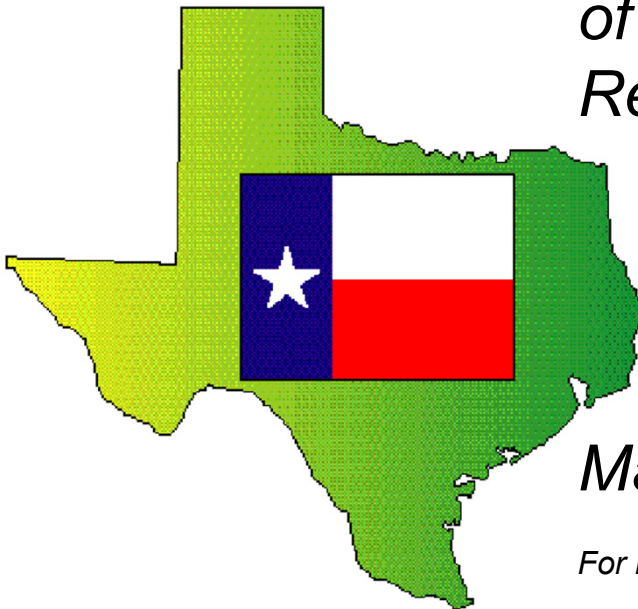




TEXPERS

Report on the Asset Allocation And Investment Performance of Texas Public Employee Retirement Systems

*The Texas Association
of Public Employee
Retirement Systems*



March 2017

For Periods Ending September 30, 2016

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Key Findings

Fifty-nine participating members contributed data for the fiscal year 2016 Asset Allocation and Investment Performance of Texas Public Employee Retirement Systems, and represented approximately \$49.97 billion in total assets. Ninety-one percent of members who contributed data this year also participated in last year's Study, lending to the integrity of the data.

- Participating TEXPERS members' FY2016 dollar-weighted asset allocation (for the fiscal year ending September 30, 2016) was: alternative strategies, 27%; domestic equities, 27%; fixed income, 22%; international equities, 22%; and short-term securities/cash/other, 2%.
- When measuring investment performance for survey respondents as a group over the 20-year period ending September 30, 2016, the respondents' composite investment return was 7.2%, compared to the average actuarial investment return assumption of 7.6%.
- For the trailing 15-year period ending September 30, 2016, survey respondents' 6.6% return moderately underperformed the 7.3% return for the Wilshire Median Public Fund for the same period.
- For the trailing 10-years ending September 30, 2016, survey respondents' 5.4% return moderately underperformed the 6.0% return for the Wilshire Median Public Fund for the same period.
- Among all TEXPERS members, the average trailing five-year return was 8.8%, while the average trailing three-year return was 5.1%. The five-year return is up year over year, but the three-year return is down year over year.

Introduction

This report reviews the asset allocation and investment performance for local pension systems that are members of the Texas Association of Public Employee Retirement Systems (TEXPERS) for the trailing one-, three-, five-, 10-, 15- and 20-year periods ending September 30, 2016. Both the aggregate TEXPERS and individual systems' asset allocation as well as investment performance will be examined.

The purpose of this report is to document TEXPERS member systems' diversification with respect to the types of assets invested in, and the investment performance of these systems with respect to their actuarially assumed returns, market benchmarks and other public funds. This will demonstrate that local systems are being managed in compliance with the "prudent expert" rule, which requires that fiduciaries of the system exercise their duties with the care, skill, prudence and diligence under the prevailing circumstances that a prudent person acting in a like capacity and familiar with matters of the type would use in the conduct of an enterprise with a like character and like aims.

Individual pension system data in this report was obtained from a December 2016 survey requesting asset allocation and investment return information from TEXPERS members. A total of sixty-eight surveys were sent to TEXPERS members. Fifty-nine were completed and returned, an eighty-seven percent response rate. Ninety-one percent of last year's universe was captured in this year's Study. The member systems responding represent approximately \$49.97 billion in total assets. A copy of the survey is contained in Appendix 1 and a listing of TEXPERS members responding to the survey is contained in Appendix 2. Respondents who agreed to have their names disclosed in this report are listed in Appendix 3. A listing of actuarial return and inflation assumptions is in Appendix 4.

This year this survey was carried out by Maples Fund Services, establishing a new partnership for this annual reporting.

Thanks to Wilshire CompassSM for providing the market return and peer group comparison data.

TEXPERS Composite

Asset Allocation

Figure 1 illustrates the average dollar-weighted* asset allocation of survey respondents as a composite group. The Domestic and International Equity asset classes include investments such as U.S. and Non-U.S. common stocks. Fixed Income includes investments such as government and corporate bonds from domestic and international issuers. Alternative Strategies include private equity, real estate, venture capital, marketable alternative strategies and commodities.

