COMPREHENSIVE ANNUAL FINANCIAL REPORT

FOR THE YEARS ENDED DECEMBER 31, 1996 AND 1995



ALAMEDA COUNTY EMPLOYEES' RETIREMENT ASSOCIATION

OAKLAND, CALIFORNIA 94612

A COMPONENT UNIT OF COUNTY OF ALAMEDA

COMPREHENSIVE ANNUAL FINANCIAL REPORT

FOR THE YEARS ENDED DECEMBER 31, 1996 AND 1995

ISSUED BY

CHARLES F. CONRAD

CHIEF EXECUTIVE OFFICER CHIEF INVESTMENT OFFICER

CATHERINE E. WALKER CHIEF FINANCIAL OFFICER



ALAMEDA COUNTY EMPLOYEES' RETIREMENT ASSOCIATION

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INTRODUCTORY SECTION

ACERA is a retirement system, organized under the 1937 County Employees' Retirement Act, that provides disability, death and retirement benefits to the employees, retirees and former employees of the County of Alameda, and certain other public employers. ACERA's primary responsibilities are:

Administration of the trust fund; Delivery of retirement, disability and death benefits to eligible members; Administration of health care and cost-of-living programs and; general assistance in retirement and related benefits.

MISSION STATEMENT

To provide ACERA members and employers with flexible, cost-effective, participant-oriented benefits through prudent investment management and superior member services.

COMMITMENT (Board and Staff)

To carry out our Mission through a competent, professional, impartial and open decision making process. In providing benefits and services, all persons will be treated fairly and with courtesy and respect. Investments will be management to balance the need for security with superior performance. We expect excellence in all activities. We will also be accountable and act in accordance with the law.

ACERA's GOALS

- I. To create an environment in which Board Members can maximize their performance as trustees.
- II. To improve the level of benefits and delivery of services provided to members and employees.
- III. To improve communications with members and employers.
- IV. To attract, develop and retain competent and professional staff.
- V. To achieve and maintain top quartile investment performance as measured by the Public Fund Universe.



June 13, 1997

Alameda County Employees' Retirement Association Board of Retirement 475 14th Street, Suite 1000 Oakland, CA 94612

Dear Board Members:

As Chief Executive Officer of the Alameda County Employees Retirement Association (ACERA), I am pleased to present this Comprehensive annual Financial Report (CAFR) for the year ended December 31, 1996 and 1995.

This report and future reports will be guided by the goals contained in our Strategic Plan. These Goals provide the direction for all our future work. The components of our Strategic Plan are highlighted, along with our first steps toward fulfilling our mission to advance the health and financial security of our members.

THE COMPREHENSIVE ANNUAL FINANCIAL REPORT

The comprehensive annual financial report (CAFR) of the Alameda County Employees' Retirement Association (ACERA) for the years ended December 31, 1996 and December 31, 1995, is submitted herewith. Responsibility for both accuracy of the data, and the completeness and fairness of the presentation, rests with ACERA's management. It is our intent to ensure that the presentation of financial information is accurate and fair, and all material disclosures have been made. The CAFR is divided into five sections:

Introductory Section: Contains ACERA's Mission, Commitment and Goals, a Letter of Transmittal, a list of Board of Retirement members, an overview of ACERA's Organizational Chart, and a list of Professional Consultants.

Financial Section: Presents the Independent Auditors' Report which contains ACERA financial condition and funding status, the financial statements of the system and certain required supplementary information.

Investment Section: Contains a report on investment activity, investment policies, investment results and various investment schedules.

Actuarial Section: Provides an overview of the funding status of the Association and other actuarial related information, contains an Actuary's Certification Letter and the results of the annual actuarial valuation.

Statistical Section: Contains significant detailed data pertaining to ACERA.

I trust that you and the members of ACERA will find this CAFR helpful in understanding your Association, and our commitment to financial integrity and member service.

ACERA and ITS SERVICES

ACERA was established by the Alameda County Board of Supervisors by Ordinance No. 446 dated October 21, 1947, operative January 1, 1948, and is governed by the provisions of the County Employees' Retirement Law of 1937. In addition, the Association administers a retiree health care plan, a retiree dental care plan, and cost-of-living programs. The Board of Retirement oversees the Chief Executive Officer and staff in the performance of their duties in accordance with the1937 Act, County Employees' Retirement Law, ACERA's by-laws and the Board policies.

ACERA exists for the exclusive purpose of providing accurate, timely benefits to its members and their beneficiaries. The Association is also charged with maximizing investment returns on member and County contributions, and defraying reasonable expenses of administration.

ACERA provides retirement, disability, and death benefits to its general and safety members. Safety membership includes law enforcement personnel (Sheriff, District Attorney, Investigators, Probation Officers, and Group Counselors). General membership includes all occupation classifications that are not safety.

The Board of Retirement consists of nine members. The County Tax Collector-Treasurer serves as an ex-officio member. ACERA's general members elect the second and third Trustees. The fourth, fifth, sixth and ninth trustees are qualified electors of the County, who are not connected with the County government in any capacity, except one may be a Supervisor, and shall be appointed by the Board of Supervisors. ACERA's safety members elect the seventh trustee and ACERA's retired members elect the eighth trustee.

Article XVI, Section 17(b) of the Constitution of the State of California provides that "the members of the Retirement Board of a public retirement system shall discharge their duties... solely in the interest of, and for the exclusive purpose of providing beneficiaries, minimizing employer contributions thereto, and defraying reasonable expenses of administering the system. A Retirement Board's duty to its participants and their beneficiaries shall take precedence over any other duty." Section 17(b) further provides that the Board has... "the sole and exclusive responsibility to administer the system in a manner that will assure prompt delivery of benefits and related services to the participants and their beneficiaries."

ACERA administers the retirement plan provisions primarily for the employees for the County of Alameda. In addition, the following special districts also participate in the retirement plan:

Livermore Area Recreation & Park District Housing Authority of Alameda County Alameda County Schools

SERVICE EFFORTS and ACCOMPLISHMENTS

ACERA efforts have focused on improving the level of retiree health care benefits and delivery of services provided to members and employers. This is evidenced by enhanced staff training, a comprehensive plan to redesign our business process and restructure our organization, a major investment in new facilities and equipment and a continuing drive to maximize the effectiveness of our member services.

ACCOUNTING SYSTEM and REPORTS

Management of ACERA is responsible for establishing and maintaining an internal control structure designed to ensure that ACERA assets are protected from loss, theft, or misuse. Responsibility for the accuracy, completeness, and fair presentation of the information, and all disclosures, rests with ACERA. The accounting firm of Williams, Adley & Co., LLP. provides both financial statement and internal control audit services. The financial attest audit ensures ACERA's financial statements are presented in conformity with generally accepted accounting principles and are free from material misstatement. The internal control audit ensures ACERA's operating policies and procedures are being adhered to and are sufficient to safeguard ACERA's assets.

This report has been prepared in accordance with generally accepted accounting principles as promulgated by the Governmental Accounting Standards Board (GASB) and its predecessor, the National Council on Governmental Accounting. The financial statements are presented in accordance with guidelines established by GASB Statement No. 25, *Financial Reporting for Defined Benefit Plans*.

ACERA transactions are reported on the accrual basis of accounting. Revenues are taken into account when earned, regardless of the date of collection. Expenses are recorded when the corresponding liabilities are incurred, regardless of when the payment is made.

REVENUES

ACERA's revenue comes from the earnings of the investment portfolio and collection of employer and employee contributions. Gross revenue at December 31, 1996 and December 31, 1995 amounted to \$627,380,847 and \$797,858,776 respectively (see Table 1). Due to the adoption of GASB 25 for the years ended December 31, 1996 and 1995, gross income at December 31, 1995 was inflated. Gross revenue for December 31, 1996 returned to expected level, reflecting normal appreciation for the year. The appreciation included in gross revenue at December 31, 1996 and 1995 is \$90,402,850 and \$270,548,241 respectively. ACERA had realized gains on the sale of investments of \$163,595,807 and \$93,805,741 at December 31, 1996 and December 31, 1995 respectively.

Active membership and contribution rates were comparable to those in the prior year; however, employer contributions at December 31, 1996 decreased by \$36,645,411. This decrease primarily reflects the sale of Pension Obligation Bonds by the County of Alameda and the deposit of \$283,485,000 and \$307,923,000 on December 19, 1996 and April 20, 1995 respectively, as contributions towards the County of Alameda's actuarial determined unfunded liability.

