



City of Houston

Long Range Financial Management Task Force

Review of Pension Systems

November 7, 2011



Agenda

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Acronyms

Acronym	Name
COLA	Cost of Living Adjustment
DB	Defined Benefit
DC	Defined Contribution
DROP	Deferred Retirement Option Plan
EE	Employee
ER	Employer
ERISA	Employee Retirement Income Security Act
FAP	Final Average Pay
GASB-ARC	Governmental Accounting Standards Board - Annual Required Contribution
HFRRF	Houston Firefighter's Relief and Retirement Fund
HMEPS	Houston Municipal Employees Pension System
HPOPS	Houston Police Officers' Pension System
UAL	Unfunded Accrued Liability



Review of Pension System Organizational Framework



Organizational Framework

- Three separate defined benefit plans – civilians, police, firefighters
- Administration of plans outsourced to three separate independent trust organizations
 - Houston Municipal Employees Pension System (HMEPS)
 - Houston Police Officers' Pension System (HPOPS)
 - Houston Firefighters Relief and Retirement (HFRRF)
- The independent trust organizations are established and governed by three separate state statutes to:
 - Manage the plan's investments, and
 - Pay the benefits when they are due



Organizational Framework

- The descriptions of the benefits (plan design) are included in the applicable state statute
 - HMEPS and HPOPS have the ability to trump their statutes through Meet & Confer with the City
 - HFRRF statute does not permit Meet and Confer
- Pension benefits are considered separately from other elements of the City's total compensation program
- The actuary advising on funding and expense options reports to the plan administrator rather than the City as plan sponsor bearing the funding risks and expense reporting responsibilities



Pension Board Composition

	<u>HMEPS</u>	<u>HPOPS</u>	<u>HFRRF</u>
Elected Active Beneficiary Trustees	4	3	5
Elected Retired Beneficiary Trustees	2	2	1
Trustees Appointed By:			
a. Mayor	1	1	1
b. City council	2	0	0
c. City Controller	1	0	0
d. City Finance Director	0	1	1
e. Elected Beneficiary Trustees	1	0	2
Total Trustees	11	7	10



Size of Pension Systems

	<u>HMEPS</u>	<u>HPOPS</u>	<u>HFRRF</u>
1. Number of members as of July 1, 2010			
a. Actives	12,913	5,347	3,911
b. Retirees	8,526	2,985	2,609
c. Deferred Vesteds	<u>5,685</u>	<u>24</u>	<u>8</u>
d. Total	27,124	8,356	6,528
2. Approximate size of staff	28	20	29
3. FY2012 Operating Budget*	\$5.9M	\$3.9M	\$7.2M
4. Market value of assets at 6/30/2011	\$2.1B	\$3.5B	\$3.2B

