



COUNTY OF EL DORADO

OPEB Prefunding and Pension Rate Stabilization Program (PRSP) January 23, 2018

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CONTACTS





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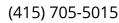
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PARS TRUST TEAM







under management

Trust Administrator & Consultant	Trustee	Investment Manager		
 Recordkeeping/sub-trust accounting Actuarial coordination Monitor contributions/process disbursements Monitor plan compliance Ongoing client liaison 	Safeguard plan assetsOversight protectionPlan fiduciaryCustodian of assets	 Investment sub-advisor to U.S. Bank Open architecture Investment strategy and asset allocation development Investment policy assistance 		
	Corporate Experience			
34 years (1984 – 2018)	155 years (1863 – 2018)	99 years (1919 – 2018)		
	Plans Under Administration			
1,600+ plans, 850+ public agencies, 400,000+ participants				
Dollars under Administration				
Over \$2.6 billion	Over \$4 trillion	Over \$16.6 billion		



OPEB/PENSION CLIENT LIST (PARTIAL)

UPDATED: JANUARY 2018

COUNTIES

Amador

Contra Costa

Humboldt

Imperial

Inyo

Kern

Kings

Merced

Mono

Nevada

Placer

Plumas

Riverside

San Benito

Shasta

Siskiyou

Solano

Sonoma

Sutter

Trinity

Yolo

EL DORADO AREA CLIENTS

El Dorado Hills County Water District Nevada County Consolidated Fire District*

Placer County Resource Conservation District Rancho Murrieta Community Services District South Placer Fire Protection District El Dorado Union High School District

Placer Union High School District

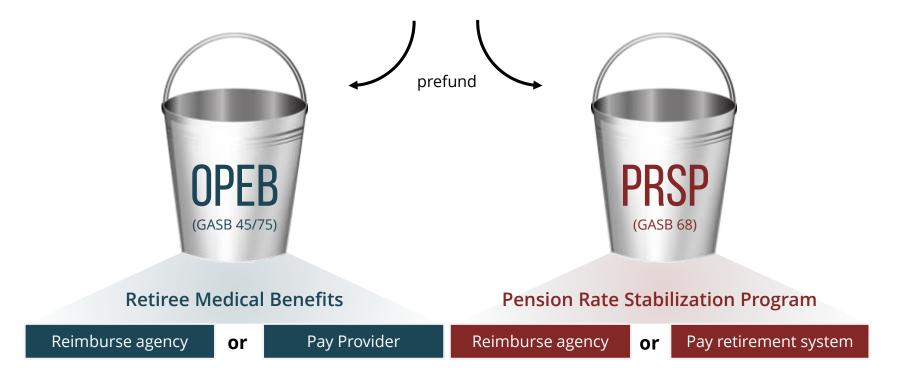
Twin Rivers Unified School District

Bolded agencies have adopted PRSP

* PRSP only



THE PARS IRS-APPROVED COMBINATION 115 TRUST



- Assets are sub-accounted for separately
- Prefund one now and the other later
- Addresses unfunded liabilities
- Can choose different investment risk tolerance levels for each

- Can access funds at anytime; OPEB for OPEB and pension for pension
- Assets (OPEB and Pension) aggregate and reach lower fees on tiered schedule sooner saving money!
- No cost to set up; no fees until assets are added



OPEB ACTUARIAL RESULTS

Bartel Associates, LLC Valuation Date: June 30, 2016	Pay-as-you-Go Discount Rate: 4.00%	Percent Change	Prefunding Discount Rate: 7.25%
Actuarial Accrued Liability (AAL)	\$86,809,000	35.32%▼	\$56,145,000
Actuarial Value of Assets	\$0		\$0
Unfunded Actuarial Accrued Liability (UAAL)	\$86,809,000	35.32% ▼	\$56,145,000
Annual Required Contribution (ARC) for FY 2015-16	\$11,868,000	32.08%▼	\$8,061,000
Annual Benefit Payments (Pay-as-you-Go) for FY 2015-16	(Pay-as-you-Go) \$2,648,296		\$2,648,296

Rule of thumb: For every one percent increase in the discount rate, the unfunded liability is lowered by 10-12%.





