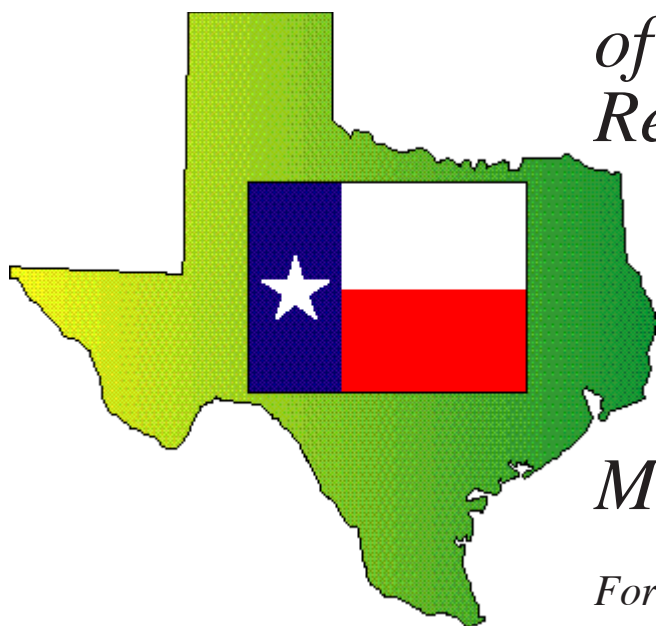


TEXPERS

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



*The Texas Association
of Public Employee
Retirement Systems*

March 2014

For Periods Ending September 30, 2013



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Key Findings

Participating members for this year's Commonfund Benchmarks Study® Report on the Asset Allocation and Investment Performance of Texas Public Employee Retirement Systems totaled sixty (up from fifty-three in FY2012), and represented approximately \$170.3 billion in total assets – a marked increase from last year's reported total market value of \$23.8 billion.

Overall, 90 percent were past participants, lending to the integrity of the data. While the overall average was skewed downward slightly by some newcomers, essentially 98 percent of last year's universe was captured in this year's Study.

- Among all TEXPERS members, FY2013 dollar-weighted asset allocation (for the fiscal year ended September 30, 2013) was alternative strategies: 32 percent, international equities: 25 percent, domestic equities: 22 percent, fixed income: 20 percent and short-term securities/cash: 1 percent.
- When measuring investment performance for survey respondents as a group over the 20-year period ending September 30, 2013 the respondents' composite investment return was 8.2%, compared to the average actuarial investment return assumption of 8.0%.
- For the trailing 15-years ended September 30, 2013 survey respondents' 7.4% return outperformed the 6.3% return for the Wilshire Median Public Fund for the same period.
- For the trailing 10-years ended September 30, 2013 survey respondents' 8.1% return outperformed the 7.1% return for the Wilshire Median Public Fund for the same period.
- A \$100 investment in the survey respondents' aggregate portfolio on September 30, 1990 would have grown to approximately \$714 as of September 30, 2013. This exceeds the \$592 that \$100 invested at the 8.0% average actuarial return assumption would have grown to during the same twenty-three year period.

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 one-, three-, five-, 10-, 15- and 20-year periods ending September 30, 2013. 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 2013 survey requesting asset allocation and investment return information from TEXPERS members. A total of sixty-six surveys were sent to TEXPERS members. Sixty surveys were completed and returned, a ninety percent response. While the overall average was skewed downward slightly by some newcomers, essentially ninety-eight percent of last year's universe was captured in this year's Study. The member systems responding represent approximately \$170.3 billion in total assets a marked increase over last year's total market value of \$23.8 billion. 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 that agreed to have their name disclosed in this report are listed in Appendix 3. A listing of actuarial return and inflation assumptions is in Appendix 4.

This year, we have entered into a partnership with Commonfund Institute, whose mission aligns with TEXPERS' primary objectives involving education and research. We believe that this partnership will be of great benefit to the TEXPERS community. Commonfund Institute houses the education and research activities of Commonfund and provides the entire community of long-term investors with investment information and professional development programs. Commonfund Institute is dedicated to the advancement of investment knowledge and the promotion of best practices in financial management.

Thanks to Wilshire Associates, Inc. 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 includes private equity, private equity real estate, venture capital, marketable alternative strategies and energy and natural resources.

Figure 1

Market Value \$170.3 Billion

As of September 30, 2013

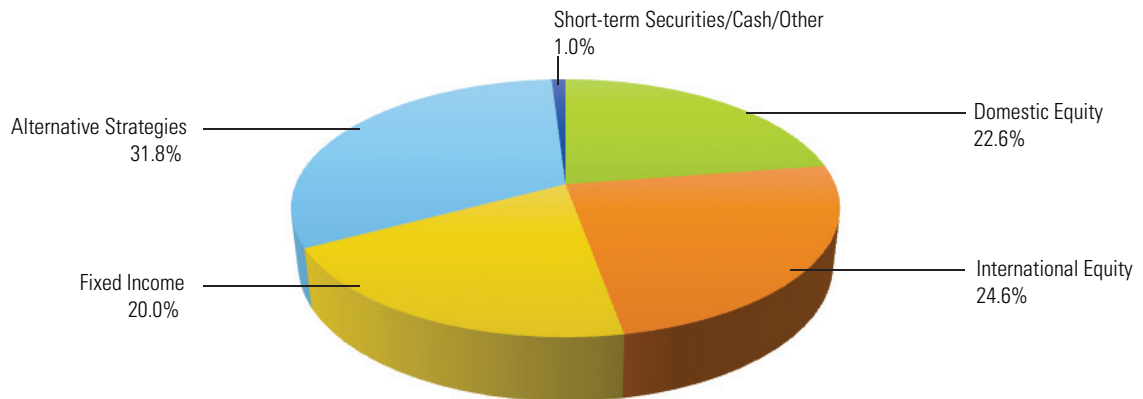
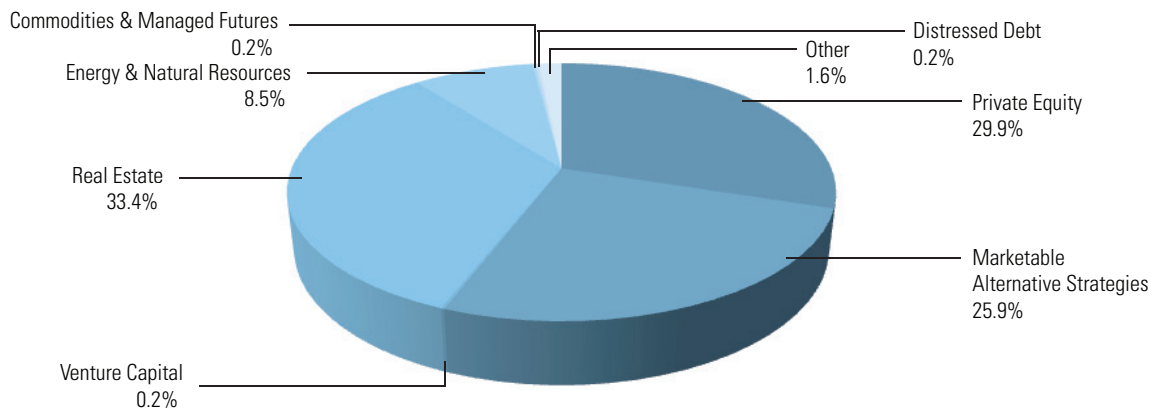


