City of Houston
COH PENSION SYSTEMS

Budget & Fiscal Affairs Committee

December 11, 2012

Finance Department

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COH PENSION SYSTEMS - Agenda

- Status of compliance with state mandated independent actuarial audits of fund actuaries' reports
- Review the COH pension plans in context with an NIRS study
- Illustration of estimated financial impact on the City of possible changes in assumptions and benefits presented in the Long Term Financial Management Task Force "menu of options"
- Illustration of the estimated financial impact on the City of new GASB rules for financial reporting and disclosure

*National Institute on Retirement Security – "Lessons From Well-Funded Public Pension Plans", June 2011

Status of Compliance with State Mandated Independent Actuarial Audit Requirement

- **The City has engaged Retirement Horizons Inc. (RHI) to perform the audits**
- **The City has requested census data from the pension funds to allow RHI to perform the audits**
- **The pension funds have declined to furnish the requested census data**
- **RHI has created hypothetical databases from available published information**
  - Insufficient for replication audit purposes
  - Sufficient for relative value analysis of plan/assumption changes

Review of COH Plans in Context with NIRS Study

- **National Institute on Retirement Security (NIRS)* identified common features of well managed public pension plans:**
  - 6 plans analyzed over a 10 year period beginning in 2000
  - Through 2 significant economic downturns
  - Plans remained affordable and sustainable

- **The common features identified by NIRS are:**
  - Funding based on a “reasonable” assumed investment return rate
  - Cost of Living Adjustments (COLAs) granted “responsibly”
  - Funding based on the actuarially determined contribution amounts
  - Employees share in cost of the plan
  - Benefit improvements actuarially valued before adoption
  - Provisions included to prevent benefit spiking

*National Institute on Retirement Security – “Lessons From Well-Funded Public Pension Plans”, June 2011

“Reasonable” Assumed Investment Return Rates

- **COH plans use 8.5% as determined by pension boards**

- **NIRS study plans as compared with COH Plan**
  - 2 use 7.25%
  - 1 uses 7.5%
  - 3 use 8.00%

- **From National Association of State Retirement Administrators (NASRA) Issue Brief in July 2012**
  - 126 plans surveyed
  - 122 use less than 8.5%, and 4 use 8.5%
  - Average weighted by size of 7.68%
  - 45 reduced assumption since 2008

Topic for discussion with pension boards:

Does an investment return assumption of 8.5% produce a reasonable estimate of the actual cost of the plans so that current City funding levels are not expected to increase?

Historical Investment Return Rates Achieved by COH Plans

For the number of years ended June 30, 2012

HFRRF **HMEPS** **HPOPS**

Reported by **Actuarial** **Reported by** **Actuarial**

Reported by **Actuarial**

No. of years **Pension board** **Rate** **Pension board** **Rate**

Pension board **Rate**

1 1.9% 1.6% -0.4% -

0.9% 3.0% 2.8%

5 3.4% 3.1% 2.7%

1.3% 3.1% 2.9%

10 8.9% 8.5% 8.2%

7.2%

15 6.8%

6.0%

20 8.4%

8.1%

* Cartoon: Pensions and investments magazine

- Rates reported by the pension board are net of investment management expenses only
- Actuarial rates are net of investment management and plan administrative expenses, comparable to 8.5% assumption

Granting Cost of Living Adjustments (COLAs) "Responsibly"

- **COLAs are automatically granted annually in COH plans but differ in calculations**
  - HPOPS is based on 80% of CPI, min 2.4% - max 8.0%, compounded
  - HFRRF in DROP – *increase up to 20% at retirement plus 3% per year thereafter*, compounded
  - HFRRF not in DROP – 3% per year , compounded
  - HMEPS - 3% (2% if hired between 1/1/05 and 1/1/08) , not compounded; none for employees hired after 1/1/2008

- **NIRS study plans**
  - 4 plans are ad-hoc
  - 1 plan is limited to 50% CPI on first $18,000 annual benefit
  - 1 plan is limited to lesser of 50% of CPI or 3%

- **From NASRA study, several states have changed COLA provision since 2009 to reduce plan liabilities**
  - 11 states reduced COLAs for current retirees
  - 5 states reduced COLAs only for current and future active employees
  - 5 states reduced COLAs only for future hires

Topic for discussion with pension boards:

Would it be more responsible from a fiduciary perspective to take into consideration actual increases in the cost of living and/or the financial health of the plan and the plan sponsor before granting COLAs?

