

# CITY OF DELRAY BEACH FIREFIGHTERS' RETIREMENT SYSTEM

Chapter 112.664, F.S. Compliance Report  
In Connection with the October 1, 2020 Funding Actuarial  
Valuation Report  
And the Plan's Financial Reporting for the Year Ending  
September 30, 2020





August 26, 2021

Board of Trustees  
City of Delray Beach Firefighters' Retirement System  
Delray Beach, Florida

Dear Board Members:

Gabriel, Roeder, Smith & Company (GRS) has been engaged by the City of Delray Beach Firefighters' Retirement System (System) to prepare a disclosure report to satisfy the requirements set forth in Ch. 112.664, F.S. and as further required pursuant to Ch. 60T-1.0035, F.A.C.

This report was prepared at the request of the Board and is intended for use by the Retirement Board and those designated or approved by the Board. This report may be provided to parties other than the System only in its entirety and only with the permission of the Board.

The purpose of the report is to provide the required information specified in Ch. 112.664, F.S. as well as supplement this information with additional exhibits. This report should not be relied on for any purpose other than the purpose described above.

The findings in this report are based on data or other information through September 30, 2020. 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. The scope of this engagement does not include an analysis of the potential range of such measurements.

This report was based upon information furnished by the City and the Board concerning Plan benefits, financial transactions, plan provisions and active members, terminated members, retirees and beneficiaries. We checked for internal and year-to-year consistency, but did not otherwise audit the data. We are not responsible for the accuracy or completeness of the information provided by the City.

Except as otherwise indicated as required for the disclosures contained herein, this report was prepared using certain assumptions selected by the Board as described in our October 1, 2020 actuarial valuation report. This report is also based on the Plan Provisions, census data, and financial information as summarized in our October 1, 2020 actuarial valuation report. Please refer to the October 1, 2020 actuarial valuation report, dated June 11, 2021, for summaries and descriptions of this information.

The use of an investment return assumption that is 2% higher than the investment return assumption used to determine the funding requirements does not represent an estimate of future Plan experience nor does it reflect an observation of future return estimates inherent in financial market data. The use of this investment return assumption is provided as a counterpart to the Chapter 112.664, Florida Statutes requirement to utilize an investment return assumption that is 2% lower than the assumption used to determine the funding requirements. The inclusion of the additional exhibits showing the effect of using a 2% higher investment return assumption shows a more complete assessment of the range of possible results as opposed to showing a one-sided range as required by Florida Statutes.

This report has been prepared by actuaries who have substantial experience valuing public employee retirement systems. To the best of our knowledge the information contained in this report is accurate and fairly presents the actuarial position of the Retirement Plan as of the valuation date. All calculations have been made in conformity with generally accepted actuarial principles and practices, with the Actuarial Standards of Practice issued by the Actuarial Standards Board and with applicable statutes.

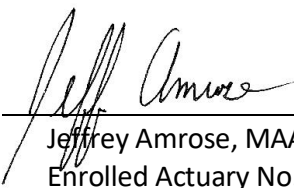
This report was prepared using our proprietary valuation model and related software which in our professional judgment has the capability to provide results that are consistent with the purposes of the valuation and has no material limitations or known weaknesses. We performed tests to ensure that the model reasonably represents that which is intended to be modeled.


Jeffrey Amrose and Trisha Amrose are members of the American Academy of Actuaries and meet the Qualification Standards of the American Academy of Actuaries to render the actuarial opinions contained herein. The signing actuaries are independent of the plan sponsor.

With respect to the reporting standards for defined benefit retirement plans or systems contained in Section 112.664(1) F.S., the actuarial disclosures required under this section were prepared and complete by us or under our direct supervision, and we acknowledge responsibility for the results. To the best of our knowledge, the results are complete and accurate, and in our opinion, meet the requirements of Section 112.664(1), F.S. and Section 60T-1.0035, F.A.C.