Figure 1

Market Value \$49.97 Billion
As of September 30, 2016

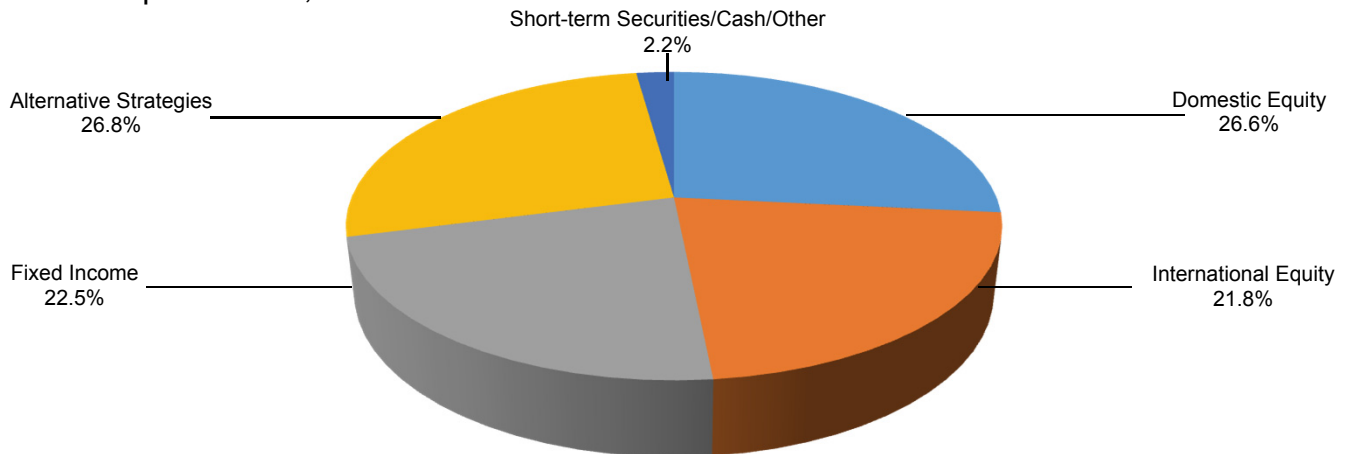
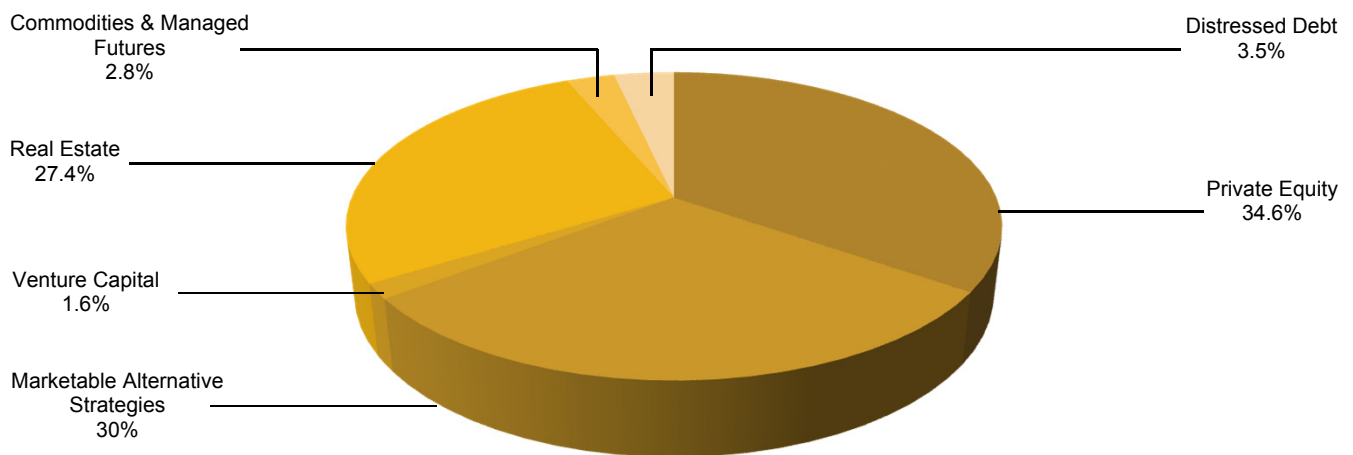


Figure 2

Alternative Strategies Breakout



The asset allocation demonstrates that, in aggregate, the respondents have a level of diversification within the norm for public pension systems.

* Dollar-weighted means that individual responses are weighted according to size of the asset base when calculating the average results – meaning that responses from large participants have a greater impact on average results than those of smaller participants.

Investment Performance

Trailing Period Returns - Table

Table 1

Annualized Returns for the Periods Ending 9/30/2016	One Year	Three Years	Five Years	Ten Years	Fifteen Years	Twenty Years
TEXPERS Average	8.5	5.1	8.8	5.4	6.6	7.2
Actuarial Assumption*	7.6	7.6	7.6	7.6	7.6	7.6

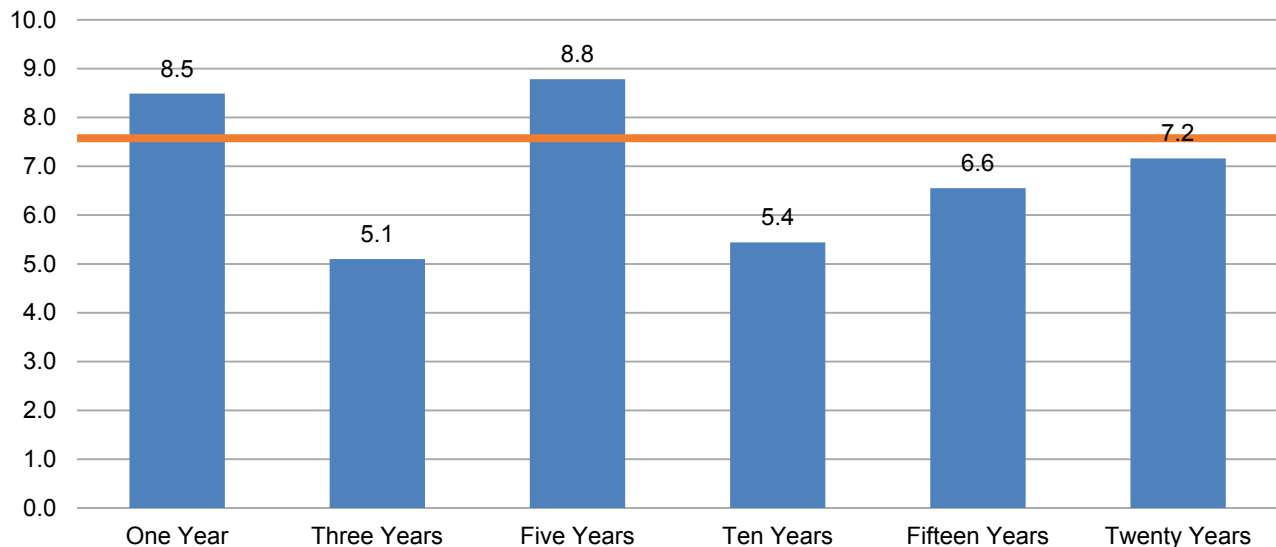
Table 1 and Figure 3 compare the survey respondents' average investment return over the one-, three-, five-, 10-, 15- and 20-year periods ending September 30, 2016 to their average actuarial investment return assumption of 7.6%.

Trailing Period Returns - Chart

Figure 3

Returns vs. Average Actuarial Assumption*

For periods ending September 30, 2016



* This year's actuarial assumption of 7.6% is the average of what was reported among participating TEXPERS members.

Actuarially Required Contribution (ARC)

Table 2

TEXPERS members were asked if their funds received their full actuarially required contribution for fiscal year 2016.

Period Ending 9/30/2016	Yes	No	Uncertain
Number Responded	36	13	1
Percentage	72	26	2

Individual Pension Systems

Asset Allocation

Table 3 details percentage allocation to the major asset classes by each survey respondent.