Figure 2

Alternative Strategies Breakout



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

*What is “dollar-weighted”?

Dollar-weighted means that individual responses are weighted according to size of asset base when calculating average results—meaning that responses from large participants have a greater impact on average results than those of smaller participants. By contrast, when overall results are calculated on an “equal-weighted” basis, each response has an equal impact on the average, regardless of the size of the respondent.

Investment Performance

Trailing Period Returns - Table

Table 1

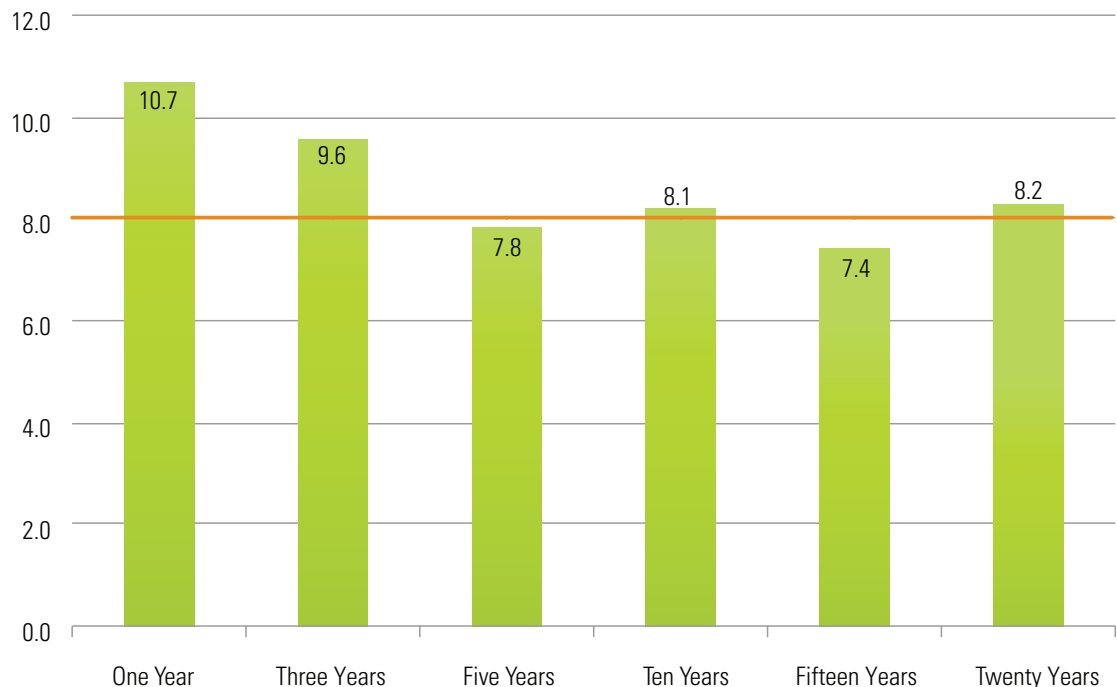
Annualized Returns for the Periods Ending 9/30/2013	One Year	Three Years	Five Years	Ten Years	Fifteen Years	Twenty Years
TEXPERS Average	10.7	9.6	7.8	8.1	7.4	8.2
Actuarial Assumption	8.0	8.0	8.0	8.0	8.0	8.0

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, 2013 to their average actuarial investment return assumption of 8.0%. Even given several extraordinarily difficult market environments over the 20-year period the average annual return of 8.2% compares favorably to the actuarial return assumption of 8.0%.