The fair value of the investment portfolio, net of related liabilities, reached \$2.6 Billion, an increase of \$593.4 million from the previous year. An explanation of investment policies, investment strategies and the portfolio's composition is included in the Investment section of this report.

TABLE 1. CONTRIBUTIONS AND INVESTMENT EARNINGS

	1996	Increase / (Decrease 1995 Amount		Increase / (Decrease) Amount		Increase /(Decrease) Percentage
Member Contributions	\$ 31,196,550	\$	30,238,340	\$	958,210	3%
Employer Contributions	304,638,565		341,283,976		(36,645,411)	(11)%
Investment earnings	291,323,263		424,987,773		(133,664,510)	(31)%
Miscellaneous	222,469		1,348,687		(1,126,218)	(84)%
Total	\$ 627,380,847	\$	797,858,776	\$	(170,477,929)	(21)%

EXPENSES

ACERA was created to provide retirement annuities, survivor benefits and permanent disability benefits to qualified members and their beneficiaries. The cost of such programs includes recurring benefit payments, as designated by the plan, refund of contributions to terminated employees and the cost of administering the system. Expenses at December 31, 1996 were consistent with the prior year and increased by \$3,629,130 or 5% percent.

TABLE 2. PAYROLL AND OTHER EXPENSES

	1996	1995	se/(Decrease) Amount	Increase/(Decrease) Percentage
Retiree Payroll	\$ 80,400,180	\$ 76,259,348	\$ 4,140,832	5%
Administrative Expense	2,225,036	1,800,294	424,742	24%
Refunds	4,276,394	5,212,838	(936,444)	(18)%
_ Total	\$ 86,901,610	\$ 83,272,480	\$ 3,629,130	4%

ACTUARIAL FUNDING STATUS

ACERA's funding objective is to meet long-term benefit promises through statutorily determined member contributions and ACERA Board of Retirement determined employer contributions that remain approximately level as a percent of member payroll. The greater the level of funding, the larger the ratio to liabilities and the greater the level of investment potential. The advantage of a well-funded plan is that the benefits earned by participants are funded during their working careers and not by future generations of taxpayers.

ACERA engages an independent actuarial consulting firm, William M. Mercer, Incorporated, to conduct annual actuarial valuations. Any necessary recommendations are presented to ACERA's Board for consideration. Triennially, an analysis is made of the appropriateness of all economic and non-economic assumptions. The last triennial analysis was performed for the period from January 1, 1993 to December 31, 1995, and certain changes to non economic assumption were adopted by the Board.

The actuarial accrued liability of ACERA at December 31, 1996 amount to \$2,067,916,000. The actuarial value of assets at December 31, 1996 amounted to \$2,285,867,000.

The County of Alameda issued \$283,485,000 of pension obligation bonds on December 19, 1996. This recent bond issue, together with \$307,923,000 issued by the County on April 20, 1995, satisfied the Unfunded Actuarial Accrued Liability (UAAL) of the County of Alameda as presently calculated. A more detailed discussion of funding is provided in the Actuarial Section of this report.

INVESTMENTS

GENERAL AUTHORITY

Article XVI, Section 17 of the constitution of the State of California provides that "Notwithstanding any other provisions of law or this Constitution, the Retirement Board of a public pension or retirement system shall have plenary authority and fiduciary responsibility for investment of moneys and administration of the system..."

Article XVI, Section 17(a) of the Constitution of the State of California provides that "the Retirement Board of a public pension or retirement system shall have the sole and exclusive fiduciary responsibility over the assets..."

PRUDENT EXPERT DUTY

Article XVI, Section 17(c) of the Constitution of the State of California, provides that "the members of the Retirement Board of a public pension or retirement system shall discharge their duties... with the care, skill, prudence, and diligence under the circumstances then prevailing that a prudent person acting in a like capacity and familiar with these matters would use in the conduct of an enterprise of a like character and with like aim." By permitting further diversification of investments within a fund, the prudent expert standard may enable a fund to reduce overall risk and increase returns. A summary of the asset allocation can be found in the investment section of this report.

The prudent expert rule permits the Board to establish an investment policy based upon professional advice and counsel and allows for delegation of investment authority to professional investment advisors. The Statement of Investment Policy out-lines the responsibility for the investment of the fund and the degree of risk that is deemed appropriate for the fund. Investment advisors are to execute the investment policy in accordance with Board policy and guidelines.

For the year ended December 31, 1996 ACERA investments provided a 14.6% rate of return. ACERA's annualized rate of return over the last three years was 13.1%. Over the last five years, it was 11.4%.

PROFESSIONAL SERVICES

Professional Consultants and Investment Managers are retained by the Board of Retirement to provide professional services essential to the effective and efficient operation of ACERA.

An opinion from the certified public accountant and the actuary are included in this report. The Consultants and Investment Managers retained by the Board are listed on page 10 of this report.

ACKNOWLEDGMENTS

The compilation of this report reflects the combined effort of ACERA's staff under the leadership of the Board of Retirement. It is intended to provide complete and reliable information with respect to the Board's stewardship of ACERA.

This report is being mailed to all employer members of the Association and employee and retiree organizations. Their cooperation contributes significantly to the success of ACERA. We hope our employers and our members find this report informative.

On behalf of the Board of Retirement, I would like to take this opportunity to express my gratitude to the staff, the advisors, and to the many people who have worked so diligently to assure the successful operation of ACERA

Respectfully submitted,

Charles F. Conrad Chief Executive Officer

MEMBERS OF THE BOARD OF RETIREMENT at December 31, 1996

Marian B. SMITH, Chair

Appointed by the Board of Supervisors

Dan McCLELLAND, Vice Chairman Elected by Safety Members

Mary KING, Secretary Appointed by the Board of Supervisors Member of the Board of Supervisors

> **Donald R. WHITE,** Treasurer-Tax Collector County of Alameda

Norvel SMITH Appointed by the Board of Supervisors

> **Charles HARRINGTON** Elected by Retired Members

James R. MUNIZ Appointed by the Board of Supervisors

> Jerry R. JACOBS Elected by General Members

> **Paul TRUDELL** Elected by General Members

ALAMEDA COUNTY EMPLOYEES' RETIREMENT ASSOCIATION Organization Chart



LIST OF PROFESSIONAL CONSULTANTS and MANAGERS

ACTUARY William M. Mercer, Co.

AUDITOR Williams, Adley & Co., LLP.

CUSTODIAN Bank of New York

EXECUTIVE SEARCH Korn & Ferry International

COMPUTER / PERSONNEL Carolyn Ford Association Client Services & Integration, Inc.

LAYOUT & DESIGN Kath Christensen Graphic Design

SOFTWARE SUPPORT Benesys Information System

LEGAL COUNSEL

County Counsel Baker & McKenzie Morrison & Foerster, LLP.

INVESTMENT CONSULTANTS

Watson Wyatt Investment Consultants Callan Associates Dorn, Helliensen & Cottle, Inc.

MORTGAGE LOAN SERVICERS Wells Fargo Bank

INVESTMENT MANGERS

EQUITY – Domestic

Amerindo Bank of New York – INDEX FUND Boston Company Harris, Bretall, Sullivan & Smith NCM Capital Management Nicholas-Applegate Capital Mgt. Rainier Investment Manager Mgt. Wellington Management Co.

EQUITY – International Capital Guardian Trust Fund Global Assets Management, Inc. RCB Trust Co.

FIXED INCOME – Domestic AFL-CIO Loomis, Sayles & Co., L.P. Nicholas-Applegate Capital Mgt. State Street Global Advisors

REAL ESTATE

PM Realty Advisors Schroeder Real Estate Associates Fund A, B & C PM Realty Advisors – IREF II The Yarmouth Group Heitman Capital Management, Corp. Copley Real Estate Advisors Equitable Real Estate **FINANCIAL SECTION**

INVESTMENT SECTION

CHIEF INVESTMENT OFFICER'S REPORT

GENERAL INFORMATION

The Alameda County Employees' Retirement Association exists for the exclusive purpose of providing accurate, timely benefits to its members and their beneficiaries and defraying reasonable expenses of administration.

The Board of Retirement is directed by law and given discretion to prudently invest the plan assets. The purpose of the Investment Policy Statement is to assist ACERA and its investment managers and consultants.

ACERA's goal is to operate at a level of performance in the upper one quarter of comparable pension funds, and to be as fully funded as possible so that ACERA's benefit costs do not become a burden upon future generations of members and taxpayers.

External, professional investment management firms exclusively manage ACERA's assets. Professional investment consultants, along with Investment staff, closely monitor the activity of these managers and assist the Board with the implementation of investment policies and long-term investment strategies.