Table 3

	1	2	3	4	5	6	7	9	10	11	12	14
Domestic Equity	21.28	32.38	24.35	37.42	36.50	38.00	36.47	46.85	41.50	31.45	16.20	68.13
Fixed Income	34.96	20.09	24.72	31.67	29.80	19.90	57.64	38.20	32.80	8.16	28.50	29.29
International Equity	20.99	29.44	20.26	30.87	15.50	21.80	5.82	9.55	25.70	21.96	21.70	0.00
Alternative Strategies	22.23	17.73	30.16	0.00	16.50	17.00	0.00	0.00	0.00	42.12	25.60	0.00
Private Equity	6.26	0.00	6.66	0.00	0.00	0.00	0.00	0.00	0.00	11.02	6.00	0.00
Marketable Alternative Strategies	9.82	4.76	14.46	0.00	9.50	14.30	0.00	0.00	0.00	24.48	13.40	0.00
Venture Capital	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.86	0.00	0.00
Real Estate	1.25	8.85	9.04	0.00	7.00	0.00	0.00	0.00	0.00	5.76	6.20	0.00
Commodities & Managed Futures	4.90	4.12	0.00	0.00	0.00	2.70	0.00	0.00	0.00	0.00	0.00	0.00
Distressed Debt	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Cash and Other	0.53	0.36	0.52	0.05	1.70	0.70	0.06	5.40	0.00	3.77	8.00	2.58
Cash, Money Market, Treasuries	0.53	0.36	0.52	0.05	1.70	0.70	0.06	5.40	0.00	3.77	8.00	2.58
Other	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00

Individual Pension Systems

Asset Allocation

Table 3 - continued

	16	17	18	19	20	22	23	24	25	26	27	28
Domestic Equity	34.50	34.16	40.30	34.26	36.00	40.30	20.01	42.00	17.20	48.30	42.63	31.76
Fixed Income	10.30	25.52	21.80	25.41	36.30	32.80	21.07	18.30	27.20	25.70	31.44	29.49
International Equity	22.40	24.63	21.30	24.87	15.50	22.90	15.34	19.80	21.80	13.20	25.82	23.26
Alternative Strategies	32.80	13.81	15.30	13.79	12.20	0.00	42.67	19.90	32.70	11.20	0.00	12.97
Private Equity	7.60	0.00	0.00	0.00	0.00	0.00	9.00	0.00	13.40	0.00	0.00	0.00
Marketable Alternative Strategies	9.80	13.81	15.30	13.79	0.00	0.00	18.75	12.80	8.10	0.00	0.00	12.97
Venture Capital	0.00	0.00	0.00	0.00	0.00	0.00	2.60	0.00	0.00	0.00	0.00	0.00
Real Estate	15.40	0.00	0.00	0.00	12.20	0.00	11.11	0.00	9.20	0.00	0.00	0.00
Commodities & Managed Futures	0.00	0.00	0.00	0.00	0.00	0.00	1.21	7.10	2.00	0.00	0.00	0.00
Distressed Debt	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Cash and Other	0.00	1.88	1.30	1.69	0.00	4.00	0.91	0.00	1.00	1.60	0.10	2.52
Cash, Money Market, Treasuries	0.00	1.88	1.30	0.00	0.00	4.00	0.91	0.00	1.00	0.00	0.10	2.52
Other	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00

Individual Pension Systems

Asset Allocation

Table 3 - continued

	29	30	31	32	33	34	37	38	39	40	41	42
Domestic Equity	27.80	34.14	28.64	37.91	43.80	38.79	34.46	18.54	42.32	40.42	40.70	47.39
Fixed Income	29.60	25.75	26.67	28.26	20.10	39.31	25.33	22.59	26.11	32.88	31.90	21.10
International Equity	29.20	25.07	29.86	22.83	16.30	10.36	24.98	21.33	31.29	25.37	23.20	8.71
Alternative Strategies	11.00	13.82	14.71	10.86	19.50	10.62	13.61	33.91	0.00	0.00	0.00	22.47
Private Equity	5.00	0.00	4.75	0.00	0.00	0.00	0.00	7.57	0.00	0.00	0.00	0.00
Marketable Alternative Strategies	0.00	13.82	0.00	0.00	14.30	0.00	13.61	9.37	0.00	0.00	0.00	6.45
Venture Capital	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.85	0.00	0.00	0.00	0.54
Real Estate	6.00	0.00	9.96	10.86	5.20	10.62	0.00	8.21	0.00	0.00	0.00	14.72
Commodities & Managed Futures	0.00	0.00	0.00	0.00	0.00	0.00	0.00	5.38	0.00	0.00	0.00	0.76
Distressed Debt	0.00	0.00	0.00	0.00	0.00	0.00	0.00	2.53	0.00	0.00	0.00	0.00
Cash and Other	2.40	1.21	0.13	0.14	0.30	0.92	1.61	3.63	0.28	1.33	4.20	0.33
Cash, Money Market, Treasuries	2.40	1.21	0.13	0.14	0.30	0.92	1.61	0.43	0.28	0.00	4.20	0.33
Other	0.00	0.00	0.00	0.00	0.00	0.00	0.00	3.20	0.00	0.00	0.00	0.00

Individual Pension Systems

Asset Allocation

Table 3 - continued

	43	44	47	48	49	50	51	52	56	57	58	59
Domestic Equity	46.00	34.23	17.50	34.70	49.05	34.94	34.73	38.01	33.00	41.90	35.88	44.23
Fixed Income	23.10	25.74	16.20	24.80	31.81	26.03	25.66	14.68	27.20	28.10	25.12	39.16
International Equity	12.40	25.21	13.60	24.60	12.79	24.99	24.78	27.20	25.00	15.40	24.45	16.61
Alternative Strategies	18.50	13.69	43.40	14.80	0.90	14.02	13.96	19.03	14.80	13.10	13.12	0.00
Private Equity	7.50	0.00	16.10	0.00	0.00	0.00	0.00	6.75	0.00	0.50	0.00	0.00
Marketable Alternative Strategies	0.00	13.69	7.50	14.80	0.00	14.02	13.96	5.25	11.50	7.90	13.12	0.00
Venture Capital	0.00	0.00	3.70	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Real Estate	5.40	0.00	10.50	0.00	0.90	0.00	0.00	0.00	3.30	4.70	0.00	0.00
Commodities & Managed Futures	5.60	0.00	2.60	0.00	0.00	0.00	0.00	7.03	0.00	0.00	0.00	0.00
Distressed Debt	0.00	0.00	3.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Cash and Other	0.00	1.13	9.30	1.10	0.28	0.02	0.87	1.09	0.00	1.50	1.43	0.00
Cash, Money Market, Treasuries	0.00	1.13	1.10	1.10	0.28	0.00	0.87	1.09	0.00	1.50	1.43	0.00
Other	0.00	0.00	8.20	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00

