

HB

13

HB 13

Nancy Manly

From: Juli Lucky
Sent: Wednesday, March 21, 2007 11:50 AM
To: Nancy Manly
Subject: Teleconference request - additional names

Nancy,

I'm sorry - this meeting keeps getting more complicated. Goldman Sachs called in to ask if the following people could be added on to the teleconference:

1 Ami Karnik 415-393-7754
 2 Dick Shoher 206-613-5533
 3 Tim Romer 310-407-5886

Thank you for your consideration of this request. Let me know if it's ok and I'll send them the call in number.

Juli Lucky
 Office of Representative Mike Hawker
 (907) 465-4949, fax: 465-4979
 Capitol Bldg Room 502, Juneau, AK 99801

From: Juli Lucky
Sent: Monday, March 19, 2007 3:07 PM
To: Nancy Manly
Subject: Teleconference request

Nancy,

I am requesting a teleconference offnet for the following people:

4 Andrew Prindle, Goldman Sachs (310) 407-5834
 5 Frank Ingrassia, Goldman Sachs (212) 902-6417
 6 Lindsay Soyde and Mark Prussing, Seattle Northwest Securities (206) 628-2875
 7 Isaac Sine and Jeff Brown, Merrill Lynch & Co (206) 830-6028

Please let me know if these are ok and I'll give them the teleconference number. Thank you!

Juli Lucky
 Office of Representative Mike Hawker
 (907) 465-4949, fax: 465-4979
 Capitol Bldg Room 502, Juneau, AK 99801

3/21/2007

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Alaska prepares to sell pension-obligation debt

Thu, Apr 10, 2008 6:04pm EDT

By Yereth Rosen

ANCHORAGE, Alaska, April 10 (Reuters) - Alaska is poised to issue pension-obligation bonds to cover part of a nearly \$9 billion combined shortfall in its retirement systems for state workers and teachers, thanks to a bill passed by lawmakers, the measure's prime sponsor said on Thursday.

The debt has the potential to help Alaska bolster its pension financing, said state Rep. Mike Hawker, the Anchorage Republican who sponsored the bill authorizing the bonds.

"Under current market conditions, we would save several hundreds of millions of dollars, if not over \$1 billion, in resolving these liabilities," Hawker said.

Alaska plans to issue the bonds later this year, said Brian Andrews, deputy commissioner of the state's Department of Revenue.

The bill passed by lawmakers last week authorizes the sale of up to \$5 billion in pension-obligation bonds and creates the new Alaska Pension Obligation Bonding Corp.

The bill also authorizes existing state entities, such as the Alaska Housing Finance Authority and the Alaska Municipal Bond Bank, to issue pension-liability bonds.

Lawmakers expect Gov. Sarah Palin to sign the bill, which Andrews said gives Alaska the same means to tackle pension fund financial woes as other states.

"The state looked around and said, 'What are other states doing as far as their unfunded liabilities?'" Andrews said. "Other states have been doing this since the 1990s."

While legislators debating the measure expected the sale of \$2 billion of the debt, state officials have yet to settle on a total, according to Andrews.

"It could be anywhere from \$500 million to \$5 billion," he said.

Along with settling on an amount, Alaska must choose an investment bank and financial advisers for any debt sale, Andrews said.

"The earliest that a transaction could happen would be in the next three to six months," he said.

STATE COFFEES FLUSH WITH OIL

The combined unfunded liability in Alaska's Public Employees Retirement System and Teachers Retirement System is estimated at \$8.6 billion, Andrews said.

The legislation authorizing the debt was paired with a bill that shifts all responsibility for local governments' unfunded pension liabilities to the state.

Palin, who supports both bills, has also proposed that lawmakers appropriate \$450 million to pay down part of the unfunded liability for the Teachers Retirement System, Andrews said.

It is unclear yet whether lawmakers will put such a provision in the coming fiscal year's budget before the legislative session adjourns next week, Andrews said.

Overall, Alaska is in better shape to handle the liability than other states, Hawker said.

Alaska is enjoying budget surpluses from record-high oil prices and has always had a conservative, cautious approach for estimating future liabilities, he noted.

Alaska has already taken major steps toward reducing the liability, including a shift in 2006 to a defined-contribution system for public employees' and teachers' retirement plans from a defined-benefit system — a change that remains controversial. (Reporting by Yereth Rosen in Anchorage, Alaska; Editing by Jim Christie and Jan Paschal; Reuters Messaging: jim.christie@reuters.com@reuters.net))

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Pension Obligation Bonds

March 21, 2007

Department of Revenue



Overview of Pension Obligation Bonds (POBs)



Pension Obligation Bonds (POBs)

- Pension Obligation Bonds are bonds issued by a state or local government to pay its obligation to the pension system in which its employees are members.
- POBs have been an increasingly popular and successful way for state and local governments to accomplish financial and other objectives.
- According to Thomson Financial, during the past decade there have been 340 POB issues by state and local government issuers in at least 26 states.



Why Should We Consider Issuing POBs?

- Interest rate savings – the interest rate of POBs issued in the near future will be lower than 8.25% charged by the pension system.
- Arbitrage – the actual investment return of pension asset exceeds the POB cost.
- POBs are not generally viewed as adding to the debt burden of the state or local government issuer because they replace existing pension obligations.

Alaska Pension Bill/Unfunded Accrued Actuarial Liability (UAAL) in 2006



AK Pension System

Total \$8.6 Billion:

\$5.5 Billion PERS

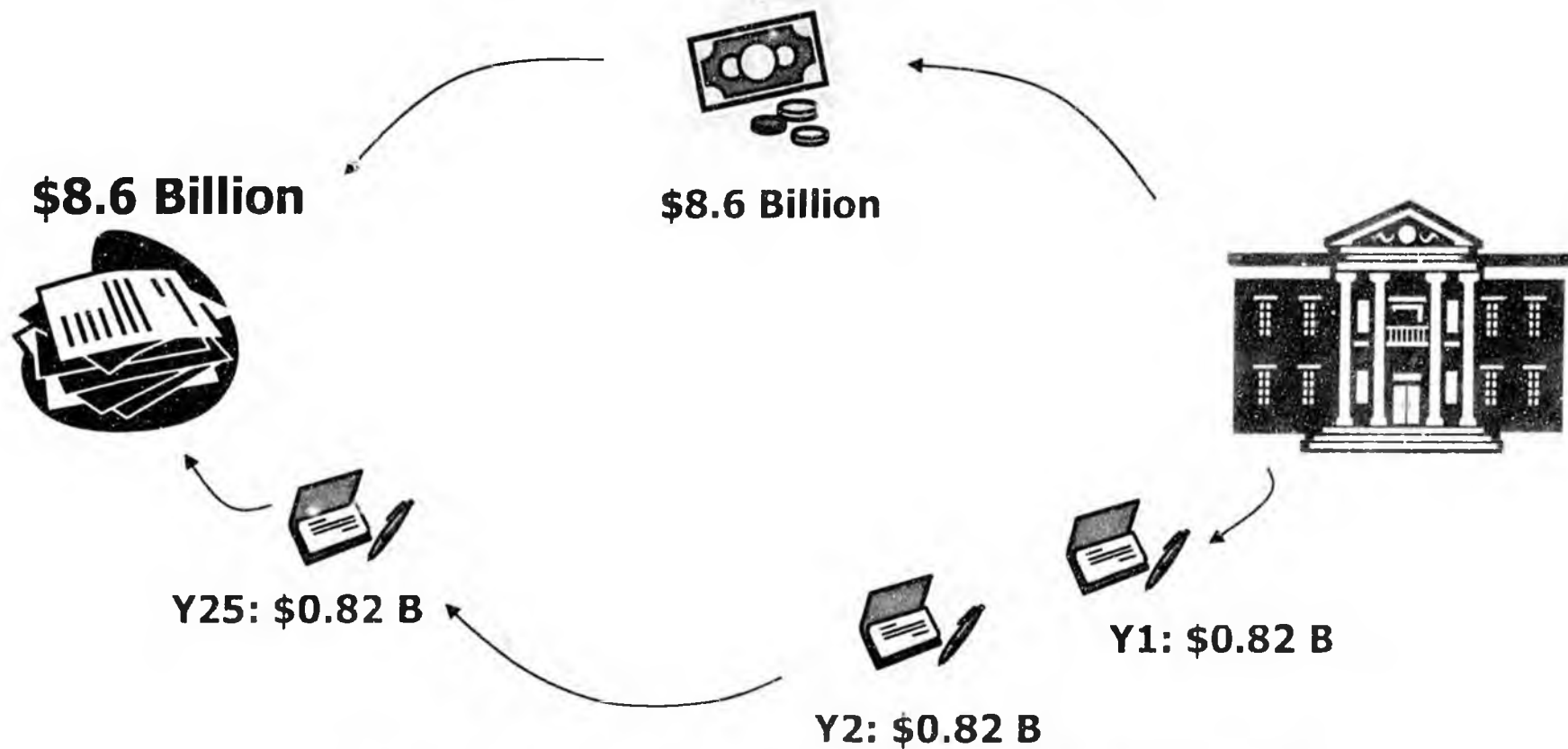
\$3.1 Billion TRS



State & Local Governments

Paying the Bill/UAAL

Option A: Pay the total with Cash



Option B: A "loan" of 25 years at 8.25% cost



Interest Rate Savings

Interest Rate Savings

Comparing the amortization of \$1 billion debt at 8.25% cost to \$1 billion debt at 5.75% over 25 years:

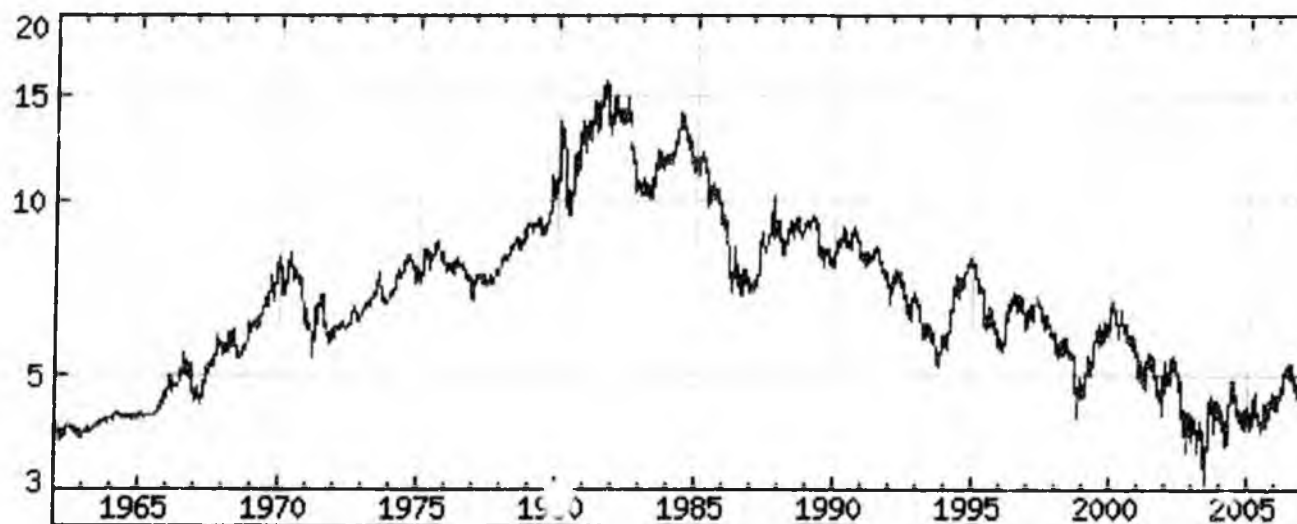
- Saving on interest cost is 2.5%;
- Saving on annual debt payment is \$19 million;
- NPV of savings on annual debt payment over 25 years is \$272 million discounted at 5%.

	Amount (\$Billion)	Interest Cost	Annual P&I Payment (\$Million)	
\$	1	8.25%	\$	96
\$	1	5.75%	\$	76
Savings		2.50%	\$	19
NPV of Cumulative Savings @ 5%			\$	272

Interest Rate History

- 10-Year Treasury yield is 4.52% as of March 14, 2007. This rate is extraordinarily attractive when viewed in a historical context.

10-Year Treasury Yields

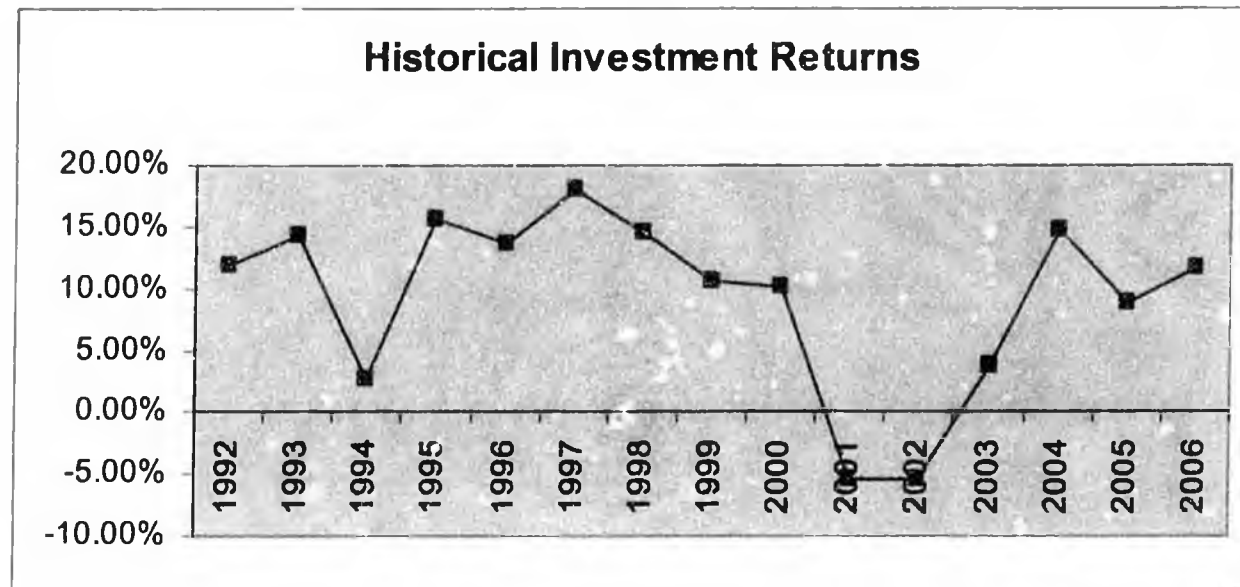




Arbitrage

Historical Investment Returns of State Pension Plans (PERS)

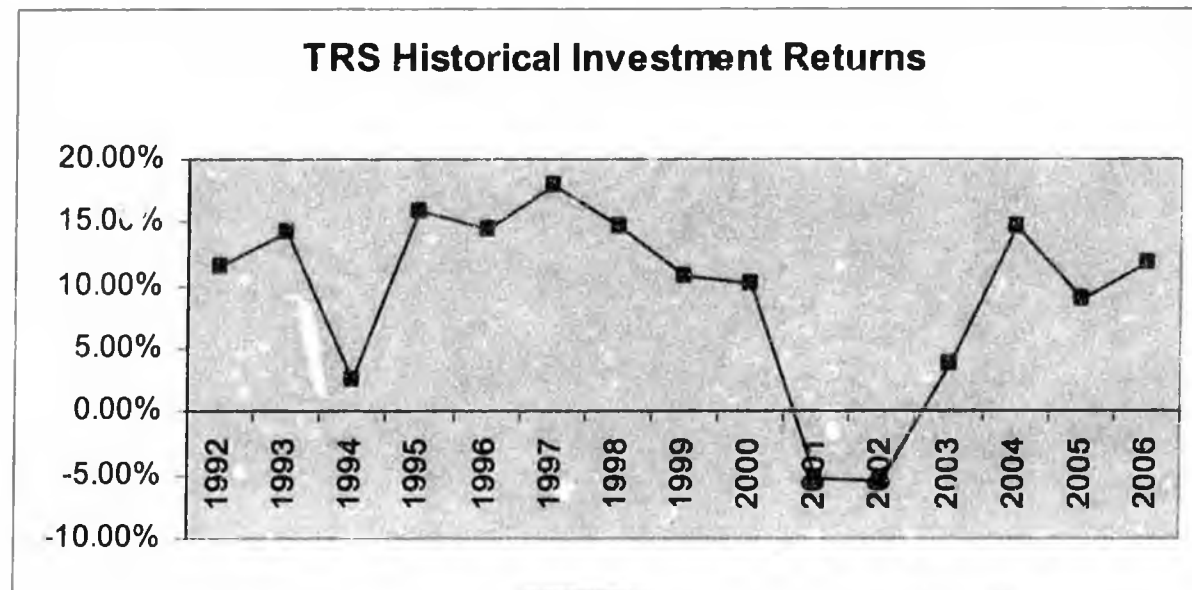
FY	ROR
2006	11.69%
2005	8.86%
2004	14.73%
2003	3.82%
2002	-5.40%
2001	-5.30%
2000	10.12%
1999	10.65%
1998	14.62%
1997	18.07%
1996	13.70%
1995	15.56%
1994	2.66%
1993	14.25%
1992	11.80%



- The average return from 1992 to 2006 is 9.09%.
- Standard Deviation is 7.25%.

Historical Investment Returns of State Pension Plans (TRS)

FY	ROR
2006	11.72%
2005	8.90%
2004	14.75%
2003	3.81%
2002	-5.41%
2001	-5.36%
2000	10.19%
1999	10.73%
1998	14.73%
1997	18.00%
1996	14.35%
1995	15.89%
1994	2.61%
1993	14.16%
1992	11.58%



- The average return from 1992 to 2006 is 9.14%.
- Standard Deviation is 7.31%.



Long Term Target Asset Allocation

Asset Class	Allocation	Range
Domestic Large Capitalization	30%	± 3%
Domestic Small Capitalization	6%	± 3%
International Equity	14%	± 3%
Emerging Markets Equity	2%	± 2%
Private Equity	7%	± 5%
Domestic Fixed-Income	20%	± 3%
High Yield	2%	± 2%
International Fixed-Income	2%	± 2%
Real Estate	10%	± 4%
Absolute Return	4%	± 4%
Other	3%	± 3%
Cash	0%	± 3%

Median Return **8.05%**

Standard Deviation **12.27%**



Credit Neutrality



Credit Rating Consideration

- Credit Neutral – debt obligation is already recognized and POBs are not considered new debt.
- “Moody’s believes the issuance of POBs is one effective way of addressing an unfunded liability.”
- “Standard & Poor’s has viewed POBs as a strategy for savings on carrying charges as long as the transaction are structured conservatively and the assumptions were reasonable and attainable.”



Risks

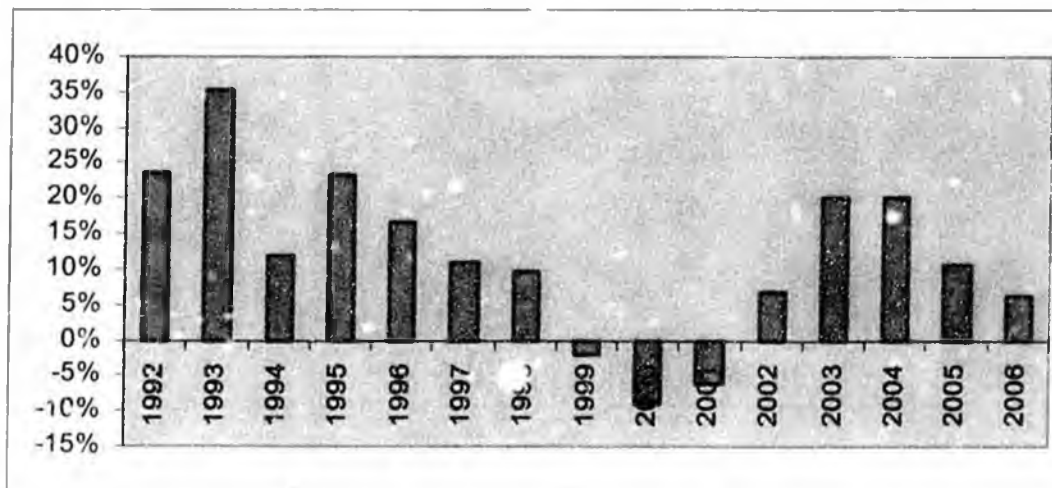
Investment Risk (PERS)

*Gruberberg
Is that Brian
for info*

*Copy of 1/10/01
From Larry...
...
...
...
...*

FY	ROR	Estimated Cost of Borrowing	Estimated Cumulative Net Return to 2006
2006	11.69%	5.55%	6.14%
2005	8.86%	5.04%	10.47%
2004	14.73%	5.02%	20.22%
2003	3.82%	4.76%	20.06%
2002	-5.40%	5.36%	6.90%
2001	-5.30%	5.77%	-6.22%
2000	10.12%	6.78%	-8.94%
1999	10.65%	6.40%	-2.03%
1998	14.62%	6.01%	9.70%
1997	18.07%	7.10%	10.86%
1996	13.70%	7.19%	16.47%
1995	15.56%	7.32%	23.28%
1994	2.66%	7.84%	11.86%
1993	14.25%	6.62%	35.35%
1992	11.80%	7.76%	23.43%

Estimated Cumulative Net Return to 2006 (PERS)

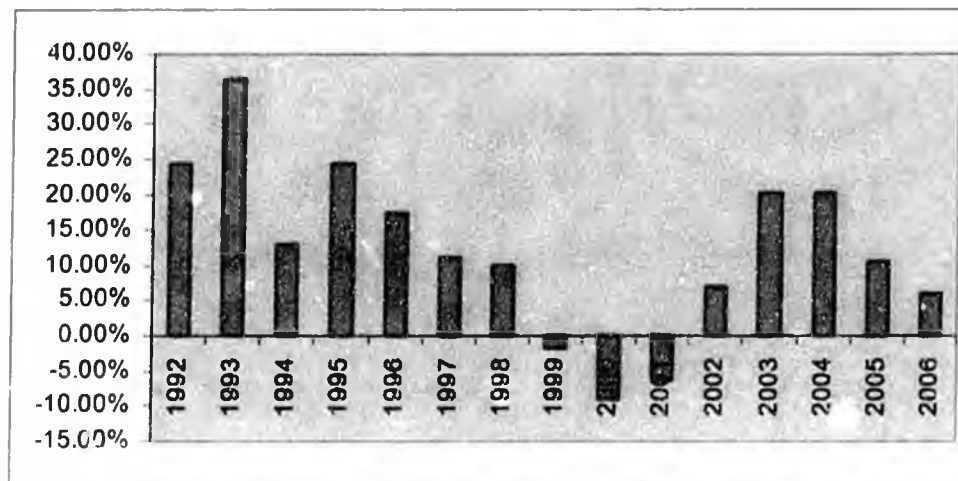


- Based on PERS actual investment history, we can see what the cumulative net return to 2006 might have been if POBs had been issued in any given year.
- For 12 out of 15 years the issuance of POBs would have resulted in a gain to the pension system.

Investment Risk (TRS)

FY	ROR	Estimated Cost of Borrowing	Estimated Cumulative Net Return to 2006
2006	11.72%	5.55%	6.17%
2005	8.90%	5.04%	10.54%
2004	14.75%	5.02%	20.31%
2003	3.81%	4.76%	20.14%
2002	-5.41%	5.36%	6.97%
2001	-5.36%	5.77%	-6.21%
2000	10.19%	6.78%	-8.86%
1999	10.73%	6.40%	-1.87%
1998	14.73%	6.01%	9.97%
1997	18.00%	7.10%	11.06%
1996	14.35%	7.19%	17.32%
1995	15.89%	7.32%	24.46%
1994	2.61%	7.84%	12.99%
1993	14.16%	6.62%	36.39%
1992	11.58%	7.76%	24.25%

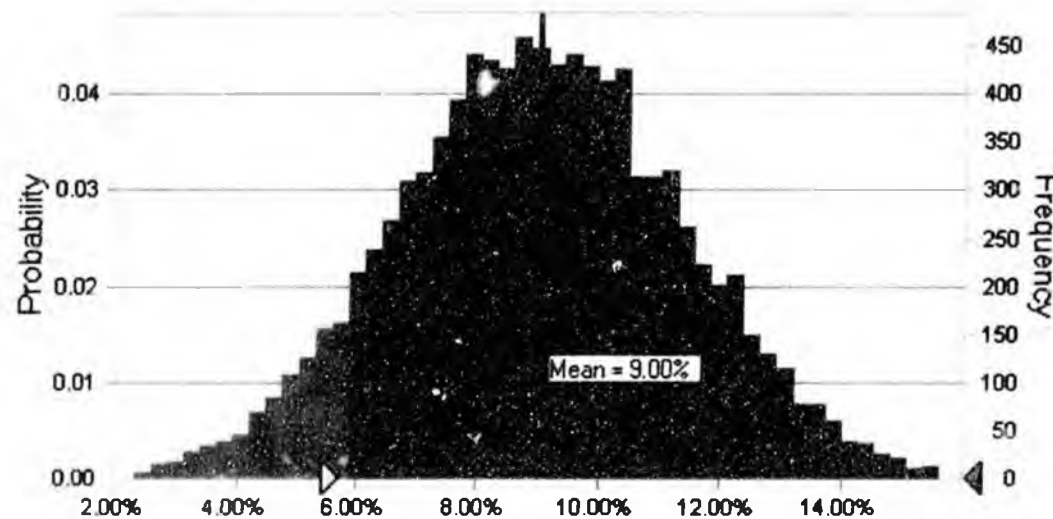
Estimated Cumulative Net Return to 2006 (TRS)



- Based on TRS actual investment history, we can see what the cumulative net return to 2006 might have been if POBs had been issued in any given year.
- For 12 out of 15 years the issuance of POBs would have resulted in a gain to the pension system.

Investment Return Forecast

With an asset mix of 70% S&P 500 Equity and 30% Government/Credit Bonds, the average return over 25 years is 9%.



Monte Carlo Simulation

- 10,000 iteration
- Annualized Average Return: 9%
- Probability of outperforming 5.75%: 91.45%



Types of POBs



Security

- **General obligation bonds**

Bonds that satisfy any constitutional debt limitation and are backed by the full faith and credit and taxing power of the issuing state and local government.

- **Obligations imposed by law**

Obligations imposed by the state or local government by the constitution or by statute or by court judgment as distinguished from a voluntary exercise of the borrowing power by the state or local government.

- **Annual appropriation bonds**

Bonds that are not considered debt subject to a constitutional debt limitation because the state and local government issuer has no legal obligation to pay them and payment is therefore subject to annual appropriation of funds for that purpose at the discretion of the legislature or governing body of the state or local government issuer.

Taxable POB Bond Alternatives (1 of 2)

Taxable Product Alternatives

Product	Investors	Advantages	Disadvantages
Current Interest Bonds (CIBS)	Domestic Institutions; European Banks	Low-Cost Financing; No Basis Risk	Typically Non-Callable or Issued with a Make-Whole Call on Term Bonds; Call Option Expensive
Zero Coupon Bonds (CABs)	Domestic Institutions; European Banks	Defers Debt Service	More Expensive than CIBs; Noncallable
Put Bonds	Domestic Institutions; Corporations	Benefit of Upward Sloping Yield Curve Versus Conventional Fixed-Rate Bonds	Interest Rate Risk
Quarterly Unsecured Interest Bonds (QUINs)	Domestic Retail	Provides Most Efficient 5-Year Call Option	Slightly Higher Yield; 3% Issuance Cost
Floating Rate Notes (FRNs)	European Banks	Fixed Spread to LIBOR; Historically Least Costly Form of Financing; Provides Quarterly Call Options; No Ongoing Fees	Interest Rate Risk
Variable Rate Demand Bonds	Money Market Funds	Historically Least Costly Form of Financing; Continuously Callable at Par	Interest Rate Risk, Facility Renewal Risk
Auction Rate Notes	Corporations; High Net Worth Retail	Historically Least Costly Form of Financing; Continuously Callable at Par	Interest Rate Risk

Source: Morgan Stanley

Taxable POB Bond Alternatives (2 of 2)

	Variable Rate Demand Bonds	Auction Rate Notes	Floating Rate Notes (Private Placement)
Prepayment	Yes	Yes	Yes
Interest Rate Reset	Weekly	Varies	Varies
Liquidity Facility Required	Yes	No	No
Rating Required	Yes	Yes	No
Legal Documentation	Substantial	Substantial	Simplified
Concerns	Failed Remarketing	Failed Auction	Short-term interest rates only
Investor Base	Money-market funds	Retail investors	European banks
Term Out Provisions	Yes	No	No



Potential Saving

POBs and Cash Infusion

Pay partial UAAL off with cash and borrow partial at 5.75% by issuance of Pension Obligation Bonds (POBs).

Implications

- Immediate reduction of the UAAL;
- Increase in the Funded Ratio;
- Reduction of employer past service contribution rate.

Case Study (PERS)

Employer Contribution Rates
POBs (in billions)

Cash (in billions)	\$ -	\$ 0.5	\$ 1.5	\$ 2.5	\$ 3.5	\$ 4.5	\$ 5.5
	0%	9%	27%	45%	64%	82%	100%
\$ -	44.49%	43.91%	42.76%	41.61%	40.46%	39.31%	38.15%
\$ 0.5	41.64%	41.06%	39.91%	38.76%	37.60%	36.45%	
\$ 1.5	35.93%	35.35%	34.20%	33.05%	31.90%		
\$ 2.5	30.22%	29.64%	28.49%	27.34%			
\$ 3.5	24.51%	23.94%	22.78%				
\$ 4.5	18.80%	18.23%					
\$ 5.5	13.09%						

Savings on Annual Contribution Amount (in millions)
POBs (in billions)

Cash (in billions)	\$ -	\$ 0.5	\$ 1.5	\$ 2.5	\$ 3.5	\$ 4.5	\$ 5.5
	0%	9%	27%	45%	64%	82%	100%
\$ -	\$0.00	\$9.65	\$28.96	\$48.27	\$67.58	\$86.89	\$106.20
\$ 0.5	\$47.84	\$57.50	\$76.81	\$96.12	\$115.43	\$134.73	
\$ 1.5	\$143.53	\$153.19	\$172.49	\$191.80	\$211.11		
\$ 2.5	\$239.22	\$248.87	\$268.18	\$287.49			
\$ 3.5	\$334.91	\$344.56	\$363.87				
\$ 4.5	\$430.59	\$440.25					
\$ 5.5	\$526.28						

Savings on Employer Contribution Rates
POBs (in billions)

Cash (in billions)	\$ -	\$ 0.5	\$ 1.5	\$ 2.5	\$ 3.5	\$ 4.5	\$ 5.5
	0%	9%	27%	45%	64%	82%	100%
\$ -	0.00%	0.58%	1.73%	2.88%	4.03%	5.18%	6.34%
\$ 0.5	2.85%	3.43%	4.58%	5.73%	6.89%	8.04%	
\$ 1.5	8.56%	9.14%	10.29%	11.44%	12.59%		
\$ 2.5	14.27%	14.85%	16.00%	17.15%			
\$ 3.5	19.98%	20.55%	21.71%				
\$ 4.5	25.69%	26.26%					
\$ 5.5	31.40%						

NPV of Savings on 25-year Contribution Amount (in millions)
POBs (in billions)

Cash (in billions)	\$ -	\$ 0.5	\$ 1.5	\$ 2.5	\$ 3.5	\$ 4.5	\$ 5.5
	0%	9%	27%	45%	64%	82%	100%
\$ -	\$0.00	\$136.07	\$408.21	\$680.36	\$952.50	\$1,224.64	\$1,496.78
\$ 0.5	\$674.31	\$810.38	\$1,082.52	\$1,354.66	\$1,626.80	\$1,898.95	
\$ 1.5	\$2,022.92	\$2,158.99	\$2,431.13	\$2,703.27	\$2,975.42		
\$ 2.5	\$3,371.53	\$3,507.60	\$3,779.74	\$4,051.89			
\$ 3.5	\$4,720.14	\$4,856.21	\$5,128.35				
\$ 4.5	\$6,068.75	\$6,204.82					
\$ 5.5	\$7,417.37						

1. \$1.5 billion POBs issued in 2007
2. Assumed \$5.5 billion PERS UAAL in 2007
3. Funding ratio will be improved from 65.12% to 74.64% (based on preliminary \$10.27 billion PERS asset as of Dec 31, 2006)

Case Study (TRS)

Employer Contribution Rates

POBs (in billions)

Cash (in billions)	POBs (in billions)					
	\$ -	\$ 1.0	\$ 2.0	\$ 3.0	\$ 3.1	
	0%	32%	65%	97%	100%	
\$ -	57.65%	54.45%	51.25%	48.04%	47.72%	
\$ 0.5	49.72%	46.51%	43.31%	40.11%		
\$ 1.0	41.78%	38.58%	35.38%			
\$ 1.5	33.85%	30.65%	27.44%			
\$ 2.0	25.91%	22.71%				
\$ 2.5	17.98%	14.78%				
\$ 3.1	8.46%					

Savings on Annual Contribution Amount (in millions)

POBs (in billions)

Cash (in billions)	POBs (in billions)					
	\$ -	\$ 1.0	\$ 2.0	\$ 3.0	\$ 3.1	
	0%	32%	65%	97%	100%	
\$ -	\$0.00	\$19.31	\$38.62	\$57.93	\$59.86	
\$ 0.5	\$47.84	\$67.15	\$86.46	\$105.77		
\$ 1.0	\$95.69	\$115.00	\$134.31			
\$ 1.5	\$143.53	\$162.84	\$182.15			
\$ 2.0	\$191.37	\$210.68				
\$ 2.5	\$239.22	\$258.53				
\$ 3.1	\$296.63					

Savings on Employer Contribution Rates

POBs (in billions)

Cash (in billions)	POBs (in billions)					
	\$ -	\$ 1.0	\$ 2.0	\$ 3.0	\$ 3.1	
	0%	32%	65%	97%	100%	
\$ -	0.00%	3.20%	6.40%	9.61%	9.93%	
\$ 0.5	7.93%	11.14%	14.34%	17.54%		
\$ 1.0	15.87%	19.07%	22.27%			
\$ 1.5	23.80%	27.00%	30.21%			
\$ 2.0	31.74%	34.94%				
\$ 2.5	39.67%	42.87%				
\$ 3.1	49.19%					

NPV of Savings on 25-year Contribution Amount (in millions)

POBs (in billions)

Cash (in billions)	POBs (in billions)					
	\$ -	\$ 1.0	\$ 2.0	\$ 3.0	\$ 3.1	
	0%	32%	65%	97%	100%	
\$ -	\$0.00	\$272.14	\$544.28	\$816.43	\$843.64	
\$ 0.5	\$674.31	\$946.45	\$1,218.59	\$1,490.73		
\$ 1.0	\$1,348.61	\$1,620.75	\$1,892.90			
\$ 1.5	\$2,022.92	\$2,295.06	\$2,567.20			
\$ 2.0	\$2,697.22	\$2,969.37				
\$ 2.5	\$3,371.53	\$3,643.67				
\$ 3.1	\$4,180.70					

1 \$0.5 billion cash infusion and \$2.0 billion POBs issued in 2007

2 Assumed \$3.1 billion TRS UAAL in 2007

3 Funding ratio will be improved from 59.9% to 92.24% (based on preliminary \$4.63 billion TRS asset as of Dec 31, 2006)



Tax Issues



Tax Exempt Bonds vs. Taxable Bonds

- Taxable Bonds
 - Can be issued for any purpose
 - Complete flexibility with use of proceeds
 - Interest rate about 1% higher than tax exempt in current market

- Tax Exempt Bonds
 - Can only be issued for public capital projects
 - Earnings on proceeds are restricted to yield paid on bonds
 - 1% lower interest rate than taxable bonds in current market



The Difficulty with Tax Exempt

- Very difficult to identify appropriate GF funded capital projects to issue bonds for.
- Certificates of Participation issuance is the most viable option.
 - However the existing, yet unexpended GF funded capital projects are small, for private purposes, short lived acquisitions, operational grants, or federal match.
 - Fiscal Year 2008 capital budget is only \$100 million, all of which could not be funded with tax exempt bonds.
- Any use of tax exempt bonds to fund capital projects would have to be coincidental, rather than integrated, to any use of on hand cash to fund PERS/TRS contributions.



Take-aways



Take-aways

1. POB issuance is a financial transaction which will lower the cost of funding the UAAL by the state and local governments – POBs issued in the near future will be at a cost lower than 8.25% charged by the pension system.
2. We are in a very favorable interest rate environment – take advantage of it!
3. Risks associated with POB issuance are quantifiable and statistically justified by the rewards.
4. Doing nothing is not a viable option.

Q & A





25th Alaska State Legislature

House Special Committee on Ways & Means

MEMORANDUM

Chair:

Rep. Mike Hawker
Capitol Room 502
465-4949

Vice-Chair:

Rep. Anna Fairclough
Capitol Room 411
465-3777

Members:

Rep. Bob Roses
Capitol Room 416
465-4939

Rep. Paul Seaton
Capitol Room 102
465-2689

Rep. Peggy Wilson
Capitol Room 403
465-3824

Rep. Sharon Cissna
Capitol Room 420
465-3875

Rep. Max Gruenberg
Capitol Room 110
465-4940

Committee Aide:

Juli Lucky
465-6587 direct

TO: Representative Bob Lynn, Chairman
House State Affairs Committee

FROM: Representative Mike Hawker
Chair, House Special Committee on Ways & Means

RE: House Bill 13

DATE: March 7, 2007

Transmitted herewith is CS For House Bill No. 13(W&M). This bill provides statutory authority for the state and political subdivisions to structure Pension Obligation Bond (POB) transactions for the purpose of reducing the unfunded actuarial liability of government retirement systems and lowering ultimate costs to the public treasury.

HB 13 is the result of a collaborative effort between its sponsor, Representative Mike Hawker, and the Departments of Revenue and Law. The Department of Revenue has testified in support of HB 13.

The bill version passed from the House Special Committee on Ways and Means provides necessary authority for the state and local governments to structure POB transactions reducing the unfunded liabilities in both the PERS and TRS systems. HB 13 does not authorize any specific transaction; it only provides the ability for government agencies to contemplate and structure transactions that are in the public interest.

Individual members of the committee differed in their opinion as to whether such POB transactions should be allowed for individual employers participating in the TRS system. Those opposed expressed concern that an individual TRS employer structuring a transaction that reduced their individual annual contribution rate would introduce a rate differential that does not currently exist in the TRS system. Proponents of allowing individual TRS employers to structure pension bond transactions believe that providing the greatest possible array of tools for addressing unfunded retirement system obligations is an overriding consideration. They also respond that the bill includes regulatory authority for the TRS system managers to develop accounting procedures or credit mechanisms that could recognize the benefit of disproportionate contributions made by individual employers in a manner that does not change the blended system rates.

Authorizing individual TRS employers to structure pension obligation bond transactions is an identified policy question most appropriate for consideration in the House Committee for State Affairs. I request that you consider this matter in your deliberations.

Possible Teleconference Requests for House Bill 13

The following individuals have testified via teleconference during previous meetings.

Larry Semmens, City of Kenai, Kenai LIO

Michael Lamb, Fairbanks North Star Borough, Fairbanks LIO

The following individuals from national investment banking firms have expertise in Pension Obligation Bonds. They have testified and been available via teleconference to answer committee questions.

Goldman Sachs:

Frank Ingrassia, Managing Director

Dick Schober, Vice President

Andrew Prindle, Analyst

Ami Karnik, Analyst

Merrill Lynch Global Markets

Paul Bloom, Dir & Regional Manager

Seattle-Northwest Securities

Carol Samuels, Vice President

Lindsay Sovde, Vice President

John Wanamaker

CS House Bill 13
Work Draft Version E
Sectional Analysis

Prepared by Representative Mike Hawker's Office

- Section 1:** Allows a Teacher's Retirement System (TRS) employer to make a lump sum payment to prepay all or a part its share of the unfunded accrued actuarial pension liability (UAAL); allows the commissioner to accept a lump sum payment that is less than the full amount; allows administrative fees to be charged; outlines how the lump sum payment and earnings or losses will be credited; and holds an employer who prepays its liability harmless if there are future state discretionary payments that benefit multiple employers. Requires the administrator of the TRS plan to recalculate the employer contribution rate within 180 days of the lump sum payment.
- Sections 2 - 5:** These sections allow the Alaska Housing Finance Corporation (AHFC) to create a subsidiary to aid an employer in the financing of a prepayment of all or a portion of that employer's UAAL.
- Section 6:** Outlines how municipalities can join together to issue debt obligations and allows funds diversion agreements between the municipalities and state agencies.
- Section 7:** Adds Article 8 to the State Bonding Act, which authorizes the state bond committee to issue Pension Obligation Bonds (POBs) and provides guidelines and requirements for bond issuance, sale, structure, repayment and the investment and accounting of bond and investment proceeds.
- Section 8:** Creates the Alaska Pension Obligation Bond Corporation, which is authorized to issue POBs. Provides guidelines and requirements for bond issuance, sale, structure, repayment and the investment and accounting of bond and investment proceeds.
- Sections 9 - 10:** Adds facilitating language to two sections of the accounting statute for the Public Employees Retirement System (PERS) to accommodate lump sum payments.
- Section 11:** Allows a PERS employer to make a lump sum payment to prepay all or a part its share of the accrued actuarial pension liability; allows the commissioner to accept a lump sum payment that is less than the full amount; allows administrative fees to be charged; outlines how the lump sum payment and earnings or losses will be credited; and holds an employer who prepays its liability harmless if there are future state discretionary payments that benefit multiple employers. Requires the administrator of the PERS plan to recalculate the employer contribution rate within 180 days of the lump sum prepayment.
- Section 12:** Adds to the statutory policies established for the Municipal Bond Bank Authority. Provides a directive to assist governmental employers to meet their unfunded retirement system obligations by issuing POBs on their behalf. Specifies that the bond bank should provide the lowest rates possible without subsidizing the employers beyond their means.
- Sections 13 - 14:** These sections allow the Municipal Bond Bank to create a subsidiary to aid an employer in the financing of a prepayment of all or a portion of that employer's UAAL.

- Section 15:** Exempts "Pension Obligation Bonds" from the current limit for revenue bonds that the Municipal Bond Bank may issue each year.
- Section 16:** Authorizes the Municipal Bond Bank to issue "Pension Obligation Bonds."
- Section 17:** Exempts "Pension Obligation Bonds" from the current limit for total revenue bonds and notes that the Municipal Bond Bank may have outstanding at any time.
- Section 18:** Adds a definition for "governmental employer" to the definitions section for the Municipal Bond Bank.
- Section 19:** Immediate effective date.

Representative Mike Hawker

Alaska State Legislature



House Bill 13

Sponsor Statement

Session:

State Capitol
Juneau, AK 99801
907 465-4949 direct
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716 W 4th Avenue
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Member:

House Finance Committee
Legislative Budget
& Audit Committee

District 32:

Ke River
Anchorage
Rainbow
Indian
Bird
Girdwood
Portage
Whittier
Suise
Hope

Short Title: Retirement System Liability/Bonds

HB 13 provides governmental employers the opportunity to utilize a financial mechanism generally referred to as a "Pension Obligation Bond" (POB) to help reduce the ultimate cost of satisfying the unfunded accrued actuarial liabilities of their retirement systems. A POB is essentially a legal arbitrage transaction where money is borrowed at a lower rate of interest than the money earns when invested by the retirement system.

HB 13 clarifies the ability of municipal entities to include POBs in their strategy to reduce the cost of meeting unfunded pension liabilities and expands the authority of the Alaska Municipal Bond Bank Authority, the Alaska Housing Finance Corporation, and the state bond committee to support governmental employers seeking assistance engaging in such transactions. HB 13 also creates the Alaska Pension Obligation Bond Corporation. The authority granted in this legislation will allow for the greatest flexibility in creating transactions to fit the needs of public employers.

This bill does not authorize any debt instruments to be issued. Separate specific action would be required to initiate any transaction under the authority provided by HB 13.

FISCAL NOTE

STATE OF ALASKA
2007 LEGISLATIVE SESSION

Fiscal Note Number: 1
 Bill Version: CSHB 13(W&M)
 (H) Publish Date: 3/7/07

Revision Date/Time (Note if correction): _____ Dept. Affected: Revenue
 Title: Pension Obligation Bonds RDU: Taxation and Treasury
 Component: Treasury
 Sponsor: Representative Hawker
 Requester: House Ways and Means Component No.: 121

Expenditures/Revenues (Thousands of Dollars)

Note: Amounts do not include inflation unless otherwise noted below.

OPERATING EXPENDITURES	FY 2008	FY 2009	FY 2010	FY 2011	FY 2012	FY 2013
Personal Services						
Travel						
Contractual						
Supplies						
Equipment						
Land & Structures						
Grants & Claims						
Miscellaneous						
TOTAL OPERATING	0.0	0.0	0.0	0.0	0.0	0.0

CAPITAL EXPENDITURES						
-----------------------------	--	--	--	--	--	--

CHANGE IN REVENUES ()						
-------------------------------	--	--	--	--	--	--

FUND SOURCE (Thousands of Dollars)

1002 Federal Receipts						
1003 GF Match						
1004 GF						
1005 GF/Program Receipts						
Bond Proceeds						
Bond Bank Operating Budget						
TOTAL	0.0	0.0	0.0	0.0	0.0	0.0

Estimate of any current year (FY2007) cost: 0.0

Mark this box (X) if funding for this bill is included in the Governor's FY 2008 budget proposal:

POSITIONS

Full-time						
Part-time						
Temporary						

ANALYSIS: (Attach a separate page if necessary)

The bill expands the powers of the Alaska Municipal Bond Bank Authority (Bond Bank) and the State Bond Committee (SBC) and creates the Pension Obligation Bond Corporation (POBC) for the purpose of issuing obligations to provide funds to prepay unfunded accrued actuarial liabilities of the retirement systems. The premise of undertaking this type of transaction is borrowing at rates that are at least 1.5% lower than the actuarial assumed rate of return on the pension funds (8.25%).

The fiscal note is indeterminate in cost as it is uncertain how or if a transaction will develop if the legislation is passed. If a transaction is undertaken it is likely that it will be of considerable size, up to several billion dollars, and occur in FY 2008. Contractual costs include rating agency fees, financial advisor, bond counsel, printing, cusip service, underwriting, & other miscellaneous costs would need to be funded in the year of issuance as well as ongoing costs for administrative monitoring and cost of contractors over the life of the bonds.

Prepared by: Deven Mitchell
 Division: Treasury
 Approved by: Jerry Burnett
 Agency: Department of Revenue

Phone: 465-3750
 Date/Time: 3/6/07 12:00 AM
 Date: 3/6/2007

An Introduction to



Pension Obligation Bonds

ROGER L. DAVIS


ORRICK

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Members of Orrick's Pension Obligation Bond Group are shown on the contact list on the inside of the back cover of this booklet.

DISCLAIMER: Nothing in this booklet should be construed or relied upon as legal advice. Instead, this booklet is intended to serve as an introduction to the general subject of the use of pension obligation bonds, from which better informed requests for advice, legal and financial, can be formulated.

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CHAPTER ONE

Introduction

Pension obligation bonds ("POBs") are bonds issued by a state or local government to pay its obligation to the pension fund or system in which its employees (or others for whose pension benefits it is responsible) are members. POBs are an increasingly popular way for state or local governments to accomplish a variety of financial and other (including political) objectives.

According to Thomson Financial, during the past decade there have been at least 275 POB issues by state and local government issuers in at least 22 states.

The purpose of this pamphlet is to introduce interested parties to the reasons why POBs are issued, advantages/disadvantages, structure alternatives, federal tax issues, and representative programs in three states where POBs are particularly popular.

The author is chair of the Public Finance Department at Orrick, Herrington & Sutcliffe LLP and has been bond counsel on more than twenty POBs in various states. Orrick is the nation's premier bond counsel firm, ranked number one for more than a decade¹ with extensive experience in all types of POB and similar financings.²

¹ Rankings for securities transactions of various types are performed annually by Thomson Financial, which has ranked Orrick number one in the country as bond counsel since prior to 1990. In an average year, Orrick handles more than 500 bond issues, aggregating more than \$20 billion.

² Orrick is ranked by Thomson Financial as the number one bond counsel in the country for POBs over the last decade, with more than 4 times as many such issues as the second ranked firm.

CHAPTER TWO

Pension Obligations

Pension obligations generally fall into two categories:

A. Unfunded Accrued Actuarial Liability (UAAL)

The unfunded accrued actuarial liability ("UAAL") is determined by the actuary for the pension fund to be the amount by which the pension fund is short of the amount that will be necessary, without further payments from the state or local government, to pay benefits already earned by current and former employees covered by the pension system. The UAAL is based on assumptions (in some cases established by the actuary and in some cases by the pension system or by the state or local government) as to retirement age, mortality, projected salary increases attributed to inflation, across-the-board raises and merit raises, increases in retirement benefits, cost-of-living adjustments, valuation of current assets, investment return and other matters. In order to avoid volatility in the UAAL based on swings in market valuation, the investment gains and losses on assets in the pension fund are often recognized (sometimes referred to as "smoothed") over a 3 to 5 year period.¹ The state or local government is obligated to amortize the UAAL over a period established by law or agreement with the pension system, typically at an assigned interest rate established by the pension system, which assigned interest rate is usually the same as the actuary's assumed rate of investment return on pension fund assets (sometimes referred to as the "Actuarial Rate").

¹ Note that the smoothing methodology referred to may result in "unrealized" or "lagging" unfunded liability. See discussion of POB possibilities in footnote 4.

B. Normal annual contribution

In addition to making payments toward any UAAL, the state or local government is required to make payments to the pension fund each year in respect of the present value of the benefits being earned by the current employees covered by the pension fund (that is, the amount being earned by those employees with each paycheck necessary to pay future retirement benefits, based on assumptions of mortality rates, salary increases, assumed rate of investment income and the other assumptions referred to in the preceding paragraph), generally referred to as the "normal annual contribution."

CHAPTER THREE

Reasons For Issuing POBs

The reasons why state or local governments issue POBs vary from issuer to issuer and from time to time with economic conditions and other circumstances. However, these reasons generally fall into one or more of the following categories:

A. Interest Rate Savings

As described in Chapter Two, most pension systems assign an interest component to the payments the state or local government is required to make in respect of its UAAL. Assigned interest rates currently generally range from 7½% to 8½% depending on the particular pension system. When taxable bond rates are low, and as of fall 2003 they are roughly 5.95% or less for 30 year debt, then POBs can function like a classic interest rate savings refunding. For example, if the assigned rate is 7.5% on a UAAL of \$100,000,000, the annual all in cost would be roughly \$8,500,000 assuming a 30 year amortization, compared to an all in cost of \$7,300,000 on POBs amortized over the same period assuming a 5.95% interest rate and costs of issuance of 1%. These savings to a degree can be front loaded or otherwise structured to occur when most needed (see Section C of Chapter 5).

On the other hand, because the factors on which the UAAL is based are constantly changing (such as mortality and investment return), the final amount of interest rate savings cannot be determined with certainty. Also, the assigned interest rate may change from time to time during the life of the bond issue, and, at least theoretically, the amount of interest rate savings could become negative (even if all the other factors remain the same) if the assigned interest rate were to drop and remain below

the bond interest rate for a substantial period. So far this has not occurred, even though the assigned interest rate in some cases has dropped by more than one percentage point since the mid-1990s. This possibility is furthermore generally considered to be unlikely, because the assigned interest rate is based on an assumed investment rate of return which reflects investments with a higher risk profile and, therefore, higher projected return than the POBs.

B. Discounts

In some cases, it may also be possible to negotiate discounts with the pension system for early payment of the normal annual contribution or even the UAAL (which may reflect the pension fund's assumed rate of investment return or even its then current investment opportunity). It may also be an opportunity to renegotiate other terms of the pension obligation.

C. Arbitrage

Generally, pension funds may invest in a much broader range of investments than the state or local governments, and the size and diversity of the pension fund's portfolio allows for a higher risk profile than the state or local government could prudently sustain with its own investments. As mentioned above, this is why the assumed rate of investment return is generally materially higher than the bond rate. The actual investment performance of most pension systems (at least in most years) has substantially exceeded the assumed interest rate. Therefore, there is the possibility that proceeds of the POBs will be invested by the pension fund at significantly higher return than the interest cost on the POBs (even if interest on the POBs is taxable).

In almost all cases, the benefit of earnings on investment of bond proceeds in the pension fund will be credited to the state or local government issuer either in reduced

UAAL or reduced normal annual contribution or both. In some cases, the allocation of this benefit is subject to negotiation between the state or local government and the pension system and may be decided by the state or local government each year. This benefit from earnings is why interest on POBs is generally not exempt from federal income tax (see Chapter 6). So this arbitrage is not the typical municipal bond arbitrage derived from borrowing at tax-exempt rates and investing at taxable rates, but rather what might be called risk arbitrage derived from borrowing against the credit of the state or local government and participating through the pension fund in a portfolio of investments that is designed to produce a higher yield and manage the higher risk through diversification. Of course, there is no guaranty that such arbitrage will be positive.

D. Budget Relief

Particularly in the current environment of substantial budget deficits, POBs are being used for budget relief. This may be accomplished by:

- (1) reamortizing the UAAL by replacing the obligation to the pension fund with POBs having a longer term and/or lower payments in the early years (or even no debt service in the early years if capital appreciation bonds (CABs) or capitalized interest is used), and/or
- (2) funding the normal annual contribution for the current (and maybe the next) fiscal year (to the extent permitted by applicable state law)

E. Labor Relations Benefits

Some state or local governments have used POBs, at least in part, to improve relations (or negotiations) with its employees and their unions by funding unfunded pension liability to those employees.

F. Better Than The Alternatives

In some cases, POBs are simply better than the alternatives: (i) paying more into the pension fund; (ii) asking employees to pay more into the pension fund; (iii) reducing benefits; or (iv) hoping that gains on pension fund investments will substantially exceed the assumed rate of investment return.

CHAPTER FOUR

Possible Disadvantages of POBs

Despite the foregoing benefits of POBs, there are a few possible disadvantages.

- A. In some jurisdictions, a state or local government may negotiate or even unilaterally make changes in its pension obligation, perhaps by postponing payments or changing assumptions. POBs replace this potentially flexible pension obligation with a more immutable bond obligation.
- B. As explained in Chapter 3, while unlikely, it is possible that the assigned interest rate will drop below the bond interest rate or that the pension fund will have negative earnings, in each case for a sustained period.
- C. If the pension fund enjoys higher than expected earnings, the pension fund may become overfunded and result in temporary contribution holidays, but also can lead to increases in retirement benefits that may be costly to sustain at some point in the future.
- D. POBs result in payment to and investment by the pension fund of a lump sum amount that otherwise would have been paid and invested in increments over a period of years, concentrating rather than spreading market timing risks.
- E. Almost all POBs are taxable and most taxable bonds with fixed interest rates are sold as noncallable bonds. Adding a redemption feature will ordinarily result in a materially higher interest rate cost than the same redemption feature in tax-exempt bonds. Therefore, taxable noncallable bonds may be expensive to refund or defease, although there have been a number of successful tender offer refundings of taxable POBs (that is, a tender offer was made for the prior bonds and the tender price was paid with proceeds of new refunding bonds).

Another way to address this concern is by using variable rate bonds, which may contain redemption provisions without additional interest rate cost, and may be accompanied by a floating-to-fixed interest rate swap if a fixed rate obligation is desired.

Note that many of these issues can be addressed in whole or in part by using POBs to fund less than all of the UAAL.

CHAPTER FIVE

Types of POBs

A. Security

Most POBs are payable from the general fund of the issuing state or local government. As such, they must either satisfy or be exempt from the debt limitation provisions typically found in the applicable state constitution and, accordingly, generally fall into one of the following three categories:

- 1 **General obligation bonds**, which term generally refers to bonds that satisfy any constitutional debt limitation and are backed by the full faith and credit and taxing power of the issuing state or local government. An example is the \$10,000,000,000 State of Illinois General Obligation Bonds Pension Funding Series of June 2003 (Taxable), the largest POB issue to date. A variation is full faith and credit limited tax bonds payable from available general funds but without any obligation to levy additional taxes. See discussion in Chapter 10.
- 2 **Obligations imposed by law**, which term refers to an exception recognized in a few states from the otherwise applicable debt limitation contained in the state constitution. It applies to obligations imposed on the state or local government by the constitution or by statute or, in some cases, by court judgment as distinguished from a voluntary exercise of the borrowing power by the state or local government. Most pension obligations would qualify and, in states in which the obligations imposed by law concept applies, bonds issued to fund those pension obligations (POBs) are considered to have the same legal character as the pension

obligations themselves. POBs issued in California during the past decade have all been obligations imposed by law. See discussion in Chapter 9.

POBs issued as obligations imposed by law generally cannot include reserves or capitalized interest because those components of the obligation are not considered to be imposed by law, even on the theory they are essential to marketing the bonds (because so many obligations imposed by law POBs have been issued without them). On the other hand, costs of issuance may be included. The inability to include capitalized interest means that it may be difficult to achieve complete budget relief in the early period following issuance of the bonds without resort to capital appreciation bonds (CABs).

3. **Annual appropriation bonds**, which term refers to bonds that are not considered debt subject to a constitutional debt limitation because the state or local government issuer has no legal obligation to pay them and payment is therefore subject to annual (or other periodic) appropriation of funds for that purpose at the discretion of the legislature or governing body of the state or local government issuer. Examples include the \$773.5 million POBs issued in 1996 for the State of New York and the \$2.8 billion POBs issued in 1997 for the State of New Jersey.

4. **Other.** In the mid-1980s and occasionally since, some cities and counties in California issued POBs as so-called asset-strip lease revenue bonds or certificates of participation (COPs). The city or county leased existing facilities (with a value at least equivalent to the amount of bonds/COPs to be issued) to a joint powers authority or other governmental entity or to a nonprofit corporation, simultaneously leasing them back; the leaseback was assigned to a trustee and bonds/COPs were issued secured by the leaseback payable from the city or county's general fund, and the proceeds of the bonds/COPs were paid to the pension fund net of costs of issuance and reserves and capitalized interest retained by the trustee.

In certain circumstances, it may also make sense to use revenue bonds as POBs (for example, if the issuer is a revenue producing enterprise, authority or district). (See also Chapter 10.)

B. Credit Ratings/Borrowing Capacity

Because POBs replace existing pension obligations, they are not generally viewed as adding to the debt burden of the state or local government issuer (much like a conventional refunding).⁴ To quote the rating agencies:

"Moody's believes the issuance of pension obligation bonds (POBs) is one effective way of addressing an unfunded liability. Since POBs reduce the cost of funding an unfunded liability, their issuance is not by itself a credit weakness. However, the planning and analysis conducted by a local government as part of the decision to grant expanded benefits, the government's plan for funding any unfunded pension liability, and its ability and willingness to budget appropriately for any attendant higher costs, are reflective of the quality of the government's overall financial management. These factors, therefore, will be considered in our assessment of a government's general credit quality.

"Standard & Poor's factors the effects of a pension obligation bond strategy into the long-term rating of the sponsor. Standard & Poor's has viewed POBs as a strategy for savings on carrying charges as long as the transaction was structured conservatively and the assumptions were reasonable and attainable. This requires a clear financing plan including reasonable assumptions and manageable leverage. Prudent expectations for investment returns and the cautious use of resultant savings help insure a POB's success. Another positive factor for a POB is, of course, to be fortunate enough to sell the bonds in a low interest rate environment, thereby increasing the spread between interest costs and investment return expectations and lowering the risk of underperformance."

"Fitch believes that POBs, if used moderately and in conjunction with a prudent approach to investing the proceeds and other pension assets, can be a useful tool in asset-liability management. However, a failure to follow balanced and prudent investment practices with respect to POB proceeds could expose the sponsor to market losses.

⁴ Note that to the extent the POBs fund the normal annual contribution, new long-term debt is created which could have an affect on credit ratings not present if the POBs fund only the BAAAL.

Because a sponsor's unfunded pension liability is already factored into the rating, the issuance of POBs simply moves the obligation from one part of the balance sheet to another. However, Fitch notes that POBs create a true debt, one which must be paid on time and in full, rather than a softer pension liability that can be deferred or rescheduled from time to time during periods of fiscal stress.

Consequently, POBs can have a significant effect on financial flexibility over time."

The actual ratings on the POBs will depend primarily on legal structure. General obligation bonds and annual appropriation POBs should be rated the same as the issuer's other general obligation or annual appropriation debt. Obligations imposed by law POBs are generally rated in between: a notch below the issuer's general obligation bond rating and a notch above its lease or other annual appropriation debt.

C. Structures

Because POBs are generally payable directly from the general fund of the state or local governmental issuer, the structure of the bond issue is usually simple and straightforward, varying primarily in interest rate mode, using one or a combination of the following:

1. **Fixed rate bonds.** Because most POBs are issued, at least in part, to achieve interest rate savings, most POBs are issued as fixed rate bonds. The advantages are the same as fixed rate bonds generally, namely, they lock in interest cost, and with interest rates at historic lows, this is a very attractive prospect in itself. The disadvantages are: (i) the assigned interest rate on the pension obligations funded with POBs is not fixed, so interest savings cannot be fixed with certainty (see Section A of Chapter 3), and (ii) fixed rate taxable bonds are usually sold as noncallable, so they cannot be easily refunded or defeased if rates drop or circumstances change (see discussion Section E of Chapter 4).
2. **Variable rate demand bonds.** Variable rate demand bonds are bonds the holders of which may tender them back to the issuer or its agent upon short notice

(usually 7 days, but may be 1 day, 1 month or other periods), for a purchase price equal to par plus accrued interest. As a result, they bear interest at rates like, and have some other characteristics of, short term obligations. Variable rate demand bonds generally require a bank letter of credit, standby purchase agreement or other facility to assure liquidity in the event bonds are tendered and cannot be remarketed. Unless the issuer is highly rated, variable rate demand bonds are typically also credit enhanced with either bond insurance or bank letter of credit or other credit facility. The advantages of variable rate demand POBs are that (i) their interest rates are generally lower than fixed rate bonds, and (ii) they are usually subject to redemption at any time without premium and at no extra interest rate cost for the right to redeem. However, while the interest rate usually starts out lower than fixed rate bonds, the rate is variable and subjects the issuer to interest rate exposure and risk to the interest rate savings objective and to the risk arbitrage pension fund investment objective for issuing the POBs (see discussion in Sections A and C of Chapter 3). Interest rates may be affected not only by market conditions but also by the financial condition of the issuer or the credit provider or liquidity provider. In addition, there are risk, costs and aggravation associated with renewal of any bank liquidity or credit facilities, which usually have a term of one to five years, compared to the POBs which typically have a term of more than 20 years.

3. **Auction rate bonds.** Auction rate bonds appear to be the most popular current variable rate mode at this time because they do not require a bank letter of credit, standby purchase agreement or similar liquidity facility required for variable rate demand bonds or commercial paper. This is because auction rate bonds are not puttable back to the issuer but instead are subject to periodic auction (typically every 7, 28 or 35 days) if the holder would like to dispose of its bonds other than by direct sale. The interest rate is reset by the auction price and tends to be materially less than the then current fixed rates (for example, in the fall of 2003, 7 day auction rate taxable POBs bore rates of roughly 1.05%-1.15% compared to 30 year taxable fixed rates of approximately 5.95%). However, there is no assurance that auction rates will not increase to exceed the fixed rate at which the POBs could have been originally issued. If there is an auction with no buyers (*i.e.*, a failed auction), the interest rate

usually goes to the maximum rate (typically 12 to 15%). Failed auctions are rare. The primary reason they may occur is (i) a cloud of some kind on the tax-exemption of the bonds (for example, an IRS audit or challenge to the tax-exemption of similar bonds), which is not a risk for most POBs because they are taxable; or (ii) a shock to the security for the bonds (for example, bankruptcy of an important source of revenue) which is improbable with general fund obligations like POBs unless the issuer goes bankrupt (which states cannot do under U.S. bankruptcy law, and cities and counties do very rarely).

