

FPPTA PENSION PLAN DATA CENTER:

Florida Local Defined Benefit Pension Plans: FY2020

- **Overview and Financial Personality**
- **Funding the Plans**
- **Investment of Assets**

Report to the FPPTA membership to better understand the members' pension plan numbers, and compare FPPTA plans to all Florida local defined benefit plans. The report includes statistical data for FY 2020 and prior years where available.

Prepared by:
Florida Public Pension Trustees Association (FPPTA)
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INTRODUCTION

The Florida Public Pension Trustees Association (FPPTA) membership represents 297 (62%) of the 481 local defined benefit retirement plans across the state of Florida. Our member trustees often ask: How does our plan compare to other plans in the FPPTA and to all Florida local plans?

This report analyzes and compares the data for Fiscal Year 2020 (October 1, 2019 – September 30, 2020), between FPPTA member plans and all Florida local defined benefit plans. These are the latest data available. The publication attempts to reveal the financial personality of the pension plans, the sources of funding for the plans, and how the assets are invested by pension trustees. Where available, the FY2020 data are compared to prior years and comparable studies.

FPPTA members are encouraged to view their plan and compare it to similar plans in the tables on the FPPTA website (fppta.org). All of the data come from the reports filed by each retirement system with the Florida Department of Management Services.

The Bureau of Local Retirement Systems in the Department of Management Services' Division of Retirement is responsible for monitoring Florida's local government defined benefit pension plans for compliance with Florida law and Florida Administrative Code. These responsibilities are divided between the Local Retirement Section and the Municipal Police Officers and Firefighters' Retirement Trust Funds Office.

FPPTA is not responsible for the accuracy of the data – if your plan data are wrong, please contact the Bureau of Local Retirement Systems.

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INTRODUCTION TO FPPTA

The Florida Public Pension Trustees Association (FPPTA) is a membership organization, founded in 1984, as a not-for-profit organization. FPPTA is established for the purpose of providing education and information for and about the Florida public pension systems, and advocating for defined benefit pension plans. FPPTA member plan participants represent 68% of the total membership of Florida's local defined benefit plans, and the FPPTA member plans manage over \$36 billion in assets, representing 80% of the market value of all local defined benefit plans. FPPTA plans are well funded (most above 80 percent) and have responded to the changes in economic times by lowering their assumed rate of return, while employee contributions have increased.

Education is FPPTA's primary mission. We safeguard public retirement plans by offering a rigorous education program designed to prepare trustees to perform their duties with confidence, expertise and fiduciary responsibility. Ethics and best practices are dominant in our programs. Our **Certified Public Pension Trustee** (CPPT) designation is nationally recognized by industry professionals and continuing education is required to maintain certification.

FPPTA Trustee Schools are offered twice a year and run two and one-half days, and offer Certified Public Pension Trustee program sessions, as well as continuing education sessions. Each Trustee School offers classes including lectures, continuing education workshops, panel discussions, and "break out" sessions with a focus on group discussion and participation.

The FPPTA Annual Conference focuses on a macro-perspective of the industry and public pension landscape over two and one-half days of speakers, panels and discussions.

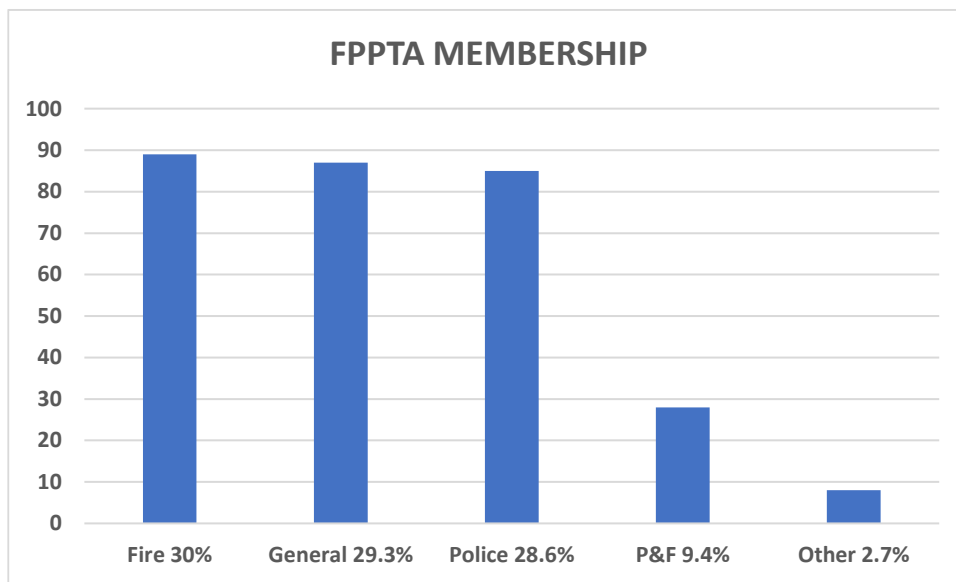
As of June 1, 2022, FPPTA members represent 297 local defined benefit plans. The following data analyses are based on these member plans. All of the data were collected from reports issued by the Bureau of Local Retirement Systems in the Department of Management Services' Division of Retirement, and they are responsible for the accuracy of the data. Their data come from the annual reports all retirement plans are required to file with the state.

FPPTA: The **VOICE** of Florida's Public Pensions
 The **ADVOCATE** for Defined Benefit Pensions

Overview and Financial Personality

PLAN CHARACTERISTICS

Employee Groups: Local public sector employees in Florida (those working for cities) are mostly covered by the local retirement system, while state and county employees, including teachers, and local plans opting to join the state plan, are covered by the Florida Retirement System (FRS) or a defined contribution account. These local plans cover general employees, police officers, firefighters, and miscellaneous employees.



The data show that the composition of the employee groups for the FPPTA plans and all local defined benefit plans are quite similar.

Number of Plan Participants: The total number of plan participants includes active members (currently employed), retired members (former employees currently receiving benefits from the plan and DROP members), beneficiaries of deceased members (collecting benefits on behalf of deceased employees), and terminated vested members (former employees who are eligible to receive benefits from the plan upon retirement).