SUMMARY OF INVESTMENT OBJECTIVES

The Board of Retirement, having sole and exclusive authority and sole and exclusive fiduciary responsibility for the investment and administration of the Trust, has adopted an Investment Policy Statement which provides the Board a framework for management of ACERA's investments. The Board reserves the right to amend, supplement or rescind this statement at any time. The Investment Policy Statement establishes investment program goals and policies, asset allocation policies, performance objectives, investment management policies and risk controls. It also defines the principal duties of the Board, Staff, investment managers, master custodian and consultants.

ACERA's primary investment objective is to take prudent risk, as necessary, to minimize the cost of meeting the obligations of the Trust. The purpose of the Investment Policy Statement is to express in operational terms: return expectations; prudence with respect to risk and; obligations, including compliance with statutes and regulations.

An integral part of the overall investment policy is the strategic asset allocation policy. This allocation mix is designed to provide an optimal mix of asset categories with return expectations that reflect expected risk. This emphasizes a maximum diversification of the portfolio that protects the Fund from declines that a particular asset class may experience in a given period. Both traditional assets (cash, bonds, domestic stocks, fixed income and mortgages) and nontraditional assets (real estate, international stock) are included in the mix.

Total portfolio return, over the long term is directed toward achieving and maintaining a fully funded status for ACERA. Prudent risk taking is warranted within the context of overall portfolio diversification to meet this objective. All activities will be conducted so as to serve the best interests of ACERA's members and beneficiaries.

SUMMARY OF PROXY VOTING GUIDELINES AND PROCEDURES

In recognition of its duty to manage retirement plan assets in the best interest of the plan participants, the Board has established Proxy voting guidelines and procedures which are intended to assist in the faithful discharge of the Board's duty to vote proxies on behalf of plan participants.

The guidelines consist of preferences with respect to specific, recurring proxy-voting issues followed by a general statement of voting policies. ACERA will at all times strive to cast proxy votes so as to advance the overall good of the plan participants.

SUMMARY OF INVESTMENT RESULTS

Domestic equities posted strong returns for 1996 with the S&P 500 up 23.1% and the broad U.S. equity market up 21.9%. The median equity manager* returned 21.6% for the year. International equities as measured by the MSCI EAFE Index returned 6.4% for the year, while the median international equity manager returned 15.5%. The MSCI South Africa Index was down -18.1% for the year, due in part to devaluation of the South African Rand. Bond returns were positive, with the Lehman Aggregate returning 3.6% and the median fixed income manager 4.1%. Real estate returns were positive with the median real estate manager returning 8.4% for the year.

ACERA's Total Fund return of 14.6% for the year is above 13.3% for the median total fund and 12.8% for the median public fund. Over longer periods, ACERA's Total Fund has outperformed both the median total fund and median public fund. ACERA's total domestic equities returned 22.6% for the year, above the median equity manager return of 21.6% but below the S&P 500 return of 23.1%. Of ACERA's equity managers, Nicholas-Applegate, Wellington, and The Boston Company performed best with returns of 32.9%, 26.7% and 23.7% respectively, exceeding the S&P 500 and median equity manager. NCM returned 22.1%, below the S&P 500 but above the median manager. Amerindo's return of 7.2% trailed the benchmarks (the Russell 2000 Growth returned 11.2% for the year). ACERA's domestic equities in aggregate have outperformed the benchmarks over longer periods.

The Morgan Stanley Capital International Europe, Australia, Far East (MSCI EAFE) Index of international equities returned 6.4% for the year and the median international equity manager returned 15.5%. Capital Guardian's return of 15.5% exceeded the MSCI EAFE Index and matched the median international manager. GAM Institutional returned 16.5%, surpassing both MSCI EAFE and the median manager. New Africa Advisers returned -10.0%, better than the -18.1% for the MSCI South Africa Index, but below MSCI EAFE and the median manager.

ACERA total fixed income returned 4.1% for the year, matching the median manager and outperforming the Lehman Aggregate. Of ACERA's active bond managers, AFL-CIO was the best performer with a return of 5.6%, beating the Aggregate and median manager as well as the 5.4% return for the Salomon Mortgage Index. Loomis Sayles outperformed with a return of 4.4%, while Nicholas-Applegate trailed the benchmarks with a return of 3.4% for the year. State Street returned 3.8%, above the Aggregate (its benchmark), but below the median manager. ACERA's total fixed income has exceeded the benchmarks over longer periods.

The median real estate manager returned 8.4% and the NCREIF Index returned 10.6% for the year. Based on Bank of New York values, ACERA's real estate portion returned 1.3%.

ACERA's fund is overweighed in total equities with 64% of assets in equities versus the target of 59% as of December 31, 1996. Domestic equities are overweight at 56% of assets versus the target of 49%, while international equities are under-weight at 8% of assets versus the target of 10%. Fixed income is at 29% of assets, in line with the target of 29%. Cash is near its target of 1% of assets. Real estate continues to be under its 11% target at 7% of assets. Real estate commitments will be funded from US equity, eventually bringing the assets closer to targets.

*All medians are Wilshire COOP.

Investment Results As of December 31, 1996

As of December 31, 1996	Current Year	Annu	alized
DOMESTIC EQUITY	1996	3-year	5-year
Total Domestic Equities	22.6	19.5	15.8
Median Equity S&P 500	21.6 23.1	17.6 19.7	15.1 15.2
INT'L EQUITY			
Total International Equitie Median Int'l Equity MSCI EAFE Index	s 14.5 13.1 8.9	12.4 9.6 8.6	12.8 11.6 8.5
FIXED INCOME Total Fixed	4.1	6.3	8.1
Median Fixed Income Lehman Aggregate	4.1 3.6	6.0 6.0	7.1 7.0
REAL ESTATE	1.3	-1.0	-5.7
Median Real Estate Russell NCREIF	8.4 10.6	6.7 8.8	3.3 4.4
TOTAL FUND Alameda Total Fund	14.6	13.1	11.4
Median Total Fund Median Public Fund	13.3 12.8	$\begin{array}{c} 12.0\\11.4\end{array}$	10.9 10.2

Note: Returns for periods greater than 1 year are annualized.

		F	ercentage of
	N	Iarket Value Tota	
EQUITY			
Domestic			
Amerindo	\$	74,876,242	2.9%
Boston		279,024,708	11.0
NCM		168,568,268	6.6
Nicholas-Applegate		107,360,618	4.2
Wellington		54,802,241	2.2
Bank of NY Index		748,364,727	29.4
Total	\$	1,432,996,804	56.4%
International Equity			
Capital Guardian	\$	109,373,227	4.3%
GAM Institutional		82,646,764	3.3
New Africa Fund		8,966,875	0.4
Total	\$	200,986,866	7.9 %
TOTAL EQUITY	\$	1,633,983,670	64.3%
FIXED INCOME			
Domestic			
AFL-CIO	\$	12,363,857	0.5%
Loomis	.1	182,611,846	7.2
Loomis Municipal		221,468	0.0
Nicholas-Applegate		180,061,247	7.1
State Street		355,729,037	14.0
TOTAL FIXED	\$	730,987,455	28.8%
	Ψ	100,201,400	20.070
REAL ESTATE	\$	171,534,264	6.7%
			
CASH	ሐ	4 051 040	0.00/
Treasurer's	\$	4,051,248	0.2%
Unallocated		1,975,731	0.1
TOTAL CASH	<u>\$</u>	6,026,979	0.2%
TOTAL ASSETS	\$	2,542,532,368	100.0%



ACERA Asset Allocation

Target Asset Allocation



Largest Stock Holdings (By Market Value) As of December 31, 1996

	Shares	Stock
1)	265,789	General Electric
2)	199,837	Philip Morris Cos In
3)	201,971	Exxon Corp
4)	326,880	Coca Cola Co.
5)	204,428	Merck & Co. Inc.
6)	108,037	Intel Corp
7)	92,854	International Bus Ma
8)	157,207	Microsoft Corp
9)	74,455	Royal Dutch Pete Co.
10)	287,578	AT&T Corp

Market Value

\$26,279,88722,581,581 19,793,158 17,202,060 16,276,544 14,146,095 14,067,381 12,989,228 12,713,191 12,475,127