OPEB PREFUNDING SCENARIOS

A Put in full ARC

\$8,061,000

Put in Full ARC, then reimburse B PAYGO at the End of Year

\$8,061,000 - \$2,648,296

Put in difference between ARC and PAYGO

\$5,415,704

Put in anything -Something is better than nothing!



WHY PREFUND OPEB?

- Greater rate of return which lowers your liabilities
- Contributions into trust are "assets" that offset liabilities on financial statements
- GASB 68 Pension liabilities listed as line item on Balance Sheet in 2015
 GASB 75 OPEB liabilities will be listed on Balance sheet after FY2017
- GFOA recommends prefunding OPEB and considers it "best practice" (January 2012)
- Credit rating companies look more favorably on agencies who adopt an Irrevocable Trust and prefund
 - At least 4 agencies have improved credit rating
 - Higher credit rating means lower borrowing costs
- OPEB assets are accessible for OPEB expenses at any time
- Prefunding has no downside other than market fluctuation (similar to pension)



SIMPLE BUT FLEXIBLE INVESTMENT APPROACH

Model Portfolios

- Cap. Appreciation 65%-85% Equity
- Balanced 50%-70% Equity
- Moderate 40%-60% Equity
- Mod-Conservative 20%-40% Equity
- Conservative 5%-20% Equity

or

Custom Portfolios

- Can design specific to Agency needs
- Lower fee options
- Individual Stocks
- Alternatives

Dedicated Portfolio Manager

- Makes Recommendation
- Fiduciary Responsibility
- Drafts Investment Policy
- Annual On-site Reviews
- Cell phone access



Input Phase

- Target Discount Rate

- Investment Philosophy

- Risk Tolerance

- Asset Allocation

HIGHMARK CAPITAL MANAGEMENT RETURNS

RETURNS AS OF SEPTEMBER 30, 2017

	Equity (%)	1 Year	3 Years	5 Years
Capital Appreciation	65-85%	14.07%	7.54%	9.56%
Balanced	50-70%	12.25%	6.63%	8.12%
Moderate	40-60%	10.14%	6.00%	7.03%
Moderately Conservative	20-40%	6.51%	4.67%	5.14%
Conservative	5-20%	3.88%	3.69%	3.71%



NET PERFORMANCE FEE ANALYSIS

Over 1 Year				
PARS/HighMark Capital Appreciation (24% Fixed Income)	14.07%	CalPERS CERBT Strategy 1 (27% Fixed Income)	10.80%	
Minus Weighted PARS Admin Fee	(-) 0.25%	Minus Fees	(-) 0.10%	
Minus Weighted HM Investment Management Fee*	(-) 0.34%			
1-Year Net Return	13.48%	1-Year Net Return	10.70%	

Over 3 Years				
PARS/HighMark Capital Appreciation (24% Fixed Income)	7.54%	CalPERS CERBT Strategy 1 (27% Fixed Income)	5.93%	
Minus Weighted PARS Admin Fee	(-) 0.25%	Minus Fees	(-) 0.10%	
Minus Weighted HM Investment Management Fee*	(-) 0.34%			
3-Year Net Return	6.95%	3-Year Net Return	5.83%	

Over 5 Years				
PARS/HighMark Capital Appreciation (24% Fixed Income)	9.56%	CalPERS CERBT Strategy 1 (27% Fixed Income)	7.69%	
Minus Weighted PARS Admin Fee	(-) 0.25%	Minus Fees	(-) 0.10%	
Minus Weighted HM Investment Management Fee*	(-) 0.34%			
5-Year Net Return	8.97%	5-Year Net Return	7.59%	

^{*} Utilizing 11/30/17 Fee Schedule



^{**} Subject to change due to rebalancing.

