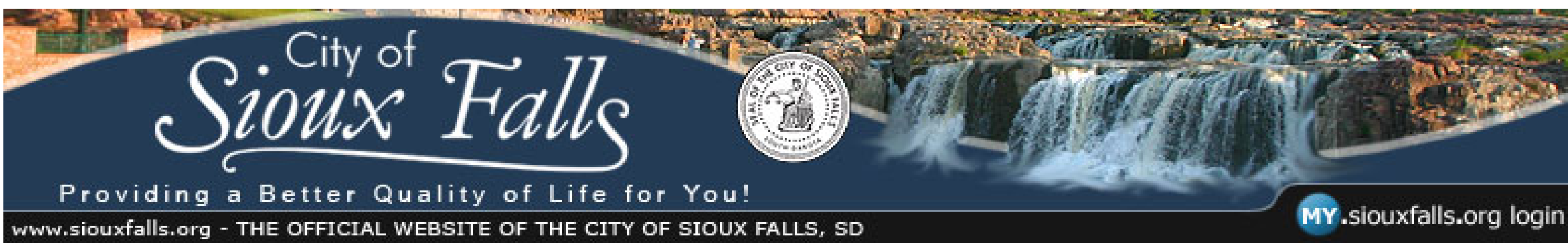
Cavanaugh Macdonald
CONSULTING, LLC

The experience and dedication you deserve

City of Sioux Falls Employees' Retirement System and City of Sioux Falls Firefighters' Pension Fund

Plan Design Study

February 1, 2012



www.CavMacConsulting.com

TABLE OF CONTENTS

TRANSMITTAL LETTER

February 1, 2012

Boards of Trustees
City of Sioux Falls Employees' Retirement System
City of Sioux Falls Firefighters' Pension Fund
229 West Ninth Street
P. O. Box 7402
Sioux Falls, SD 57117-7402

Dear Board Members:

We are pleased to submit our report on a plan design study for members of the City of Sioux Falls Employees' Retirement System and City of Sioux Falls Firefighters' Pension Fund.

The purpose of the study is to examine the current benefit structures of the plans, and to identify potential changes in contribution patterns and/or benefits that would produce more stable, sustainable cost levels for the City.

Future actuarial results may differ significantly from the results presented in this report due to such factors as the following: plan experience differing from that anticipated by the economic or demographic assumptions; changes in economic or demographic assumptions; increases or decreases expected as part of the natural operation of the methodology used for these measurements (such as the end of an amortization period or additional cost or contribution requirements based on the plan's funded status); and changes in plan provisions (other than those modeled) or applicable law.

To the best of our knowledge, this report is complete and accurate. The undersigned is a member of the American Academy of Actuaries and meets the Qualification Standards of the American Academy of Actuaries to render the actuarial opinion contained herein.

Respectfully submitted,

Thomas J. Cavanaugh, FSA, FCA, MAAA, EA
Chief Executive Officer

The City of Sioux Falls Employees' Retirement System and the City of Sioux Falls Firefighters' Pension Fund issued a Request For Proposal (RFP) with the following stated objective:

> "The City of Sioux Falls' two pension systems jointly request proposals from qualified actuarial or consulting firms interested in facilitating their Boards of Trustees' discussion and analysis on system alternatives and plan design changes necessary to reduce and stabilize City pension contribution rates. Consultant will identify options and/or pension benefit structure changes, provide cost analysis, and recommend system modifications for Board consideration. The Boards will forward recommendations to the Mayor. Ultimate decision(s) on pursuing any modifications rests with the Mayor and City Council."

Cavanaugh Macdonald Consulting, LLC was selected to provide the requested services. This report details the results of the plan design study undertaken in accordance with the RFP.

Those requested services are not unusual in the current economic environment. The recent market downturn has put pressure on employer contribution rates at a time when the economic outlook for revenue growth is uncertain. This combination of events has driven sponsors of pension plans to analyze alternatives to make sure the benefits promised to current members are secure while not overburdening the tax payers in the short-term. This report should help assist decision makers in deciding on any appropriate steps to mitigate the current financial strain.

It must be noted at the outset that any changes in the retirement programs of the City should be undertaken with the understanding that the programs are one part of the overall compensation package offered to employees and that the programs have an impact on the recruitment and retention of employees. Changes, if any, should only be made to the extent it is believed they help the City to attain its overall goals regarding City employment. The City's stated compensation and benefit objectives are:

a. Attract qualified applicants for employment by the City in all categories of work;
b. Retain experienced and qualified employees in all categories of work;
c. Provide incentives for employees to pursue career advancement opportunities as they arise within the City;
d. Accomplish these objectives within responsible economic parameters.

Having said that, this study deals with the retirement program specifically. In that regard there are two broad categories of plans – defined benefit (DB) plans, which focus on benefit security and defined contribution (DC) plans which focus on wealth accumulation. Of course, a retirement program could incorporate both a DB and a DC component (these plans are generally referred to as hybrid plans). The City plans also provide retiree healthcare benefits which are addressed separately from the pension benefits in this report.

The Boards considered whether a DC plan should be created for new hires, but after discussing the various risks and the resulting impact on benefit levels a DC plan was not considered a viable alternative. There is often a misconception by the general public that changing to a DC plan will "solve" the funding problems of the retirement system. However, moving to a DC plan for a new hire does not reduce the unfunded actuarial accrued liability (UAAL) of the existing DB plans which will still need to be funded. In fact, the UAAL may grow in the future as the asset allocation of the then closed DB plans changes to a more conservative mix as the covered population ages and the asset levels decline. In addition, a DC plan is not really viable for police and fire employees given the earlier retirement ages desired by the City to maintain an effective police and fire force combined with the lack of Social Security coverage for these employee groups and the poor pre-retirement death and disability benefits provided through a DC plan, unless supplemental insurance is purchased.

Another alternative that was considered is placing new hires in the South Dakota Retirement System (SDRS). Prior to this plan design study, the Boards had asked their retained actuary, GRS, to perform studies to estimate the cost impact of moving all new hires into SDRS. GRS issued a Supplemental Actuarial Report dated October 26, 2010 that provided the Board with the requested cost projections. Because the Boards had previously studied this option, there was limited discussion of this alternative, particularly because it creates the same issues regarding the UAAL as a DC plan and will also introduce a loss of City control on decisions over benefit and contribution levels.

Current Status of Plans

The current DB plans for City employees are well-funded plans. The annual required contribution (ARC) has always been paid by the City, the unfunded actuarial accrued liability (UAAL) of each plan is being amortized over a closed period which was 13 years at the last valuation date, and there have been no benefit improvements in many years.

The table below illustrates the contribution rates, the funded status and the amortization period of the unfunded actuarial accrued liability for the pension plans under the current assumptions and methods, based on the actuarial valuation conducted as of December 31, 2010.

Pension	General Employees	Police Officers	Firefighters
Total Normal Rate	11.62%	19.30%	21.01%
Member Rate	3.00	8.00	8.00
Employer Normal Rate	8.62%	11.30%	13.01%
UAAL Rate	4.24	9.42	12.20
Actuarially Determined Contributions	12.86%	20.72%	25.21%
Amortization Period (Years)	13	13	13
Funded Ratio	91.0%	86.7%	87.0%

The funded ratio shown in the table is the actuarial value of assets divided by the actuarial accrued liability. The ratio for each employee group is very strong. As an example, only 29 of 126 systems included in the latest Public Funds Survey conducted by the National Association of State Retirement Administrators (NASRA) have a funded ratio above 86.7% (the aggregate for all plans in the survey is 77.2%).

The plans also assist the employer in providing retiree healthcare benefits which are funded in a manner similar to the pension benefits. The following table shows the current status of those benefits.

Retiree Healthcare	General Employees	Police Officers	Firefighters
Total Normal Rate	3.25%	4.81%	5.37%
Member Rate	0.00	0.00	0.00
Employer Normal Rate	3.25%	4.81%	5.37%
UAAL Rate	2.28	4.14	4.28
Actuarially Determined Contributions	5.53%	8.95%	9.65%
Amortization Period (Years)	25	25	25
Funded Status	42.7%	37.2%	37.7%

While the funded ratios for the retiree healthcare plans are lower than the pension plans, they are higher than most retiree healthcare plans in our experience. Additionally, the current use of a 401(h) subaccount as a funding vehicle links the funding of retiree healthcare benefits to pension plan normal costs, potentially limiting the City's ability to contribute the full ARC for retiree healthcare benefits.

The actuarially determined contribution rates in recent years are above historic averages for both pensions and retiree healthcare. The likelihood of continued upward pressure on those rates due to prior investment losses and, for retiree healthcare, the additional volatility and strain due to healthcare cost increases above price and wage inflation have created the need to study alternatives that will stabilize the rates and reduce them over time. The following graph and table shows the contribution rate history for the systems.

City Pension and Retiree Healthcare Contributions

	Fire			Police			General		
	Pension	Health*	Total	Pension	Health*	Total	Pension	Health*	Total
1986			22.64%			18.33%			10.40%
1987			18.56			14.06			8.49
1988			18.04			12.44			8.00
1989			16.66			12.51			7.45
1990			14.92			10.67			8.77
1991			15.12			9.57			8.14
1992			16.65			11.66			10.06
1993			20.94			13.00			10.39
1994			22.85			19.05			11.21
1995			22.34			19.38			10.56
1996			22.52			19.88			10.81
1997			22.09			18.95			10.35
1998			21.62			19.06			10.32
1999			18.80			20.01			11.06
2000	14.43%	1.96%	16.39	16.85%	1.75%	18.60	9.68%	0.71%	10.39
2001	11.87	2.00	13.87	13.90	1.81	15.71	8.47	0.96	9.43
2002	7.86	3.01	10.87	15.60	2.60	18.20	7.60	1.59	9.19
2003	7.23	3.72	10.95	14.42	3.01	17.43	7.77	1.97	9.74
2004	9.31	4.39	13.70	15.68	3.58	19.26	8.68	2.18	10.86
2005	11.12	4.43	15.55	13.96	4.63	18.59	9.43	2.55	11.98
2006	16.21	4.35	20.56	14.84	3.58	18.42	9.80	2.03	11.83
2007	17.14	8.91	26.05	14.96	7.23	22.19	10.38	5.04	15.42
2008	15.99	9.47	25.46	13.36	7.57	20.93	9.50	5.49	14.99
2009	16.36	8.72	25.08	14.58	7.36	21.94	9.33	5.18	14.51
2010	19.97	8.33	28.30	17.66	7.45	25.11	10.93	5.03	15.96
2011	24.55	8.35	32.90	20.78	7.66	28.44	13.17	4.89	18.06
2012	25.21	9.65	34.86	20.72	8.95	29.67	12.86	5.53	18.39

* The City pre-funded retiree health benefits prior to 2000. However, separate contribution rates were not provided in the actuarial valuation report until 2000.

Pension Plan Changes

Five alternative pension benefit designs were considered for each group (General Employees, Police, and Fire) and modeled to quantify the impact on the employer's required contribution rates. In all of the alternative pension plan designs that were studied, no change was made to the benefits for current retired members. In addition, in all but Alternatives 4 and 5, no change was made to the plan provisions for current active employees. The only change for current members considered in Alternative 4 was an increase of 2% in the employee contribution rate, phased in over a two year period. Alternative 5 eliminates the lump sum payments in the definition of final average salary for current active members, but leaves the current contribution rate in place for current members. All other changes considered would apply only to new hires. It must be kept in mind that the cost savings from reducing benefits for new hires takes many years to manifest itself. The full cost impact is only realized after all of the current active members leave City employment and are replaced by employees covered under the new benefit structure. This usually takes 15 to 30 years depending on the active member demographics and benefit provisions regarding retirement eligibility.

The five pension alternatives studied for each group modify different provisions of the current plan design to create the cost savings. Therefore, each pension alternative creates different projected contribution rates and related savings for the City. It is important to remember that the cost savings to the City are created by either increased employee contributions or lower benefits expected to be paid to employees. A brief summary of the range of cost savings under each alternative for each group is shown in the following table. Please note that the specifics of the plan design changes under each pension alternative vary for each group. Details of these plan designs and the related savings are included in the following sections of the report.

Estimated Pension Savings over 30 Year Projection Period ($Millions)

	General	Fire	Police	Total
Pension Alternative 1	$96	$26	$33	$155
Pension Alternative 2	80	21	26	127
Pension Alternative 3	93	18	27	138
Pension Alternative 4	92	23	28	143
Pension Alternative 5	107	34	39	180

One of the stated goals of the study was to improve the stability of the contribution rate. Section Four of the report presents a potential change to the funding policy for the pension plans that would help lower and stabilize the pension contribution rates. This change could be stand-alone or done in conjunction with changes in benefits.

Healthcare Changes

Two alternative healthcare benefit designs were considered for each group (General Employees, Police, and Fire) and modeled to quantify the impact on the required contribution rates. In all of the healthcare plan design scenarios studied, no benefit changes were assumed for current retired members.

The benefit changes of Healthcare Scenario #1 apply only to new hires and provide the cost impact to the retiree healthcare plan of the change to the normal retirement age modeled in the following pension alternatives:

- General Employees
  - Pension Alternative 1
  - Pension Alternative 2
  - Pension Alternative 4
- Police and Fire
  - Pension Alternative 3

It should be noted that changing the normal retirement age to sixty-five limits the payment of retiree healthcare benefits to early retirees, disabled retirees, and surviving spouses. As with the pension plan, the cost savings from reducing or eliminating benefits for new hires may take many years to materialize, as the current active membership must be replaced by employees covered under the new benefit structure.

The benefit changes modeled for Healthcare Scenario #2 impact current active employees and new hires. The benefit changes of Healthcare Scenario #2 are summarized as:

- Discontinue access to the City's healthcare plan for members retiring after 12/31/2013
- Provide a fixed dollar benefit to be applied to a retiree's healthcare costs for eligible employees retiring after 12/31/2013
  - Fixed dollar amount based upon years of service
  - Fixed dollar amount may be indexed by cost of living adjustments
- Discontinue the retiree healthcare benefit for employees hired after 12/31/2013

Scenario #2 impacts current active employees, and, as a result, provides an immediate impact to current liabilities. As Scenario #2 closes the plan to new entrants, this impact may be altered by any changes to asset allocation or amortization methodology.

The two healthcare scenarios studied for each group modify different provisions of the current plan design to create the cost savings. Therefore, each healthcare scenario creates different projected contribution rates and related savings for the City. It is important to remember that the cost savings to the City are created by a reduction in expected benefit payments. A brief summary of the range of cost savings under each scenario for each group is shown in the following table. While a total for each alternative of Scenario #2 is provided, the alternative elected for each employee group could vary. Details of the plan designs, including specific variations for each employee group, and the related savings are included in the section of the report titled "Current Retiree Healthcare Plans".

Estimated Dollar Amount of Healthcare Savings over 30 Year Projection Period ($Millions)

	General Employees	Fire	Police	Total
Healthcare Scenario #1	$30	$0	$3	$33
Healthcare Scenario #2*				
Alternative #4 ($10/mo./YOS)	$96	$49	$59	$204
Alternative #8 ($20/mo./YOS)	83	42	49	174
Alternative #12 ($30/mo./YOS)	70	35	40	145

*The alternatives shown for scenario #2 reflect a 3% COLA adjustment. Furthermore, while a total savings for scenario #2 is provided, the fixed dollar subsidy amount could vary by employee group and could provide for varying levels of indexing.

Trends

Over the past few years, there has been a significant amount of activity in the public pension arena related to changes in the plan design of retirement benefits. These changes have been made to address concerns about the viability of retirement plan benefits and funding that date back to the 2001 recession, coupled with the severe investment losses in the 2007-2009 recession, demographic changes, and the fiscal condition of state budgets.

In most cases, systems have revised rather than replaced traditional defined benefit plans, usually creating a new "tier" with different benefit provisions. Costs have been shifted to members through higher employee contributions, longer service requirements and older ages for normal retirement, and lower post-retirement benefit adjustments. The details of recent activity in this area can be found on pages 15 to 16 in the Plan Design Basics section of this report. In addition, please see Appendix B for recent information on this topic published by the National Association of State Retirement Administrators (NASRA).

Background

The purpose of this study is to examine the current benefit structures of the plans, and to identify potential changes in contribution patterns and/or benefits that would produce more stable, sustainable cost levels for the City.

However, it should be noted that in order to properly address this issue, the over-riding retirement policy of the City needs to be identified. This requires a determination of the purpose of a retirement program and who should bear the risks associated with that program. The City's stated compensation and benefit objectives are:

a. Attract qualified applicants for employment by the City in all categories of work;
b. Retain experienced and qualified employees in all categories of work;
c. Provide incentives for employees to pursue career advancement opportunities as they arise within the City;
d. Accomplish these objectives within responsible economic parameters.

As is typically the case, the City's retirement programs are established to both attract and retain employees. Given that goal, the question becomes what design and level of benefits are appropriate to meet the goal? In answering that question the City should take into account the total compensation provided to employees, including salary, retirement, health, life and other fringe benefits. Reviewing the total compensation provided by entities competing for employees in the local labor market will be a help in this regard.

This study deals with the retirement program specifically. In that regard there are two broad categories of plans – defined benefit (DB) plans, which focus on benefit security by providing guaranteed lifetime income and defined contribution (DC) plans which focus on wealth accumulation by providing lump sum benefits through individual accounts. Of course a retirement program could incorporate both a DB and a DC component (these plans are generally referred to as hybrid plans).

DB plans include final average pay plans (like the City's), career average pay plans, flat dollar plans and cash balance plans. DC plans include 401(a) plans, 401(k) plans, 403(b) plans (mainly for teachers), and 457 plans, all named for sections of the Internal Revenue Code that created them. Any retirement program, whether DB or DC, involves risk. The categories of risk shared by both are:

- Investment risk (return on assets lower than expected)
- Inflation risk (the impact of inflation on wages prior to retirement and benefits after retirement)

- Contribution risk (absolute level and volatility of amounts needed to finance a given benefit level), and
- Longevity risk (the possibility of outliving retirement assets)

Two other risk areas that impact DC plans only are leakage risk (the risk that participants will withdraw and spend assets prior to retirement) and participation risk (the risk that some employees will fail to defer current compensation in a voluntary DC plan).

The four main risk areas are shared between employers and employees differently under DB and DC plans. Investment risk is usually borne by employers in DB plans unless increases in the contribution rate are shared with employees. In DC plans the investment risk is borne solely by employees. Inflation risk prior to retirement is borne by employers in salary related DB plans and by employees in DC plans. Post-retirement inflation risk is the employee's responsibility in both plans unless a cost-of-living adjustment (COLA) indexed to inflation is provided in a DB plan. In that case, the risk is shifted either entirely or partially to the employer depending on the design of the COLA.

Employers bear the contribution risk in DB plans, although some plans share this risk with employees. In DC plans, inadequate asset balances at retirement are the employees' risk regardless of the reason for the shortfall. DB plan longevity risk is covered by the employer exclusively, again unless the plan design includes sharing contribution increase with employees. In DC plans longevity risk is solely the employees'. Since the longevity risk is pooled in DB plans but falls on individuals in DC plans, DB plans are better able to manage this risk, thereby reducing its overall impact

The table on the following page provides a summary of the typical risk levels for plans, as well as some of the main features of the various basic plan designs.

	Current Defined Benefit		Pure Defined Contribution		Hybrid Plans	
Economic Risk	**ER**	**EE**	**ER**	**EE**	**ER**	**EE**
Investment Risk	High	Low	None	High	Medium	Medium
Inflation Risk – wage (pre-retirement)	High	None	None	High	Medium	Medium
Inflation Risk – price (post-retirement)	Medium	Medium	None	High	Low	Medium
Contribution Risk	High	Low	None	High	Medium	Medium
Longevity Risk	Medium	None	None	High	Low	Medium
Features						
Rewards older/longer service employees	High		Low		Medium	
Provides retirement security	High		Low		Medium	
Attract employees	Medium		High		High	
Retain employees	High		Low		Medium	
Provides systematic retirement of employees	High		Low		Medium	

Both of the Sioux Falls plans are Internal Revenue Code (IRC) qualified DB plans. As noted earlier, a DB plan provides a guaranteed lifetime benefit at retirement based on a formula that reflects salary history and service with a covered employer. In contrast, a DC plan does not provide for a guaranteed benefit. A DC plan is funded by employer (and possibly employee) contributions. These contributions accumulate with actual investment earnings, and the participant's annual retirement income is whatever the accumulated assets can provide over the retiree's lifetime.

DB plans do a better job of providing retirement income whereas DC plans are better at creating retirement savings. Although the current approach in the public sector is to consider *replacing* a DB plan with a DC plan, they really are complimentary vehicles and should be offered together. Many employers also offer a DC plan in conjunction with the DB plan. For example, the City of Sioux Falls currently provides a 457 plan, with some employer matching contributions, in addition to the DB plan for certain employee groups.

The ultimate goal of any retirement program is to provide adequate retirement benefits to career employees when they reach normal retirement age. The most common method used to analyze and compare retirement programs and measure the relative income provided by the retirement plan is called the "replacement ratio". This measurement is expressed as a percentage of the employee's final salary at retirement. The replacement ratio includes income from all sources including employer provided retirement plans, Social Security, if applicable, and personal savings. The typical benchmark is that a replacement ratio of 75% to 90% of pre-retirement income is needed to maintain the employee's standard of living, depending on the level of pre-retirement income. A higher percentage usually applies if the employee is a lower wage earner and a lower percentage applies if the employee is a higher wage earner. The replacement ratio measurement is not a perfect measure because of the diversity in the personal situations of the working population, but it is the most commonly used tool to evaluate the adequacy of retirement benefits.

The replacement ratio for the current pension benefit structure will vary depending on the employee's age and years of service at retirement. Most often a DB plan is designed to replace a certain level of pre-retirement income for a "career employee", typically at least 30 years for non-public safety employees, and 20 to 25 years for public safety employees. The following table shows the replacement ratio for the retirement benefits provided by the current plans assuming the employee has met the age and service requirement for normal retirement (unreduced benefits). Please note that the replacement ratio is a measurement of benefit adequacy at retirement and, therefore, is not reflective of the level of benefits after retirement. To the extent that a full CPI-indexed cost of living adjustment is not included in the plan design, the purchasing power of the benefit may decline after the employee retires.

Replacement Ratios
(Retirement Benefit as a Percent of Final Year's Salary)

	Service	Current Plan
General Employees		
	20	38.7%
	25	48.4%
	30	58.0%
	35	67.7%
Police		
	20	53.7%
	25	67.2%
	30	75.2%
Fire		
	20	55.2%
	25	69.0%
	30	77.3%

The retirement benefit received from the City-sponsored DB plan is only one component of retirement income. General Employees are covered by Social Security and can elect to receive those benefits as early as age 62. There clearly could be a lag between the time an employee retires and the time he begins to receive Social Security benefits. By design, the replacement ratio for Social Security benefits is higher for low wage earners and lower for high wage earners. The typical benchmark used is that Social Security benefits replace about 20 to 30% of pre-retirement pay. However, if benefits commence before full Social Security Retirement Age, a reduction applies and the benefit amount received will be less. For a career employee who works thirty years and retires at age 65, the pension plan (to which the employee has contributed) and Social Security together would provide a replacement ratio of around 85%, which is in the target range of 75% to 90%. However, at earlier retirement ages, the replacement ratio would be less. Since Social Security benefits cannot begin before age 62, but benefits in the City's plan may currently begin as early as age 55, there is a gap in target replacement ratio for the pre-62 years that must be filled with personal savings or other sources.

Police and Fire members are not covered by Social Security so the benefit from the City's DB plan is the main source of retirement income and thus must provide a higher replacement ratio than the General Employees' benefit structure.

In reviewing the replacement ratios produced by the current benefit structure in the DB plans, it is important to remember that the employees contribute to both the City DB plans and Social Security (for General employees) and thus are financing part of the benefits received. This review of the replacement ratio for the Sioux Falls plans indicates that, while the benefits provided are adequate, they are not overly generous or lucrative.

It is an undisputed fact that for a given employer commitment (i.e., contribution level) DB plans are the superior vehicle for achieving this goal. This is demonstrated below. For all pension plans, whether defined benefit or defined contribution, the basic retirement funding equation is:

$$C + I = B + E$$

Where:

- C = employer and member contributions
- I = investment income
- B = benefits paid
- E = expenses paid from the fund, if any.

The underlying message is that dollars in have to equal dollars out. When comparing a DB plan and a DC plan with identical employer contributions ("C"), if investment income ("I") and expenses ("E") are the same, then the *total* benefits ("B") paid from the plans must be equal. However, DC plans are designed to allow members terminating prior to retirement to withdraw their account balance which includes vested employer contributions. Therefore under a DC plan the benefits paid to those who terminate prior to retirement are higher than under a DB plan (even when a member terminates prior to retirement under a DB plan with no right to a vested benefit, the employer contributions remain in the system). As a result under a DC plan, there are fewer benefit dollars available for members who retire when compared to a DB plan.

If there is to be a DB/DC discussion and it is going to revolve around an "either/or" choice, then the City has a key decision to make. Is the goal of the pension program to provide adequate <u>retirement</u> income to employees who serve the citizens of Sioux Falls for a career, or to provide higher benefits for those employees who terminate prior to retirement after a period of service with the City?

In addition, moving to a DC plan for a new hires does not reduce the unfunded actuarial accrued liability of the existing DB plans which will still need to be funded. In fact, the liability will grow in the future as the asset allocation of the then closed DB plans changes to a more conservative mix as the covered population ages and the asset levels decline. The initial cost of the closed DB plan may also increase as contributions to amortize the unfunded actuarial accrued liability typically will be made on a level dollar basis rather than the current level percent of payroll basis. Finally a DC plan is not really viable for police and fire employees given the earlier retirement ages desired by the City to maintain an effective police and fire force combined with the lack of Social Security coverage for these employee groups and the poor pre-retirement death and disability benefits provided through a DC plan, unless supplemental insurance is purchased.

Another alternative that was considered as part of this study was placing new hires in the South Dakota Retirement System. The Boards had performed analysis prior to the commencement of this plan design study which included having their retained actuary, GRS, perform studies to estimate the cost impact of moving new hires into SDRS. GRS issued a Supplemental Actuarial Report dated October 26, 2010 that provided the Board with the requested cost projections. Because the Boards had previously studied this option, there was limited discussion of this alternative, particularly because it creates the same issues regarding the UAAL as a DC plan and will also introduce a loss of City control over decisions that impact benefit amounts and contribution levels.

Trends

Over the past few years, there has been a significant amount of activity in the public pension arena related to the plan design of retirement benefits. According to the National Conference of State Legislatures (NCSL) 27 states enacted significant changes in public pension plans in 2011 and 21 enacted changes in 2010. Some states acted in both years. These plan design changes address concerns about the viability of retirement plan benefits and funding that date back to the 2001 recession, coupled with the severe investment losses in the 2007-2009 recession and demographic changes and the fiscal condition of state budgets. The most common changes made in the last two years were:

1. Increase in the employee contribution rate for at least some of the current membership (18 states),
2. Increase in the employee contribution rate for future members only (7 states),
3. Requiring a higher age and service requirement for normal retirement (unreduced) benefits (24 states), and
4. Reduced post-retirement benefit increases (18 states in total of which 6 have included current retirees).

Additional changes have included longer vesting periods for new hires (13 states) and a longer period for calculating final average salary (meaning a lower base for a pension) in 14 states. Sixteen states have provided for a greater reduction in the amount of benefit payable under early retirement provisions and five states included current employees in this change. There have also been greater restrictions on the rules related to retirees returning to covered employment in twelve (12) states.

With two exceptions, states have revised rather than replaced traditional defined benefit pension plans, often creating a new "tier" with different benefit provisions. In 2010, Utah closed its DB plan for all state and local employees and is offering new employees a choice of a defined contribution plan and a combined plan that includes a DB plan and a DC plan. Also in 2010, Michigan replaced its School Employees DB plan with a combined plan. Indiana created an alternative DC plan in 2011.

Costs have been shifted to members through higher contributions, longer service requirements, older ages for normal retirement, and lower post-retirement benefit adjustments. Most states that increased employee contribution rates in 2011 offset them with lower employer contribution rates, at least temporarily. This appears to be a trend toward equalizing the employer and employee contribution rates. It also helps balance highly-stressed state (and sometime local) budgets.

The National Association of State Retirement Administrators (NASRA) recently published a document that provides the details on changes made to state-wide retirement systems to address the sustainability of those systems. It shows the same trend as discussed above, i.e. that most changes are made to the current benefit structure and a new tier is created as opposed to changing from a DB to a DC plan. The NASRA survey is attached to this report as Appendix B.

The ability to change benefits or contributions for current active employees varies from state to state as the pertinent law varies by state. It is very common for the plan provisions, including the employee contribution rate, to be considered part of the "contract" between the employee and employer and thus, be protected by contract law. In these situations the only changes that can be made are for new hires.

Because the Sioux Falls plans are well funded and the amortization period is relatively short in comparison to other public retirement plans, less dramatic changes to the current benefit structure are necessary to generate savings and bring contributions to reasonable levels. The sections of this report that follow present the results of potential alternative plan designs that were considered that are within the DB framework.

Current Situation

The City of Sioux Falls Employees' Retirement System (covering general employees and police officers) and City of Sioux Falls Firefighters' Pension Fund are well-funded plans. The annual required contribution (ARC) as always been paid by the employer, the (UAAL of each plan is being amortized over a closed period (currently 13 years), and there have been no benefit improvements in many years.

The tables below illustrate the current benefit structure of the plans. YOS stands for years of service.

Item	General Employees
Benefit Multiplier	1.8% per YOS
Final Average Pay	High 3 years of last 10 including lump sum pay
Normal Retirement	Age 55 with 30 YOS or age 60 with 5 YOS
COLA	100% of CPI change capped at 3%. Commencing after 36 months of retirement.
Vesting	5 YOS
Employee Contribution Rate	3.0%
Employer Contribution Rate	Actuarially determined
Form of Payment	Single life annuity

Item	Firefighters	Police Officers
Benefit Multiplier	2.5% for first 25 YOS + 1.5% for YOS > 25	2.5% for first 25 YOS + 1.5% for YOS > 25
Final Average Pay	Final 3 years, including lump sum pay	High 3 years of last 10, including lump sum pay
Normal Retirement	Age 55 with 20 YOS or Rule of 80 (min age 50)	Age 50 with 25 YOS or age 60 with 15 YOS
COLA	100% of CPI change capped at 3%. Commencing after 36 months of retirement	100% of CPI change capped at 3%. Commencing after 36 months of retirement
Vesting	15 YOS	15 YOS
Employee Contribution Rate	8.0%	8.0%
Employer Contribution Rate	Actuarially determined	Actuarially determined
Form of Payment	Single life annuity	Single life annuity

As noted in the previous section, for all pension plans the basic retirement funding equation is:

$$C + I = B + E$$

As can be seen from the formula, for a given level of benefits and expenses the greater "I" is, the smaller "C" is. This is the underlying reason for advance funding a pension plan, and historically in a DB plan investment income pays for 70% to 75% of the benefit dollars received by plan participants. In other words, for every dollar paid to a participant only 25 to 30 cents comes from contributions.

Of course, the problem with the formula is that in order to figure out exactly how much to contribute, the plan would have to be closed to new members and allowed to operate until all retirees were deceased. At that point, the benefits and expenses actually paid out and the investment income actually earned would be known and, using the equation above, the true cost could be determined. Since the vast majority of plans are ongoing and have no intention of closing, and since even with a closed plan it takes a very long time before all benefits are finally paid out, plan sponsors hire actuaries to estimate the true cost of their plans and to create a budget to make systematic contributions to meet that cost.

In order to determine the contributions needed, the actuary's first step is to estimate on a given date (the valuation date) the value of all benefits (and expenses) that will be paid to the existing active and retired membership over their remaining lifetimes based on the plan's current benefit structure. This estimation requires the use of assumptions regarding both future events (termination, disability, retirement, death, etc.) and future economic conditions (return on assets, inflation, salary growth, etc.).

By combining the assumptions about future events and the salary growth assumption, the actuary generates an expected benefit payment stream. In other words, a string of annual payments expected to be made to the current active and retired members from the valuation date until all members are no longer living. Then the actuary applies the asset return assumption to discount each year's payments to the valuation date, creating the present value of all future benefits or the total liability of the plan.

The difference between the total liability and the current assets of the plan represents the present value of future contributions (PVFC) that have to be made by the plan sponsor and employees in a contributory system. Usually the plan sponsor cannot contribute the entire difference in one year, but rather desires a relatively smooth contribution pattern over time that also meets any external constraints. In order to budget for the PVFC, the actuary applies an actuarial cost method. There are several acceptable cost methods, but it's important to recognize that they are nothing more than budgeting tools.

Different actuarial cost methods can provide for faster funding earlier in a plan's existence, more level funding over time, or more flexibility in funding. The choice of an actuarial cost method will determine the pattern or pace of the funding and, therefore, should be linked to long term financing objectives of the fund and benefit security considerations. However, it is important to keep in mind that the actuarial cost method used will not change the ultimate cost of the pension plan.

There are several credible funding methods that can be used to fund a public pension plan. They include entry age normal and projected unit credit. Entry Age Normal (EAN) is used by a large majority of public sector systems, including the Sioux Falls plans. Its popularity stems from the fact that it is designed to generate level contributions as a percent of active member payroll over an employee's working lifetime. The EAN method splits the present value of future contributions into a present value of future normal costs and an actuarial accrued liability. The "normal cost" is a measure of the contribution rate necessary, payable from date of hire until departure from active membership in the plan, to finance the benefits promised to active members. The difference between the present value of future contributions and the present value of future normal costs is called the actuarial accrued liability.

In the table below we present the contribution rates, the funded status and the amortization period of the unfunded actuarial accrued liability for the plans under the current assumptions and methods, based on the actuarial valuation conducted as of December 31, 2010.

Item	General Employees	Police Officers	Firefighters
Total Normal Rate	11.62%	19.30%	21.01%
Member Rate	3.00	8.00	8.00
Employer Normal Rate	8.62%	11.30%	13.01%
UAAL Rate	4.24	9.42	12.20
Actuarially Determined Contributions	12.86%	20.72%	25.21%
Amortization Period (Years)	13	13	13
Funded Status	91.0%	86.7%	87.0%

The recent market downturn has put pressure on employer contribution rates at a time when the economic outlook for revenue growth is uncertain. This combination of events has driven sponsors of pension plans to analyze alternatives to make sure the benefits promised to current members are secure while not overburdening the tax payers.

Potential Changes for Current Actives

The system's ability to modify benefits for current active employees is contingent upon a change to the ordinance and an affirmative vote by both the council and the members of the system. Therefore, the potential changes considered for current active employees were limited to (1) an increase in the employee contribution rate and (2) elimination of lump sum payments in the calculation of final average salary.

Potential Benefit Changes for New Hires

Defined benefit plan costs can be lowered by reducing the benefits paid (benefit multipliers, final compensation or cost-of-living adjustments), reducing the time period benefits are expected to be paid by increasing age and service requirements for when benefits commence (retirement eligibilities), increasing the employee's share of the contribution burden, or a combination of these. Depending on the changes made, the cost impact is different for the various changes available. The impact generally falls into the following categories:

- Greatest savings:
    - Benefit multiplier
    - Retirement eligibility
    - Cost-of-living-adjustments (COLAs)
    - Elimination of inclusion of lump sum payments at retirement in final average salary definition

- Large savings:
    - Final average salary
    - Normal form of benefit payment

- Small savings:
    - Vesting
    - Interest on employee contributions
    - Pre-retirement death and disability benefits
    - Early retirement reduction factors

It must be kept in mind that the cost savings from reducing benefits for new hires takes many years to manifest itself. The full impact is only realized after all of the current active members leave City employment and are replaced by employees covered under the new benefit structure. This usually takes 15 to 30 years depending on the active member demographics and benefit provisions regarding retirement eligibility.

The table on the following page shows the ultimate savings from a number of potential changes to the benefit structure for new members. The savings is measured as a reduction in the employer normal cost rate. The baseline used to determine the savings is the valuation results produced by Cavanaugh Macdonald during the actuarial audit conducted as part of the services provided to the City. The results of that audit are detailed in a separate report. **Please note that the cost impact of a combination of changes is not necessarily additive.**

Retirement Plan Changes
For New Hires

	12/31/10 Valuation GRS	12/31/10 Valuation CMC	Increase Employee Contributions by 2% of Pay	Change Final Average Salary to 5 Years	Lower COLA to 2%	Increase Normal Retirement Age to 65 with 5 YOS for General Employees and 55 with 25 YOS for Police & Fire	Increase Years for Vesting to 10 for General Employees	Lower Benefit Multiplier to 1.55% per year for General Employees and 2.00% per year for Police & Fire	Exclude LS Pay in FAS Calculation
GENERAL EMPLOYEES									
Total Normal Cost	11.62%	11.24%	11.29%	10.79%	10.49%	9.20%	11.16%	9.78%	10.03%
Employer Normal Cost		8.24%	6.29%	7.79%	7.49%	6.20%	8.16%	6.78%	7.03%
Savings			*-1.95%*	*-0.45%*	*-0.75%*	*-2.04%*	*-0.08%*	*-1.46%*	*-1.21%*
POLICE									
Total Normal Cost	19.30%	19.40%	19.44%	18.66%	17.98%	17.85%		16.32%	17.32%
Employer Normal Cost		11.40%	9.44%	10.66%	9.98%	9.85%		8.32%	9.32%
Savings			*-1.96%*	*-0.74%*	*-1.42%*	*-1.55%*		*-3.08%*	*-2.08%*
FIRE									
Total Normal Cost	21.01%	21.15%	21.18%	20.34%	19.62%	20.19%		17.78%	18.44%
Employer Normal Cost		13.15%	11.18%	12.34%	11.62%	12.19%		9.78%	10.44%
Savings			*-1.97%*	*-0.81%*	*-1.53%*	*-0.96%*		*-3.37%*	*-2.71%*

Financial Impact of Potential Changes

As noted above, the savings associated with changes in benefits are not necessarily additive. To demonstrate this, we have estimated the cost savings for five plan design change scenarios all with an effective date of changes of January 1, 2013. For general employees the scenarios are:

1. Eliminate lump sum payments in the definition of final average salary; increase member contributions by 2% of pay; increase normal retirement age to age 65 with 5 years of service; increase final average salary to a 5 year average; reduce the COLA to 2%. Applies only to new hires.

2. Eliminate lump sum payments in the definition of final average salary; increase member contributions by 2% of pay; increase normal retirement age to age 65 with 5 years of service. Applies only to new hires.

3. Eliminate lump sum payments in the definition of final average salary; increase member contributions by 2% of pay; increase normal retirement age to age 65 with 5 years of service or age 60 with 30 years of service; reduce the COLA to 2%. Applies only to new hires.

4. Eliminate lump sum payments in the definition of final average salary for new hires; increase member contributions for both current actives and new hires by 2% of pay (1% in the first year for current actives); increase normal retirement age to age 65 with 5 years of service for new hires.

5. Eliminate lump sum payments in the definition of final average salary for both current actives and new hires; increase member contributions for new hires by 2% of pay; increase normal retirement age for new hires to age 65 with 5 years of service.

For police and fire the scenarios are:

1. Eliminate lump sum payments in the definition of final average salary; increase member contributions by 2% of pay; increase final average salary to a 5 year average; reduce the COLA to 2%. Applies only to new hires.

2. Eliminate lump sum payments in the definition of final average salary; increase member contributions by 2% of pay; increase final average salary to a 5 year average. Applies only to new hires.

3. Eliminate lump sum payments in the definition of final average salary; increase normal retirement age to age 55 with 25 years of service or age 60 with 15 years of service; reduce the COLA to 2%. Applies only to new hires.

4. Eliminate lump sum payments in the definition of final average salary for new hires; increase final average salary to a 5 year average for new hires, increase member contributions for both current actives and new hires by 2% of pay (1% in the first year for current actives).

5. Eliminate lump sum payments in the definition of final average salary for both current actives and new hires, increase member contributions for new hires by 2% of pay, and increase final average salary for new hires to a 5 year average.

As mentioned earlier, the full impact of changes that are made to the benefit structure for new hires takes many years to unfold. Therefore, costs must be compared over a long period. For our modeling we used a thirty year projection period to permit adequate time for the long term trends to appear. The long term savings for each scenario are shown in the following tables.

Long Term Reduction in Employer Normal Cost Rate

	General Employees	Fire	Police
Pension Alternative 1	5.20%	6.44%	5.62%
Pension Alternative 2	4.38%	5.19%	4.42%
Pension Alternative 3	5.03%	4.42%	4.43%
Pension Alternative 4	5.03%	5.19%	4.42%
Pension Alternative 5	5.07%	5.22%	4.45%

Estimated Dollar Amount of Pension Savings over 30 Year Projection Period ($Millions)

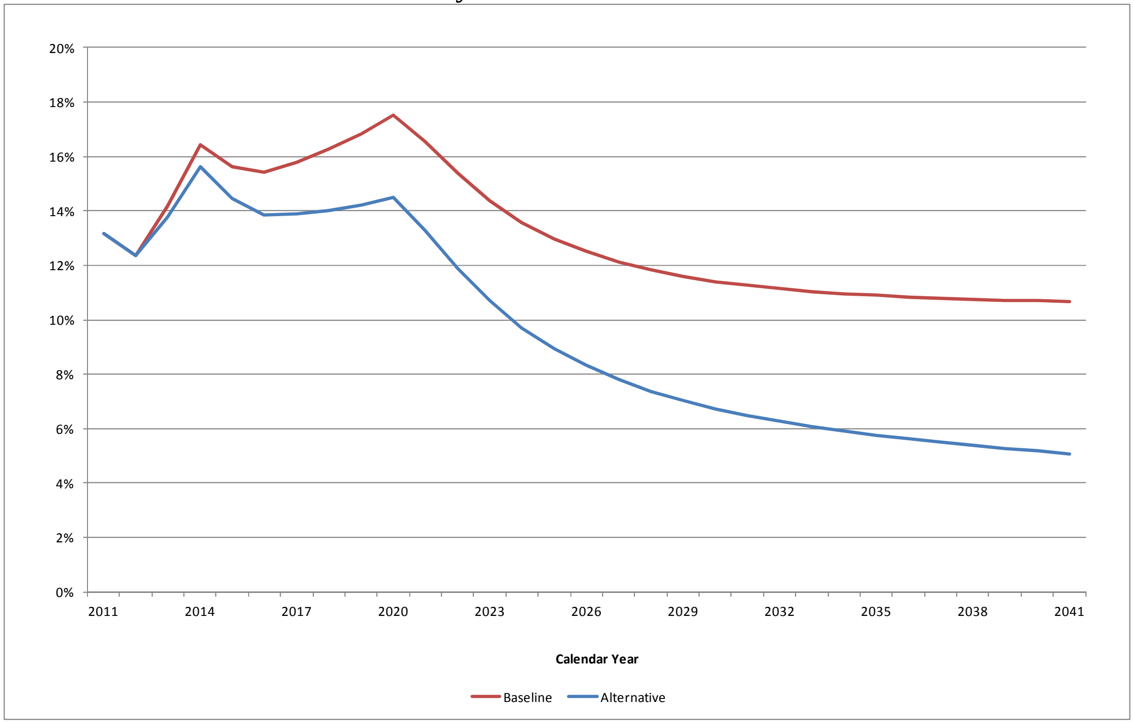
	General	Fire	Police	Total
Pension Alternative 1	$96	$26	$33	$155
Pension Alternative 2	80	21	26	127
Pension Alternative 3	93	18	27	138
Pension Alternative 4	92	23	28	143
Pension Alternative 5	107	34	39	180

In the following pages, we provide further detail on the impact of these changes by projecting the contribution pattern expected over time under each of the scenarios, assuming all actuarial assumptions are met in future years. The projection results show how the long term savings are expected to emerge over time.