Trailing Period Returns - Chart

Figure 3

Returns vs. Average Actuarial Assumption
For periods ending September 30, 2013



Growth of \$100

Figure 4

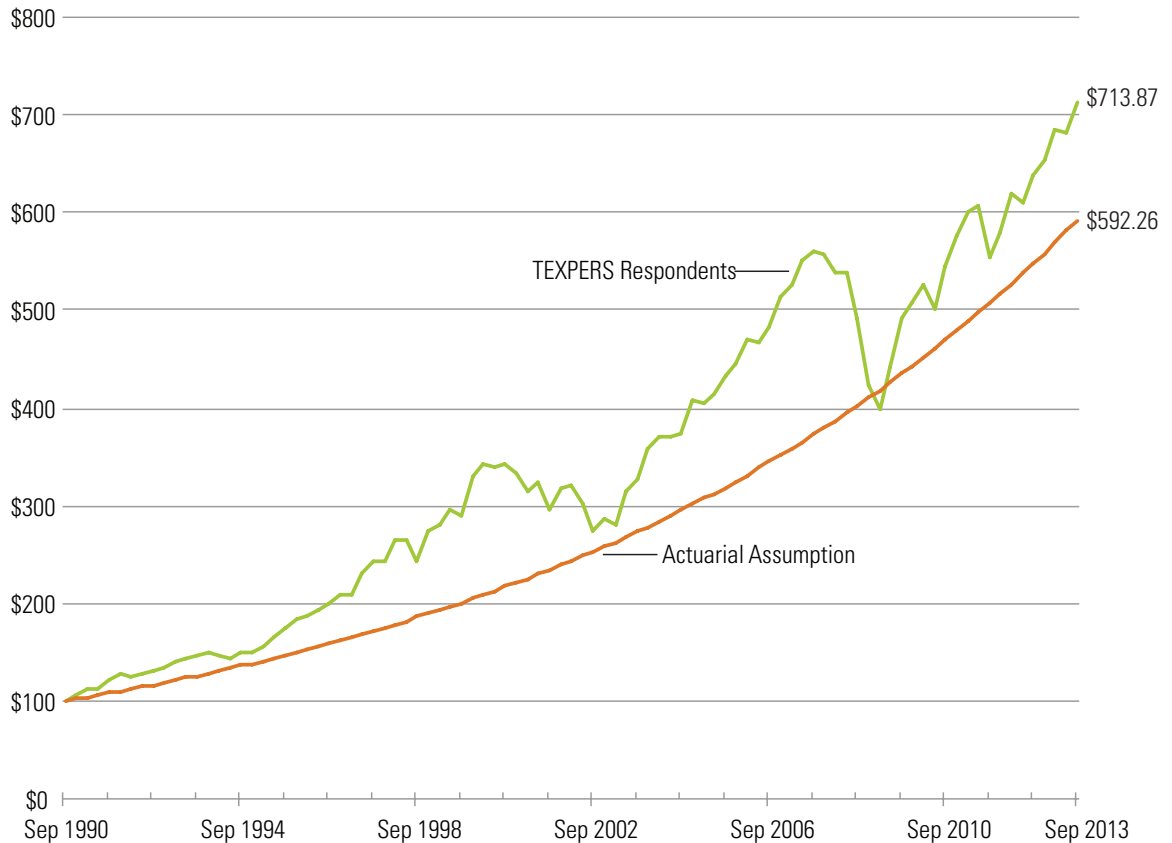


Figure 4 displays the growth of \$100 as if it were invested on September 30, 1990 in the survey respondents' aggregate portfolio. This is compared to \$100 invested in a hypothetical portfolio growing at the 8.0% average actuarial assumption. As can be seen from this exhibit, a \$100 investment in the survey respondents' aggregate portfolio would have grown to approximately \$714 as of September 30, 2013. This exceeds the \$592 that \$100 invested at the 8.0% average actuarial return assumption would have grown to during the same twenty-three year period.

TEXPERS member systems as a group have exceeded their actuarial investment return hurdle over the 23 years ending September 30, 2013.

Individual Pension Systems

Asset Allocation

Table 2 details the percentage allocation to the major asset classes by each survey respondent.

Table 2

	1	2	3	4	5	6	7	8	9	10
Domestic Equity	27.15	32.76	48.00	38.00	41.50	39.00	34.80	14.20	58.92	38.50
Fixed Income	23.48	28.32	25.00	34.00	31.70	19.20	31.26	14.10	16.09	30.80
International Equity	23.12	31.84	19.00	22.00	15.00	21.90	28.38	9.80	13.25	27.80
Alternative strategies	25.87	7.06	7.00	0.00	8.40	19.70	5.53	61.30	7.93	0.00
Private Equity	1.58	0.00	0.00	0.00	0.00	0.00	0.00	19.10	0.00	0.00
Marketable alternative strategies	16.68	0.00	0.00	0.00	5.40	15.10	0.00	9.00	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
Private equity real estate	5.30	7.06	0.00	0.00	0.00	0.00	0.00	18.10	0.00	0.00
Energy & natural resources	0.00	0.00	0.00	0.00	2.80	2.40	0.00	13.70	0.00	0.00
Commodities & managed futures	2.31	0.00	0.00	0.00	0.20	2.20	5.52	1.40	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
Alternatives not broken out	0.00	0.00	7.00	0.00	0.00	0.00	0.00	0.00	7.93	0.00
Short-term securities/cash/other	0.38	0.02	1.00	6.00	3.40	0.20	0.03	0.60	3.81	2.90
Short-term securities/cash	0.38	0.02	1.00	6.00	3.40	0.20	0.03	0.60	3.81	2.90
Other	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 2 - continued

	11	12	13	14	15	16	17	18	19	20
Domestic Equity	20.00	27.28	12.00	N/A	36.00	40.94	35.00	38.20	37.10	47.00
Fixed Income	20.00	27.91	20.00	N/A	10.00	5.46	30.00	27.00	29.10	35.00
International Equity	15.00	26.27	11.00	N/A	10.50	29.04	20.00	16.00	19.70	18.00
Alternative strategies	45.00	18.15	54.00	N/A	42.50	24.40	14.00	17.80	13.50	0.00
Private Equity	7.00	1.86	0.00	N/A	9.00	4.48	0.00	0.00	0.00	0.00
Marketable alternative strategies	35.50	11.34	0.00	N/A	7.00	9.26	0.00	0.00	0.00	0.00
Venture capital	0.00	0.00	0.00	N/A	1.50	0.00	0.00	0.00	0.00	0.00
Private equity real estate	1.50	0.00	0.00	N/A	17.00	8.46	0.00	0.00	0.00	0.00
Energy & natural resources	1.00	0.00	0.00	N/A	8.00	2.20	0.00	0.00	0.00	0.00
Commodities & managed futures	0.00	4.95	0.00	N/A	0.00	0.00	0.00	0.00	0.00	0.00
Distressed debt	0.00	0.00	0.00	N/A	0.00	0.00	0.00	0.00	0.00	0.00
Alternatives not broken out	0.00	0.00	54.00	N/A	0.00	0.00	14.00	17.80	13.50	0.00
Short-term securities/cash/other	0.00	0.39	3.00	N/A	1.00	0.16	1.00	1.00	0.60	0.00
Short-term securities/cash	0.00	0.39	3.00	N/A	1.00	0.16	1.00	1.00	0.60	0.00
Other	0.00	0.00	0.00	N/A	0.00	0.00	0.00	0.00	0.00	0.00

