

AGENDA	Monday, March 26, 2012	
Informational Meeting	4:00 PM at Carnegie Town Hall	
Sioux Falls City Council	235 West Tenth Street	

1. Call To Order

2. Staff Report

A. Lorie Hogstad, City Clerk

3. City Council Open Discussion

4. Presentations

A. Pension Design Study by Thomas J. Cavanaugh, Cavanaugh Macdonald Consulting, LLC; Pat Beckham, Principal and Consulting Actuary with Cavanaugh Macdonald Consulting, LLC; and Eric Gary, Healthcare Lead Actuary with Cavanaugh Macdonald Consulting, LLC

5. Adjournment

The City Council may include such other business as may come before this body.

Date: 2012-03-26  
SIRE Meeting ID: 1685  
Meeting Type: Informational Meeting

YouTube:<https://youtu.be/idpjrY9uDTg>  
Agenda Item: Not Assigned  
Item ID: 62386

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City of Sioux Falls.



**Cavanaugh Macdonald**  
CONSULTING, LLC

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## Pension Plan Design Study Presentation

March 26, 2012

Tom Cavanaugh, FSA, FCA, EA, MAAA

Eric Gary, FSA, FCA, MAAA

Patrice Beckham, FSA, FCA, EA, MAAA



# Today's Meeting



- Scope of Project
- Pension Plan Design Study
  - Goals/Objectives
  - Background
  - Alternatives considered
  - Recommended changes
  - Cost impact of proposed changes

# Scope of Project



- RFP issued jointly by both Boards in April, 2011
  
- Services requested in RFP
  - Actuarial audit of the 12/31/10 actuarial valuations
  - Plan design study
    - Facilitate discussion and analysis on system alternatives and plan design changes necessary to reduce and stabilize City pension contribution rates.
  
    - Identify options and/or benefit structure changes, provide cost analysis, and recommend system modifications for Board consideration.

# Background Information



- Two broad categories of retirement plans
  - Defined benefit (DB) plans: benefit security
  - Defined contribution (DC) plans: wealth accumulation
  
- Hybrid plan contain features of both DB and DC plans
  - Combination DB/DC plan
  - Cash balance plan
  
- City offers retiree healthcare benefits which were also considered in this study

# Plan Design Study



- Recent market downturn has put upward pressure on employer contribution rates at a time when revenue growth is uncertain
  
- Significant activity in this area
  - From 2009 to 2011, 43 states enacted major pension changes
  - Restructured benefits and contribution provisions. Changes are dependent on legal provisions.
  - Typically have revised rather than replaced traditional defined benefit plan, often with new tier.
  - Costs shifted to employees through higher contributions and lower benefits

# Employer Cost



$$C^{ER} = B + E - I - C^{EE}$$

C = Contributions

I = Investment Income

B = Benefits Paid

E = Expenses



# Retirement Benefits



- Retirement programs are part of the overall compensation package
- Impact recruitment and retention of employees
- Any changes made should be designed to help the City attain its overall goals regarding City employment

# City's Compensation and Benefit Objectives



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



# Current Pension Benefit Plans

- Plans are well funded (around 90%)
  - ARC has always been contributed
  - Closed amortization period (13 for pension)
  - No benefit improvements for many years
- City cost of current retirement benefits

	General	Police	Fire
Normal Cost Rate	11.62%	19.30%	21.01%
UAAL Contribution Rate	<u>4.24%</u>	<u>9.42%</u>	<u>12.20%</u>
ARC Rate	15.86%	28.72%	33.21%
Employee Contribution Rate	<u>3.00%</u>	<u>8.00%</u>	<u>8.00%</u>
Employer ARC Rate	12.86%	20.72%	25.21%

# Unfunded Actuarial Accrued Liability



- Existing UAAL cannot be reduced without reducing benefits for current retirees or actives
  - No desire to change the benefits of retirees
  - Difficult to change pension benefits for current active members since subject to vote of active employees
  - Only option for City cost reduction is to have current active employees contribute more toward their pension benefits.
- UAAL is a “legacy” cost that must be paid regardless of changes for new hires
- Change in the benefit structure for new hires (future actives) will generate additional savings



# Alternatives Considered

- South Dakota State Retirement System
- Defined Contribution Plan
- Hybrid Plans
- Retain current Defined Benefit Plan
  - Increase contribution rate for current active members
  - Change benefits for new hires (create a new tier)
- Healthcare Benefits
  - Change eligibility requirements
  - Change subsidy amount
  - Discontinue access to active employee plan
  - Discontinue healthcare benefit

