



CMTA Annual Conference April 2018

Cash Flow Confidence: The Cornerstone of Investing

Susan Munson, CFP®, CFIP
Government Portfolio Advisors, LLC
www.gpafixedincome.com

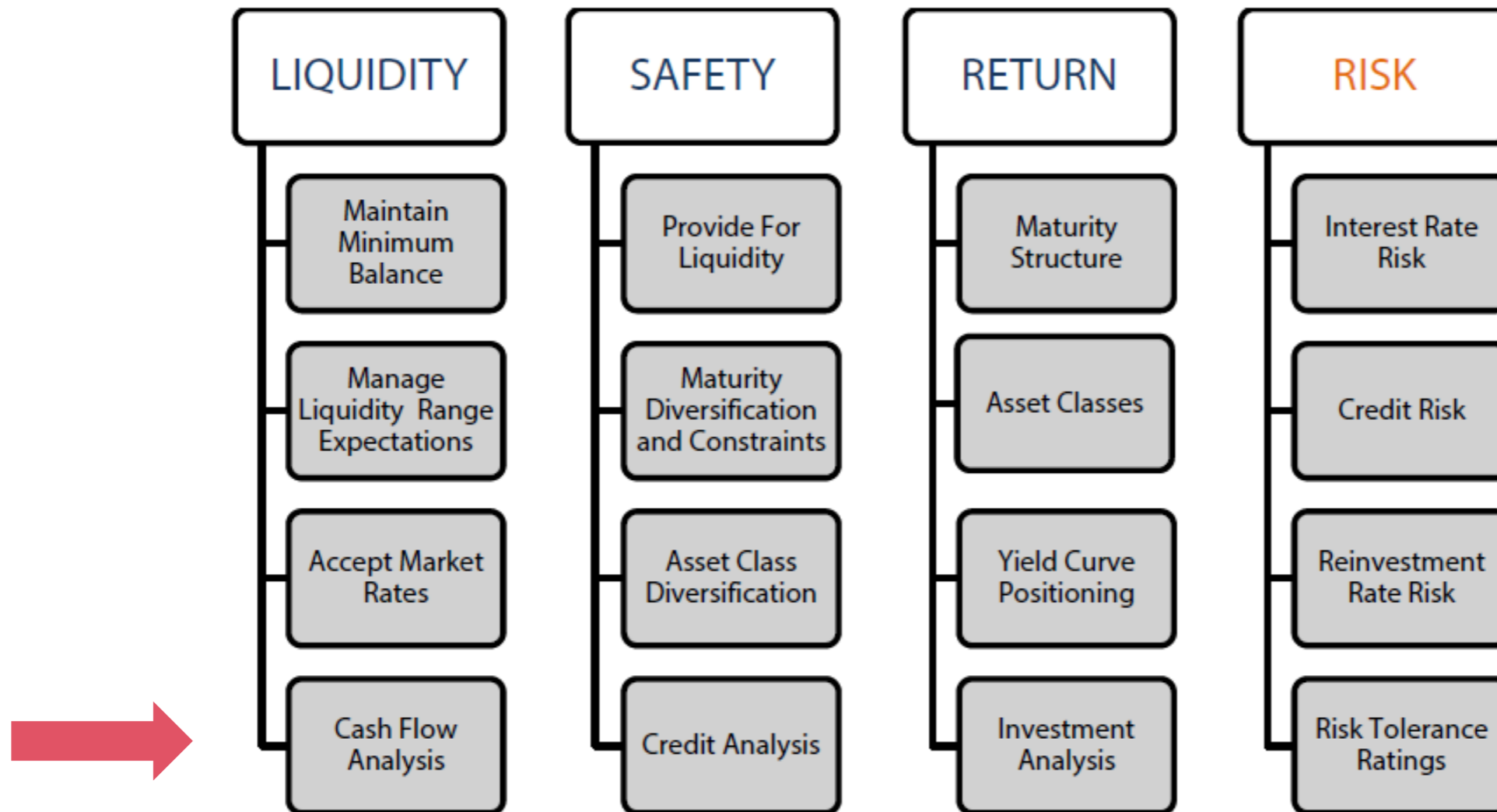
Understanding Cash Flow is Step One

CORE COMPETENCIES



- Multi-task, Responsibilities, Efficiencies
- Knowledge, Market Expertise and Confidence
- Reporting, Bloomberg, Advisors Brokers, Access to the Markets
- Investment Policy, Compliance, Internal Controls

Cash is the Cornerstone



Session Summary & Objectives

Investing cash starts with knowing when you need cash. Increasing clarity of cash projections is the first step to optimizing investment results. Today, we will gain insight from multiple perspectives through real life experiences to improve inter-department communication and tactical analysis.

