



EXECUTIVE CHAMBERS  
HONOLULU

LINDA LINGLE  
GOVERNOR

February 1, 2007

The Honorable Calvin K. Y. Say, Speaker  
and Members of the House of Representatives  
Twenty-Fourth State Legislature  
State Capitol, Room 431  
Honolulu, Hawaii 96813

Dear Mr. Speaker and Members of the House:

For your information and consideration, I am transmitting herewith (2) copies of the Employees' Retirement System's (ERS) Post Retirement Allowance Study to meet the requirements of Section 84.1 of Act 160, Session Laws of Hawaii 2006. In accordance with Section 93-16, Hawaii Revised Statutes, I am also informing you that the report may be viewed electronically at [www.state.hi.us/budget](http://www.state.hi.us/budget).

Sincerely,

LINDA LINGLE

Enclosures



EXECUTIVE CHAMBERS  
HONOLULU

LINDA LINGLE  
GOVERNOR

February 1, 2007

The Honorable Colleen Hanabusa, President  
and Members of the Senate  
Twenty-Fourth State Legislature  
State Capitol  
Honolulu, Hawaii 96813

Dear Madam President and Members of the Senate:

For your information and consideration, I am transmitting herewith (2) copies of the Employees' Retirement System's (ERS) Post Retirement Allowance Study to meet the requirements of Section 84.1 of Act 160, Session Laws of Hawaii 2006. In accordance with Section 93-16, Hawaii Revised Statutes, I am also informing you that the report may be viewed electronically at [www.state.hi.us/budget](http://www.state.hi.us/budget).

Sincerely,

LINDA LINGLE

Enclosures

December 11, 2006

Board of Trustees  
State of Hawaii Employees' Retirement System  
City Financial Tower  
201 Merchant Street, Suite 1400  
Honolulu, HI 96813-2980

RECEIVED  
EMPLOYEES' RETIREMENT  
SYSTEM  
STATE OF HAWAII

2006 DEC 21 P 11 18

**Re:                   Post Retirement Allowance Study**

Dear Members of the Board:

During the 2006 Legislative session, the Hawaii Legislature passed legislation directing the Employees' Retirement System of the State of Hawaii (HERS) to conduct an actuarial study analyzing possible improvements to the current post retirement allowance.

*Legislation*

The Legislature indicated in the legislation that the current post retirement was "inadequate for countering the negative impacts of inflation on pensions." The legislation also directed HERS to look at changes to the post retirement allowance that would be more "favorable to retirees, especially those who have been retired for a greater number of years."

However, the legislation passed by the Legislature did not provide much else in the way of guidance with regards to what kind of improvements in the post retirement allowance the Legislature wanted to see and more importantly did not discuss how much more in additional contributions the Legislature would be willing to provide to the HERS to fund an improved post retirement allowance.

*COLA Study*

The Legislative and Administrative Committee of the HERS Board met with representatives of Gabriel Roeder Smith & Company (GRS) to discuss possible changes to the post retirement allowances. The Committee members were very much aware that permanent improvements to the post retirement allowance would most likely be expensive. The Committee was also aware that the group of retirees that has been the most negatively impacted by inflation is those retirees that have been retired for more than twenty years, when inflation was much higher than it has been over the last twenty years.

After discussions with GRS it was decided that the Study would look at two different types of improvements to the post retirement allowance. The first type of improvements would be

permanent changes to the post retirement allowance. These changes would impact not only current retirees but future retirees as well. The second type of improvement to be studied would be in the form of an ad hoc increase to current retirees. The ad hoc nature of the increase would make them less expensive than a permanent change. Also, an ad hoc increase can more easily be directed at a specific group of retirees which may be more desirable for the legislature.

Therefore, the Committee directed GRS to prepare a list of possible permanent changes to the post retirement allowance and a list of possible ad hoc increases. The Committee would then select which possible changes in the post retirement allowance it would have GRS determine the actuarial impact on the HERS.

