



Retiree Medical Actuarial Valuations

Law Enforcement Officers' and Fire Fighters'
Plan 2 Retirement Board

September 28, 2005



Martin McCaulay, FSA, EA, MAAA
Senior Pension Actuary

Retiree Medical Benefits

- Access to employer-provided group medical insurance after retirement.
- Retiree medical premiums
 - Higher before age 65
 - Medicare starts at 65
 - Lower after age 65

LEOFF 1 Retiree Medical

- ❑ LEOFF 1 retirees receive retiree medical benefits.
- ❑ Employers pay full medical costs before and after age 65.
- ❑ A significant number of LEOFF 1 retirees are not covered by Medicare.

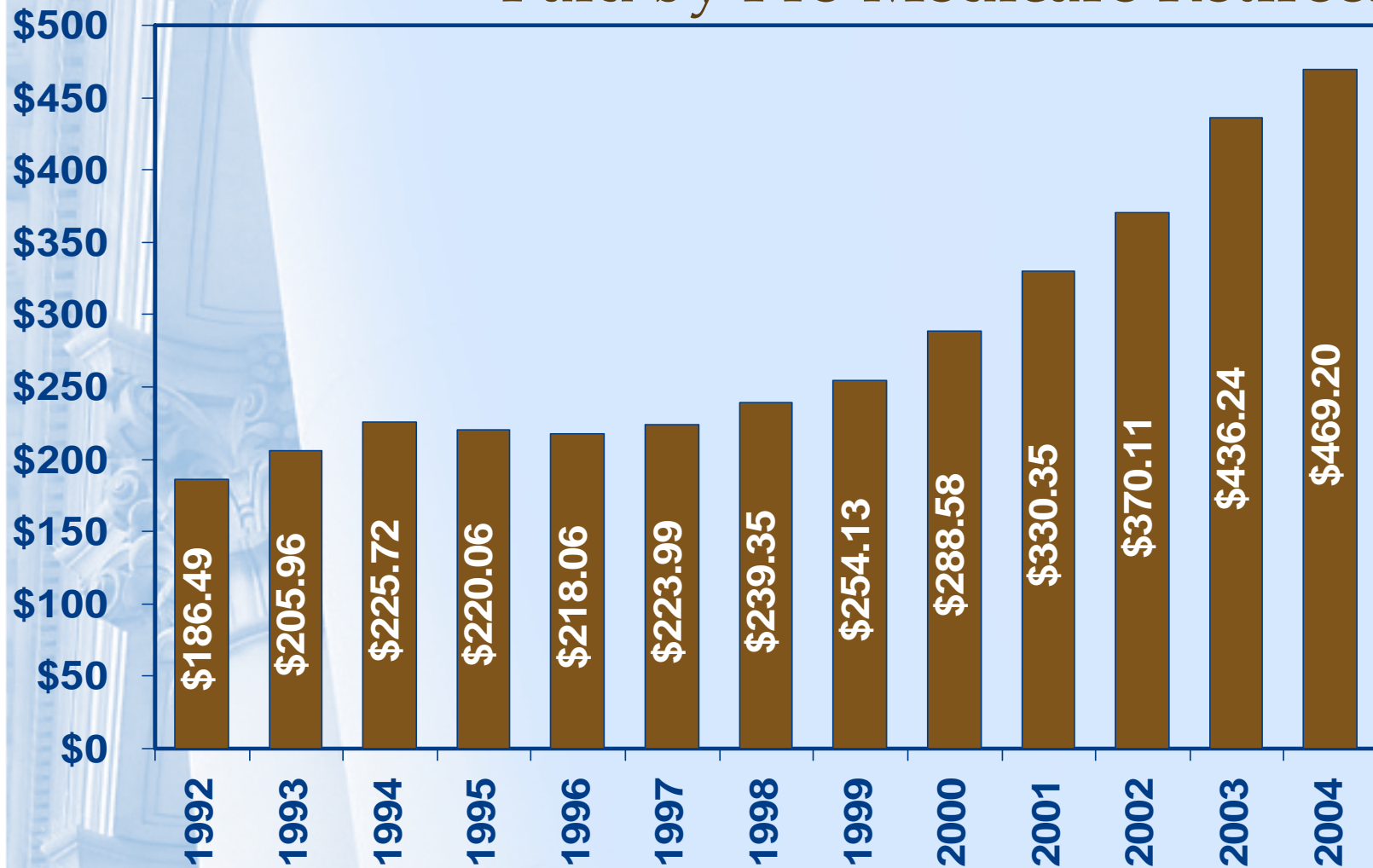
Retirees in PEBB

- ❑ Public Employees Benefits Board (PEBB).
- ❑ State employees may continue in PEBB after retirement.
- ❑ Retirees pay entire PEBB premium before age 65.
- ❑ The state pays part of the PEBB premium after age 65.