*Excluding investment related expenses which offset investment income

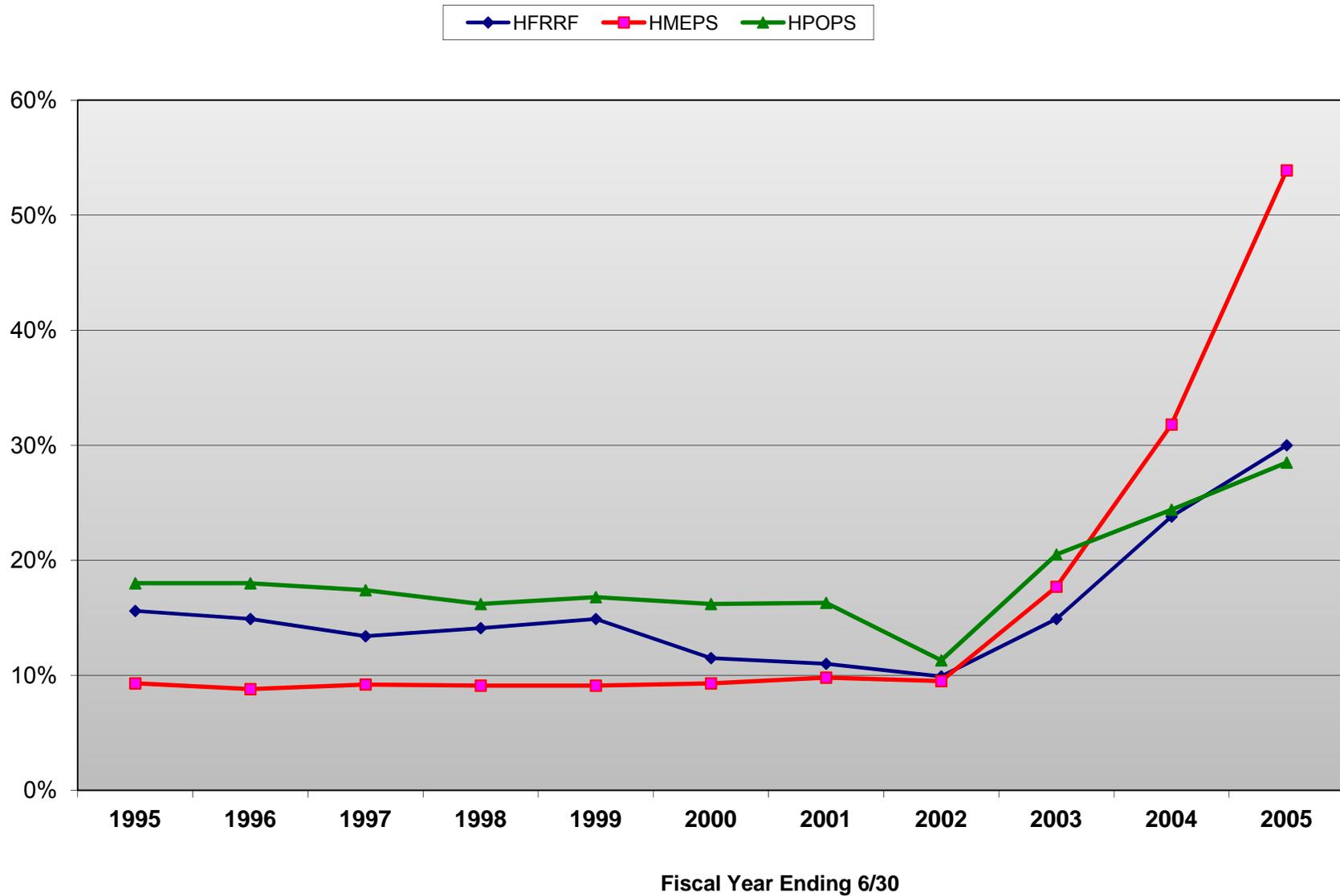


Genesis of Increases in Funding Liabilities



Actuarial City Contribution as a Percent of Payroll

Increased Dramatically From 2002 to 2005





What Happened?

- **At HMEPS:**

- An increase in benefits was proposed in 2001
- HMEPS estimated the ongoing City contribution rate would be 15% of payroll for the proposed benefit increase
- City Council and state legislature approved and implemented the benefit increase based on that estimate
- After implementation the actuarially calculated city contribution rate increased to 53% of payroll

- **At HPOPS:**

- HPOPS statute included plan provisions allowing for individual “benefit spiking” without regard to impact on the overall plan’s liability
 - Pension benefits were based on highest pay in two week period
 - Pay included overtime and one-time pays
- City/HPD administration apparently did not consider the impact on pension liabilities of bargained changes to other elements of the compensation program
- The actuarially calculated city contribution rate increased from 11% to 30% of payroll



What Happened?

- **At HFRRF:**

- The HFRRF statute allows the HFRRF board to increase benefits without city approval if the HFRRF actuary determines that the increase would not pose “a material risk of jeopardizing the fund’s ability to pay any existing benefit”
- The HFRRF board exercised the provision in 2001
- Based on information submitted by HFRRF indicating the benefit increase would have a minimal impact on the City’s funding obligations, the benefit increase was:
 - Approved by the State Pension Review Board
 - Supported by Mayor Lee Brown
- After the benefit increase was implemented the actuarially calculated city contribution rate actually increased from 10% to 30% of payroll

- **All Funds:**

- The inability of all 3 funds to achieve the funding target rate of investment return of 8.5% for the 10 year period ended June 30, 2010 has exacerbated the increase in City funding obligations



Steps Taken to Date to Mitigate the Increases in Funding Obligations



Steps Taken to Mitigate the Increased Funding Obligations in General

- State constitutional amendment passed in November 2003 prohibiting local municipalities from reducing accrued pension benefits
- A general election was held in May 2004 where citizens of Houston elected to opt out of the State constitutional amendment
- Although available, the option to reduce accrued pension benefits has not been utilized
- The position of Chief Pension Executive was created to enhance communication among all stakeholders and promote better decision making
- Issued approximately \$608 million in Pension Obligation Bonds
 - \$482 million to HMEPS
 - \$123 million to HPOPS
 - \$3 million for underwriter's discount and related cost of issuance



Steps Taken to Mitigate the Increased Funding Obligations to HMEPS

- Adopted a Meet & Confer agreement in 2004 which:
 - Reduced future benefit accrual rates
 - Increased the eligibility age for retirement from “Rule of 70” to “Rule of 75” (age + years of service)
 - Increased the mandatory employee contribution rate from 4% to 5% of pay
 - Increased assets by transferring an asset valued at \$300 million to the Pension Fund
 - Provided for a schedule of increasing dollar City contributions to HMEPS for FY2005 through FY2007
- Adopted a Meet & Confer agreement in 2007 which:
 - Established a new lower liability benefit structure for employees hired after 1/1/2008
 - Provided for a schedule of increasing dollar City contributions to HMEPS for FY2008 through FY2011
- Adopted a Meet & Confer agreement in 2011 which provides for future City contributions to HMEPS to increase by 2% of payroll each year until the contribution rate is equal to the GASB-ARC rate



Steps Taken to Mitigate the Increased Funding Obligations to HPOPS

- Adopted a Meet & Confer agreement in 2004 which:
 - Eliminated provisions conducive to “benefit spiking”
 - Established a new lower liability benefit structure for police officers sworn in after 10/9/2004 which includes:
 - Reduced benefit levels,
 - Increased employee contributions,
 - A minimum retirement eligibility age of 55, and
 - The elimination of DROP
 - Provided for a schedule of increasing dollar contributions to HPOPS at least until June 30, 2023
- Adopted a Meet & Confer agreement in 2011 which provides for a portion of the scheduled dollar contribution for FY2012 to be made with an “in kind” contribution of real estate valued at \$17 million



Steps Taken to Mitigate the Increased Funding Obligations to HFRRF

- The City has been unable to make any benefit changes
- The actuarially calculated contribution levels have been reduced somewhat due to changes in the actuarial assumptions adopted by HFRRF in 2010 (included an increase in the assumed retirement ages and reduction in the assumed salary increases)



