy is robust.
  - Policy includes a diversified mix of asset classes allowed by California Government Code.
  - Policy contains adequate diversification and risk management guidelines.
- If engaged, we would like to discuss:
  - Including highly-rated Asset-backed securities (ABS) as a permitted investment type
  - Updating ratings language pursuant to agency mortgage-backed securities
  - Including a 20% limit on callable securities (excluding “make-whole calls”).
  - Adding specific, market-available benchmarks for performance measurement to each strategy (both internal and external)
  - Consider removing maximum portfolio allocation to LAIF
- Proactively communicate changes to California Government Code:



- Consolidated reporting incorporating all investable assets of the City's investment program
- The *Chandler Client Portal* eases pressure on staff's reporting process to the Investment Advisory Committee and Council
- Increased control over investment portfolio
  - Additional managed assets will be subject to the City's investment policy on a security-level basis
  - More control over strategy and increased transparency
  - Reallocation of funds could allow the City to have a \$225 million managed portfolio under the proposed tiered fee structure\*\*

Investment Allocation	Balance (9/30/2019)	Pool Fee*	Total Annual Fee
San Mateo County Pool	\$57,787,424	0.095%	\$54,898.05
California Asset Management Program	\$21,628,794	0.130%	\$28,117.43
<b>Total Pool Fee</b>			<b>\$83,015.49</b>
Externally Managed Portfolio	\$52,550,705	0.080% <sup>1</sup>	\$42,040.56
<b>Total Fees</b>			<b>\$125,056.05</b>

\*Sources: San Mateo County Investment Policy Statement Calendar Year 2019, California Asset Management Program Guide, October 1, 2019. City of San Mateo Investment Advisory Meeting Agenda, November 14<sup>th</sup>, 2019. Data as of September 30, 2019.

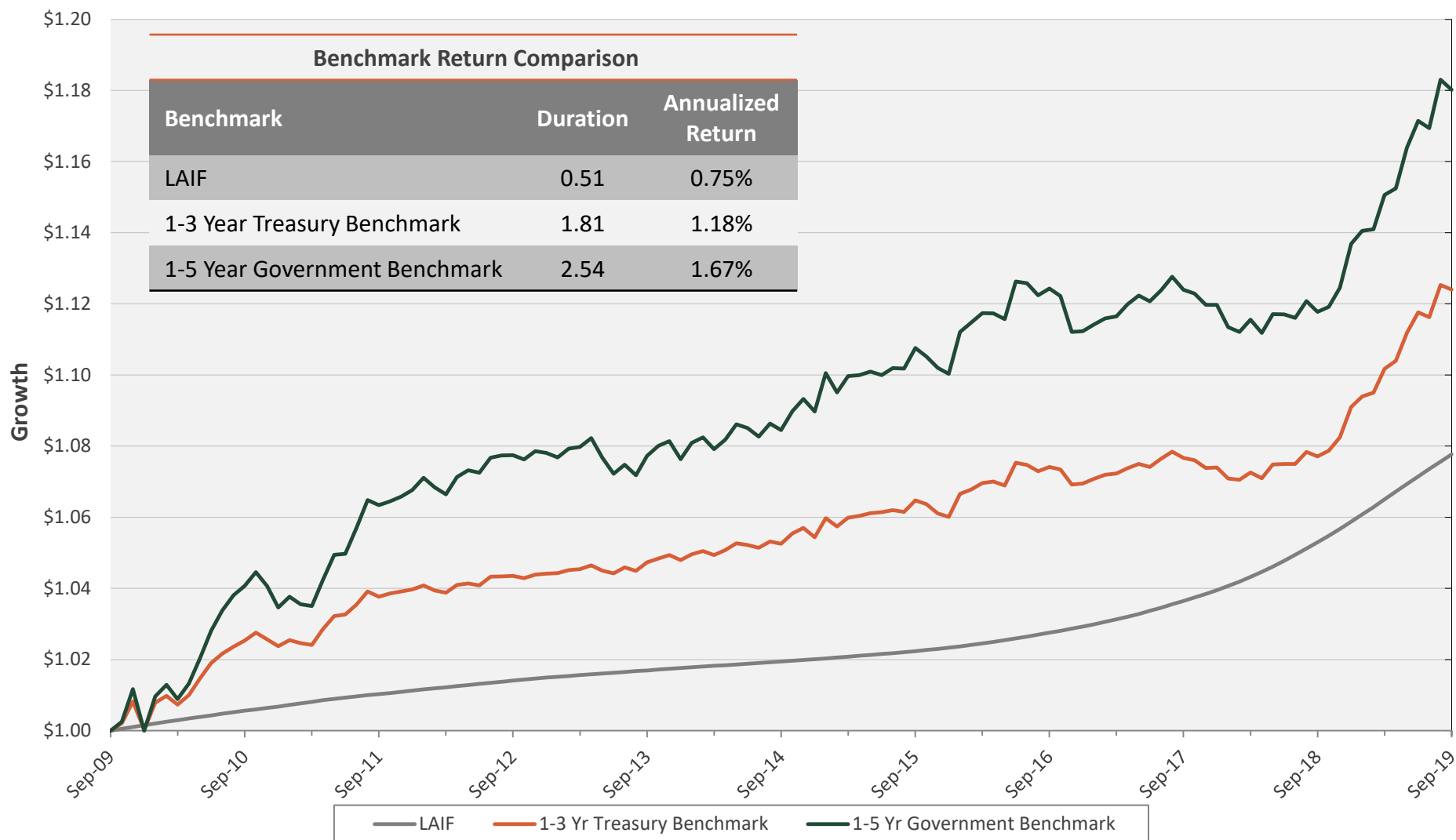
\*\* Using proposed fee schedule.

<sup>1</sup> Externally Managed Portfolio fee is unknown and for demonstration purposes only.

# Longer-Duration Strategies Over Time



## 10-Year Benchmark Comparison September 30, 2009 – September 30, 2019



Source: LAIF and ICE BAML Indices as of 9/30/2019. Please see disclosures attached for LAIF, ICE BAML 1-3 Year U.S. Treasury Index, and ICE BAML 1-5 Year U.S. Treasury & Agency Index. LAIF duration estimated based on average maturity in days, as of 9/30/2019, divided by 365 days. LAIF returns include an administrative fee charged to investors by the California State Treasurer. The data contained in this chart is the property of providers which were obtained from sources believed to be reliable but are subject to change at any time at the provider's discretion. Index returns assume reinvestment of income dividends and capital gains, if any, but do not reflect fees, brokerage commissions or other expenses of investing. It is not possible to invest directly in an index. Past performance is not indicative of future results. Please see disclosures at the end of this presentation.



## Chandler Investment Styles

10-Year Net of Fee Performance\* (Hypothetical)  
September 2009 – September 2019

Investment Style	Portfolio Duration	Annualized Total Return 10 Year Period (Net of 6.8 bps fee)	10-Year Growth of \$125 Million Portfolio (Net of Fee)	Chandler Added Value Over LAIF (Net of Fee)
LAIF	0.51	0.75%	\$134.7 million	N/A
Chandler's Limited Maturity (1-3 Year)	1.78	1.43%	\$144.1 million	\$9.4 million
Chandler's Short Term Bond (1-5 Year)	2.39	1.87%	\$150.4 million	\$15.7 million

*\*Net performance for Chandler investment styles based on proposed fee of 6.8 basis points (0.068 of 1%) calculated for a \$125 million total portfolio, relative to LAIF. LAIF returns include an administrative fee charged to investors by the California State Treasurer. LAIF duration estimated based on average maturity in days, as of 9/30/2019, divided by 365 days. Performance shown is hypothetical for a \$125 million portfolio and not based on an actual client's account. Performance for Chandler's Limited Maturity and Short Term Bond has been calculated using historical composite performance. Past performance is not a guarantee of future results. Please see the GIPS and disclosures at the end of this presentation for further details. For one-on-one presentation only.*





*The City's current investment policy largely mirrors the State Code. If your firm was able to advocate for changes to the State Code, what changes would you make, and why? How would this change impact local government investment portfolios in California, and the City in particular?*

*California Government Code provides local agencies with a broad investment universe; therefore, we would only advocate for minor changes.*

- Updating the investment universe to current issuance trends may increase return potential without materially sacrificing safety or liquidity
  - Increasing the maximum maturity of Asset-backed securities and non-government backed Passthrough securities to 10 years would provide added flexibility with minimal additional risk.
  - Increasing the maximum maturity for Corporate Notes to 6 years.

Final Maturity Extension	Final Maturity	Spread to Treasury (bps)
<b>Corporate Notes</b>		
Wells Fargo 3.300%	9/9/2024	53
Wells Fargo 2.406% C 10/30/2024	10/30/2025	72
<b>Additional Earnings on \$1 million</b>		<b>\$ 1,900</b>
<b>Asset Backed Securities</b>		
TAOT 2019-D A3 1.92%	1/16/2024	30
TAOT 2019-D A4 1.99%	2/18/2025	35
<b>Additional Earnings on \$1 million</b>		<b>\$500</b>

Source: Bloomberg

*For illustrative purposes only. References to specific securities are examples of securities held in a portfolio and are not intended to be, and should not be interpreted as an offer, solicitation, or recommendation to purchase or sell any financial instrument, an indication that the purchase of such securities was or will be profitable, or representative of the composition or performance of the portfolio. Information is subject to change and was obtained from sources we believe to be reliable, but we do not guarantee its accuracy. Please see disclosures at the end of this presentation.*

