CITY OF
SAN JOSE
CAPITAL OF SILICON VALLEY

Investment Program

RETIREMENT PLANS' TOTAL EXPENSE RATIO

Office of Retirement Services

October 1, 2019

Investment Policy Statement on Investment Fees

"The Plan will seek alignment of interests when negotiating fees while pursuing the best net of fees performance results. Investment costs shall be monitored, controlled, and whenever possible negotiated to ensure cost effectiveness. The Board shall give consideration to the impact of administrative expenses, external management fees and performance fees when establishing the asset mix policy of the Plan. The Board will be provided reports on investment costs of the Plan at least annually."

Understanding Total Expense Ratio

- Complex topic

- Declining return expectations → Increased focus
  - Net returns = Gross returns – Total expense ratio

- A function of asset allocation and asset class structuring
  - Higher complexity = higher fees

- ORS comprehensive annual fee reporting started 2015
  - Includes embedded or unobserved fees/expenses (e.g., fees not reported on statements)
  - Few public plans have comprehensive fee reporting (CalPERS, CalSTRS, LACERA, OCERS)
  - No public-sector standard methodology for comprehensive fee reporting

- Complies with California Government Code §7514.7

Understanding Total Expense Ratio

Net returns = Gross returns – Total expense ratio

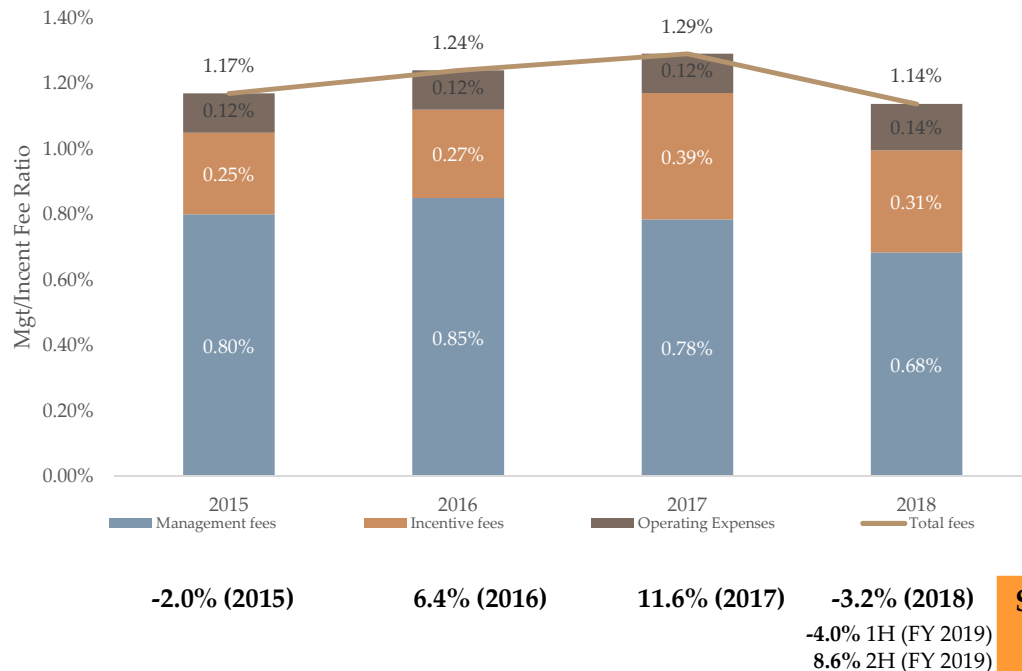| Fee type	Description	Examples
Management fees	Fees paid to investment management firms	
Incentive fees	Performance-based fees paid to investment management firms	
Operating expenses	Costs of administering individual investment vehicles	Audit, tax, legal, custodian
Other expenses	Costs incurred at the plan level	Staff salaries and benefits, consultants, third party vendors

Calendar Year 2018 Fees

	Management Fees ($)	Incentive Fees	Operating Expenses	Mgmt, Incent, and Op Exp	Average Balance	Fee Ratio
Federated Pension	$15.9	$6.3	$3.2	$25.4	$2,171	1.17%
Police & Fire Pension	$26.0	$13.2	$5.5	$44.7	$3,658	1.22%
Federated Health Care	$0.8	$0.1	$0.1	$1.0	$295	0.32%
Police & Fire Health Care	$0.2	-	$0.0	$0.2	$140	0.15%
All 4 ORS Plans	$42.8	$19.6	$8.9	$71.2	$6,263	1.14%

Source: ORS 2018 Fee Report
Values show are in $ millions

	Investment Staff Salary and Benefits	Consultants	Custodian	Travel and Other Third Party Vendors	Total Other Costs	Fee Ratio
All 4 ORS Plans	$1.7	$1.5	$0.7	$1.0	$4.8	0.08%

Source: ORS 2018 Fee Report
Values show are in $ millions

Total Expense Ratio (Comprehensive)

Reported Expense Ratio Over 4 Years

Total Expense Ratio (Comprehensive) chart

Mgt/Incent Fee Ratio

- 1.17% (2015): 0.12% Operating Expenses, 0.25% Incentive fees, 0.80% Management fees
- 1.24% (2016): 0.12% Operating Expenses, 0.27% Incentive fees, 0.85% Management fees
- 1.29% (2017): 0.12% Operating Expenses, 0.39% Incentive fees, 0.78% Management fees
- 1.14% (2018): 0.14% Operating Expenses, 0.31% Incentive fees, 0.68% Management fees