Summary of Current and Near-Term Future Funding Liabilities



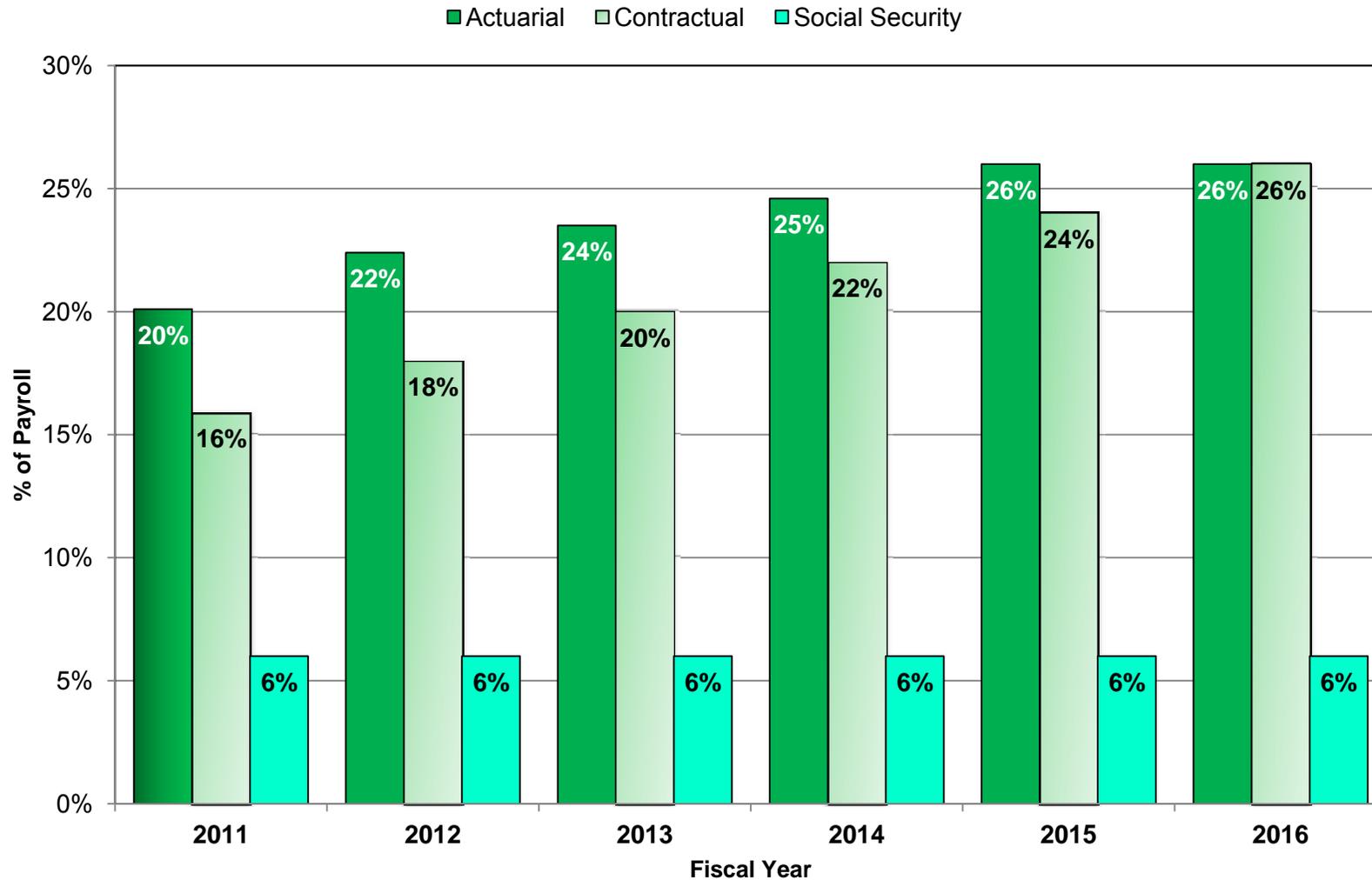
Summary of Funding Liabilities as of July 1, 2010*

(\$ in Thousands)

	<u>HMEPS</u>	<u>HPOPS</u>	<u>HFRRF</u>
1. Total funding liability**	\$3,975,116	\$5,179,097	\$3,979,751
2. Market value of assets			
a. Amount	\$1,828,492	\$2,972,027	\$2,721,637
b. % of Total funding liability (1)	46.0%	57.4%	68.4%
3. Current unfunded liability (1. – 2a.)	\$2,146,624	\$2,207,070	\$1,258,114
4. To be funded with future employee contributions	\$130,552	\$296,710	\$205,356
5. Unfunded liability to be funded with future city contributions (3. – 4.)	\$2,016,072	\$1,910,360	\$1,052,758
6. Allocation of item 5 for GASB-ARC to be amortized over a 30 year period as the UAL:			
a. Amount	\$1,359,328	\$706,029	\$220,625
b. % of item 5	67.4%	37.0%	21.0%
7. GASB-ARC rates of payroll for FY2012			
a. 30 year amortization of UAL	16.5%	11.8%	5.9%
b. Normal cost paid over the life of the plan	5.9%	20.2%	18.0%
c. Total	22.4%	32.0%	23.9%
8. Actual city contribution rate for FY2012	18.0%	20.0%	23.9%
<p>*Most recent actuarial available for all 3 plans</p> <p>**Present value of projected benefits payable to current members (based on an 8.5% discount rate)</p>			