4. **Indexed bonds.** Indexed bonds are variable rate bonds that are not subject to tender back to the issuer and, therefore, do not require a bank liquidity facility, and bear interest at a fixed spread over a market index (typically either three or six month LIBOR) reset at the end of each accrual period (typically quarterly if three month LIBOR is used or semiannually if six month LIBOR is used). LIBOR refers to the London Interbank Offered Rate and is published daily as page 3750 on the Telerate, Inc. news and information service (referred to as the Official LIBOR Page). Indexed bonds of this type are used primarily to facilitate marketing of POBs outside of the U.S. where investors are more accustomed to LIBOR based investments, but are also attractive to many U.S. investors as well. Like auction rate bonds, index bonds may be subject to redemption without penalty. However, also like auction rate bonds there is no assurance that LIBOR indexed rates will not increase to exceed the fixed rate at which the POBs could have been originally issued. However, unlike auction rates, the LIBOR index is not affected by events affecting the POBs issuer or the POBs. Index bonds may also be swapped to fixed more efficiently and with little or no basis risk compared to auction or other variable rate bonds because the global swap market is primarily LIBOR based.

5. **Capital appreciation bonds.** Capital appreciation bonds (CABs) are bonds that bear no current interest, which instead is accrued, compounded (usually semiannually) and paid at the maturity of the bonds. They are used primarily to reduce debt service in the early years. A variation is convertible CABs, that function as CABs for several years and then convert on a certain date to current interest

bonds (with interest paid on the then accrued value of the bonds, being the original principal amount plus the amount of accrued, compounded interest up to the conversion date). The disadvantage of CABs is that higher rates of interest are required in order to market them.

6. **Swaps.** If variable rate bonds are used, the resulting interest rate exposure may be swapped to a fixed rate, in whole or in part, using a floating-to-fixed interest rate swap. While swaps may often make a great deal of sense in this context, they are complex financial investments and beyond the scope of this pamphlet. It is important to make sure that if a swap is to be used, it is consistent with the issuer's objectives and does not itself expose the issuer to risks or consequences the issuer does not fully understand or are inconsistent with its objectives. For example, if the purpose of using variable rate POBs is to allow for refunding or early redemption if rates drop or other circumstances change, the termination payment that may be due on early termination of the swap may offset the benefit of and effectively prevent refunding or redemption. There are also other circumstances in which a substantial termination payment may be due from the state or local government such as default of the swap provider or downrating of either party, as well as other terms that can be modified to suit the state or local government's objectives. Expert advice should be sought before entering into any swap.

D. Payments to the Pension Fund: Whole or Part

POBs may be issued to pay all or any part of the UAAL or (depending on applicable state law) the normal annual contribution.⁴ Frequently, issuers choose to use POBs to fund only a portion of the UAAL, generally to avoid or reduce the concerns described in Chapter 4. The portion of the UAAL funded may be (1) a percentage of the total UAAL as of the date of issuance of the POBs, or (2) all of

⁴ Depending on state law and financing structure, it may also be possible to finance future year's normal annual contribution and/or unfunded liability created by investment losses not yet realized due to actuarial smoothing methodologies (which phase in investment gains and losses over a period of, usually 3 to 5, years)

certain years contributions to the UAAL. If agreed to by the pension system, the second approach can result in suspension of all UAAL contributions during those years (for example, the next succeeding 10 years). At the end of the period, the UAAL will be recalculated and amortized over the remaining original term of the UAAL. The risk of this second approach to partial payment of the UAAL, which is much less common than the first approach, is that if investment performance of the pension fund is substantially below the assumed rate of return, there could be a significant increase in the amount of UAAL to be amortized over the remaining term. To a degree, that risk can be addressed by subsequent issues of POBs (before or after the date of recalculation).

CHAPTER SIX

Tax Issues

A. Taxable Bonds

Most POBs are taxable. That is, interest on the bonds is included in gross income for federal tax purposes, although they are usually exempt from income taxes of the state in which the issuer is located. This affects not only the interest rate at which the POBs are sold but also the types of investors to which they are marketed (for example, corporate pension funds, charitable endowments and others not subject to federal income tax and, for some of the larger issues, non-U.S. investors). There are, however, a few circumstances in which POBs may be tax-exempt.

Why most POBs are taxable, with these few exceptions, is explained below.

B. Tax-Exempt POBs Prior to 1986 Tax Act

Prior to the enactment of the Tax Reform Act of 1986 (the "1986 Tax Act") POBs that were properly structured could bear interest that was excluded from gross income for federal tax purposes. However, to get tax-exempt treatment, investment of bond proceeds for the benefit of the covered employees and former employees had to be designed so that the issuer/employer did not benefit from the investment in any way other than relieving the issuer of the responsibility of paying its retirees.

If proceeds deposited in the pension fund were expected to be invested in securities or obligations with a yield higher than the yield on the POBs, the issuer's obligation to make additional contributions into the fund would be reduced in the future, a

prohibited anticipated direct benefit from the investment of the bond proceeds by the pension fund.

However, the situation was different where the issuer contracted with someone else to take over the responsibility of making payment to the retirees and paid for that transfer of risk with proceeds of POBs – for example, by purchasing an insurance company annuity whereby the insurance company took over all liability for the payment of the pension benefits. In that case, the insurance company bore the risks and benefits of investment return – the issuer got no benefit from investments made by the insurance company even if the expected investment return was reflected in the price paid by the issuer for the annuity policy. In addition, the purchase of an annuity was not treated as the purchase of a “security” or “obligation” under the tax law. A number of tax-exempt POB transactions were consummated in the early 1980’s in which the proceeds were deposited into a pension fund and were used to acquire insurance company annuity contracts.

C. Tax Reform Act of 1986; Transition Rules

1. *Stopping New Issues of Tax-Exempt Pension Bonds.* As a result of the threat of a proliferation of tax-exempt POB issues, Congress decided to amend the tax law to prevent the investment of tax-exempt bond proceeds in annuity contracts. New rules were adopted in the 1986 Tax Act. “Investment type property,” including annuity contracts, was added to “securities” and “obligations” – potential arbitrage investments. In addition, because of the urgency with which it viewed the matter, Congress included a special effective date rule in the 1986 Tax Act relating to annuity contracts which applied to all bonds issued after September 25, 1985. The 1986 Tax Act essentially ended the issuance of tax-exempt POBs for the purpose of depositing the proceeds into a pension fund or for the purpose of purchasing annuities to replace the issuer’s responsibilities to its retirees, except as described below.

2. *Transition Rules for Refundings of POBs.* The status of refundings of pre-1986 Tax Act POBs was not specifically addressed in the 1986 Tax Act. In connection with two later tax acts, the Technical Corrections Bill of 1988 and Technical and

Miscellaneous Revenue Act of 1988, Congress attempted to clarify its position on refundings. While the statutory language and legislative history are a bit confused, the related House, Senate, and Conference Committee Reports indicate that Congress intended generally to permit one advance refunding of pre-September 25, 1985 POBs (at least where the amount of the refunding is not greater than the amount of prior bonds). Additionally, the legislative history indicates that Congress intended to permit any number of current refundings of pre-September 25, 1985 POBs where the refunding bonds do not additionally burden the tax-exempt market, but merely replace existing tax-exempt debt.

D. Columbus Case

The State of Ohio created a state fund into which municipal corporations in the State were required to transfer, on January 1, 1967, all existing assets and liabilities of their local pension funds for police and firefighters. Under the State law, all pension liabilities accruing after the transfer would be supported by current employer and employee contributions. However, while the State fund completely assumed the assets and liabilities of a city’s retirement fund, the law mandated the city pay to the fund, either immediately or over time, an amount equal to the present value of the accrued but unfunded liability determined at the time of the transfer. The City of Columbus opted to satisfy its obligation over time together with the required interest.

In 1993, the State modified the law to allow any city still owing money to the fund to extinguish its remaining UAAL in return for a single payment equal to 65% of the then unpaid principal balance. The City decided to prepay its obligation. However, upon hearing that the City was going to issue tax-exempt bonds to fund its prepayment, representatives of the Internal Revenue Service notified the City that they would assert that interest on these bonds would be taxable. The City sought a private letter ruling from the Internal Revenue Service and received an adverse ruling which it appealed to the Tax Court.

In the court proceedings the Service argued, among other things, that the discount the City received on the prepayment of its obligation to the fund was a form of

investment return and thus created impermissible arbitrage profit. The Service reasoned that the pricing of the prepayment reflected the expectation of the State fund that it would be able to invest the amount of the prepayment at a yield materially higher than the yield on the City's bonds. As a result, the Service believed that both the City and State fund would benefit from the earnings on the investments. In addition, the Service argued that the prepayment constituted the use of bond proceeds to acquire "investment-type property" at a yield higher than that on the bonds (after taking into account the discount received on the prepayment) in that absent the discount pricing of the prepayment there would be no economic savings for the City.

Ultimately, the City prevailed on appeal as the Court of Appeals concluded that there was an existing obligation of the City to the State fund, the City would not benefit from the investment of amounts by the State fund and the prepayment of the City's own debt obligation to the State fund did not constitute the acquisition of investment type property by the City. The City was then able to refund its obligation to the State fund by issuing tax exempt POBs.

While the unusual facts in this case have application beyond the City of Columbus, such application is likely to be fairly limited and to attract unfavorable attention from the Internal Revenue Service.

E. Tax-Exempt Working Capital Bonds

While directly issuing bonds to deposit the proceeds into a pension fund does not appear to be permitted under current tax law governing tax-exempt bonds, in certain cases it may be possible for a state or local government to indirectly fund the current year's pension deposit. For example, a state or local government may issue short term tax or revenue anticipation notes or long term working capital bonds to finance a cash flow budget deficit or a so-called structural budget deficit. The deficit analysis would include any cash flow deficit relating to the state or local government's obligation to deposit amounts into its pension fund.

It may be that this type of financing is best done so that the bond proceeds are not required to be deposited in the pension fund, but rather, are used to fund deficits

created by working capital expenditures including the deposit of amounts into the pension fund. In other words, it is important that the bond proceeds not be "traced" into the pension fund or required to be deposited there and the bonds should not be called Pension Obligation Bonds.

Among other things, long term bonds of this type would bring into play the application of some complex federal tax rules relating to when proceeds can be treated as spent, allocation of the deficit in sizing the issue, permitted amortization structure, the application of so-called "other replacement proceeds" rules, applicable yield and other investment restrictions, post-issuance compliance matters, plus the intersection in sizing and in post-issuance compliance with the issuance of normal tax or revenue anticipation notes and any other short term or long term working capital obligations.

F. Investment of POB Proceeds in Municipal Obligations

The primary tax problem in the use of tax-exempt POBs to make a deposit to a pension fund is that the proceeds are not treated as spent, but rather are treated as invested. Moreover, under the so-called "proceeds spent last" rule applicable to working capital financings, these proceeds cannot be treated as paid out to pension recipients until all other available amounts are first expended, which as a practical matter, means that the proceeds will never be deemed expended. Unless the investment yield on the investments in the pension fund is not more than the yield on the bonds, the bonds will become taxable arbitrage bonds. In addition, the "hedge bond" rule would result in the bonds being treated as taxable hedge bonds unless the issuer actually expected to spend the proceeds within a three- or five-year time frame, taking into account the "proceeds spent last" rule.

However, under both the arbitrage rules and the hedge bond rules, interest on the bonds used to fund the pension fund could be tax exempt if the issuer invested the proceeds of the bonds in municipal obligations the interest on which is not subject to the alternative minimum tax (so called "non-AMT" municipal bonds). Under these provisions as long as the amount of non-AMT municipal bond investments in the

pension fund is at least equal to 95% of the amount of POBs outstanding at any time, interest on the POBs will be tax exempt. As the POBs are amortized, there is a similar reduction in the amount required to be invested only in non-AMT municipal bonds in the pension fund.

While this structure allows for POBs to be issued as tax exempt, the benefit of the tax exemption on the bonds may be outweighed by the limitation on the type of investments allowed with the proceeds.

G. Other Considerations: Effect on TRANS

Tax and revenue anticipation notes (TRANS) are typically issued by state and governmental units of all sizes to fund the annual cash flow deficit which arises due to the timing mismatch between annual revenues and annual expenses. TRANS are almost always issued as short term notes with maturities of 13 months or less and are repaid at or shortly after the end of the fiscal year by which time it is expected that revenues will have "caught up" with expenses. To the extent the POB proceeds are used to fund a deposit to the pension fund that otherwise would have been made out of current year's revenues, the deficit will be likely be reduced by the same amount, impacting the sizing of any TRANS issued for that year. The one circumstance where this would not happen is if the calculation of the maximum cash flow deficit used in sizing the TRANS shows that it is incurred prior to the time of the pension deposit. In that case, the use of proceeds to make that deposit would not have any impact on the size of the TRAN issue.

CHAPTER SEVEN

Federal Reimbursement Issues

Certain costs of state and local government in administering programs under grants from or contracts with the federal government are eligible for reimbursement from the federal government. Such costs include compensation and benefits, including pension benefits, of state or local government employees for the time devoted to the administration of such programs. Such allocable pension benefit costs even include the interest assigned to the state or local government's unfunded liability. The principles governing such reimbursement are set out in Office of Management and Budget Circular A-87. Some states have similar programs for reimbursement of local governments for costs related to the administration of state programs.

POBs replace the state or local government's payment of some or all of these pension costs with payment of the principal of and interest on the POBs. Issuers will want to be comfortable that the federal government will treat debt service on the POBs as the surrogate for the pension obligations funded or refunded with the POBs and will continue to reimburse its allocable share. Statements have been issued by the Office of Management and Budget and the Department of Health and Human Services to the effect that the POBs, including principal (representing amounts paid to the pension fund), interest and costs of issuance, will be allowable as the pension costs funded or refunded thereby, so long as the POBs are not more costly to the federal government than the regular pension costs funded or refunded over the remaining life of the unfunded liability. The same principles should apply to refunding POBs. Further details of federal and state reimbursement programs are beyond the scope of this pamphlet.

CHAPTER EIGHT

New York

A greater number of POBs (roughly 95) have been issued by the state and local governments in New York over the past decade than from any other state.

The issuance of POBs by local governments in New York was first authorized in 1989. The State and Local Employees Retirement System of the State of New York ("ERS"), the New York State Police and Fire Retirement System ("PFRS") and the New York State Teachers Retirement System ("TRS", in the aggregate referred to as the "NYS Retirement System") were all modified in 1989 with respect to the method by which the annual contribution amounts were to be calculated in the future. As a result, each system was significantly underfunded, requiring a "catch-up" payment to return to actuarial full funding. Participating local governmental units were offered the option of (1) amortizing the UAAL amount due by a date certain through a direct loan from the State which carried an 8% (for TRS) or 8 $\frac{1}{4}$ % (for ERS and PFRS) rate of interest until the liability was fully met, or (2) financing the UAAL through the issuance of general obligation bonds over a statutory period (applicable to the particular retirement system), or (3) paying cash by the date certain. Few local governments, except small jurisdictions with few employees, took the third option.

During the period 1989 through 1993, counties, cities and larger school districts, in particular, issued general obligation bonds to pay off their then current balance of unamortized UAAL whenever interest rates dipped sufficiently to permit a lower net interest cost on their own bonds than the 8% or 8 $\frac{1}{4}$ % rate being charged by the State. During this period, local governments could issue ten year general obligation bonds with net interest costs in the range of 6% to 7.375% depending on their credit rating. The 1989 legislation further provided that at such time as the remaining amortization period was less than five years, local governments could no longer issue

their own debt to pay off the outstanding balances. Thus, with a permitted maximum statutory amortization period of seventeen years for most UAALs, the possibility of financing of the 1989 UAALs ended in the 2001-2002 fiscal year of most local governments.

Beginning in 1995, the State adopted legislation almost every year creating new retirement incentive programs for various categories of State and local government employees, largely to support a goal of efficient downsizing of government. Generally the legislation establishing these programs did not at the time include provisions for financing of the resulting unfunded liabilities. Such costs, which added to any existing UAAL, were paid either by amortization through the NYS Retirement System or by cash.

Concurrently in this time period, another type of pension-related program was developed by the State legislature which authorized local governments to create service award and defined benefit programs for volunteer ambulance and fire-fighting personnel. The legislation permitted the financing of contributions to certain of such programs attributable to years of volunteer service rendered during the five years prior to adoption of such programs. Such financing cannot be amortized over a period exceeding five years.

In 2003, new legislation was adopted for the purpose of structural reform in the method and manner of employer contributions to the NYS Retirement System, which legislation also included two provisions for the issuance of POBs.

1. Local governments are now permitted to issue POBs for any outstanding obligations to the State for any existing retirement incentive program (*i.e.*, the retirement incentive programs established annually in the years from 1995 through 2002). (This provision was drafted by Orrick attorneys on behalf of the New York State Association of Counties.) The amortization period is limited to five years.
2. Similar to the 1989 legislation, a local government (and the State itself with regard to its own employees) is permitted to amortize a portion of its normal annual contribution for one fiscal year — that is, local governments are permitted

to amortize the amount due on December 15, 2004 to the ERS or PFRS component of the NYS Retirement System (except deficiency payments, adjustments relating to prior year payments, obligations for retirement incentives or other similar amounts) to the extent that such amount exceeds 7% of the estimated "pensionable salary" base for the then current fiscal year (2004-2005). This "amount eligible for amortization" may be amortized over a five year period at 8% with the State, or local governments are authorized to issue their own debt obligations to pay such amount, with maximum maturity not to exceed five years. On or about October 15, 2003, the State Comptroller is to determine the "amounts eligible for amortization."

The only type of financing specifically authorized for POBs in New York State are general obligation bonds (which obligations include a pledge of the full faith and credit and taxing power of the local government). These bonds must be issued in the same manner, under the same procedural requirements and subject to the same debt limits and other constraints as for any capital project of the local government. Mandatory or permissive referendum requirements applicable to general obligation bonds of the particular type of local government apply to bond resolutions authorizing POBs. For example, school districts must receive voter approval before issuing debt for any purpose authorized by the 2003 legislation. (Note that the legislation, in 1989 exempted such school district POBs from the voter approval requirement, this omission in the 2003 legislation may be corrected during a future legislative session.) Likewise, fire districts would need prior voter approval. The bond resolutions of counties, towns and villages which authorize payment for five years or less are not subject to mandatory or permissive referendum. Similarly, city bond ordinances should not be subject to mandatory or permissive referendum unless specified by applicable special city charter provisions.

Once a bond resolution has been adopted by a local government authorizing the issuance of POBs, it is generally necessary to publish a legal notice of estoppel including a summary of the bond resolution and allow the 20-day estoppel period to elapse prior to the sale of the POBs. The purpose of the estoppel notice is to ensure that debt issued by the local government cannot be challenged on any basis.

procedural or otherwise, except on constitutional grounds once the estoppel period elapsed.

The New York State Legislature has also authorized the State itself to borrow in order to fund its UAAL on at least two occasions. In 1996, the State through the Dormitory Authority of the State of New York issued \$773,475,000 of POB, as annual appropriation debt. These bonds had a final maturity in 2003. The 2003 legislation described above also amended the State Retirement and Social Security Law to authorize the State to amortize a portion of the State's contribution bill for the fiscal year ending March 31, 2005. The amortizable portion is calculated in the same manner as that permitted local governments. Likewise, the State may either amortize that portion through the office of the State Comptroller for five years at 8% or issue POBs.

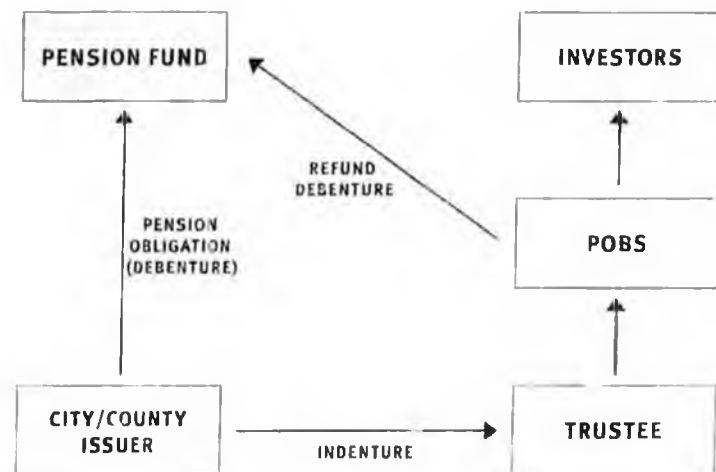
CHAPTER NINE

California

Pension obligation bonds had their start with the famous City of Oakland, California pension bond financing in 1985, the first POB in the country, which Orrick helped to invent and for which it served as bond counsel. That financing and a number of copy-cats that rapidly followed were tax-exempt and primarily driven by then legal arbitrage possibilities. As explained in Chapter 6, tax-exempt POBs largely came to an end with the introduction of tax legislation that became part of the Tax Reform Act of 1986.

A new taxable version of POBs surfaced in late 1993. During the last decade since, thirteen or so cities and seventeen or so counties in California have issued over 60 POBs (second only to New York) aggregating more than \$11 billion (more than from any other state). With the exception of one tax-exempt transaction rule (see Chapter 6C) POB transactions issued as lease revenue bonds, all of these POBs have been issued under the local agency refunding law (drafted by Orrick a few years before for other purposes). California cities and counties do not have specific authority to issue POBs.¹ However, the local agency refunding law is available to all local public entities in California to refund prior bonds² or "other evidence of indebtedness." The pension obligation to the county pension system, the California Public Employees Retirement System or other retirement system is memorialized as a "debenture," thereby becoming an "evidence of indebtedness," which can be refunded by POBs under the local agency refunding law.

¹ The State of California enacted specific authority for State POBs in 2001.



The POBs are typically structured as obligations payable from the general fund of the city or county issuer. They are not full faith and credit taxing power general obligation bonds backed by the issuer's taxing power, because the California Constitution's debt limitation requires such type of bonds to be approved by two-thirds of the electorate. Instead, California POBs have generally been designed to be valid without voter approval under a judicially created exception to the State Constitution debt limitation, which exception is generally referred to as "obligations imposed by law". See discussion in Section A2 of Chapter 5. Because this exception to the Constitutional debt limit was and is much less developed in the case law (few cases not directly on point) than the other two judicially created exceptions (for lease financing and revenue bonds) each POB issued in California has been validated pursuant to California's validation statute (Code of Civil Procedure §§860 *et seq.*).

While there have been many validation actions for POBs, so far they have all ended with a default judgment and no published opinion, meaning that they have no precedential value or application to any transaction other than the specific transaction(s) validated.

What is validated in such validation actions is not legal principles but the bonds and the other principal legal documents approved in a bond resolution. Before the

validation action is filed, it is necessary for the state or local government issuer to first adopt the resolution and authorize the bonds, the documents and the validation action. The validation action is filed in the superior court of the county in which the issuer is located, and an order for publication of summons is received. Summons can then be published (usually in a newspaper of general circulation in the city or county in which the issuer is located), which takes a minimum of 21 days. If no one answers the complaint by the date specified in the summons, which must be at least 10 days after completion of publication, the clerk can enter a default, and schedule a hearing before the judge for the default judgment (the timing of which will depend on the jurisdiction, and may be a day or two or, in some jurisdictions, at least 15 days after the clerk enters the default).

So assuming the very best case, obtaining a validation judgment takes a minimum of 31 to 46 days (depending on the jurisdiction) after filing the validation complaint. Of course, issuers are at the mercy of the judge and the clerk, and it sometimes takes a week or more to get an order for publication of summons, or longer than 15 days after the clerk enters a default to schedule the hearing. In addition, the judge could take the matter under submission for an indefinite amount of time, or even disagree with the proposed default judgment, and decline to validate the transaction. Once granted, the default judgment may be appealed on jurisdictional grounds within 30 days. Therefore, it is typically assumed that the validation action will take approximately 60 days (not including the appeal period). It is generally considered reasonable to sell the POBs without waiting for the 30 day appeal period to run, assuming no one has answered the complaint, because the grounds for appeal are so narrow, but usually the bond closing does not occur until after the appeal period has expired.

If someone does answer the complaint, then there is true two party litigation on the merits. While some expedited procedures are available, the timing for resolution of the litigation cannot be predicted, and may take many months unless settled or abandoned. So far, no one has answered the complaint and default judgments have been obtained for every city and county POB issuer. However, the same was not true of the State of California, whose validation complaint was answered by the Howard Jarvis Taxpayers Association, and resulted in a decision on September 23, 2003 by

the Sacramento County Superior Court declining to validate the State's proposed POBs, which decision, as of this writing, is being appealed by the State.

The validation actions can and usually do validate not only the POBs to be issued but also any future POBs or refunding POBs. Not all validation actions are as inclusive or as flexible as they could be (some leaving out future new money or refunding POBs or costs of issuance or locking in semiannual interest payment rate, etc.), and must be carefully reviewed before relied on for future POBs or refunding POBs.

Note, as mentioned in Section A2 of Chapter 5, that the "obligations imposed by law" concept that is generally used to support POBs in California *does* not support reserves or capitalized interest because inclusion of such components in the bond issue are considered volitional not mandatory (as evidenced by the numerous California POBs issued without them) and therefore not "obligations imposed by law." Costs of issuance, on the other hand, can be included on the theory that they cannot be avoided. The inability to include capitalized interest makes achieving current budget relief more challenging (see discussion of structure options in Section C of Chapter 5). Alternatively, the POBs could be issued as annual appropriation bonds or asset-strip lease revenue bonds (see Section A3 and 4 of Chapter 5), which can include reserves and capitalized interest.

CHAPTER TEN

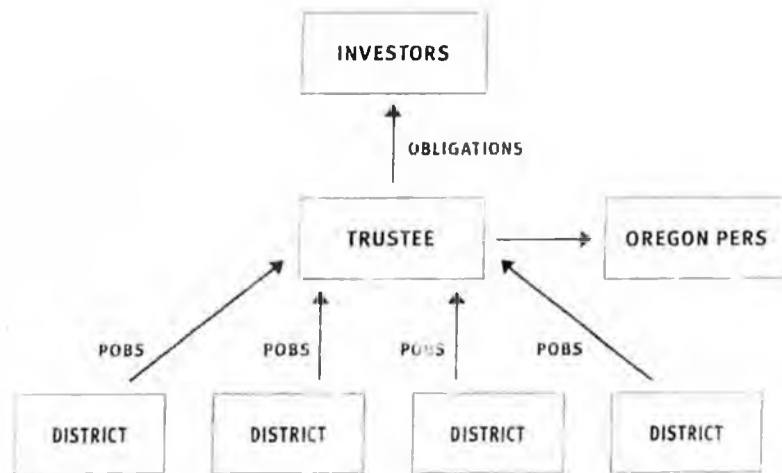
Oregon

State and local government issuers in Oregon have been among the most active users of POBs to finance their share of unfunded liability to the Oregon Public Employees Retirement System. POBs are issued in Oregon either as limited tax bonds or as revenue bonds.

Prior to the passage of the Pension Bonding Act in 2001, the City of Portland, Multnomah County and Josephine County issued significant sized POBs under Oregon's Uniform Revenue Bond Act. In 2001, the Oregon Legislative Assembly approved the Pension Bonding Act (which Orrick attorneys were involved in drafting). The Pension Bonding Act granted authority to "governmental units," including cities, counties, school districts, special districts, public corporations and intergovernmental corporations, to sell full faith and credit obligations for the purpose of refinancing pension obligations. POBs issued under the Pension Bonding Act are not subject to voter approval or annual appropriation and may be issued by local governments individually or jointly.

Significant pooled POB issues have been done by Oregon school districts, community college districts and local governments. In these transactions, the participants pledge their full faith and credit within the limitations of the Oregon Constitution and issue limited tax bonds payable from available general funds of the issuer. Available general funds include all ad valorem property tax revenues received from levies under each issuer's permanent rate limit and all other unrestricted taxes, fees, charges and revenues legally available to pay debt service on the POBs. The issuers are not authorized to levy additional taxes to pay the POBs.

In the pooled school district and community college district transactions, individual districts issued limited tax POBs in favor of a bond Trustee, which in turn issued obligations that represent a proportionate and undivided interest in and right to receive POB payments pursuant to a Trust Agreement. The POBs were further secured by an Intercept Agreement between the State Department of Education and the school districts and community colleges under which the Trustee was authorized to intercept specific education revenues otherwise paid by the State to the school districts and community colleges in an amount equal to the debt service on each issuer's POBs. Specific examples of recently completed Oregon pooled POB issues include: \$153,582,299.60 Oregon Community College Districts Limited Tax Pension Obligations, Series 2003 (Federally Taxable); \$927,079,763.45 Oregon School Boards Association Limited Tax Pension Obligations, Series 2003 (Federally Taxable); and \$238,743,693.40 Oregon Local Governments Limited Tax Pension Obligations, Series 2002 (Federally Taxable). Each of the pooled transactions have been enhanced with bond insurance. By pooling these transactions, the issuers were able to increase the amount of bonds sold, which increased access to investors, and to lower interest rates and reduce costs of issuance.



Other jurisdictions, including the City of Portland, City of Corvallis, Multnomah County, Marion County, Josephine County, Eugene Water and Electric Board and Portland Community College District have sold POBs on a stand-alone basis.

As an alternative to issuing POBs as limited tax bonds pursuant to the Pension Bonding Act as described above, issuers have the option to issue POBs as revenue bonds pursuant to the Uniform Revenue Bond Act or the Pension Bonding Act. The Uniform Revenue Bond Act allows municipalities to issue revenue bonds for any public purpose secured by designated "revenues," which may include taxes and virtually all other general and special fund revenues and receipts of the municipalities. The Uniform Revenue Bond Act requires notice and a 60-day referendum period during which revenue bonds are normally subject to referral to a vote of the electorate if within the 60-day period 5% or more of the voters file petitions requesting a vote on the bonds. Revenue bonds issued pursuant to the Pension Bonding Act are exempt from this requirement.

In a special election on September 16, 2003, Oregon voters approved an amendment to the Oregon Constitution that authorizes the State Treasurer to issue POBs as general obligation bonds of the State of Oregon for the purpose of paying substantially all of the State's UAAL. The amendment provides that the general obligation of the State must contain a direct promise on behalf of the State to pay the principal, premium, if any, and interest on that indebtedness. The State also will pledge its full faith and credit and taxing power to pay that indebtedness; however, the ad valorem taxing power of the State may not be pledged to pay that indebtedness. The amount of POB indebtedness authorized by the amendment that may be outstanding at any time cannot exceed 1% of the real market value of all property in the State. The State presently expects to issue approximately \$2 billion in POBs and to list them on the Luxembourg Stock Exchange in order to facilitate sales to European investors.

In 2003, the Oregon Legislative Assembly made substantial changes to Oregon PERS. The amount of litigation surrounding PERS in Oregon is increasing, and a

number of challenges to the legislative changes are pending in the courts. Several lawsuits have been filed in the Oregon Supreme Court and in the federal district court in Oregon seeking to have changes that were enacted to PERS enjoined or declared an unconstitutional impairment of contract or unconstitutional taking of property. Although these cases are not directly related to any particular bond issues, their outcome could have far-reaching implications with respect to PERS and related liability.

CHAPTER ELEVEN

Similar To POBs

Pension obligations are similar to other state and local government non-bond obligations, which it may be possible to fund in a manner similar to POBs. While this pamphlet is intended to cover primarily POBs, and they are the most frequently used and highly developed of this category, it is useful to note, at least briefly, that there may be other applications of the same concepts discussed above. Several examples (not an exhaustive list) may include such other actuarially based insurance or benefit obligations as workers compensation, health benefits and unemployment insurance or such non-actuarial obligations imposed by law as court rendered judgments for damages against the state or local government and, in California, county obligations under the Teter delinquent property tax program.

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STANDARD
& POOR'S

RATINGS DIRECT

Return to Regular Format

Research:

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Pension obligation bonds (POBs), the once-arcane debt instrument used to finance unfunded pension liabilities, have returned with a vengeance after a brief hiatus, and are again making their mark on the public finance landscape. A number of conditions have fallen into place to spark this resurgence, including:

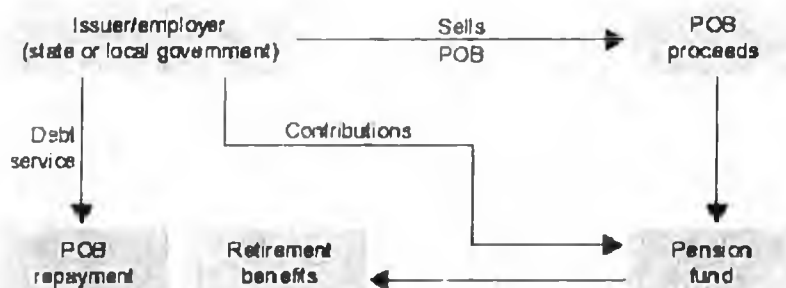
- The rapid growth in unfunded liabilities for public pension funds over the last few years, driven by investment losses, benefit enhancements, and greater longevity of pension plan beneficiaries;
- The relatively low interest-rate environment, which widens the spreads between the POB interest costs paid by the issuer/employer and the assumed investment return rate of the pension systems, which makes the economics of the transaction more attractive; and
- The potential cost savings from a POB, as many state and local employers struggle with budgetary imbalances and other savings alternatives become scarce.

Because of the confluence of these factors, POBs are back. This report details the mechanics of how POBs work, their history, the special risks unique to this debt instrument, the critical rating factors and implications, and future prospects.

How POBs Work

While the financial implications of POBs are complex, the actual mechanics are relatively simple. Generally, the municipal employer will use the findings from the most recent actuarial valuation, or have a new valuation completed, to determine the pension system's unfunded actuarial accrued liability (UAAL). Then, it will decide what portion of the UAAL (either all or a part) will be funded with the POB. In the 1990s most employers funded the entire UAAL, but for various reasons discussed below, many now tend to finance less than the full amount. Once the POB is sized and sold, the net proceeds are placed in the pension trust fund to be commingled with the other funds, and usually invested according to the existing asset allocation guidelines (see Chart). Thus, the pension fund experiences a rapid increase in assets resulting in a higher funded ratio (actuarial value of assets divided by actuarial accrued liability). For the POB to generate savings for the employer, the investment return rate on the POB proceeds must be greater than the interest cost of the bonds (and ideally equal to, or exceed the pension system's investment return assumption), and the larger the spread between these two rates the better. The employer, as POB issuer and obligor, would then be projected to achieve lower total pension contribution and debt service costs than it would have if it had not sold the POB.

Pension Obligation Bond Mechanics



■ Brief History

While there were a few issues in the 1980s, the first big wave of POBs really came in the early 1990s. By the end of the decade about \$15 billion of POBs had been issued. The years 2000 and 2001 were slow from a POB standpoint, with 2000 correlating to the apex of U.S. public pension funding at an average funded ratios of slightly over 100%, up from only about 80% in 1990. These robust funding gains were fueled by above-average equity returns during the period and a general shift in the weighting of public pension assets to this asset class from fixed-income. The corollary to a high funding level is a lower or nonexistent UAAL. Falling funding ratios, now estimated to be heading toward the 90%, have been exacerbated by a combination of adverse circumstances, some uncontrollable and some self-inflicted. These factors include the decrease in asset values from poor equity returns and the increase in liabilities from benefit enhancements and demographic changes (for example, members living longer). The second wave of POBs, driven by burgeoning unfunded liabilities, has come on strong in 2002 and 2003. As in the first wave, California counties have been leading the pack, and there are a number of repeat borrowers, but there are also significant new players. The state of Illinois, which issued in June of this year, now holds the POB record for sheer size at \$10 billion — almost four times larger than the previous record. Oregon sold a \$2 billion issue last fall, and other states that have recently completed or plan a POB sale include Kansas, Wisconsin, and West Virginia.

■ POB Risks

The principal risks to the issuer of a POB fall into a number of categories:

- Arbitrage (investment return/POB interest cost);
- Leverage;
- Market risk; and
- Political.

POBs are essentially an arbitrage play, the success of which is dependent on the premise that the pension fund assets (including POB proceeds) will earn on average more than the interest cost on the POBs and hopefully the assumed investment return rate (generally about 8%) or better each year for the life of the bonds. If the bonds are sold at an interest cost of 6%, for example, the spread could generate handsome savings if the investment returns goals are met over the life of the bonds. The problem is that there is no certainty that the average 8% return will be realized over time, and therein lies the principal risk of the POB to the issuer. If the pension fund earns 8% or more on the POB proceeds, then the result will be success by virtue of having to pay lower pension-related costs (contributions plus POB interest) than without the POB. However, if the investment return is less than the POB interest cost, the transaction becomes a drag on cash flows. Not only will the employer have the new POB debt service costs but also higher contribution rates attributable to new unfunded liabilities from under performing investment returns. If returns are above 6% (as in the example above) but below 8%, the employer will have increasing contribution rate costs, but it would have had them even without the POB. When investment returns are less than the POB interest costs, the POB puts additional strains on financial operations rather than helping.

While the 1990s produced some impressive investment returns, no pension fund consistently earns 8% or higher every year in perpetuity; returns vary dramatically and may (or may not) average the investment return assumption or even the POB interest rate cost. The POB paradigm has a goal to average or beat the 8% investment return assumption over the long-term. With the appropriate asset allocation strategy this goal may be attainable, but market experience over the last several years has led some to believe that an 8% return assumption may be too aggressive.

Another factor in evaluating the success of a POB is that its full effect can only fully be tallied at final maturity of the bonds. Due to market gyrations, a POB may look like a great success for several years, or even a decade, only to see investment gains erode, and at maturity are pronounced a failure. Conversely the exact opposite may be true, with poor results in the early years later overcome to achieve projected benefits in the final analysis.

In any event, we do know that even if projections are met on average over the life of the POBs, there will be years with returns that are higher, and some that are lower (maybe significantly), than the 8%

bogey. We do not have to look back very far to see evidence of such swings: in fiscal 2001 the S&P500 index of domestic equities fell 16%, in 2002 it fell another 19%, but in 2003 it fell only 1.6%. These market declines hurt issuers with POBs outstanding: most had to pay increased contribution rates to cover the new actuarial losses, plus they had the higher debt service costs due to the POB.

The risk of adding too much leverage is another factor for POB issuers to consider. Borrowing for any purpose increases leverage, and incurring debt to pay unfunded liabilities is no different. While the issuer is substituting one type of long-term liability (POB) for another (UAAL), there is a difference. In most cases, bond debt service is a "harder" obligation than the "softer" contribution payments used to amortize the UAAL. Bond debt service must be paid in full and on time or the issue falls into default, with wide ramifications. For certain employers, contribution payments, on the other hand, may be temporarily deferred or reduced without serious negative consequences. Therefore, the size of the POB relative to the total debt structure of the issuer must be measured in terms of what level of debt service can be managed if actual future investment returns do not meet the original POB plan projections.

Because POBs generate very large infusions of funds into the pension system compared with the more steady investment and reinvestment of interest, dividends, and contributions by the fund, the plan for investing POB proceeds must be considered. Should the monies be invested according to the existing asset allocation guidelines, or should POB proceeds have a special allocation strategy because of current market conditions or expectations? If the chief investment officer of the fund believes that international equities, for example, are overvalued, maybe a delay in filling that allocation would be warranted. On the other hand, in that pension funds are long-term investors, most have stuck with their traditional allocations for proceeds, eschewing market timing strategies. Whatever the strategy may be, it should be fully vetted before the POB sale.

Another aspect that few envisioned when this instrument was first initiated is the political risk hidden, almost like a Trojan horse, within the POB structure. As was mentioned in a feature on this subject, ("Pension Obligation Bonds: Unique Rating Documentation", RatingsDirect, March, 4, 1999), POBs can become victims of their own success. For example, if a POB is issued for the full UAAL, resulting in a 100% funded ratio, and subsequent higher-than-average returns push the ratio to 110% or 120%, there will arise tremendous political pressure to distribute the so-called "excess" funding by increasing benefits, thus incurring new liabilities. The excess funding touted in the late 1990s turned out to be illusory. Even systems bolstered by POBs that did not increase benefits found themselves in underfunded positions following the market declines from 2000 to 2003. Those that fell victim to the siren's song and increased benefits have even lower funding levels. Some pension funding ratios declined to the extent that the employers' opted to go back to the market to issue POBs for a second time.

Analysis

The rating process for POBs basically parallels that of long-term debt with similar security plus with certain additional analytical factors pertinent to the POB and pension system. Most POBs issued to date have a GO or general fund pledge. Also, a high percentage of those sold have been additionally secured by bond insurance. In Standard & Poor's analysis specific to POBs we focus on the effect of the bonds on the issuer's debt structure and its ability to meet its obligations. The financial review includes the impact on both the balance sheet and the operating statement or cash flows. The status of the issuer's pension fund on a pro forma basis is also part of the review as with any similar analysis.

From the balance sheet perspective we look at how the POB fits into the issuer's total debt plan. Does the POB dramatically alter the issuer's debt profile? We look at total debt with and without the POB so as not to penalize a POB issuer in comparison to another issuer that might have relatively low debt (and no POBs) but sizable unfunded pension liabilities. Also, we evaluate the leverage added by the POB. Does it markedly increase hard, fixed costs (bond debt service) in place of a softer, more discretionary obligation (pension contributions)? If sub par investment returns put upward pressure on contribution rates will they, coupled with the new higher debt service costs due to the POB, put the issuer's budget under greater strain? The issuer must also be cognizant of the effect the POB issuance may have on statutory debt limits. Will the POB use up debt capacity that might be needed for other, more pressing needs?

From a cash flow standpoint, Standard & Poor's reviews projected debt service and contribution costs, with and without the POB, including the validity of the assumptions including those for POB interest

costs and pension fund investment returns. How do the projections compare in total and on an annual basis? The spread between interest costs and investment return generates the savings expected from the transaction. What is the magnitude of annual savings and total present value savings? Where (in what years) are the savings taken? Are the savings front-loaded in an attempt to mask budgetary stress? Will any front-loading lead to higher, unsustainable contribution rates in later years? Do the potential savings from the POB outweigh the risks involved? The analysis of the cash flows is a critical component to understanding the full impact of the transaction.

As part of the POB analysis we also review the current status of the recipient of bond proceeds — the pension system itself. What is the statutory relationship between the issuer/employer and fund? How have the laws and precedents for making contributions affected funding progress and how do they play into the POB strategy? Have funding levels generally been increasing over time? What are the funding goals and how will the POB impact these objectives?

The pension fund's general actuarial methods and assumptions also will be reviewed for comparative purposes. The fund's asset allocation strategy will be studied for consistency with the POB assumptions and for the general risk profile. An aggressive investment strategy may make the POB objectives more difficult to achieve on a consistent basis.

Rating Implications

Employers looking to help manage their unfunded liabilities through the issuance of a POB should weigh the pros and cons very carefully. Any applicable risks from the above list should be evaluated. There should be a clear POB plan with attainable actuarial and investment assumptions and a conservative structure. Prudent allocation for projected savings over time limits the chances for problems.

It is possible for POBs to have a negative effect on credit quality, especially in the investment environment over the last several years or if they were structured poorly at the outset. Standard & Poor's will continue to evaluate POB risks in light of each employer's individual profile at the time of sale as well as their projected effects over time. POBs may work as planned over the long-term, but short-term fiscal dislocations resulting from these structures are part of their baggage.

Special Rating Documentation Requirements for POBs

The unique nature of POBs requires certain additional documentation not normally requested for other types of ratings:

- POB financing plan, including its effect on the overall debt plan;
- Projections of UAAL contributions and debt service with and without the POB;
- Latest pension fund annual report;
- Most recent actuarial valuation and experience studies of the fund; and
- Pension fund's current asset allocation strategy and plan for investing POB proceeds.

Research:

Managing State Pension Liabilities: A Growing Credit Concern

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State governments have a long history of providing retirement security for their employees--and in many cases certain local government employees--through large, defined benefit pension systems, which, throughout the 20th century, had been successful in meeting their intended goals. However, after state pension funds reached their apex of financial soundness, based on funding levels, in 2000, they have since deteriorated--in many cases precipitously--leaving most funds with the problem of managing new, large unfunded liabilities. The rapid growth and significant magnitude of these liabilities has become an increasing credit concern for many state ratings, reaching crisis proportions in some cases.

This article provides a brief overview of public pension funds in the U.S., along with the factors leading to their current status and some of the options available for managing pension liabilities. In addition, the status of a number of state funds, with a range of funding levels, and some of the strategies states have used to address their respective pension situations, will be examined.

Historical Background

Defined benefit pension plans, as used by most states, provide a systematic method for setting aside sufficient monies to pay promised retirement benefits to employees in the future. The benefits are funded by contributions, usually from both employer and employee, and the investment income derived from such contributions. Most states have two principal funds: one for state employees, and possibly certain local government employees, called public employee' retirement systems; and one for teachers, referred to as state teachers' retirement systems. Some have one, monolithic system for all government employees (state and local), while others have multiple systems for individual job specialties, such as judges and safety officers.

Public pension funds in the U.S., of which the lion's share of assets belong to state funds, have come a long way from their humble beginnings--some dating to the beginning of the 20th century. Starting with little or no assets to offset liabilities, and some initially operating on a pay-as-you-go-basis, pension funds gradually improved their funding ratios (actuarial value of assets divided by actuarial accrued liability) to the 50% level in the mid-1970s, and further to around 80% by 1990. Early on, pension assets were invested largely, if not exclusively, in fixed income investments. Gradually, investment strategies became more diversified, however, and by the end of the 1990s public funds had increased their allocations to equities and other higher yielding asset classes significantly. This shift in allocations coincided with, and to some extent was fueled by, the bull markets in domestic equities that lasted from the early 1980s through fiscal 2000. At June 30 (the fiscal year-end for most public pension funds), 2000, the average funding ratio for all U.S. public funds was slightly above 100%, and was even higher for state funds.

The party to celebrate the final defeat of unfunded pension liabilities was short-lived, unfortunately, as dark clouds soon began to appear. Trends that would adversely affect actuarial balance impacted both liabilities and assets. Liabilities were being inflated not only by normal growth and inflationary pressures but also by overt changes in benefits and actuarial assumptions. The late 1990s saw a number of improvements to pension benefits, which automatically boosted liabilities, and the actuarial consequences of many of these changes really kicked in after 2000 due to the normal delayed reaction in contribution increases. Demographic and lifestyle trends--along with the resultant assumption changes, such as retirees living longer (a global phenomenon) and more employees taking early retirement--had a similar, expansionary effect on liabilities. However, the biggest component in the steep decline in funding levels from fiscals 2001 to 2003 came from the asset side, and was caused by the bottom falling out of the domestic equity markets. The investment return assumption requirement for most public funds to maintain actuarial balance, about 8%, could not be sustained when the average allocation to domestic equities stood at 40%-50% and the annual returns of the S&P 500 Index were

negative 16%, negative 19%, and positive 2% in fiscals 2001, 2002, and 2003, respectively. The net result was that, by June 30, 2003, average funding ratios for state funds had fallen from an average overfunded level in 2000 to an estimated 80%-90% in just three short years. While the S&P 500 saw a 17% gain at fiscal year-end June 30, 2004, public pension fund actuarial results, on average for the year, will not report major funding gains due to the effects of the actuarial smoothing of gains and losses over a period of years used by most. With five-year smoothing, for example, a fund in fiscal 2004 would still be accounting for a portion of the losses (or gains) from the prior four years.

■ Alternatives to Improve Funding

The range of options to fix a pension mismatch of assets and liabilities is relatively narrow, and almost all are difficult to implement due to legal, economic, or political impediments. Corrective measures should act to stop or slow pension liability growth or grow assets, or both. From a liability standpoint, most states have constitutional or statutory pension benefit protections that preclude any reductions in benefits already promised to existing employees. One way around these restrictions is to close off the current benefit to new employees and offer new employees a reduced level of benefits. This tactic of creating a new tier of benefits has been used by a number of funds to reduce liability growth. Completely closing existing plans and creating new, less generous defined benefit plans, and even new defined contribution plans, is another option.

Changing actuarial assumptions to reduce liabilities has been used in the past; the current demographic and economic realities related to the major variables, however, make these options difficult. The raising of the actuarial investment return assumption to 8.25% from 8.00%, for example, would automatically lower actuarial liabilities, all other assumptions being equal. However, the investment experience over the past three or four years and current expectations would tend to preclude such a change at this time.

The principal options to improve pension balance by increasing assets fall into three main categories:

- The pension fund may alter its asset allocation strategy to enhance investment returns;
- The pension fund sponsor may sell pension obligation bonds (POBs), placing the proceeds in the pension trust and thus reducing or eliminating the unfunded actuarial accrued liability (UAAL); and
- Annual contribution rates for sponsors or employees may be increased.

Pension funds in the U.S., as major global investors with more than \$2 trillion in assets, have developed sophisticated asset allocation plans over the years, and, with access to professional asset managers, attempt to maximize returns within their prescribed tolerance for risk. For an individual fund to dramatically enhance yields by altering its allocations, there would most likely need to be a sea change in thinking about the fund's view of risk. Minor tweaking of strategies is a more regular occurrence as funds seek to keep up with changing markets, risk profiles, and expected returns of various asset classes, but major strategy changes leading to markedly improved results are rare.

Some states, as sponsors, have opted to pursue the POB route to significantly boost assets in one bold move, while at the same time taking advantage of the projected lower carrying charges this vehicle offers to a sponsor. (For further information, see report titled "Pension Obligation Bonds Are Surging After Brief Hiatus," published Jan. 20, 2004, on RatingsDirect). While no panacea, POBs are basically an arbitrage play based on the premise that, as a result of the bond proceeds being invested at an expected yield above the cost of the bonds, net savings will be achieved by the sponsor over the life of the bonds. In other words, after the issuance of the POB, combined debt service plus pension contribution costs will be lower than they would have been without a POB. The success of this formula depends on the realization of a certain investment return, which is in no way guaranteed. Whether a POB succeeds or fails cannot fully be evaluated until the final maturity of the bond, and it is a given that some years will be winners and others losers. The bad years may add short-term fiscal stress to the POB issuer (pension sponsor), which could be significant based on the amount of leverage the POB exerts. With most POBs having been issued over the past 10 years or so, it would be premature to pronounce them an unqualified success (or failure). The best that can be said to date is that POB results have been mixed, with some having met or exceeded expectations while others have come up short based largely on the vicissitudes of market timing.

The last major option for increasing assets, and the most common alternative used to manage new, unfunded liabilities, is to simply increase annual contribution rates. Indeed, a major principle of an actuarially funded defined benefit plan is that, if assets and liabilities become unbalanced, increasing

(or decreasing if the system is overfunded) contributions will bring the system back into balance. Sometimes employee contributions are increased, but usually it is the sponsor that steps up to the plate: the investment risk of a public defined benefit plan and the burden to make good on benefit promises are ultimately the responsibilities of the sponsor. Thus, the principal byproduct of the current state pension funding crisis has been increasing contribution costs coming at a time when states, in recent years, have been squeezed by weak revenues and burgeoning expenses, including security and health care cost pressures.

■ How Are Some States Managing Their Pension Liabilities?

Arizona.

The Arizona State Retirement System, a multiple-employer defined benefit plan, provides pension benefits for employees of the state, political subdivisions, and public schools, with more than 500 employers and 222,000 active members. The system's funded ratio fell to 98.4% at June 30, 2003, after a decade of more than 100% funding. As reported in the June 30, 2003, actuarial valuation, the major contributor to this decline was investment losses for the year that resulted in a decrease in the actuarial value of assets by \$1.2 billion. In November 2002, the state retirement system board removed the requirement that actuarial assets be within 20% of market value, and changed the period for recognizing investment gains or losses to 10 years from five years. At June 30, 2003, the system's market value of assets (\$18.1 billion) was 77% of actuarial value. The 2003 actuarial valuation developed hypothetical contribution rates for both employees and employers (odd-year calculations are not actually implemented) of 6.96% each, compared with 1.92% each in 2001.

California.

California has two large state pension funds: one for state and certain local employees--California Public Employees' Retirement System (CalPERS)--with assets exceeding \$170 billion; and the other for teachers--California State Teachers' Retirement System (CalSTRS)--with more than \$115 billion in assets. These systems have been experiencing some of the same pressures as pension funds in other states, and have experienced declines in funding levels. For example, the funded ratio for the state member category of CalPERS had fallen to 84% as of June 30, 2003, compared with 111% in 2000. State contributions to CalPERS for its employees, as actuarially determined, have risen from \$167 million in fiscal 2001 to \$2.2 billion in fiscal 2004. In the same vein, the funded ratio for the CalSTRS defined benefit plan fell from 110% in 2000 to 82% in 2003. However, total amounts contributed to CalSTRS by members, employers, and the state, as set by statute, increased just 1% during the same period.

A number of changes for both pension systems have been proposed over the last year. In relation to CalPERS, the state's 2005 budget included certain pension reforms, such as a two-year delay of contributions into CalPERS from new miscellaneous and industrial employees, thus obviating the state's obligation to make contributions on their behalf over that period. A \$900 million POB was proposed, the proceeds of which would be used to pay a portion of the current contribution payment as opposed to paying a portion of the unfunded actuarial accrued liability like most other POBs. Court validation of the POBs is being sought. The 2005 state budget also included proposals to increase employee contribution rates and lower benefits for new employees to pre-1999 levels.

In December 2004, CalSTRS proposed a number of options to help address the funding deficiency in its defined benefit plan. At June 30, 2003, the system's unfunded actuarial obligation totaled \$23.1 billion. The first option was for the state to issue a POB to pay down the entire liability. Other options included a change in the amortization period of the unfunded liability and a number of changes to how benefits are calculated. One option that could have a large effect on the amortization cost is to eliminate the 2% benefit adjustment. Several alternatives included increases in contribution rates by all three contribution bases: members, employers, and the state.

On July 1, 2003, the state did not make its full contribution payment to CalSTRS' supplemental benefit maintenance account, although it did make the required payment to the system's defined benefit program. The state paid \$59 million of the \$559 million required supplemental benefit maintenance account amount. In October 2003, CalSTRS filed suit in Sacramento County Superior Court to have the \$500 million payment restored. The state is currently defending the action.

Of late, proposals to replace the two California state defined benefit plans with defined contribution plans, and to eliminate state contributions to CalSTRS, have been actively debated.

Florida.

The Florida Retirement System was created in 1970. The system was created to provide a defined benefit pension plan for participating employees. The plan is administered by the state division of retirement in the department of management services. Participation by local governments in the state is optional, but is generally irrevocable once the government opts to participate in the plan. Currently there are 866 participating employers and 956,875 individual participants. Of the total participants, 23.5% are retirees and beneficiaries. Contrary to trends for most other states, the actuarial value of assets in the system has consistently exceeded the actuarial accrued liabilities in recent years. The funded ratio of the pension system has ranged from 112% in fiscal 2004 to 118% in fiscal 2000. Investment performance in fiscal 2004 was strong, with a return of 16.6% compared with the 7.75% assumed rate of return. The actuarial value of assets at July 1, 2004, was \$106.7 billion. The solid asset position of the Florida Retirement System has provided budget relief in the form of lower contribution requirements for the state and participating local governments.

Illinois.

Illinois sponsors five defined benefit retirement plans for about 630,000 members and annuitants, including public employees, teachers, university personnel, and judges. By 2003, the funded ratio of the Illinois funds ranked near the bottom compared with other states in the U.S. Contributing to the \$26.9 billion increase in unfunded liabilities from 2000 to 2003 were:

- Contribution shortfalls (\$4.8 billion of the total),
- Investment losses (\$14.1 billion), and
- Benefit improvements (\$3.3 billion).

Adding to the state's pension woes is a 2002 early retirement incentive plan for state employees, which resulted in a liability that, at \$2.5 billion, was quadruple the original estimate. Part of the variance was due to a much larger number of employees (11,032) taking part in the program than originally projected (7,215). Due to the requirement of a 10-year amortization of this liability, the early retirement program contribution for 2005 is \$382 million, compared with the originally projected \$70 million.

In 2003, the state sold a \$10 billion POB, the largest on record, using the proceeds to fund a portion of the UAAL (\$8.1 billion) and to pay (\$1.9 billion) the state's current pension contribution for fiscals 2003 and 2004. The POB increased the combined system's funded ratio by seven percentage points. At the end of fiscal 2003, the funded ratio for the combined systems was 57% (after giving effect to the POB), and the UAAL was \$35.8 billion.

New York State.

The New York State comptroller is the sole trustee of the state's common retirement fund, which includes all assets of the New York State Retirement System. Members of the system are typically employees of New York State or employees of municipalities in the state (excluding New York City). As of March 31, 2004, there were 2,985 participating government employers in the system. The overall membership in the system exceeds 970,000; this includes 641,721 members and 328,357 retirees and beneficiaries. Overall, membership has expanded continuously, but the growth from retirees has been most significant. Retirees now make up 34% of the system's members, compared with 26% in 1990. Benefit payments continue to rise, reflecting improvements in final average salaries, cost of living adjustments, and benefit improvement. The increased benefit payments, coupled with the performance of the stock market after 2000, have required significant employer contribution increases, with significant increases forecasted for the next two years as well. At March 31, 2004, about 63% of the pension system assets were invested in various stocks. For the largest component in the system--the New York State and Local Employees' Retirement System--employer contributions had averaged 1.75% from fiscals 1996 through 2003. Contributions will increase in fiscal 2004 to 5.9%, totaling \$1.2 billion. This rate is projected to more than double in fiscal 2005 to 12.9%, or a \$2.6 billion contribution, followed by an estimated 11.4% contribution rate in fiscal 2006. Similar increases are forecasted in the New York State and Local Police and Fire Retirement System (PFRS) for fiscal 2004. The contribution rates for fiscals 2005 and 2006 are projected to be even steeper for PFRS, however, growing to 17.6% and 16.3%, respectively. These contribution increases have been, and will continue to be, a significant source of budget pressure for the state and its local governments. The legislature has allowed a portion of the increase to be funded with the issuance of bonds or a loan from the state comptroller. For governments that choose this option, fixed costs to service pension contributions will include an interest component, with the fixed costs extended for up to 10 years. The system uses the aggregate actuarial funding method, which does

not identify or separately amortize unfunded actuarial liabilities. Due to the use of this funding method, there is no disclosure or schedule provided on funding progress.

Oregon.

Oregon has historically delivered pension benefits for state and local employees through a single system called the Oregon Public Employees Retirement System (OPERS). After experiencing relatively high funding levels through the 1990s, the UAAL of OPERS at Dec. 31, 2001, was estimated at \$9.7 billion, almost three times the prior year. With 2002 investment losses, this figure was estimated to be almost \$15 billion--of which about one-third was the state's share. Contributing factors to the increase in UAAL included some of the usual suspects: benefit increases in the late 1990s and poor investment returns. In addition, under the plan, tier-one members were guaranteed a minimum 8% on their regular account assets regardless of actual investment returns earned by the system, and in 2001 and 2002, like most other funds, the system generated negative returns.

In 2003, the state initiated a number of reforms to OPERS, including:

- Modernizing the mortality tables and requiring regular updates;
- Shifting future employee contributions to a defined contribution plan;
- Converting the annual 8% guaranteed rate of return to an assumed 8% to be received over the length of members' service;
- Temporarily suspending future cost of living increases for retirees in certain instances; and
- Creating a new, more independent, retirement system board.

In addition, for new employees hired after Aug. 29, 2003, the state created a new retirement plan called the Oregon Public Service Retirement Plan, which includes both defined benefit and defined contribution components. Employer contributions fund the defined benefit plan, and employee contributions fund the defined contribution plan.

The legislative changes to OPERS resulted in an estimated reduction in the state's UAAL to \$2.2 billion from \$4.6 billion. A number of lawsuits have been filed challenging some of the OPERS changes. The state intends to continue to defend the challenges. In October 2003, the state sold \$2 billion of GO POBs to further reduce its UAAL. The preliminary results of the OPERS 2003 actuarial valuation reported the pension system's funded ratio at about 97%. Employer contribution rates under the valuation showed an increase to 18.27% from 9.96%.

West Virginia.

The West Virginia Teachers' Retirement System (TRS) is a multiple-employer, defined benefit plan for 55 county school systems, certain state higher education employees, and the state boards of education and higher education. The state provides substantially all funding for the system. TRS has occupied the bottom rung among state plans in terms of funded ratios for some time. As of July 1, 2003, the funded ratio was 19%, and the UAAL was \$5.1 billion. The state supreme court has ruled that the UAAL of TRS is a public debt, and has required the state to fund TRS in an actuarially sound manner. This requirement entails the elimination of the UAAL over a 40-year period beginning July 1, 1994, enabling TRS to meet cash flow requirements to fulfill future obligations to members.

While for a number of years West Virginia has attempted to clear the way to issue a POB to help lower or eliminate the UAAL in TRS and other state funds, its efforts have been blocked by legal issues, including the requirement for voter approval. If bonding is not an option, the state may have to pursue other avenues to cure its pension ills.

Looking Ahead

States are under varying degrees of pressure to fund the burgeoning liabilities of their pension systems. The common theme lies in developing strategies to manage increasing contribution rates at a time when other demands are conspiring to break the budget: growing health care, education, and security costs to name a few. Options to reduce pension liabilities or even slow their growth, and thus moderate contribution rates, are few and usually difficult to bring to fruition. Even with adequate investment returns, the pension funding problem will be in the forefront for at least a few more years, and possibly much longer if the markets don't cooperate. As if pension liabilities were not enough to handle, states and other governments will soon have to deal with funding issues related to liabilities from Other Postemployment Benefits (OPEB)--largely retiree health care costs. The GASB has established new accounting rules for reporting on OPEB liabilities. (For further information, see report titled "Reporting &

Credit Implications of GASB 45 Statement on Other Postemployment Benefits," published Dec. 1, 2004, on RatingsDirect.) Both pension and OPEB liabilities will act to constrain ratings over the foreseeable future.

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Research: Pension Obligation Bonds: Were They A Good Bet?

Publication date: 08-Nov-2001

Credit Analyst: Parry Young, New York (1) 212-438-2120; Steven J Murphy, New York (1) 212-438-2066

What do the volatility in equity prices and the decline in market indices over the past year or two mean for the security of public pension investments and, further, what is their effect on the strategy, used by a number of governmental pension sponsors over the last decade, of selling pension obligation bonds to fund the unfunded liability of their pension funds? Specifically, given the current and expected market conditions, was the POB strategy a good idea and, if so, does it still have validity, and does this technique represent a viable opportunity for governmental sponsors who may find themselves wrestling with unfunded liabilities as a result of the declines in equity performance?

Brief History

While a few POBs were done in the 1980s, they really came into their own in the 1990s with more than \$10 billion being sold. Over the last two years, only a few, relatively small, POBs have been floated. The average principal amount for POBs ranged from \$100 million to \$300 million with a few exceeding \$1 billion or more. Most POBs issued to date have been general obligation or general fund secured, capitalizing on the credit quality of the pension system's sponsor.

The POB Experience Through 2000

With this kind of debt instrument, timing is very important and issuers of POBs in the early- to mid-1990s could not have had better timing. While public pension funds during the 1990s were boosting their average allocations in domestic equities from 35% to almost 50%, the returns on this asset class were sustained at levels well above the historical experience. The average annual increase in the S&P 500 index for the 10 fiscal years ended June 30, 2000 (most public pension funds have June fiscal years), was almost 16%, compared to a historical average of about 10%. The five-year total portfolio return for public funds has averaged more than 13%. These performances should be viewed in the context of average investment return assumptions for public pension systems of only about 8%.