Individual Pension Systems

Asset Allocation

Table 2 - continued

	22	23	24	25	26	27	28	29	30	31
Domestic Equity	52.40	19.00	44.70	44.00	36.29	39.66	51.00	36.84	37.00	33.00
Fixed Income	33.30	21.00	25.20	18.00	34.05	31.28	29.00	28.22	29.00	28.00
Non-Domestic Equity	13.80	16.00	20.10	26.00	20.63	28.88	0.00	22.84	20.00	32.00
Alternative strategies	0.00	42.00	10.00	12.00	8.23	0.00	0.00	11.49	14.00	5.00
Private Equity	0.00	6.00	0.00	0.00	1.96	0.00	0.00	0.00	0.00	0.00
Marketable alternative strategies	0.00	21.00	5.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Venture capital	0.00	2.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Private equity real estate	0.00	11.00	0.00	0.00	2.13	0.00	0.00	0.00	0.00	0.00
Energy & natural resources	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Commodities & managed futures	0.00	2.00	5.00	0.00	4.14	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
Alternatives not broken out	0.00	0.00	0.00	12.00	0.00	0.00	0.00	11.49	14.00	5.00
Short-term securities/cash/other	0.50	2.00	0.00	0.00	0.80	0.18	20.00	0.61	0.00	2.00
Short-term securities/cash	0.50	2.00	0.00	0.00	0.80	0.18	0.00	0.61	0.00	2.00
Other	0.00	0.00	0.00	0.00	0.00	0.00	20.00	0.00	0.00	0.00

Individual Pension Systems

Asset Allocation

Table 2 - continued

	32	33	34	35	36	37	38	39	40	41
Domestic Equity	35.00	44.50	50.20	50.00	66.27	36.00	25.10	48.00	38.10	51.10
Fixed Income	30.00	24.90	39.60	31.00	25.22	29.00	18.70	21.00	31.46	30.10
International Equity	25.00	14.50	8.40	10.00	7.70	20.00	20.80	31.00	29.16	16.60
Alternative strategies	10.00	15.40	0.00	9.00	0.00	13.00	35.40	0.00	0.00	0.00
Private Equity	0.00	0.00	0.00	0.00	0.00	0.00	5.10	0.00	0.00	0.00
Marketable alternative strategies	0.00	0.00	0.00	9.00	0.00	0.00	13.00	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
Private equity real estate	0.00	0.00	0.00	0.00	0.00	0.00	10.10	0.00	0.00	0.00
Energy & natural resources	0.00	0.00	0.00	0.00	0.00	0.00	4.80	0.00	0.00	0.00
Commodities & managed futures	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Distressed debt	0.00	0.00	0.00	0.00	0.00	0.00	2.40	0.00	0.00	0.00
Alternatives not broken out	10.00	15.40	0.00	0.00	0.00	13.00	0.00	0.00	0.00	0.00
Short-term securities/cash/other	0.00	0.70	1.80	0.00	0.81	2.00	0.00	0.00	1.28	2.20
Short-term securities/cash	0.00	0.70	0.00	0.00	0.81	2.00	0.00	0.00	1.28	2.20
Other	0.00	0.00	1.80	0.00	0.00	0.00	0.00	0.00	0.00	0.00

Individual Pension Systems

Asset Allocation

Table 2 - continued

	42	43	44	45	46	47	48	49	50	51
Domestic Equity	49.75	42.28	37.00	14.20	40.37	24.00	54.00	53.00	36.90	51.00
Fixed Income	21.42	23.34	29.00	14.10	31.09	18.30	22.00	29.00	28.80	23.00
International Equity	10.94	13.55	20.00	9.80	28.50	23.80	22.00	12.00	19.50	8.00
Alternative strategies	17.77	19.82	13.00	61.30	0.00	33.20	0.00	4.00	13.30	10.00
Private Equity	0.00	7.49	0.00	19.10	0.00	9.30	0.00	0.00	0.00	0.00
Marketable alternative strategies	0.00	2.40	0.00	9.00	0.00	7.00	0.00	0.00	0.00	10.00
Venture capital	0.00	0.00	0.00	0.00	0.00	1.80	0.00	0.00	0.00	0.00
Private equity real estate	0.00	7.33	0.00	18.10	0.00	7.00	0.00	0.00	0.00	0.00
Energy & natural resources	0.00	0.00	0.00	13.70	0.00	5.00	0.00	0.00	0.00	0.00
Commodities & managed futures	0.00	2.60	0.00	1.40	0.00	0.80	0.00	4.00	0.00	0.00
Distressed debt	0.00	0.00	0.00	0.00	0.00	2.30	0.00	0.00	0.00	0.00
Alternatives not broken out	17.77	0.00	13.00	0.00	0.00	0.00	0.00	0.00	13.30	0.00
Short-term securities/cash/other	0.12	1.01	1.00	0.60	0.04	0.70	2.00	2.00	1.50	8.00
Short-term securities/cash	0.12	1.01	1.00	0.60	0.04	0.70	2.00	2.00	1.50	8.00
Other	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 2 - continued

	52	56	57	59	62	63	64	65	66	67
Domestic Equity	35.00	50.86	48.20	48.00	59.45	38.00	61.00	47.00	28.40	20.00
Fixed Income	25.00	26.67	27.20	35.00	30.70	26.00	24.00	32.00	28.40	18.00
International Equity	20.00	12.47	6.80	16.00	8.50	18.00	14.00	15.00	28.20	25.00
Alternative strategies	18.00	9.12	9.30	0.00	0.00	17.00	0.00	2.00	13.80	36.00
Private Equity	0.00	0.00	3.10	0.00	0.00	0.00	0.00	0.00	6.50	11.00
Marketable alternative strategies	13.00	6.53	5.40	0.00	0.00	12.50	0.00	0.00	2.40	9.00
Venture capital	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Private equity real estate	0.00	0.00	0.80	0.00	0.00	4.50	0.00	2.00	4.00	13.00
Energy & natural resources	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.90	3.00
Commodities & managed futures	5.00	2.59	0.00	0.00	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
Alternatives not broken out	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Short-term securities/cash/other	2.00	0.88	8.50	1.00	1.35	1.00	1.00	4.00	1.20	1.00
Short-term securities/cash	2.00	0.88	8.50	1.00	1.35	1.00	1.00	4.00	1.20	1.00
Other	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00

Investment Performance

Table 3 lists investment returns for survey respondents over the one-, three-, five-, 10-, 15- and 20-year periods ending September 30, 2013. For comparison purposes the benchmark of 60% of the Wilshire 5000 index and 40% of the Barclays Capital Aggregate index is represented by the “Index”.