HMEPS Projected City Contribution Rates: Actuarial vs. Contractual

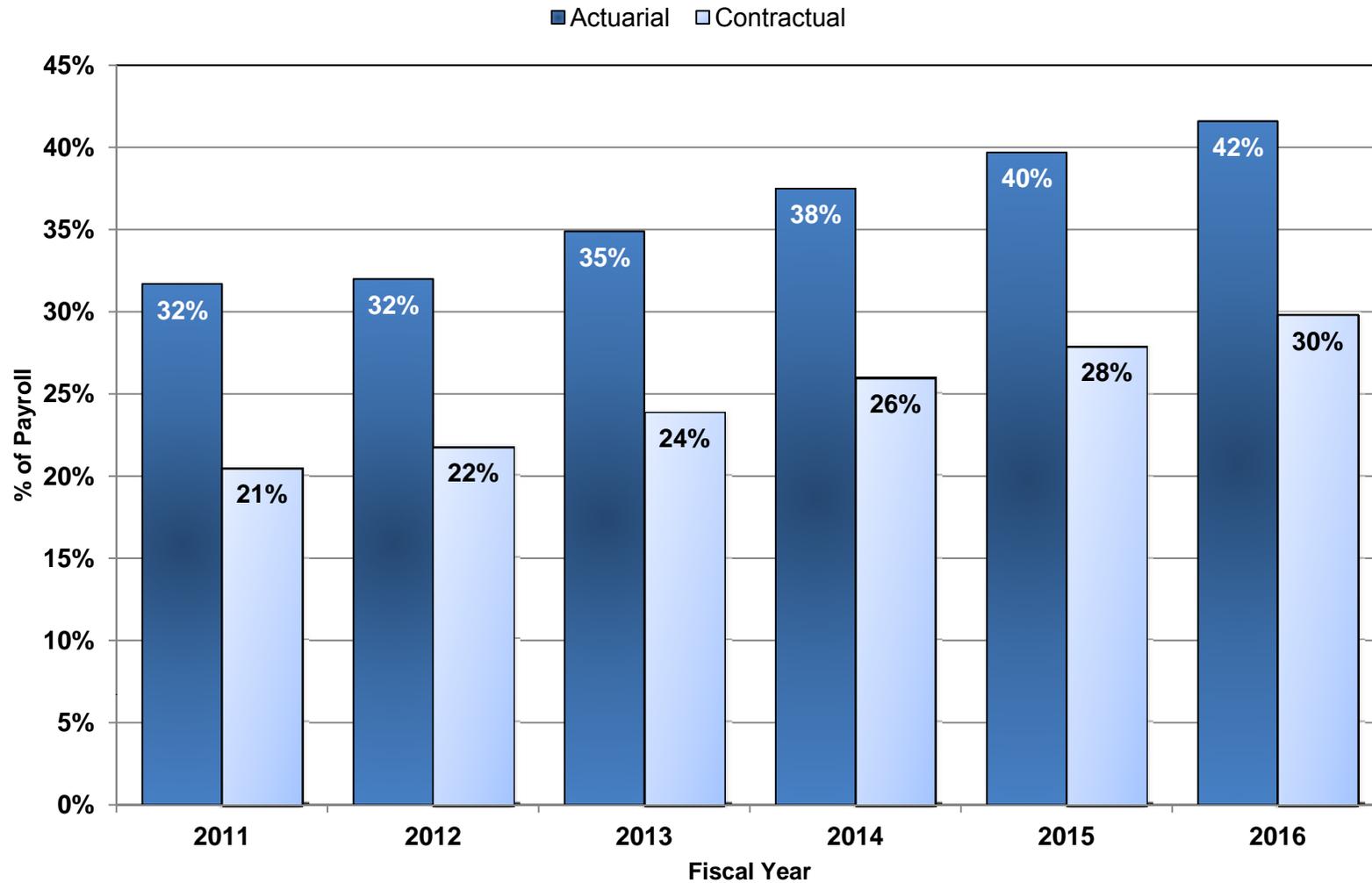


Note:

The projected actuarial contribution rates are based on the 7/1/2010 actuarial valuation report and do not reflect the investment gains for the year ended 6/30/2011. An additional 6.2% of payroll is paid to Social Security for HMEPS employees ONLY.