# New hires go into South Dakota Retirement System (SDRS)



- Would require legislation
- Current retirees and actives continue to earn benefits in the current City plans – no change
- New hires are covered by SDRS
- Cost impact of closing the plan – impact of changing cash flows on asset allocation
- Loss of City control – No real influence on decisions driving costs or benefits

# New Hires Participate in SDRS



- City will have to continue paying for unfunded liability of current plans
- May need to evaluate different payment schedules for UAAL
- Will impact asset allocation at some point which will increase costs
- Potential variability of SDRS employer contribution although relatively stable in past and history of being well funded
- Potential variability of SDRS benefit levels for new and existing members as exhibited recently

# New Hires Participate in DC Plan



- City will have to continue paying for unfunded liability of current plans
- May need to evaluate different payment schedules for UAAL
- Will impact asset allocation at some point which will increase costs
- More benefits paid to those who leave City employment than under DB Plan
- Question of benefit security and ability of employees to successfully manage the various retirement risks



# New Hires in New Tier in Existing DB Plan

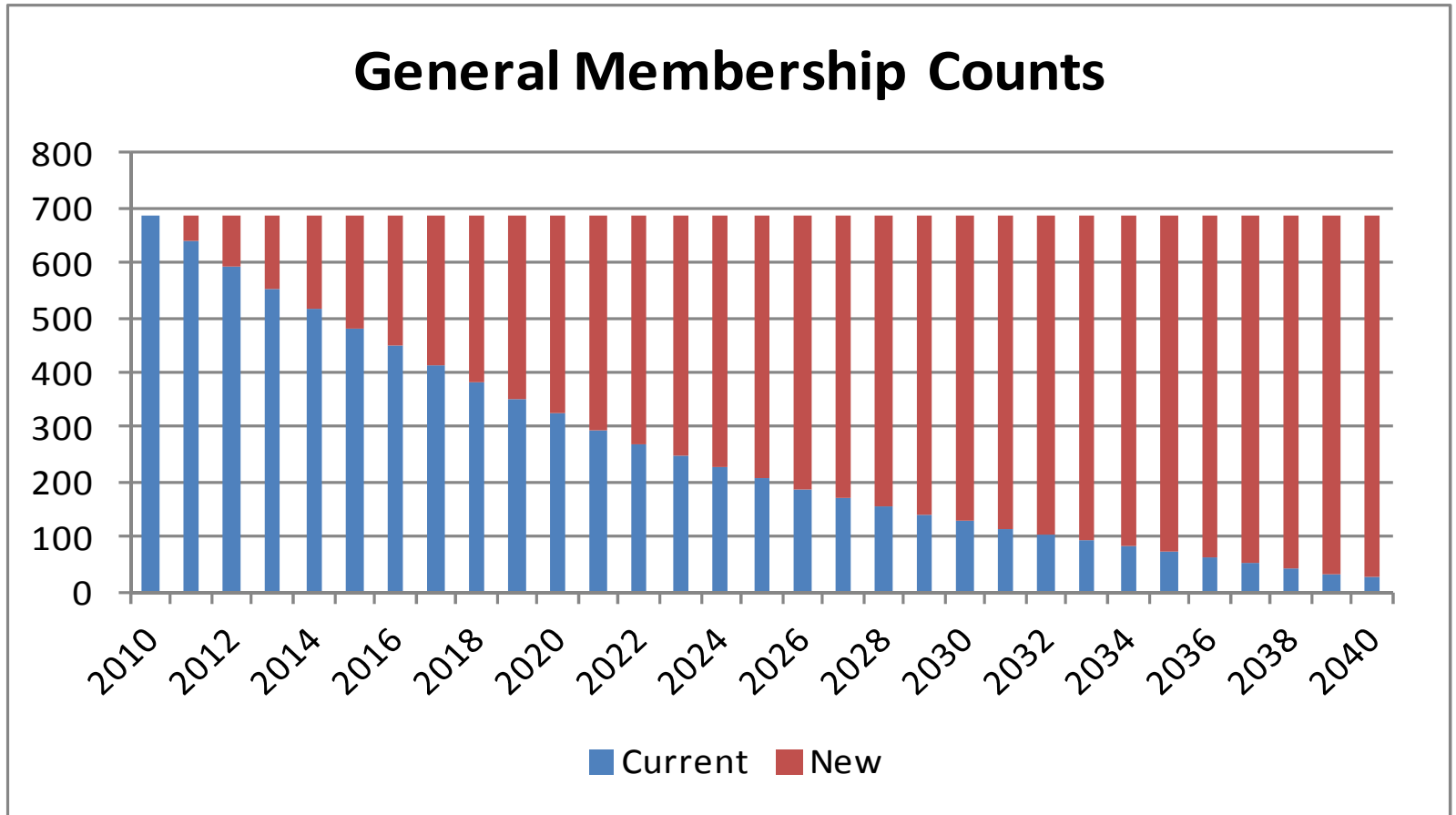


- Design new tier to have a lower cost than current plan.
- Cost savings unfolds over time as current actives are replaced by new hires
  - Savings quantified by modeling the difference in estimated employer contributions over the projection period (30 years for study)
  - Most significant savings later in projection period
  - Payroll growth creates very large payrolls farther out in projection period – can distort comparison of savings
- Projections are based on many different assumptions. Actual experience will vary which will impact the actual costs in future years.

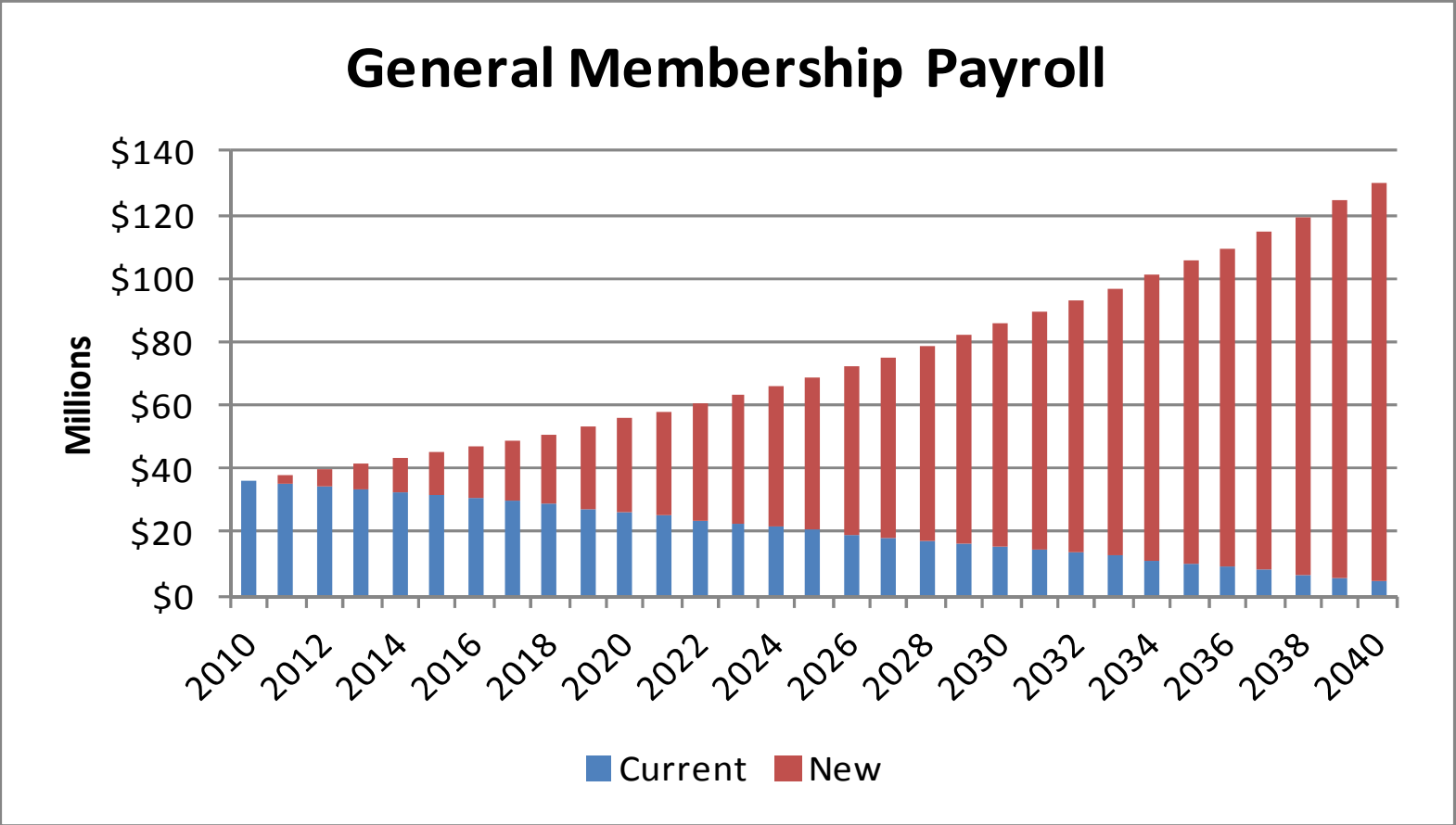
# Change in Active Membership



## General Membership Counts



# Change in Payroll Over Time



# Relative Impact of Plan Changes



- Numerous changes that could reduce costs, but where is greatest potential savings?
- Relative cost of current pension benefit structure:

