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# Actuarial Projections for the National Religious Retirement Office

**MERCER**

Human Resource Consulting

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## Introduction

Mercer Human Resource Consulting ("Mercer") has been retained by the National Religious Retirement Office (NRRO) to estimate future aged and infirm care ("retirement") costs.

The purpose of this report is to summarize the projection findings. The report is designed to illustrate projection results using current data and existing actuarial assumptions. The findings are based upon on information and data provided by the NRRO.

The projections are performed for the 20-year period ending December 31, 2023 and uses data provided as of December 31, 2003 to project future cost of care, future population demographics, Social Security, and retirement fund trends. Actuarial assumptions used in the projections were determined using information provided by the NRRO. These assumptions are set forth in Section 2.

Annual cost of care data is based on the results of an analysis provided by the NRRO. Using data supplied by the NRRO as of December 31, 2003, the annual per capita cost was assumed to be \$26,396.

Future cost of care includes the costs for Members who are currently retired and those who will retire in the future. Since the total cost of caring for a retired Member will increase with inflation, the projections assume future benefit escalation. Actual future cost of care should be compared with the projections to detect any trends that would allow for a more accurate projection.

The retirement fund projections provide projected retirement fund balances and estimates of the percentage of unfundedness for men, women and men & women combined over the 20-year period based on assets designated for retirement.

The accuracy of the final results is largely dependent upon the accuracy of the actuarial assumptions used. If significant deviations between the projection results and actual experience emerge, a revision to the projections using revised assumptions and updated data would be advisable. The calculations reported herein have been made on a basis consistent with generally accepted actuarial principles and practices.



## Actuarial Assumptions

### A. Basis and Significance of Selection

In anticipating the future financial needs of the Men and Women Religious (Religious), it is necessary to have expectations concerning the future characteristics of the Religious population and the levels of those items that generate revenue and expense for Religious. To prepare future estimates of this type, assumptions need to be made concerning the frequency and timing of certain future events. For those events that are economic in nature, rates of future increases need to be approximated.

Actuarial assumptions are a significant component of any projections into the future. In order for the projections to be at all reliable, the assumptions used need to be reasonable based on those facts that are already known. Slight deviations between future experience and the assumptions used will not generally decrease the reliability of the projection results. However, significant deviations will harm the credibility of the projections, so any user of the projections needs to be aware of how Religious experience since the date of the study is comparing to the assumed experience. In judging whether or not there have been deviations, it must be realized that the assumptions used are long-term assumptions; they represent the best guess model of future experience over a 20-year period. Actual experience may differ from the assumptions each year, but over the longer 20-year period, the assumptions are expected to represent the average experience.

Demographic assumptions are those assumptions related to future Religious population changes.

Economic assumption data provided by the NRRO are used to predict the investment yield earned by Religious on its investments and the rate of increase in Religious revenue and expense items. The economic assumptions used reflect likely experience over the next 20 years based on past trends and current indicators.

## B. Demographic Assumptions

	<b><u>Current Assumptions (2004)</u></b>	<b><u>Prior Assumptions (1995)</u></b>
Mortality:	The William M. Mercer, Incorporated Mortality Table for Men Religious and Women Religious.	The William M. Mercer, Incorporated Mortality Table for Men Religious and Women Religious.
New Members:	The projections assumed no new members.	The projections assumed no new members.
Turnover:	The projections assumed no withdrawals.	The projections assumed no withdrawals.
Disabilities:	The projections assumed no disabilities.	The projections assumed no disabilities.
Retirement Age:	Men Religious currently under the age of 74 were assumed to retire at age 74. Women Religious currently under the age of 75 were assumed to retire at age 75.	Retirement age: age 70 for both Men and Women.