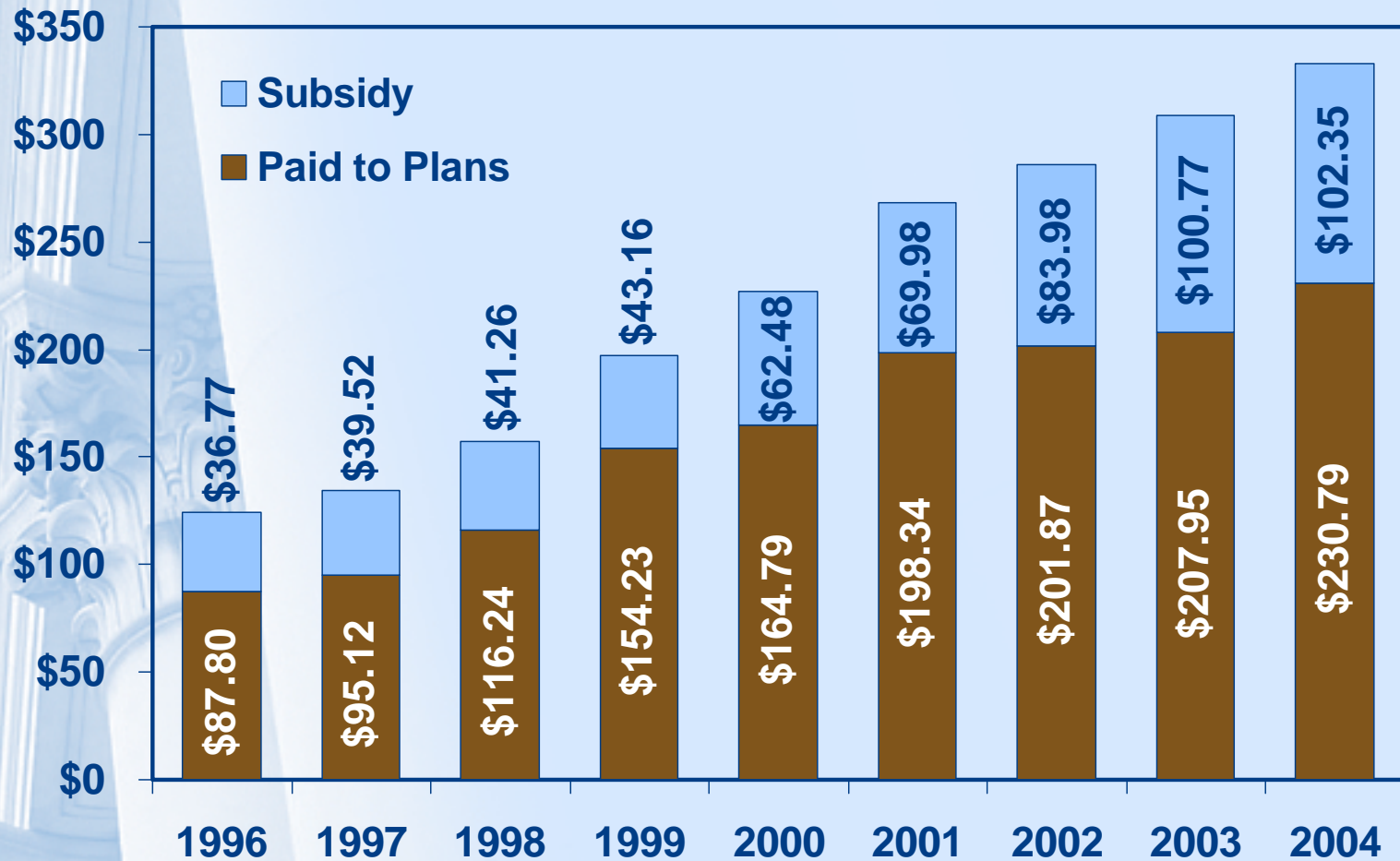
PEBB Premiums from HCA

- ❖ Health Care Authority (HCA)
- ❖ 2006 blended premium
 - ▣ Pre-Medicare subscriber - \$689.38/month
 - ▣ Including LEOFF 2 retirees - \$689.71/month
- ❖ 2006 Medicare retiree rate
 - ▣ \$458.17/month total claim cost
 - ▣ \$131.87/month is subsidized
 - ▣ \$326.30/month retiree premium

Average Monthly PEBB Premium Paid by Pre-Medicare Retirees



Average Monthly PEBB Premium Paid by Medicare Retirees and Subsidy



Explicit and Implicit Subsidies

- ❑ Explicit subsidy: The employer pays part of the cost.
- ❑ Implicit subsidy: The rate charged is a blended rate.
- ❑ Blended rate is less than the rate that would apply to the retirees only.
- ❑ Both types of subsidies have a cost.

Explicit and Implicit Subsidies

- Medicare retirees in PEBB:
 - Explicit subsidy of \$131.87 per month.
- Pre-Medicare retirees in PEBB:
 - 50 percent higher risk factor than actives.
 - Implicit subsidy of about 50 percent of blended rate of \$689.71 / month.

Retiree Medical Valuations

- ❑ Benefit provisions
- ❑ Member data
- ❑ Assumptions and methods
- ❑ Funding and contribution policy
- ❑ Accounting expense

Benefit Provisions

- ❑ Eligibility
- ❑ Medical, prescription drugs, dental, long-term care
- ❑ Employer paid premiums
- ❑ Retiree contributions
- ❑ Family coverage

Member Data

- ❑ Start with pension plan data
- ❑ Type of coverage – individual, family, or not enrolled
- ❑ Type of plans – medical, dental, or both

Methods and Assumptions