Following the issuance of POBs to increase the funding status or to fully fund a system, this excess return phenomenon could easily result in funded ratios greatly exceeding 100%. However, in that actuarially funded pension systems tend to be self-balancing, this overfunding imbalance would have been corrected by actions taken to affect either the pension fund's assets or liabilities, or both. In these circumstances, pension fund sponsors would, upon the recommendation of their actuaries, decrease or temporarily eliminate pension contributions (contribution holiday), thus slowing the growth of assets. On the liability side, some sponsors made the decision to improve employee benefits, instantly increased liabilities but also balancing overfunding. Regardless of how the "problem" of overfunding was managed by sponsors or pension funds that used POBs prior to fiscal 2000, POBs produced, as promised, an economic benefit and in most cases it was substantial.

2001: Harbinger of Tough Times for POBs?

For the fiscal year ended June 30, 2001, the S&P 500 declined 15.8% (and fell a further 15% in the next quarter), which was its worst performance since fiscal 1982. This fiscal 2001 result followed the below-average performance of positive 6% for fiscal 2000. Following two decades of above-average equity returns, it is probable that these returns will approach the historical pattern going forward.

While a long-term environment of weak investment returns will lower pension funding levels, it may be premature for issuers of POBs and pension funds in general to adjust investment expectations based on the most recent results. As more data become available, if it is apparent that a trend is developing, some reactive changes may be needed. Regardless of the causes, any investment underperformance over an extended period of time will lead to actuarial losses and new unfunded liabilities, resulting in the need to increase contribution rates to bring the systems back into balance. It should be kept in mind that such a need would be in sharp contrast to recent years, when a decrease in the needed contribution rates actually provided budgetary flexibility for fund sponsors. Many funds now use smoothing methods for actuarial purposes in valuing assets to spread investment gains and losses over up to five years. This practice would temper the effects of the fiscal 2000 and 2001 investment return experience. With five-year smoothing, for example, only 20% of the fiscal 2001 losses would be included in the June 30, 2001 valuation, which would still be taking into account prior year gains as far back as 1997.

No matter how sponsors who utilize a POB strategy choose to manage their actuarial gains from the excess investment returns following POB sales (lower contributions or increased benefits), most are likely still fully funded, albeit with a lower cushion. In a long-term lower return environment with declining funding levels, those systems that have taken the bulk of their excess funding out of their POB structure may see trouble ahead.

For example, say a state sold POBs in 1985 with a 30-year amortization to fully fund its retirement system and had average annual investment returns of 12% against its investment assumption of 8%. However, instead of permitting the natural increase in the funded ratio that these conditions would have caused, the state managed its funding ratio, through contribution holidays and benefit improvements, to maintain the ratio at around 100%. If we are in fact heading into a lower return period (the average annual increase in the S&P 500 for the 16 years from 1966 to 1982 was a meager 2.7%, for example), the state may have already reaped all its gains from the transaction structure and be headed for losses. If actuarial losses start to be incurred, contributions will have to increase. If returns fall below the interest cost on its POB that will mean that the POB will have become a net financial drain. If investment yields fall below POB interest cost, total debt service, including that on the POB, plus normal and new unfunded actuarial accrued liability (due to low returns) contributions, will now be higher than if the POB had not been sold. To judge the full effect of a POB, however, any future losses have to be weighed against prior period gains. With a POB, its ultimate success, or failure, can only be judged at its final maturity is approached. The financial dynamics may be a winning formula for 25 years, for example, and then a losing one in the last five years (or vice versa).

POBs Going Forward

Standard & Poor's factors the effects of a pension obligation bond strategy into the long-term rating of the sponsor. Standard & Poor's has viewed POBs as a strategy for savings on carrying charges as long as the transaction was structured conservatively and the assumptions were reasonable and attainable. This requires a clear financing plan including reasonable assumptions and manageable leverage. Prudent expectations for investment returns and the cautious use of resultant savings help insure a POB's success. Another positive factor for a POB is, of course, to be fortunate enough to sell the bonds in a low interest rate environment, thereby increasing the spread between interest costs and investment return expectations and lowering the risk of underperformance. The long-term expectations for investment returns have not yet changed because of the recent return experience or current economic and political conditions and public funds will rely on diversification of investments to maintain necessary total returns. Thus, a sound POB plan today should be as viable as it was 10 years ago. The 2000 Public Pension Coordinating Council Survey of State and Local

Government Retirement Systems reported total public pension fund unfunded liabilities at more than \$100 billion, which would be the theoretical limit of POB bonding capacity nationwide.

Conclusion

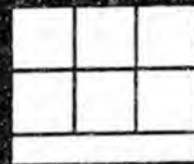
Pension obligation bonds, despite recent equity market gyrations, have largely been a boon to the sponsors who have used this strategy. Over the last 10 years, during which period the vast majority of these bonds were issued, investment yields have comfortably exceeded the investment return assumptions of public pension funds and the interest cost of the POBs, generating handsome actuarial gains.

Do the math: actual return of approximately 12% minus expected return of 8% equals 4% gravy. Some of the gravy was used to lower current contributions and some to increase benefits. By any economic measure POBs have been a success. However, for a POB to be a total success the math has to work (or generate net savings) over the full amortization of the bonds and for most POBs we are not even halfway there. To use a baseball analogy, POBs are ahead 3-1, but it's only the fourth inning. If the POB plan was sound to begin with, they should still be winning at the final out. The same ingredients that helped outstanding POBs succeed--conservative planning and expectations coupled with fortuitous timing--will also help future POBs to be a viable alternative for savings.

Pension Obligation Bonds

The Oregon Story

February 14, 2007



SNW

*Oregon vs. Alaska Pension System **

	Oregon	Alaska	
		PERS	TRS
Asset base	\$ 52.9 billion	\$8.6 billion	\$4.0 billion
Covered Employees	324,914	71,009	21,865
Average employer rate	14.80% ⁽¹⁾	21.77% ⁽²⁾	26.00% ⁽³⁾
Projected high rate	30.00% ⁽⁴⁾	35%	64%
Funded ratio	91.00%	65.70%	60.90%
UAAL as of 2005 valuation	\$ 4.6 billion ⁽⁵⁾	\$4.4 billion	\$2.5 billion

* As of December 31, 2005 for Oregon and June 30, 2005 for Alaska.

(1) Tier 1 and Tier 2 only.

(2) 39.76% for 2008. Actuarially computed at 28.19% for 2007 and 32.51% for 2008 by Buck Consultants.

(3) 54.03% for 2008. Actuarially computed at 41.78% for 2007 and 42.26 for 2008 by Buck Consultants.

(4) Prior to reforms.

(5) Not counting bond proceeds in side accounts.

Bonding a Popular Tool

Many Oregon jurisdictions have chosen to finance PERS liabilities with bonds.

- Original statutory authority provided to local governments and school districts in 2001 for issuance of "full faith and credit obligations."
- Jurisdictions also granted authority to enter into intercept agreements with the State, whereby operating funds were additionally pledged. This approach resulted in "State" credit rating.
- State Constitutional amendment approved by voters in 2003 authorizing the State to issue GO bonds for its share of the liability. Voter approval margin was 55.25%.
- Bond proceeds are placed in a "lump sum account" for benefit of employer. Earnings and losses directly accrue to that account.
- Lump sum account is used to provide prepayment credit on payroll rates charged to jurisdictions.
- Although bonds have to be sold on taxable basis, interest rates for most borrowings have been well under 6%.



Alaska Legal Issues

- Under Constitution, "debt" must be for capital improvements and approved by voters.
- Restrictions do not apply to "Certificates of Participation" or other obligations subject to appropriation.
- Subject-to-appropriation debt is somewhat more expensive than full faith and credit debt.
- Although some home rule municipalities may be able to issue obligations under their own charter provisions, there is no general statutory authority for the issuance of pension obligation bonds.
- HB13 would provide authority for the issuance of obligations for this purpose.

Oregon Bonding Examples

Date	Issuer	Par Amount	TIC	PV Savings
September 2005	Local Governments- 12 jurisdictions	\$ 186 m	5.04%	\$ 57 m
June 2005	OSBA - 16 school districts	\$ 492 m	4.77	\$ 171 m
June 2005	OCCA - 6 community colleges	\$ 57 m	4.86	\$ 19 m
May 2004	Local Government Pool - 10 cities, counties, special districts	\$ 126 m	6.11	\$ 23 m
February 2004	OSBA - 23 school districts	\$ 400 m	5.49	\$ 120 m
	OCCA - 6 community colleges	\$ 100 m	5.49	\$ 25 m
October 2003	State of Oregon	\$ 2,000 m	5.78	\$ 481 m
April 2003	OSBA - 44 school districts	\$ 927 m	5.73	\$ 230 m
	OCCA - 6 community colleges	\$ 153 m	5.72	\$ 37 m
October 2002	OSBA - 41 school districts	\$ 775 m	5.60	\$ 207 m
March 2002	Local Government Pool - 10 cities, counties, special districts	\$ 238 m	7.00	\$ 21 m
	Total	\$ 5,454 m		\$ 1,391 m ⁽¹⁾

(1) Assumes 8% return.

Miscellaneous other cities, counties and special districts have sold bonds since 1999 at rates ranging from 6.50% to 7.80%, totaling in excess of \$1 billion dollars.



Recent Returns – Lump Sum Accounts

Issuer	Par Amount	TIC	Total Return	Annualized
Series 2005 - Local Government Pool	\$ 186 m	5.04%	19.27%	15.42%
Series 2005 School District Pool	\$ 492 m	4.77%	26.43%	17.62%
Series 2005 Community College Pool	\$ 57m	4.86%	26.43%	17.62%
Series 2004 - Local Government Pool	\$ 126 m	6.11%	46.96%	18.18%
Series 2004 - School District and Community College Pool	\$ 400 m	5.49%	46.06%	16.26%
Series 2003- School District and Community College Pool	\$ 1,080 m	5.73%	79.60%	21.71%
Series 2002 - School District Pool	\$ 775 m	5.60%	88.03%	21.13%
Series 2002 A&B - Local Government Pool	\$ 238 m	7.00%	69.15%	14.56%

NOTE: Earnings reflected through December 31, 2006.



Oregon vs. Alaska: Potential Savings

<u>Oregon</u>		<u>Alaska</u>	<u>PERS</u>	<u>TRS</u>
Par Amount Issued:	\$5.4 billion	Total System Par Amount:	\$5.0 billion	\$2.9 billion
Number of Jurisdictions:	175	Number of Jurisdictions:	All	All
Average TIC %:	5.65% ⁽¹⁾	Assumed TIC:	6.00%	6.00%
Projected PV Savings:	\$1.4 billion ⁽²⁾	Projected PV Savings:	\$1.123 billion ⁽³⁾	\$652 million ⁽³⁾
Projected Savings %:	26% ⁽²⁾	Projected Savings %:	22% ⁽³⁾	22% ⁽³⁾

(1) Issued between 2002 and 2005.

(2) At assumed rate of 8%.

(3) At assumed rate of 8.25%.

Considerations

Payment to PERS does NOT guarantee UAAL will be paid off in full.

1. Changes in Calculation of UAAL

- Judicial, legislative, regulatory or investment activities can cause future changes to UAAL. Further increases would continue to be responsibility of jurisdiction.
 - Reductions: Lump sum payment would put jurisdiction in surplus. Funds will not be returned to jurisdiction, but surplus is used to reduce payroll rates further.
 - Increases: Lump sum payment would defray total deficit. UAAL would not be as high as would otherwise be the case.

In any case, arbitrage risks remain the same for existing lump sum payment.



SNV

Considerations

2. Variations in crediting rate due to changes in payroll growth
 - Rate adjustment will be different in each valuation based upon actual vs. projected growth in payroll.
 - Timing of rate adjustment may cause short-term cash flow mismatch.
3. Bond Related Considerations
 - Bonds are not likely to be subject to early redemption.
 - Rating agencies will scrutinize structure carefully to ensure payment of liability is not further deferred.
 - Changes “soft” liability to “hard” liability, which may put some limitations on financial flexibility.
4. PERS Regulatory and Accounting Issues
 - Adequate protection and proper accounting of lump sum account are critical issues.
 - Oregon statutes and regulations needed to be modified to ensure that the employers making the deposit were the ones getting the credit. HB13 would provide for this in Alaska.

Lessons Learned

- Legislative reforms were necessary to make most significant reductions in cost.
- Pension Obligation Bonding worked to help defray some of the costs, but it is critical to fully understand all risks.

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Presentation to the State of Alaska

Pension Obligation Bonds – Overview of Structure and Current Market Opportunities

February 14, 2007



A number of factors have caused a steady growth in unfunded pension and OPEB liabilities nationwide since 2000.

- Funding ratios for Public Pension Funds grew from around an 80% in 1990 to over 100% funded in 2001.
 - Led to the negotiation of more generous benefit contracts with public employees in many states
- Funding ratios fell significantly after 2001, creating an unfunded liability of over \$340 billion nationally by 2005^(a).
 - By 2002, state pension assets nationally fell by \$120 billion – largely as a result of negative investment returns.
 - Over the same period, liabilities grew by 10%
- Exponential growth in Other Post Employment Benefit (OPEB), primarily medical, costs has further contributed to unfunded liabilities of state and local governments.
- *Standard and Poors* refers to the unfunded liability as a crisis because they view the unfunded pension liability the same as they view debt^(a).



Alaska's pension funding experience has been similar to other state pension systems.

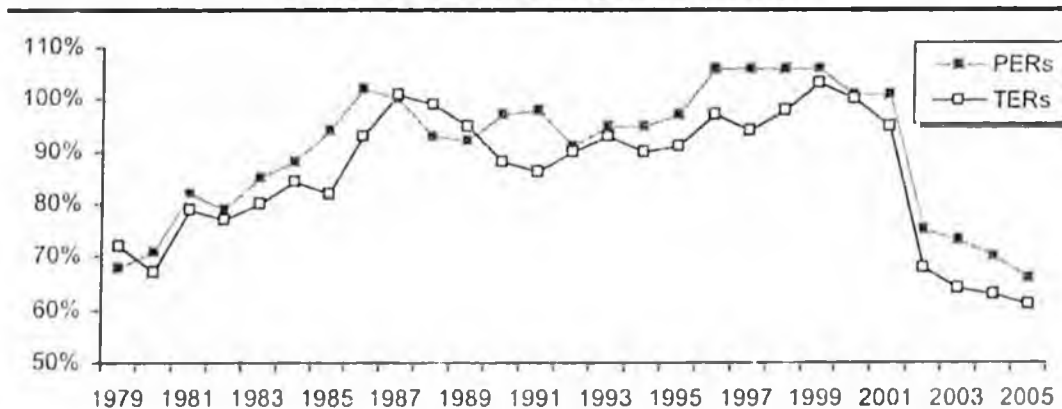
- In 1999 the funding ratios for PERS and TRS were 106% and 103%, respectively.

The current funding ratios for the PERS and TRS Programs is 65.7% and 60.9%, respectively. Accordingly, the State has a large Unfunded Actuarial Accrued Liability ("UAAL")

Funding Status as of June 30, 2005^(a)

	PERS		TRS		Total	
	2004	2005	2004	2005	2004	2005
Valuation Assets ^(a)	\$8,030,414	\$8,442,919	\$3,845,370	\$3,958,939	\$11,875,784	\$12,401,858
Accrued Liability ^(a)	\$11,443,916	\$12,844,841	\$6,123,600	\$6,498,556	\$17,567,516	\$19,343,397
UAAL ^(a)	\$3,413,502	\$4,401,922	\$2,278,230	\$2,539,617	\$5,691,732	\$6,941,539
Funding Ratio (Valuation Assets)	70.2%	65.7%	62.8%	60.9%	67.6%	64.1%

PERS and TRS Funding Ratio History



- "Informally, it is believed that an 80% ratio is the demarcation between a serious and a manageable underfunding situation. If a fund's ratio exceeds 80%, it is likely that investment returns combined with increased contributions will be able to restore the ratio to a level much closer to 100%. However, pension funds with ratios below 80% are likely to face a contribution increase that will significantly strain the budget of the underlying government. Further, if the requirement is not met, the problem is compounded. Like a snowball rolling down hill, the pension obligation then becomes difficult to manage and can significantly affect the government's operating budget."^(b)

(a) Figures from Buck Consultants Actuarial Valuation Report dated 9/15/2006. All dollar amounts in thousands

(b) Wisconsin Research Institute Policy Report, "Mounting Cost of Deferred Responsibility in Government", January 2007



An Unfunded Accrued Actuarial Liability (UAAL) is the difference between the assets currently in the pension fund and the present value of the required payments to existing plan participants over time.

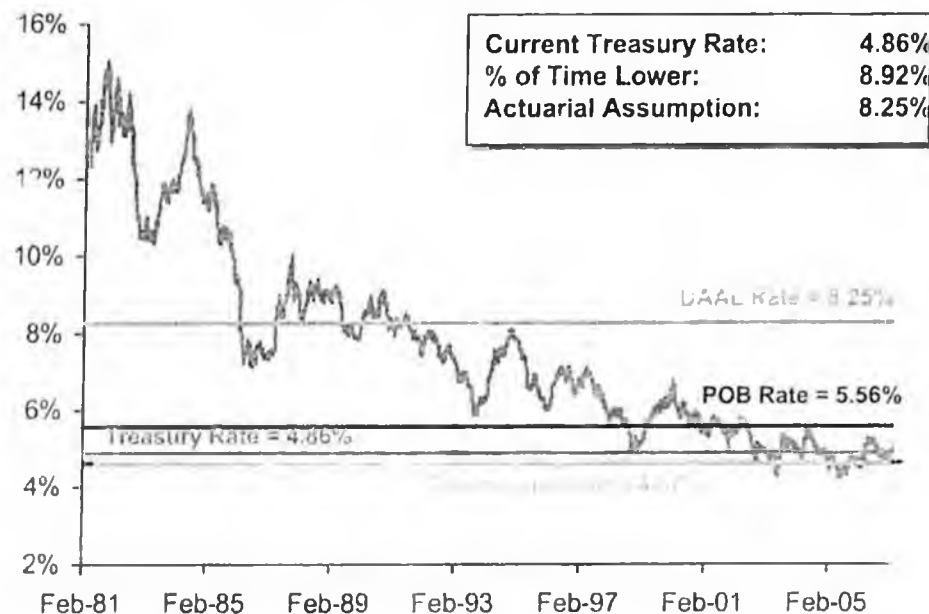
- Each year the State's pension systems review the assumptions in the pension fund actuarial report to determine the required payment stream and compare it to the earnings potential of the assets on hand.
- The pro forma annual shortfall is then discounted at the assumed interest rate (8.25%) to determine the present value of the shortfall known as the UAAL.
- The UAAL, therefore, represents an unfunded liability (i.e. debt) of the State to its plan participants, carrying an interest rate of 8.25% and amortizes like debt.
- This debt obligation to plan participants is constitutionally protected by Article XII, § 7 of the Alaska State Constitution.



Pension Obligation Bonds (POBs) may be used to refinance at a lower cost the State's existing debt to its plan participants.

- This is an ideal time to lock in low rates on POBs and maximize potential cost reductions.
 - Interest rates are near historical lows.
- Taxable POBs would have an all-in True Interest Cost (TIC) of 5.56%^(a) compared to the 8.25% rate on the UAAL liability.
- Potential savings to the State from a POB refinancing are significant.
 - Assuming funding 80% of the UAAL on PERS, the State could issue \$2.1 Bn of bonds for \$626.6 million savings^(b).
 - Assuming funding 80% of the UAAL on TRS, the State could issue \$1.3 Bn of bonds for \$384.2 million savings^(b).

Current 30 Year Treasury and Estimated Yields



Note: As of Close of Business February 9, 2007.



POBs can be used as a single tool or in combination with other strategies to achieve the State's UAAL funding objectives.

■ Factors impacting size of UAAL

- Actuarial assumptions – life expectancy, demographics, etc.
- 8.25% Actuarial Assumed Rate of Return
- Actual Investment Returns
- Changes in contractual benefits
- Benefits cost assumptions vs. actual/experienced, especially medical



- Due to these variables the size of the UAAL is constantly shifting.
- Most pension systems target a funded ratio of 80% to 90% to avoid dramatically under or over-funding^(a).

■ Options for funding UAAL

- Upfront cash contribution from State or employer reserves
- Increased annual employer contributions
- Prefund with Pension Bond proceeds at 5.56%^(b) interest rate



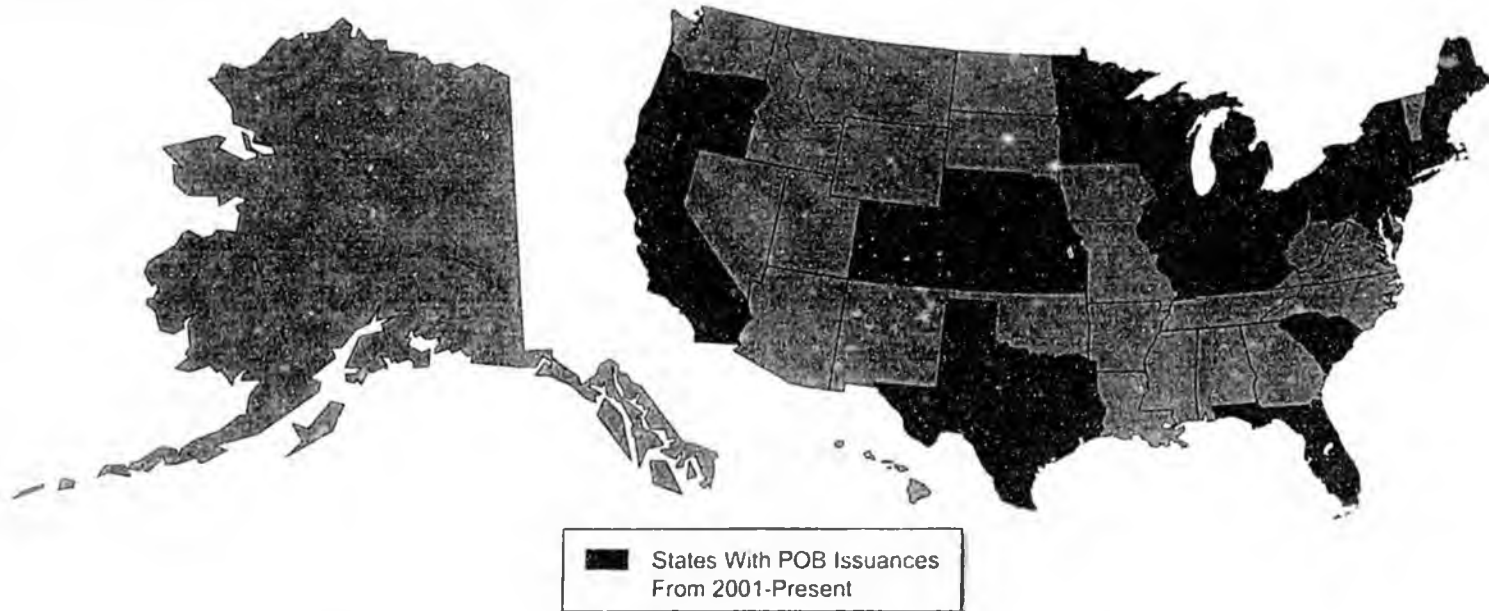
- Pension systems can develop a strategy for reaching the target funding ratio using a variety of funding options.
- Strategies should address both political sensitivities and budget constraints.
- UAAL funding cost savings can likely be achieved through the use of POBs.

As a result of the growth in unfunded pension liabilities and ideal market conditions, there have been a number of POB issuances over the last few years.

■ One study of POBs in 2004 concluded that 84% were profitable to their issuers with another 7% at a breakeven, leaving only 9% that have lost money.

Since 2001 over \$29 billion of POBs have been issued nationwide

- \$800 million Detroit Retirement System Fund (6/06)
- \$2.1 billion State of Oregon (10/03)
- \$10 billion State of Illinois (06/03)
- \$927 million Oregon School Boards Association (04/03)



POB Issues by Year

Year	Amount (\$Mn)	Number of Issues
2006	\$1,408.34	10
2005	3,971.32	37
2004	3,676.42	32
2003	17,685.31	71
2002	2,599.31	25
2001	536.64	9
	\$29,877.33	184

POB Issues by Size

Issue Size (\$Mn)	Amount (\$Mn)	Number of Issues
\$100 and under	\$3,292.09	134
\$100-250	4,275.92	28
\$250-500	4,928.48	13
Over \$500	17,380.82	9
	\$29,877.33	184

Alaska Pension Obligation Bonds



Rating agencies have varying views of pension liabilities and their effect on issuers' credit.

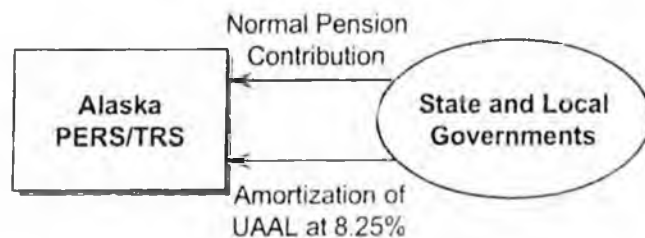
- Moody's generally incorporates a view of the 'soft' cost of unfunded pension liabilities in their debt calculations.
 - Issuing debt to fund the unfunded pension liability is moving a 'soft' cost to a 'hard' cost.
 - Should not have an impact on debt rating
- S&P does not include pension liabilities in the calculation of debt ratios, but incorporates them in the overall rating analysis.
- Implementing a plan to address the existing UAAL and a funding plan for future obligations could be considered a credit positive.
- Issuing pension bonds to pay down UAAL without setting policies for funding liabilities and granting benefits may be viewed as a partial solution by the credit agencies.



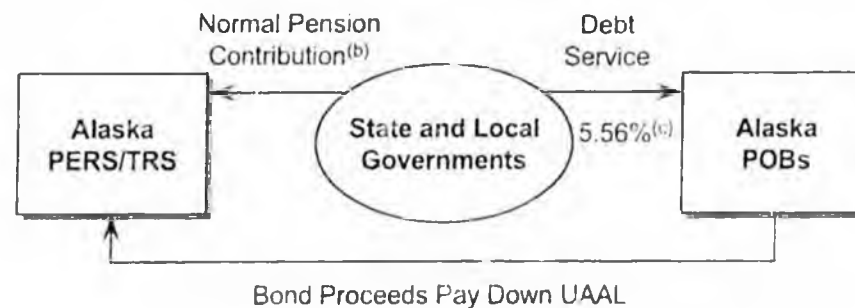
Pension Obligation Bond Mechanics

- Currently the total annual employer contribution for pension liabilities is comprised of two major components:
 - The "normal pension contribution" to meet the annual pension expenses accrued in the current fiscal year;
 - The "UAAL component" is sized to help amortize unfunded liabilities over some period of time.
- As the UAAL has grown in recent years, the second component has become increasingly larger.
- To achieve an 80% funding level the State needs to contribute the following amounts through cash or POBs:
 - \$2.1 billion for PERS^(a)
 - \$1.3 billion for TRS^(a)
- The mechanism could be structured so that employer contributions and debt service do not exceed current contribution levels.

Pension/UAAL Payments Before POBs



Pension/UAAL Payments After POBs



(a) Figures from 2005 Buck Consultants Actuarial Valuation Report dated 9/15/2006.
(b) Assumes 100% funding of the UAAL and no future amortization obligation of UAAL
(c) Bond yield based on current market conditions and structure of bonds.



Recognizing and managing risks is key to POB success.

Benefits

- Arbitrage
 - The broad range of investments utilized by pension funds generally result in returns substantially higher than today's debt rates.
 - Returns above assumed actuarial investment return will produce greater than expected savings from POBs.
 - Returns below assumed actuarial investment return but above POB yield will produce savings, but less than projected.

- Local Government Benefit
 - POBs can be used to improve relations with local governments and political subdivisions by providing more security with a higher funding ratio.
 - POBs will permit more stable budget planning for all participants in PERS and TRS

Risks

- Arbitrage Risk
 - Returns below the bond interest rate will result in negative earnings.

- Conversion of "soft" obligation to "hard" obligation.

- Market risk
 - POBs result in a lump-sum payment into a pension fund, concentrating rather than spreading market timing risk.



Authority to Issue POBs in Alaska

- Since the State Constitution limits the issuance of general obligation debt to capital improvements, POBs cannot be issued as general obligations.
- State issuance of POBs will require new legislative authority. Debt service payment on POBs will be subject to annual appropriation.
- Substantial market demand exists for POBs issued by the State of Alaska and secured by an annual appropriation pledge.
- Alaska could consider a pooled pension obligation program whereby the State's credit serves as backstop to PERS participants or it could create legislative authority for local governments to issue POBs individually, similar to last year's proposed House legislation that would have allowed the Bond Bank to serve as the conduit for such issuers.
- Home rule municipal governments may be able to issue POBs under their charter provisions:
 - Anchorage, Juneau, Sitka, Fairbanks

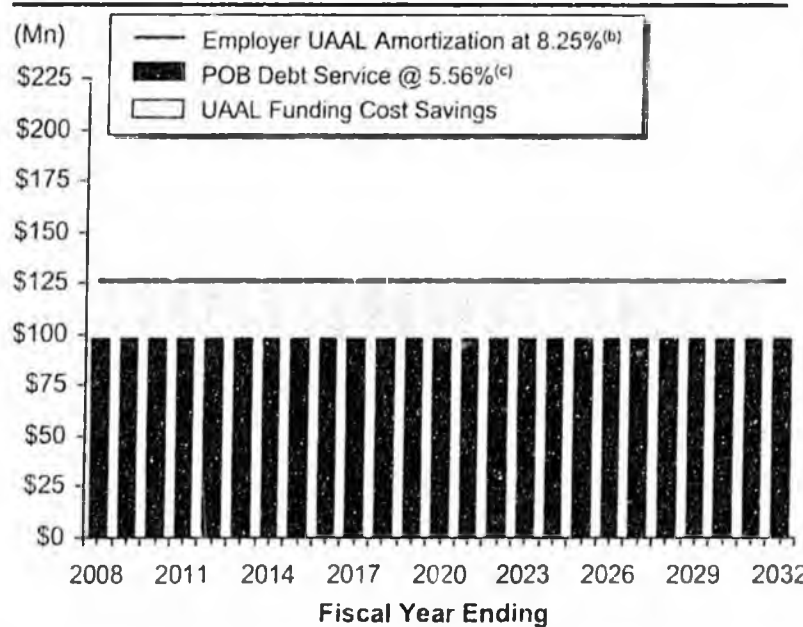


POB proceeds invested in the pension system are expected to have returns that are higher than the POB borrowing rate, creating significant UAAL funding cost savings.

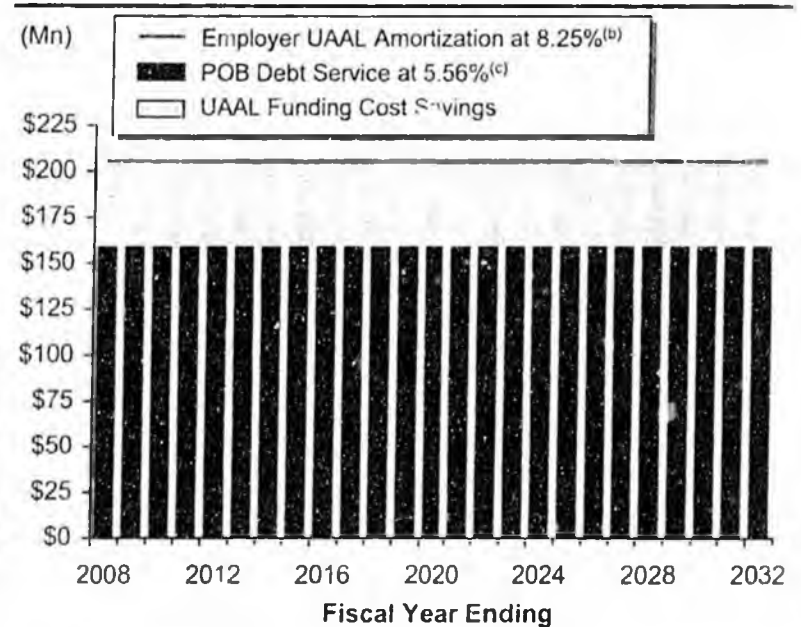
TRS POB Program (000s)	
Target Funding Ratio:	80%
Par:	\$1,320,045
All-in TIC:	5.56%
Assumed Pension System IRR:	8.25%
Estimated Gross Savings^(a)	\$720,166
Estimated PV Savings: ^(a)	\$384,157
Average Annual Employer Contribution Savings:	\$28,806

PERS POB Program (000s)	
Target Funding Ratio:	80%
Par:	\$2,145,330
All-in TIC:	5.56%
Assumed Pension System IRR:	8.25%
Estimated Gross Savings^(a)	\$1,174,594
Estimated PV Savings: ^(a)	\$626,563
Average Annual Employer Contribution Savings:	\$46,984

TRS Payment Structure



PERS Payment Structure



(a) Estimate. Assumes 8.25% earning rate on investment and PV rate of 5.56%. Savings dependent on actual investment performance

(b) Assumed level amortization of UAAL based on the Department of Administration of PERS and TRS report dated 2/2/2007. All other assumptions based on the Buck Consultants Actuarial Valuation Report dated 9/15/2006.

(c) Cost of debt service based on current market conditions.



Summary of Changes in Employer Contribution Rates

Teachers' Retirement System – 8.25% Earning Rate

UAAL: \$2.5 Billion as of June 30, 2005

- The matrix provides employer contribution rates required to achieve a target funding ratio of 80% by 2032, given corresponding cash contributions and POB issuances.

Status Quo Contribution Rate 44.96%	Pension Obligation Bond			
	\$0	\$500 Mn	\$750 Mn	\$1 Bn
	10 yr. Avg. Employer Contribution Rate	10 yr. Avg. Employer Contribution Rate	10 yr. Avg. Employer Contribution Rate	10 yr. Avg. Employer Contribution Rate
Cash Contribution				
\$0	44.96%	43.84%	43.28%	42.72%
\$250 Mn	41.39%	40.27%	39.71%	39.15%
\$500 Mn	37.82%	36.70%	36.14%	NA
\$750 Mn	34.25%	33.13%	NA	NA
\$1 Bn	30.68%	NA	NA	NA

**Annual
Contribution
Rate
40.27%**

- Through a combination of a \$250 million cash infusion and \$500 million POB issuance, the State can lower their projected annual contribution rate from 44.96% to 40.27% while still achieving a funding ratio of 80% in 2032.
- A decrease of 5% in the employer contribution rate equates to \$31.2 million annually.
- Instead of a one-time up-front payment, the contribution could be spread over a period of years.
 - An annual contribution of \$250 million for 3 years would lower the contribution rate to 35.04%.

Note: Estimate, Savings dependent on actual investment performance
Assumed level amortization of UAAL based on the Department of Administration of PERS and TRS report dated 2/2/2007. All other assumptions based on the Buck Consultants Actuarial Valuation Report dated 9/15/2006



Summary of Changes in Employer Contribution Rates

Public Employees' Retirement System – 8.25% Earning Rate

UAAL: \$4.4 Billion as of June 30, 2006

- The matrix provides employer contribution rates required to achieve a target funding ratio of 80% by 2032, given corresponding cash contributions and POB issuances.

Status Quo Contribution Rate 29.53%	Pension Obligation Bond		
	\$0	\$1.0 Bn	\$2.0 Bn
Cash Contribution	10 yr. Avg. Employer Contribution Rate	10 yr. Avg. Employer Contribution Rate	10 yr. Avg. Employer Contribution Rate
\$0	29.53%	28.84%	28.15%
\$250 Mn	28.36%	27.66%	NA
\$500 Mn	27.18%	26.49%	I.A
\$750 Mn	26.01%	25.31%	NA
\$1 Bn	24.83%	24.14%	NA

**Annual
Contribution
Rate
26.49%**

- Through a combination of a \$500 million cash infusion and \$1 billion POB issuance, the State can lower their projected annual contribution rate from 29.53% to 26.49% while still achieving a funding ratio of 80% in 2032.
- A decrease of 5% in the employer contribution rate equates to \$94.8 million annually.
- Instead of a one-time up-front payment, the contribution could be spread over a period of years.
 - An annual contribution of \$250 million for 3 years would lower the contribution rate to 26.27%.

Note: Estimate, Savings dependent on actual investment performance.

Assumed level amortization of UAAL based on the Department of Administration of PERS and TRS report dated 2/2/2007. All other assumptions based on the Buck Consultants Actuarial Valuation Report dated 9/15/2006



Sensitivity of Employer Contribution Rates to a 8.1% Earnings Rate Teachers' Retirement System

- The matrix provides employer contribution rates required to achieve the target funding ratio of 80% by 2032 assuming the actual earnings rate achieved is 8.1%.

	Pension Obligation Bond			
	\$0	\$500 Mn	\$750 Mn	\$1 Bn
Cash Contribution	10 yr. Avg. Employer Contribution Rate	10 yr. Avg. Employer Contribution Rate	10 yr. Avg. Employer Contribution Rate	10 yr. Avg. Employer Contribution Rate
\$0	46.09%	45.07%	44.55%	44.04%
\$250 Mn	42.57%	41.54%	41.03%	40.52%
\$500 Mn	39.04%	38.02%	37.50%	NA
\$750 Mn	35.52%	34.49%	NA	NA
\$1 Bn	31.99%	NA	NA	NA

- Lowering the assumed earnings rate on the system from 8.25% to 8.1% increases the projected Employer Contribution Rate by approximately 1% annually.
- All other variables used to calculate and amortize the UAAL are assumed to remain the same.
- A lower actuarial assumed earning rate will increase the size of the UAAL.

Note: Estimate, Savings dependent on actual investment performance
Assumed level amortization of UAAL based on the Department of Administration of PERS and TRS report dated 2/2/2007 All other assumptions based on the Buck Consultants Actuarial Valuation Report dated 9/15/2006.



Sensitivity of Employer Contribution Rates to a 8.1% Earnings Rate Public Employees' Retirement System

- The matrix provides employer contribution rates required to achieve the target funding ratio of 80% by 2032 assuming the actual earnings rate achieved is 8.1%.

	Pension Obligation Bond		
	\$0	\$1.0 Bn	\$2.0 Bn
Cash Contribution	10 yr. Avg. Employer Contribution Rate	10 yr. Avg. Employer Contribution Rate	10 yr. Avg. Employer Contribution Rate
\$0	30.48%	29.84%	29.21%
\$250 Mn	29.32%	28.68%	NA
\$500 Mn	28.15%	27.52%	NA
\$750 Mn	27.00%	26.36%	NA
\$1 Bn	25.83%	25.20%	NA

- Lowering the assumed earnings rate on the system from 8.25% to 8.1% increases the projected Employer Contribution Rate by approximately 1% annually.
- All other variables used to calculate and amortize the UAAL are assumed to remain the same.
- A lower actuarial assumed earning rate will increase the size of the UAAL.

Note: Estimate, Savings dependent on actual investment performance.

Assumed level amortization of UAAL based on the Department of Administration of PERS and TRS report dated 2/2/2007. All other assumptions based on the Buck Consultants Actuarial Valuation Report dated 9/15/2006.

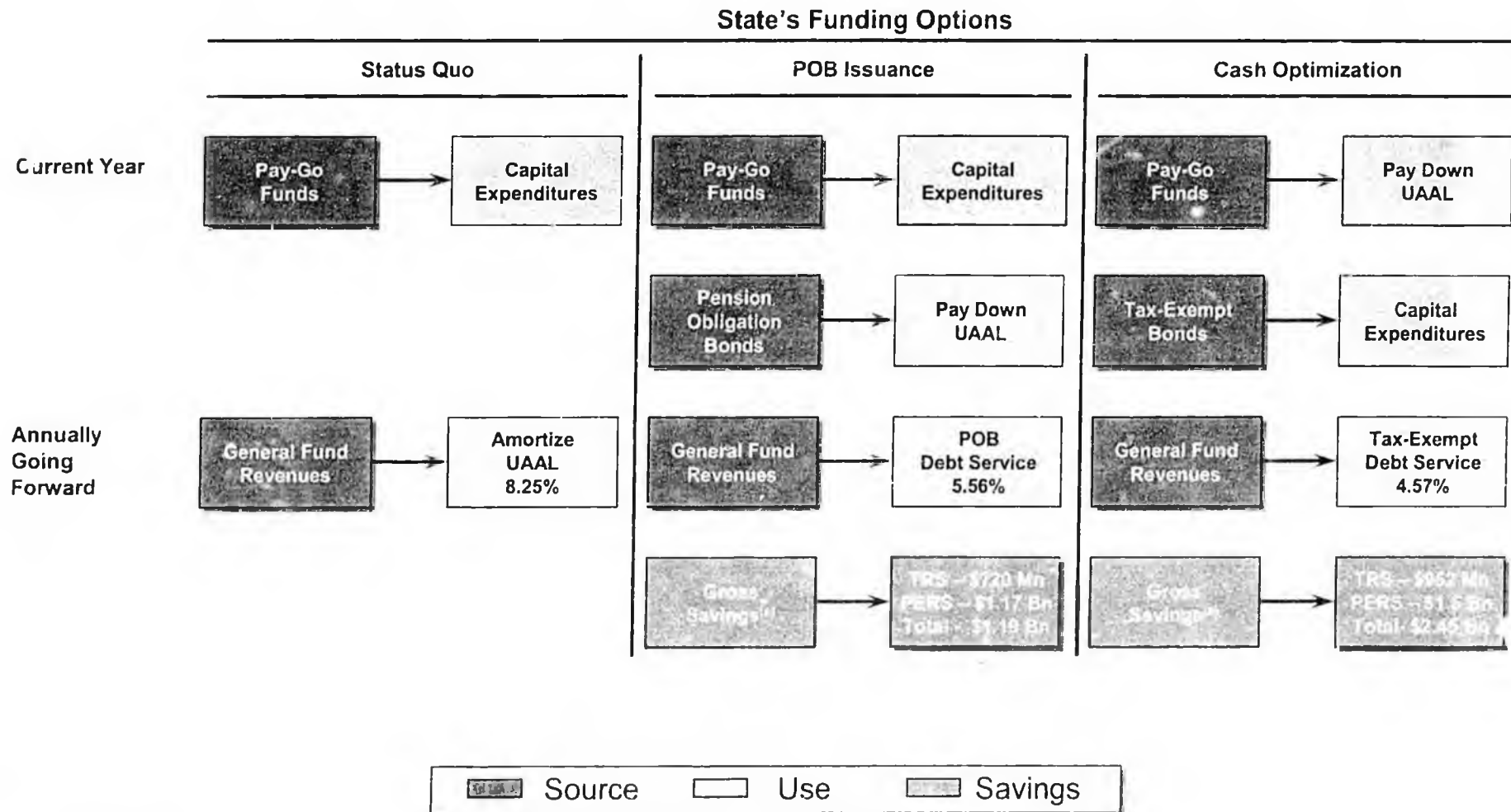


A Cash Optimization Program could provide a cost-effective strategy to reduce the State's overall portfolio cost.

- Under a Cash Optimization Program, the State re-deploys General Fund revenues, currently projected to be used for current Capital Expenditures, to make contributions to the pension system to reduce the UAAL.
- Capital Expenditures that would otherwise have been funded with current funds are funded with tax-exempt bonds.
- Revenues from the General Fund are re-deployed to pay debt service on tax-exempt bonds.
- The net effect is a reduction in borrowing costs for the State's overall portfolio and an increase in the benefit of funding the UAAL.



Using Cash Optimization, the State achieves all of its policy goals at an overall lower net cost.





A Cash Optimization Program provides a cost-effective strategy to reduce the State's cost to amortize the UAAL of the TRS program.

- A Taxable Pension Obligation Bond decreases the State's imputed cost of capital of 8.25% to 5.56%.
- A cash optimization program with tax-exempt financing results in a borrowing cost for the State on its debt of 4.57%.
- Assuming a \$1.2 billion issuance, the net benefit of the lower cost to the State translates into an increase in gross savings of \$232 million, which is equivalent to a 1.49% reduction to the average annual employer contribution rate.

TRS Program (000s)	
Target Funding Ratio:	80%
Par:	\$1,247,015
All-in TIC:	4.57%
Assumed IRR:	8.25%
Estimated Gross Savings:	\$951,890
Estimated PV Savings: ^(a)	\$560,544

(a) Estimate. Assumes 4.57% PV Rate. Savings dependent on actual investment performance



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Representative Mike Hawker

Alaska State Legislature

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Members

House Finance Committee
Legislative Budget
& Audit Committee

House District 32

Eagle River
Anchorage
Rainbow
Indian
Bud
Cradwood
Portage
Whitner
Sunrise
Hope

To: Representative Bob Lynn
Chairman, House State Affairs Committee

From: Representative Mike Hawker



Date: March 7, 2007

Re: House Bill 13

I request that House Bill 13, which would allow public employers to utilize Pension Obligation Bonds (POBs), be scheduled for a hearing in the House State Affairs Committee at your earliest convenience.

A POB is essentially a legal arbitrage transaction where money is borrowed at a lower rate of interest than the money earns when invested by the retirement system. POBs are a proven and acceptable tool to manage pre-existing liabilities for state and local pensions. Bond market participants are receptive to POBs, including bond insurers, rating agencies and investors.

This bill does not authorize any debt instruments to be issued. The state or a municipality would need to take a separate specific action to utilize this option.

Please feel free to contact me, or my legislative aide, Juli Lucky, if you need any additional information.

MERCER

Human Resource Consulting

September 22, 2004

Presentation to the Tier Committee of PERS/TRS Boards

State of Alaska
PERS & TRS
Tier Redesign Study

MMC Marsh & McLennan Companies



Contents

- Introduction and Overview
- Descriptions of Proposed Programs
- Medical Program – Proposed Method and Assumption Changes
- Medical Program – Medicare Reform
- Alternative 1 – Valuation Results and Cost Projections
- Alternative 2 – Valuation Results and Cost Projections
- Next Steps
- Appendix



1. Introduction and Overview



Introduction and Overview

Meeting Objectives

- Review revised effect of proposed assumption and method changes for valuing post-retirement medical benefits, including impact of Medicare reform
- Review cost implications of two proposed tier alternatives



Introduction and Overview

Key Objectives

- System benefits should favor longer-service members
- Increase predictability and stability of employer contributions
- Share investment risk between employers and members
- Medical program
 - Offer access
 - Decreased cost & risk associated with pre-Medicare-eligible
 - Offer increased benefits after Medicare eligibility
 - Decrease healthcare inflation risk
 - Increase cost sharing & retiree responsibility
- Reduced employer cost relative to current Tiers



Introduction and Overview

Proposed Tier Alternatives

- Alternative 1
 - Basic defined benefit component
 - Defined contribution component
 - Post-retirement medical program
- Alternative 2
 - Defined contribution component
 - Post-retirement medical program
- Member contributions under both alternatives are higher than the current tiers
- Post-retirement medical program is the same for both alternatives



Introduction and Overview

Target "Normal Cost" Rates

- As discussed at the July meeting, Alternative 1 targets approximate normal cost rates as follows:

	<u>Normal Cost Rates</u>	
	<u>TRS</u>	<u>PFRS</u>
Medical normal cost rate	4.50%	4.00%
Defined benefit normal cost rate	6.00%	6.00%
Defined contribution rate	8.25%	6.00%
Gross normal cost rate	18.75%	16.00%
Member contribution rate	<u>(10.00)%</u>	<u>(8.00)%</u>
Employer normal cost rate	8.75%	8.00%



Introduction and Overview

Target "Normal Cost" Rates

- Alternative 2 targets approximate normal cost rates as follows:

	<u>Normal Cost Rates</u>	
	<u>TRS</u>	<u>PERS</u>
Medical normal cost rate	4.50%	4.00%
Defined contribution rate	14.25%	12.00%
Gross normal cost rate	18.75%	16.00%
Member contribution rate	<u>(10.00)%</u>	<u>(8.00)%</u>
Employer normal cost rate	8.75%	8.00%



Introduction and Overview

Social Security “Opt-Out”

- Both PERS and TRS alternatives 1 and 2 satisfy the Social Security minimum requirements through the defined contribution component (together with 1.5% of member contributions for PERS Alternative 1)
 - A combination of employer and member contributions must exceed 7.5% of compensation



Introduction and Overview

Employer Rates

- As for the current tiers, employer rates can be expected to vary over time from the normal cost rates
- Differences between actual experience and that predicted by the actuarial assumptions will result in funding deficits or surpluses
- Alternative 1 and 2 can be expected to produce rate volatility that differs by source and magnitude
- Sources of volatility
 - Alternative 1: Medical and defined benefit components
 - Alternative 2: Medical component only
- For both alternatives, there is no volatility associated with the defined contribution component



2. Descriptions of Proposed Programs



Descriptions of Proposed Programs

Defined Benefit Alternative

Key features of Alternative 1 defined benefit program

- 1 percent of final average pay
- Five-year averaging period
- Base pay only
- Normal retirement at the earlier of
 - (1) age 60 with 5 years of service (8 years for TRS), or
 - (2) 25 years of service (30 years for PERS “others”)
- Post-retirement pension adjustments similar to current tiers
- No 10 percent Alaska cost-of-living adjustment (COLA)



Descriptions of Proposed Programs

Defined Contribution Alternatives

Key features of defined contribution components

- Individual accounts are maintained for each member
- Contributions are a percentage of total pay
- Various investment options (member-directed)
- 100% vested
- Terminating or retiring member takes account (eligible for rollover)

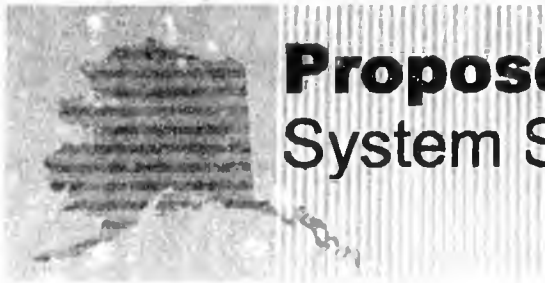


Proposed Medical Program

Key Features

Key features of post-retirement medical program

- Members must retire directly from the System to be eligible
- System sponsored health plan with varying levels of subsidy or cost to members
- Early retirees get “access only” prior to normal retirement eligibility
- Defined dollar benefit from normal retirement to Medicare eligibility (currently age 65)
- Defined health benefit after Medicare eligibility, similar to the current program with the following key exceptions:
 - Method of coordination with Medicare
 - Retired members will share in the cost through premium contributions



Proposed Medical Program

System Sponsored Health Care Plan

- System sponsored health plan available to all eligible retirees, but with varying levels of subsidy
- Basic plan design elements

	Current Plan	Alternative Plan
Medical		
▪ Coordination with Medicare	Total Allowable	Maintenance of Benefits
▪ Deductible	\$150/person, \$450/family	\$250/person, \$750/family
▪ Out of Pocket	\$800	\$2,500
▪ Outpatient Surgery Coinsurance	100%	80%
Prescription Drug		
▪ Retail	90 day supply	30 day supply
- Generic	\$4	\$5
- Brand Formulary	\$8	\$15
- Brand Non-Formulary	\$8	\$30
▪ Mail Order	90 day supply	90 day supply
- Generic	\$0	\$5
- Brand Formulary	\$0	\$15
- Brand Non-Formulary	\$0	\$30
Dental, Vision, Audio	No Change	



Proposed Medical Program Eligibility

- Normal retirement eligibility for medical benefits will be defined as the earlier of
 - (1) age 60 with 10 years of service
 - (2) 25 years of service (30 years for PERS “others” retirees).
- Disabled participants will be eligible
- Terminated vested participants are not eligible. A member must retire directly from active service in order to receive coverage



Proposed Medical Program

Early Retirement

- Early retirees who have not reached normal retirement eligibility
 - Receive “access only”
 - Will not be eligible for subsidized retiree health plan costs
 - Pay 100% of the pre-age 65 per member per year (PMPY) claim costs
- Dependent spouses of early retirees will pay 100% of the appropriate pre-Medicare or Medicare eligible PMPY claim cost



Proposed Medical Program

Normal Retirement to Medicare Eligibility

- Members who retire (or early retire) directly from the Systems will be eligible for a “defined dollar” benefit upon reaching eligibility for normal retirement
- Fixed dollar subsidy toward system sponsored health coverage
- Access to system sponsored retiree medical plan as outlined above
- Subsidy amount is based on length of service
- Subsidy amount indexed each year by healthcare inflation up to a maximum of 5 percent (with a “catch-up” provision based on years when healthcare inflation is less than 5%)



Proposed Medical Program

Normal Retirement to Medicare Eligibility

- Upon becoming eligible for Medicare (currently age 65), such members will become eligible for the “defined health” benefit
- Pre-Medicare dependent spouse is eligible for the same subsidy as retiree
- Medicare eligible dependent spouse is eligible for the after Medicare eligible benefit level, with contribution percentage based on retiree length of service



Proposed Medical Program Defined Dollar Subsidy Projection

- Subsidy Projection Assumptions
 - Pre Medicare retiree, 25 years of service
 - Year 1 assumes plan cost and subsidy base are equal
 - Average plan cost increases with blended medical, Rx trend of 11%
 - Subsidy base increases at healthcare inflation rate up to 5%

	Plan Cost	Subsidy Base	Retiree Subsidy	Retiree Contribution	Percent Increase	Contribution Percent
Year 1	5,962	5,962	4,472	1,491	N/A	25%
Year 2	6,618	6,260	4,695	1,923	29%	29%
Year 5	9,051	7,247	5,435	3,616	21%	40%
Year 10	15,251	9,249	6,937	8,314	17%	55%
Year 15	25,699	11,804	8,853	16,846	14%	66%



Proposed Medical Program After Medicare Eligibility

- Defined health benefit similar to current program
- Retirees who were previously eligible for 100% subsidy of retiree health plan costs will now participate in the premium cost.
- Contributions are per covered individual
- Pre-Medicare dependent spouses are eligible to receive a defined dollar subsidy with percentage based on retiree length of service
- Medicare eligible dependent spouses are eligible to receive the same defined health benefits as the retiree and pay the same contributions



3. Current Medical Program – Proposed Method and Assumption Changes



Proposed Method and Assumption Changes

Objectives

- Independent review of claims development methodology
 - Potential refinement on going forward basis
- Update claims basis used in the valuation with more recent experience.
 - Update for experience through May 2004
 - Valuation claims were based on experience through August 2003
- Refinement of current valuation assumptions in advance of next formal assumption review
 - Current assumptions were last reviewed in 2000
 - Based on access to and detailed analysis of claims data



Proposed Method and Assumption Changes

Primary Changes

- We are recommending changes to the following elements:
 - Claims cost methodology
 - Claims costs
 - Medicare offset
 - Aging factors
 - Trend



Proposed Method and Assumption Changes

Claims Cost Methodology

- Current Methodology
 - Total rate for all retirees equals current premium rate
 - Pre-65 cost and (lower) post 65 claim cost per retiree are determined
 - Pre and post 65 costs increased with appropriate trend
- Proposed Methodology
 - Analysis of claims is completed based on claims information from Aetna and enrollment information from the State
 - Paid claims for June 2001 – May 2004 are tabulated and an average annual claim amount is determined. Next, four adjustments are applied.
 - Participation adjustment to account for differences in exposures between the experience period and current census.
 - Trend factor to trend historical claims from the midpoint of the experience period to the midpoint of the valuation period.



Proposed Method and Assumption Changes

Claims Cost Methodology

- Proposed methodology (*continued*)
 - Incurred claims adjustment to restate paid claims on an incurred basis. This assumes claims are paid on average three months after the incurred date.
 - Adjustments to paid claims to account for changes in the plan
- Administrative costs are added to arrive at total projected costs for the valuation period
- Distribution of per capita claims cost is developed by allocating total projected costs to the population census used in the valuation. The allocation is separate for medical and prescription drug costs.