Identify the connection between optimizing cash and minimizing risk

Compare methods commonly used to prepare forecasts

Learn about available resources to complement internal processes

Why Care?

Ensure the cash you need is on hand

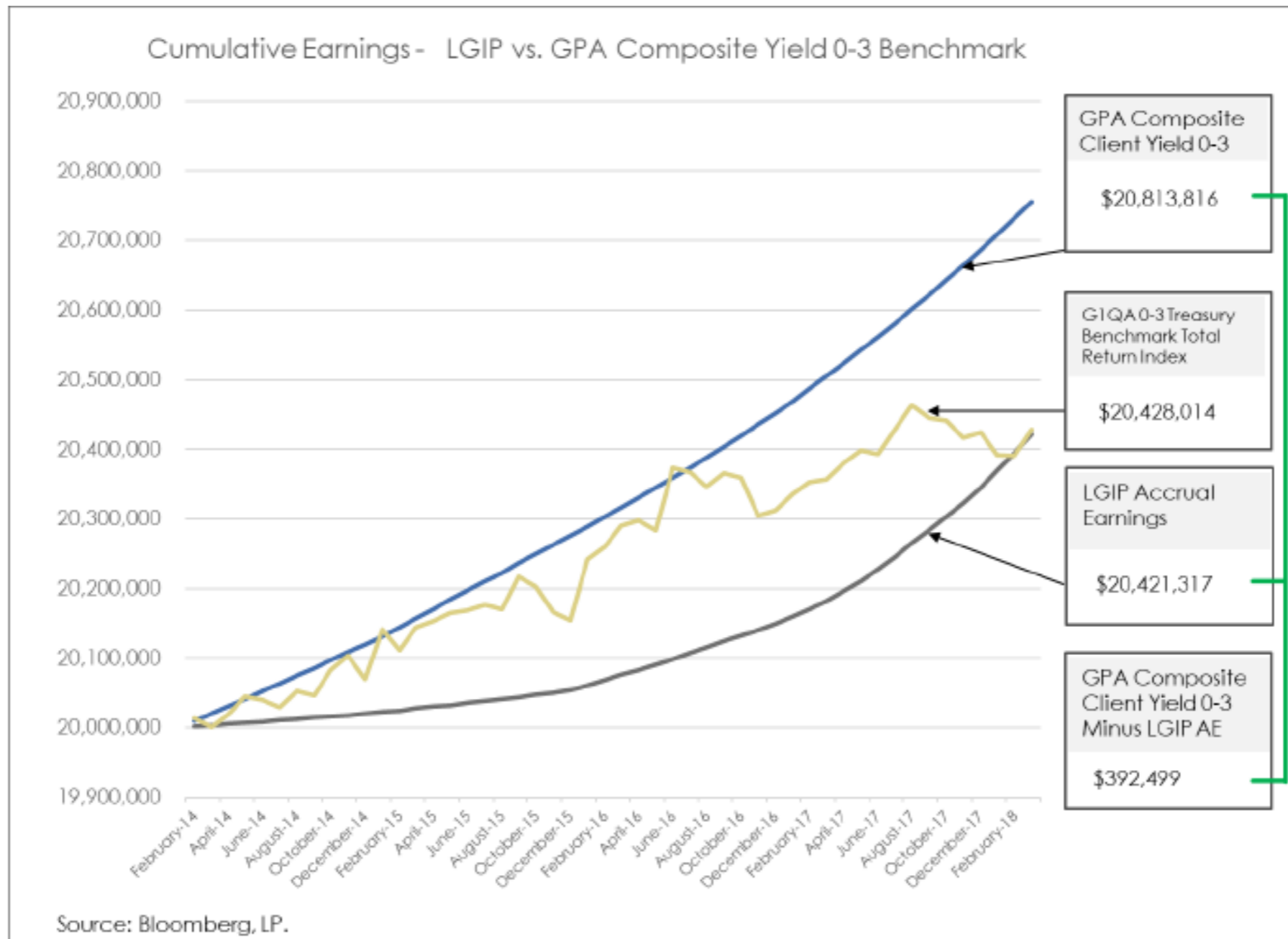
Financial benefit of reliable forecasting

Mitigating risk through increased visibility

Ancillary benefits of proactive discussions

Systems for reviewing and maintaining projections

Impact is Significant – Sample based on historical returns



What's the Problem?