The following graphs show the projected employer contribution rates compared to the baseline for the three groups, General Employees, Fire and Police, under each of the five pension alternative plan designs described earlier. To provide stability in the contribution rate and improve comparability of the costs of each plan design, the UAAL is re-amortized using an open 5 year period in 2019 for both the baseline and alternative scenarios. All actuarial assumptions, including the 7.75% rate of return are assumed to be met each year in the projection period. Details, including projected employer contribution rates and dollar amounts by year are shown for each alternative plan design in Appendix A.

During the presentation on the actuarial audit, some possible changes to the set of actuarial assumptions were discussed. If a different set of assumptions is used, the baseline projection will change as well as the projected savings of the various alternatives.

General Employees – Alternative 1
City Contribution Rate



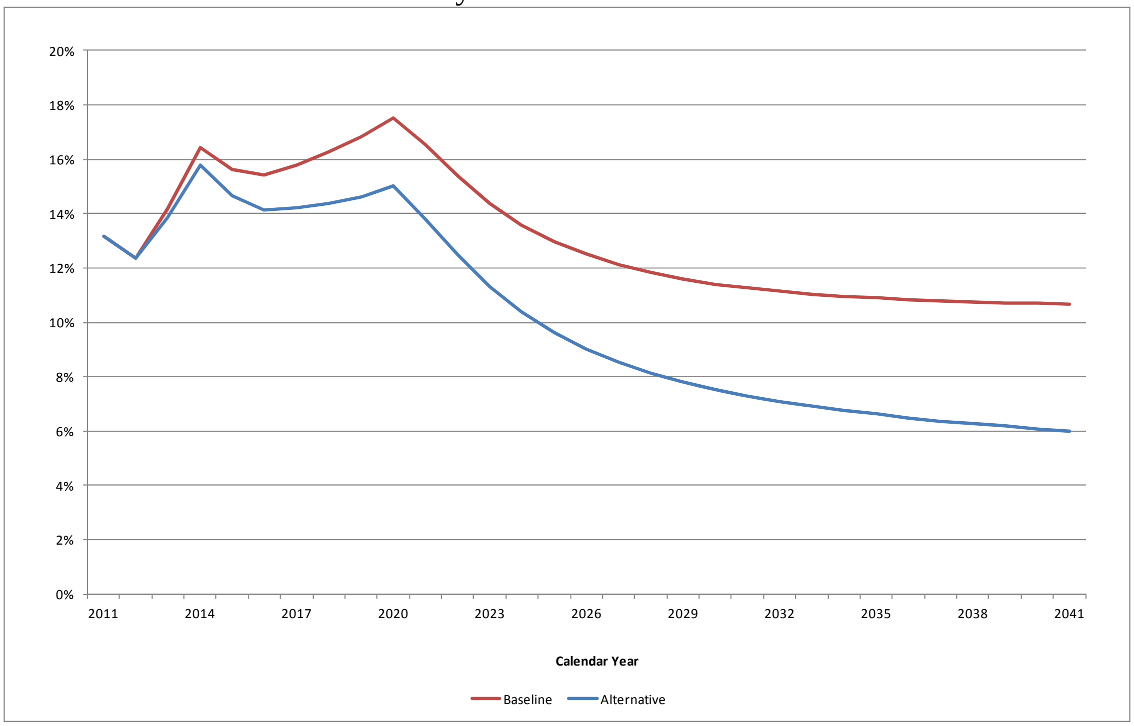
Changes for New Hires Only:

- Eliminate lump sum payments in the definition of final average salary;
- Increase member contributions from 3% to 5% of pay;
- Increase normal retirement age to age 65 with 5 years of service;
- Increase final average salary from 3 years to a 5 year average, and
- Reduce the COLA from CPI up to 3% beginning 36 months after retirement to CPI up to 2% beginning 36 months after retirement.

The initial spike in the contribution rate is the result of the deferred investment losses - difference between the market value and actuarial value of assets - being recognized through the asset smoothing method.

The proposed changes are for new hires only so it takes about fifteen years for major savings to emerge. The City's cost under this alternative drops from about 14% of pay to about 5% of pay over the projection period and produces cumulative savings over the projection period of $96 million. This option represents the most significant reduction in benefits, particularly for long service employees who can retire at age 55 with 30 year of service under the current plan. Under the proposed plan, unreduced retirement benefits are not available until an employee reaches age 65 with at least 5 years of service.

General Employees – Alternative 2
City Contribution Rate



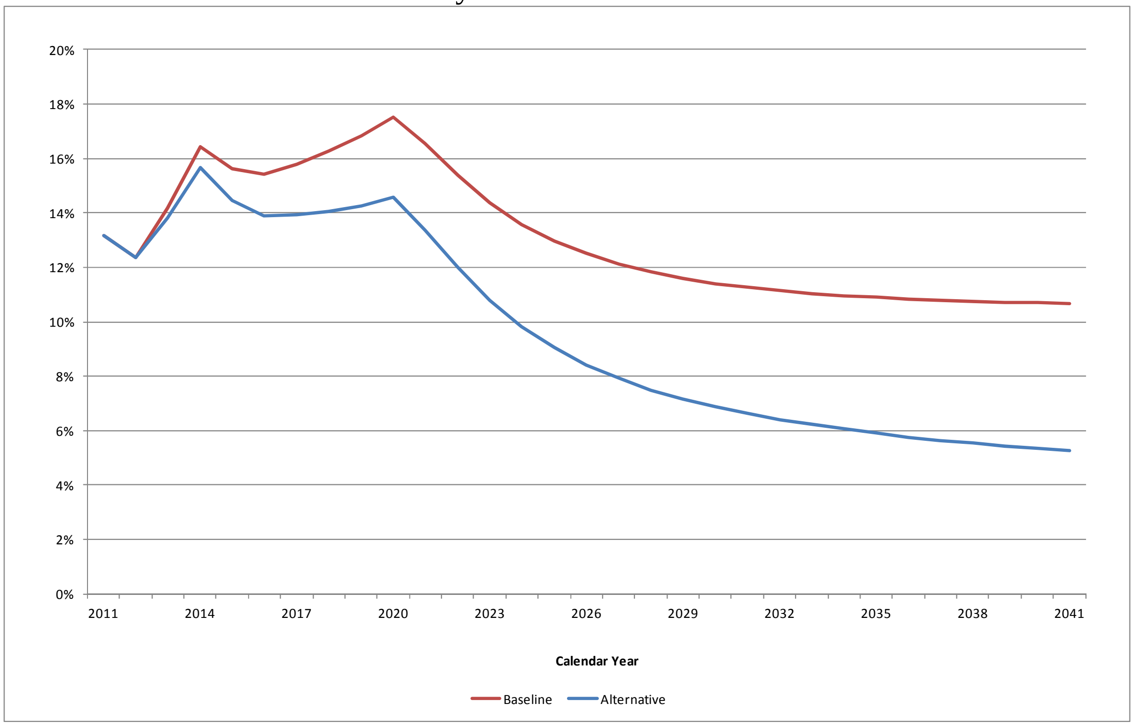
<u>Changes for New Hires Only:</u>

- Eliminate lump sum payments in the definition of final average salary;
- Increase member contributions from 3% to 5% of pay;
- Increase normal retirement age to age 65 with 5 years of service.

The initial spike in the contribution rate is the result of the deferred investment losses - difference between the market value and actuarial value of assets - being recognized through the asset smoothing method.

In this alternative the plan changes are only for new hires only so it takes fifteen years before major cost savings start to be realized. There are fewer benefit changes than in Alternative 1 so the cost savings is less. However, by the end of the thirty year projection period, the City's contribution rate is around 6% of payroll and the cumulative savings over the thirty year projection period is $80 million.

General Employees – Alternative 3
City Contribution Rate



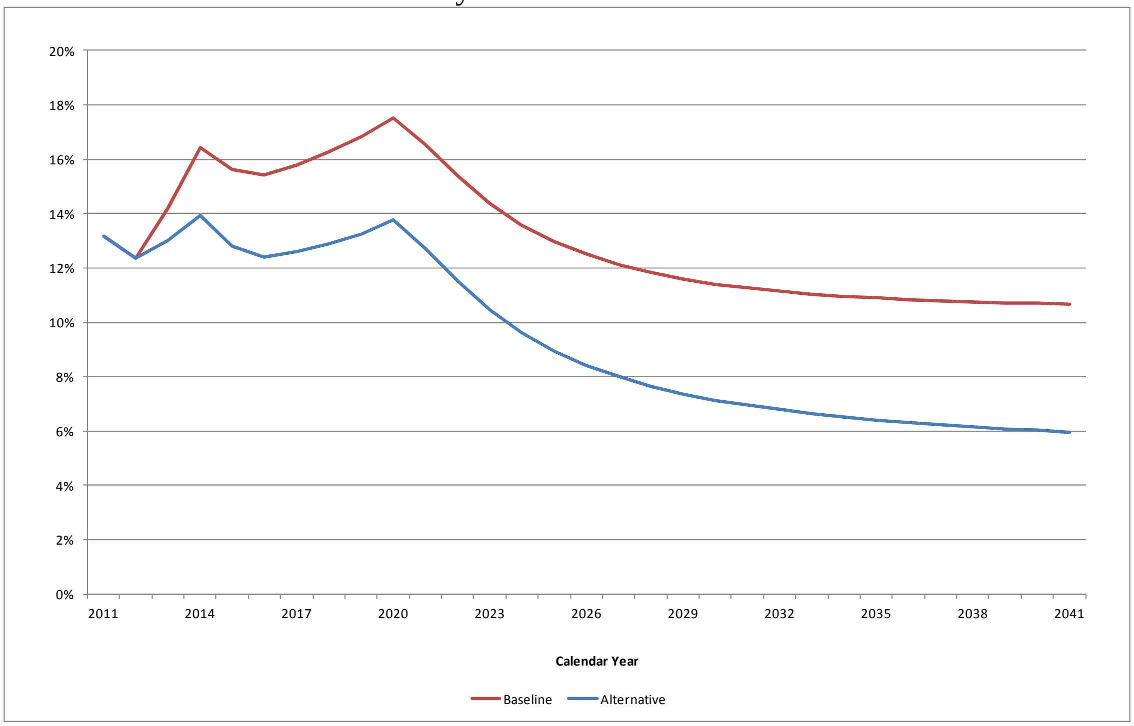
Changes for New Hires Only:

- Eliminate lump sum payments in the definition of final average salary;
- Increase member contribution rate from 3% to 5%;
- Increase normal retirement age to age 60 with 30 years of service or age 65 with 5 years of service;
- Reduce the COLA from CPI up to 3% beginning 36 months after retirement to CPI up to 2% beginning 36 months after retirement.

The initial spike in the contribution rate is the result of the deferred investment losses - difference between the market value and actuarial value of assets - being recognized through the asset smoothing method.

Alternative 3 is similar to Alternative 1 except it does not move the final average salary (FAS) to a high 5 year average and it provides for unreduced retirement benefits at age 60 with 30 years of service as well as at age 65 with 5 years of service. Again, these changes are for new hires only so it takes about fifteen years before significant cost savings are realized. By 2026, the City's contribution rate is projected to be 8.43% and ultimately reaches about 5.25% of payroll in 2041. The total savings under this alternative over the thirty year projection period is $93 million, just slightly less than Alternative 1.

General Employees – Alternative 4
City Contribution Rate



Changes to Current Active Members: increase employee contributions from 3% to 5% over a two year period.

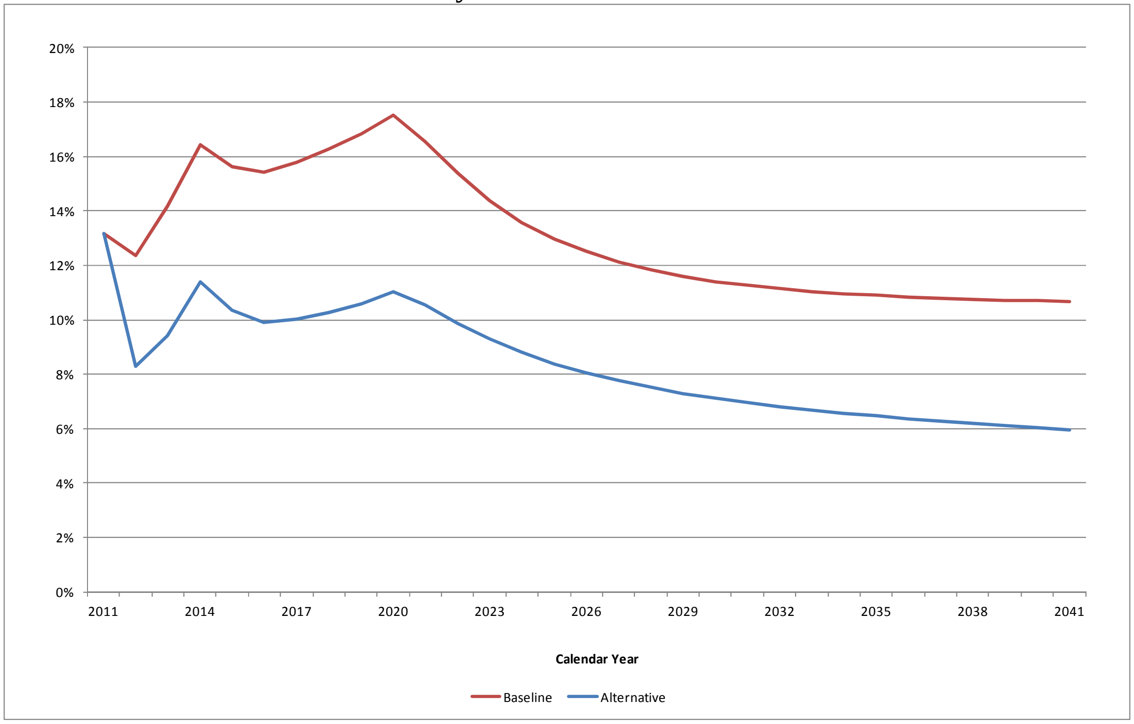
Changes to New Hires Only:

- Eliminate lump sum payments in the definition of final average salary;
- Increase member contributions from 3% to 5% of pay,
- Increase normal retirement age to age 65 with 5 years of service.

The initial spike in the contribution rate is the result of the deferred investment losses - difference between the market value and actuarial value of assets - being recognized through the asset smoothing method.

There is more immediate cost savings to the City under this alternative because current active members are assumed to increase their contributions by 2%, which lowers the City's contribution. Fewer changes are made to the new hires under this alternative so the cost savings is less than under the other three options. However, the ultimate City contribution rate in thirty years is about 6% and total savings over the projection period is $92 million.

General Employees – Alternative 5
City Contribution Rate



Changes to Current Active Members: eliminate lump sum payments in the definition of final average salary.

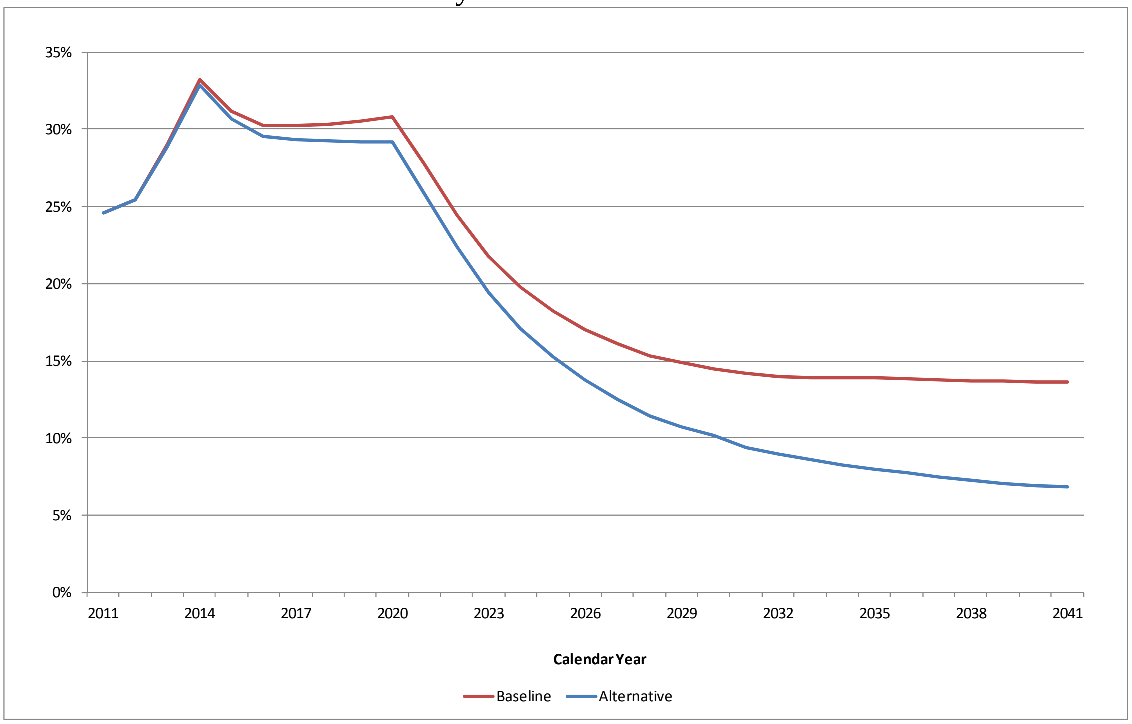
Changes to New Hires Only:

- Eliminate lump sum payments in the definition of final average salary;
- Increase member contributions from 3% to 5% of pay,
- Increase normal retirement age to age 65 with 5 years of service.

The initial spike in the contribution rate is the result of the deferred investment losses - difference between the market value and actuarial value of assets - being recognized through the asset smoothing method.

This alternative reflects the same benefit changes for new hires as Alternative 4, but instead of increasing the employee contribution rate by 2% for current members, lump sum payments are excluded from the determination of final average salary for current active members. Greater savings appear immediately under this alternative because of the reduction in benefits for current active members. The ultimate City contribution rate in thirty years is about 6% and total savings over the projection period is $107 million.

Fire Employees – Alternative 1
City Contribution Rate



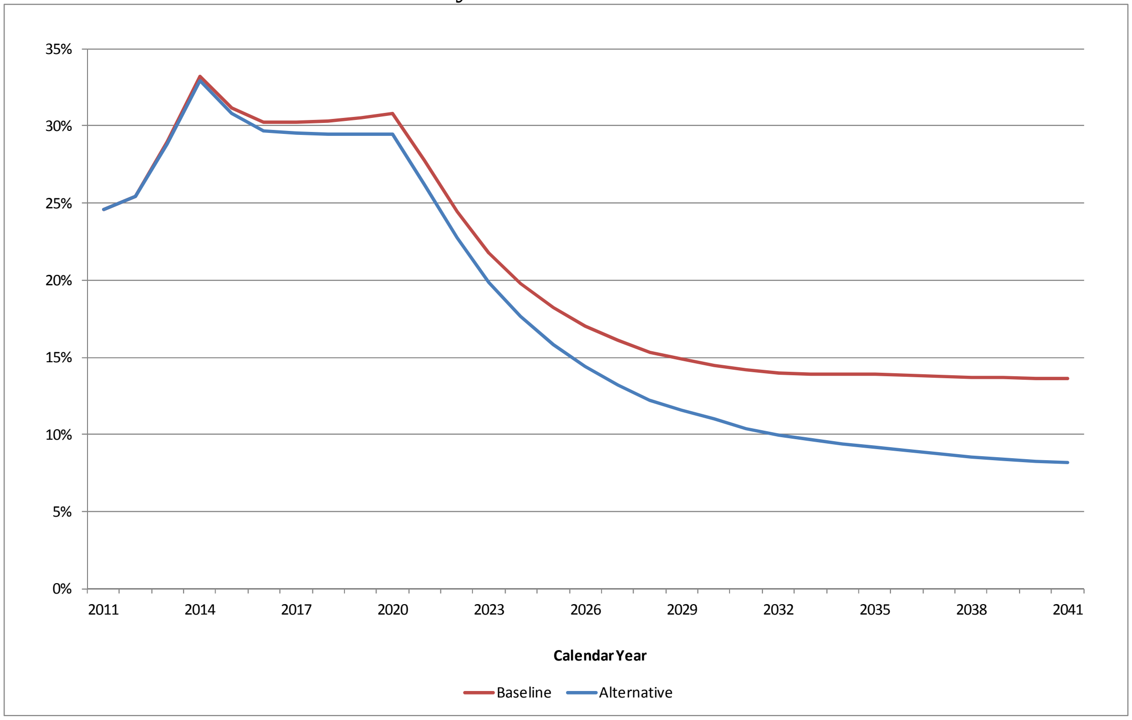
Changes for New Hires Only:

- Eliminate lump sum payments in the definition of final average salary;
- Increase member contributions from 8% to 10% of pay;
- Increase final average salary from 3 years to a 5 year average, and
- Reduce the COLA from CPI up to 3% beginning 36 months after retirement to CPI up to 2% beginning after 36 months.

The initial spike in the contribution rate is the result of the deferred investment losses - difference between the market value and actuarial value of assets - being recognized through the asset smoothing method.

Given the desire to maintain the earlier retirement ages for public safety members, most of the alternatives studied leave the plan provisions for retirement unchanged. The proposed changes are for new hires only so it takes about fifteen years for significant savings to emerge. The City's cost under this alternative drops from about 33% of pay in 2014 to around 7% of pay in 2041, and producing about $26 million in savings over the projection period.

Fire Employees – Alternative 2
City Contribution Rate



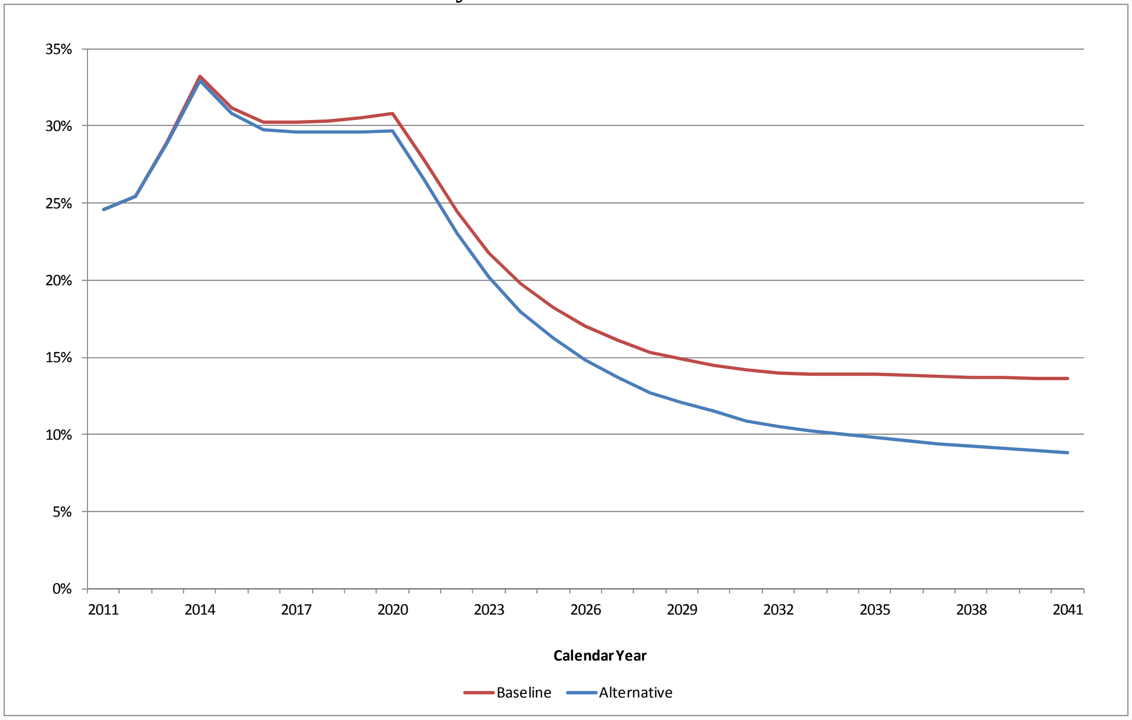
<u>Changes for New Hires Only</u>:

- Eliminate lump sum payments in the definition of final average salary;
- Increase member contributions from 8% to 10% of pay;
- Increase final average salary from a 3 year to a 5 year average.

The initial spike in the contribution rate is the result of the deferred investment losses - difference between the market value and actuarial value of assets - being recognized through the asset smoothing method.

As mentioned earlier, this alternative leaves the plan provisions for retirement unchanged. The post-retirement cost of living adjustment is also unchanged. This alternative produces estimated cost savings of $21 million over the thirty year projection period. The proposed changes are for new hires only so it takes fifteen years for significant cost savings to emerge. The City's cost under this alternative drops from about 33% of pay in 2014 to around 8% of pay in 2041.

Fire Employees – Alternative 3
City Contribution Rate



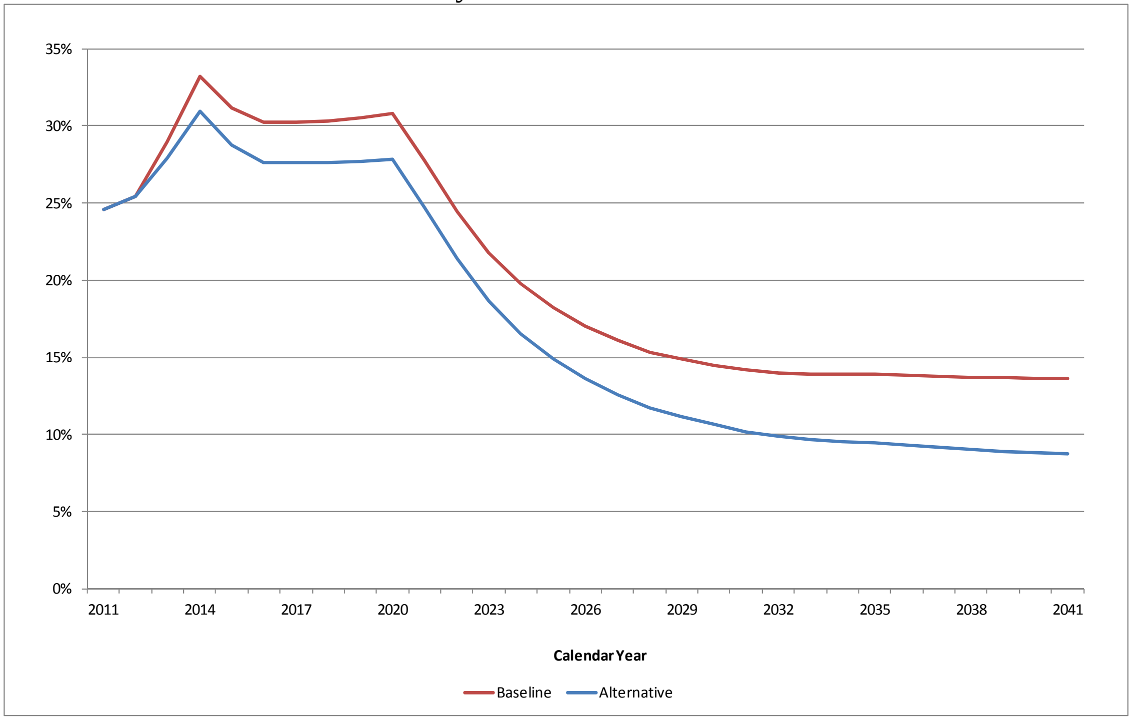
<u>Changes for New Hires Only</u>:

- Eliminate lump sum payments in the definition of final average salary;
- Change eligibility for unreduced retirement benefits from the current provisions of:
    - (1) age 55 with 20 years of service or (2) age plus years of service equal at least 80 (minimum age 50) to
    - (a) age 55 with 25 years of service or (b) age 60 with 15 years of service
- Reduce the COLA from CPI up to 3% beginning 36 months after retirement to CPI up to 2% beginning 36 months after retirement.

The initial spike in the contribution rate is the result of the deferred investment losses - difference between the market value and actuarial value of assets - being recognized through the asset smoothing method.

This is the only alternative for Fire that changes to age at which unreduced retirement benefits may begin. This alternative produces estimated cost savings of $18 million over the thirty year projection period. The proposed changes are for new hires only so it takes about fifteen years for significant cost savings to emerge. The City's cost under this alternative drops from about 33% of pay in 2014 to just under 9% of pay in 2041.

Fire Employees – Alternative 4
City Contribution Rate



Changes to Current Active Members: increase employee contributions from 8% to 10% over a two year period.

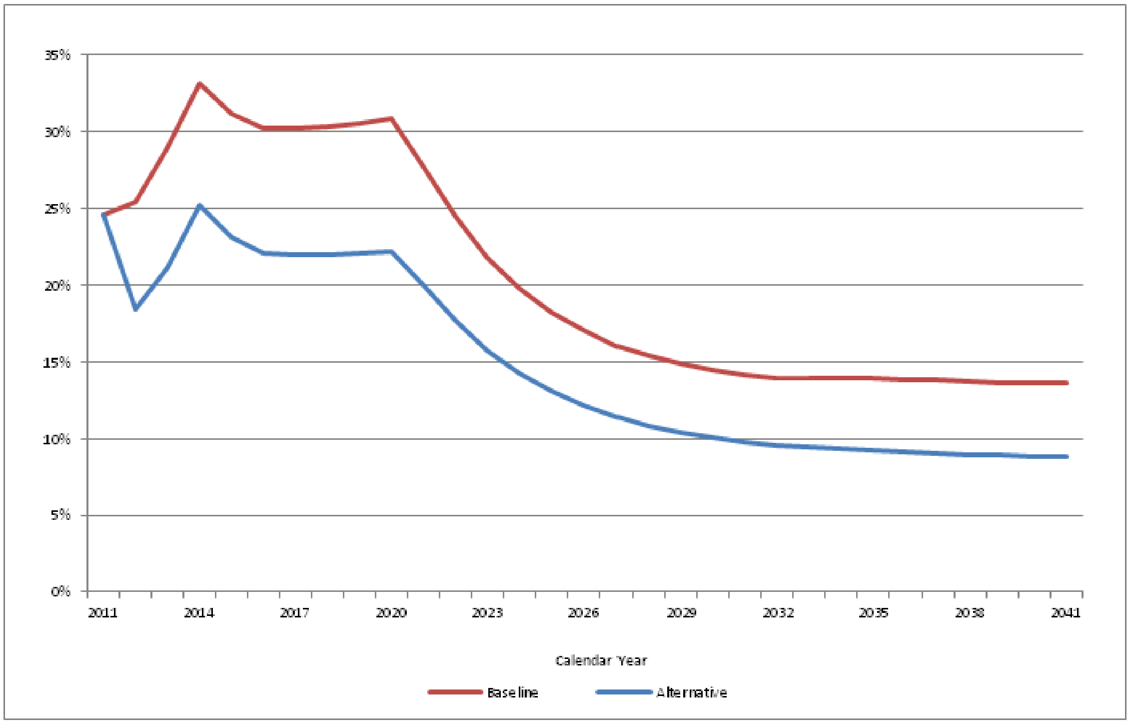
Changes to New Hires Only:

- Eliminate lump sum payments in the definition of final average salary;
- Increase final average salary from 3 years to a 5 year average,
- Increase member contributions from 8% to 10% of pay,

The initial spike in the contribution rate is the result of the deferred investment losses - difference between the market value and actuarial value of assets - being recognized through the asset smoothing method.

There is more immediate cost savings to the City under this option because current active members are assumed to increase their contributions from 8% to 10%, providing an immediate decrease to the City's contribution rate. Because of the cost savings that result from current members contributing at a higher rate, fewer changes for new hires are necessary to provide similar cost savings as the other alternatives. Under this alternative, the City contribution rate declines from a high of nearly 33% in 2014 to about 8.8% in 2041, representing $23 million of estimated savings over the thirty year projection period.

Fire Employees – Alternative 5
City Contribution Rate



Changes to Current Active Members: eliminate lump sum payments in the definition of final average salary.

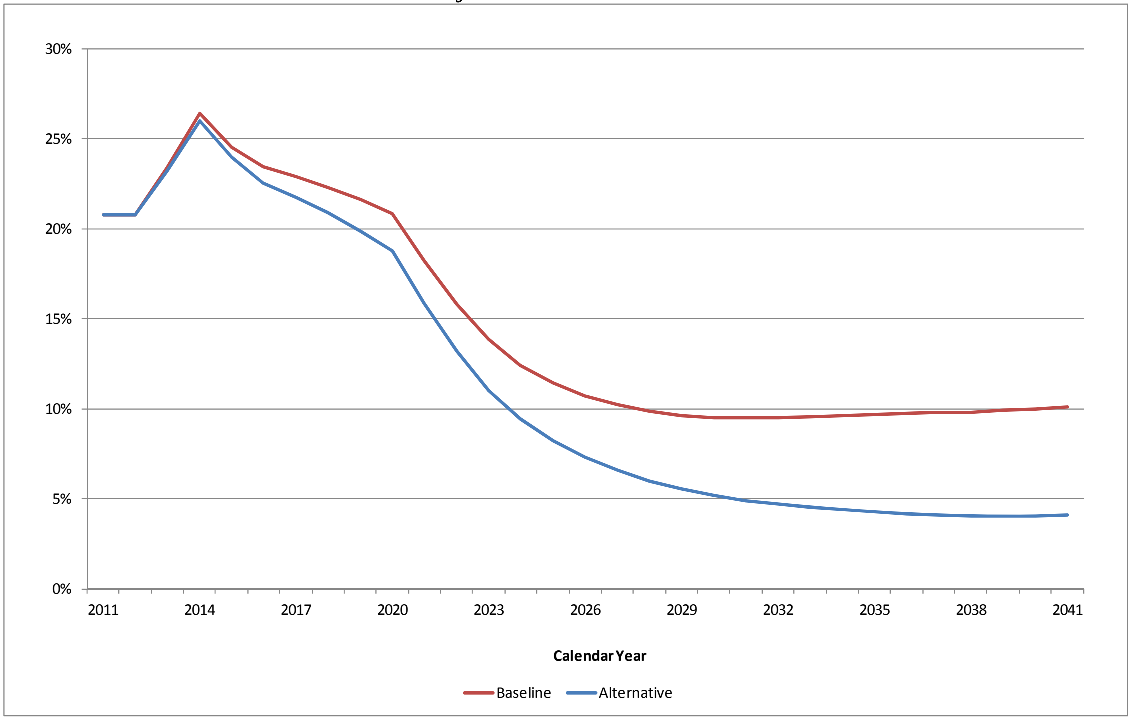
Changes to New Hires Only:

- Eliminate lump sum payments in the definition of final average salary;
- Increase final average salary from 3 years to a 5 year average,
- Increase member contributions from 8% to 10% of pay,

The initial spike in the contribution rate is the result of the deferred investment losses - difference between the market value and actuarial value of assets - being recognized through the asset smoothing method.

This alternative reflects the same benefit changes for new hires as Alternative 4, but instead of increasing the employee contribution rate by 2% for current members, lump sum payments are excluded from the determination of final average salary for current active members. Greater savings appear immediately under this alternative because of the reduction in benefits for current active members. The ultimate City contribution rate in thirty years is about 8.75% and total savings over the projection period is $34 million.

Police Employees – Alternative 1
City Contribution Rate



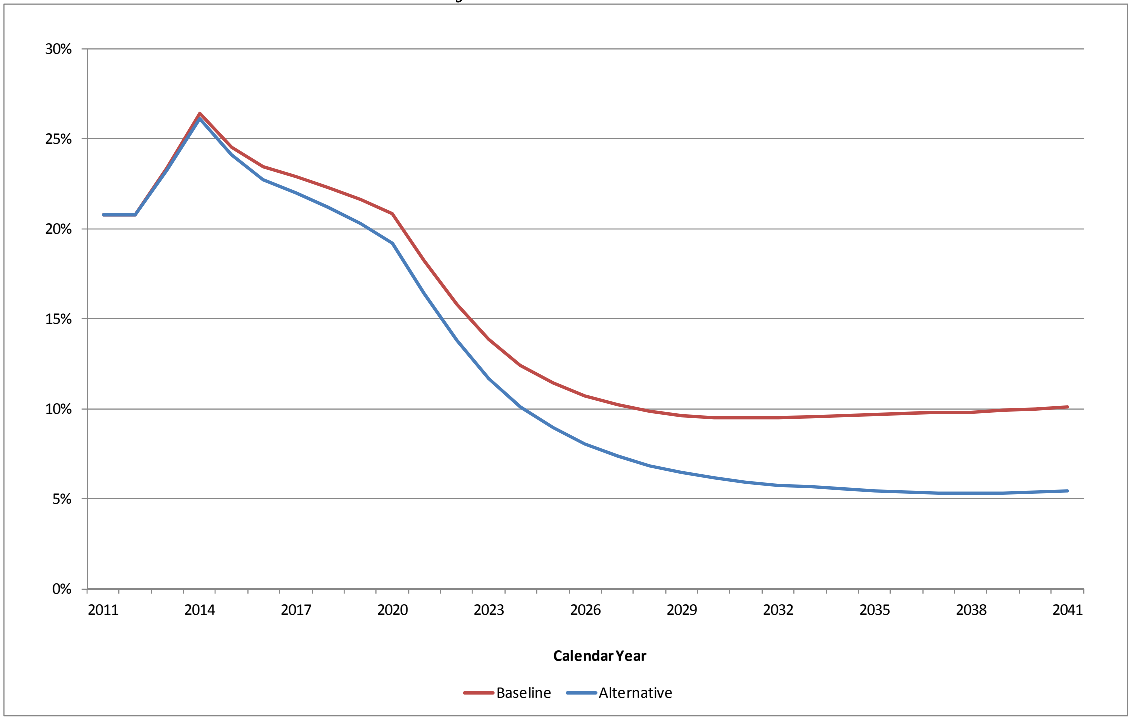
Changes for New Hires Only:

- Eliminate lump sum payments in the definition of final average salary;
- Increase member contributions from 8% to 10% of pay;
- Increase final average salary from 3 years to a 5 year average, and
- Reduce the COLA from CPI up to 3% beginning 36 months after retirement to CPI up to 2% beginning 36 months after retirement.

The initial spike in the contribution rate is the result of the deferred investment losses - difference between the market value and actuarial value of assets - being recognized through the asset smoothing method.

Given the desire to maintain the earlier retirement ages for public safety members, most of the alternatives studied leave the plan provisions for retirement unchanged. The proposed changes are for new hires only so it takes around fifteen years for significant savings to emerge. The City's cost under this alternative drops from about 26% of pay in 2014 to around 4% of pay in 2041 and produces cumulative savings over the projection period of $33 million.

Police Employees – Alternative 2
City Contribution Rate



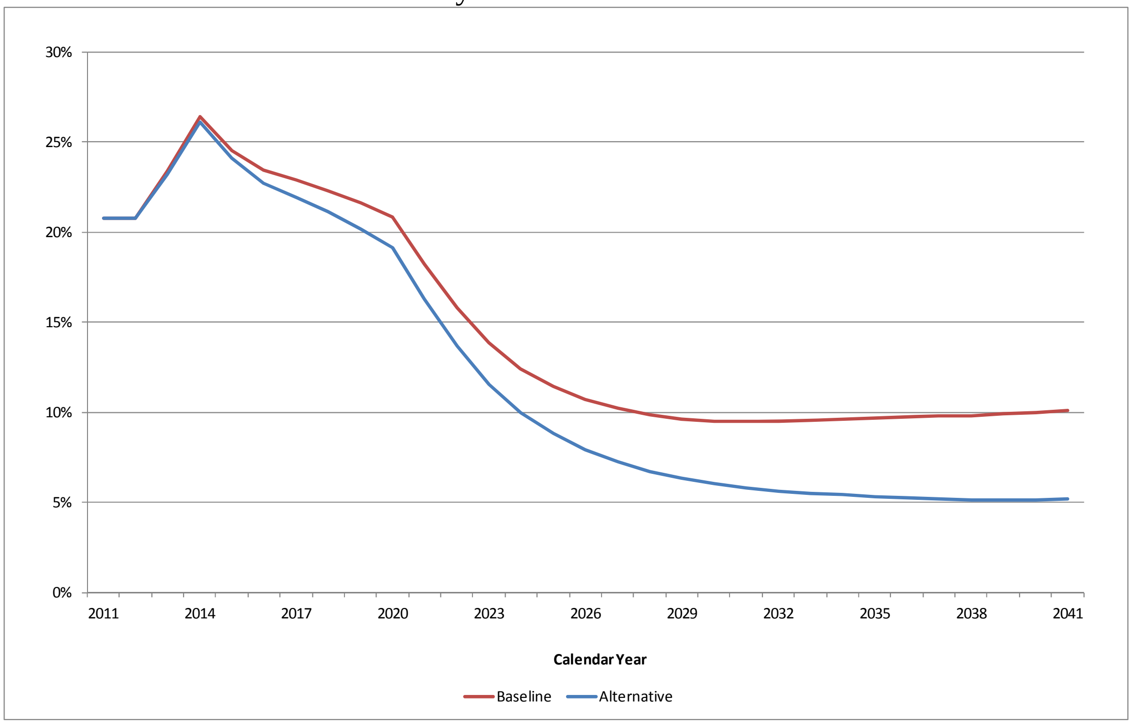
Changes for New Hires Only:

- Eliminate lump sum payments in the definition of final average salary;
- Increase member contributions from 8% to 10% of pay;
- Increase final average salary from 3 years to a 5 year average.

The initial spike in the contribution rate is the result of the deferred investment losses - difference between the market value and actuarial value of assets - being recognized through the asset smoothing method.

As mentioned earlier, this alternative leaves the plan provisions for retirement unchanged. It also leaves the post-retirement cost of living adjustment (COLA) unchanged. As seen in earlier projections, the proposed changes are for new hires only so it takes around fifteen years for significant cost savings to emerge. The City's cost under this alternative drops from about 26% of pay in 2014 to about 5.5% of pay in 2041. Based on the assumptions used, this alternative produces estimated cost savings of $26 million over the thirty year projection period.

Police Employees – Alternative 3
City Contribution Rate



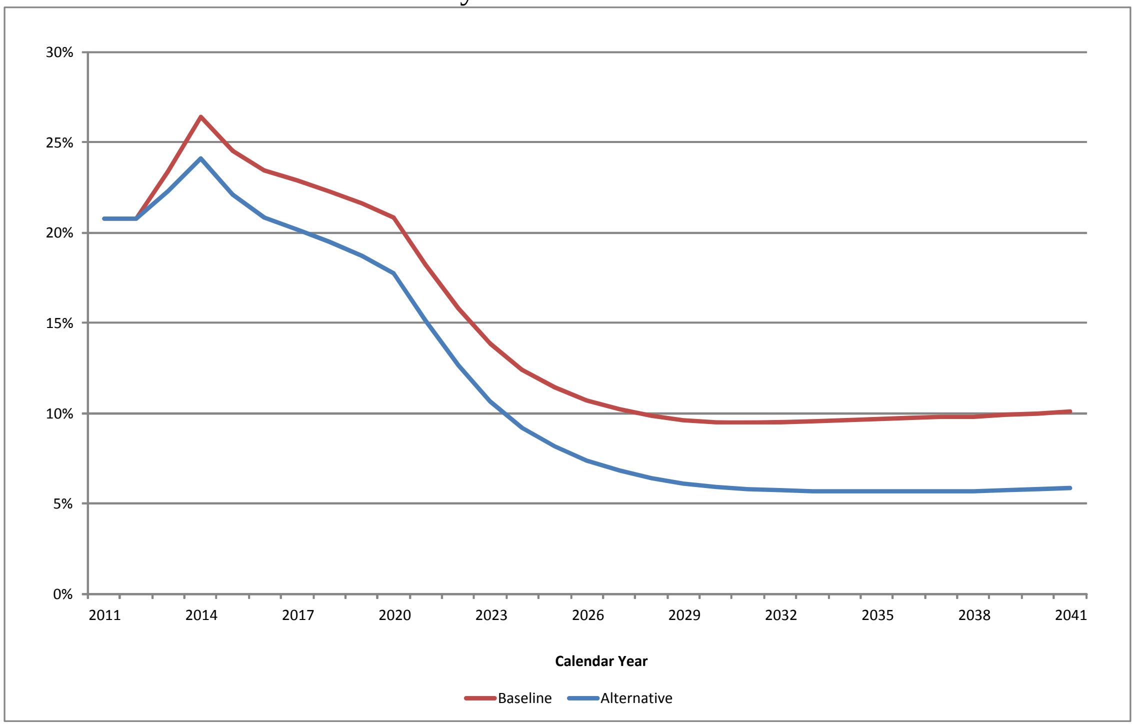
<u>Changes for New Hires Only</u>:

- Eliminate lump sum payments in the definition of final average salary;
- Change eligibility for unreduced retirement benefits from the current provisions of: (1) age 50 with 25 years of service or (2) age 60 with 15 years of service, to (a) age 55 with 25 years of service or (b) age 60 with 15 years of service
- Reduce the COLA from CPI up to 3% beginning 36 months after retirement to CPI up to 2% beginning 36 months after retirement.