Proposed Method and Assumption Changes

Chart of Claims Development

Detailed Development of Claims Cost

For the period 7/1/2003 through 6/30/2004

		Medical	Rx
Paid Claims (6/01 - 5/02)		115,904,729	42,174,073
Paid Claims (6/02 - 5/03)		133,794,131	49,761,201
Paid Claims (6/03 - 5/04)		143,042,729	61,583,420
Estimated annual paid claims		130,913,863	51,172,898
Population adjustment	1	1.052	1.039
Trend Adjustment (13.0 months)	2	1.109	1.163
Incurred Adjustment	2	1.024	1.000
Projected incurred claims		156,334,142	61,856,358
Administrative costs	3	7,540,731	0
Projected Plan Costs		\$163,874,873	\$61,856,358



Proposed Method and Assumption Changes

Claims Cost

<u>Average Claim Cost</u>	<u>Current PSPM</u>	<u>Revised PSPM</u>	<u>Revised PMPM</u>	<u>Age 65* PMPM</u>
Pre Medicare	\$1,016	\$971	\$553	\$709
Medicare eligible	\$387	\$442	\$253	\$212
Composite	\$777	\$738	\$425	N/A

*Note: Age 65 costs represent pre- and post-Medicare medical and prescription drug costs for an age 65 participant

- Current claims cost are on a Per Subscriber (Retiree) Per Month (PSPM) basis
- Revised claims cost are on a Per Member Per Month basis (PMPM)
- Revised pre-65 costs are less, post-65 costs are greater



Proposed Method and Assumption Changes

Medicare Offset

- Revised offset of 85%
- Based on experience study of pre- and post-65 members
- Currently no explicit Medicare offset assumed



Proposed Method and Assumption Changes

Aging Factors

- Aging factors represent the expected incremental increase in claims cost as an individual ages 1 year
- The following table shows proposed aging factors:

Age	Medical	Rx
00-44	2.0%	4.5%
45-54	2.5%	3.5%
55-64	3.5%	3.0%
65-74	4.0%	1.5%
75-84	1.5%	0.5%
85+	0.5%	0.0%

- For example, this means we expect medical claims to be 3.5 percent higher for a member age 57 compared to a member age 56
- Currently no explicit aging factors assumed

Proposed Method and Assumption Changes

Chart of Claims Costs by Age

Claims cost per member per year by age band

<u>Age</u>	<u>Medical Cost</u>	<u>Medicare Offset</u>	<u>After Offset</u>	<u>Rx Cost</u>	<u>Total Cost After Offset</u>
45	\$3,884	N/A	\$3,884	\$786	\$4,670
50	\$4,395	N/A	\$4,395	\$934	\$5,328
55	\$4,972	N/A	\$4,972	\$1,109	\$6,081
60	\$5,905	N/A	\$5,905	\$1,286	\$7,191
65	\$7,014	\$5,961	\$1,052	\$1,491	\$2,543
70	\$8,533	\$7,253	\$1,280	\$1,606	\$2,886
75	\$10,382	\$8,824	\$1,557	\$1,730	\$3,287
80	\$11,184	\$9,506	\$1,678	\$1,774	\$3,451



Proposed Method and Assumption Changes Trend

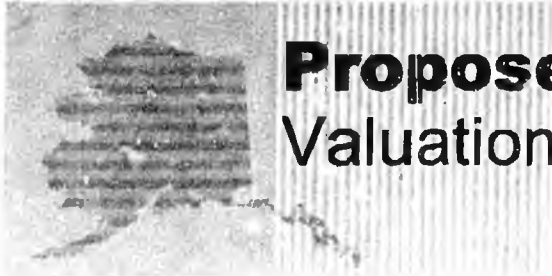
- Factors used to determine current and ultimate trend levels include:
 - Most recent 36 months of claims experience by claims cost category
 - Examined rolling 12 month averages and multiple regression models
 - Mercer's Actuarial and Financial Steering Committee retiree medical trend guidelines by claims cost category
 - Medicare trend forecasts
 - Current market observations



Proposed Method and Assumption Changes Trend

The following table shows our proposed changes to assumed health care cost increases

Year	Current Medical/Rx	Proposed Medical	Proposed Rx
FY04	12.0%	10.0%	15%
FY05	12.0%	9.5%	14%
FY06	11.5%	9.0%	13%
FY07	11.0%	8.5%	12%
FY08	10.5%	8.0%	11%
FY09	10.0%	7.5%	10%
FY10	9.5%	7.0%	9%
FY11	9.0%	6.5%	8%
FY12	8.5%	6.0%	7%
FY13	8.0%	5.5%	6%
FY14	7.5%	5.0%	5%
FY15	7.0%	5.0%	5%
FY16	6.0%	5.0%	5%
FY17 and later	5.0%	5.0%	5%



Proposed Method and Assumption Changes

Valuation Results

- The proposed assumption changes produce the following percentage changes in medical liabilities:

	<u>Percentage Change</u>
Accrued Liability (medical only)	11.1%
Normal Cost (medical only)	0.8%



Proposed Method and Assumption Changes

Cost Projections

The following pages show the effect the proposed medical assumption changes would be expected to have over time on actuarial calculated contribution rates

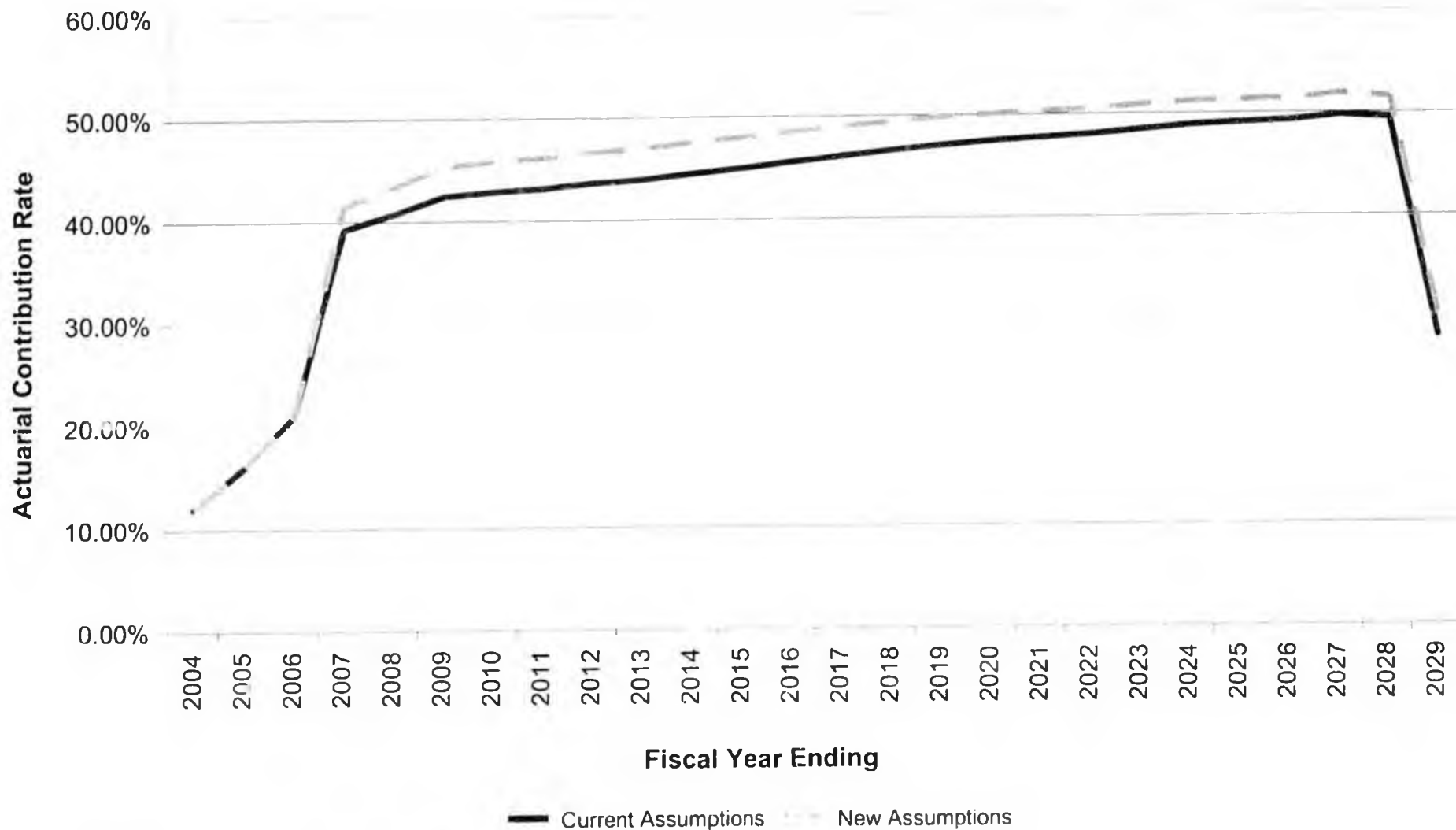
- For purposes of isolating the effect of the proposed medical assumption changes, non-medical benefits have been kept unchanged from the current program
- Data, assumptions and methods are as described in the Appendix



Proposed Method and Assumption Changes

Cost Projections - TRS

Contribution Comparison – TRS

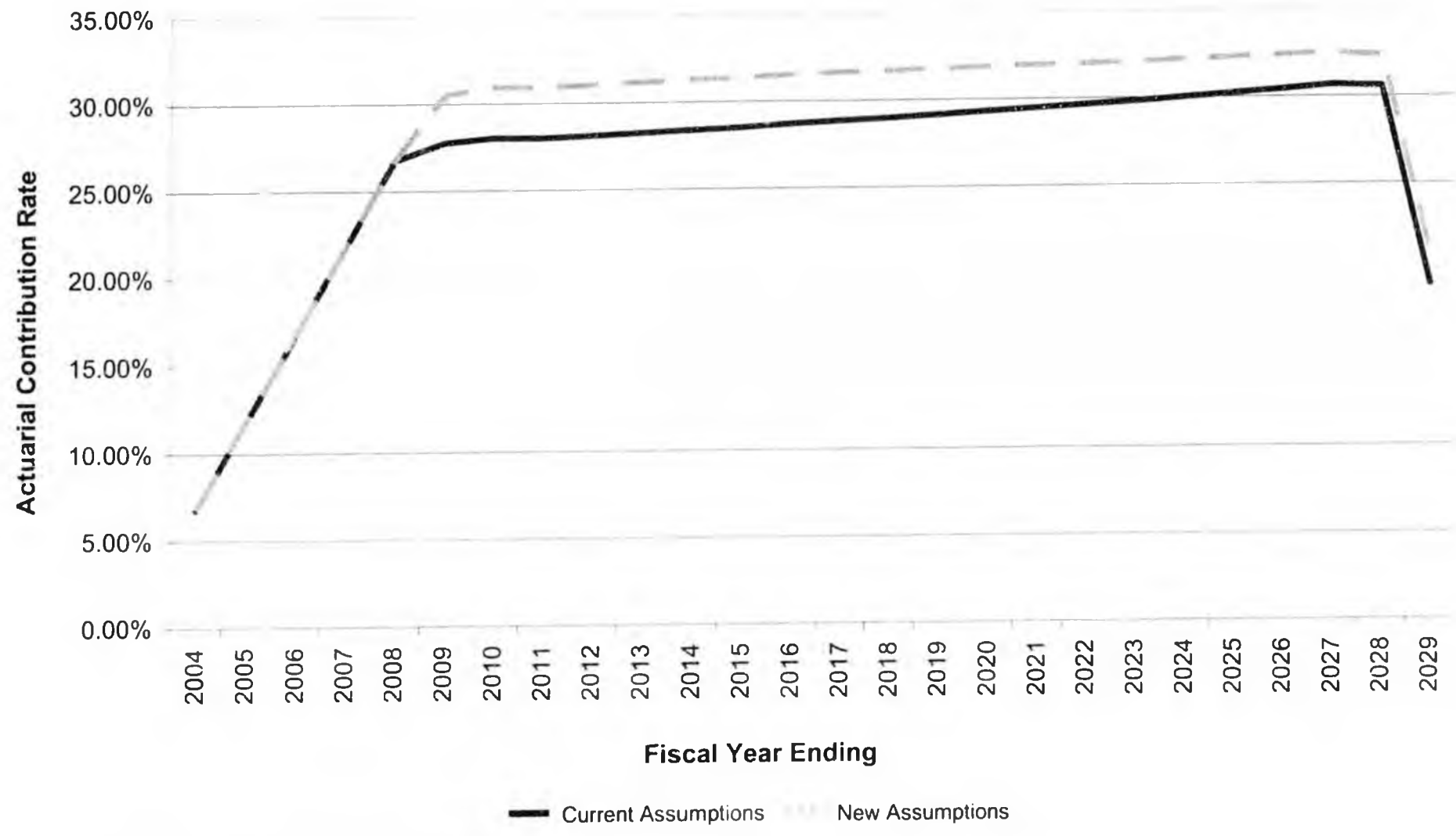




Proposed Method and Assumption Changes

Cost Projections - PERS

Contribution Comparison – PERS





4. Medicare Reform



Medicare Reform Update

- CMS issued proposed regulations on July 26, 2004
- Proposed regulations do not reach a final conclusion
 - Broad array of possible actuarial equivalence tests given
 - Solicit comments on the tests under consideration
- Written comments to CMS are encouraged; must be received by October 4, 2004, to receive consideration
- Final regulations are expected in the first quarter of 2005



Medicare Reform

New Information

Qualified retiree drug plans

Plan must be actuarially equivalent to standard Medicare drug benefit Plan-wide testing Several different tests under consideration Actuarial attestation as to equivalence	Monthly payments proposed Alternative payment mechanisms may be considered
---	--

Other proposed rules

Enrollment Medicare Part D kickoff: 11/15/05 – 5/15/06 Annual open enrollment in 2007 and later: 11/15 – 12/31	“Creditable coverage” notices Disclose to retirees and CMS whether drug benefit is “creditable” Rules for content, method, timing – TBD
--	--

Rules merely proposed

For many items, CMS provided alternative positions and is seeking comments	Content of the final regulations may differ from the proposed version
---	--

Mercer's Medicare reform website: www.mercerHR.com/usmedicarereform



Medicare Reform

Actuarial Equivalence

- Range of alternatives presented for actuarial equivalence
- “One-pronged” approach” – Gross Value of Benefit \geq Medicare Part D Gross Value
 - Same as creditable coverage test, easiest to pass
 - Financing of coverage is not considered
 - Does not avoid employer windfall
- “One-pronged” approach with subsidy limit – Gross Value of Benefit \geq Medicare Part D Gross Value - PLUS - Subsidy limited to plan sponsor’s cost for the prescription drug benefit
 - Still easy to pass test
 - Prevents windfall
 - Sponsor cost can be zero, but does not allow gain

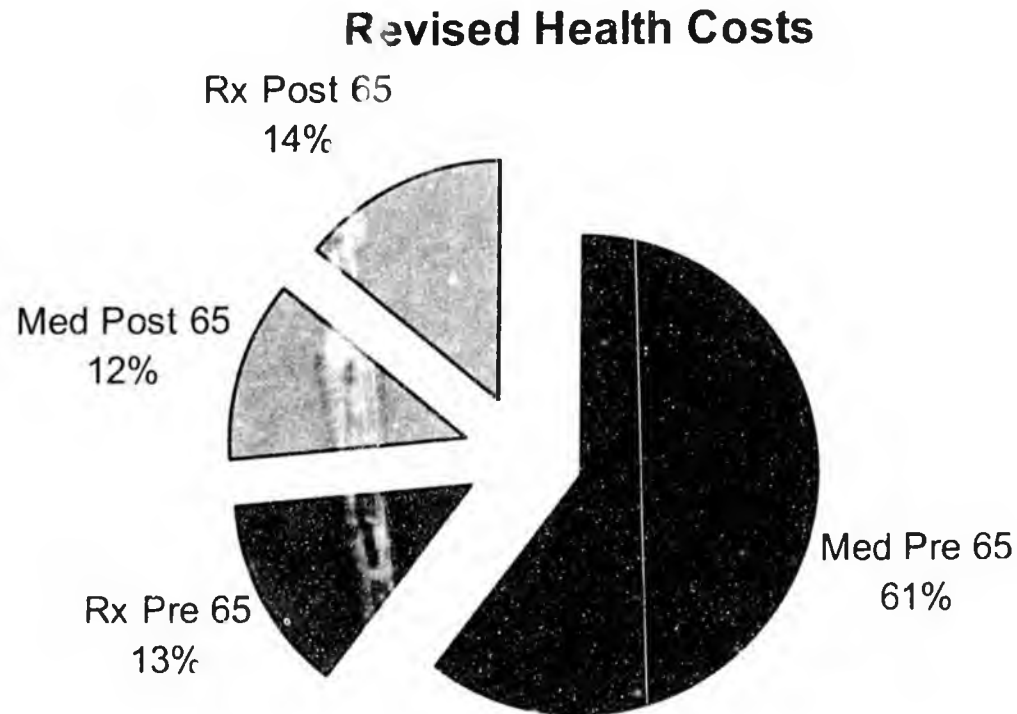


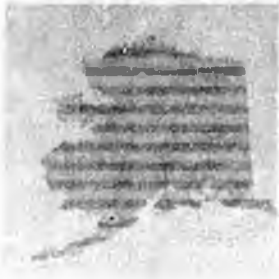
Medicare Reform Actuarial Equivalence

- “Two-pronged” approach – Net value of benefit must be as rich as Medicare Part D value
 - Net Value is Gross Value less retiree contributions
 - Most difficult test to pass
 - Prevents windfall

Medicare Reform Assumption Changes

- Total Projected Claims Cost for Fiscal Year 2004 - \$225,731,231



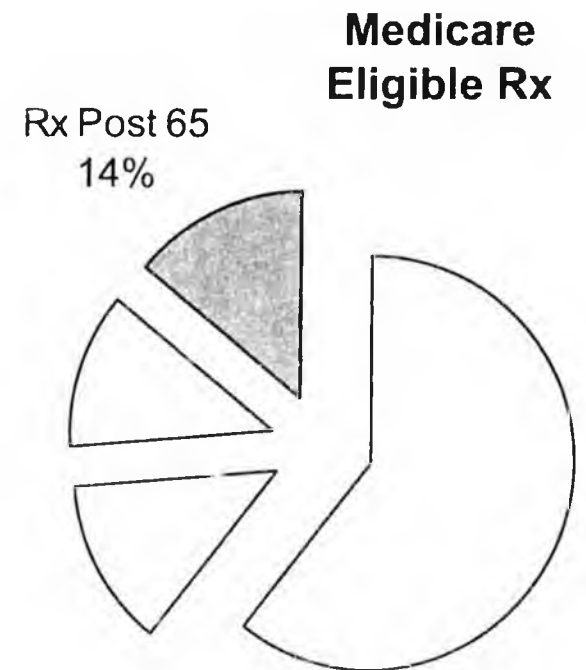


Medicare Reform Assumption Changes

- Beginning in 2006, the federal government will provide a cash incentive payment to plan sponsors that maintain Rx plans which are at least actuarially equivalent to Medicare Part D
- Plan sponsor gets 28% subsidy for covered drug costs from \$250 to \$5000 (indexed) per eligible participant

Medicare Eligible Rx Total Cost	\$32.2 M
Estimated Subsidy	23.3%
Estimated Savings*	\$7.5 M

*Represents savings in 2004 dollars.
Actual medicare subsidy will be effective in 2006.



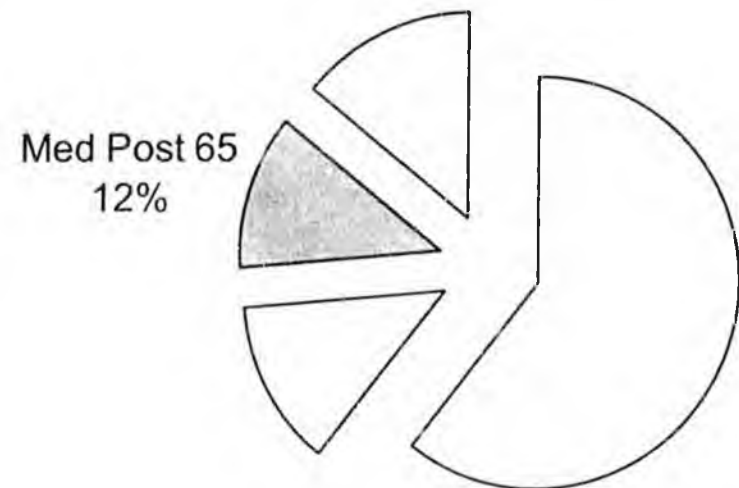


Medicare Reform Assumption Changes

- As part of the Medicare Prescription Drug Improvement and Modernization Act of 2003, a special provision affecting physicians in Alaska will result in more than a 52% increase in average Physician fee schedule payments for 2004
- Assumptions
 - Portion of physician services performed in State of Alaska - 65%
 - Portion of medical expenses related to physician cost - 61%

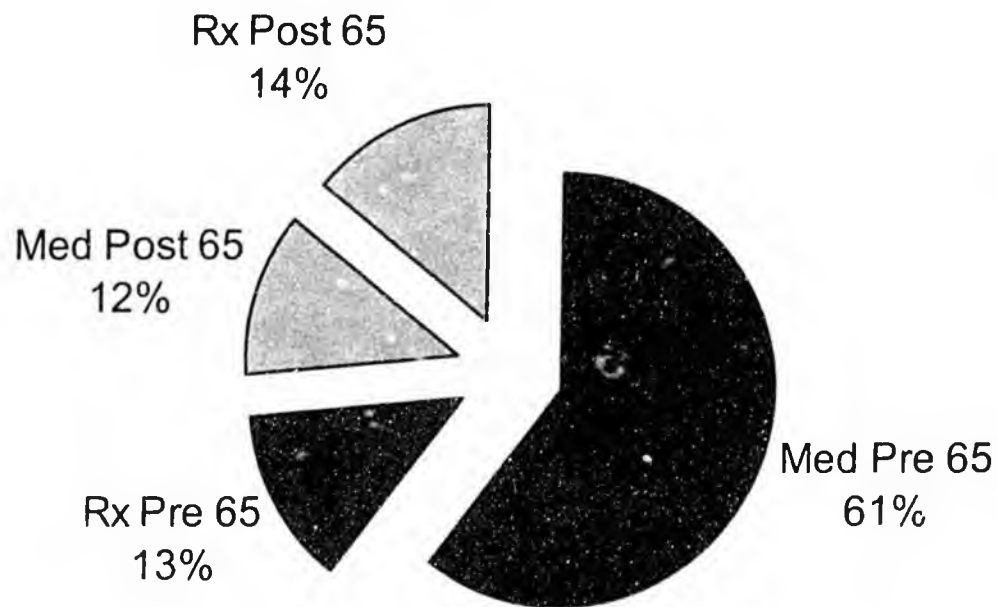
Post-65 Physician Reimbursement	\$27.1 M
Estimated Increase	20.6%
Estimated Cost Increase	\$5.6 M

**Physician
Fee Increase**

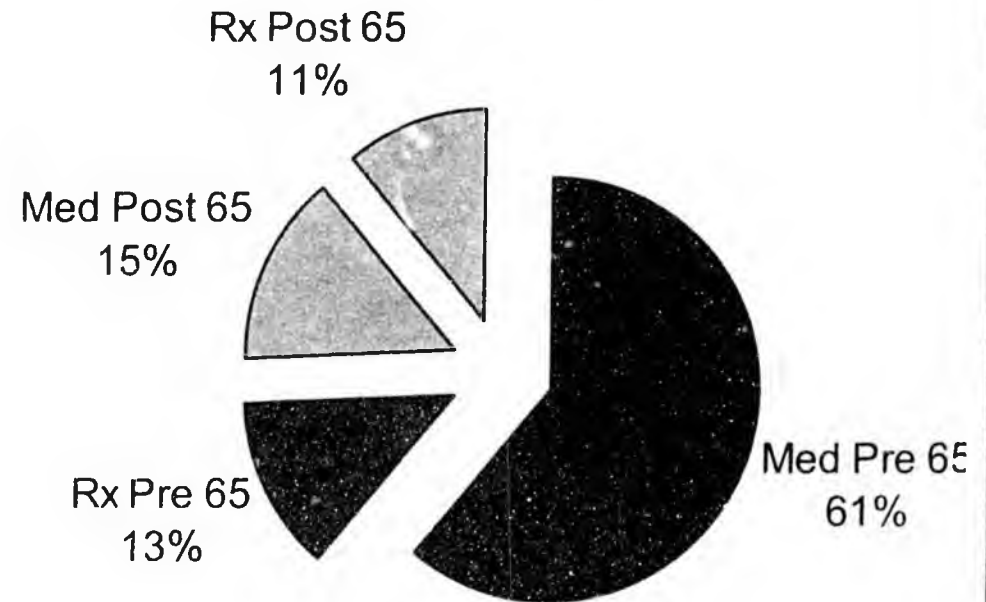


Medicare Reform Assumption Changes

Revised Total Projected Claim Cost
\$225.7 M



Total Claim Cost after Medicare Reform
\$223.6 M*



*Represents savings in 2004 dollars.
Actual medicare subsidy will be effective in 2006.



Medicare Reform

Medicare Reform Impact

Claims Cost Assumptions – Age 65 Per Member Per Year

	<u>Medical</u>		<u>Prescription Drug</u>	
	<u>Pre-Medicare</u>	<u>Post-Medicare</u>	<u>Pre-Medicare</u>	<u>Post-Medicare</u>
Revised Assumptions	\$7,014	\$1,052	\$1,491	\$1,491
Medicare Reform	\$7,010	\$1,262	\$1,491	\$1,132

*Represents savings in 2004 dollars.
Actual medicare subsidy will be effective in 2006.



Medicare Reform

Medicare Reform Impact

Valuation Results

- Incorporation of claims and assumption changes related to Medicare Reform produces the following percentage changes in medical liabilities (relative to revised assumption liabilities):

	<u>Percentage Change</u>
Accrued Liability (medical only)	-3.1%
Normal Cost (medical only)	-2.6%



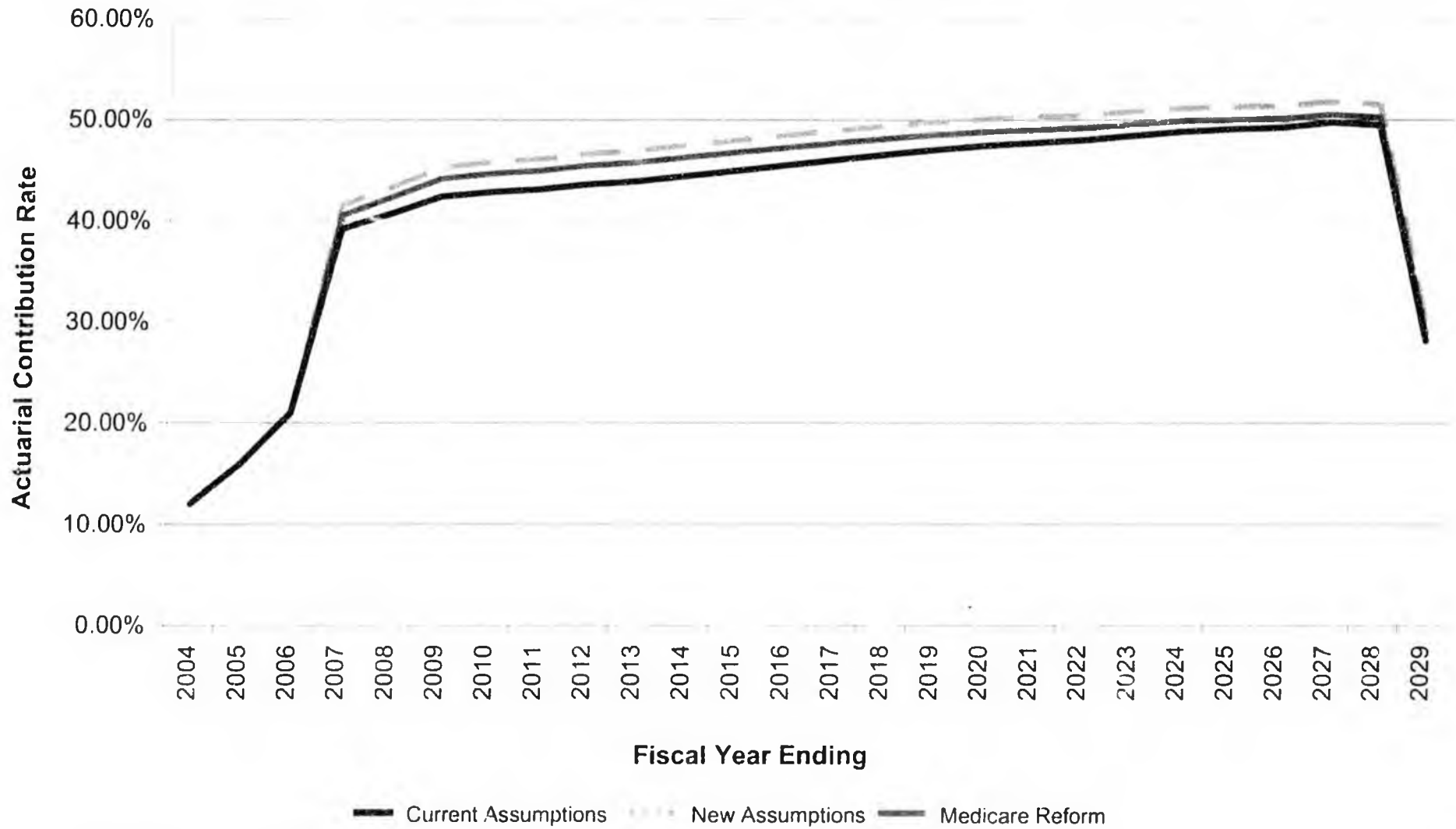
Medicare Reform Cost Projections

The following pages show the effect the changes due to Medicare Reform would be expected to have over time on actuarial calculated contribution rates

- For purposes of isolating the effect of the Medicare Reform changes, non-medical benefits have been kept unchanged from the current program
- Data, assumptions and methods are as described in the Appendix

Medicare Reform Cost Projections – TRS

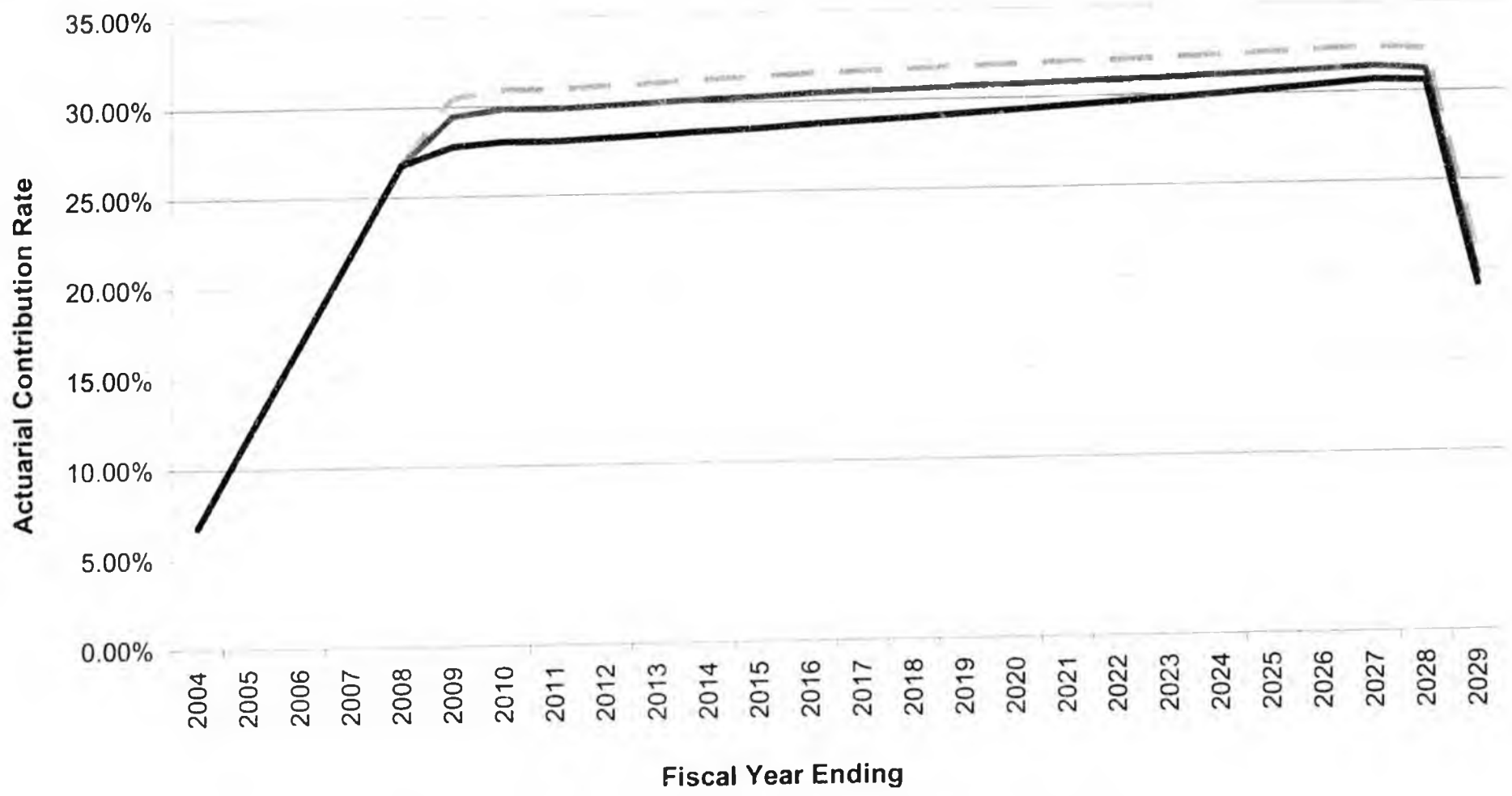
Contribution Comparison – TRS





Medicare Reform Cost Projections – PERS

Contribution Comparison – PERS



— Current Assumptions - - - New Assumptions — Medicare Reform



Medicare Reform

Key Observations

- Net effect of new assumptions and Medicare reform is a modest increase in total employer actuarial contribution rate
- Assumption and method improvements over current
 - Separate costs and trend for medical versus Rx
 - More accurate estimation and valuation of benefit changes
 - Explicit recognition of effect of aging on claims
 - Detailed analysis of claims costs by Medicare eligibility status (pre and post 65)
- Opportunity for further method improvements
 - Annual review recommended
 - Dependent coverage data for retiree population



5. Alternative 1 – Valuation Results and Cost Projections



Alternative 1 – Valuation Results and Cost Projections

Claims Cost Assumptions – Age 65 PMPY

	<u>Medical</u>		<u>Prescription Drug</u>	
	<u>Pre-Medicare</u>	<u>Post-Medicare</u>	<u>Pre-Medicare</u>	<u>Post-Medicare</u>
Revised Assumptions	\$7,014	\$1,052	\$1,491	\$1,491
Medicare Reform	\$7,010	\$1,262	\$1,491	\$1,132
Plan Alternative	\$6,381	\$1,149	\$1,252	\$951



Alternative 1 – Valuation Results and Cost Projections

- Actual “normal cost” rates for Alternative 1 are as follows:

	<u>Normal Cost Rates</u>	
	<u>TRS</u>	<u>PERS</u>
Medical normal cost rate	3.75%	3.5%
Defined benefit normal cost rate	5.0%	4.5%
Defined contribution rate	8.25%	6.0%
Gross normal cost rate	17.0%	14.0%
Member contribution rate	(10.0)%	(8.0)%
Employer normal cost rate	7.0%	6.0%



Alternative 1 – Valuation Results and Cost Projections

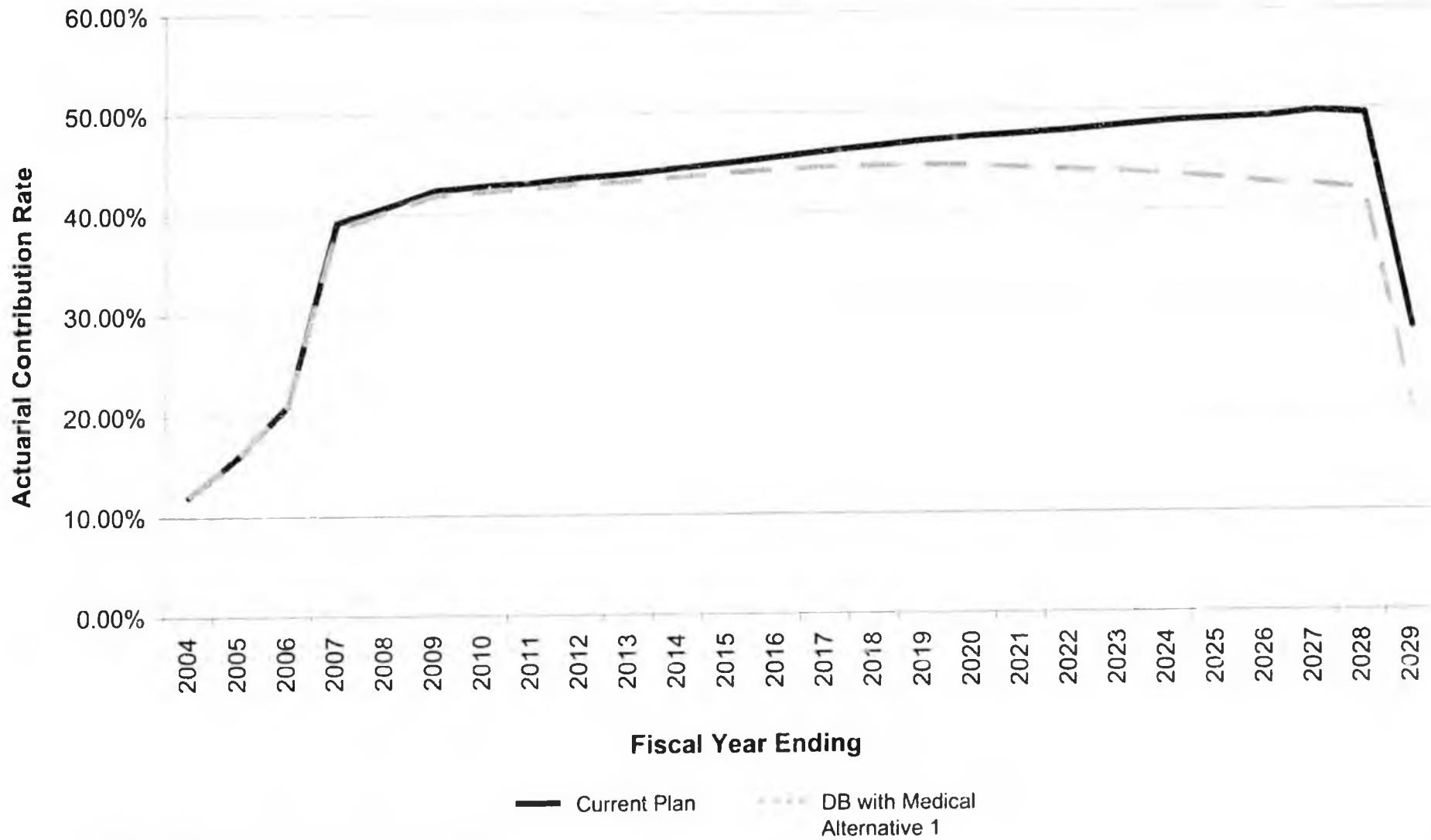
The following pages show the effect that proposed program alternative 1 would be expected to have over time on actuarial calculated contribution rates

- Member data, assumptions and methods are as described in the June 30, 2003 actuarial valuation reports, except for revisions to the medical assumptions previously described
- Proposed assumption and method changes (including the estimated effect of Medicare Reform) have been incorporated in this analysis
- Data, assumptions and methods are as described in the Appendix



Alternative 1 - Valuation Results and Cost Projections - TRS

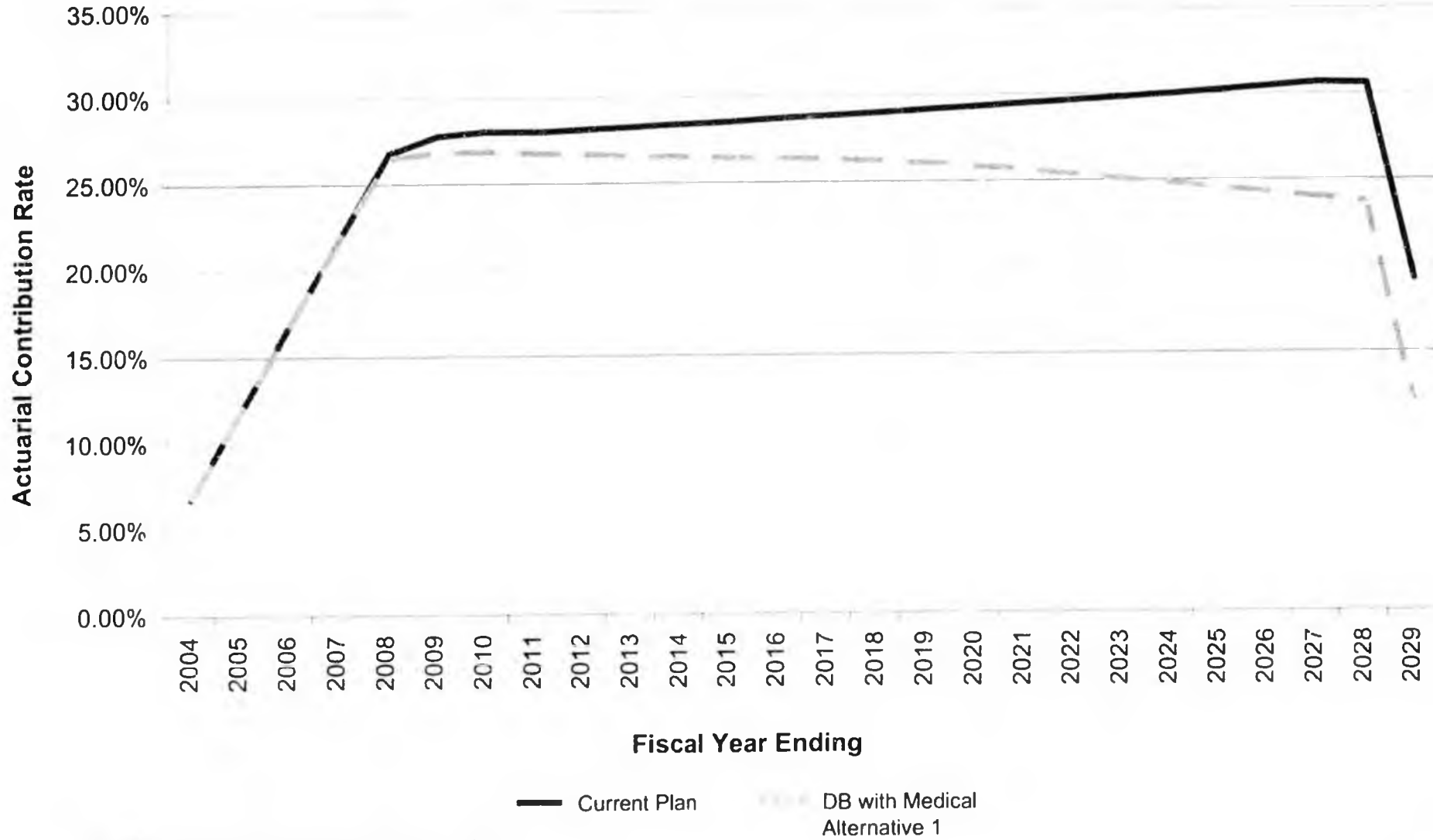
Contribution Comparison - TRS

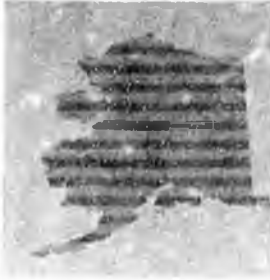




Alternative 1 – Valuation Results and Cost Projections - PERS

Contribution Comparison – PERS





Alternative 1

Key Observations

- Alternative 1 reduces overall cost
- Cost is shared between employers and members
- Much of the investment risk continues to be borne by employers
- Healthcare inflation risk is borne by both employers and members



5. Alternative 2 – Valuation Results and Cost Projections



Alternative 2 – Valuation Results and Cost Projections

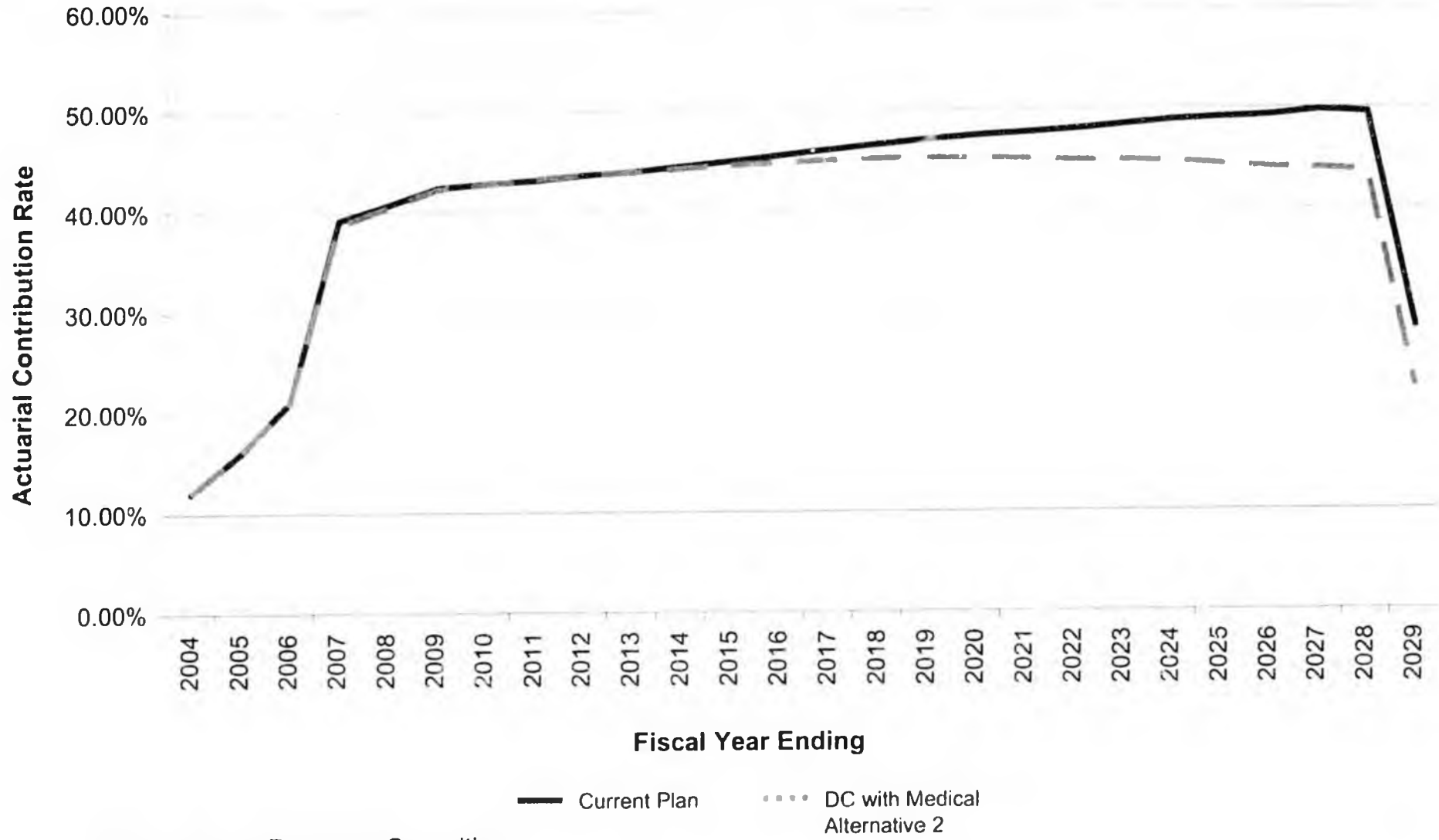
- Actual “normal cost” rates for Alternative 2 are as follows:

	<u>Normal Cost Rates</u>	
	<u>TRS</u>	<u>PERS</u>
Medical normal cost rate	3.75%	3.5%
Defined contribution rate	14.25%	12.0%
Gross normal cost rate	18.0%	15.5%
Member contribution rate	<u>(10.0)%</u>	<u>(8.0)%</u>
Employer normal cost rate	8.0%	7.5%



Alternative 2 – Valuation Results and Cost Projections - TRS

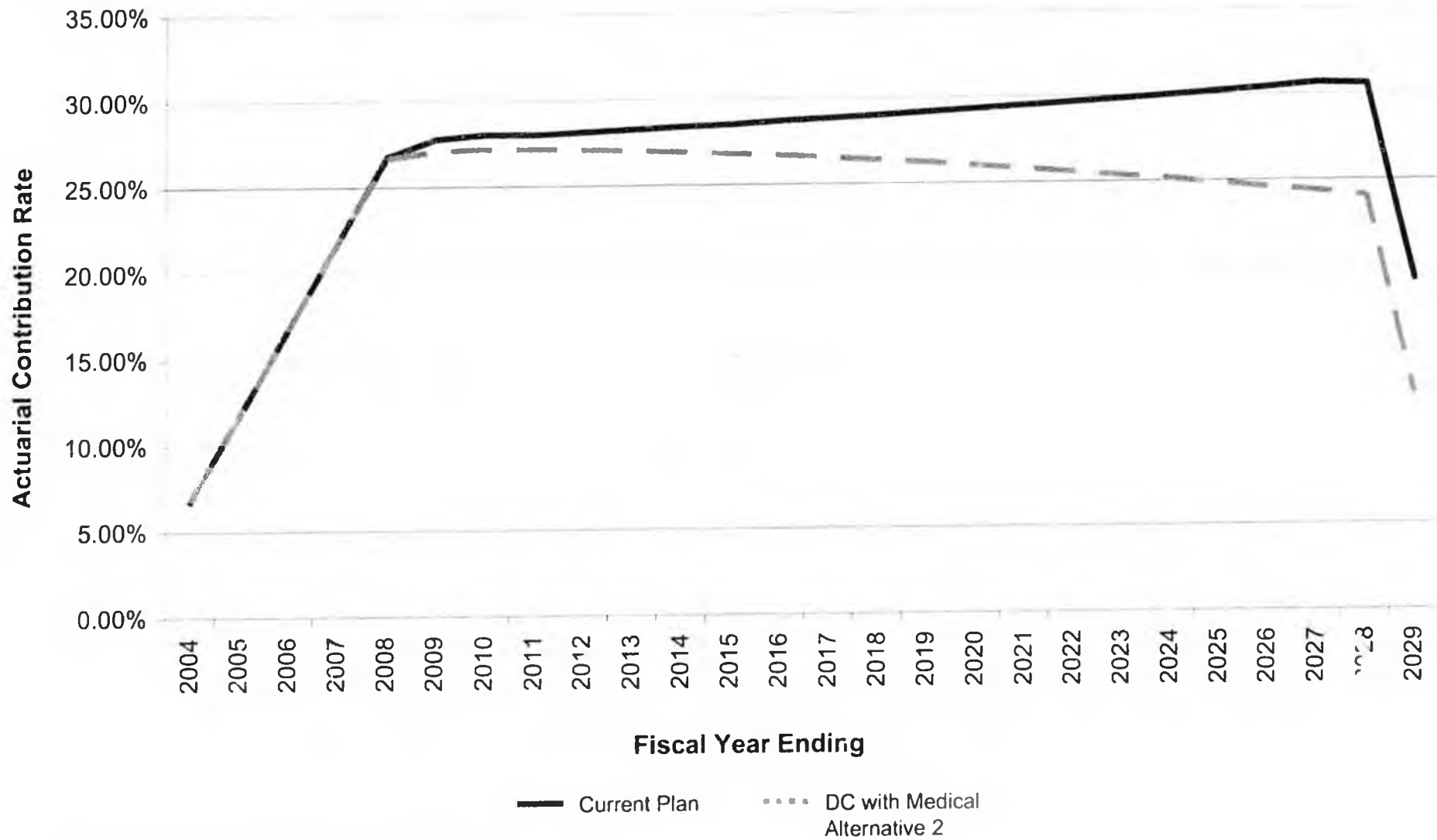
Contribution Comparison – TRS





Alternative 2 - Valuation Results and Cost Projections - PERS

Contribution Comparison -- PERS





Alternative 2

Key Observations

- Alternative 2 reduces overall cost
- Cost is shared between employers and members
- Employers bear less investment risk than either the current program or Alternative 1
- Members bear healthcare inflation risk
 - Can expect to pay greater share over time



6. Next Steps



Next Steps

- Agree on most desirable alternative
- Presentation to full Boards
- Documentation needs



7. Appendix



Appendix

Data, Assumptions and Methods for Cost Projections

- Member data, assumptions and methods are as described in the June 30, 2003 actuarial valuation reports, except for revisions to the medical assumptions previously described
- Proposed assumption and method changes (including the estimated effect of Medicare Reform) have been incorporated in this analysis
- Active population scenario: 1% growth
- New entrants brought in to replace members assumed to die, terminate, retire, or become disabled
- New entrant profiles based on average new entrant profiles from the prior 3 years



Appendix

Data, Assumptions and Methods for Cost Projections

- Future liabilities and asset returns are calculated at 8.25%, except:
 - 17% investment return for FY04
- Adopted contribution rate is equal to the actuarially calculated rate for all future years.



Appendix

Current Financial Context

- The following charts show projected actuarial contribution rates assuming
 - No benefits are accrued by new members to the Systems
 - New members also do not contribute to the Systems
- This is not presented as a tier alternative
- It is shown for context, to show the long-term, gradual effect of new tier changes on employer contribution rates
- Projections for the current Systems assuming no changes are shown for comparative purposes
- Key assumptions:
 - Adopted rates are equal to actuarial contribution rates
 - Other assumptions as follows



Appendix

Current Financial Context

- Member data, assumptions and methods are as described in the June 30, 2003 actuarial valuation reports

Other key assumptions

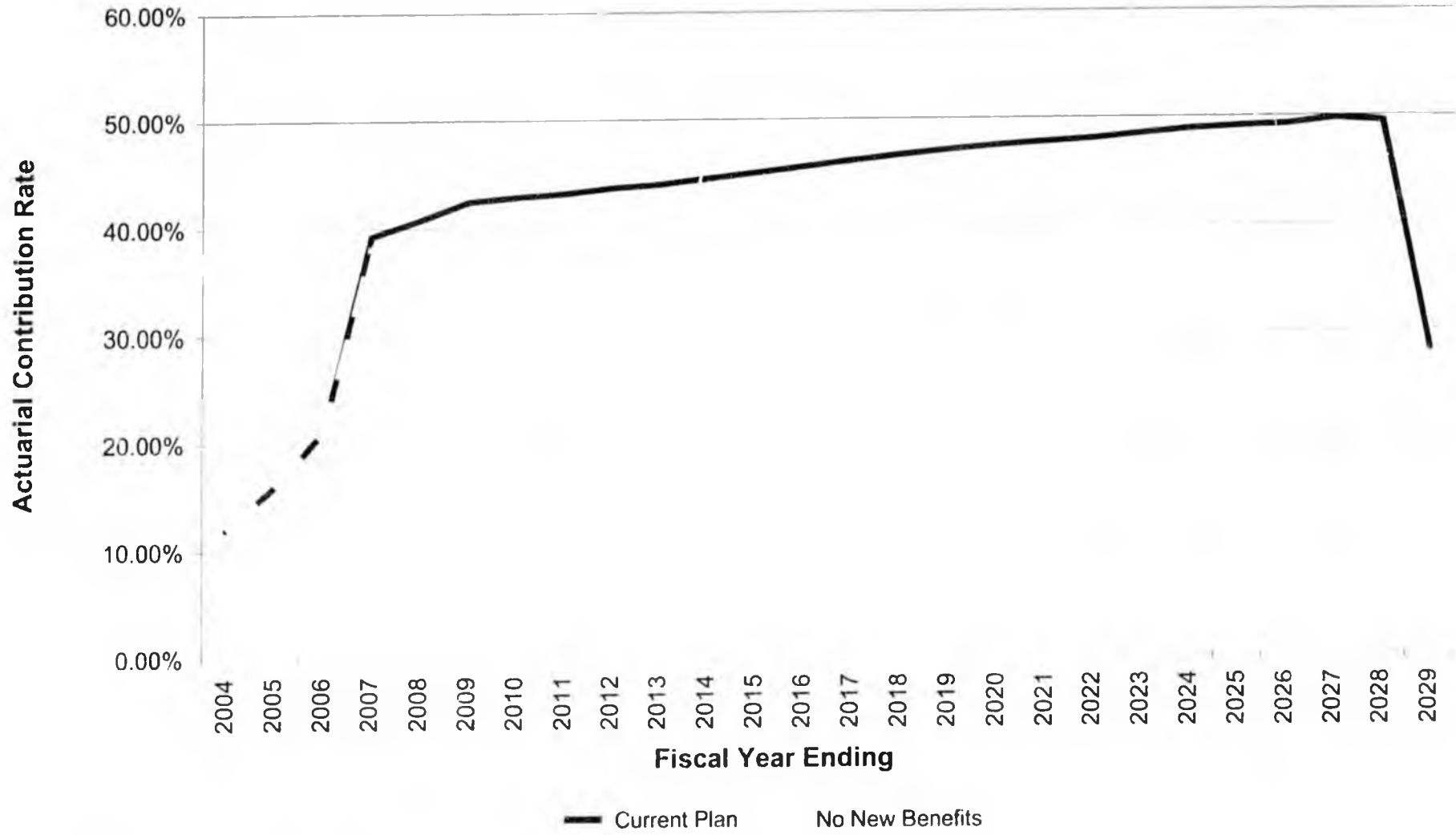
- Active population scenario: 1% growth
- New entrants brought in to replace members assumed to die, terminate, retire, or become disabled
- New entrant profiles based on average new entrant profiles from the prior 3 years
- Future liabilities and asset returns are calculated at 8.25%, except:
 - 17% investment return for FY04



Appendix

Current Financial Context

Contribution Comparison – TRS

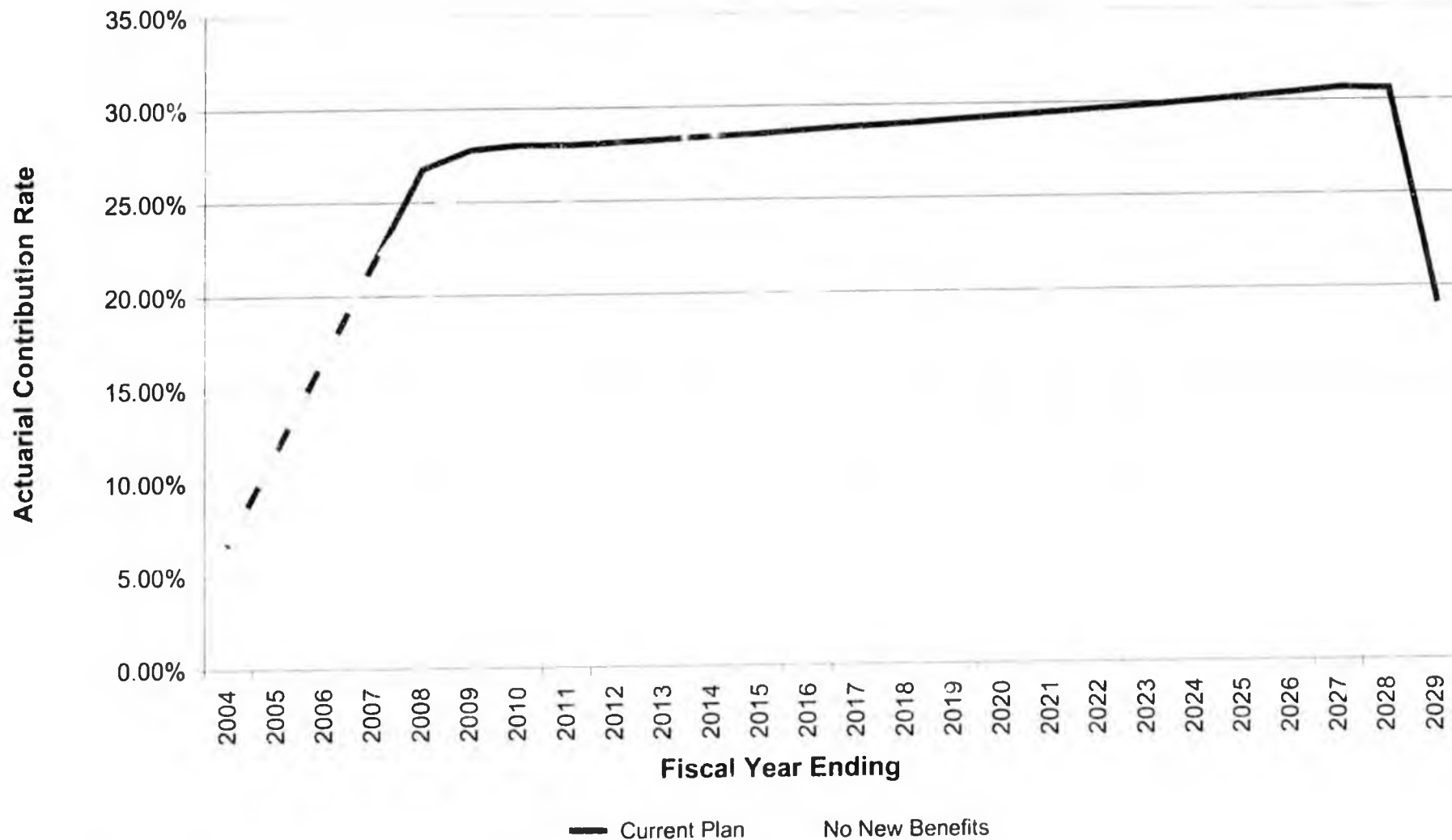




Appendix

Current Financial Context

Contribution Comparison – PERS



MERCER

Human Resource Consulting

June 10 & 11, 2004

Presentation to the Tier Committee of PERE/TRS Boards

State of Alaska
PERS & TRS
Tier Redesign Study



Marsh & McLennan Companies

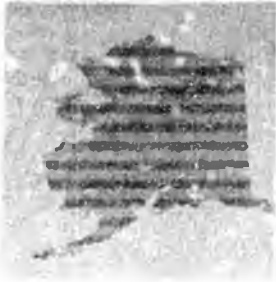


Proposed Agenda

- Introduction
- Benchmarking
- Income and Current Program Analysis
- Demographics
- Financial Analysis
- Medicare Reform and Implications
- Employer Survey Results
- Member Focus Group Results
- Medical Program Issues and Alternatives
- Retirement (Non-medical) Program Observations, Trends and Alternatives
- Next Steps



1. Introduction



Introduction

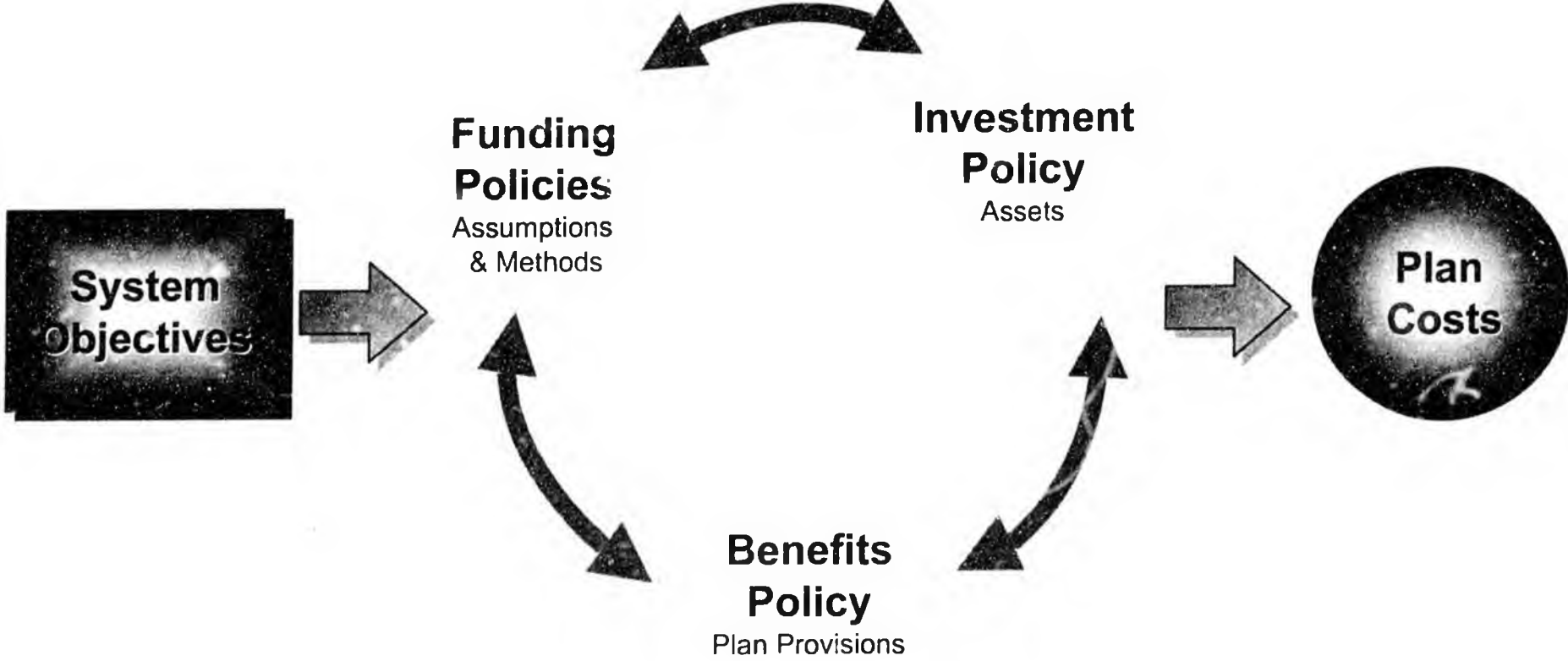
Meeting Objectives

- Develop a thorough understanding of relevant facts applicable to the State of Alaska's Public Employees' Retirement System (PERS) and Teachers' Retirement System (TRS)
- Review retirement system objectives, and examine current trends and alternatives
- Draft future directions for the retirement systems



Introduction

Retirement Program Financial Management





Introduction

Meeting Context

- Rising contribution levels
- Volatile investment returns
 - Investment uncertainty
- Rising medical costs



Introduction

- Implications of opting out of Social Security
 - Required minimum level of benefits
 - Separate requirements for defined benefit versus defined contributions plans
 - Described in Federal Insurance Contributions Act



Introduction

- Required minimum level of benefits – defined contribution plans
 - Allocations must be at least 7.5% of compensation
 - Employer match may be taken into account
 - Definition of compensation must at least include base pay



Introduction

- Required minimum level of benefits – defined benefit plans
 - Minimum accrued benefit
 - Expressed as annual amount commencing on or before Social Security retirement age
 - Must at least equal Primary Insurance Amount (PIA)



2. Benchmarking

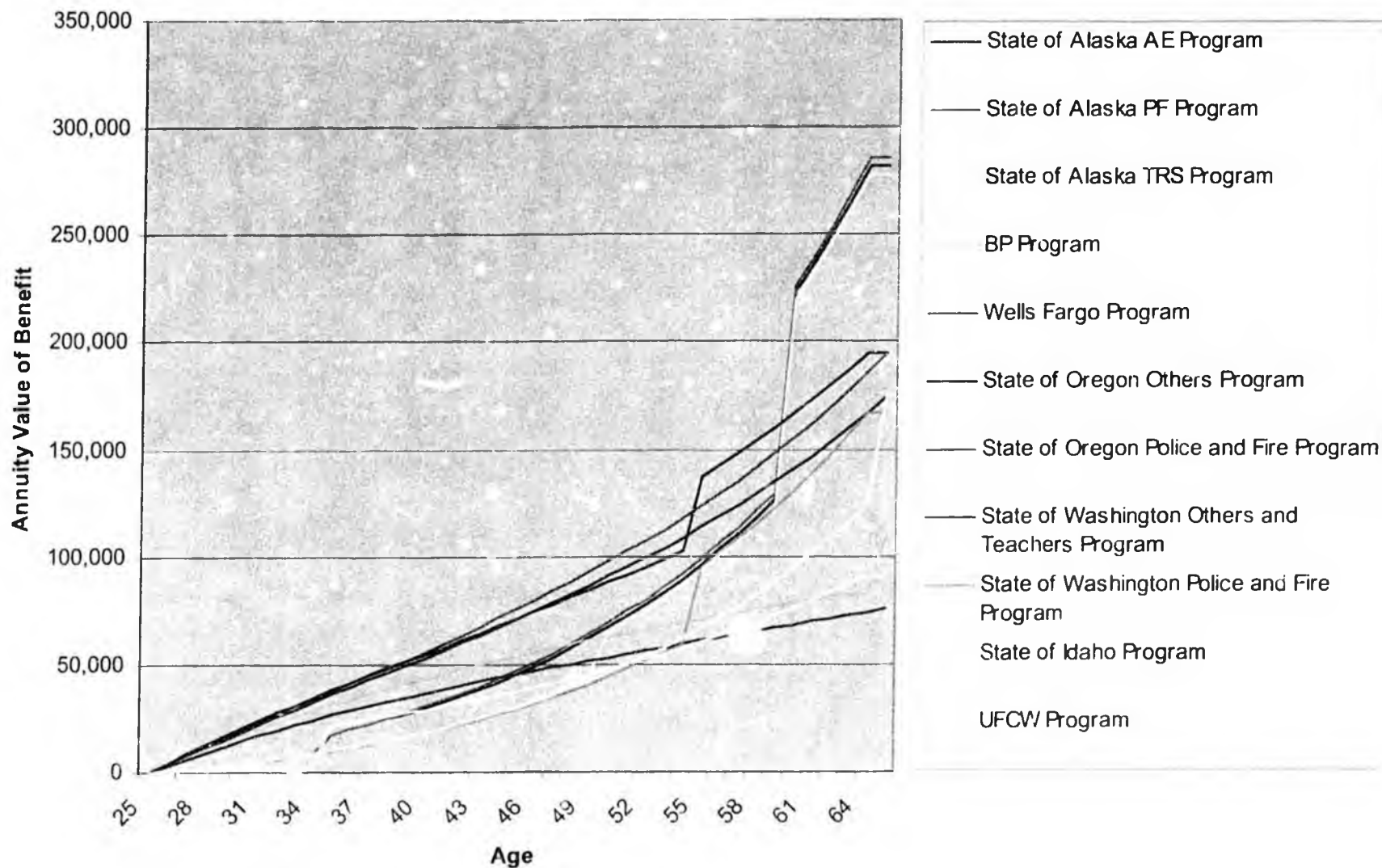


Benchmarking

Purpose of Benchmarking

- Qualitative
 - Identify key features
 - Trends (what are other states doing?)
- Quantitative
 - Identify position in market