Legend: Management fees | Incentive fees | Operating Expenses | Total fees

-2.0% (2015)   **6.4% (2016)**   **11.6% (2017)**   **-3.2% (2018)**
-4.0% 1H (FY 2019)
8.6% 2H (FY 2019)

ORS Annual Fee Reports (Comprehensive)

Calendar year basis

All 4 ORS plans aggregated
(Federated and Police & Fire Pension and health care trusts)

Middle column (orange boxes)

- San Jose Plan Return
- Source
- Time Periods
- Data Points

Peer Comparison (CAFR's)

Reported Expense Ratio Over 4 Years

Peer Comparison chart showing ACERA, CCERA, OCERS, ORS, CalPERS, CalSTRS across 2015, 2016, 2017, 2018.

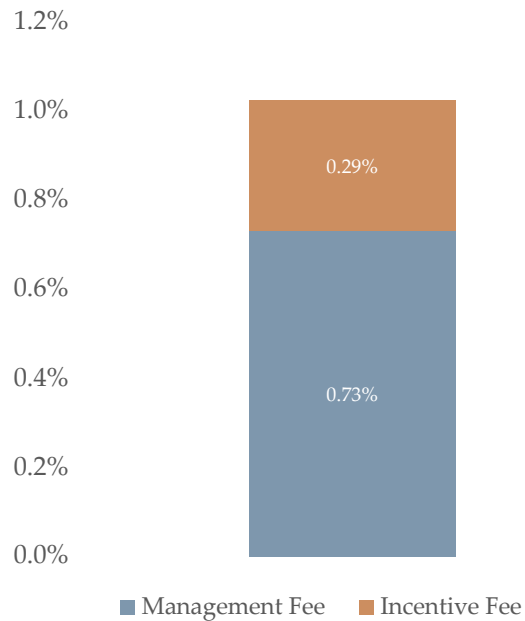**-1.0% (2015)**   **-0.6% (2016)**   **8.8% (2017)**   **6.4% (2018)**
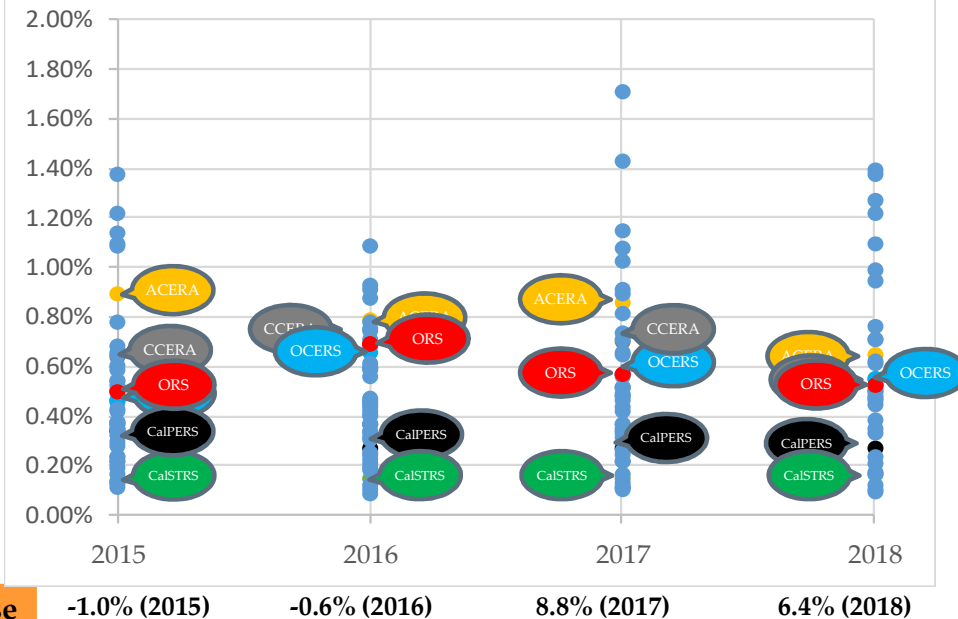
Public Plans Database (from CAFRs)
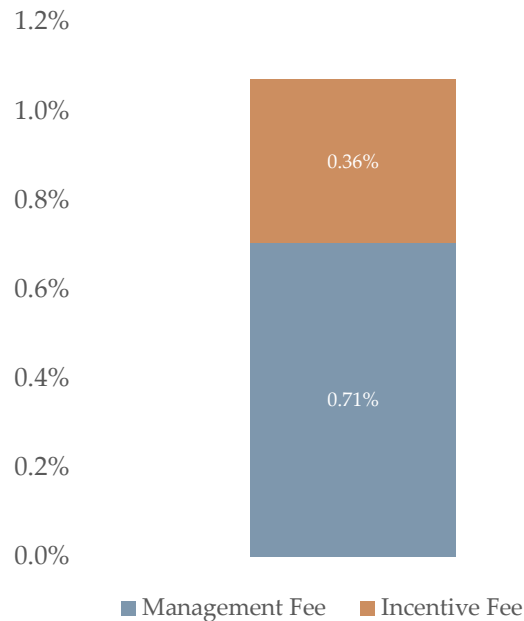
Fiscal year basis