The initial spike in the contribution rate is the result of the deferred investment losses - difference between the market value and actuarial value of assets - being recognized through the asset smoothing method.

This is the only alternative for Police that changes to age at which unreduced retirement benefits may begin This option also lowers the post-retirement cost of living adjustments, but leaves the member contribution rate unchanged at 8%. This alternative produces estimated cost savings of $27 million over the thirty year projection period. The proposed changes are only for new hires only so it takes around fifteen years for significant cost savings to emerge. The City's cost under this alternative drops from about 26% of pay in 2014 to around 5.25% of pay in 2041.

Police Employees – Alternative 4
City Contribution Rate



<u>Changes to Current Active Members</u>: Increase employee contributions from 8% to 10% over a two year period.

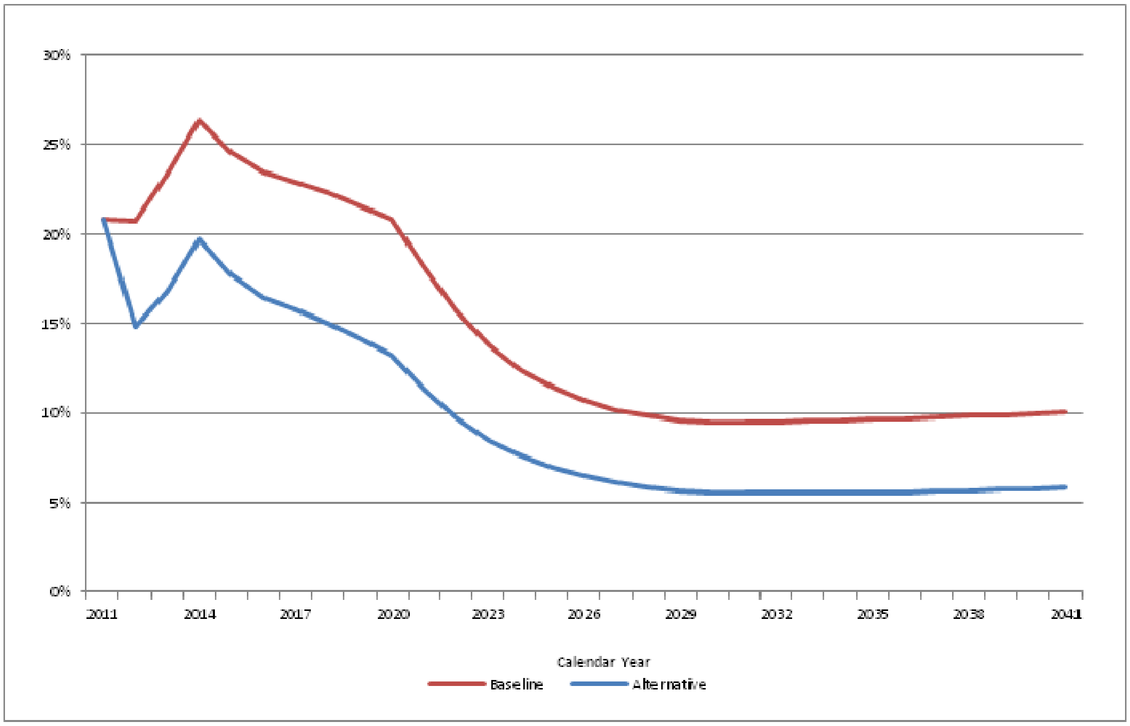
<u>Changes to New Hires Only</u>:

- Eliminate lump sum payments in the definition of final average salary;
- Increase final average salary from 3 years to a 5 year average
- Increase member contributions from 8% to 10% of pay.

The initial spike in the contribution rate is the result of the deferred investment losses - difference between the market value and actuarial value of assets - being recognized through the asset smoothing method.

There is more immediate cost savings to the City under this option because current active members are assumed to increase their contributions from 8% to 10%, providing an immediate decrease to the City's contribution. Because of the cost savings that results from current members contributing at a higher rate, fewer changes for new hires are necessary to provide similar cost savings as the other alternatives. Under this alternative, the City contribution rate declines from a high of nearly 24% in 2014 to about 6% in 2041, representing $28 million of estimated savings over the thirty year projection period.

Police Employees – Alternative 5
City Contribution Rate



Changes to Current Active Members: Eliminate lump sum payments in the definition of final average salary.

Changes to New Hires Only:

- Eliminate lump sum payments in the definition of final average salary;
- Increase final average salary from 3 years to a 5 year average
- Increase member contributions from 8% to 10% of pay.

The initial spike in the contribution rate is the result of the deferred investment losses - difference between the market value and actuarial value of assets - being recognized through the asset smoothing method.

This alternative reflects the same benefit changes for new hires as Alternative 4, but instead of increasing the employee contribution rate by 2% for current active members, lump sum payments are excluded from the definition of final average salary for current active members. Greater savings appear immediately under this alternative because of the reduction in benefits for current active members. The ultimate City contribution rate in thirty years is about 5.90% and total savings over the projection period is $39 million.

Benefit Impact of Potential Changes

As is hopefully obvious, the savings detailed above come as a result of a reduction in benefit levels for new hires (and an increase in contributions for existing active members under alternative #4 and a reduction in benefits for both current and future hires in Alternative 5). In order to put the benefit reductions in perspective, we have determined the change in the replacement ratio (the retirement benefits determined as a percent of final salary) under the current benefit structure and each pension alternative for a few sample retirement scenarios. The impact of the lump sum payments at retirement was estimated by using the load from the actuarial valuation (12%) that is applied to active liabilities to estimate the additional benefits paid as a result of the lump sum payments. The actual impact will vary by employee depending on each individual's lump sum amount.

For the General Employees, all alternative plan designs change the earliest age at which an employee may retire with unreduced benefits. In the current plan, normal retirement (which permits benefits to begin without reduction) is age 55 with 30 years of service or age 60 with 5 years of service. Under all of the alternative plan designs other than Alternative 3 (which permits normal retirement at either age 65 with 5 years of service or age 60 with 30 years of service), normal retirement is age 65 with 5 years of service. If retirement benefits commence at an age earlier than normal retirement, the employee takes a full actuarial reduction in the amount of benefit payable. This significant change in the retirement eligibility requirements, in addition to other changes included in the plan design, results in much lower replacement ratios under all of the plan design alternatives studied for General Employees with the exception of Alternative 3 if a member is age 60 with at least 30 years of service and, therefore, eligible for unreduced benefits.

Dramatic changes in the normal retirement provisions were not made in the alternatives for Police and Fire members (with the exception of Alternative 3) so the decrease in the replacement ratios under the various alternatives for those groups are less dramatic.

The replacement ratios for Alternative 5 would be the same as for Alternative 4 because the only difference in the two alternative plan designs is changes that apply to current active members. The benefit structure for new hires is the same. Therefore, a column for Alternative 5 has not been included in the following table.

Comparison of Benefits Provided by Alternative Plan Designs

			Replacement Ratios Under Plan Design			
Age	Service	Current	#1	#2	#3	#4
			General Employees			
55	30	58.0%	19.9%*	20.7%*	36.3%*	20.7%*
60	20	38.7%	23.2%*	24.2%*	24.2%*	24.2%*
65	30	58.0%	49.8%	51.8%	51.8%	51.8%
60	30	58.0%	34.8%*	36.3%*	51.8%	36.3%*
			Police Officers			
50	25	67.2%	57.6%	57.6%	42.0%*	57.6%
60	15	40.3%	34.6%	34.6%	36.0%	34.6%
55	30	75.2%	64.5%	64.5%	67.2%	67.2%
60	20	53.7%	46.1%	46.1%	48.0%	48.0%
			Firefighters			
55	30	77.3%	64.5%	64.5%	67.2%	67.2%
55	20	55.2%	46.1%	46.1%	33.6%*	46.1%
60	20	55.2%	46.1%	46.1%	48.0%	48.0%

*Reflects a reduction in the benefit amount due to commencement before normal retirement age.

The reduction in the COLA under several of the alternatives will also impact benefit levels years after retirement, but that impact will be dependent on the level of actual inflation during retirement, since the COLA is based on the change in the Consumer Price Index with an annual cap. The maximum impact of a 2% versus 3% COLA would be a benefit 6.4% lower after 10 years of retirement, 15.3% lower after 20 years and 23.2% lower after 30 years. The minimum impact would be no change in benefit which would be the case if actual inflation was 2.0% or less in each year after retirement.

One of the stated goals of the study was to achieve a stable and, if possible, lower employer contribution rate. While the main thrust of the study was an analysis of how to accomplish this goal through benefit reductions, there is a potential change in funding policy that could lower the current employer rates without changing benefits and offer some stability in those rates.

Before going further, it must be made clear that without changes in benefits, the overall liability of the plans does not change. Adjusting the funding policy simply alters the incidence of contributions. In fact, by extending the payment period, the ultimate cost to the employer is greater. Remember C+I=B+E. If current contributions are lowered in favor of a longer contribution stream, the investment income that will be earned is less. If I is smaller, C must be larger for a given level of B and E.

The current funding policy of the plans calls for amortizing the unfunded actuarial accrued liability (UAAL) as a level percent of payroll over a fixed period of years. As of December 31, 2010 that period was 13 years for pensions and 25 years for healthcare. While the period for healthcare is too long to allow for meaningful redistribution, the pension period is not.

The potential change in funding policy is to increase the UAAL amortization period to 16 years and set the employer contribution rate based on that period. The 16 years is suggested as it is approximately the longest period that can be utilized without generating negative amortization of the UAAL. In other words the contribution will generate an amount at least equal to the interest owed on the UAAL. Then, establish a maximum funding period of 25 years to provide a reserve for adverse experience. As long as the actuarially determined amortization period does not exceed 25 years, the contribution rate is kept at the level calculated under 16 year amortization. If the amortization period does exceed 25 years, the contribution rate would have to be increased. The 25 year threshold was selected to provide as large a margin for adverse experience as possible before the contribution rate would be forced to increase.

Any positive experience will serve to accelerate the amortization of the UAAL. Should changes be made in the benefit structure for new hires, the savings that develop over time should be used to further reduce the UAAL rather than lower the employer contribution rate. Finally an ultimate funding target of 110% of the accrued liability should be used so as to provide a long term reserve to help in maintaining stable contribution rates.

Using the December 31, 2010 valuation results, the following table illustrates the impact of this potential change in funding policy.

Impact on Employer Contribution Rate

	General Employees	Police Officers	Firefighters
(a) Current (13 years)	12.86%	20.72%	25.21%
(b) New (16 years)	12.24%	19.35%	23.43%
Reduction (a)-(b)	0.62%	1.37%	1.78%
Reserve (% of pay)	0.97%	2.17%	2.81%
Reserve ($ liability)	$6.0 million	$5.2 million	$5.3 million
Accrued Liability	$184.6 million	$105.0 million	$110.7 million

As shown, based on the December 31, 2010 valuation results the potential change in the funding policy would produce an immediate reduction in employer contribution rates (e.g., 0.62% of payroll for general employees). In addition there would exist a reserve (equivalent to 0.97% of payroll for general employees) to absorb future adverse experience until the calculated amortization period exceeded 25 years. The reserve, as a percent of pay, is the difference between the contribution rate using 16 year amortization and that using 25 year amortization. The reserve, in dollars, represents the increase in accrued liability that can be absorbed before the contribution rate would have to be raised. While the amount of the reserve is relatively small in comparison to the accrued liability, it would provide some stability to the employer rate.

While the December 30, 2011 results will produce different amounts than shown above, the basic concept would remain the same, and is one that we recommend to be considered by the Board.

Current Situation

The City of Sioux Falls Employees' Retirement System (covering general employees and police officers) and City of Sioux Falls Firefighters' Pension Fund provide retiree healthcare benefits to members. These benefits are well funded in comparison to other retiree healthcare benefit programs which are often financed on a pay-as-you-go basis. The annual required contribution (ARC) has always been paid by the employer since the pre-funding these benefits commenced. In determining the unfunded actuarial accrued liability (UAAL) contribution for each plan, closed period (currently 25 years) amortization is assumed. While, at a basic level, there have been no benefit improvements in many years, increases to the required retiree contributions have not always kept pace with healthcare inflation, resulting in retiree contribution amounts of less than one-half of the full cost of benefits.

Provided they have participated in the City's employee healthcare plan for at least five years immediately prior to separation from City employment, retirees and their dependents (e.g., spouses, dependent children) are eligible to continue to participate in the City's employee healthcare plan until age 65. The healthcare plan provides medical, prescription drug and dental coverage. The cost to the retiree and covered dependents, if any, is 50% of a stipulated premium developed by the City. As noted above, recent premium increases have been less than the actual claims cost increases, resulting in payments from retirees and dependents of less than half the cost of coverage.

The funding of retiree healthcare benefits is done in a similar manner to pensions as discussed in the previous section. In the table below, we present the contribution rates, the funded status and the amortization period of the unfunded actuarial accrued liability for the retiree healthcare benefits provided by the plans under the current assumptions and methods, based on the actuarial valuation conducted as of December 31, 2010.

Item	General Employees	Police Officers	Firefighters
Total Normal Rate	3.25%	4.81%	5.37%
Active Member Rate	0.00	0.00	0.00
Employer Normal Rate	3.25%	4.81%	5.37%
Unfunded Actuarial Accrued Liability Rate	2.28	4.14	4.28
Actuarially Determined Contributions	5.53%	8.95%	9.65%
Amortization Period (Years)	25	25	25
Funded Status	42.7%	37.2%	37.7%

From a historical perspective, the change to the valuation process brought about by the adoption and implementation of Governmental Accounting Standards Board Statements No. 43 and No. 45 (GASB 43/45) resulted in a significant increase to the City's healthcare contributions, beginning in 2007. With the adoption and implementation of GASB 43/45, valuations are required to recognize not only explicit OPEB subsidies, but also reflect implicit rate subsidies. Here, the costs specific to providing retiree coverage are used in determining liabilities, instead of a cost basis reflecting the aggregate claims experience of the entire plan. Based upon the assumption retirees utilize healthcare benefits at a higher rate than active employees, this practice creates a higher OPEB liability, as retiree costs are not pooled with and subsidized by lower cost active employees.

As with pensions, the recent market downturn has put pressure on employer contribution rates for retiree healthcare benefits. In addition to the pressures applicable to pension benefits, two additional factors impact the stability and sustainability of retiree healthcare benefits. First, the volatility and strain due to healthcare cost increases above price and wage inflation. Second, the current use of a 401(h) subaccount as a funding vehicle, linking the funding of retiree healthcare benefits to pension plan normal costs, and potentially limiting the City's ability to contribute the full ARC for retiree healthcare benefits. This has led to a re-examination of the retiree healthcare benefits being provided to ensure long-term sustainability.

Potential Benefit Changes for Retiree Healthcare Benefits

Retiree healthcare plan costs can be lowered in a similar manner to pensions by reducing the benefits paid (increased retiree cost-sharing through higher contributions, deductibles, co-pays, etc.), changing benefit eligibility requirements (increased age and service requirements), or a combination of the two.

One of the areas we specifically studied was the stability in the level of funding for retiree healthcare benefits. In order to better explain how the suggested plan changes were developed, we present a brief summary of the three major components of instability in the current plan.

The first element, healthcare cost inflation, or trend, is the assumption for how the cost of healthcare will change over time. It is a primary determinant in the final liability for any retiree healthcare plan. The inherent challenge with trend is two-fold. First, the near-term trends that are most accurate in predicting the future are significantly higher than the market forces of price and wage inflation. As a result, financial instruments, based on what they can earn in the market, will not be sufficient, in the long run, to effectively fund the healthcare benefits being provided. Second, there is a great deal of instability in how trend operates. With changes in technology, the advancement of medicine and pharmaceuticals, and the increasing options available for medical solutions, the landscape is constantly changing. The trend that is used at any point in time runs the risk of becoming obsolete in the future, which results in an unstable migration of liability from one year to the next.

The next element is the link between the retiree healthcare plan and the active employee health plan. Currently, the level of healthcare cost-sharing (e.g., co-pays, deductibles, and coinsurance) for active employees is the same for retirees. As any of these items are changed to manage the cost of healthcare for active employees, they impact the cost to retirees, and add an element of instability in how the liabilities will morph over time.

Additionally, the premiums paid by retirees towards their healthcare coverage do not cover the full cost the system incurs. As a result, part of the risk of offering a retiree healthcare benefit that is structurally evolving is borne by the system.

The final element is the current use of a 401(h) subaccount as a funding vehicle linking the funding of retiree healthcare benefits to pension plan normal costs. Here, under IRS rules, the permissible funding of the retiree healthcare plan is subordinate to the pension plan. This may have an impact on the City's ability to properly fund retiree healthcare benefits over time. Therefore it would be prudent to explore all the qualified funding options available to determine if there is an option that will provide the City more flexibility in how it finances retiree healthcare benefits.

The following changes being proposed to the retiree healthcare plan reflect an attempt to address the three major causes for instability mentioned above. It is important to note that some of the proposals suggested modify benefits for current and future active employees. The system's ability to modify benefits for current active employees is contingent upon a change to ordinance, an affirmative vote by both the council and the membership of the system, and/or other constraints.

As with pensions, it must be kept in mind that the cost savings from reducing benefits for new hires takes many years to manifest themselves. The full impact is only felt after the current active membership leaves City employment and is replaced by employees covered under the new benefit structure. This usually takes 15 to 30 years depending on the active member demographics.

The potential changes to retiree healthcare benefits include the following scenarios:

1. Increase the normal retirement age for new hires to age 65 with 5 years of service for general employees and to age 55 with 25 years of service or age 60 with 15 years of service for police officers and firefighters, or

2. Make the following structural changes to current benefits:

a. Retain the current benefit structure for those already retired. This eliminates benefit disruption for those currently receiving a benefit and permits continued access to the active employee health plan for those retirees.

b. For future retirees, specifically, those active participants that were hired prior to January 1, 2014 and will retire after December 31, 2013 – provide a fixed dollar subsidy to retirees and their dependents that is tiered according to the participant's years of service at retirement. Three specific variations are considered:

   - $10 per month, per year of service
   - $20 per month, per year of service
   - $30 per month, per year of service

   For each of these variations, a further enhancement is considered by indexing the flat dollar subsidy:

   - 1% Cost of Living Adjustment
   - 2% Cost of Living Adjustment
   - 3% Cost of Living Adjustment

   For example, a potential structure for handling this group of future retirees would be to offer a $20 per month for each year the retiree worked, with a 2% annual Cost of Living Adjustment. Cost of Living Adjustments are assumed to begin in 2015 and are assumed to apply to all retirees eligible for benefits after the date of increase.

   Additionally, beneficiaries under the proposed structure would no longer be permitted to access the City's employee healthcare plan for coverage. Instead, employees would have the opportunity to seek coverage through alternative sources such as an employer plan available through a spouse or individual coverage (e.g., coverage through health insurance exchanges to be made available under the Patient Protection and Affordable Care Act beginning in 2014). To maintain the tax-free status of distributions, beneficiaries and the plan would be required to link benefit payments to qualified medical expenses.

   With access to the City's employee healthcare plan being discontinued, some consideration to continued access for duty-related disability retirees may need to be considered. Currently, it is assumed the plan has no liability for duty-related disability retirees, as Workers' Compensation is assumed to cover the cost of benefits. Non-duty-related disability retirees are assumed to be eligible for the proposed structure.

As a benefit enhancement, it is assumed the proposed healthcare benefit structure would be provided to participants that are vested terminated. While providing this enhancement would increase cost, the incidence of a vested terminated participant seeking the benefit is low enough that any cost addition would be minor. Moreover, providing this enhancement may translate well to employee groups from a political perspective.

The purpose of presenting a fixed dollar benefit is to stabilize the cost structure of the plan. Doing so would eliminate the instability caused by the fluctuation of medical trend and transfer a majority of the risk items mentioned in the previous section away from the employer.

c. Discontinue the retiree healthcare benefit for those active participants hired after 12/31/2013. Elimination of retiree healthcare benefits may be the result of the modification of plan benefits or the provision of pension benefits for new hires through the South Dakota Retirement System or participation in a DC plan.

Financial Impact of Potential Changes

The long term savings for scenario #1 are again measurable by comparing employer normal cost rates as was done for the potential pension changes. The fixed dollar subsidy in scenario #2 could vary by employee group and could provide for varying levels of indexing. If a specific target for costs of benefits is determined, the dollar and/or indexing amount could be adjusted to reach the desired level. Additionally, the exclusion of dependents and/or vested terminated participants could be considered. Since scenario #2 impacts current employees, the savings impact can be measured immediately. The following table provides the savings including several different levels of fixed dollar subsidy and indexing. To maintain the comparability of scenarios, all results have been prepared using total payroll (including new hire pay) and level percent of payroll amortization where the period declines annually to an ultimate level of 5 years. As Scenario #2 closes the plan to new entrants, the impact to savings may be altered by any changes to asset allocation or amortization methodology.

Retiree Healthcare Plan Changes

	12/31/10 Valuation		Scenario #1	Scenario #2: $10 Initial Monthly Subsidy per Year of Service				Scenario #2: $20 Initial Monthly Subsidy per Year of Service				Scenario #2: $30 Initial Monthly Subsidy per Year of Service			
	GRS	CMC		0% COLA	1% COLA	2% COLA	3% COLA	0% COLA	1% COLA	2% COLA	3% COLA	0% COLA	1% COLA	2% COLA	3% COLA
General Employees															
Normal Cost	3.25%	3.18%	1.51%	1.03%	1.07%	1.13%	1.19%	1.33%	1.42%	1.53%	1.66%	1.63%	1.77%	1.93%	2.12%
UAAL	2.28%	2.21%	n/a	0.04%	0.09%	0.13%	0.19%	0.51%	0.59%	0.69%	0.80%	0.97%	1.10%	1.25%	1.41%
Total	5.53%	5.39%	n/a	1.07%	1.16%	1.26%	1.38%	1.84%	2.01%	2.22%	2.46%	2.60%	2.87%	3.18%	3.53%
Savings			*-1.67%*	*-4.32%*	*-4.23%*	*-4.13%*	*-4.01%*	*-3.55%*	*-3.38%*	*-3.17%*	*-2.93%*	*-2.79%*	*-2.52%*	*-2.21%*	*-1.86%*
Police															
Normal Cost	4.81%	5.07%	4.59%	1.06%	1.17%	1.29%	1.44%	1.70%	1.90%	2.15%	2.45%	2.33%	2.64%	3.01%	3.46%
UAAL	4.14%	4.10%	n/a	0.41%	0.50%	0.60%	0.71%	1.16%	1.33%	1.53%	1.76%	1.91%	2.17%	2.46%	2.81%
Total	8.95%	9.17%	n/a	1.47%	1.67%	1.89%	2.15%	2.86%	3.23%	3.68%	4.21%	4.24%	4.81%	5.47%	6.27%
Savings			*-0.48%*	*-7.70%*	*-7.50%*	*-7.28%*	*-7.02%*	*-6.31%*	*-5.94%*	*-5.49%*	*-4.96%*	*-4.93%*	*-4.36%*	*-3.70%*	*-2.90%*
Fire															
Normal Cost	5.37%	5.65%	5.39%	1.11%	1.22%	1.35%	1.50%	1.76%	1.98%	2.23%	2.55%	2.41%	2.73%	3.12%	3.59%
UAAL	4.28%	4.10%	n/a	0.87%	0.94%	1.02%	1.12%	1.49%	1.63%	1.79%	1.98%	2.10%	2.32%	2.56%	2.84%
Total	9.65%	9.75%	n/a	1.98%	2.16%	2.37%	2.62%	3.25%	3.61%	4.02%	4.53%	4.51%	5.05%	5.68%	6.43%
Savings			*-0.26%*	*-7.77%*	*-7.59%*	*-7.38%*	*-7.13%*	*-6.50%*	*-6.14%*	*-5.73%*	*-5.22%*	*-5.24%*	*-4.70%*	*-4.07%*	*-3.32%*

Again we provide below further detail on the impact of each scenario by projecting the contribution pattern expected over time. The projection results show how the long term savings are expected to emerge over time.

Long Term Reduction in Employer Healthcare Contribution Rate

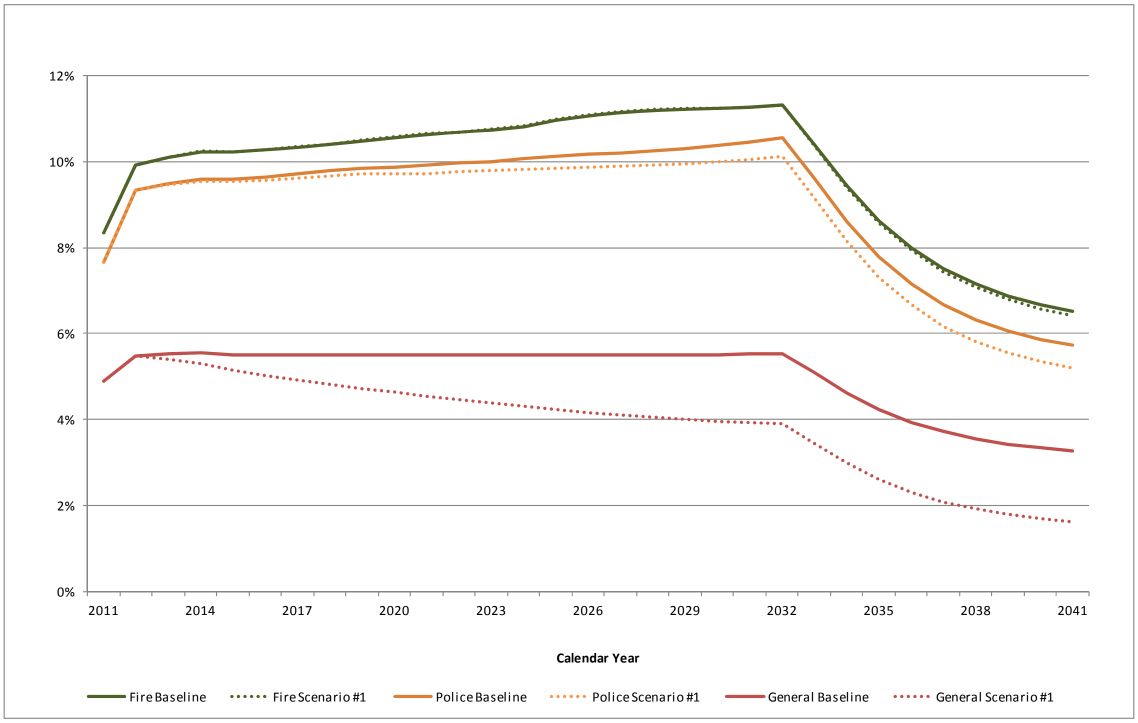
	General Employees	Fire	Police
Scenario #1	1.57%	0.10%	0.50%
Scenario #2	2.97%	5.94%	5.00%

Estimated Dollar Amount of Healthcare Savings over 30 Year Projection Period ($Millions)

	General Employees	Fire	Police	Total*
	Healthcare Scenario #1			
	$30	$0	$3	$33
	Healthcare Scenario #2			
Healthcare Alternative 1	$100	$52	$62	$214
Healthcare Alternative 2	99	51	61	211
Healthcare Alternative 3	98	50	60	208
Healthcare Alternative 4	96	49	59	204
Healthcare Alternative 5	91	47	56	194
Healthcare Alternative 6	89	46	54	189
Healthcare Alternative 7	86	44	52	182
Healthcare Alternative 8	83	42	49	174
Healthcare Alternative 9	81	42	49	172
Healthcare Alternative 10	78	40	47	165
Healthcare Alternative 11	74	38	44	156
Healthcare Alternative 12	70	35	40	145

*While a total for each alternative of scenario #2 is provided, the fixed dollar subsidy could vary by employee group and could provide for varying levels of indexing.

Scenario #1
City Contribution Rate



Changes for Current Retirees:

- None

Changes for Future Retirees:

- None

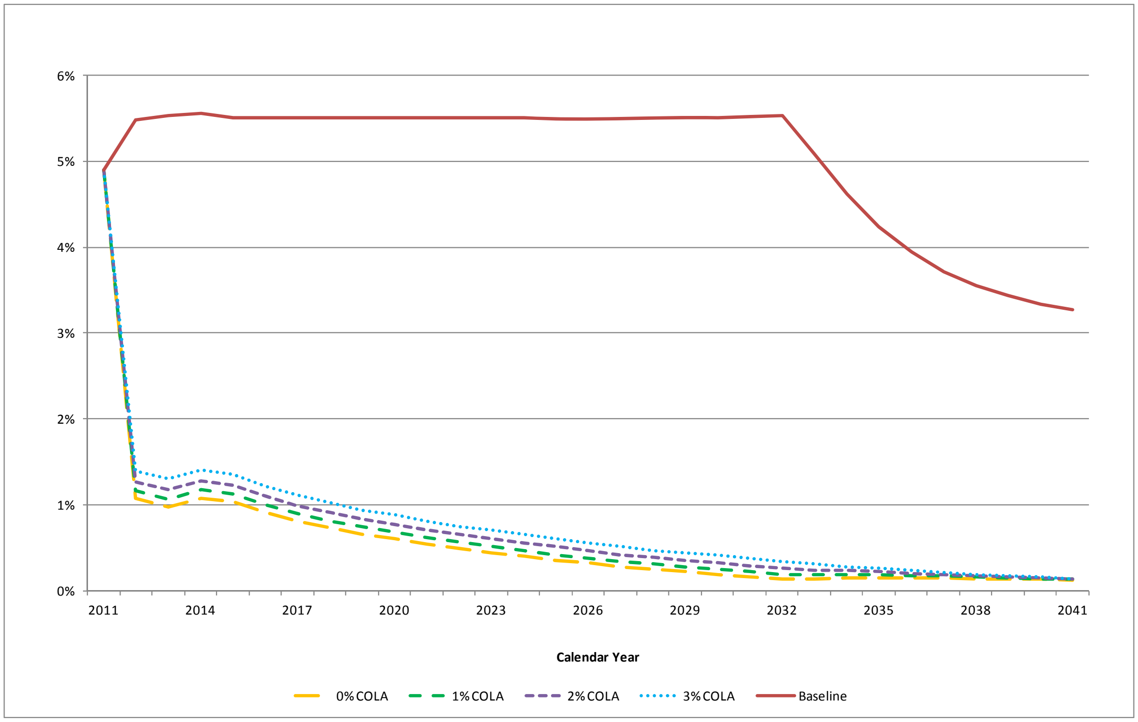
Changes for New Entrants:

- Increase the normal retirement age:
  - General: Age 65 with 5 years of service
  - Police and Fire: Age 55 with 25 years of service or age 60 with 15 years of service

Cost Savings to Plan:

Savings	General	Police	Fire
Contribution Rate	1.57%	0.50%	0.10%
Dollar Amount	$30mil	$3mil	$0mil

General Employees – Scenario #2: Alternatives 1, 2, 3, and 4
City Contribution Rate



Changes for Current Retirees:

- None

Changes for Future Retirees:

- $10 monthly subsidy per year of service at retirement
- Alternative 1: 0% COLA Adjustment
- Alternative 2: 1% COLA Adjustment
- Alternative 3: 2% COLA Adjustment
- Alternative 4: 3% COLA Adjustment

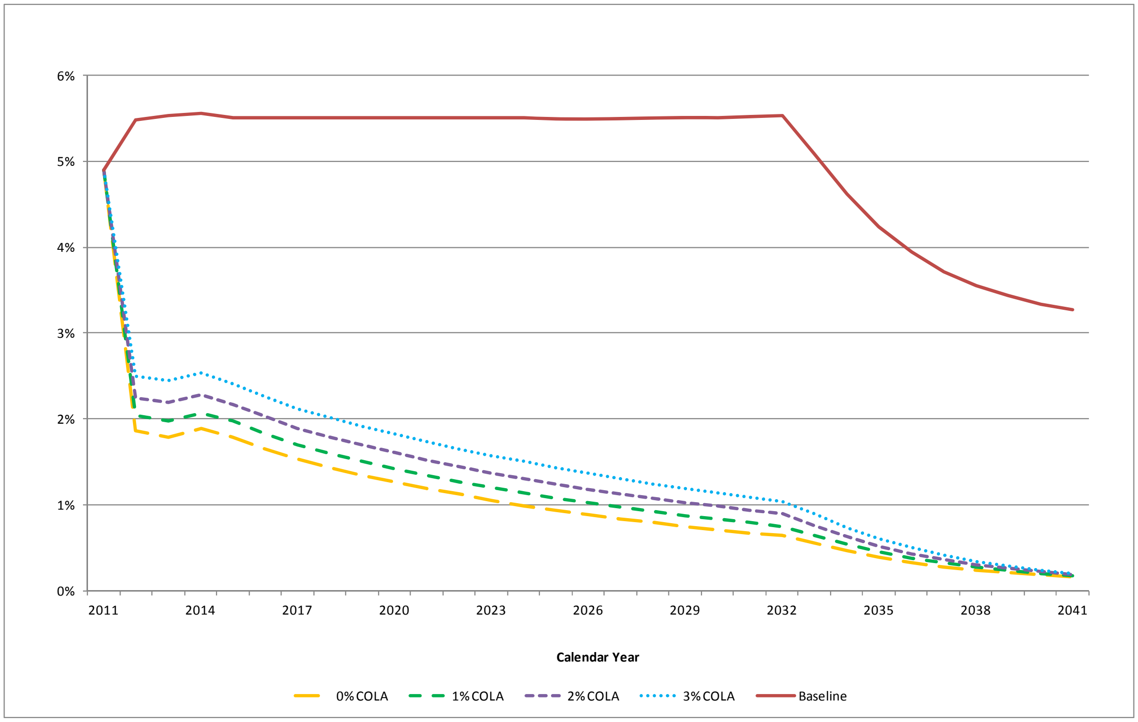
Changes for New Entrants:

- Excluded from the retiree healthcare plan

Cost Savings to Plan:

Savings	Alternative 1	Alternative 2	Alternative 3	Alternative 4
Contribution Rate	2.97%			
Dollar Amount	$100mil	$99mil	$98mil	$96mil

General Employees - Scenario #2: Alternatives 5, 6, 7, and 8
City Contribution Rate



<u>Changes for Current Retirees</u>:

- None

<u>Changes for Future Retirees</u>:

- $20 monthly subsidy per year of service at retirement
- Alternative 5: 0% COLA Adjustment
- Alternative 6: 1% COLA Adjustment
- Alternative 7: 2% COLA Adjustment
- Alternative 8: 3% COLA Adjustment

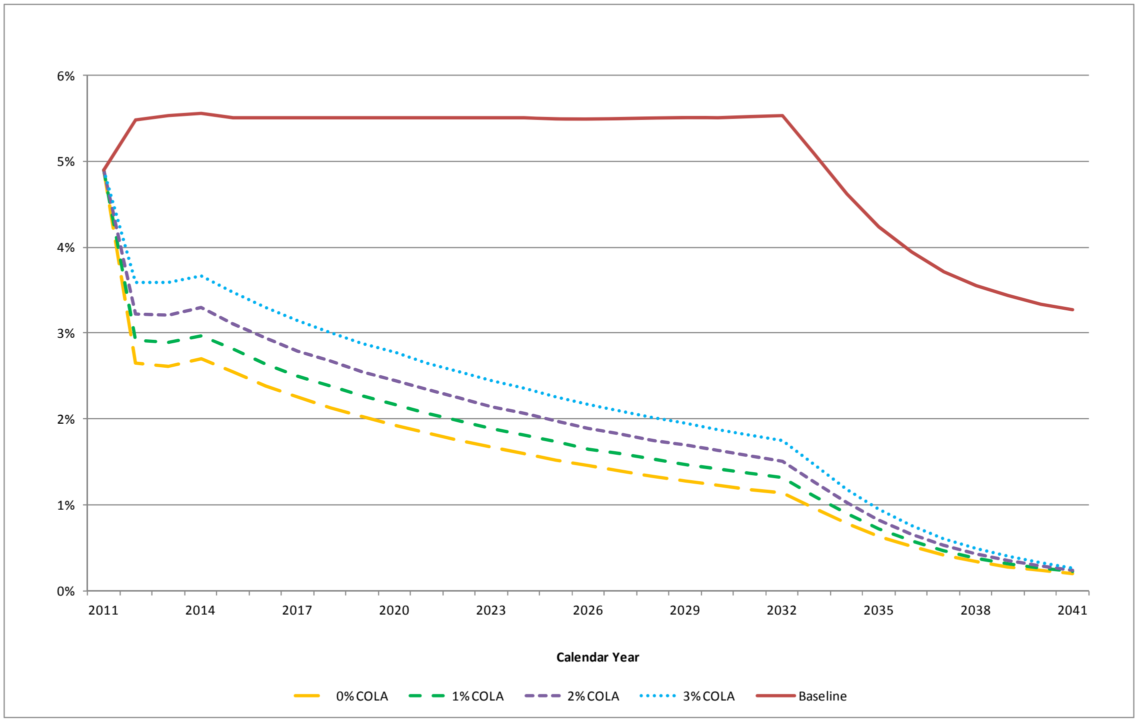
<u>Changes for New Entrants</u>:

- Excluded from the retiree healthcare plan

<u>Cost Savings to Plan:</u>

Savings	Alternative 5	Alternative 6	Alternative 7	Alternative 8
Contribution Rate	2.97%			
Dollar Amount	$91mil	$89mil	$86mil	$83mil

General Employees - Scenario #2: Alternatives 9, 10, 11, and 12
City Contribution Rate



<u>Changes for Current Retirees</u>:

- None

<u>Changes for Future Retirees</u>:

- $30 monthly subsidy per year of service at retirement
- Alternative 9: 0% COLA Adjustment
- Alternative 10: 1% COLA Adjustment
- Alternative 11: 2% COLA Adjustment
- Alternative 12: 3% COLA Adjustment

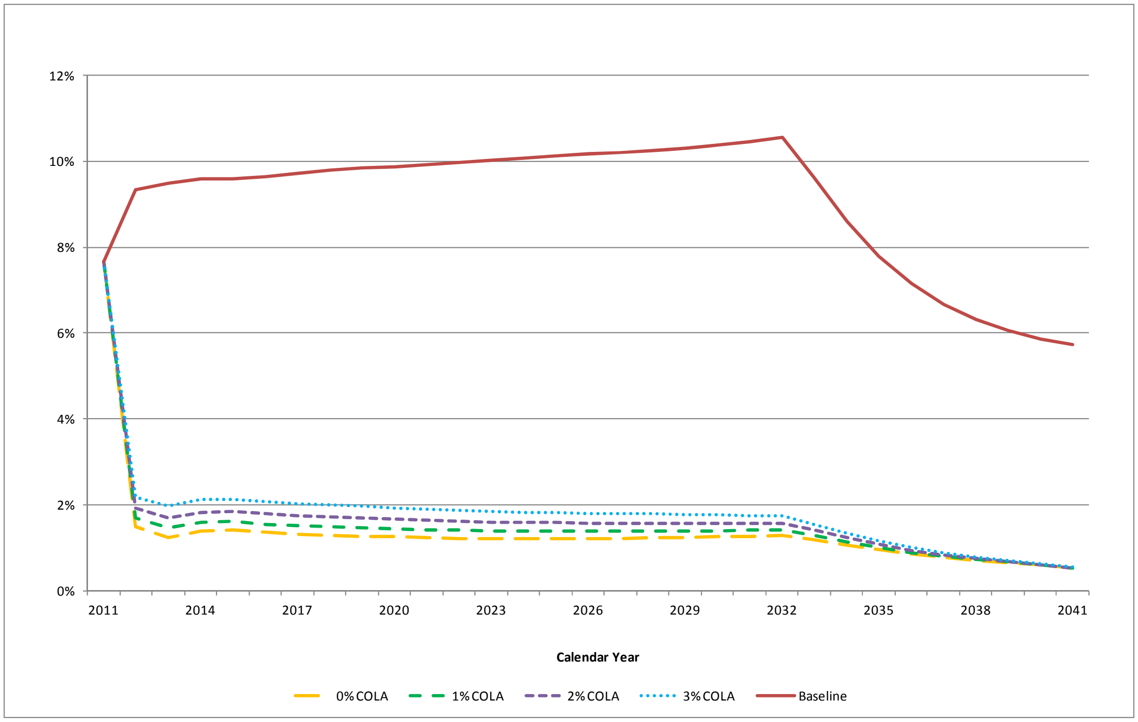
<u>Changes for New Entrants</u>:

- Excluded from the retiree healthcare plan

<u>Cost Savings to Plan:</u>

Savings	Alternative 9	Alternative 10	Alternative 11	Alternative 12
Contribution Rate	2.97%			
Dollar Amount	$81mil	$78mil	$74mil	$70mil

Police Employees - Scenario #2: Alternatives 1, 2, 3, and 4
City Contribution Rate



<u>Changes for Current Retirees</u>:
- None

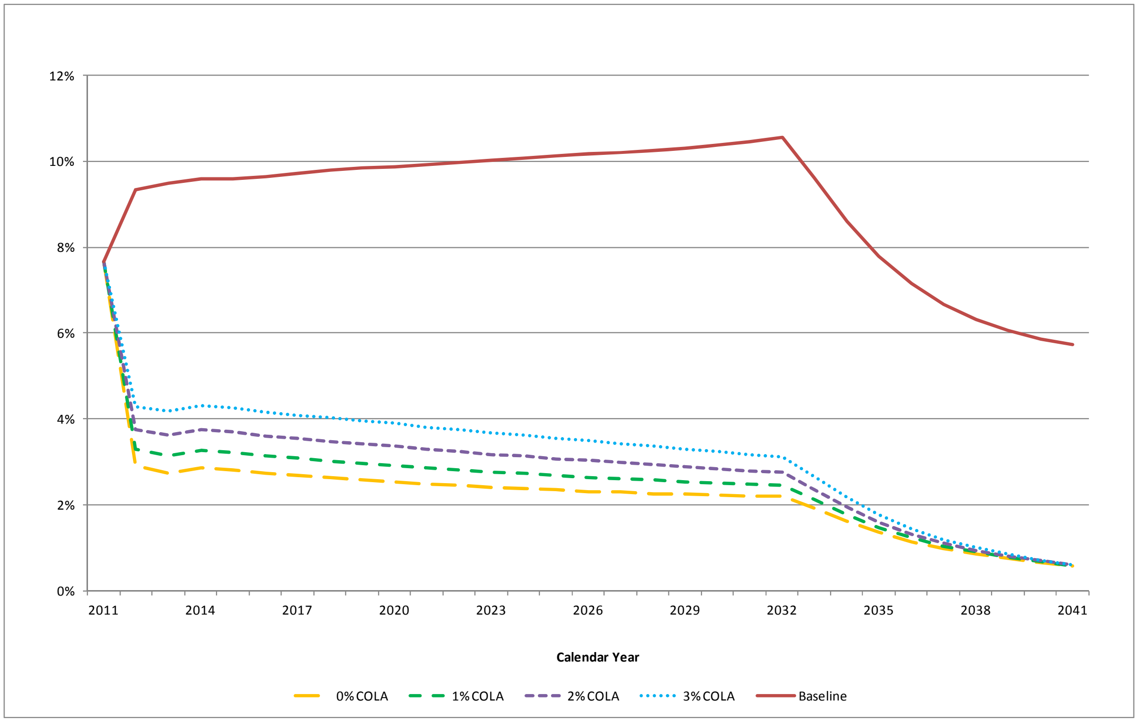
<u>Changes for Future Retirees</u>:
- $10 monthly subsidy per year of service at retirement
- Alternative 1: 0% COLA Adjustment
- Alternative 2: 1% COLA Adjustment
- Alternative 3: 2% COLA Adjustment
- Alternative 4: 3% COLA Adjustment