ALL LOCAL PLANS		
	FY 2019	FY 2020
Number of plan participants	191,166	185,533
FPPTA PLANS		
Number of plan participants	120,978	126,037

Statewide in FY20, there are 185,533 participants covered by the 481 local defined benefit plans (3% drop from the prior year). The FPPTA plans represent a total of 126,037 plan participants in FY20, representing 68% of the total local plan participants. Statewide, there are 87,521 active members, 77,484 retirees and beneficiaries, 4,839 DROP members, and 15,689 terminated and vested.

Plan Status: Plan status is Active (new employees are eligible to enroll in the plan) or Closed (new employees are not eligible to enroll, but continuing employees accrue additional benefits), or Frozen (no benefit accruals for any employee). In closed plans, the new employees are either covered by the Florida Retirement System (FRS) or participate in a defined contribution account, such as a 401(a) account. Frozen plans are closed plans where participants' current accrued benefits are "frozen" with no additional defined benefit accruals for continuing service.

ALL LOCAL PLANS				
	Active	Closed	Frozen	% Active
Plan Status	369	99	13	77%
FPPTA PLANS				
Plan Status	235	56	6	79%

Within the FPPTA membership, while the overall percentage of active plans is 79%, it varies by membership group: Fire plans are 80.9% active; General is 74.7% active; Police is 76.4% active; Police and Fire is 78.6% active; and mixed plans are 100% active. Across Florida, of the 481 local defined benefit plans, 99 are closed to new hires, but those already in the plan continue to contribute and accrue pension benefits, and 13 plans are frozen. Within FPPTA, there are 56 closed plans and six frozen plans.

Of the total local defined benefits plans, active plans have a total participant membership of 136,778 participants, closed plans 42,876 and frozen plans 5,879. Within FPPTA, the total participant membership is 126,037, with 98,788 enrolled in an active plan, 25,977 enrolled in a closed plan, and 1,272 enrolled in a frozen plan.

Employees Covered by Social Security: When Social Security was established in 1935, state and local government employees were excluded from coverage. Over the years, these plans were given the ability to opt-into Social Security coverage for their employees. Nationwide, about 75 percent of state and local retirement systems have opted for coverage, with about 25% still not covered. The majority of that 25% are police, firefighter and teacher

retirement plans. The database lists coverage as TRUE – meaning the plan participants are covered by Social Security, and FALSE – meaning they are not covered.

ALL LOCAL PLANS		
	FY 2019	FY 2020
Employees covered by Social Security	75%	75%
FPPTA PLANS		
Employees covered by Social Security	78%	77%

Of all local defined benefit plans, 75% of the plans include mandatory Social Security coverage for their plan participants. The count is 361 plans covered and 120 plans not covered by Social Security. For the FPPTA plans, 77% of the plans include mandatory Social Security coverage. The count is 229 plans covered and 68 not covered. Over the years, the percentage of plan participants covered has not significantly changed.

VALUE OF PLAN ASSETS

Actuarial Value of Plan Assets (AVA): This is the smoothed value of the plan's assets used for performing an actuarial valuation to determine the amount of pension contributions the employer will have to make each year to fund the actuarial liability. The Actuarial Value of Assets (AVA) is calculated by starting with the market value of assets in the trust and using a formula to spread the recognition of prior years' asset gains and losses over a period of years. The method is a standard actuarial technique approved under Actuarial Standards of Practice for Pension Funding, and it mitigates the effects of large fluctuations in the market value and lowers the volatility in an employer's contribution from one year to the next.

ALL LOCAL PLANS		
	FY 2019	FY 2020
Actuarial Value of Plan Assets	\$44.6 billion	\$47.2 billion
FPPTA PLANS		
Actuarial Value of Plan Assets	\$34.8 billion	\$38.0 billion

The increase in total AVA includes plan contributions, investment returns and the net impact of asset smoothing from prior years, offset by benefit payments and administrative expenses. Over the last year, all local plan AVA increased from \$44.6 billion to \$47.2 billion – an increase of 5.8%. The total FPPTA plan AVA increased 9.2%, from \$34.8 to \$38 billion. FPPTA plans represent 81% of the actuarial value of all plan assets of local DB plans.

Market Value of Assets (MVA): The fair market value of assets, including DROP accounts, is the last reported price of an asset in the market in which it is traded as measured the last day of the fiscal year (usually September 30).

ALL LOCAL PLANS		
	FY 2019	FY 2020
Market Value of Plan Assets	\$42.9 billion	\$45.7 billion
FPPTA PLANS		
Market Value of Plan Assets	\$33.2 billion	\$36.4 billion

The increase in the market value of assets was due to plan contributions and investment returns, offset by benefit payments and administrative expenses. The market value of the pension funds increased from FY19 to FY20. For all local plans, the increase was from \$42.9 billion to \$45.7 billion – an increase of 6.5%. For the FPPTA plans, the increase was from \$33.2 to \$36.4 billion – an increase of 9.6%. FPPTA member plans represent 80% of the market value of all plan assets.

PLAN LIABILITY

Actuarial Accrued Liability (AAL): The portion of the present value of the plan's total projected pension benefits attributable to service already credited as of the valuation date. This includes all of the present value of benefits for retirees and beneficiaries currently receiving benefits and inactive members who have not yet commenced their benefits.

ALL LOCAL PLANS		
	FY 2019	FY 2020
Actuarial Accrued Liability	\$55.8 billion	\$58.1 billion
FPPTA PLANS		
Actuarial Accrued Liability	\$44.8 billion	\$47.9 billion

The increase in Actuarial Accrued Liability reflects benefit accruals during the year due to possible increase in pay, the increase in service credits, and changes in actuarial assumptions, such as lowering the discount rate used to calculate the present value of benefits.