### ***Permanent Studies***

The Legislative and Administrative Committee decided to have GRS analyze two permanent changes to the post retirement allowance. The first study, which we will designate as Option #1P (permanent option #1) was to change the current post retirement allowance from a "simple basis" to a "compound basis". A "simple basis" means that each year's post retirement allowance is based on the retiree's original benefit from the HERS. Over time this amount becomes a smaller and smaller percentage of the retiree's total pension. A "compound basis" means that each year's post retirement allowance is based on the prior year's total pension amount rather than just the original pension amount. This methodology produces significantly larger post retirement allowances after a retiree has been retired for many years. The table below shows the hypothetical 2.5% increases on a "simple basis" vs. a "compound basis" for a member who retired with a \$1,000 monthly pension.

<u># of Years Retired</u>	Simple Basis			Compound Basis		
	<u>Monthly Increase</u>	<u>Total Monthly Pension</u>	<u>% Increase</u>	<u>Monthly Increase</u>	<u>Total Monthly Pension</u>	<u>% Increase</u>
0	\$ 0	\$1,000	N/A	\$ 0	\$1,000	N/A
1	25	1,025	2.50%	25	1,025	2.50%
2	25	1,050	2.44%	26	1,051	2.50%
3	25	1,075	2.38%	26	1,077	2.50%
4	25	1,100	2.33%	27	1,104	2.50%
5	25	1,125	2.27%	27	1,131	2.50%
10	25	1,250	2.04%	31	1,280	2.50%
15	25	1,375	1.85%	35	1,448	2.50%
20	25	1,500	1.69%	40	1,639	2.50%
25	25	1,625	1.56%	45	1,854	2.50%
30	25	1,750	1.45%	51	2,098	2.50%
35	25	1,875	1.35%	58	2,373	2.50%

As can be seen on the table, after 20 years of retirement the “compound basis” provides a benefit that is 9.2% larger than the “simple basis”. After 30 years of retirement the difference between the benefits has grown to 19.9%.

The actuarial impact on the HERS of Option #1P is shown in the table below. We have shown the impact on the normal cost, unfunded actuarial accrued liability, the funding period based on the current employer contribution rates, as well as the minimum employer contribution rate necessary to satisfy the GASB #25 Annual Required Contribution (ARC) requirements, as well as the employer rate necessary to produce the targeted funding period of 25 years.

**Actuarial Cost Impact – Option Study #1P  
2.5% Compound COLA**

	Baseline Results (1)	Option #1P (2)	Change (3)
Gross Normal Cost % (includes employee contribution)	12.43%	12.83%	0.40%
Unfunded Actuarial Accrued Liability (\$ in millions)	\$5,185	\$5,894	\$709
Funding Period based on Current Statutory Contribution Rate	43.0 years	Never	N/A
GASB #25 ARC (30-year Funding)	15.29%	17.02%	1.73%
Targeted Employer Contribution Rate (25-year Funding)	16.25%	18.11%	1.86%

You will note that the cost numbers shown in Column 1 are not the same as shown in the June 30, 2006 valuation report. As agreed to by the Board, GRS will be using as a baseline, for all cost analyses performed during fiscal year 2006-2007, the June 30, 2006 liabilities determined using our recommended rates of salary increase from the 2006 experience investigation rather than the statutory 4% rate of increase on which the June 30, 2006 valuation report is based.

The other permanent change study, which we will designate as Option #2P, would make several changes to the post retirement allowance. The first change would be the same change as the previous study which is to change from a “simple basis” to a “compound basis”. The second change would be to remove the fixed basis of the post retirement allowance and instead tie the size of each year’s new post retirement allowance to the change in the Consumer Price Index (CPI) for the prior twelve months. The increase would be limited to a maximum of 3.0%.