Table 3

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	7.42%	6.43%	5.46%	4.60%	N/A	N/A	34	11.90%	8.86%	6.68%	6.06%	N/A	N/A
2	12.98%	10.08%	9.73%	8.11%	7.39%	8.20%	35	12.36%	8.69%	6.27%	4.85%	N/A	N/A
3	14.11%	10.50%	9.32%	7.88%	6.78%	8.13%	36	11.24%	9.95%	8.79%	6.93%	N/A	N/A
4	14.30%	9.85%	8.72%	7.63%	6.70%	7.42%	37	12.33%	9.90%	8.66%	7.80%	5.97%	N/A
5	10.15%	9.61%	7.29%	N/A	N/A	N/A	38	10.72%	9.15%	6.03%	6.92%	6.57%	7.64%
6	9.77%	7.55%	7.53%	6.45%	4.06%	N/A	39	14.68%	11.63%	9.68%	8.10%	N/A	N/A
7	12.83%	9.16%	9.27%	N/A	N/A	N/A	40	12.80%	9.99%	6.48%	5.67%	N/A	N/A
8	14.20%	8.22%	5.39%	8.77%	8.13%	9.04%	41	13.14%	11.31%	9.32%	7.08%	6.10%	N/A
9	5.95%	6.32%	3.60%	N/A	N/A	N/A	42	15.27%	10.59%	9.05%	7.41%	8.48%	8.75%
10	14.29%	10.72%	10.08%	7.62%	6.80%	N/A	43	13.30%	9.53%	8.27%	8.13%	7.31%	8.66%
11	6.40%	8.57%	7.69%	8.33%	7.64%	8.20%	44	12.61%	10.04%	8.59%	8.82%	7.79%	N/A
12	9.12%	7.73%	7.03%	5.57%	4.16%	N/A	45	14.20%	8.22%	5.39%	7.79%	6.49%	7.64%
13	9.40%	6.82%	7.75%	7.23%	6.14%	N/A	46	14.01%	9.01%	6.28%	N/A	N/A	N/A
14	14.51%	12.38%	9.53%	8.50%	7.47%	8.73%	47	13.44%	10.31%	8.10%	9.57%	8.93%	8.64%
15	10.90%	9.23%	4.22%	6.91%	6.79%	8.39%	48	9.33%	8.40%	7.78%	7.44%	5.59%	N/A
16	16.66%	11.20%	8.46%	8.12%	N/A	N/A	49	12.80%	10.83%	7.82%	6.92%	N/A	N/A
17	12.08%	9.79%	8.36%	N/A	N/A	N/A	50	12.51%	9.93%	8.56%	8.59%	7.43%	N/A
18	11.70%	9.69%	8.30%	8.43%	7.74%	9.87%	51	12.84%	8.80%	6.62%	6.49%	6.72%	N/A
19	12.60%	10.09%	8.61%	N/A	N/A	N/A	52	9.44%	7.61%	7.05%	7.23%	6.03%	N/A
20	12.87%	10.16%	9.26%	7.72%	6.48%	N/A	56	8.47%	N/A	N/A	N/A	N/A	N/A
22	10.31%	9.95%	8.75%	6.77%	5.89%	N/A	57	5.24%	N/A	N/A	N/A	N/A	N/A
23	11.09%	8.60%	6.69%	7.30%	6.49%	7.87%	59	12.20%	7.24%	N/A	N/A	N/A	N/A
24	10.17%	8.56%	8.61%	7.30%	5.92%	N/A	62	13.96%	N/A	N/A	N/A	N/A	N/A
25	14.71%	9.87%	7.70%	7.53%	7.47%	8.16%	63	N/A	N/A	N/A	N/A	N/A	N/A
26	9.13%	8.04%	7.21%	N/A	N/A	N/A	64	5.68%	N/A	N/A	N/A	N/A	N/A
27	14.98%	9.92%	10.15%	N/A	N/A	N/A	65	14.37%	10.40%	9.93%	N/A	N/A	N/A
28	11.55%	9.53%	6.65%	4.86%	N/A	N/A	66	11.62%	9.34%	8.22%	7.34%	N/A	N/A
29	13.83%	10.90%	9.54%	8.38%	7.14%	8.21%	67	10.20%	9.62%	7.76%	7.41%	N/A	N/A
30	12.83%	10.11%	8.69%	N/A	N/A	N/A	Index	11.17%	11.16%	9.05%	7.14%	6.28%	8.05%
31	13.91%	8.95%	8.83%	9.01%	7.99%	8.91%							
32	13.98%	11.18%	8.06%	6.67%	6.50%	8.02%							
33	12.42%	9.57%	8.63%	7.32%	7.70%	N/A							

Five Year Return versus Standard Deviation

Figure 5

For the Five Years Ending September 30, 2013



Figure 5 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 Barclays Capital 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. Eight respondents are located in the most desirable northwest quadrant, indicating higher returns with less standard deviation than the benchmark. Thirty-four 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. Twelve 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 6

