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# **Palm Tran, Inc. Amalgamated Transit Union Local 1577 Pension Plan**

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Actuarial Valuation as of January 1, 2022



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May 19, 2022

REPORT TO DETERMINE MINIMUM FUNDING REQUIREMENTS  
FOR THE PLAN YEAR  
ENDING DECEMBER 31, 2023





May 19, 2022

Board of Trustees  
Palm Tran, Inc. Amalgamated Transit Union Local 1577 Pension Plan  
West Palm Beach, Florida

**RE: Actuarial Valuation as of January 1, 2022**

Dear Board Members:

We are pleased to present the actuarial valuation as of January 1, 2022 for the Palm Tran, Inc. Amalgamated Transit Union Local 1577 Pension Plan (the Plan). This report provides a review of the current funded status of the Plan, establishes the minimum funding requirements for the fiscal year ending December 31, 2023 and provides an analysis of experience since the last valuation. In addition to providing the summary and derivation of actuarial findings, this report describes the data, assumptions, and methods used to create these results.

In producing our work product, we rely on various models, internal and external, which were used for their intended purposes. Underlying data, assumptions, methodologies, model inputs and resulting outputs have been reviewed. The 7.0% net assumed return is a prescribed assumption as defined by Actuarial Standard of Practice No. 27 (ASOP 27), as it is set by the Board. While we find all other inputs and outputs to be reasonable, this prescribed assumption significantly conflicts with our judgment regarding what would constitute a reasonable assumption for the purpose of the measurement as discussed in ASOP 27. We continue to recommend lowering the net assumed return.

Future actuarial measurements may differ significantly from the current measurements presented in this report due to such factors as the following: plan experience differing from that anticipated by the economic or demographic assumptions; changes in economic or demographic assumptions; increases or decreases expected as part of the natural operation of the methodology used for these measurements (such as the end of an amortization period or additional cost or contribution requirements based on the plan's funded status); and changes in plan provisions or applicable law.

Statement by Enrolled Actuary:

"This actuarial valuation and/or cost determination was prepared and completed by me or under my direct supervision, and I acknowledge responsibility for the results. To the best of my knowledge, the results are complete and accurate, and in my opinion, the techniques and assumptions used are reasonable and meet the requirements and intent of Part VII, Chapter 112, Florida Statutes. There is no benefit or expense to be provided by the plan and/or paid from the plan's assets for which liabilities or current costs have not been established or otherwise taken into account in the valuation. All known events or trends which may require a material increase in plan costs or required contribution rates have been taken into account in the valuation."

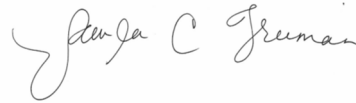
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We look forward to the presentation of these results to you and we are always available to answer any questions you may have. If other measures of liability are needed, please contact us.

Sincerely,



Chad M. Little, ASA, EA  
Partner, Consulting Actuary  
Enrollment Number 20-6619



Paula C. Freiman, ASA, EA  
Partner, Consulting Actuary  
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**FLA**

FREIMAN LITTLE ACTUARIES



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## Section

## 1

# Board Summary

## Summary of Principal Valuation Results

A summary of the key valuation findings as of January 1, 2022 are compared with the prior year below.

### Minimum Funding Requirements

Funding Year Ending December 31,	2022	2023
Minimum Required Employer Contribution*	\$6,390,895	\$6,189,910
As a Percent of Payroll	19.16 %	18.60 %

### Funded Status

Valuation Date January 1,	2021	2022
Accrued Liability (AL)	\$150,642,308	\$159,943,269
Actuarial Value of Assets	<u>127,570,545</u>	<u>140,722,665</u>
Unfunded Accrued Liability (UAL)	\$23,071,763	\$19,220,604
Funded Percentage	84.68 %	87.98 %

### Key Assumptions

Valuation Date January 1,	2021	2022
Assumed Rate of Investment Return	7.25%	7.00%
Salary Increase Assumption	12.5%-5.0%	12.5%-5.0%
Payroll Inflation	2.00%	2.00%
Funding Method	Entry Age	Entry Age

\*The Minimum Required Employer Contribution shown above is payable on the first day of the funding year.



## Summary of Significant Events

Determination of the funded status of the Plan and minimum funding requirements are based on participant data, asset information, Plan provisions, actuarial methods and assumptions. Any significant events associated with these items are discussed in the following.

In preparing our report we relied, without audit, on information (some oral and some written) supplied by the Plan administrator. This information includes, but is not limited to, statutory provisions, employee census, and financial information. In our examination of these data, we have found them to be reasonably consistent and comparable with data used for other purposes. We have also relied upon asset information provided by the auditor. Since the valuation results are dependent on the integrity of the data supplied, the results can be expected to differ if the underlying data is incomplete or missing. It should be noted that if any data or other information is inaccurate or incomplete, our calculations may need to be revised.

### Participant Data

The number of active members decreased by 22 while the covered valuation payroll decreased 0.25% from the prior year. Meanwhile, the number of inactive members in payment status increased by 12 while the average monthly benefit remained level as a dollar amount.

On an individual level, pay increases were 5.96% amongst continuing actives in comparison to 8.69% payroll increases expected on average. Note that this average is based on use of valuation pay in the current year no less than pay in the prior valuation.

As shown in the following table, the average of total compensation increases over the last ten years was 2.76% as compared to the 2.0% total payroll increase assumption used in the amortization of the Unfunded Accrued Liability as a level percentage of payroll in the prior actuarial valuation.

Year Ending December 31,	Total Compensation	Annual Salary Increases			
		Total Payroll		Average by Individual	
		Actual	Expected	Actual	Expected
2021	\$32,799,623	0.84%	2.0%	6.0%	8.7%
2020	32,525,195	3.60%	2.0%	4.6%	9.2%
2019	31,395,399	2.35%	2.0%	4.4%	8.9%
2018	30,674,568	0.90%	2.3%	5.0%	8.7%
2017	30,402,375	1.13%	2.6%	6.3%	8.4%
2016	30,061,310	9.27%	2.6%	7.8%	8.0%
2015	27,512,115	3.05%	2.8%	3.4%	7.7%
2014	26,697,432	7.06%	3.5%	7.9%	7.8%
2013	24,937,880	0.71%	4.0%	2.7%	7.8%
2012	24,761,240	(0.86%)	4.0%	5.3%	7.8%
10-Year Average		2.76%	2.8%	5.3%	8.3%

Note: In the above table total compensation prior to 2014 was determined based on the member contributions deposited to the fund.

Demographic experience produced an actuarial gain. Should a pattern of consistent gains or losses develop, assumptions will be adjusted as needed.



## Assets

The assumed net annual rate of investment return was 7.25% for the year ending December 31, 2021. The Actuarial Value of Assets recognizes investment returns less or more than the net assumed 7.25% return on a straight-line basis over a five-year period. This gradual recognition is called "asset smoothing" which is performed to reduce volatility in employer contributions. While the return on the Market Value of Assets was 12.40%, the return on the smoothed Actuarial Value of Assets was 11.36%. Since the return on the Actuarial Value of Assets was more than the 7.25% assumed net rate of return, an investment-related actuarial gain occurred.

Investment returns less than the assumed rate of return result in increased annual minimum required contributions payable in a subsequent year.

The net assumed investment return has been revised to 7.0% as of January 1, 2022 in comparison to the 7.25% assumption used in the prior valuation.

Historic return on investment information follows.

Year Ending December 31	Return on Investments		
	Market	Actuarial	Expected
2021	12.40%	11.36%	7.25%
2020	16.41%	9.91%	7.50%
2019	18.87%	5.90%	7.75%
2018	(4.16%)	4.38%	8.00%
2017	13.45%	7.00%	8.00%
2016	6.64%	6.23%	8.00%
2015	(2.13%)	6.02%	8.00%
2014	6.17%	8.88%	8.00%
2013	13.45%	10.70%	8.00%
2012	11.10%	4.18%	8.00%
2011	0.04%	3.69%	8.00%
2010	13.83%	4.79%	8.00%
2009	20.77%	11.55%	8.00%
2008	(23.15%)	(7.82%)	8.00%
2007	8.15%	8.15%	8.00%
2006	10.16%	4.92%	8.00%
2005	3.49%	2.95%	8.00%
2004	6.30%	3.34%	8.00%
2003	14.26%	5.40%	8.00%
2002	(12.39%)	5.72%	8.00%
2001	(0.94%)	(0.94%)	
2000	8.65%	8.65%	
1999	4.09%	4.09%	
1998	10.34%	10.34%	
1997	22.61%	22.61%	
1996	11.15%	11.15%	
1995	18.04%	18.04%	
Geometric Average of of Last 27 Years	7.19%	6.94%	
of Last 20 Years	6.11%	5.78%	7.92%
of Last 10 Years	8.98%	7.43%	7.85%

**Plan Provisions**

Amendment No. 5 was adopted effective March 24, 2021 regarding required minimum distributions at age 72. This change in Plan provisions had no significant effect on Plan liabilities.

**Assumptions and Methods**

The net assumed investment return has been revised to 7.0% as of January 1, 2022 in comparison to the 7.25% assumption used in the prior valuation as directed by the Board of Trustees. The 7.0% assumed net return is a prescribed assumption as defined by Actuarial Standard of Practice No. 27 (ASOP 27), as it is set by the Board. The prescribed assumption significantly conflicts with our judgment regarding what would constitute a reasonable assumption for the purpose of the measurement as discussed in ASOP 27. We recommend lowering the net assumed return.

The reconciliation of the funded status and the minimum required contribution provided in Section 2 of this report provide detail for each change in assumptions.