Largest Bond Holdings (By Market Value) December 31, 1996

	Par	Bonds	Market Value
1)	9,000,000	U.S. Treasury Note 5.50% due 04-15-2000	\$8,848,080
2)	8,125,000	U.S. Treasury Note 7.50% due 09-15-2005	8,691,231
3)	8,000,000	Philip Morris Cos I 7.65% due 07-01-2008	8,170,000
4)	6,700,000	U.S. Treasury Bd 7.25% due 11-15-2016	7,250,673
5)	7,000,000	American President 8.00% due 01-15-2024	6,745,250
6)	6,000,000	Merrill Lynch & Co 8.23% due 04-30-2002	6,127,500
7)	5,000,000	U.S. Treasury Bd 7.25% due 05-15-2016	5,279,700
8)	5,000,000	Souwstn Bell Tel 7.375% due 05-01-2012	4,956,250
9)	5,000,000	Souwstn Bell Tel 6.75% due 06-01-2008	4,843,750
10)	5,000,000	Morgan Stanley 7.50% due 02-01-2024	4,781,250

ACTUARIAL SECTION

SCHEDULE OF RETIREES and BENEFICIARIES Added To and Removed From Retiree Payroll

Plan Year	At Beginning of Year	Added During Year	Removed During Year	At End of Year	Annual Retiree Payroll (In Thousands)	% Increase in Annual Retiree Payroll	Average Annual Allowance
1986	3,914	N/A	N/A	4,032	\$31,724	8.67%	\$7,868
1987	4,032	N/A	N/A	4,105	\$34,161	7.68%	\$8,322
1988	4,105	N/A	N/A	4,185	\$36,932	8.11%	\$8,825
1989	4,185	N/A	N/A	4,474	\$44,492	20.47%	\$9,945
1990	4,474	N/A	N/A	4,509	\$46,891	5.39%	\$10,399
1991	4,509	N/A	N/A	4,557	\$50,588	7.88%	\$11,101
1992	4,557	N/A	N/A	4,642	\$54,450	7.63%	\$11,730
1993	4,642	355	121	4,876	\$63,511	16.64%	\$13,025
1994	4,876	241	191	4,926	\$66,392	4.54%	\$13,478
1995	4,926	284	190	5,020	\$71,426	7.58%	\$14,228
1996	5,020	248	157	5,111	\$75,966	6.36%	\$14,863

STATISTICAL SECTION

REVENUES BY SOURCE AND EXPENSES BY TYPE

Fiscal Year	Employee Contributions	Employer Contributions	Investment Income	Miscellaneous Revenue	TOTAL
ICal	Contributions	Contributions	meonie	Revenue	IOIAL
1987	17,982,731	24,487,533	83,445,356	44,861	125,960,481
1988	18,779,928	23,796,433	54,183,253	40,104	96,799,718
1989	21,569,572	25,411,362	82,326,190	10,064	129,317,188
1990	24,857,647	29,419,282	63,942,135	15,914	118,234,978
1991	27,314,377	33,277,622	88,196,188	35,990	148,824,177
1992	29,193,236	36,585,394	86,818,240	24,311	152,621,181
1993	29,367,914	38,952,790	135,625,162	64,170	204,010,036
1994	29,512,801	44,154,192	96,685,846	29,379	170,382,218
1995	30,238,340	33,360,976	159,421,850	309,271,687	532,292,853
1996	31,196,550	21,153,565	200,920,413	283,707,469	536,977,997

REVENUE BY SOURCE

*Excludes Appreciation in Fair Value of Investments.

EXPENSES BY TYPE

Fiscal		Administrative		Other	
Year	Benefits	Expenses	Refunds	Benefits	TOTAL
1987	34,095,020	3,193,989	4,281,871	2,149,786	43,720,666
1988	36,809,631	3,263,920	3,979,688	2,404,750	46,457,989
1989	43,542,393	3,194,190	4,540,985	2,850,996	54,128,564
1990	46,971,872	3,639,923	4,440,224	3,561,852	58,613,871
1991	50,484,979	4,526,804	3,399,944	3,986,293	62,398,020
1992	54,321,974	5,057,072	2,943,539	4,353,350	66,675,935
1993	62,290,772	5,673,442	3,916,563	4,792,727	76,673,504
1994	66,635,507	5,709,417	3,795,036	5,015,845	81,155,805
1995	71,038,847	1,800,294	5,212,838	5,220,501	83,272,480
1996	75,276,328	2,225,036	4,276,394	5,123,852	86,901,610

SCHEDULE OF BENEFIT EXPENSE BY TYPE

	1996	1995	1994	1993	1992	1991
Service Retirement Payroll						
Basic	\$ 49,230,000	\$ 46,961,000	\$ 44,343,000	\$ 43,282,704	\$ 38,316,396	\$ 34,301,556
COLA	14,941,000	13,807,000	12,800,000	11,628,216	11,550,108	9,302,244
Total	64,171,000	60,768,000	57,143,000	54,910,920	49,866,504	43,603,800
Disability Retiree Payroll						
Basic	4,197,000	3,587,000	2,822,000	2,732,412	2,959,392	2,087,856
COLA	1,082,000	991,000	906,000	828,420	953,676	692,700
Total	5,279,000	4,578,000	3,728,000	3,560,832	3,913,068	2,780,556
Beneficiaries and Survivors						
Basic	4,101,000	3,905,000	3,560,000	3,268,080	443,952	2,750,400
COLA	2,415,000	2,175,000	1,961,000	1,771,080	226,333	1,453,278
Total	6,516,000	6,080,000	5,521,000	5,039,160	670,285	4,203,678
Total	\$ 75,966,000	\$ 71,426,000	\$ 66,392,000	\$ 63,510,912	\$ 54,449,857	\$ 50,588,034

December 31

SCHEDULE OF AVERAGE BENEFIT PAYMENTS

Years Credited Service

Retirement Effective Dates							
1/1/91 to 12/31/96	0-4	5-9	10-14	15-19	20-24	25-29	30 & OVER
Period 1/1/91 - 12/31/91:							
Average Monthly Benefit	\$1,546	\$1,105	\$818	\$650	\$507	\$377	\$366
Average Final Average Salary	16,414,501	12,082,297	11,291,973	6,751,541	2,718,051	872,835	456,836
Number of Active Retirants	885	911	1,151	866	447	193	104
Period 1/1/92 - 12/31/92:							
Average Monthly Benefit	\$1,634	\$1,185	\$881	\$391	\$566	\$401	\$377
Average Final Average Salary	17,514,129	12,730,561	11,722,858	4,328,269	3,284,443	1,047,833	546,764
Number of Active Retirants	893	895	1,109	922	484	218	121
Period 1/1/93 - 12/31/93:							
Average Monthly Benefit	\$1,804	\$1,420	\$956	\$768	\$584	\$432	\$379
Average Final Average Salary	18,117,383	18,874,778	11,864,078	8,910,239	3,895,091	1,222,340	627,006
Number of Active Retirants	837	1,108	1,034	967	556	236	138
Period 1/1/94 - 12/31/94:							
Average Monthly Benefit	\$1,793	\$1,463	\$1,065	\$823	\$623	\$473	\$196
Average Final Average Salary	19,325,359	18,472,507	12,336,671	10,261,676	4,482,704	1,390,052	298,923
Number of Active Retirants	898	1,052	965	1,039	600	245	127
Period 1/1/95 - 12/31/95:							
Average Monthly Benefit	\$1,758	\$1,494	\$1,111	\$878	\$716	\$550	\$425
Average Final Average Salary	23,414,228	20,300,531	12,376,377	10,310,362	4,751,549	1,386,947	510,357
Number of Active Retirants	1,110	1,132	928	979	553	210	100
Period 1/1/96 - 12/31/96:							
Average Monthly Benefit	\$1,670	\$1,564	\$1,181	\$954	\$758	\$616	\$428
Average Final Average Salary	22,982,181	21,128,649	12,927,391	10,981,815	5,567,522	1,811,429	564,819
Number of Active Retirants	1,147	1,126	912	959	612	245	110

SUMMARY OF PLAN PROVISIONS

Benefit Sections 31676.1, 31676.12 and 31664 of the 1937 County Act

Briefly summarized below are the major provisions of the County Employees Retirement Law of 1937, as amended through January 1, 1997, and as adopted by Alameda County.

Membership

Employees hired after June 30, 1983 become members under Tier 2. All other members are covered by Tier 1 provisions.

Final Average Salary

Final average salary (FAS) is defined as the highest 12 consecutive months of compensation earnable for Tier 1 and highest 36 consecutive months for Tier 2.

Return of Contributions

If a member should resign or die before becoming eligible for retirement, his or her contributions plus interest will be refunded. In lieu of receiving a return of contributions, a member with five or more years of service may elect to leave his or her contributions on deposit and receive a deferred vested benefit when eligible for retirement.