Respectfully submitted,

GABRIEL, ROEDER, SMITH & COMPANY

By   
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Enrolled Actuary No. 20-6599  
Senior Consultant & Actuary

By   
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Enrolled Actuary No. 20-8010  
Consultant & Actuary



# TABLE OF CONTENTS

Title	Page
Ch. 112.664, F.S. Results	
Schedule of Changes in Net Pension Liability	
1. Using financial reporting assumptions per GASB Statement No. 67	1
2. Using assumptions prescribed in Section 112.664(1)(a), F.S.	2
3. Using assumptions prescribed in Section 112.664(1)(b), F.S.	3
4. Using the mandated mortality and funding interest rate +2%	4
Assets Versus Benefit Payments Projections	
1. Using assumptions from the Plan's latest actuarial valuation	5
2. Using assumptions prescribed in Section 112.664(1)(a), F.S.	6
3. Using assumptions prescribed in Section 112.664(1)(b), F.S.	7
4. Using the mandated mortality and funding interest rate +2%	8
Actuarially Determined Contribution	9



## **CH. 112.664, FLORIDA STATUTES**

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### **RESULTS**

**Schedule of Changes in the Employers' Net Pension Liability  
Using Financial Reporting Assumptions per GASB Statement No. 67**

Fiscal year ending September 30,	<u>2020</u>
<b>1. Total pension liability</b>	
a. Service Cost	\$ 3,280,458
b. Interest	12,697,183
c. Benefit Changes	19,307
d. Difference between actual & expected experience & Other	89,257
e. Assumption Changes	(772,154)
f. Benefit Payments	(8,584,372)
g. Contribution Refunds	(25,385)
<b>h. Net Change in Total Pension Liability</b>	<u>6,704,294</u>
<b>i. Total Pension Liability - Beginning</b>	<u>182,412,751</u>
<b>j. Total Pension Liability - Ending</b>	<u>\$ 189,117,045</u>
<b>2. Plan Fiduciary Net Position</b>	
a. Contributions - Employer and Non-Employer	\$ 6,941,701
b. Contributions - State	1,109,338
c. Contributions - Member	1,119,504
d. Net Investment Income	10,124,131
e. Benefit Payments	(8,584,372)
f. Contribution Refunds	(25,385)
g. Administrative Expense	(142,338)
h. Other	-
<b>i. Net Change in Plan Fiduciary Net Position</b>	<u>10,542,579</u>
<b>j. Plan Fiduciary Net Position - Beginning</b>	<u>120,485,851</u>
<b>k. Plan Fiduciary Net Position - Ending</b>	<u>\$ 131,028,430</u>
<b>3. Net Pension Liability / (Asset)</b>	58,088,615
<b>Certain Key Assumptions</b>	
Valuation Date	10/01/2019
Measurement Date	09/30/2020
Investment Return Assumption	6.75%
Mortality Table	FRS Mortality - Special Risk



**Schedule of Changes in the Employers' Net Pension Liability  
Using Assumptions required under 112.664(1)(a), F.S.**

Fiscal year ending September 30,	<u>2020</u>
<b>1. Total pension liability</b>	
a. Service Cost	\$ 3,280,458
b. Interest	12,697,183
c. Benefit Changes	19,307
d. Difference between actual & expected experience & Other	89,257
e. Assumption Changes	(772,154)
f. Benefit Payments	(8,584,372)
g. Contribution Refunds	(25,385)
<b>h. Net Change in Total Pension Liability</b>	<u>6,704,294</u>
<b>i. Total Pension Liability - Beginning</b>	<u>182,412,751</u>
<b>j. Total Pension Liability - Ending</b>	<u>\$ 189,117,045</u>
<b>2. Plan Fiduciary Net Position</b>	
a. Contributions - Employer and Non-Employer	\$ 6,941,701
b. Contributions - State	1,109,338
c. Contributions - Member	1,119,504
d. Net Investment Income	10,124,131
e. Benefit Payments	(8,584,372)
f. Contribution Refunds	(25,385)
g. Administrative Expense	(142,338)
h. Other	-
<b>i. Net Change in Plan Fiduciary Net Position</b>	<u>10,542,579</u>
<b>j. Plan Fiduciary Net Position - Beginning</b>	<u>120,485,851</u>
<b>k. Plan Fiduciary Net Position - Ending</b>	<u>\$ 131,028,430</u>
<b>3. Net Pension Liability / (Asset)</b>	58,088,615
<b>Certain Key Assumptions</b>	
Valuation Date	10/01/2019
Measurement Date	09/30/2020
Investment Return Assumption	6.75%
Mortality Table	FRS Mortality - Special Risk