## Assessment and Disclosure of Risk

As described in Actuarial Standard of Practice No. 51 (ASOP 51), this section is meant to address the assessment and disclosure of risk in a pension funding valuation. This is not meant to be a comprehensive summary but should provide information regarding risks related to this plan. Additional historical information provided in this report also contain relevant information regarding asset size, asset mix, pay increases, benefits and contributions. This information can be used to understand the changes over time to identify trends.

Note that ASOP 51 defines risk as “The potential of actual future measurements deviating from expected future measurements resulting from actual future experience deviating from actuarially assumed experience....” The following provides examples of potential risk.

**Investment Risk:** As noted previously, investment returns less than the assumed rate of return result in increased annual minimum required contributions payable in a subsequent year.

**Interest Rate Risk:** Interest rates are used to discount the value of benefits. If the long-term expectation of returns is higher or lower than the assumed net investment return, the assumed net investment return should be adjusted. When the assumed net investment return is increased the estimated liability is decreased. When the assumed net investment return is decreased the estimated liability is increased. The chart below shows what the funded status of the plan is on a market value of assets basis after changing the net assumed return by 1% or 2%. Note that assumptions may have been revised between valuation dates shown below.

<b>Funded Status on Market Value of Assets Basis</b>						
<b>Valuation As of January 1,</b>	<b>Valuation Net Assumed Return</b>		<b>Valuation Net Assumed Return</b>			
	<b>2% Decrease</b>	<b>1% Decrease</b>	<b>1% Increase</b>	<b>2% Increase</b>	<b>2% Increase</b>	<b>Valuation Net Assumed Return</b>
2022	78.42%	87.35%	96.61%	106.16%	115.96%	7.00%
2021	74.84%	83.29%	92.06%	101.10%	110.39%	7.25%
2020	68.92%	76.65%	84.67%	92.95%	101.46%	7.50%
2019	61.60%	68.61%	75.88%	83.41%	91.16%	7.75%
2018	69.16%	77.04%	85.23%	93.72%	102.49%	8.00%
2017	62.87%	70.13%	77.70%	85.55%	93.65%	8.00%
2016	61.24%	68.38%	75.82%	83.55%	91.54%	8.00%
2015	64.85%	72.24%	79.97%	88.01%	96.34%	8.00%

**Longevity and Other Demographic Risks:** The estimated liability of the Plan is based on assumptions related to mortality, retirement, disability and termination. To the extent that Plan experience is different than these assumptions the gains and losses affect future required contributions and estimated liability.

**Contribution Risk:** The possibility that the plan sponsor does not make contributions to the plan according to the funding policy.

**Intergenerational equity risk:** Intergenerational equity is the concept that resources do not belong to a specific generation and they must be preserved for future generations. One way to alleviate this risk is to pay for benefits over the average future service of the group receiving benefits. Members may feel there are inequities when one is paying more than others, receiving less than others, or paying more than others in relation to what they are receiving.

Plan maturity measures may help understand the risks associated with the plan. As the Plan matures, the ratio of the Market Value of Assets to the Covered Payroll increases. As this ratio gets larger, the impact of asset volatility has a larger effect on the volatility of the Minimum Required Contribution as a percentage of pay.

<b><u>Year Ending December 31,</u></b>	<b><u>Market Value of Assets</u></b>	<b><u>Covered Valuation Payroll</u></b>	<b><u>Asset Volatility Ratio</u></b>
2021	\$154,520,407	\$32,622,308	4.7
2020	138,676,209	32,705,258	4.2
2019	119,658,658	31,920,449	3.7
2018	101,334,628	31,702,463	3.2
2017	106,312,842	31,910,081	3.3
2016	93,500,289	29,713,024	3.1
2015	85,571,117	28,018,022	3.1
2014	85,267,807	27,029,437	3.2
2013	76,687,616	24,661,404	3.1
2012	64,254,818	25,724,674	2.5
2011	54,215,053	24,999,674	2.2
2010	53,700,203	25,497,963	2.1
2009	46,496,283	25,386,904	1.8
2008	37,332,547	24,611,065	1.5
2007	46,902,218	21,454,569	2.2
2006	41,834,410	20,148,949	2.1
2005	36,516,528	18,954,945	1.9
2004	33,637,571	17,938,780	1.9
2003	29,883,879	17,206,023	1.7
2002	24,743,099	16,656,892	1.5
2001	26,522,564	15,633,008	1.7
2000	25,299,461	13,723,500	1.8
1999	21,667,779	15,064,500	1.4
1998	19,105,793	12,617,200	1.5

Another measure of a pension plan's maturity is the Ratio of Benefit Payments to Contributions. Over the life of a pension plan, it is expected that the majority of the benefits will be paid for by returns rather than contributions. For this to happen, as a plan matures, the plan will eventually pay out more in benefits than it receives in contributions. It is important to understand the magnitude of this difference so that steps can be taken, if necessary, to manage cash flows going forward. The table below provides the Ratio of Benefit Payments to Contributions. Note that there are other cash flows to be considered such as interest and dividends earned or expenses paid by a pension plan.

<b>Year Ending December 31,</b>	<b>Benefit Payments</b>	<b>Contributions</b>	<b>Ratio of Benefit Payments to Contributions</b>
2021	\$8,241,414	\$7,256,487	1.14
2020	7,606,438	7,314,117	1.04
2019	7,205,264	6,753,022	1.07
2018	6,625,328	6,433,634	1.03
2017	5,898,029	6,334,206	0.93
2016	5,467,344	7,799,451	0.70
2015	5,009,083	7,334,513	0.68
2014	4,626,680	8,584,921	0.54
2013	4,256,193	7,980,722	0.53
2012	4,051,806	8,030,106	0.50
2011	3,577,083	4,252,836	0.84
2010	3,053,766	3,930,790	0.78
2009	2,493,458	3,938,061	0.63
2008	2,303,030	3,905,350	0.59
2007	2,112,919	3,880,197	0.54
2006	1,831,150	3,469,337	0.53
2005	1,474,715	3,294,555	0.45
2004	1,201,780	3,140,276	0.38
2003	1,137,534	2,756,437	0.41
2002	975,180	2,693,712	0.36
2001	948,518	2,520,920	0.38
2000	779,336	2,590,583	0.30
1999	619,413	2,484,915	0.25
1998	526,077	2,286,881	0.23

When looking at Net Cash Flows, it is useful to understand the relative size of the cash flows in comparison to the Market Value of Assets. The following table provides the ratio of the Net Cash Flows divided by the Market Value of Assets. As mentioned previously, there are other cash flows to be considered such as interest and dividends earned or expenses paid by a pension plan.

<b>Year Ending December 31,</b>	<b>Contributions</b>	<b>Disbursements</b>	<b>Assets</b>	<b>Net Cash Flow Divided by Assets</b>
2021	\$7,256,487	\$8,529,129	\$154,520,407	(0.01)
2020	7,314,117	7,884,100	138,676,209	0.00
2019	6,753,022	7,481,791	119,658,658	(0.01)
2018	6,433,634	6,997,481	101,334,628	(0.01)
2017	6,334,206	6,111,724	106,312,842	0.00
2016	7,799,451	5,624,363	93,500,289	0.02
2015	7,334,513	5,191,527	85,571,117	0.03
2014	8,584,921	4,849,982	85,267,807	0.04
2013	7,980,722	4,426,271	76,687,616	0.05
2012	8,030,106	4,217,532	64,254,818	0.06
2011	4,252,836	3,759,253	54,215,053	0.01
2010	3,930,790	3,207,631	53,700,203	0.01
2009	3,938,061	2,662,489	46,496,283	0.03
2008	3,905,350	2,452,275	37,332,547	0.04
2007	3,880,197	2,286,129	46,902,218	0.03
2006	3,469,337	1,940,948	41,834,410	0.04
2005	3,294,555	1,617,982	36,516,528	0.05
2004	3,140,276	1,327,044	33,637,571	0.05
2003	2,756,437	1,250,590	29,883,879	0.05
2002	2,693,712	1,087,274	24,743,099	0.06
2001	2,520,920	1,053,307	26,522,564	0.06
2000	2,590,583	906,888	25,299,461	0.07
1999	2,484,915	739,536	21,667,779	0.08
1998	2,286,881	633,454	19,105,793	0.09

## Section 2 Results Derivation

In this section, the assets and liabilities of the Plan are shown in detail. Assets and liabilities are then compared to determine the funded status and minimum funding requirements. Finally, analysis is performed to explain movement in results from the prior valuation.

While asset information is based on the fair market value of assets, along with any techniques used to smooth out market fluctuations, liabilities are determined through a combination of the benefit provisions, participant census data which contains information for the members who will receive those benefits, and the methods and assumptions used with regard to how benefits will be paid to members. A summary of participant data, an outline of the benefit provisions, and a description of the methods and assumptions used in this valuation are described in Section 4.

### Financial Information

Over the life of the Plan, the majority of assets are typically generated from investment return. In this section, we describe how the assets of the Plan are invested, show how the actuarial value of assets is derived, and review the investment results since the prior valuation.