For FY20, the Actuarial Accrued Liability increased for both groups. For all local plans, the liability increased from \$55.8 billion to \$58.1 billion – a 4% increase. For the FPPTA plans, the increase was from \$44.8 to \$47.9 billion – a 6.9% increase. However, the increases in FY20 were smaller than in the past.

Unfunded Accrued Liability (UAL): For funding purposes, the amount by which the actuarial accrued liability (AAL) exceeds the actuarial value of assets (AVA) accumulated to finance the obligation.

ALL LOCAL PLANS		
	FY 2019	FY 2020
Unfunded Accrued Liability	\$11.2 billion	\$10.9 billion
FPPTA PLANS		
Unfunded Accrued Liability	\$10.0 billion	\$9.9 billion

The decrease in the Unfunded Accrued Liability (UAL) may be due to the actual asset investment returns during the year exceeding the expected return, and ultimately the growth in assets being greater than the growth in liabilities. These numbers represent the unfunded liability of a pension plan. The term UAL is often used interchangeably with terms such as “unfunded liabilities,” “unfunded actuarially accrued liabilities” (UAAL), or “net pension liability” (NPL). However, different terms may mean different things, especially when applied for accounting purposes.

The Unfunded Accrued Liability of all local plans decreased from \$11.2 billion to \$10.9 billion – a 2.7% decrease. For the FPPTA plans, the decrease was from \$10 billion to \$9.9 billion – a 1% decrease.

FUNDED RATIO

Current Valuation: It is the ratio, expressed as a percentage, of the assets of a pension plan to its liabilities. The ratio is the market value of plan assets divided by actuarial accrued liability (AAL). It is referred to as the pre-funded ratio – meaning it is the percentage of funds on hand now to play for present and future pension obligations.

ALL LOCAL PLANS		
	FY 2019	FY 2020
Funded Ratio - Current Valuation	96.5%	92.7%
FPPTA PLANS		
Funded Ratio - Current Valuation	85.5%	88.5%

The funded ratio for the FPPTA member plans improved compared to all local plans, possibly due to better asset performance.

The pre-funded ratio of assets to liabilities for all local plans decreased from 96.5% to 92.7% – a decrease of 3.9%. Three plans were not included in the calculation as their funding ratio was between 779% and 1900%. Using the median helps correct for such extreme numbers. The median pre-funding level for all plans was 90.1%. For the same period, the FPPTA plans pre-funded ratio increased from 85.5% to 88.5% - an increase of 3.5%. The median funded ratio was 88.0%. Among active plans, the median pre-funded ratio is 89.6%.

Among the FPPTA plans, the three highest pre-funded plans (160.48% and 150.91%) are closed plans, with 23 total participants, and a frozen plan (145.90%) with 722 participants. The highest pre-funded active plan is at 129.31%, with the lowest active plan at 58.50%. The funding status shows that 43.4% (129 plans) are pre-funded at 90% or above; 75.1% (223 plans) are pre-funded at 80% or above; 90.2% (268) are pre-funded at 70% or above; and only 9.7% (29 plans) are pre-funded below 70%. Most of those plans are closed or frozen plans. Of those below 60% (5 plans), two of the plans are closed, with a total membership of 14,423 participants.

Funded ratio appears frequently in the media – used to claim that public pension funds are underfunded (and mostly called unfunded – which is a completely different term). The data show that a large majority (90%) are pre-funded at 70% or better. However, the health of a pension plan depends upon much more than a single point in time comparison of assets and liabilities. Looking at range and distribution of outcomes under alternative economic scenarios can provide more insights about the health and sustainability of pension plans.

RATE OF RETURN

Actual Market Value Rate of Return: This is a measure of the total investment performance of the portfolio over the fiscal year. It is expressed as a percentage, reflecting the gain on investment as a percentage of the market value of assets. The gain in investments is calculated by starting with the increase in asset value from beginning to end of period, and adjusting for investment expenses, contributions, benefit payments, and administrative expenses.

ALL LOCAL PLANS		
	FY 2019	FY 2020
Actual Market Value Rate of Return	4.7%	8.2%
FPPTA PLANS		
Actual Market Value Rate of Return	4.1%	8.3%

The increase in the actual rates of return is consistent with the capital markets' performance during the same time period.

From FY19 to FY120, all plans' rate of return increased from 4.7% to 8.2% - an increase of 74.5%. The range of returns was from a high of 20.65% to a low of a negative 1.42%. The FPPTA plans, during the same period, saw their return on investments increase from 4.1%% to 8.3%% - an increase of 104.2%. The range of returns was from a high of 20.65% to a low of a negative 0.72%. Over the four-year period, the average actual market rate of return for all plans is 8.01% and FPPTA plans is 8.12%.

Assumed Rate of Return: This is an estimated measure of the long-term investment performance of the assets invested in the pension fund. The investment return assumption reflects the long-term (often 30 years) anticipated returns on the plan's target asset allocation as reflected in the Investment Policy Statement. This assumption is typically constructed using a building block approach, by considering various factors including the time value of money, and growth in earnings, dividends, and interest. It is based on long-term expectations of the rate of return of the different asset classes which make up the pension plan's investment portfolio. Assumed rate of return is often used interchangeably with the terms "Expected Return on Assets" and "Discount Rate."

ALL LOCAL PLANS		
	FY 2019	FY 2020
Assumed Rate of Return	7.20%	7.05%
FPPTA PLANS		
Assumed Rate of Return	7.30%	7.15%

The decreases for the FPPTA plans and all local plans are broadly consistent with the lowering of the assumption for public sector plans across the country, as shown in NASRA Discount Rate surveys, and conform to the GFOA recommendations.

For all local plans, the decrease in the average assumed rate of return continues the long-term downward trend. It decreased from 7.2% to 7.05% - a reduction of 15 basis points. The median assumed rate is 7.12%. The range is from a high of 8.5% to a low of 1.0%. However, for the FPPTA plans, the average assumed rate of return decreased from 7.3% to 7.15% - a reduction of 15 basis points. The Median assumed rate is 7.25%. The range is from a high of 8.5% to a low of 2.0%.