Funding Based on Actuarially Determined Contribution Amounts

- **Funding policies for COH plans target future contributions equal to actuarially determined amounts**
  - Negotiated schedule of increasing contributions at HMEPS and HPOPS
  - Actuarially determined amounts adjusted every 3 years at HFRRF

Topic for discussion with pension boards:

2 of the 3 pensions boards have recognized the fiscal stress placed on the City by contributing actuarially determined amounts and have negotiated reduced contributions; however, benefit security remains in jeopardy over the long-term due to the unsustainable future actuarially determined contributions.

What steps can be taken to enhance benefit security with sustainable funding levels over the long-term?

Employee Cost Sharing

- **COH plans have employee cost sharing features**
  - Employee contributions based on a fixed percent of pay, or
  - Lower benefit levels for non-contributory groups in HMEPS

- **COH employee contributions as a percent of pay**
  - 5% to HMEPS + 6.2% to social security for HMEPS contributory plan members
  - 6.2% to social security for HMEPS non-contributory plan members
  - 9.0% for HPOPS members hired prior to 10/09/2004
  - 10.25% for HPOPS members hired after 10/09/2004
  - 9.0% for HFRRF members

- **Employee (EE) contribution share of cost negated by corresponding increase in benefits in DROP at HPOPS and HFRRF**

Topic for discussion with pension boards:

- Should employee contributions be based on a percentage of the total actuarially determined contributions?
- Should the corresponding increase in DROP benefit be discontinued to avoid negating the cost sharing of employee contributions?

Advance Actuarial Valuations of Benefit Improvements

- **City has relied on pension funds to provide advance actuarial valuations of benefit improvements**
  - Cost of benefit improvements were underestimated at HMEPS and HFRRF
  - No advance valuation of the impact on pension costs of other bargained compensation changes at HPOPS

Topic for discussion with pension boards:

To avoid miscommunication of actuarial results which have significant impact on the City, should the actuarial process be a more collaborative process managed jointly by the City and the pension boards?

Anti-Benefit Spiking Provisions

- **HMEPS and HPOPS have implemented anti-benefit spiking provisions**
  - Benefits are based on "final" 3 year average compensation
  - Compensation excludes overtime and other non-regular forms of pay

- **HFRRF provisions are subject to benefit spiking**
  - Benefits based on highest average of "any" 3 years non-consecutive compensation
  - Compensation includes overtime

Topic for discussion with pension boards:

Should HFRRF implement anti-benefit spiking provisions similar to HMEPS and HPOPS?

Illustration of the Financial Impact to the City of Possible Changes in Assumptions and/or Benefits

- **Changes were indentified by the Long Range Financial Management Task Force (LRFMTF) for impact analysis**
  - Lowering of the investment return rate assumption from current 8.5%
  - Elimination of future automatic COLAs
  - Replacing future DROP account accruals with basic formula accruals based on salary and service
  - Illustrated impact analysis is strictly for informational purposes. Actual implementation of changes would differ in timing and design.