<u>Changes for New Entrants</u>:
- Excluded from the retiree healthcare plan

<u>Cost Savings to Plan:</u>

Savings	Alternative 1	Alternative 2	Alternative 3	Alternative 4
Contribution Rate	5.00%			
Dollar Amount	$62mil	$61mil	$60mil	$59mil

Police Employees - Scenario #2: Alternatives 5, 6, 7, and 8
City Contribution Rate



<u>Changes for Current Retirees</u>:
- None

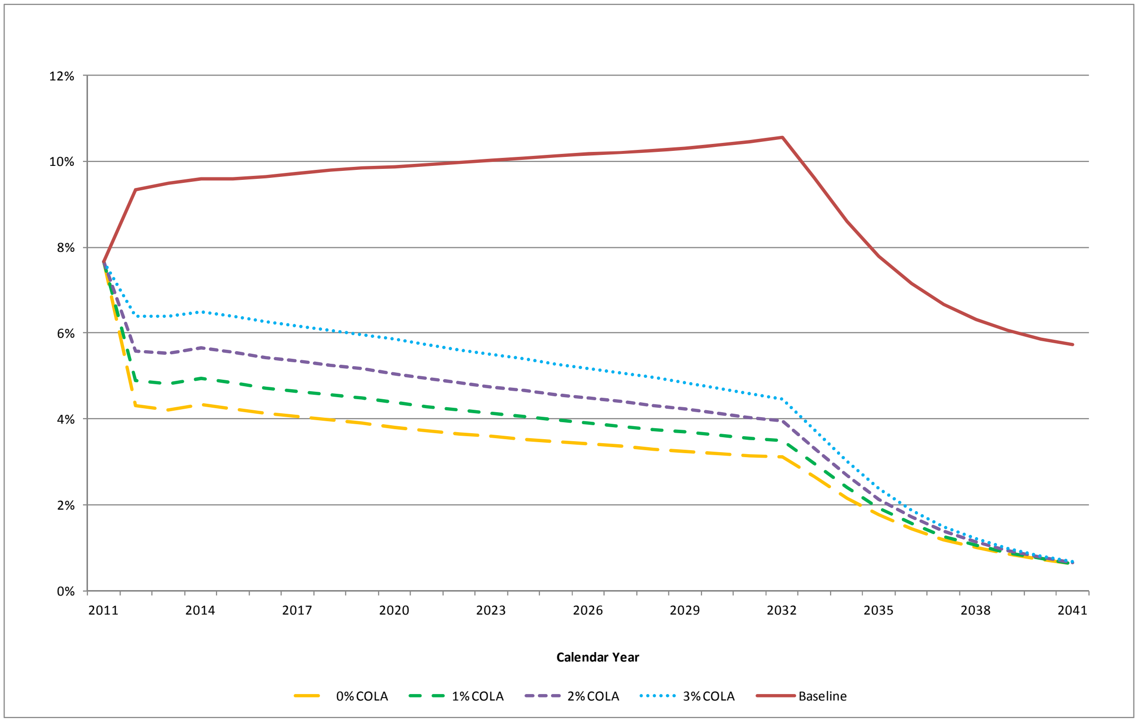
<u>Changes for Future Retirees</u>:
- $20 monthly subsidy per year of service at retirement
- Alternative 5: 0% COLA Adjustment
- Alternative 6: 1% COLA Adjustment
- Alternative 7: 2% COLA Adjustment
- Alternative 8: 3% COLA Adjustment

<u>Changes for New Entrants</u>:
- Excluded from the retiree healthcare plan

<u>Cost Savings to Plan:</u>

Savings	Alternative 5	Alternative 6	Alternative 7	Alternative 8
Contribution Rate	5.00%			
Dollar Amount	$56mil	$54mil	$52mil	$49mil

Police Employees - Scenario #2: Alternatives 9, 10, 11, and 12
City Contribution Rate



<u>Changes for Current Retirees</u>:

- None

<u>Changes for Future Retirees</u>:

- $30 monthly subsidy per year of service at retirement
- Alternative 9: 0% COLA Adjustment
- Alternative 10: 1% COLA Adjustment
- Alternative 11: 2% COLA Adjustment
- Alternative 12: 3% COLA Adjustment

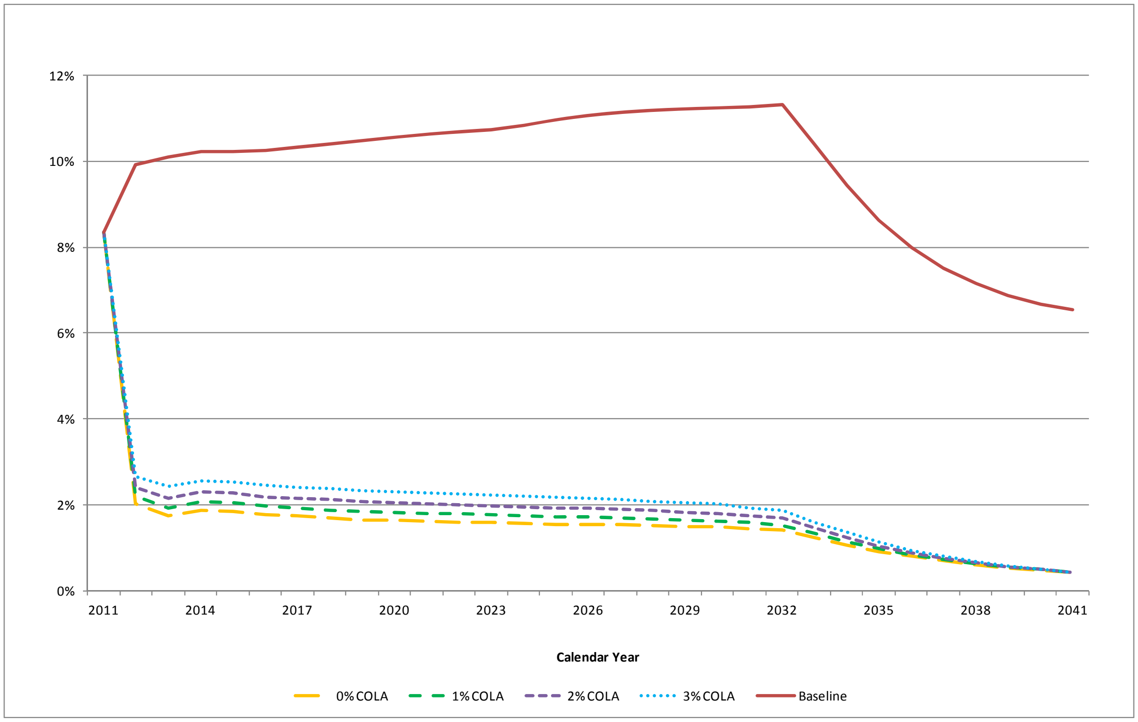
<u>Changes for New Entrants</u>:

- Excluded from the retiree healthcare plan

<u>Cost Savings to Plan:</u>

Savings	Alternative 9	Alternative 10	Alternative 11	Alternative 12
Contribution Rate	5.00%			
Dollar Amount	$49mil	$47mil	$44mil	$40mil

Fire Employees - Scenario #2: Alternatives 1, 2, 3, and 4
City Contribution Rate



Changes for Current Retirees:

- None

Changes for Future Retirees:

- $10 monthly subsidy per year of service at retirement
- Alternative 1: 0% COLA Adjustment
- Alternative 2: 1% COLA Adjustment
- Alternative 3: 2% COLA Adjustment
- Alternative 4: 3% COLA Adjustment

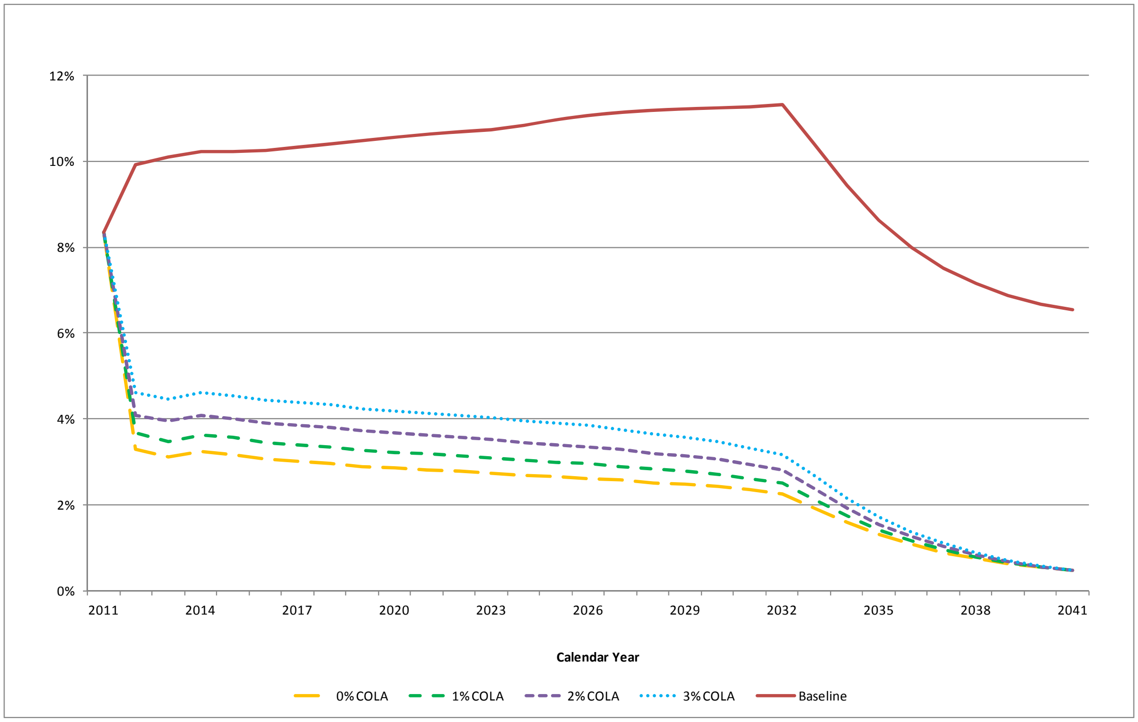
Changes for New Entrants:

- Excluded from the retiree healthcare plan

Cost Savings to Plan:

Savings	Alternative 1	Alternative 2	Alternative 3	Alternative 4
Contribution Rate	5.94%			
Dollar Amount	$52mil	$51mil	$50mil	$49mil

Fire Employees - Scenario #2: Alternatives 5, 6, 7, and 8
City Contribution Rate



<u>Changes for Current Retirees</u>:

- None

<u>Changes for Future Retirees</u>:

- $20 monthly subsidy per year of service at retirement
- Alternative 5: 0% COLA Adjustment
- Alternative 6: 1% COLA Adjustment
- Alternative 7: 2% COLA Adjustment
- Alternative 8: 3% COLA Adjustment

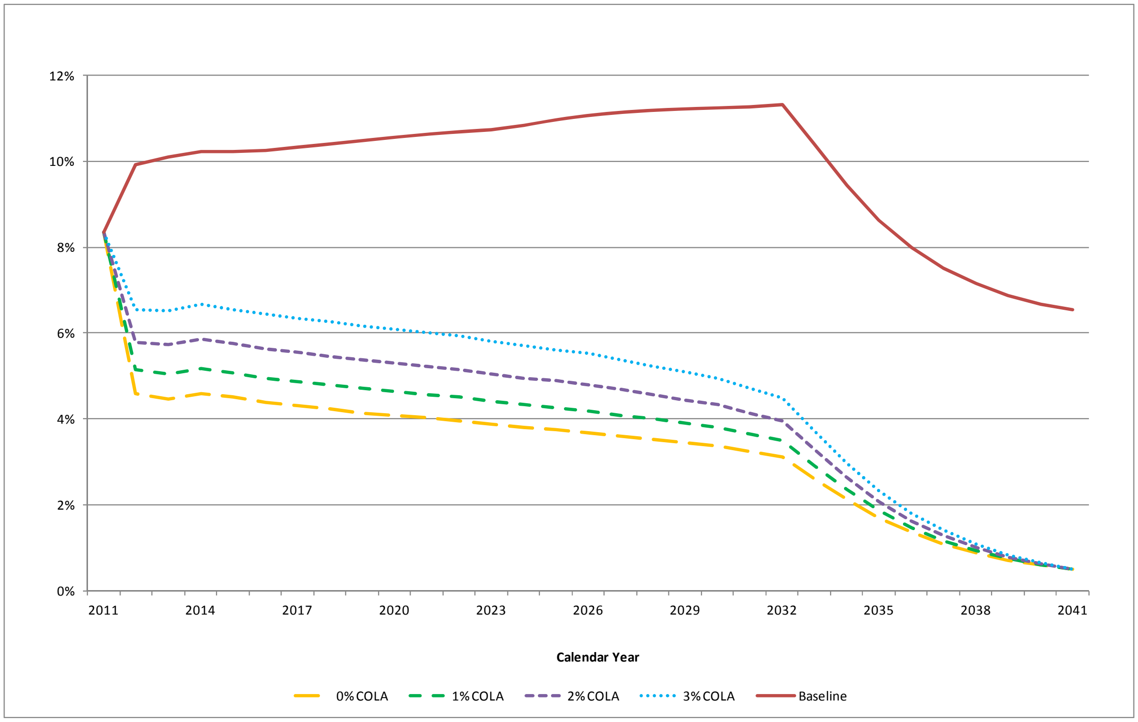
<u>Changes for New Entrants</u>:

- Excluded from the retiree healthcare plan

<u>Cost Savings to Plan:</u>

Savings	Alternative 5	Alternative 6	Alternative 7	Alternative 8
Contribution Rate	5.94%			
Dollar Amount	$47mil	$46mil	$44mil	$42mil

Fire Employees - Scenario #2: Alternatives 9, 10, 11, and 12
City Contribution Rate



<u>Changes for Current Retirees</u>:

- None

<u>Changes for Future Retirees</u>:

- $30 monthly subsidy per year of service at retirement
- Alternative 9: 0% COLA Adjustment
- Alternative 10: 1% COLA Adjustment
- Alternative 11: 2% COLA Adjustment
- Alternative 12: 3% COLA Adjustment

<u>Changes for New Entrants</u>:

- Excluded from the retiree healthcare plan

<u>Cost Savings to Plan:</u>

Savings	Alternative 9	Alternative 10	Alternative 11	Alternative 12
Contribution Rate	5.94%			
Dollar Amount	$42mil	$40mil	$38mil	$35mil

General Employees
Alternative 1
Current members unchanged
New members: Eliminate lump sum pay, members contribute 5%, Normal Retirement = 65/5, High 5 Final Average Pay, 2% COLA

	Total	Employer Contribution Rate		Employer Contribution Amount		
Year	Payroll	Baseline	Alternative	Baseline	Alternative	Difference
2011	36,097,881	13.17%	13.17%	4,754,091	4,754,091	0
2012	37,746,650	12.37%	12.37%	4,667,656	4,667,656	0
2013	39,433,753	14.19%	13.79%	5,594,782	5,436,747	(158,035)
2014	41,186,164	16.44%	15.64%	6,769,692	6,440,873	(328,819)
2015	42,964,448	15.63%	14.44%	6,714,725	6,205,867	(508,858)
2016	44,846,858	15.42%	13.86%	6,913,177	6,216,131	(697,046)
2017	46,786,432	15.79%	13.88%	7,386,764	6,491,757	(895,007)
2018	48,804,802	16.26%	14.00%	7,936,205	6,832,521	(1,103,685)
2019	50,950,523	16.82%	14.19%	8,568,852	7,231,621	(1,337,231)
2020	53,224,243	17.51%	14.50%	9,319,676	7,718,989	(1,600,687)
2021	55,593,018	16.53%	13.27%	9,191,723	7,377,193	(1,814,531)
2022	58,045,550	15.37%	11.89%	8,919,063	6,903,306	(2,015,758)
2023	60,604,067	14.37%	10.69%	8,709,776	6,480,082	(2,229,694)
2024	63,291,428	13.58%	9.72%	8,597,393	6,150,228	(2,447,166)
2025	66,074,873	12.97%	8.93%	8,571,285	5,902,825	(2,668,459)
2026	68,978,721	12.50%	8.31%	8,621,999	5,730,713	(2,891,286)
2027	71,926,022	12.13%	7.80%	8,726,595	5,609,354	(3,117,241)
2028	75,077,074	11.84%	7.38%	8,891,716	5,540,050	(3,351,666)
2029	78,376,136	11.60%	7.03%	9,094,763	5,507,479	(3,587,284)
2030	81,810,706	11.41%	6.73%	9,333,981	5,508,152	(3,825,829)
2031	85,329,891	11.26%	6.49%	9,608,209	5,533,939	(4,074,271)
2032	88,995,667	11.14%	6.27%	9,914,656	5,579,212	(4,335,445)
2033	92,791,307	11.04%	6.08%	10,245,771	5,639,105	(4,606,666)
2034	96,736,966	10.96%	5.91%	10,601,966	5,714,540	(4,887,425)
2035	100,856,958	10.89%	5.75%	10,983,409	5,804,251	(5,179,157)
2036	105,159,729	10.83%	5.61%	11,390,172	5,904,422	(5,485,749)
2037	109,628,908	10.78%	5.49%	11,822,798	6,015,751	(5,807,047)
2038	114,324,826	10.75%	5.37%	12,289,231	6,141,168	(6,148,063)
2039	119,223,689	10.72%	5.27%	12,782,202	6,277,524	(6,504,679)
2040	124,308,084	10.69%	5.17%	13,293,237	6,424,261	(6,868,977)
2041	129,611,004	10.67%	5.08%	13,826,522	6,583,782	(7,242,740)
Total				284,042,088	188,323,588	(95,718,500)

To provide stability in the contribution rate, re-amortization is set to an open 5 year period in 2019 for both the baseline and alternative scenarios. All assumptions, including the 7.75% rate of return, are assumed to be met.

General Employees
Alternative 2
Current members unchanged
New members: Eliminate lump sum pay, members contribute 5%, Normal Retirement = 65/5

Year	Total Payroll	Employer Contribution Rate Baseline	Employer Contribution Rate Alternative	Employer Contribution Amount Baseline	Employer Contribution Amount Alternative	Difference
2011	36,097,881	13.17%	13.17%	4,754,091	4,754,091	0
2012	37,746,650	12.37%	12.37%	4,667,656	4,667,656	0
2013	39,433,753	14.19%	13.85%	5,594,782	5,462,722	(132,061)
2014	41,186,164	16.44%	15.77%	6,769,692	6,494,956	(274,736)
2015	42,964,448	15.63%	14.64%	6,714,725	6,289,943	(424,782)
2016	44,846,858	15.42%	14.12%	6,913,177	6,331,668	(581,509)
2017	46,786,432	15.79%	14.19%	7,386,764	6,640,521	(746,243)
2018	48,804,802	16.26%	14.38%	7,936,205	7,016,572	(919,634)
2019	50,950,523	16.82%	14.63%	8,568,852	7,455,558	(1,113,294)
2020	53,224,243	17.51%	15.01%	9,319,676	7,988,195	(1,331,481)
2021	55,593,018	16.53%	13.82%	9,191,723	7,682,111	(1,509,612)
2022	58,045,550	15.37%	12.48%	8,919,063	7,241,583	(1,677,481)
2023	60,604,067	14.37%	11.31%	8,709,776	6,853,809	(1,855,966)
2024	63,291,428	13.58%	10.36%	8,597,393	6,560,098	(2,037,295)
2025	66,074,873	12.97%	9.61%	8,571,285	6,349,387	(2,221,898)
2026	68,978,721	12.50%	9.01%	8,621,999	6,214,264	(2,407,735)
2027	71,926,022	12.13%	8.52%	8,726,595	6,130,523	(2,596,072)
2028	75,077,074	11.84%	8.13%	8,891,716	6,100,494	(2,791,222)
2029	78,376,136	11.60%	7.79%	9,094,763	6,107,515	(2,987,248)
2030	81,810,706	11.41%	7.52%	9,333,981	6,148,804	(3,185,177)
2031	85,329,891	11.26%	7.29%	9,608,209	6,216,795	(3,391,414)
2032	88,995,667	11.14%	7.09%	9,914,656	6,306,341	(3,608,315)
2033	92,791,307	11.04%	6.91%	10,245,771	6,411,842	(3,833,929)
2034	96,736,966	10.96%	6.75%	10,601,966	6,533,906	(4,068,060)
2035	100,856,958	10.89%	6.62%	10,983,409	6,671,842	(4,311,567)
2036	105,159,729	10.83%	6.49%	11,390,172	6,821,766	(4,568,406)
2037	109,628,908	10.78%	6.37%	11,822,798	6,985,313	(4,837,485)
2038	114,324,826	10.75%	6.27%	12,289,231	7,165,273	(5,123,958)
2039	119,223,689	10.72%	6.17%	12,782,202	7,358,474	(5,423,728)
2040	124,308,084	10.69%	6.09%	13,293,237	7,564,559	(5,728,678)
2041	129,611,004	10.67%	6.01%	13,826,522	7,787,039	(6,039,482)
Total				284,042,088	204,313,620	(79,728,468)

To provide stability in the contribution rate, re-amortization is set to an open 5 year period in 2019 for both the baseline and alternative scenarios. All assumptions, including the 7.75% rate of return, are assumed to be met.

General Employees
Alternative 3
Current members unchanged
New members: Eliminate lump sum pay, members contribute 5%, Normal Retirement = 65/5 or 60/30, 2% COLA

	Total	Employer Contribution Rate		Employer Contribution Amount		
Year	Payroll	Baseline	Alternative	Baseline	Alternative	Difference
2011	36,097,881	13.17%	13.17%	4,754,091	4,754,091	0
2012	37,746,650	12.37%	12.37%	4,667,656	4,667,656	0
2013	39,433,753	14.19%	13.80%	5,594,782	5,440,666	(154,116)
2014	41,186,164	16.44%	15.66%	6,769,692	6,449,144	(320,548)
2015	42,964,448	15.63%	14.47%	6,714,725	6,218,906	(495,819)
2016	44,846,858	15.42%	13.90%	6,913,177	6,234,308	(678,869)
2017	46,786,432	15.79%	13.93%	7,386,764	6,515,503	(871,261)
2018	48,804,802	16.26%	14.06%	7,936,205	6,862,271	(1,073,935)
2019	50,950,523	16.82%	14.27%	8,568,852	7,268,129	(1,300,723)
2020	53,224,243	17.51%	14.59%	9,319,676	7,763,263	(1,556,413)
2021	55,593,018	16.53%	13.36%	9,191,723	7,427,287	(1,764,437)
2022	58,045,550	15.37%	11.99%	8,919,063	6,958,672	(1,960,391)
2023	60,604,067	14.37%	10.79%	8,709,776	6,540,948	(2,168,828)
2024	63,291,428	13.58%	9.82%	8,597,393	6,216,630	(2,380,763)
2025	66,074,873	12.97%	9.04%	8,571,285	5,974,865	(2,596,420)
2026	68,978,721	12.50%	8.42%	8,621,999	5,808,493	(2,813,506)
2027	71,926,022	12.13%	7.92%	8,726,595	5,692,959	(3,033,636)
2028	75,077,074	11.84%	7.50%	8,891,716	5,629,714	(3,262,003)
2029	78,376,136	11.60%	7.15%	9,094,763	5,603,698	(3,491,065)
2030	81,810,706	11.41%	6.86%	9,333,981	5,611,680	(3,722,301)
2031	85,329,891	11.26%	6.62%	9,608,209	5,645,295	(3,962,914)
2032	88,995,667	11.14%	6.40%	9,914,656	5,699,140	(4,215,516)
2033	92,791,307	11.04%	6.22%	10,245,771	5,768,191	(4,477,580)
2034	96,736,966	10.96%	6.05%	10,601,966	5,853,235	(4,748,731)
2035	100,856,958	10.89%	5.90%	10,983,409	5,953,338	(5,030,070)
2036	105,159,729	10.83%	5.77%	11,390,172	6,064,514	(5,325,658)
2037	109,628,908	10.78%	5.64%	11,822,798	6,188,049	(5,634,749)
2038	114,324,826	10.75%	5.53%	12,289,231	6,326,497	(5,962,733)
2039	119,223,689	10.72%	5.43%	12,782,202	6,476,876	(6,305,327)
2040	124,308,084	10.69%	5.34%	13,293,237	6,638,912	(6,654,325)
2041	129,611,004	10.67%	5.26%	13,826,522	6,815,458	(7,011,063)
Total				284,042,088	191,068,390	(92,973,698)

To provide stability in the contribution rate, re-amortization is set to an open 5 year period in 2019 for both the baseline and alternative scenarios. All assumptions, including the 7.75% rate of return, are assumed to be met.

General Employees
Alternative 4
Current members: Members contribute 5%
New members: Eliminate lump sum pay, members contribute 5%, Normal Retirement = 65/5

	Total	Employer Contribution Rate		Employer Contribution Amount		
Year	Payroll	Baseline	Alternative	Baseline	Alternative	Difference
2011	36,097,881	13.17%	13.17%	4,754,091	4,754,091	0
2012	37,746,650	12.37%	12.37%	4,667,656	4,667,656	0
2013	39,433,753	14.19%	12.99%	5,594,782	5,124,075	(470,708)
2014	41,186,164	16.44%	13.94%	6,769,692	5,741,105	(1,028,587)
2015	42,964,448	15.63%	12.81%	6,714,725	5,504,383	(1,210,342)
2016	44,846,858	15.42%	12.40%	6,913,177	5,560,757	(1,352,420)
2017	46,786,432	15.79%	12.59%	7,386,764	5,891,640	(1,495,124)
2018	48,804,802	16.26%	12.89%	7,936,205	6,291,330	(1,644,876)
2019	50,950,523	16.82%	13.26%	8,568,852	6,758,226	(1,810,626)
2020	53,224,243	17.51%	13.76%	9,319,676	7,323,511	(1,996,165)
2021	55,593,018	16.53%	12.71%	9,191,723	7,065,704	(2,126,020)
2022	58,045,550	15.37%	11.50%	8,919,063	6,672,766	(2,246,297)
2023	60,604,067	14.37%	10.45%	8,709,776	6,331,959	(2,377,817)
2024	63,291,428	13.58%	9.61%	8,597,393	6,079,792	(2,517,602)
2025	66,074,873	12.97%	8.94%	8,571,285	5,905,937	(2,665,347)
2026	68,978,721	12.50%	8.41%	8,621,999	5,802,564	(2,819,435)
2027	71,926,022	12.13%	7.99%	8,726,595	5,748,464	(2,978,131)
2028	75,077,074	11.84%	7.65%	8,891,716	5,745,461	(3,146,255)
2029	78,376,136	11.60%	7.37%	9,094,763	5,775,474	(3,319,289)
2030	81,810,706	11.41%	7.13%	9,333,981	5,837,139	(3,496,842)
2031	85,329,891	11.26%	6.95%	9,608,209	5,926,343	(3,681,866)
2032	88,995,667	11.14%	6.78%	9,914,656	6,037,627	(3,877,030)
2033	92,791,307	11.04%	6.64%	10,245,771	6,164,931	(4,080,840)
2034	96,736,966	10.96%	6.52%	10,601,966	6,308,406	(4,293,560)
2035	100,856,958	10.89%	6.41%	10,983,409	6,467,300	(4,516,108)
2036	105,159,729	10.83%	6.31%	11,390,172	6,638,126	(4,752,045)
2037	109,628,908	10.78%	6.22%	11,822,798	6,823,287	(4,999,511)
2038	114,324,826	10.75%	6.15%	12,289,231	7,025,581	(5,263,650)
2039	119,223,689	10.72%	6.07%	12,782,202	7,241,688	(5,540,514)
2040	124,308,084	10.69%	6.01%	13,293,237	7,470,446	(5,822,791)
2041	129,611,004	10.67%	5.95%	13,826,522	7,715,841	(6,110,681)
Total				284,042,088	192,401,607	(91,640,480)

To provide stability in the contribution rate, re-amortization is set to an open 5 year period in 2019 for both the baseline and alternative scenarios. All assumptions, including the 7.75% rate of return, are assumed to be met.

General Employees
Alternative 5
Current members: Eliminate lump sum pay
New members: Eliminate lump sum pay, members contribute 5%, Normal Retirement = 65/5

	Total	Employer Contribution Rate		Employer Contribution Amount		
Year	Payroll	Baseline	Alternative	Baseline	Alternative	Difference
2011	36,097,881	13.17%	13.17%	4,754,091	4,754,091	0
2012	37,746,650	12.37%	8.27%	4,667,656	3,122,998	(1,544,658)
2013	39,433,753	14.19%	9.43%	5,594,782	3,719,825	(1,874,957)
2014	41,186,164	16.44%	11.39%	6,769,692	4,691,782	(2,077,911)
2015	42,964,448	15.63%	10.34%	6,714,725	4,441,685	(2,273,040)
2016	44,846,858	15.42%	9.89%	6,913,177	4,434,210	(2,478,967)
2017	46,786,432	15.79%	10.03%	7,386,764	4,692,936	(2,693,828)
2018	48,804,802	16.26%	10.28%	7,936,205	5,015,260	(2,920,945)
2019	50,950,523	16.82%	10.59%	8,568,852	5,397,274	(3,171,578)
2020	53,224,243	17.51%	11.03%	9,319,676	5,871,995	(3,447,681)
2021	55,593,018	16.53%	10.52%	9,191,723	5,850,840	(3,340,883)
2022	58,045,550	15.37%	9.88%	8,919,063	5,733,427	(3,185,637)
2023	60,604,067	14.37%	9.29%	8,709,776	5,629,808	(3,079,968)
2024	63,291,428	13.58%	8.80%	8,597,393	5,566,605	(3,030,788)
2025	66,074,873	12.97%	8.38%	8,571,285	5,539,377	(3,031,908)
2026	68,978,721	12.50%	8.04%	8,621,999	5,548,114	(3,073,885)
2027	71,926,022	12.13%	7.76%	8,726,595	5,578,814	(3,147,781)
2028	75,077,074	11.84%	7.51%	8,891,716	5,639,065	(3,252,651)
2029	78,376,136	11.60%	7.29%	9,094,763	5,717,360	(3,377,403)
2030	81,810,706	11.41%	7.11%	9,333,981	5,815,176	(3,518,805)
2031	85,329,891	11.26%	6.95%	9,608,209	5,929,466	(3,678,744)
2032	88,995,667	11.14%	6.81%	9,914,656	6,057,842	(3,856,815)
2033	92,791,307	11.04%	6.68%	10,245,771	6,196,270	(4,049,501)
2034	96,736,966	10.96%	6.56%	10,601,966	6,346,260	(4,255,705)
2035	100,856,958	10.89%	6.45%	10,983,409	6,508,313	(4,475,095)
2036	105,159,729	10.83%	6.35%	11,390,172	6,679,746	(4,710,426)
2037	109,628,908	10.78%	6.26%	11,822,798	6,863,037	(4,959,761)
2038	114,324,826	10.75%	6.18%	12,289,231	7,061,167	(5,228,064)
2039	119,223,689	10.72%	6.10%	12,782,202	7,271,441	(5,510,761)
2040	124,308,084	10.69%	6.03%	13,293,237	7,493,730	(5,799,507)
2041	129,611,004	10.67%	5.97%	13,826,522	7,731,954	(6,094,567)
Total				284,042,088	176,899,865	(107,142,223)

To provide stability in the contribution rate, re-amortization is set to an open 5 year period in 2019 for both the baseline and alternative scenarios. All assumptions, including the 7.75% rate of return, are assumed to be met.

Fire Employees
Alternative 1
Current members unchanged
New members: Eliminate lump sum pay, members contribute 10%, High 5 Final Average Pay, 2% COLA

	Total	Employer Contribution Rate		Employer Contribution Amount		
Year	Payroll	Baseline	Alternative	Baseline	Alternative	Difference
2011	10,918,494	24.55%	24.55%	2,680,490	2,680,490	0
2012	11,440,536	25.46%	25.46%	2,912,271	2,912,271	0
2013	11,889,353	28.98%	28.83%	3,445,094	3,428,116	(16,978)
2014	12,427,714	33.19%	32.85%	4,124,170	4,082,067	(42,103)
2015	12,899,446	31.18%	30.68%	4,021,795	3,957,404	(64,391)
2016	13,412,830	30.21%	29.51%	4,052,307	3,957,708	(94,598)
2017	13,970,599	30.25%	29.34%	4,225,714	4,099,042	(126,672)
2018	14,440,597	30.35%	29.25%	4,382,070	4,224,387	(157,683)
2019	14,952,771	30.56%	29.19%	4,569,620	4,365,117	(204,503)
2020	15,547,183	30.82%	29.17%	4,792,285	4,534,981	(257,304)
2021	16,144,392	27.74%	25.88%	4,478,214	4,177,511	(300,703)
2022	16,728,917	24.45%	22.37%	4,089,796	3,741,958	(347,839)
2023	17,244,896	21.75%	19.42%	3,750,841	3,349,386	(401,455)
2024	17,857,095	19.75%	17.10%	3,526,030	3,054,244	(471,786)
2025	18,361,519	18.19%	15.26%	3,339,499	2,801,283	(538,216)
2026	18,984,387	17.03%	13.79%	3,232,848	2,618,685	(614,163)
2027	19,674,029	16.07%	12.49%	3,161,893	2,458,262	(703,630)
2028	20,513,734	15.35%	11.45%	3,149,749	2,348,650	(801,099)
2029	21,361,277	14.87%	10.73%	3,176,750	2,292,141	(884,609)
2030	22,084,908	14.49%	10.12%	3,200,326	2,235,839	(964,487)
2031	22,990,840	14.17%	9.40%	3,258,314	2,161,926	(1,096,388)
2032	23,877,595	13.99%	8.92%	3,340,393	2,129,954	(1,210,439)
2033	24,818,767	13.93%	8.57%	3,457,544	2,127,651	(1,329,893)
2034	25,822,598	13.91%	8.27%	3,592,205	2,135,484	(1,456,721)
2035	26,897,628	13.89%	8.00%	3,737,010	2,151,444	(1,585,567)
2036	28,082,761	13.85%	7.72%	3,888,422	2,167,867	(1,720,556)
2037	29,289,669	13.79%	7.48%	4,038,684	2,190,659	(1,848,024)
2038	30,599,956	13.71%	7.23%	4,195,369	2,213,323	(1,982,046)
2039	32,022,057	13.67%	7.05%	4,378,310	2,255,986	(2,122,324)
2040	33,507,348	13.62%	6.90%	4,565,356	2,311,604	(2,253,752)
2041	35,063,014	13.59%	6.81%	4,766,282	2,387,096	(2,379,186)
Total				117,529,652	91,552,536	(25,977,115)

To provide stability in the contribution rate, re-amortization is set to an open 5 year period in 2019 for both the baseline and alternative scenarios. All assumptions, including the 7.75% rate of return, are assumed to be met.

Fire Employees
Alternative 2
Current members unchanged
New members: Eliminate lump sum pay, members contribute 10%, High 5 Final Average Pay

Year	Total Payroll	Employer Contribution Rate Baseline	Employer Contribution Rate Alternative	Employer Contribution Amount Baseline	Employer Contribution Amount Alternative	Difference
2011	10,918,494	24.55%	24.55%	2,680,490	2,680,490	0
2012	11,440,536	25.46%	25.46%	2,912,271	2,912,271	0
2013	11,889,353	28.98%	28.86%	3,445,094	3,431,424	(13,670)
2014	12,427,714	33.19%	32.91%	4,124,170	4,090,275	(33,894)
2015	12,899,446	31.18%	30.78%	4,021,795	3,969,967	(51,827)
2016	13,412,830	30.21%	29.64%	4,052,307	3,976,177	(76,130)
2017	13,970,599	30.25%	29.52%	4,225,714	4,123,796	(101,918)
2018	14,440,597	30.35%	29.47%	4,382,070	4,255,235	(126,835)
2019	14,952,771	30.56%	29.46%	4,569,620	4,405,165	(164,455)
2020	15,547,183	30.82%	29.49%	4,792,285	4,585,443	(206,841)
2021	16,144,392	27.74%	26.24%	4,478,214	4,236,529	(241,685)
2022	16,728,917	24.45%	22.78%	4,089,796	3,810,260	(279,536)
2023	17,244,896	21.75%	19.88%	3,750,841	3,428,245	(322,596)
2024	17,857,095	19.75%	17.62%	3,526,030	3,146,942	(379,088)
2025	18,361,519	18.19%	15.83%	3,339,499	2,907,079	(432,419)
2026	18,984,387	17.03%	14.43%	3,232,848	2,739,471	(493,377)
2027	19,674,029	16.07%	13.20%	3,161,893	2,596,697	(565,196)
2028	20,513,734	15.35%	12.22%	3,149,749	2,506,331	(643,418)
2029	21,361,277	14.87%	11.55%	3,176,750	2,466,372	(710,378)
2030	22,084,908	14.49%	10.98%	3,200,326	2,425,925	(774,402)
2031	22,990,840	14.17%	10.34%	3,258,314	2,378,108	(880,206)
2032	23,877,595	13.99%	9.92%	3,340,393	2,368,751	(971,642)
2033	24,818,767	13.93%	9.63%	3,457,544	2,390,133	(1,067,411)
2034	25,822,598	13.91%	9.38%	3,592,205	2,423,218	(1,168,987)
2035	26,897,628	13.89%	9.16%	3,737,010	2,464,911	(1,272,100)
2036	28,082,761	13.85%	8.93%	3,888,422	2,508,332	(1,380,090)
2037	29,289,669	13.79%	8.73%	4,038,684	2,556,758	(1,481,926)
2038	30,599,956	13.71%	8.52%	4,195,369	2,606,434	(1,588,936)
2039	32,022,057	13.67%	8.36%	4,378,310	2,677,426	(1,700,884)
2040	33,507,348	13.62%	8.24%	4,565,356	2,759,959	(1,805,397)
2041	35,063,014	13.59%	8.16%	4,766,282	2,861,837	(1,904,446)
Total				117,529,652	96,689,963	(20,839,688)

To provide stability in the contribution rate, re-amortization is set to an open 5 year period in 2019 for both the baseline and alternative scenarios. All assumptions, including the 7.75% rate of return, are assumed to be met.

Fire Employees
Alternative 3
Current members unchanged
New members: Eliminate lump sum pay, Normal Retirement 55/25 or 60/15, 2% COLA

	Total	Employer Contribution Rate		Employer Contribution Amount		
Year	Payroll	Baseline	Alternative	Baseline	Alternative	Difference
2011	10,918,494	24.55%	24.55%	2,680,490	2,680,490	0
2012	11,440,536	25.46%	25.46%	2,912,271	2,912,271	0
2013	11,889,353	28.98%	28.88%	3,445,094	3,433,738	(11,357)
2014	12,427,714	33.19%	32.96%	4,124,170	4,095,987	(28,182)
2015	12,899,446	31.18%	30.84%	4,021,795	3,978,657	(43,138)
2016	13,412,830	30.21%	29.74%	4,052,307	3,988,879	(63,428)
2017	13,970,599	30.25%	29.64%	4,225,714	4,140,696	(85,018)
2018	14,440,597	30.35%	29.61%	4,382,070	4,276,107	(105,963)
2019	14,952,771	30.56%	29.64%	4,569,620	4,432,053	(137,567)
2020	15,547,183	30.82%	29.71%	4,792,285	4,618,977	(173,308)
2021	16,144,392	27.74%	26.48%	4,478,214	4,275,563	(202,651)
2022	16,728,917	24.45%	23.05%	4,089,796	3,855,327	(234,470)
2023	17,244,896	21.75%	20.18%	3,750,841	3,480,204	(270,636)
2024	17,857,095	19.75%	17.96%	3,526,030	3,207,978	(318,052)
2025	18,361,519	18.19%	16.21%	3,339,499	2,976,611	(362,888)
2026	18,984,387	17.03%	14.85%	3,232,848	2,818,674	(414,174)
2027	19,674,029	16.07%	13.66%	3,161,893	2,687,329	(474,564)
2028	20,513,734	15.35%	12.72%	3,149,749	2,609,343	(540,406)
2029	21,361,277	14.87%	12.06%	3,176,750	2,576,527	(600,223)
2030	22,084,908	14.49%	11.50%	3,200,326	2,538,887	(661,439)
2031	22,990,840	14.17%	10.88%	3,258,314	2,501,995	(756,319)
2032	23,877,595	13.99%	10.49%	3,340,393	2,504,217	(836,176)
2033	24,818,767	13.93%	10.23%	3,457,544	2,538,135	(919,409)
2034	25,822,598	13.91%	10.01%	3,592,205	2,585,347	(1,006,858)
2035	26,897,628	13.89%	9.82%	3,737,010	2,640,322	(1,096,688)
2036	28,082,761	13.85%	9.60%	3,888,422	2,695,733	(1,192,689)
2037	29,289,669	13.79%	9.41%	4,038,684	2,756,558	(1,282,126)
2038	30,599,956	13.71%	9.21%	4,195,369	2,819,299	(1,376,070)
2039	32,022,057	13.67%	9.06%	4,378,310	2,901,397	(1,476,913)
2040	33,507,348	13.62%	8.92%	4,565,356	2,989,842	(1,575,514)
2041	35,063,014	13.59%	8.83%	4,766,282	3,094,464	(1,671,818)
Total				117,529,652	99,611,610	(17,918,042)

To provide stability in the contribution rate, re-amortization is set to an open 5 year period in 2019 for both the baseline and alternative scenarios. All assumptions, including the 7.75% rate of return, are assumed to be met.