**Schedule of Changes in the Employers' Net Pension Liability  
Using Assumptions required under 112.664(1)(b), F.S.**

Fiscal year ending September 30,	<u>2020</u>
<b>1. Total pension liability</b>	
a. Service Cost	\$ 5,828,997
b. Interest	10,895,952
c. Benefit Changes	-
d. Difference between actual & expected experience & Other	-
e. Assumption Changes	-
f. Benefit Payments	(8,584,372)
g. Contribution Refunds	(25,385)
<b>h. Net Change in Total Pension Liability</b>	<u>8,115,192</u>
<b>i. Total Pension Liability - Beginning</b>	<u>227,864,345</u>
<b>j. Total Pension Liability - Ending</b>	<u>\$ 235,979,537</u>
<b>2. Plan Fiduciary Net Position</b>	
a. Contributions - Employer and Non-Employer	\$ 6,941,701
b. Contributions - State	1,109,338
c. Contributions - Member	1,119,504
d. Net Investment Income	10,124,131
e. Benefit Payments	(8,584,372)
f. Contribution Refunds	(25,385)
g. Administrative Expense	(142,338)
h. Other	-
<b>i. Net Change in Plan Fiduciary Net Position</b>	<u>10,542,579</u>
<b>j. Plan Fiduciary Net Position - Beginning</b>	<u>120,485,851</u>
<b>k. Plan Fiduciary Net Position - Ending</b>	<u>\$ 131,028,430</u>
<b>3. Net Pension Liability / (Asset)</b>	104,951,107
<b>Certain Key Assumptions</b>	
Valuation Date	10/01/2019
Measurement Date	09/30/2020
Investment Return Assumption	4.75%
Mortality Table	FRS Mortality - Special Risk





**Schedule of Changes in the Employers' Net Pension Liability**  
**Using Assumptions under 112.664(1)(b), F.S. except 2% higher investment return assumption**

Fiscal year ending September 30,	<u>2020</u>
<b>1. Total pension liability</b>	
a. Service Cost	\$ 2,327,816
b. Interest	13,020,295
c. Benefit Changes	-
d. Difference between actual & expected experience & Other	-
e. Assumption Changes	-
f. Benefit Payments	(8,584,372)
g. Contribution Refunds	(25,385)
<b>h. Net Change in Total Pension Liability</b>	<u>6,738,354</u>
<b>i. Total Pension Liability - Beginning</b>	<u>150,780,434</u>
<b>j. Total Pension Liability - Ending</b>	<u>\$ 157,518,788</u>
<b>2. Plan Fiduciary Net Position</b>	
a. Contributions - Employer and Non-Employer	\$ 6,941,701
b. Contributions - State	1,109,338
c. Contributions - Member	1,119,504
d. Net Investment Income	10,124,131
e. Benefit Payments	(8,584,372)
f. Contribution Refunds	(25,385)
g. Administrative Expense	(142,338)
h. Other	-
<b>i. Net Change in Plan Fiduciary Net Position</b>	<u>10,542,579</u>
<b>j. Plan Fiduciary Net Position - Beginning</b>	<u>120,485,851</u>
<b>k. Plan Fiduciary Net Position - Ending</b>	<u>\$ 131,028,430</u>
<b>3. Net Pension Liability / (Asset)</b>	26,490,358
<b>Certain Key Assumptions</b>	
Valuation Date	10/01/2019
Measurement Date	09/30/2020
Investment Return Assumption	8.75%
Mortality Table	FRS Mortality - Special Risk



**Asset and Benefit Payment Projection**  
**Not Reflecting Any Contributions from the Employer, State or Employee**  
**Using Assumptions from the Plan's Latest Actuarial Valuation**