The lower assumed rate of return is due to the fact that retirement boards of trustees have often voted to reduce their assumed rate in response to market returns, in an effort to give more funding and stability to their plans. Most realize that the traditional 7.5% or higher rate of return is no longer obtainable in the current market environment, therefore, they have taken positive actions.

When considering whether to lower the assumed rate of return, an issue brief from NASRA provides excellent guidance. "The process for evaluating a pension plan's investment return assumption should include abundant input and feedback from investment experts and actuarial professionals." (NASRA Issue Brief, "Public Pension Plan Investment Return Assumptions," updated February 2020)

FUNDING REQUIREMENT AS PERCENTAGE OF PAYROLL

Definition: Total required contribution (employer and employees) divided by total payroll of active participants. There is no interest adjustment included.

ALL LOCAL PLANS		
Funding as Percentage of Payroll (Range)	Average	Median
Active Plans (.5% - 133.3%)	36.5%	32.0%
Closed Plans (3.1% - 1540.3%)	156.9%	26.1%
Frozen Plans (12.1% - 88.0%)	41.5%	30.1%

Because many of the plans (especially those not active) had a zero-percentage employer contribution, the data are divided into the three categories of plans: active, closed and frozen. The chart shows the averages for each type of plan and the median value. The range of percentage of payroll is next to each of the types of plans.

These averages are not necessarily representative of all plans due to several factors. In both groups, there are extreme numbers that skew the averages. These extreme numbers tend to come from closed plans, frozen plans, or unique active plans such as volunteer firefighters, management or excess plans. Some are very small, with just a couple of participants.

The median is a better indicator of the real funding requirement. It is the midpoint from the highest to the lowest: half of the funds are above this amount and half are below this amount.

One issue to think about is whether or not a plan has DROP members. If so, these members usually don't make a contribution, so the question is, is their pay included in the total payroll? If it is, then the funding requirement as a percentage of payroll is skewed.

Another issue to consider is that a large portion of plan liabilities are for members who are already retired. Since retirees are not part of payroll, the cost of unfunded liabilities as a percentage of payroll produces a higher percentage. Perhaps a better indicator of the budget impact of pensions is to consider **the cost of pension as a percent of General Fund revenue, instead of payroll.**

PERCENTAGE OF PAYROLL CONTRIBUTED BY EMPLOYEES

Definition: The percentage of pay deducted from the employees' salary as their contribution to the pension plan's funding. Almost all Florida local plans require a contribution by the employees. The exceptions in the database are excess plans, DROP plans, 175/185 share plans, volunteer firefighters, supplemental plans and some closed and frozen plans.

ALL LOCAL PLANS	
Percentage of Payroll Contributed by Employee	FY 2020
Active Plans (.01% - 20.7%)	6.4%
Closed Plans (2.5% - 24.6%)	7.0%
Frozein Plans	0.0%
FPPTA PLANS	
Active Plans (.01% - 15.55%)	6.9%
Closed Plans (2.5% - 24.6%)	6.4%
Frozein Plans	0.0%

The data show that FPPTA plan participants continue to contribute more toward their pensions, a trend over the past four years. It is important to keep in mind that public employees not covered by Social Security tend to contribute a higher amount to make up for the loss of Social Security benefits at retirement.

Funding the Plans

Valuation Basis Total Dollar Contribution: The required total annual contribution from all sources to fund the pension plan. These funds come from employee contributions, employer contribution, return on investments, and state funding (if it is a police or firefighter plan, called 185 or 175 contributions). Contributions will vary based on the Florida Statute Chapter assumption.

ALL LOCAL PLANS		
	FY 2019	FY 2020
Valuation Basis Total Dollar Contribution	\$2.2 billion	\$2.2 billion
FPPTA PLANS		
Valuation Basis Total Dollar Contribution	\$1.8 billion	\$1.8 billion

The amount needed to fully fund the retirement plans remained the same from FY2019 to FY2020, mainly attributed to the higher market returns of the plans which offset the impact of lower discount rates resulting in higher liabilities.

Local Plan Funding: Funding for the plans comes from employee contributions, employer contribution, return on investments, and state funding (if police or firefighters are participants in the plan). Full funding is required each year as determined by the actuarial valuation that takes into consideration past performance, and changes in assumption that may come as a result of an experience study.

The employee contribution is determined by the collective bargaining agreement between the union representing employees and the city as the employer. Since the employee count remains basically stable (except for inflation, promotions and large hirings), that contribution is easier to predict.

State funding comes through monies collected on homeowners' insurance policies and auto insurance policies. It is called 175 funds (for firefighter participants) and 185 funds (for police participants). If the plan does not apply for the funding or does not contain any public safety officers, then there is no state funding component. Each year, the state announces the funding amounts, based on insurance premiums, so the amount varies.

Investment earnings are based on the market value of the return on investments, and smoothed over basically five years, to avoid spikes in plan returns, which in effect influence the employer contribution. Higher returns results in reducing the city contribution, while smaller returns or negative returns increase the city's contribution.

The funding remaining, needed to reach full funding of the plan for the year, is assigned to the city. The city's contribution varies year-to-year, with smoothing helping reduce spikes in the amount. The graph below shows the three sources of funding needed to reach full funding each year. The benefits and expenses for the next year must be funded by an equal dollar amount of contributions and investments.