Fire Employees
Alternative 4
Current members: Members contribute 10%
New members: Eliminate lump sum pay, members contribute 10%, High 5 Final Average Pay

	Total	Employer Contribution Rate		Employer Contribution Amount		
Year	Payroll	Baseline	Alternative	Baseline	Alternative	Difference
2011	10,918,494	24.55%	24.55%	2,680,490	2,680,490	0
2012	11,440,536	25.46%	25.46%	2,912,271	2,912,271	0
2013	11,889,353	28.98%	27.92%	3,445,094	3,319,191	(125,903)
2014	12,427,714	33.19%	30.93%	4,124,170	3,844,481	(279,689)
2015	12,899,446	31.18%	28.73%	4,021,795	3,705,903	(315,892)
2016	13,412,830	30.21%	27.66%	4,052,307	3,709,923	(342,384)
2017	13,970,599	30.25%	27.61%	4,225,714	3,856,942	(368,772)
2018	14,440,597	30.35%	27.63%	4,382,070	3,989,638	(392,432)
2019	14,952,771	30.56%	27.73%	4,569,620	4,145,742	(423,878)
2020	15,547,183	30.82%	27.87%	4,792,285	4,332,525	(459,759)
2021	16,144,392	27.74%	24.74%	4,478,214	3,994,765	(483,449)
2022	16,728,917	24.45%	21.41%	4,089,796	3,582,331	(507,465)
2023	17,244,896	21.75%	18.66%	3,750,841	3,217,127	(533,713)
2024	17,857,095	19.75%	16.55%	3,526,030	2,955,729	(570,301)
2025	18,361,519	18.19%	14.90%	3,339,499	2,735,409	(604,090)
2026	18,984,387	17.03%	13.63%	3,232,848	2,587,580	(645,268)
2027	19,674,029	16.07%	12.54%	3,161,893	2,467,837	(694,056)
2028	20,513,734	15.35%	11.70%	3,149,749	2,400,015	(749,734)
2029	21,361,277	14.87%	11.13%	3,176,750	2,376,577	(800,174)
2030	22,084,908	14.49%	10.66%	3,200,326	2,353,402	(846,925)
2031	22,990,840	14.17%	10.17%	3,258,314	2,338,975	(919,338)
2032	23,877,595	13.99%	9.87%	3,340,393	2,356,231	(984,161)
2033	24,818,767	13.93%	9.69%	3,457,544	2,405,102	(1,052,442)
2034	25,822,598	13.91%	9.55%	3,592,205	2,466,941	(1,125,264)
2035	26,897,628	13.89%	9.43%	3,737,010	2,536,567	(1,200,444)
2036	28,082,761	13.85%	9.29%	3,888,422	2,607,948	(1,280,474)
2037	29,289,669	13.79%	9.15%	4,038,684	2,680,638	(1,358,045)
2038	30,599,956	13.71%	9.00%	4,195,369	2,755,041	(1,440,329)
2039	32,022,057	13.67%	8.90%	4,378,310	2,850,897	(1,527,413)
2040	33,507,348	13.62%	8.81%	4,565,356	2,953,173	(1,612,183)
2041	35,063,014	13.59%	8.76%	4,766,282	3,070,541	(1,695,741)
Total				117,529,652	94,189,933	(23,339,719)

To provide stability in the contribution rate, re-amortization is set to an open 5 year period in 2019 for both the baseline and alternative scenarios. All assumptions, including the 7.75% rate of return, are assumed to be met.

Fire Employees
Alternative 5
Current members: Eliminate lump sum pay
New members: Eliminate lump sum pay, members contribute 10%, High 5 Final Average Pay

Year	Total Payroll	Employer Contribution Rate Baseline	Employer Contribution Rate Alternative	Employer Contribution Amount Baseline	Employer Contribution Amount Alternative	Difference
2011	10,918,494	24.55%	24.55%	2,680,490	2,680,490	0
2012	11,440,536	25.46%	18.41%	2,912,271	2,106,327	(805,944)
2013	11,889,353	28.98%	21.18%	3,445,094	2,518,101	(926,993)
2014	12,427,714	33.19%	25.22%	4,124,170	3,134,325	(989,844)
2015	12,899,446	31.18%	23.15%	4,021,795	2,986,299	(1,035,496)
2016	13,412,830	30.21%	22.08%	4,052,307	2,961,822	(1,090,485)
2017	13,970,599	30.25%	22.02%	4,225,714	3,076,241	(1,149,473)
2018	14,440,597	30.35%	22.03%	4,382,070	3,181,122	(1,200,948)
2019	14,952,771	30.56%	22.09%	4,569,620	3,302,661	(1,266,958)
2020	15,547,183	30.82%	22.19%	4,792,285	3,450,038	(1,342,247)
2021	16,144,392	27.74%	20.00%	4,478,214	3,229,604	(1,248,610)
2022	16,728,917	24.45%	17.67%	4,089,796	2,955,273	(1,134,523)
2023	17,244,896	21.75%	15.73%	3,750,841	2,712,696	(1,038,145)
2024	17,857,095	19.75%	14.26%	3,526,030	2,546,804	(979,226)
2025	18,361,519	18.19%	13.10%	3,339,499	2,404,514	(934,984)
2026	18,984,387	17.03%	12.20%	3,232,848	2,315,363	(917,485)
2027	19,674,029	16.07%	11.41%	3,161,893	2,245,430	(916,463)
2028	20,513,734	15.35%	10.81%	3,149,749	2,217,581	(932,168)
2029	21,361,277	14.87%	10.41%	3,176,750	2,224,247	(952,503)
2030	22,084,908	14.49%	10.08%	3,200,326	2,225,520	(974,807)
2031	22,990,840	14.17%	9.73%	3,258,314	2,236,369	(1,021,944)
2032	23,877,595	13.99%	9.52%	3,340,393	2,272,099	(1,068,293)
2033	24,818,767	13.93%	9.41%	3,457,544	2,334,344	(1,123,200)
2034	25,822,598	13.91%	9.33%	3,592,205	2,407,969	(1,184,236)
2035	26,897,628	13.89%	9.25%	3,737,010	2,487,928	(1,249,082)
2036	28,082,761	13.85%	9.15%	3,888,422	2,570,233	(1,318,189)
2037	29,289,669	13.79%	9.06%	4,038,684	2,652,509	(1,386,174)
2038	30,599,956	13.71%	8.94%	4,195,369	2,737,065	(1,458,304)
2039	32,022,057	13.67%	8.87%	4,378,310	2,841,303	(1,537,007)
2040	33,507,348	13.62%	8.81%	4,565,356	2,950,963	(1,614,393)
2041	35,063,014	13.59%	8.77%	4,766,282	3,073,867	(1,692,416)
Total				117,529,652	83,039,109	(34,490,543)

To provide stability in the contribution rate, re-amortization is set to an open 5 year period in 2019 for both the baseline and alternative scenarios. All assumptions, including the 7.75% rate of return, are assumed to be met.

Police Employees
Alternative 1
Current members unchanged
New members: Eliminate lump sum pay, members contribute 10%, High 5 Final Average Pay, 2% COLA

Year	Total Payroll	Employer Contribution Rate Baseline	Employer Contribution Rate Alternative	Employer Contribution Amount Baseline	Employer Contribution Amount Alternative	Difference
2011	13,774,086	20.78%	20.78%	2,862,255	2,862,255	0
2012	14,402,840	20.75%	20.75%	2,988,702	2,988,702	0
2013	15,018,006	23.37%	23.19%	3,509,603	3,482,163	(27,440)
2014	15,631,698	26.39%	26.00%	4,124,505	4,064,827	(59,678)
2015	16,165,380	24.55%	23.97%	3,969,105	3,874,690	(94,415)
2016	16,772,886	23.42%	22.54%	3,928,075	3,781,368	(146,707)
2017	17,409,273	22.88%	21.74%	3,983,191	3,784,702	(198,490)
2018	18,067,396	22.31%	20.89%	4,030,499	3,773,738	(256,761)
2019	18,773,830	21.62%	19.88%	4,058,842	3,732,990	(325,852)
2020	19,462,848	20.80%	18.75%	4,048,608	3,648,551	(400,057)
2021	20,246,047	18.21%	15.85%	3,687,176	3,209,765	(477,412)
2022	21,079,433	15.79%	13.19%	3,328,996	2,780,961	(548,035)
2023	21,954,224	13.84%	11.02%	3,039,443	2,420,230	(619,213)
2024	22,838,932	12.43%	9.41%	2,837,896	2,148,865	(689,032)
2025	23,822,519	11.43%	8.20%	2,723,459	1,953,639	(769,820)
2026	24,839,740	10.72%	7.30%	2,662,992	1,813,958	(849,034)
2027	25,836,119	10.19%	6.59%	2,633,553	1,701,959	(931,594)
2028	26,928,268	9.83%	5.99%	2,646,888	1,612,102	(1,034,785)
2029	28,021,457	9.62%	5.55%	2,694,368	1,555,300	(1,139,068)
2030	29,101,968	9.51%	5.21%	2,768,584	1,516,615	(1,251,968)
2031	30,315,559	9.49%	4.91%	2,875,660	1,487,093	(1,388,567)
2032	31,639,071	9.51%	4.69%	3,009,490	1,483,815	(1,525,674)
2033	32,993,070	9.57%	4.54%	3,158,836	1,497,391	(1,661,445)
2034	34,399,796	9.63%	4.40%	3,311,585	1,514,023	(1,797,562)
2035	35,944,197	9.67%	4.25%	3,476,078	1,528,452	(1,947,626)
2036	37,526,370	9.72%	4.16%	3,646,362	1,559,427	(2,086,934)
2037	39,179,739	9.77%	4.08%	3,828,321	1,597,364	(2,230,957)
2038	40,947,162	9.83%	4.02%	4,023,502	1,644,323	(2,379,179)
2039	42,761,899	9.90%	4.01%	4,235,330	1,716,335	(2,518,995)
2040	44,654,313	10.00%	4.04%	4,464,327	1,805,382	(2,658,945)
2041	46,586,952	10.09%	4.10%	4,702,564	1,907,961	(2,794,603)
Total				107,258,794	74,448,947	(32,809,847)

To provide stability in the contribution rate, re-amortization is set to an open 5 year period in 2019 for both the baseline and alternative scenarios. All assumptions, including the 7.75% rate of return, are assumed to be met.

Police Employees
Alternative 2
Current members unchanged
New members: Eliminate lump sum pay, members contribute 10%, High 5 Final Average Pay

	Total	Employer Contribution Rate		Employer Contribution Amount		
Year	Payroll	Baseline	Alternative	Baseline	Alternative	Difference
2011	13,774,086	20.78%	20.78%	2,862,255	2,862,255	0
2012	14,402,840	20.75%	20.75%	2,988,702	2,988,702	0
2013	15,018,006	23.37%	23.23%	3,509,603	3,488,210	(21,393)
2014	15,631,698	26.39%	26.09%	4,124,505	4,078,003	(46,501)
2015	16,165,380	24.55%	24.10%	3,969,105	3,895,582	(73,524)
2016	16,772,886	23.42%	22.74%	3,928,075	3,813,899	(114,176)
2017	17,409,273	22.88%	21.99%	3,983,191	3,828,823	(154,368)
2018	18,067,396	22.31%	21.20%	4,030,499	3,830,968	(199,531)
2019	18,773,830	21.62%	20.27%	4,058,842	3,805,854	(252,988)
2020	19,462,848	20.80%	19.21%	4,048,608	3,738,357	(310,251)
2021	20,246,047	18.21%	16.38%	3,687,176	3,316,744	(370,433)
2022	21,079,433	15.79%	13.77%	3,328,996	2,903,445	(425,551)
2023	21,954,224	13.84%	11.65%	3,039,443	2,558,297	(481,146)
2024	22,838,932	12.43%	10.08%	2,837,896	2,302,193	(535,703)
2025	23,822,519	11.43%	8.92%	2,723,459	2,124,687	(598,772)
2026	24,839,740	10.72%	8.06%	2,662,992	2,002,371	(660,622)
2027	25,836,119	10.19%	7.39%	2,633,553	1,908,493	(725,060)
2028	26,928,268	9.83%	6.84%	2,646,888	1,841,388	(805,500)
2029	28,021,457	9.62%	6.45%	2,694,368	1,807,581	(886,787)
2030	29,101,968	9.51%	6.16%	2,768,584	1,793,821	(974,763)
2031	30,315,559	9.49%	5.92%	2,875,660	1,794,519	(1,081,141)
2032	31,639,071	9.51%	5.76%	3,009,490	1,821,547	(1,187,943)
2033	32,993,070	9.57%	5.65%	3,158,836	1,865,105	(1,293,732)
2034	34,399,796	9.63%	5.56%	3,311,585	1,911,754	(1,399,831)
2035	35,944,197	9.67%	5.45%	3,476,078	1,959,286	(1,516,792)
2036	37,526,370	9.72%	5.39%	3,646,362	2,020,981	(1,625,381)
2037	39,179,739	9.77%	5.34%	3,828,321	2,090,666	(1,737,655)
2038	40,947,162	9.83%	5.30%	4,023,502	2,170,934	(1,852,568)
2039	42,761,899	9.90%	5.32%	4,235,330	2,275,136	(1,960,193)
2040	44,654,313	10.00%	5.37%	4,464,327	2,397,325	(2,067,002)
2041	46,586,952	10.09%	5.44%	4,702,564	2,533,349	(2,169,215)
Total				107,258,794	81,730,275	(25,528,519)

To provide stability in the contribution rate, re-amortization is set to an open 5 year period in 2019 for both the baseline and alternative scenarios. All assumptions, including the 7.75% rate of return, are assumed to be met.

Police Employees
Alternative 3
Current members unchanged
New members: Eliminate lump sum pay, Normal Retirement 55/25 or 60/15, 2% COLA

Year	Total Payroll	Employer Contribution Rate Baseline	Employer Contribution Rate Alternative	Employer Contribution Amount Baseline	Employer Contribution Amount Alternative	Difference
2011	13,774,086	20.78%	20.78%	2,862,255	2,862,255	0
2012	14,402,840	20.75%	20.75%	2,988,702	2,988,702	0
2013	15,018,006	23.37%	23.22%	3,509,603	3,487,392	(22,211)
2014	15,631,698	26.39%	26.08%	4,124,505	4,076,096	(48,409)
2015	16,165,380	24.55%	24.08%	3,969,105	3,892,353	(76,753)
2016	16,772,886	23.42%	22.71%	3,928,075	3,808,554	(119,521)
2017	17,409,273	22.88%	21.95%	3,983,191	3,821,080	(162,111)
2018	18,067,396	22.31%	21.14%	4,030,499	3,820,232	(210,268)
2019	18,773,830	21.62%	20.19%	4,058,842	3,791,164	(267,678)
2020	19,462,848	20.80%	19.11%	4,048,608	3,718,744	(329,864)
2021	20,246,047	18.21%	16.27%	3,687,176	3,294,330	(392,847)
2022	21,079,433	15.79%	13.66%	3,328,996	2,879,351	(449,645)
2023	21,954,224	13.84%	11.54%	3,039,443	2,532,772	(506,671)
2024	22,838,932	12.43%	9.96%	2,837,896	2,275,437	(562,459)
2025	23,822,519	11.43%	8.80%	2,723,459	2,096,247	(627,212)
2026	24,839,740	10.72%	7.94%	2,662,992	1,972,420	(690,573)
2027	25,836,119	10.19%	7.26%	2,633,553	1,876,929	(756,624)
2028	26,928,268	9.83%	6.71%	2,646,888	1,807,315	(839,573)
2029	28,021,457	9.62%	6.32%	2,694,368	1,771,048	(923,320)
2030	29,101,968	9.51%	6.03%	2,768,584	1,754,543	(1,014,041)
2031	30,315,559	9.49%	5.78%	2,875,660	1,751,588	(1,124,072)
2032	31,639,071	9.51%	5.61%	3,009,490	1,775,206	(1,234,284)
2033	32,993,070	9.57%	5.50%	3,158,836	1,815,595	(1,343,242)
2034	34,399,796	9.63%	5.41%	3,311,585	1,859,335	(1,452,250)
2035	35,944,197	9.67%	5.30%	3,476,078	1,903,571	(1,572,507)
2036	37,526,370	9.72%	5.23%	3,646,362	1,961,675	(1,684,686)
2037	39,179,739	9.77%	5.17%	3,828,321	2,027,489	(1,800,833)
2038	40,947,162	9.83%	5.13%	4,023,502	2,100,630	(1,922,872)
2039	42,761,899	9.90%	5.13%	4,235,330	2,193,903	(2,041,427)
2040	44,654,313	10.00%	5.15%	4,464,327	2,300,482	(2,163,844)
2041	46,586,952	10.09%	5.18%	4,702,564	2,414,932	(2,287,632)
Total				107,258,794	80,631,368	(26,627,426)

To provide stability in the contribution rate, re-amortization is set to an open 5 year period in 2019 for both the baseline and alternative scenarios. All assumptions, including the 7.75% rate of return, are assumed to be met.

Police Employees
Alternative 4
Current members: Members contribute 10%
New members: Eliminate lump sum pay, members contribute 10%, High 5 Final Average Pay

	Total	Employer Contribution Rate		Employer Contribution Amount		
Year	Payroll	Baseline	Alternative	Baseline	Alternative	Difference
2011	13,774,086	20.78%	20.78%	2,862,255	2,862,255	0
2012	14,402,840	20.75%	20.75%	2,988,702	2,988,702	0
2013	15,018,006	23.37%	22.30%	3,509,603	3,349,291	(160,312)
2014	15,631,698	26.39%	24.13%	4,124,505	3,772,561	(351,944)
2015	16,165,380	24.55%	22.09%	3,969,105	3,571,484	(397,621)
2016	16,772,886	23.42%	20.83%	3,928,075	3,494,054	(434,021)
2017	17,409,273	22.88%	20.19%	3,983,191	3,514,637	(468,555)
2018	18,067,396	22.31%	19.51%	4,030,499	3,524,726	(505,773)
2019	18,773,830	21.62%	18.70%	4,058,842	3,510,547	(548,294)
2020	19,462,848	20.80%	17.76%	4,048,608	3,456,039	(592,568)
2021	20,246,047	18.21%	15.10%	3,687,176	3,058,009	(629,167)
2022	21,079,433	15.79%	12.65%	3,328,996	2,666,299	(662,697)
2023	21,954,224	13.84%	10.66%	3,039,443	2,341,129	(698,314)
2024	22,838,932	12.43%	9.21%	2,837,896	2,102,781	(735,115)
2025	23,822,519	11.43%	8.16%	2,723,459	1,943,965	(779,493)
2026	24,839,740	10.72%	7.40%	2,662,992	1,837,963	(825,030)
2027	25,836,119	10.19%	6.82%	2,633,553	1,761,275	(872,278)
2028	26,928,268	9.83%	6.38%	2,646,888	1,716,960	(929,927)
2029	28,021,457	9.62%	6.09%	2,694,368	1,705,867	(988,501)
2030	29,101,968	9.51%	5.90%	2,768,584	1,718,145	(1,050,438)
2031	30,315,559	9.49%	5.78%	2,875,660	1,751,442	(1,124,218)
2032	31,639,071	9.51%	5.72%	3,009,490	1,808,958	(1,200,532)
2033	32,993,070	9.57%	5.70%	3,158,836	1,881,768	(1,277,068)
2034	34,399,796	9.63%	5.69%	3,311,585	1,956,743	(1,354,843)
2035	35,944,197	9.67%	5.66%	3,476,078	2,035,438	(1,440,639)
2036	37,526,370	9.72%	5.66%	3,646,362	2,123,246	(1,523,115)
2037	39,179,739	9.77%	5.67%	3,828,321	2,219,579	(1,608,742)
2038	40,947,162	9.83%	5.68%	4,023,502	2,325,395	(1,698,107)
2039	42,761,899	9.90%	5.73%	4,235,330	2,450,203	(1,785,127)
2040	44,654,313	10.00%	5.80%	4,464,327	2,590,726	(1,873,601)
2041	46,586,952	10.09%	5.88%	4,702,564	2,741,435	(1,961,129)
Total				107,258,794	78,781,624	(28,477,170)

To provide stability in the contribution rate, re-amortization is set to an open 5 year period in 2019 for both the baseline and alternative scenarios. All assumptions, including the 7.75% rate of return, are assumed to be met

Police Employees
Alternative 5
Current members: Eliminate lump sum pay
New members: Eliminate lump sum pay, members contribute 10%, High 5 Final Average Pay

	Total	Employer Contribution Rate		Employer Contribution Amount		
Year	Payroll	Baseline	Alternative	Baseline	Alternative	Difference
2011	13,774,086	20.78%	20.78%	2,862,255	2,862,255	0
2012	14,402,840	20.75%	14.84%	2,988,702	2,137,620	(851,083)
2013	15,018,006	23.37%	16.79%	3,509,603	2,521,945	(987,658)
2014	15,631,698	26.39%	19.66%	4,124,505	3,073,664	(1,050,841)
2015	16,165,380	24.55%	17.73%	3,969,105	2,866,131	(1,102,974)
2016	16,772,886	23.42%	16.44%	3,928,075	2,757,784	(1,170,291)
2017	17,409,273	22.88%	15.76%	3,983,191	2,744,317	(1,238,874)
2018	18,067,396	22.31%	15.05%	4,030,499	2,718,610	(1,311,889)
2019	18,773,830	21.62%	14.20%	4,058,842	2,665,947	(1,392,895)
2020	19,462,848	20.80%	13.23%	4,048,608	2,574,488	(1,474,120)
2021	20,246,047	18.21%	11.38%	3,687,176	2,304,607	(1,382,570)
2022	21,079,433	15.79%	9.77%	3,328,996	2,060,485	(1,268,511)
2023	21,954,224	13.84%	8.50%	3,039,443	1,865,350	(1,174,093)
2024	22,838,932	12.43%	7.58%	2,837,896	1,731,510	(1,106,386)
2025	23,822,519	11.43%	6.94%	2,723,459	1,652,766	(1,070,693)
2026	24,839,740	10.72%	6.48%	2,662,992	1,609,620	(1,053,373)
2027	25,836,119	10.19%	6.13%	2,633,553	1,583,120	(1,050,433)
2028	26,928,268	9.83%	5.86%	2,646,888	1,577,690	(1,069,198)
2029	28,021,457	9.62%	5.70%	2,694,368	1,596,513	(1,097,855)
2030	29,101,968	9.51%	5.61%	2,768,584	1,631,555	(1,137,028)
2031	30,315,559	9.49%	5.55%	2,875,660	1,682,271	(1,193,388)
2032	31,639,071	9.51%	5.54%	3,009,490	1,752,893	(1,256,597)
2033	32,993,070	9.57%	5.56%	3,158,836	1,835,875	(1,322,962)
2034	34,399,796	9.63%	5.58%	3,311,585	1,919,509	(1,392,076)
2035	35,944,197	9.67%	5.58%	3,476,078	2,006,183	(1,469,895)
2036	37,526,370	9.72%	5.60%	3,646,362	2,100,498	(1,545,864)
2037	39,179,739	9.77%	5.62%	3,828,321	2,202,171	(1,626,150)
2038	40,947,162	9.83%	5.65%	4,023,502	2,313,010	(1,710,493)
2039	42,761,899	9.90%	5.71%	4,235,330	2,441,357	(1,793,973)
2040	44,654,313	10.00%	5.79%	4,464,327	2,584,651	(1,879,676)
2041	46,586,952	10.09%	5.88%	4,702,564	2,738,196	(1,964,368)
Total				107,258,794	68,112,587	(39,146,207)

To provide stability in the contribution rate, re-amortization is set to an open 5 year period in 2019 for both the baseline and alternative scenarios. All assumptions, including the 7.75% rate of return, are assumed to be met

General Employees
Retiree Healthcare Plan – Scenario #1
Current retirees: Unchanged, Current active members: Unchanged, New members: Increase normal retirement age to age 65 with 5 years of service

	Total	Employer Contribution Rate		Employer Contribution Amount		
Year	Payroll	Baseline	Alternative	Baseline	Alternative	Difference
2011	36,097,881	4.89%	4.89%	1,765,186	1,765,186	0
2012	37,746,650	5.48%	5.48%	2,067,731	2,067,731	0
2013	39,433,753	5.53%	5.40%	2,181,795	2,130,950	(50,845)
2014	41,186,164	5.56%	5.31%	2,289,398	2,185,503	(103,895)
2015	42,964,448	5.51%	5.14%	2,367,662	2,209,014	(158,648)
2016	44,846,858	5.50%	5.02%	2,465,674	2,250,736	(214,938)
2017	46,786,432	5.50%	4.91%	2,571,175	2,299,280	(271,895)
2018	48,804,802	5.50%	4.82%	2,682,528	2,351,517	(331,011)
2019	50,950,523	5.50%	4.72%	2,802,091	2,407,077	(395,014)
2020	53,224,243	5.50%	4.63%	2,928,945	2,465,425	(463,520)
2021	55,593,018	5.50%	4.54%	3,057,748	2,523,785	(533,963)
2022	58,045,550	5.50%	4.46%	3,190,833	2,586,015	(604,818)
2023	60,604,067	5.50%	4.38%	3,331,166	2,651,587	(679,579)
2024	63,291,428	5.50%	4.30%	3,478,849	2,721,469	(757,380)
2025	66,074,873	5.49%	4.23%	3,630,695	2,793,541	(837,154)
2026	68,978,721	5.49%	4.16%	3,788,408	2,868,710	(919,698)
2027	71,926,022	5.49%	4.10%	3,950,055	2,946,133	(1,003,922)
2028	75,077,074	5.50%	4.04%	4,127,205	3,035,297	(1,091,908)
2029	78,376,136	5.50%	4.00%	4,311,889	3,133,302	(1,178,587)
2030	81,810,706	5.51%	3.96%	4,505,125	3,239,183	(1,265,942)
2031	85,329,891	5.52%	3.92%	4,706,472	3,348,435	(1,358,037)
2032	88,995,667	5.53%	3.90%	4,924,286	3,466,973	(1,457,313)
2033	92,791,307	5.08%	3.44%	4,717,677	3,195,982	(1,521,695)
2034	96,736,966	4.62%	2.98%	4,466,559	2,885,081	(1,581,478)
2035	100,856,958	4.23%	2.60%	4,268,260	2,623,505	(1,644,755)
2036	105,159,729	3.94%	2.31%	4,139,778	2,425,445	(1,714,333)
2037	109,628,908	3.72%	2.08%	4,073,474	2,283,284	(1,790,190)
2038	114,324,826	3.55%	1.91%	4,059,366	2,186,628	(1,872,738)
2039	119,223,689	3.43%	1.78%	4,088,407	2,125,861	(1,962,546)
2040	124,308,084	3.34%	1.68%	4,149,953	2,094,025	(2,055,928)
2041	129,611,004	3.27%	1.61%	4,240,629	2,084,978	(2,155,651)
Total				109,329,019	79,351,638	(29,977,381)

Results based upon total payroll (including new hire pay) and level percent of payroll amortization (period declines annually to an ultimate level of 5 years). All assumptions, including the 7.75% rate of return, are assumed to be met.

Fire Employees
Retiree Healthcare Plan – Scenario #1
Current retirees: Unchanged, Current active members: Unchanged, New members: Increase normal retirement age to age 55 with 25 years of service or age 60 with 15 years of service

	Total	Employer Contribution Rate		Employer Contribution Amount		
Year	Payroll	Baseline	Alternative	Baseline	Alternative	Difference
2011	10,918,494	8.35%	8.35%	911,694	911,694	0
2012	11,440,536	9.91%	9.91%	1,133,616	1,133,616	0
2013	11,889,353	10.10%	10.10%	1,200,338	1,200,494	156
2014	12,427,714	10.23%	10.24%	1,271,934	1,272,299	365
2015	12,899,446	10.22%	10.22%	1,318,425	1,318,963	538
2016	13,412,830	10.26%	10.27%	1,376,807	1,377,583	776
2017	13,970,599	10.33%	10.34%	1,443,568	1,444,597	1,029
2018	14,440,597	10.39%	10.40%	1,500,512	1,501,766	1,254
2019	14,952,771	10.48%	10.49%	1,566,827	1,568,425	1,598
2020	15,547,183	10.56%	10.58%	1,642,347	1,644,363	2,016
2021	16,144,392	10.63%	10.65%	1,716,869	1,719,267	2,398
2022	16,728,917	10.67%	10.69%	1,785,273	1,788,131	2,858
2023	17,244,896	10.73%	10.75%	1,850,304	1,853,700	3,396
2024	17,857,095	10.82%	10.84%	1,931,960	1,936,021	4,061
2025	18,361,519	10.95%	10.98%	2,010,948	2,015,689	4,741
2026	18,984,387	11.07%	11.10%	2,101,042	2,106,559	5,517
2027	19,674,029	11.13%	11.16%	2,188,932	2,195,313	6,381
2028	20,513,734	11.18%	11.22%	2,293,570	2,300,934	7,364
2029	21,361,277	11.22%	11.24%	2,396,151	2,401,979	5,828
2030	22,084,908	11.23%	11.24%	2,479,203	2,482,661	3,458
2031	22,990,840	11.26%	11.27%	2,588,090	2,590,035	1,945
2032	23,877,595	11.32%	11.31%	2,702,746	2,701,723	(1,023)
2033	24,818,767	10.40%	10.38%	2,579,915	2,575,301	(4,614)
2034	25,822,598	9.43%	9.40%	2,434,169	2,426,329	(7,840)
2035	26,897,628	8.62%	8.57%	2,318,102	2,306,072	(12,030)
2036	28,082,761	7.98%	7.92%	2,242,403	2,225,519	(16,884)
2037	29,289,669	7.51%	7.44%	2,198,520	2,178,135	(20,385)
2038	30,599,956	7.15%	7.07%	2,186,885	2,163,068	(23,817)
2039	32,022,057	6.88%	6.79%	2,202,069	2,173,787	(28,282)
2040	33,507,348	6.67%	6.57%	2,235,940	2,201,727	(34,213)
2041	35,063,014	6.53%	6.41%	2,288,318	2,247,537	(40,781)
Total				60,097,477	59,963,287	(134,190)

Results based upon total payroll (including new hire pay) and level percent of payroll amortization (period declines annually to an ultimate level of 5 years). All assumptions, including the 7.75% rate of return, are assumed to be met.

Police Employees
Retiree Healthcare Plan – Scenario #1
Current retirees: Unchanged, Current active members: Unchanged, New members: Increase normal retirement age to age 55 with 25 years of service or age 60 with 15 years of service

	Total	Employer Contribution Rate		Employer Contribution Amount		
Year	Payroll	Baseline	Alternative	Baseline	Alternative	Difference
2011	13,774,086	7.66%	7.66%	1,055,095	1,055,095	0
2012	14,402,840	9.33%	9.33%	1,343,140	1,343,140	0
2013	15,018,006	9.48%	9.47%	1,424,396	1,422,065	(2,331)
2014	15,631,698	9.58%	9.55%	1,497,225	1,492,293	(4,932)
2015	16,165,380	9.58%	9.53%	1,548,178	1,540,558	(7,620)
2016	16,772,886	9.63%	9.56%	1,615,382	1,603,901	(11,481)
2017	17,409,273	9.71%	9.62%	1,690,191	1,674,546	(15,645)
2018	18,067,396	9.78%	9.67%	1,767,469	1,747,474	(19,995)
2019	18,773,830	9.83%	9.70%	1,846,297	1,821,718	(24,579)
2020	19,462,848	9.87%	9.71%	1,920,506	1,890,569	(29,937)
2021	20,246,047	9.91%	9.73%	2,005,893	1,969,393	(36,500)
2022	21,079,433	9.96%	9.76%	2,099,207	2,056,439	(42,768)
2023	21,954,224	10.01%	9.78%	2,196,892	2,147,436	(49,456)
2024	22,838,932	10.06%	9.81%	2,297,436	2,241,357	(56,079)
2025	23,822,519	10.12%	9.85%	2,410,076	2,346,291	(63,785)
2026	24,839,740	10.16%	9.88%	2,524,595	2,453,196	(71,399)
2027	25,836,119	10.20%	9.90%	2,636,210	2,556,680	(79,530)
2028	26,928,268	10.25%	9.92%	2,760,374	2,670,914	(89,460)
2029	28,021,457	10.31%	9.95%	2,888,120	2,788,403	(99,717)
2030	29,101,968	10.38%	10.00%	3,019,758	2,908,743	(111,015)
2031	30,315,559	10.46%	10.05%	3,170,701	3,046,143	(124,558)
2032	31,639,071	10.55%	10.11%	3,338,558	3,199,887	(138,671)
2033	32,993,070	9.61%	9.15%	3,169,525	3,020,291	(149,234)
2034	34,399,796	8.61%	8.14%	2,961,562	2,801,542	(160,020)
2035	35,944,197	7.78%	7.31%	2,797,829	2,626,259	(171,570)
2036	37,526,370	7.15%	6.66%	2,682,173	2,499,124	(183,049)
2037	39,179,739	6.67%	6.17%	2,613,295	2,418,238	(195,057)
2038	40,947,162	6.31%	5.81%	2,585,707	2,378,513	(207,194)
2039	42,761,899	6.05%	5.54%	2,588,508	2,368,723	(219,785)
2040	44,654,313	5.86%	5.34%	2,617,449	2,384,846	(232,603)
2041	46,586,952	5.72%	5.20%	2,666,501	2,420,934	(245,567)
Total				71,738,248	68,894,711	(2,843,537)

Results based upon total payroll (including new hire pay) and level percent of payroll amortization (period declines annually to an ultimate level of 5 years). All assumptions, including the 7.75% rate of return, are assumed to be met.

General Employees
Retiree Healthcare Plan – Scenario #2: Alternative 1
Current retirees: Unchanged, Current active members: $10 monthly subsidy per year of service with 0% COLA adjustment, New members: No longer eligible for retiree healthcare benefits

Year	Total Payroll	Employer Contribution Rate Baseline	Employer Contribution Rate Alternative	Employer Contribution Amount Baseline	Employer Contribution Amount Alternative	Difference
2011	36,097,881	4.89%	4.89%	1,765,186	1,765,186	0
2012	37,746,650	5.48%	1.07%	2,068,516	403,889	(1,664,627)
2013	39,433,753	5.53%	0.97%	2,180,687	382,507	(1,798,180)
2014	41,186,164	5.56%	1.08%	2,289,951	444,811	(1,845,140)
2015	42,964,448	5.51%	1.04%	2,367,341	446,830	(1,920,511)
2016	44,846,858	5.50%	0.91%	2,466,577	408,106	(2,058,471)
2017	46,786,432	5.50%	0.81%	2,573,254	378,970	(2,194,284)
2018	48,804,802	5.50%	0.73%	2,684,264	356,275	(2,327,989)
2019	50,950,523	5.50%	0.66%	2,802,279	336,273	(2,466,006)
2020	53,224,243	5.50%	0.60%	2,927,333	319,345	(2,607,988)
2021	55,593,018	5.50%	0.54%	3,057,616	300,202	(2,757,414)
2022	58,045,550	5.50%	0.49%	3,192,505	284,423	(2,908,082)
2023	60,604,067	5.50%	0.44%	3,333,224	266,658	(3,066,566)
2024	63,291,428	5.50%	0.40%	3,481,029	253,166	(3,227,863)
2025	66,074,873	5.49%	0.35%	3,627,511	231,262	(3,396,249)
2026	68,978,721	5.49%	0.32%	3,786,932	220,732	(3,566,200)
2027	71,926,022	5.49%	0.28%	3,948,739	201,393	(3,747,346)
2028	75,077,074	5.50%	0.25%	4,129,239	187,693	(3,941,546)
2029	78,376,136	5.50%	0.22%	4,310,687	172,427	(4,138,260)
2030	81,810,706	5.51%	0.19%	4,507,770	155,440	(4,352,330)
2031	85,329,891	5.52%	0.16%	4,710,210	136,528	(4,573,682)
2032	88,995,667	5.53%	0.14%	4,921,460	124,594	(4,796,866)
2033	92,791,307	5.08%	0.14%	4,713,798	129,908	(4,583,890)
2034	96,736,966	4.62%	0.15%	4,469,248	145,105	(4,324,143)
2035	100,856,958	4.23%	0.15%	4,266,249	151,285	(4,114,964)
2036	105,159,729	3.94%	0.15%	4,143,293	157,740	(3,985,553)
2037	109,628,908	3.72%	0.15%	4,078,195	164,443	(3,913,752)
2038	114,324,826	3.55%	0.14%	4,058,531	160,055	(3,898,476)
2039	119,223,689	3.43%	0.14%	4,089,373	166,913	(3,922,460)
2040	124,308,084	3.34%	0.13%	4,151,890	161,601	(3,990,289)
2041	129,611,004	3.27%	0.12%	4,238,280	155,533	(4,082,747)
Total				109,341,167	9,169,293	(100,171,874)

Results based upon total payroll (including new hire pay) and level percent of payroll amortization (period declines annually to an ultimate level of 5 years). All assumptions, including the 7.75% rate of return, are assumed to be met.

General Employees
Retiree Healthcare Plan - Scenario #2: Alternative 2
Current retirees: Unchanged, Current active members: $10 monthly subsidy per year of service with 1% COLA adjustment, New members: No longer eligible for retiree healthcare benefits

Year	Total Payroll	Employer Contribution Rate: Baseline	Employer Contribution Rate: Alternative	Employer Contribution Amount: Baseline	Employer Contribution Amount: Alternative	Difference
2011	36,097,881	4.89%	4.89%	1,765,186	1,765,186	0
2012	37,746,650	5.48%	1.16%	2,068,516	437,861	(1,630,655)
2013	39,433,753	5.53%	1.06%	2,180,687	417,998	(1,762,689)
2014	41,186,164	5.56%	1.17%	2,289,951	481,878	(1,808,073)
2015	42,964,448	5.51%	1.13%	2,367,341	485,498	(1,881,843)
2016	44,846,858	5.50%	1.00%	2,466,577	448,469	(2,018,108)
2017	46,786,432	5.50%	0.90%	2,573,254	421,078	(2,152,176)
2018	48,804,802	5.50%	0.81%	2,684,264	395,319	(2,288,945)
2019	50,950,523	5.50%	0.74%	2,802,279	377,034	(2,425,245)
2020	53,224,243	5.50%	0.68%	2,927,333	361,925	(2,565,408)
2021	55,593,018	5.50%	0.62%	3,057,616	344,677	(2,712,939)
2022	58,045,550	5.50%	0.56%	3,192,505	325,055	(2,867,450)
2023	60,604,067	5.50%	0.51%	3,333,224	309,081	(3,024,143)
2024	63,291,428	5.50%	0.47%	3,481,029	297,470	(3,183,559)
2025	66,074,873	5.49%	0.42%	3,627,511	277,514	(3,349,997)
2026	68,978,721	5.49%	0.38%	3,786,932	262,119	(3,524,813)
2027	71,926,022	5.49%	0.34%	3,948,739	244,548	(3,704,191)
2028	75,077,074	5.50%	0.31%	4,129,239	232,739	(3,896,500)
2029	78,376,136	5.50%	0.28%	4,310,687	219,453	(4,091,234)
2030	81,810,706	5.51%	0.25%	4,507,770	204,527	(4,303,243)
2031	85,329,891	5.52%	0.22%	4,710,210	187,726	(4,522,484)
2032	88,995,667	5.53%	0.19%	4,921,460	169,092	(4,752,368)
2033	92,791,307	5.08%	0.19%	4,713,798	176,303	(4,537,495)
2034	96,736,966	4.62%	0.18%	4,469,248	174,127	(4,295,121)
2035	100,856,958	4.23%	0.18%	4,266,249	181,543	(4,084,706)
2036	105,159,729	3.94%	0.17%	4,143,293	178,772	(3,964,521)
2037	109,628,908	3.72%	0.17%	4,078,195	186,369	(3,891,826)
2038	114,324,826	3.55%	0.16%	4,058,531	182,920	(3,875,611)
2039	119,223,689	3.43%	0.15%	4,089,373	178,836	(3,910,537)
2040	124,308,084	3.34%	0.14%	4,151,890	174,031	(3,977,859)
2041	129,611,004	3.27%	0.13%	4,238,280	168,494	(4,069,786)
Total				109,341,167	10,267,642	(99,073,525)

Results based upon total payroll (including new hire pay) and level percent of payroll amortization (period declines annually to an ultimate level of 5 years). All assumptions, including the 7.75% rate of return, are assumed to be met.

General Employees
Retiree Healthcare Plan - Scenario #2: Alternative 3
Current retirees: Unchanged, Current active members: $10 monthly subsidy per year of service with 2% COLA adjustment, New members: No longer eligible for retiree healthcare benefits

Year	Total Payroll	Employer Contribution Rate Baseline	Employer Contribution Rate Alternative	Employer Contribution Amount Baseline	Employer Contribution Amount Alternative	Difference
2011	36,097,881	4.89%	4.89%	1,765,186	1,765,186	0
2012	37,746,650	5.48%	1.27%	2,068,516	479,382	(1,589,134)
2013	39,433,753	5.53%	1.17%	2,180,687	461,375	(1,719,312)
2014	41,186,164	5.56%	1.28%	2,289,951	527,183	(1,762,768)
2015	42,964,448	5.51%	1.23%	2,367,341	528,463	(1,838,878)
2016	44,846,858	5.50%	1.10%	2,466,577	493,315	(1,973,262)
2017	46,786,432	5.50%	0.99%	2,573,254	463,186	(2,110,068)
2018	48,804,802	5.50%	0.91%	2,684,264	444,124	(2,240,140)
2019	50,950,523	5.50%	0.83%	2,802,279	422,889	(2,379,390)
2020	53,224,243	5.50%	0.77%	2,927,333	409,827	(2,517,506)
2021	55,593,018	5.50%	0.71%	3,057,616	394,710	(2,662,906)
2022	58,045,550	5.50%	0.65%	3,192,505	377,296	(2,815,209)
2023	60,604,067	5.50%	0.60%	3,333,224	363,624	(2,969,600)
2024	63,291,428	5.50%	0.55%	3,481,029	348,103	(3,132,926)
2025	66,074,873	5.49%	0.51%	3,627,511	336,982	(3,290,529)
2026	68,978,721	5.49%	0.46%	3,786,932	317,302	(3,469,630)
2027	71,926,022	5.49%	0.42%	3,948,739	302,089	(3,646,650)
2028	75,077,074	5.50%	0.39%	4,129,239	292,801	(3,836,438)
2029	78,376,136	5.50%	0.35%	4,310,687	274,316	(4,036,371)
2030	81,810,706	5.51%	0.32%	4,507,770	261,794	(4,245,976)
2031	85,329,891	5.52%	0.29%	4,710,210	247,457	(4,462,753)
2032	88,995,667	5.53%	0.26%	4,921,460	231,389	(4,690,071)
2033	92,791,307	5.08%	0.24%	4,713,798	222,699	(4,491,099)
2034	96,736,966	4.62%	0.23%	4,469,248	222,495	(4,246,753)
2035	100,856,958	4.23%	0.22%	4,266,249	221,885	(4,044,364)
2036	105,159,729	3.94%	0.20%	4,143,293	210,319	(3,932,974)
2037	109,628,908	3.72%	0.19%	4,078,195	208,295	(3,869,900)
2038	114,324,826	3.55%	0.17%	4,058,531	194,352	(3,864,179)
2039	119,223,689	3.43%	0.16%	4,089,373	190,758	(3,898,615)
2040	124,308,084	3.34%	0.15%	4,151,890	186,462	(3,965,428)
2041	129,611,004	3.27%	0.13%	4,238,280	168,494	(4,069,786)
Total				109,341,167	11,568,552	(97,772,615)

Results based upon total payroll (including new hire pay) and level percent of payroll amortization (period declines annually to an ultimate level of 5 years). All assumptions, including the 7.75% rate of return, are assumed to be met.