42 diversified U.S. Public Pension Plans $2-13 B & CA Public Plans
All 4 ORS plans aggregated

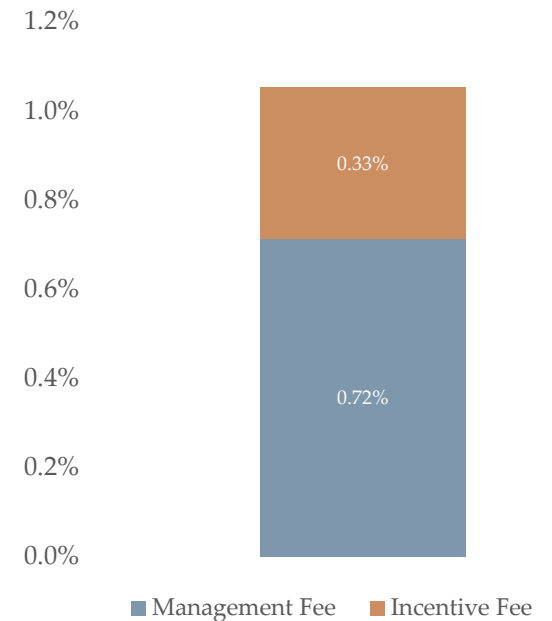# Calendar Year 2018 Management and Incentive Fee Ratios

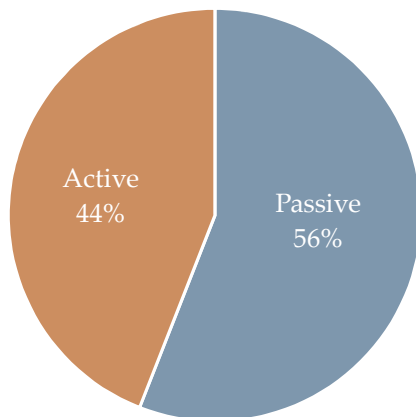# Active vs. Passive Allocations as of 12/31/2018

Fed Pension

Active 44%

Passive 56%

P&F Pension

Active 53%

Passive 47%

Combined

Active 50%

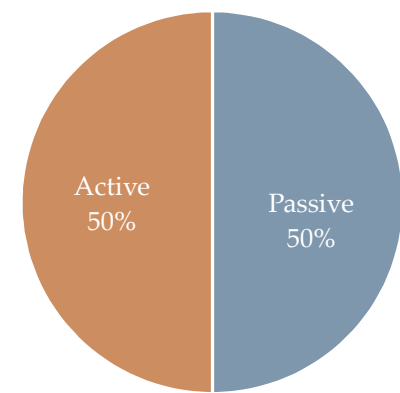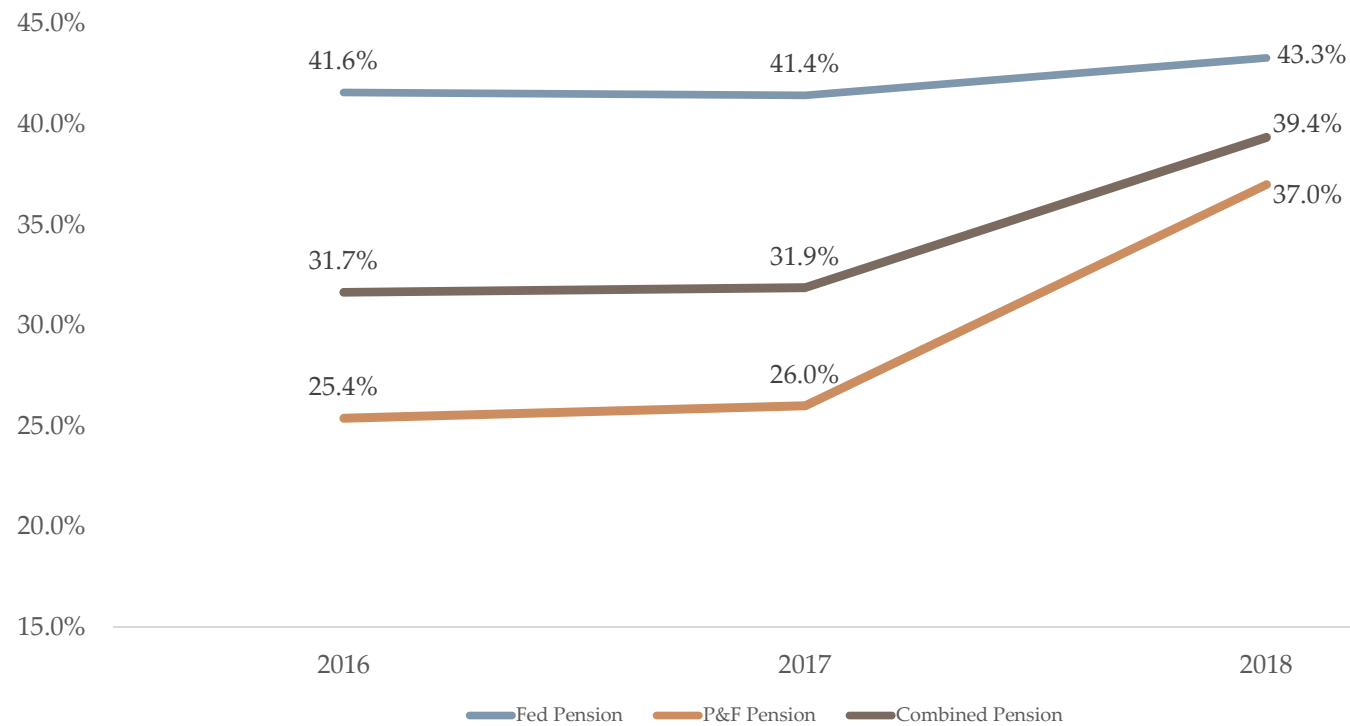Passive 50%