The most significant change would be that instead of the first post retirement allowance being paid on the July 1<sup>st</sup> following the calendar year in which the member retired, the first post retirement allowance increase under this proposed retirement allowance would be paid on the July 1<sup>st</sup> following the later of a participant’s 70<sup>th</sup> birthday or the fifth anniversary of his or her date of retirement.

Due to constitutional protections, current members (both active and retired) would continue to receive the 2.5% "simple" post retirement allowance increase each year until they reach the later of age 70 or their fifth anniversary of their date of retirement. Once they have reached the eligibility for the proposed post retirement allowance they would receive the greater of the new compound post retirement allowance increase based on the change in the CPI or the current 2.5% post retirement allowance increase. Future members who join HERS after the legislation becomes effective would only be entitled to the new post retirement allowance.

The actuarial impact on the HERS of Option #2P is shown in the table below.

**Actuarial Cost Impact – Option Study #2P**  
**CPI Compound COLA (3% Maximum) – Minimum Age 70 & 5 Years in Retirement**

	Baseline Results (1)	Option #2P (2)	Change (3)
Gross Normal Cost % (includes employee contribution)	12.43%	11.27%	-1.16%
Unfunded Actuarial Accrued Liability (\$ in millions)	\$5,185	\$6,024	\$839
Funding Period based on Current Statutory Contribution Rate	43.0 years	45.6 years	2.6 years
GASB #25 ARC (30-year Funding)	15.29%	15.70%	0.41%
Targeted Employer Contribution Rate (25-year Funding)	16.25%	16.82%	0.57%

As shown above, this proposed post retirement allowance would decrease the normal cost of HERS. This decrease is due to the fact that we determine the normal cost based on the ultimate benefit structure. The normal cost is determined based on a post retirement allowance that will commence at later ages than the current allowance. Even though the increases when they commence will most likely be larger than the current program would produce, the delay in these increases produces a cost savings for new members.

As noted above, for new hires the proposed program would cost less than the current program. However, the overall liabilities of the proposed post retirement allowance are greater than the current program. This occurs because of the fact that once a member is eligible for the new post retirement allowance, the increases will tend to be bigger than the current 2.5% "simple basis" increases. In addition, for current members each year's post retirement allowance increase cannot be less than what the member would have received under the current 2.5% "simple basis". Therefore, current members can only receive better benefits than they currently have, which produces the increase in the actuarial liabilities of HERS.

### *Ad Hoc Options*

This section of the report will discuss several alternative ad hoc increase proposals. The term ad hoc implies that this will be a one time event and not a permanent change to the benefit structure. As an example, suppose all current retirees received a permanent \$200 increase in their monthly pensions. Next year the increase in the post retirement allowance would still be 2.5% of the retirees' original allowances and new retirees would not be entitled to the \$200 monthly increase. In other words, all of the retirees' benefits were increased by \$200, but no future increases of this type are contemplated in the evaluation of the cost of the System.

The first ad hoc increase to be studied, which we will designate as Option #1AH, would provide an increase intended to catch-up retirees with inflation. In other words, if a retiree has received post retirement allowances equal to 20% of their pension, but inflation since retirement has been 30% then the proposed increase would be designed to provide a one-time increase in the retiree's post retirement allowance to make it equal to the 30% of the original benefit. Future post retirement allowance increases would still be based on the retiree's original benefit and no future catch-ups would be contemplated. The eligible group for this ad hoc increase would be those retirees who have attained the age of 70 by July 1, 2007.

As you are aware, in the past there have been other increases in retirees' benefits other than the post retirement allowance, such as the bonus payments. Therefore, we cannot just compare the change in the CPI with the number of actual post retirement allowances that have been granted (multiplied by 2.5%). Instead we will compare the total benefit being received by the retiree to the retiree's original benefit. This percentage increase will then be compared to the change in the CPI since the retiree's date of retirement. Rather than doing this comparison on an individual basis, the comparison will be performed on an aggregate basis. The table below compares the average increase in benefits for retirees with the change in the CPI since that year of retirement for selected years.