## C. Economic Assumptions

	<b><u>Current Assumptions (2004)</u></b>	<b><u>Prior Assumptions (1995)</u></b>
Investment Yield:	7.0%, per annum.	7.0%, per annum.
Annual Cost-of-Living:	Cost of care was assumed to increase at the rate of 6.0% per year. These costs include health care costs for retired members.	Cost of care was assumed to increase at the rate of 5.0% per year. These costs include health care costs for retired members.
Annual Cost of Care:	The average annual cost of care as of December 31, 2003 was assumed to be: \$26,396 per each retired Member. Cost of care is subject to the above annual cost-of-living increases. For projection purposes, Social Security is subtracted from the Cost of Care; then the cost of Care is inflated by the annual Cost of Living.	The average annual cost of care as of December 31, 2003 was assumed to be: \$26,396 per each retired Member. Cost of care is subject to the above annual cost-of-living increases. For projection purposes, Social Security is subtracted from the Cost of Care; then the cost of Care is inflated by the annual Cost of Living.
Social Security Increases:	Social Security benefits were assumed to increase at the rate of 3.0% per year and commence at age 65.	Social Security benefits were assumed received by all religious at age 65.



## Demographic Data Projections

### A. Current Demographic Data\*

<u>Age</u>	<u>Women</u>	<u>Men</u>	<u>Total Census</u>
90 & Above	4,206	229	4,435
85 – 89	5,901	564	6,465
80 – 84	6,696	962	7,658
75 – 79	8,161	1,483	9,644
70 – 74	8,928	1,773	10,701
65 – 69	8,332	1,571	9,903
60 – 64	7,385	1,549	8,934
55 – 59	5,032	1,357	6,389
50 – 54	2,261	1,061	3,322
45 – 49	1,177	782	1,959
40 – 44	717	606	1,323
35 – 39	532	431	963
30 – 34	367	322	689
25 – 29	<u>367</u>	<u>258</u>	<u>625</u>
<b>TOTAL</b>	<b>60,062</b>	<b>12,948</b>	<b>73,010</b>

\*Based upon data supplied by the NRRO as of December 31, 2003.

## B. Discussion of Mortality and Retirement Age Assumptions

Members of religious communities generally have longer life expectancies when compared to members of the general population. To be able to better reflect this fact in its frequent work with religious communities, William M. Mercer, Inc. has created a mortality table that reflects the actual mortality experience of a large number of communities. This special table has been employed in this study.

For this study, we used retirement age data provided by NRRO. NRRO provided results of research completed in June 2004 of the actual age of retirement for women and for men for the past three years. The study was done to provide a basis for the assumptions of when withdrawals from the retirement fund will begin. The criteria stated for retirement age was “retirement from full time compensated ministry.” The three year retroactive study indicated that in 2003 men retired from full time compensated ministry at age 74.1 and women at 74.8.

### C. Demographic Projections

The following chart provides a comparison over the next 20 years.

	<b>Women</b>				
	<b>Population Projections – Year Ending:</b>				
<b>December 31</b>	<b>2003*</b>	<b>2008</b>	<b>2013</b>	<b>2018</b>	<b>2023</b>
Under Age 75	35,098	25,484	16,999	9,816	5,071
Age 75 and Over	24,964	25,266	24,251	22,474	18,965
<b>Total</b>	<b>60,062</b>	<b>50,750</b>	<b>41,250</b>	<b>32,290</b>	<b>24,036</b>

*\*Based upon data supplied by the NRRO.*

The following chart provides a comparison over the next 20 years.

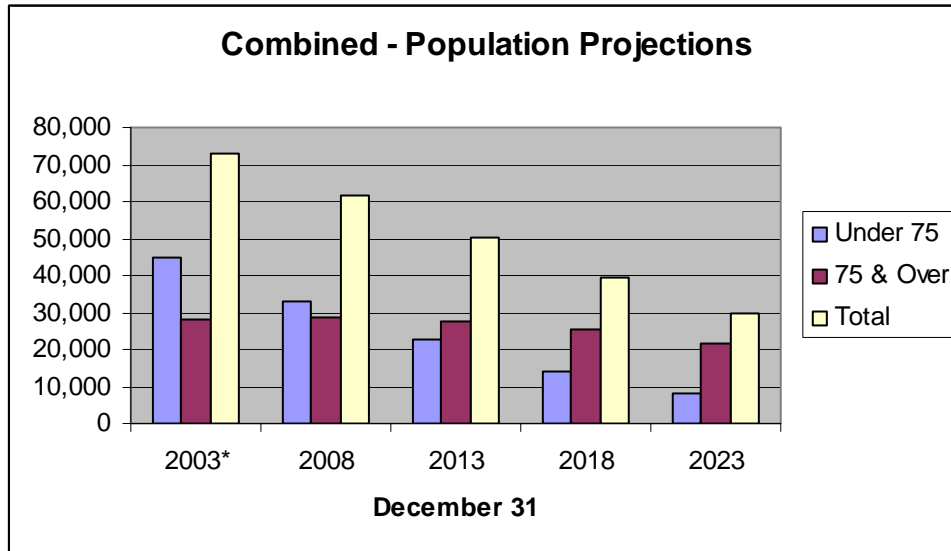
	<b>Men</b>				
	<b>Population Projections – Year Ending:</b>				
<b>December 31</b>	<b>2003*</b>	<b>2008</b>	<b>2013</b>	<b>2018</b>	<b>2023</b>
Under Age 75	9,710	7,301	5,604	4,089	2,859
Age 75 and Over	3,238	3,592	3,301	2,979	2,582
<b>Total</b>	<b>12,948</b>	<b>10,893</b>	<b>8,905</b>	<b>7,068</b>	<b>5,441</b>