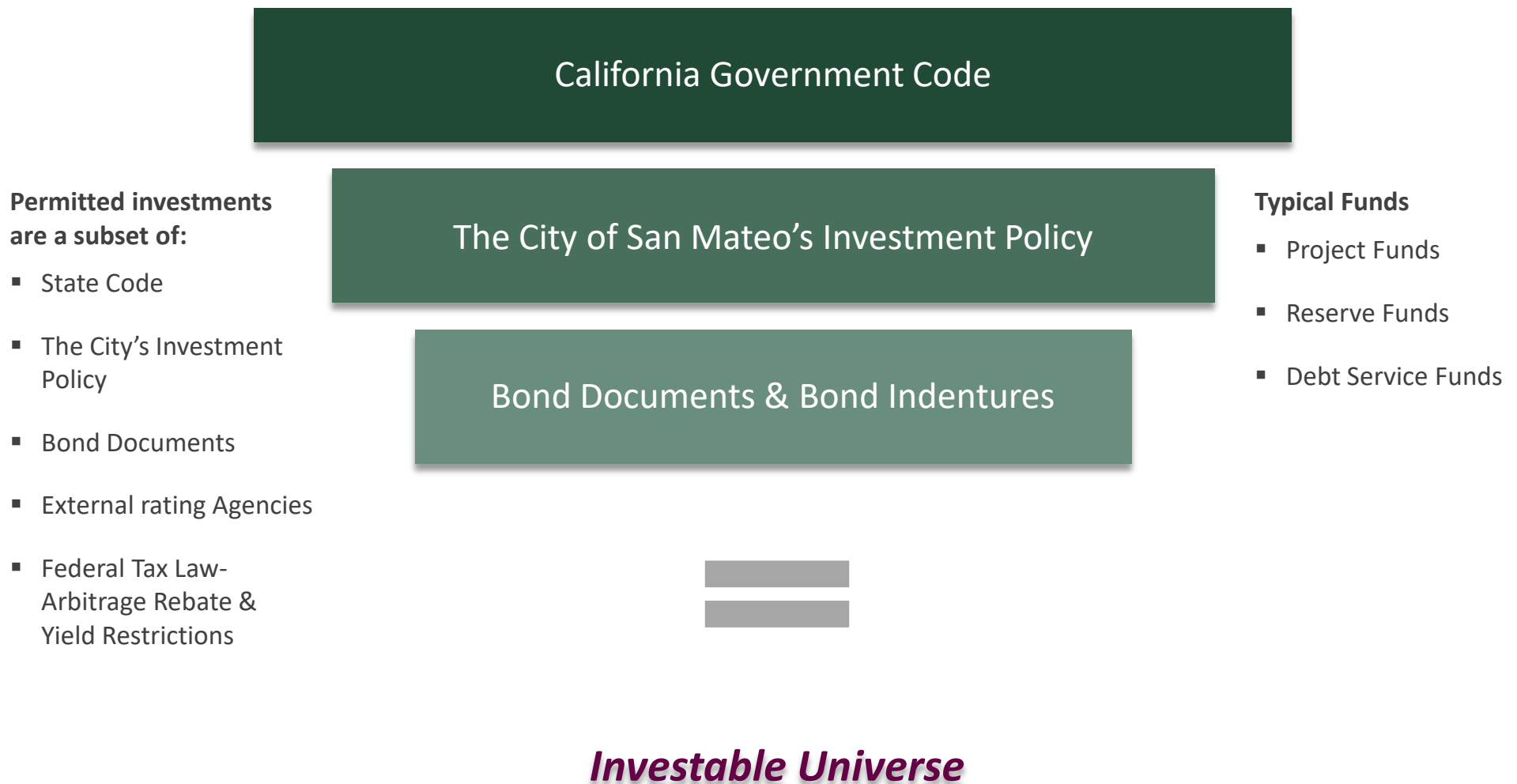
Local agencies may also benefit from procedural and operational changes.

- Create a framework for drafting legislation
  - Include all stakeholders in the conversation along with a review period
  - Minimize ambiguity in California Government Code due to oversights
- Clean up reporting requirements to minimize confusion while being cognizant of the resources available at local agencies

California Code allows for significant freedom in investing excess reserve funds while maintaining safety and liquidity.

- Risk tolerance of an agency is the largest factor determining how a California government agency invests its funds
  - Tolerance for split rated corporate notes
  - Optionality in portfolio
  - Credit exposure
  - Duration exposure
- Local agencies do not have a maximum maturity limitation with treasury, agency or municipal debt
  - Traditional agency mortgage passthrough securities become a potential investment

*The City has a sizeable debt portfolio, reflecting its investment in City infrastructure and facilities. It is anticipated that debt issuance will be the City's strategy in the foreseeable future to finance the cost of capital improvements. Describe how your firm would collaborate with the City to structure investment of bond proceeds to discount the cost of the debt service.*



We work with staff before the debt issuance to craft language in the offering documents to provide investment flexibility for the proceeds and reserves.

Gain an in-depth understanding of the project, issuance schedule and variability of potential draws

- Segment the funds into different “buckets”
  - Liquidity sleeve for current and unexpected needs
    - LAIF
    - Short term security ladder
  - Longer term holdings for funds that have a longer time horizon of need.
    - Government securities are the primary vehicle, but we review governing documents for instances where this is not the case
    - Forward view of interest rates and shape of the yield curve are key considerations in developing a strategy for these funds

City of San Mateo Bond Proceeds				
	6/30/2019	7/31/2019	8/31/2019	9/30/2019
JPFA Clean Water Collection System 2019	166,404,645	166,404,645	160,137,956	157,436,793
JPFA Clean Water Waste 2019	78,145,885	78,145,885	74,185,039	74,217,946

Source: City of San Mateo Investment Advisory Meeting Agenda, November 14<sup>th</sup>, 2019. Data as of September 30, 2019..

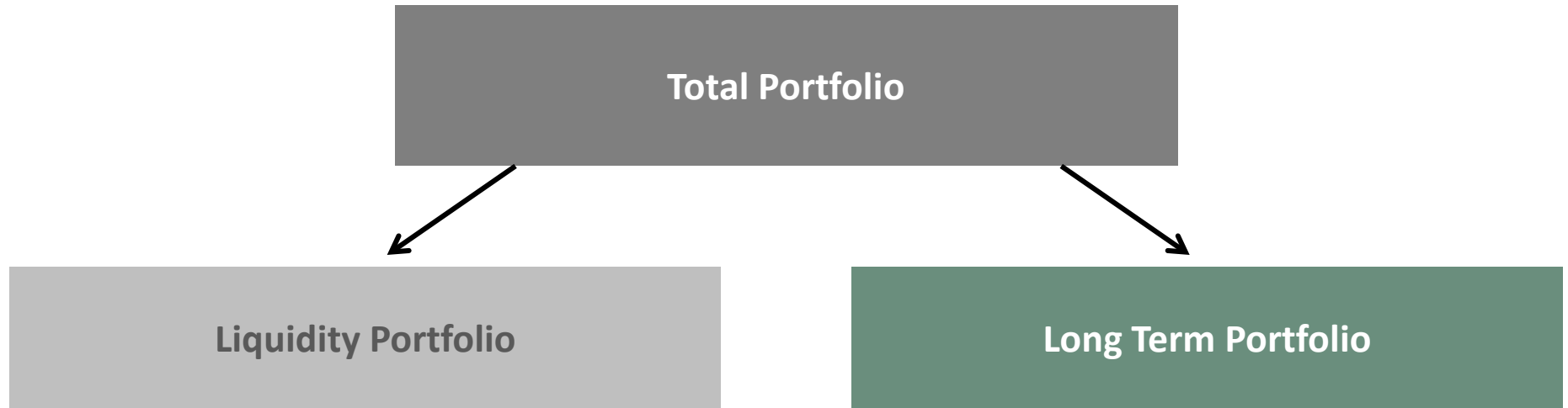


*The City continues to seek diversification and increase returns in the City managed portfolio. What would be the proposed plan of action to work with the City to do so?*



We feel the best investment program relationship is collaborative and based on strong communication with the client.

- We welcome investment program involvement from City staff. If resources are limited, staff can provide value managing the City's liquidity position
  - Staff has expert knowledge of liquidity needs and revenue cycles
  - Investment pools and short-term securities are often utilized
- Outside management provides an opportunity to enhance the City's investment program
  - Professional management
    - In-depth market knowledge
    - Competitive execution
    - Enhanced exposure to new issue market
  - Increased diversification
    - Skilled staff with expertise in all security types allowed in California Government Code
    - Potential for greater returns
  - Repeatable strategy
    - Benchmarked strategy tailored to the City's risk tolerance

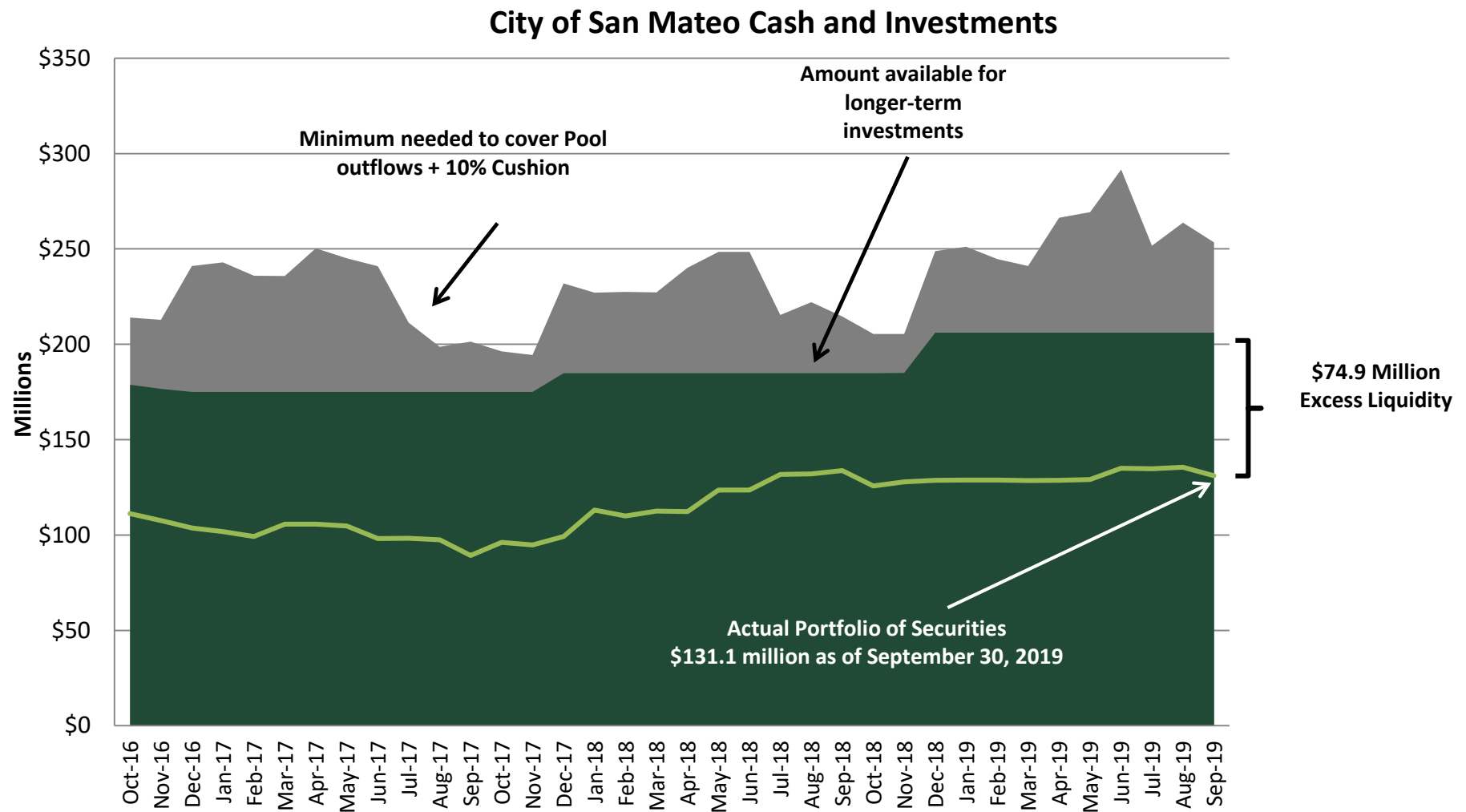


- Local Government Investment Pool (LGIP)
  - Matching maturities to known expenditures
    - Common money market instruments
      - Agency Discount Notes
      - Commercial Paper
      - Certificates of Deposit
- Target generally to a higher duration to enhance the potential to increase earnings
    - Invest in all securities allowed by Code and the City's policy, such as:
      - U.S. Treasury Securities
      - U.S. Agency Securities
      - High-Grade Credit

# Cash Flow Analysis for Optimal Structure



- Cash and investment balances have grown 5% annually
- The City maintains ample liquidity
- The City may benefit from reallocating excess liquidity into longer-duration investments



Source: City of San Mateo's Cash and Investment statements September 2016 – September 2019. Please see disclosures at the end of this presentation.