FYE	Market Value of Assets (BOY)	Expected Investment Return	Projected Benefit Payments	Market Value of Assets (EOY)
2021	118,579,565	7,551,758	9,181,525	116,949,798
2022	116,949,798	7,437,755	9,363,602	115,023,951
2023	115,023,951	7,298,546	9,714,450	112,608,047
2024	112,608,047	7,128,312	10,021,763	109,714,596
2025	109,714,596	6,924,660	10,382,864	106,256,392
2026	106,256,392	6,685,583	10,683,859	102,258,116
2027	102,258,116	6,406,588	11,109,791	97,554,913
2028	97,554,913	6,085,891	11,384,828	92,255,976
2029	92,255,976	5,727,214	11,614,929	86,368,261
2030	86,368,261	5,331,549	11,784,091	79,915,719
2031	79,915,719	4,898,381	11,955,791	72,858,309
2032	72,858,309	4,427,551	12,054,702	65,231,158
2033	65,231,158	3,920,417	12,110,110	57,041,465
2034	57,041,465	3,376,757	12,143,096	48,275,126
2035	48,275,126	2,795,109	12,169,600	38,900,635
2036	38,900,635	2,173,990	12,171,392	28,903,233
2037	28,903,233	1,513,021	12,130,347	18,285,907
2038	18,285,907	811,990	12,058,902	7,038,995
2039	7,038,995	69,837	11,969,706	-
2040	-	-	11,874,315	-
2041	-	-	11,743,168	-
2042	-	-	11,590,143	-
2043	-	-	11,450,098	-
2044	-	-	11,253,845	-
2045	-	-	11,037,291	-
2046	-	-	10,793,087	-

Number of years for which current market value of assets are adequate to sustain the payment of expected retirement benefits, reflecting no contributions from the Employer, Employee or State, contrary to Florida Statutes and Plan provisions: 18.58

**Certain Key Assumptions**

Valuation Investment Return Assumption 6.625%  
 Valuation Mortality Table FRS Mortality - Special Risk

**Note: As required in Section 112.664(1)(c) of the Florida Statutes, the projection of the Fund assets do not include contributions from the Employer, Employee or State, which is contrary to Florida Statutes and Plan provisions. For this reason, these projections should not be viewed as a representation of the amount of time the Fund can sustain benefit payments. Under the GASB standards which DO include contributions from the employer, employee and State, the Fund is expected to be able to sustain the benefit payment demands in the near-term and long-term future.**



**Asset and Benefit Payment Projection**  
**Not Reflecting Any Contributions from the Employer, State or Employee**  
**Using Assumptions required under 112.664(1)(a), F.S.**

FYE	Market Value of Assets (BOY)	Expected Investment Return	Projected Benefit Payments	Market Value of Assets (EOY)
2021	118,579,565	7,551,758	9,181,525	116,949,798
2022	116,949,798	7,437,755	9,363,602	115,023,951
2023	115,023,951	7,298,546	9,714,450	112,608,047
2024	112,608,047	7,128,312	10,021,763	109,714,596
2025	109,714,596	6,924,660	10,382,864	106,256,392
2026	106,256,392	6,685,583	10,683,859	102,258,116
2027	102,258,116	6,406,588	11,109,791	97,554,913
2028	97,554,913	6,085,891	11,384,828	92,255,976
2029	92,255,976	5,727,214	11,614,929	86,368,261
2030	86,368,261	5,331,549	11,784,091	79,915,719
2031	79,915,719	4,898,381	11,955,791	72,858,309
2032	72,858,309	4,427,551	12,054,702	65,231,158
2033	65,231,158	3,920,417	12,110,110	57,041,465
2034	57,041,465	3,376,757	12,143,096	48,275,126
2035	48,275,126	2,795,109	12,169,600	38,900,635
2036	38,900,635	2,173,990	12,171,392	28,903,233
2037	28,903,233	1,513,021	12,130,347	18,285,907
2038	18,285,907	811,990	12,058,902	7,038,995
2039	7,038,995	69,837	11,969,706	-
2040	-	-	11,874,315	-
2041	-	-	11,743,168	-
2042	-	-	11,590,143	-
2043	-	-	11,450,098	-
2044	-	-	11,253,845	-
2045	-	-	11,037,291	-
2046	-	-	10,793,087	-

Number of years for which current market value of assets are adequate to sustain the payment of expected retirement benefits, reflecting no contributions from the Employer, Employee or State, contrary to Florida Statutes and Plan provisions: 18.58

**Certain Key Assumptions**

Valuation Investment Return Assumption 6.625%  
 Valuation Mortality Table FRS Mortality - Special Risk