UNSURE of when you will need the cash

Too many unknowns

Limited (or no) inter-department communication

Easier to leave it overnight for immediate liquidity

The griping gives me a headache!

Assess Liquidity Needs

Address Liquidity & Create Guidelines

- What amount of cash do you need to have on hand or keep under six months in maturity?
- Pull up historical cash balances for the last 3 years.
- Liquidity fund must stay in pools i.e., LAIF, 2(a)7 money markets; and short instruments such as Treasury bills, CDs and commercial paper. Typically 6 months and in.

Review Historical Fund Balances

HISTORICAL BALANCE

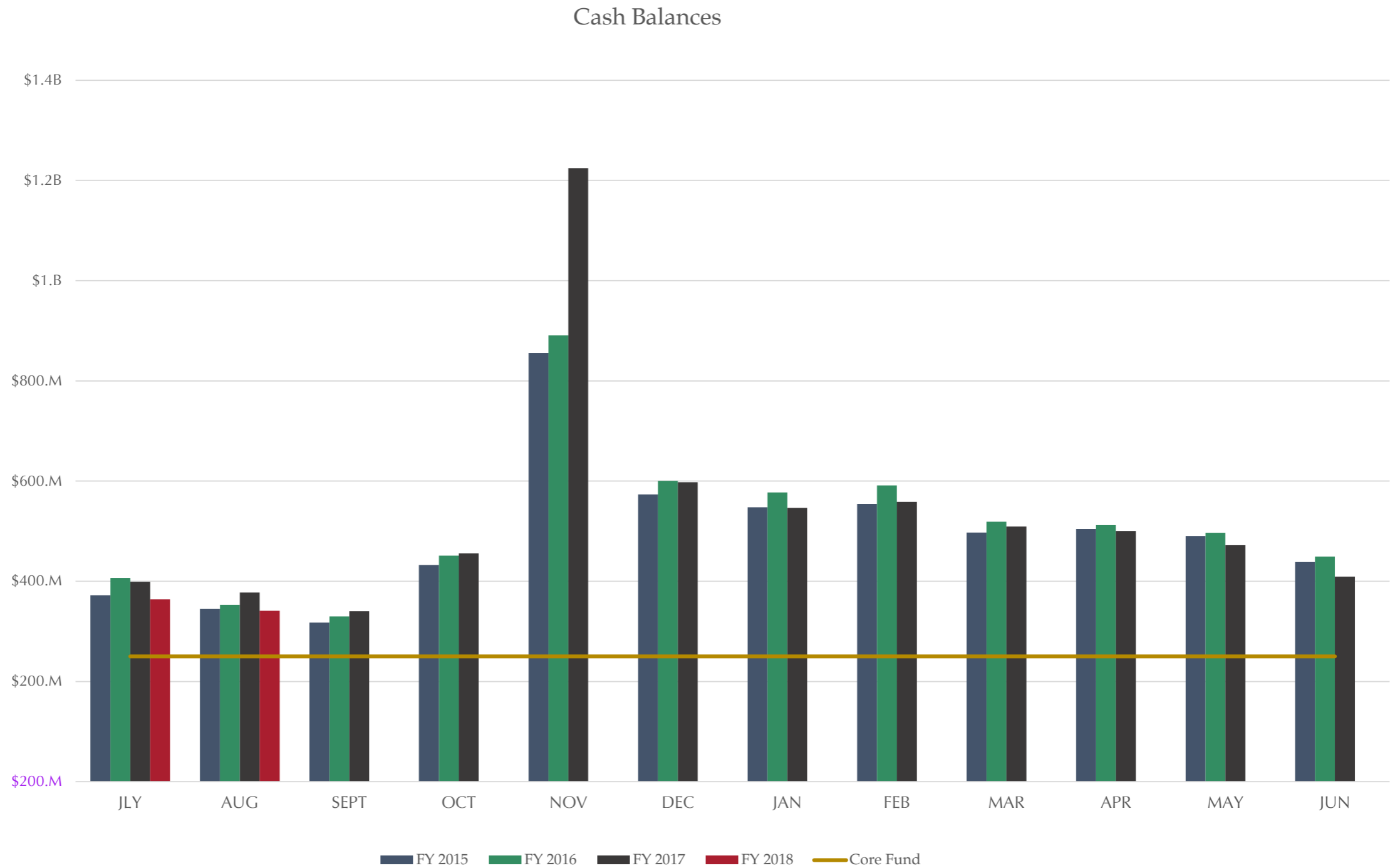
	FY 2013	FY 2014	FY 2015	FY 2016	FY 2017	FY 2018
JLY	\$247,459,920	\$343,729,969	\$371,968,819	\$406,945,594	\$398,784,822	\$364,058,051
AUG	\$226,330,336	\$315,598,250	\$344,732,828	\$353,249,968	\$377,727,652	\$340,995,183
SEPT	\$222,038,813	\$283,661,037	\$317,617,941	\$329,749,522	\$340,164,617	
OCT	\$321,948,879	\$400,064,689	\$432,390,980	\$451,346,045	\$455,532,972	
NOV	\$588,332,059	\$663,958,820	\$855,837,230	\$890,789,484	\$1,224,811,870	
DEC	\$522,273,794	\$491,707,667	\$573,253,240	\$600,518,843	\$597,561,650	
JAN	\$502,636,058	\$463,199,505	\$547,824,680	\$577,371,450	\$546,317,960	
FEB	\$500,695,620	\$478,411,001	\$554,591,170	\$591,328,524	\$558,595,390	
MAR	\$457,933,956	\$420,438,317	\$497,234,090	\$518,943,996	\$509,138,950	
APR	\$450,526,426	\$416,706,311	\$504,605,650	\$512,068,231	\$500,440,250	
MAY	\$430,177,458	\$400,279,768	\$490,410,950	\$496,962,569	\$472,019,470	
JUN	\$379,551,423	\$412,791,863	\$438,279,560	\$449,297,525	\$409,036,280	