HPOPS Projected City Contribution Rates: Actuarial vs. Contractual

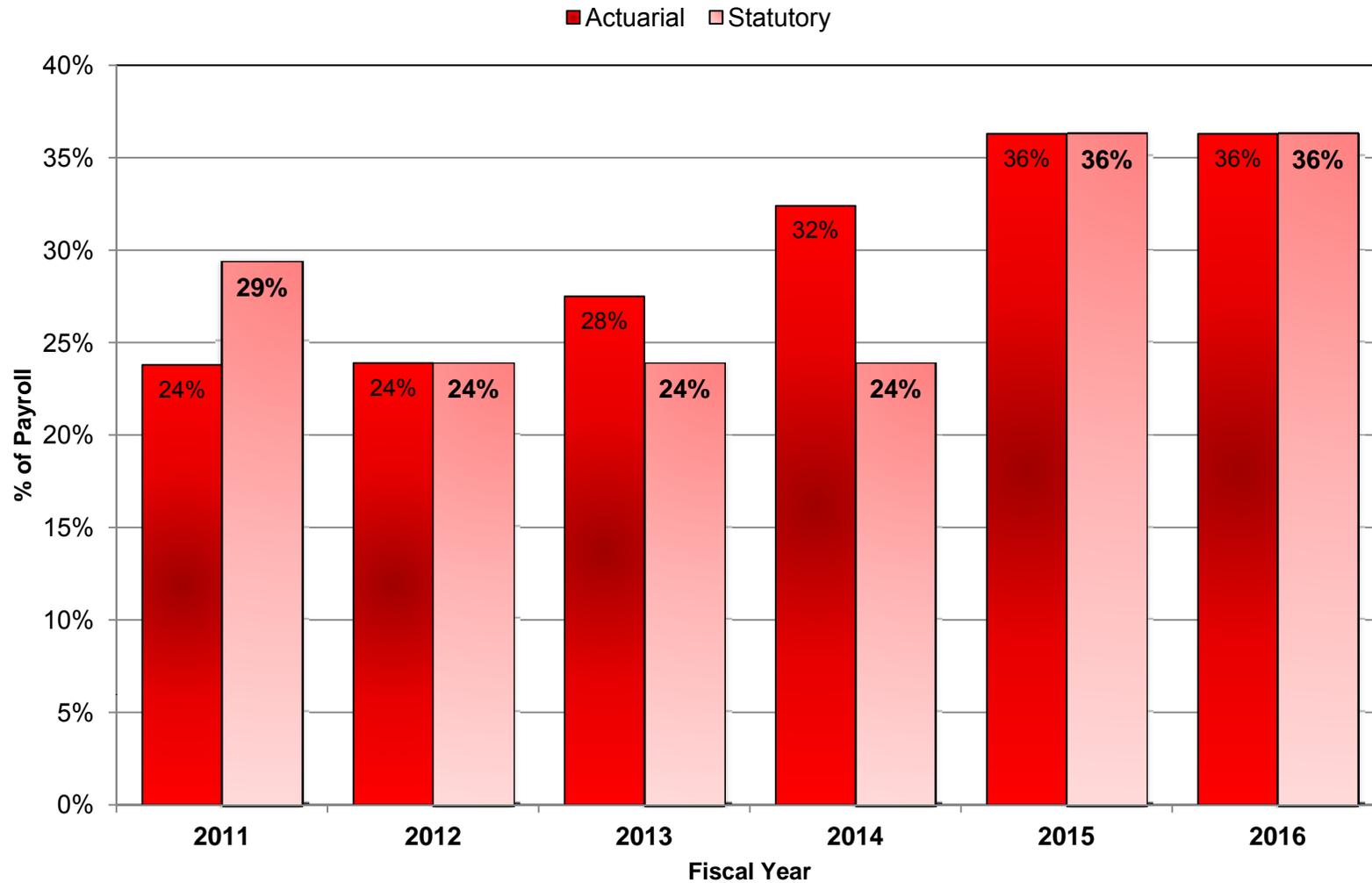


Note:

The projected actuarial contribution rates are based on the 7/1/2010 actuarial valuation report and do not reflect the investment gains for the year ended 6/30/2011.



HFRRF Projected City Contribution Rates: Actuarial vs. Statutory



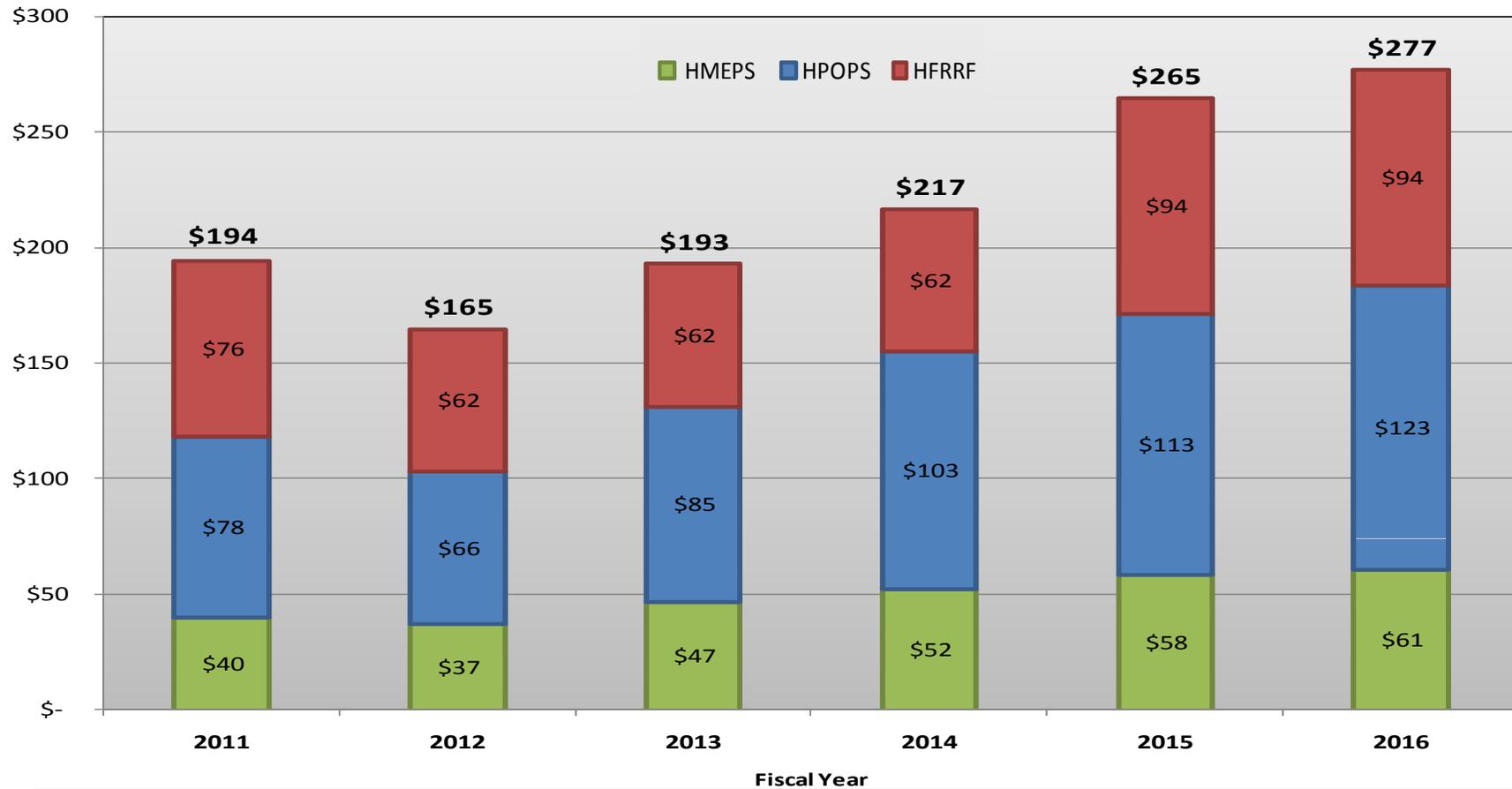
Note:

The projected actuarial contribution rates are based on the 7/1/2010 actuarial valuation report and do not reflect the investment gains for the year ended 6/30/2011.