*\*Based upon data supplied by the NRRO.*

The following chart and graph provides a comparison over the next 20 years.

	<b>Combined</b>				
	<b>Population Projections – Year Ending:</b>				
<b>December 31</b>	<b>2003*</b>	<b>2008</b>	<b>2013</b>	<b>2018</b>	<b>2023</b>
Under Age 75	44,808	32,785	22,603	13,905	7,930
Age 75 and Over	28,202	28,858	27,552	25,453	21,547
<b>Total</b>	<b>73,010</b>	<b>61,643</b>	<b>50,155</b>	<b>39,358</b>	<b>29,477</b>

*\*Based upon data supplied by the NRRO.*





## Social Security Benefit Projections

### A. Social Security Issues

In projecting future Social Security benefits, it was assumed that members would begin to receive their Social Security benefits at the age of 65 and that benefits being received would increase by 3.0% annually over the 20-year projection period. It was also assumed that there would be no significant changes in the current Social Security law.

An analysis of the Social Security benefit trend was based on NRRO information from 2001-2204. Since religious were only allowed in the Social Security program in 1973 and their FICA contribution is based on the fair market value of their basic cost of living, the benefits are significantly lower than the average U. S. beneficiary. The Social Security benefit data provided by the NRRO was separated for men and for women and assumed an average annual benefit of \$4,033 for women religious \$3,240 for men religious.

The NRRO should be aware that proposals have been discussed that could significantly change the Social Security system during the next 20 years. Depending on what proposal is adopted, benefits could increase, benefits could decrease, Social Security tax levels might increase, cost-of-living adjustments might decrease, and retirement ages might increase. It is premature at this point in time to predict that one set of changes might be more likely to be adopted over another. In any case, whatever changes occur is very likely to have a more significant affect on younger members than older members. For this reason, we do not believe that any of the proposed changes will have a major impact on our projections, especially for the first 10 to 15 years.

## B. Social Security Benefit Projections

After increasing slightly during the next ten years, the aggregate Social Security benefits exhibit a decreasing trend over the last ten years of the projection period.

<b>Year Ending December 31</b>	<b>Women Projected Annual Social Security Benefits</b>
2003*	\$170,289,400
2008	189,054,000
2013	194,783,200
2018	183,513,300
2023	161,046,000