Normal Cost	General	Police	Fire
Retirement	9.67%	16.71%	18.51%
Death/disability	0.99%	1.26%	1.75%
Deferred Vested	0.49%	0.23%	0.18%
Refund of EE contributions	<u>0.47%</u>	<u>1.10%</u>	<u>0.57%</u>
<b>Total</b>	<b>11.62%</b>	<b>19.30%</b>	<b>21.01%</b>

# Cost Impact of Pension Changes



- **Greatest savings**
  - Benefit multiplier
  - Retirement eligibility
  - COLAs
  - Eliminate lump sum pay in final average salary
- **Large savings**
  - Final average pay: longer period
  - Reduce disability benefits (public safety)
- **Small savings**
  - Longer period to vest
  - Lower interest on employee contributions
  - Reduce pre-retirement death and disability benefits (General)
  - More severe reduction in benefits for early retirement

# Current Retiree Healthcare Plans



- Plans are about 40% funded
  - ARC has always been contributed
  - Closed amortization period (25 years)
  - Funding within the pension plan is limited by IRC §401(h)
- City cost of current retiree health benefits

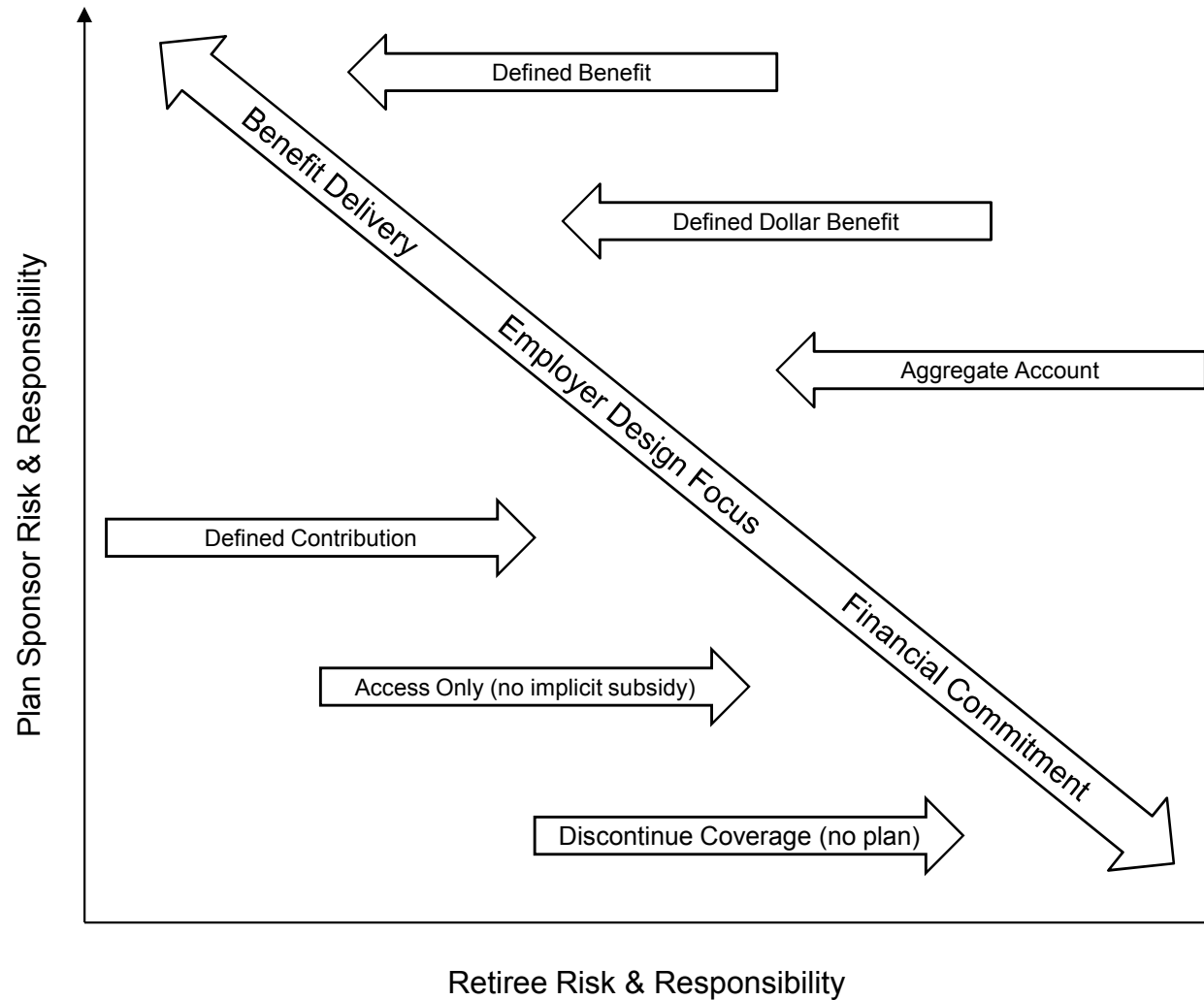
Normal Cost	General	Police	Fire
Retirement	2.74%	4.75%	5.23%
Death/disability	0.44%	0.32%	0.42%
Deferred Vested	<u>0.00%</u>	<u>0.00%</u>	<u>0.00%</u>
Total Normal Cost Rate	3.18%	5.07%	5.65%
UAAL Contribution Rate	<u>2.21%</u>	<u>4.10%</u>	<u>4.10%</u>
ARC Rate	5.39%	9.17%	9.75%
Employee Contribution Rate	<u>0.00%</u>	<u>0.00%</u>	<u>0.00%</u>
Employer ARC Rate	5.39%	9.17%	9.75%