Individual Pension Systems

Asset Allocation

Table 3 - continued

	62	63	65	66	73	77	78	79	80	81	82
Domestic Equity	52.30	36.40	46.33	25.10	45.00	68.90	52.20	36.54	55.00	59.78	50.88
Fixed Income	31.30	32.30	24.66	22.60	41.00	23.37	19.20	47.95	34.00	13.36	33.70
International Equity	11.70	14.40	15.50	24.00	11.00	0.00	14.30	15.43	10.00	0.00	9.52
Alternative Strategies	2.20	16.70	9.37	26.50	0.00	0.00	9.60	0.00	0.00	25.58	0.00
Private Equity	0.00	0.00	0.00	11.70	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Marketable Alternative Strategies	2.20	10.70	5.39	6.70	0.00	0.00	9.60	0.00	0.00	0.00	0.00
Venture Capital	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Real Estate	0.00	6.00	1.98	6.80	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Commodities & Managed Futures	0.00	0.00	2.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Distressed Debt	0.00	0.00	0.00	1.30	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Cash and Other	2.50	0.20	4.14	1.80	3.00	7.73	4.70	0.09	1.00	1.28	5.90
Cash, Money Market, Treasuries	2.50	0.20	0.00	1.80	3.00	7.73	4.70	0.09	1.00	0.00	5.90
Other	0.00	0.00	4.14	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00

Investment Performance

Table 4 lists investment returns for survey respondents over the one-, three-, five-, 10-, 15- and 20-year periods ending September 30, 2016. For comparison purposes the benchmark of 60% of the Wilshire 5000 equity index and 40% of the Barclays Capital Aggregate fixed income index is represented by the "Index".

Table 4

Fund	1 Year	3 Years	5 Years	10 Years	15 Years	20 Years	Fund	1 Year	3 Years	5 Years	10 Years	15 Years	20 Years
1	4.34%	4.46%	6.76%	3.93%	3.67%	n/a	38	9.27%	5.50%	8.15%	4.98%	6.03%	6.94%
2	10.67%	5.34%	9.16%	6.05%	7.16%	7.44%	39	9.93%	n/a	n/a	n/a	n/a	n/a
3	9.30%	5.71%	10.15%	6.16%	7.24%	7.28%	40	5.60%	n/a	n/a	n/a	n/a	n/a
4	8.30%	4.50%	8.53%	5.59%	5.59%	6.83%	41	10.25%	4.23%	8.96%	5.28%	5.89%	6.87%
5	7.73%	3.10%	7.51%	4.99%	n/a	n/a	42	9.98%	5.82%	10.16%	6.04%	7.54%	7.93%
6	8.74%	4.07%	8.12%	4.83%	5.44%	5.01%	43	9.25%	3.26%	7.30%	5.63%	6.46%	7.31%
7	5.79%	2.89%	7.22%	5.25%	n/a	n/a	44	10.46%	5.46%	9.48%	6.15%	7.81%	8.12%
10	6.74%	4.27%	8.77%	6.02%	6.38%	n/a	47	8.97%	6.46%	9.48%	6.69%	8.37%	7.92%
11	7.38%	7.53%	8.79%	6.29%	7.69%	7.92%	48	3.53%	n/a	n/a	n/a	n/a	n/a
12	4.12%	1.07%	5.71%	3.95%	3.71%	5.32%	49	9.22%	n/a	n/a	n/a	n/a	n/a
14	12.08%	n/a	n/a	n/a	n/a	n/a	50	10.71%	5.51%	9.45%	6.07%	7.58%	7.84%
16	7.51%	4.74%	9.70%	5.96%	6.78%	n/a	51	10.83%	3.66%	8.23%	3.48%	6.04%	7.26%
17	10.71%	5.51%	9.37%	6.00%	n/a	n/a	52	9.71%	3.93%	7.59%	4.80%	6.09%	7.03%
18	9.64%	5.63%	9.35%	6.03%	7.75%	8.54%	56	5.41%	4.21%	7.91%	n/a	n/a	n/a
19	10.61%	5.43%	9.50%	n/a	n/a	n/a	57	10.17%	4.11%	n/a	n/a	n/a	n/a
20	7.33%	5.93%	10.03%	6.32%	6.93%	7.22%	58	10.53%	n/a	n/a	n/a	n/a	n/a
22	10.79%	5.03%	9.68%	5.50%	6.04%	6.98%	59	11.19%	6.97%	8.68%	n/a	n/a	n/a
23	8.48%	5.36%	8.05%	4.55%	6.72%	6.85%	62	8.77%	6.82%	n/a	n/a	n/a	n/a
24	8.97%	4.20%	8.17%	5.65%	6.23%	5.94%	63	9.09%	6.68%	n/a	n/a	n/a	n/a
25	10.50%	6.00%	10.01%	5.70%	6.96%	7.66%	65	10.49%	6.38%	10.38%	6.21%	n/a	n/a
26	10.86%	4.89%	8.01%	4.86%	n/a	n/a	66	7.99%	5.78%	8.90%	5.74%	n/a	n/a
27	5.93%	3.69%	8.28%	6.09%	n/a	n/a	73	9.40%	5.65%	9.98%	6.55%	n/a	n/a
28	10.71%	5.62%	9.38%	4.20%	n/a	n/a	77	11.10%	8.27%	n/a	n/a	n/a	n/a
29	10.77%	5.99%	10.17%	5.78%	7.54%	7.67%	78	10.06%	5.87%	8.77%	n/a	n/a	n/a
30	10.60%	5.44%	9.46%	6.13%	n/a	n/a	79	8.09%	4.70%	7.89%	4.78%	n/a	n/a
31	9.39%	5.68%	9.27%	6.10%	7.87%	8.21%	80	10.20%	4.96%	8.93%	3.92%	n/a	n/a
32	9.75%	7.48%	11.07%	5.98%	6.68%	7.39%	81	-9.50%	n/a	n/a	n/a	n/a	n/a
33	8.88%	3.27%	7.88%	4.86%	6.14%	7.09%	82	8.15%	n/a	n/a	n/a	n/a	n/a
34	10.11%	6.56%	9.33%	5.08%	n/a	n/a	Index	11.26%	8.06%	11.01%	6.80%	7.03%	7.52%
37	0.00%	2.02%	7.21%	4.61%	5.92%	5.82%							