For the Ten Years Ending September 30, 2013

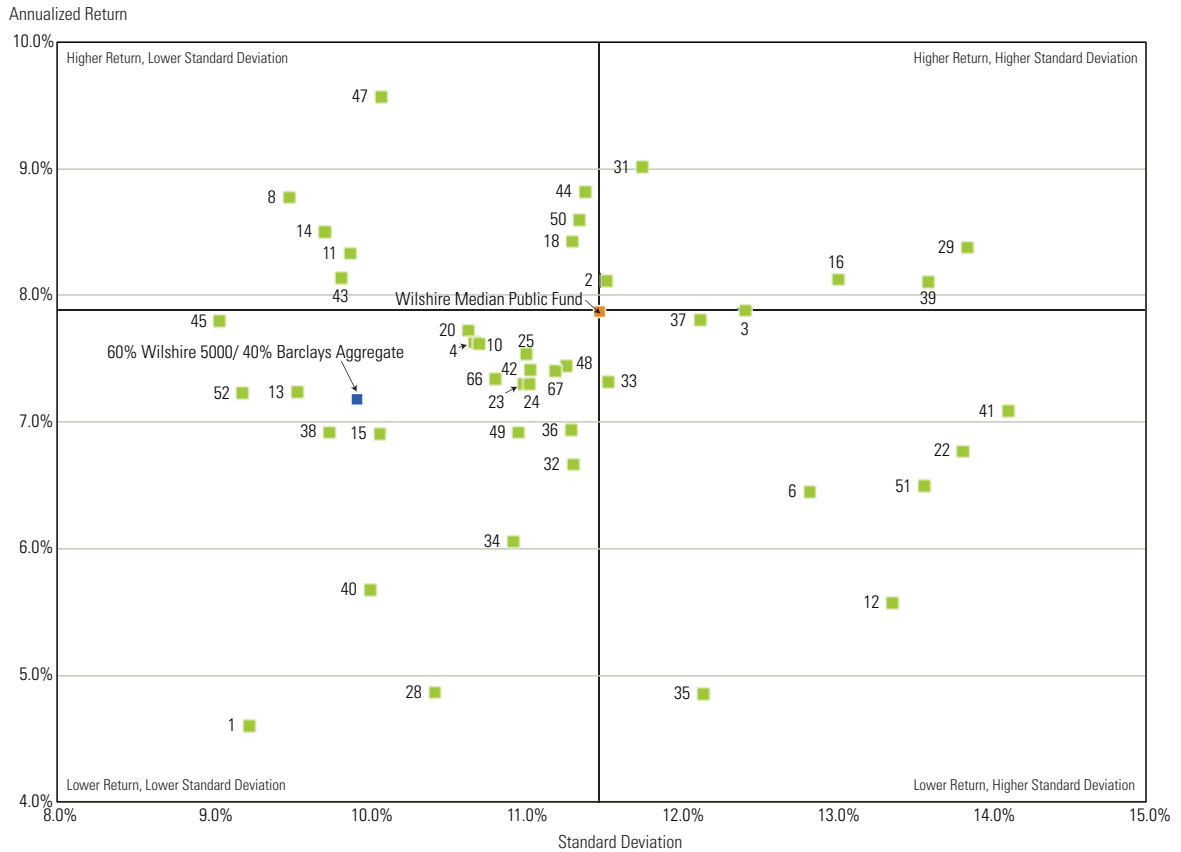


Figure 6 shows 10-year return and standard deviation characteristics of individual TEXPERS survey respondents versus two benchmarks. The first benchmark defines the four quadrants and is the Wilshire Public Funds Universe, representing the returns of Wilshire’s public fund clients. The second benchmark is a combination of 60% of the Wilshire 5000 equity index and 40% of the Barclays Capital 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. Eight respondents are located in the most desirable northwest quadrant, indicating higher returns with less standard deviation than the benchmark. Twenty-eight 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.

Fifteen Year Return versus Standard Deviation

Figure 7

For the Fifteen Years Ending September 30, 2013



Figure 7 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 Barclays Capital 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. Ten respondents are located in the most desirable northwest quadrant, indicating higher returns with less standard deviation than the benchmark. Twelve 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. Eleven 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 8