^{***} Past performance does not guarantee future results.

PROGRAM FEES

Trust Administration/Consulting Fees*

Plan Set-Up Fee:

None

Ongoing Fees:



0.25%	for assets \$0-10 million
0.20%	for assets \$10-15 million
0.15%	for assets \$15-50 million
0.10%	for assets over \$50 million

Discretionary Trustee/Investment Management Fees*

Plan Set-Up Fee:

Ongoing Fees:





None	0.35%*	for assets under \$5 million
	0.25%	for assets \$5-10 million
	0.20%	for assets \$10-15 million
	0.15%	for assets \$15-50 million
	0.10%	for assets over \$50 million

^{**} Fees as of September 30, 2017. Subject to change due to rebalancing.



^{*} PARS does not receive any compensation from the investments or any commissions, back-end loads, or any other forms of compensation.

The

PARS PENSION RATE STABILIZATION PROGRAM

for prefunding pension obligations



BACKGROUND

- New GASB 68 requirements to disclose Net Pension Liability on financial statements – 2015
- Previously, only way to reduce retirement system unfunded liability was to send additional contributions in excess of annual required contribution but the amortization rules may have changed
- Trust assets can be transferred to retirement system at County's direction, which can help offset future rate increases (i.e., pension rate stabilization) due to the lowering of CalPERS discount rate from 7.5% to 7.0% with a 3-year phase-in announced on 12/21/16.





PENSION FUNDING STATUS

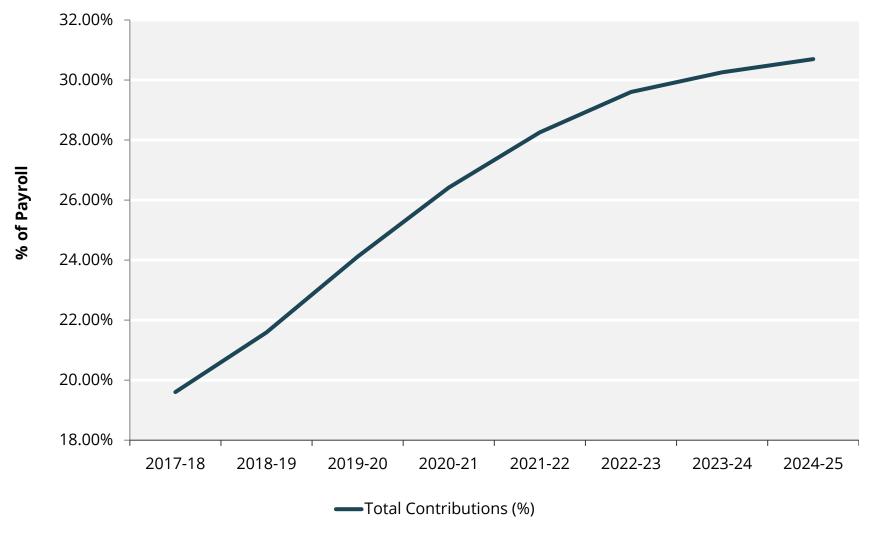
As of June 30, 2016, El Dorado County's CalPERS pension plan is funded as follows*:

Actuarial Liability	\$996.3M
Assets	\$650.1 M
Unfunded Liability	\$346.3 M
Funded Ratio	65.2%
Employer Contribution Amount (FY 17-18)	\$30.5 M
Projected Employer Contribution Amount (FY 24-25)	\$57.8 M (89.2% 个)



PROJECTED EMPLOYER CONTRIBUTIONS (MISC.)