Projected City Contributions From the General Fund Only

(\$ in Millions)

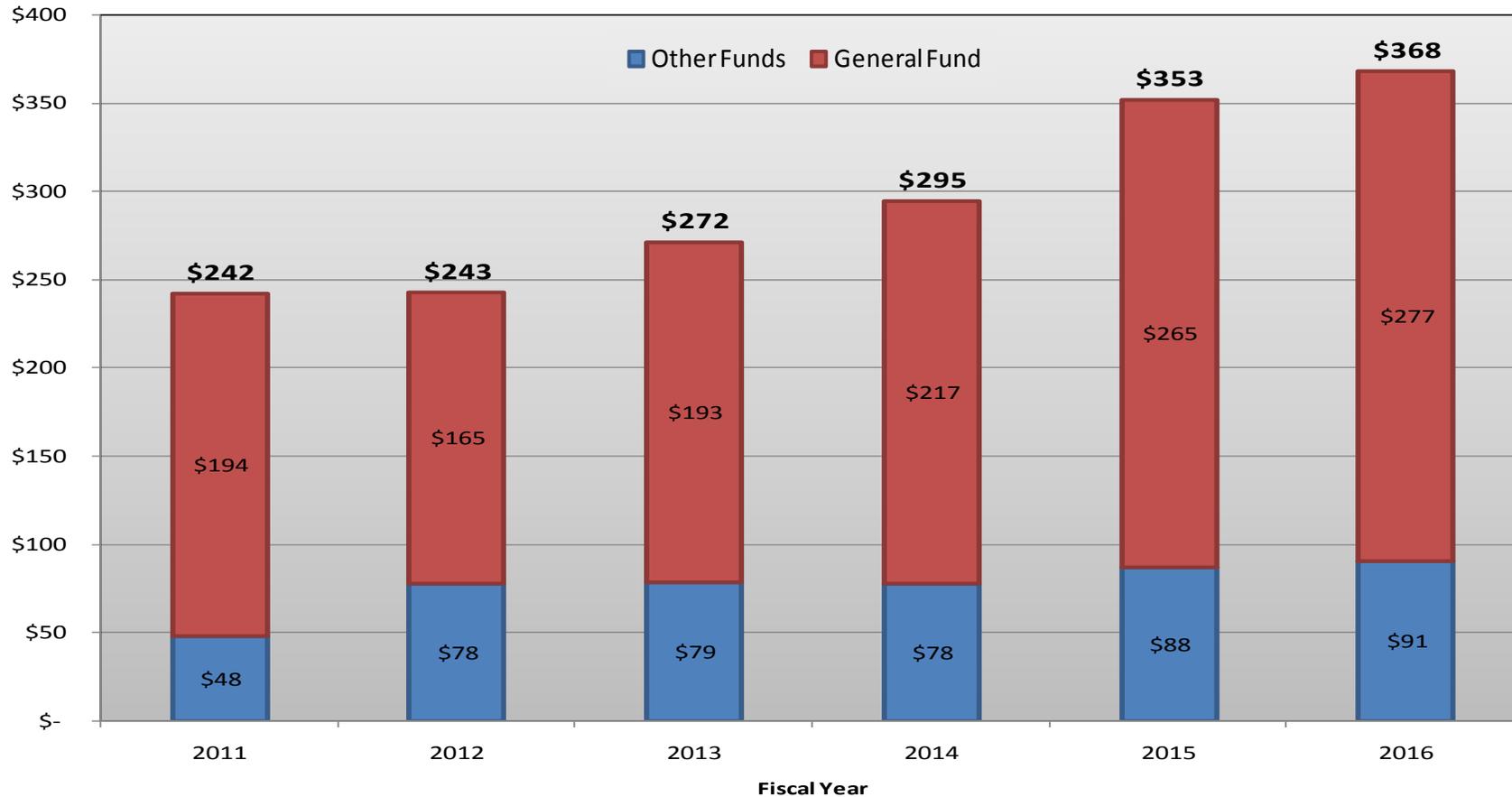


% of Total Contributions						
Fiscal Year	2011	2012	2013	2014	2015	2016
HMEPS	21%	23%	24%	24%	22%	22%
HPOPS	40%	40%	44%	47%	43%	44%
HFRRF	39%	37%	32%	28%	35%	34%



Projected City Contributions From All Funds

(\$ in Millions)



% of Total Contributions						
Fiscal Year	2011	2012	2013	2014	2015	2016
General Fund	80%	68%	71%	74%	75%	75%
Other Funds	20%	32%	29%	26%	25%	25%



Review of Current Benefit Levels



COH Pension Systems Retirement Benefit Levels

Replacement ratio:

- Standard measure of retirement benefit levels
- Retirement income as a % of pre-retirement income
- For benefit formula purposes, pre-retirement income is defined as the average pay:
 - Excluding overtime, received for the highest paid 78 pay periods of employment for HMEPS,
 - Excluding overtime, received during the 78 pay periods immediately prior to retirement for HPOPS,
 - Including overtime, received for the highest paid 78 pay periods of employment for HFRRF.



HMEPS Formula Benefits for Civilian Employees Without DROP

<u>Years of Service at Retirement</u>	<u>Plan A Employees Hired Prior to 1-1-08</u>			<u>Employees Hired After 1-1-08</u>
	<u>All Service Prior to 1-1-05</u>	<u>10 years Service After 1-1-05</u>	<u>All Service After 1-1-05</u>	
20	68%+ SS	58% + SS	50% + SS	36% + SS
25	89%+ SS	75% + SS	66% + SS	45% + SS
30	90%+ SS	90% + SS	83% + SS	50% + SS
EE Contribution % of Salary		5%+6.2% SS		0%+6.2% SS
Eligible for Full Benefit		Age+Svc=75		Age 62 & 5 Yrs
OT Included in Benefit Calculation		No		No
DROP Available		Yes		No
Automatic Annual COLA		Yes		No



HPOPS and HFRRF Formula Benefits for Public Safety Employees Without Drop

<u>Years of Service at Retirement</u>	<u>Replacement Ratio Without DROP</u>			
	HPOPS		HFRRF	
	<u>Hired prior to 10-09-04</u>	<u>Hired After 10-09-04</u>	<u>Current</u>	<u>Future</u>
20	55%	45%	50%	50%
25	65%	55%	65%	65%
30	75%	65%	80%	80%
EE Contribution % of Salary	9%	10.25%	9%	9%
Eligible for Full Benefit	20 Yrs	Age 55 & 10 Yrs	20 Yrs	20 Yrs
OT Included in Benefit Calculation	No	No	Yes	Yes
DROP Available	Yes	No	Yes	Yes
Automatic Annual COLA	Yes	Yes	Yes	Yes