**Note: As required in Section 112.664(1)(c) of the Florida Statutes, the projection of the Fund assets do not include contributions from the Employer, Employee or State, which is contrary to Florida Statutes and Plan provisions. For this reason, these projections should not be viewed as a representation of the amount of time the Fund can sustain benefit payments. Under the GASB standards which DO include contributions from the employer, employee and State, the Fund is expected to be able to sustain the benefit payment demands in the near-term and long-term future.**



**Asset and Benefit Payment Projection**  
**Not Reflecting Any Contributions from the Employer, State or Employee**  
**Using Assumptions required under 112.664(1)(b), F.S.**

FYE	Market Value of Assets (BOY)	Expected Investment Return	Projected Benefit Payments	Market Value of Assets (EOY)
2021	118,579,565	5,271,982	9,181,525	114,670,022
2022	114,670,022	5,086,955	9,363,602	110,393,375
2023	110,393,375	4,881,047	9,714,450	105,559,972
2024	105,559,972	4,650,395	10,021,763	100,188,604
2025	100,188,604	4,393,619	10,382,864	94,199,359
2026	94,199,359	4,109,656	10,683,859	87,625,156
2027	87,625,156	3,795,750	11,109,791	80,311,115
2028	80,311,115	3,451,115	11,384,828	72,377,402
2029	72,377,402	3,078,860	11,614,929	63,841,333
2030	63,841,333	2,680,155	11,784,091	54,737,397
2031	54,737,397	2,255,127	11,955,791	45,036,733
2032	45,036,733	1,804,184	12,054,702	34,786,215
2033	34,786,215	1,328,816	12,110,110	24,004,921
2034	24,004,921	829,419	12,143,096	12,691,244
2035	12,691,244	305,548	12,169,600	827,192
2036	827,192	-	12,171,392	-
2037	-	-	12,130,347	-
2038	-	-	12,058,902	-
2039	-	-	11,969,706	-
2040	-	-	11,874,315	-
2041	-	-	11,743,168	-
2042	-	-	11,590,143	-
2043	-	-	11,450,098	-
2044	-	-	11,253,845	-
2045	-	-	11,037,291	-
2046	-	-	10,793,087	-

Number of years for which current market value of assets are adequate to sustain the payment of expected retirement benefits, reflecting no contributions from the Employer, Employee or State, contrary to Florida Statutes and Plan provisions: 15.08

**Certain Key Assumptions**

Valuation Investment Return Assumption 4.625%  
 Valuation Mortality Table FRS Mortality - Special Risk

**Note: As required in Section 112.664(1)(c) of the Florida Statutes, the projection of the Fund assets do not include contributions from the Employer, Employee or State, which is contrary to Florida Statutes and Plan provisions. For this reason, these projections should not be viewed as a representation of the amount of time the Fund can sustain benefit payments. Under the GASB standards which DO include contributions from the employer, employee and State, the Fund is expected to be able to sustain the benefit payment demands in the near-term and long-term future.**



**Asset and Benefit Payment Projection**

**Not Reflecting Any Contributions from the Employer, State or Employee**

**Using Assumptions under 112.664(1)(b), F.S. except 2% higher investment return assumption**

FYE	Market Value of Assets (BOY)	Expected Investment Return	Projected Benefit Payments	Market Value of Assets (EOY)
2021	118,579,565	9,831,534	9,181,525	119,229,574
2022	119,229,574	9,879,745	9,363,602	119,745,717
2023	119,745,717	9,909,132	9,714,450	119,940,399
2024	119,940,399	9,912,671	10,021,763	119,831,307
2025	119,831,307	9,887,689	10,382,864	119,336,132
2026	119,336,132	9,832,000	10,683,859	118,484,273
2027	118,484,273	9,740,159	11,109,791	117,114,641
2028	117,114,641	9,610,167	11,384,828	115,339,980
2029	115,339,980	9,447,179	11,614,929	113,172,230
2030	113,172,230	9,252,916	11,784,091	110,641,055
2031	110,641,055	9,027,198	11,955,791	107,712,462
2032	107,712,462	8,770,341	12,054,702	104,428,101
2033	104,428,101	8,484,675	12,110,110	100,802,666
2034	100,802,666	8,170,559	12,143,096	96,830,129
2035	96,830,129	7,826,785	12,169,600	92,487,314
2036	92,487,314	7,452,140	12,171,392	87,768,062
2037	87,768,062	7,046,874	12,130,347	82,684,589
2038	82,684,589	6,611,506	12,058,902	77,237,193
2039	77,237,193	6,145,514	11,969,706	71,413,001
2040	71,413,001	5,647,292	11,874,315	65,185,978
2041	65,185,978	5,115,866	11,743,168	58,558,676
2042	58,558,676	4,550,861	11,590,143	51,519,394
2043	51,519,394	3,949,762	11,450,098	44,019,058
2044	44,019,058	3,311,322	11,253,845	36,076,535
2045	36,076,535	2,635,618	11,037,291	27,674,862
2046	27,674,862	1,921,505	10,793,087	18,803,280
2047	18,803,280	1,167,625	10,531,196	9,439,709
2048	9,439,709	371,957	10,254,335	-