Look For Patterns

ANNUAL HISTORICAL SUMMARY

	FY 2013	FY 2014	FY 2015	FY 2016	FY 2017	FY 2018
Average Balance:	\$404,158,729	\$424,212,266	\$494,062,261	\$514,880,979	\$532,510,990	\$352,526,617
Maximum Balance:	\$588,332,059	\$663,958,820	\$855,837,230	\$890,789,484	\$1,224,811,870	\$364,058,051
Minimum Balance:	\$222,038,813	\$283,661,037	\$317,617,941	\$329,749,522	\$340,164,617	\$340,995,183
Variance in period Maximum/Minimum	\$366,293,246	\$380,297,783	\$538,219,289	\$561,039,962	\$884,647,253	\$23,062,868

Liquidity vs. Core Funds



Establish Targets for Liquidity and Investments

BASED ON LAST YEARS BALANCES

Recommended Core Fund Size:	\$250,000,000.00
Minimum Liquidity Balance (Previous Year):	\$90,164,617
Average Total Fund Balance (Previous Year):	\$532,510,990.25
Liquidity Fund Target Range (Previous Year):	\$90,164,617.00 \$974,811,870.00
Minimum Fund Balance (Last Year):	\$340,164,617

BASED ON LAST YEARS BALANCES

Recommended Core Fund Size:	\$300,000,000.00
Minimum Liquidity Balance (Previous Year):	\$40,164,617
Average Total Fund Balance (Previous Year):	\$532,510,990.25
Liquidity Fund Target Range (Previous Year):	\$40,164,617.00 \$924,811,870.00
Minimum Fund Balance (Last Year):	\$340,164,617

Identify Liquidity Range

Liquidity Ranges are developed to guide expectations

Based on FY 2017

Total Average Balance	\$532,510,990
Total Low Balance	\$340,164,617
Total Maximum	\$1,224,811,870