Service Retirement Benefit

Members with 10 years of service who have attained the age of 50 are eligible to retire. Members with 30 years of service (20 years for Safety), regardless of age, are eligible to retire.

The benefit is a percentage of monthly FAS per year of service, depending on age at retirement and is illustrated below for typical ages. For members integrated with Social Security, the benefit is reduced by 1/3 of the percentage shown below times the first \$350 of monthly FAS per year of service credited after January 1, 1956.

PERCENTAGE OF FINAL AVERAGE SALARY GENERAL									
Age	Tier 1	Tier 2	Safety						
50	1.34%	1.18%	2.00%						
55	1.77%	1.49%	2.62%						
60	2.34%	1.92%	2.62%						
62	2.62%	2.09%	2.62%						
65 and over	2.62%	2.43%	2.62%						

Disability Benefit

Members with 5 years of service, regardless of age, are eligible for nonservice connected disability. The benefit is 1.8% (1.5% for Tier 2 General members) of FAS for each year of service. If this benefit does not equal 1/3 of FAS, the benefit is increased by the above percentage of FAS for the years which would have been credited to age 62 for Tier 1 General members, age 65 for Tier 2 General members and age 55 for Safety members. The total benefit in this case cannot exceed 1/3 of FAS.

If the disability is service connected, the member may retire regardless of length of service, with a benefit of 50% of FAS.

Death Benefit (Before Retirement)

In addition to the return of contributions, a lump sum death benefit is payable to the member's beneficiary or estate equal to one month's salary for each completed year of service under the Retirement System, based on the final year's average salary, but not to exceed six months' salary.

If a member dies while eligible for service retirement or non-service connected disability, the spouse receives 60% of the allowance that the member would have received for retirement on the day of his or her death.

If a member dies in the performance of duty, the spouse receives 50% of the member's FAS.

Death Benefit (After Retirement)

If a member dies after retirement, a lump sum amount of \$1,000 is paid to the beneficiary or estate.

If the retirement was for service connected disability, 100% of the member's allowance as it was at death is continued to the surviving spouse for life.

If the retirement was for other than service connected disability, 60% of the member's allowance is continued to the spouse for life.

Maximum Benefit

The maximum basic benefit payable to a member or beneficiary is 100% of FAS.

Cost of Living

The maximum increase in retirement allowance is 3% per year for Tier 1 and 2% for Tier 2 members. The maximums are based on the change in the Consumer Price Index for the calendar year prior to the April 1 effective date.

Contribution Rates

Member basic rates are based on a formula reflecting the age at entry into the System. The rates are such as to provide, for each year of service, an average annuity at age 60 of 1/100 of FAS for General members under Tier 1, at age 60 of 1/120 of FAS for General members under Tier 2, and at age 50 of 1/100 of FAS for Safety members. Member cost of living rates are actuarially determined to pay for one-half of future cost of living liabilities.

For members integrated with Social Security, the above contributions are reduced by one-third of that portion of such contribution payable with respect to the first \$350 of monthly salary. Member contributions are refundable upon termination from the System.

The County rates are actuarially determined to provide for the balance of the contributions needed to fund the benefits promised under the Retirement System.

GENERAL TIER 1 MALE MEMBERS

	Withdrawal		Ordinary	Ordinary		Duty	Duty	Terminated	
<u>Age</u>	<u>0<x<5< u=""></x<5<></u>	<u>5 <= X</u>	Death	<u>Disability</u>	<u>Service</u>	Death	<u>Disability</u>	Vested	
20	.23205	.20000	.00020	.00000	.00000	.00010	.00010	.00000	
21	.23205	.18990	.00020	.00000	.00000	.00010	.00010	.00000	
22	.23205	.17980	.00020	.00000	.00000	.00010	.00010	.00000	
23	.23205	.16971	.00020	.00000	.00000	.00010	.00010	.00000	
24	.23205	15961	.00020	.00000	.00000	.00010	.00010	.00000	
25	.23205	.14951	.00030	.00020	.00000	.00010	.00010	.00100	
26	.23205	.13941	.00030	.00020	.00000	.00010	.00010	.00180	
20 27	.23205	.12932	.00040	.00020	.00000	.00010	.00010	.00180	
		.11922	.00040	.00020	.00000	.00010	.00010	.00270	
28	.23205								
29	.23205	.10912	.00050	.00020	.00000	.00010	.00010	.00450	
30	.23205	.09902	.00048	.00020	.00000	.00010	.00010	.00464	
31	.23205	.08893	.00048	.00030	.00000	.00010	.00010	.00548	
32	.23205	.07883	.00048	.00030	.00000	.00010	.00010	.00633	
33	.23205	.06873	.00048	.00030	.00000	.00010	.00010	.00658	
34	.23205	.05863	.00048	.00040	.00000	.00010	.00010	.00683	
35	.23205	.04854	.00050	.00040	.00000	.00010	.00010	.00840	
36	.23205	.04480	.00060	.00040	.00000	.00010	.00010	.00870	
37	.23205	.04160	.00070	.00050	.00000	.00010	.00020	.00900	
38	.23205	.03840	.00070	.00050	.00000	.00010	.00030	.00900	
39	.23205	.03520	.00070	.00060	.00000	.00010	.00030	.00900	
40	.23205	.02740	.00091	.00070	.00000	.00010	.00040	.00870	
41	.23205	.02471	.00091	.00080	.00000	.00010	.00040	.00841	
42	.23205	.02246	.00101	.00090	.00000	.00010	.00050	.00811	
43	.23205	.02022	.00111	.00100	.00000	.00010	.00060	.00781	
44	.23205	.01842	.00131	.00100	.00000	.00010	.00060	.00752	
45	.23205	.01712	.00145	.00110	.00000	.00009	.00070	.00722	
46	.23205	.01527	.00159	.00110	.00000	.00009	.00070	.00722	
47	.23205	.01388	.00174	.00120	.00000	.00009	.00080	.00722	
48	.23205	.01296	.00188	.00130	.00000	.00009	.00080	.00722	
49	.23205	.01296	.00202	.00130	.00000	.00009	.00090	.00722	
50	.23205	.00897	.00217	.00140	.01967	.00010	.00090	.00660	
51	.23205	.00859	.00243	.00140	.01180	.00010	.00100	.00598	
52	.23205	.00822	.00277	.00150	.01180	.00010	.00100	.00535	
53	.23205	.00785	.00303	.00160	.01180	.00010	.00120	.00473	
54	.23205	.00747	.00329	.00170	.01574	.00010	.00140	.00411	
55	.23205	.00755	.00376	.00180	.08594	.00010	.00160	.00348	
56	.23205	.00715	.00370	.00190	.07448	.00010	.00180	.00340	
50 57	.23205	.00715	.00423	.00190	.07448	.00010	.00180	.00305	
			.00470			.00010	.00200		
58	.23205	.00650		.00220	.08021			.00218	
59	.23205	.00650	.00563	.00240	.10313	.00010	.00240	.00174	
60	.23205	.00650	.00610	.00260	.14937	.00010	.00260	.00133	
61	.23205	.00650	.00660	.00280	.13579	.00010	.00280	.00133	
62	.23205	.00650	.00710	.00300	.33948	.00010	.00300	.00133	
63	.23205	.00650	.00760	.00320	.25801	.00010	.00320	.00133	
64	.23205	.00650	.00810	.00340	.27159	.00010	.00340	.00133	
65	.00000	.00000	.00850	.00000	.27203	.00010	.00000	.00133	
66	.00000	.00000	.00900	.00000	.27203	.00010	.00000	.00133	
67	.00000	.00000	.00950	.00000	.31736	.00010	.00000	.00133	
68	.00000	.00000	.01010	.00000	.54405	.00010	.00000	.00133	
69	.00000	.00000	.01070	.00000	.72540	.00010	.00000	.00133	
70	.00000	.00000	.00000	.00000	1.00000	.00000	.00000	.00000	