Number of years for which current market value of assets are adequate to sustain the payment of expected retirement benefits, reflecting no contributions from the

**Employer, Employee or State, contrary to Florida Statutes and Plan provisions:** 27.92

**Certain Key Assumptions**

Valuation Investment Return Assumption	8.625%
Valuation Mortality Table	FRS Mortality - Special Risk

**Note: As required in Section 112.664(1)(c) of the Florida Statutes, the projection of the Fund assets do not include contributions from the Employer, Employee or State, which is contrary to Florida Statutes and Plan provisions. For this reason, these projections should not be viewed as a representation of the amount of time the Fund can sustain benefit payments. Under the GASB standards which DO include contributions from the employer, employee and State, the Fund is expected to be able to sustain the benefit payment demands in the near-term and long-term future.**



**ACTUARIALLY DETERMINED CONTRIBUTION**

	Plan's Latest Actuarial Valuation	112.664(1)(a) F.S. Assumptions	112.664(1)(b) F.S. Assumptions	112.664(1)(b) F.S. except 2% higher investment return assumption
A. Valuation Date	October 1, 2020	October 1, 2020	October 1, 2020	October 1, 2020
B. Actuarially Determined Contribution (ADC) to Be Paid During Fiscal Year Ending	9/30/2022	9/30/2022	9/30/2022	9/30/2022
C. Assumed Dates of Employer Contributions	Biweekly	Biweekly	Biweekly	Biweekly
D. Annual Payment to Amortize Unfunded Actuarial Liability	\$ 5,917,191	\$ 5,917,191	\$ 8,703,430	\$ 3,540,585
E. Employer Normal Cost	2,905,838	2,905,838	5,378,918	1,481,148
F. ADC if Paid on Valuation Date: D + E	8,823,029	8,823,029	14,082,348	5,021,733
G. ADC Adjusted for Frequency of Payments	9,117,189	9,117,189	14,413,142	5,237,668
H. ADC as % of Covered Payroll	68.52 %	68.52 %	108.32 %	39.36 %
I. Assumed Rate of Increase in Covered Payroll to Contribution Year	5.55 %	5.55 %	5.55 %	5.55 %
J. Covered Payroll for Contribution Year	14,044,887	14,044,887	14,044,887	14,044,887
K. ADC for Contribution Year: H x J	9,623,557	9,623,557	15,213,422	5,528,068
L. Estimated Credit for State Revenue in Contribution Year	1,109,338	1,109,338	1,109,338	1,109,338
M. Required Employer Contribution (REC) in Contribution Year	8,514,219	8,514,219	14,104,084	4,418,730
N. REC as % of Covered Payroll in Contribution Year: M ÷ J	60.62 %	60.62 %	100.42 %	31.46 %
O. Expected Member Contributions	1,333,262	1,333,262	1,333,262	1,333,262
P. Total Contribution (Including Members) in Contribution Year	10,956,819	10,956,819	16,546,684	6,861,330
Q. Total Contribution as % of Covered Payroll in Contribution Year: P ÷ J	78.01 %	78.01 %	117.81 %	48.85 %
R. Certain Key Assumptions				
Investment Return Assumption	6.625 %	6.625 %	4.625 %	8.625 %
Mortality Table	FRS Mortality - Special Risk	FRS Mortality - Special Risk	FRS Mortality - Special Risk	FRS Mortality - Special Risk