Five Year Return versus Standard Deviation

Figure 4

For the Five Years Ending September 30, 2016

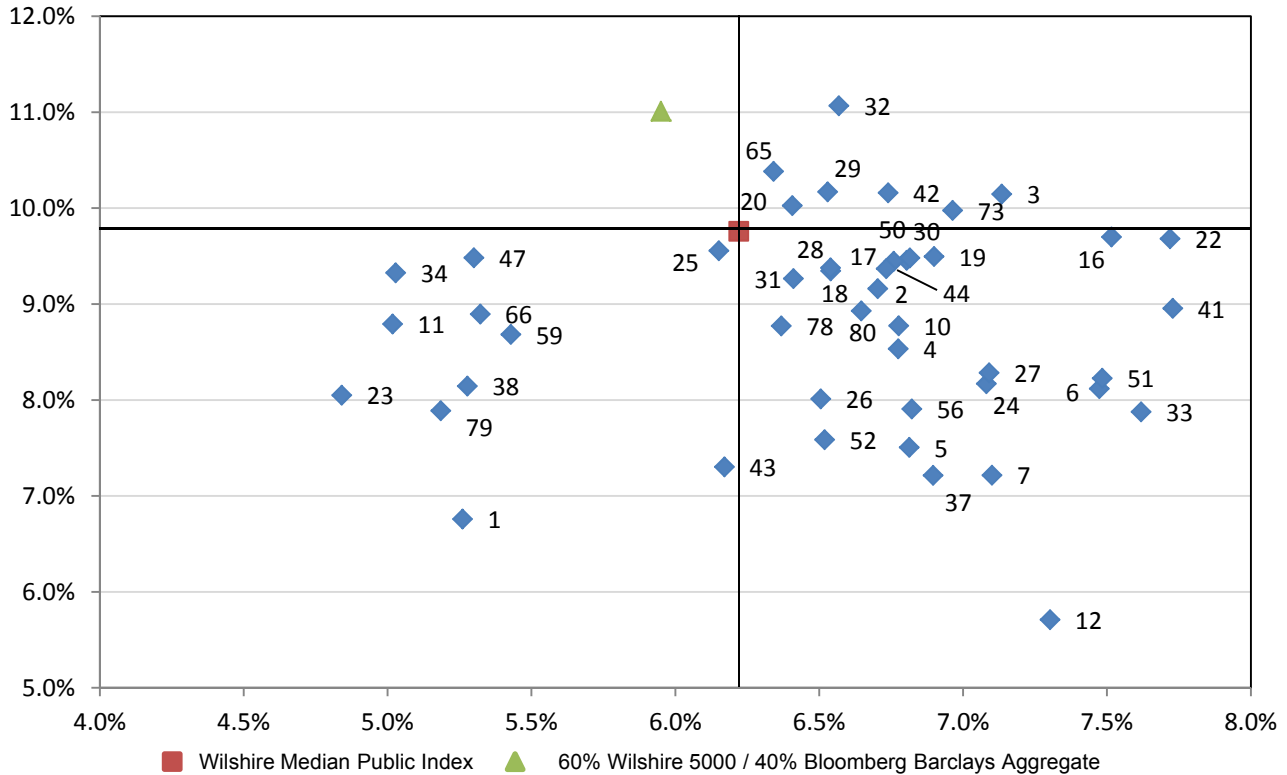


Figure 4 shows the five-year return and standard deviation characteristics of the individual TEXPERS survey respondents versus two benchmarks. The first benchmark defines the four quadrants and is the Wilshire Public Funds Universe, representing the returns of Wilshire’s public fund clients. The second benchmark is a combination of 60% of the Wilshire 5000 equity index and 40% of the Bloomberg Barclays Aggregate fixed income index. Annualized return and standard deviation are based on quarterly returns for the period. Standard deviation is a measure of the dispersion or volatility of the quarterly returns around their average value.

The points representing the performance of the TEXPERS survey respondents are located in all four quadrants of the chart. No respondents are located in the most desirable northwest quadrant, indicating higher returns with less standard deviation than the benchmark. Eighteen respondents are located in the northeast or southwest quadrants, indicating reasonable return versus standard deviation trade-offs. That is, they have either a higher return with a higher standard deviation, or a lower return with a lower standard deviation, than the benchmark. Twenty-eight respondents are located in the least desirable southeast quadrant, where return is lower and standard deviation is higher than the benchmark.

Ten Year Return versus Standard Deviation

Figure 5

For the Ten Years Ending September 30, 2016

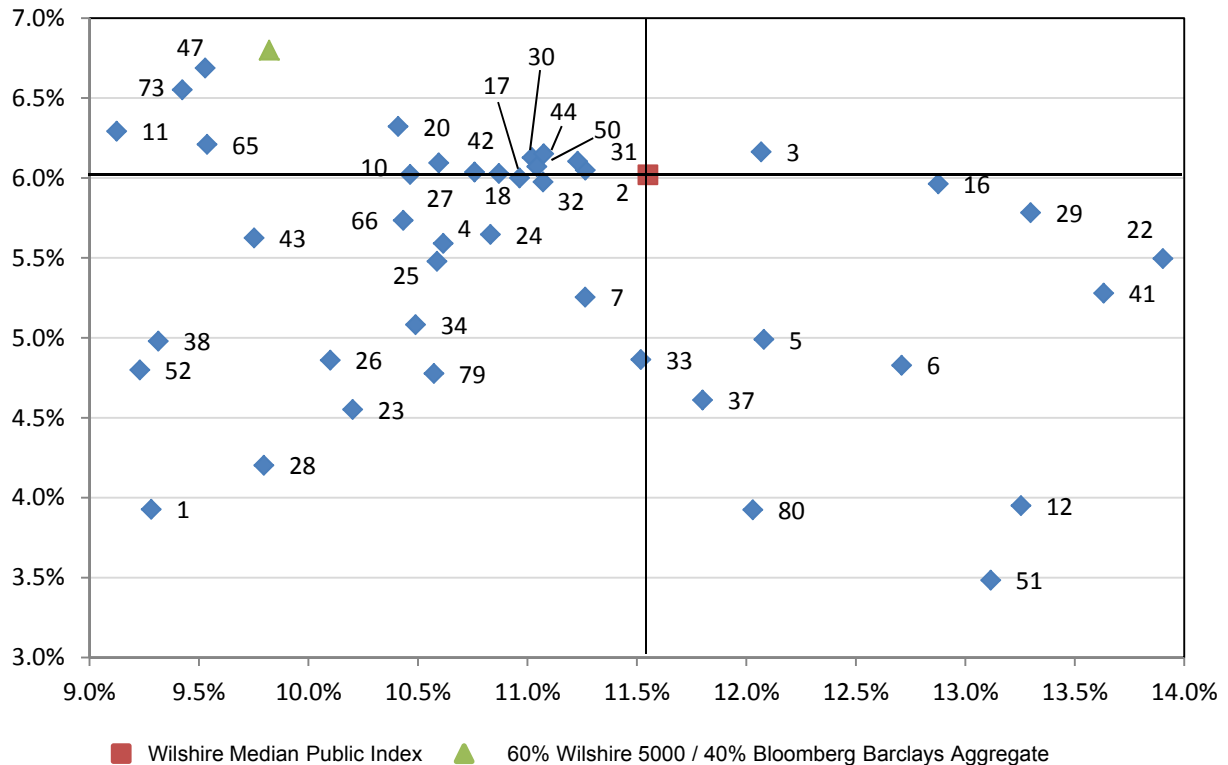


Figure 5 shows 10-year return and standard deviation characteristics of individual TEXPERS survey respondents versus two benchmarks. The first benchmark defines the four quadrants and is the Wilshire Public Funds Universe, representing the returns of Wilshire’s public fund clients. The second benchmark is a combination of 60% of the Wilshire 5000 equity index and 40% of the Bloomberg Barclays Aggregate fixed income index. Annualized return and standard deviation are based on quarterly returns for the period. Standard deviation is a measure of the dispersion or volatility of the quarterly returns around their average value.