GENERAL TIER 1 FEMALE MEMBERS

	Withd	Irawal	Ordinary	Ordinary		Duty	Duty	Terminated
Age	0< X< 5	5< = X	Death	Disability	Service	Death	Disability	Vested
<u></u>	<u>• , , ,</u> •	<u> </u>	<u></u>	<u></u>	<u></u>	<u>D 000.1</u>	<u></u>	<u></u>
20	.23205	.20000	.00000	.00000	.00000	.00000	.00010	.00000
21	.23205	. 18192	.00000	.00000	.00000	.00000	.00010	.00000
22	.23205	. 16383	.00000	.00000	.00000	.00000	.00010	.00000
23	.23205	. 14575	.00000	.00000	.00000	.00000	.00010	.00000
24	.23205	. 12766	.00000	.00000	.00000	.00000	.00010	.00000
25	.23205	.10958	.00020	.00010	.00000	.00000	.00010	.00094
26	.23205	.09778	.00020	.00010	.00000	.00000	.00010	.00170
27	.23205	.08599	.00020	.00020	.00000	.00000	.00010	.00254
28	.23205	.07419	.00020	.00020	.00000	.00000	.00010	.00339
29	.23205	.06240	.00020	.00020	.00000	.00000	.00010	.00424
30	.23205	.05060	.00030	.00030	.00000	.00000	.00019	.00638
31	.23205	.04866	.00030	.00030	.00000	.00000	.00028	.00754
32	.23205	.04671	.00030	.00030	.00000	.00000	.00028	.00870
33	.23205	.04476	.00040	.00030	.00000	.00000	.00038	.00986
34	.23205	.04243	.00040	.00040	.00000	.00000	.00038	.01000
35	.23205	.03773	.00040	.00040	.00000	.00010	.00050	.01000
36	.23205	.03303	.00040	.00040	.00000	.00010	.00050	.01000
37	.23205	.02833	.00040	.00040	.00000	.00010	.00060	.01000
38	.23205	.02362	.00040	.00050	.00000	.00010	.00060	.01000
39	.23205	.01892	.00040	.00060	.00000	.00010	.00060	.01000
40	.23205	.01422	.00049	.00070	.00000	.00010	.00078	.00984
41	.23205	.01304	.00058	.00080	.00000	.00010	.00078	.00969
42	.23205	.01205	.00067	.00090	.00000	.00010	.00078	.00953
43	.23205	.01106	.00076	.00090	.00000	.00010	.00078	.00937
44	.23205	.01007	.00085	.00090	.00000	.00010	.00078	.00922
45	.23205	.00935	.00094	.00100	.00000	.00010	.00113	.00906
46	.23205	.00857	.00104	.00100	.00000	.00010	.00149	.00853
47	.23205	.00779	.00113	.00100	.00000	.00010	.00184	.00799
48	.23205	.00721	.00132	.00110	.00000	.00010	.00220	.00767
49	.23205	.00662	.00142	.00110	.00000	.00010	.00255	.00735
50	.23205	.00506	.00143	.00120	.04500	.00010	.00291	.00666
51	.23205	.00474	.00145	.00120	.03500	.00010	.00291	.00597
52	.23205	.00441	.00147	.00150	.03500	.00010	.00323	.00528
53	.23205	.00408	.00149	.00160	.03500	.00010	.00355	.00459
54	.23205	.00376	.00150	.00170	.04000	.00010	.00388	.00390
55	.23205	.00635	.00152	.00180	.08886	.00010	.00373	.00321
56	.23205	.00606	.00154	.00190	.07270	.00010	.00358	.00294
57	.23205	.00577	.00156	.00200	.08078	.00010	.00344	.00268
58	.23205	.00548	.00157	.00220	.10501	.00010	.00329	.00254
59	.23205	.00519	.00159	.00240	. 10501	.00010	.00315	.00250
60	.23205	.00180	.00161	.00260	.10502	.00010	.00300	.00210
61	.23205	.00180	.00172	.00280	.12836	.00010	.00300	.00180
62	.23205	.00180	.00184	.00300	.25672	.00010	.00300	.00150
63	.23205	.00180	.00195	.00320	.21005	.00010	.00300	.00120
64	.23205	.00180	.00213	.00340	.22172	.00010	.00300	.00090
65	.00000	.00000	.00234	.00000	.25717	.00010	.00000	.00060
66	.00000	.00000	.00246	.00000	.23812	.00010	.00000	.00050
67	.00000	.00000	.00252	.00000	.33337	.00010	.00000	.00040
68	.00000	.00000	.00270	.00000	.47625	.00010	.00000	.00030
69	.00000	.00000	.00282	.00000	.57150	.00010	.00000	.00020
70	.00000	.00000	.00000	.00000	1.00000	.00000	.00000	.00000
.0	.00000	.00000		.00000	1.00000			.00000

GENERAL TIER 2 MALE MEMBERS

			With	drawal			Ordinary	Ordinary		Duty	Duty	Terminated
Age	<u>0< X<</u> 1	<u>1< = X<</u> 2	<u>2< = X<</u> 3	<u>3< = X<</u> 4	<u>4< = X<</u> 5	<u>5< = X</u>	Death	Disability	Service	Death	Disability	Vested
20	10700	10647	07740	.06285	04774	10770	00000	.00000	00000	.00010	00010	.10000
20 21	.18768 .18768	. 10647 . 10647	.07748 .07748	.06285	.04774 .04774	. 18770 . 10650	.00020 .00020	.00000	.00000	.00010	.00010 .00010	. 10000
22	. 18768	.10647	.07748	.06285	.04774	.07750	.00020	.00000	.00000	.00010	.00010	.10000
23	.18768	.10647	.07748	.06285	.04774	.06290	.00020	.00000	.00000	.00010	.00010	.10000
24	.18768	.10647	.07748	.06285	.04774	.04770	.00020	.00000	.00000	.00010	.00010	.10000
25	.18768	.10647	.07748	.06285	.04774	.04700	.00030	.00020	.00000	.00010	.00010	.08000
26	.18768	.10647	.07748	.06285	.04774	.04650	.00040	.00020	.00000	.00010	.00010	.06000
27	. 18768	.10647	.07748	.06285	.04774	.04579	.00040	.00020	.00000	.00010	.00010	.04000
28	. 18768	.10647	.07748	.06285	.04774	.04335	.00040	.00020	.00000	.00010	.00010	.03000
29	. 18768	.10647	.07748	.06285	.04774	.04121	.00050	.00020	.00000	.00010	.00010	.02500
30	. 18768	.10647	.07748	.06285	.04774	.03992	.00050	.00020	.00000	.00009	.00010	.02250
31	. 18768	.10647	.07748	.06285	.04774	.03863	.00050	.00030	.00000	.00009	.00010	.02000
32	. 18768	.10647	.07748	.06285	.04774	.03734	.00050	.00030	.00000	.00009	.00010	.01900
33	. 18768	.10647	.07748	.06285	.04774	.03605	.00050	.00030	.00000	.00009	.00010	.01861
34	. 18768	.10647	.07748	.06285	.04774	.03476	.00050	.00040	.00000	.00009	.00010	.01823
35	.18768	.10647	.07748	.06285	.04774	.03347	.00050	.00040	.00000	.00009	.00010	.01784
36	.18768	.10647	.07748	.06285	.04774	.03218	.00060	.00040	.00000	.00009	.00010	.01746
37	.18768	.10647	.07748	.06285	.04774	.03089	.00070	.00050	.00000	.00009	.00020	.01707
38	.18768	.10647	.07748	.06285	.04774	.02960	.00070	.00050	.00000	.00009	.00020	.01669
39	. 18768	.10647	.07748	.06285	.04774	.02900	.00070	.00050	.00000	.00009	.00030	.01630
40	.18768	.10647	.07748	.06285	.04774	.02702	.00090	.00070	.00000	.00009	.00040	.01591
41	.18768	.10647	.07748	.06285	.04774	.02436	.00090	.00080	.00000	.00009	.00040	.01553
42	. 18768	.10647	.07748	.06285	.04774	.02215	.00100	.00090	.00000	.00009	.00050	.01514
43	. 18768	.10647	.07748	.06285	.04774	.02180	.00110	.00100	.00000	.00009	.00060	.01476
44	.18768	.10647	.07748	.06285	.04774	.02150	.00130	.00100	.00000	.00009	.00060	.01437
45	. 18768	.10647	.07748	.06285	.04774	.02130	.00150	.00110	.00000	.00009	.00070	.01398
46	. 18768	.10647	.07748	.06285	.04774	.02110	.00170	.00110	.00000	.00009	.00070	.01398
47	. 18768	.10647	.07748	.06285	.04774	.02100	.00180	.00120	.00000	.00009	.00080	.01398
48	. 18768	.10647	.07748	.06285	.04774	.02080	.00200	.00130	.00000	.00009	.00080	.01398
49	.18768	.10647	.07748	.06285	.04774	.02060	.00230	.00130	.00000	.00009	.00090	.01398
50	.18768	.10647	.07748	.06285	.04774	.02050	.00250	.00140	.01464	.00010	.00090	.01260
51	.18768	.10647	.07748	.06285	.04774	.01997	.00280	.00140	.00879	.00010	.00100	.01200
52	.18768	.10647	.07748	.06285	.04774	.01911	.00320	.00150	.00879	.00010	.00100	.00980
53	.18768	.10647	.07748	.06285	.04774	.01824	.00350	.00160	.00879	.00010	.00120	.00840
54	.18768	.10647	.07748	.06285	.04774	.01737	.00380	.00170	.01171	.00010	.00140	.00700
55	. 18768	.10647	.07748	.06285	.04774	.01900	.00420	.00180	.02642	.00010	.00160	.00634
56	. 18768	.10647	.07748	.06285	.04774	.01800	.00450	.00190	.02290	.00010	.00180	.00555
57	. 18768	.10647	.07748	.06285	.04774	.01700	.00500	.00200	.02290	.00010	.00200	.00460
58	. 18768	.10647	.07748	.06285	.04774	.01600	.00530	.00220	.02466	.00010	.00220	.00396
59	.18768	.10647	.07748	.06285	.04774	.01600	.00570	.00240	.03171	.00010	.00240	.00317
60	.18768	.10647	.07748	.06285	.04774	.01600	.00610	.00260	.03713	.00010	.00260	.00200
61	. 18768	.10647	.07748	.06285	.04774	.01500	.00660	.00280	.03376	.00010	.00280	.00200
62	. 18768	.10647	.07748	.06285	.04774	.01500	.00710	.00300	.08439	.00010	.00300	.00200
63	.18768	.10647	.07748	.06285	.04774	.01500	.00760	.00320	.06414	.00010	.00320	.00200
64	.18768	.10647	.07748	.06285	.04774	.01500	.00810	.00340	.06752	.00010	.00340	.00200
65	.00000	.00000	.00000	.00000	.00000	.00000	.00850	.00000	.12606	.00010	.00000	.00185
66	.00000	.00000	.00000	.00000	.00000	.00000	.00830	.00000	. 12606	.00010	.00000	.00185
67 69	.00000	.00000	.00000	.00000	.00000	.00000	.00950	.00000	.14706	.00010	.00000	.00185
68	.00000	.00000	.00000	.00000	.00000	.00000	.01010	.00000	.25211	.00010	.00000	.00185
69	.00000	.00000	.00000	.00000	.00000	.00000	.01070	.00000	.33615	.00010	.00000	.00185
70	.00000	.00000	.00000	.00000	.00000	.00000	.00000	.00000	1.00000	.00000	.00000	.00000