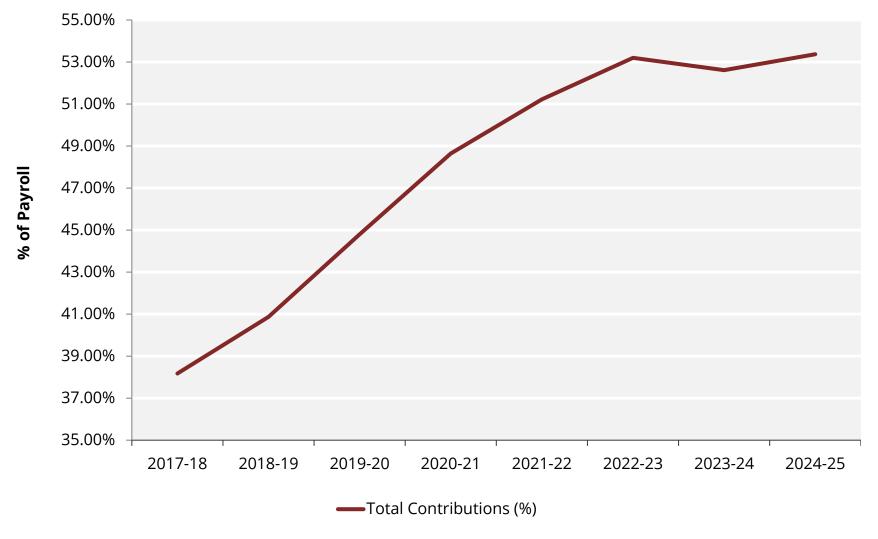
Projected misc. contributions increase from \$18.9M to \$37.2M* (96.9% 个)





PROJECTED EMPLOYER CONTRIBUTIONS (SAFETY)

Projected safety contributions increase from \$11.6M to \$20.6M* (76.7% 个)





WHY PREFUND PENSION OBLIGATIONS?

Complete Local Control over Assets

County has complete control over contributions and disbursements; timing, amount, and risk tolerance level

Pension Rate Stabilization

economic or other conditions

Assets can be transferred to retirement system plan at the County's direction, which can reduce or eliminate large fluctuations in Employer contributions to retirement system

Rainy Day Fund Emergency source of funds when Employer revenues are impaired based on

Lower Costs

115 Trust might have lower overall administrative and investment management costs compared to the retirement system

WHY PREFUND PENSION OBLIGATIONS?

__ Addresses Pension Liabilities for GASB 68

Contributions placed in an exclusive benefit trust addresses County's unfunded pension liability

6 Improved Credit Ratings
Rating agencies may look favorably upon actions to reduce liabilities

Actuarially Sound Retirement System

Provide integrity and security for the source of funding for retirement benefits

Diversified Investing/Potential for Greater Return than General Fund
Can choose risk tolerance level for County's unique needs



COUNTY SAMPLE FUNDING POLICIES

Contribute \$2 million towards the establishment of the trust, with additional funds depending on the fiscal year ending RIVERSIDE COUNTY balance of the County's Liability Management fund Contribute funds towards the trust as existing pension and other outstanding debts are retired, in order to achieve and **SOLANO COUNTY** maintain a funding ratio at or above 90% in the County's Safety/Miscellaneous plans Established an annual departmental contribution towards the trust ranging from .25% up to 2% of salaries, depending on **HUMBOLDT COUNTY** funding availability during each fiscal year budget cycle. Transfer \$2.9 million from Reserve for Post-Retirement Contributions towards the 115 Trust, with annual contributions PLACER COUNTY totaling to the PERS employer contribution collected biweekly through Payroll Contribute \$3.2 million towards the establishment from the trust from the General Fund, coinciding with the payoff of **NEVADA COUNTY** Safety Plan pension liability, with additional payments totaling \$850,000 over 4 years