#### Investment Allocation

Year Ending	December 31, 2020		December 31, 2021	
Cash and Equivalents	\$0	0 %	\$0	0 %
Money Market	8,604,662	6 %	9,761,315	6 %
Fixed Income Securities	38,731,350	29 %	45,698,789	30 %
Convertible Bonds	6,202,628	4 %	6,404,357	4 %
Equity Securities	74,440,782	54 %	82,742,313	54 %
Global Infrastructure Fund	5,698,589	4 %	8,311,738	5 %
Real Estate Funds	11,665,533	8 %	13,525,462	9 %
Net Receivables	<u>(6,667,335)</u>	<u>(5)%</u>	<u>(11,923,567)</u>	<u>(8)%</u>
Total Assets	\$138,676,209	100 %	\$154,520,407	100 %



**Reconciliation of Market and Actuarial Value of Assets**

Year Ending Asset Value Type	December 31, 2021	
	Market Value	Actuarial Value
1. Value as of Beginning of Year	\$138,676,209	\$127,570,545
2. Contributions		
a. Employer	\$6,268,796	
b. Employee	<u>987,691</u>	
d. Total Contributions	\$7,256,487	\$7,256,487
3. Investment Income		
a. Realized Gain or (Loss)	\$9,870,578	
b. Unrealized Gain or (Loss)	4,011,919	
c. Interest and Dividends	3,741,070	
d. Other Income	9,092	
e. Investment Expenses	<u>(515,819)</u>	
f. Net Investment Income	\$17,116,840	\$14,424,762
4. Deductions		
a. Benefit Payments	\$(7,803,238)	
b. Refunds	(438,176)	
c. Administrative Expenses	<u>(287,715)</u>	
d. Total Deductions	\$(8,529,129)	\$(8,529,129)
5. Value as of End of Year	\$154,520,407	\$140,722,665
6. Return on Investments	12.40 %	11.36 %

**Determination of Market Value Gains or Losses**

	<b>2021</b>	<b>2020</b>
1. Market Value of Assets - Beginning of Year	\$138,676,209	\$119,658,658
2. Contributions	7,256,487	7,314,117
3. Benefit Payments and Administrative Expense	(8,529,129)	(7,884,100)
4. Interest	<u>10,235,136</u>	<u>8,953,025</u>
5. Expected Value of Assets at End of Year	\$147,638,703	\$128,041,700
6. Market Value of Assets - End of Year	\$154,520,407	\$138,676,209
7. Gain (Loss) for Plan Year	\$6,881,704	\$10,634,509
	<b>2019</b>	<b>2018</b>
1. Market Value of Assets - Beginning of Year	\$101,334,628	\$106,312,842
2. Contributions	6,753,022	6,433,634
3. Benefit Payments and Administrative Expense	(7,481,791)	(6,997,481)
4. Interest	<u>7,825,194</u>	<u>8,482,473</u>
5. Expected Value of Assets at End of Year	\$108,431,053	\$114,231,468
6. Market Value of Assets - End of Year	\$119,658,658	\$101,334,628
7. Gain (Loss) for Plan Year	\$11,227,605	\$(12,896,840)

**Development of Actuarial Value of Assets**

The Actuarial Value of Assets was determined as follows:

1.	Market Value of Assets of January 1, 2022			\$154,520,407
2.	Phase-In of Gains or (Losses) for Previous Five Years			
	Year Ending	Gain or (Loss)	Percentage Recognized	Unrecognized Gain (Loss)
	12/31/2021	\$6,881,704	20%	\$5,505,363
	12/31/2020	10,634,509	40%	6,380,705
	12/31/2019	11,227,605	60%	4,491,042
	12/31/2018	(12,896,840)	80%	<u>(2,579,368)</u>
			Total	\$13,797,742
3.	Preliminary Actuarial Value = (1) - (2)			\$140,722,665
4.	Corridor Around Market Value			
	a. Minimum = 80% x Market Value of Assets			\$123,616,326
	b. Maximum = 120% x Market Value of Assets			185,424,488
	c. Corridor Adjustment			0
5.	Actuarial Value of Assets of January 1, 2022			\$140,722,665

**Historical Asset Information**

Year Ending December 31	Asset Values		Return on Investments		
	Market	Actuarial	Market	Actuarial	Expected
2021	\$154,520,407	\$140,722,665	12.40%	11.36%	7.25%
2020	138,676,209	127,570,545	16.41%	9.91%	7.50%
2019	119,658,658	116,611,177	18.87%	5.90%	7.75%
2018	101,334,628	110,819,439	(4.16%)	4.38%	8.00%
2017	106,312,842	106,724,233	13.45%	7.00%	8.00%
2016	93,500,289	99,523,840	6.64%	6.23%	8.00%
2015	85,571,117	91,577,584	(2.13%)	6.02%	8.00%
2014	85,267,807	84,293,375	6.17%	8.88%	8.00%
2013	76,687,616	73,836,234	13.45%	10.70%	8.00%
2012	64,254,818	63,314,431	11.10%	4.18%	8.00%
2011	54,215,053	57,037,023	0.04%	3.69%	8.00%
2010	53,700,203	54,522,208	13.83%	4.79%	8.00%
2009	46,496,283	51,323,623	20.77%	11.55%	8.00%
2008	37,332,547	44,799,056	(23.15%)	(7.82%)	8.00%
2007	46,902,218	47,083,495	8.15%	8.15%	8.00%
2006	41,834,410	42,001,404	10.16%	4.92%	8.00%
2005	36,516,528	38,539,860	3.49%	2.95%	8.00%
2004	33,637,571	35,781,897	6.30%	3.34%	8.00%
2003	29,883,879	32,841,975	14.26%	5.40%	8.00%
2002	24,743,099	29,691,719	(12.39%)	5.72%	8.00%
2001	26,522,564	26,522,564	(0.94%)	(0.94%)	
2000	25,299,461	25,299,461	8.65%	8.65%	
1999	21,667,779	21,667,779	4.09%	4.09%	
1998	19,105,793	19,105,793	10.34%	10.34%	
1997	15,740,062	15,740,062	22.61%	22.61%	
1996	11,346,702	11,346,702	11.15%	11.15%	
1995	9,056,494	9,056,494	18.04%	18.04%	
Geometric Average of Last 27 Years			7.19%	6.94%	
Geometric Average of Last 20 Years			6.11%	5.78%	7.92%
Geometric Average of Last 10 Years			8.98%	7.43%	7.85%

Note: Investment returns less than the assumed rate of return result in increased annual minimum required contributions.

**Historical Contribution Information**

Year Ending December 31,	Company Contributions		Member Contributions	
	Dollars	% of Pay	Dollars	% of Pay
2021	\$6,268,796	19.1 %	\$987,691	3.0 %
2020	6,338,056	19.5 %	976,061	3.0 %
2019	5,809,852	18.5 %	943,170	3.0 %
2018	5,509,648	18.0 %	923,986	3.0 %
2017	5,421,844	17.8 %	912,362	3.0 %
2016	6,931,452	23.1 %	867,999	2.9 %
2015	6,557,240	23.8 %	777,273	2.8 %
2014	7,900,190	29.5 %	684,731	2.6 %
2013	7,357,275	29.5 %	623,447	2.5 %
2012	7,411,075	29.9 %	619,031	2.5 %
2011	3,628,424	13.0 %	624,412	2.5 %
2010	3,294,481	13.0 %	636,309	2.5 %
2009	3,302,893	13.0 %	635,168	2.5 %
2008	3,275,495	13.0 %	629,855	2.5 %
2007	3,272,841	13.0 %	607,356	2.5 %
2006	2,909,900	13.0 %	559,437	2.5 %
2005	2,761,386	13.0 %	533,169	2.5 %
2004	2,632,934	13.0 %	507,342	2.5 %
2003	2,313,147	13.0 %	443,290	2.5 %
2002	2,269,712	13.5 %	424,000	2.5 %
2001	2,127,458	13.5 %	393,462	2.5 %
2000	2,221,011	15.0 %	369,572	2.5 %
1999	2,140,768	15.6 %	344,147	2.5 %
1998	1,970,144	15.6 %	316,737	2.5 %

Note: Company Contributions were less than the actuarially determined minimum required contribution from 2008 through 2015. Member contributions should be 3.0% in calendar 2016.

**Historical Disbursements**

<b>Year Ending</b>	<b>Benefits</b>	<b>Administrative Expenses</b>	<b>Disbursements</b>
12/31/2021	\$(8,241,414)	\$(287,715)	\$(8,529,129)
12/31/2020	(7,606,438)	(277,662)	(7,884,100)
12/31/2019	(7,205,264)	(276,527)	(7,481,791)
12/31/2018	(6,625,328)	(372,153)	(6,997,481)
12/31/2017	(5,898,029)	(213,695)	(6,111,724)
12/31/2016	(5,467,344)	(157,019)	(5,624,363)
12/31/2015	(5,009,083)	(182,444)	(5,191,527)
12/31/2014	(4,626,680)	(223,302)	(4,849,982)
12/31/2013	(4,256,193)	(170,078)	(4,426,271)
12/31/2012	(4,051,806)	(165,726)	(4,217,532)
12/31/2011	(3,577,083)	(182,170)	(3,759,253)
12/31/2010	(3,053,766)	(153,865)	(3,207,631)
12/31/2009	(2,493,458)	(169,031)	(2,662,489)
12/31/2008	(2,303,030)	(148,136)	(2,451,166)
12/31/2007	(2,112,919)	(173,210)	(2,286,129)
12/31/2006	(1,831,150)	(109,798)	(1,940,948)
12/31/2005	(1,474,715)	(143,267)	(1,617,982)
12/31/2004	(1,201,780)	(125,264)	(1,327,044)
12/31/2003	(1,137,534)	(113,056)	(1,250,590)
12/31/2002	(975,180)	(112,094)	(1,087,274)
12/31/2001	(948,518)	(104,789)	(1,053,307)
12/31/2000	(779,336)	(127,552)	(906,888)
12/31/1999	(619,413)	(120,123)	(739,536)
12/31/1998	(526,077)	(107,377)	(633,454)
12/31/1997	(491,065)	(99,256)	(590,321)
12/31/1996	(393,563)	(88,424)	(481,987)
12/31/1995	(350,975)	(51,993)	(402,968)