Source: ORS, State Street
Active includes all non-passive investments (active, hedged, private)

Average Passive Allocations 2016 - 2018

Source: ORS, State Street

Active vs. Passive Management Fees

Combined

Pie chart:
- Passive 0.02%
- Active 0.70%

Legend: Active | Hedged | Private

Waterfall chart (Contribution to Active Fee Ratio (0.70%)):
- Active 0.16%
- Hedged 0.26%
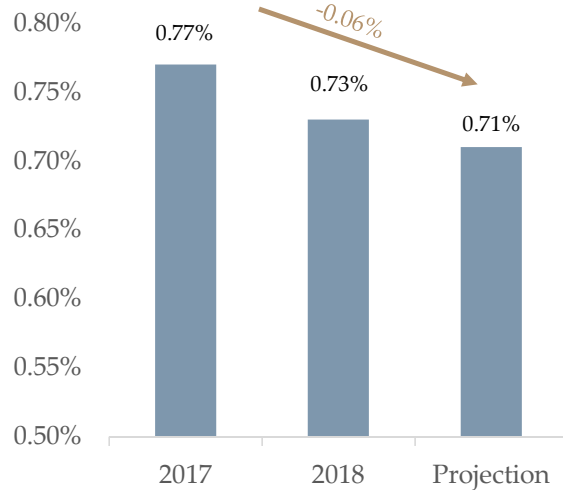- Private 0.27%

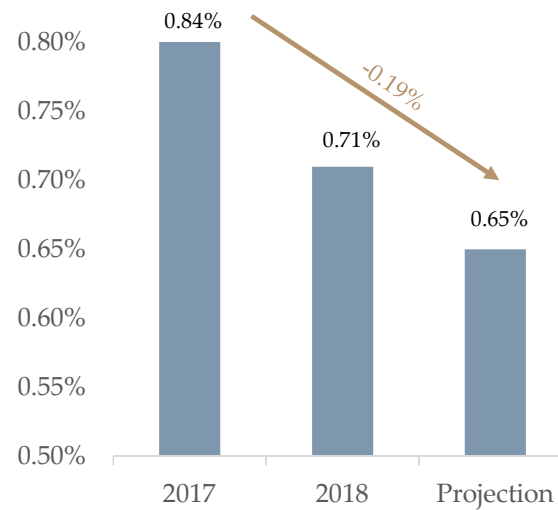Y-axis: 0.00%, 0.20%, 0.40%, 0.60%, 0.80%
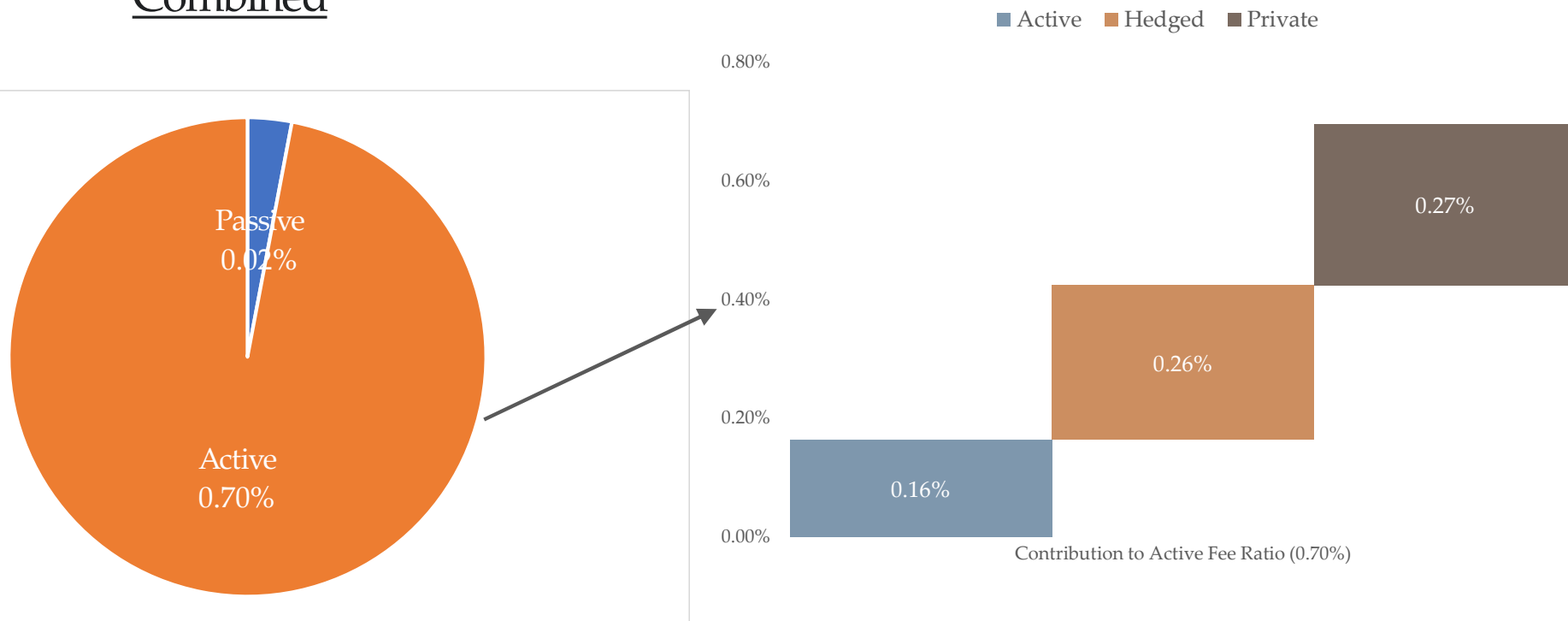
Source: State Street, ORS 2018 Fee Reports
Active includes all non-passive investments (long only active, hedged, private)
Charts only represent fund management fees, not incentive or fund operating expenses
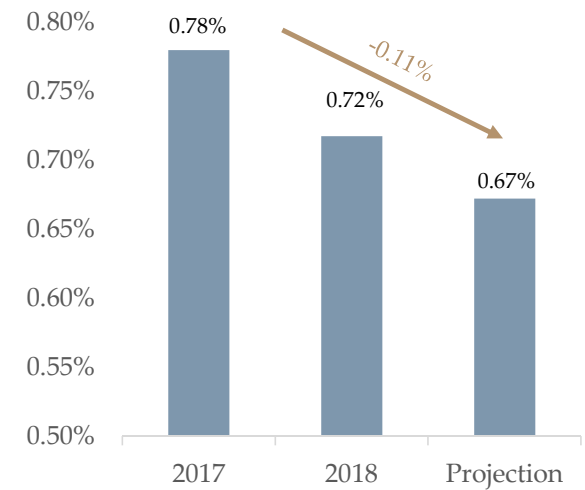
Projected Management Fees *