OTHER SAMPLE FUNDING POLICIES

Contribute 50% of a given year's realized year end surplus to address pension liability Contribute amount equal to annual PERS employer contribution (\$6 million) in order to allow 2 full access to trust assets at all times Contribute \$4 million to stabilize PERS employer misc. Rates to 28% and safety rates to 44% through FY 23-24 "One equals five plan" - Contribute \$1 million per year for 5 years based on premise that every 4 contribution will save taxpayers \$5 million over 25 years Contribute Employer contribution equal to the 2.8% discount rate (as opposed to the standard 5 7.5% rate), with difference going into the Section 115 Trust Maintains a 15% general fund reserve and is targeting to make contributions over and above that threshold into the Trust Earmarked a portion of a recently approved local sales tax measure to be set aside for unfunded pension liabilities 8 Using one-time revenue source plus on-going savings from CalPERS unfunded liability pre-payment Using one-time revenue source and lowering the minimum General Fund Reserve level 9 from 30% to 20%



PARS Investment Program



About HighMark Capital Management, Inc.

LONGEVITY

Managing assets for clients since **1919***

TALENT

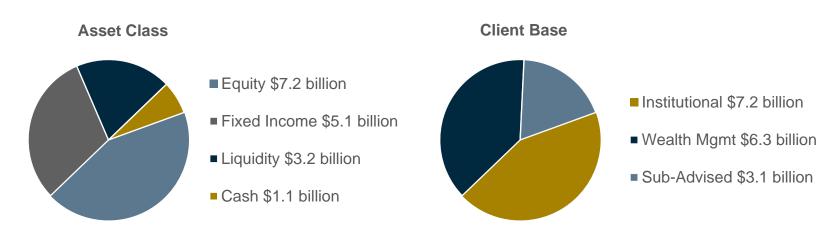
- **52** investment professionals
- **31** professionals hold the Chartered Financial Analyst® (CFA) designation
- 23 years average industry experience

STABILITY

Investment boutique structure headquartered in San Francisco backed by **global strength** within MUFG Union Bank, N.A. and Mitsubishi UFJ Financial Group

ASSETS UNDER MANAGEMENT

\$16.6 billion as of 9/30/2017



^{*}Includes predecessor organizations. HighMark Capital Management, Inc. registered with the SEC as an investment adviser on August 7, 1998.

18-0078



Disciplined Investment Process

Your Plan's Portfolio Manager is supported by deep investment resources and unique processes.

Establish

Strategic

Asset

Allocation

Andrew Brown, CFA

Sr. Portfolio

Manager

Equity & Fixed Income

Research

Construct & Manage

Regular investment & performance reports, as well as contact with your account portfolio manager, helps to keep you informed.

Report

Performance

Results

Trading &

Rebalancing

Investment

Review

We typically invest in share classes that offer the lowest expense ratio available for that fund, which is typically reserved for larger institutional investors.

Your portfolio's strategic asset allocation policy is established in your Investment Guidelines Document (IGD) after a thorough analysis of your needs and objectives.

Diversify

Tactical

Asset

Allocation

Manager

Research

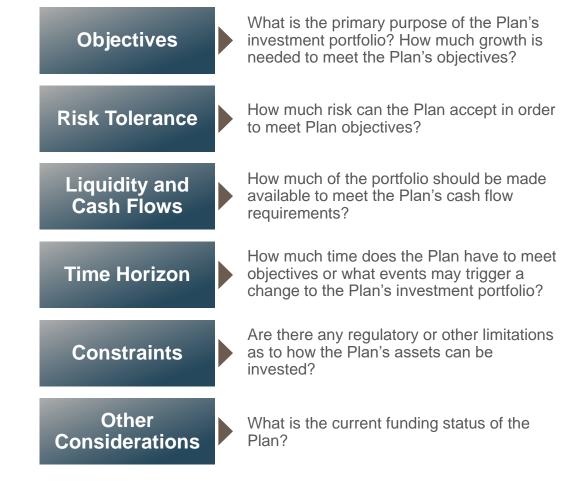
Asset Allocation Committee (AAC) employs a multi-factor approach to establish long-term strategic asset allocation ranges as well as provide tactical diversification guidelines in an effort to capitalize on short-term market opportunities.