Benchmarking Comparison with Other Programs

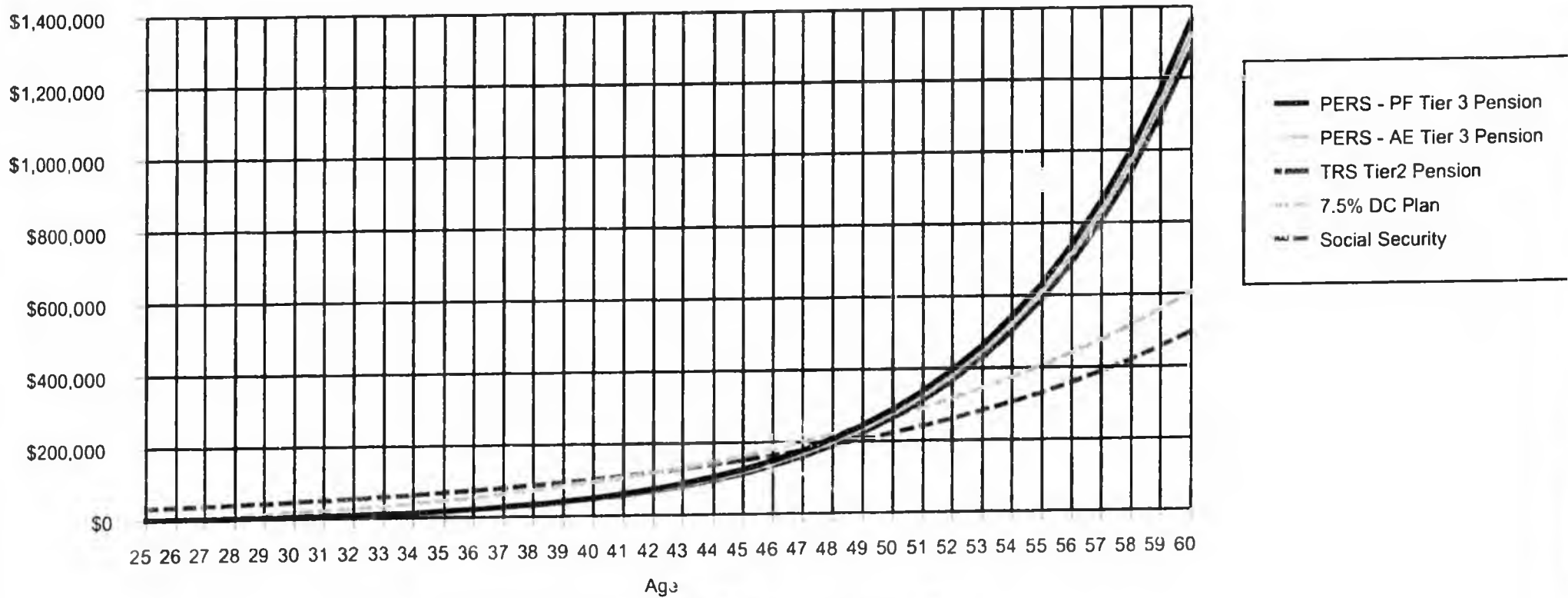




Benchmarking Comparison with Social Security

Present Value of Benefit Payable as a Lump Sum

Sample Employee 1 Data at 2003: Age = 25, Service = 0, Salary = \$35,000



Equity: Rate of return on account balance: 8.39%; 7.39%; 6.39%; 5.39%; 4.39%
Bond: Rate of return on account balance: 10%; 9%; 8%; 7%; 6%
Equity investment mix: 80%; 70%; 60%; 50%; 40%; Post-retirement 20%
Salary increase rate: 5.5%; 4%



3. Income and Current Program Analysis



Income and Current Program Analysis

- Benefit accumulation graphs show how benefits are earned under the Systems and express value as a lump sum
- All components of the Systems are incorporated, pension and retiree medical
- Benefits are earned throughout a member's career, with most significant value earned at later ages
- The benefit accumulation graphs also show how System benefit values would compare to a defined contribution program with similar annual cost
- System annual cost is based on the normal cost rate (employer portion)
- A defined contribution program with similar annual cost delivers greater value early on in a member's career, but provides significantly less at retirement



Income and Current Program Analysis

Retirement Spending and Employee View of Risk

- Retirement spending charts focus on the “spend down” of Retirement Program assets after age 60
- Retirement need targeted at 70% (plus retiree medical) income replacement (adjusted for inflation)
- Pension annuities will/can continue for life, with some adjustment annually for inflation
- Savings are drawn down each year to fill gap to meet needs
- A defined contribution plan of similar cost runs out sooner:
 - The accumulation is less at age 60
 - There is no pooling of longevity risk

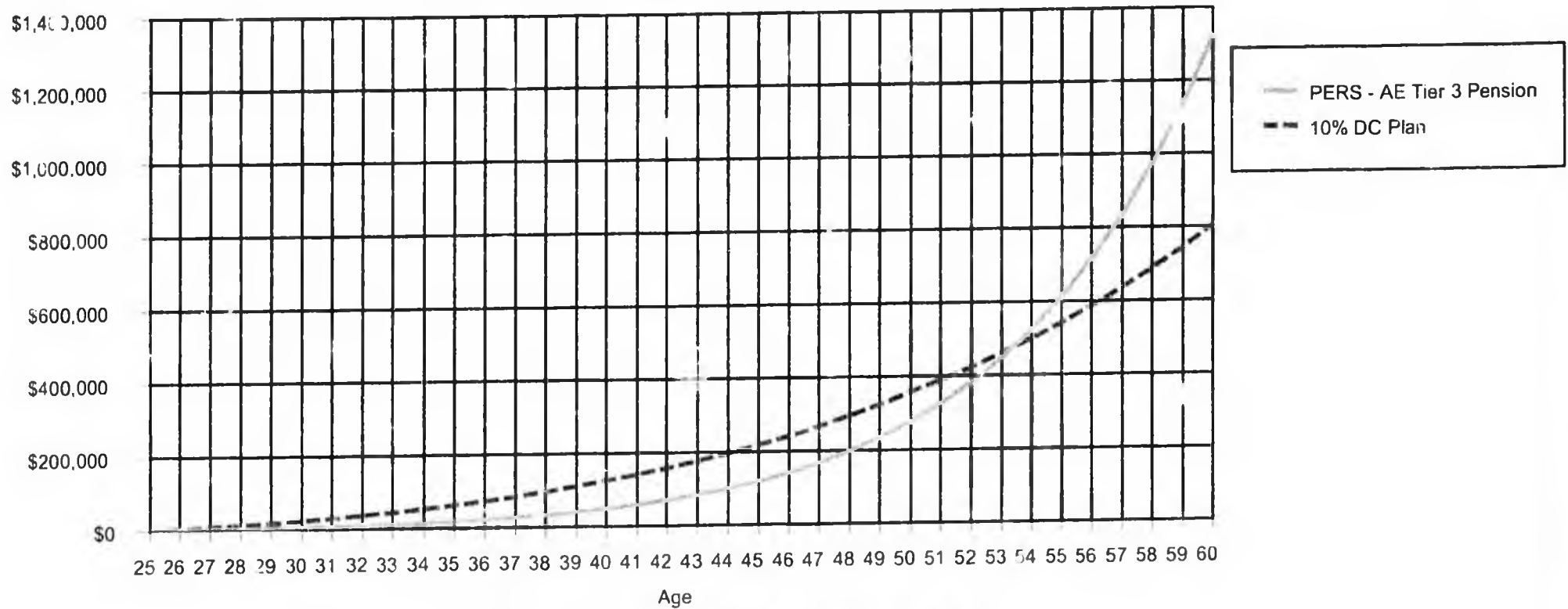
Income and Current Program Analysis

PERS Others

Benefit Accumulation – Long Service Member

Present Value of Benefit Payable as a Lump Sum

Sample Employee 1 Data at 2003: Age = 25, Service = 0, Salary = \$35,000



Equity: Rate of return on account balance: 8.39%; 7.39%; 6.39%; 5.39%; 4.39%
 Bond: Rate of return on account balance: 10%; 9%; 8%; 7%; 6%
 Equity investment mix: 80%; 70%; 60%; 50%; 40%; Post-retirement 20%
 Salary increase rate: 5.5%; 4%



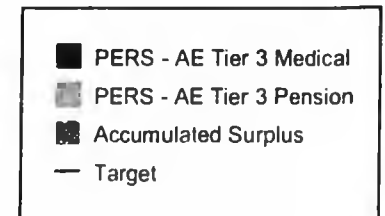
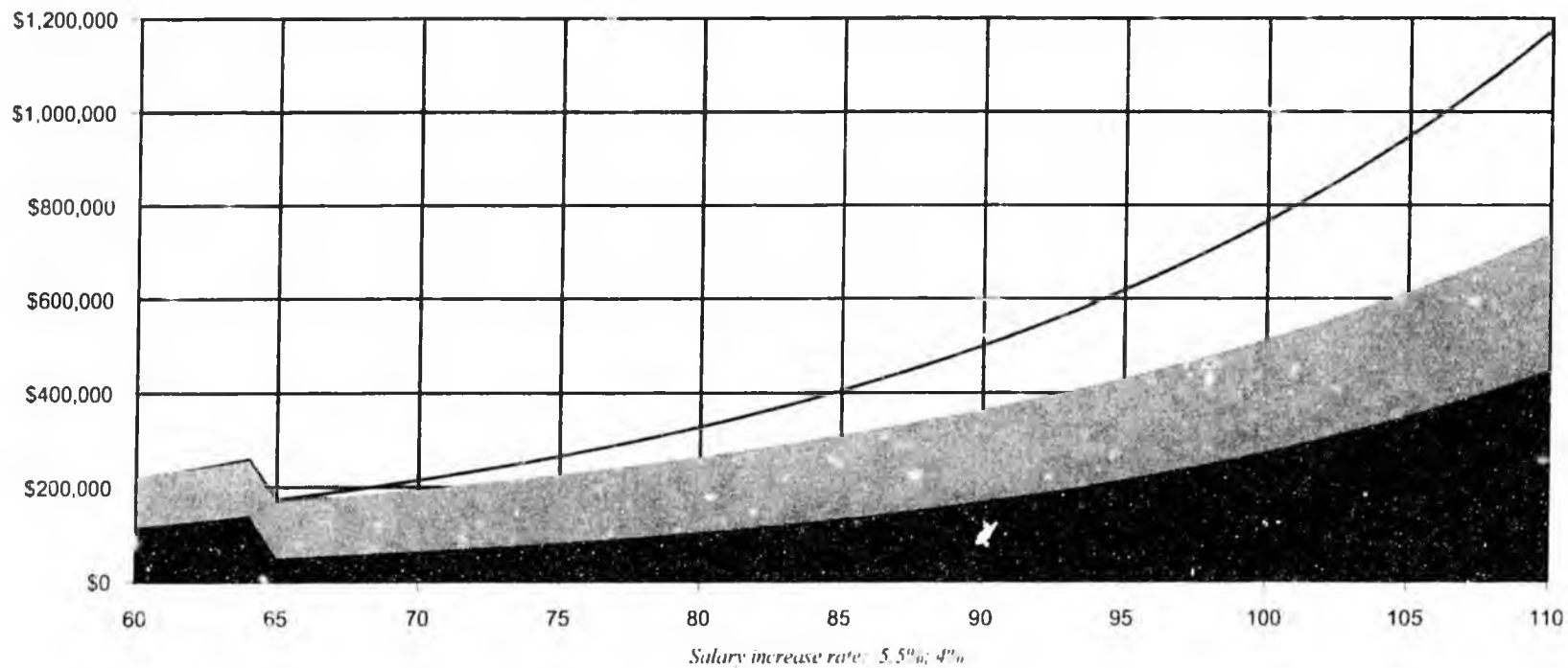
Income and Current Program Analysis

PERS Others

Retirement Spending – Long Service Member

Post-Retirement Spending Needs and Sources -- Terminal Age = 66

Sample Employee 1 Data at 2003: Age = 25, Service = 0, Salary = \$35,000
Retirement Age = 60, Target = 70% (plus medical), Tax Rate = 28%, Post Ret COLA = 4%



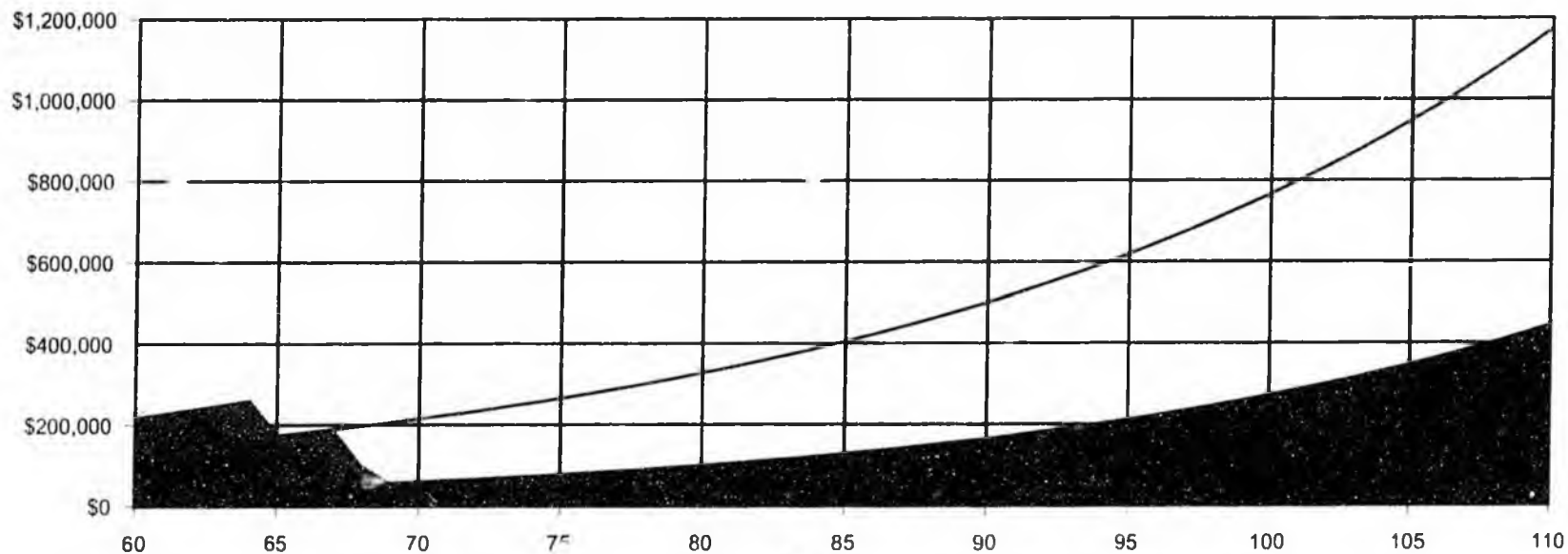
Income and Current Program Analysis

PERS Others

Retirement Spending (DC Plan) – Long Service Member

Post-Retirement Spending Needs and Sources -- Terminal Age = 68

Sample Employee 1 Data at 2003: Age = 25, Service = 0, Salary = \$35,000
 Retirement Age = 60, Target = 70% (plus medical), Tax Rate = 28%, Post-Ret COLA = 4%



PERS - AE Tier 3 Medical
 10% DC Plan
 Target

Equity: Rate of return on account balance: Pre-Ret: 8.39%; 7.39%; 6.39%; 5.39%; 4.39%; Post-Ret: 4.39%
Bond: Rate of return on account balance: Pre-Ret: 10%; 9%; 8%; 7%; 6%; Post-Ret: 6%
Equity investment mix: 80%; 70%; 60%; 50%; 40%; Post-retirement 20%
Salary increase rate: 5.5%; 4%

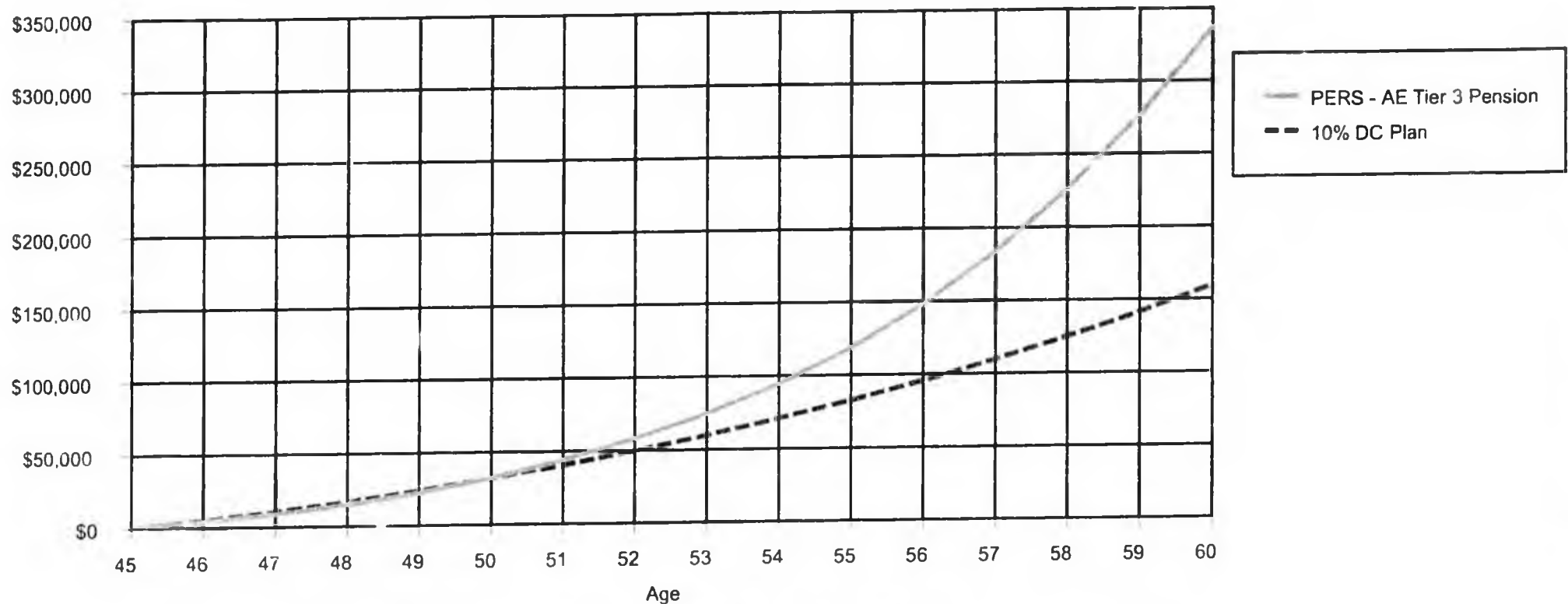
Income and Current Program Analysis

PERS Others

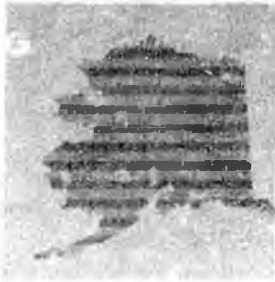
Benefit Accumulation – Short Service Member

Present Value of Benefit Payable as a Lump Sum

Sample Employee 1 Data at 2003: Age = 45, Service = 0, Salary = \$50,000



Equity: Rate of return on account balance: 8.39%_a; 7.39%_a; 6.39%_a; 5.30%_a; 4.39%_a
 Bond: Rate of return on account balance: 10%_a; 9%_a; 8%_a; 7%_a; 6%_a
 Equity investment mix: 80%_a; 70%_a; 60%_a; 50%_a; 40%_a; Post-retirement 20%_a
 Salary increase rate: 5.5%_a; 4%_a



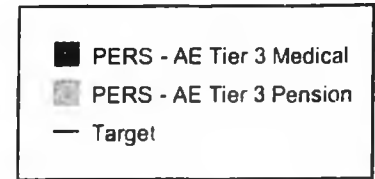
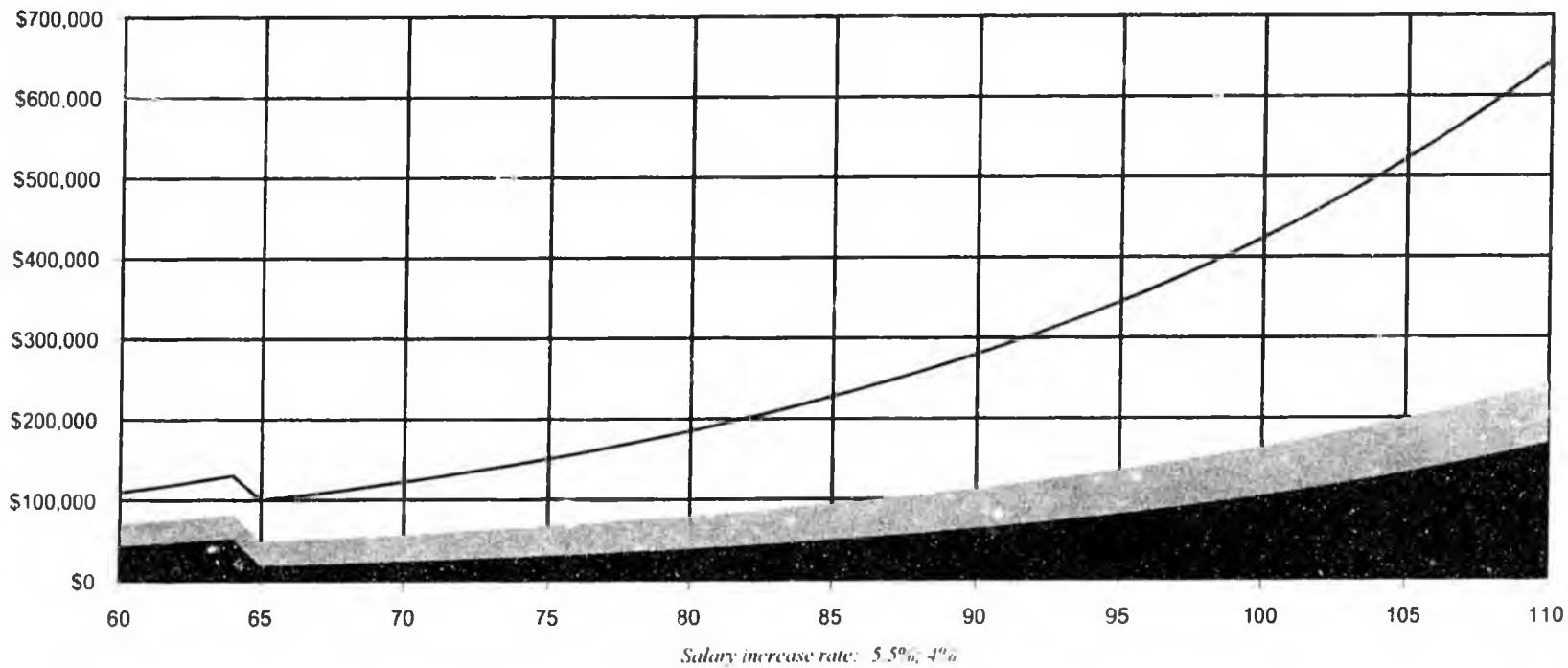
Income and Current Program Analysis

PERS Others

Retirement Spending – Short Service Member

Post-Retirement Spending Needs and Sources -- Terminal Age = 60

Sample Employee 1 Data at 2003: Age = 45, Service = 0, Salary = \$50,000
Retirement Age = 60, Target = 70% (plus medical), Tax Rate = 28%, Post-Ret COLA = 4%





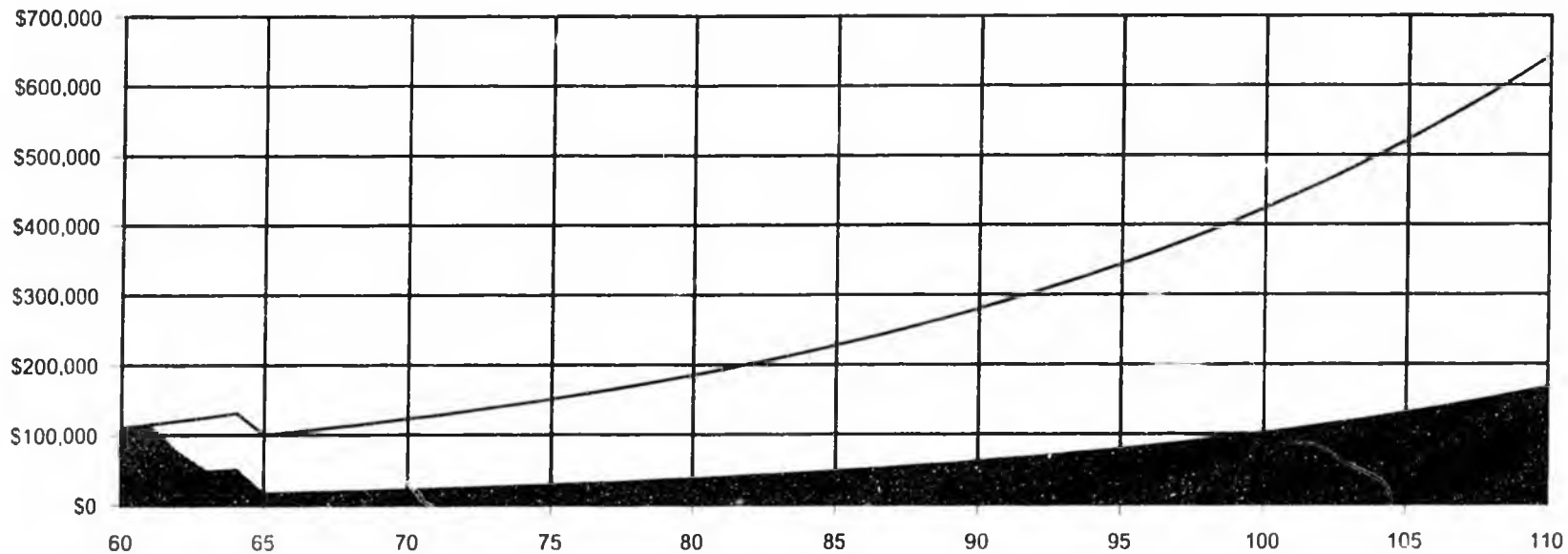
Income and Current Program Analysis

PERS Others

Retirement Spending (DC Plan) – Short Service Member

Post-Retirement Spending Needs and Sources -- Terminal Age = 62

Sample Employee 1 Data at 2003: Age = 45, Service = 0, Salary = \$50,000
 Retirement Age = 60, Target = 70% (plus medical), Tax Rate = 28%, Post-Ret COLA = 4%



PERS - AE Tier 3 Medical
 10% DC Plan
 — Target

Equity: Rate of return on account balance: Pre-Ret: 8.39%; 7.39%; 6.39%; 3.9%; 4.39%; Post-Ret: 4.39%
Bond: Rate of return on account balance: Pre-Ret: 10%; 9%; 8%; 7%; 6%; Post-Ret: 6%
Equity investment mix: 80%; 70%; 60%; 50%; 40%; Post-retirement 20%
Salary increase rate: 5.5%; 4%

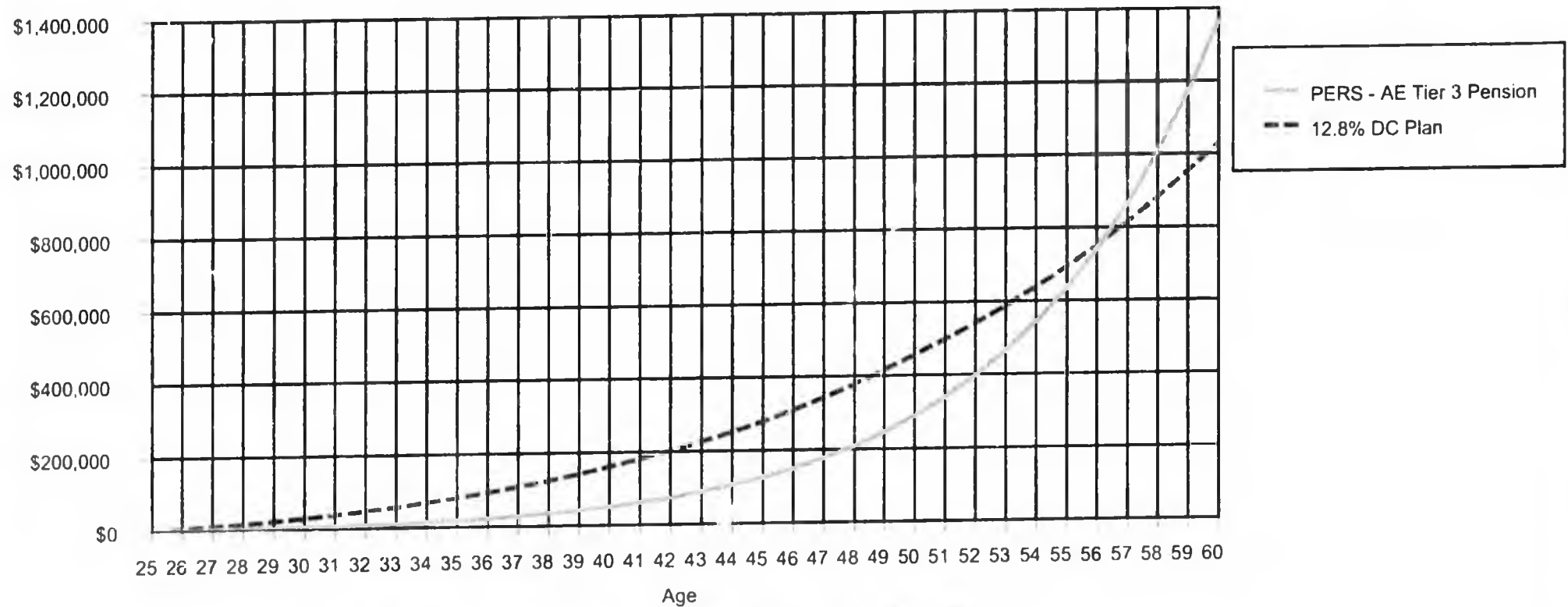
Income and Current Program Analysis

PERS Police/Fire

Benefit Accumulation – Long Service Member

Present Value of Benefit Payable as a Lump Sum

Sample Employee 1 Data at 2003: Age = 25, Service = 0, Salary = \$35,000



Equity: Rate of return on account balance: 8.39%₀; 7.39%₀; 6.39%₀; 5.39%₀; 4.39%₀
 Bond: Rate of return on account balance: 10%₀; 9%₀; 8%₀; 7%₀; 6%₀
 Equity investment mix: 80%₀; 70%₀; 60%₀; 50%₀; 40%₀; Post-retirement 20%₀
 Salary increase rate: 5.5%₀; 4%₀

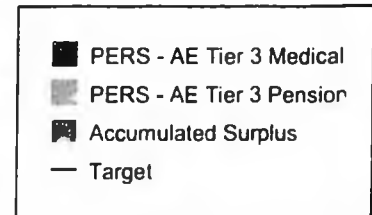
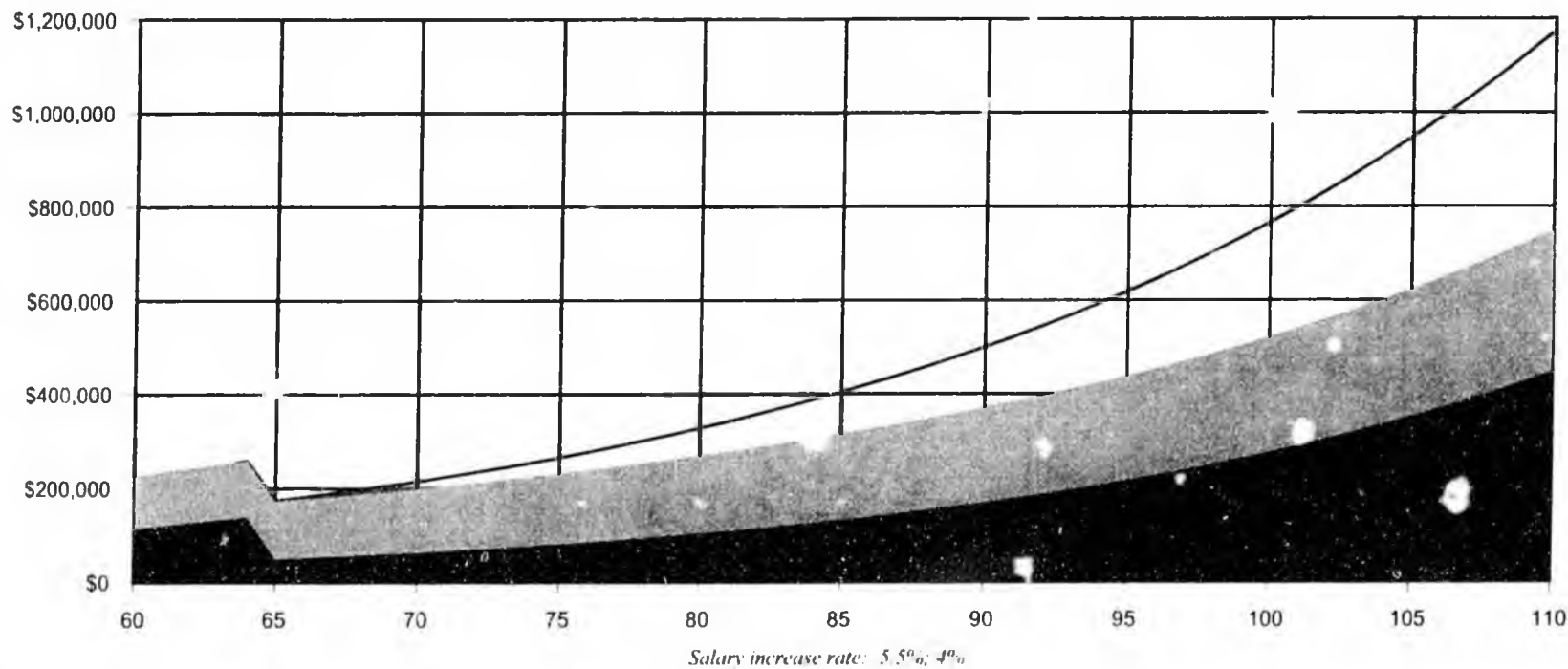
Income and Current Program Analysis

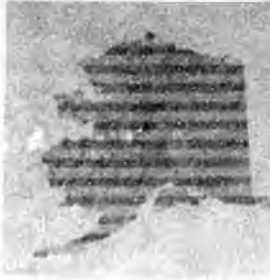
PERS Police/Fire

Retirement Spending – Long Service Member

Post-Retirement Spending Needs and Sources – Terminal Age = 70

Sample Employee 1 Data at 2003: Age = 25, Service = 0, Salary = \$35,000
 Retirement Age = 60, Target = 70% (plus medical), Tax Rate = 28%, Post-Ret COLA = 4%





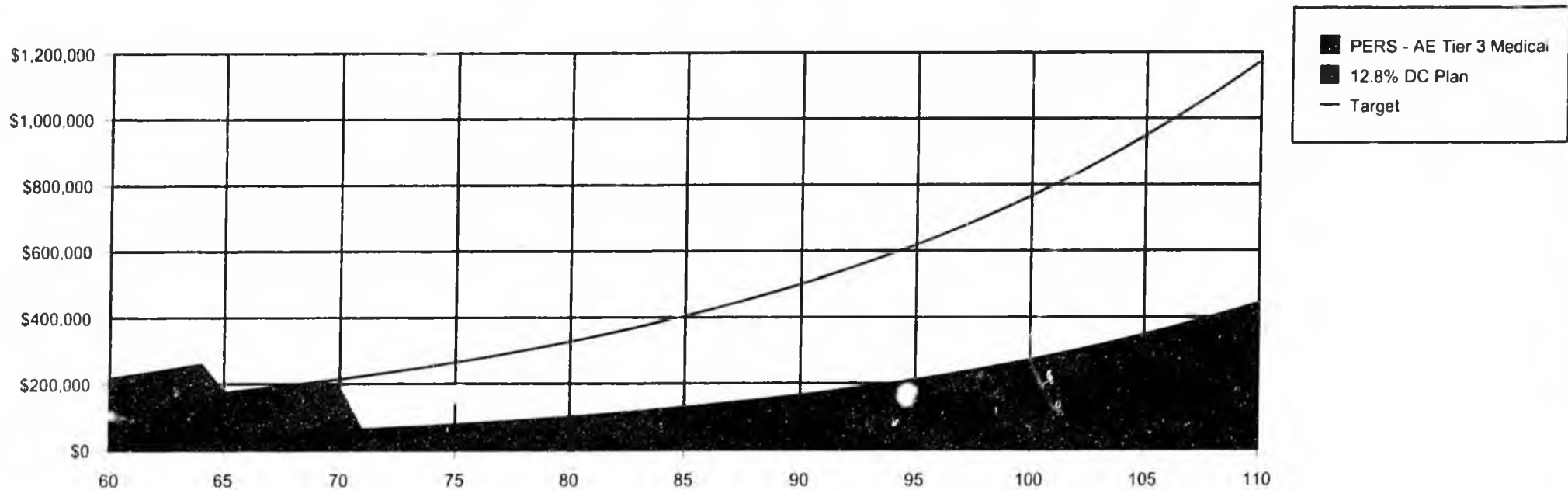
Income and Current Program Analysis

PERS Police/Fire

Retirement Spending (DC Plan) – Long Service Member

Post-Retirement Spending Needs and Sources -- Terminal Age = 70

Sample Employee 1 Data at 2003: Age = 25, Service = 0, Salary = \$35,000
Retirement Age = 60, Target = 70% (plus medical), Tax Rate = 28%, Post-Ret COLA = 4%



Equity: Rate of return on account balance: Pre-Ret: 8.39%, 7.39%, 6.39%, 5.39%, 4.39%, Post-Ret: 4.39%
Bond: Rate of return on account balance: Pre-Ret: 10%, 9%, 8%, 7%, 6%, Post-Ret: 6%
Equity investment mix: 80%, 70%, 60%, 50%, 40%, Post-retirement 20%
Salary increase rate: 5.5%, 4%



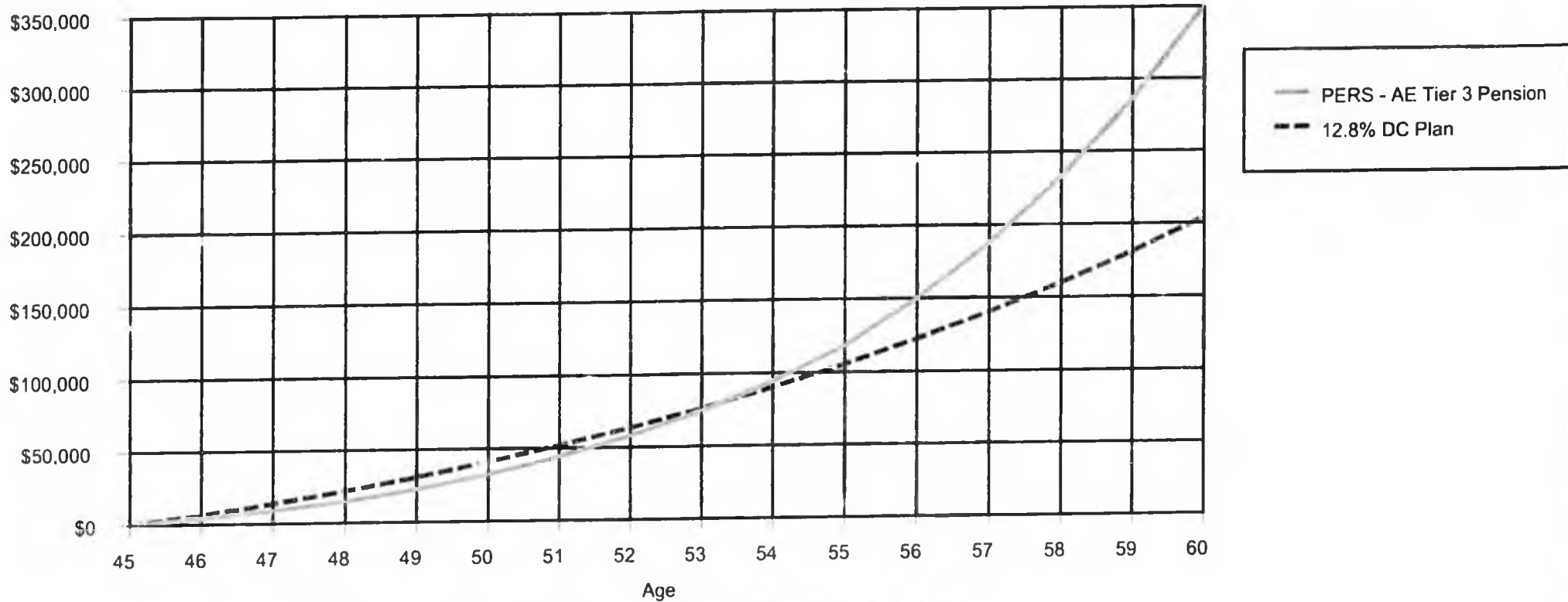
Income and Current Program Analysis

PERS Police/Fire

Benefit Accumulation – Short Service Member

Present Value of Benefit Payable as a Lump Sum

Sample Employee 1 Data at 2003: Age = 45, Service = 0, Salary = \$50,000



Equity: Rate of return on account balance: 8.39%; 7.39%; 6.39%; 5.39%; 4.39%
Bond: Rate of return on account balance: 10%; 9%; 8%; 7%; 6%
Equity investment mix: 80%; 70%; 60%; 50%; 40%; Post-retirement 20%
Salary increase rate: 5.5%; 4%

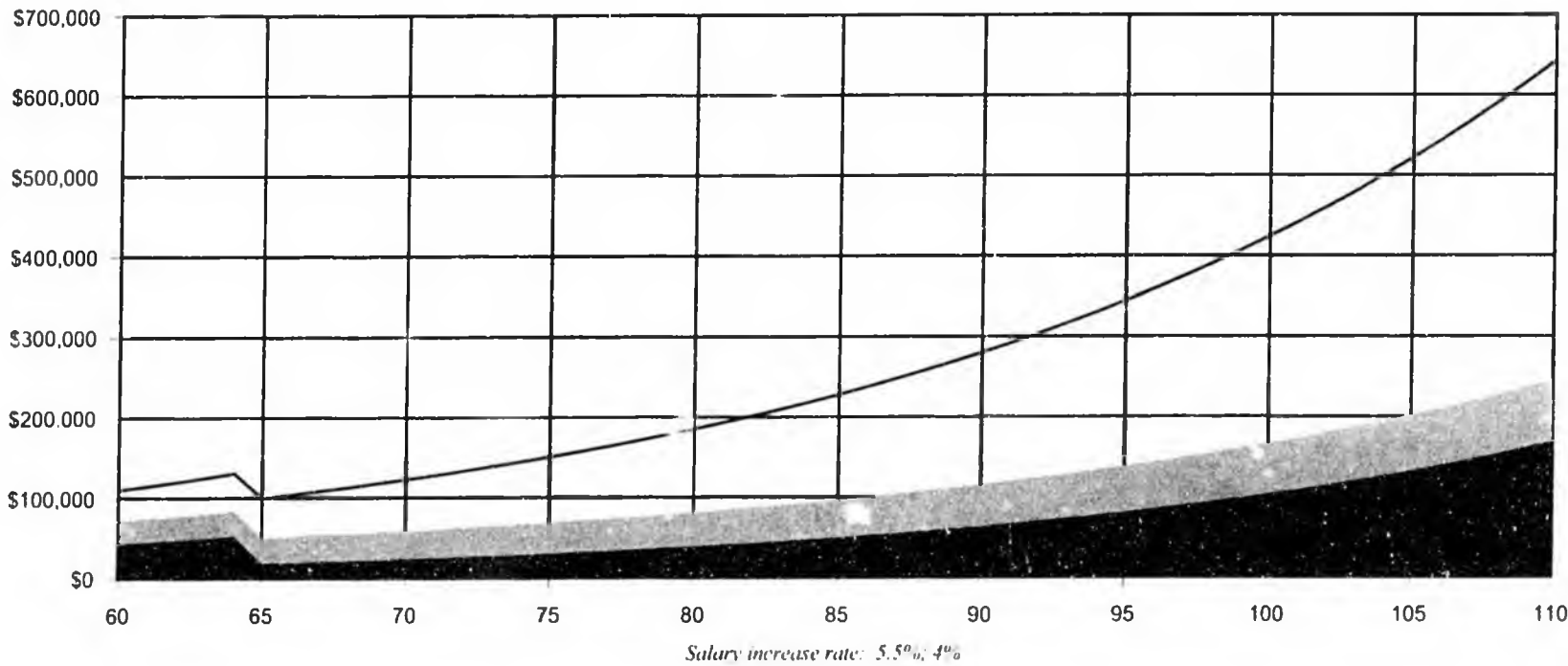
Income and Current Program Analysis

PERS Police/Fire

Retirement Spending – Short Service Member

Post-Retirement Spending Needs and Sources -- Terminal Age = 60

Sample Employee 1 Data at 2003: Age = 45, Service = 0, Salary = \$50,000
 Retirement Age = 60, Target = 70% (plus medical), Tax Rate = 28%, Post-Ret COLA = 4%



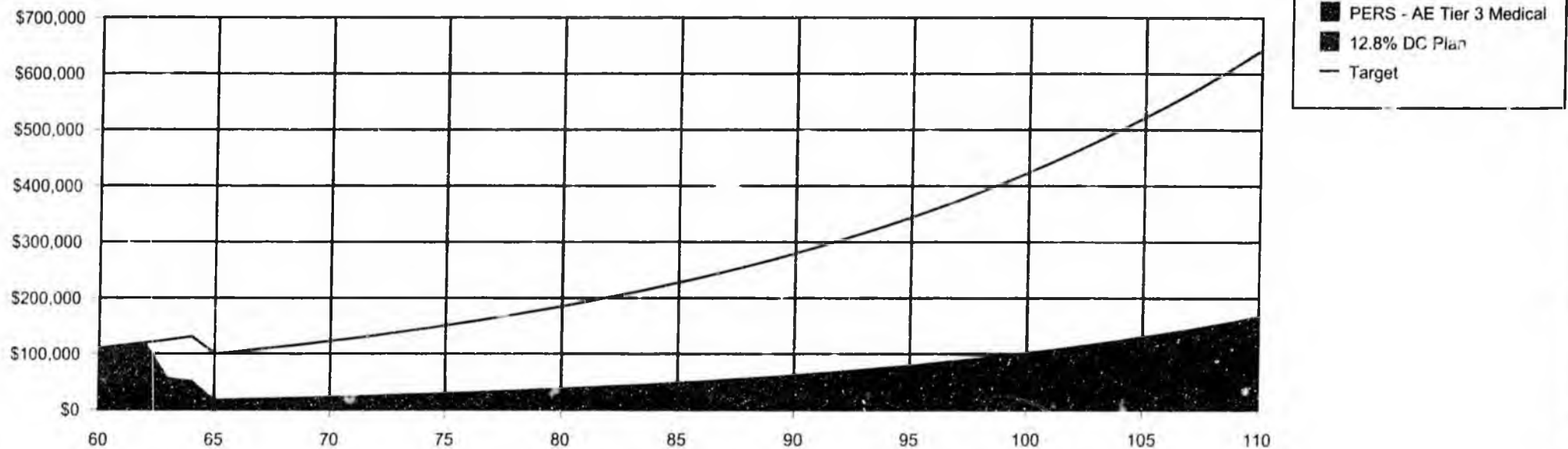
Income and Current Program Analysis

PERS Police/Fire

Retirement Spending (DC Plan) – Short Service Member

Post-Retirement Spending Needs and Sources -- Terminal Age = 63

Sample Employee 1 Data at 2003: Age = 45, Service = 0, Salary = \$50,000
 Retirement Age = 60, Target = 70% (plus medical), Tax Rate = 28%, Post-Ret COLA = 4%



Equity: Rate of return on account balance: Pre-Ret: 8.39%, 7.39%, 6.39%, 5.39%, 4.39%; Post-Ret: 4.39%
 Bond: Rate of return on account balance: Pre-Ret: 10%, 9%, 8%, 7%, 6%; Post-Ret: 6%
 Equity investment mix: 80%, 70%, 60%, 50%, 40%, Post-retirement 20%
 Salary increase rate: 5.5%, 4%

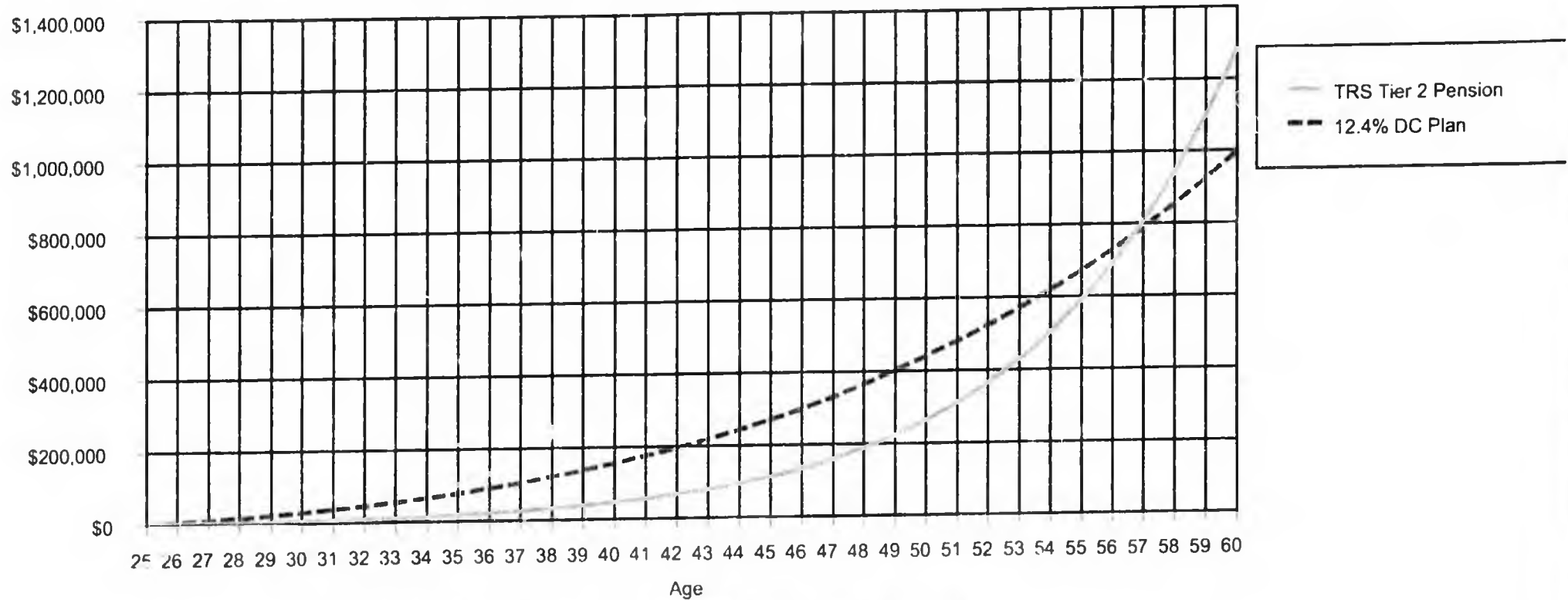
Income and Current Program Analysis

TRS

Benefit Accumulation – Long Service Member

Present Value of Benefit Payable as a Lump Sum

Sample Employee 1 Data at 2003: Age = 25, Service = 0, Salary = \$35,000



Equity: Rate of return on account balance: 8.39%, 7.39%, 6.39%, 5.39%, 4.39%
 Bond: Rate of return on account balance: 10%, 9%, 8%, 7%, 6%
 Equity investment mix: 80%, 70%, 60%, 50%, 40%; Post-retirement 20%
 Salary increase rate: 5.5%, 4%



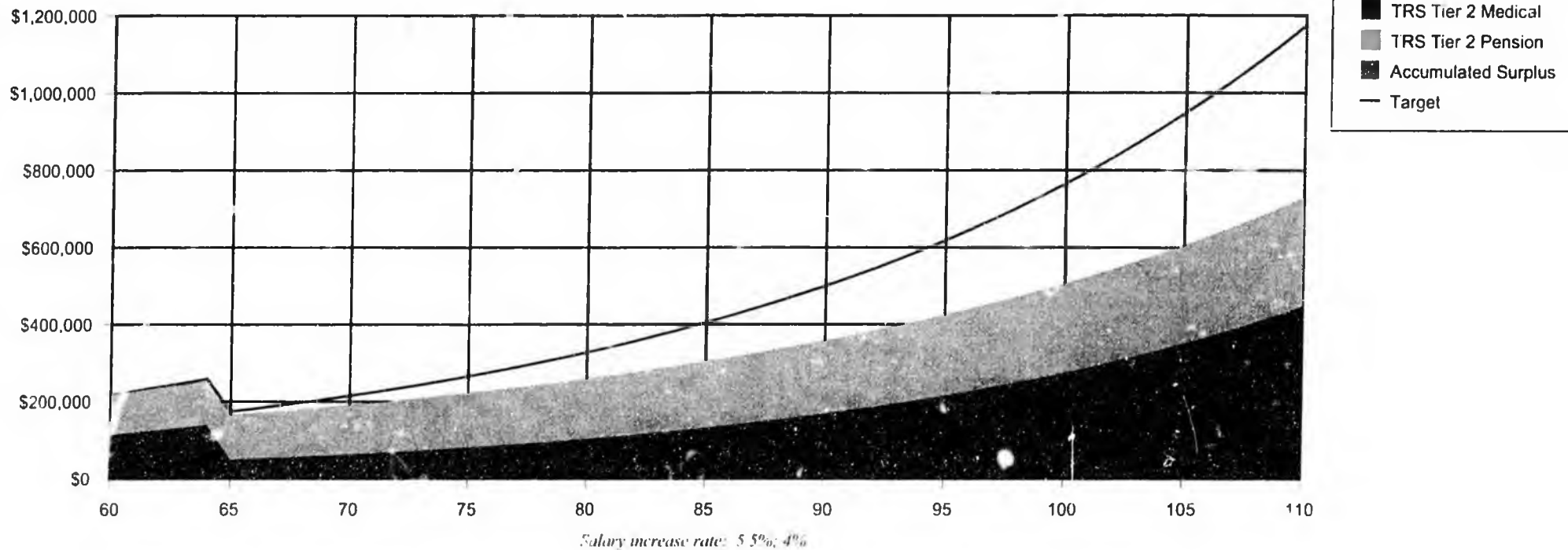
Income and Current Program Analysis

TRS

Retirement Spending – Long Service Member

Post-Retirement Spending Needs and Sources -- Terminal Age = 63

Sample Employee 1 Data at 2003: Age = 25, Service = 0, Salary = \$35,000
Retirement Age = 60, Target = 70% (plus medical), Tax Rate = 28%, Post-Ret COLA = 4%





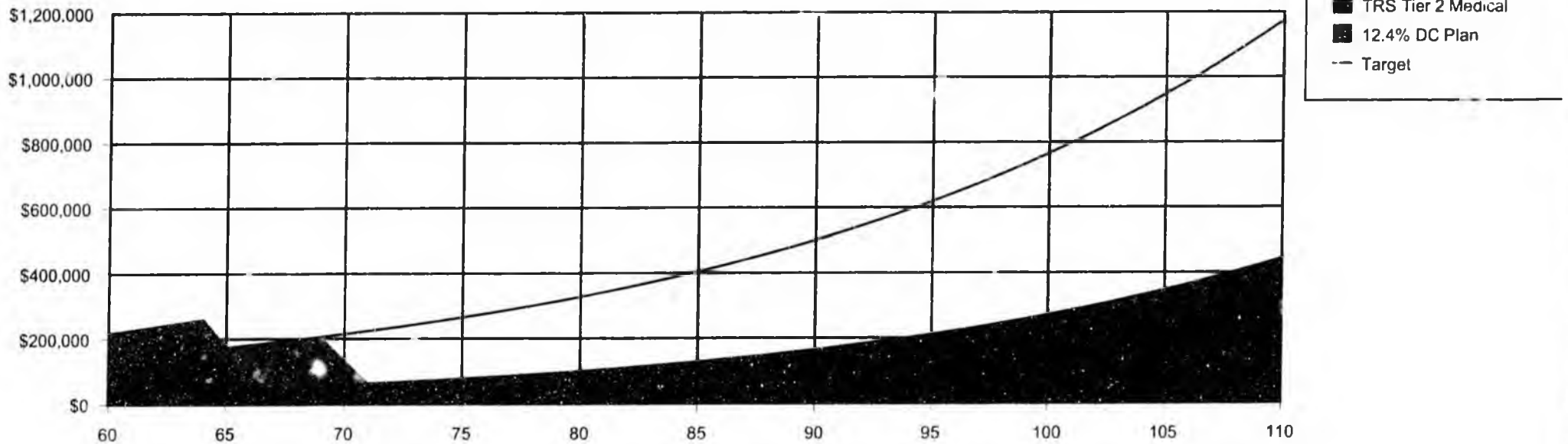
Income and Current Program Analysis

TRS

Retirement Spending (DC Plan) – Long Service Member

Post-Retirement Spending Needs and Sources -- Terminal Age = 70

Sample Employee 1 Data at 2003: Age = 25, Service = 0, Salary = \$35,000
 Retirement Age = 60, Target = 70% (plus medical), Tax Rate = 28%, Post-Ret COLA = 4%



Equity: Rate of return on account balance: Pre-Ret: 8.39%; 7.39%; 6.39%; 5.39%; 4.39%; Post-Ret: 4.39%
 Bond: Rate of return on account balance: Pre-Ret: 10%; 9%; 8%; 7%; 6%; Post-Ret: 6%
 Equity investment mix: 80%; 70%; 60%; 50%; 40%; Post-retirement 20%
 Salary increase rate: 5.5%; 4%



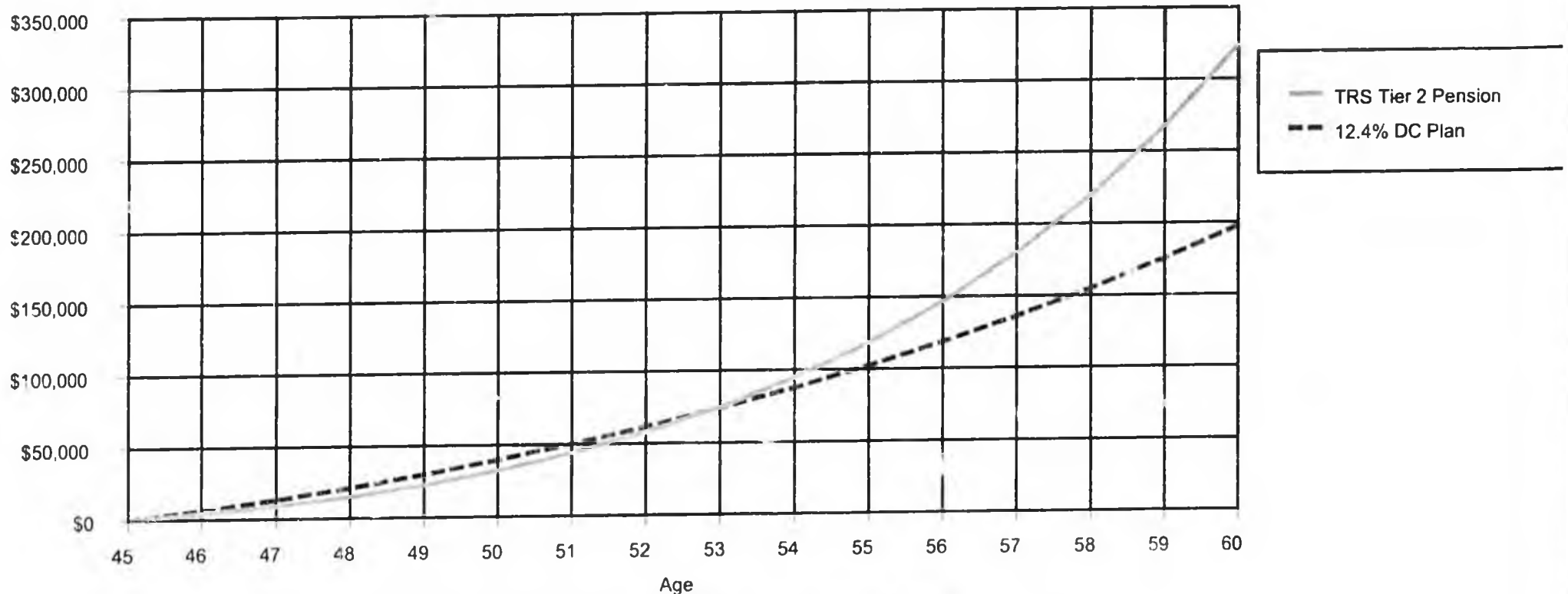
Income and Current Program Analysis

TRS

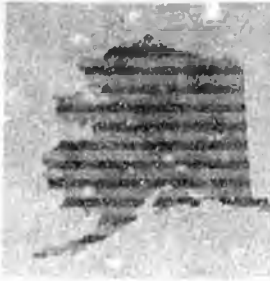
Benefit Accumulation – Short Service Member

Present Value of Benefit Payable as a Lump Sum

Sample Employee 1 Data at 2003: Age = 45, Service = 0, Salary = \$50,000



Equity: Rate of return on account balance: 8.39%; 7.39%; 6.39%; 5.39%; 4.39%
Bond: Rate of return on account balance: 10%; 9%; 8%; 7%; 6%
Equity investment mix: 80%; 70%; 60%; 50%; 40%; Post-retirement 20%
Salary increase rate: 5.5%; 4%



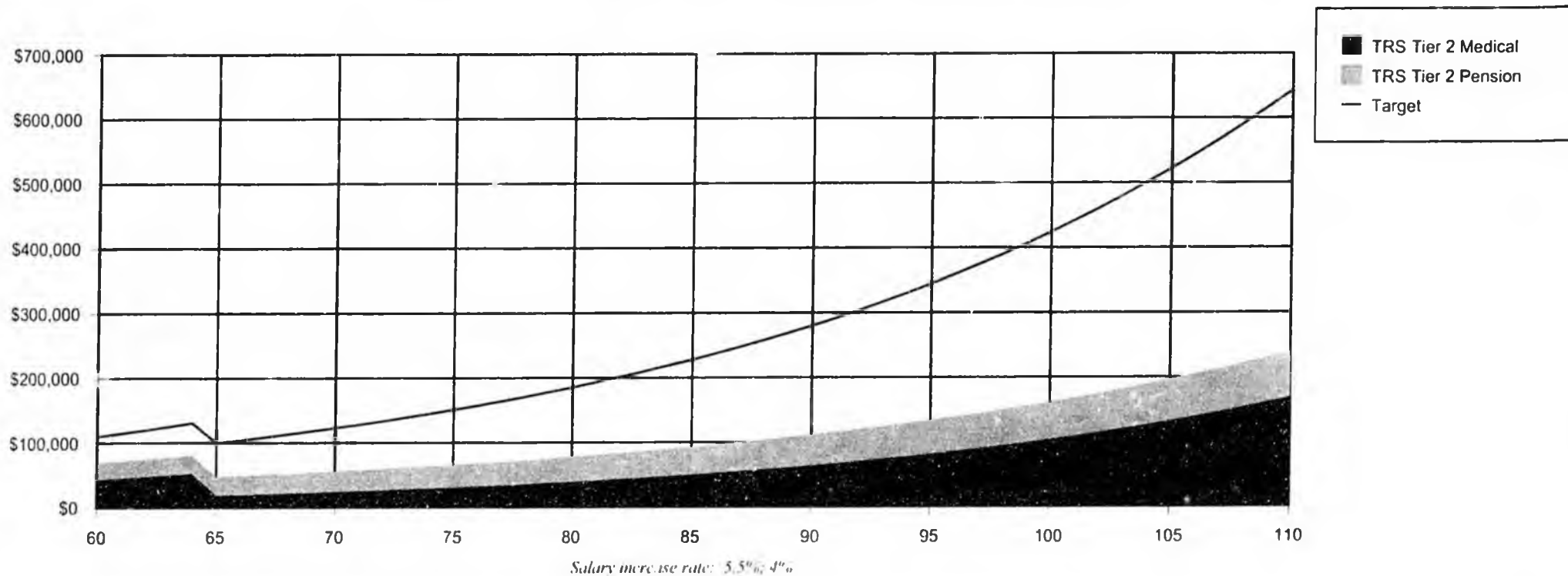
Income and Current Program Analysis

TRS

Retirement Spending – Short Service Member

Post-Retirement Spending Needs and Sources – Terminal Age = 60

Sample Employee 1 Data at 2003: Age = 45, Service = 0, Salary = \$50,000
Retirement Age = 60, Target = 70% (plus medical), Tax Rate = 28%, Post-Ret COLA = 4%