Fed Pension

P&F Pension

Combined

Source: ORS, State Street
* Projections are based on many assumptions with a wide margin of error. Actual fund management fees will vary as the composition of underlying funds and fund types changes over time
Projections calculated by multiplying the calendar year 2018 fee ratios for each fund type within an asset class by actual December 31, 2018 allocations
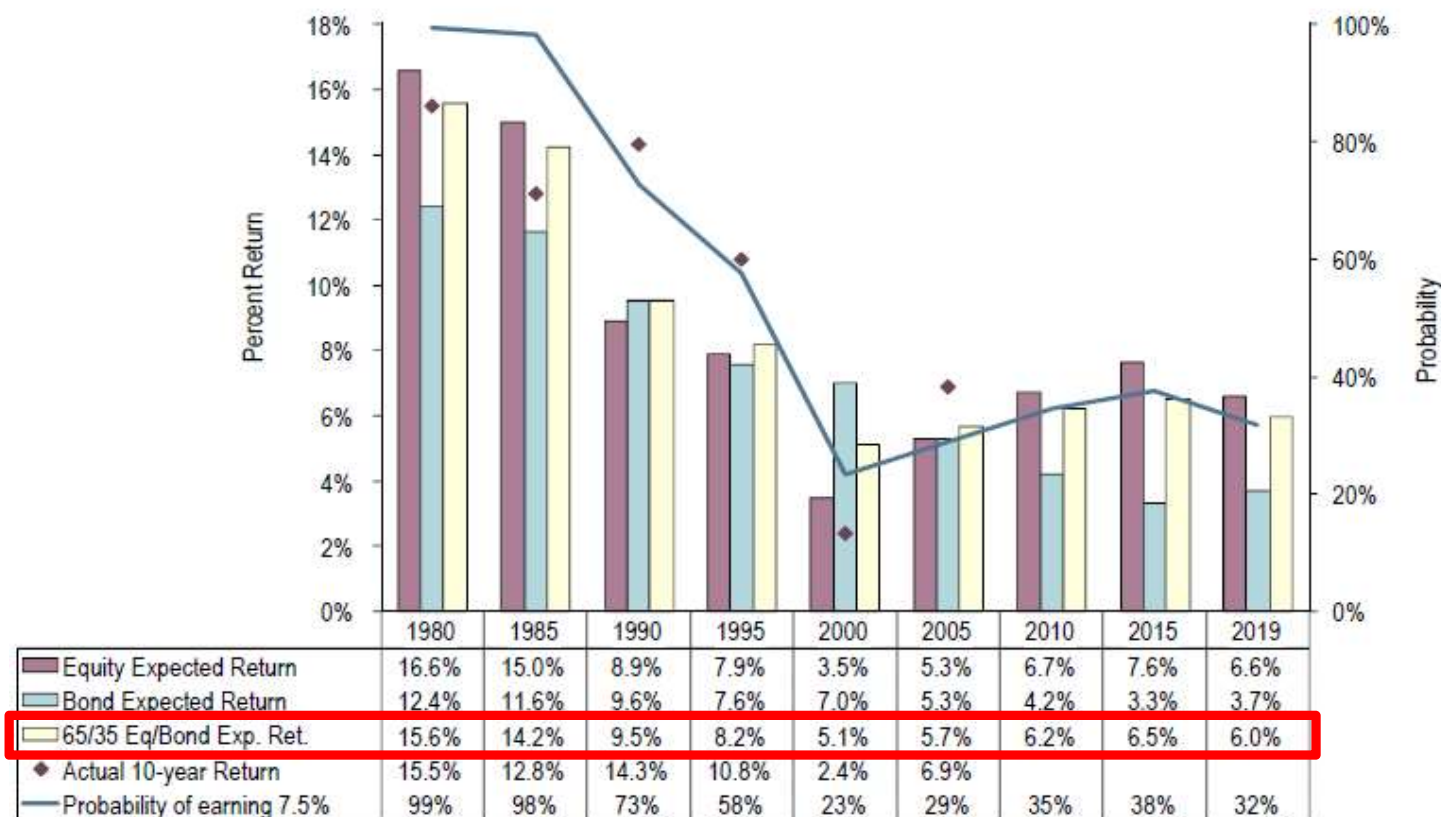Charts only represent fund management fees, not incentive or fund operating expenses