## Present Value of Benefits

Year Beginning January 1,	2021	2022
<b>1. Active Members</b>		
a. Retirement Benefits	\$99,461,567	\$104,875,322
b. Termination Benefits	4,445,590	4,394,324
c. Survivor Benefits	444,467	436,995
d. Disability Retirement	<u>1,771,841</u>	<u>1,778,186</u>
e. Total for Active Members	\$106,123,465	\$111,484,827
<b>2. Vested Terminated Members</b>	\$5,051,368	\$6,795,252
<b>3. Members in Payment Status</b>		
a. Retirees	\$66,595,603	\$68,558,116
b. Beneficiaries	4,529,861	5,079,569
c. Disability Retirees	<u>3,205,978</u>	<u>3,440,839</u>
d. Total	\$74,331,442	\$77,078,524
<b>4. Present Value of Benefits (PVB)</b>	\$185,506,275	\$195,358,603

## Accrued Liability

Year Beginning January 1,	2021	2022
<b>1. Active Members</b>		
a. Retirement Benefits	\$69,765,183	\$74,581,628
b. Termination Benefits	422,256	423,053
c. Survivor Benefits	224,818	221,074
d. Disability Retirement	<u>847,241</u>	<u>843,738</u>
e. Total for Active Members	\$71,259,498	\$76,069,493
<b>2. Vested Terminated Members</b>	\$5,051,368	\$6,795,252
<b>3. Members in Payment Status</b>		
a. Retirees	\$66,595,603	\$68,558,116
b. Beneficiaries	4,529,861	5,079,569
c. Disability Retirees	<u>3,205,978</u>	<u>3,440,839</u>
d. Total	\$74,331,442	\$77,078,524
<b>4. Accrued Liability (AL)</b>	\$150,642,308	\$159,943,269



## Normal Cost

Year Beginning January 1,	2021	2022
<b>1. Preliminary Normal Cost</b>		
a. Retirement Benefits	\$3,699,025	\$3,809,135
b. Termination Benefits	518,661	520,101
c. Survivor Benefits	27,373	27,866
d. Disability Retirement	<u>103,345</u>	<u>104,878</u>
e. Preliminary Normal Cost	\$4,348,404	\$4,461,980
<b>2. Total Normal Cost</b>		
a. Preliminary Normal Cost	\$4,348,404	\$4,461,980
b. Administrative Expenses	<u>277,662</u>	<u>287,715</u>
c. Total Normal Cost - Dollar Amount	\$4,626,066	\$4,749,695
d. Total Normal Cost - Percent of Pay	14.14 %	14.56 %
<b>3. Actual Employer Normal Cost</b>		
a. Preliminary Normal Cost	\$4,348,404	
b. Actual Administrative Expense	287,715	
c. Actual Employee Contributions	<u>(987,691)</u>	
d. Actual Employer Normal Cost	\$3,648,428	
<b>4. Valuation Payroll</b>	\$32,705,258	\$32,622,307

## Unfunded Accrued Liability

### Derivation of Unfunded Accrued Liability (UAL)

Year Beginning January 1,	2022
<b>Unfunded Accrued Liability</b>	
1. Accrued Liability	\$159,943,269
2. Actuarial Value of Assets	<u>140,722,665</u>
3. Unfunded Accrued Liability	\$19,220,604

### Determination of Expected Unfunded Accrued Liability

1. Unfunded Accrued Liability at Begin of Prior Year	\$23,071,763
2. Employer Normal Cost (Including Administrative Expenses)	3,648,428
3. Interest for a full year on (1) and (2)	1,937,214
4. Employer Contribution	(6,268,796)
5. Interest on Contribution for Time on Deposit	(454,488)
6. Change in Plan, Methods or Assumptions	<u>3,815,456</u>
7. Expected Unfunded Accrued Liability	\$25,749,577

### Calculation of (Gain) or Loss

1. Actual Unfunded Accrued Liability	\$19,220,604
2. Expected Unfunded Accrued Liability	<u>25,749,577</u>
3. Total (Gain) or Loss	\$(6,528,973)
4. Breakdown of (Gain) or Loss	
a. (Gain) / Loss Due to Investments	\$(4,994,787)
b. (Gain) / Loss Due to Demographic Experience	<u>(1,534,186)</u>
c. Total (Gain) or Loss	\$(6,528,973)

### Calculation of Actuarial Asset (Gain) or Loss

1. Actuarial Value of Assets - Beginning of Year	\$127,570,545
2. Contributions	7,256,487
3. Benefit Payments plus Administrative Expense	(8,529,129)
4. Interest	<u>9,429,975</u>
5. Expected Value of Assets at End of Year	\$135,727,878
6. Actuarial Value of Assets - End of Year	\$140,722,665
7. Actual Investment Return	\$14,424,762
8. Gain (Loss) for Plan Year	\$4,994,787
9. Actual % Return	11.36 %

### Amortization of Unfunded Liability

The Unfunded Actuarial Accrued Liability is amortized as a level percentage of payroll based on interest and payroll growth assumptions. Changes in the Unfunded Actuarial Accrued Liability due to plan changes, assumption changes, method changes, or gains and losses are all amortized over a 25-year period beginning with the January 1, 2016 actuarial valuation. Prior to January 1, 2016 a 30-year amortization period was used.

### Amortization Bases

	Date of Origin 1/1	Source	Remaining Balance	Adjusted Balance	Years Remain	Amort. Payment
1.	1993	Plan Amendment	\$75,056	\$73,666	1	\$73,666
2.	1994	Plan Amendment	109,720	107,688	2	55,132
3.	1997	Plan Amendment	468,886	460,201	5	101,053
4.	1999	Plan Amendment	25,974	25,493	7	4,185
5.	2000	Plan Amendment	1,873,223	1,838,525	8	270,094
6.	2003	Funding Method	4,531,909	4,447,965	11	507,838
7.	2003	Asset Method	(4,409,930)	(4,328,245)	11	(494,169)
8.	2003	Assumption Change	(1,384,769)	(1,359,119)	11	(155,175)
9.	2004	(Gain) Loss	101,576	99,695	12	10,663
10.	2005	(Gain) Loss	2,375,843	2,331,835	13	235,243
11.	2006	(Gain) Loss	507,783	498,377	14	47,695
12.	2007	(Gain) Loss	1,569,951	1,540,871	15	140,578
13.	2008	Plan Amendment	(4,505)	(4,422)	16	(386)
14.	2008	(Gain) Loss	448,447	440,140	16	38,444
15.	2009	(Gain) Loss	7,408,907	7,271,672	17	610,357
16.	2009	Assumption Change	4,824,176	4,734,818	17	397,423
17.	2010	(Gain) Loss	(1,669,491)	(1,638,567)	18	(132,602)
18.	2010	Assumption Change	889,342	872,869	18	70,637
19.	2011	(Gain) Loss	1,190,752	1,168,696	19	91,450
20.	2012	Plan Amendment	(1,383,070)	(1,357,451)	20	(102,974)
21.	2012	(Gain) Loss	1,053,111	1,033,604	20	78,408
22.	2013	(Gain) Loss	2,597,294	2,549,184	21	187,903
23.	2014	Plan Amendment	(3,098,328)	(3,040,938)	22	(218,262)
24.	2014	(Gain) Loss	(4,256,381)	(4,177,540)	22	(299,841)
25.	2015	(Gain) Loss	987,256	968,969	23	67,848
26.	2016	(Gain) Loss	(855,266)	(839,424)	19	(65,684)
27.	2016	Assumption Change	1,439,935	1,413,263	19	110,587
28.	2017	(Gain) Loss	1,810,531	1,776,995	20	134,800
29.	2018	Assumption Change	(507,297)	(497,900)	21	(36,701)
30.	2018	(Gain) Loss	(1,450,156)	(1,423,295)	21	(104,913)
31.	2019	Assumption Change	3,104,853	3,047,342	22	218,722
32.	2019	(Gain) Loss	1,998,211	1,961,198	22	140,764
33.	2020	(Gain) Loss	934,996	917,677	23	64,257
34.	2020	Assumption Change	1,641,122	1,610,724	23	112,784
35.	2021	(Gain) Loss	(4,170,380)	(4,093,132)	24	(280,081)
36.	2021	Assumption Change	3,568,792	3,502,687	24	239,679
37.	2022	(Gain) Loss	(6,528,973)	(6,528,973)	25	(437,270)
38.	2022	Assumption Change	3,815,456	3,815,456	25	255,536
Scheduled Amortization Payment						\$1,937,688
Total Outstanding Bases			\$19,634,556	\$19,220,604		



### Projected Unfunded Accrued Liability and Amortization Payments

Year Beginning January 1,	Outstanding Bases	Amortization Payment
2022	\$19,220,604	\$1,937,688
2023	18,492,720	1,901,302
2024	17,752,818	1,881,968
2025	16,981,809	1,919,607
2026	16,116,556	1,957,999
2027	15,149,656	1,885,588
2028	14,192,552	1,923,300
2029	13,128,100	1,956,959
2030	11,953,120	1,679,640
2031	10,992,624	1,713,233
2032	9,928,948	1,747,498
2033	8,754,152	1,958,393
2034	7,271,462	1,984,037
2035	5,657,545	1,719,406
2036	4,213,809	1,690,862
2037	2,699,553	1,535,480
2038	1,245,559	1,513,944
2039	(287,172)	133,087
2040	(449,677)	224,249
2041	(721,101)	30,094
2042	(803,779)	(133,105)
2043	(717,621)	(205,927)
2044	(547,512)	35,174
2045	(623,474)	(350,288)
2046	(292,309)	(292,309)

### Actions Taken to Reduce Unfunded Actuarial Accrued Liability

The required contributions calculated each year include a payment for the amortization of the unfunded actuarial accrued liability. Changes in the Unfunded Actuarial Accrued Liability due to plan changes, assumption changes, method changes, or gains and losses are all amortized over a 25-year period beginning with the January 1, 2016 actuarial valuation. Prior to January 1, 2016 a 30-year amortization period was used.