Estimated Impact of Changes in the Investment Return Assumption

	Unfunded Accrued Liability			Actuarially Determined City Contribution FY2013					
				$ Amount			% of Payroll		
Assumed Rate	8.5%	7.5%	4.5%	8.5%	7.5%	4.5%	8.5%	7.5%	4.5%
HFRRF	$336	$712	$2,389	$73	$110	$258	26.9%	40.5%	95.1%
HPOPS	$770	$1,184	$3,129	$127	$165	$321	32.7%	42.6%	82.6%
HMEPS	$1,461	$1,900	$3,896	$130	$154	$236	23.8%	28.1%	43.1%
TOTALS	$2,567	$3,796	$9,414	$330	$429	$815			

($ Amounts in millions)

NOTES

1) Amounts at 8.5% are from the funds' actuarial valuations as of 7/1/2011

2) Amounts at 7.5% and 4.5% are estimated by applying the % changes from the RHI valuations based on imputed data from published information to the 8.5% amounts

3) The 4.5% rate is a proxy for a high quality corporate bond rate, which is required for measuring liabilities of private sector plans

Estimated Impact of Eliminating Future Automatic COLAs

	Current			No COLAs		
		Actuarially Determined City Contribution FY2013			Actuarially Determined City Contribution FY2013	
	Unfunded Accrued Liability	$ Amount	% of Payroll	Unfunded Accrued Liability	$ Amount	% of Payroll
HFRRF	$ 336	$ 73	26.9%	$ (355)	$ 10	3.7%
HPOPS	$ 770	$ 127	32.7%	$ 171	$ 68	17.4%
HMEPS	$ 1,461	$ 130	23.8%	$ 809	$ 86	15.6%
Totals	$ 2,567	$ 330		$ 625	$ 164	

($ Amounts in millions)

NOTES:

1) Current amounts are from the funds' actuarial valuations as of 7/1/2011 based on an 8.5% assumed rate of return

2) No COLA amounts are estimated by applying the % changes from the RHI valuations based on imputed data from published information to the current amounts

3) The actual City contribution to HFRRF is subject to a statutory minimum of 18% of payroll (2 times the employee contribution rate of 9% of pay)

Estimated Impact of Replacing Future DROP Accruals with Basic Formula Accruals

Current

		Actuarially Determined City Contribution FY2013	
	Unfunded Accrued Liability	$ Amount	% of Payroll
HFRRF	$ 336	$ 73	26.9%
HPOPS	$ 770	$ 127	32.7%
HMEPS	$ 1,461	$ 130	23.8%
Totals	$ 2,567	$ 330	

DROP Change

		Actuarially Determined City Contribution FY2013	
	Unfunded Accrued Liability	$ Amount	% of Payroll
HFRRF	$ 245	$ 62	23.9%
HPOPS	$ 584	$ 81	20.9%
HMEPS	$ 1,250	$ 116	21.2%
Totals	$ 2,079	$ 259	

($ Amounts in millions)

NOTES:

1) Current amounts are from the funds' actuarial valuations as of 7/1/2011 based on an 8.5% assumed rate of return

2) DROP change amounts are estimated by applying the % changes from the RHI valuations based on imputed data from published information to the current amounts

New GASB Rules for Financial Reporting and Disclosure

- **Effective for FY2015**
- **No longer direct relationship between funding and financial reporting**
  - **Different assumed discount rates**
  - **Fair value vs. “smoothed” value of assets**
  - **Financial reporting more volatile than funding**
- **Increase in pension liability on the City’s balance sheet**

Fiscal Year ending 6/30/2011 ($ millions)	HFRRF	HPOPS	HMEPS
Current GASB 27 Employer Accounting			
Actuarial Accrued Liability	$3,558.2	$4,488.1	$3,790.3
Actuarial Value of Assets	$3,222.3	$3,718.0	$2,328.8
Unfunded Actuarial Liability	$335.9	$770.1	$1,461.5
Net Pension Obligation (Asset)	($0.5)	$480.7	$388.2
New GASB 68 Employer Accounting (8.5% Interest)			
Total Pension Liability	$3,558.2	$4,488.1	$3,790.3
Plan Fiduciary Position	$3,203.1	$3,530.6	$2,129.4
Net Pension Liability	$355.1	$957.5	$1,660.9
New GASB 68 Employer Accounting (7.5% Interest)			
Total Pension Liability	$3,871.1	$5,178.8	$4,315.4
Plan Fiduciary Position	$3,203.1	$3,530.6	$2,129.4
Net Pension Liability	$668.0	$1,648.2	$2,186.0