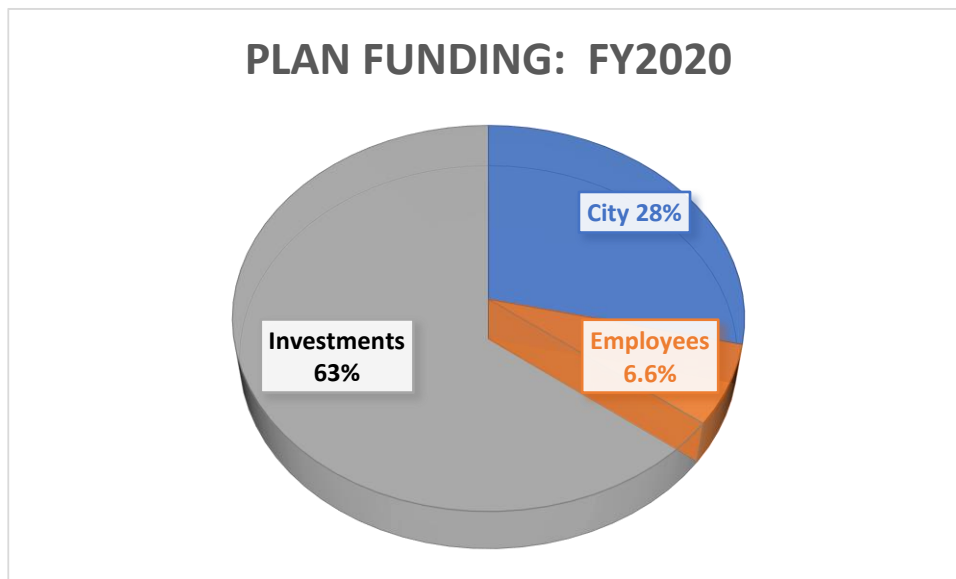
Benefits + Expenses =		Contributions + Investments
		City contribution
		Normal costs +
		Unfunded liability
		Investment earnings
		ROI
		Dividends and Interest
		Appreciation
		Employee contributions
		P&F - 175/185 state funding

To determine full funding, the actuary determines two contribution amounts needed: normal costs (costs associated with one additional year of service by each participant) and the unfunded actuarial accrued liability (UAAL) costs (shortfall from the prior years, amortized over a number of years, usually 30).

The question arises: Of the total costs for fully funding a plan, what percentage comes from normal costs and from UAAL? It is somewhat misleading to lump all plans together in this analysis, therefore, the funding is distinguished among active plans, closed plans and frozen plans.

FUNDING COSTS		
	Normal Costs	Unfunded Liability
Active Plans	56.0%	44.0%
Closed Plans	47.2%	52.8%
Frozen Plans	3.3%	96.7%

Normal costs are higher for an active plan, as new members are being added, thus new liabilities are being added to the plan resulting in increased benefit accruals.



When analyzing the active plans, the data show that 63% of the funding came from investment returns on the assets, while 37% came from required contribution. Nine active plans have a required contribution of 0%. The required contribution was distributed among employees (6.6%), city contribution (28%), and state funding where public safety officers were members of the plan. Of the 369 active plans, 239 received state funding (in a couple of case public safety plans did not receive state funding). For those receiving 175/185 funding, the average amount was 7.8%, with the median amount being 6.8%. The median is a better number due to some extremes, such as one plan reporting 199.8% state funding. The percentages don't total 100% due to rounding and the fact not all plans in both groups received state funding. If the state funding was added, it would increase the employee contributions.

Investment of Assets

MAJOR ASSET CLASSES OF INVESTMENT

Public pension asset allocations are developed by the trustees, taking into consideration the plan's projected benefit payments, expected contributions, and future investment earnings. Since 1989, on a national basis, investment earnings have accounted for approximately 61 percent of all public pension revenues.

Over time, investment earnings finance a majority of the costs of public pension plans. According to the U.S. Census Bureau, for the 30 years between 1990 through 2020, investment earnings accounted for 61 percent of public pension revenues. A recent study based on FY2020 data from the National Association of State Retirement Administrators shows that investment earnings represented 60%; employer contributions made up approximately 28 percent, and employee contributions were around 12 percent.

Pension funds are invested in a diversified portfolio among many asset classes and subclasses of investment instruments. Generally, asset classes are aligned with the target asset allocation specified in a plan's Investment Policy Statement (as discussed at the end) and include an investment category of **equities** (stocks), **fixed income** (bonds) and **cash** (money market). Many plans also reflect **alternative investments** (private credit markets, real estate, commodities, hedge funds, etc.). Equities can be classified by size (small, mid and large capitalization), type (value stocks, growth stocks), geographic location (domestic, developed international, emerging markets, etc.).

Below are brief descriptions of the major asset classes that are commonly found in the Investment Policy Statement and asset allocation for public pension plans in the state of Florida.

Equities are stocks or any other securities that represent ownership interest in a business.

Domestic Equities are those individual securities or index funds or mutual funds where the issuing companies are all domiciled **American companies traded on the various stock exchanges**. The function of a domestic stock is to divide the ownership interest of a given company equally among the number of shares outstanding for that company. The three types of domestic stocks are common stock, preferred stock and convertible preferred stock.

International Equities are those securities where the issuing companies or index funds or mutual funds are domiciled outside the United States. They represent an opportunity for investors to diversify their portfolios and may help with improved diversification and lower volatility compared to allocating 100% to US-only equities.

Fixed Income (bonds) investments follow the same guidelines as above and can be domestic or international. Investing in **International** fixed income may result in similar benefits as investing in international equities above. Fixed income broadly refers to those types of investment securities that pay investors fixed interest (periodic coupon payments, often semi-annually) until its maturity date. At maturity, investors are repaid the principal amount invested. Government and corporate bonds are the most common types of fixed-income products. Fixed income instruments usually reflect lower returns (yields) and lower risks compared to equities. These are a key component of a plan's asset allocation because they lower portfolio risk (volatility of returns) and can offset some of the interest rate risk inherent in the pension liabilities.

Cash or cash equivalent is used by plans to meet immediate cash flow needs or used to park funds resulting in the liquidation of one investment before moving them to another. There are critical in meeting unforeseen liquidity requirements.

Real Estate, considered one form of an alternative investment, is usually treated as a separate asset class. These are considered to be return-seeking assets (similar to equities), but may help with risk reduction without giving up much return. Most real estate investments are through a REIT (Real Estate Investment Trust), which are essentially real estate mutual funds. Real estate investments come in many forms, in some cases, a pension plan will own a building or piece of land as part of their real estate allocation. A REIT is a trust that uses pooled money to invest in property and/or mortgage loans; REITs are granted special tax considerations and are traded on major exchanges; there are several benefits over actually owning properties, and they pay dividends and are valued based on measures similar to stocks.