# Challenges Unique to Health Plan



- Current health plan costs and funding linked to external influences
  - Level of current benefit linked to health care inflation
    - Health plan cost trends continue to be significantly higher than price and wage inflation
    - Unpredictable
    - Retiree contributions not keeping pace (leveraging)
  - Level of current benefit linked to active employee health plan
    - Benefits (e.g., copays, deductibles, coinsurance)
  - Level of health plan funding linked to pension plan
    - 401(h) subordination limit

# Continuum of Retiree Healthcare Plan Designs





# Challenges Unique to Health Plan Plan Design Considerations



- Change healthcare plan for retirees
  - Increase cost sharing (e.g., co-pays, deductibles, coinsurance)
  - Change retiree contributions/subsidy amount
    - Cap subsidy
    - Defined dollar subsidy
    - Eliminate dependent subsidies
    - Eliminate implicit subsidy
  - Additional administrative efforts
  - Flight of healthier retirees with increase in cost

# Challenges Unique to Health Plan Plan Design Considerations



- Tighten retiree healthcare benefit eligibility
  - Require a certain number of years of service to be eligible for healthcare benefit (e.g., 15 years of service)
- Plan access only
  - No explicit or implicit subsidies
- Discontinue retiree healthcare benefit
- Impact of pension changes
  - Pension eligibility
  - Will retiree healthcare be offered if DC or SDRS is elected for the pension plan?

# Challenges Unique to Health Plan Alternative Plan Design Considerations



- Level of health plan funding linked to pension plan
  - Trust contribution limits may drive the design of the health benefits plan
  - Explore all qualifying funding options available
  - Need to consider requirements and limitations

# Projected Value of Healthcare Benefit (\$) Year of Retirement - 2025



Age and YOS	Current Plan*		Proposed Changes	
	Retiree**	Spouse**	Current Employees	Future Employees
50/25	822	769	1,384	0
55/20	1,324	1,070	1,107	0
55/30	1,324	1,070	1,661	0
60/15	1,872	1,438	831	0
60/20	1,872	1,438	1,107	0
60/30	1,872	1,438	1,661	0
64/30	2,312	1,747	1,661	0

\*Year 2025 net benefit cost projected using the assumptions of the 12/31/2010 valuation.

\*\*Assumes a male retiree and a female spouse three years younger.

# Proposed Changes: Current Members



- Current retirees: no changes
- Current employees
  - Increase employee contributions by 2% over a 2 year period beginning in 2014 for all groups
  - Eliminate access to the City's health plan effective January 1, 2014 and provide stipend to employees to purchase their own health insurance
    - \$40 per month per year of service until Medicare eligible (age 65)
    - Annual inflationary adjustment but not more than 3% per year
    - Benefit payable ONLY to employee/retiree (except for death while actively employed where surviving spouse is covered)
    - Need to determine status of benefit
      - Taxation
      - Administrative effort
      - Pension or OPEB
      - Trust/401(h) implications