General Employees
Retiree Healthcare Plan - Scenario #2: Alternative 4
Current retirees: Unchanged, Current active members: $10 monthly subsidy per year of service with 3% COLA adjustment, New members: No longer eligible for retiree healthcare benefits

Year	Total Payroll	Employer Contribution Rate Baseline	Employer Contribution Rate Alternative	Employer Contribution Amount Baseline	Employer Contribution Amount Alternative	Difference
2011	36,097,881	4.89%	4.89%	1,765,186	1,765,186	0
2012	37,746,650	5.48%	1.39%	2,068,516	524,678	(1,543,838)
2013	39,433,753	5.53%	1.30%	2,180,687	512,639	(1,668,048)
2014	41,186,164	5.56%	1.40%	2,289,951	576,606	(1,713,345)
2015	42,964,448	5.51%	1.35%	2,367,341	580,020	(1,787,321)
2016	44,846,858	5.50%	1.21%	2,466,577	542,647	(1,923,930)
2017	46,786,432	5.50%	1.11%	2,573,254	519,329	(2,053,925)
2018	48,804,802	5.50%	1.02%	2,684,264	497,809	(2,186,455)
2019	50,950,523	5.50%	0.94%	2,802,279	478,935	(2,323,344)
2020	53,224,243	5.50%	0.88%	2,927,333	468,373	(2,458,960)
2021	55,593,018	5.50%	0.81%	3,057,616	450,303	(2,607,313)
2022	58,045,550	5.50%	0.75%	3,192,505	435,342	(2,757,163)
2023	60,604,067	5.50%	0.70%	3,333,224	424,228	(2,908,996)
2024	63,291,428	5.50%	0.65%	3,481,029	411,394	(3,069,635)
2025	66,074,873	5.49%	0.60%	3,627,511	396,449	(3,231,062)
2026	68,978,721	5.49%	0.55%	3,786,932	379,383	(3,407,549)
2027	71,926,022	5.49%	0.51%	3,948,739	366,823	(3,581,916)
2028	75,077,074	5.50%	0.47%	4,129,239	352,862	(3,776,377)
2029	78,376,136	5.50%	0.44%	4,310,687	344,855	(3,965,832)
2030	81,810,706	5.51%	0.41%	4,507,770	335,424	(4,172,346)
2031	85,329,891	5.52%	0.37%	4,710,210	315,721	(4,394,489)
2032	88,995,667	5.53%	0.34%	4,921,460	302,585	(4,618,875)
2033	92,791,307	5.08%	0.31%	4,713,798	287,653	(4,426,145)
2034	96,736,966	4.62%	0.28%	4,469,248	270,864	(4,198,384)
2035	100,856,958	4.23%	0.26%	4,266,249	262,228	(4,004,021)
2036	105,159,729	3.94%	0.23%	4,143,293	241,867	(3,901,426)
2037	109,628,908	3.72%	0.21%	4,078,195	230,221	(3,847,974)
2038	114,324,826	3.55%	0.19%	4,058,531	217,217	(3,841,314)
2039	119,223,689	3.43%	0.17%	4,089,373	202,680	(3,886,693)
2040	124,308,084	3.34%	0.16%	4,151,890	198,893	(3,952,997)
2041	129,611,004	3.27%	0.14%	4,238,280	181,455	(4,056,825)
Total				109,341,167	13,074,669	(96,266,498)

Results based upon total payroll (including new hire pay) and level percent of payroll amortization (period declines annually to an ultimate level of 5 years). All assumptions, including the 7.75% rate of return, are assumed to be met.

General Employees
Retiree Healthcare Plan - Scenario #2: Alternative 5
Current retirees: Unchanged, Current active members: $20 monthly subsidy per year of service with 0% COLA adjustment, New members: No longer eligible for retiree healthcare benefits

Year	Total Payroll	Employer Contribution Rate Baseline	Employer Contribution Rate Alternative	Employer Contribution Amount Baseline	Employer Contribution Amount Alternative	Difference
2011	36,097,881	4.89%	4.89%	1,765,186	1,765,186	0
2012	37,746,650	5.48%	1.86%	2,068,516	702,088	(1,366,428)
2013	39,433,753	5.53%	1.79%	2,180,687	705,864	(1,474,823)
2014	41,186,164	5.56%	1.89%	2,289,951	778,418	(1,511,533)
2015	42,964,448	5.51%	1.79%	2,367,341	769,064	(1,598,277)
2016	44,846,858	5.50%	1.65%	2,466,577	739,973	(1,726,604)
2017	46,786,432	5.50%	1.53%	2,573,254	715,832	(1,857,422)
2018	48,804,802	5.50%	1.43%	2,684,264	697,909	(1,986,355)
2019	50,950,523	5.50%	1.34%	2,802,279	682,737	(2,119,542)
2020	53,224,243	5.50%	1.27%	2,927,333	675,948	(2,251,385)
2021	55,593,018	5.50%	1.19%	3,057,616	661,557	(2,396,059)
2022	58,045,550	5.50%	1.12%	3,192,505	650,110	(2,542,395)
2023	60,604,067	5.50%	1.05%	3,333,224	636,343	(2,696,881)
2024	63,291,428	5.50%	0.99%	3,481,029	626,585	(2,854,444)
2025	66,074,873	5.49%	0.94%	3,627,511	621,104	(3,006,407)
2026	68,978,721	5.49%	0.88%	3,786,932	607,013	(3,179,919)
2027	71,926,022	5.49%	0.83%	3,948,739	596,986	(3,351,753)
2028	75,077,074	5.50%	0.79%	4,129,239	593,109	(3,536,130)
2029	78,376,136	5.50%	0.75%	4,310,687	587,821	(3,722,866)
2030	81,810,706	5.51%	0.71%	4,507,770	580,856	(3,926,914)
2031	85,329,891	5.52%	0.67%	4,710,210	571,710	(4,138,500)
2032	88,995,667	5.53%	0.64%	4,921,460	569,572	(4,351,888)
2033	92,791,307	5.08%	0.55%	4,713,798	510,352	(4,203,446)
2034	96,736,966	4.62%	0.46%	4,469,248	444,990	(4,024,258)
2035	100,856,958	4.23%	0.39%	4,266,249	393,342	(3,872,907)
2036	105,159,729	3.94%	0.33%	4,143,293	347,027	(3,796,266)
2037	109,628,908	3.72%	0.28%	4,078,195	306,961	(3,771,234)
2038	114,324,826	3.55%	0.24%	4,058,531	274,380	(3,784,151)
2039	119,223,689	3.43%	0.21%	4,089,373	250,370	(3,839,003)
2040	124,308,084	3.34%	0.18%	4,151,890	223,755	(3,928,135)
2041	129,611,004	3.27%	0.16%	4,238,280	207,378	(4,030,902)
Total				109,341,167	18,494,340	(90,846,827)

Results based upon total payroll (including new hire pay) and level percent of payroll amortization (period declines annually to an ultimate level of 5 years). All assumptions, including the 7.75% rate of return, are assumed to be met.

General Employees
Retiree Healthcare Plan - Scenario #2: Alternative 6
Current retirees: Unchanged, Current active members: $20 monthly subsidy per year of service with 1% COLA adjustment, New members: No longer eligible for retiree healthcare benefits

	Total	Employer Contribution Rate		Employer Contribution Amount		
Year	Payroll	Baseline	Alternative	Baseline	Alternative	Difference
2011	36,097,881	4.89%	4.89%	1,765,186	1,765,186	0
2012	37,746,650	5.48%	2.04%	2,068,516	770,032	(1,298,484)
2013	39,433,753	5.53%	1.98%	2,180,687	780,788	(1,399,899)
2014	41,186,164	5.56%	2.07%	2,289,951	852,554	(1,437,397)
2015	42,964,448	5.51%	1.97%	2,367,341	846,400	(1,520,941)
2016	44,846,858	5.50%	1.82%	2,466,577	816,213	(1,650,364)
2017	46,786,432	5.50%	1.70%	2,573,254	795,369	(1,777,885)
2018	48,804,802	5.50%	1.59%	2,684,264	775,996	(1,908,268)
2019	50,950,523	5.50%	1.50%	2,802,279	764,258	(2,038,021)
2020	53,224,243	5.50%	1.42%	2,927,333	755,784	(2,171,549)
2021	55,593,018	5.50%	1.34%	3,057,616	744,946	(2,312,670)
2022	58,045,550	5.50%	1.27%	3,192,505	737,178	(2,455,327)
2023	60,604,067	5.50%	1.20%	3,333,224	727,249	(2,605,975)
2024	63,291,428	5.50%	1.14%	3,481,029	721,522	(2,759,507)
2025	66,074,873	5.49%	1.08%	3,627,511	713,609	(2,913,902)
2026	68,978,721	5.49%	1.02%	3,786,932	703,583	(3,083,349)
2027	71,926,022	5.49%	0.97%	3,948,739	697,682	(3,251,057)
2028	75,077,074	5.50%	0.92%	4,129,239	690,709	(3,438,530)
2029	78,376,136	5.50%	0.87%	4,310,687	681,872	(3,628,815)
2030	81,810,706	5.51%	0.83%	4,507,770	679,029	(3,828,741)
2031	85,329,891	5.52%	0.79%	4,710,210	674,106	(4,036,104)
2032	88,995,667	5.53%	0.75%	4,921,460	667,468	(4,253,992)
2033	92,791,307	5.08%	0.64%	4,713,798	593,864	(4,119,934)
2034	96,736,966	4.62%	0.54%	4,469,248	522,380	(3,946,868)
2035	100,856,958	4.23%	0.45%	4,266,249	453,856	(3,812,393)
2036	105,159,729	3.94%	0.38%	4,143,293	399,607	(3,743,686)
2037	109,628,908	3.72%	0.32%	4,078,195	350,813	(3,727,382)
2038	114,324,826	3.55%	0.27%	4,058,531	308,677	(3,749,854)
2039	119,223,689	3.43%	0.23%	4,089,373	274,214	(3,815,159)
2040	124,308,084	3.34%	0.20%	4,151,890	248,616	(3,903,274)
2041	129,611,004	3.27%	0.17%	4,238,280	220,339	(4,017,941)
Total				109,341,167	20,733,899	(88,607,268)

Results based upon total payroll (including new hire pay) and level percent of payroll amortization (period declines annually to an ultimate level of 5 years). All assumptions, including the 7.75% rate of return, are assumed to be met.

General Employees
Retiree Healthcare Plan - Scenario #2: Alternative 7
Current retirees: Unchanged, Current active members: $20 monthly subsidy per year of service with 2% COLA adjustment, New members: No longer eligible for retiree healthcare benefits

Year	Total Payroll	Employer Contribution Rate Baseline	Employer Contribution Rate Alternative	Employer Contribution Amount Baseline	Employer Contribution Amount Alternative	Difference
2011	36,097,881	4.89%	4.89%	1,765,186	1,765,186	0
2012	37,746,650	5.48%	2.24%	2,068,516	845,525	(1,222,991)
2013	39,433,753	5.53%	2.19%	2,180,687	863,599	(1,317,088)
2014	41,186,164	5.56%	2.28%	2,289,951	939,045	(1,350,906)
2015	42,964,448	5.51%	2.17%	2,367,341	932,329	(1,435,012)
2016	44,846,858	5.50%	2.02%	2,466,577	905,907	(1,560,670)
2017	46,786,432	5.50%	1.89%	2,573,254	884,264	(1,688,990)
2018	48,804,802	5.50%	1.79%	2,684,264	873,606	(1,810,658)
2019	50,950,523	5.50%	1.69%	2,802,279	861,064	(1,941,215)
2020	53,224,243	5.50%	1.61%	2,927,333	856,910	(2,070,423)
2021	55,593,018	5.50%	1.52%	3,057,616	845,014	(2,212,602)
2022	58,045,550	5.50%	1.44%	3,192,505	835,856	(2,356,649)
2023	60,604,067	5.50%	1.37%	3,333,224	830,276	(2,502,948)
2024	63,291,428	5.50%	1.30%	3,481,029	822,789	(2,658,240)
2025	66,074,873	5.49%	1.24%	3,627,511	819,328	(2,808,183)
2026	68,978,721	5.49%	1.18%	3,786,932	813,949	(2,972,983)
2027	71,926,022	5.49%	1.12%	3,948,739	805,571	(3,143,168)
2028	75,077,074	5.50%	1.07%	4,129,239	803,325	(3,325,914)
2029	78,376,136	5.50%	1.02%	4,310,687	799,437	(3,511,250)
2030	81,810,706	5.51%	0.98%	4,507,770	801,745	(3,706,025)
2031	85,329,891	5.52%	0.93%	4,710,210	793,568	(3,916,642)
2032	88,995,667	5.53%	0.89%	4,921,460	792,061	(4,129,399)
2033	92,791,307	5.08%	0.76%	4,713,798	705,214	(4,008,584)
2034	96,736,966	4.62%	0.63%	4,469,248	609,443	(3,859,805)
2035	100,856,958	4.23%	0.52%	4,266,249	524,456	(3,741,793)
2036	105,159,729	3.94%	0.43%	4,143,293	452,187	(3,691,106)
2037	109,628,908	3.72%	0.36%	4,078,195	394,664	(3,683,531)
2038	114,324,826	3.55%	0.30%	4,058,531	342,974	(3,715,557)
2039	119,223,689	3.43%	0.26%	4,089,373	309,982	(3,779,391)
2040	124,308,084	3.34%	0.22%	4,151,890	273,478	(3,878,412)
2041	129,611,004	3.27%	0.19%	4,238,280	246,261	(3,992,019)
Total				109,341,167	23,349,013	(85,992,154)

Results based upon total payroll (including new hire pay) and level percent of payroll amortization (period declines annually to an ultimate level of 5 years). All assumptions, including the 7.75% rate of return, are assumed to be met.

General Employees

Retiree Healthcare Plan - Scenario #2: Alternative 8

Current retirees: Unchanged, Current active members: $20 monthly subsidy per year of service with 3% COLA adjustment, New members: No longer eligible for retiree healthcare benefits

	Total	Employer Contribution Rate		Employer Contribution Amount		
Year	Payroll	Baseline	Alternative	Baseline	Alternative	Difference
2011	36,097,881	4.89%	4.89%	1,765,186	1,765,186	0
2012	37,746,650	5.48%	2.49%	2,068,516	939,892	(1,128,624)
2013	39,433,753	5.53%	2.44%	2,180,687	962,184	(1,218,503)
2014	41,186,164	5.56%	2.53%	2,289,951	1,042,010	(1,247,941)
2015	42,964,448	5.51%	2.41%	2,367,341	1,035,443	(1,331,898)
2016	44,846,858	5.50%	2.25%	2,466,577	1,009,054	(1,457,523)
2017	46,786,432	5.50%	2.12%	2,573,254	991,872	(1,581,382)
2018	48,804,802	5.50%	2.01%	2,684,264	980,977	(1,703,287)
2019	50,950,523	5.50%	1.91%	2,802,279	973,155	(1,829,124)
2020	53,224,243	5.50%	1.82%	2,927,333	968,681	(1,958,652)
2021	55,593,018	5.50%	1.73%	3,057,616	961,759	(2,095,857)
2022	58,045,550	5.50%	1.65%	3,192,505	957,752	(2,234,753)
2023	60,604,067	5.50%	1.57%	3,333,224	951,484	(2,381,740)
2024	63,291,428	5.50%	1.50%	3,481,029	949,371	(2,531,658)
2025	66,074,873	5.49%	1.43%	3,627,511	944,871	(2,682,640)
2026	68,978,721	5.49%	1.36%	3,786,932	938,111	(2,848,821)
2027	71,926,022	5.49%	1.30%	3,948,739	935,038	(3,013,701)
2028	75,077,074	5.50%	1.24%	4,129,239	930,956	(3,198,283)
2029	78,376,136	5.50%	1.19%	4,310,687	932,676	(3,378,011)
2030	81,810,706	5.51%	1.14%	4,507,770	932,642	(3,575,128)
2031	85,329,891	5.52%	1.09%	4,710,210	930,096	(3,780,114)
2032	88,995,667	5.53%	1.04%	4,921,460	925,555	(3,995,905)
2033	92,791,307	5.08%	0.89%	4,713,798	825,843	(3,887,955)
2034	96,736,966	4.62%	0.73%	4,469,248	706,180	(3,763,068)
2035	100,856,958	4.23%	0.60%	4,266,249	605,142	(3,661,107)
2036	105,159,729	3.94%	0.50%	4,143,293	525,799	(3,617,494)
2037	109,628,908	3.72%	0.41%	4,078,195	449,479	(3,628,716)
2038	114,324,826	3.55%	0.34%	4,058,531	388,704	(3,669,827)
2039	119,223,689	3.43%	0.29%	4,089,373	345,749	(3,743,624)
2040	124,308,084	3.34%	0.24%	4,151,890	298,339	(3,853,551)
2041	129,611,004	3.27%	0.20%	4,238,280	259,222	(3,979,058)
Total				109,341,167	26,363,222	(82,977,945)

Results based upon total payroll (including new hire pay) and level percent of payroll amortization (period declines annually to an ultimate level of 5 years). All assumptions, including the 7.75% rate of return, are assumed to be met.

General Employees
Retiree Healthcare Plan - Scenario #2: Alternative 9
Current retirees: Unchanged, Current active members: $30 monthly subsidy per year of service with 0% COLA adjustment, New members: No longer eligible for retiree healthcare benefits

	Total	Employer Contribution Rate		Employer Contribution Amount		
Year	Payroll	Baseline	Alternative	Baseline	Alternative	Difference
2011	36,097,881	4.89%	4.89%	1,765,186	1,765,186	0
2012	37,746,650	5.48%	2.65%	2,068,516	1,000,286	(1,068,230)
2013	39,433,753	5.53%	2.61%	2,180,687	1,029,221	(1,151,466)
2014	41,186,164	5.56%	2.70%	2,289,951	1,112,026	(1,177,925)
2015	42,964,448	5.51%	2.55%	2,367,341	1,095,593	(1,271,748)
2016	44,846,858	5.50%	2.38%	2,466,577	1,067,355	(1,399,222)
2017	46,786,432	5.50%	2.25%	2,573,254	1,052,695	(1,520,559)
2018	48,804,802	5.50%	2.13%	2,684,264	1,039,542	(1,644,722)
2019	50,950,523	5.50%	2.03%	2,802,279	1,034,296	(1,767,983)
2020	53,224,243	5.50%	1.93%	2,927,333	1,027,228	(1,900,105)
2021	55,593,018	5.50%	1.84%	3,057,616	1,022,912	(2,034,704)
2022	58,045,550	5.50%	1.75%	3,192,505	1,015,797	(2,176,708)
2023	60,604,067	5.50%	1.67%	3,333,224	1,012,088	(2,321,136)
2024	63,291,428	5.50%	1.59%	3,481,029	1,006,334	(2,474,695)
2025	66,074,873	5.49%	1.52%	3,627,511	1,004,338	(2,623,173)
2026	68,978,721	5.49%	1.45%	3,786,932	1,000,191	(2,786,741)
2027	71,926,022	5.49%	1.39%	3,948,739	999,772	(2,948,967)
2028	75,077,074	5.50%	1.33%	4,129,239	998,525	(3,130,714)
2029	78,376,136	5.50%	1.28%	4,310,687	1,003,215	(3,307,472)
2030	81,810,706	5.51%	1.23%	4,507,770	1,006,272	(3,501,498)
2031	85,329,891	5.52%	1.18%	4,710,210	1,006,893	(3,703,317)
2032	88,995,667	5.53%	1.14%	4,921,460	1,014,551	(3,906,909)
2033	92,791,307	5.08%	0.96%	4,713,798	890,797	(3,823,001)
2034	96,736,966	4.62%	0.78%	4,469,248	754,548	(3,714,700)
2035	100,856,958	4.23%	0.63%	4,266,249	635,399	(3,630,850)
2036	105,159,729	3.94%	0.51%	4,143,293	536,315	(3,606,978)
2037	109,628,908	3.72%	0.42%	4,078,195	460,441	(3,617,754)
2038	114,324,826	3.55%	0.34%	4,058,531	388,704	(3,669,827)
2039	119,223,689	3.43%	0.28%	4,089,373	333,826	(3,755,547)
2040	124,308,084	3.34%	0.24%	4,151,890	298,339	(3,853,551)
2041	129,611,004	3.27%	0.20%	4,238,280	259,222	(3,979,058)
Total				109,341,167	27,871,907	(81,469,260)

Results based upon total payroll (including new hire pay) and level percent of payroll amortization (period declines annually to an ultimate level of 5 years). All assumptions, including the 7.75% rate of return, are assumed to be met.

General Employees
Retiree Healthcare Plan - Scenario #2: Alternative 10
Current retirees: Unchanged, Current active members: $30 monthly subsidy per year of service with 1% COLA adjustment, New members: No longer eligible for retiree healthcare benefits

Year	Total Payroll	Employer Contribution Rate Baseline	Employer Contribution Rate Alternative	Employer Contribution Amount Baseline	Employer Contribution Amount Alternative	Difference
2011	36,097,881	4.89%	4.89%	1,765,186	1,765,186	0
2012	37,746,650	5.48%	2.91%	2,068,516	1,098,428	(970,088)
2013	39,433,753	5.53%	2.89%	2,180,687	1,139,635	(1,041,052)
2014	41,186,164	5.56%	2.97%	2,289,951	1,223,229	(1,066,722)
2015	42,964,448	5.51%	2.81%	2,367,341	1,207,301	(1,160,040)
2016	44,846,858	5.50%	2.64%	2,466,577	1,183,957	(1,282,620)
2017	46,786,432	5.50%	2.50%	2,573,254	1,169,661	(1,403,593)
2018	48,804,802	5.50%	2.38%	2,684,264	1,161,554	(1,522,710)
2019	50,950,523	5.50%	2.27%	2,802,279	1,156,577	(1,645,702)
2020	53,224,243	5.50%	2.17%	2,927,333	1,154,966	(1,772,367)
2021	55,593,018	5.50%	2.07%	3,057,616	1,150,775	(1,906,841)
2022	58,045,550	5.50%	1.98%	3,192,505	1,149,302	(2,043,203)
2023	60,604,067	5.50%	1.89%	3,333,224	1,145,417	(2,187,807)
2024	63,291,428	5.50%	1.81%	3,481,029	1,145,575	(2,335,454)
2025	66,074,873	5.49%	1.73%	3,627,511	1,143,095	(2,484,416)
2026	68,978,721	5.49%	1.65%	3,786,932	1,138,149	(2,648,783)
2027	71,926,022	5.49%	1.59%	3,948,739	1,143,624	(2,805,115)
2028	75,077,074	5.50%	1.53%	4,129,239	1,148,679	(2,980,560)
2029	78,376,136	5.50%	1.47%	4,310,687	1,152,129	(3,158,558)
2030	81,810,706	5.51%	1.42%	4,507,770	1,161,712	(3,346,058)
2031	85,329,891	5.52%	1.36%	4,710,210	1,160,487	(3,549,723)
2032	88,995,667	5.53%	1.31%	4,921,460	1,165,843	(3,755,617)
2033	92,791,307	5.08%	1.10%	4,713,798	1,020,704	(3,693,094)
2034	96,736,966	4.62%	0.89%	4,469,248	860,959	(3,608,289)
2035	100,856,958	4.23%	0.72%	4,266,249	726,170	(3,540,079)
2036	105,159,729	3.94%	0.58%	4,143,293	609,926	(3,533,367)
2037	109,628,908	3.72%	0.47%	4,078,195	515,256	(3,562,939)
2038	114,324,826	3.55%	0.38%	4,058,531	434,434	(3,624,097)
2039	119,223,689	3.43%	0.31%	4,089,373	369,593	(3,719,780)
2040	124,308,084	3.34%	0.26%	4,151,890	323,201	(3,828,689)
2041	129,611,004	3.27%	0.22%	4,238,280	285,144	(3,953,136)
Total				109,341,167	31,210,668	(78,130,499)

Results based upon total payroll (including new hire pay) and level percent of payroll amortization (period declines annually to an ultimate level of 5 years). All assumptions, including the 7.75% rate of return, are assumed to be met.

General Employees
Retiree Healthcare Plan - Scenario #2: Alternative 11
Current retirees: Unchanged, Current active members: $30 monthly subsidy per year of service with 2% COLA adjustment, New members: No longer eligible for retiree healthcare benefits

	Total	Employer Contribution Rate		Employer Contribution Amount		
Year	Payroll	Baseline	Alternative	Baseline	Alternative	Difference
2011	36,097,881	4.89%	4.89%	1,765,186	1,765,186	0
2012	37,746,650	5.48%	3.22%	2,068,516	1,215,442	(853,074)
2013	39,433,753	5.53%	3.21%	2,180,687	1,265,823	(914,864)
2014	41,186,164	5.56%	3.29%	2,289,951	1,355,025	(934,926)
2015	42,964,448	5.51%	3.11%	2,367,341	1,336,194	(1,031,147)
2016	44,846,858	5.50%	2.94%	2,466,577	1,318,498	(1,148,079)
2017	46,786,432	5.50%	2.79%	2,573,254	1,305,341	(1,267,913)
2018	48,804,802	5.50%	2.67%	2,684,264	1,303,088	(1,381,176)
2019	50,950,523	5.50%	2.55%	2,802,279	1,299,238	(1,503,041)
2020	53,224,243	5.50%	2.44%	2,927,333	1,298,672	(1,628,661)
2021	55,593,018	5.50%	2.34%	3,057,616	1,300,877	(1,756,739)
2022	58,045,550	5.50%	2.24%	3,192,505	1,300,220	(1,892,285)
2023	60,604,067	5.50%	2.14%	3,333,224	1,296,927	(2,036,297)
2024	63,291,428	5.50%	2.06%	3,481,029	1,303,803	(2,177,226)
2025	66,074,873	5.49%	1.97%	3,627,511	1,301,675	(2,325,836)
2026	68,978,721	5.49%	1.89%	3,786,932	1,303,698	(2,483,234)
2027	71,926,022	5.49%	1.82%	3,948,739	1,309,054	(2,639,685)
2028	75,077,074	5.50%	1.75%	4,129,239	1,313,849	(2,815,390)
2029	78,376,136	5.50%	1.69%	4,310,687	1,324,557	(2,986,130)
2030	81,810,706	5.51%	1.63%	4,507,770	1,333,515	(3,174,255)
2031	85,329,891	5.52%	1.57%	4,710,210	1,339,679	(3,370,531)
2032	88,995,667	5.53%	1.51%	4,921,460	1,343,835	(3,577,625)
2033	92,791,307	5.08%	1.27%	4,713,798	1,178,450	(3,535,348)
2034	96,736,966	4.62%	1.02%	4,469,248	986,717	(3,482,531)
2035	100,856,958	4.23%	0.82%	4,266,249	827,027	(3,439,222)
2036	105,159,729	3.94%	0.66%	4,143,293	694,054	(3,449,239)
2037	109,628,908	3.72%	0.53%	4,078,195	581,033	(3,497,162)
2038	114,324,826	3.55%	0.43%	4,058,531	491,597	(3,566,934)
2039	119,223,689	3.43%	0.35%	4,089,373	417,283	(3,672,090)
2040	124,308,084	3.34%	0.29%	4,151,890	360,493	(3,791,397)
2041	129,611,004	3.27%	0.24%	4,238,280	311,066	(3,927,214)
Total				109,341,167	35,081,916	(74,259,251)

Results based upon total payroll (including new hire pay) and level percent of payroll amortization (period declines annually to an ultimate level of 5 years). All assumptions, including the 7.75% rate of return, are assumed to be met.

General Employees
Retiree Healthcare Plan - Scenario #2: Alternative 12
Current retirees: Unchanged, Current active members: $30 monthly subsidy per year of service with 3% COLA adjustment, New members: No longer eligible for retiree healthcare benefits

	Total	Employer Contribution Rate		Employer Contribution Amount		
Year	Payroll	Baseline	Alternative	Baseline	Alternative	Difference
2011	36,097,881	4.89%	4.89%	1,765,186	1,765,186	0
2012	37,746,650	5.48%	3.59%	2,068,516	1,355,105	(713,411)
2013	39,433,753	5.53%	3.59%	2,180,687	1,415,672	(765,015)
2014	41,186,164	5.56%	3.66%	2,289,951	1,507,414	(782,537)
2015	42,964,448	5.51%	3.47%	2,367,341	1,490,866	(876,475)
2016	44,846,858	5.50%	3.29%	2,466,577	1,475,462	(991,115)
2017	46,786,432	5.50%	3.14%	2,573,254	1,469,094	(1,104,160)
2018	48,804,802	5.50%	3.00%	2,684,264	1,464,144	(1,220,120)
2019	50,950,523	5.50%	2.88%	2,802,279	1,467,375	(1,334,904)
2020	53,224,243	5.50%	2.77%	2,927,333	1,474,312	(1,453,021)
2021	55,593,018	5.50%	2.65%	3,057,616	1,473,215	(1,584,401)
2022	58,045,550	5.50%	2.55%	3,192,505	1,480,162	(1,712,343)
2023	60,604,067	5.50%	2.44%	3,333,224	1,478,739	(1,854,485)
2024	63,291,428	5.50%	2.35%	3,481,029	1,487,349	(1,993,680)
2025	66,074,873	5.49%	2.26%	3,627,511	1,493,292	(2,134,219)
2026	68,978,721	5.49%	2.17%	3,786,932	1,496,838	(2,290,094)
2027	71,926,022	5.49%	2.09%	3,948,739	1,503,254	(2,445,485)
2028	75,077,074	5.50%	2.01%	4,129,239	1,509,049	(2,620,190)
2029	78,376,136	5.50%	1.95%	4,310,687	1,528,335	(2,782,352)
2030	81,810,706	5.51%	1.88%	4,507,770	1,538,041	(2,969,729)
2031	85,329,891	5.52%	1.81%	4,710,210	1,544,471	(3,165,739)
2032	88,995,667	5.53%	1.75%	4,921,460	1,557,424	(3,364,036)
2033	92,791,307	5.08%	1.47%	4,713,798	1,364,032	(3,349,766)
2034	96,736,966	4.62%	1.18%	4,469,248	1,141,496	(3,327,752)
2035	100,856,958	4.23%	0.95%	4,266,249	958,141	(3,308,108)
2036	105,159,729	3.94%	0.76%	4,143,293	799,214	(3,344,079)
2037	109,628,908	3.72%	0.61%	4,078,195	668,736	(3,409,459)
2038	114,324,826	3.55%	0.49%	4,058,531	560,192	(3,498,339)
2039	119,223,689	3.43%	0.40%	4,089,373	476,895	(3,612,478)
2040	124,308,084	3.34%	0.32%	4,151,890	397,786	(3,754,104)
2041	129,611,004	3.27%	0.26%	4,238,280	336,989	(3,901,291)
Total				109,341,167	39,678,280	(69,662,887)

Results based upon total payroll (including new hire pay) and level percent of payroll amortization (period declines annually to an ultimate level of 5 years). All assumptions, including the 7.75% rate of return, are assumed to be met.

Fire Employees
Retiree Healthcare Plan - Scenario #2: Alternative 1
Current retirees: Unchanged, Current active members: $10 monthly subsidy per year of service with 0% COLA adjustment, New members: No longer eligible for retiree healthcare benefits

	Total	Employer Contribution Rate		Employer Contribution Amount		
Year	Payroll	Baseline	Alternative	Baseline	Alternative	Difference
2011	10,918,494	8.35%	8.35%	911,694	911,694	0
2012	11,440,536	9.91%	2.02%	1,133,757	231,099	(902,658)
2013	11,889,353	10.10%	1.74%	1,200,825	206,875	(993,950)
2014	12,427,714	10.23%	1.88%	1,271,355	233,641	(1,037,714)
2015	12,899,446	10.22%	1.85%	1,318,323	238,640	(1,079,683)
2016	13,412,830	10.26%	1.77%	1,376,156	237,407	(1,138,749)
2017	13,970,599	10.33%	1.73%	1,443,163	241,691	(1,201,472)
2018	14,440,597	10.39%	1.69%	1,500,378	244,046	(1,256,332)
2019	14,952,771	10.48%	1.65%	1,567,050	246,721	(1,320,329)
2020	15,547,183	10.56%	1.63%	1,641,783	253,419	(1,388,364)
2021	16,144,392	10.63%	1.61%	1,716,149	259,925	(1,456,224)
2022	16,728,917	10.67%	1.60%	1,784,975	267,663	(1,517,312)
2023	17,244,896	10.73%	1.58%	1,850,377	272,469	(1,577,908)
2024	17,857,095	10.82%	1.56%	1,932,138	278,571	(1,653,567)
2025	18,361,519	10.95%	1.55%	2,010,586	284,604	(1,725,982)
2026	18,984,387	11.07%	1.54%	2,101,572	292,360	(1,809,212)
2027	19,674,029	11.13%	1.53%	2,189,719	301,013	(1,888,706)
2028	20,513,734	11.18%	1.51%	2,293,435	309,757	(1,983,678)
2029	21,361,277	11.22%	1.50%	2,396,735	320,419	(2,076,316)
2030	22,084,908	11.23%	1.48%	2,480,135	326,857	(2,153,278)
2031	22,990,840	11.26%	1.44%	2,588,769	331,068	(2,257,701)
2032	23,877,595	11.32%	1.40%	2,702,944	334,286	(2,368,658)
2033	24,818,767	10.40%	1.23%	2,581,152	305,271	(2,275,881)
2034	25,822,598	9.43%	1.06%	2,435,071	273,720	(2,161,351)
2035	26,897,628	8.62%	0.91%	2,318,576	244,768	(2,073,808)
2036	28,082,761	7.98%	0.79%	2,241,004	221,854	(2,019,150)
2037	29,289,669	7.51%	0.69%	2,199,654	202,099	(1,997,555)
2038	30,599,956	7.15%	0.60%	2,187,897	183,600	(2,004,297)
2039	32,022,057	6.88%	0.53%	2,203,118	169,717	(2,033,401)
2040	33,507,348	6.67%	0.48%	2,234,940	160,835	(2,074,105)
2041	35,063,014	6.53%	0.43%	2,289,615	150,771	(2,138,844)
Total				60,103,045	8,536,860	(51,566,185)

Results based upon total payroll (including new hire pay) and level percent of payroll amortization (period declines annually to an ultimate level of 5 years). All assumptions, including the 7.75% rate of return, are assumed to be met.

Fire Employees
Retiree Healthcare Plan - Scenario #2: Alternative 2
Current retirees: Unchanged, Current active members: $10 monthly subsidy per year of service with 1% COLA adjustment, New members: No longer eligible for retiree healthcare benefits

	Total	Employer Contribution Rate		Employer Contribution Amount		
Year	Payroll	Baseline	Alternative	Baseline	Alternative	Difference
2011	10,918,494	8.35%	8.35%	911,694	911,694	0
2012	11,440,536	9.91%	2.20%	1,133,757	251,692	(882,065)
2013	11,889,353	10.10%	1.93%	1,200,825	229,465	(971,360)
2014	12,427,714	10.23%	2.07%	1,271,355	257,254	(1,014,101)
2015	12,899,446	10.22%	2.04%	1,318,323	263,149	(1,055,174)
2016	13,412,830	10.26%	1.96%	1,376,156	262,891	(1,113,265)
2017	13,970,599	10.33%	1.92%	1,443,163	268,236	(1,174,927)
2018	14,440,597	10.39%	1.88%	1,500,378	271,483	(1,228,895)
2019	14,952,771	10.48%	1.84%	1,567,050	275,131	(1,291,919)
2020	15,547,183	10.56%	1.81%	1,641,783	281,404	(1,360,379)
2021	16,144,392	10.63%	1.80%	1,716,149	290,599	(1,425,550)
2022	16,728,917	10.67%	1.78%	1,784,975	297,775	(1,487,200)
2023	17,244,896	10.73%	1.76%	1,850,377	303,510	(1,546,867)
2024	17,857,095	10.82%	1.73%	1,932,138	308,928	(1,623,210)
2025	18,361,519	10.95%	1.72%	2,010,586	315,818	(1,694,768)
2026	18,984,387	11.07%	1.71%	2,101,572	324,633	(1,776,939)
2027	19,674,029	11.13%	1.69%	2,189,719	332,491	(1,857,228)
2028	20,513,734	11.18%	1.67%	2,293,435	342,579	(1,950,856)
2029	21,361,277	11.22%	1.65%	2,396,735	352,461	(2,044,274)
2030	22,084,908	11.23%	1.62%	2,480,135	357,776	(2,122,359)
2031	22,990,840	11.26%	1.58%	2,588,769	363,255	(2,225,514)
2032	23,877,595	11.32%	1.52%	2,702,944	362,939	(2,340,005)
2033	24,818,767	10.40%	1.33%	2,581,152	330,090	(2,251,062)
2034	25,822,598	9.43%	1.14%	2,435,071	294,378	(2,140,693)
2035	26,897,628	8.62%	0.97%	2,318,576	260,907	(2,057,669)
2036	28,082,761	7.98%	0.83%	2,241,004	233,087	(2,007,917)
2037	29,289,669	7.51%	0.72%	2,199,654	210,886	(1,988,768)
2038	30,599,956	7.15%	0.62%	2,187,897	189,720	(1,998,177)
2039	32,022,057	6.88%	0.55%	2,203,118	176,121	(2,026,997)
2040	33,507,348	6.67%	0.49%	2,234,940	164,186	(2,070,754)
2041	35,063,014	6.53%	0.43%	2,289,615	150,771	(2,138,844)
Total				60,103,045	9,235,309	(50,867,736)

Results based upon total payroll (including new hire pay) and level percent of payroll amortization (period declines annually to an ultimate level of 5 years). All assumptions, including the 7.75% rate of return, are assumed to be met.

Fire Employees
Retiree Healthcare Plan - Scenario #2: Alternative 3
Current retirees: Unchanged, Current active members: $10 monthly subsidy per year of service with 2% COLA adjustment, New members: No longer eligible for retiree healthcare benefits

Year	Total Payroll	Employer Contribution Rate Baseline	Employer Contribution Rate Alternative	Employer Contribution Amount Baseline	Employer Contribution Amount Alternative	Difference
2011	10,918,494	8.35%	8.35%	911,694	911,694	0
2012	11,440,536	9.91%	2.41%	1,133,757	275,717	(858,040)
2013	11,889,353	10.10%	2.16%	1,200,825	256,810	(944,015)
2014	12,427,714	10.23%	2.30%	1,271,355	285,837	(985,518)
2015	12,899,446	10.22%	2.27%	1,318,323	292,817	(1,025,506)
2016	13,412,830	10.26%	2.18%	1,376,156	292,400	(1,083,756)
2017	13,970,599	10.33%	2.14%	1,443,163	298,971	(1,144,192)
2018	14,440,597	10.39%	2.11%	1,500,378	304,697	(1,195,681)
2019	14,952,771	10.48%	2.06%	1,567,050	308,027	(1,259,023)
2020	15,547,183	10.56%	2.04%	1,641,783	317,163	(1,324,620)
2021	16,144,392	10.63%	2.02%	1,716,149	326,117	(1,390,032)
2022	16,728,917	10.67%	2.00%	1,784,975	334,578	(1,450,397)
2023	17,244,896	10.73%	1.97%	1,850,377	339,724	(1,510,653)
2024	17,857,095	10.82%	1.94%	1,932,138	346,428	(1,585,710)
2025	18,361,519	10.95%	1.93%	2,010,586	354,377	(1,656,209)
2026	18,984,387	11.07%	1.91%	2,101,572	362,602	(1,738,970)
2027	19,674,029	11.13%	1.89%	2,189,719	371,839	(1,817,880)
2028	20,513,734	11.18%	1.86%	2,293,435	381,555	(1,911,880)
2029	21,361,277	11.22%	1.83%	2,396,735	390,911	(2,005,824)
2030	22,084,908	11.23%	1.80%	2,480,135	397,528	(2,082,607)
2031	22,990,840	11.26%	1.74%	2,588,769	400,041	(2,188,728)
2032	23,877,595	11.32%	1.68%	2,702,944	401,144	(2,301,800)
2033	24,818,767	10.40%	1.46%	2,581,152	362,354	(2,218,798)
2034	25,822,598	9.43%	1.23%	2,435,071	317,618	(2,117,453)
2035	26,897,628	8.62%	1.04%	2,318,576	279,735	(2,038,841)
2036	28,082,761	7.98%	0.88%	2,241,004	247,128	(1,993,876)
2037	29,289,669	7.51%	0.76%	2,199,654	222,601	(1,977,053)
2038	30,599,956	7.15%	0.64%	2,187,897	195,840	(1,992,057)
2039	32,022,057	6.88%	0.56%	2,203,118	179,324	(2,023,794)
2040	33,507,348	6.67%	0.49%	2,234,940	164,186	(2,070,754)
2041	35,063,014	6.53%	0.43%	2,289,615	150,771	(2,138,844)
Total				60,103,045	10,070,534	(50,032,511)

Results based upon total payroll (including new hire pay) and level percent of payroll amortization (period declines annually to an ultimate level of 5 years). All assumptions, including the 7.75% rate of return, are assumed to be met.

Fire Employees
Retiree Healthcare Plan - Scenario #2: Alternative 4
Current retirees: Unchanged, Current active members: $10 monthly subsidy per year of service with 3% COLA adjustment, New members: No longer eligible for retiree healthcare benefits

Year	Total Payroll	Employer Contribution Rate Baseline	Employer Contribution Rate Alternative	Employer Contribution Amount Baseline	Employer Contribution Amount Alternative	Difference
2011	10,918,494	8.35%	8.35%	911,694	911,694	0
2012	11,440,536	9.91%	2.66%	1,133,757	304,318	(829,439)
2013	11,889,353	10.10%	2.43%	1,200,825	288,911	(911,914)
2014	12,427,714	10.23%	2.56%	1,271,355	318,149	(953,206)
2015	12,899,446	10.22%	2.54%	1,318,323	327,646	(990,677)
2016	13,412,830	10.26%	2.45%	1,376,156	328,614	(1,047,542)
2017	13,970,599	10.33%	2.41%	1,443,163	336,691	(1,106,472)
2018	14,440,597	10.39%	2.37%	1,500,378	342,242	(1,158,136)
2019	14,952,771	10.48%	2.32%	1,567,050	346,904	(1,220,146)
2020	15,547,183	10.56%	2.30%	1,641,783	357,585	(1,284,198)
2021	16,144,392	10.63%	2.28%	1,716,149	368,092	(1,348,057)
2022	16,728,917	10.67%	2.25%	1,784,975	376,401	(1,408,574)
2023	17,244,896	10.73%	2.22%	1,850,377	382,837	(1,467,540)
2024	17,857,095	10.82%	2.19%	1,932,138	391,070	(1,541,068)
2025	18,361,519	10.95%	2.18%	2,010,586	400,281	(1,610,305)
2026	18,984,387	11.07%	2.15%	2,101,572	408,164	(1,693,408)
2027	19,674,029	11.13%	2.12%	2,189,719	417,089	(1,772,630)
2028	20,513,734	11.18%	2.08%	2,293,435	426,686	(1,866,749)
2029	21,361,277	11.22%	2.05%	2,396,735	437,906	(1,958,829)
2030	22,084,908	11.23%	2.01%	2,480,135	443,907	(2,036,228)
2031	22,990,840	11.26%	1.93%	2,588,769	443,723	(2,145,046)
2032	23,877,595	11.32%	1.86%	2,702,944	444,123	(2,258,821)
2033	24,818,767	10.40%	1.60%	2,581,152	397,100	(2,184,052)
2034	25,822,598	9.43%	1.35%	2,435,071	348,605	(2,086,466)
2035	26,897,628	8.62%	1.12%	2,318,576	301,253	(2,017,323)
2036	28,082,761	7.98%	0.94%	2,241,004	263,978	(1,977,026)
2037	29,289,669	7.51%	0.80%	2,199,654	234,317	(1,965,337)
2038	30,599,956	7.15%	0.67%	2,187,897	205,020	(1,982,877)
2039	32,022,057	6.88%	0.57%	2,203,118	182,526	(2,020,592)
2040	33,507,348	6.67%	0.50%	2,234,940	167,537	(2,067,403)
2041	35,063,014	6.53%	0.43%	2,289,615	150,771	(2,138,844)
Total				60,103,045	11,054,140	(49,048,905)

Results based upon total payroll (including new hire pay) and level percent of payroll amortization (period declines annually to an ultimate level of 5 years). All assumptions, including the 7.75% rate of return, are assumed to be met.