Year of Retirement	Average Increase in Retirees Benefits	Change in CPI Since Retirement	Ad hoc Increase % of Total Benefit to Restore Purchasing Power
2005	2.50%	3.21%	0.69%
2000	15.01%	17.05%	1.77%
1995	27.55%	32.27%	3.70%
1990	42.42%	54.26%	8.32%
1985	60.42%	87.38%	16.81%
1980	82.05%	144.58%	34.35%
1975	104.29%	274.52%	83.33%
1970	241.32%	419.14%	151.13%
1965	273.15%	520.97%	134.19%

The actuarial impact on the HERS of Option #1AH is shown in the table below. We have shown the impact on the unfunded actuarial accrued liability, the funding period based on the current employer contribution rates, as well as the minimum employer contribution rate necessary to satisfy the GASB #25 Annual Required Contribution (ARC) requirements, as well as the employer rate necessary to produce the targeted funding period of 25 years. Since these benefits are one time ad hoc increases, there is no change in the normal cost of the HERS.

**Actuarial Cost Impact – Option Study #1AH  
CPI Catch-up COLA – Minimum Age of 70**

	Baseline Results (1)	Option #1AH (2)	Change (3)
Unfunded Actuarial Accrued Liability (\$ in millions)	\$5,185	\$5,563	\$378
Funding Period based on Current Statutory Contribution Rate	43.0 years	54.8 years	11.8 years
GASB #25 ARC (30-year Funding)	15.29%	16.01%	0.72%
Targeted Employer Contribution Rate (25-year Funding)	16.25%	17.04%	0.79%

The remaining ad hoc options will all be increases determined as \$1 per month increases. This does not mean that we are recommending that the benefit increase level be \$1 per month. However, by providing the cost analyses for a \$1 per month it becomes a simple exercise to determine the cost impact of a \$2 or \$3 per month increase because the cost impact is multiplicative. For example if a \$1 scenario cost \$10 million, then a \$2 per month increase would cost \$20 million. Since the remaining ad hoc options are not directly related to the retiree's pay or benefit amount, but instead are based on the retirees' years of service or the number of years since they retired, these options will produce larger increases as a percentage of the retiree's benefit for retirees with lower benefit levels.

The second ad hoc option, which we will designate as Option #2AH, provides an increase in the retiree's benefit of \$1 per month for each year of service earned by the retiree. For example, an eligible retiree who retired with 25 years of service would be eligible for a \$25 per month increase in his or her pension. To be eligible for the increase the retiree must have attained the age of 75. The actuarial impact of Study Option #2AH is shown below.

**Actuarial Cost Impact – Option Study #2AH  
 \$1 Per Month Per Year of Service – Minimum Age of 75**

	Baseline Results	Option #2AH	Change
	(1)	(2)	(3)
Unfunded Actuarial Accrued Liability (\$ in millions)	\$5,185	\$5,207	\$22
Funding Period based on Current Statutory Contribution Rate	43.0 years	43.8 years	0.8 years
GASB #25 ARC (30-year Funding)	15.29%	15.35%	0.06%
Targeted Employer Contribution Rate (25-year Funding)	16.25%	16.32%	0.07%

The third ad hoc option is similar to the second ad hoc option. We will designate this option as Option #3AH. This option also provides an increase in the retiree's benefit of \$1 per month for each year of service earned by the retiree. However, to be eligible under this scenario the retiree must have attained the age of 70 and must also have been retired at least 20 years. The actuarial impact of Study Option #3AH is shown below.