Appendix

Glossary of Terms

- <u>Active strategies</u>: Funds that attempt to outperform an index
- <u>Asset allocation</u>: Distribution of assets across a number of asset classes that each exhibit a unique combination of risk and expected return. Asset allocation is the most important determinant of long-term plan performance
- <u>Hedged strategies</u>: Investments that generally seek to achieve a return regardless of market direction
- <u>Gross returns</u>: Returns before the deduction of expenses
- <u>Incentive fees</u>: Performance-based fees paid to individual investment management firms. Incentive fees are a form of shared economics. Also known as "carried interest"
- <u>Management fees</u>: Asset-based fees paid to individual investment management firms
- <u>Net returns</u>: Returns after the deduction of management fees, incentive fees, and operating expenses
- <u>Operating expenses</u>: Costs of administering individual investment vehicles (not the retirement plans)
- <u>Other expenses</u>: Costs incurred at the plan level (staff, consultants, third party vendors, etc.)
- <u>Passive strategies</u>: Investments that intend to match the return of an index
- <u>Private strategies</u>: Investments in illiquid assets such as privately held companies or real estate
- <u>Total expense ratio</u>: Total expenses (sum of management fees, incentive fees, and operating expenses) divided by average plan assets

Asset Allocation Considerations

The Secular Decline in Investment Returns[1]

	1980	1985	1990	1995	2000	2005	2010	2015	2019
Equity Expected Return	16.6%	15.0%	8.9%	7.9%	3.5%	5.3%	6.7%	7.6%	6.6%
Bond Expected Return	12.4%	11.6%	9.6%	7.6%	7.0%	5.3%	4.2%	3.3%	3.7%
65/35 Eq/Bond Exp. Ret.	15.6%	14.2%	9.5%	8.2%	5.1%	5.7%	6.2%	6.5%	6.0%
Actual 10-year Return	15.5%	12.8%	14.3%	10.8%	2.4%	6.9%			
Probability of earning 7.5%	99%	98%	73%	58%	23%	29%	35%	38%	32%

Source: Meketa Investment Group

Asset Allocation Considerations

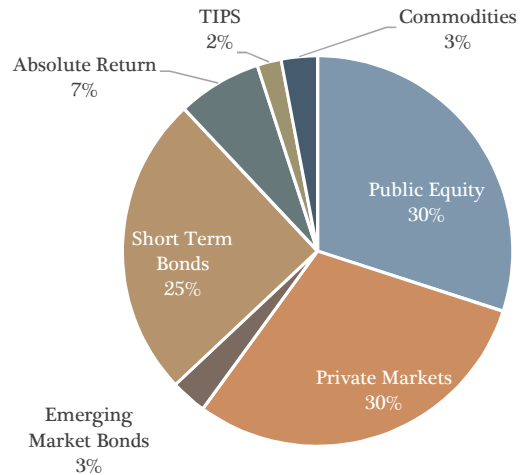|	Federated (%)	P&F (%)	Global 60/40 (%)
Expected Return[1]	**7.7**	**8.0**	**7.1**
Standard Deviation[1]	**11.6**	**12.5**	**10.4**
Probability of Achieving 6.75%			
1 Year	53.2	53.9	51.4
3 Years	55.5	56.8	52.4
5 Years	57.1	58.7	53.1
10 Years	60.0	62.2	54.4
20 Years	63.9	67.0	56.2
"Worst Case" Returns [2]			
1 Year	-16.0	-17.3	-14.4
3 Years	-6.7	-7.4	-5.9
5 Years	-3.6	-4.2	-3.1
10 Years	-0.5	-0.8	-0.2
20 years	1.9	1.7	1.9
Expected Returns if Equities Decline 25%	*-13.1*	*-14.8*	*-14.7*
Expected Returns if Equities Decline 40%	*-22.3*	*-25.3*	*-25.5*