Manager Research Group utilizes rigorous due diligence methodologies to provide access to competitive externally managed strategies and index-based funds.



Establish: Analyze Your Plan's Needs and Objectives

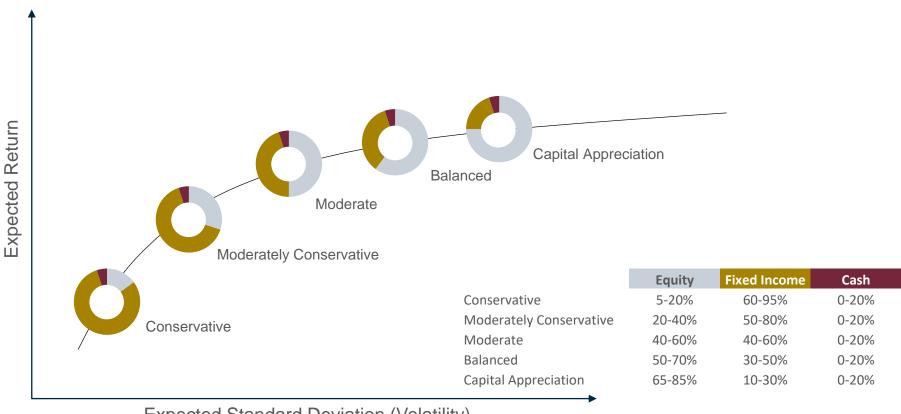
Your Plan's needs and objectives drive the selection of an investment strategy, which is governed by your Investment Guidelines Document.





Establish: Determine your Strategic Asset Allocation Strategy

Efficient frontier of portfolios with varying ranges of equities and fixed income



Expected Standard Deviation (Volatility)

Each Investment Objective reflects the associated PARS Diversified Portfolio as of 9/30/2017. A client 's portfolio construction may vary depending on the client's investment needs, objectives, and restrictions as well as the prevailing market conditions at the time of investment.

Construct Your Plan's Portfolio: PARS Diversified Portfolios – Tactical Allocation











	Conservative	Moderately Conservative	Moderate	Balanced	Capital Appreciation
Equity	5-20%	20-40%	40-60%	50-70%	65-85%
Current Tactical	15.00%	30.00%	50.00%	60.00%	75.00%
Large Cap Blend	4.19%	8.73%	14.69%	17.40%	22.17%
Large Cap Value	1.78%	3.50%	5.97%	7.00%	8.77%
Large Cap Growth	1.23%	2.47%	4.26%	5.00%	6.16%
Mid Cap Blend	1.10%	2.20%	3.60%	4.50%	5.50%
Mid Cap Value	0.00%	0.00%	0.00%	0.00%	0.00%
Real Estate	0.75%	1.38%	1.50%	1.63%	1.75%
Small Cap Value	1.25%	2.25%	3.75%	4.50%	5.25%
Small Cap Growth	1.25%	2.25%	3.75%	4.50%	5.25%
International	2.68%	5.30%	9.23%	11.48%	14.90%
Tactical - Europe	0.00%	0.00%	0.00%	0.00%	0.00%
Emerging Markets	0.78%	1.93%	3.25%	4.00%	5.25%
Fixed Income	60-95%	50-80%	40-60%	30-50%	10-30%
Current Tactical	79.06%	66.50%	46.92%	37.31%	22.81%
Short Term Bond	12.40%	10.19%	6.31%	4.50%	4.00%
Intermediate Term Bond	64.66%	54.56%	39.11%	31.56%	17.81%
Floating Rate Note	2.00%	1.75%	1.50%	1.25%	1.00%
Cash	0-20%	0-20%	0-20%	0-20%	0-20%
Current Tactical	5.94%	3.50%	3.08%	2.69%	2.19%
TOTAL	100.00%	100.00%	100.00%	100.00%	100.00%

Each Investment Objective reflects the associated PARS Diversified Portfolio as of 9/30/2017. A client 's portfolio construction may vary depending on the client's investment needs, objectives, and restrictions as well as the prevailing market conditions at the time of investment.