**Actuarial Cost Impact – Option Study #3AH  
 \$1 Per Month Per Year of Service – Minimum Age 70 & 20 Years in Retirement**

	Baseline Results	Option #3AH	Change
	(1)	(2)	(3)
Unfunded Actuarial Accrued Liability (\$ in millions)	\$5,185	\$5,198	\$13
Funding Period based on Current Statutory Contribution Rate	43.0 years	43.6 years	0.6 years
GASB #25 ARC (30-year Funding)	15.29%	15.34%	0.05%
Targeted Employer Contribution Rate (25-year Funding)	16.25%	16.30%	0.05%

The final ad hoc study, which we will designate as Study Option #4AH, provides two types of benefit increases. The first part of the increase would be \$1 per month per year of service earned by the retiree. In addition, there would be added to this increase the amount of \$1 per month for each complete year since retirement. To be eligible for this benefit the retiree must be at least age 70. The actuarial impact of Study Option #4AH is shown below. Note that we have shown the cost

impact for each portion of the increase separately so that alternatives such as \$2 per year of service and \$3 for each year since retirement may be considered.

**Actuarial Cost Impact – Option Study #4AH**  
**\$1 Per Month Per Year of Service and \$1 Per Month Per Year Retired – Minimum Age 70**

	Option #4AH				
	Baseline Results	\$1 per Year of SVC	\$1 per Year Retired	Combined	Change
	(1)	(2)	(3)	(4)	(5)
Unfunded Actuarial Accrued Liability (\$ in millions)	\$5,185	\$5,222	\$5,212	\$5,249	\$64
Funding Period based on Current Statutory Contribution Rate	43.0 years	44.2 years	43.7 years	44.9 years	1.9 years
GASB #25 ARC (30-year Funding)	15.29%	15.38%	15.34%	15.43%	0.14%
Targeted Employer Contribution Rate (25-year Funding)	16.25%	16.35%	16.30%	16.40%	0.15%

Some of the ad hoc studies have different eligible groups. They also have different benefit levels. The table below shows the estimated number of retirees that would receive an increase under each of the alternative ad hoc increases. We have also show the average monthly increase as a dollar amount and as a percentage of the July 1, 2006 pension.

Item	Option Study #				
	1AH	2AH	3AH	4AH \$ per year of SVC	4AH \$ per years retired
Number of Retirees Impacted	19,439	13,477	8,764	19,439	19,439
Average Monthly Increase in Dollars	\$300	\$23	\$24	\$24	\$19
Average Monthly Increase as % of Total Benefit	20.37%	1.71%	1.85%	1.61%	1.30%

***Administrative Costs***

In the cost analyses shown above, GRS has estimated the actuarial cost impact on HERS of implementing the proposed studies. It should be noted that there would be additional administrative cost to the System. These costs could include modifications to the computer system, calculations of the increase in benefits, a major communication effort, as well as changes to published materials. These costs would be more significant for the permanent increases than for the ad hoc increases, but either type of increase would result in many man hours and expense.

***Other Comments***

Our actuarial valuation report as of June 30, 2006 makes a recommendation that the employer contribution rates be increased because we do not believe that future asset gains will be able to offset both the 2002-2003 Bear Market investment losses and the pattern of significant salary increases that has evidenced itself beginning with the 2005 valuation results and continuing in the 2006 valuation results. This pattern is anticipated to continue into the near-term future.

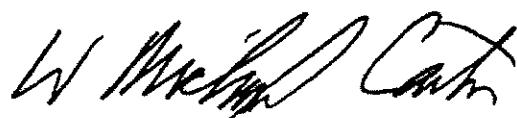
Because of this situation and our contribution increase recommendation, we strongly believe that it would be inappropriate for ERS to be required to absorb any benefit increases without additional adequate funding. For the ad hoc options this additional funding could be in the form of employer contribution rate increases or in the form of a supplemental lump-sum appropriation equal to the additional liability created by the ad hoc increase.

It has been our pleasure to prepare this study for the HERS. If you have any questions please don't hesitate to contact us.

Sincerely,



Lewis Ward  
Consultant



W. Michael Carter  
Senior Consultant

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