Liquidity Range: \$90,164,671 - \$974,811,870

Recommended Investment Fund: \$250,000,000

If liquidity balances are outside range, cash flows should be checked

Behind the Scenes

2017 MONTH-END FUND BALANCES Sample Account						
	January 2017	February 2017	March 2017	April 2017	May 2017	June 2017
<u>ACCOUNT</u>	<u>Ending Value</u>	<u>Ending Value</u>	<u>Ending Value</u>	<u>Ending Value</u>	<u>Ending Value</u>	<u>Ending Value</u>
LAIF (Bank Account) (Investment Account)						
FUND BALANCE TOTALS	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
	July 2017	August 2017	September 2017	October 2017	November 2017	December 2017
<u>ACCOUNT</u>	<u>Ending Value</u>	<u>Ending Value</u>	<u>Ending Value</u>	<u>Ending Value</u>	<u>Ending Value</u>	<u>Ending Value</u>
LAIF (Bank Account) (Investment Account)						
LIQUIDITY BALANCE TOTALS	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -

Tables and graphs are populated from a centralized spreadsheet to minimize input errors.

Optimizing Returns

Identify potential returns

Understand potential risk

Identify your organization's cash flow drivers

Determine comfort level for your entity

Opportunity Cost Evaluation

Annualized Returns (%)		\$ 250,000,000					6/30/2017
Benchmark	Duration	Last Quarter	Last Year	3 Year	5 Year	10 year	
LAI F Es timates	0.01	0.250%	0.550%	0.450%	0.330%	0.850%	
US Treas ury 0-1 Year	0.51	0.187%	0.507%	0.366%	0.295%	0.886%	
US Treas ury 0-3 Year	1.45	0.178%	0.096%	0.585%	0.524%	1.590%	
US Treas ury 0-5 Year	2.23	0.338%	-0.303%	0.926%	0.748%	2.229%	

Dollar Amount of Earnings in Period		\$ 250,000,000					6/30/2017
LAI F Es timates	0.01	\$ 625,000.00	\$ 1,375,000.00	\$ 3,390,210.28	\$ 4,152,314.99	\$ 22,081,513.12	
US Treas ury 0-1 Year	0.51	\$ 468,130.64	\$ 1,268,602.10	\$ 2,755,909.38	\$ 3,712,261.55	\$ 23,063,014.34	
US Treas ury 0-3 Year	1.45	\$ 445,650.58	\$ 240,365.44	\$ 4,412,221.79	\$ 6,618,943.33	\$ 42,722,462.07	
US Treas ury 0-5 Year	2.23	\$ 845,251.54	\$ (758,290.71)	\$ 7,008,241.69	\$ 9,494,003.57	\$ 61,668,034.56	

Percentage Principal Price Change Given Change in Rates

Core Fund Target: \$ 250,000,000		Interest Rate Change (bps)			
Benchmark	Max Duration	25	50	75	100
LAI F Es timates	0.01	\$ 6,250.00	\$ 12,500.00	\$ 18,750.00	\$ 25,000.00
US Treas ury 0-1 Year	0.51	\$ 318,750.00	\$ 637,500.00	\$ 956,250.00	\$ 1,275,000.00
US Treas ury 0-3 Year	1.45	\$ 906,250.00	\$ 1,812,500.00	\$ 2,718,750.00	\$ 3,625,000.00
US Treas ury 0-5 Year	2.23	\$ 1,395,000.00	\$ 2,790,000.00	\$ 4,185,000.00	\$ 5,580,000.00

Opportunity Cost Evaluation

Annualized Returns (%)		\$ 250,000,000					6/30/2017
Benchmark	Duration	Last Quarter	Last Year	3 Year	5 Year	10 year	
LAI F Es timates	0.01	0.250%	0.550%	0.450%	0.330%	0.850%	
US Treas ury 0-1 Year	0.51	0.187%	0.507%	0.366%	0.295%	0.886%	
US Treas ury 0-3 Year	1.45	0.178%	0.096%	0.585%	0.524%	1.590%	
US Treas ury 0-5 Year	2.23	0.338%	-0.303%	0.926%	0.748%	2.229%	