GENERAL TIER 2 FEMALE MEMBERS

			With	drawal			Ordinary	Ordinary		Duty	Duty	Terminated
<u>Age</u>	<u>0< X<</u> 1	<u>1< = X<</u> 2	<u>2< = X<</u> 3	<u>3< = X<</u> 4	<u>4< = X<</u> 5	<u>5< = X</u>	<u>Death</u>	Disability	<u>Service</u>	Death	Disability	Vested
20	.18768	. 10647	.07748	.06285	.04774	. 18770	.00000	.00000	.00000	.00000	.00010	.01048
21	.18768	.10647	.07748	.06285	.04774	.10650	.00000	.00000	.00000	.00000	.00010	.01048
22	.18768	.10647	.07748	.06285	.04774	.07750	.00000	.00000	.00000	.00000	.00010	.01048
23	.18768	.10647	.07748	.06285	.04774	.06290	.00000	.00000	.00000	.00000	.00010	.01048
24	.18768	.10647	.07748	.06285	.04774	.04770	.00000	.00000	.00000	.00000	.00010	.01048
25	.18768	.10647	.07748	.06285	.04774	.04676	.00011	.00009	.00000	.00000	.00009	.01048
26	.18768	.10647	.07748	.06285	.04774	.04582	.00011	.00009	.00000	.00000	.00009	.01048
20 27	.18768	.10647	.07748	.06285	.04774	.04302	.00016	.00019	.00000	.00000	.00009	.01048
28	.18768	.10647	.07748	.06285	.04774	.04395	.00016	.00019	.00000	.00000	.00009	.01048
29	. 18768	.10647	.07748	.06285	.04774	.04301	.00016	.00019	.00000	.00000	.00009	.01048
30	.18768	.10647	.07748	.06285	.04774	.04207	.00040	.00021	.00000	.00000	.00022	.01048
31	.18768	.10647	.07748	.06285	.04774	.04113	.00040	.00021	.00000	.00000	.00035	.01048
32	.18768	.10647	.07748	.06285	.04774	.04019	.00040	.00021	.00000	.00000	.00048	.01048
33	.18768	.10647	.07748	.06285	.04774	.03926	.00040	.00021	.00000	.00000	.00061	.01048
34	.18768	.10647	.07748	.06285	.04774	.03832	.00050	.00028	.00000	.00000	.00075	.01048
35	.18768	.10647	.07748	.06285	.04774	.03738	.00048	.00023	.00000	.00008	.00088	.01048
36	.18768	.10647	.07748	.06285	.04774	.03520	.00048	.00023	.00000	.00008	.00088	.01048
37	.18768	.10647	.07748	.06285	.04774	.03266	.00048	.00023	.00000	.00008	.00105	.01048
38	.18768	.10647	.07748	.06285	.04774	.03048	.00058	.00020	.00000	.00008	.00105	.01048
39	.18768	.10647	.07748	.06285	.04774	.02831	.00068	.00020	.00000	.00008	.00105	.01048
40	.18768	.10647	.07748	.06285	.04774	.02743	.00069	.00022	.00000	.00008	.00117	.01048
40 41	.18768	.10647	.07748	.06285	.04774	.02515	.00070	.00022	.00000	.00008	.00129	.01048
42	. 18768	.10647	.07748	.06285	.04774	.02313	.00070	.00020	.00000	.00008	.00129	.01048
42		.10647	.07748	.06285	.04774	.02324	.00072	.00029	.00000	.00008	.00141	.01048
	.18768											
44	.18768	.10647	.07748	.06285	.04774	.01943	.00074	.00029	.00000	.00008	.00164	.01048
45	.18768	.10647	.07748	.06285	.04774	.02039	.00075	.00035	.00000	.00009	.00176	.01048
46	.18768	.10647	.07748	.06285	.04774	.01869	.00075	.00035	.00000	.00009	.00176	.01048
47	.18768	.10647	.07748	.06285	.04774	.01699	.00075	.00035	.00000	.00009	.00176	.01048
48	.18768	.10647	.07748	.06285	.04774	.01572	.00087	.00038	.00000	.00009	.00180	.01048
49	.18768	.10647	.07748	.06285	.04774	.01444	.00087	.00038	.00000	.00009	.00180	.01048
50	.18768	.10647	.07748	.06285	.04774	.01415	.00110	.00049	.01094	.00009	.00176	.01048
51	.18768	.10647	.07748	.06285	.04774	.01323	.00110	.00049	.00851	.00009	.00176	.01048
52	.18768	.10647	.07748	.06285	.04774	.01232	.00131	.00062	.00851	.00009	.00196	.01048
53	.18768	.10647	.07748	.06285	.04774	.01141	.00145	.00066	.00851	.00009	.00216	.01048
54	.18768	.10647	.07748	.06285	.04774	.01050	.00152	.00070	.00973	.00009	.00235	.01048
55	.18768	.10647	.07748	.06285	.04774	.01315	.00170	.00102	.02026	.00010	.00258	.01048
56	.18768	.10647	.07748	.06285	.04774	.01255	.00188	.00133	.01657	.00010	.00280	.01048
57	.18768	.10647	.07748	.06285	.04774	.01196	.00206	.00165	.01842	.00010	.00303	.01048
58	.18768	.10647	.07748	.06285	.04774	.01136	.00225	.00197	.02394	.00010	.00325	.01048
59	.18768	.10647	.07748	.06285	.04774	.01076	.00243	.00228	.02394	.00010	.00348	.01048
60	.18768	.10647	.07748	.06285	.04774	.01800	.00261	.00260	.03548	.00010	.00371	.01048
61	.18768	.10647	.07748	.06285	.04774	.01800	.00286	.00280	.04337	.00010	.00406	.01048
62	.18768	.10647	.07748	.06285	.04774	.01800	.00302	.00300	.08673	.00010	.00400	.01048
63	.18768	.10647	.07748	.06285	.04774	.01800	.00318	.00320	.07096	.00010	.00494	.01048
64	.18768	.10647	.07748	.06285	.04774	.01800	.00343	.00320	.07090	.00010	.00494	.01048
65 62	.00000	.00000	.00000	.00000	.00000	.00000	.00071	.00000	.12129	.00010	.00000	.01048
66	.00000	.00000	.00000	.00000	.00000	.00000	.00071	.00000	.11231	.00010	.00000	.01048
67	.00000	.00000	.00000	.00000	.00000	.00000	.00071	.00000	.15723	.00010	.00000	.01048
68	.00000	.00000	.00000	.00000	.00000	.00000	.00071	.00000	.22461	.00010	.00000	.01048
69	.00000	.00000	.00000	.00000	.00000	.00000	.00071	.00000	.26953	.00010	.00000	.01048
70	.00000	.00000	.00000	.00000	.00000	.00000	.00000	.00000	1.00000	.00000	.00000	.00000