For the Twenty Years Ending September 30, 2013

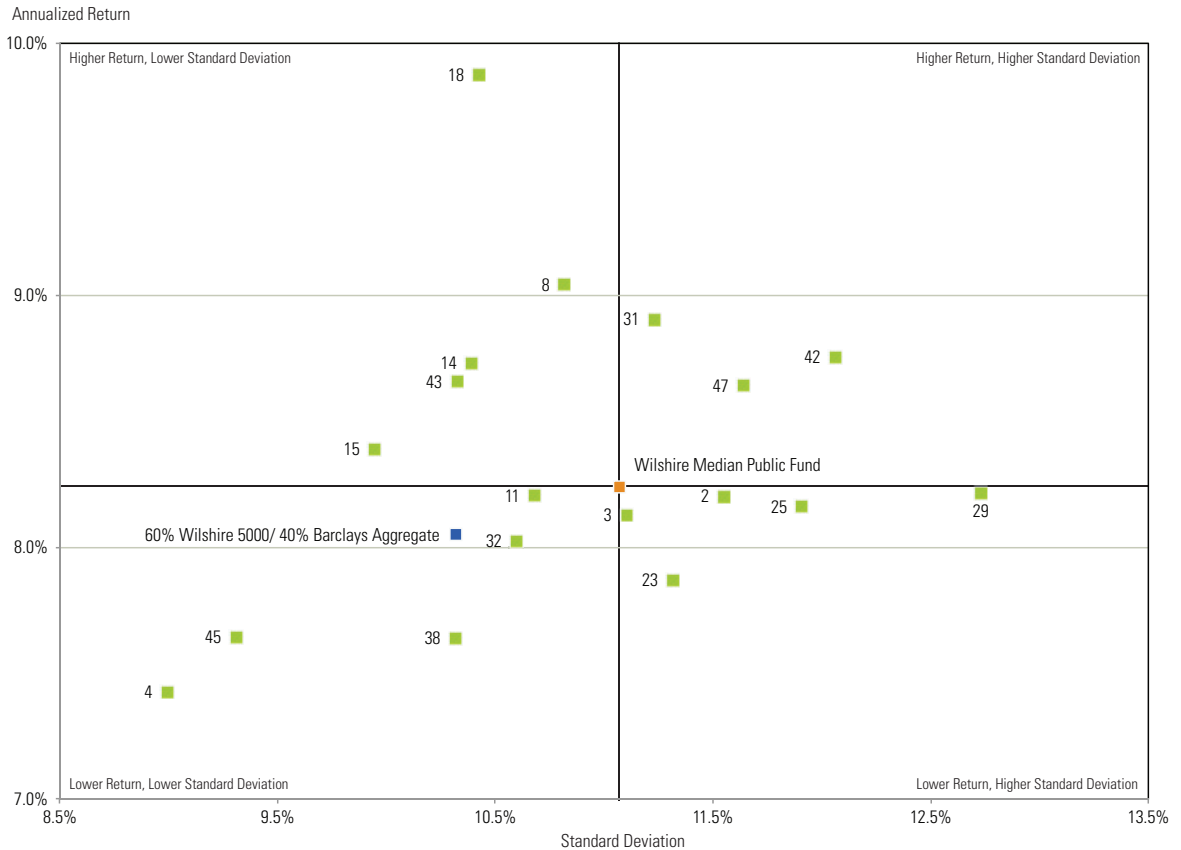


Figure 8 shows 20-year return and standard deviation characteristics of individual TEXPERS survey respondents versus two benchmarks. The first benchmark defines the four quadrants and is the Wilshire Public Funds Universe, representing the returns of Wilshire’s public fund clients. The second benchmark is a combination of 60% of the Wilshire 5000 equity index and 40% of the Barclays Capital 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. Five respondents are located in the most desirable northwest quadrant, indicating higher returns with less standard deviation than the benchmark. Eight 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. Five 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

(a Commonfund Benchmarks Study®) FISCAL YEAR 2013

October 1, 2012 - September 30, 2013

Total Fund Rates of Return (Numbers in Percent)

All returns must be actual quarterly returns and should not be annualized. The returns must include both income and changes in market value; income yields alone are not sufficient.

If your fund WAS in last year's report only the four quarters ending Sep. 30, 2013 are required. (Please note that the Dec 31 return is for the quarter ended, NOT the year ended):

Quarter Ended	Mar. 31	Jun. 30	Sept. 30	Dec. 31
2013				XXXXXXX
2012	XXXXXXX	XXXXXXX	XXXXXXX	

Historical Rates of Return (%)

You've responded that your fund did NOT participate in last year's Study...

Please provide actual (not annualized) QUARTERLY returns for at least the trailing five years, 10 if possible.

**December 31, 2012 return already provided above.*

Quarter Ended	Mar. 31	Jun. 30	Sept. 30	Dec. 31
2012				XXXXXXX
2011				
2010				
2009				
2008				
2007				
2006				
2005				
2004				
2003				

Actuarial Investment Return Assumption (%) _____

Inflation Assumption (%) _____

Market Value Data (in Dollars)

Please provide the Total Market Value of your Fund as of Sep. 30, 2013.

This does not have to be an audited number, custodial market value is sufficient.

Total Fund Value (\$) _____

Asset Allocation

Please provide the percentage of your TOTAL INVESTABLE ASSETS invested in each of the asset classes below. If unable to respond with detail within each class, answer as a minimum, CLASS TOTALS. Mandates within each asset class should be reported as a percentage of the Total Portfolio and TOTALS for each asset class should sum to 100%.

Domestic Equities

_____ Active -- INCLUDE REITs HERE

_____ Index (Passive/Enhanced)

_____ *If entering CLASS TOTAL ONLY - please report percentage here

Fixed Income

_____ Domestic (U.S.) Investment Grade (Active) -- INCLUDE TIPs HERE

_____ Domestic (U.S.) Investment Grade (Passive)

_____ Domestic (U.S.) Non-Investment Grade (Active or Passive)

_____ International (Non-U.S.) Investment Grade (Active or Passive)

_____ Emerging Markets (Active or Passive)

_____ *If entering CLASS TOTAL ONLY - please report percentage here

International Equities

_____ Active MSCI EAFE®

_____ Passive/index MSCI EAFE®

_____ Emerging Markets

_____ *If entering CLASS TOTAL ONLY - please report percentage here

Alternative Strategies

_____ Private Equity Real Estate -- EXCLUDES REITs

_____ Venture Capital

_____ Private Equity -- LBO'S, MEZZANINE, M&A FUNDS, INTERNATIONAL PRIVATE EQUITY

_____ Energy & Natural Resources -- INCLUDES OIL, GAS, TIMBER

_____ Commodities and Managed Futures

_____ Marketable Alternative Strategies -- INCLUDE HEDGE FUNDS, ABSOLUTE RETURN, MARKET NEUTRAL, LONG/SHORT, 130/30 STRATEGY, EVENT DRIVEN AND DERIVATIVES

_____ Distressed Debt

_____ *If entering CLASS TOTAL ONLY - please report percentage here

Cash and Other

_____ Cash, Money Market Investments, Treasuries -- ALL INVESTMENTS <1 YEAR

_____ Other -- Please Specify

Thank you in advance for your assistance in this important research.

Our goal will be to compile and analyze the data we receive from you and your colleagues and release the results at the Twenty-Fifth Annual Conference in Fort Worth, Texas on March 23-26, 2014.

OK to identify your Fund by name in the annual performance report?

Yes No

Appendix 2

List of TEXPERS Survey Respondents

Abilene Firemen's Relief and Retirement Fund
Amarillo Firemen's Relief & Retirement Fund
Atlanta Firemen's Relief and Retirement Fund
Austin Employees' Retirement System
Austin Fire Fighters Relief & Retirement Fund
Austin Police Retirement System
Beaumont Firemen's Relief & Retirement Fund
Big Spring Firemen's Relief & Retirement Fund
Brownwood Firemen's Relief and Retirement Fund
Capital Metro Retirement Plan for StarTran
Capital MTA Retirement Plan for Admin Employees
Conroe Firefighters Relief & Retirement Fund
Corpus Christi Firefighters' Retirement System
Corsicana Firemen's Relief & Retirement Fund
CPS Energy Employees' Benefit Trust
Dallas Employees' Retirement Fund
Dallas Police and Fire Pension System
Dallas Police and Fire Supplemental Pension System
DART Employees' Defined Benefit Retirement Plan & Trust
El Paso City Employees' Pension Fund
El Paso Firemen & Policemen's Pension Fund
Floresville Electric Light & Power System
Fort Worth Employees' Retirement Fund
Galveston Firefighters Pension Fund
Greenville Firemen's Relief and Retirement Fund
Guadalupe-Blanco River Authority Defined Benefit Plan
Harlingen Firemen's Relief and Retirement Fund
Houston Municipal Employees Pension System
Houston Police Officers' Pension System
Irving Firemen's Relief & Retirement Fund
Irving Supplemental Benefit Plan
Killeen Firefighters' 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 and Retirement Fund
Midland Firemen's Relief and Retirement Fund
MTA of Harris County Non-Union Pension Plan
MTA of Harris County Workers Union Pension Plan
Odessa Firefighters' Relief & Retirement Fund
Orange Firemen's Relief & Retirement Fund
Plainview Fire Fighter's Relief and Retirement Fund
Plano Retirement Security Plan
Port Arthur Firemen's Relief and Retirement Fund
San Antonio Fire & Police Pension Fund
San Benito Fireman's R&R Fund
Sweetwater Firemen's Relief & Retirement Fund
Temple Firefighter's Relief and Retirement Fund
Texarkana Firemen's Relief and Retirement Fund
Texas Emergency Services Retirement System
Texas Employees Retirement System
Texas Teacher Retirement System
Travis County ESD#6 Firefighters' Relief & Retirement Fund
Tyler Firefighters Relief and Retirement Fund
University Park Firefighters Relief and Retirement Fund
VIA Metropolitan Transit Retirement Plan
Waxahachie Firefighter's relief and Retirement
Wichita Falls Firemen's Relief & Retirement Fund