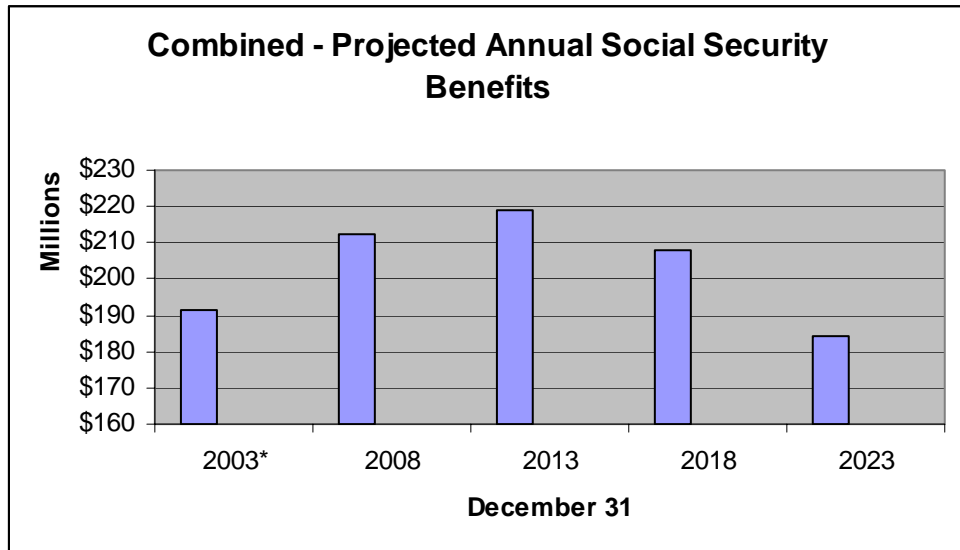
*\* Based on the average Social Security benefit provided by NRRO times the number of reported women age 65 and over.*

<b>Year Ending December 31</b>	<b>Men Projected Annual Social Security Benefits</b>
2003*	\$21,323,400
2008	23,250,100
2013	24,334,900
2018	24,239,600
2023	23,022,700

*\* Based on the average Social Security benefit provided by NRRO times the number of reported men age 65 and over.*

<b>Year Ending December 31</b>	<b>Combined Projected Annual Social Security Benefits</b>
2003*	\$191,612,800
2008	212,304,100
2013	219,118,100
2018	207,752,900
2023	184,068,700

\* Based on the average Social Security benefit provided by NRRO times the number of reported men and women age 65 and over.





## Retirement Fund Projections

### A. Cost of Care

A five-year analysis for the years 1999-2003 of the median and the average cost of care provided by each religious institute were studied by the NRRO. The analysis provided the rate of increase in the cost of care over these years for both men and women. This figure provided a basis for assuming average cost and a foundation for its annual rate of increase. The projections assume an average cost of care of \$26,396 and a 6% annual cost-of-living increase.

When the 6.0% cost-of-living increases are combined with the NRRO’s reported demographics and average per capita cost of \$26,396, the following cost of care over the next 20 years are obtained.

<b>Year Ending December 31</b>	<b>Women Projected Annual Cost of Care</b>
2003*	\$658,949,700
2008	892,508,700
2013	1,146,368,200
2018	1,421,679,600
2023	1,605,520,300

*\* Based on the average cost of care data provided by NRRO times the number of reported women age 75 and over.*

<b>Year Ending December 31</b>	<b>Men Projected Annual Cost of Care</b>
2003*	\$85,470,200
2008	126,872,700
2013	156,060,600
2018	188,435,400
2023	218,562,200

*\* Based on the average cost of care data provided by NRRO times the number of reported men age 74 and over.*

<b>Year Ending December 31</b>	<b>Combined Projected Annual Cost of Care</b>
2003*	\$744,419,900
2008	1,019,381,400
2013	1,302,428,800
2018	1,610,115,000
2023	1,824,082,500

*\* Based on the average cost of care data provided by NRRO times the number of reported women and men at and over the assumed retirement ages.*