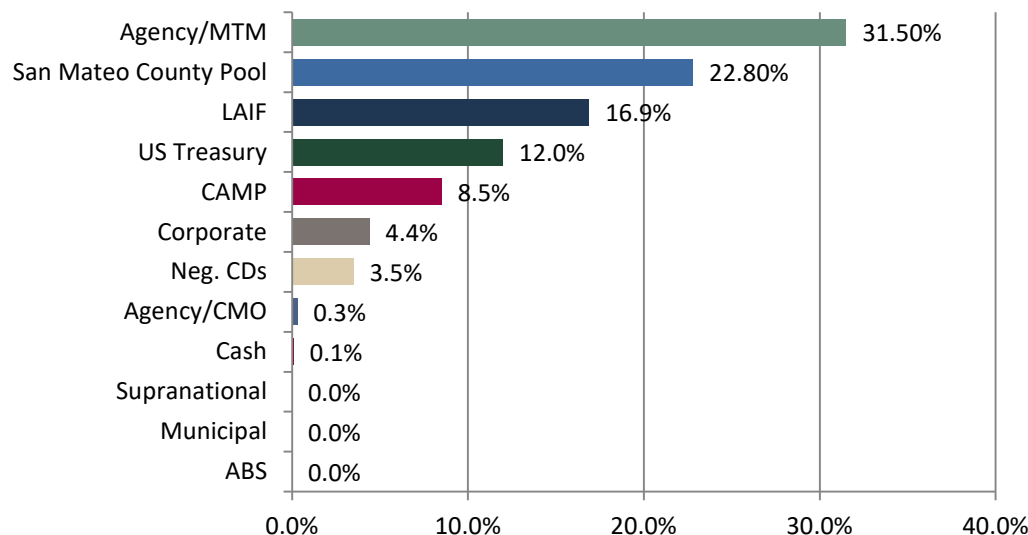
# The City's Aggregate Operating Reserve Investment Program



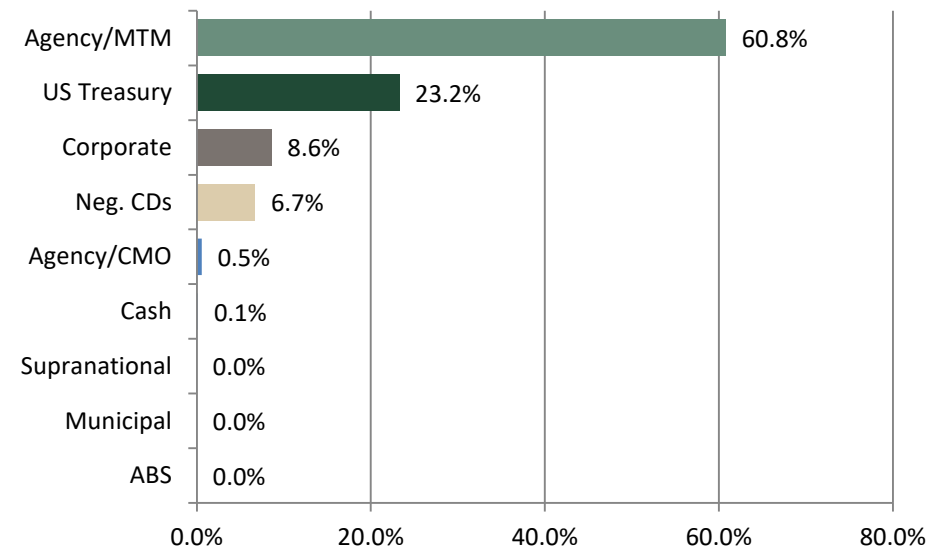
- The City maintains ample liquidity.
- We feel the City can review its current structure to ensure the allocations are optimized within each strategy to achieve its goals.
- If engaged, we would explore:
  - Increased diversification to issuers, sectors, and credit quality; A more dynamic maturity and duration structure;
  - The appropriateness of BBB/split-rated securities in the City's investment program.
- The City maintains substantial investments in investment pools.

Characteristics with Inv. Pools	
Total Market Value:	\$253,450,736*
Purchase Yield:	2.21%
Average Maturity:	584 Days

**Sector Allocation with Inv Pools**



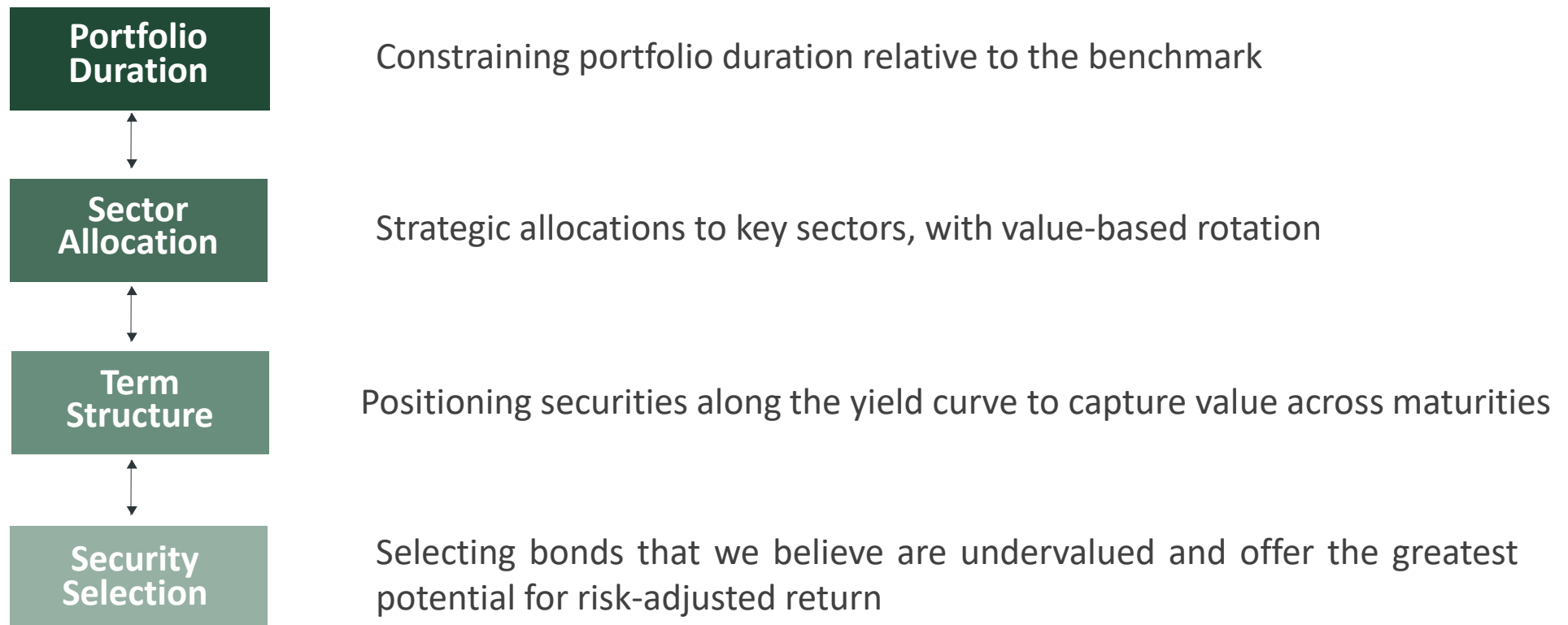
**Sector Allocation without Inv Pools**





*Please provide comment on your firm's investment philosophy and process for analyzing a client's portfolio and for recommending modifications.*

## *Four Key Elements of Our Approach*





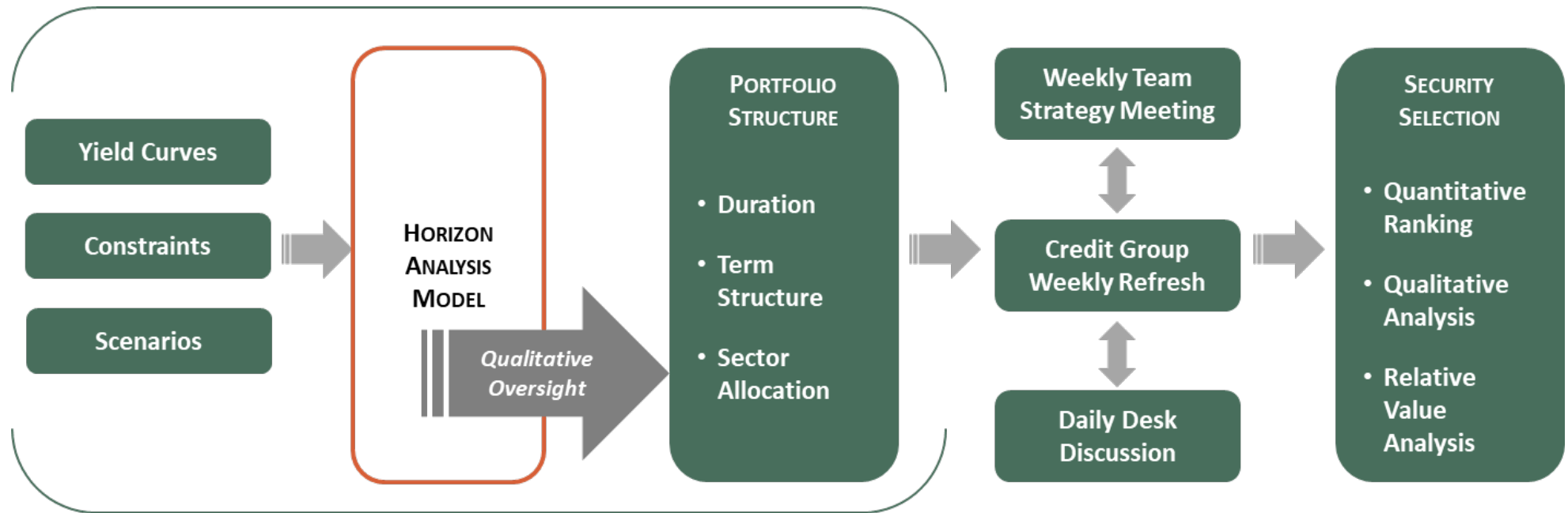
## **Total Return Market Benchmark**

- Includes the types of securities and maturities that are permitted in the investor's policies
- Represents the appropriate level of risk for the investor's portfolio
- Representative of assets in which the fund may invest
- Exhibit similar risk characteristics as the investment objectives
- Returns of the investment strategy and benchmark are typically well correlated
- Total return measures both income return as well as unrealized and realized gains and losses