The points representing the performance of the TEXPERS survey respondents are located in all four quadrants of the chart. Fourteen respondents are located in the most desirable northwest quadrant, indicating higher returns with less standard deviation than the benchmark. Eighteen respondents are located in the northeast or southwest quadrants, indicating reasonable return versus standard deviation trade-offs. That is, they have either a higher return with a higher standard deviation, or a lower return with a lower standard deviation, than the benchmark. Ten respondents are located in the least desirable southeast quadrant, where return is lower and standard deviation is higher than the benchmark.

Fifteen Year Return versus Standard Deviation

Figure 6

For the Fifteen Years Ending September 30, 2016

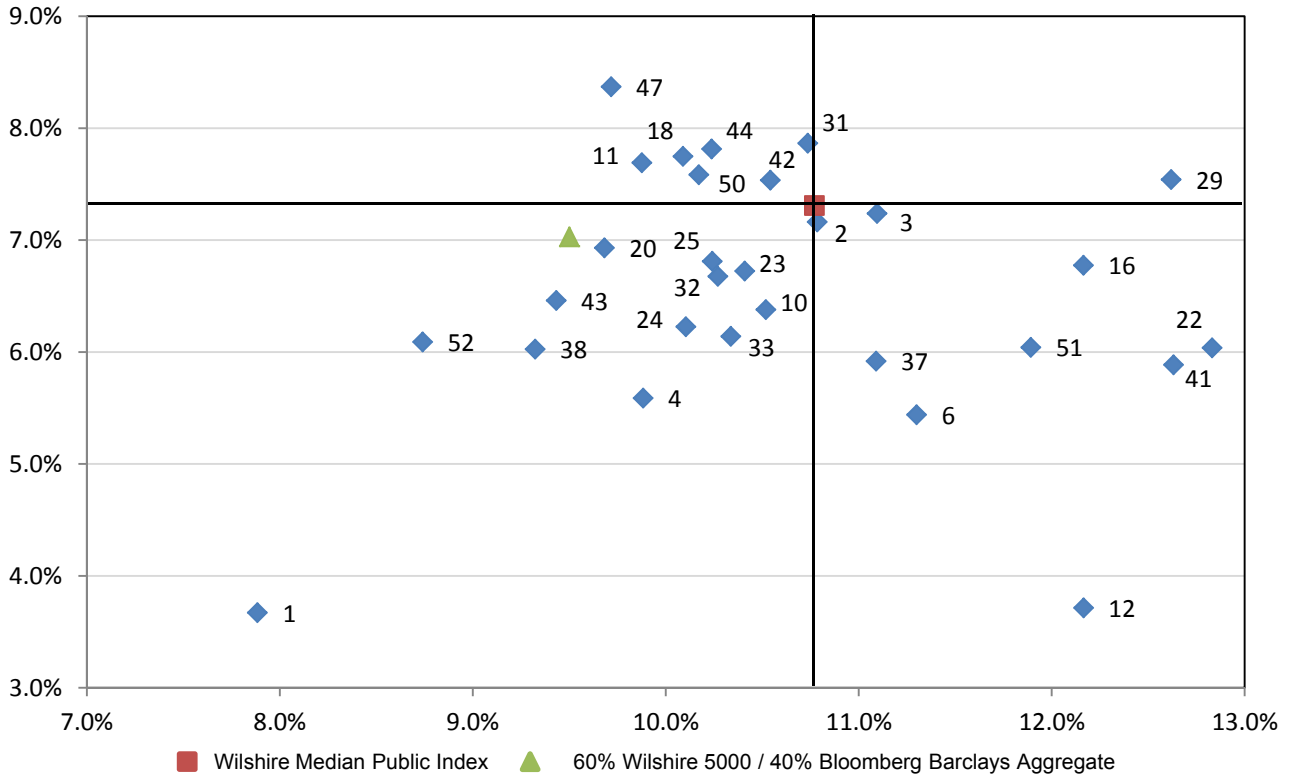


Figure 6 shows 15-year return and standard deviation characteristics of individual TEXPERS survey respondents versus two benchmarks. The first benchmark defines the four quadrants and is the Wilshire Public Funds Universe, representing the returns of Wilshire’s public fund clients. The second benchmark is a combination of 60% of the Wilshire 5000 equity index and 40% of the Bloomberg Barclays Aggregate fixed income index. Annualized return and standard deviation are based on quarterly returns for the period. Standard deviation is a measure of the dispersion or volatility of the quarterly returns around their average value.

The points representing the performance of the TEXPERS survey respondents are located in all four quadrants of the chart. Seven respondents are located in the most desirable northwest quadrant, indicating higher returns with less standard deviation than the benchmark. Thirteen respondents are located in the northeast or southwest quadrants, indicating reasonable return versus standard deviation trade-offs. That is, they have either a higher return with a higher standard deviation, or a lower return with a lower standard deviation, than the benchmark. Nine respondents are located in the least desirable southeast quadrant, where return is lower and standard deviation is higher than the benchmark.