*No Social Security benefit for public safety employees



Deferred Retirement Option Plan (DROP)

- DROP stands for Derred Retirement Option Plan and is a provision whereby an employee who would otherwise be entitled to retire and receive pension benefits elects to continue working. The employees additional years of service and compensation do not continue to accrue for pension purposes, but a notional deferred compensation account is established and credited each year with the amount of pension he or she would have received if retired plus interest. At subsequent retirement the employee receives the accumulated value of his or her deferred compensation account plus the pension benefit based on pay and service when he or she entered DROP.



DROP is a Game Changer

- Potentially provide substantial increases over formula benefits at the employee's option only
- Specific to individual – cannot generalize
- Variables Include:
 - Provisions of DROP
 - Age and service at DROP entry and exit
 - Basic benefit accrual rates without DROP
 - Salary changes during DROP
 - Employee contributions during DROP
 - Interest credits on DROP account



Sample of DROP Increasing the Formula Benefit at HFRRF

At DROP Entry:

- Age 50
- 20 years of service
- Annual pay \$75,000 (includes overtime)
- Average annual pay for previous 3 years \$73,539 (FAP)
- Eligible for lifetime annuity of \$36,770 per year (50% of FAP)



Sample of DROP Increasing the Formula Benefit at HFRRF (cont'd)

During DROP:

- Active, but no further benefit accruals based on pay and service
- Pay increases 2% per year
- DROP account credited each year with:
 - 20 year service annuity adjusted for 3% annual COLAs
 - Employee contributions of 9% of pay
 - Interest at the minimum rate of 5% per year (maximum rate is 10 %)



Sample of DROP Increasing the Formula Benefit at HFRRF (cont'd)

At Retirement:

- Age 60
- 30 years of service
- Annual pay of \$91,425
- Average annual pay for previous 3 years \$89,644 (FAP)
- Accumulated value of DROP account: \$628,765
- 20 year service annuity increased by 20% and adjusted for 3% per year COLAs



Sample of DROP Increasing the Formula Benefit at HFRRF (cont'd)

	<u>w/o DROP</u>	<u>with DROP</u>
▪ FAP at retirement	\$89,644	\$89,644
▪ Annuity Payable		
- From DROP account	\$ N/A	\$ 46,138
- Adjusted service annuity	<u>71,715</u>	<u>55,154</u>
- Total	\$ 71,715	\$ 101,292
▪ Replacement Ratio	80%	113%
▪ % Increase Over Formula Benefit	NA	41%

A recent study by Mercer concluded that the HFRRF DROP provision:

- Is more generous than the firefighter plans in Austin, Ft. Worth, Dallas, and San Antonio
- Could potentially more than double the formula benefit



Overview of Options for Further Mitigation of Funding Liabilities



Some Options for Reducing the City's Future Funding Obligations for Pension Benefits

Affecting Current Retirees – Reduce **future** cost of living (COLA) increases

Affecting Active Employees:

	HMEPS		HPOPS		HFRRF	
	Hired Prior to <u>1/1/2008</u>	Hired After <u>1/1/2008</u>	Hired Prior to <u>10/9/2004</u>	Hired After <u>10/9/2004</u>	Hired Prior to <u>x/xx/xxxx</u>	Hired After <u>x/xx/xxxx</u>
1. Reduce benefit accrual rates	Done	Done	Not Done	Done	Not Done	Not Done
2. Increase eligibility age for full retirement	Done	Done	Not Done	Done	Not Done	Not Done
3. Eliminate DROP ⁽¹⁾	Not Done	Done	Not Done	Done	Not Done	Not Done
4. Eliminate automatic annual COLAs ⁽²⁾	Not Done	Done	Not Done	Not Done	Not Done	Not Done
5. Make post-retirement survivor's benefit optional ⁽³⁾	Not Done	Done	Not Done	Not Done	Not Done	Not Done
6. Increase employee contributions	Done	N/A ⁽⁴⁾	Not Done*	Done	Not Done*	Not Done

* Since 2004

Notes:

(1) In lieu of DROP, may add a partial lump sum option actuarially equivalent to an annuity amount

(2) May provide COLAs on an ad hoc basis or contingent upon the plan's funded status

(3) The annuity amount would be actuarially adjusted to a "normal form" of a straight life annuity

(4) Any increases in employee contributions would necessarily be offset by an increase in the benefit accrual rates



Relative Impact of Mitigation Options

- The funding liability for current retirees and actives eligible to retire is estimated to be 75%-80% of the total funding liability
- Mitigation options addressing only new and non-vested employees will have minimal impact on the current and near-term funding obligations
- Options to make a significant impact on current and near-term funding obligations include:
 - Reduction in benefits for retirees and actives near retirement
 - City contribute an amount in excess of the actuarially calculated amount
- Reduction in benefits for retirees and actives near retirement while possible because of the opt out vote in 2004 would probably engender legal challenges and adverse employee behavior



Review of Basics of Defined Benefit (DB) and Defined Contribution (DC) Plans



Defined Benefit and Defined Contribution Are:

- Categories of methods for delivering deferred compensation benefits to employees
- Created by ERISA for determining tax qualified status of a specific plan
- Fundamentally different
- Not Interchangeable
- Not mutually exclusive



The Defined Contribution Category of Plans Include:

- Profit Sharing
 - Discretionary
 - Formula based
- Money Purchase
- Tax-Deferred Savings
 - With Employer (ER) match
 - Without ER match
- After Tax Savings
 - With ER match
 - Without ER match