Construct Your Plan's Portfolio: PARS Diversified Portfolios – Active v. Passive

	HighMark Plus (Active)		Index Plus (Passive)	
Equity	Ticker Fund Name		Ticker	Fund Name
Large Cap Blend	SMGIX Columbia Contraria	n Core Z	VV	iShares Core S&P 500
Large Cap Blend	/GIAX Vanguard Growth 8	Income Adm		
Large Cap Value	OODGX Dodge & Cox Stock	IV	VΕ	iShares S&P 500 Value
Large Cap Growth	HNACX Harbor Capital App	reciation Ret	VW	iShares S&P 500 Growth
Large Cap Growth	PRUFX T. Rowe Price Grov	vth Stock I		
Mid Cap Blend	WR iShares Russell Mid	d-Cap IV	WR	iShares Russell Mid-Cap
Real Estate	/NQ Nuveen Real Estate	e Securities I	/NQ	Vanguard REIT ETF
Small Cap Value	JBVLX Undiscovered Mana	agers Behavioral Val L	ΝN	iShares Russell 2000 Value
Small Cap Growth	PRJIX T. Rowe Price New	Horizons I	NO	iShares Russell 2000 Growth
International	NWHMX Nationwide Bailard	Intl Eqs Instl		
International	OODFX Dodge & Cox Interr	national Stock		
International	MQGIX MFS International (Growth I	FA	iShares MSCI EAFE
Emerging Markets	HHHYX Hartford Schroders	Emerging Mkts Eq I	/WO	Vanguard FTSE Emerging Markets ETF
Fixed Income	Ticker Fund Name		icker	Fund Name
	/FSUX Vanguard Short-Te			Vanguard Short-Term Investment-Grade Adm
Intermediate Term Bond	PTTRX PIMCO Total Retur		\GG	iShares Core US Aggregate Bond
Intermediate Term Bond	PTRQX Prudential Total Re			
	NWJJX Nationwide HighMa			
Floating Rate Note	EIFHX Eaton Vance Floati	ng-Rate & Hi Inc Inst	BKLN	PowerShares Senior Loan ETF
Cash				
Characteristics				
Fund Manager Dependency	Higher dependency	on portfolio manager skill		Tracks index, thus little-to-no dependency on portfolio manager skill
Opportunity to Outperform Index	Opportunity to outp	erform index		Typically performs below index after fees
Costs	Higher expense rat	ios due to portfolio manager skill		Lower expense ratio due to little dependency on portfolio manager skill or opportunity for outperformance

Each Investment Objective reflects the associated PARS Diversified Portfolio as of 9/30/2017. A client 's portfolio construction may vary depending on the client's investment needs, objectives, and restrictions as well as the prevailing market conditions at the time of investment. Specific securities identified above do not represent all of the securities purchased, sold or recommended for advisory clients, and you should not assume that investments in the securities identified in this presentation were or will be profitable.

Report: Responsive and Proactive Client Communication

HighMark's dedicated investment team continuously seeks to add value to our relationship with your organization.

- Integrated client service program established with PARS over the last 18 years
- We have a tradition of interactive client service to maintain a strong relationship delivered by local portfolio managers
- You benefit from face-to-face meetings and scheduled conference calls with your client service team and portfolio management team
- You receive regular communications in a variety of formats
 - Account holdings and transactions
 - Quarterly performance evaluation reports
 - Investment outlook and economic updates



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Keith Stribling, CFA Vice President Sr. Portfolio Manager Orange County



Hoddy Fritz
Director
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Sr. Portfolio Manager
Los Angeles



Tory Milazzo, CFA
Vice President
Sr. Portfolio Manager
Central Coast



Randy Yurchak, CFA Vice President Sr. Portfolio Manager Northern California



Summary

Strength and Longevity

- After 98 years* of experience, we remain dedicated to helping our clients meet their investment goals and objectives;
- With more than 18 years of partnership with PARS, we remain firmly committed to investing in the business.
- Our unique market position and ownership structure provides the resources, talent, and product breadth of a large parent organization combined with the agility, flexibility, and responsiveness of a boutique investment advisor.