- ❑ Discount rate
- ❑ Medical inflation rate
- ❑ Age-based claim costs or premiums
- ❑ Retiree contributions
- ❑ Utilization rate and Medicare coverage
- ❑ Decrements (retirement, withdrawal, mortality, disability)

Liability Discount Rate

- ❖ Pension plan uses 8 percent
- ❖ Retiree medical rate could be lower
- ❖ Lower interest rate increases liability
- ❖ Interest rate linked to expected return on assets

Medical Inflation

- ❖ Medical inflation (healthcare trend rate) assumed to start high and decrease.
- ❖ Short term medical inflation around 10 percent to 15 percent.
- ❖ Long-term medical inflation more in line with general inflation.
- ❖ Inflation on prescription drug costs higher.

Inflation Assumption Example

Year	Medical	Rx
2005	13.5%	15.5%
2007	11.5%	13.5%
2009	9.5%	11.5%
2011	7.5%	9.5%
2013	5.5%	7.5%
2015	3.5%	5.5%
2017	3.5%	3.5%

Claim Costs or Premiums

- ❑ Age-based claim costs if self-insured
- ❑ Premiums if insured
- ❑ Higher costs before Medicare coverage
- ❑ Include cost of subsidy

Sample 2006 PEBB Claim Costs

Retiree	Claims	Premium	Subsidy
Pre-Medicare	\$1,064/mo risk- adjusted	\$689/mo blended premium	\$375/mo implicit subsidy
Medicare	\$458/mo experience rated	\$326/mo experience rated	\$132/mo explicit subsidy

Options for Funding

- ❑ Pay-as-you-go Method:
 - ❖ Contributions equal payments.
- ❑ Pre-funding:
 - ❖ Uses actuarial method such as Aggregate or PUC.
 - ❖ Initial contributions exceed payments to build fund.
 - ❖ Lower long-term cost.