The Defined Benefit Category of Plans Include:

- Pay related plans
 - Final average pay
 - Career average pay
- Non-pay related plans
 - Unit benefit
 - Flat benefit
- Social Security integrated plans
 - Offset
 - Step rate
- Account based plans



To Select the Right Plan:

- Ignore the category or names of plans
- Formulate a set of objectives for benefits and costs
- Identify the plan, or plans, that satisfy those objectives



Benefit/Cost Relationship

- The cost equation is the same:
$$\mathbf{Cost = Benefits + Expenses - Investment\ income}$$
- If **B**, **E**, and **I** are the same, the **C**ost is the same
- DB has predictable benefits with variable contributions
- DC has variable benefits with stable contributions
- Cost per unit of benefit generally higher in DC, because of:
 - Lower investment income
 - Higher administrative expenses



Key Benefit Considerations

- The nature of the promise
- The benefit accrual pattern
- The allocation of risks employer and employee
- The ability to support workforce management
- Portability

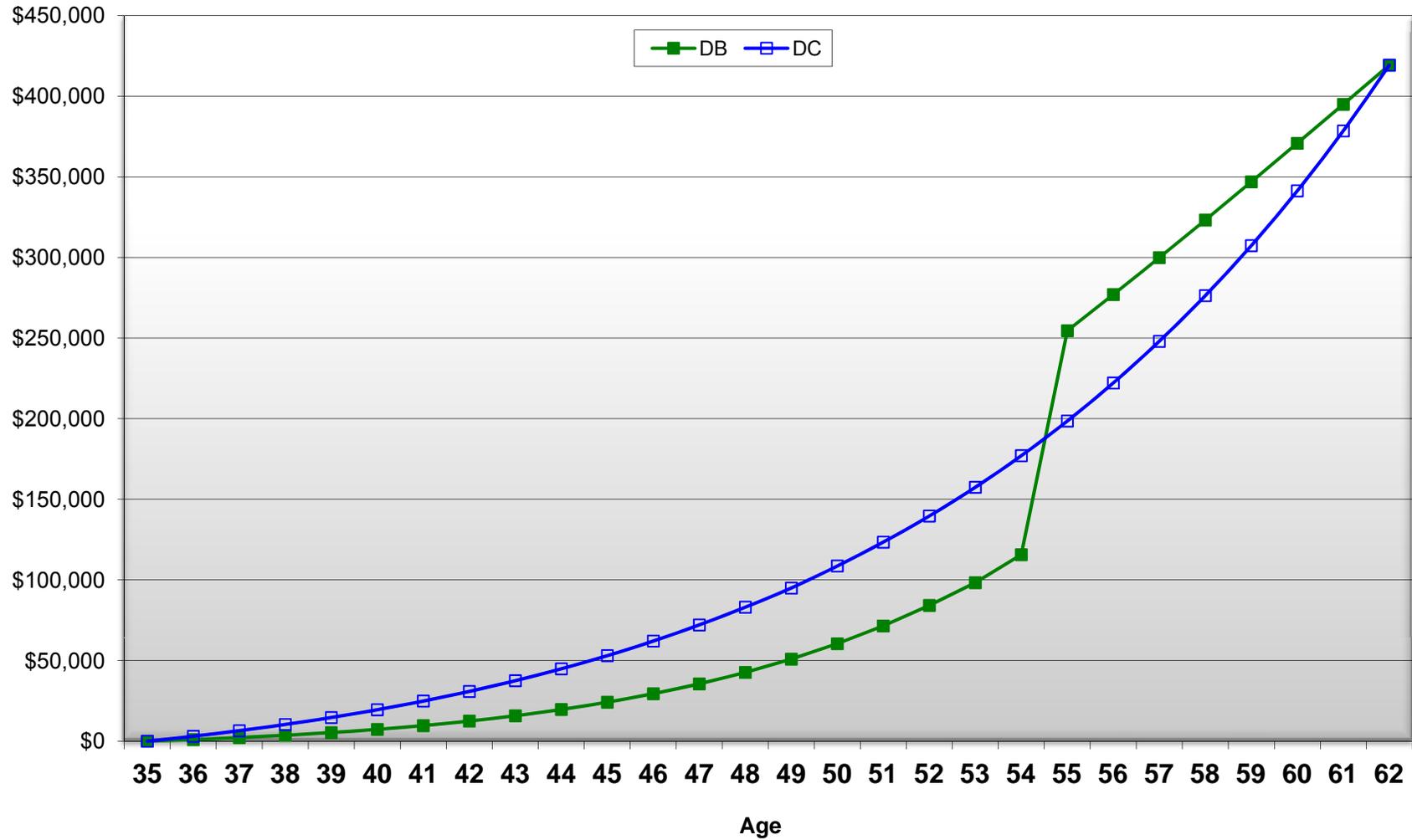


The Nature of the Promise

- For DB, it is income replacement upon retirement at advanced ages
 - Payable as monthly income for life
 - Greater portion of benefit dollars allocated to “career” employees
- For DC, it is capital accumulation opportunity
 - Payable as lump sum
 - Greater portion of benefit dollars allocated to “early leavers”



Benefit Accrual Patterns





Assumptions of Risks

- Risks include investment, inflation, and longevity
- Employer assumes all investment and longevity risks in DB
- Employer and employee may share inflation risk in DB
- Employee assumes virtually all risks in DC



Workforce Management Support

- DB can:
 - Adjust benefits mid-course to support workforce objectives
 - Provide specific benefits for interrupted careers due to death and disability
 - Can provide meaningful benefits when retirement at earlier ages is an objective
- DC can only adjust future contributions



Portability

- DC provides access to immediate lump sum with “rollover” capability
 - Rollover provides portability only if not used for current expenses
- DB provides deferred commencement of accrued benefit



DB/DC – Objectives May be Met with:

- DB only
- DC only
- DB/DC combination
- Cash balance plan



Questions