## **Examples**

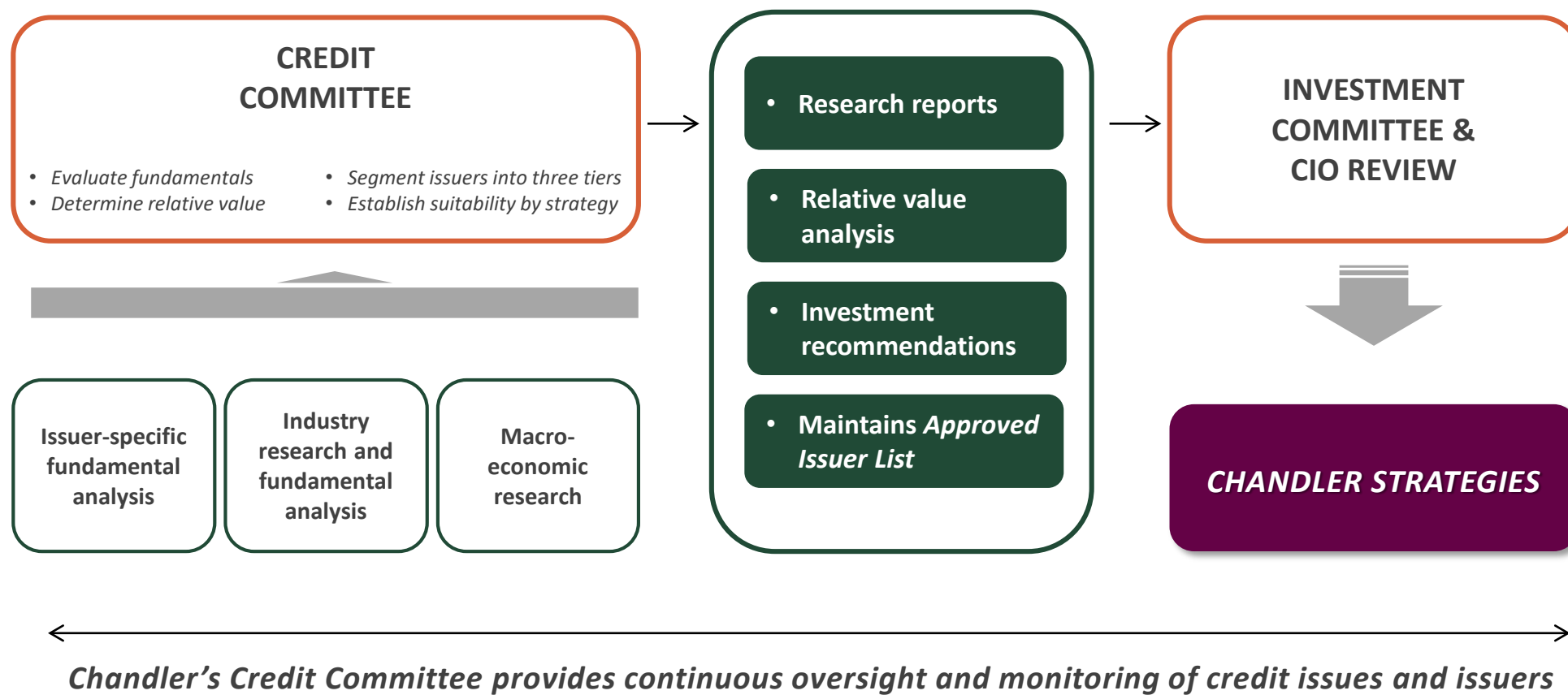
- Fixed Income total return benchmarks:
  - 0-3 Year Treasury
  - Index of 1-3 year government notes
  - Index of 1-5 year government and corporate securities rated "AA" or higher

## Chandler's *Horizon Analysis Model*



- Proprietary quantitative Horizon Analysis Model suggests target duration, sector allocation and term structure.
- The security selection process employs quantitative tools and rigorous qualitative analysis to determine relative value.





## Section 3 | Client Service, Compliance & Reporting



# Compliance with Investment Policy



*Assets managed by Chandler Asset Management are in full compliance with California Government Code and with the Client's investment policy.*

Category	Standard	Comment
Treasury Issues	No limitation	<i>Complies</i>
Agency Issues	No limitation	<i>Complies</i>
Supranationals	30% maximum; 5% max issuer; 5 years max maturity; Issued by IBRD, IFC, or IADB only; "AA" rated or higher by a NRSRO	<i>Complies</i>
Banker's Acceptances	40% maximum; 5% max issuer; <180 days maturity; A-1 rated equivalent by at least two NRSROs; "A" rated or better by two NRSROs on long-term debt	<i>Complies</i>
Commercial Paper	25% maximum; 5% max issuer; <270 days maturity; A-1 rated or higher by at least two NRSROs; "A" rated or higher by two NRSROs on long-term debt; Issuer is a corporation organized and operating within U.S. with assets in excess of \$500 million	<i>Complies</i>
Negotiable Certificates of Deposit	40% maximum; 5% max issuer; <180 days maturity; A-1 rated equivalent by at least two NRSROs; "A" rated or better by two NRSROs on long-term debt	<i>Complies</i>
Medium Term Notes	30% maximum; 5% max issuer; "A" rated or better by two NRSROs	<i>Complies</i>
Money Market Mutual Funds	20% maximum; 10% per fund; Highest rating by two NRSROs	<i>Complies</i>
Federally Insured Certificates of Deposit (CDs)/Time Deposit (TDs)	20% maximum (combined FDIC insured and collateralized TD/CD)	<i>Complies</i>
Collateralized Certificates of Deposit (CDs)/Time Deposit (TDs)	20% maximum (combined FDIC and collateralized TD/ CD); A-1, or higher by 2 NRSROs; "A" rated or higher by two NRSROs, if long-term debt	<i>Complies</i>
Mortgage Pass-throughs, CMOs and Asset Backed Securities	20% maximum; 5% max issuer; "AA" rated or higher by a NRSRO; "A" rated issuer or higher by a NRSRO; 5 years max maturity	<i>Complies</i>
Local Agency Investment Fund (LAIF)	Program limitation; Currently not used by investment adviser	<i>Complies</i>
Repurchase Agreement	1 year max maturity; 102% collateral; Currently not used by investment adviser	<i>Complies</i>
Prohibited Securities	Inverse floaters; Ranges notes, interest-only strips from mortgaged backed securities; Zero interest accrual securities	<i>Complies</i>
Max Per Issuer	5% (except U.S. government, its Agencies and GSEs, Money Market Fund or LGIP)	<i>Complies</i>
Maximum maturity	5 years	<i>Complies</i>

*This sample report is being provided for illustrative purposes to demonstrate Chandler Asset Management's reporting capabilities. Elements of the Compliance Report are representative of investment guidelines promulgated by State Law or the entity's investment policy.*

## Investment Guidelines

### ▶ Define Your Parameters

- ☐ State Legal Requirements
- ☐ Your Investment Policy
- ☐ Your Management Directives
- ☐ Chandler Guidelines

## Bloomberg AIM

### ▶ Code Rules into Bloomberg

- ☐ Concentration Limits
- ☐ Credit Quality
- ☐ Issuer Exposure
- ☐ Prohibited Transactions

## Compliance Check

### ▶ Pre-Trade Compliance



**Approved**



**Warning**




**Prohibited**

- ☐ Only a compliance officer can override a "prohibited" alert

11) Actions				Violation Status	
Rule Id	15461487	Name	Max Maturity = 5 yrs		
Rule Group	*MULTIPLE*			Severity	VMGR_APPROVAL
Account	ACCOUNT /	Type of Violation		Currency	USD
Trader Note				Tkt Writer	
Violation Status					
Processed	08/31/2018 00:13:11	Priority	0	As Of	08/31/2018
Status	Pending	Follow Up	mm/dd/yyyy	Day Count	258
Viol Flag	Passive	Suppress in ERA Report		<input checked="" type="checkbox"/> Copy Note & Status	
Note				Attachments	0 file(s) attached
Status of Violation					
Status	Note	User	Date	Viol Flag	
1 Pending	Client contributed securities (see prev notes) for all others -	RGUTIERREZ54	07/12/2018 11:37:09	Passive	

**Audit Trail**

*The City is assured that through Chandler's best execution practices, it is receiving competitive, institutional pricing on transactions, as the firm seeks a minimum of three quotes per trade.*



**CHANDLER**  
 ASSET  
 MANAGEMENT

**Trade Ticket**  
All trades are discretionary unless otherwise noted

<b>BUY</b>	ORDER ID	00000	ACCT MANAGER	Manager
	TRADE DATE	08/31/2018	TRADER	Trader
	SETTLE DATE	08/31/2018	Bkr/CParty	Broker

**ACCOUNT INFORMATION**  
 Account Name: Chandler DEMO Viewer Account  
 Pam #: 725  
 Bank/Custodian: Custodian Bank Acct: 00000000

**TRADE INFORMATION**

Security	SAMPLE ISSUER			<b>SETTLEMENT VALUES</b>	
Cusip	SAMPLE CUSIP	Coupon Rate	2.750000	Maturity Date	07/31/2023
Qty/Par	2,200,000.00	Yield (YTM)	2.740	Issue Date	07/31/2018
Price		Disc Rate	0.000000	Pay Freq	Semi-Annually
Int. Pymt		First Pay Date	01/31/2019	Day Basis	ACT/ACT
Spread	TN	Next Cpn Date	01/31/2019	Accrual Type	FIXED
Sec Type		Ticker	TREASU	Original Face	
				Principal	\$2,200,945.31
				Interest	\$5,096.47
				Commission	\$0.00
				Sec Fee	\$0.00
				Trade Fee	\$0.00
				Net Amt	\$2,206,041.78

**RATINGS**  
 S&P: AA+  
 Moody: Aaa

**SETTLEMENT INSTRUCTIONS**  
 Delivery Type: Federal Wire  
 Agent Name: Broker  
 Delivery Location: Broker's Office  
 Agent DTC #: #  
 Agent BIC Code:  
 ADR #: 000000

**NOTES**

**COMPETITIVE PRICE**

Dealer 1	Price 1	Dealer 2	Price 2	Dealer 3	Price 3
BW	100.047	NOM	100.047	GS	100.051

This sample report is being provided for illustrative purposes to demonstrate Chandler Asset Management's reporting capabilities. References to specific securities and their characteristics are examples of securities held in the portfolio and are not intended to be, and should not be interpreted as an offer, solicitation or recommendation to purchase or sell any financial instrument, an indication that the purchase of such securities was or will be profitable, or representative of the composition or performance of the portfolio.