## Minimum Funding Requirements

Valuation for Year Beginning January 1	2021	2022
<b>1. Contributions Payable at Valuation Date</b>	<b>2021</b>	<b>2022</b>
a. Total Normal Cost (Including Employee Contributions)	\$4,626,066	\$4,749,695
b. Amortization of Unfunded Accrued Liability	<u>2,234,400</u>	<u>1,937,688</u>
c. Preliminary Total Required Contribution BO Valuation Year	\$6,860,466	\$6,687,383
<b>2. Projected Contributions Payable Beginning of Funding Year</b>	<b>2022</b>	<b>2023</b>
a. Employer Minimum Required Contribution	\$6,390,895	\$6,189,910
b. Expected Employee Contributions	<u>1,000,781</u>	<u>998,243</u>
c. Total Required Contribution	\$7,391,676	\$7,188,153
d. Employer Minimum Required Contribution	19.16 %	18.60 %
e. Expected Employee Contributions	<u>3.00 %</u>	<u>3.00 %</u>
f. Total Required Contribution	22.16 %	21.60 %
<b>3. Valuation Payroll</b>		
a. Year Beginning on Valuation Date	\$32,705,258	\$32,622,307
b. Year Ending in Funding Year	\$33,359,363	\$33,274,753
<b>4. Employer Funding Required for Year Beginning January 1</b>	<b>2022</b>	<b>2023</b>
a. January 1	\$6,390,895	\$6,189,910
b. April 1	--	--
c. July 1	--	--
d. October 1	--	--
e. Total Required Contributions - \$ Amount	\$6,390,895	\$6,189,910
f. Total Required Contributions - % of Pay	19.16 %	18.60 %

Note: Employer funding must be deposited as shown in item 4. in the amounts shown on the dates shown. **If the funding is less than the amounts shown or later than the dates shown the employer is funding less than required.**

## Reconciliation of Unfunded Accrued Liability

	Unfunded Accrued Liability	Funded Percentage	Change in Unfunded Accrued Liability	Change in Funded Percentage Gain (Loss)
<b>As of Prior Valuation</b>	\$23,071,763	84.68 %		
Changes in Funded Status Due to:				
"Normal" Operation of Plan	\$21,934,121	86.09 %	\$(1,137,642)	1.41 %
Investment Experience	\$16,939,334	89.26 %	(4,994,787)	3.17 %
Demographic Experience	\$15,405,148	90.13 %	(1,534,186)	0.87 %
Revise Net Assumed Return	\$19,220,604	87.98 %	<u>3,815,456</u>	<u>(2.15)%</u>
Total Changes			\$(3,851,159)	3.30 %
<b>As of Current Valuation</b>	\$19,220,604	87.98 %		

## Reconciliation of Minimum Contributions

	Minimum Required Contribution	
	As a Dollar Amount	As a Percent of Pay
<b>Actual Required Contribution for 2022</b> (Payable January 1, 2022)	\$6,390,895	19.16%
Changes in Contribution due to:		
Normal Operation of Plan	\$31,129	(0.29%)
Investment Experience	(366,826)	(1.07%)
Demographic Experience	(332,011)	(0.60%)
Revise Net Assumed Return	<u>466,723</u>	<u>1.40%</u>
Total Changes	\$(200,985)	(0.56%)
<b>Actual Required Contribution for 2023</b> (Payable January 1, 2023)	\$6,189,910	18.60%

Section  
**3**

# Accounting Information

## Information Required by GASB 67/68

Supplemental reports provide information under the Governmental Accounting Standards Board No. 67/68.



## Statement of Accumulated Plan Benefits (FASB 35)

The following table is based on prior accounting standards and is required by the State. The present value of accrued benefits is an estimate of the liability for all benefits accrued to date.

Year Beginning January 1,	2021	2022
1. Actuarial present value of accumulated plan benefits		
a. Participants currently receiving benefits	\$74,331,442	\$77,078,524
b. Other participants	<u>60,291,409</u>	<u>65,967,295</u>
c. Total vested plan benefits	\$134,622,851	\$143,045,819
d. Total non-vested plan benefits	<u>3,336,002</u>	<u>3,664,688</u>
e. Total accumulated plan benefits	\$137,958,853	\$146,710,507
2. Change in actuarial present value of accumulated plan benefits		
a. Accumulated plan benefits beginning of year		\$137,958,853
b. Increase (decrease) during year due to:		
i. Plan amendment		\$0
ii. Change in assumptions or methods		3,505,389
iii. Increase for interest and probability of payment due to decrease in discount period and benefits accrued		13,487,679
iv. Benefits paid		(8,241,414)
v. Other changes		<u>0</u>
vi. Net increase (decrease)		\$8,751,654
c. Accumulated plan benefits end of year		\$146,710,507

## Other Disclosures Required by the State of Florida

Year Beginning January 1,	2021	2022
Present value of active member:		
Future salaries (attained age)	\$299,560,168	\$295,326,137
Future contributions (attained age)	\$8,986,805	\$8,859,784
Employee contributions (with interest to 5/25/07)	\$7,486,627	\$7,790,611

## Required Disclosure Under F.S. 112.664(1)

As required under F.S. Section 112.664(1) we have produced the following information:

- (a) Total pension liability calculated based on mortality used in one of the last two Florida Retirement System (FRS) valuations. This actuarial valuation assumes mortality as used in the July 1, 2019, 2020 and 2021 actuarial valuation.
- (b) Total pension liability calculated using an assumed interest rate that is 200 basis points lower than that assumed in the valuation of the Plan.
- (c) Determination of the number of months or years for which the current market value of assets is adequate to sustain the payment of expected retirement benefits.
- (d) Recommended contribution to the Plan using the most recent valuation and the contributions necessary prepared pursuant to (a) and (b) stated as a dollar amount and % of payroll.

	2% Decrease (5.00%)	Actual Valuation Current Discount Rate (7.00%)	2% Increase (9.00%)
Total pension liability	\$197,034,314	\$159,943,269	\$133,255,524
Plan fiduciary net position	<u>(154,520,407)</u>	<u>(154,520,407)</u>	<u>(154,520,407)</u>
Net pension liability	<u>\$42,513,907</u>	<u>\$5,422,862</u>	<u>\$(21,264,883)</u>
 Plan fiduciary net position as a percentage of the total pension liability	 78.42%	 96.61%	 115.96%
 Years of benefit payments:			
Expected for current members:	98	98	98
Paid for with current assets:	16.24	21.31	98.00
 Employer Plus Expected Employee Contributions			
Dollar Amount	\$11,397,632	\$7,188,153	\$3,696,969
Percent of Payroll	34.25%	21.60%	11.11%

## Required Disclosure Under F.S. 112.664(2)(b)2.

F.S. Section 112.664(2)(b)2. - For the previous five years, beginning with 2013, a side-by-side comparison of the plan's assumed rate of return compared to the actual rate of return, as well as the percentages of cash, equity, bond and alternative investments in the plan portfolio.

Year Ending December 30,	2021	2020	2019	2018	2017
Net assumed rate of return	7.25%	7.5%	7.75%	8.0%	8.0%
Actual rate of return	12.40%	16.41%	18.87%	(4.2%)	13.4%
Percentages of assets in:					
Cash	(2%)	1%	3%	4%	4%
Equity	54%	54%	50%	47%	55%
Bond	34%	33%	32%	34%	32%
Alternative	14%	12%	15%	15%	9%
Total	100%	100%	100%	100%	100%

## Section

## 4

# Supplementary Information

## Summary of Participant Data

### Member Statistics

As of January 1,	2021	2022
<u>Active Participants</u>		
Number	598	576
Average Age	50.2	50.7
Average Credited Service	9.4	9.9
Percent Male	58.5	57.6
Average Valuation Salary	\$54,974	\$57,731
Total Valuation Salary (Year Ending as of Date)	\$32,874,750	\$33,253,006
Total Valuation Salary (Imputed)	\$35,701,806	\$36,090,368
Payroll Covered in Valuation	\$32,705,258	\$32,622,308
<u>Terminated with Rights to Deferred Benefits</u>		
Number	102	107
Average Age	53.9	54.9
Percent Male	52.9	51.4
Average Monthly Benefit	\$547	\$623
Annuities Inforce	\$669,495	\$799,559
<u>Service Retirements</u>		
Number	335	340
Average Age	71.8	72.3
Percent Male	71.9	71.8
Average Monthly Benefit	\$1,714	\$1,722
Annuities Inforce	\$6,889,690	\$7,024,791
<u>Beneficiaries</u>		
Number	57	62
Average Age	70.1	70.9
Percent Male	12.3	11.3
Average Monthly Benefit	\$713	\$745
Annuities Inforce	\$487,977	\$554,529
<u>Disability Retirements</u>		
Number	19	21
Average Age	59.6	60.4
Percent Male	63.2	61.9
Average Monthly Benefit	\$1,534	\$1,476
Annuities Inforce	\$349,663	\$372,035

**Number of Active Members by Age and Service as of January 1, 2022**

Age	Service							Total
	< 1	< 5	< 10	< 15	< 20	< 25	25+	
< 25	1	1						2
< 30		6	1					7
< 35	4	17	16					37
< 40	1	23	17	8				49
< 45	2	21	18	7	9	1		58
< 50	6	30	25	14	7	4	1	87
< 55	8	26	27	17	15	14	9	116
< 60	1	19	20	15	14	19	11	99
< 65	1	10	20	16	18	12	10	87
< 70		4	9	4	5	5	3	30
70+		1		1			2	4
Total	24	158	153	82	68	55	36	576

**Active Valuation Pay by Age and Service as of January 1, 2022**

Age	Service							Total
	< 1	< 5	< 10	< 15	< 20	< 25	25+	
< 25	32,603	46,512						39,557
< 30		62,746	61,342					62,546
< 35	44,724	50,860	47,679					48,821
< 40	47,071	47,823	55,974	58,265				52,341
< 45	36,091	43,811	53,411	64,739	65,676	58,045		52,688
< 50	40,691	45,205	60,306	66,983	61,853	77,277	73,163	55,873
< 55	37,997	42,483	56,887	65,179	70,549	73,874	75,200	58,809
< 60	38,607	47,775	54,582	69,580	66,208	68,856	69,640	61,443
< 65	33,833	46,485	50,501	65,696	70,241	56,616	79,774	60,935
< 70		49,010	64,745	73,624	58,294	75,311	80,208	66,063
70+		36,205		69,046			77,522	65,074
Total	39,638	46,665	55,328	66,140	67,132	68,465	75,262	57,731

**Reconciliation of Plan Participants**

	Active	Terminated Vested	Retired	Beneficiary	Disabled	Total
<b>As of January 1, 2021</b>	598	102	335	57	19	1,111
Vested Terminations	(8)	8				0
Nonvested Terminations	(51)					(51)
Retired	(11)	(3)	14			0
Disabled	(2)				2	0
Deaths with Survivor			(5)	5		0
Deaths with No Survivor		(1)	(5)			(6)
New Hires	51					51
Correction	(1)	1	1			1
<b>As of January 1, 2022</b>	576	107	340	62	21	1,106

## Outline of Plan Provisions

Plan Type: Single-employer Defined Benefit Pension Plan

Legal Authority: The Plan was established and is amended by the Board of Trustees and the Palm Beach County Commission.