## B. Retirement Fund Balance Projections

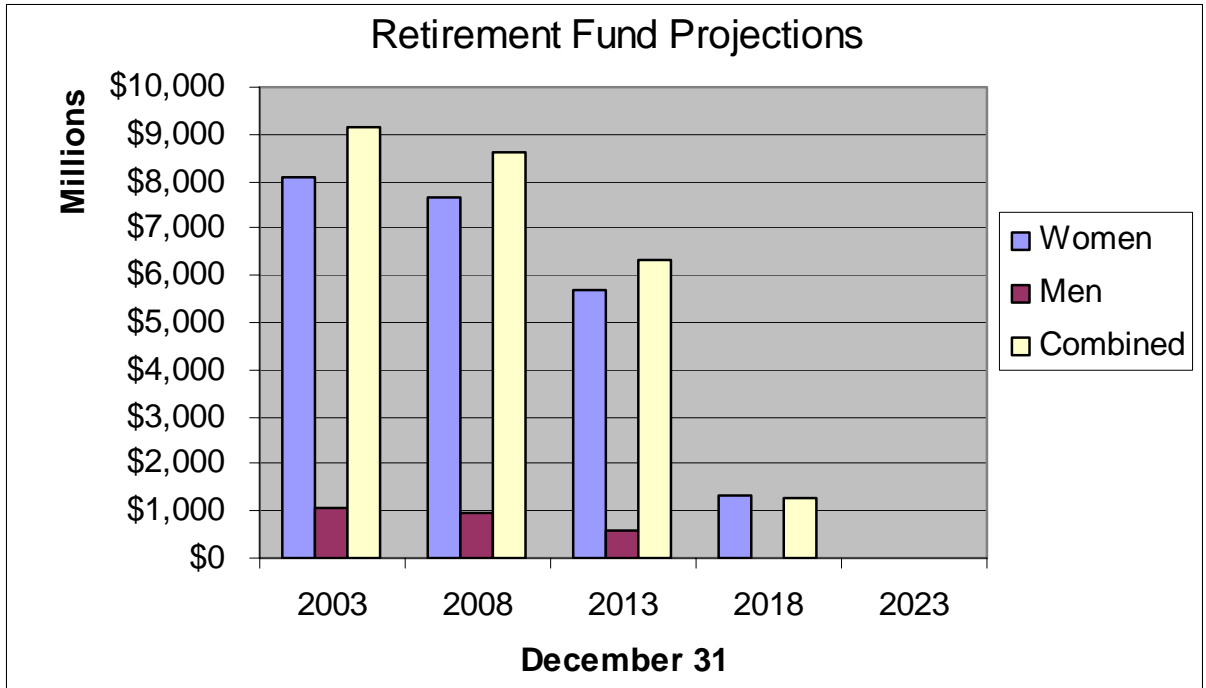
The projections were structured to provide estimates of the percentage of unfundedness for men, women and men & women combined based on assets designated for retirement.

The projections assume that the projected Social Security benefits illustrated in Section 4 are contributed to the fund. However, no additional contributions were assumed to be contributed to the retirement fund other than investment income.

Using assets designated for retirement as of December 31, 2003, annual Social Security benefits and projected investment income to pay projected cost of care produce projected retirement fund balances shown in the following chart and graph.

<b>Retirement Fund Projections</b>			
<b>Beginning December 31</b>	<b>Women - Based on Assets Designated for Retirement</b>	<b>Men - Based on Assets Designated for Retirement</b>	<b>Combined - Based on Assets Designated for Retirement</b>
2003	\$8,079,889,236	\$1,064,584,724	\$9,144,473,960
2008	7,665,684,100	946,149,200	8,611,833,300
2013	5,701,827,100	610,865,300	6,312,692,400
2018	1,342,851,200	0*	1,298,752,100
2023	0	0	0

\* The amount shown has been limited to be not less than zero. It is actually negative. For this reason, the sum of this amount and the amount in the prior column does not equal the Combined total.



### C. Total Unfunded Retirement Liability

The NRRO advised Mercer to provide information regarding the “funded status” of the retirement fund in relation to the total projected retirement liability. The total projected liability includes the projected cost of care for the combined (women and men) population reported as of December 31, 2003 and December 31, 2023. The following charts illustrate the funded status of the retirement fund based upon the December 31, 2003 and December 31, 2023 retirement fund balances and member census on those dates.

<b>December 31, 2003 Total Unfunded Retirement Liability</b>	<b>Combined  Based on Assets Designated for Retirement</b>
a.) Present value of total retirement liability on December 31, 2003	\$17,844,977,400
b.) Retirement fund balance on December 31, 2003	\$9,144,473,960
Unfunded Retirement liability on December 31, 2003 (a-b)	\$8,700,503,440
Funded percentage (b/a)	51.2%

<b>December 31, 2023 Total Unfunded Retirement Liability</b>	<b>Combined  Based on Assets Designated for Retirement</b>
a.) Present value of total retirement liability on December 31, 2023	\$20,361,908,200
b.) Retirement fund balance on December 31, 2023	0
Unfunded Retirement liability on December 31, 2023 (a-b)	\$20,361,908,200
Funded percentage (b/a)	0.0%

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