- Process is documented for transparency
- Transactions are executed on a competitive basis
- We seek multiple price quotations on all purchases and sales
- Block trade execution and pricing saves you money

*This sample report is being provided for illustrative purposes to demonstrate Chandler Asset Management's reporting capabilities. References to specific securities and their characteristics are examples of securities held in the portfolio and are not intended to be, and should not be interpreted as an offer, solicitation or recommendation to purchase or sell any financial instrument, an indication that the purchase of such securities was or will be profitable, or representative of the composition or performance of the portfolio. The information contained in this sample presentation was obtained from sources we believe to be reliable, but we do not guarantee its accuracy.*

# Transparency through Reporting and Communication



## Monthly statements available by the 3<sup>rd</sup> business day

- Reports designed for use by management
  - Portfolio summary, compliance statement, reconciliation summary, holdings report, transactions ledger, income earned, cash flow report

**24/7 Online Access to the City's Portfolio via the Chandler Client Portal**

## Quarterly Reports in person with investment management team

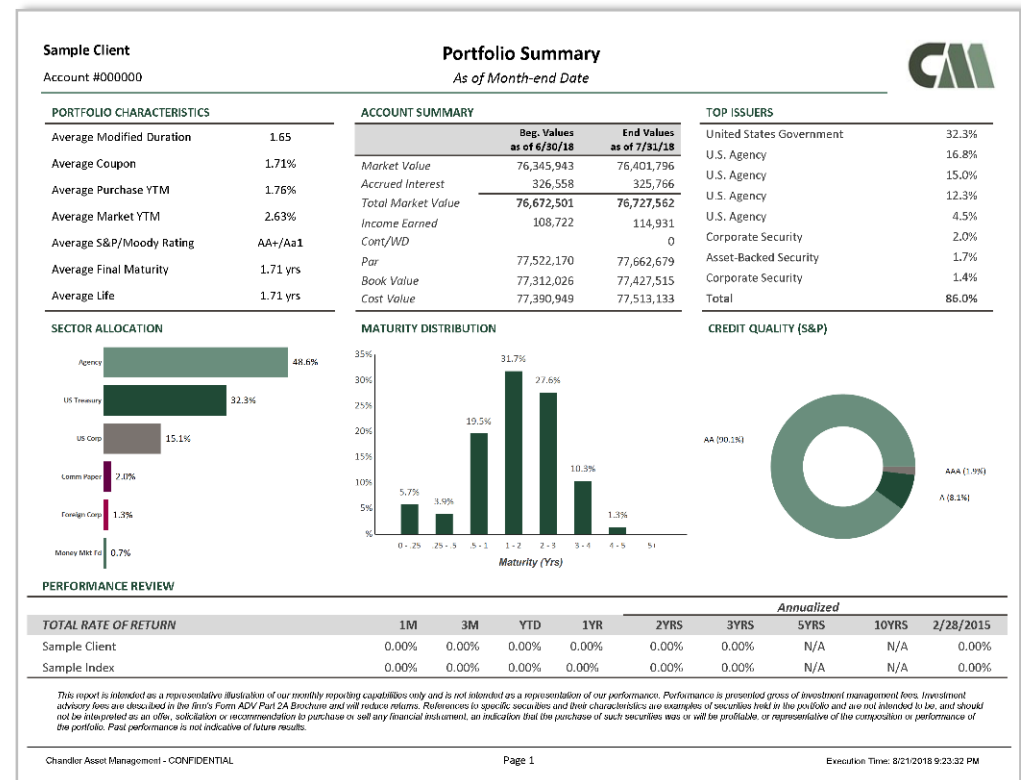
- Economic overview
- Account profile
  - Objectives and compliance statement
  - Portfolio summary, sector distribution, issuer report, quality distribution, duration distribution and investment performance
- Holdings Report, Transactions Ledger

## Consolidated Reporting

## Annual Reporting

- GASB 40 and 72

*This sample report is being provided for illustrative purposes to demonstrate Chandler Asset Management's reporting capabilities. References to specific securities and their characteristics are examples of securities held in the portfolio and are not intended to be, and should not be interpreted as an offer, solicitation or recommendation to purchase or sell any financial instrument, an indication that the purchase of such securities was or will be profitable, or representative of the composition or performance of the portfolio. The information contained in this sample presentation was obtained from sources we believe to be reliable, but we do not guarantee its accuracy.*



# Sample GASB 40 and 72 Reporting



## GASB 40 Report Sample Portfolio

### Portfolio Characteristics

Market Value	192,354,356	100 bps	-4,825,986
Ave Portfolio Duration	2.51	200 bps	-9,651,972
Ave Portfolio Maturity	2.72	300 bps	-14,477,958

### Interest Rate Shock Analysis

Fair value of portfolio after increase of:

Sector	Sector Characteristics				Segmented Time Distribution			
	Market Value	Ave Duration	Ave Maturity	% of Port	<1 yr	1-3 yrs	3-5 yrs	>5yrs
Agency	100,571,860	2.49	2.75	52.28%	9,458,270	47,550,776	43,562,815	0
US Treasury	35,638,016	2.53	2.70	18.53%	0	22,742,859	12,895,158	0
FDIC Insured US Corporate	34,775,805	2.96	3.10	18.08%	0	23,046,153	11,729,651	0
US Corporate	21,368,676	1.84	2.00	11.11%	4,526,179	11,068,461	5,774,035	0
	<b>192,354,356</b>	<b>2.51</b>	<b>2.72</b>	<b>100.00%</b>	<b>13,984,449</b>	<b>104,408,249</b>	<b>73,961,659</b>	<b>0</b>

The GASB 40 Statement's objective is to establish accounting and financial reporting standards and comprehensive disclosure requirements addressing common risks of deposits and investments of state and local governments that have fair values that are highly sensitive to changes in interest rates.



Sample Client

## GASB 72 - Fair Value Measurements

As of 6/30/2016

Asset	Fair Value	Quoted Prices in Active Markets for Identical Assets (Level 1)	Significant Other Observable Inputs (Level 2)	Significant Unobservable Inputs (Level 3)
Agency	\$9,588,537.00	\$0.00	\$9,588,537.00	\$0.00
Commercial Paper	\$508,742.00	\$0.00	\$508,742.00	\$0.00
Money Market Fund FI	\$457,886.22	\$457,886.22	\$0.00	\$0.00
US Corporate	\$4,676,945.84	\$0.00	\$4,676,945.84	\$0.00
US Treasury	\$10,333,679.95	\$0.00	\$10,333,679.95	\$0.00
<b>Total Portfolio</b>	<b>\$25,565,791.01</b>	<b>\$457,886.22</b>	<b>\$25,107,904.79</b>	<b>\$0.00</b>

The GASB 72, Fair Value Measurement and Application, issued in February of 2015, is a new statement that requires government investments to be measured at fair market value. It also requires disclosures regarding how fair value was measured, what hierarchy the investment fits into and any special valuation processes used.

*These sample reports are being provided for illustrative purposes to demonstrate Chandler Asset Management's reporting capabilities. References to assets and their characteristics are examples of assets held in the portfolio and are not intended to be, and should not be interpreted as an offer, solicitation or recommendation to purchase or sell any financial instrument, an indication that the purchase of such securities was or will be profitable, or representative of the composition or performance of the portfolio. The information contained in this sample presentation was obtained from sources we believe to be reliable, but we do not guarantee its accuracy.*

# Communication Plan to Effectively Execute the City's Program



## Daily/Weekly

- Access to investment team members via phone and email
- 24/7 secure online account access to reporting and trade tickets
- Weekly economic recap

## Monthly

- Portfolio statements available on 3<sup>rd</sup> business day
- Affirmation of compliance
- Bond market and economic review

## Quarterly

- Economic Overview and Investment report
- In person meetings with City's Staff to review portfolio
- In-depth strategy discussions

## Annually

- Investment policy review
- GASB 40 & 72 reports
- Annual reports for audit

## Custom

- Cash flow analysis
- Special projects, presentations to Staff, Investment Advisory Committee, and Council
- Periodic white papers and training on wide array of topics





## ***Expertise.***

Since the inception of Chandler in 1988, we have been thought-leaders in managing and reporting on public agency portfolios.

## ***Independence.***

We are 100% employee-owned with no conflicts of interest from other divisions such as brokerage, banking, insurance, or financial advisory.

## ***Process.***

Our investment team has developed proprietary tools and processes for structuring and managing fixed income portfolios.

## ***Customization.***

We will provide investment solutions designed to meet the specific objectives and policies of the City of San Mateo.

## ***Team Approach.***

Our team approach draws on the collective wisdom of a highly qualified group of professionals, who have worked together through challenging markets.