Plan Administrator: The Board of Trustees

Board Composition: Two members are elected from among the members of Amalgamated Transit Union Local 1577, who are members of the plan, and two members appointed by the Commission.

Funding Requirements: Employer contributions are actuarially determined and subject to State statute. Employee contributions are as described below and may be amended.

Effective Date: Originally effective January 1, 1977. Amended and restated effective January 1, 2001. The following Amendments 1 through 14 were made prior to the plan amended and restated effective January 1, 2015.

Amendment No. 1 adopted June 26, 2003 subsequently amended Plan provisions as follows:

<u>Effective</u>	<u>Section Amended</u>
01/01/2002	1.6 Earnings
09/06/2002	4.7 Unreduced Early Retirement
01/01/2003	4.16 Pension Benefit on Vested Deferred Retirement
05/22/2003	4.1 Pension Benefit Commencement Dates

Amendment No. 2 adopted November 29, 2005 subsequently amended Plan provisions as follows:

<u>Effective</u>	<u>Section Amended</u>
11/29/2005	4.20 Supplemental Pension
11/29/2005	7.3 Ten (10) Year Certain and Life Annuity

Amendment No. 3 adopted May 24, 2007 amended Section 9.5, Assignability, effective January 1, 2007.

Amendment No. 4 adopted August 28, 2008 subsequently amended Plan provisions as follows:

<u>Effective</u>	<u>Section Amended</u>
08/28/2008	1.2 Actuarial Present Value
05/25/2007	2.2 When Individuals Shall Become Participants
05/25/2007	3.2 Employee Contributions as a Condition of Participation
05/25/2007	4.16 Pension Benefit on Vested Deferred Retirement
05/25/2007	4.21 Death Benefit
05/25/2007	7.1 Normal Form
05/25/2007	7.2 Joint and Survivor Annuity

Amendment No. 4 provided for use of the assumptions from the most recent actuarial valuation of the Plan for use in determination of actuarial equivalence. In addition, whereas employee contributions were previously payable based on interest accumulation through the month preceding distribution to non-vested and vested terminations, Amendment No. 4 provided for the refund of employee contributions with no interest accumulated after May 25, 2007. In addition, the spouse of a member who died prior to age 55 may receive a refund of employee contributions with interest earned before May 25, 2007. The future monthly benefit payable to a vested member or to the spouse of a member who died prior to age

55 is then reduced actuarially for the payment received using the assumptions used in the most recent actuarial valuation of the Plan.

Amendment No. 5 adopted February 25, 2010 effective January 1, 2010 amended Section 4.21, Death Benefits, to indicate that the death benefit payable to a beneficiary of a Participant who dies on or after January 1, 2007 while performing Uniformed Services Employment and Reemployment Act (USERRA) Qualified Military Service is payable as if the Participant had resumed employment and then died while employed.

Amendment No. 6 adopted August 26, 2010 effective September 1, 2010 amended Section 4.17, Repayment of Refund, to indicate Participants who are involuntarily terminated from employment and receive a refund of contributions and are subsequently reinstated the Participant must repay to the plan the refund of contributions with interest at the rate of 5.0% annually within 60 months of the reinstatement. Upon repayment, Credited Service for the period for which contributions are being repaid is restored.

Amendment No. 7 adopted December 14, 2010 revised the definition of Normal Retirement to be age 65 with at least 5 years of Credited Service. Prior to this amendment Normal Retirement was defined to be age 65 with at least 5 years of participation.

Amendment No. 8 was adopted June 10, 2011. Prior to amendment the Plan contained a provision to refund a member their employee contributions if at least 10 years of service had been earned during employment. Employee contributions after December 31, 2011 are no longer refunded to retirees with at least 10 years of service under amendment 8.

Amendment No. 9 was adopted effective July 17, 2013. This amendment revised language regarding the maximum amount of retirement income payable under the Plan due to Internal Revenue Code (IRC) Section 415(b), minimum required distributions under IRC Section 401(a)(9), rollover distributions, and compensation limitations under IRC Section 401(a)(17).

Amendment No. 10 was adopted effective September 18, 2013. This amendment changed the provisions of the Plan significantly. The benefits payable to Participants who terminated employment with a deferred benefit payable at a future retirement date and Participants who retired from the Plan prior to October 1, 2013 are unchanged by this amendment. The eligibility to receive benefits and the amount of the benefit payable to Participants who were actively employed on October 1, 2013 depends on the Credited Service earned by a member as of a Participant's first anniversary date of employment occurring on or after October 1, 2013. There are four categories of Participants, as follows:

<u>Tier</u>	<u>Credited Service Determined as of First Anniversary On or After October 1, 2013</u>
Tier 1	Participants with 10 or more years of Credited Service
Tier 2	Participants with at least 5 but less than 10 years of Credited Service
Tier 3	Participants with less than 5 years of Credited Service
Tier 4	Those hired on or after October 1, 2013

This summary of Plan provisions uses the Tiers noted above to describe the benefits payable to each category of Participants.

Amendment No. 11 was adopted June 11, 2014 and effective February 25, 2014. This amendment changed the provisions of the Plan related to the treatment of members who return to work after retirement. The monthly benefit in payment status is continued for retired Participants who are reemployed after a bone fide retirement. They are considered new employees who accrue a second pension based on the provisions of Tier 4. The monthly benefit in payment status is suspended for retired Participants who are reemployed if there has not been a bone fide retirement. These fully vested participants accrue a second pension based on the Tier they were a part of during their prior period of employment.

Amendment No. 12 was adopted effective April 8, 2014. This amendment provides that the Trustees have the right to amend the Plan in whole or in part any or all provisions of the Plan to the extent provided by the Trust Agreement and the Collective Bargaining Agreement (CBA). Trustees may recommend changes to pension benefits and employee contributions but do not have the authority to implement such



changes without the approval of the Board of County Commissioners. Any amendments necessary to comply with federal or state law will be adopted by the Trustees.

Amendment No. 13 was adopted effective July 9, 2014. Effective April 20, 2014, Earnings excludes overtime pay in excess of 300 hours per calendar year. In addition, Earnings only includes payment for the number of CBA eligible unused accumulated hours of sick and vacation leave as of April 20, 2014.

Amendment No. 14 was adopted effective July 9, 2014. This amendment clarified that Final Average Salary is not defined based on W-2 earnings.

The Plan was amended and restated effective January 1, 2015. The following amendments were made after restatement:

Amendment No. 1 was adopted effective February 26, 2015 to add language indicating differential wage payments are added to definition of Compensation with respect to plan years beginning on or after December 31, 2008.

Prior to Amendment No. 2 the pension benefit commencement date was set as the first day of the calendar month after the latest of (a) termination and (b) 30 days after an application is made. Amendment No. 2 adopted effective December 17, 2015 to removed language such that no 30 day waiting period would be required. The pension benefit commencement date is set as the first day of the calendar month after the latest of (a) termination and (b) the application date.

Amendment No. 3 was adopted effective September 26, 2017. This amendment clarified that members who terminate vested with a deferred benefit may commence monthly benefits upon reaching their Unreduced Early Retirement Date. Additionally, an outdated reference to vesting at 5 years of Credited Service was eliminated from the section regarding Vested Deferred Retirement. A statement of no impact was issued May 25, 2017 as the language was amended to match current practice.

Amendment No. 4 was adopted effective June 6, 2019 to amend Section 1.12, such that the definition of hour of service during which no duties are performed removes references to incapacity (including disability) and military duty with respect to the limitation of granting no more than 501 hours of service for any single continuous period. In addition, Section 5.4 is modified with regard to credit for non-working periods to add language to clarify hours of service are granted for non-working periods due to disability (not more than 1 year) and military service (not more than 5 years) under this Section 5.4 notwithstanding the limitations of Section 1.12.

Amendment No. 5 was adopted effective March 24, 2021 regarding required minimum distributions at age 72.

Plan Year: The 12-month period beginning January 1<sup>st</sup> and ending December 31<sup>st</sup>.

Participant: Full-time employees become Participants in the Plan on the first day of full-time employment that is covered under the terms of a collective bargaining agreement between the Employer and the Amalgamated Transit Union Local Union No. 1577 or on the first day of full-time employment for any other employee of the Employer or Union for whom the Employer makes or is obligated to make contributions to this Plan.

Employer: Palm Beach County and Palm Tran, Inc., jointly.