Dollar Amount of Earnings in Period		\$ 250,000,000					6/30/2017
LAI F Es timates	0.01	\$ 625,000.00	\$ 1,375,000.00	\$ 3,390,210.28	\$ 4,152,314.99	\$ 22,081,513.12	
US Treas ury 0-1 Year	0.51	\$ 468,130.64	\$ 1,268,602.10	\$ 2,755,909.38	\$ 3,712,261.55	\$ 23,063,014.34	
US Treas ury 0-3 Year	1.45	\$ 445,650.58	\$ 240,365.44	\$ 4,412,221.79	\$ 6,618,943.33	\$ 42,722,462.07	
US Treas ury 0-5 Year	2.23	\$ 845,251.54	\$ (758,290.71)	\$ 7,008,241.69	\$ 9,494,003.57	\$ 61,668,034.56	

Percentage Principal Price Change Given Change in Rates

Core Fund Target: \$ 250,000,000		Interest Rate Change (bps)			
Benchmark	Max Duration	25	50	75	100
LAI F Es timates	0.01	\$ 6,250.00	\$ 12,500.00	\$ 18,750.00	\$ 25,000.00
US Treas ury 0-1 Year	0.51	\$ 318,750.00	\$ 637,500.00	\$ 956,250.00	\$ 1,275,000.00
US Treas ury 0-3 Year	1.45	\$ 906,250.00	\$ 1,812,500.00	\$ 2,718,750.00	\$ 3,625,000.00
US Treas ury 0-5 Year	2.23	\$ 1,395,000.00	\$ 2,790,000.00	\$ 4,185,000.00	\$ 5,580,000.00

Mitigating Risk

Risks associated with uncertainty

- Too much allocated to investments
- Limited places to “park” cash

Strategies to mitigate risks

- Matching maturities
- Selecting benchmarks for cash and core funds
- Adopting disciplined investment approach
- Incorporating systems for reviewing and refining projections

Stakeholders are interested parties belonging to a system or organization where all participants are seen as having an interest in achieving success.

Inter-Department Communication

Engage stakeholders early and often

- Often there is a lack of understanding as to impact on investments
- More transparency will build trust
- Increased communication will improve internal relationships
- Third-parties can help instigate discussions

Keeping Forecasts Current

Recommended process for staying current

- Update cash flow projections at least annually
- Incorporate process to guide the conversations
- Compare projections versus actuals to identify trends
- Document and retain for future reference

Stay Accountable



Managing expectations is key!



Stakeholder buy-in
reduces
tough conversations



Susan Munson, CFP®,CFIP
Government Portfolio Advisors
Managing Director & Senior Portfolio Advisor

Ms. Munson is a Managing Director at Government Portfolio Advisors and serves clients in the role of Senior Portfolio Advisor. She is dedicated to the empowerment of public fund investors and is a specialist in the implementation of the investment process, strategy and due diligence.

She is also the founder and current Advisory Board Chair of Fixed Income Academy, a national online learning platform where financial professionals learn market fundamentals and earn certifications to hone investment management skills. To complement her earlier experience in institutional bond sales and client management, she earned her Certified Financial Planner (CFP®) designation which has influenced her focus on planning as the basis for investment strategy and practice development.

Ms. Munson has been serving public entities for over 25 years and is actively involved as a speaker and educator with trade associations throughout the country.

Contact Susan at susan@gpafixedincome.com or 949-529-5289.

Disclaimer

Government Portfolio Advisors, LLC (GPA) presentations have been prepared either from publicly available information or reflects the opinions of the author. Information contained within the investment reports provided by GPA are believed to be reliable but may not have been independently verified. GPA, LLC does not guaranty, represent or warrant, or accept an responsibility or liability as to, the accuracy, completeness or appropriateness of the information contained in these reports. Information contained herein may not be current due to, among other things, changes in the financial markets or economic environment. Opinions reflected in these reports are subject to change without notice. Forecasts represent estimates. Information provided by Government Portfolio Advisors is expressed in good faith, but not guaranteed. Investing carries risk of losses. Information provided by GPA does not constitute, and should not be used as a substitute, tax, legal or investment advice. It is imperative for investors to understand the risks before trading or making investment decisions. The content of this report may not be altered, reproduced or redistributed in whole or in part, without prior written consent of Government Portfolio Advisors.