# Proposed Changes: Future Employees



- Future employees (hired on/after 1/1/13)
  - Increase employee contributions by 2% for all groups
  - Remove lump sum payments from the calculation of Final Average Salary for all groups
  - Increase normal retirement age for General Employees from current provisions of Rule of 85 (age plus service is at least 85) or age 60 with 5 years of service to age 60 with 30 years of service or age 65 with 5 years of service
  - Discontinue retiree healthcare benefits

# Estimated Retiree Healthcare Savings in Over 30 Year Projection Period (\$M)



	General EEs	Firefighters	Police Officers	Total
<b>Current Employees:</b> eliminate access to City health plan and provide stipend of \$40 per month per year of service (to age 65)	\$43.8	\$25.9	\$31.0	\$100.7
<b>Current Employees:</b> provide a 3% inflationary adjustment to the \$40 stipend	(8.3)	(5.1)	(6.7)	(20.1)
<b>Future Employees:</b> eliminate retiree healthcare	51.1	23.4	27.5	102.0
All Proposed Changes Combined	86.6	44.2	51.8	182.6

# Estimated Pension Savings (\$M) Over 30 Year Projection Period

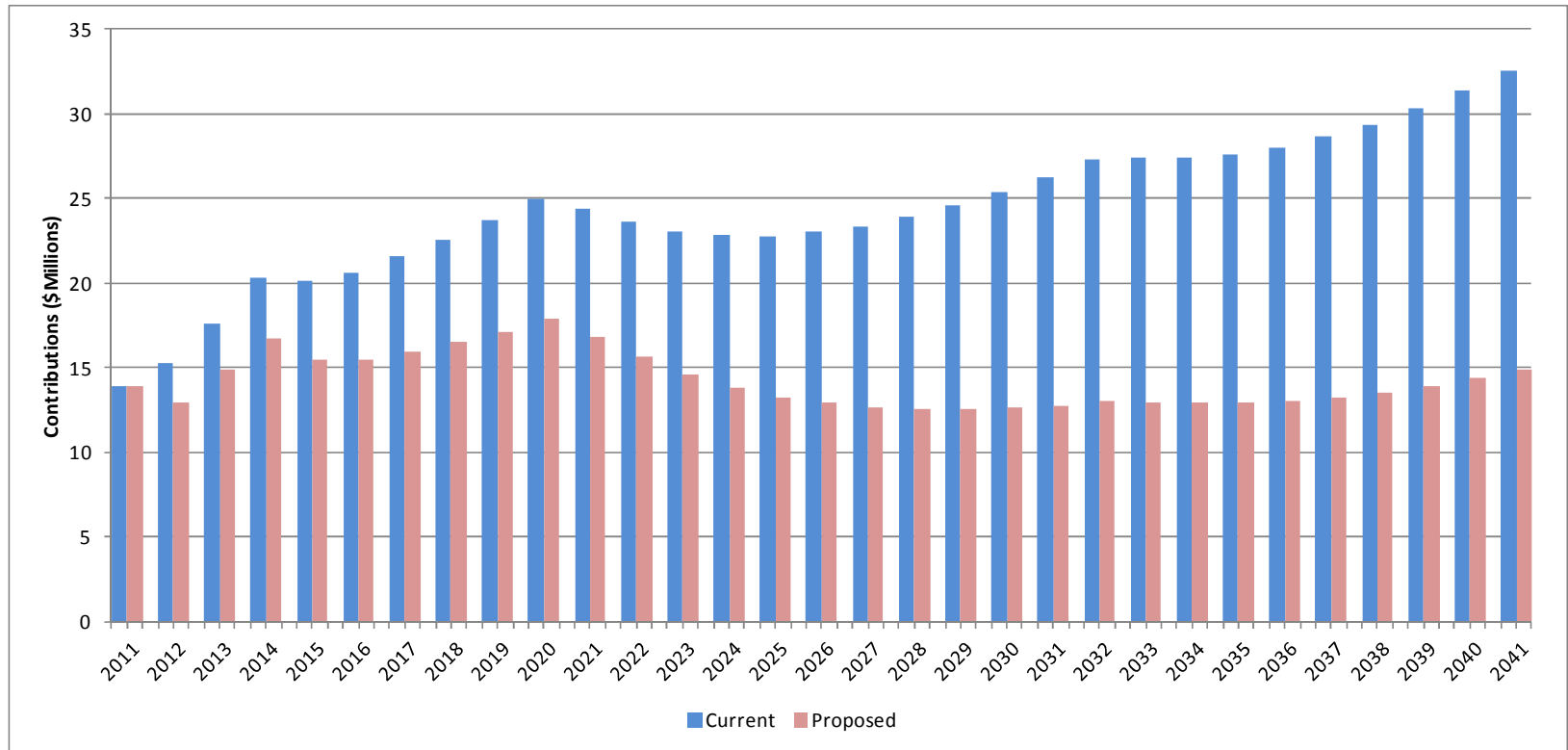


	General EEs	Firefighters	Police Officers	Total
<b>Current Employees:</b> increase contributions 2%	\$13.1	\$4.9	\$5.6	\$23.6
<b>Future Employees:</b>				
Increase contributions 2%	\$26.6	\$6.7	\$8.7	\$42.0
Remove lump sum from final average pay calculation	22.2	10.0	11.2	43.4
Increase normal retirement age to age 60 and 30 years of service or age 65 and 5 years	19.6	N/A	N/A	19.6
All Proposed Changes*	82.1	21.6	25.5	129.2

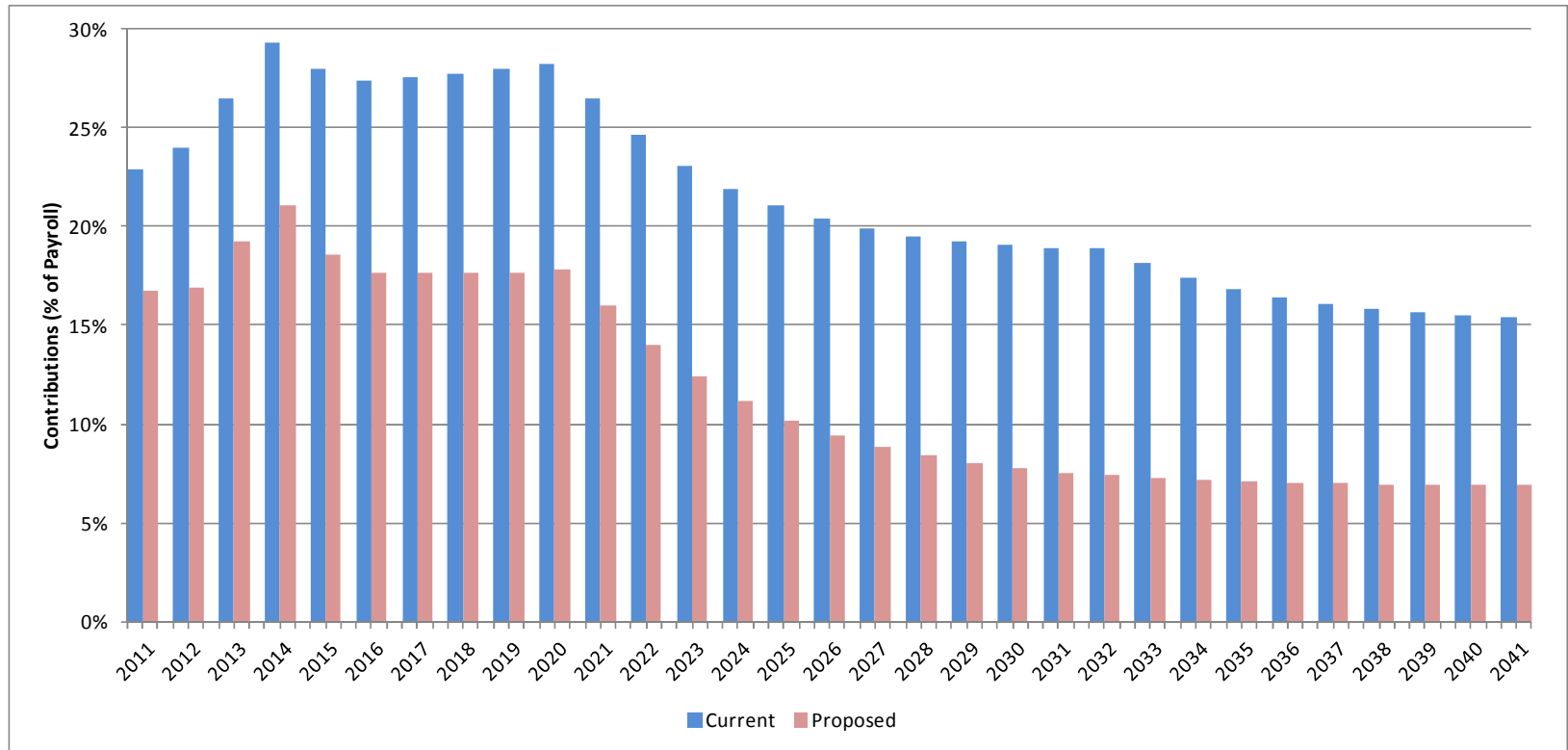
\*Total savings are not necessarily additive.