## Section 4 | Supplemental



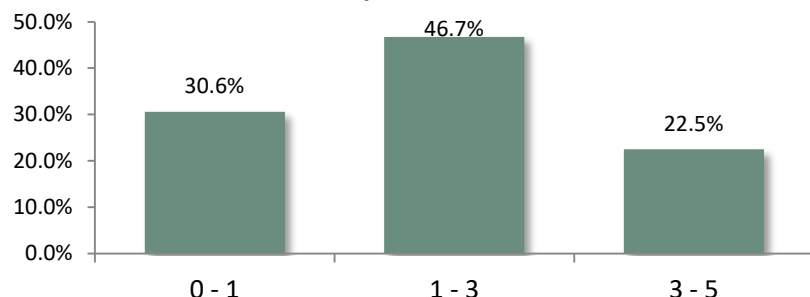
# Chandler Composite Strategies as of September 30, 2019



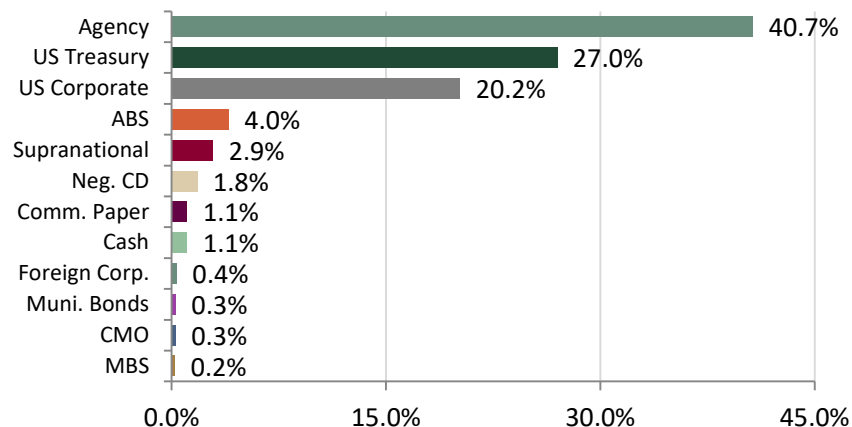
## Limited Maturity

Average Final Maturity	1.95 years
Average Duration	1.78 years
Average Market Yield	1.82%
Average Quality (S&P)	AA+
Average Coupon	2.08%

### Maturity Distribution



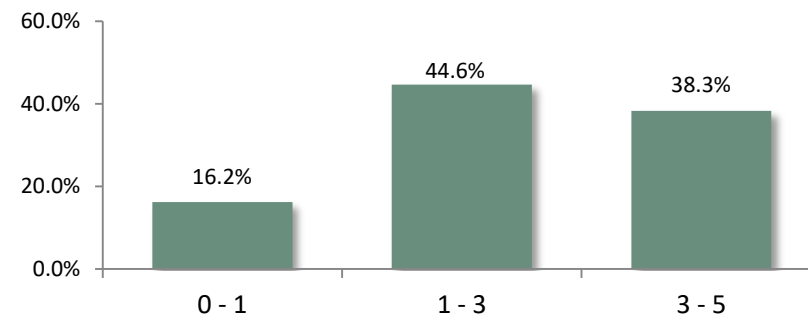
### Sector Allocation



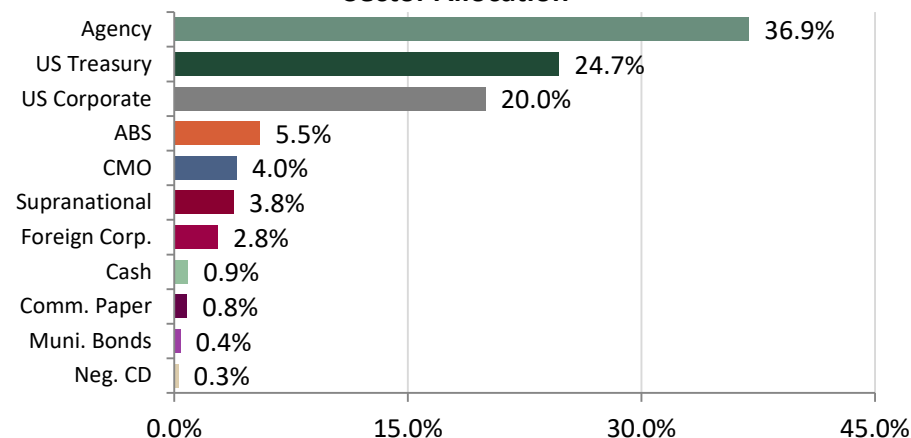
## Short Term Bond

Average Final Maturity	2.64 years
Average Duration	2.39 years
Average Market Yield	1.82%
Average Quality (S&P)	AA
Average Coupon	2.26%

### Maturity Distribution



### Sector Allocation



Based on Chandler's Limited Maturity and Short Term Bond composite characteristics as of 9/30/2019. Credit Quality equivalent of composite/average of S&P, Moody's and Fitch ratings; "A" category includes "A-1" rated money market securities. The composite characteristic information presented above is supplemental information pursuant to GIPS®. There is no guarantee that investment in any of these styles will result in characteristics similar to those that appear in this presentation due to changes in economic conditions and other market factors. Past characteristic is not indicative of future results. Please see the GIPS disclosures at the end of this presentation for complete details.

## Statistical Factors

- Historical Balances
- Seasonality Factors
- Historical Growth Rates
- Liquidity Cushions



## Budgetary Factors

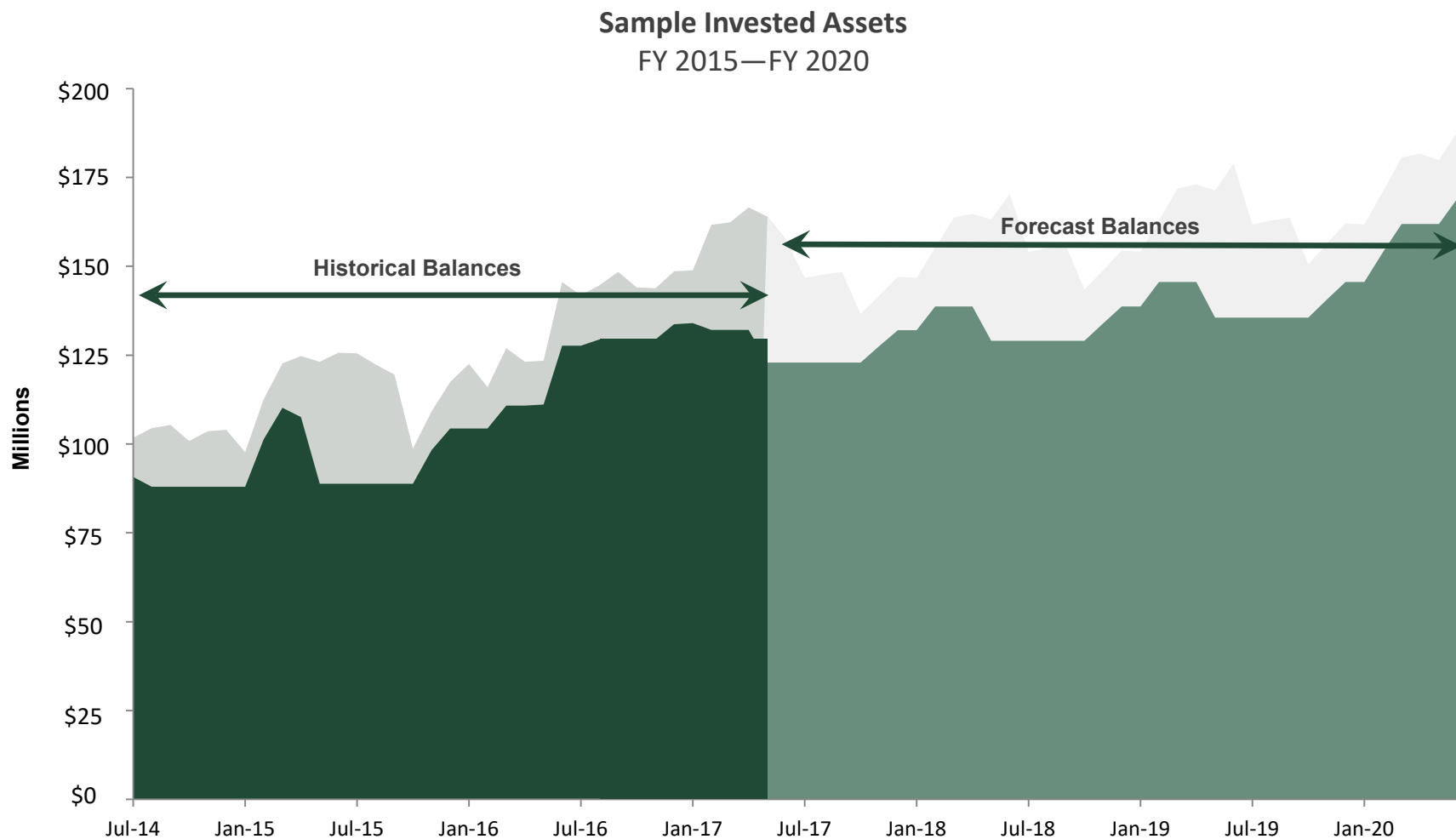
- Known Future Expenditures
- Expected Revenue Changes
- CIP In Progress
- Future Growth Assumptions



## Analysis Results

- Identifies Correct Amount for Cash Needs
- Pinpoints Amount For Long-Term Investment
- Ensures Funds Are Optimized

- Assume future growth rates
- Factor in seasonality and known future budget events
- Forecast future liquid and longer-term balances



*This sample illustration is being provided to demonstrate the tools on how we analyze cash balances. Please see disclosures at the end of this presentation.*

## Investment Management Committee

**Martin Cassell, CFA**  
CEO, CIO

**William Dennehy II, CFA**  
Executive Vice President,  
Portfolio Manager

**Scott Prickett, CTP**  
Executive Vice President,  
Portfolio Strategist

**Jayson Schmitt, CFA**  
Executive Vice President,  
Portfolio Manager

**Julie Hughes**  
Senior Vice President,  
Portfolio Strategist

**Christopher McCarry, AIF**  
Senior Vice President,  
Portfolio Strategist

**Carlos Oblites**  
Senior Vice President,  
Portfolio Strategist

**Ted Piorkowski, CFA**  
Senior Vice President  
Portfolio Manager

**Shelly Henbest, CFA**  
Vice President,  
Credit Analyst

**Genny Lynkiewicz, CFA**  
Vice President,  
Portfolio Manager

**Jeff Probst, CFA**  
Vice President,  
Portfolio Manager

**Devin Weinstein, CFA**  
Portfolio Management  
Associate

### Economic and Market Analysis Committee

- Economic Outlook
- Market Analysis
- Develops Interest Rate Scenario Inputs for HAM

### Credit Committee

- Fundamental Credit Analysis
- Security Relative Value Analysis
- Maintains Approved List

### Quantitative Analysis Committee

- Reviews Committee Data
- Produces HAM Analysis
- Improves Model Methodology

### Sector Committee

- Sector Valuation
- New Sector Analysis
- Develop Valuation Inputs

### Multi-Asset Class Committee

- Reviews Global Markets and outlook
- Sets Capital Market Expectations
- Reviews and Enhances Investment Vehicles

Our proprietary credit process is supported by a robust research platform, which supplements our Credit Committee's independent analysis, including:

- **External Research Providers**

<b>Bloomberg</b>	Real-time market and security data; Market analytics; News resource; Communication tool	<b>Stone McCarthy</b>	Macroeconomic analysis; Market commentary; Sector analysis; Tactical, focused analysis
<b>CreditSights</b>	Credit analysis and research; Ratings reports	<b>ITR</b>	Macroeconomic analysis; Market commentary; Sector analysis; Tactical, focused analysis; Strategic data; Longer-term, macro analysis
<b>BCA Research</b>	Macroeconomic research; Market commentary; Sector analysis; Strategic data; Longer-term, macro analysis	<b>Egan-Jones</b>	Quantitative metrics; Independent firm level credit quality analysis

- **Credit Ratings Providers**

<b>Fitch Ratings</b>	<b>Moody's</b>	<b>Standard &amp; Poor's</b>
----------------------	----------------	------------------------------

- **Industry Research and News Sources**

- Broad scope of equity, credit, economic and investment research reports.
- Network of research analysts to discuss findings in greater detail by phone or email.
- Dailies, Government Resources, Regulatory Filings, Industry Publications, etc.