Disciplined Investment Process

- Proprietary strategic asset allocation process forms the foundation of portfolio;
- Tactical asset allocation exploits potential market opportunities;
- Rigorous manager due diligence provides access to competitive externally managed strategies;
- Rebalancing strategies helps to ensure the portfolio is aligned with goals and objectives.

Flexible Investment Options

5 Investment Objectives



- Conservative
- Moderately Conservative
- Moderate
- Balanced
- Capital Appreciation

- 2 Implementation Strategies
 - HighMark Plus (Active)
 - Index Plus (Passive)



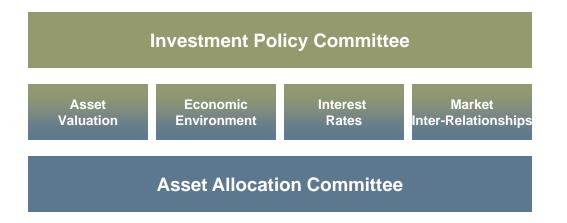
Disclosures

HighMark Capital Management, Inc. (HighMark), an SEC-registered investment adviser, is a wholly owned subsidiary of MUFG Union Bank, N.A. (MUB). HighMark manages institutional separate account portfolios for a wide variety of for-profit and nonprofit organizations, public agencies, public and private retirement plans, and personal trusts of all sizes. It may also serve as sub-adviser for mutual funds, common trust funds and collective investment funds. MUB, a subsidiary of MUFG Americas Holdings Corporation, provides certain services to HighMark and is compensated for these services. MUB is an indirect subsidiary of Mitsubishi UFJ Financial Group. Past performance does not guarantee future results. Individual account management and construction will vary depending on each client's investment needs and objectives. Specific securities identified in this presentation do not represent all of the securities purchased, sold or recommended for advisory clients, and you should not assume that investments in the securities identified in this presentation were or will be profitable. Investments employing HighMark strategies are NOT insured by the FDIC or by any other Federal Government Agency, are NOT Bank deposits, are NOT guaranteed by the Bank or any Bank affiliate, and MAY lose value, including possible loss of principal.



Asset Allocation Committee

Seek to identify investment opportunities using fundamental indicators to enhance returns over time through active asset allocation and investment selection without significantly increasing risk



Investment Professionals16

Investment Experience
26 years average

Tenure with Firm 13 years average

Multi-disciplinary Group Equity, Bond, Quantitative



Manager Research

Our manager due diligence process optimizes our diversification strategy while harnessing both internal and external investment expertise.

Research-Based

- Manager Research Group (MRG) represents a team of experienced and highly qualified manager research professionals
 - 7 members
 - 20 years average experience
 - 7 years average tenure
- MRG conducts proprietary due diligence and monitoring of managers, platforms, and independent research experts

Manager / Vehicle Selection

- We go beyond performance and category ranking to assess sustainability of competitive advantages
- In-depth quantitative and fundamental research focuses on people, philosophy, and process
- Access to a broad universe of mutual funds and ETFs helps to select the most appropriate vehicle while assessing associated expenses and costs

Monitoring

- Ongoing monitoring of over 150 funds
- Focus on spotting red flags that can threaten a successful manager's track record
- Emphasize understanding the key drivers of returns and markets where they are most effective
- Regular site visits and manager calls to monitor firm and process changes

Portfolio-Centric

- Select strategies best suited to portfolio's risk and return objectives
- Careful review and regular affirmation of portfolio goals, objectives, risk tolerance, time horizon, and liquidity needs
- Understand how the strategies within a portfolio can complement each other
- Construct portfolios using strategies designed to help boost risk-adjusted returns