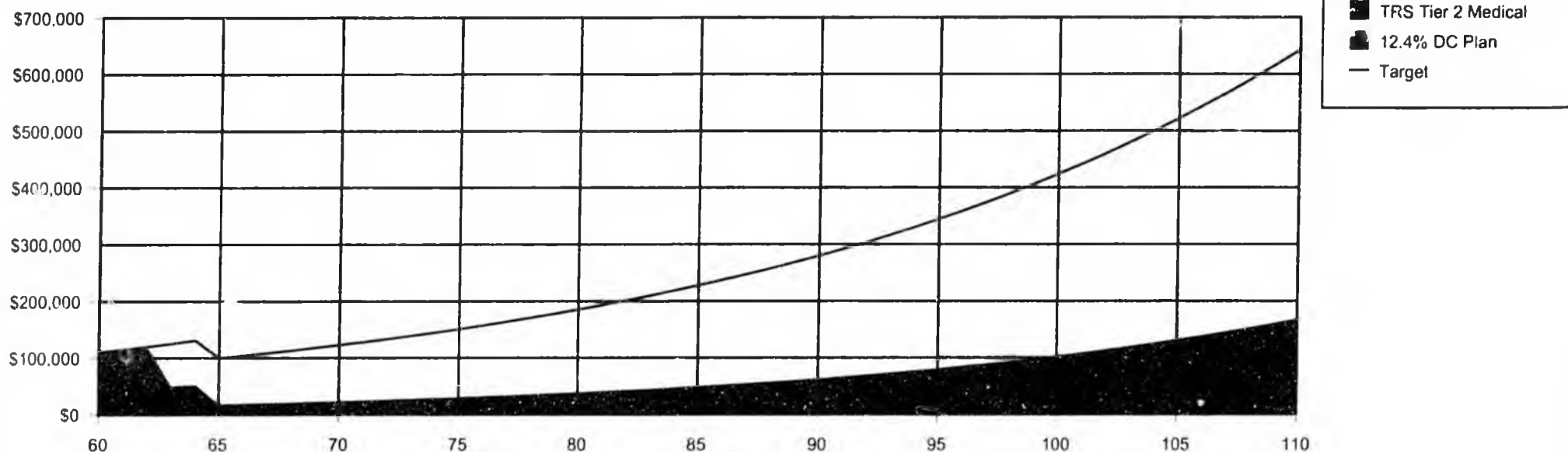
Income and Current Program Analysis

TRS

Benefit Accumulation (DC Plan) – Short Service Member

Post-Retirement Spending Needs and Sources -- Terminal Age = 63

Sample Employee 1 Data at 2003: Age = 45, Service = 0, Salary = \$50,000
 Retirement Age = 60, Target = 70% (plus medical), Tax Rate = 28%, Post-Ret COI A = 4%



Equity: Rate of return on account balance: Pre-Ret: 8.39%; 7.39%; 6.39%; 5.39%; 4.39%; Post-Ret: 4.39%
 Bond: Rate of return on account balance: Pre-Ret: 10%; 9%; 8%; 7%; 6%; Post-Ret: 6%
 Equity investment mix: 80%; 70%; 60%; 50%; 40%; Post-retirement 20%
 Salary increase rate: 5.5%; 4%



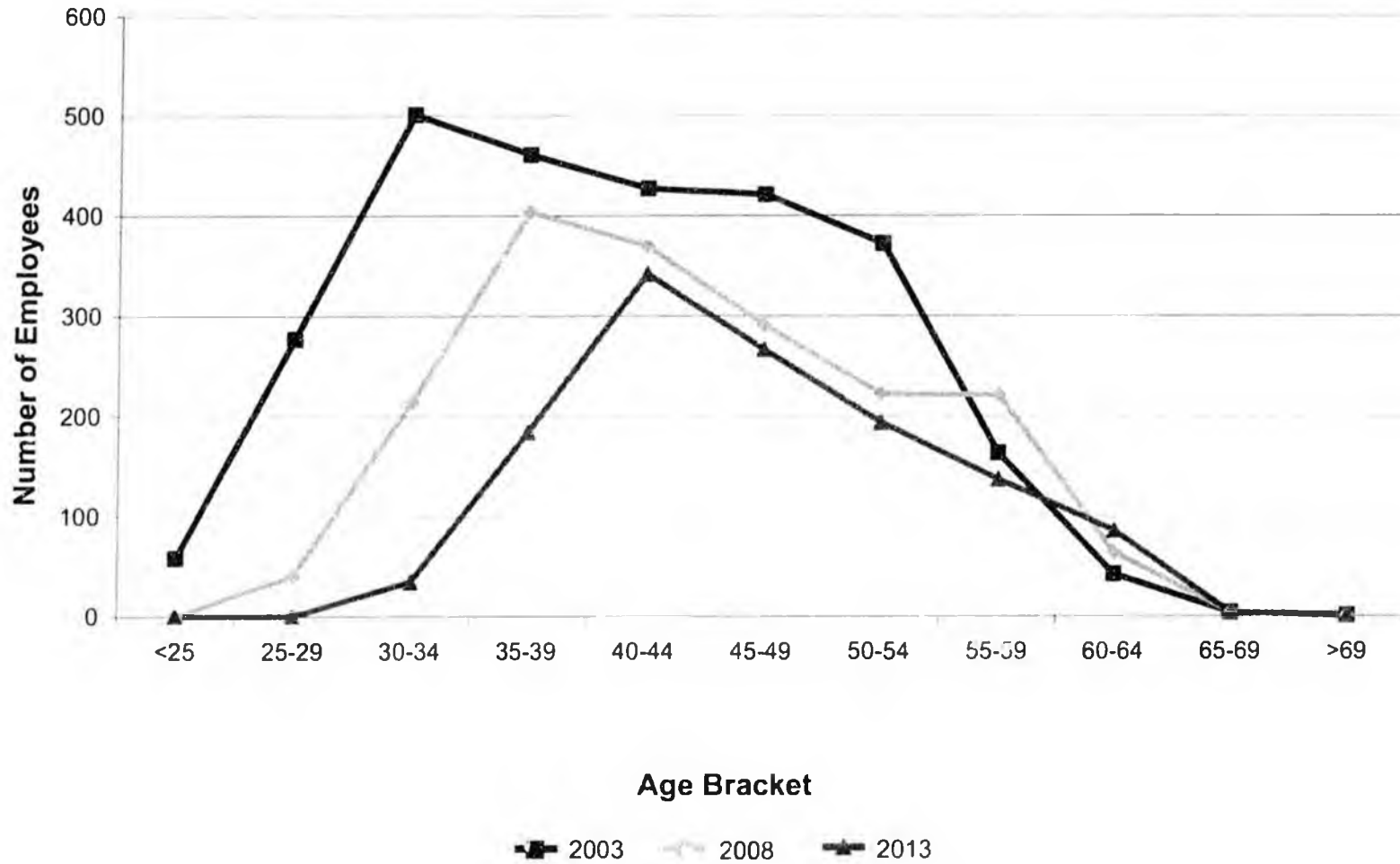
4. Demographics



Demographics

Police & Fire

Distribution of Work Force

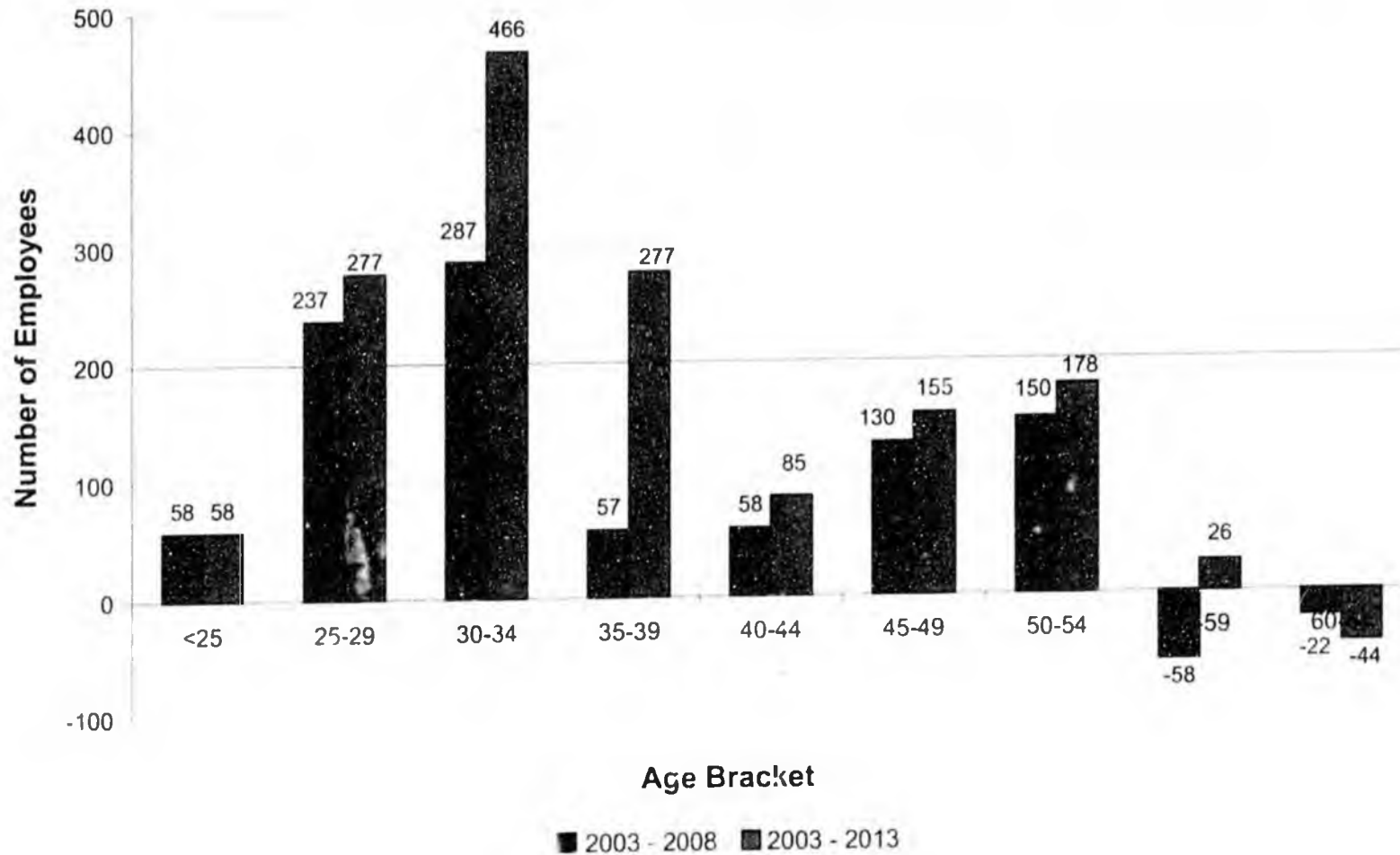




Demographics

Police & Fire

Recruiting Needs





Demographics

Police & Fire

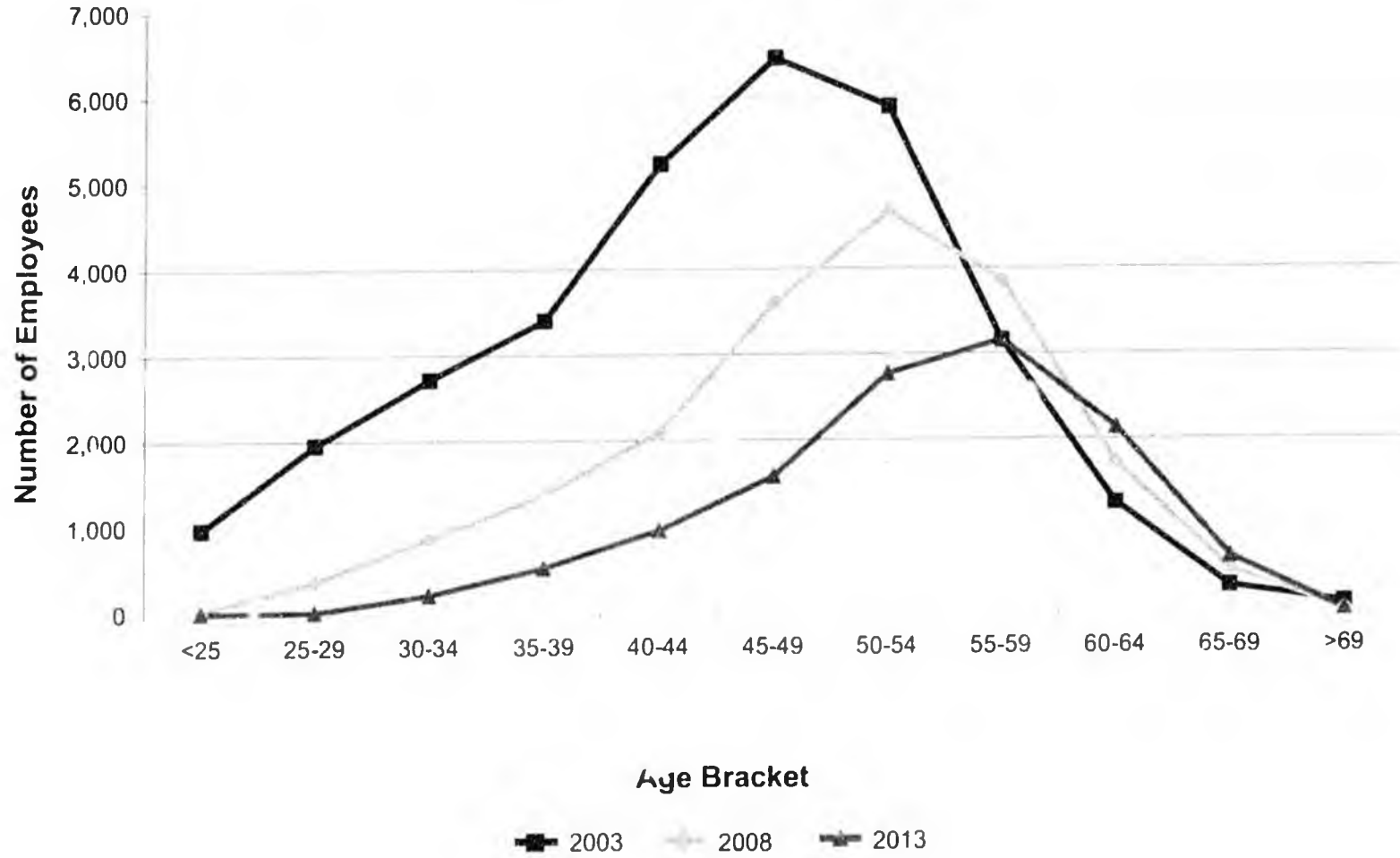
- Projection of current police & firefighter population shows the following:
 - Within 5 years, 33% of current members will retire or terminate
 - Within 10 years, 54% of current members will retire or terminate
- 69% of recruiting needs will be at ages 25 to 39 over the next 10 years
- There are significant hiring needs at ages 40 to 54: 28% over the next 10 years
- Will there be a need to manage workforce at age 60 and older?
- 29% of current active members will leave before retirement
- 71% will retire and receive majority of plan's value



Demographics

PERS All Others

Distribution of Work Force

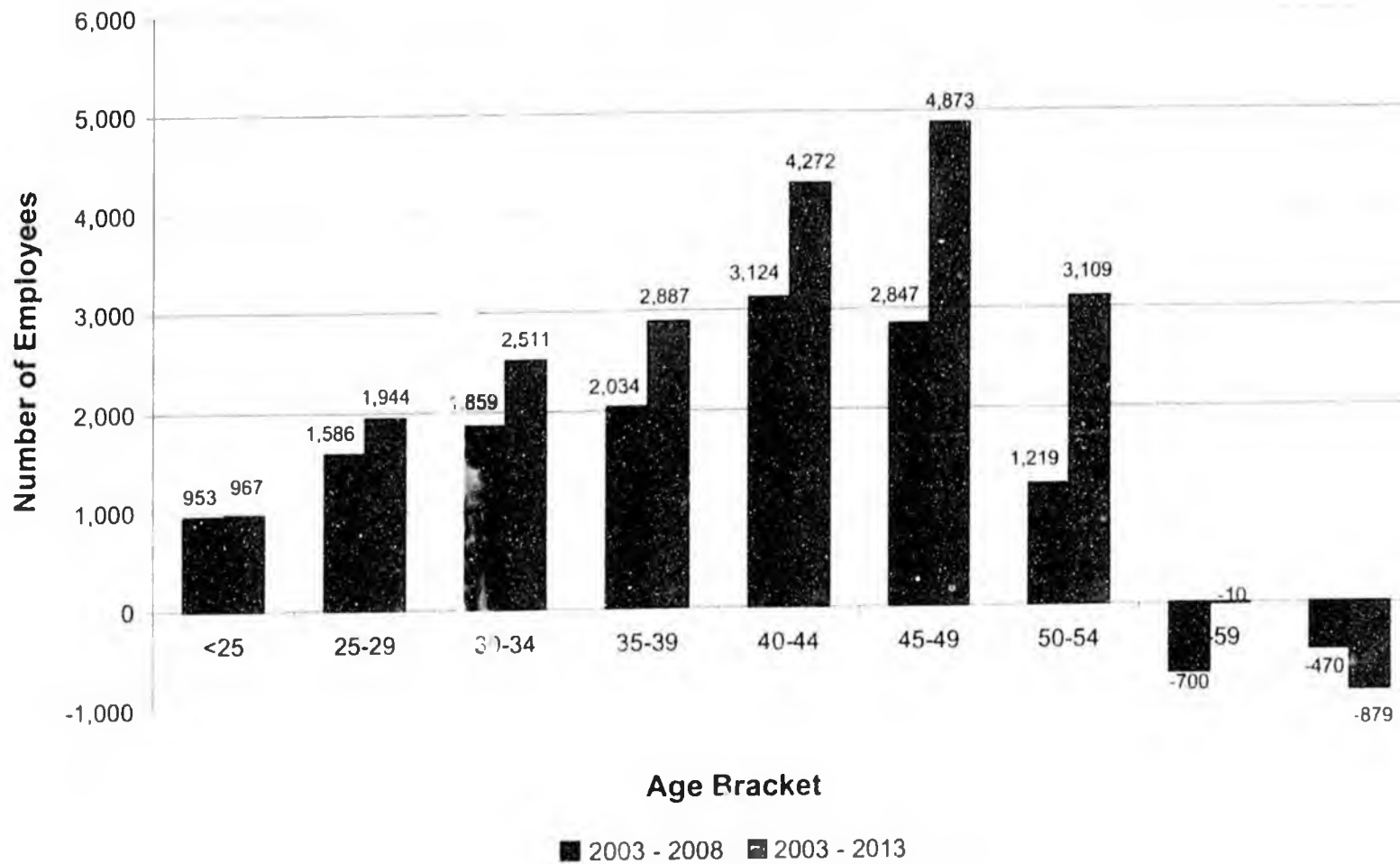




Demographics

PERS All Others

Recruiting Needs





Demographics

PERS All Others

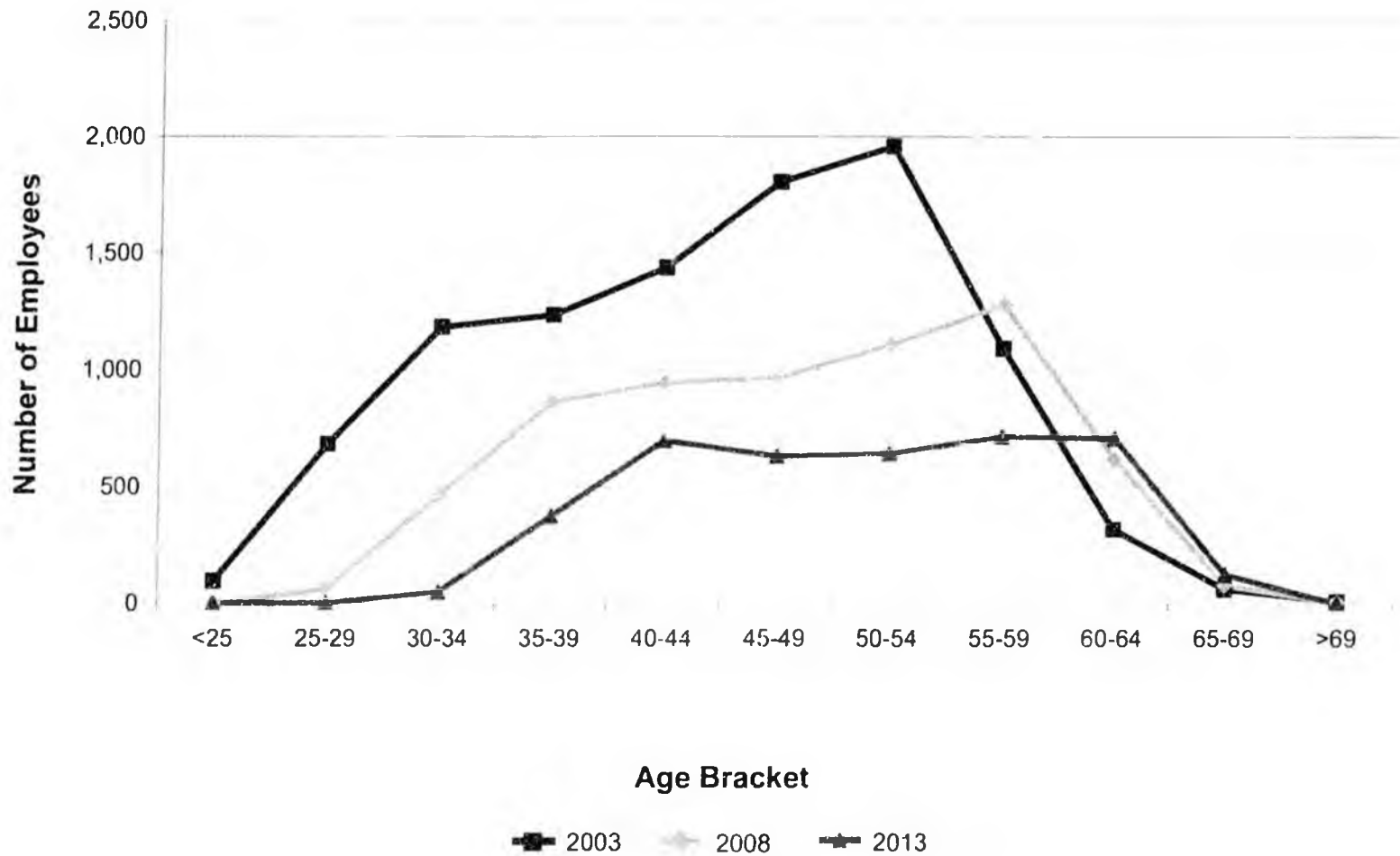
- Projection of current others population shows the following:
 - within 5 years, 39% of current members will retire or terminate
 - within 10 years, 62% of current members will retire or terminate
- There are significant hiring needs across wide spectrum of ages: 85% over the next 10 years
 - main needs will be at ages 40 – 54
- Will there be a need to manage workforce at age 55 and older?
- 44% of current active members will leave before retirement
- 56% will retire and receive majority of plan's value



Demographics

Teachers

Distribution of Work Force





Demographics Teachers

- Projection of current teacher population shows the following:
 - Within 5 years, 35% of current members will retire or terminate
 - Within 10 years, 60% of current members will retire or terminate
- There are significant hiring needs across wide spectrum of ages: 77% over the next 10 years
 - High need for experienced teachers (ages 45 – 54)
 - Also significant need at ages 30 – 34
- Will there be a need to manage workforce at age 60 and older?
- 32% of current active members will leave before retirement
- 68% will retire and receive majority of plan's value



5. Financial Analysis



State of Alaska – PERS

Projections at Calculated Rate – Observations

- Calculated rates increase under all population scenarios
- Calculated rates begin to decline towards end of the projection period under the 1% and 2% scenarios.
- Over the past 9 years, the average annual population increase for the PERS has been 1.1%
- Calculated rates increase to above 30% under the 1% population increase scenario
- Factors contributing to the projected rate increases are:
 - Contributions are less than the actuarially calculated rate for the first 5 years of the projection
 - New entrants enter the System at lower pay levels than the exiting members they are replacing, generating losses and diluting the pay-off of unfunded liabilities
- Funding ratios are at least 96% by the end of the 25-year period, under all 3 population scenarios



State of Alaska – TRS

Projections at Calculated Rate – Observations

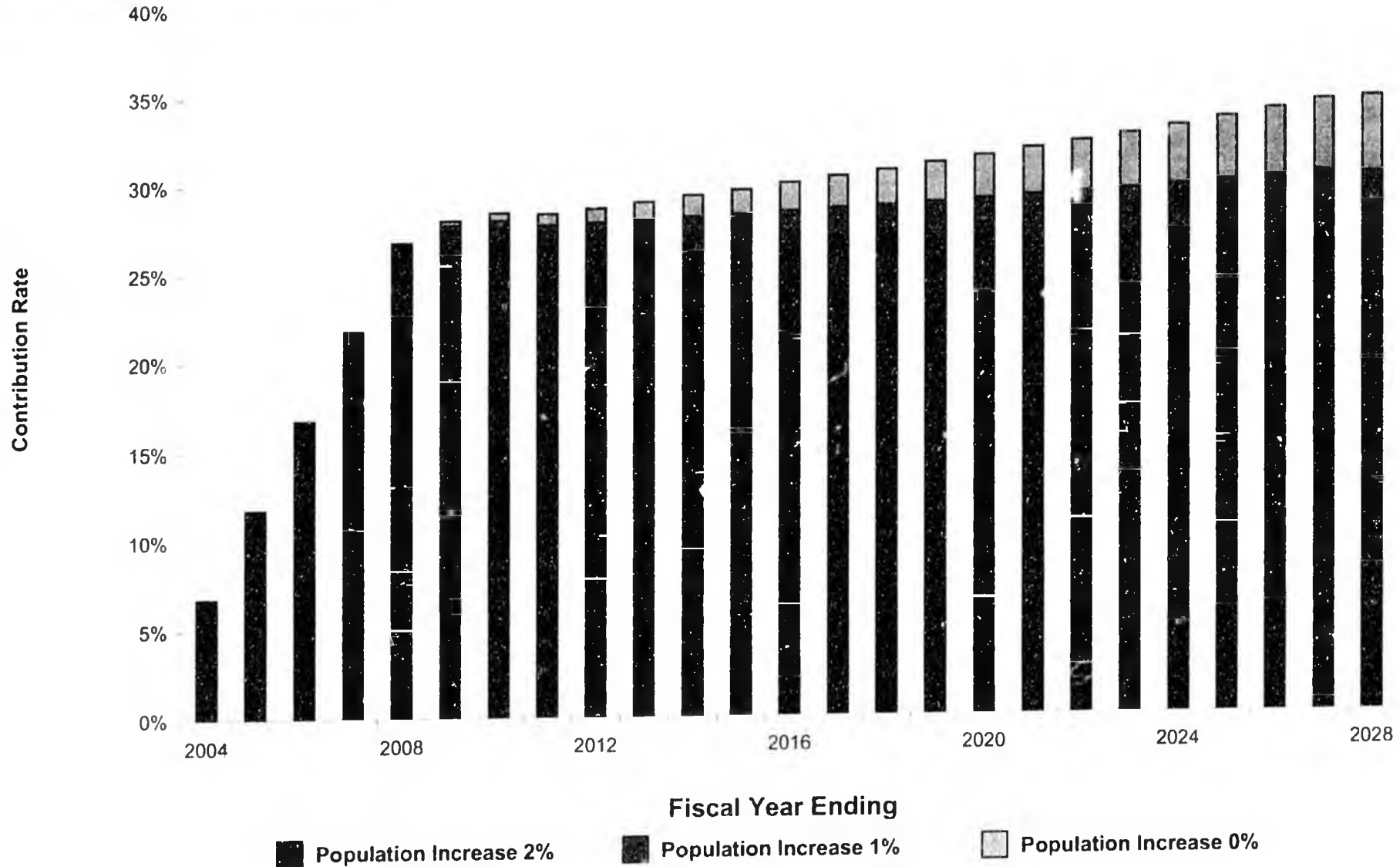
- Calculated rates increase under all population scenarios
- Calculated rates begin to decline towards end of the projection period under the 1% and 2% scenarios
- Calculated rates increase to 42% even under the 2% population increase scenario
- Factors contribution to the projected rate increases are:
 - Contributions are less than the actuarially calculated rate for the first 2 years of the projection
 - After the first 2 years, there is still a 2-year lag before calculated rates actually enter the System
 - New entrants enter the System at lower pay levels than the exiting members they are replacing, generating losses and diluting the pay-off of unfunded liabilities
- Funding ratios are at least 96% by the end of the 25-year period. under all 3 population scenarios



State of Alaska - PERS

Projections at Calculated Rate

Contribution Rates

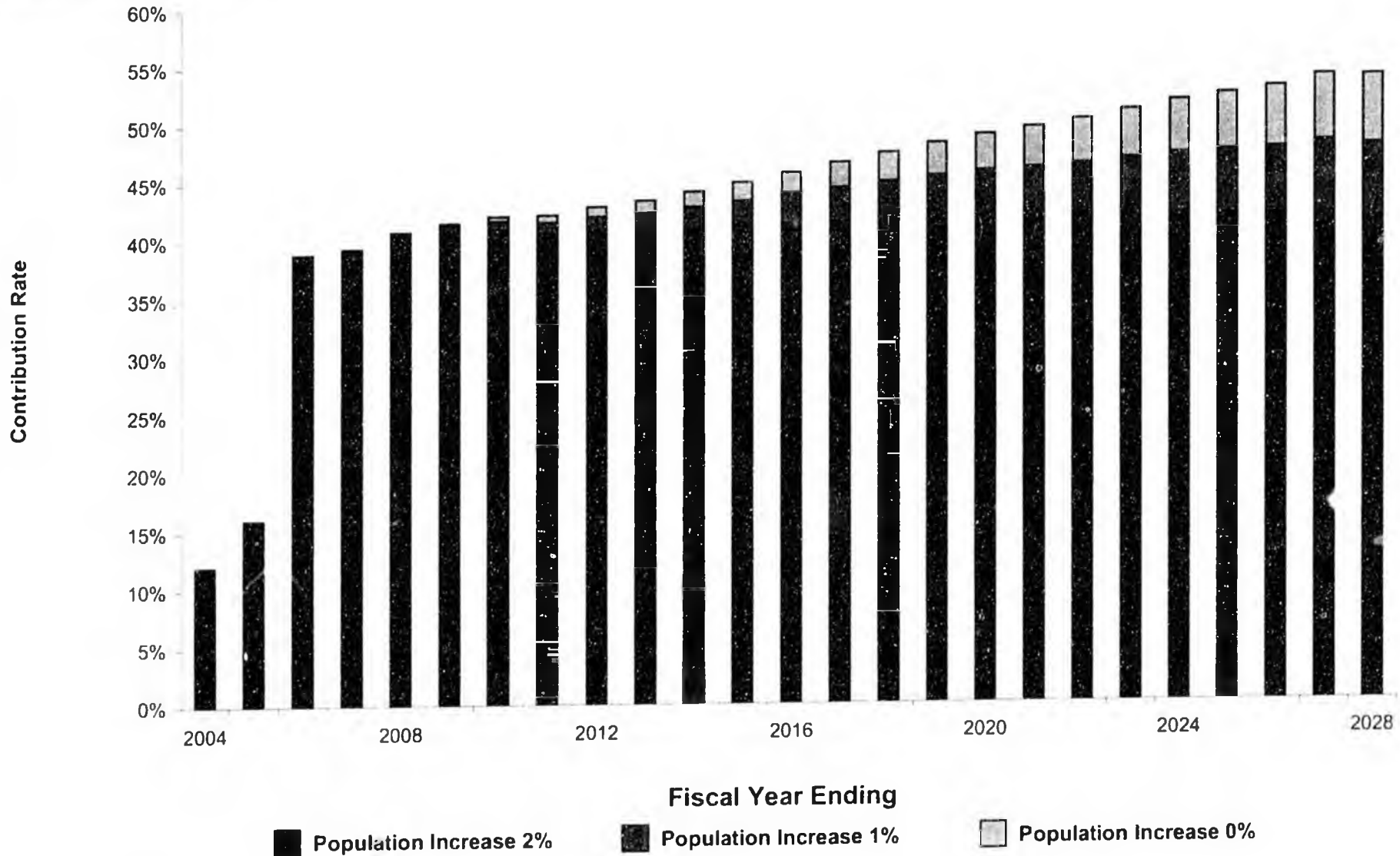




State of Alaska - TRS

Projections at Calculated Rate

Contribution Rates

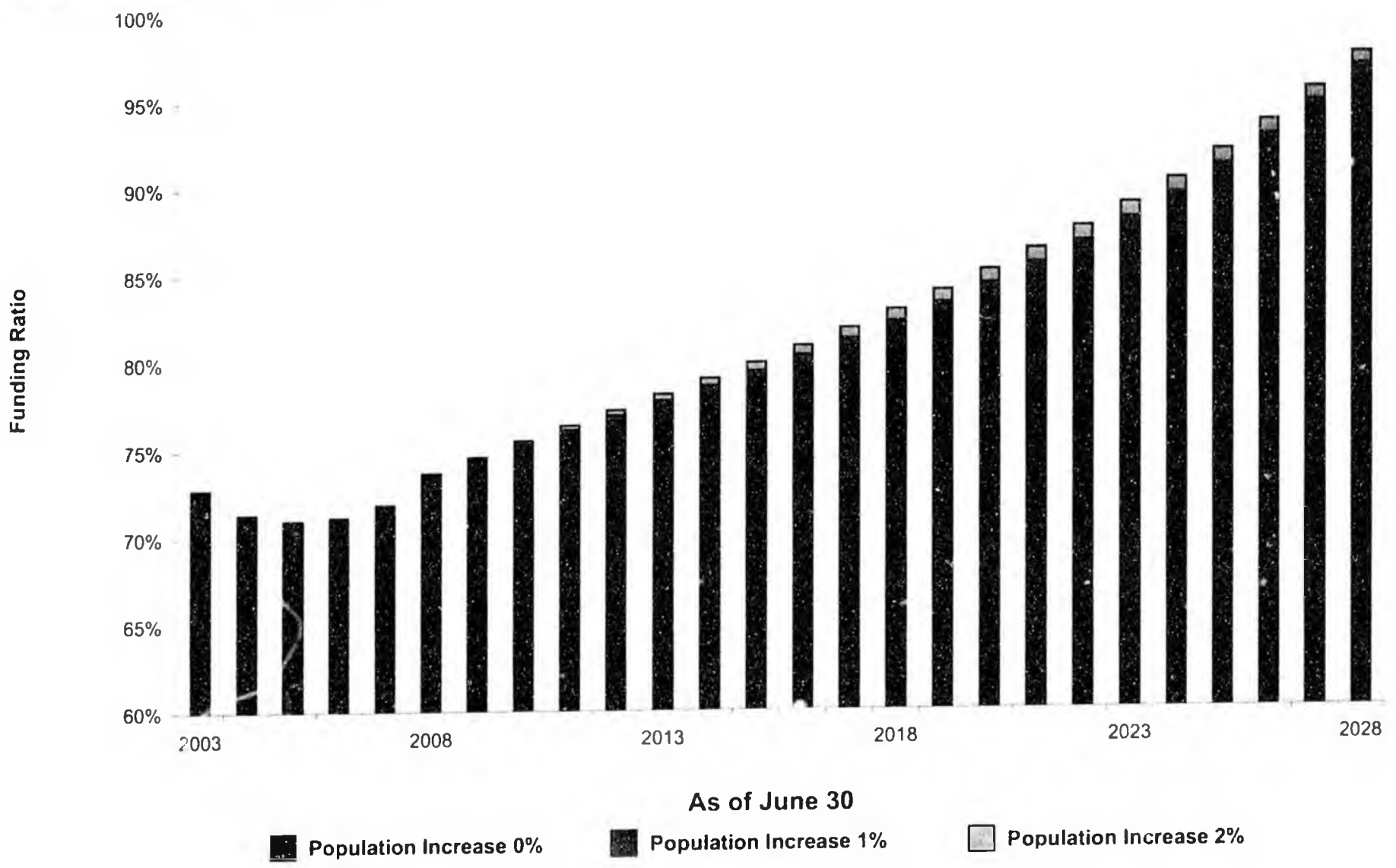




State of Alaska - PERS

Projections at Calculated Rate

Funding Ratios

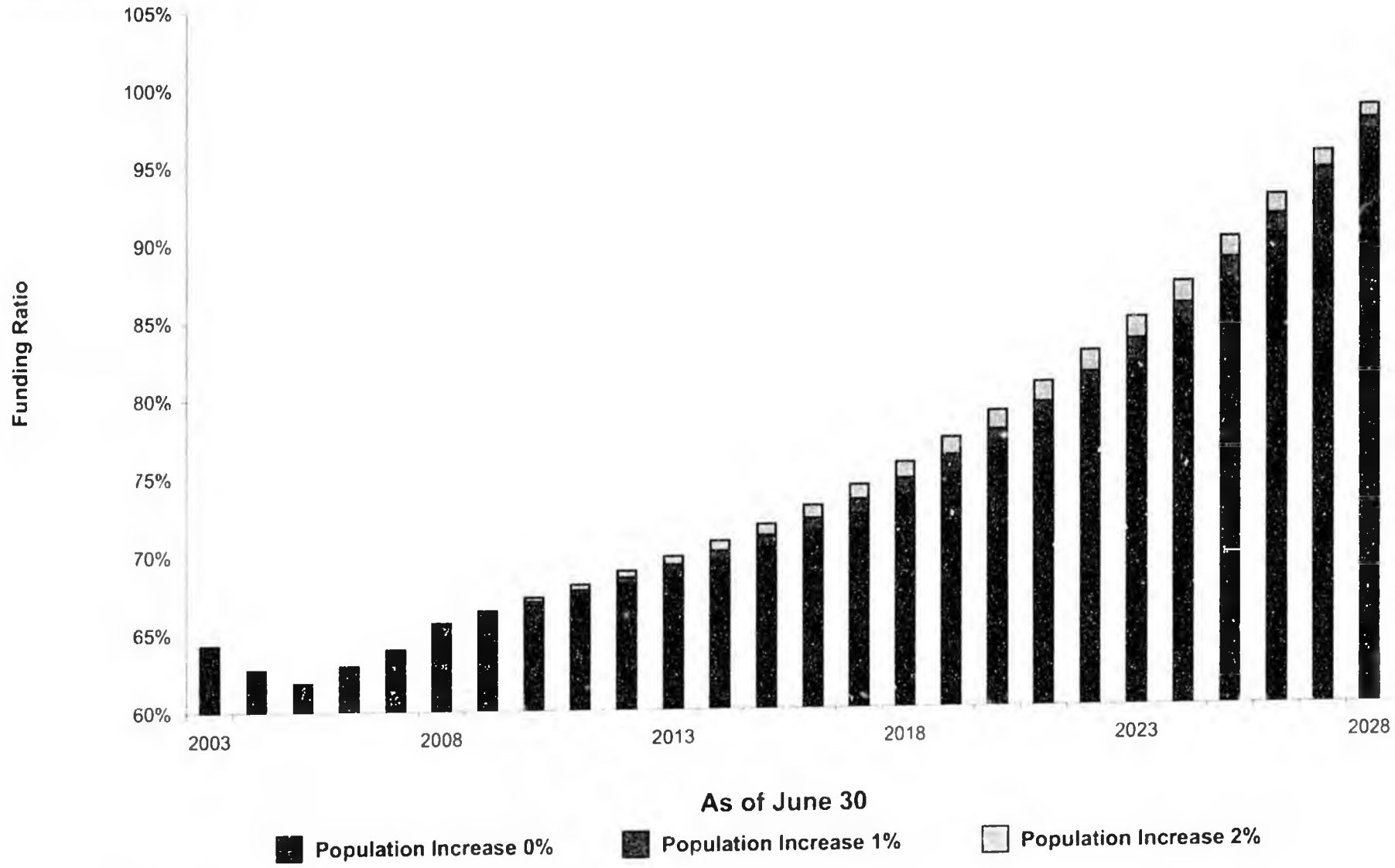


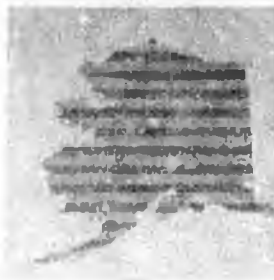


State of Alaska - TRS

Projections at Calculated Rate

Funding Ratios





State of Alaska

Projections at FY06 Rate – Key Assumptions

- Three active population scenarios:
 - 0% growth
 - 1% growth
 - 2% growth
- New entrants brought in to replace members assumed to die, terminate, retire, or become disabled
- New entrant profiles based on average new entrant profiles from the prior 3 years
- Future liabilities and asset returns are calculated at 8.25%, except:
 - 17% investment return for FY04
- Adopted contribution rate is maintained at the FY06 level for all future years.



State of Alaska

Projections at FY06 Rate – Observations

PERS Observations

- System funding declines under all three population scenarios
 - Funding ratio is 25% higher at end of projection period than if rate were maintained at FY05 level
- Actuarially calculated rates escalate under all population scenarios
- Assuming 1% population growth, actuarially calculated rates increase to 60%, while the funding ratio decreases to 45% by the end of the projection period.



State of Alaska

Projections at FY06 Rate – Observations

TRS Observations

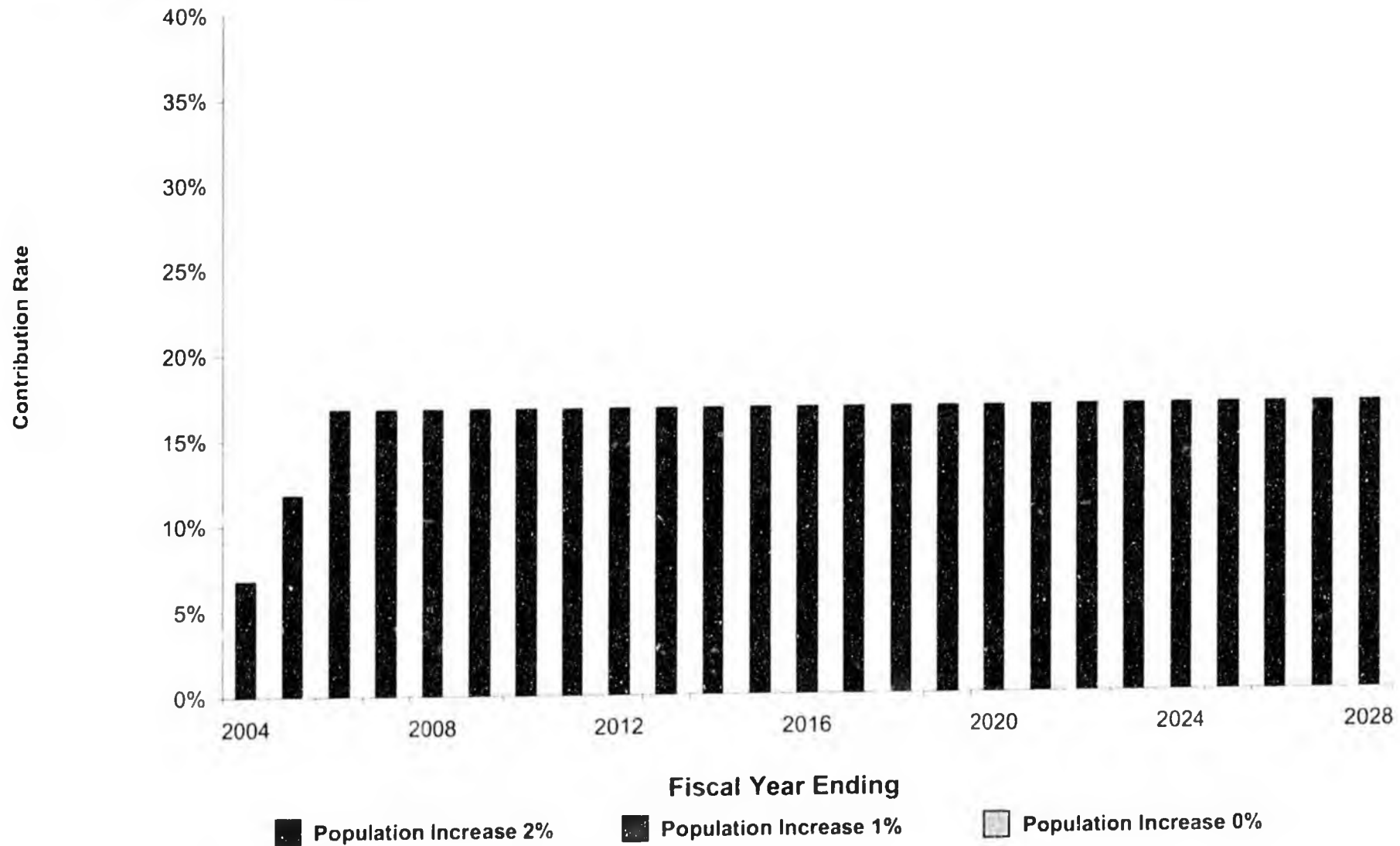
- System funding deteriorates under all three population scenarios
 - Funding ratios are improved to projections at FY05 rate
- Actuarially calculated rates escalate to 90% or more, depending on the population scenario
- Assuming 1% population growth, actuarially calculated rates increase to more than 100%, while the funding ratio decreases to less than 10% by the end of the projection period.



State of Alaska - PERS

Projections at FY06 Rate

Contribution Rates

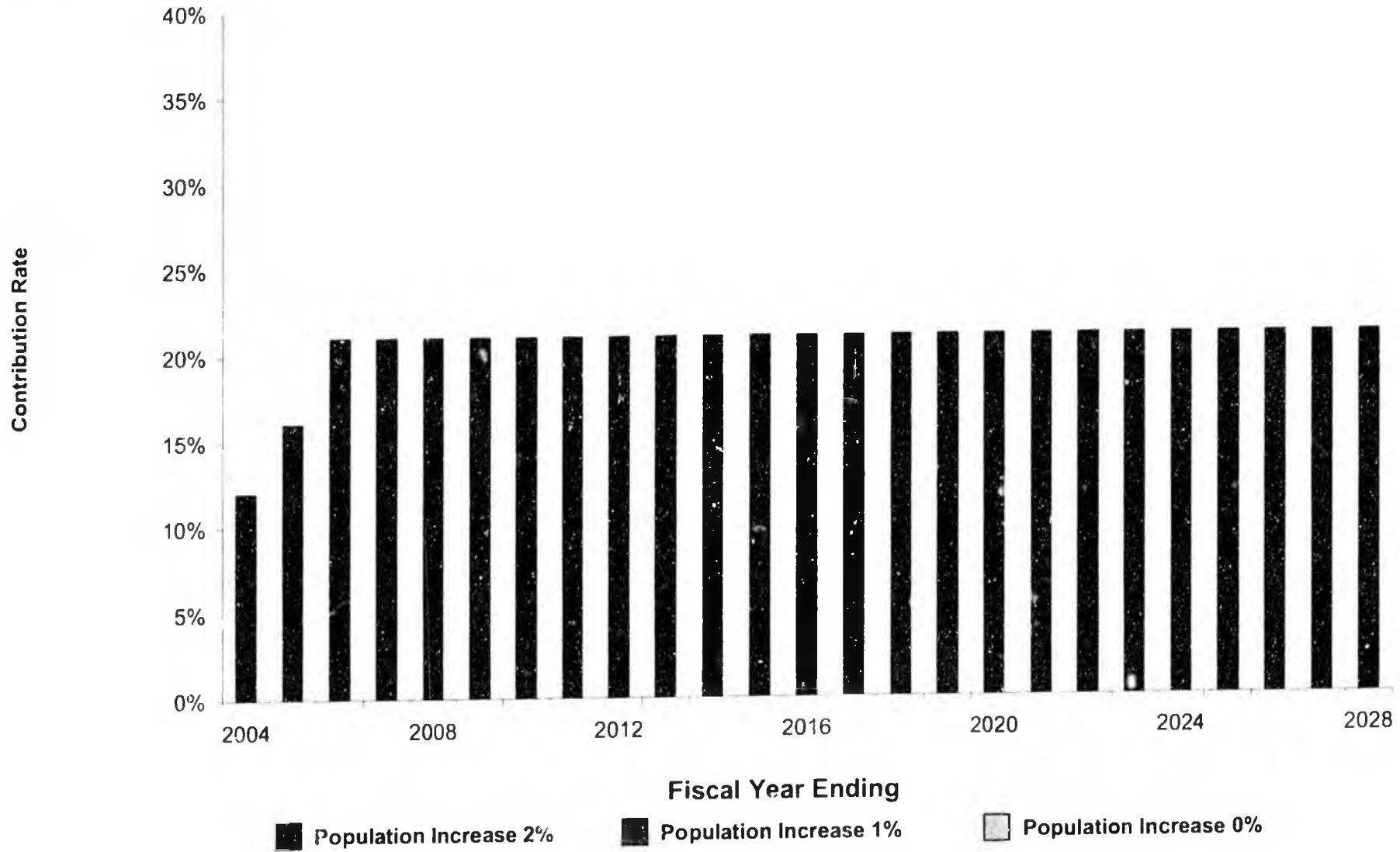




State of Alaska - TRS

Projections at FY06 Rate

Contribution Rates

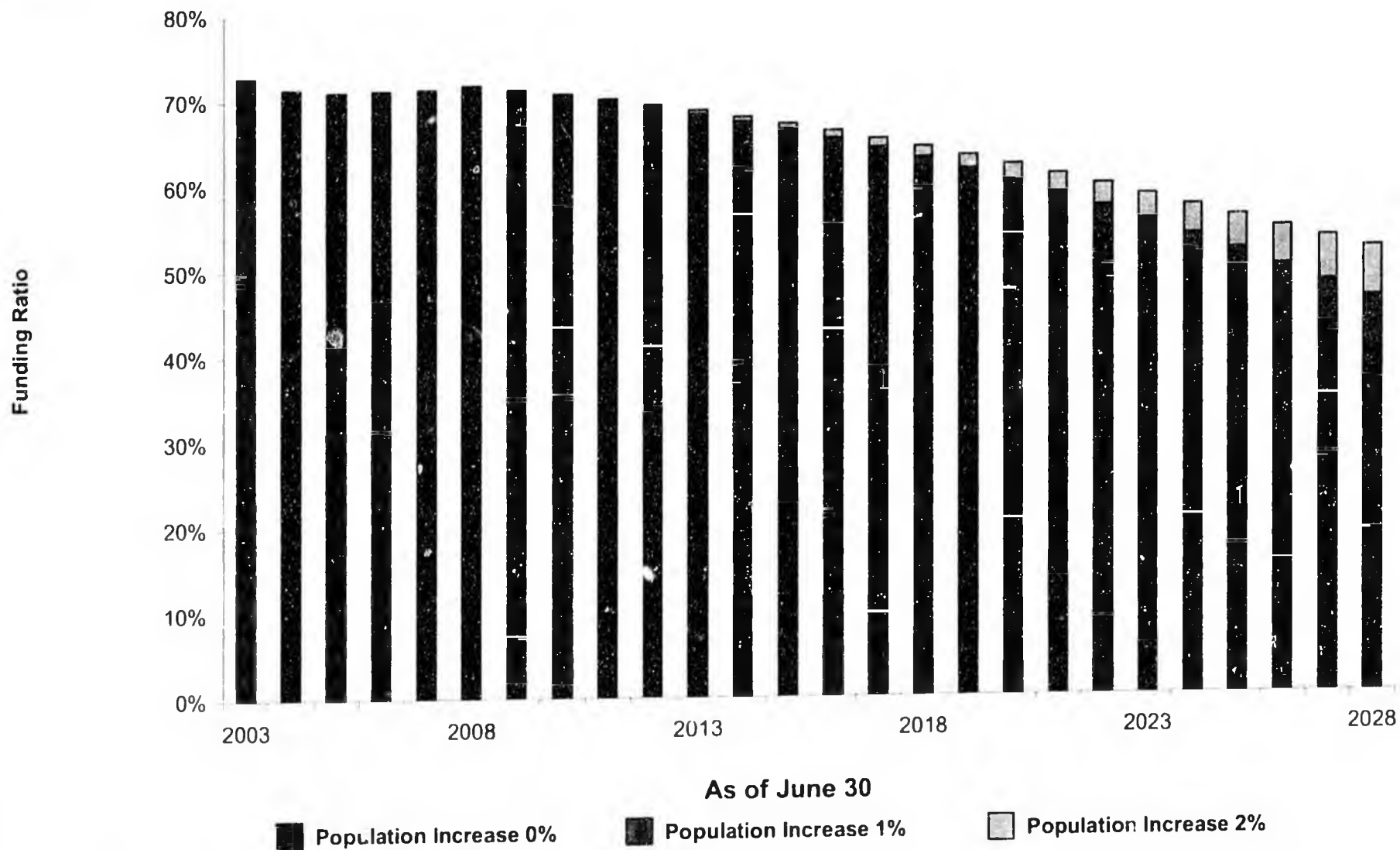




State of Alaska - PERS

Projections at FY06 Rate

Funding Ratios

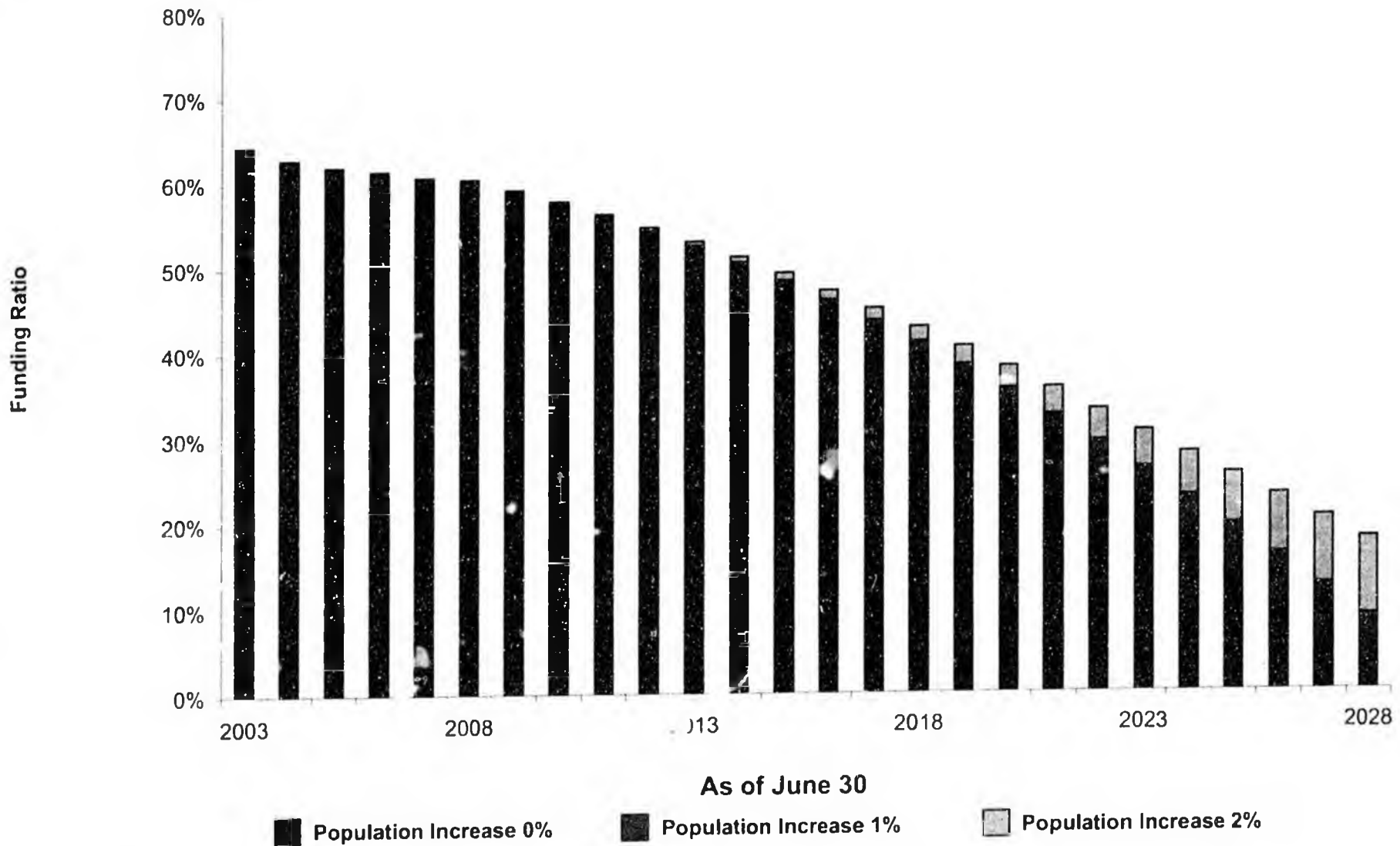




State of Alaska - TRS

Projections at FY06 Rate

Funding Ratios

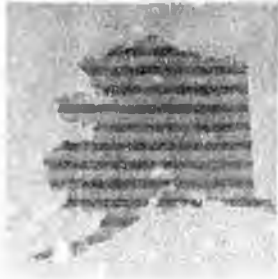




Financial Analysis

Liabilities and Costs

- Present value of future benefits (PVFB) – value in today's dollars of total benefits expected to be earned by the current System members
- Accrued liabilities (AL) – value in today's dollars of benefits expected to be paid based on service to-date (projecting pay)
- Normal cost (NC) – value of benefits that are expected to be earned in the coming fiscal year



Financial Analysis

Normal Cost Rate

- The employer normal cost rate is equal to the total normal cost rate, minus the member contribution rate.

	<u>TRS</u>	<u>PERS-PF</u>	<u>PERS-AE</u>
Normal cost rate			
Non-medical benefits	13.90%	13.34%	11.13%
Medical benefits	9.07%	6.05%	9.00%
Total	<u>22.97%</u>	<u>19.39%</u>	<u>20.13%</u>
Average member contribution rate	8.69%	7.50%	6.75%
Employer normal cost rate	14.28%	11.89%	13.38%

- If assumptions were always exactly met, the Systems would always be 100% funded by contributing the normal cost rate.