Twenty Year Return versus Standard Deviation

Figure 7

For the Twenty Years Ending September 30, 2016

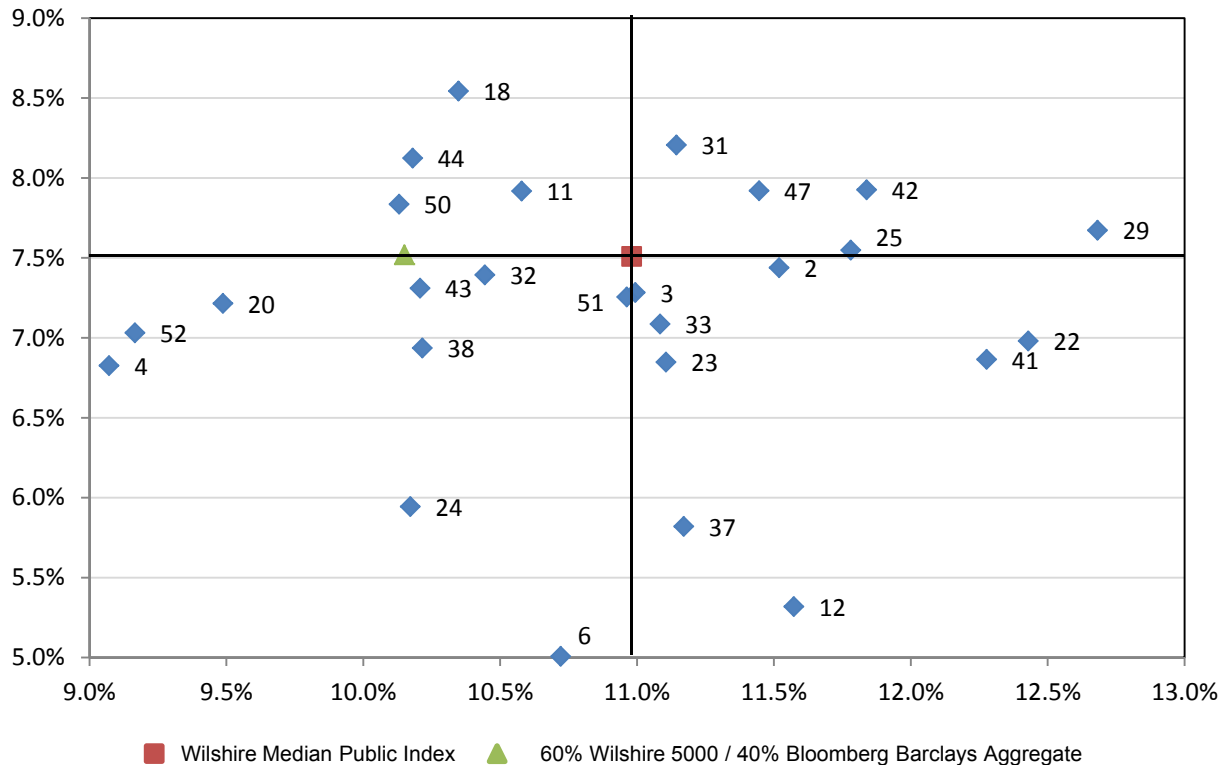


Figure 7 shows 20-year return and standard deviation characteristics of individual TEXPERS survey respondents versus two benchmarks. The first benchmark defines the four quadrants and is the Wilshire Public Funds Universe, representing the returns of Wilshire’s public fund clients. The second benchmark is a combination of 60% of the Wilshire 5000 equity index and 40% of the Bloomberg Barclays Aggregate fixed income index. Annualized return and standard deviation are based on quarterly returns for the period. Standard deviation is a measure of the dispersion or volatility of the quarterly returns around their average value.

The points representing the performance of the TEXPERS survey respondents are located in all four quadrants of the chart. Four respondents are located in the most desirable northwest quadrant, indicating higher returns with less standard deviation than the benchmark. Fourteen respondents are located in the northeast or southwest quadrants, indicating reasonable return versus standard deviation trade-offs. That is, they have either a higher return with a higher standard deviation, or a lower return with a lower standard deviation, than the benchmark. Eight respondents are located in the least desirable southeast quadrant, where return is lower and standard deviation is higher than the benchmark.

Appendix 1

Asset Allocation and Investment Performance Study of TEXPERS Members

Total Fund Rates of Returns (%)				
Quarter Ending	Gross Return	Uncertain	Net Return	Uncertain
September 30, 2016				
June 30, 2016				
March 31, 2016				
December 31, 2015				

Historical Rates of Return (%)				
Quarter Ending	Mar 31	Jun 30	Sep 30	Dec 31
2015				
2014				
2013				
2012				
2011				
2010				
2009				
2008				
2007				
2006				
2005				

Actuarial Investment Return Assumption (%)	
Inflation Assumption (%)	

Total Fund Value (\$)	\$ -
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Actuarial Required Contribution
Did your Fund receive its full Actuarially Required Contribution (ARC) for the last fiscal year? (Y / N / Uncertain)
Please provide thoughts or commentary as to why you did not receive your full ARC for last fiscal year:

Appendix 1 (cont.)

Asset Allocation and Investment Performance Study of TEXPERS Members

Asset Allocation			
	Percentage Invested at 9/30/2016	Percentage Return at 9/30/2016	(Return Only) Uncertain
Domestic Equities			
Total Domestic Equities	0.00		
<i>Active (Include REITs)</i>			
<i>Index (Passive/Enhanced)</i>			
<i>Multi-Strategy Equity Fund</i>			
Fixed Income			
Total Fixed Income	0.00		
<i>Domestic (U.S.) Investment Grade (Active) (Include TIPS)</i>			
<i>Domestic (U.S.) Investment Grade (Passive)</i>			
<i>Domestic (U.S.) Non-Investment Grade (Active or Passive)</i>			
<i>International (Non-U.S.) Investment Grade (Active or Passive)</i>			
<i>Emerging Markets (Active or Passive)</i>			
<i>Multi-Strategy Bond Fund</i>			
International Equities			
Total International Equities	0.00		
<i>Active MSCI EAFE®</i>			
<i>Passive/Index MSCI EAFE®</i>			
<i>Emerging Markets</i>			
Alternative Strategies			
Total Alternative Strategies	0.00		
<i>Real Estate (excl REITs)</i>			
<i>Venture Capital</i>			
<i>Private Equity (LBOs, Mezzanine, M&A Funds)</i>			
<i>Commodities & Managed Futures</i>			
<i>Marketable Alternative Strategies (Hedge Funds, Derivatives)</i>			
<i>Distressed Debt</i>			
Cash and Other			
Total Cash and Other	0.00		
<i>Cash, Money Market, Treasuries</i>			
<i>Other (Please Specify Below)</i>			
Okay to identify your fund by name in the annual performance report? (Y/N)			