# Cost Impact of Proposed Changes over 30 Year Projection Period



# Cost Impact of Proposed Changes over 30 Year Projection Period



# Estimated Total Cost Savings Over 30 Year Projection Period (\$M)



	General EEs	Firefighters	Police Officers	Total
<b>Current Retirees</b>	\$0	\$0	\$0	\$0
<b>Current Employees</b>	48.6	25.7	29.9	104.2
<b>Future Employees</b>	120.1	40.1	47.4	207.6
<b>All Employees</b>	168.7	65.8	77.3	311.8



# Appendix

# Assumptions



- The projected cost savings provided are based primarily upon:
  - The 12/31/2010 replication valuation results prepared by CMC.
  - The actuarial assumptions used in the valuation.
  - The projection model prepared by CMC for the plan design study.
  - The membership data provided by the City for the December 31, 2010 actuarial valuation.
  
- To the extent actual experience deviates significantly from the assumptions, results may be significantly better or significantly worse than indicated. Significant items are noted on the following slides.



# Assumptions

- 7.75% investment return in all future years.
- All demographic assumptions regarding mortality, disability, retirement, salary increases, and termination of employment are based upon the assumptions of the 12/31/2010 valuations and are assumed to hold true in the future.
- Estimates based upon an open group projection assuming the active member count remains the same (no increase or decrease).
- Plan provisions for future employees are modified as described. No other benefit changes are reflected in future years.



# Assumptions

- The funding methods including the entry age normal cost method, the asset smoothing method and the amortization method remain unchanged.
  - Exception: Implementation of a five year floor on the amortization period in 2019 (pension) and 2031 (healthcare).
- The full actuarial contribution rate will be contributed in each future year.
- To maintain the comparability of scenarios, all retiree healthcare results have been prepared using total payroll (including new hire pay) and level percent of payroll amortization.



# Assumptions

- As the proposed changes close the retiree healthcare plan to new entrants, the impact to savings may be altered by any changes to asset allocation or amortization methodology.
- The cost savings determined by the Systems' retained actuary may differ from those presented as different actuarial software will be used to perform the projections.



# Retirement Design Strategy



- Determine goals and objectives
  - Reduce costs (what level?)
  - Stabilize costs (how much variation is acceptable?)
  - Is funded ratio a consideration?
- Retirement philosophy
  - Who should bear risk?
  - Importance of income security?
  - Career employee – how defined?
  - Which employees will be impacted by change?
    - Current retirees
    - Current actives(future service only)
    - Future hires

# Retirement Design Strategy



- Attraction and retention of employees
  - Are retirement benefits important in attracting employees?
  - Are retirement benefits important in retaining employees?
  - Local marketplace competition for talent and importance of benefits
  - Future hires – what type of workers will be needed and what retirement program will attract and retain those employees
- Total compensation
  - Salary, retirement, health, life and other fringe benefits



# Definition of Risks

## ➤ Investment Risk

- Rate of return on assets
- In DB plans, employer usually bears risk unless contribution increases are shared with employees
- In DC plans, employee bears all the investment risk

## ➤ Inflation Risk

- Cost of living before/after retirement
- DB plans are usually based on final average pay so employee has limited cost of living risk before retirement
- If post-retirement increases (COLA) are provided, employee has some protection against inflation in retirement



# Definition of Risks

## ➤ Contribution Risk

- Level and volatility of annual contributions
- In DB plans, employer often bears this risk. At best, it is shared with employees
- In DC plans, contributions are a fixed percentage of salary. No volatility.
- If investment returns are low, employees have to make additional contributions to reach retirement goals.

## ➤ Longevity Risk

- Outliving your retirement assets
- DB: benefits paid as life annuity so plan bears risk
- DC: benefits based on account balance, so employee bears all risk.

# EE/ER Risk Features of Different Plan Designs



Economic Risk	Current Defined Benefit		Pure Defined Contribution		Hybrid Plans	
	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
<b>Features</b>						
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	

# Plan Design Considerations



- Risk components
  - Is it in the right place?
  - Can it be managed by the person bearing it?
  - Short term vs. long term risk (don't solve the short term problem and create a long term problem)
- Retirement Philosophy
  - Adequacy of benefits
  - Importance of benefit security
  - Purchasing power after retirement
- Funding Policy
  - Level of contributions
  - Stability
- Balance stakeholder concerns
  - Employer
  - Employee
  - Taxpayer