Financial Analysis

TRS

Liabilities and Actuarial Costs (in thousands)

Teachers	Current Population Current Program	Current Population Tier 2 Benefits
Accrued liability		
Actives	1,730,164	1,437,923
Terminated vested	189,052	189,052
Retirees & beneficiaries	3,888,663	3,888,663
Other	27,730	27,730
Total	5,835,609	5,543,368
Normal cost	122,346	108,423
Employer normal cost rate	14.28%	11.67%

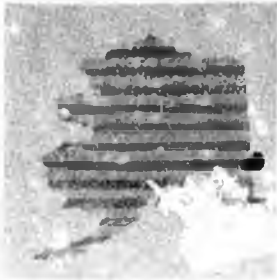


Financial Analysis

PERS

Liabilities and Actuarial Costs (in thousands)

Police & Fire	Current Population Current Program	Current Population Tier 3 Benefits
Accrued liability		
Actives	481,432	418,904
Terminated vested	45,879	45,879
Retirees & beneficiaries	1,049,940	1,049,940
Other	-	-
Total	1,577,251	1,514,723
Normal cost	31,161	28,806
Employer normal cost rate	11.89%	10.42%



Financial Analysis

PERS

Liabilities and Actuarial Costs (in thousands)

PERS Others	Current Population Current Program	Current Population Tier 3 Benefits
Accrued liability		
Actives	3,219,387	2,689,513
Terminated vested	1,258,426	1,258,426
Retirees & beneficiaries	4,467,517	4,467,517
Other	39,072	39,072
Total	8,984,402	8,454,528
Normal cost	261,665	227,535
Employer normal cost rate	13.38%	10.75%



Financial Analysis

Estimated Effect of Medicare Reform

- The estimated effect of Medicare reform is a reduction of about $\frac{3}{4}$ of 1% in the calculated contribution rate



Financial Analysis

- There may be some overall cost savings already in place
 - New tiers and medicare reform
- Looking at contribution rate alone is not sufficient
 - Each assumption is our best estimate based on information available at the time
 - Actual experience often deviates from our assumptions
 - Sound funding methods adjust for differences between assumed and actual experiences
 - Differences are spread, but they can accumulate, and significant cost volatility can result



Financial Analysis

Primary sources of cost volatility

- Investment returns
- Health care cost increases
- Longevity
- Other demographic factors
- Other economic factors



Financial Analysis

Range of Net Portfolio Returns

- Based on capital market assumptions provided by Mercer Investment Consulting, Inc.
- Not including additional return attributable to active management



Financial Analysis

Range of Net Portfolio Returns *(continued)*

Projection Horizon (years)		
	20	30
5%	3.15%	3.93%
10%	4.09%	4.70%
15%	4.72%	5.22%
20%	5.23%	5.63%
25%	5.66%	5.98%
30%	6.05%	6.30%
35%	6.41%	6.60%
40%	6.76%	6.88%
45%	7.09%	7.15%
50%	7.41%	7.41%
55%	7.74%	7.68%
60%	8.07%	7.95%
65%	8.41%	8.23%
70%	8.77%	8.52%
75%	9.16%	8.84%
80%	9.59%	9.19%
85%	10.10%	9.61%
90%	10.73%	10.13%
95%	11.68%	10.89%

Percentiles



Financial Analysis

Range of Net Portfolio Returns (*continued*)

- Current investment return (8.25%) is at about 63rd percentile (not including additional return attributable to active management)
- 25% chance that 20-year return will be less than 5.7%
- 25% chance that 20-year return will be more than 9.2%



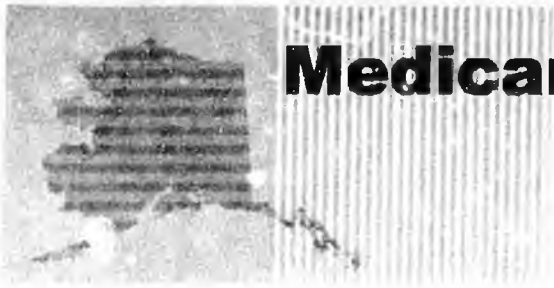
Financial Analysis

Ways of Reducing Risks

- Changes to investment policy
 - Reducing risk often means increasing overall cost
- Transfer all or a portion to members
 - Defined contribution approach
 - Alternative design



6. Medicare Reform and Implications



Medicare Reform and Implications

- Opportunity: Medicare Reform – Prescription Drugs
 - Reflections
- Opportunity: Health Savings Accounts
- Conclusion
 - Q&A



Medicare Reform and Implication

What's Driving Re-evaluation

Medicare Reform Overview

- Rx benefit is the most significant change to Medicare since its inception
 - Legislation is hailed as “historic breakthrough” by some, criticized as flawed and limited by others
 - Rx benefit provides significant savings opportunities for sponsors/retirees
 - Prescription drugs often account for 50% to 70+% of post-65 spend, and 35% to 45% of total retiree medical liability
- Legislation also helps those not eligible for Medicare with HSAs, effective January 1, 2004 (discussed later)
- Changes to the structure of Medicare
 - Medicare Advantage
 - Updated Medicare+Choice (becomes Medicare Advantage in 2006)
 - Regional and national plans; improved payments from Medicare



Medicare Reform and Implications

What's Driving Re-evaluation

Medicare Reform Overview *(continued)*

- New law allows 10 to 50 “regional” plans, plus a national plan
- Medicare Advantage plans can receive somewhat higher payments from Medicare than previously for Medicare+Choice, at least initially
- Competition between Medicare and private plans in 2010
 - Benefit offered by private plans
 - Government payments to private Prescription Drug Plans (PDPs)
 - Beneficiaries pay premium
- Discount prescription drug card effective spring 2004 until 2006
- Part B deductible will be increased to \$110 in 2005, then indexed
- Medicare Part B premiums will be tied to income
- While new law provides framework for change, it will take time for necessary details to emerge
- Opportunity to re-examine the entire retirement program

Prescription Drugs



Medicare Reform and Implications

Prescription Drugs

Rx savings opportunities

- New voluntary Part D benefit for retirees
- Federal subsidy for sponsors of qualified retiree health plans
 - Sponsor gets 28% tax-free subsidy for covered drug costs from \$250 to \$5,000 (indexed) per eligible participant
- Updated Medicare+Choice (becomes Medicare Advantage in 2006)
 - Regional and national plans; improved payments from Medicare
 - Despite past history, could be an option worth considering
- Currently, there are many accounting, regulatory, and market uncertainties



Medicare Reform and Implications

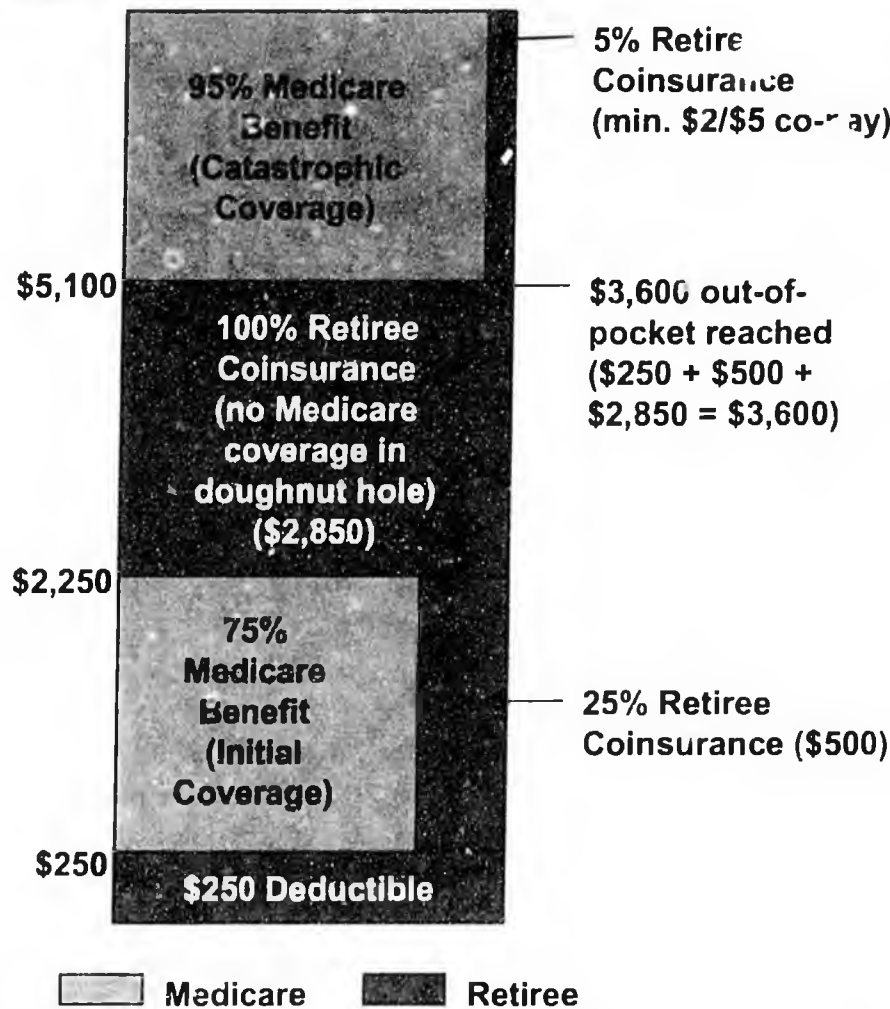
Prescription Drugs

Prescription Drug Benefit (Medicare Part D)

- Standard benefit design
 - Initial coverage: Deductible of \$250, enrollee coinsurance of 25% up to \$2,250
 - “Doughnut hole”: No coverage until enrollee reaches out-of-pocket limit of \$3,600
 - Amounts paid by third parties (e.g., plan sponsors, individual coverage, etc.) do not count towards out-of-pocket limit
 - Catastrophic coverage: Above the out-of-pocket limit, enrollee coinsurance is the greater of 5% or a fixed co-pay (\$2 generic or \$5 brand, indexed)
 - Amounts are indexed

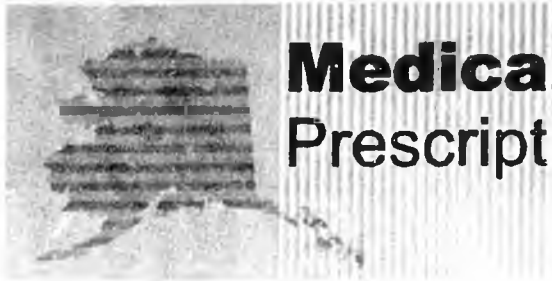
Medicare Reform and Implications

Prescription Drugs



Amounts paid by third parties do not count towards out-of-pocket limits

- These 2006 covered expense thresholds will increase as drug expenses increase
- For a beneficiary with no other coverage, the breakeven point is \$810 in drug covered expenses
 - 50% to 60% of retirees are expected to have over \$810 in 2006
- The Medicare benefit can be provided under various actuarially equivalent designs
- Medicare Part D benefits are primary, employer plan secondary, if retiree enrolls in Part D



Medicare Reform and Implications

Prescription Drugs

Prescription Drug Benefit (Medicare Part D) *(continued)*

- Cost sharing
 - Member pays roughly one-quarter of Medicare Part D premium (estimated \$35 PMPM in 2006)
 - Amounts indexed
 - Subsidies for low income seniors
 - Premiums may be increased for “late” enrollees
 - Premiums may be deducted from Social Security benefits
 - Medicare Part D benefits are primary
 - Sponsor’s plan secondary if retiree enrolls in Part D



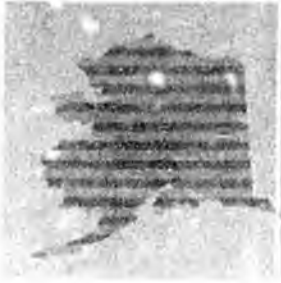
Medicare Reform and Implications

Prescription Drugs

Subsidy for Retiree Health Plans

- Sponsor gets 28% subsidy of eligible drug costs
 - Covered drug costs from \$250 to \$5,000 (indexed) per eligible participant
 - Subsidy only for participants that do not enroll in either Part D or Medicare Advantage drug coverage
 - Subsidy is not taxed to plan sponsor
 - Recordkeeping and documentation requirements, but no details yet
 - FASB requires immediate recognition of change in accounting for retiree medical benefits under FAS106

- Qualification and actuarial equivalence
 - Currently, no regulatory guidance
 - Expect guidance in late summer 2004



Medicare Reform and Implications

Prescription Drugs

New Employer Options for Prescription Drug Coverage

- Sponsor a qualified plan; receive government subsidy
- Integrate plan sponsor benefits with Medicare Part D
- Negotiate with a Medicare Advantage plan
- Maximize savings: significantly reduce or terminate employer-sponsored coverage



Medicare Reform and Implications

Prescription Drugs

Employer Options: 28% Government Subsidy

- Subsidy: 28% of individual covered expenses between \$250 and \$5,000
 - Company plan must be at least actuarially equivalent to Part D
 - Subsidy paid to the employer on a tax-free basis
- Options
 - Plan design options with subsidy
 - Using current design (if at least actuarially equivalent)
 - Using different design (lower or higher benefits) that is at least actuarially equivalent with Part D
- Advantages
 - Could be no change for beneficiaries
 - No immediate communication requirements
 - May be only option for some groups



Medicare Reform and Implications

Prescription Drugs

Employer Options: 28% Government Subsidy *(continued)*

- Disadvantages
 - Requires annual certification
 - Administrative and reporting requirements
 - Significant unknowns

- Illustrative Impact/Considerations

	Paid Claim/Deduction	Tax Reduction ¹	Subsidy	After-Tax
Current	\$1.00	(\$0.40)	\$0.00	\$0.60
With Subsidy ²	\$1.00	(\$0.40)	(\$0.25)	\$0.35

¹Assumes 40% tax bracket; no "sharing".

²Assumes 28% subsidy is equal to 25% of paid claims; no retiree contributions



Medicare Reform and Implications

Prescription Drugs

Employer options: Offer a plan that integrates with or wraps around Medicare

■ Design options

- Reduce plan benefits by amounts payable under Part D (whether or not retirees are enrolled in Part D)
- Fill in gaps in Part D
- Subsidize all, some or none of Part D premium
- Shift catastrophic drug liability to Medicare

■ Considerations

- Must amend plan and communicate to receive funding relief
- Doughnut hole increases in size
- Potentially complex administration

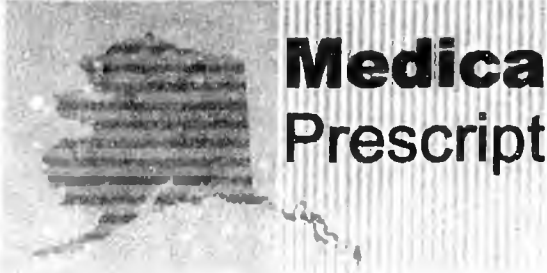


Medicare Reform and Implications

Prescription Drugs

Employer options: Offer a plan that integrates with or wraps around Medicare *(continued)*

- Advantages
 - No annual certification needed
 - Some will save more than with the subsidy option
- Disadvantages
 - Must amend plan and communicate to receive opportunity relief
 - Doughnut hole increases in size
 - Retirees may have to pay Medicare Part D premium unless plan sponsor chooses to subsidize premium
 - Mechanics of integration with Medicare problematic



Medicare Reform and Implications

Prescription Drugs

Medicare Advantage Plan

- If health plans offer national plan or regional plans at reasonable cost, Medicare Advantage could be a viable alternative for some plan sponsors
 - Plans maintain “managed care”
 - Benefits could potentially fill prescription drug “doughnut hole”
- Past history is problematic: Growth in enrollment, followed by tight controls on reimbursement by Medicare, then reductions in enrollment With or without sponsor subsidy of Medicare Advantage premium
- Despite past history, could be an option worth considering



Medicare Reform and Implications

Prescription Drugs

Employer options: Maximize savings – significantly reduce or terminate coverage

- 2006 is a logical effective date
- Part D (partially) fills in biggest Medicare coverage gap
- Plan Sponsor Options
 - Terminate Rx coverage completely
 - Reimburse all, a portion or none of Part D premium (and/or Part B premium)
 - Voucher for medical expenses (not necessarily a significant reduction)
 - Only cover 5% catastrophic level
- Considerations
 - Retirees may not be able to purchase supplemental Rx coverage
 - PR/employee morale issues
 - Potential ADEA issue resolution – EEOC Exemption

Medicare Reform and Implications

Prescription Drugs

Illustrative integration/subsidy comparison

	Average Employer PMPY	Part D Premium Reimbursement	Plan Cost Pre-Tax	Tax Deduction*	Plan Cost Post-Tax	Subsidy	Employer Cost Post-Tax	Percent of Current
Current Plan	\$2,000	NA	\$2,000	(\$800)	\$1,200	NA	\$1,200	100%
Current Plan with Subsidy	\$2,000	NA	\$2,000	(\$800)	\$1,200	(\$500)	\$700	58%
Integrate with Part D** (retiree pays Part D premium)	\$1,000	\$0	\$1,000	(\$400)	\$600	\$0	\$600	50%
Integrate with Part D** (employer pays Part D premium)	\$1,000	\$420	\$1,420	(\$568)	\$852	\$0	\$852	71%

* Assumes 40% tax bracket

**Assumes Part D covers 50% of employer cost and no retiree contributions required

Reflections...



Medicare Reform and Implications

Reflections...

**While quick action possibly needed
for accounting, more time likely
warranted for design details**

- While many plan sponsors will see a significant reduction in cash costs and funding requirements, some will not
- No one approach is the most advantageous for every group
- For details of 2006 plan design, don't rush to judgment
 - Look at emerging Prescription Drug Plan (PDP) designs for equivalent Part D plans
 - New ideas, information, and designs will emerge
 - Some opportunities may be better than what is known now
 - New Medicare Advantage plans may create additional options
 - May want to allow retirees to waive coverage and re-enter at a later date



Medicare Reform and Implications

Reflections...

- How much good news depends on
 - The plan you currently have, including
 - Demographics of plan population
 - Rx utilization of plan population
 - The option you select and any changes you make
 - How Medicare reform is reflected in plan sponsors' financials
 - How various details are resolved through regulation and the courts
 - Plan Sponsor tax situation

Medicare Reform and Implications

Reflections...

Savings for Those with No Coverage Other than Medicare

Out-of-Pocket (OOP) for Drugs After Medicare Reform				Cost and Savings	
Claim Amount*	Medicare Payment	Net Retiree-Claims Payment	Part D Premium	Total Cost After Reform	Savings from Reform**
\$0	\$0	\$0	\$420	\$420	(\$420)
Deductible → \$250	\$0	\$250	\$420	\$670	(\$420)
\$500	\$188	\$313	\$420	\$733	(\$233)
Break-even → \$810	\$420	\$390	\$420	\$810	\$0
\$1,000	\$563	\$438	\$420	\$858	\$143
Beginning of "doughnut hole" → \$2,250	\$1,500	\$750	\$420	\$1,170	\$1,080
\$4,000	\$1,500	\$2,500	\$420	\$2,920	\$1,080
End of "doughnut hole" → \$5,100	\$1,500	\$3,600	\$420	\$4,020	\$1,080
\$10,000	\$6,155	\$3,845	\$420	\$4,265	\$5,735
\$20,000	\$15,655	\$4,345	\$420	\$4,765	\$15,235

*Total cost prior to Medicare Reform with no other coverage

**Claims amount less Total Cost after Medicare Reform

Health Savings Accounts

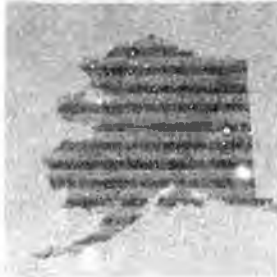


Medicare Reform and Implications

Health Savings Accounts

Overview

- Tax favored account to pay for retiree medical expense
- Carry forward provision (no “use it or lose it” provision)
 - Unused balances are carried into future years, portable, non-forfeitable
- Account Requirement
 - HSAs must be held in an employee-owned trust or custodial account for each beneficiary
 - The HSA is owned by the individual, not the plan sponsor
 - May be established with or without plan sponsor funding (individual market will likely emerge)
- Qualified Trustees and Custodians -- Ins Co, Banks, any approved by IRS, any who already admin 401(k)



Medicare Reform and Implications

Health Savings Accounts

Eligibility Requirements

- Individuals enrolled in a high-deductible health plan are eligible
- Not covered by another health plan that is not a HDHP (except for permitted coverage such as dental, vision, workers compensation and specific diseases)
- Not eligible to be claimed as a dependent on another's tax return
- Not eligible for Medicare
- Individuals covered under a health FSA or Health Reimbursement Arrangement (HRA) can qualify for an HSA under limited circumstances



Medicare Reform and Implications

Health Savings Accounts

High Deductible Health Plan

- Employee must have plan with deductible of \$1,000 or more in 2006 (\$2,000 for family)
 - Plan out-of-pocket maximum cannot be greater than \$5,000 (\$10,000 family)
 - Okay if plan imposes no deductible for preventive care or has higher OOP limit for out-of-network benefits
- Deductible OOP and contribution maximum are indexed annually
- Preventative care covered at 100%
- Rx can be carved out for 2004 and 2005, then subject to deductible



Medicare Reform and Implications

Health Savings Accounts

Contributions – Limited

- Sponsors and employees can contribute (within limits) to the HSA
 - Maximum aggregate contribution is the lesser of the deductible and \$2,600 (\$5,150 family)
 - Contributions cannot be made for individuals covered by Medicare
 - If sponsor contributes to HSAs, then comparable contributions must be made for all employees with comparable coverage
- Contributions are tax deductible – without itemizing
- Nonforeitable and portable
- Catch up contributions for 55+, \$500 in 2004 to \$1000 in 2009
- Transfers from Archer MSA or other HSA only, no FSA or HRAs



Medicare Reform and Implications

Health Savings Accounts

Distributions – Flexible

- Does not require HDHP to get money out, only to put in
- Tax free for qualified medical expenses
- Qualified expenses not defined by sponsor or trustee, Sec 213 IRC
- Premium payments usually not allowed – except COBRA, unemployed, after 65 (no Medigap), LTC
- All other distributions permitted but taxable + 10% penalty (unless 65)



Medicare Reform and Implications

Health Savings Accounts

Triple Tax Favored (contributions, earnings, distributions)

- Subject to limits
- Contributions (subject to limits)
- Distributions
 - Distributions for qualified medical expenses are tax-free
 - Other distributions are included in income and subject to 10% penalty tax (no penalty if eligible for Medicare)
 - Special rules for distributions upon death and divorce
- Earnings
- Only approach where contribution, investment earnings and withdrawals for health-related expenses are all free from taxation



Medicare Reform and Implications

Health Savings Accounts

Active Design Options

- Do nothing
- Offer an HSA-compliant high deductible health plan (HDHP)
 - Employees have option of setting up HSA on their own
 - No cost to employer for HSA
- Offer HDHP and sponsor an HSA for eligible employees
 - Employees can contribute through employer or set up HSA on their own
 - Administrative cost for employer unless employees pay cost



Medicare Reform and Implications

Health Savings Accounts

Active Design Options

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- Offer an HSA-compliant high deductible health plan (HDHP)
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 - Employees can contribute through employer or set up HSA on their own
 - Administrative cost for employer unless employees pay cost



Medicare Reform and Implications

Health Savings Accounts

Active Design Options *(continued)*

- Offer HDHP, sponsor HSA and make contributions to the HSA
 - Employer plus employee contributions cannot exceed limits on contribution
 - Employer pays HSA cost plus administrative cost (unless paid by employees)
 - Funding HSAs by employer is not a long-term liability but has a cash cost
- Convert existing CDHP from HRA to HSA



Medicare Reform and Implications

Health Savings Accounts

HSA Retiree Medical Design Opportunities

- Provides pre-funding opportunity (see appendix for details)
- Could lead to fundamental shift to defined dollar structure
- Reduces employer's future PRM expenditures
- Advantages
 - Provides employees with an efficient vehicle to save for retiree medical expense
 - Increases flexibility for employee/retiree
 - e.g., HSA funds may be used for LTC
 - Encourages enrollment in HDHP as active employees
 - Lower plan costs
 - Possible pathway to consumerism



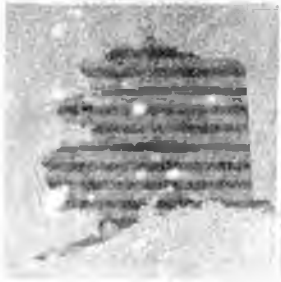
Medicare Reform and Implications

Health Savings Accounts

HSAs Retiree Medical Design Opportunities *(continued)*

■ Disadvantages

- Greater employee communication needs
- Potentially negative PR because of inability of employees to afford HDHP
- Currently, inadequate markets for actives and pre-65 insured medical products, but robust market for Medicare eligibles
- Defined dollar contribution will prove inadequate for those who don't pre-fund
- Even for those who pre-fund, possibility that poor choices by employees will leave them with insufficient retiree medical funds



Medicare Reform and Implications

Health Savings Accounts

Plan Sponsor Considerations

- Fit with sponsor culture and benefit strategy
 - Consistent w/ active strategy
 - Ability to change retiree medical promises and strategy
 - Consistency w/ total retirement compensation strategy (i.e. defined contribution vs. defined benefit – employee responsibility, cap costs...)
- High Deductible Health Plan impact on current design
- HSA contribution strategy
 - None, fixed by tier, vary by employment status
 - Matching not clear
 - Watch for discrimination



Medicare Reform and Implications

Health Savings Accounts

Plan Sponsor Considerations *(continued)*

- Impact on total medical plan cost
 - Additional admin costs
 - Medical management / negotiated provider costs
 - Potential adverse selection if HDHP not full replacement
- Perception by employees
- Communication
 - Very important to get employee buy in
 - Educate to reduce anti selection


HSA Illustrations



Medicare Reform and Implications

HSA Illustrations

- The following graphs are for only illustrative purposes
- Projections are based on reasonable assumptions for "typical" plans
- Assumes the Medicare Rx benefit is effective
- Illustrations reflect only single employees/retirees
- All dollar amounts are shown in future dollars
- Funds Needed at Retirement Age (FNARA) reflect an actuarial present value and include:
 - Employer plan contributions
 - Utilization costs (e.g., deductibles, coinsurance)
 - Medicare Part B and Part D premiums (assumes employer does not reimburse any Medicare premiums)



Medicare Reform and Implications

HSA Illustrations

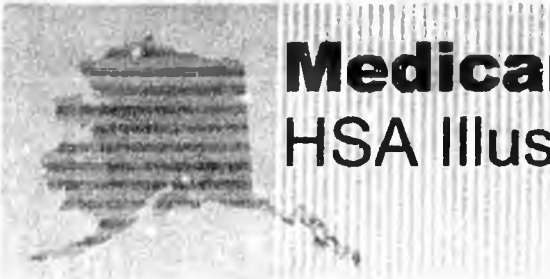
- FNARAs are shown on a post-tax basis. The additional tax advantages of HSA are not illustrated
- HSA Accumulation:
 - Assumes contributions equal the maximum amount allowed in each year, based on the assumed deductible
 - The minimum deductible equals \$1,000 (indexed) and the maximum deductible equals \$2,600 (indexed)
 - Maximum catch-up contributions are included in some scenarios
 - Assumes no employer HSA contributions
 - "No Outflow" scenarios imply that the participant pays all active medical costs from outside the HSA. Other scenarios reflect deterministic outflow every five years and imply all other active employee medical costs are paid outside the HSA



Medicare Reform and Implications

HSA Illustrations

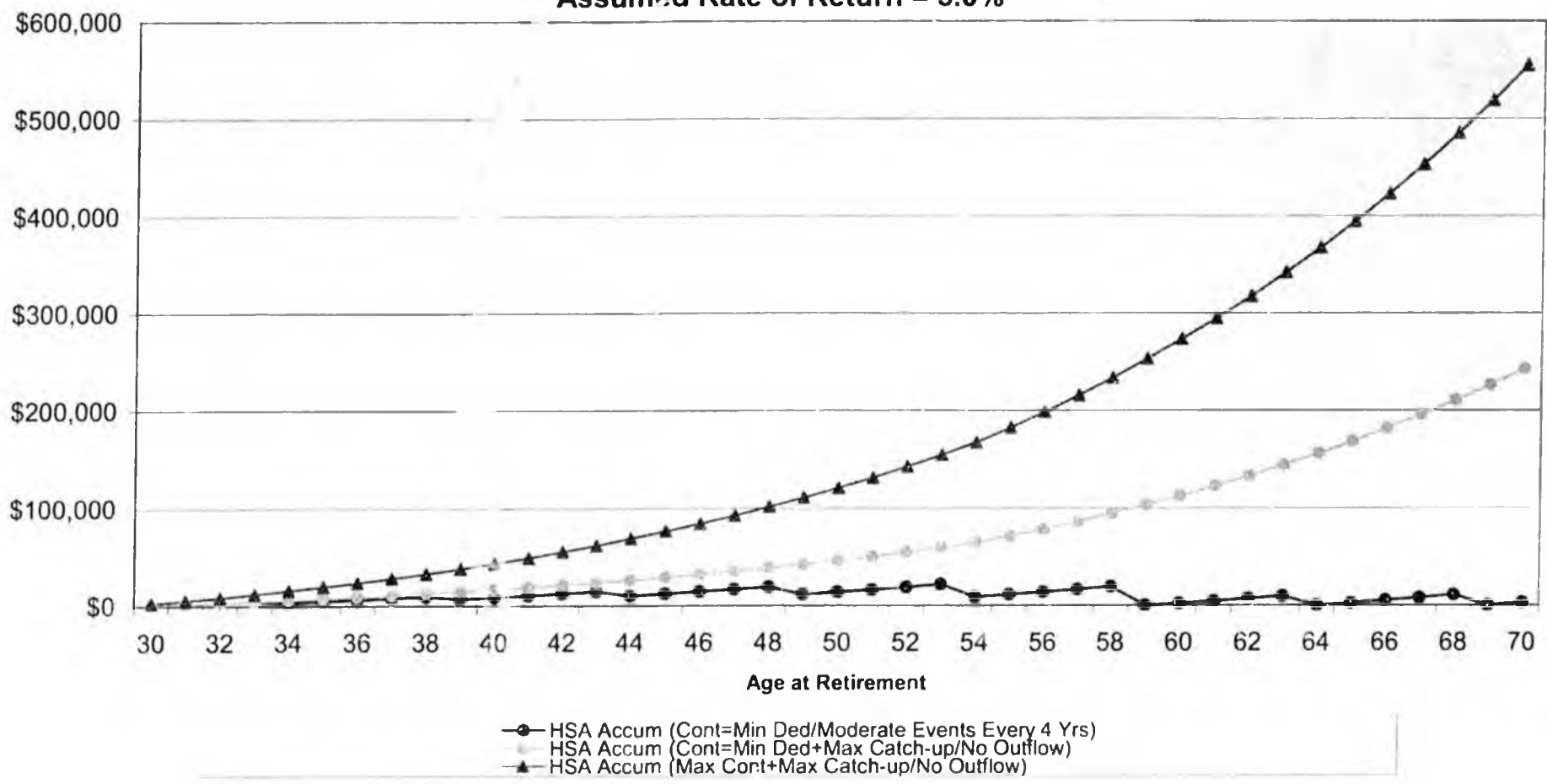
- Employees are assumed to participate in HDHPs in all years until retirement. Retirees are assumed to participate in "typical" retiree plans
- Key Assumptions
 - Interest Rate: 5.0% or 8.0% (as noted)
 - Typical 2004 pre-65 employer plan rate (at age 65): \$7,462
 - Typical 2004 post-65 employer plan rate (at age 65): \$2,175 (before the new Medicare prescription drug benefit); \$915 (after the new Medicare prescription drug benefit)
 - Initial trend rates are assumed to be between 11% and 12% and step-down to 5% in 8 years
 - The post-65 employer plan uses the carve-out Medicare integration method
 - HDHP and related HSA threshold amounts are indexed at CPI
 - Retiree contributions under employer plans: 30%
 - Medicare Part B and Part D premium indexing
 - Beginning of year payments



Medicare Reform and Implications

HSA Illustrations

HSA Accumulation Under Various Savings Scenarios
2004 Age = 30
Assumed Rate of Return = 5.0%

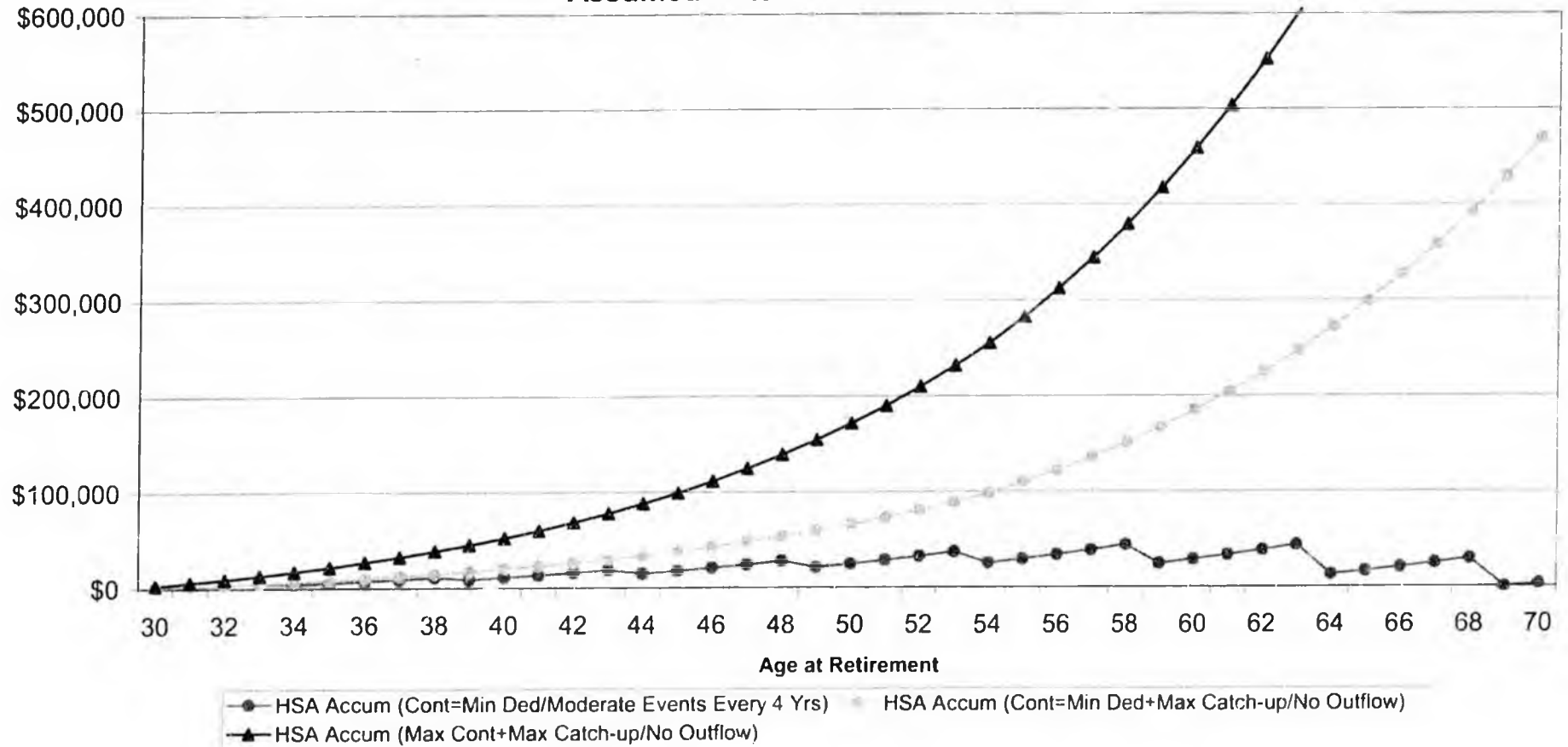




Medicare Reform and Implications

HSA Illustrations

HSA Accumulation Under Various Savings Scenarios
2004 Age = 30
Assumed Rate of Return = 8.0%





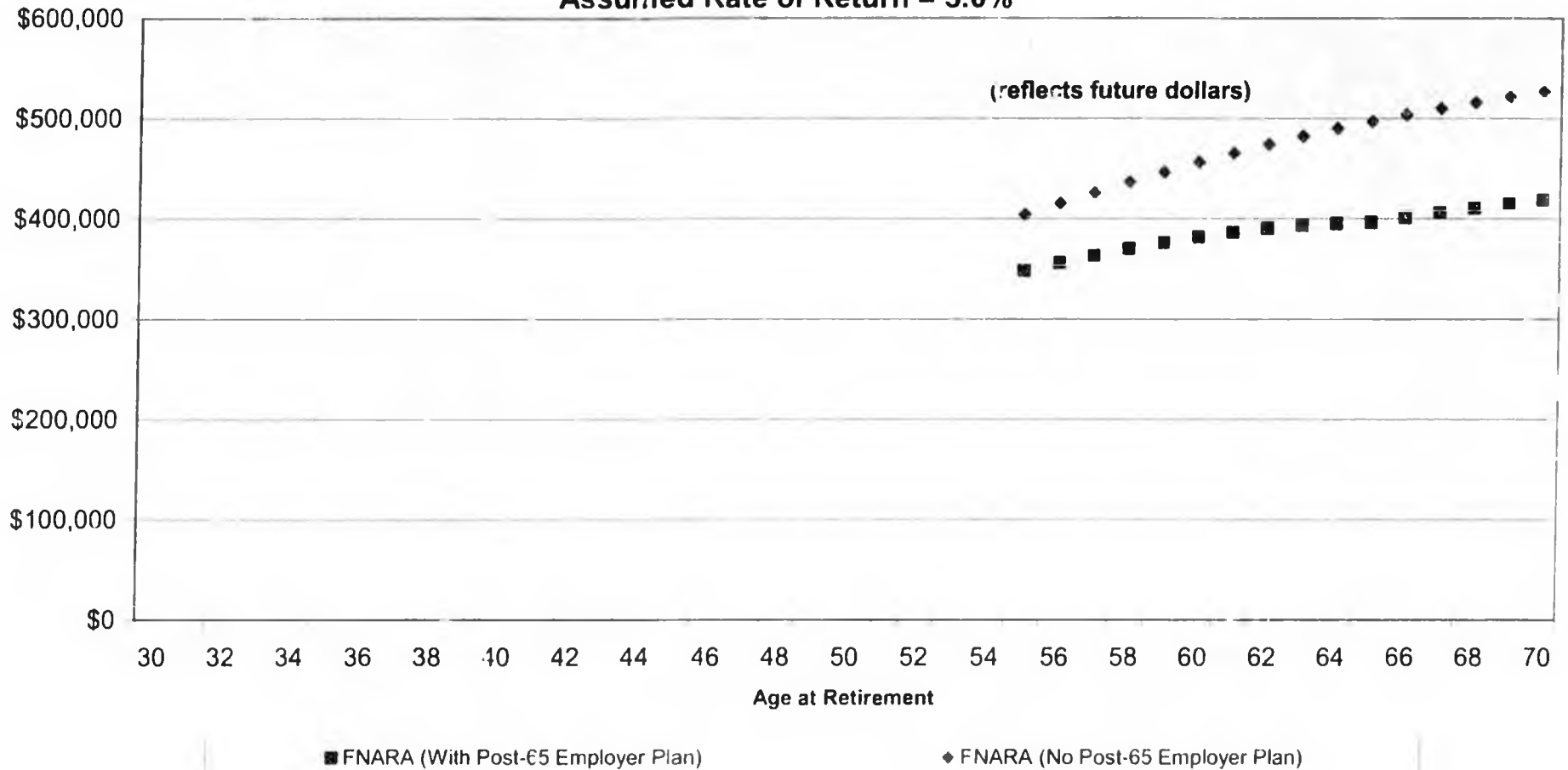
Medicare Reform and Implications

HSA Illustrations

Funds Needed at Retirement Age (FNARA) With and Without Post-65 Employer Coverage

2004 Age = 30

Assumed Rate of Return = 5.0%

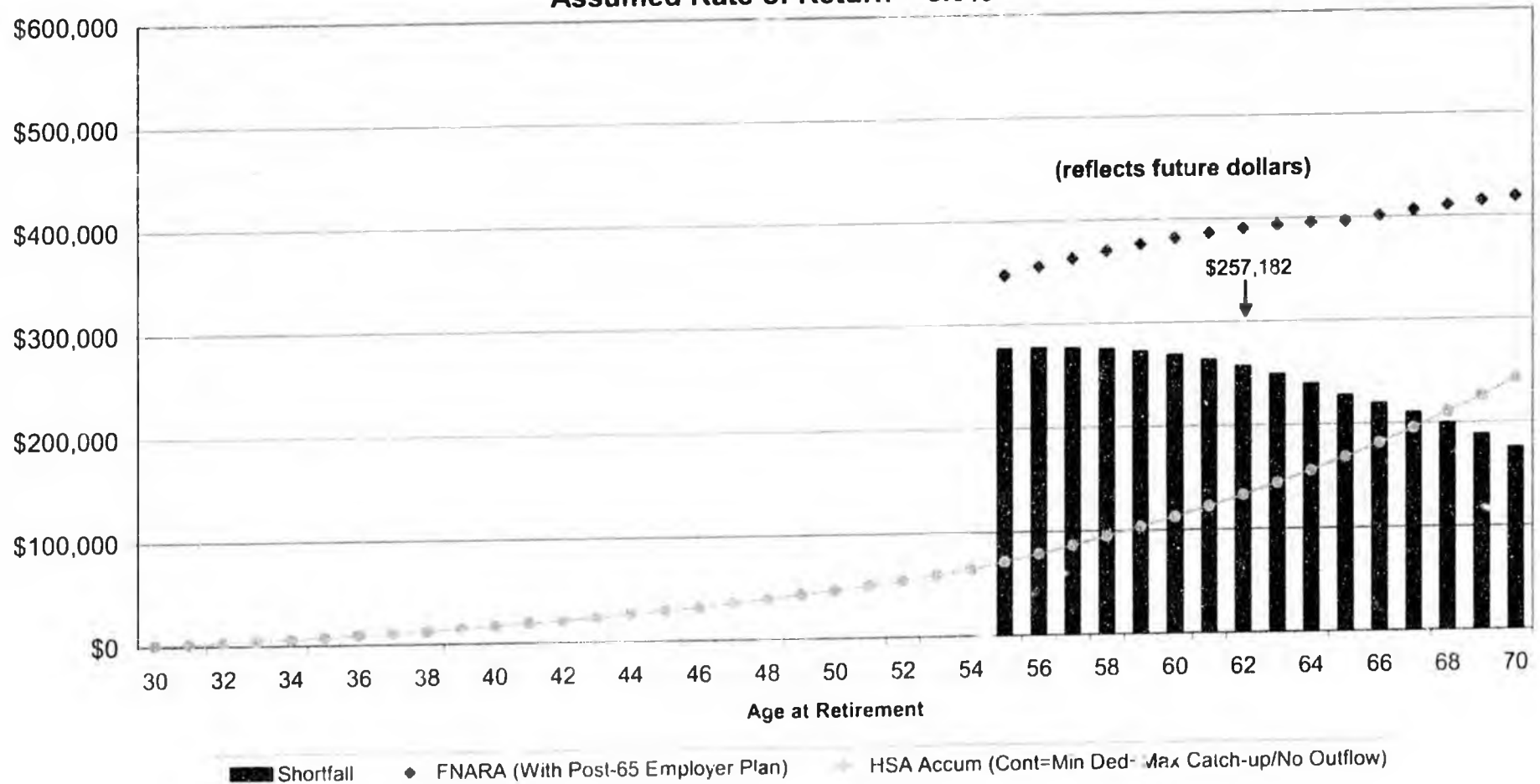




Medicare Reform and Implications

HSA Illustrations

Shortfall at Retirement Age - With Post-65 Employer Plan
2004 Age = 30
Assumed Rate of Return = 5.0%

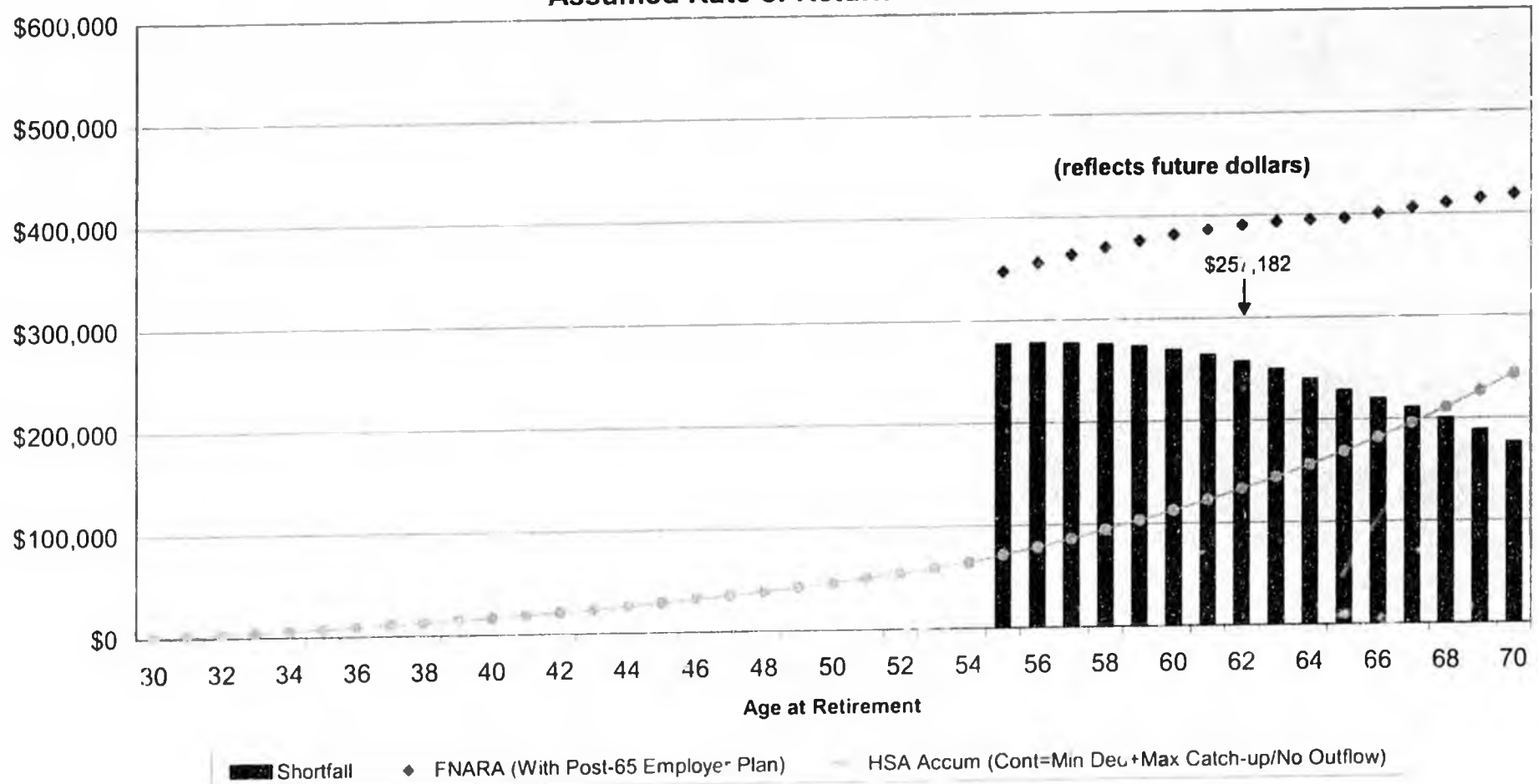




Medicare Reform and Implications

HSA Illustrations

Shortfall at Retirement Age - With Post-65 Employer Plan
2004 Age = 30
Assumed Rate of Return = 5.0%

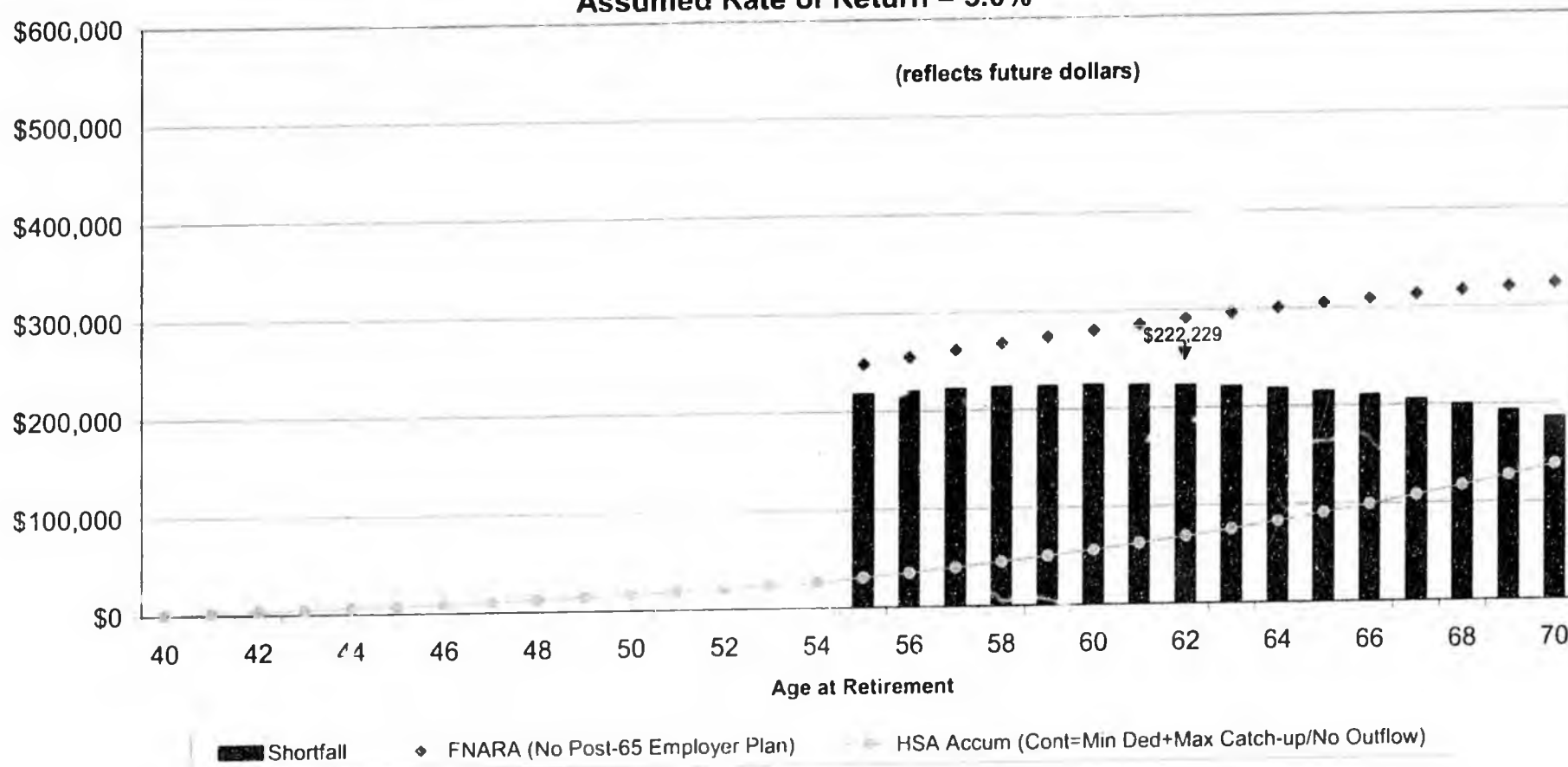




Medicare Reform and Implications

HSA Illustrations

Shortfall at Retirement Age - No Post-65 Employer Plan
2004 Age = 40
Assumed Rate of Return = 5.0%

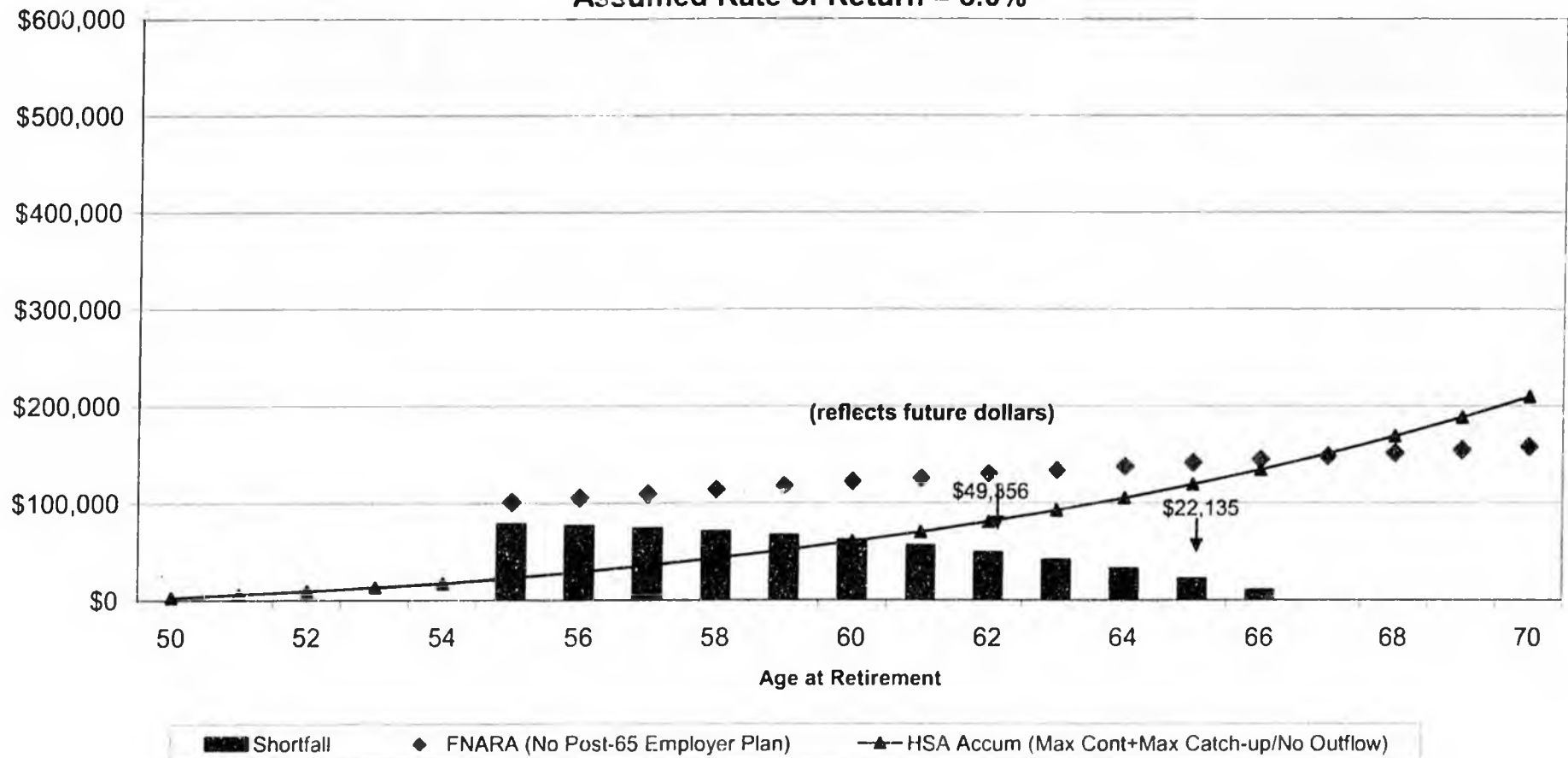




Medicare Reform and Implications

HSA Illustrations

Shortfall at Retirement Age - No Post-65 Employer Plan
2004 Age = 50
Assumed Rate of Return = 8.0%



Medicare Reform and Implications

HSAs, HRAs, Health FSAs

Comparison of tax-advantaged healthcare accounts

	Health Savings Account (HSA)	Health Reimbursement Account (HRA)	Flexible Spending Account (FSA)
Account requirements	Funds must be held in trust or custodial account	No requirement; often unfunded	No requirement; often unfunded
Qualifying expenses	Miscellaneous IRC 213(d) expenses, limited health premium reimbursements*	Miscellaneous IRC 213(d) expenses, unlimited premium reimbursements, subject to plan design	Miscellaneous IRC 213(d) expenses, no health premium reimbursements
Non-qualified withdrawals	Yes, but taxable, plus 10% penalty. No penalty after age 65, disability, or death (no penalty or tax after death if HSA goes to spouse)	Not allowed	Not allowed
Rollover of unused funds	Unused funds roll over indefinitely	Allowed, although employer can establish limits	Not allowed
Nonforfeitable	Yes and fully portable, can take to new employer	No, but COBRA rights apply	No, but limited COBRA rights apply

*COBRA, long-term care insurance and premiums for account holders at least 65 or receiving unemployment compensation

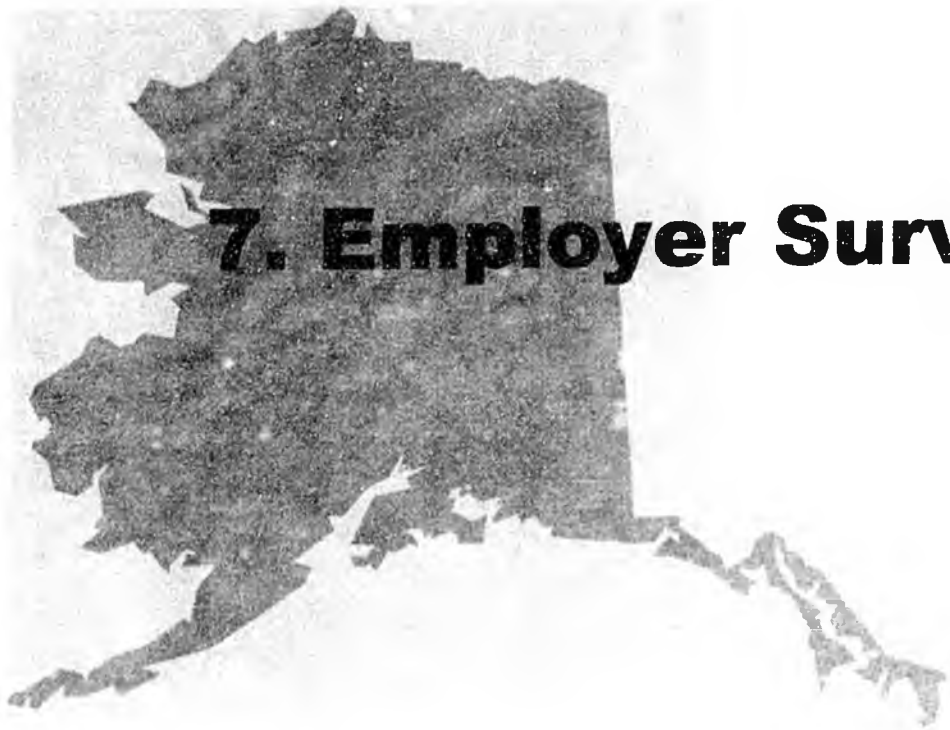


Medicare Reform and Implications

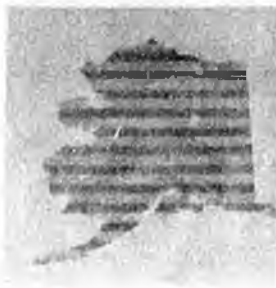
HSAs, HRAs, Health FSAs

Comparison of tax-advantaged healthcare accounts (continued)

	Health Savings Account (HSA)	Health Reimbursement Account (HRA)	Flexible Spending Account (FSA)
Eligibility	Individuals (employees) with high deductible plan (HDHP)	Employees whose employers make available	Employees whose employers make available
Health insurance requirement	Qualified high deductible health plan required	None, although employer typically requires high deductible coverage	None
Contributions - Source	Employer, employee, or both	Employer only	Employer, employee or both
Taxability of employee contributions	Tax-free	Employee contribution not allowed	Tax-free
Taxability of employer contributions	Tax-free to employee; tax deductible to employer	Tax-free to employee; tax deductible to employer	Tax-free to employee; tax deductible to employer
Annual contribution limits (employee+employer)	Lesser of 100% of deductible or fixed amount (established by law)	None legally required, employer sets its contribution amounts	None legally required, employer sets employee contribution limits



7. Employer Survey Results



Employer Survey – TRS

Key

The following pages illustrate the responses to the employer survey sent to all TRS employers. In total, 36 employers responded. TRS represents employers of various sizes. As a way to show the five largest employers' responses (of those who responded), we have included the letters A – E on the charts to represent how they answered. The employers have been assigned the following letters:

<u>Employer</u>	<u># Active Employees</u>	<u>Code Letter</u>
Anchorage SD	3,464	A
Fairbanks North Star Borough SD	988	B
Matanuska-Susitna Borough SD	936	C
Kenai Peninsula Borough SD	723	D
Juneau Bureau SD	372	E



Employer Survey – TRS

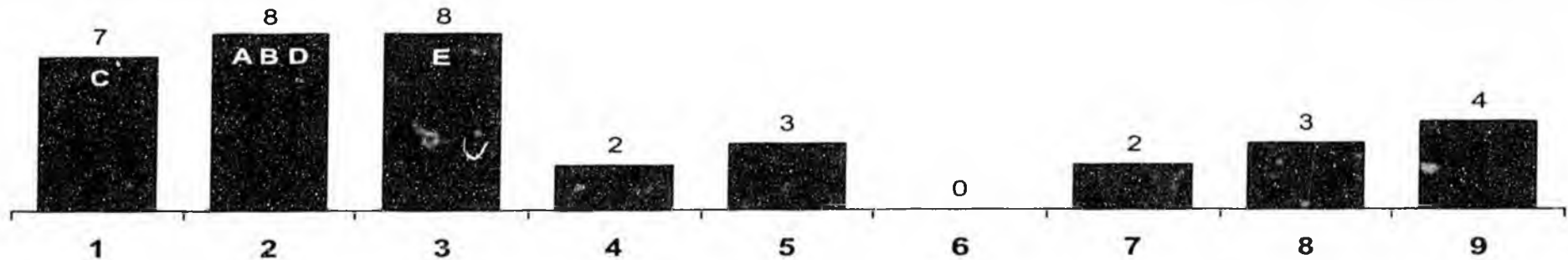
1. Long-Service Employees

Importance



Plan should favor long-service employees

Plan should not distinguish on account of length of service



Key Comments

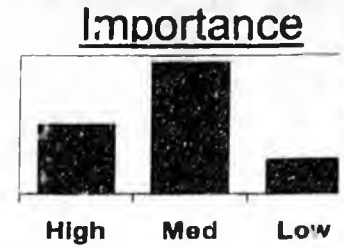
- *Incentives to reduce teacher turnover always help.*
- *Anything that keeps employees, saves time in recruitment, hiring, and training.*
- *Retaining quality employees is far more important. Employees for hire consider immediate compensation, not retirement. Veteran employees deserve rewards.*

Key Implications

- *Rewarding long-service employees supports career employment.*
- *Uniform allocation can be an important attraction tool, but allows dollars to "walk out the door" when short-service employees leave the System.*

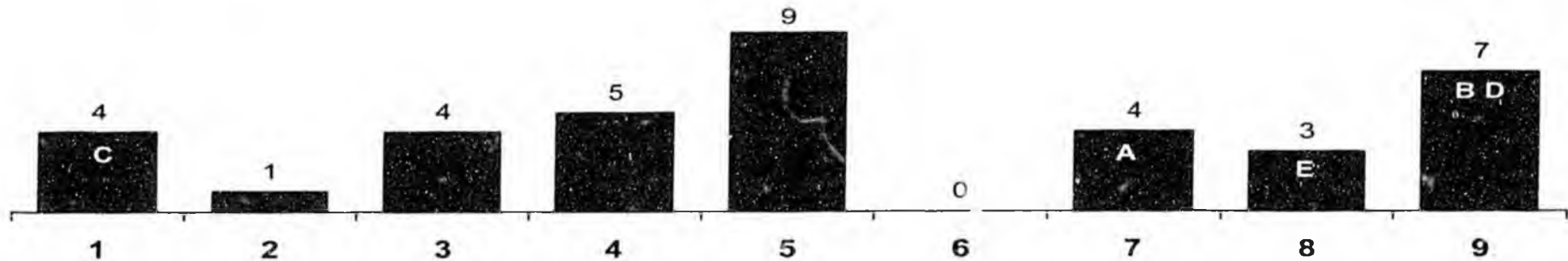
Employer Survey – TRS

2. Older Employees



Plan should favor older employees

Plan should not distinguish on account of age

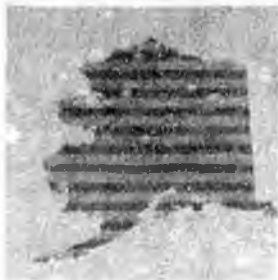


Key Comments

- Length of service should be more important than age in determining retirement benefits.
- Inflation and decreases in salary raises are historical in Alaska. Young need to see opportunity in this state.
- Equal balance regardless of age.

Key Implications

- Rewarding older employees supports career employment.
- Uniform allocation can be an important attraction tool, but allows dollars to “walk out the door” when younger members leave the System.



Employer Survey - TRS

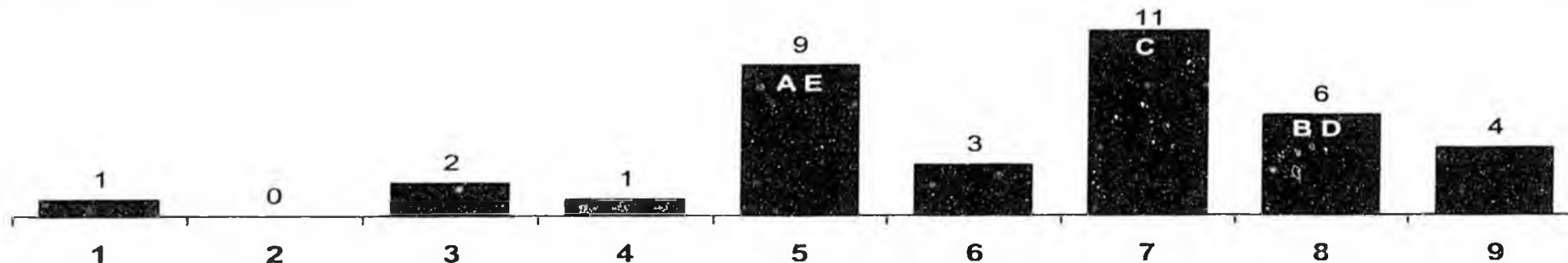
3. Benefits Build Up

Importance



Benefits should build up quickly, so "early leavers" have good benefits

Benefits should build up slowly, so "early leavers" have little



Key Comments

- *In order to save costs in a defined benefit plan, benefits should accrue at a constant rate rather than increase after so many years of service.*
- *The System should promote an optimum age or service time that encourages turnover of the workforce without loss of good experience while providing a decent retirement.*

Key Implications

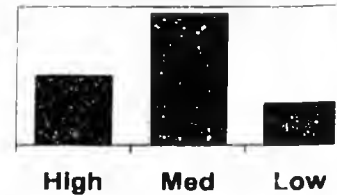
- *Does not affect career employees who stay until retirement.*
- *Uniform allocation can be an important attraction tool, but allows dollars to "walk out the door" when younger members leave the System.*



Employer Survey - TRS

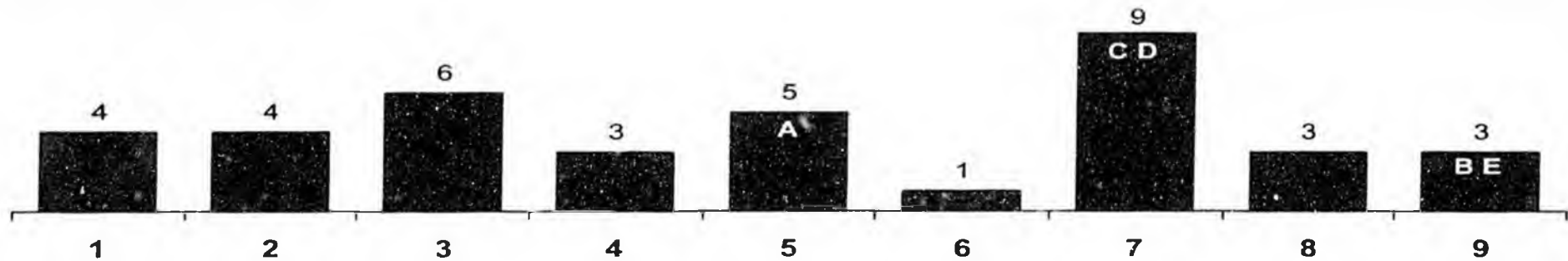
4. Mid-career Hires

Importance



Mid-career hires should accrue excellent benefits

It's OK for mid-career hire: to accrue smaller benefit:



Key Comments

- *This offers the chance to attract employees with experience.*
- *Teachers/administrators need an infusion of mid-career change people. We need their experiences and insight in educating our kids. We need to not penalize them in retirement planning.*
- *Mid-career employees probably have other benefits.*

Key Implications

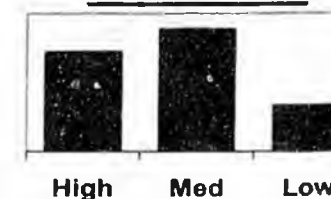
- *Sufficient benefits for mid-career hires can be an important tool in order to attract experienced talent.*
- *Providing higher benefits equals higher cost.*
- *Mid-career hires may be sacrificing good benefits to switch employers.*



Employer Survey – TRS

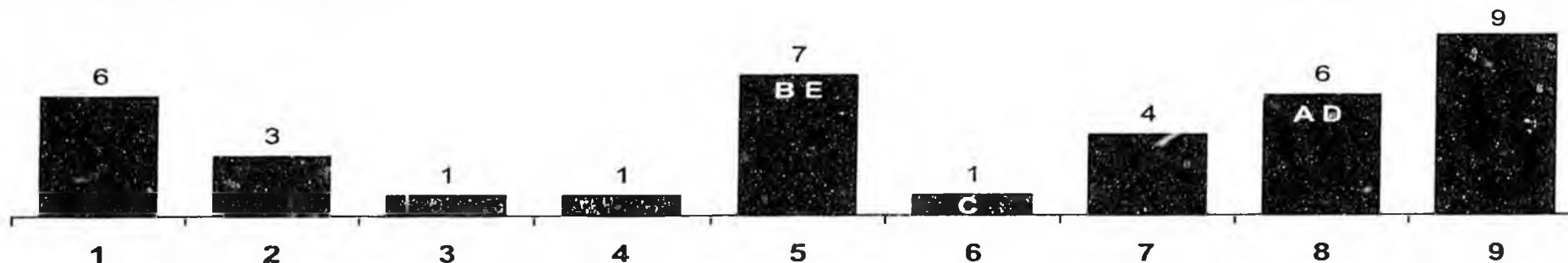
5. Remaining in Alaska

Importance



The System should **not** reward retirees who remain in Alaska

The System should reward retirees who remain in Alaska



Key Comments

- Retirees should be encouraged to stay in Alaska.
- When people have given and earned their retirement, let them live where they choose without penalty.
- Alaska needs to promote lifelong state citizenship.
- Spend money where they want. The employee has earned it.