Appendix 2

List of TEXPERS Survey Respondents

Abilene Firemen's Relief & Retirement Fund
Amarillo Firemen's Relief & Retirement Fund
Atlanta Firemen's Relief & Retirement Fund
Austin Employees Retirement System (COAERS)
Austin Firefighters Relief & Retirement Fund
Beaumont Firemen's Relief & Retirement Fund
Big Spring Firemen's Relief & Retirement Fund
Brazos River Authority R Plan for Employees
Brownwood Firemen's Relief & Retirement Fund
Capital MTA Retirement Plan for Administrative Employees
Conroe Firefighter Relief & Retirement Fund
Corpus Christi Firefighters' Retirement System
Corsicana Firefighter's Relief & Retirement Fund
CPS Energy Employees' Benefit Trust
Dallas Employees' Retirement Fund
DART Employees' Def. Ben. R Plan & Trust
DART Retirement Plan & Trust
El Paso City Employees' Pension Fund
El Paso Firemen & Policemen's Pension Fund
Floresville Electric Light & Power Pension Plan
Fort Worth Employees' Retirement Fund
Galveston Firefighter's Pension Fund
Greenville Firemen's Relief & Retirement Fund
Guadalupe Blanco River Auth. Def. B R Plan
Harlingen Firemen's Relief & Retirement Fund
Houston Municipal Employees Pension System
Houston Police Officers' Pension System
Irving Firemen's Relief & Retirement Fund
Irving Supplemental Benefit Plan
Killeen Firefighter's Relief & Retirement Fund
Laredo Firefighters Retirement System
Longview Firefighters' Relief & Retirement Fund
Lubbock Fire Pension Fund
Lufkin Firemen's Relief & Retirement Fund
Marshall Firemen's Relief & Retirement Fund
McAllen Firemen's Relief & Retirement Fund
MTA of Harris County Workers Non Union Pension Plan
MTA of Harris County Workers Union Pension Plan
Odessa Firefighters Relief & Retirement Fund
Orange Firemen's Relief & Retirement Fund
Paris Firefighters' Relief & Retirement Fund
Plainview Firemen's Relief & Retirement Fund
Port Arthur Firemen's Relief & Retirement Fund
Port of Houston Authority
San Antonio Fire & Police Pension Fund
San Benito Police and Firemen Relief and Retirement Fund
Sweetwater Firemen's Relief & Retirement Fund
Temple Fire Fighter's Relief & Retirement Fund
Texarkana Firemen's Relief & Retirement Fund
Texas Emergency Services Retirement System
Texas Employees Retirement System
Travis County ESD#6 Firefighters' R & R Fund
Tyler Firefighter's Relief & Retirement Fund
University Park Firefighter Relief & Retirement Fund
VIA Metropolitan Transit Retirement Plan
Waxahachie Firefighter's Relief & Retirement Fund
Weslaco Firemen's Relief & Retirement Fund
Wichita Falls Firemens Relief & Retirement Fund
Woodland Firefighters' Retirement System

Appendix 3

Respondent Fund Number – Name Cross Reference

Number	Name
24	Abilene Firemen's Relief & Retirement Fund
14	Amarillo Firemen's Relief & Retirement Fund
2	Austin Employees Retirement System (COAERS)
25	Austin Firefighters Relief & Retirement Fund
18	Big Spring Firemen's Relief & Retirement Fund
78	Brazos River Authority R Plan for Employees
27	Brownwood Firemen's Relief & Retirement Fund
65	Capital Metropolitan Transportation Authority Retirement Plan for Administrative Employees
9	Conroe Firefighter Relief & Retirement Fund
20	Corpus Christi Firefighters' Retirement System
29	Dallas Employees' Retirement Fund
34	DART Employees' Def. Ben. R Plan & Trust
79	DART Retirement Plan & Trust
3	El Paso City Employees' Pension Fund
31	El Paso Firemen & Policemen's Pension Fund
80	Floresville Electric Light & Power Pension Plan
23	Fort Worth Employees' Retirement Fund
56	Galveston Firefighter's Pension Fund
50	Harlingen Firemen's Relief & Retirement Fund
5	Guadalupe Blanco River Auth. Def. B R Plan
47	Houston Municipal Employees Pension System
16	Irving Firemen's Relief & Retirement Fund
1	Irving Supplemental Benefit Plan
57	Killeen Firefighter's Relief & Retirement Fund
6	Laredo Firefighters Retirement System
12	Longview Firefighters' Relief & Retirement Fund
43	Lubbock Fire Pension Fund
28	Lufkin Firemen's Relief & Retirement Fund
33	McAllen Firemen's Relief & Retirement Fund
41	MTA of Harris County Workers Non Union Pension Plan
22	MTA of Harris County Workers Union Pension Plan
51	Odessa Firefighters Relief & Retirement Fund
4	Orange Firemen's Relief & Retirement Fund
58	Paris Firefighters' Relief & Retirement Fund
59	Port Arthur Firemen's Relief & Retirement Fund
73	Port of Houston Authority
81	San Benito Police and Firemen Relief and Retirement Fund
44	Sweetwater Firemen's Relief & Retirement Fund
52	Temple Fire Fighter's Relief & Retirement Fund
48	Texarkana Firemen's Relief & Retirement Fund
39	Texas Emergency Services Retirement System
66	Texas Employees Retirement System
62	Travis County ESD#6 Firefighters' R & R Fund
49	Tyler Firefighter's Relief & Retirement Fund
32	VIA Metropolitan Transit Retirement Plan
10	Waxahachie Firefighter's Relief & Retirement Fund
77	Weslaco Firemen's Relief & Retirement Fund
63	Wichita Falls Firemens Relief & Retirement Fund
82	Woodland Firefighters' Retirement System

Appendix 4

Respondent Fund Number – Return Assumptions

Fund	Nominal	Inflation	Real	Fund	Nominal	Inflation	Real
1	6.75%	2.00%	4.75%	37			
2	7.50%	2.75%	4.75%	38	7.25%	3.00%	4.25%
3	7.50%	3.00%	4.50%	39	7.75%	3.00%	4.75%
4	7.75%	3.00%	4.75%	40	7.75%	2.00%	5.75%
5	7.00%	3.00%	4.00%	41	6.75%	2.50%	4.25%
6	8.00%	3.50%	4.50%	42	7.50%	3.00%	4.50%
7	7.75%	2.00%	5.75%	43	7.75%	2.00%	5.75%
9	7.75%	2.50%	5.25%	44	8.00%	3.00%	5.00%
10	7.00%	2.00%	5.00%	47	8.00%	3.00%	5.00%
11	8.00%	2.75%	5.25%	48	7.75%	3.25%	4.50%
12	8.00%	3.00%	5.00%	49	7.65%	3.50%	4.15%
14	8.00%	3.00%	5.00%	50		8.00%	
16	8.25%			51			
17	7.75%			52	8.00%	3.75%	4.25%
18	8.00%			56	8.00%	3.00%	5.00%
19				57	7.75%	3.50%	4.25%
20	7.90%	3.75%	4.15%	58	8.00%	3.00%	5.00%
22	6.75%	2.50%	4.25%	59	8.00%	3.00%	5.00%
23	7.75%	2.75%	5.00%	62	7.00%	3.00%	4.00%
24	8.00%	3.00%	5.00%	63	8.00%	3.00%	5.00%
25	7.70%	3.00%	4.70%	65	7.00%	2.50%	4.50%
26	8.00%	3.00%	5.00%	66	8.00%	3.50%	4.50%
27	7.25%	2.00%	5.25%	73	7.00%	2.50%	4.50%
28	7.50%			77	7.25%	3.25%	4.00%
29	8.00%	3.00%	5.00%	78	6.50%	3.50%	3.00%
30				79		2.50%	
31	7.75%	3.50%	4.25%	80	6.50%	2.50%	4.00%
32	7.50%	3.00%	4.50%	81	7.50%	2.50%	5.00%
33	7.75%	3.00%	4.75%	82	7.00%	2.50%	4.50%
34	7.00%	2.50%	4.50%				