Employer Contributions: Prior to October 1, 2014, the Employer made contributions to the Plan as specified in the collective bargaining agreement. Effective October 1, 2014, we understand the Employer will make the minimum required contribution as determined by the Plan actuary and approved by the Board.

Employee Contributions: Each Participant is required to make contributions to the Plan at the rate established in the collective bargaining agreement.

The contribution rate for Tier 4 (hired on or after October 1, 2013) is 3.0%.

For Participants who terminated or retired prior to October 1, 2013, historical contribution rates as a percentage of Earnings follow. These are the historical rates applicable to Tiers 1, 2, and 3.

<u>Calendar Year</u>	<u>Employee Contribution Rate</u>	<u>Calendar Year</u>	<u>Employee Contribution Rate</u>
1977	3.0%/2.0%	1986-1993	1.0%
1978-1982	2.0%	1994	1.0%/1.5%
1983	2.0%/3.0%	1995	1.5%/2.0%
1984	3.0%	1996	2.0%/2.5%
1985	3.0%/1.0%	1997-2013	2.5%

If hired prior to October 1, 2013 and still working on that date, the contribution rates are as follows:

<u>Effective</u>	<u>Rate</u>
through 9/30/2014	2.50%
10/1/2014-9/30/2015	2.75%
10/1/2015+	3.00%

A Participant who terminates non-vested is entitled to refund of accumulated Employee Contributions with no interest accumulation.

Employee Contributions are assumed to be deposited on the last day of a calendar year. Prior to 1988, Employee Contributions are accumulated with interest at a rate of 5% annually. For each year from 1988 through 2001, Employee Contributions are accumulated at 120% of the federal mid-term rate as of January 1, as shown below. Effective January 1, 2002, Employee Contributions are again accumulated at 5% per year. Members are eligible to receive a refund of employee contributions with interest earned before May 25, 2007.

<u>Year</u>	<u>Rate</u>	<u>Year</u>	<u>Rate</u>	<u>Year</u>	<u>Rate</u>
1988	10.61%	1993	7.63%	1998	7.13%
1989	11.11%	1994	6.40%	1999	5.59%
1990	9.57%	1995	9.54%	2000	7.47%
1991	9.78%	1996	6.89%	2001	6.75%
1992	8.10%	1997	7.34%		

Contributions may be repaid with interest upon reentry into the Plan due to rehire.

Credited Service: A Participant is credited with Credited Service for each 12 consecutive month period beginning with the date of hire and the anniversary of hire thereafter as follows:

<u>Hours</u>	<u>Credited Service</u>
<250	0.00
<500	0.25
<750	0.50
<1000	0.75
1000+	1.00

Participants receive up to one year of Credited Service for periods of absence from work due to disability. Such Credited Service is granted based on a 40 hour work week.

Credited Service is also granted for certain Military Service.

Amendment No. 10 revised the provisions of the Plan significantly where Tiers 2 and 3 have a different multiplier for Credited Service earned by a member as of a Participant's first anniversary date of employment occurring on or after October 1, 2013 (hereinafter referred to as "Pre 2013 Service") and



Credited Service earned by a member after the first anniversary date of employment occurring on or after October 1, 2013 (hereinafter referred to as "Post 2013 Service").

Vesting: Effective January 1, 1989, 100% upon the completion of 5 years of Credited Service or attainment of the Normal Retirement Date, if earlier. Participants hired on or after October 1, 2013 become 100% vested upon completion of 8 years of Credited Service.

Vested Participants who terminate employment prior to being eligible to receive an annuity may begin receipt of benefits once they meet eligibility conditions as defined for either the Normal Retirement Benefit, Early Retirement Benefit, or the Unreduced Early Retirement Benefit.

Further, Participants who terminate at least six months prior to the commencement of monthly benefits under the Plan may elect to receive a refund of accumulated Employee Contributions with interest earned before May 25, 2007 (or an actuarially equivalent immediate annuity). If a distribution of accumulated Employee Contributions with interest earned before May 25, 2007 is elected, the Accrued Benefit payable once benefits commence is actuarially reduced to reflect the distribution of that portion of the Accrued Benefit derived from Employee Contributions with interest earned before May 25, 2007.

Earnings: Actual annual gross compensation inclusive of tax deferred or tax exempt items paid to a Participant by the Employer or Union. Effective April 20, 2014, Earnings excludes overtime pay in excess of 300 hours per calendar year. In addition, Earnings only includes payment for the number of CBA eligible unused accumulated hours of sick and vacation leave as of April 20, 2014.

Final Average Salary: For Participants who terminated employment or retired before October 1, 2013 as well as Tier 1 and Tier 2 Participants, the Average of Earnings for the three highest years.

For Tier 3 Participants, the Average of Earnings for the five highest years.

For Tier 4 Participants, the Average of Earnings for the eight highest years.

Accrued Benefit: The following formulas are used to determine the Accrued Benefit payable under the terms of the Plan.

For Tier 1 and for Participants who terminated employment or retired before October 1, 2013, the Accrued Benefit is defined as follows:

$$2.5\% \times 3\text{-Year Final Average Salary (FAS)} \times \text{Credited Service up to 25 years}$$

The formula is revised for Tiers 2, 3 and 4. For each of these tiers, the 25 year Credited Service cap is removed and the Accrued Benefit is limited to 62.5% of FAS.

The Accrued Benefit is defined as follows for Tier 2:

$$(2.5\% \times \text{Pre 2013 Service} + 2.0\% \times \text{Post 2013 Service}) \times 3\text{-Year FAS}$$

The Accrued Benefit is defined as follows for Tier 3:

$$(2.5\% \times \text{Pre 2013 Service} + 1.6\% \times \text{Post 2013 Service}) \times 5\text{-Year FAS}$$

For Tier 3, the Accrued Benefit is not less than that accrued as of September 30, 2013 based on the formula for Tier 1. The Accrued Benefit at September 30, 2013 is determined using Credited Service at September 30, 2013. For purposes of calculating the Accrued Benefit at September 30, 2013, the 3-Year FAS for any Tier 3 Participants with less than 3 years of Credited Service at September 30, 2013 is determined as the sum of all earnings received as of September 30, 2013 divided by Credited Service at September 30, 2013.

The Accrued Benefit is defined as follows for Tier 4:

$$1.6\% \times 8\text{-Year FAS} \times \text{Credited Service}$$

The Accrued Benefit is payable in the form of a life only annuity.

Supplemental Pension: Participants who retire directly from active service at age 60 or later with at least 10 years of Credited Service with an Early Retirement Benefit, Unreduced Early Retirement Benefit, Rule of 85 Pension, or Disability Retirement Benefit are due an additional \$200 per month payable as a



temporary life annuity to their age 65. However, in the event a Participant retires under the Rule of 85 Pension and has not yet reached age 60 at retirement the Supplemental Pension commences on the first of the month coincident with or next following attainment of age 60.

**Minimum Benefit:** Participants who were actively employed on January 1, 1989 and have at least 10 years of Credited Service upon retirement receive an Accrued Benefit payable in the form of a modified cash refund annuity which is not less than \$5,362 annually. In addition, Participants with at least 5 years of Credited Service as of January 1, 1989 and who retire with less than 10 years of Credited Service receive an Accrued Benefit payable in the form of a modified cash refund annuity which is not less than \$4,468 annually.

Currently the Accrued Benefit for all active Members who were actively employed on January 1, 1989 is higher than \$5,362 annually.

**Normal Retirement Date:** For Participants who terminated employment or retired before October 1, 2013 as well as Tier 1 Participants, the first day of the month coincident with or next following the later of age 65 and five years of Credited Service.

Additionally, the Normal Retirement Date is upon earning 33 years of Credited Service, if earlier than age 65 and five years of Credited Service for Tier 2 and Tier 3.

For Tier 4, the first day of the month coincident with or next following the later of age 65 and eight years of Credited Service.

**Normal Retirement Benefit:** The Accrued Benefit.

In addition, if the Participant earned at least 10 years of Credited Service during employment, the Participant receives a return of Employee Contributions paid into the fund through December 31, 2011, without interest. This benefit is not payable if the Participant previously received a distribution of accumulated Employee Contributions with interest earned before May 25, 2007.

**Early Retirement Date:** First day of any month within the 10 year period immediately preceding the Normal Retirement Date after earning at least 10 years of Credited Service.

**Early Retirement Benefit:** The Accrued Benefit reduced for early commencement, as follows, plus the Supplemental Pension payable to age 65:

<u>Tier</u>	<u>Termination</u>	<u>Early Retirement Reduction</u>
Tier 1	10/1/13+	6% each year prior to age 60
Tiers 2-4	10/1/13+	6% each year prior to age 62
	1996 to 10/1/2013	6% each year prior to age 60
	Prior to 1996	3% each year from 62 down to 60 plus 6% each year prior to age 60
	Prior to 1987	3% each year from 65 down to 60 plus 6% each year prior to age 60

In addition, if the Participant earned at least 10 years of Credited Service during employment, the Participant receives a return of Employee Contributions paid into the fund through December 31, 2011, without interest. This benefit is not payable if the Participant previously received a distribution of accumulated Employee Contributions.

**Unreduced Early Retirement Date:** First day of the month coincident with or next following the following eligibility requirements:

<u>Tier</u>	<u>Hire</u>	<u>Termination</u>	<u>Eligibility Requirement</u>
Tier 1	< 9/6/2002	10/1/2013+	62 and 5 years of Credited Service
Tier 1	Any	10/1/2013+	60 and 10 years of Credited Service
Tier 2-4	Any	10/1/2013+	62 and 10 years of Credited Service

In other words, Tier 1 employees hired by September 6, 2002 are eligible for Unreduced Early Retirement at the earlier of age 62 with 5 years of Credited Service and age 60 with 10 years of Credited Service.

Unreduced Early Retirement Benefit: The Accrued Benefit unreduced for early commencement, plus the Supplemental Pension payable to age 65.