Alternative investments are alternatives to the above investments. They include a broad range of nontraditional investments and investment strategies that are often viewed as more risky than traditional investments in isolation. However, they can help in lowering portfolio risk as part of a balanced well-diversified portfolio because of low correlation (directional relationship) with other major asset classes. Alternative investments include **private equity and/or private credit markets, hedge funds, managed futures, art and antiques, commodities, and derivatives contracts**.

Other assets are just that – anything not classified above.

The following asset classes are used by the state of Florida to report asset allocations of investments by all local defined benefit pension plans.

Cash & Equivalents
Equity: International
Equity: Domestic
Fixed Income: International
Fixed Income: Domestic
Real Estate
Alternative Investment
Other Assets

ASSET ALLOCATION OF INVESTMENTS

The asset allocation of invested funds is represented by the charts and data below. They compare the asset allocation of all local defined benefit plans with the FPPTA member defined benefit plans. FPPTA member plans manage and invest 80% of the total market value of all local plans' assets. FPPTA plan members manage and invest over \$36 billion, as of the end of the fiscal year on September 30, 2020.

ASSET ALLOCATION OF PENSION INVESTMENTS: FY2020					
	ALL	PLANS		FPPTA	PLANS
Cash & Equivalents	3.0%	1,352,658,067		3.2%	1,159,037,670
Equity: International	9.0%	4,114,021,277		7.8%	2,875,257,057
Equity: Domestic	51.1%	23,406,397,056		52.6%	19,313,733,523
Fixed Income: International	0.1%	410,609,404		0.9%	377,837,703
Fixed Income: Domestic	22.0%	10,063,008,825		21.1%	7,730,853,880
Real Estate	8.4%	3,862,268,437		9.0%	3,286,842,350
Alternative Investments	4.4%	1,591,707,330		3.0%	1,017,190,496
Other Assets	2.0%	970,284,456		2.5%	931,128,653

All local plans tend to be slightly more heavily invested in international equities compared to FPPTA member plans (9.0% vs 7.8%), slightly less in domestic equities (51.1% vs 52.6%) and more in alternative investments (4.4% vs 3.0%). Overall, the investment allocations of all local DB plans and FPPTA member plans are quite similar, and the similarities continue from the prior year.

The composition of the portfolios of all DB plans and FPPTA members plans is similar. Both favor equities over fixed income and have close to the traditional 75 to 25 return seeking vs hedging assets splits. All plans portfolio is 74.9% equities (including Real Estate, Alternatives and Other Assets) and 25.1% fixed income (including Cash and Cash Equivalents).

FPPTA member plan portfolio is 74.8% equities (including Real Estate, Alternatives and Other Assets) and 25.2% fixed income (including Cash and Cash Equivalents). The increase in equities can be attributed to the market appreciations during the fiscal year and the fact that plans have not yet rebalanced as of September 30.

Based on the latest information from the Public Fund Survey, conducted by the National Association of State Retirement Administrators, the average public pension fund asset allocation in FY2020 is as follows:

- Public equities: 45.7%
- Fixed income: 23.4%
- Real estate: 7.6%
- Alternative investments: 21.0%
- Cash & Other: 2.3%

The Florida public pension defined benefit plans are similar to the average public pension fund asset allocation of the 50 states in terms of the broad Return Seeking (Equity plus Real Estate and Alternatives/Hedging Fixed Income plus Cash and Cash Equivalents) allocation. However, beneath the initial allocation there is divergence in terms of the allocation between traditional equities and non-traditional equity investments. The average public pension fund asset allocation appears to be significantly more tilted toward Alternative Investments compared to the Florida plans and FPPTA member plans.

Both the Florida DB plans and FPPTA member plans are slightly more invested in real estate (8.4% and 9.0%) compared to the average state fund (7.6%). However, both are significantly lower in funds invested in alternative investments (4.4% and 3.0%) than the average state fund (21.0%). Some of that variation could be attributed the size of state pension plans, and their ability to do greater asset diversification among asset classes.

INVESTMENT POLICY STATEMENT

Most public funds adopt an Investment Policy Statement to guide the investment of assets. A Government Finance Officers Association (GFOA) Best Practice "Creating an Investment Policy," states in part:

A written investment policy is the single most important element in a public fund's investment program. An investment policy should describe the most prudent primary objectives for a sound policy: safety, liquidity, and yield. It should also indicate the type of instruments eligible for purchase by a government entity, the investment process, and the management of a portfolio. Such a policy improves the quality of decisions and demonstrates a commitment to the fiduciary care of public funds, with emphasis on balancing safety of principal and liquidity with yield. Adherence to an investment policy signals to rating agencies, the capital markets and the public that a government entity is well managed and is earning interest income suitable to its situation and economic environment.

The GFOA recommends that all pension boards adopt a comprehensive written investment policy and review and update its policies on an annual basis.

SUMMARY

FPPTA is an educational organization that schools public pension trustees and administrators on the best practices for successfully operating a pension plan for public employees. Their goal is to ensure that plan participants (and beneficiaries) receive their pension benefits for life. The 297 local defined benefit pension plans participating in FPPTA are committed to safeguarding the retirement security of their plan participants. Trustees ensure each month the retirement benefits are paid to those who have earned it, and the payment is on time.

The data in this study show that FPPTA is the voice of Florida's public pensions. FPPTA's membership represents over 68% of the total plan participants and 81% of the Actuarial Value and 80% of the Market Value of Plan Assets under investment in FY20.