Fire Employees
Retiree Healthcare Plan - Scenario #2: Alternative 5
Current retirees: Unchanged, Current active members: $20 monthly subsidy per year of service with 0% COLA adjustment, New members: No longer eligible for retiree healthcare benefits

Year	Total Payroll	Employer Contribution Rate Baseline	Employer Contribution Rate Alternative	Employer Contribution Amount Baseline	Employer Contribution Amount Alternative	Difference
2011	10,918,494	8.35%	8.35%	911,694	911,694	0
2012	11,440,536	9.91%	3.30%	1,133,757	377,538	(756,219)
2013	11,889,353	10.10%	3.10%	1,200,825	368,570	(832,255)
2014	12,427,714	10.23%	3.24%	1,271,355	402,658	(868,697)
2015	12,899,446	10.22%	3.17%	1,318,323	408,912	(909,411)
2016	13,412,830	10.26%	3.07%	1,376,156	411,774	(964,382)
2017	13,970,599	10.33%	3.02%	1,443,163	421,912	(1,021,251)
2018	14,440,597	10.39%	2.96%	1,500,378	427,442	(1,072,936)
2019	14,952,771	10.48%	2.89%	1,567,050	432,135	(1,134,915)
2020	15,547,183	10.56%	2.85%	1,641,783	443,095	(1,198,688)
2021	16,144,392	10.63%	2.82%	1,716,149	455,272	(1,260,877)
2022	16,728,917	10.67%	2.77%	1,784,975	463,391	(1,321,584)
2023	17,244,896	10.73%	2.73%	1,850,377	470,786	(1,379,591)
2024	17,857,095	10.82%	2.68%	1,932,138	478,570	(1,453,568)
2025	18,361,519	10.95%	2.65%	2,010,586	486,580	(1,524,006)
2026	18,984,387	11.07%	2.61%	2,101,572	495,493	(1,606,079)
2027	19,674,029	11.13%	2.57%	2,189,719	505,623	(1,684,096)
2028	20,513,734	11.18%	2.51%	2,293,435	514,895	(1,778,540)
2029	21,361,277	11.22%	2.47%	2,396,735	527,624	(1,869,111)
2030	22,084,908	11.23%	2.42%	2,480,135	534,455	(1,945,680)
2031	22,990,840	11.26%	2.34%	2,588,769	537,986	(2,050,783)
2032	23,877,595	11.32%	2.25%	2,702,944	537,246	(2,165,698)
2033	24,818,767	10.40%	1.92%	2,581,152	476,520	(2,104,632)
2034	25,822,598	9.43%	1.59%	2,435,071	410,579	(2,024,492)
2035	26,897,628	8.62%	1.30%	2,318,576	349,669	(1,968,907)
2036	28,082,761	7.98%	1.07%	2,241,004	300,486	(1,940,518)
2037	29,289,669	7.51%	0.89%	2,199,654	260,678	(1,938,976)
2038	30,599,956	7.15%	0.74%	2,187,897	226,440	(1,961,457)
2039	32,022,057	6.88%	0.62%	2,203,118	198,537	(2,004,581)
2040	33,507,348	6.67%	0.54%	2,234,940	180,940	(2,054,000)
2041	35,063,014	6.53%	0.46%	2,289,615	161,290	(2,128,325)
Total				60,103,045	13,178,790	(46,924,255)

Results based upon total payroll (including new hire pay) and level percent of payroll amortization (period declines annually to an ultimate level of 5 years). All assumptions, including the 7.75% rate of return, are assumed to be met.

Fire Employees
Retiree Healthcare Plan - Scenario #2: Alternative 6
Current retirees: Unchanged, Current active members: $20 monthly subsidy per year of service with 1% COLA adjustment, New members: No longer eligible for retiree healthcare benefits

	Total	Employer Contribution Rate		Employer Contribution Amount		
Year	Payroll	Baseline	Alternative	Baseline	Alternative	Difference
2011	10,918,494	8.35%	8.35%	911,694	911,694	0
2012	11,440,536	9.91%	3.67%	1,133,757	419,868	(713,889)
2013	11,889,353	10.10%	3.48%	1,200,825	413,749	(787,076)
2014	12,427,714	10.23%	3.62%	1,271,355	449,883	(821,472)
2015	12,899,446	10.22%	3.56%	1,318,323	459,220	(859,103)
2016	13,412,830	10.26%	3.45%	1,376,156	462,743	(913,413)
2017	13,970,599	10.33%	3.39%	1,443,163	473,603	(969,560)
2018	14,440,597	10.39%	3.34%	1,500,378	482,316	(1,018,062)
2019	14,952,771	10.48%	3.27%	1,567,050	488,956	(1,078,094)
2020	15,547,183	10.56%	3.22%	1,641,783	500,619	(1,141,164)
2021	16,144,392	10.63%	3.18%	1,716,149	513,392	(1,202,757)
2022	16,728,917	10.67%	3.14%	1,784,975	525,288	(1,259,687)
2023	17,244,896	10.73%	3.08%	1,850,377	531,143	(1,319,234)
2024	17,857,095	10.82%	3.03%	1,932,138	541,070	(1,391,068)
2025	18,361,519	10.95%	2.99%	2,010,586	549,009	(1,461,577)
2026	18,984,387	11.07%	2.95%	2,101,572	560,039	(1,541,533)
2027	19,674,029	11.13%	2.89%	2,189,719	568,579	(1,621,140)
2028	20,513,734	11.18%	2.83%	2,293,435	580,539	(1,712,896)
2029	21,361,277	11.22%	2.77%	2,396,735	591,707	(1,805,028)
2030	22,084,908	11.23%	2.71%	2,480,135	598,501	(1,881,634)
2031	22,990,840	11.26%	2.61%	2,588,769	600,061	(1,988,708)
2032	23,877,595	11.32%	2.51%	2,702,944	599,328	(2,103,616)
2033	24,818,767	10.40%	2.13%	2,581,152	528,640	(2,052,512)
2034	25,822,598	9.43%	1.74%	2,435,071	449,313	(1,985,758)
2035	26,897,628	8.62%	1.41%	2,318,576	379,257	(1,939,319)
2036	28,082,761	7.98%	1.15%	2,241,004	322,952	(1,918,052)
2037	29,289,669	7.51%	0.95%	2,199,654	278,252	(1,921,402)
2038	30,599,956	7.15%	0.77%	2,187,897	235,620	(1,952,277)
2039	32,022,057	6.88%	0.64%	2,203,118	204,941	(1,998,177)
2040	33,507,348	6.67%	0.54%	2,234,940	180,940	(2,054,000)
2041	35,063,014	6.53%	0.46%	2,289,615	161,290	(2,128,325)
Total				60,103,045	14,562,512	(45,540,533)

Results based upon total payroll (including new hire pay) and level percent of payroll amortization (period declines annually to an ultimate level of 5 years). All assumptions, including the 7.75% rate of return, are assumed to be met.

Fire Employees
Retiree Healthcare Plan - Scenario #2: Alternative 7
Current retirees: Unchanged, Current active members: $20 monthly subsidy per year of service with 2% COLA adjustment, New members: No longer eligible for retiree healthcare benefits

	Total	Employer Contribution Rate		Employer Contribution Amount		
Year	Payroll	Baseline	Alternative	Baseline	Alternative	Difference
2011	10,918,494	8.35%	8.35%	911,694	911,694	0
2012	11,440,536	9.91%	4.09%	1,133,757	467,918	(665,839)
2013	11,889,353	10.10%	3.94%	1,200,825	468,441	(732,384)
2014	12,427,714	10.23%	4.07%	1,271,355	505,808	(765,547)
2015	12,899,446	10.22%	4.01%	1,318,323	517,268	(801,055)
2016	13,412,830	10.26%	3.90%	1,376,156	523,100	(853,056)
2017	13,970,599	10.33%	3.84%	1,443,163	536,471	(906,692)
2018	14,440,597	10.39%	3.79%	1,500,378	547,299	(953,079)
2019	14,952,771	10.48%	3.71%	1,567,050	554,748	(1,012,302)
2020	15,547,183	10.56%	3.66%	1,641,783	569,027	(1,072,756)
2021	16,144,392	10.63%	3.62%	1,716,149	584,427	(1,131,722)
2022	16,728,917	10.67%	3.57%	1,784,975	597,222	(1,187,753)
2023	17,244,896	10.73%	3.51%	1,850,377	605,296	(1,245,081)
2024	17,857,095	10.82%	3.45%	1,932,138	616,070	(1,316,068)
2025	18,361,519	10.95%	3.40%	2,010,586	624,292	(1,386,294)
2026	18,984,387	11.07%	3.35%	2,101,572	635,977	(1,465,595)
2027	19,674,029	11.13%	3.28%	2,189,719	645,308	(1,544,411)
2028	20,513,734	11.18%	3.20%	2,293,435	656,439	(1,636,996)
2029	21,361,277	11.22%	3.13%	2,396,735	668,608	(1,728,127)
2030	22,084,908	11.23%	3.06%	2,480,135	675,798	(1,804,337)
2031	22,990,840	11.26%	2.93%	2,588,769	673,632	(1,915,137)
2032	23,877,595	11.32%	2.81%	2,702,944	670,960	(2,031,984)
2033	24,818,767	10.40%	2.37%	2,581,152	588,205	(1,992,947)
2034	25,822,598	9.43%	1.93%	2,435,071	498,376	(1,936,695)
2035	26,897,628	8.62%	1.55%	2,318,576	416,913	(1,901,663)
2036	28,082,761	7.98%	1.25%	2,241,004	351,035	(1,889,969)
2037	29,289,669	7.51%	1.02%	2,199,654	298,755	(1,900,899)
2038	30,599,956	7.15%	0.82%	2,187,897	250,920	(1,936,977)
2039	32,022,057	6.88%	0.67%	2,203,118	214,548	(1,988,570)
2040	33,507,348	6.67%	0.55%	2,234,940	184,290	(2,050,650)
2041	35,063,014	6.53%	0.46%	2,289,615	161,290	(2,128,325)
Total				60,103,045	16,220,135	(43,882,910)

Results based upon total payroll (including new hire pay) and level percent of payroll amortization (period declines annually to an ultimate level of 5 years). All assumptions, including the 7.75% rate of return, are assumed to be met.

Fire Employees
Retiree Healthcare Plan - Scenario #2: Alternative 8
Current retirees: Unchanged, Current active members: $20 monthly subsidy per year of service with 3% COLA adjustment, New members: No longer eligible for retiree healthcare benefits

Year	Total Payroll	Employer Contribution Rate		Employer Contribution Amount		Difference
		Baseline	Alternative	Baseline	Alternative	
2011	10,918,494	8.35%	8.35%	911,694	911,694	0
2012	11,440,536	9.91%	4.60%	1,133,757	526,265	(607,492)
2013	11,889,353	10.10%	4.47%	1,200,825	531,454	(669,371)
2014	12,427,714	10.23%	4.61%	1,271,355	572,918	(698,437)
2015	12,899,446	10.22%	4.54%	1,318,323	585,635	(732,688)
2016	13,412,830	10.26%	4.44%	1,376,156	595,530	(780,626)
2017	13,970,599	10.33%	4.37%	1,443,163	610,515	(832,648)
2018	14,440,597	10.39%	4.32%	1,500,378	623,834	(876,544)
2019	14,952,771	10.48%	4.24%	1,567,050	633,997	(933,053)
2020	15,547,183	10.56%	4.19%	1,641,783	651,427	(990,356)
2021	16,144,392	10.63%	4.14%	1,716,149	668,378	(1,047,771)
2022	16,728,917	10.67%	4.09%	1,784,975	684,213	(1,100,762)
2023	17,244,896	10.73%	4.02%	1,850,377	693,245	(1,157,132)
2024	17,857,095	10.82%	3.95%	1,932,138	705,355	(1,226,783)
2025	18,361,519	10.95%	3.89%	2,010,586	714,263	(1,296,323)
2026	18,984,387	11.07%	3.84%	2,101,572	729,000	(1,372,572)
2027	19,674,029	11.13%	3.75%	2,189,719	737,776	(1,451,943)
2028	20,513,734	11.18%	3.65%	2,293,435	748,751	(1,544,684)
2029	21,361,277	11.22%	3.57%	2,396,735	762,598	(1,634,137)
2030	22,084,908	11.23%	3.48%	2,480,135	768,555	(1,711,580)
2031	22,990,840	11.26%	3.32%	2,588,769	763,296	(1,825,473)
2032	23,877,595	11.32%	3.17%	2,702,944	756,920	(1,946,024)
2033	24,818,767	10.40%	2.67%	2,581,152	662,661	(1,918,491)
2034	25,822,598	9.43%	2.16%	2,435,071	557,768	(1,877,303)
2035	26,897,628	8.62%	1.72%	2,318,576	462,639	(1,855,937)
2036	28,082,761	7.98%	1.37%	2,241,004	384,734	(1,856,270)
2037	29,289,669	7.51%	1.10%	2,199,654	322,186	(1,877,468)
2038	30,599,956	7.15%	0.88%	2,187,897	269,280	(1,918,617)
2039	32,022,057	6.88%	0.70%	2,203,118	224,154	(1,978,964)
2040	33,507,348	6.67%	0.57%	2,234,940	190,992	(2,043,948)
2041	35,063,014	6.53%	0.46%	2,289,615	161,290	(2,128,325)
Total				60,103,045	18,211,323	(41,891,722)

Results based upon total payroll (including new hire pay) and level percent of payroll amortization (period declines annually to an ultimate level of 5 years). All assumptions, including the 7.75% rate of return, are assumed to be met.

Fire Employees
Retiree Healthcare Plan - Scenario #2: Alternative 9
Current retirees: Unchanged, Current active members: $30 monthly subsidy per year of service with 0% COLA adjustment, New members: No longer eligible for retiree healthcare benefits

	Total	Employer Contribution Rate		Employer Contribution Amount		
Year	Payroll	Baseline	Alternative	Baseline	Alternative	Difference
2011	10,918,494	8.35%	8.35%	911,694	911,694	0
2012	11,440,536	9.91%	4.59%	1,133,757	525,121	(608,636)
2013	11,889,353	10.10%	4.46%	1,200,825	530,265	(670,560)
2014	12,427,714	10.23%	4.59%	1,271,355	570,432	(700,923)
2015	12,899,446	10.22%	4.50%	1,318,323	580,475	(737,848)
2016	13,412,830	10.26%	4.38%	1,376,156	587,482	(788,674)
2017	13,970,599	10.33%	4.30%	1,443,163	600,736	(842,427)
2018	14,440,597	10.39%	4.23%	1,500,378	610,837	(889,541)
2019	14,952,771	10.48%	4.14%	1,567,050	619,045	(948,005)
2020	15,547,183	10.56%	4.07%	1,641,783	632,770	(1,009,013)
2021	16,144,392	10.63%	4.02%	1,716,149	649,005	(1,067,144)
2022	16,728,917	10.67%	3.95%	1,784,975	660,792	(1,124,183)
2023	17,244,896	10.73%	3.88%	1,850,377	669,102	(1,181,275)
2024	17,857,095	10.82%	3.80%	1,932,138	678,570	(1,253,568)
2025	18,361,519	10.95%	3.74%	2,010,586	686,721	(1,323,865)
2026	18,984,387	11.07%	3.68%	2,101,572	698,625	(1,402,947)
2027	19,674,029	11.13%	3.60%	2,189,719	708,265	(1,481,454)
2028	20,513,734	11.18%	3.52%	2,293,435	722,083	(1,571,352)
2029	21,361,277	11.22%	3.44%	2,396,735	734,828	(1,661,907)
2030	22,084,908	11.23%	3.36%	2,480,135	742,053	(1,738,082)
2031	22,990,840	11.26%	3.23%	2,588,769	742,604	(1,846,165)
2032	23,877,595	11.32%	3.11%	2,702,944	742,593	(1,960,351)
2033	24,818,767	10.40%	2.61%	2,581,152	647,770	(1,933,382)
2034	25,822,598	9.43%	2.11%	2,435,071	544,857	(1,890,214)
2035	26,897,628	8.62%	1.69%	2,318,576	454,570	(1,864,006)
2036	28,082,761	7.98%	1.35%	2,241,004	379,117	(1,861,887)
2037	29,289,669	7.51%	1.09%	2,199,654	319,257	(1,880,397)
2038	30,599,956	7.15%	0.87%	2,187,897	266,220	(1,921,677)
2039	32,022,057	6.88%	0.71%	2,203,118	227,357	(1,975,761)
2040	33,507,348	6.67%	0.59%	2,234,940	197,693	(2,037,247)
2041	35,063,014	6.53%	0.49%	2,289,615	171,809	(2,117,806)
Total				60,103,045	17,812,748	(42,290,297)

Results based upon total payroll (including new hire pay) and level percent of payroll amortization (period declines annually to an ultimate level of 5 years). All assumptions, including the 7.75% rate of return, are assumed to be met.

Fire Employees
Retiree Healthcare Plan - Scenario #2: Alternative 10
Current retirees: Unchanged, Current active members: $30 monthly subsidy per year of service with 1% COLA adjustment, New members: No longer eligible for retiree healthcare benefits

Year	Total Payroll	Employer Contribution Rate Baseline	Employer Contribution Rate Alternative	Employer Contribution Amount Baseline	Employer Contribution Amount Alternative	Difference
2011	10,918,494	8.35%	8.35%	911,694	911,694	0
2012	11,440,536	9.91%	5.14%	1,133,757	588,044	(545,713)
2013	11,889,353	10.10%	5.04%	1,200,825	599,223	(601,602)
2014	12,427,714	10.23%	5.17%	1,271,355	642,513	(628,842)
2015	12,899,446	10.22%	5.07%	1,318,323	654,002	(664,321)
2016	13,412,830	10.26%	4.95%	1,376,156	663,935	(712,221)
2017	13,970,599	10.33%	4.87%	1,443,163	680,368	(762,795)
2018	14,440,597	10.39%	4.79%	1,500,378	691,705	(808,673)
2019	14,952,771	10.48%	4.70%	1,567,050	702,780	(864,270)
2020	15,547,183	10.56%	4.63%	1,641,783	719,835	(921,948)
2021	16,144,392	10.63%	4.57%	1,716,149	737,799	(978,350)
2022	16,728,917	10.67%	4.50%	1,784,975	752,801	(1,032,174)
2023	17,244,896	10.73%	4.41%	1,850,377	760,500	(1,089,877)
2024	17,857,095	10.82%	4.32%	1,932,138	771,427	(1,160,711)
2025	18,361,519	10.95%	4.26%	2,010,586	782,201	(1,228,385)
2026	18,984,387	11.07%	4.19%	2,101,572	795,446	(1,306,126)
2027	19,674,029	11.13%	4.09%	2,189,719	804,668	(1,385,051)
2028	20,513,734	11.18%	3.99%	2,293,435	818,498	(1,474,937)
2029	21,361,277	11.22%	3.89%	2,396,735	830,954	(1,565,781)
2030	22,084,908	11.23%	3.80%	2,480,135	839,227	(1,640,908)
2031	22,990,840	11.26%	3.64%	2,588,769	836,867	(1,751,902)
2032	23,877,595	11.32%	3.49%	2,702,944	833,328	(1,869,616)
2033	24,818,767	10.40%	2.92%	2,581,152	724,708	(1,856,444)
2034	25,822,598	9.43%	2.35%	2,435,071	606,831	(1,828,240)
2035	26,897,628	8.62%	1.86%	2,318,576	500,296	(1,818,280)
2036	28,082,761	7.98%	1.47%	2,241,004	412,817	(1,828,187)
2037	29,289,669	7.51%	1.17%	2,199,654	342,689	(1,856,965)
2038	30,599,956	7.15%	0.93%	2,187,897	284,580	(1,903,317)
2039	32,022,057	6.88%	0.74%	2,203,118	236,963	(1,966,155)
2040	33,507,348	6.67%	0.60%	2,234,940	201,044	(2,033,896)
2041	35,063,014	6.53%	0.49%	2,289,615	171,809	(2,117,806)
Total				60,103,045	19,899,552	(40,203,493)

Results based upon total payroll (including new hire pay) and level percent of payroll amortization (period declines annually to an ultimate level of 5 years). All assumptions, including the 7.75% rate of return, are assumed to be met.

Fire Employees
Retiree Healthcare Plan - Scenario #2: Alternative 11
Current retirees: Unchanged, Current active members: $30 monthly subsidy per year of service with 2% COLA adjustment, New members: No longer eligible for retiree healthcare benefits

Year	Total Payroll	Employer Contribution Rate Baseline	Employer Contribution Rate Alternative	Employer Contribution Amount Baseline	Employer Contribution Amount Alternative	Difference
2011	10,918,494	8.35%	8.35%	911,694	911,694	0
2012	11,440,536	9.91%	5.78%	1,133,757	661,263	(472,494)
2013	11,889,353	10.10%	5.72%	1,200,825	680,071	(520,754)
2014	12,427,714	10.23%	5.85%	1,271,355	727,021	(544,334)
2015	12,899,446	10.22%	5.75%	1,318,323	741,718	(576,605)
2016	13,412,830	10.26%	5.62%	1,376,156	753,801	(622,355)
2017	13,970,599	10.33%	5.54%	1,443,163	773,971	(669,192)
2018	14,440,597	10.39%	5.46%	1,500,378	788,457	(711,921)
2019	14,952,771	10.48%	5.37%	1,567,050	802,964	(764,086)
2020	15,547,183	10.56%	5.29%	1,641,783	822,446	(819,337)
2021	16,144,392	10.63%	5.23%	1,716,149	844,352	(871,797)
2022	16,728,917	10.67%	5.15%	1,784,975	861,539	(923,436)
2023	17,244,896	10.73%	5.05%	1,850,377	870,867	(979,510)
2024	17,857,095	10.82%	4.95%	1,932,138	883,926	(1,048,212)
2025	18,361,519	10.95%	4.88%	2,010,586	896,042	(1,114,544)
2026	18,984,387	11.07%	4.79%	2,101,572	909,352	(1,192,220)
2027	19,674,029	11.13%	4.68%	2,189,719	920,745	(1,268,974)
2028	20,513,734	11.18%	4.55%	2,293,435	933,375	(1,360,060)
2029	21,361,277	11.22%	4.44%	2,396,735	948,441	(1,448,294)
2030	22,084,908	11.23%	4.32%	2,480,135	954,068	(1,526,067)
2031	22,990,840	11.26%	4.13%	2,588,769	949,522	(1,639,247)
2032	23,877,595	11.32%	3.94%	2,702,944	940,777	(1,762,167)
2033	24,818,767	10.40%	3.29%	2,581,152	816,537	(1,764,615)
2034	25,822,598	9.43%	2.63%	2,435,071	679,134	(1,755,937)
2035	26,897,628	8.62%	2.07%	2,318,576	556,781	(1,761,795)
2036	28,082,761	7.98%	1.62%	2,241,004	454,941	(1,786,063)
2037	29,289,669	7.51%	1.28%	2,199,654	374,908	(1,824,746)
2038	30,599,956	7.15%	1.00%	2,187,897	306,000	(1,881,897)
2039	32,022,057	6.88%	0.78%	2,203,118	249,772	(1,953,346)
2040	33,507,348	6.67%	0.62%	2,234,940	207,746	(2,027,194)
2041	35,063,014	6.53%	0.49%	2,289,615	171,809	(2,117,806)
Total				60,103,045	22,394,040	(37,709,005)

Results based upon total payroll (including new hire pay) and level percent of payroll amortization (period declines annually to an ultimate level of 5 years). All assumptions, including the 7.75% rate of return, are assumed to be met.

Fire Employees
Retiree Healthcare Plan - Scenario #2: Alternative 12
Current retirees: Unchanged, Current active members: $30 monthly subsidy per year of service with 3% COLA adjustment, New members: No longer eligible for retiree healthcare benefits

Year	Total Payroll	Employer Contribution Rate Baseline	Employer Contribution Rate Alternative	Employer Contribution Amount Baseline	Employer Contribution Amount Alternative	Difference
2011	10,918,494	8.35%	8.35%	911,694	911,694	0
2012	11,440,536	9.91%	6.54%	1,133,757	748,211	(385,546)
2013	11,889,353	10.10%	6.52%	1,200,825	775,186	(425,639)
2014	12,427,714	10.23%	6.66%	1,271,355	827,686	(443,669)
2015	12,899,446	10.22%	6.55%	1,318,323	844,914	(473,409)
2016	13,412,830	10.26%	6.43%	1,376,156	862,445	(513,711)
2017	13,970,599	10.33%	6.34%	1,443,163	885,736	(557,427)
2018	14,440,597	10.39%	6.26%	1,500,378	903,981	(596,397)
2019	14,952,771	10.48%	6.16%	1,567,050	921,091	(645,959)
2020	15,547,183	10.56%	6.08%	1,641,783	945,269	(696,514)
2021	16,144,392	10.63%	6.01%	1,716,149	970,278	(745,871)
2022	16,728,917	10.67%	5.92%	1,784,975	990,352	(794,623)
2023	17,244,896	10.73%	5.81%	1,850,377	1,001,928	(848,449)
2024	17,857,095	10.82%	5.70%	1,932,138	1,017,854	(914,284)
2025	18,361,519	10.95%	5.61%	2,010,586	1,030,081	(980,505)
2026	18,984,387	11.07%	5.52%	2,101,572	1,047,938	(1,053,634)
2027	19,674,029	11.13%	5.38%	2,189,719	1,058,463	(1,131,256)
2028	20,513,734	11.18%	5.23%	2,293,435	1,072,868	(1,220,567)
2029	21,361,277	11.22%	5.09%	2,396,735	1,087,289	(1,309,446)
2030	22,084,908	11.23%	4.95%	2,480,135	1,093,203	(1,386,932)
2031	22,990,840	11.26%	4.71%	2,588,769	1,082,869	(1,505,900)
2032	23,877,595	11.32%	4.48%	2,702,944	1,069,716	(1,633,228)
2033	24,818,767	10.40%	3.73%	2,581,152	925,740	(1,655,412)
2034	25,822,598	9.43%	2.97%	2,435,071	766,931	(1,668,140)
2035	26,897,628	8.62%	2.32%	2,318,576	624,025	(1,694,551)
2036	28,082,761	7.98%	1.80%	2,241,004	505,490	(1,735,514)
2037	29,289,669	7.51%	1.41%	2,199,654	412,984	(1,786,670)
2038	30,599,956	7.15%	1.08%	2,187,897	330,480	(1,857,417)
2039	32,022,057	6.88%	0.82%	2,203,118	262,581	(1,940,537)
2040	33,507,348	6.67%	0.64%	2,234,940	214,447	(2,020,493)
2041	35,063,014	6.53%	0.50%	2,289,615	175,315	(2,114,300)
Total				60,103,045	25,367,045	(34,736,000)

Results based upon total payroll (including new hire pay) and level percent of payroll amortization (period declines annually to an ultimate level of 5 years). All assumptions, including the 7.75% rate of return, are assumed to be met.

Police Employees
Retiree Healthcare Plan - Scenario #2: Alternative 1
Current retirees: Unchanged, Current active members: $10 monthly subsidy per year of service with 0% COLA adjustment, New members: No longer eligible for retiree healthcare benefits

	Total	Employer Contribution Rate		Employer Contribution Amount		
Year	Payroll	Baseline	Alternative	Baseline	Alternative	Difference
2011	13,774,086	7.66%	7.66%	1,055,095	1,055,095	0
2012	14,402,840	9.33%	1.49%	1,343,785	214,602	(1,129,183)
2013	15,018,006	9.48%	1.24%	1,423,707	186,223	(1,237,484)
2014	15,631,698	9.58%	1.39%	1,497,517	217,281	(1,280,236)
2015	16,165,380	9.58%	1.41%	1,548,643	227,932	(1,320,711)
2016	16,772,886	9.63%	1.35%	1,615,229	226,434	(1,388,795)
2017	17,409,273	9.71%	1.32%	1,690,440	229,802	(1,460,638)
2018	18,067,396	9.78%	1.29%	1,766,991	233,069	(1,533,922)
2019	18,773,830	9.83%	1.27%	1,845,467	238,428	(1,607,039)
2020	19,462,848	9.87%	1.25%	1,920,983	243,286	(1,677,697)
2021	20,246,047	9.91%	1.23%	2,006,383	249,026	(1,757,357)
2022	21,079,433	9.96%	1.22%	2,099,512	257,169	(1,842,343)
2023	21,954,224	10.01%	1.22%	2,197,618	267,842	(1,929,776)
2024	22,838,932	10.06%	1.21%	2,297,597	276,351	(2,021,246)
2025	23,822,519	10.12%	1.21%	2,410,839	288,252	(2,122,587)
2026	24,839,740	10.16%	1.22%	2,523,718	303,045	(2,220,673)
2027	25,836,119	10.20%	1.22%	2,635,284	315,201	(2,320,083)
2028	26,928,268	10.25%	1.23%	2,760,147	331,218	(2,428,929)
2029	28,021,457	10.31%	1.24%	2,889,012	347,466	(2,541,546)
2030	29,101,968	10.38%	1.25%	3,020,784	363,775	(2,657,009)
2031	30,315,559	10.46%	1.27%	3,171,007	385,008	(2,785,999)
2032	31,639,071	10.55%	1.29%	3,337,922	408,144	(2,929,778)
2033	32,993,070	9.61%	1.18%	3,170,634	389,318	(2,781,316)
2034	34,399,796	8.61%	1.06%	2,961,822	364,638	(2,597,184)
2035	35,944,197	7.78%	0.95%	2,796,459	341,470	(2,454,989)
2036	37,526,370	7.15%	0.85%	2,683,135	318,974	(2,364,161)
2037	39,179,739	6.67%	0.77%	2,613,289	301,684	(2,311,605)
2038	40,947,162	6.31%	0.71%	2,583,766	290,725	(2,293,041)
2039	42,761,899	6.05%	0.65%	2,587,095	277,952	(2,309,143)
2040	44,654,313	5.86%	0.59%	2,616,743	263,460	(2,353,283)
2041	46,586,952	5.72%	0.52%	2,664,774	242,252	(2,422,522)
Total				71,735,397	9,655,122	(62,080,275)

Results based upon total payroll (including new hire pay) and level percent of payroll amortization (period declines annually to an ultimate level of 5 years). All assumptions, including the 7.75% rate of return, are assumed to be met.

Police Employees
Retiree Healthcare Plan - Scenario #2: Alternative 2
Current retirees: Unchanged, Current active members: $10 monthly subsidy per year of service with 1% COLA adjustment, New members: No longer eligible for retiree healthcare benefits

	Total	Employer Contribution Rate		Employer Contribution Amount		
Year	Payroll	Baseline	Alternative	Baseline	Alternative	Difference
2011	13,774,086	7.66%	7.66%	1,055,095	1,055,095	0
2012	14,402,840	9.33%	1.69%	1,343,785	243,408	(1,100,377)
2013	15,018,006	9.48%	1.45%	1,423,707	217,761	(1,205,946)
2014	15,631,698	9.58%	1.59%	1,497,517	248,544	(1,248,973)
2015	16,165,380	9.58%	1.61%	1,548,643	260,263	(1,288,380)
2016	16,772,886	9.63%	1.55%	1,615,229	259,980	(1,355,249)
2017	17,409,273	9.71%	1.52%	1,690,440	264,621	(1,425,819)
2018	18,067,396	9.78%	1.48%	1,766,991	267,397	(1,499,594)
2019	18,773,830	9.83%	1.46%	1,845,467	274,098	(1,571,369)
2020	19,462,848	9.87%	1.44%	1,920,983	280,265	(1,640,718)
2021	20,246,047	9.91%	1.42%	2,006,383	287,494	(1,718,889)
2022	21,079,433	9.96%	1.40%	2,099,512	295,112	(1,804,400)
2023	21,954,224	10.01%	1.39%	2,197,618	305,164	(1,892,454)
2024	22,838,932	10.06%	1.39%	2,297,597	317,461	(1,980,136)
2025	23,822,519	10.12%	1.38%	2,410,839	328,751	(2,082,088)
2026	24,839,740	10.16%	1.38%	2,523,718	342,788	(2,180,930)
2027	25,836,119	10.20%	1.38%	2,635,284	356,538	(2,278,746)
2028	26,928,268	10.25%	1.38%	2,760,147	371,610	(2,388,537)
2029	28,021,457	10.31%	1.38%	2,889,012	386,696	(2,502,316)
2030	29,101,968	10.38%	1.39%	3,020,784	404,517	(2,616,267)
2031	30,315,559	10.46%	1.40%	3,171,007	424,418	(2,746,589)
2032	31,639,071	10.55%	1.42%	3,337,922	449,275	(2,888,647)
2033	32,993,070	9.61%	1.28%	3,170,634	422,311	(2,748,323)
2034	34,399,796	8.61%	1.13%	2,961,822	388,718	(2,573,104)
2035	35,944,197	7.78%	1.00%	2,796,459	359,442	(2,437,017)
2036	37,526,370	7.15%	0.89%	2,683,135	333,985	(2,349,150)
2037	39,179,739	6.67%	0.80%	2,613,289	313,438	(2,299,851)
2038	40,947,162	6.31%	0.73%	2,583,766	298,914	(2,284,852)
2039	42,761,899	6.05%	0.67%	2,587,095	286,505	(2,300,590)
2040	44,654,313	5.86%	0.60%	2,616,743	267,926	(2,348,817)
2041	46,586,952	5.72%	0.53%	2,664,774	246,911	(2,417,863)
Total				71,735,397	10,559,406	(61,175,991)

Results based upon total payroll (including new hire pay) and level percent of payroll amortization (period declines annually to an ultimate level of 5 years). All assumptions, including the 7.75% rate of return, are assumed to be met.

Police Employees
Retiree Healthcare Plan - Scenario #2: Alternative 3
Current retirees: Unchanged, Current active members: $10 monthly subsidy per year of service with 2% COLA adjustment, New members: No longer eligible for retiree healthcare benefits

Year	Total Payroll	Employer Contribution Rate Baseline	Employer Contribution Rate Alternative	Employer Contribution Amount Baseline	Employer Contribution Amount Alternative	Difference
2011	13,774,086	7.66%	7.66%	1,055,095	1,055,095	0
2012	14,402,840	9.33%	1.91%	1,343,785	275,094	(1,068,691)
2013	15,018,006	9.48%	1.69%	1,423,707	253,804	(1,169,903)
2014	15,631,698	9.58%	1.83%	1,497,517	286,060	(1,211,457)
2015	16,165,380	9.58%	1.84%	1,548,643	297,443	(1,251,200)
2016	16,772,886	9.63%	1.78%	1,615,229	298,557	(1,316,672)
2017	17,409,273	9.71%	1.75%	1,690,440	304,662	(1,385,778)
2018	18,067,396	9.78%	1.71%	1,766,991	308,952	(1,458,039)
2019	18,773,830	9.83%	1.69%	1,845,467	317,278	(1,528,189)
2020	19,462,848	9.87%	1.66%	1,920,983	323,083	(1,597,900)
2021	20,246,047	9.91%	1.64%	2,006,383	332,035	(1,674,348)
2022	21,079,433	9.96%	1.62%	2,099,512	341,487	(1,758,025)
2023	21,954,224	10.01%	1.60%	2,197,618	351,268	(1,846,350)
2024	22,838,932	10.06%	1.59%	2,297,597	363,139	(1,934,458)
2025	23,822,519	10.12%	1.58%	2,410,839	376,396	(2,034,443)
2026	24,839,740	10.16%	1.57%	2,523,718	389,984	(2,133,734)
2027	25,836,119	10.20%	1.57%	2,635,284	405,627	(2,229,657)
2028	26,928,268	10.25%	1.56%	2,760,147	420,081	(2,340,066)
2029	28,021,457	10.31%	1.56%	2,889,012	437,135	(2,451,877)
2030	29,101,968	10.38%	1.56%	3,020,784	453,991	(2,566,793)
2031	30,315,559	10.46%	1.56%	3,171,007	472,923	(2,698,084)
2032	31,639,071	10.55%	1.57%	3,337,922	496,733	(2,841,189)
2033	32,993,070	9.61%	1.41%	3,170,634	465,202	(2,705,432)
2034	34,399,796	8.61%	1.23%	2,961,822	423,117	(2,538,705)
2035	35,944,197	7.78%	1.07%	2,796,459	384,603	(2,411,856)
2036	37,526,370	7.15%	0.94%	2,683,135	352,748	(2,330,387)
2037	39,179,739	6.67%	0.83%	2,613,289	325,192	(2,288,097)
2038	40,947,162	6.31%	0.75%	2,583,766	307,104	(2,276,662)
2039	42,761,899	6.05%	0.68%	2,587,095	290,781	(2,296,314)
2040	44,654,313	5.86%	0.61%	2,616,743	272,391	(2,344,352)
2041	46,586,952	5.72%	0.53%	2,664,774	246,911	(2,417,863)
Total				71,735,397	11,628,876	(60,106,521)

Results based upon total payroll (including new hire pay) and level percent of payroll amortization (period declines annually to an ultimate level of 5 years). All assumptions, including the 7.75% rate of return, are assumed to be met.

Police Employees
Retiree Healthcare Plan - Scenario #2: Alternative 4
Current retirees: Unchanged, Current active members: $10 monthly subsidy per year of service with 3% COLA adjustment, New members: No longer eligible for retiree healthcare benefits

	Total	Employer Contribution Rate		Employer Contribution Amount		
Year	Payroll	Baseline	Alternative	Baseline	Alternative	Difference
2011	13,774,086	7.66%	7.66%	1,055,095	1,055,095	0
2012	14,402,840	9.33%	2.18%	1,343,785	313,982	(1,029,803)
2013	15,018,006	9.48%	1.97%	1,423,707	295,855	(1,127,852)
2014	15,631,698	9.58%	2.11%	1,497,517	329,829	(1,167,688)
2015	16,165,380	9.58%	2.12%	1,548,643	342,706	(1,205,937)
2016	16,772,886	9.63%	2.06%	1,615,229	345,521	(1,269,708)
2017	17,409,273	9.71%	2.02%	1,690,440	351,667	(1,338,773)
2018	18,067,396	9.78%	1.99%	1,766,991	359,541	(1,407,450)
2019	18,773,830	9.83%	1.96%	1,845,467	367,967	(1,477,500)
2020	19,462,848	9.87%	1.93%	1,920,983	375,633	(1,545,350)
2021	20,246,047	9.91%	1.90%	2,006,383	384,675	(1,621,708)
2022	21,079,433	9.96%	1.87%	2,099,512	394,185	(1,705,327)
2023	21,954,224	10.01%	1.85%	2,197,618	406,153	(1,791,465)
2024	22,838,932	10.06%	1.83%	2,297,597	417,952	(1,879,645)
2025	23,822,519	10.12%	1.82%	2,410,839	433,570	(1,977,269)
2026	24,839,740	10.16%	1.80%	2,523,718	447,115	(2,076,603)
2027	25,836,119	10.20%	1.79%	2,635,284	462,467	(2,172,817)
2028	26,928,268	10.25%	1.78%	2,760,147	479,323	(2,280,824)
2029	28,021,457	10.31%	1.77%	2,889,012	495,980	(2,393,032)
2030	29,101,968	10.38%	1.76%	3,020,784	512,195	(2,508,589)
2031	30,315,559	10.46%	1.75%	3,171,007	530,522	(2,640,485)
2032	31,639,071	10.55%	1.75%	3,337,922	553,684	(2,784,238)
2033	32,993,070	9.61%	1.55%	3,170,634	511,393	(2,659,241)
2034	34,399,796	8.61%	1.34%	2,961,822	460,957	(2,500,865)
2035	35,944,197	7.78%	1.15%	2,796,459	413,358	(2,383,101)
2036	37,526,370	7.15%	1.00%	2,683,135	375,264	(2,307,871)
2037	39,179,739	6.67%	0.87%	2,613,289	340,864	(2,272,425)
2038	40,947,162	6.31%	0.78%	2,583,766	319,388	(2,264,378)
2039	42,761,899	6.05%	0.70%	2,587,095	299,333	(2,287,762)
2040	44,654,313	5.86%	0.62%	2,616,743	276,857	(2,339,886)
2041	46,586,952	5.72%	0.54%	2,664,774	251,570	(2,413,204)
Total				71,735,397	12,904,601	(58,830,796)

Results based upon total payroll (including new hire pay) and level percent of payroll amortization (period declines annually to an ultimate level of 5 years). All assumptions, including the 7.75% rate of return, are assumed to be met.

Police Employees
Retiree Healthcare Plan - Scenario #2: Alternative 5
Current retirees: Unchanged, Current active members: $20 monthly subsidy per year of service with 0% COLA adjustment, New members: No longer eligible for retiree healthcare benefits

	Total	Employer Contribution Rate		Employer Contribution Amount		
Year	Payroll	Baseline	Alternative	Baseline	Alternative	Difference
2011	13,774,086	7.66%	7.66%	1,055,095	1,055,095	0
2012	14,402,840	9.33%	2.90%	1,343,785	417,682	(926,103)
2013	15,018,006	9.48%	2.72%	1,423,707	408,490	(1,015,217)
2014	15,631,698	9.58%	2.86%	1,497,517	447,067	(1,050,450)
2015	16,165,380	9.58%	2.82%	1,548,643	455,864	(1,092,779)
2016	16,772,886	9.63%	2.74%	1,615,229	459,577	(1,155,652)
2017	17,409,273	9.71%	2.69%	1,690,440	468,309	(1,222,131)
2018	18,067,396	9.78%	2.63%	1,766,991	475,173	(1,291,818)
2019	18,773,830	9.83%	2.59%	1,845,467	486,242	(1,359,225)
2020	19,462,848	9.87%	2.53%	1,920,983	492,410	(1,428,573)
2021	20,246,047	9.91%	2.48%	2,006,383	502,102	(1,504,281)
2022	21,079,433	9.96%	2.44%	2,099,512	514,338	(1,585,174)
2023	21,954,224	10.01%	2.40%	2,197,618	526,901	(1,670,717)
2024	22,838,932	10.06%	2.37%	2,297,597	541,283	(1,756,314)
2025	23,822,519	10.12%	2.34%	2,410,839	557,447	(1,853,392)
2026	24,839,740	10.16%	2.31%	2,523,718	573,798	(1,949,920)
2027	25,836,119	10.20%	2.29%	2,635,284	591,647	(2,043,637)
2028	26,928,268	10.25%	2.26%	2,760,147	608,579	(2,151,568)
2029	28,021,457	10.31%	2.24%	2,889,012	627,681	(2,261,331)
2030	29,101,968	10.38%	2.22%	3,020,784	646,064	(2,374,720)
2031	30,315,559	10.46%	2.21%	3,171,007	669,974	(2,501,033)
2032	31,639,071	10.55%	2.20%	3,337,922	696,060	(2,641,862)
2033	32,993,070	9.61%	1.91%	3,170,634	630,168	(2,540,466)
2034	34,399,796	8.61%	1.61%	2,961,822	553,837	(2,407,985)
2035	35,944,197	7.78%	1.35%	2,796,459	485,247	(2,311,212)
2036	37,526,370	7.15%	1.14%	2,683,135	427,801	(2,255,334)
2037	39,179,739	6.67%	0.98%	2,613,289	383,961	(2,229,328)
2038	40,947,162	6.31%	0.86%	2,583,766	352,146	(2,231,620)
2039	42,761,899	6.05%	0.75%	2,587,095	320,714	(2,266,381)
2040	44,654,313	5.86%	0.66%	2,616,743	294,718	(2,322,025)
2041	46,586,952	5.72%	0.57%	2,664,774	265,546	(2,399,228)
Total				71,735,397	15,935,921	(55,799,476)

Results based upon total payroll (including new hire pay) and level percent of payroll amortization (period declines annually to an ultimate level of 5 years). All assumptions, including the 7.75% rate of return, are assumed to be met.