Appendix 3

Respondent Fund Number - Name Cross Reference

Number	Name
24	Abilene Firemen's Relief and Retirement Fund
14	Amarillo Firemen's Relief & Retirement Fund
30	Atlanta Firemen's Relief and Retirement Fund
2	Austin Employees' Retirement System
25	Austin Fire Fighters Relief & Retirement Fund
15	Austin Police Retirement System
26	Beaumont Firemen's Relief & Retirement Fund
18	Big Spring Firemen's Relief & Retirement Fund
27	Brownwood Firemen's Relief and Retirement Fund
64	Capital Metro Retirement Plan for StarTran
65	Capital MTA Retirement Plan for Admin Employees
9	Conroe Firefighters Relief & Retirement Fund
20	Corpus Christi Firefighters' Retirement System
7	Corsicana Firemen's Relief & Retirement Fund
29	Dallas Employees' Retirement Fund
8	Dallas Police and Fire Pension System
45	Dallas Police and Fire Supplemental Pension System
34	DART Employees' Defined Benefit Retirement Plan & Trust
3	El Paso City Employees' Pension Fund
31	El Paso Firemen & Policemen's Pension Fund
35	Floresville Electric Light & Power System
23	Fort Worth Employees' Retirement Fund
56	Galveston Firefighters Pension Fund
19	Greenville Firemen's Relief and Retirement Fund
5	Guadalupe-Blanco River Authority Defined Benefit Plan
50	Harlingen Firemen's' Relief and Retirement Fund
47	Houston Municipal Employees Pension System
11	Houston Police Officers' Pension System
16	Irving Firemen's Relief & Retirement Fund
1	Irving Supplemental Benefit Plan
57	Killeen Firefighters' 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
17	Marshall Firemen's Relief & Retirement Fund
33	McAllen Firemen's Relief and Retirement Fund
41	MTA of Harris County 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
40	Plainview Fire Fighter's Relief and Retirement Fund
36	Plano Retirement Security Plan
59	Port Arthur Firemen's' Relief and Retirement Fund
46	San Benito Fireman's R&R Fund
44	Sweetwater Firemen's Relief & Retirement Fund
52	Temple Firefighter's Relief and Retirement Fund
48	Texarkana Firemen's Relief and Retirement Fund
39	Texas Emergency Services Retirement System
66	Texas Employees Retirement System
67	Texas Teacher Retirement System
62	Travis County ESD#6 Firefighters' Relief & Retirement Fund
49	Tyler Firefighters Relief and Retirement Fund
37	University Park Firefighters Relief and Retirement Fund
32	VIA Metropolitan Transit Retirement Plan

Appendix 4

Respondent Fund Number - Return Assumptions

Fund	Nominal	Inflation	Real	Fund	Nominal	Inflation	Real
1	7.00	2.00	5.00	34	7.00	3.25	3.75
2	7.75	3.25	4.50	35	8.00	4.00	4.00
3	7.50	3.50	4.00	36	7.75	3.00	4.75
4	8.00	2.00	6.00	37	8.00	4.00	4.00
5	7.75	4.00	3.75	38	7.50	3.50	4.00
6	8.00	3.75	4.25	39	7.75	3.50	4.25
7	7.50	2.00	5.50	40	7.75	2.00	5.75
8	8.50	4.00	4.50	41	8.00	2.50	5.50
9	7.75	4.00	3.75	42	7.75	3.00	4.75
10	7.00	2.50	4.50	43	8.00	2.00	6.00
11	8.50	3.00	5.50	44	8.00	3.00	5.00
12	8.00	2.00	6.00	45	8.50	4.00	4.50
13	8.00	3.00	5.00	46	6.50	2.00	4.50
14	8.25	3.00	5.25	47	8.50	3.00	5.50
15	8.00	3.75	4.25	48	7.75	3.50	4.25
16	8.25	2.00	6.25	49	7.75	3.75	4.00
17	7.75	4.00	3.75	50	8.00	4.00	4.00
18	8.00	3.00	5.00	51	8.25	3.00	5.25
19	8.25	3.00	5.25	52	8.00	4.00	4.00
20	8.00	4.00	4.00	56	8.00	2.00	6.00
22	8.00	2.50	5.50	57	7.75	4.00	3.75
23	8.00	3.00	5.00	59	8.00	4.00	4.00
24	8.00	3.00	5.00	62	7.00	3.00	4.00
25	7.75	3.50	4.25	63	8.00	0.00	8.00
26	8.00	3.50	4.50	64	7.50	0.00	7.50
27	7.25	2.00	5.25	65	7.25	3.00	4.25
28	7.50	2.00	5.50	66	8.00	3.50	4.50
29	8.25	3.00	5.25	67	8.00	3.00	5.00
30	7.25	4.00	3.25				
31	7.75	3.50	4.25				
32	7.50	3.00	4.50				
33	8.00	3.00	5.00				