One issue that continues to trouble trustees, based on media reports and public reactions, is the funded ratio of assets to liabilities. Misunderstanding of funded ratio and a popular perception that anything below 100% (most media report 80%) is unacceptable are used to indicate the pension plan is financially or actuarially unsound. The American Academy of Actuaries defines funded ratio best:

A funded ratio of 80% should not be used as a criterion for identifying a plan as being either in good financial health or poor financial health. No single level of funding should be identified as a defining line between a "healthy" and an "unhealthy" pension plan. Pension plans should have a strategy in place to attain or maintain a funded status of 100% or greater over a reasonable period of time. (American Academy of Actuaries, Issue Brief, July 2012)

Credit rating agencies, whose rating helps determine the borrowing rates for cities, look at pension funding ratios as one of the criteria for setting the bond rate. "Fitch generally considers a funded ratio of 70% or above to be adequate and less than 60% to be weak, while noting that the funded ratio is one of many factors considered in Fitch's analysis of pension obligations." ("Enhancing the Analysis of U.S. State and Local Government Pension Obligations," Feb.17, 2011)

FPPTA plans have responded to changes in the economy and markets by voting to lower their assumed rate of return. Some have done it in one step, while most have phased in the reduction over several years. The average assumed rate of return has declined from 7.46% in FY17 to 7.15% in FY20, a reduction of 31 basis points.

When the economy and investment markets are booming, pension plans see the benefits through return on investments, greater assets, and declining unfunded liabilities, resulting in

the plan sponsor making a smaller annual contribution. When the economy and markets experience a crisis and/or go into a recession, the opposite occurs. The increased employer contribution (during city declining revenues) puts pressure on pension plans (trustees) and often ignites calls to reform or replace defined benefits plans with defined contribution accounts. Trustees know a bull market will eventually become a bear market, and a bear market will eventually become a bull market. Their investment policies should be designed to take advantage of both markets, and their plans are invested for the long-term (50 years or more).

Given all of the above, trustees are often held answerable for any and all changes in the pension plan: increased contributions, downturns in the markets, poor performance, and the economy. In truth, trustees have no control over any of these. Their control comes in two areas:

1. Setting the assumed rate of return (as this rate declines, the required contribution from the plan sponsor increases),
2. Investing the funds in a diversified portfolio (in a market they don't control) to obtain reasonable returns with a prudent amount of risk – a portfolio that is rebalanced to adjust for changes in asset classes and to comply with the investment policy asset class targets.

Being a trustee is not an easy job. However, with all the expertise trustees and administrators possess about a difficult subject (that others have little understanding), it is their job to educate the plan sponsor, the media, plan active members, retired members (including beneficiaries) and terminated vested members about how a public pension operates and the advantages of a guaranteed pension benefit to the city and its residents.

ACKNOWLEDGEMENTS

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We acknowledge the support and encouragement from the FPPTA Board of Directors and CEO Kim Prior.

We acknowledge the data collection, analysis of data, and draft of the report compiled by Fred Nesbitt, FPPTA Media Consultant.

We acknowledge the peer review and submissions provided by Aon, specifically Eric Atwater, Partner and National Public Sector Retirement Practice Leader, and Deep Mandal, Senior Consultant.

We acknowledge the technical support provided by Sean McKinstry, FPPTA Director of Research.

APPENDIX

The FPPTA established the **Pension Plan Data Center** whereby members can view important plan data from their plan as well as other FPPTA members' plans and all the local defined benefit plans across Florida. All of the data were collected from reports issued by the Bureau of Local Retirement Systems in the Department of Management Services' Division of Retirement, and they are responsible for the accuracy of the data. Their data come from the annual reports all retirement plans are required to file with the state.

The data center has expanded to include additional data that will be useful to trustees and administrators. These files can be found by logging into your FPPTA account at: fppta.org

RESEARCH REPORTS:

"FLORIDA LOCAL DEFINED BENEFIT PENSION PLANS: FY2020"

An analysis of the overview and financial personality, investment of assets, and funding of plans, comparing all Florida local defined benefit plans with the FPPTA member defined benefit plans, using data from FY2020.

"OVERVIEW AND FINANCIAL PERSONALITY – FY2019"

An analysis of the FY2019 data, comparing the financial personality of FPPTA plans to all local defined benefit plans in Florida for the past three years.

"OVERVIEW AND FINANCIAL PERSONALITY – FY2018"

An analysis of the FY2018 and FY2017 data, comparing the financial personality of FPPTA plans to all local defined benefits plans in Florida.

"PENSION PLAN ASSET ALLOCATION – FY2019"

An analysis of the asset classes of investments for all local defined benefit plans compared to FPPTA member plans for FY2019. The breakdown is by five major asset classes: equities (domestic and international), fixed income (domestic and international), real estate, alternative investments and cash.

DATA FILES:

FY2020 FPPTA MEMBER DATA:

The FY20 actuarial data used for the study for each of the FPPTA member plans. These data can be viewed as a pdf or Excel spreadsheet.

FY2019 FPPTA MEMBER DATA:

The FY19 actuarial data used for the study for each of the FPPTA member plans. These data can be viewed as a pdf or Excel spreadsheet.

FY2018 FPPTA MEMBER DATA:

The FY18 actuarial data used for the study for each of the FPPTA member plans. These data can be viewed as a pdf or Excel spreadsheet.

FY2017 FPPTA MEMBER DATA:

The FY17 actuarial data used for the study for each of the FPPTA member plans. These data can be viewed as a pdf or Excel spreadsheet.

ACTUARIAL FACT SHEET:

A one-page summary sheet for each local defined benefit plan, along with additional data as it relates to GASB 67 and actuarial disclosures required by section 112.664, *Florida Statutes*. The summary sheet also has a link to the plan's latest actuarial valuation. A sample of the one-page summary can be found at the end of the report.

ASSET ALLOCATION FY2020:

The table provides the dollar asset allocation of investments of FPPTA member plan across eight asset classes, including DROP account balances where applicable.

FUNDING THE PLANS FY2020:

The table provides the percentage of funding of the FPPTA member plans from the employee contribution, employer contribution, investment returns and state funding (for police and firefighter plans).

RETIREMENT BENEFIT SUMMARY:

The table provides a description and data for all plans about the retirement benefits: retirement benefit rate, normal retirement age description, normal form of benefit, years to vest, and other benefits such as COLA and DROP.

OTHER RETIREMENT BENEFITS:

The table provides a description and data for all plans about disability retirement, death benefits, and early retirement benefits.