- The Chandler professionals managing your portfolio will select corporate bonds they know will be consistent with your specific objectives, because they participate actively in our credit research process.
- Our process is founded on the sharing of information, both informally on the trading desk and through scheduled, structured committee meetings.
- Our team collaboration and communication is a significant benefit to you, because you receive the collective wisdom and judgment of the entire team.
- Our Credit Committee meets weekly, while credit research and communication on the trading floor occurs on an ongoing basis.
- Credit Committee to review:
  - Approved Issuer List
  - Industry Groups
  - Relative Valuation
  - New Investment Ideas
  - Deteriorating or Troubled Credits
  - Recent News and Events



*The City's engagement team will ensure a seamless implementation.*

## Sample Transition

Step 1	Step 2	Step 3	Implementation
Establish the Account	Kick-off Meeting	Review Investment Recommendations and Reporting	Investment of Funds
<ul style="list-style-type: none"> <li>▪ Notice of award</li> <li>▪ Execute investment management agreement</li> <li>▪ Complete new account documents</li> <li>▪ Review investment policy and existing portfolio</li> </ul>	<ul style="list-style-type: none"> <li>▪ Hold Kick off meeting</li> <li>▪ Select appropriate benchmark</li> <li>▪ Establish authority</li> <li>▪ Written documentation of all decisions</li> </ul>	<ul style="list-style-type: none"> <li>▪ Detailed plan for investing of assets</li> <li>▪ Set up reporting and prepare account statements</li> <li>▪ Access to the <i>Chandler Client Portal</i></li> </ul>	<ul style="list-style-type: none"> <li>▪ The City approves investment plan</li> <li>▪ Initial investments Transactions</li> </ul>

*Please note that these time ranges represent a typical client onboarding. The process may take more or less time to complete due to a variety of factors.*

## Section 5 | Biographies & Disclosures





## **Jayson Schmitt, CFA**

*Executive Vice President, Portfolio Manager*

Jayson Schmitt is an Executive Vice President and Portfolio Manager. Jayson is an integral part of the development and integration of quantitative analytic tools for the portfolio management process. He serves as Co-Chair of the firm's Quantitative Analysis Committee, Sector Committee, and Multi Asset Class Committee, and serves on the firm's Executive Management Team. Prior to joining the firm in 1995, Jayson was a Financial Analyst with USA Federal Credit Union. He originally joined the firm as an Operations Manager and was promoted to Portfolio Manager in 2003. Jayson earned his B.A. in economics from San Diego State University. He is a member of the CFA Society of San Diego and holds the designation of Chartered Financial Analyst.

## **Jeff Probst, CFA**

*Vice President, Portfolio Manager*

Jeff Probst is Vice President, Portfolio Manager, 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, and currently serves as Co-Chair of the firm's Quantitative Analysis Committee and as a member of the Credit Committee. 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. He holds the designation of Chartered Financial Analyst.

## **Carlos Oblites**

*Senior Vice President, Portfolio Strategist*

Carlos Oblites is a Senior Vice President and Portfolio Strategist. He is responsible for building and maintaining client relationships with public agencies along with participating actively in the portfolio management process. Carlos serves as Co-Chair of the firm's Multi Asset Class Committee and has over 20 years of investment and financial experience, focused largely on managing short-term fixed income and pension strategies for governmental and institutional non-profit clients. Prior to joining Chandler, Carlos served as the Administrative Services Manager at Central Marin Sanitation Agency (CMSA) and was responsible for all aspects of the Agency's financial, human resources, administrative support, and information systems activities. Carlos holds a Bachelor of Arts degree in History from the University of California, Santa Barbara, and earned a Master's degree in Business Administration from San Francisco State University.



## Verification Report

Chandler Asset Management, Inc.  
6225 Lusk Boulevard  
San Diego, CA 92121

We have verified whether Chandler Asset Management, Inc. (the "Firm") (1) has complied with all the composite construction requirements of the Global Investment Performance Standards (GIPS®) on a firm-wide basis for the periods from July 1, 1997 through March 31, 2019, and (2) designed its policies and procedures to calculate and present performance in compliance with the GIPS standards as of March 31, 2019. The Firm's management is responsible for compliance with the GIPS standards and the design of its policies and procedures. Our responsibility is to express an opinion based on our verification. We conducted this verification in accordance with the required verification procedures of the GIPS standards. We also conducted such other procedures as we considered necessary in the circumstances.

In our opinion, the Firm has, in all material respects:

- Complied with all the composite construction requirements of the GIPS standards on a firm-wide basis for the periods from July 1, 1997 through March 31, 2019; and
- Designed its policies and procedures to calculate and present performance in compliance with the GIPS standards as of March 31, 2019.

This report does not relate to or provide assurance on any composite compliant presentation of the Firm and does not ensure the accuracy of any specific composite compliant presentation.

*ACA Performance Services, LLC*

ACA Performance Services, LLC  
July 31, 2019



## Annual Rates of Return 2009 through 2018

Year End	Returns			3 Year Annualized		Dispersion Asset Wtd Std. Dev.	Number of Portfolios	Assets		
	Total Gross	Total Net	Index	Standard Deviation Composite	Index			Composite (MM)	% of Firm Assets	Firm (MM)
2009	2.10%	1.85%	0.78%	n/a	n/a	0.34%	9	224	4.51%	4,965
2010	2.96%	2.70%	2.35%	n/a	n/a	0.38%	8	201	3.50%	5,755
2011	1.88%	1.62%	1.55%	1.02%	1.02%	0.31%	9	222	3.74%	5,929
2012	1.16%	0.91%	0.43%	0.78%	0.73%	0.06%	15	474	7.37%	6,431
2013	0.30%	0.05%	0.36%	0.59%	0.50%	0.08%	18	797	11.12%	7,165
2014	0.87%	0.61%	0.62%	0.54%	0.43%	0.09%	21	879	9.88%	8,894
2015	0.74%	0.49%	0.54%	0.63%	0.56%	0.07%	27	1,328	11.31%	11,747
2016	1.11%	0.86%	0.88%	0.74%	0.76%	0.06%	31	1,081	8.39%	12,882
2017	0.85%	0.60%	0.43%	0.71%	0.74%	0.08%	32	1,178	8.60%	13,698
2018	1.69%	1.44%	1.59%	0.77%	0.85%	0.03%	31	1,905	11.51%	16,551

**Chandler Asset Management claims compliance with the Global Investment Performance Standards (GIPS®) and has prepared and presented this report in compliance with the GIPS standards.**

Chandler Asset Management has been independently verified by ACA Performance Services for the period of July 1, 1997 through March 31, 2019. The verification report is available upon request. A firm that claims compliance with the GIPS standards must establish policies and procedures for complying with all the applicable requirements of the GIPS standards. Verification provides assurance on whether the firm's policies and procedures related to composite maintenance, as well as the calculation, presentation, and distribution of performance, have been designed in compliance with the GIPS standards and have been implemented on a firm-wide basis. Verification does not provide assurance on the accuracy of any specific performance report.

1. Chandler Asset Management is an independent investment adviser registered as such with the Securities and Exchange Commission under the Investment Adviser's Act of 1940. Registration with the SEC does not imply a certain level of skill or training. Since 1988, Chandler Asset Management has provided fixed income investment management services to the public sector, as well as to foundations, endowments, individuals and corporations. A complete list and description of all of the firm's composites is available upon request.
2. The Limited Maturity Composite is a composite of individually managed accounts with an average modified duration approximately equal to the modified duration of the ICE Bank of America Merrill Lynch 1-3 Year US Treasury Index and a final stated maturity of individual securities of five years. The minimum account size required to be included in this composite is \$2 million. This composite was created September 1988. The name of this composite was changed from Short-Term Fixed Income effective June 30, 2009.
3. The ICE BAML 1-3 Year US Treasury Index tracks the performance of US dollar-denominated sovereign debt publicly issued by the US government in its domestic market. Qualifying securities must have at least one year remaining term to final maturity and less than three years remaining term to final maturity, a fixed coupon schedule, and a minimum amount outstanding of \$1 billion. Qualifying securities must have at least 18 months to final maturity at the time of issuance. Indexes are referred to for comparative purposes only and are not intended to parallel the risk or investment style of the portfolios in the Composite. Indexes do not utilize leverage. Index calculations do not reflect fees, brokerage commissions or other expenses of investing. Investors may not make direct investments into any index. Index data contained herein (and all trademarks related thereto) are owned by the indicated index provider, and may not be redistributed. The information herein has not been approved by the index provider.
4. Valuations are computed and performance reported in U.S. Dollars.
5. Performance is calculated using a time-weighted total rate of return, which links performance monthly, and is reported gross of investment management fees and custodial fees, but after all trading expenses. Results reflect the reinvestment of income, dividends and other earnings, and include realized and unrealized gains and losses and interest accrued through the last day of each month. Results do not reflect the potential impact of taxes. Past performance is not indicative of future results. Fees charged by Chandler Asset Management will reduce performance.
6. Net-of-fees performance returns are calculated by reducing the monthly gross performance by one-twelfth (1/12) of the actual maximum applicable fee of 0.25%, which is representative of our current fee schedule for this composite. These monthly returns are then geometrically linked to produce annual returns which are presented before custodial fees but after management fees and all trading expenses. Fees are negotiable and additional information regarding Chandler's fees is included in our Part 2A of Form ADV.
7. Dispersion is calculated using the asset weighted standard deviation of annual gross returns of those portfolios that were included in the composite for the entire year. For years when less than six portfolios were included in the composite for the full year, no dispersion measure is presented. The three-year annualized standard deviation measures the variability of the composite gross returns and the benchmark returns over the preceding 36-month period. Policies for valuing investments, calculating performance, and preparing GIPS reports are available upon request.
8. GIPS® is a registered trademark of CFA Institute. CFA Institute does not endorse or promote this organization, nor does it warrant the accuracy or quality of the content contained herein.

Source ice Data Indices, LLC ("ICE"), used with permission. ICE permits the use of ICE Indices and related data on an "as is" basis; ICE, its affiliates and their respective third party suppliers disclaim any and all warranties and representation, express and/or implied, including any warranties of merchantability or fitness for a particular purpose or use, including the indices, index data and any data included in, related to, or derived therefrom. Neither ICE data, its affiliates or their respective third-party providers guarantee the quality, adequacy, accuracy, timeliness or completeness of the indices or the index data or any component thereof, and the indices and index data and all components thereof are provided on an "as is" basis and licensee's use is at licensee's own risk. ICE data, its affiliates and their respective third party do not sponsor, endorse, or recommend Chandler, or any of its products or services.