[1] Expected return and standard deviation are based on Meketa Investment Group's 2019 Annual Asset Study and reflect our 20-year expectations. Returns for periods longer than one year are annualized.
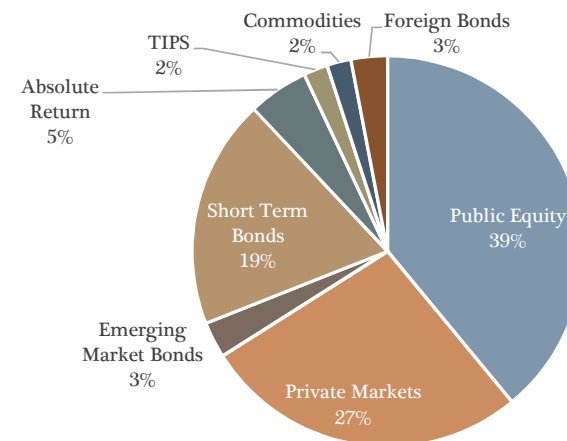[2] "Worst Case" return projections encompass 99% of all possible outcomes

Source: Meketa Investment Group

Asset Allocation Targets

As of August 31, 2019

Federated Pension

- TIPS 2%
- Commodities 3%
- Absolute Return 7%
- Public Equity 30%
- Short Term Bonds 25%
- Private Markets 30%
- Emerging Market Bonds 3%

Police & Fire Pension

- Commodities 2%
- Foreign Bonds 3%
- TIPS 2%
- Absolute Return 5%
- Public Equity 39%
- Short Term Bonds 19%
- Emerging Market Bonds 3%
- Private Markets 27%

Source: ORS

Allocation to investment fund types

As of July 31, 2019

Federated Pension

Police & Fire Pension

Federated Pension:
- Private 16%
- Hedged 11%
- Active 21%
- Passive 52%

Police & Fire Pension:
- Private 19%
- Hedged 10%
- Active 23%
- Passive 48%
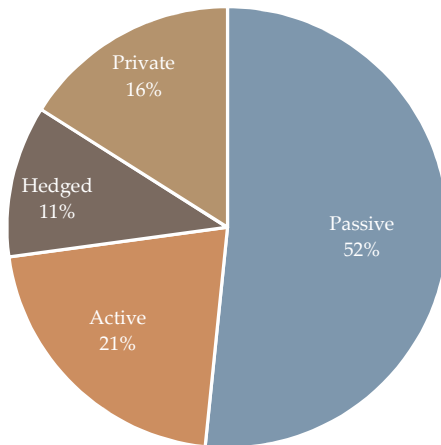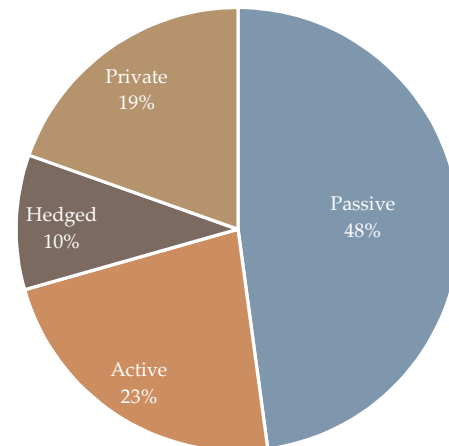
Source: ORS, State Street

Plan Return History

For period ending June 30, 2019

	10 years ending 6/30/19	10 years ending 12/31/18	10 years ending 6/30/18	10 years ending 12/31/17	20 years ending 6/30/19	1/31/94 - 6/30/19
San Jose Federated City Employees' Retirement System	6.5%	6.0%	4.1%	8.3%	5.0%	6.6%
Federated Policy Benchmark	7.2%	6.7%	5.0%	7.7%	5.1%	6.9%
Federated Investable Benchmark Portfolio	6.3%	6.0%	4.1%	--	--	--
San Jose Police & Fire Department Retirement Plan	7.2%	6.8%	4.6%	9.0%	5.4%	8.3%
Police and Fire Policy Benchmark	7.7%	7.2%	4.9%	9.0%	5.3%	--
Police and Fire Policy Investable Benchmark Portfolio	7.3%	6.9%	4.8%	9.0%	--	--
DB Plans >$1 Billion Net Peer Universe	9.0%	8.2%	6.1%	7.4%	5.4%	7.2%
Number of Plans	65	151	120	64	44	34