INVENTORY OF MUNICIPALITIES:

The table provides data for all plans about the municipalities and an inventory of the cities by type of retirement plan: defined benefit, defined contribution, Florida Retirement System, and Social Security coverage. Each employee group is shown by type of plan.

POPULATION DATA:

The table provides data about the local retirement plans showing city population, county name, county population, and plan members by active, retired, DROP and terminated member.

2021 FIREFIGHTER 175 FUNDING:

The table shows the reimbursement from the state to firefighter pension plans for the insurance premium tax in 2021.

2021 POLICE 185 FUNDING:

The table shows the reimbursement from the state to police pension plans for the insurance premium tax in 2021.

SAMPLE ACTUARIAL FACT SHEET

2021 Florida Local Government Retirement Systems Actuarial Fact Sheet

City/District Name: Saint Petersburg		Employee group(s) covered: Police	
Current actuarial valuation date: 10/1/2020		Plan Status: Active	Date prepared: 1/13/2022
Number of plan participants: 1,229		GASB 67 Reporting	
Actuarial Value of Plan Assets (AVA):	\$479,520,065	Discount Rate	7.80%
Actuarial Accrued Liability (AAL):	\$517,221,275	Total Pension Liability	484,863,338
Unfunded Accrued Liability (UAL):	\$37,701,210	Market Value of Plan Assets	431,032,344
Market Value of Plan Assets (MVA):	\$431,032,344	Net Pension Liability	53,830,994
		GASB 67 Funded Ratio	88.90%
MVA Funded Ratio (5-year history):		Averages for all plans with 2020 current actuarial valuation date	
Current valuation	83.34%	90.52%	*
1 year prior	86.15%	86.77%	*
2 years prior	87.74%	89.02%	*
3 years prior	85.64%	86.31%	*
4 years prior	88.50%	82.76%	*
Rate of Return: Actuarial Value, Actual (2020 Plan Year)	7.31%	8.10%	
Market Value, Actual	4.44%	8.39%	
Assumed	7.80%	7.10%	
Funding requirement as percentage of payroll:	19.98%	60.19%	**
Percentage of payroll contributed by employee:	7.00%	6.48%	**
Funding requirement as dollar amount:	9,258,904	N/A	

Benefit Formula Description: 3.00% X EARN BASE X SC
 AFC Averaging Period (years): 3
 Employees covered by Social Security? Yes

Additional actuarial disclosures required by section 112.664, Florida Statutes:

Florida Statute Chapter	Discount Rate	Pension Liability	Market Value of Plan Assets	Net Pension Liability	Years assets sustain benefit payments	Total Dollar Contribution	Total % of Pay Contribution
112.664(1)(a)	7.80%	487,657,847	431,032,344	56,625,503	22.00	4,822,608	10.41
112.664(1)(b)	5.80%	620,775,348	431,032,344	189,743,004	17.00	17,303,996	37.34
Valuation Basis	7.80%	N/A	N/A	N/A	22.00	4,808,362	10.62

Link to annual financial statements: <https://frs.fl.gov/forms/LOC5340823PDF10012020N1.pdf>

*Adjusted by excluding plans from average whose Funded Ratios were not within two standard deviations from the mean

**Excludes plans with zero payroll

(For explanation of terms, see glossary on page 2)

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Actuarial Summary Fact Sheet – Glossary of Terms	
Plan Status:	Active, Closed (closed to new entrants) and Frozen (closed to new entrants and no further benefit accruals)
Actuarial Value of Plan Assets (AVA):	Assets calculated under an asset valuation method smoothing the effects of volatility in market value of assets. Used to determine employer contribution.
Actuarial Accrued Liability (AAL):	Portion of Present Value of Fully Projected Benefits attributable to service credit earned as of the current actuarial valuation date.
Unfunded Accrued Liability (UAL):	The difference between the actuarial accrued liability and the actuarial value of assets accumulated to finance the obligation.
Market Value of Plan Assets (MVA):	The fair market value of assets, including DROP accounts.
MVA Funded Ratio:	Market Value of Plan Assets divided by Actuarial Accrued Liability (GASB)
Rate of Return (Assumed):	Assumed long-term rate of return on the pension fund assets.
Funding requirement as percentage of payroll:	Total Required Contribution (employer and employee) divided by total payroll of active participants. No interest adjustment is included.
Funding requirement as dollar amount:	Total Required Contribution (employer and employee). No interest adjustment is included.
AFC:	Average Final Compensation or some variant of compensation (e.g., AME [Average Monthly Earnings], FAC [Final Average Compensation], FMC [Final Monthly Compensation] etc.)
SC:	Service Credit

Section 112.664 – Glossary of Terms	
Florida Statute Chapter:	<p>112.664(1)(a) – uses mortality tables used in either of the two most recently published FRS valuation reports, with projection scale for mortality improvement</p> <p>112.664(1)(b) – uses same mortality assumption as 112.664(1)(a) but using an assumed discount rate equal to 200 basis points (2.00%) less than plan's assumed rate of return.</p> <p>Valuation Basis – uses all the assumptions in the plan's valuation as of the current actuarial valuation date.</p>
Discount Rate:	Rate used to discount the liabilities. Typically the same as assumed rate of return on assets.
Total Pension Liability:	Actuarial Accrued Liability measured using the appropriate assumptions as specified above and the Traditional Individual Entry Age Normal Cost method.
Net Pension Liability:	Total Pension Liability minus Market Value of Plan Assets.
Years assets sustain benefit payments:	Assuming no future contributions from any source, the number of years the market value of assets will sustain payment of expected retirement benefits. The number of years will vary based on the Florida Statute Chapter assumption.
Total Dollar Contribution:	Required contribution from all sources (i.e., employee and sponsor). Contribution will vary based on the Florida Statute Chapter assumption.
Total % of Pay Contribution:	Total Dollar Contribution divided by total payroll of active participants
Annual financial statements:	A report issued which covers a local government retirement system or plan to satisfy the financial reporting requirements of section 112.664(1), F.S.