## Annual Rates of Return 2009 through 2018

		Returns		3 Year Annualized		Dispersion		Assets		
Year	Total	Total		Standard Deviation		Asset Wtd	Number of	Composite	% of Firm	Firm
End	Gross	Net	Index	Composite	Index	Std. Dev.	Portfolios	(MM)	Assets	(MM)
2009	2.80%	2.50%	0.91%	n/a	n/a	0.35%	29	1,554	31.29%	4,965
2010	3.97%	3.70%	3.46%	n/a	n/a	0.11%	33	1,906	33.12%	5,755
2011	2.90%	2.64%	3.19%	1.47%	1.65%	0.07%	32	1,866	31.48%	5,929
2012	1.80%	1.54%	0.98%	1.18%	1.27%	0.26%	38	2,133	33.17%	6,431
2013	0.04%	-0.21%	-0.16%	1.02%	1.10%	0.08%	39	2,168	30.26%	7,165
2014	1.42%	1.17%	1.24%	0.96%	0.99%	0.07%	40	2,325	26.14%	8,894
2015	1.15%	0.90%	0.96%	1.11%	1.18%	0.07%	44	3,403	28.97%	11,747
2016	1.30%	1.04%	1.08%	1.24%	1.39%	0.05%	49	4,131	32.07%	12,882
2017	1.08%	0.83%	0.67%	1.19%	1.34%	0.11%	48	3,783	27.62%	13,698
2018	1.53%	1.27%	1.55%	1.22%	1.40%	0.05%	48	3,485	21.06%	16,551

**Chandler Asset Management claims compliance with the Global Investment Performance Standards (GIPS®) and has prepared and presented this report in compliance with the GIPS standards.**

Chandler Asset Management has been independently verified by ACA Performance Services for the period of July 1, 1997 through March 31, 2019. The verification report is available upon request. A firm that claims compliance with the GIPS standards must establish policies and procedures for complying with all the applicable requirements of the GIPS standards. Verification provides assurance on whether the firm's policies and procedures related to composite maintenance, as well as the calculation, presentation, and distribution of performance, have been designed in compliance with the GIPS standards and have been implemented on a firm-wide basis. Verification does not provide assurance on the accuracy of any specific performance report.

1. Chandler Asset Management is an independent investment adviser registered as such with the Securities and Exchange Commission under the Investment Adviser's Act of 1940. Registration with the SEC does not imply a certain level of skill or training. Since 1988, Chandler Asset Management has provided fixed income investment management services to the public sector, as well as to foundations, endowments, individuals and corporations. A complete list and description of all of the firm's composites is available upon request.
2. The Short Term Bond Composite is a composite of individually managed accounts with an average modified duration approximately equal to the modified duration of the ICE Bank of America Merrill Lynch 1-5 Year US Treasury & Agency Index and a maximum final stated maturity of individual securities of five years. The minimum account size required to be included in this composite is \$2 million. This composite was created in September 1995. The name of this composite was changed from 1-5 Year Government Fixed Income effective June 30, 2009.
3. The ICE BAML 1-5 Year US Treasury & Agency Index tracks the performance of US dollar denominated US Treasury and nonsubordinated US agency debt issued in the US domestic market. Qualifying securities must have an investment grade rating (based on an average of Moody's, S&P and Fitch). Qualifying securities must have at least one year remaining term to final maturity and less than five years remaining term to final maturity, at least 18 months to maturity at time of issuance, a fixed coupon schedule, and a minimum amount outstanding of \$1 billion for sovereigns and \$250 million for agencies. Indexes are referred to for comparative purposes only and are not intended to parallel the risk or investment style of the portfolios in the Composite. Indexes do not utilize leverage. Index calculations do not reflect fees, brokerage commissions or other expenses of investing. Investors may not make direct investments into any index. Index data contained herein (and all trademarks related thereto) are owned by the indicated index provider, and may not be redistributed. The information herein has not been approved by the index provider.
4. Valuations are computed and performance reported in U.S. Dollars.
5. Performance is calculated using a time-weighted total rate of return, which links performance monthly, and is reported gross of investment management fees and custodial fees, but after all trading expenses. Results reflect the reinvestment of income, dividends and other earnings, and include realized and unrealized gains and losses and interest accrued through the last day of each month. Results do not reflect the potential impact of taxes. Past performance is not indicative of future results. Fees charged by Chandler Asset Management will reduce performance.
6. Net-of-fees performance returns are calculated by reducing the monthly gross performance by one-twelfth (1/12) of the actual maximum applicable fee of 0.25%, which is reflective of our current fee schedule for this composite. These monthly returns are then geometrically linked to produce annual returns which are presented before custodial fees but after management fees and all trading expenses. Fees are negotiable and additional information regarding Chandler's fees is included in our Part 2A of Form ADV.
7. Dispersion is calculated using the asset weighted standard deviation of annual gross returns of those portfolios that were included in the composite for the entire year. For years when less than six portfolios were included in the composite for the full year, no dispersion measure is presented. The three-year annualized standard deviation measures the variability of the composite gross returns and the benchmark returns over the preceding 36-month period. Policies for valuing investments, calculating performance, and preparing GIPS reports are available upon request.
8. GIPS® is a registered trademark of CFA Institute. CFA Institute does not endorse or promote this organization, nor does it warrant the accuracy or quality of the content contained herein.

Source ice Data Indices, LLC ("ICE"), used with permission. ICE permits the use of ICE Indices and related data on an "as is" basis; ICE, its affiliates and their respective third party suppliers disclaim any and all warranties and representation, express and/or implied, including any warranties of merchantability or fitness for a particular purpose or use, including the indices, index data and any data included in, related to, or derived therefrom. Neither ICE data, its affiliates or their respective third-party providers guarantee the quality, adequacy, accuracy, timeliness or completeness of the indices or the index data or any component thereof, and the indices and index data and all components thereof are provided on an "as is" basis and licensee's use is at licensee's own risk. ICE data, its affiliates and their respective third party do not sponsor, endorse, or recommend Chandler, or any of its products or services.

## **LAIF**

The California State Local Agency Investment Fund (LAIF) is an investment portfolio managed by the State Treasurer. All securities are purchased under the authority of Government Code Section 16430 and 16480.4 and include securities issued by entities of the US Government, including the US Treasury and Agencies, Corporate debt, Certificates of Deposit, Mortgage Backed Securities and certain loans to the State and state agencies. The average maturity of the Fund will be between 120 days and 18 months.

## **ICE BAML 1-3 Year US Treasury Index**

The ICE BAML 1-3 Year US Treasury Index tracks the performance of US dollar denominated sovereign debt publicly issued by the US government in its domestic market. Qualifying securities must have at least one year remaining term to final maturity and less than three years remaining term to final maturity, a fixed coupon schedule and a minimum amount outstanding of \$1 billion. Qualifying securities must have at least 18 months to final maturity at the time of issuance.

## **ICE BAML 1-3 Year US Treasury & Agency Index**

The ICE BAML 1-3 Year US Treasury & Agency Index tracks the performance of US dollar denominated US Treasury and nonsubordinated US agency debt issued in the US domestic market. Qualifying securities must have an investment grade rating (based on an average of Moody's, S&P and Fitch). Qualifying securities must have at least one year remaining term to final maturity and less than three years remaining term to final maturity, at least 18 months to maturity at time of issuance, a fixed coupon schedule, and a minimum amount outstanding of \$1 billion for sovereigns and \$250 million for agencies.

## **ICE BAML 1-5 Year US Treasury & Agency Index**

The ICE BAML US Treasury & Agency Index tracks the performance of US dollar denominated US Treasury and nonsubordinated US agency debt issued in the US domestic market. Qualifying securities must have an investment grade rating (based on an average of Moody's, S&P and Fitch). Qualifying securities must have at least one year remaining term to final maturity and less than five years remaining term to final maturity, at least 18 months to maturity at time of issuance, a fixed coupon schedule and a minimum amount outstanding of \$1 billion for sovereigns and \$250 million for agencies.

Source ICE Data Indices, LLC ("ICE"), used with permission. ICE permits the use of ICE Indices and related data on an "as is" basis; ICE, its affiliates and their respective third party suppliers disclaim any and all warranties and representation, express and/or implied, including any warranties of merchantability or fitness for a particular purpose or use, including the indices, index data and any data included in, related to, or derived therefrom. Neither ICE data, its affiliates or their respective third-party providers guarantee the quality, adequacy, accuracy, timeliness or completeness of the indices or the index data or any component thereof, and the indices and index data and all components thereof are provided on an "as is" basis and licensee's use is at licensee's own risk. ICE data, its affiliates and their respective third party do not sponsor, endorse, or recommend Chandler, or any of its products or services.



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. No investment decision should be made based solely on the information provided herein. All investments involve risk, including loss of principal invested. The strategies referenced may not be suitable for all investors. Economic factors, market conditions, and investment strategies will affect the performance of any portfolio and there are no assurances that it will match or outperform any particular benchmark. References to specific securities are examples of securities held in a portfolio and are not intended to be, and should not be interpreted as an offer, solicitation, or recommendation to purchase or sell any financial instrument, an indication that the purchase of such securities was or will be profitable, or representative of the composition or performance of the portfolio. The data contained in this presentation is the property of those providers, which was obtained from sources believed to be reliable, but are subject to change at any time at the provider's discretion. Unless otherwise noted, Chandler is the source of data contained in this presentation.

Certain performance provided is hypothetical and does not represent actual trading in an account. Individual investor performance will vary from the performance shown herein and may be higher or lower than the results shown. Hypothetical performance has inherent limitations, including the following: (1) the results do not reflect the results of actual trading, but were achieved by means of retroactive application, which can be designed with the benefit of hindsight; (2) the performance does not reflect the impact that any material market or economic factors might have had on our decision-making process; and (3) for various reasons (including the reasons indicated above), investors may have experienced investment results during the corresponding time periods that were materially different from those portrayed. Back-tested performance does not represent actual performance and should not be interpreted as an indication of such performance. The opinions referenced are as of the date of publication and are subject to change without notice. An index is not available for direct investment.

Any forecasts, forward-looking statements and assumptions are inherently limited and should not be relied upon as an indicator of future results. Any opinions or views constitute judgments made by the author at the date of this presentation and may become outdated or superseded at any time without notice. Any statements concerning financial market trends are based on current market conditions, which will fluctuate.

Index returns assume reinvestment of all distributions. Historical performance results for investment indexes generally do not reflect the deduction of transaction and/or custodial charges or the deduction of an investment management fee, the incurrence of which would have the effect of decreasing historical performance results. It is not possible to invest directly in an index.

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 rates 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.