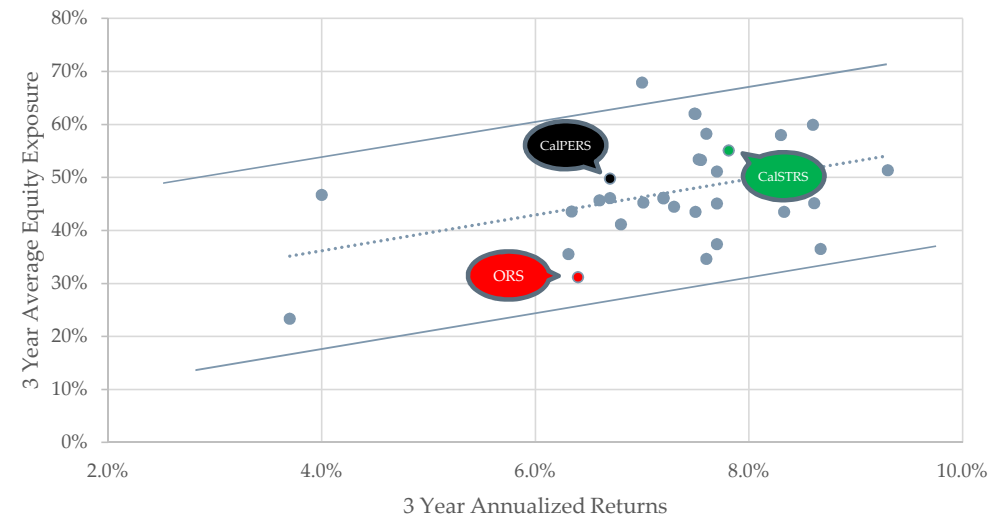*Source: Meketa Investment Group*

Returns/Expense Ratios

Higher returns not correlated to higher expenses
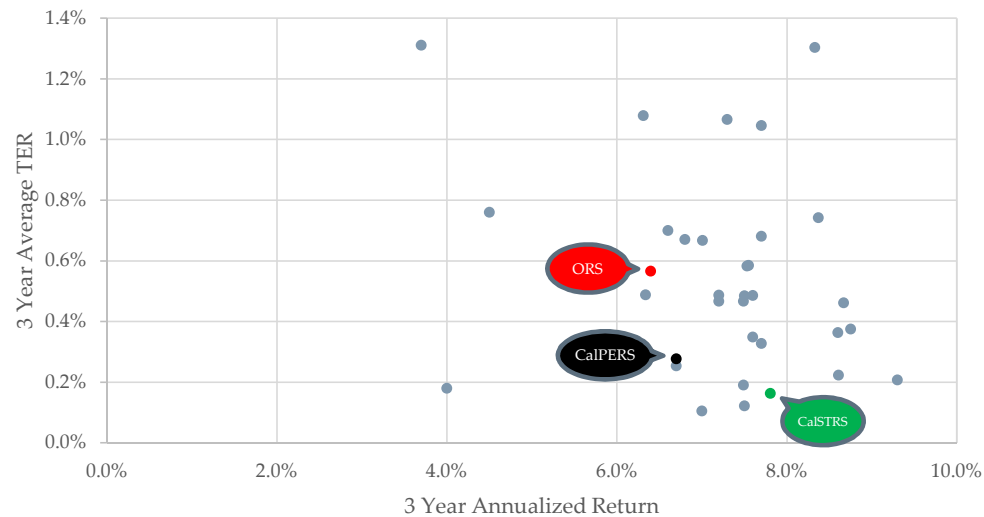
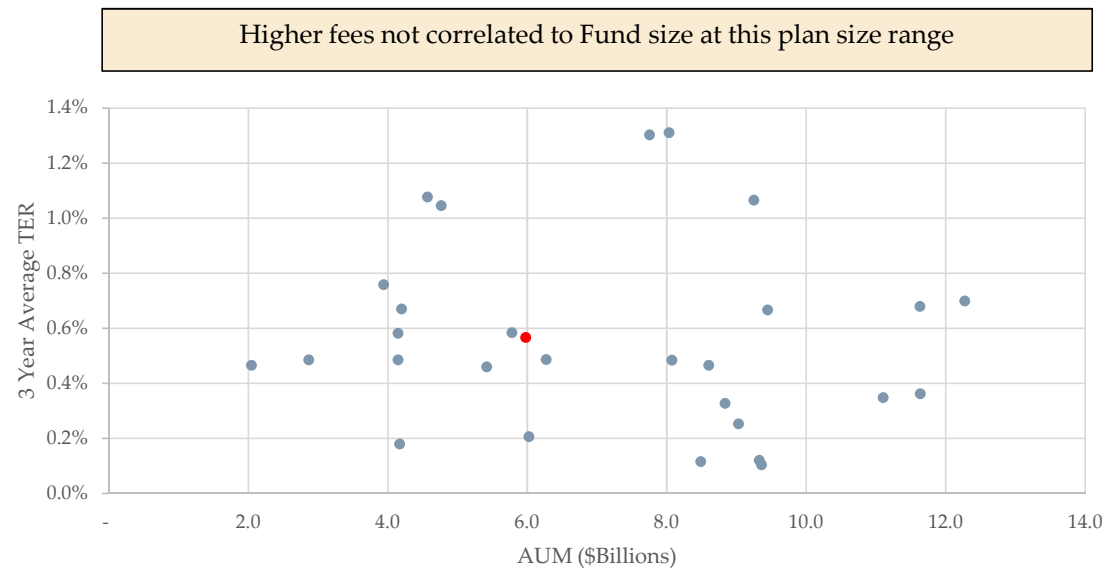# Returns/Public Equity Exposure

Higher returns correlated to higher public equity exposure

Source	Public Plans Database (from CAFRs)
Time Periods	Fiscal year basis, ending June 30, 2018
Data points	31 diversified U.S. Public Plans $2-13 billion, CA Public Plans All 4 ORS plans aggregated

Plan Size/Expense Ratios

Higher fees not correlated to Fund size at this plan size range

Source	Public Plans Database (from CAFRs)
Time Periods	Fiscal year basis, ending June 30, 2018
Data points	31 diversified U.S. Public Plans $3-15 billion, CA Public Plans All 4 ORS plans aggregated (CALPers/CALStrs/SFERS excluded)