In addition, if the Participant earned at least 10 years of Credited Service during employment, the Participant receives a return of Employee Contributions paid into the fund through December 31, 2011, without interest. This benefit is not payable if the Participant previously received a distribution of accumulated Employee Contributions.

Rule of 85 Pension: Participants who terminated employment or retired before October 1, 2013 as well as Tier 1 Participants may retire from active service on the first day of the month coincident with or next following the date on which the sum of this attained age and years of Credited Service equal 85 with a benefit as defined under the Unreduced Early Retirement Benefit.

There is no Rule of 85 Pension available for Tiers 2, 3 and 4.

Late Retirement Benefit: The benefit payable for Participants who retire from active service subsequent to the Normal Retirement Date is determined as defined for the Accrued Benefit using Credited Service and Earnings through the actual date of retirement. In addition, the resulting amount is increased 1% for each of the first 60 months benefit commencement follows the Normal Retirement Date, plus 1.5% for each month thereafter.

In addition, if the Participant earned at least 10 years of Credited Service during employment, the Participant receives a return of Employee Contributions paid into the fund through December 31, 2011, without interest.

Disability Retirement Benefit: For Participants who have completed at least 10 years of Credited Service, the Accrued Benefit is payable with no reduction for commencement prior the Normal Retirement Date. This benefit is payable commencing on the first day of the month coincident with or next following the Board of Trustees' determination that the Participant is totally and permanently disabled. In addition, the Supplemental Pension is payable to age 65. The Disability Retirement Benefit is offset by benefits received under any other disability plan funded by the Employer.

In addition, if the Participant earned at least 10 years of Credited Service during employment, the Participant receives a return of Employee Contributions paid into the fund through December 31, 2011, without interest. This benefit is not payable if the Participant previously received a distribution of accumulated Employee Contributions with interest earned before May 25, 2007 at the time of termination of employment prior to retirement eligibility.

Death Benefits: The beneficiary of a non-vested or unmarried Participant who dies before having retired is due a refund of accumulated Employee Contributions with interest earned before May 25, 2007.

The beneficiary of a vested, married Participant who dies before having retired is eligible to receive a refund of accumulated Employee Contributions with interest earned before May 25, 2007 and an actuarially reduced pre-retirement joint and survivor annuity based on the assumption that the Participant retired the day before death.

The beneficiary of a Participant who dies while in active service after having earned 10 years of Credited Service receives a lump sum benefit of \$5,000. The beneficiary of a retired Participant receives a lump sum benefit of \$7,500.

Optional Forms of Benefit: The normal form of benefit payment for an unmarried Participant is a modified cash refund annuity. This is a life only annuity where the excess of the Employee Contributions accumulated with interest earned before May 25, 2007 over the total sum of pension benefits received is paid to the designated beneficiary in a single sum.

The normal form of benefit payment for a married participant is an adjusted 50% joint and survivor annuity.

Participants may optionally choose an "actuarially equivalent" single life annuity, 10 year certain and life annuity, joint and survivor annuity (with 50%, 66 2/3, or 100% continuance).

The following percentages are used to adjust the life only normal form of benefit to the joint and survivor annuity forms.

<u>J&amp;S</u> <u>Continuation</u> <u>Percentage</u>	<u>Healthy Life</u> <u>Initial Adjustment</u> <u>Percentage</u>	<u>Disabled Life</u> <u>Initial Adjustment</u> <u>Percentage</u>	<u>Plus/Minus</u> <u>Full Years</u> <u>Beneficiary</u> <u>Older/Younger</u>
50%	88.0%	77.5%	0.4%
66-2/3%	85.5%	72.0%	0.5%
100%	79.0%	63.0%	0.6%

In no event is the percentage to be greater than 99%.

Actuarial Equivalence: Actuarial Equivalence is determined using the assumptions used in the most recent actuarial valuation of the Plan. Factors shown above for optional forms of benefit are not based on this definition of Actuarial Equivalence.

## Description of Assumptions and Methods

Assumed Net Rate of Investment Return: 7.0% per year (revised from 7.25% in the prior year)

Salary Increase – Individual: 12.5% the first eight years, 5.0% thereafter. Salary is imputed using the individual salary increase assumption and the prior calendar year Plan compensation, annualized for those hired during the year, but not less than the compensation used in the prior actuarial valuation.

Aggregate Payroll Growth: A 2.0% aggregate payroll growth assumption is used to amortize unfunded accrued liability as a level percent of payroll.

Accrued Leave Payout: Liabilities are increased 1% for Tiers 1, 2 and 3 to account for payouts of accumulated unused hours of vacation and sick leave at retirement.

Administrative Expenses: Prior year's actual expenses added to Normal Cost

Mortality: Mortality rates are those required by state statute. Mortality is as assumed for the Florida Retirement System (FRS) valuation as of July 1, 2019, 2020, and 2021 for not special risk and not school instructional personnel, as follows:

The following two sex distinct tables are used with fully generational mortality improvements using sex distinct Scale MP-2018.

Healthy Active: PubG.H-2010(B) (male set back 1 year)

Healthy Retiree: PubG.H-2010(B) (male set back 1 year)

Juvenile rates were used for ages 15-17.

The active table references the healthy retiree rates, above, at ages 81+.

The healthy retiree table references the active mortality rates, above, before age 51.

The following sex distinct table was used with no mortality improvement assumed:

Disabled Retiree: PubG.H-2010 (male and female set forward 3 years)

Retirement: Tier 1 Members with at least 10 years of service and who have not reached the Rule of 85 retire at a rate of 10% between age 62 and 64. Members with at least 5 years of service and who have not reached the Rule of 85 retire at a rate of 10% between age 65 and 68. Tier 1 Members who are age 69 or have met the Rule of 85 are assumed to retire immediately.

Tier 2 and 3 Members are assumed to retire at the earliest of 65 with 5 years of service, age 62 with 10 years of service, or at 33 years of service regardless of age. Tier 4 Members are assumed to retire at the earliest of 65 with 8 years of service or 62 with 10 years of service.

Termination: Unisex rates of termination are as follows:

<u>Service</u>	<u>Rate</u>	<u>Service</u>	<u>Rate</u>	<u>Service</u>	<u>Rate</u>	<u>Service</u>	<u>Rate</u>
0	14.00%	5	4.50%	10	3.60%	15	3.10%
1	8.50%	6	4.00%	11	3.50%	16	3.00%
2	7.50%	7	3.90%	12	3.40%	17	2.25%
3	6.50%	8	3.80%	13	3.30%	18	1.50%
4	5.50%	9	3.70%	14	3.20%	19	1.50%
						>=20	0.00%



Disability: Unisex rates of disability are as follows:

<u>Age</u>	<u>Rate</u>	<u>Age</u>	<u>Rate</u>	<u>Age</u>	<u>Rate</u>	<u>Age</u>	<u>Rate</u>
<=19	0.00%	30	0.01%	41	0.03%	52	0.45%
20	0.01%	31	0.01%	42	0.03%	53	0.55%
21	0.01%	32	0.01%	43	0.04%	54	0.55%
22	0.01%	33	0.01%	44	0.04%	55	0.55%
23	0.01%	34	0.01%	45	0.05%	56	0.55%
24	0.01%	35	0.02%	46	0.05%	57	0.55%
25	0.01%	36	0.02%	47	0.06%	58	0.40%
26	0.01%	37	0.02%	48	0.15%	59	0.25%
27	0.01%	38	0.02%	49	0.20%	60	0.15%
28	0.01%	39	0.02%	50	0.25%	61	0.05%
29	0.01%	40	0.02%	51	0.35%	>=62	0.00%

Form of Payment: Single members are paid a modified cash refund annuity which is valued as if they are in receipt of a 4-year certain and continuous annuity. Married members are assumed to be paid under the 50% joint and survivor form of benefit.

Marital Assumption: Members are assumed to be married while in active service according to the following percentages.

<u>Age</u>	<u>Male</u>	<u>Female</u>	<u>Age</u>	<u>Male</u>	<u>Female</u>
15-24	33%	37%	50-54	76%	64%
25-29	59%	65%	55-59	77%	58%
30-34	65%	62%	60-64	74%	50%
35-39	71%	64%	65-69	70%	23%
40-44	71%	63%	>=70	63%	15%
45-49	73%	61%			

Funding Method: Entry Age Normal (level percent of salary).

A description of the funding method is found on the next page entitled "Glossary of Actuarial Terms."



## Glossary of Actuarial Terms

Present Value of Benefits (PVB): The present value, as of the valuation date, of all benefits that will become payable by the Plan for the current group of members in the census.

Normal Cost (NC): Under the Individual Entry Age Normal Cost Method, the annual normal cost for each individual active member is determined as the amount, from the date of employment to the date of retirement, sufficient to accumulate the value of the member's benefit at the time of retirement. The annual normal cost is a constant percentage of the member's projected covered pay.

Accrued Liability (AL): This is the portion of the PVB attributable to the past at the valuation date. For active members, AL is the annual NC accumulated from date of entry to the valuation date for each member. For retired and terminated members, the PVB and the AL are equal. The AL is the estimated liability owed by the pension fund at the valuation date.

Unfunded Accrued Liability (UAL): Any excess of the Accrued Liability over the fund assets. A negative UAL indicates fund assets are greater than the Accrued Liability, otherwise known as a surplus. Actuarial gains/(losses), as they occur, reduce (increase) the Unfunded Actuarial Accrued Liability.

Actuarial Value of Assets: The value of assets used in the actuarial valuation of the Plan which is compared to the AL to determine the UAL and minimum funding requirements. A method may be used to smooth out short term volatility in the fair market value of assets. In this valuation, the Actuarial Value of Assets has been calculated to smooth out unexpected fluctuations in the fair market value of assets over a 5-year period.