Police Employees
Retiree Healthcare Plan - Scenario #2: Alternative 6
Current retirees: Unchanged, Current active members: $20 monthly subsidy per year of service with 1% COLA adjustment, New members: No longer eligible for retiree healthcare benefits

Year	Total Payroll	Employer Contribution Rate Baseline	Employer Contribution Rate Alternative	Employer Contribution Amount Baseline	Employer Contribution Amount Alternative	Difference
2011	13,774,086	7.66%	7.66%	1,055,095	1,055,095	0
2012	14,402,840	9.33%	3.29%	1,343,785	473,853	(869,932)
2013	15,018,006	9.48%	3.13%	1,423,707	470,064	(953,643)
2014	15,631,698	9.58%	3.26%	1,497,517	509,593	(987,924)
2015	16,165,380	9.58%	3.22%	1,548,643	520,525	(1,028,118)
2016	16,772,886	9.63%	3.14%	1,615,229	526,669	(1,088,560)
2017	17,409,273	9.71%	3.08%	1,690,440	536,206	(1,154,234)
2018	18,067,396	9.78%	3.02%	1,766,991	545,635	(1,221,356)
2019	18,773,830	9.83%	2.97%	1,845,467	557,583	(1,287,884)
2020	19,462,848	9.87%	2.91%	1,920,983	566,369	(1,354,614)
2021	20,246,047	9.91%	2.85%	2,006,383	577,012	(1,429,371)
2022	21,079,433	9.96%	2.80%	2,099,512	590,224	(1,509,288)
2023	21,954,224	10.01%	2.76%	2,197,618	605,937	(1,591,681)
2024	22,838,932	10.06%	2.72%	2,297,597	621,219	(1,676,378)
2025	23,822,519	10.12%	2.68%	2,410,839	638,444	(1,772,395)
2026	24,839,740	10.16%	2.64%	2,523,718	655,769	(1,867,949)
2027	25,836,119	10.20%	2.61%	2,635,284	674,323	(1,960,961)
2028	26,928,268	10.25%	2.57%	2,760,147	692,056	(2,068,091)
2029	28,021,457	10.31%	2.54%	2,889,012	711,745	(2,177,267)
2030	29,101,968	10.38%	2.51%	3,020,784	730,459	(2,290,325)
2031	30,315,559	10.46%	2.47%	3,171,007	748,794	(2,422,213)
2032	31,639,071	10.55%	2.45%	3,337,922	775,157	(2,562,765)
2033	32,993,070	9.61%	2.12%	3,170,634	699,453	(2,471,181)
2034	34,399,796	8.61%	1.76%	2,961,822	605,436	(2,356,386)
2035	35,944,197	7.78%	1.47%	2,796,459	528,380	(2,268,079)
2036	37,526,370	7.15%	1.23%	2,683,135	461,574	(2,221,561)
2037	39,179,739	6.67%	1.04%	2,613,289	407,469	(2,205,820)
2038	40,947,162	6.31%	0.90%	2,583,766	368,524	(2,215,242)
2039	42,761,899	6.05%	0.78%	2,587,095	333,543	(2,253,552)
2040	44,654,313	5.86%	0.67%	2,616,743	299,184	(2,317,559)
2041	46,586,952	5.72%	0.58%	2,664,774	270,204	(2,394,570)
Total				71,735,397	17,756,498	(53,978,899)

Results based upon total payroll (including new hire pay) and level percent of payroll amortization (period declines annually to an ultimate level of 5 years). All assumptions, including the 7.75% rate of return, are assumed to be met.

Police Employees
Retiree Healthcare Plan - Scenario #2: Alternative 7
Current retirees: Unchanged, Current active members: $20 monthly subsidy per year of service with 2% COLA adjustment, New members: No longer eligible for retiree healthcare benefits

	Total	Employer Contribution Rate		Employer Contribution Amount		
Year	Payroll	Baseline	Alternative	Baseline	Alternative	Difference
2011	13,774,086	7.66%	7.66%	1,055,095	1,055,095	0
2012	14,402,840	9.33%	3.74%	1,343,785	538,666	(805,119)
2013	15,018,006	9.48%	3.61%	1,423,707	542,150	(881,557)
2014	15,631,698	9.58%	3.74%	1,497,517	584,626	(912,891)
2015	16,165,380	9.58%	3.69%	1,548,643	596,503	(952,140)
2016	16,772,886	9.63%	3.60%	1,615,229	603,824	(1,011,405)
2017	17,409,273	9.71%	3.54%	1,690,440	616,288	(1,074,152)
2018	18,067,396	9.78%	3.48%	1,766,991	628,745	(1,138,246)
2019	18,773,830	9.83%	3.42%	1,845,467	642,065	(1,203,402)
2020	19,462,848	9.87%	3.36%	1,920,983	653,952	(1,267,031)
2021	20,246,047	9.91%	3.29%	2,006,383	666,095	(1,340,288)
2022	21,079,433	9.96%	3.23%	2,099,512	680,866	(1,418,646)
2023	21,954,224	10.01%	3.17%	2,197,618	695,949	(1,501,669)
2024	22,838,932	10.06%	3.13%	2,297,597	714,859	(1,582,738)
2025	23,822,519	10.12%	3.07%	2,410,839	731,351	(1,679,488)
2026	24,839,740	10.16%	3.03%	2,523,718	752,644	(1,771,074)
2027	25,836,119	10.20%	2.98%	2,635,284	769,916	(1,865,368)
2028	26,928,268	10.25%	2.93%	2,760,147	788,998	(1,971,149)
2029	28,021,457	10.31%	2.89%	2,889,012	809,820	(2,079,192)
2030	29,101,968	10.38%	2.84%	3,020,784	826,496	(2,194,288)
2031	30,315,559	10.46%	2.79%	3,171,007	845,804	(2,325,203)
2032	31,639,071	10.55%	2.75%	3,337,922	870,074	(2,467,848)
2033	32,993,070	9.61%	2.36%	3,170,634	778,636	(2,391,998)
2034	34,399,796	8.61%	1.95%	2,961,822	670,796	(2,291,026)
2035	35,944,197	7.78%	1.60%	2,796,459	575,107	(2,221,352)
2036	37,526,370	7.15%	1.32%	2,683,135	495,348	(2,187,787)
2037	39,179,739	6.67%	1.10%	2,613,289	430,977	(2,182,312)
2038	40,947,162	6.31%	0.94%	2,583,766	384,903	(2,198,863)
2039	42,761,899	6.05%	0.81%	2,587,095	346,371	(2,240,724)
2040	44,654,313	5.86%	0.69%	2,616,743	308,115	(2,308,628)
2041	46,586,952	5.72%	0.59%	2,664,774	274,863	(2,389,911)
Total				71,735,397	19,879,902	(51,855,495)

Results based upon total payroll (including new hire pay) and level percent of payroll amortization (period declines annually to an ultimate level of 5 years). All assumptions, including the 7.75% rate of return, are assumed to be met.

Police Employees
Retiree Healthcare Plan - Scenario #2: Alternative 8
Current retirees: Unchanged, Current active members: $20 monthly subsidy per year of service with 3% COLA adjustment, New members: No longer eligible for retiree healthcare benefits

Year	Total Payroll	Employer Contribution Rate Baseline	Employer Contribution Rate Alternative	Employer Contribution Amount Baseline	Employer Contribution Amount Alternative	Difference
2011	13,774,086	7.66%	7.66%	1,055,095	1,055,095	0
2012	14,402,840	9.33%	4.28%	1,343,785	616,442	(727,343)
2013	15,018,006	9.48%	4.17%	1,423,707	626,251	(797,456)
2014	15,631,698	9.58%	4.30%	1,497,517	672,163	(825,354)
2015	16,165,380	9.58%	4.25%	1,548,643	687,029	(861,614)
2016	16,772,886	9.63%	4.16%	1,615,229	697,752	(917,477)
2017	17,409,273	9.71%	4.09%	1,690,440	712,039	(978,401)
2018	18,067,396	9.78%	4.02%	1,766,991	726,309	(1,040,682)
2019	18,773,830	9.83%	3.96%	1,845,467	743,444	(1,102,023)
2020	19,462,848	9.87%	3.89%	1,920,983	757,105	(1,163,878)
2021	20,246,047	9.91%	3.81%	2,006,383	771,374	(1,235,009)
2022	21,079,433	9.96%	3.74%	2,099,512	788,371	(1,311,141)
2023	21,954,224	10.01%	3.67%	2,197,618	805,720	(1,391,898)
2024	22,838,932	10.06%	3.61%	2,297,597	824,485	(1,473,112)
2025	23,822,519	10.12%	3.55%	2,410,839	845,699	(1,565,140)
2026	24,839,740	10.16%	3.49%	2,523,718	866,907	(1,656,811)
2027	25,836,119	10.20%	3.43%	2,635,284	886,179	(1,749,105)
2028	26,928,268	10.25%	3.37%	2,760,147	907,483	(1,852,664)
2029	28,021,457	10.31%	3.30%	2,889,012	924,708	(1,964,304)
2030	29,101,968	10.38%	3.24%	3,020,784	942,904	(2,077,880)
2031	30,315,559	10.46%	3.17%	3,171,007	961,003	(2,210,004)
2032	31,639,071	10.55%	3.11%	3,337,922	983,975	(2,353,947)
2033	32,993,070	9.61%	2.65%	3,170,634	874,316	(2,296,318)
2034	34,399,796	8.61%	2.17%	2,961,822	746,476	(2,215,346)
2035	35,944,197	7.78%	1.76%	2,796,459	632,618	(2,163,841)
2036	37,526,370	7.15%	1.44%	2,683,135	540,380	(2,142,755)
2037	39,179,739	6.67%	1.19%	2,613,289	466,239	(2,147,050)
2038	40,947,162	6.31%	1.00%	2,583,766	409,472	(2,174,294)
2039	42,761,899	6.05%	0.85%	2,587,095	363,476	(2,223,619)
2040	44,654,313	5.86%	0.71%	2,616,743	317,046	(2,299,697)
2041	46,586,952	5.72%	0.60%	2,664,774	279,522	(2,385,252)
Total				71,735,397	22,431,982	(49,303,415)

Results based upon total payroll (including new hire pay) and level percent of payroll amortization (period declines annually to an ultimate level of 5 years). All assumptions, including the 7.75% rate of return, are assumed to be met.

Police Employees
Retiree Healthcare Plan - Scenario #2: Alternative 9
Current retirees: Unchanged, Current active members: $30 monthly subsidy per year of service with 0% COLA adjustment, New members: No longer eligible for retiree healthcare benefits

Year	Total Payroll	Employer Contribution Rate		Employer Contribution Amount		Difference
		Baseline	Alternative	Baseline	Alternative	
2011	13,774,086	7.66%	7.66%	1,055,095	1,055,095	0
2012	14,402,840	9.33%	4.31%	1,343,785	620,762	(723,023)
2013	15,018,006	9.48%	4.21%	1,423,707	632,258	(791,449)
2014	15,631,698	9.58%	4.33%	1,497,517	676,853	(820,664)
2015	16,165,380	9.58%	4.24%	1,548,643	685,412	(863,231)
2016	16,772,886	9.63%	4.13%	1,615,229	692,720	(922,509)
2017	17,409,273	9.71%	4.05%	1,690,440	705,076	(985,364)
2018	18,067,396	9.78%	3.98%	1,766,991	719,082	(1,047,909)
2019	18,773,830	9.83%	3.90%	1,845,467	732,179	(1,113,288)
2020	19,462,848	9.87%	3.81%	1,920,983	741,535	(1,179,448)
2021	20,246,047	9.91%	3.73%	2,006,383	755,178	(1,251,205)
2022	21,079,433	9.96%	3.65%	2,099,512	769,399	(1,330,113)
2023	21,954,224	10.01%	3.59%	2,197,618	788,157	(1,409,461)
2024	22,838,932	10.06%	3.53%	2,297,597	806,214	(1,491,383)
2025	23,822,519	10.12%	3.47%	2,410,839	826,641	(1,584,198)
2026	24,839,740	10.16%	3.41%	2,523,718	847,035	(1,676,683)
2027	25,836,119	10.20%	3.36%	2,635,284	868,094	(1,767,190)
2028	26,928,268	10.25%	3.30%	2,760,147	888,633	(1,871,514)
2029	28,021,457	10.31%	3.25%	2,889,012	910,697	(1,978,315)
2030	29,101,968	10.38%	3.20%	3,020,784	931,263	(2,089,521)
2031	30,315,559	10.46%	3.15%	3,171,007	954,940	(2,216,067)
2032	31,639,071	10.55%	3.11%	3,337,922	983,975	(2,353,947)
2033	32,993,070	9.61%	2.65%	3,170,634	874,316	(2,296,318)
2034	34,399,796	8.61%	2.16%	2,961,822	743,036	(2,218,786)
2035	35,944,197	7.78%	1.76%	2,796,459	632,618	(2,163,841)
2036	37,526,370	7.15%	1.44%	2,683,135	540,380	(2,142,755)
2037	39,179,739	6.67%	1.19%	2,613,289	466,239	(2,147,050)
2038	40,947,162	6.31%	1.00%	2,583,766	409,472	(2,174,294)
2039	42,761,899	6.05%	0.86%	2,587,095	367,752	(2,219,343)
2040	44,654,313	5.86%	0.73%	2,616,743	325,976	(2,290,767)
2041	46,586,952	5.72%	0.62%	2,664,774	288,839	(2,375,935)
Total				71,735,397	22,239,826	(49,495,571)

Results based upon total payroll (including new hire pay) and level percent of payroll amortization (period declines annually to an ultimate level of 5 years). All assumptions, including the 7.75% rate of return, are assumed to be met.

Police Employees
Retiree Healthcare Plan - Scenario #2: Alternative 10
Current retirees: Unchanged, Current active members: $30 monthly subsidy per year of service with 1% COLA adjustment, New members: No longer eligible for retiree healthcare benefits

	Total	Employer Contribution Rate		Employer Contribution Amount		
Year	Payroll	Baseline	Alternative	Baseline	Alternative	Difference
2011	13,774,086	7.66%	7.66%	1,055,095	1,055,095	0
2012	14,402,840	9.33%	4.89%	1,343,785	704,299	(639,486)
2013	15,018,006	9.48%	4.82%	1,423,707	723,868	(699,839)
2014	15,631,698	9.58%	4.94%	1,497,517	772,206	(725,311)
2015	16,165,380	9.58%	4.84%	1,548,643	782,404	(766,239)
2016	16,772,886	9.63%	4.72%	1,615,229	791,680	(823,549)
2017	17,409,273	9.71%	4.64%	1,690,440	807,790	(882,650)
2018	18,067,396	9.78%	4.56%	1,766,991	823,873	(943,118)
2019	18,773,830	9.83%	4.48%	1,845,467	841,068	(1,004,399)
2020	19,462,848	9.87%	4.38%	1,920,983	852,473	(1,068,510)
2021	20,246,047	9.91%	4.29%	2,006,383	868,555	(1,137,828)
2022	21,079,433	9.96%	4.20%	2,099,512	885,336	(1,214,176)
2023	21,954,224	10.01%	4.12%	2,197,618	904,514	(1,293,104)
2024	22,838,932	10.06%	4.05%	2,297,597	924,977	(1,372,620)
2025	23,822,519	10.12%	3.97%	2,410,839	945,754	(1,465,085)
2026	24,839,740	10.16%	3.90%	2,523,718	968,750	(1,554,968)
2027	25,836,119	10.20%	3.83%	2,635,284	989,523	(1,645,761)
2028	26,928,268	10.25%	3.76%	2,760,147	1,012,503	(1,747,644)
2029	28,021,457	10.31%	3.69%	2,889,012	1,033,992	(1,855,020)
2030	29,101,968	10.38%	3.62%	3,020,784	1,053,491	(1,967,293)
2031	30,315,559	10.46%	3.55%	3,171,007	1,076,202	(2,094,805)
2032	31,639,071	10.55%	3.49%	3,337,922	1,104,204	(2,233,718)
2033	32,993,070	9.61%	2.95%	3,170,634	973,296	(2,197,338)
2034	34,399,796	8.61%	2.39%	2,961,822	822,155	(2,139,667)
2035	35,944,197	7.78%	1.93%	2,796,459	693,723	(2,102,736)
2036	37,526,370	7.15%	1.56%	2,683,135	585,411	(2,097,724)
2037	39,179,739	6.67%	1.27%	2,613,289	497,583	(2,115,706)
2038	40,947,162	6.31%	1.06%	2,583,766	434,040	(2,149,726)
2039	42,761,899	6.05%	0.89%	2,587,095	380,581	(2,206,514)
2040	44,654,313	5.86%	0.75%	2,616,743	334,907	(2,281,836)
2041	46,586,952	5.72%	0.63%	2,664,774	293,498	(2,371,276)
Total				71,735,397	24,937,751	(46,797,646)

Results based upon total payroll (including new hire pay) and level percent of payroll amortization (period declines annually to an ultimate level of 5 years). All assumptions, including the 7.75% rate of return, are assumed to be met.

Police Employees
Retiree Healthcare Plan - Scenario #2: Alternative 11
Current retirees: Unchanged, Current active members: $30 monthly subsidy per year of service with 2% COLA adjustment, New members: No longer eligible for retiree healthcare benefits

	Total	Employer Contribution Rate		Employer Contribution Amount		
Year	Payroll	Baseline	Alternative	Baseline	Alternative	Difference
2011	13,774,086	7.66%	7.66%	1,055,095	1,055,095	0
2012	14,402,840	9.33%	5.57%	1,343,785	802,238	(541,547)
2013	15,018,006	9.48%	5.53%	1,423,707	830,496	(593,211)
2014	15,631,698	9.58%	5.65%	1,497,517	883,191	(614,326)
2015	16,165,380	9.58%	5.54%	1,548,643	895,562	(653,081)
2016	16,772,886	9.63%	5.43%	1,615,229	910,768	(704,461)
2017	17,409,273	9.71%	5.34%	1,690,440	929,655	(760,785)
2018	18,067,396	9.78%	5.25%	1,766,991	948,538	(818,453)
2019	18,773,830	9.83%	5.16%	1,845,467	968,730	(876,737)
2020	19,462,848	9.87%	5.05%	1,920,983	982,874	(938,109)
2021	20,246,047	9.91%	4.94%	2,006,383	1,000,155	(1,006,228)
2022	21,079,433	9.96%	4.84%	2,099,512	1,020,245	(1,079,267)
2023	21,954,224	10.01%	4.75%	2,197,618	1,042,826	(1,154,792)
2024	22,838,932	10.06%	4.66%	2,297,597	1,064,294	(1,233,303)
2025	23,822,519	10.12%	4.57%	2,410,839	1,088,689	(1,322,150)
2026	24,839,740	10.16%	4.48%	2,523,718	1,112,820	(1,410,898)
2027	25,836,119	10.20%	4.40%	2,635,284	1,136,789	(1,498,495)
2028	26,928,268	10.25%	4.31%	2,760,147	1,160,608	(1,599,539)
2029	28,021,457	10.31%	4.22%	2,889,012	1,182,505	(1,706,507)
2030	29,101,968	10.38%	4.13%	3,020,784	1,201,911	(1,818,873)
2031	30,315,559	10.46%	4.02%	3,171,007	1,218,685	(1,952,322)
2032	31,639,071	10.55%	3.94%	3,337,922	1,246,579	(2,091,343)
2033	32,993,070	9.61%	3.32%	3,170,634	1,095,370	(2,075,264)
2034	34,399,796	8.61%	2.67%	2,961,822	918,475	(2,043,347)
2035	35,944,197	7.78%	2.13%	2,796,459	765,611	(2,030,848)
2036	37,526,370	7.15%	1.71%	2,683,135	641,701	(2,041,434)
2037	39,179,739	6.67%	1.38%	2,613,289	540,680	(2,072,609)
2038	40,947,162	6.31%	1.13%	2,583,766	462,703	(2,121,063)
2039	42,761,899	6.05%	0.94%	2,587,095	401,962	(2,185,133)
2040	44,654,313	5.86%	0.78%	2,616,743	348,304	(2,268,439)
2041	46,586,952	5.72%	0.65%	2,664,774	302,815	(2,361,959)
Total				71,735,397	28,160,874	(43,574,523)

Results based upon total payroll (including new hire pay) and level percent of payroll amortization (period declines annually to an ultimate level of 5 years). All assumptions, including the 7.75% rate of return, are assumed to be met.

Police Employees
Retiree Healthcare Plan - Scenario #2: Alternative 12
Current retirees: Unchanged, Current active members: $30 monthly subsidy per year of service with 3% COLA adjustment, New members: No longer eligible for retiree healthcare benefits

Year	Total Payroll	Employer Contribution Rate Baseline	Employer Contribution Rate Alternative	Employer Contribution Amount Baseline	Employer Contribution Amount Alternative	Difference
2011	13,774,086	7.66%	7.66%	1,055,095	1,055,095	0
2012	14,402,840	9.33%	6.38%	1,343,785	918,901	(424,884)
2013	15,018,006	9.48%	6.38%	1,423,707	958,149	(465,558)
2014	15,631,698	9.58%	6.49%	1,497,517	1,014,497	(483,020)
2015	16,165,380	9.58%	6.38%	1,548,643	1,031,351	(517,292)
2016	16,772,886	9.63%	6.26%	1,615,229	1,049,983	(565,246)
2017	17,409,273	9.71%	6.16%	1,690,440	1,072,411	(618,029)
2018	18,067,396	9.78%	6.06%	1,766,991	1,094,884	(672,107)
2019	18,773,830	9.83%	5.96%	1,845,467	1,118,920	(726,547)
2020	19,462,848	9.87%	5.86%	1,920,983	1,140,523	(780,460)
2021	20,246,047	9.91%	5.72%	2,006,383	1,158,074	(848,309)
2022	21,079,433	9.96%	5.61%	2,099,512	1,182,556	(916,956)
2023	21,954,224	10.01%	5.49%	2,197,618	1,205,287	(992,331)
2024	22,838,932	10.06%	5.39%	2,297,597	1,231,018	(1,066,579)
2025	23,822,519	10.12%	5.28%	2,410,839	1,257,829	(1,153,010)
2026	24,839,740	10.16%	5.18%	2,523,718	1,286,699	(1,237,019)
2027	25,836,119	10.20%	5.08%	2,635,284	1,312,475	(1,322,809)
2028	26,928,268	10.25%	4.96%	2,760,147	1,335,642	(1,424,505)
2029	28,021,457	10.31%	4.84%	2,889,012	1,356,239	(1,532,773)
2030	29,101,968	10.38%	4.72%	3,020,784	1,373,613	(1,647,171)
2031	30,315,559	10.46%	4.59%	3,171,007	1,391,484	(1,779,523)
2032	31,639,071	10.55%	4.47%	3,337,922	1,414,266	(1,923,656)
2033	32,993,070	9.61%	3.75%	3,170,634	1,237,240	(1,933,394)
2034	34,399,796	8.61%	3.00%	2,961,822	1,031,994	(1,929,828)
2035	35,944,197	7.78%	2.37%	2,796,459	851,877	(1,944,582)
2036	37,526,370	7.15%	1.88%	2,683,135	705,496	(1,977,639)
2037	39,179,739	6.67%	1.50%	2,613,289	587,696	(2,025,593)
2038	40,947,162	6.31%	1.22%	2,583,766	499,555	(2,084,211)
2039	42,761,899	6.05%	0.99%	2,587,095	423,343	(2,163,752)
2040	44,654,313	5.86%	0.81%	2,616,743	361,700	(2,255,043)
2041	46,586,952	5.72%	0.67%	2,664,774	312,133	(2,352,641)
Total				71,735,397	31,970,930	(39,764,467)

Results based upon total payroll (including new hire pay) and level percent of payroll amortization (period declines annually to an ultimate level of 5 years). All assumptions, including the 7.75% rate of return, are assumed to be met.

Selected Approved Changes to State Public Pensions to Restore or Preserve Plan Sustainability

NASRA

System	Contributions	Benefits	Early Retirement	Actuarial Methods/Processes	Study Commission	Notes
Retirement Systems of Alabama	Raised contribution rates for current and future employees, as follows: • general state employees and teachers, from 5% to 7.5%; • firefighters, law enforcement officers and correctional officers, from 6% to 8.25% and 8.5% Employer rates will be reduced commensurate with the increase in employee rates.					
Arizona State Retirement System	Employee and employer contributions are matched and adjusted annually based on actuarial results; they rose on 7/1/10 from 9.0% to 9.6%; this includes the retiree health insurance benefit.	For new hires: • Change from Rule of 80 to Rule of 85 • Change FAS from high 3 years to high 5 • Eliminate access to ER contributions for terminating participants Also, • Made service purchases cost-neutral • Decreased interest rate paid on refunds • Requiring ERs to pay ASRS for early retirement incentives • Rescinded modified DROP Program	Early retirement provisions revised commensurate with change in normal retirement eligibility			Changes approved in 2010

Selected Approved Changes to State Public Pensions to Restore or Preserve Plan Sustainability

System	Contributions	Benefits	Early Retirement	Actuarial Methods/Processes	Study Commission	Notes
Arizona statewide plans	Increased employee contributions for participants in the Public Safety Personnel Retirement System (firefighters and police officers), rising gradually from current level of 7.65% to 11.65%. Also, requires employers to make contributions for retirees who return to work.	Changed terms of the investment-performance-based COLA for participants in the Correctional Officers, Public Safety Personnel, and Elected Officials plans. A COLA may be paid only if the funds' total return exceeds 10.5 percent, and the amount of the COLA is linked to the plans' funding condition.				Changes approved in 2011
California PERF	State employee contributions, which for most workers are set in labor contracts, are rising by 2% to 5% of pay for most employees, depending on bargaining unit and employee classification.	For new hires: • Increased final average salary period from one year to three • For general state employees, higher normal retirement age, from 55 to 60 • For state public safety employees, lower retirement multiplier, from 3.0% to 2.5% or 2.5% to 2.0%; and higher retirement age, from 50 to 55, depending on employee classification				Changes approved in 2010. PERF is an agent plan with many state and local employers. The changes shown here affect state employees; other employers have also made changes to benefits and/or contributions.

Selected Approved Changes to State Public Pensions to Restore or Preserve Plan Sustainability

System	Contributions	Benefits	Early Retirement	Actuarial Methods/Processes	Study Commission	Notes
Colorado PERA	Employee and employer contribution rates will rise incrementally for several years. Additionally, the legislature approved temporary increases in contribution rates for state employees by 2.5%, for FY 2012 only, and reduced employer rates by a commensurate amount.	• Lower auto-COLA for existing retirees, to lesser of CPI-W or 2.0% • Require future retirees to be retired for 1 year before receiving a COLA • 5-year service credit required on 50% employer match on contribution refunds, effective 1/1/11	Increased actuarial reduction for early retirement		Changes were preceded by a statewide listening tour	Changes approved in 2010 and 2011.
Delaware PERS	Increased employee contribution rates from 3% to 5% on salaries above $6,000, effective 1/1/12.	For new hires as of 1/1/12: • 10-year vesting period, from 5; • Raised normal retirement eligibility to 65 years of age with 10 years of service, 60/20, or any/30, up from 62/5, 60/15, or any/30 • Overtime will be excluded from final average salary calculation	Increased actuarial reduction for early retirement.			Changes approved in 2011.
Florida Retirement System	FRS, which previously was a non-contributory plan, will require participants to contribute 3% of pay beginning 7/1/11.	For new hires as of 7/1/11: • 8-year vesting period, from 6 • 8-year final average salary period, from 5 • Raised normal retirement age, from 62 to 65, and 55 to 60 for public safety workers • Longer final avg salary period, from 5 highest years to 8 Also, eliminates COLA for all service earned after 6/30/11				Changes approved in 2011. FRS participants maintain option to select a DB or DC plan as their primary retirement benefit.

Selected Approved Changes to State Public Pensions to Restore or Preserve Plan Sustainability

System	Contributions	Benefits	Early Retirement	Actuarial Methods/Processes	Study Commission	Notes
Hawaii ERS	Increased EE contribution rates for those hired after 6/30/12, as follows: general EEs and teachers, from 7.8% to 9.8%, and public safety personnel, from 12.2% to 14.2%. Higher ER rates will be phased in over several years, from 15% to 17% for general EEs and 19.7% to 25% for public safety.					
Illinois statewide plans (except judges and legislators)		For new hires as of 1/1/11: • Normal retirement age increases to 67, from 60 • Minimum retirement age set at 62 • FAS basis is now highest 8 of last 10 years, up from final 4 • Limits pension benefit to 75% of FAS or $106,800, indexed to the lesser of 3% or half of CPI • COLAs will be lesser of 3% or half of CPI, non-compounded, from current auto 3% compounded • COLAs begin at age 67	Early retirement provisions revised commensurate with change in normal retirement eligibility			Changes approved in 2010. Suspends pension benefits for those who return-to-work for another public employer in the state.
Iowa PERS	Contribution rates will rise incrementally, from 4.7% to 5.3% for EEs and 7.25% to 8.15% for ERs. Thereafter, the board has authority to adjust the total rate by up to 1%.	• Vesting period for those not vested (currently 4 years) on 7/1/12 will increase to 7 years. • Increased FAS period from 3 years to 5	Increased actuarial reduction for early retirement			Changes approved in 2010.

Selected Approved Changes to State Public Pensions to Restore or Preserve Plan Sustainability

NASRA

System	Contributions	Benefits	Early Retirement	Actuarial Methods/Processes	Study Commission	Notes
Kansas PERS	Cap on permissible annual increase in employer rates will rise gradually from 0.6% to 1.2% by 2017. Participants employed before 1/1/09 may choose to keep the 4% contribution rate with a lower future benefit accrual, or opt for 6% rate and keep the same benefit accrual rate.	See KPERS Contributions column entry. Also, those employed after 12/31/08 will be permitted to choose to retain their 1.75% multiplier and forfeit accrual of their COLA (for all service), or to retain their COLA and reduce future accrual rate from 1.75% to 1.4%. All changes would become effective in 2014.			Established a commission to study alternative plan designs and recommend a plan for System sustainability. Commission report due Jan 2012. Recommendations must be voted on in the 2012 Legislature for the other parts of the bill to take effect.	Changes approved May 2011. The legislation also directs that 80% of proceeds from excess real estate property sales will be used to pay down KPERS' unfunded liability.
Kentucky TRS		For new hires after 6/30/08: • Increased normal retirement eligibility from 55/5 to 55/10; retained 60/27 • Established graduated retirement factor schedule that is lower for those who accrue less than 30 years of service, beginning with 1.7% for 10 years and less	Increased actuarial reduction for early retirement			Changes were approved in 2008.
Maine PERS		• Increased age when most new hires and those with less than 5 years of service on 7/1/11 are eligible to retire, from 62 to 65. Members may be able to purchase other types of service to remain in the Age 62 plan. • The retiree COLA will be frozen for 3 years, then based on CPI up to 3%. Retirees will receive a COLA only on their first $20,000 of benefits, indexed				Changes approved June 2011.

NASRA

System	Contributions	Benefits	Early Retirement	Actuarial Methods/Processes	Study Commission	Notes
		each year by the CPI. • State employees or teachers who are 1) normal retirement age; 2) retire after 7/11, and, 3) return to work in a position covered by the State/Teacher plan may work no more than 5 years and only at a salary not more than 75% of that established for the position.				
Maryland State Retirement Agency	For existing state workers and teachers not yet paying 7%, raised contribution rate to that level. Establishes 7% employee contribution rate for all new hires as of 7/1/11.	For new state workers and teachers as of 7/1/11: • Increased vesting period from 5 years to 10 • Increased FAS period from 3 years to 5 • Increased normal retirement eligibility to Rule of 90 or 65/10 For existing state workers and teachers and new hires as of 7/1/11, reduced auto-COLA to CPI up to 2.5% when assumed investment return is achieved; 1% when it's not. Also, approved changes to DROP and other benefit provisions affecting state and local police and corrections officers.	For new state workers and teachers as of 7/1/11, Increased early retirement eligibility to age 60 or 15 years of service			Changes were approved in 2011.
Michigan Public School ERS	New hires on or after 7/1/10 participate in a hybrid plan featuring higher EE contributions to the DB plan and mandatory participation in the DC plan.	New school system hires have a hybrid plan instead of the current DB plan. Hybrid plan features the same multiplier as the legacy DB plan, but requires higher EE contributions and mandatory participation in DC plan.				Changes approved in 2010.

Selected Approved Changes to State Public Pensions to Restore or Preserve Plan Sustainability

NASRA

System	Contributions	Benefits	Early Retirement	Actuarial Methods/Processes	Study Commission	Notes
Minnesota PERA	Employer contribution rates increased from 7.0% to 7.25% and employee contributions increased from 6.0% to 6.25%, on 1/1/11.	• Reduction in COLA for existing retirees from 2.5% to 1.0%, until funding ratio=90% • Reduction in interest paid on inactive and terminating accounts. • Increase in vesting period, from 3 years to 5			Directors of the 3 statewide systems were directed to conduct study of cost, benefits, and feasibility of DB, DC, and other plans, and report back by 6/11.	Changes approved in 2010.
Minnesota SRS		• Reduction in COLA for existing retirees from 2.5% to 2.0%, until funding ratio=90% • Reduction in interest paid on inactive and terminating accounts. • Increase in vesting period, from 3 years to 5		Extended amortization period from 2020 to 2040.	Directors of the 3 statewide systems were directed to conduct study of cost, benefits, and feasibility of DB, DC, and other plans, and report back by 6/11.	Changes approved in 2010.
Minnesota Teachers	Employer and employee contributions will rise by 0.5% each year, from 5.5% each to 7.5%, phased over 4 years. After the phase-in, the TRA board has authority to adjust future rates (within limits) should the system have a contribution deficiency or sufficiency.	• For existing retirees, 2-yr suspension of COLA followed by permanent reduction in COLA from 2.5% to 2.0%, until funding ratio=90% • Reduction in interest paid on inactive and terminating accounts.			Directors of the 3 statewide systems were directed to conduct study of cost, benefits, and feasibility of DB, DC, and other plans, and report back by 6/11.	Changes approved in 2010.
Mississippi PERS	Raised contribution rates for all employees by 1.75%.	For new hires after 7/1/11: • Retirement eligibility raised to 30 years of service or age 65. • Effective 7/1/11, ERs will be required to pay contributions on any re-employed retiree, and a 90-day break in service				Changes approved in 2010 and 2011.

Selected Approved Changes to State Public Pensions to Restore or Preserve Plan Sustainability

System	Contributions	Benefits	Early Retirement	Actuarial Methods/Processes	Study Commission	Notes
		will be required (up from 45, with an emergency provision). • Increased age when COLA begins compounding, from 55 to 60.				
Missouri State ERS	New hires as of 1/1/11 will be required to contribute 4% of pay; plan currently is non-contributory.	For new hires as of 1/1/11: • 10-year vesting (from 5) • Normal retirement at age 67 or Rule of 90 at age 55 (from 62 or Rule of 80 at any age)	For new hires as of 1/1/11: • Age 62 with 10 yrs of service (from 57/5)			Changes were approved in 2010.
Montana PERA	New hires as of 7/1/11 will contribute 7.9% rather than 6.9%.					Changes were approved in 2011.
Nebraska PERS	Rates for teachers and other school employees will rise from 8.28% to 9.78%, phased in over 2 years beginning 9/1/11. Rates are scheduled to return to 7.28% in 2017. The state contribution of 1%, up from 0.7%, to teacher plans is extended to 2017. Also, state patrol employee and employer rates are increased from 16% to 19% for a 2-year period beginning 7/1/11.					
Nevada PERS		For new hires as of 1/1/10: • New minimum retirement age • Lower multiplier • Anti-spiking provision	Increased actuarial reduction for early retirement			Changes were approved in '09 and reflected a consensus among affected groups.

Selected Approved Changes to State Public Pensions to Restore or Preserve Plan Sustainability

System	Contributions	Benefits	Early Retirement	Actuarial Methods/Processes	Study Commission	Notes
New Hampshire Retirement System	Rates for general employees and teachers will rise from 5% to 7%; for police, from 9.3% to 11.55%; and firefighters, from 9.3% to 11.8%.	For new hires as of 7/1/11, normal retirement eligibility for firefighters and police will change from age 45 with 20 years of service to age 50 with 25 years of service.				Changes were approved in June 2011. Also placed limits on return-to-work.
New Jersey Division of Pension and Benefits	For general employees and teachers, raises employee contribution rates from 5.5% to 6.5%, then phases in to 7.5% over 7 years. For public safety officers, increases employee rate from 8.5% to 10.0%. The state police rate will rise from 7.5% to 9.0%.	• Future COLAs are suspended for all existing and future retirees until plans reach a funding level of 80%. • For new hires after 6/29/11, a new tier is established with a retirement age of 65.	For new hires after 6/28/11, early retirement eligibility with 30 years at any age, with a 3% reduction in benefit for each year of age under 65.			Changes approved in 2011.
New Mexico Educational Retirement Board	For EEs earning $20k and more, increased EE contribution rate by 1.5% and reduced ER rate by same amount.	For new hires after 6/30/09: • Increased normal retirement eligibility from any age w/25 years of service to any/30, from Rule of 75 to Rule of 80, and 65/5 to 67/5				Changes approved in 2009.
New Mexico PERA	Increased EE contribution rate by 1.5% and reduced ER rate by same amount.	For new hires after 6/30/10: • Increased normal retirement eligibility from any age w/25 years of service to any/30. Retained retirement eligibility of Rule of 80 and 67/5				Changes approved in 2009.
New York State & Local RS	Most new hires must now make contributions of 3% their entire career, instead of only first 10 yrs	For new hires as of 1/1/10: • 10-year vesting, from 5 • Limit on use of OT in benefit calculation	Increased actuarial reduction for early retirement			Changes approved in2009.

Selected Approved Changes to State Public Pensions to Restore or Preserve Plan Sustainability

NASRA

System	Contributions	Benefits	Early Retirement	Actuarial Methods/Processes	Study Commission	Notes
New York State TRS	New hires must now make contributions of 3.5% their entire career, instead of only first 10 years.	For new hires as of 1/1/10: • 10-year vesting, from 5 • Full retirement factor of 2.0% after 25 years of service, up from 20 • Normal retirement at age 57 with 30 years of service, up from age 55 • Limit on use of OT in benefit calculation	Increased actuarial reduction for early retirement			Changes approved in 2009.
North Dakota PERS	Increased employee and employer rates by 2% over 2 years beginning 1/1/12. Employee rates will rise to 12.3% and employer rates will reach 18.7%.					
North Dakota Teachers	Increased employee rates by 4%, from 7.75% to 11.75%, in 2 increments of 2% each, effective 7/1/12 and 7/1/14. Increased employer rates in the same manner, from 8.75% to 12.75%. EE and ER rates will return to 7.75% when funding level reaches 90%.					
Oklahoma statewide plans		Raised normal retirement eligibility criteria for teachers and state employees. Also, requires provision of a funding source to fund future COLAs.				Changes approved in 2011. Required COLA funding provision is estimated to reduce OK PERS

Selected Approved Changes to State Public Pensions to Restore or Preserve Plan Sustainability

NASRA

System	Contributions	Benefits	Early Retirement	Actuarial Methods/Processes	Study Commission	Notes
						and TRS unfunded liabilities by roughly 30%.
Pennsylvania Public Schools ERS	For new hires as of 7/1/11, reform bill establishes a "shared-risk" provision that could result in higher future employee contribution rates, depending on fund investment performance, and creates a floor for employee rates at their present levels. Also, creates cap on amount employer rates may increase in any year.	For new hires as of 7/1/11: • Reduced retirement multiplier, from 2.5% to 2.0% • Permits option to retain 2.5% multiplier with employee contribution rate of 10.3%, rather than 7.5% current rate. • 10-year vesting, up from 5 • Replaces retirement provision of any age with 65 years of age and 3 years of service (from 60/30, 62/3 or any/35); or 35 years of svc with Rule of 92, i.e., age and years of service must total 92		Increases asset smoothing period from five years to 10 and increases amortization period to 24 years.		Changes were approved in 2010. Reform bill prohibits future use of pension obligation bonds to pay down unfunded pension liabilities.
Pennsylvania State ERS	For new hires as of 1/1/11, reform bill establishes a "shared-risk" provision that could result in higher future employee contribution rates, depending on fund investment performance, and creates a floor for employee rates at their present levels. Also, creates cap on amount that employer rates may increase in any year.	For new hires as of 1/1/11: • Reduced retirement multiplier, from 2.5% to 2.0% • Permits option to retain 2.5% multiplier with employee contribution rate of 9.3%, rather than 6.25% current rate • 10-year vesting, up from 5 • Raises normal retirement age to 65 from 60, and to 55 from 50, depending on class • Replaces retirement provision of any age w/ 35 years of svc with Rule of 92, i.e., age and years of service must total 92 • Prohibits payment of lump-sum withdrawals with interest for		Restarts amortization period to 30 years.		Changes were approved in 2010. Reform bill prohibits future use of pension obligation bonds to pay down unfunded pension liabilities.

System	Contributions	Benefits	Early Retirement	Actuarial Methods/Processes	Study Commission	Notes
		those who qualify for an annuity.				
Rhode Island	As part of new hybrid plan for most current participants, employee contributions will be split between the DB and DC components.	New hybrid effective 7/1/12 for current active members features a retirement multiplier of 1.0 percent, with 5% employee contributions and 1% employer made to a DC plan. For teachers without Social Security, an additional 2% employee and 2% employer contribution. Also, revoked automatic COLA up to 3%, in lieu of risk-adjusted COLA targeting 2%, calculated as a 5-year smoothed investment return less 5.50% with a 0% floor and 4% cap, applied to first $25,000 of benefit, indexed. COLA delayed until later of SS NRA or 3 years after retirement.				Changes were approved in 2011, effective 7/1/12.
Rhode Island		Reduced benefits for state EEs, teachers and judges not eligible to retire on or before 9/30/09, by increasing retirement age to 62 with a methodology that proportionally changes age requirement based on years of service, so the closer one is to retirement, the less the impact. Also, increased FAS period from 3 years to 5 and reduced COLA to lesser of CPI or 3.0%.				Changes were approved in 2009. A group of public employee unions has filed suit against the benefit reductions.
South Dakota RS		• New COLA format, affecting existing retirees, based on plan funding level • Eliminate first-year pro-rated COLAs • Reduce refunds of ER				Changes were approved in 2010. New limits on return-to-work

Selected Approved Changes to State Public Pensions to Restore or Preserve Plan Sustainability

NASRA

System	Contributions	Benefits	Early Retirement	Actuarial Methods/Processes	Study Commission	Notes
		contributions				
Texas ERS		For new hires, retirement eligibility increases to age 65 with 10 years of service, from 60/5.				Changes were approved in 2009.
Utah RS	Plan currently is non-contributory. New hybrid plan is projected to cost 7.5%. ERs will fund first 10% of the hybrid or DC plan. Difference between the cost of the hybrid and 10% is deposited into EEs' DC account. If cost of the hybrid exceeds 10%, EEs will pay the difference.	New hires as of 7/1/11 will have their choice of DC or hybrid, and employers will fund the first 10% of either.			State will be studying projected costs of approved changes and may make additional changes.	Changes were approved in 2010. Employer liabilities for new hires as of 7/1/11 are effectively capped at 10% of pay.
Vermont TRS	Raises contributions for current employees from 3.54% to 5.0%.	For current teachers 5 years or more from normal retirement eligibility: • raises normal retirement to 65 or Rule of 90, from 62 or any/30 • increases max benefit to 60% of FAS, from 50% • increases multiplier for those w/20 years of service, to 2.0 from 1.67	Increases penalties for early retirement			Changes were approved in 2010. Also increases limits on maximum permissible benefit and includes anti-spiking provision.
Virginia RS	New hires as of 7/1/10 are required to make contributions, of 5%	For new hires as of 7/1/10: • Normal retirement age tied to Social Security retirement age, from 65 • Lower auto-COLA • Final average salary period of 5 years, up from 3	Early retirement provisions revised commensurate with change in normal retirement eligibility			Changes were approved in 2010. Will continue as non-contributory for existing employees.