Accounting Issues

- ❖ Governmental Accounting Standards Board (GASB).
- ❖ Accounting rules for financial reports of public employers.
- ❖ New GASB rules for retiree medical are effective after 2006.
- ❖ Required to start disclosing retiree medical liability and expense.

GASB Discount Rate

- ❖ If benefits are pre-funded, a likely discount rate is between 7 percent and 8 percent.
- ❖ If pay-as-you-go funding method used, a likely discount rate is between 2 percent and 5 percent.
- ❖ Lower discount rate increases GASB liability.
- ❖ Increased GASB liability could have a negative impact on bond ratings.

Actuarial Valuation Inputs

- ❖ Plan design options - premiums and contributions.
- ❖ Discount rate and medical inflation rate.
- ❖ Utilization rate, Medicare coverage, and decrements.
- ❖ Funding policy and cost method.

Five Plan Design Options

■ Access to PEBB, Plan pays:

- The implicit subsidy only (least expensive option).
- Full premium (significantly more expensive).
- Full premiums plus out-of-pocket expenses.

■ Medical costs paid:

- Claims paid subject to deductibles and co-pays.
- Claims 100 percent paid (most expensive option).



WASHINGTON STATE LEGISLATURE
Office of the State Actuary

July 6, 2005

TO: Steve Nelsen, Executive Director
LEOFF Plan 2 Retirement Board

FROM: Marty McCaulay, Associate Actuary

CC: Matt Smith, State Actuary

SUBJECT: DEMOGRAPHIC INFORMATION FOR RETIREE HEALTH CARE STUDY

As requested, we are providing the following LEOFF 2 demographic information for the retiree health care study. For active members, we show the number of police officers and firefighters by gender for different age and service groups. Information for PERS 2/3 is shown for comparison.

Leoff Plan 2 & PERS Plan 2/3 Active Members						
<i>as of 9/30/2004</i>						
<i>Preliminary data</i>	LEOFF				PERS	
	Police Officers		Firefighters		MALE	FEMALE
Age Group	MALE Count	FEMALE Count	MALE Count	FEMALE Count	Count	Count
Under 20				1	150	153
20-24	56	14	66	3	1,566	1,982
25-29	634	90	524	23	4,149	5,557
30-34	1,394	178	1,049	43	6,355	7,377
35-39	1,724	215	1,194	86	7,815	8,699
40-44	1,449	178	1,176	93	9,924	10,825
45-49	1,244	111	1,051	63	12,056	12,796
50-54	824	72	608	19	11,264	11,393
55-59	273	12	170	5	8,166	7,978
60-64	59		45		4,021	3,916
65 & Over	6		2		1,189	1,096
All	7,663	870	5,885	336	66,655	71,772
Service Group						
Under 5	1,672	182	1,239	77	21,586	25,399
5-9	1,881	286	1,382	99	15,099	17,643
10-14	1,571	189	1,282	77	12,411	12,632
15-19	1,244	132	857	47	9,093	9,345
20-24	868	58	787	33	5,961	5,020
25-29	426	23	338	3	2,501	1,733
30-34	1				4	
All	7,663	870	5,885	336	66,655	71,772

2100 Evergreen Park Drive S.W., Suite 150
P.O. Box 40914
Olympia, WA 98504-0914
(360) 753-9144

FAX: (360) 586-8135
TDD: 1-800-635-9993

E-MAIL: actuary_st@leg.wa.gov

For inactive and retired members, we show the number of police officers and firefighters by gender along with the average age and average number of years of service.

Leoff Plan 2 & PERS Plan 2/3 Retired & Inactive Members						
<i>as of 9/30/2004</i>						
<i>Preliminary data</i>	LEOFF				PERS	
	Police Officers		Firefighters		MALE	FEMALE
	MALE	FEMALE	MALE	FEMALE		
Count	1,291	251	588	71	44,661	66,846
Average Age	44.90	41.90	45.60	41.60	45.10	45.80
Average Service	6.70	4.60	6.70	4.10	3.70	3.70

O:\LEOFF 2 Board\2005\7-27-05\Retiree HC Study Memo.wpd