SAFETY TIER 1 MEMBERS

	Withd	rawal	Ordinary	Ordinary		Duty	Duty	Terminated
<u>Age</u>	<u>0< X<</u> 5	<u>5< = X</u>	<u>Death</u>	<u>Disability</u>	<u>Service</u>	<u>Death</u>	<u>Disability</u>	Vested
20	15000	15000	00000	00000	00000	00040	00000	10000
20 21	.15000 .13500	. 15000 . 13500	.00000	.00000 .00000	.00000 .00000	.00040 .00040	.00000	. 10000 . 10000
21	. 13500	. 13500	.00000	.00000	.00000	.00040	.00000	. 10000
22	. 12000	. 12000	.00000	.00000	.00000	.00040	.00000	. 10000
23 24	. 10200	. 10200	.00000	.00000	.00000	.00040	.00000	. 10000
25	.09700	.09700	.00030	.00010	.00000	.00040	.00010	. 10000
26	.09200	.09200	.00030	.00010	.00000	.00040	.00010	. 10000
27	.08700	.08700	.00040	.00020	.00000	.00040	.00020	. 10000
28	.08000	.08000	.00040	.00020	.00000	.00040	.00020	. 10000
29	.07500	.07500	.00040	.00020	.00000	.00040	.00020	. 10000
30	.06900	.06901	.00038	.00020	.00000	.00040	.00020	.04450
31	.06600	.06302	.00048	.00020	.00000	.00040	.00020	.03263
32	.06500	.05704	.00048	.00020	.00000	.00040	.00020	.02670
33	.06400	.05105	.00048	.00020	.00000	.00040	.00020	.02077
34	.06300	.04506	.00050	.00030	.00000	.00040	.00030	.01500
35	.06100	.03907	.00050	.00030	.00000	.00040	.00084	.01434
36	.05800	.03308	.00050	.00040	.00000	.00040	.00112	.01368
37	.05300	.02710	.00050	.00040	.00000	.00040	.00112	.01302
38	.04800	.02111	.00057	.00050	.00000	.00040	.00140	.01236
39	.04400	.01512	.00064	.00050	.00000	.00050	.00140	.01170
40	.04000	.00913	.00069	.00060	.00000	.00050	.00148	.01104
41	.03700	.00845	.00074	.00060	.00100	.00050	.00155	.01038
42	.03300	.00753	.00079	.00060	.00100	.00050	.00163	.00972
43	.03000	.00685	.00084	.00070	.00100	.00050	.00170	.00906
44	.02700	.00616	.00089	.00070	.00100	.00060	.00178	.00840
45	.02000	.00378	.00094	.00080	.00100	.00060	.00185	.00774
46	.01200	.00227	.00099	.00080	.00150	.00060	.00185	.00774
47	.00700	.00132	.00104	.00090	.00150	.00060	.00209	.00774
48	.00400	.00076	.00109	.00090	.00200	.00060	.00209	.00774
49	.00100	.00019	.00114	.00100	.00250	.00070	.00232	.00774
50	.00000	.00000	.00119	.00100	.08066	.00070	.00247	.00269
51	.00000	.00000	.00124	.00110	.02881	.00070	.00272	.00269
52	.00000	.00000	.00129	.00110	.03457	.00070	.00272	.00269
53	.00000	.00000	.00134	.00120	.05185	.00080	.00297	.00269
54	.00000	.00000	.00139	.00120	. 14404	.00080	.00297	.00269
55	.00000	.00000	.00144	.00130	.29653	.00080	.00321	.00000
56	.00000	.00000	.00150	.00130	.22239	.00080	.00321	.00000
57	.00000	.00000	.00156	.00140	.22239	.00090	.00346	.00000
58	.00000	.00000	.00163	.00140	.22239	.00090	.00346	.00000
59	.00000	.00000	.00175	.00150	.59305	.00090	.00371	.00000
60	.00000	.00000	.00000	.00000	1.00000	.00000	.00000	.00000

SAFETY TIER 2 MEMBERS

	Withd	Irawal	Ordinary	Ordinary		Duty	Duty	Terminated
<u>Age</u>	<u>0< X<</u> 5	<u>5 < = X</u>	<u>Death</u>	<u>Disability</u>	<u>Service</u>	<u>Death</u>	<u>Disability</u>	<u>Vested</u>
20	.07000	.07000	.00000	.00000	.00000	.00040	.00000	.02500
21	.07000	.07000	.00000	.00000	.00000	.00040	.00000	.02500
22	.07000	.07000	.00000	.00000	.00000	.00040	.00000	.02500
23	.07000	.07000	.00000	.00000	.00000	.00040	.00000	.02500
24	.07000	.07000	.00000	.00000	.00000	.00040	.00000	.02500
25	.07000	.05147	.00030	.00010	.00000	.00040	.00010	.02400
26	.07000	.04881	.00030	.00010	.00000	.00040	.00010	.02300
27	.07000	.04616	.00040	.00020	.00000	.00040	.00019	.02200
28	.07000	.04245	.00040	.00020	.00000	.00040	.00019	.02100
29	.07000	.03979	.00040	.00020	.00000	.00040	.00019	.02000
30	.06900	.03700	.00038	.00020	.00000	.00040	.00157	.01909
31	.06600	.03420	.00048	.00020	.00000	.00040	.00157	.01818
32	.06500	.03141	.00048	.00020	.00000	.00040	.00157	.01727
33	.06400	.02862	.00048	.00020	.00000	.00040	.00157	.01636
34	.06300	.02582	.00050	.00030	.00000	.00040	.00160	.01545
35	.05490	.02303	.00050	.00030	.00000	.00040	.00170	.01454
36	.05220	.02189	.00050	.00040	.00000	.00040	.00179	.01363
37	.04770	.02001	.00050	.00040	.00000	.00040	.00189	.01273
38	.04320	.01812	.00057	.00050	.00000	.00040	.00198	.01182
39	.03960	.01661	.00064	.00050	.00000	.00050	.00208	.01091
40	.03340	.01124	.00069	.00060	.00000	.00050	.00218	.01000
41	.03089	.01040	.00074	.00060	.00100	.00050	.00218	.00909
42	.02755	.00927	.00079	.00060	.00100	.00050	.00218	.00818
43	.02505	.00843	.00084	.00070	.00100	.00050	.00254	.00727
44	.02254	.00759	.00089	.00070	.00100	.00060	.00254	.00636
45	.02000	.00632	.00094	.00080	.00100	.00060	.00250	.00545
46	.01200	.00506	.00099	.00080	.00150	.00060	.00250	.00454
47	.00700	.00379	.00104	.00090	.00150	.00060	.00250	.00363
48	.00400	.00253	.00109	.00090	.00200	.00060	.00250	.00272
49	.00100	.00126	.00114	.00100	.00250	.00070	.00250	.00181
50	.00000	.00000	.00119	.00100	.03715	.00070	.00247	.00090
51	.00000	.00000	.00124	.00110	.01327	.00070	.00272	.00090
52	.00000	.00000	.00129	.00110	.01592	.00070	.00272	.00090
53	.00000	.00000	.00134	.00120	.02388	.00080	.00297	.00090
54	.00000	.00000	.00139	.00120	.06634	.00080	.00297	.00090
55	.00000	.00000	.00144	.00130	.12295	.00080	.00321	.00000
56	.00000	.00000	.00150	.00130	.09221	.00080	.00321	.00000
57	.00000	.00000	.00156	.00140	.09221	.00090	.00346	.00000
58	.00000	.00000	.00163	.00140	.09221	.00090	.00346	.00000
59	.00000	.00000	.00175	.00150	.24591	.00090	.00371	.00000
60	.00000	.00000	.00000	.00000	1.00000	.00000	.00000	.00000