Key Implications

- Providing COLA results in higher System costs, but Alaskan economy benefits from additional dollars spent by those who remain in Alaska.
- COLA for residents promotes lifelong residency.

Employer Survey - TRS

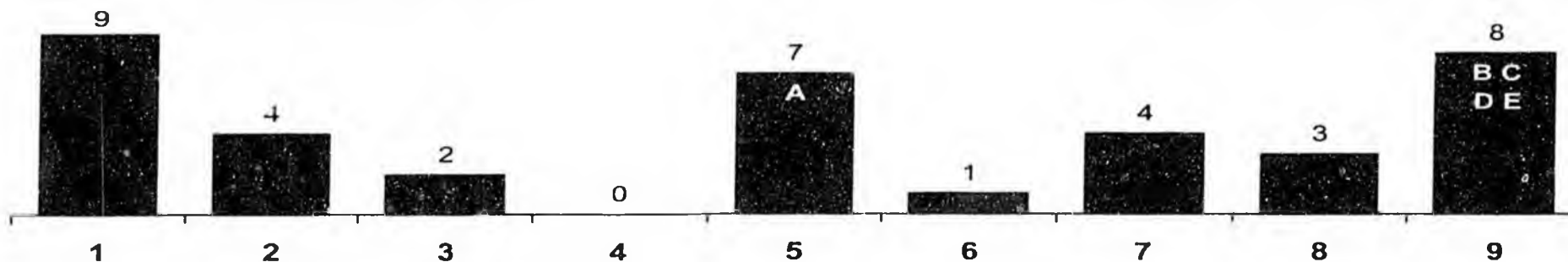
6. Med Coverage to Term. Vested Members

Importance



The System should provide medical coverage to terminated vested members

The System should **not** provide medical coverage to terminated vested member:



Key Comments

- *This area needs to be reviewed and modified to help control costs. It may be necessary to qualify for benefits or look at providing a flat dollar amount for benefits with the retiree paying the difference.*
- *Helps with recruitment. Many come to Alaska to get vested - we need to encourage this trend.*
- *Medical coverage should be available after vesting and attaining a certain specified age (say 60) or direct retirement if prior to 60.*

Key Implications

- *Opportunity for cost savings exists by cutting back medical benefits for terminated vested members*
- *By eliminating, employers would lose out on a recruiting tool.*



Employer Survey – TRS

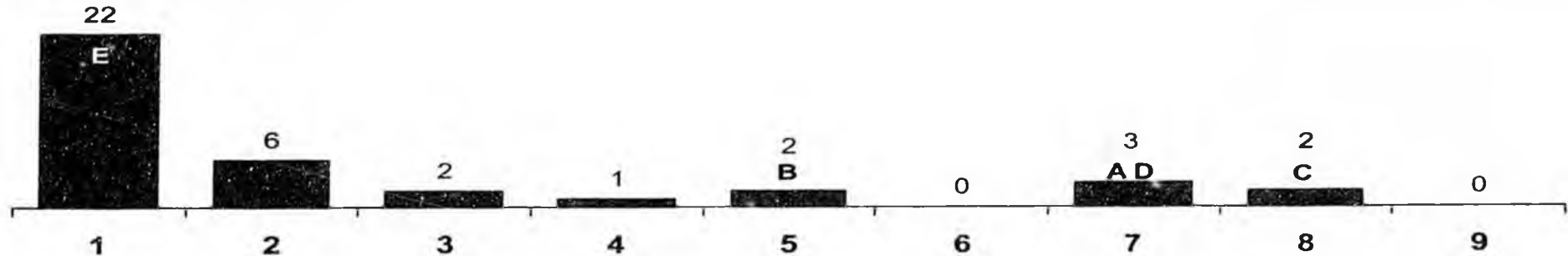
7. Medical Coverage

Importance



The retirement program should provide medical coverage

The program should no provide medical coverage



Key Comments

- *Biggest selling point in recruiting - medical.*
- *Delaying medical coverage will only force potential retirees to stay in the system longer at the top-end of salary.*
- *Coverage important, but retirees could pay a share, perhaps based on years of services.*
- *Medical coverage is very important. But with costs increasing as they are, we need to consider changes to the current structure.*

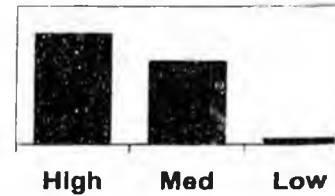
Key Implications

- *Elimination of medical coverage would lower System costs significantly over time.*
- *Eliminating medical coverage would drastically change current design and hinder attraction and retention of employees as well as possibly providing insufficient overall retirement benefits to meet retirees' needs.*

Employer Survey – TRS

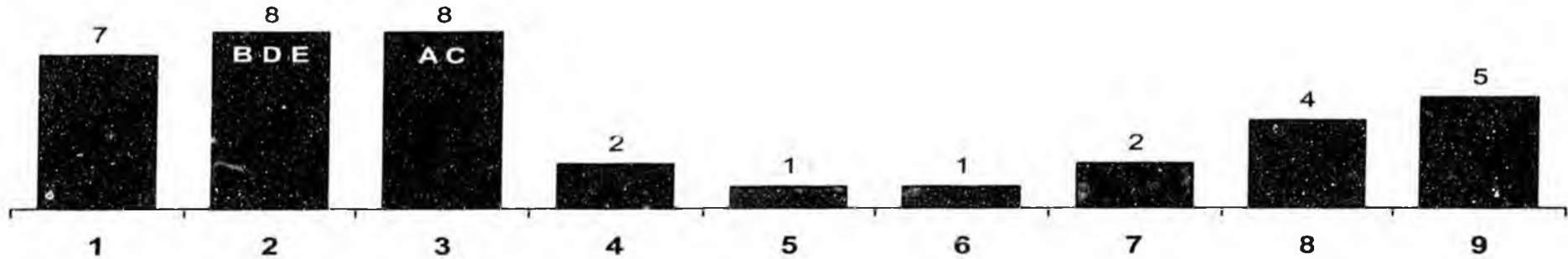
8. Medical Coverage based on Service

Importance



The System should provide levels of medical coverage that depend on years of service

The System should provide the same level of medical coverage regardless of years of service



Key Comments

- Contributions to medical coverage could be based on a formula depending on years of service.
- This will help retain teachers beyond 8 year minimum.
- Eligibility for full retirement (20 years) should make one eligible for full medical benefits.

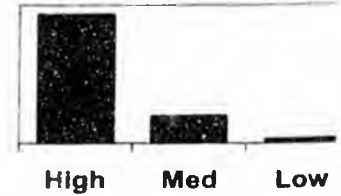
Key Implications

- Rewarding long-service employees supports career employment.
- Employees in same tier with differing years of service could potentially have different levels of medical coverage.

Employer Survey – TRS

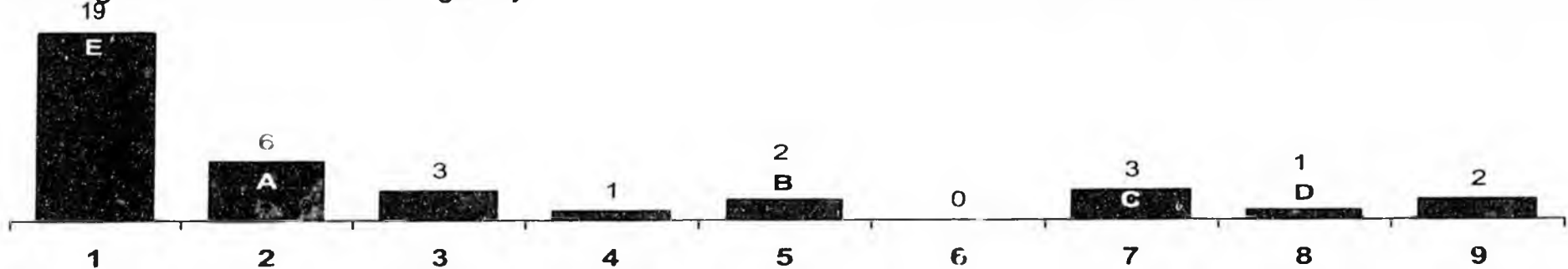
9. Medical Coverage and Medicare

Importance



The System should provide medical coverage to all retirees regardless of Medicare eligibility

The System should provide medical coverage only to those retirees **without** access to Medicare coverage



Key Comments

- *Need to make sure Medicare gaps can be covered.*
- *Medical coverage should be based on years of service.*

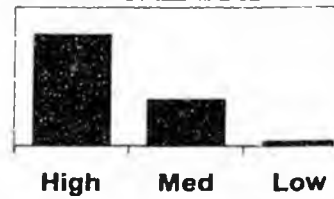
Key Implications

- *Limiting coverage would decrease System costs over time.*
- *Could result in inadequate medical coverage for Medicare eligible retirees.*

Employer Survey – TRS

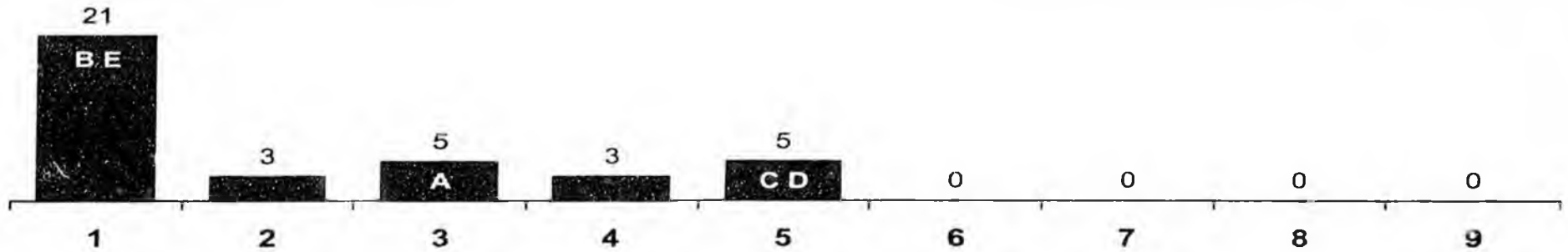
10. Medical Coverage and Medicare

Importance



The System should provide medical coverage to all retirees regardless of Medicare eligibility

The System should provide medical coverage only to those retirees **with** access to Medicare coverage



Key Comments

- Not being able to see into the future to determine what Medicare will look like, it would seem irresponsible to not provide retirees with some sense of comfort in a predictable benefit.
- Medical coverage should supplement Medicare up to a maximum amount based on a formula determined by number of years of service.
- Medicare should not be a factor.

Key Implications

- Limiting coverage would decrease System costs over time.
- Without retiree medical coverage before Medicare, members would be more inclined to work until Medicare eligible.
- If medical coverage is not offered by the System to pre-medicare retirees, access to health coverage will be significantly reduced.

Employer Survey – TRS

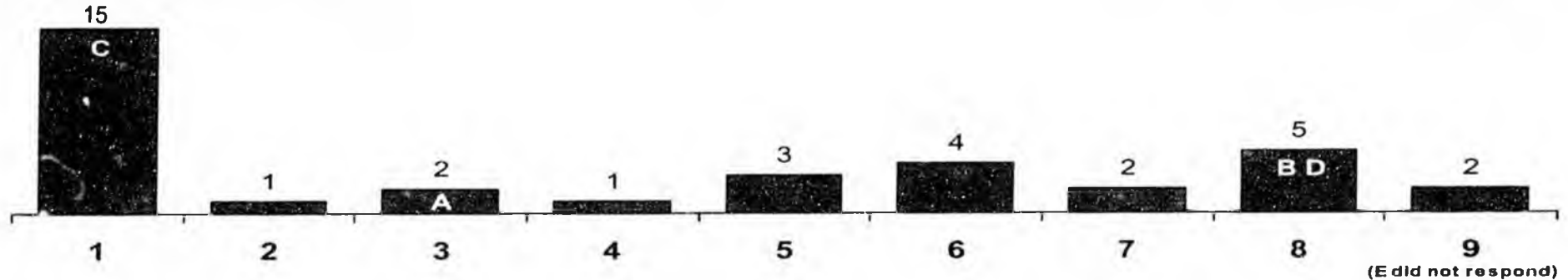
11. Medical Coverage

Importance



The System should offer the same medical coverage to active and retired members

The System should **not** offer the same medical coverage to active and retired member:



Key Comments

- Provide dollar amount of medical for retirees; if medical coverage for active employees provides better coverage, give retirees option to make co-pay.
- Those who are retired are less able to provide coverage.
- This is a composite of many employers. Medical benefits are a negotiated item at the bargaining table.

Key Implications

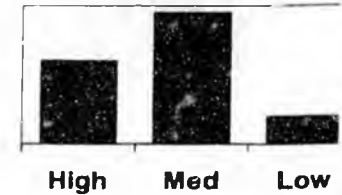
- Potential cost savings by providing lesser medical coverage for retired members.
- Different benefit levels for active and retired members may lead to communication and perceived equity challenges.



Employer Survey – TRS

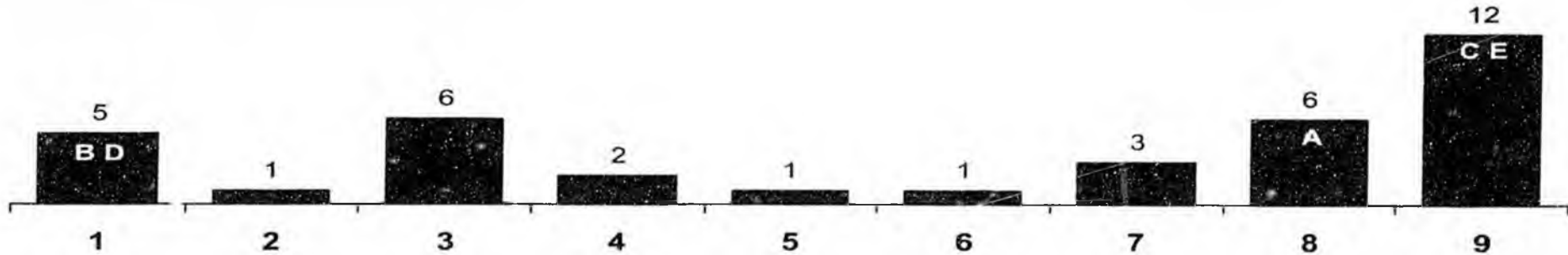
12. Retiring Age

Importance



We want to be able to encourage retirement at a particular age range

We don't care when people retire



Key Comments

- *Employees productivity and contribution are not subject to age so mandatory retirement at a certain age may not be beneficial.*
- *Their years of service should determine benefits, not their age. The loopholes allowing short service and full benefits should be closed.*
- *20 and out needs to be changed. If anyone should be 20 and out it should be law enforcement.*

Key Implications

- *By encouraging retirement at a particular age, the System may run the risk of losing productive members too soon and/or unproductive members "hanging on" too long.*

Employer Survey - TRS

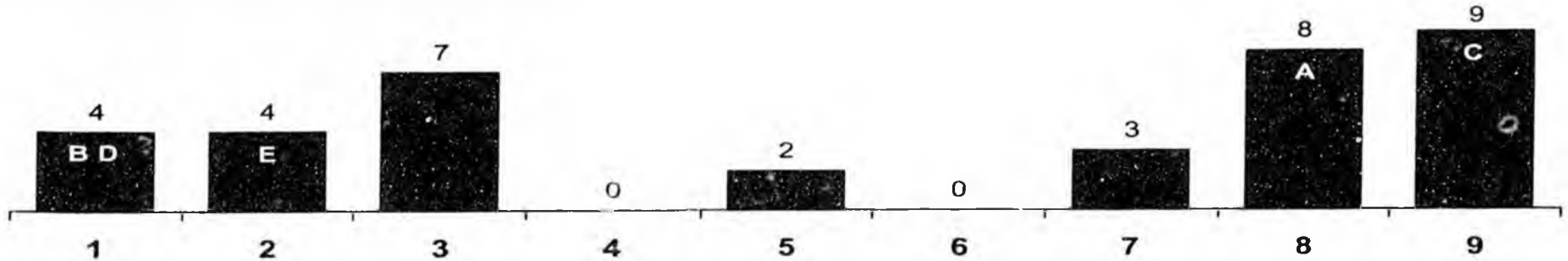
13. Retiring after Years of Service

Importance



We want to be able to encourage retirement after a particular number of years of service

We don't care when people retire



Key Comments

- Increasing the number of years of service required, when age is not a factor, would reduce the cost to the retirement system.
- While high salary people are a budget concern, their experience and expertise is a tremendous plus for a small organization.
- 20 years, at least 50 years in age.

Key Implications

- By encouraging retirement at a particular number of years of service, the System may run the risk of losing productive members too soon and/or unproductive members "hanging on" too long.

Employer Survey - TRS

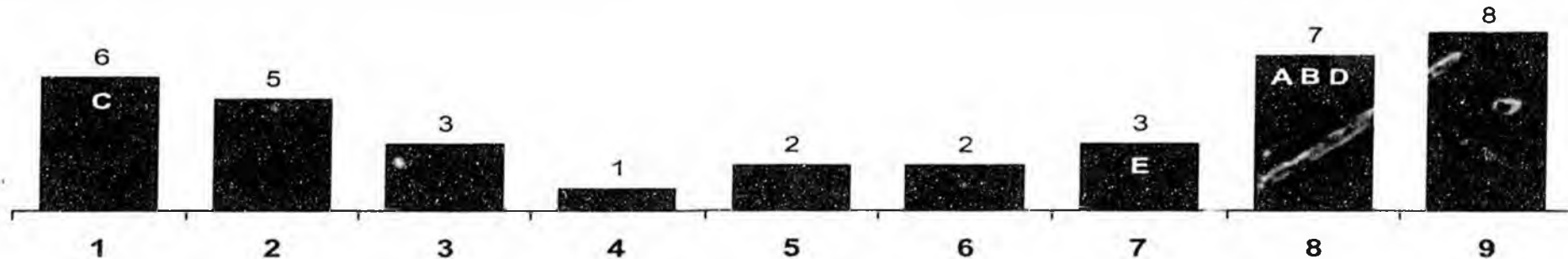
14. Early Retirement

Importance



We want to be able to encourage early retirement with ad hoc enhanced benefits through the plan

We don't care about encouraging early retirement, or will handle it through other method



Key Comments

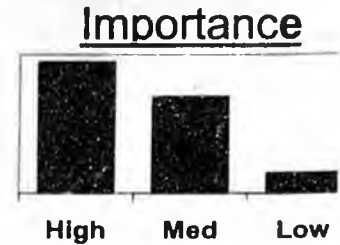
- *RIP and severance plans which offer early retirement have been shown to have a detrimental financial effect on the retirement system.*
- *Given NEA/union's impact on teaching force per seniority, this is needed to bring in new blood to the organization.*
- *In times of financial stress this will allow us to be more creative.*

Key Implications

- *Being able to provide ad hoc enhanced retirement benefits gives the System and individual employers an additional tool to manage the workforce.*

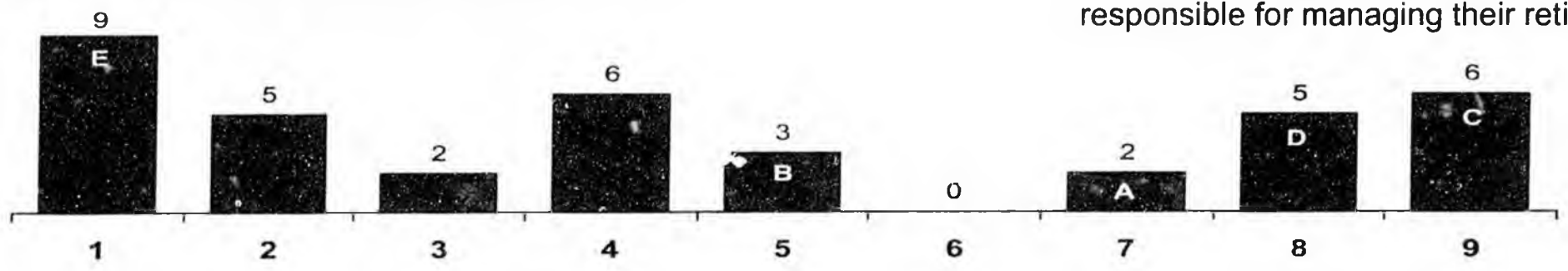
Employer Survey - TRS

15. Retirement Income



We want to provide employees with a specific amount of retirement income they can count on at retirement

We will contribute to our employees retirement but each employee should be entirely responsible for managing their retirement



Key Comments

- A defined contribution plan would be more predictable, in terms of costs to the retirement system, and less expensive than a defined benefit plan.
- Should not be a crap shoot!
- Some flexibility on this might be useful.

Key Implications

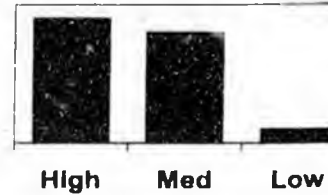
- By not providing members with a specific amount of retirement income, members may not be saving enough or taking the appropriate responsibility to ensure a comfortable retirement.



Employer Survey – TRS

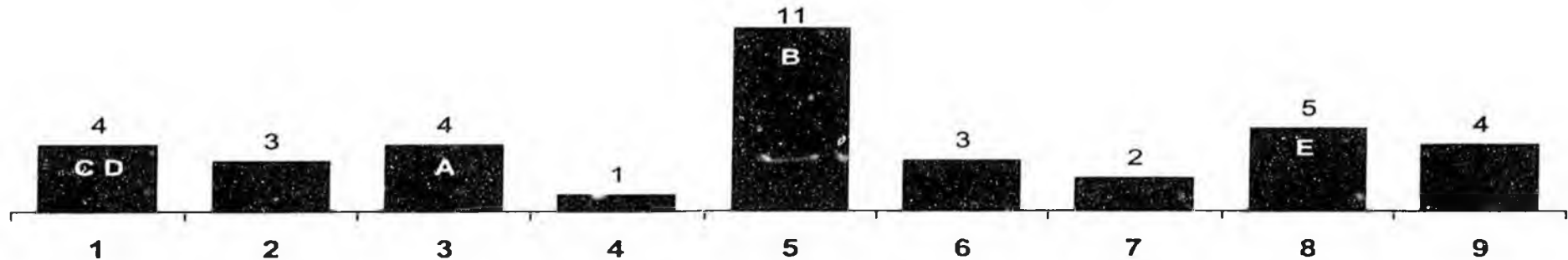
16. Investment Risk Responsibility

Importance



Employees should assume investment risk

Employer should assume investment risk



Key Comments

- *Employees should assume responsibility. However employers may want to limit investment options to minimize risk.*
- *Our employees neither have the time nor the investment skills to manage a retirement portfolio.*
- *Defined contribution plans are bad public policy. Employer should provide access to a pre-tax dollar investment program; but a stable retirement income must be in place.*

Key Implications

- *Bearing the investment risk exposes the System to cost increases and volatility, but can also often achieve higher returns than an individual due to a longer time horizon and professional management.*
- *Members can often invest too conservatively or too aggressively for their given situation and needs.*



Employer Survey - TRS

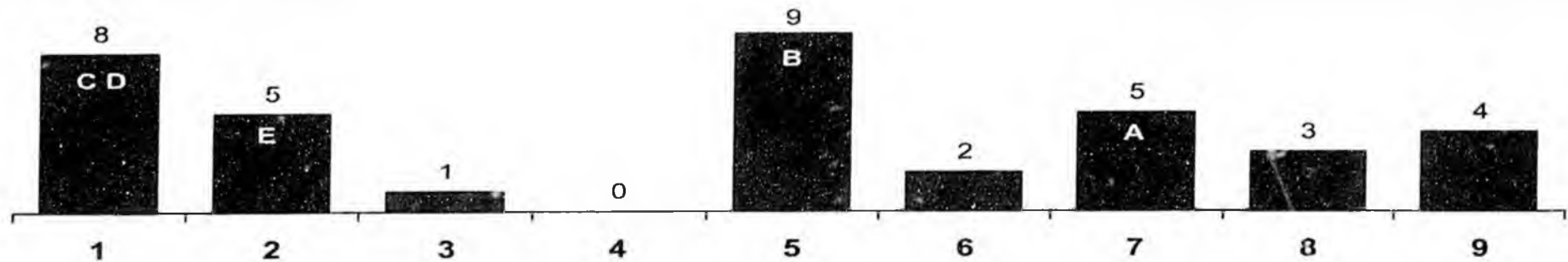
17. Inflation Risk Responsibility

Importance



Employees should assume pre-retirement inflation risk

Employers should adjust benefits for pre-retirement inflation



Key Comments

- *Employers should adjust benefits for pre-retirement inflation.*
- *This should lag by a few years.*

Key Implications

- *Value of benefits for members who terminate prior to retirement can erode over time from inflation.*
- *Providing pre-retirement inflationary protection is a cost to the System.*
- *The final average pay plan design provides some automatic pre-retirement inflation protection.*

Employer Survey – TRS

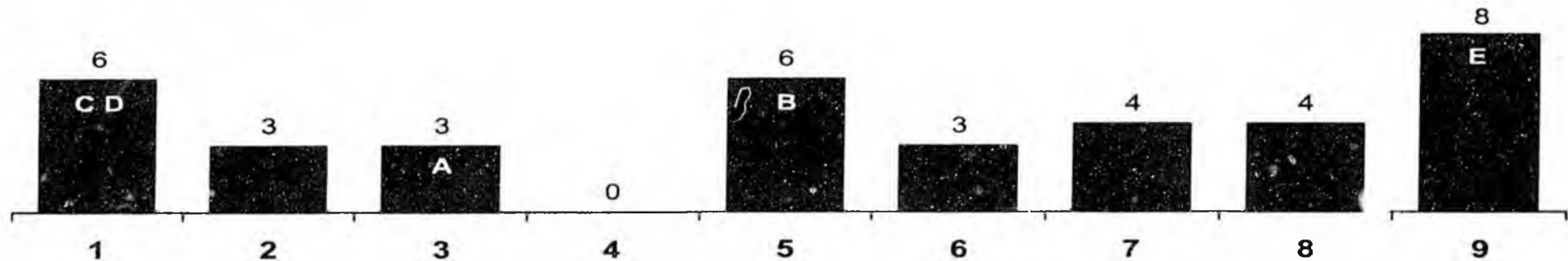
18. Inflation Risk Responsibility

Importance



Employees should assume post-retirement inflation risk

Employers should adjust benefit for post-retirement inflation



Key Comments

- *Employees should assume more risk for post-retirement inflation.*
- *This should lag by a few years.*

Key Implications

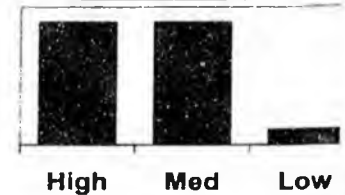
- *Providing post-retirement inflationary protection would ensure that the value of member's benefits at retirement continue to remain as valuable throughout their lifetime.*
- *Providing post-retirement inflationary protection is a cost to the System.*



Employer Survey - TRS

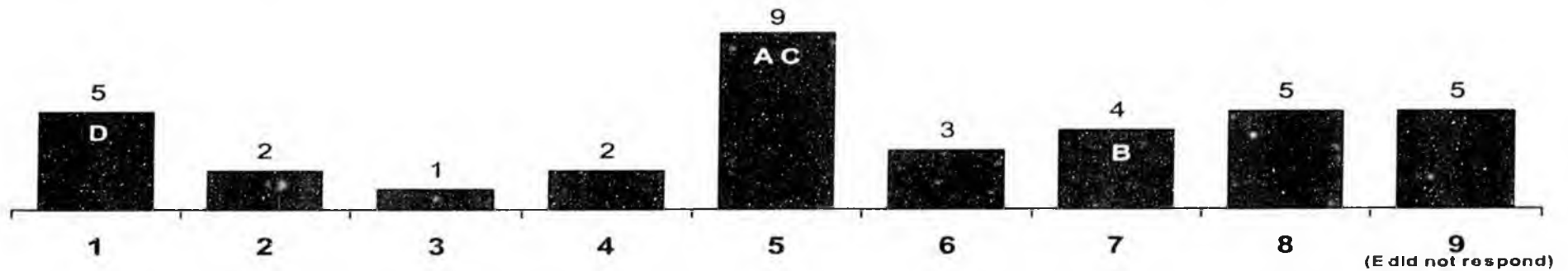
19. Longevity Risk Responsibility

Importance



Employees should assume longevity risk

Employers should assume longevity risk



Key Comments

- *Employers can no longer afford to assume all future cost increases.*
- *Employees need to be on the ball in this area.*

Key Implications

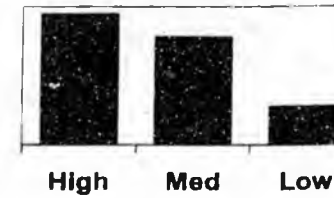
- *Providing longevity protection is a cost to the System.*
- *By assuming the longevity risk, the System could predict and manage it more accurately for the entire group than any employee could do individually.*



Employer Survey – TRS

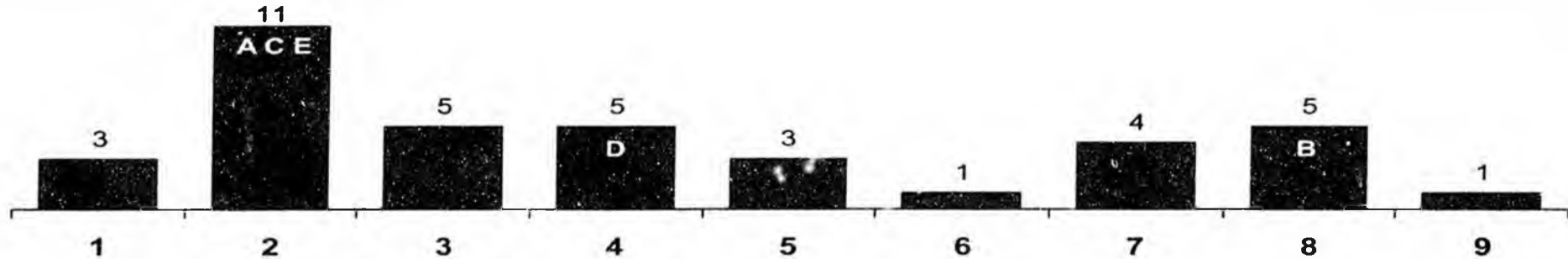
20. Savings

Importance



The retirement program should heavily encourage savings in the plan

The program should permit but not push savings



Key Comments

- *Employees need to assume more responsibility for their retirement. Programs should be structured to educate and encourage employees to save for retirement.*
- *Employees should be allowed to contribute and enhance their retirement security.*
- *Savings in one plan should encourage long careers.*

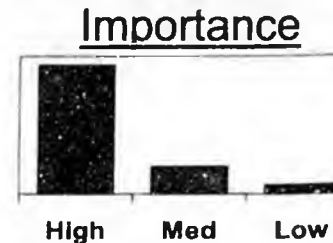
Key Implications

- *Without strongly encouraging members to contribute to their retirement, many will not have adequate funds to retire comfortably.*



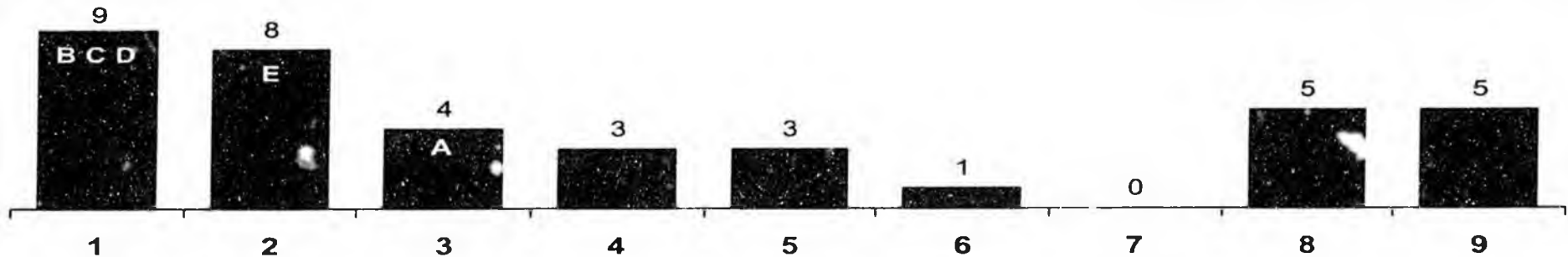
Employer Survey – TRS

21. Cost of Medical Coverage



Employees should share in the cost of medical coverage

Employer should assume the cost of providing medical coverage

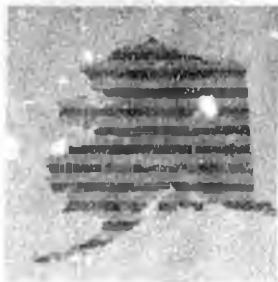


Key Comments

- *Employers can no longer afford to pay the entire amount for medical insurance. Employees should share in the cost.*
- *Teacher/administrator salary does not reflect "high wages," hence this benefit should be provided.*
- *Employees share in the cost of medical coverage and retirement benefits through their active career contributions. They also contribute via co-pays, deductibles and Medicare Part B premiums.*

Key Implications

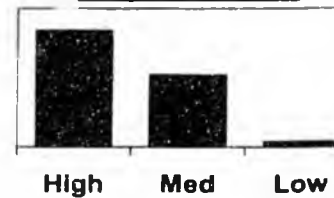
- *Members sharing in the cost of medical coverage would provide cost savings to the System over time.*
- *Would be a significant shift from current design and increase financial burden on retirees.*



Employer Survey - TRS

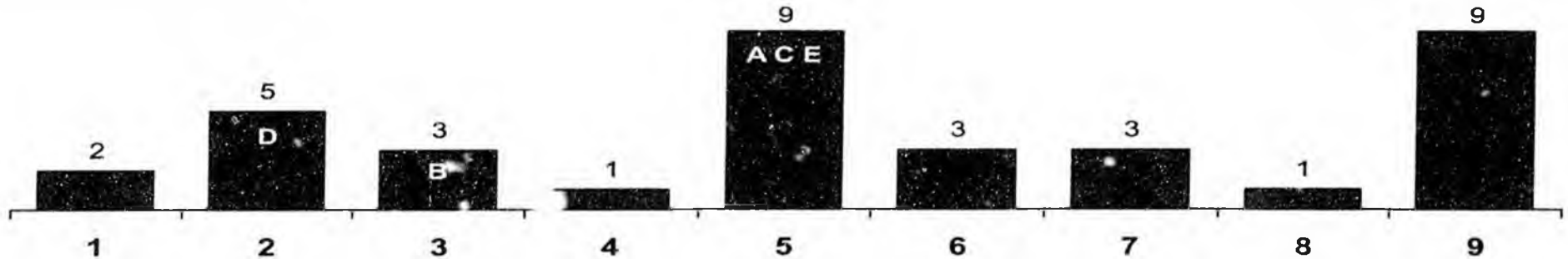
22. Cost of Medical Coverage

Importance



Employees should assume responsibility for medical cost increases

Employer should assume responsibility for medical cost increase:



Key Comments

- *The retirement system should be responsible for the management of the medical coverage while the retiree should be responsible for cost increases.*
- *Both should assume cost responsibilities. It's not either or.*

Key Implications

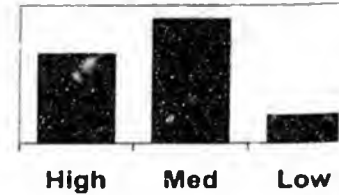
- *Members assuming the responsibility for medical cost increases would provide cost savings to the System over time.*
- *Would be a shift from current design and increase financial burden on retirees.*



Employer Survey - TRS

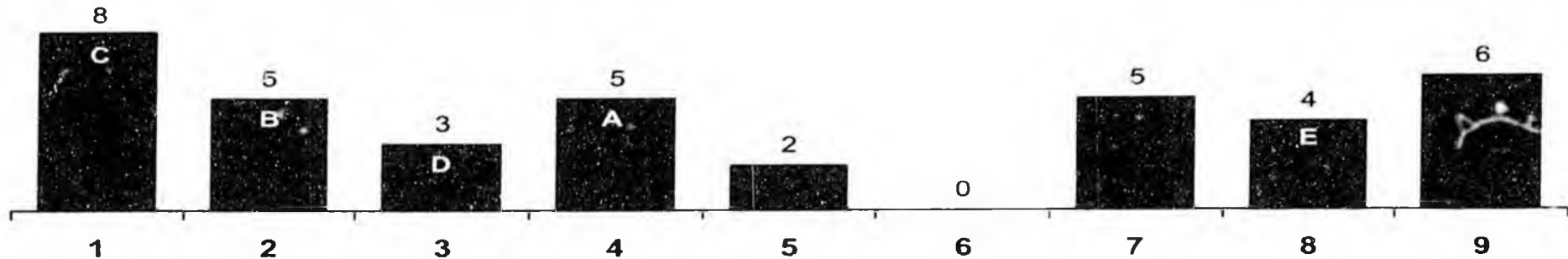
23. Access to Contributions

Importance



Employees should have access to as much of their own retirement contributions as legally possible

Employees should have **no** access to plan assets until retirement

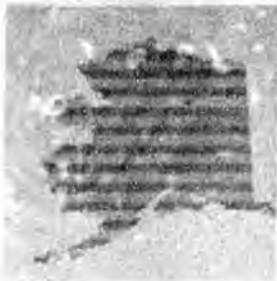


Key Comments

- *Small portion should be available for "emergency only" situation.*
- *Access should certainly be very limited.*
- *Only with benefit of understanding the consequences.*

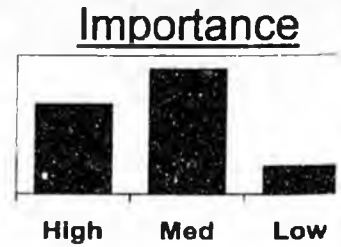
Key Implications

- *Members may spend retirement income during working lifetime and as a result may be unable to retire.*
- *The capability to use retirement plans for pre-retirement needs such as a home purchase can be a valuable benefit.*



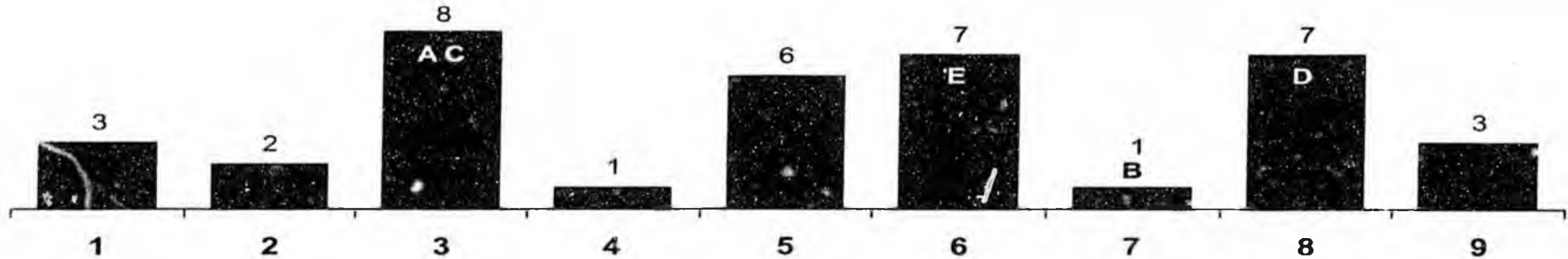
Employer Survey - TRS

24. Understandability



Understandability is the primary concern

We'll sacrifice understandability if necessary to achieve our workforce and benefit objective:



Key Comments

- *Employers need to provide good communication and seminars to explain plans, but the plan must be structured so it is simple enough for the majority of people to understand.*
- *Let individuals who want complexity and flexibility do so on their own apart from this.*
- *It is their responsibility to understand it.*
- *College should teach it!*

Key Implications

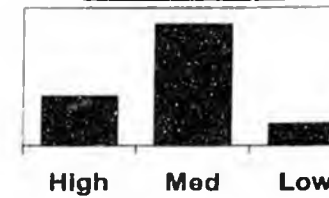
- *Generally a more complex formula can meet a wider variety of specific objectives.*
- *Members may perceive more value in a retirement plan that is more understandable.*



Employer Survey – TRS

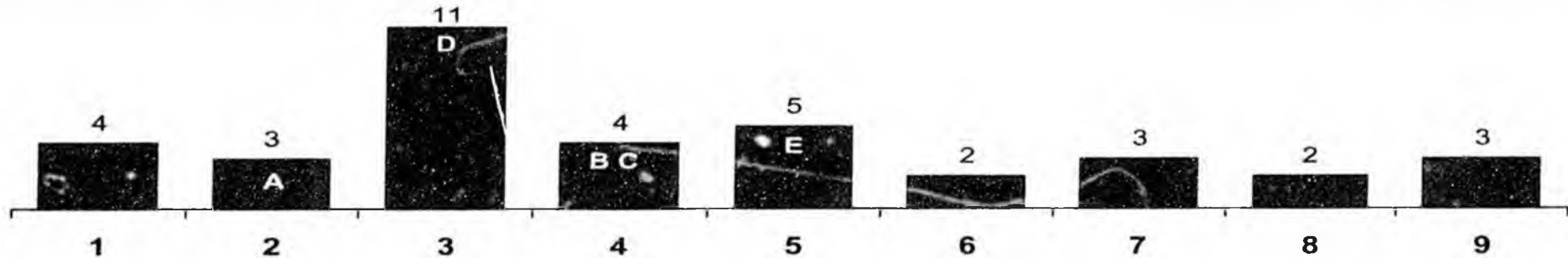
25. Tangible and Relevant Plan

Importance



All employees should find the plan tangible and relevant

It's OK if the plan is tangible and relevant mainly to older employee



Key Comments

- All employees should understand and value the retirement plan.
- Recruiting tool.

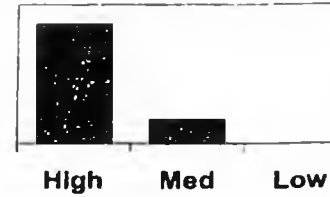
Key Implications

- Members may perceive more value in a retirement plan that is tangible and relevant.

Employer Survey – TRS

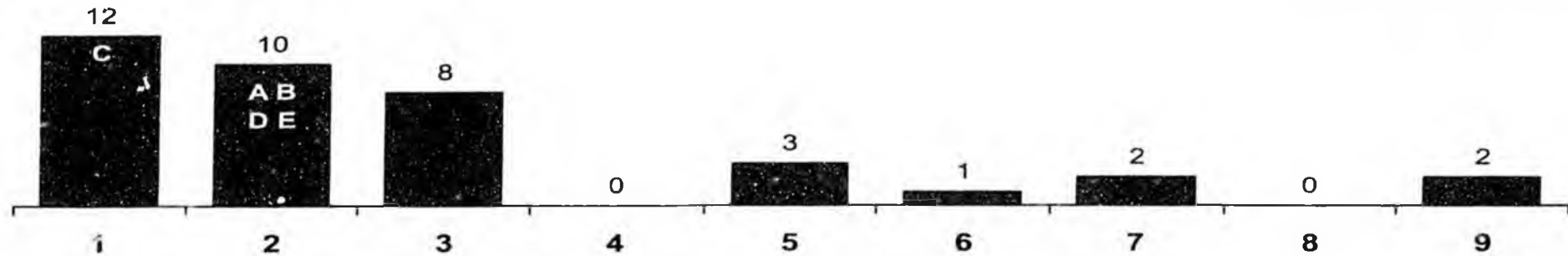
26. Predictability and Stability

Importance



We want maximum predictability and stability of contributions

We're willing to accept volatility as part of our asset strategy



Key Comments

- For budgeting purposes, employers need a high degree of predictability.
- Until schools are adequately funded, predictability and stability are very important. If adequate funding is ever established, volatility can be more easily handled.
- Can't swing in a major way in a short period. 5% is too much of a swing. 1-2% is doable.

Key Implications

- Volatility is the result of a higher-risk asset strategy with higher potential rewards.



Employer Survey – TRS

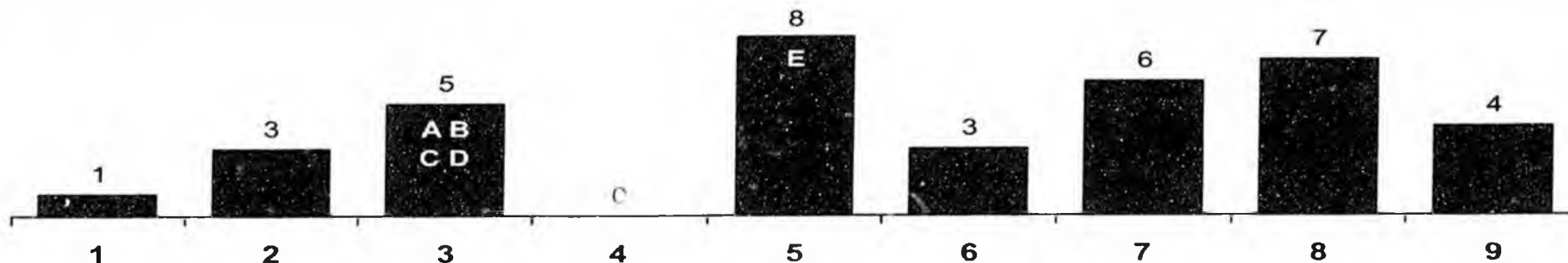
27. Change in Cost

Importance



Aggregate retirement contributions should be less than they are now

Marginal cost increases are appropriate to meet other design goal



Key Comments

- *Employees contribution rates may need to increase!!*
- *We understand that costs are increasing. Want to keep plans competitive while keeping plan costs reasonable.*
- *We have to contain costs or everyone loses.*
- *Costs need to be sufficient to do the job.*

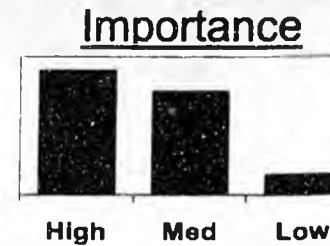
Key Implications

- *Lowering contributions will result in generally lower level of benefits for retirees.*
- *System benefits may or may not be competitive against peer group if benefits are decreased.*



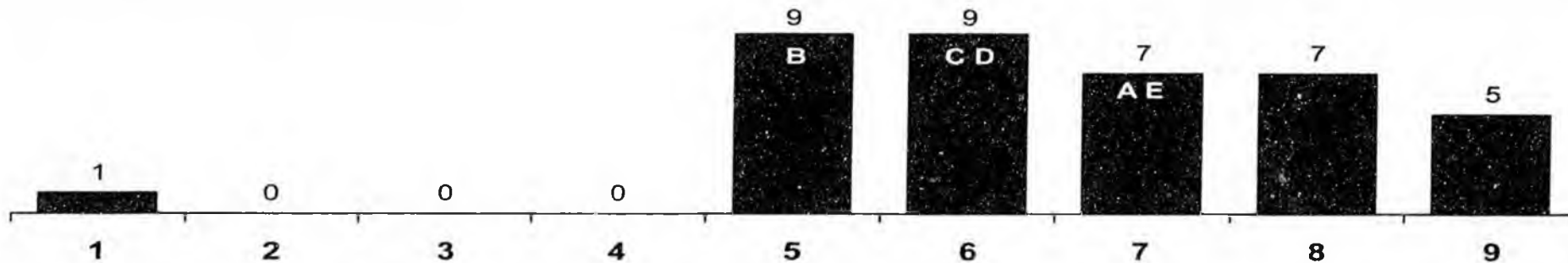
Employer Survey - TRS

28. Comparison with the Market



We would like our retirement program to be low compared to the market

We would like our retirement program to be high compared to the market

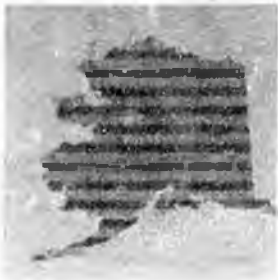


Key Comments

- *An attractive retirement package is valuable in terms of helping to retain employees. The retirement package we offer needs to be competitive in order to recruit and retain quality individuals.*
- *Make K - 12 public education more attractive to some.*
- *A good running Chevy will be fine.*

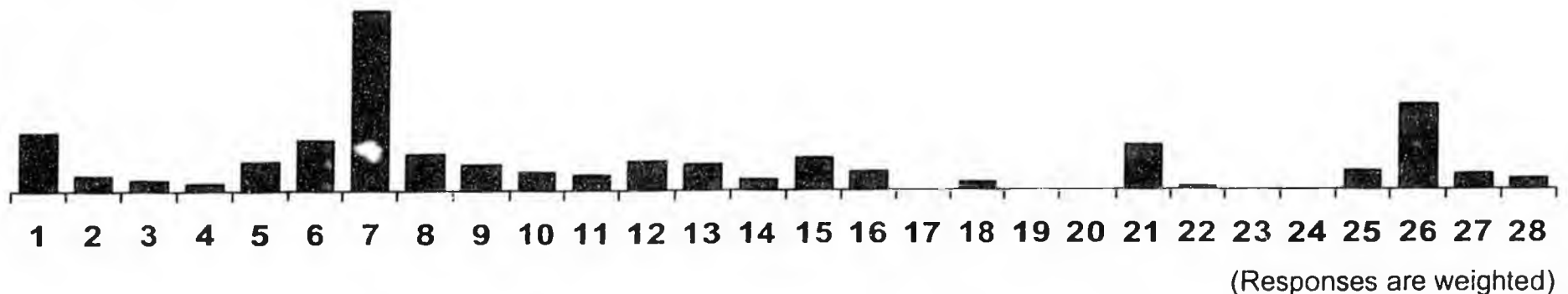
Key Implications

- *High-end benefits are an important attraction and retention tool.*
- *High-end benefits can be costly.*



Employer Survey – TRS

29. Most Important Questions



The four most important questions with preferred spectrum comment

- **Question # 7:** “The retirement program should provide medical coverage”
- **Question #26:** “We want maximum predictability and stability of contributions”
- **Question #1:** “Plan should favor long-service employees”
- **Question #6:** (The responses did not indicate a significant difference between the two)
 - “The System should provide medical coverage to terminated vested members”
 - “The System should **not** provide medical coverage to terminated vested members”



Employer Survey – TRS

Important Conclusions

- Employers want the retirement program to continue to provide medical coverage
- Many employers, particularly the largest employers, open to the possibility of providing differing levels of medical coverage based on service or having members share in the cost of coverage
- Other potential cost savings areas that some employers seem open to:
 - Lowering the post-retirement cost-of-living adjustment
 - Not providing medical coverage to vested terminated members
- Some responses seem to favor continuing a defined benefit approach
 - Reward long service
- However, responses leaned towards shifting investment risk to members



Employer Survey – PERS

Key

The following pages illustrate the responses to the employer survey sent to all PERS employers. In total, 89 employers responded. PERS represents employers of various sizes. As a way to show the five largest employers' responses (of those who responded), we have included the letters A – E on the charts to represent how they answered. The employers have been assigned the following letters:

<u>Employer</u>	<u># Active Employees</u>	<u>Code Letter</u>
State of Alaska	15,259	A
Anchorage SD	2,496	B
Anchorage, Municipality of	2,351	C
Fairbanks North Star Borough SD	790	D
North Slope Borough	788	E



Employer Survey - PERS

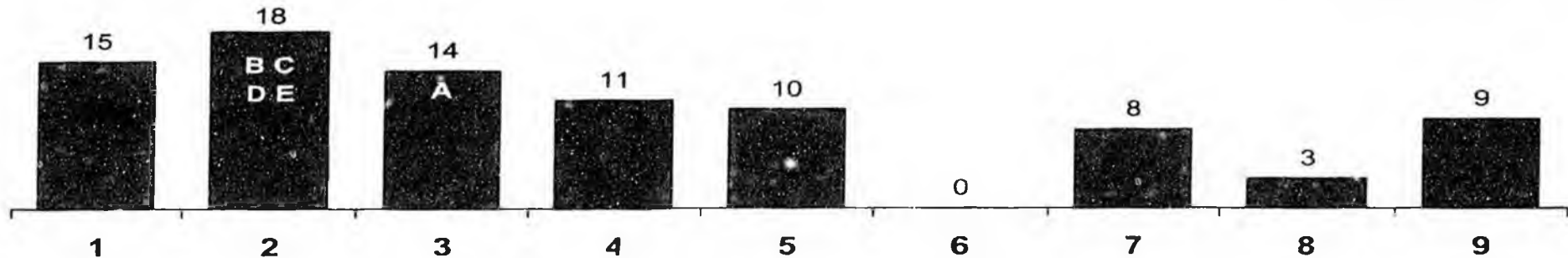
1. Long-Service Employees

Importance



Plan should favor long-service employees

Plan should not distinguish on account of length of service



Key Comments

- Retirement plans should favor long-service employees.
- With over 150 employers in PERS, portability between employers is a real factor. If that can be achieved without penalizing long time PERS covered employees, there is not problem.
- One of our problems is that baby-boomer "glut" of long service employees. While they should be compensated for their time, there seems to be a shortage of professional people entering state/municipal public service.

Key Implications

- Rewarding long-service employees supports career employment.
- Uniform allocation can be an important attraction tool, but allows dollars to "walk out the door" when short-service employees leave the System.

Employer Survey - PERS

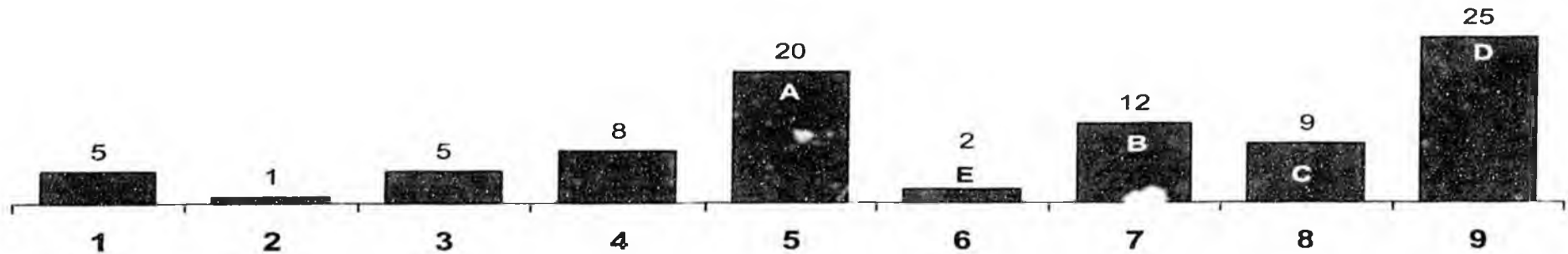
2. Older Employees

Importance



Plan should favor older employees

Plan should not distinguish on account of age



Key Comments

- Length of service should be more important than age in determining retirement benefits.
- Inflation and decreases in salary raises are historical in Alaska. Young need to see opportunity in this state.

Key Implications

- Rewarding older employees supports career employment.
- Uniform allocation can be an important attraction tool, but allows dollars to "walk out the door" when younger members leave the System.



Employer Survey – PERS

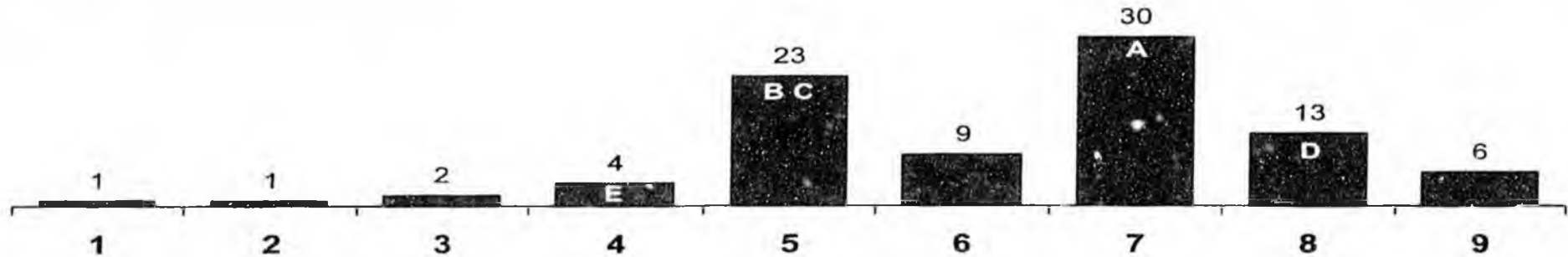
3. Benefits Build Up

Importance



Benefits should build up quickly, so "early leavers" have good benefits

Benefits should build up slowly, so "early leavers" have little

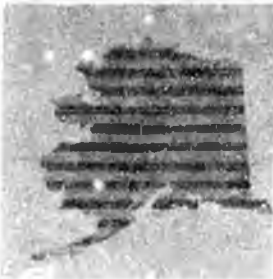


Key Comments

- *Benefits should accrue at a constant rate rather than increase after so many years of service.*
- *It should not pay to leave system as soon as vested.*
- *All employees are important. Early leavers should accrue good benefits.*

Key Implications

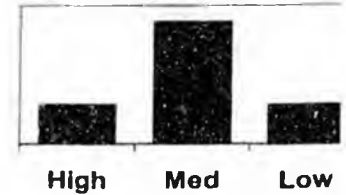
- *Does not affect career employees who stay until retirement.*
- *Uniform allocation can be an important attraction tool, but allows dollars to "walk out the door" when younger members leave the System.*



Employer Survey – PERS

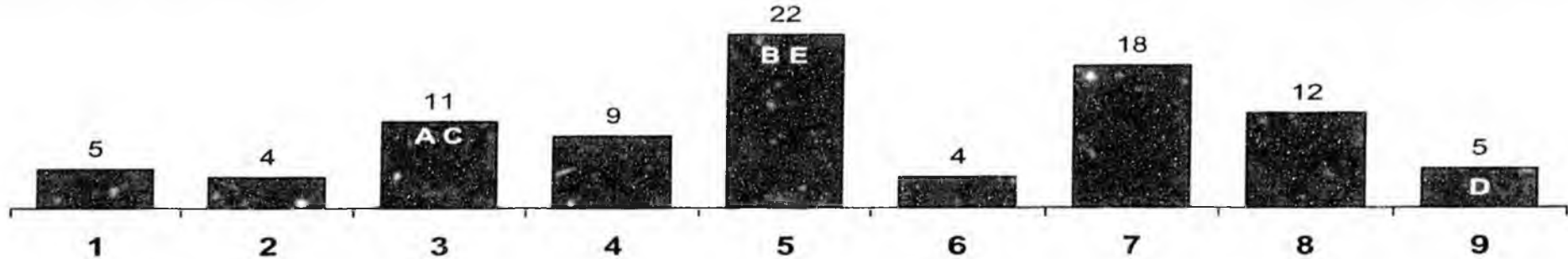
4. Mid-career Hires

Importance



Mid-career hires should accrue excellent benefits

It's OK for mid-career hires to accrue smaller benefits



Key Comments

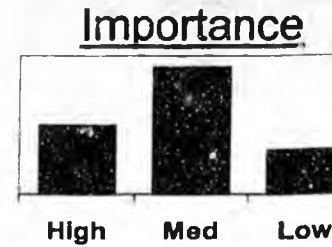
- *This offers the chance to attract employees with experience.*
- *They should start at the same point as everyone else when starting a new job elsewhere.*

Key Implications

- *Sufficient benefits for mid-career hires can be an important tool in order to attract experienced talent.*
- *Providing higher benefits equals higher cost.*
- *Mid-career hires may be sacrificing good benefits to switch employers.*

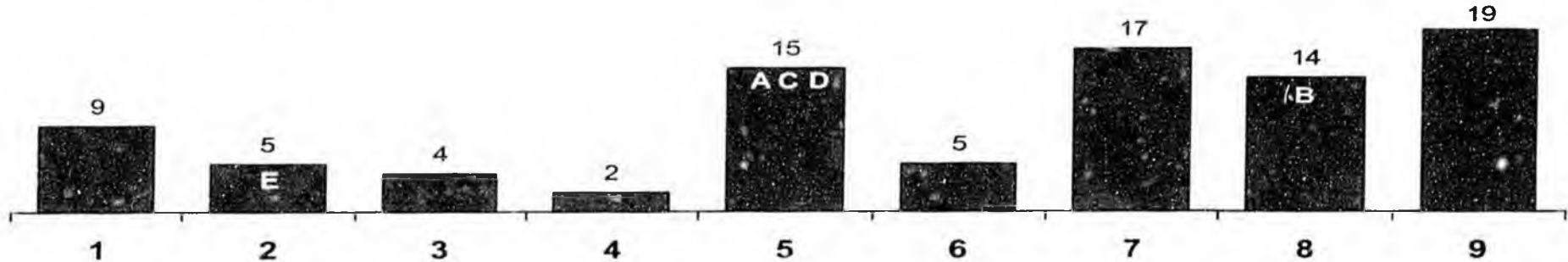
Employer Survey – PERS

5. Remaining in Alaska



The System should **not** reward retirees who remain in Alaska

The System should reward retirees who remain in Alaska



Key Comments

- They should start at the same point as everyone else when starting a new job elsewhere.
- Living in state could benefit the economy. Should be in state for minimum of 9 months per year to qualify.
- When people have given and earned their retirement, let them live where they choose without penalty

Key Implications

- Providing COLA results in higher System costs, but Alaskan economy benefits from additional dollars spent by those who remain in Alaska.
- COLA for residents promotes lifelong residency.

Employer Survey – PERS

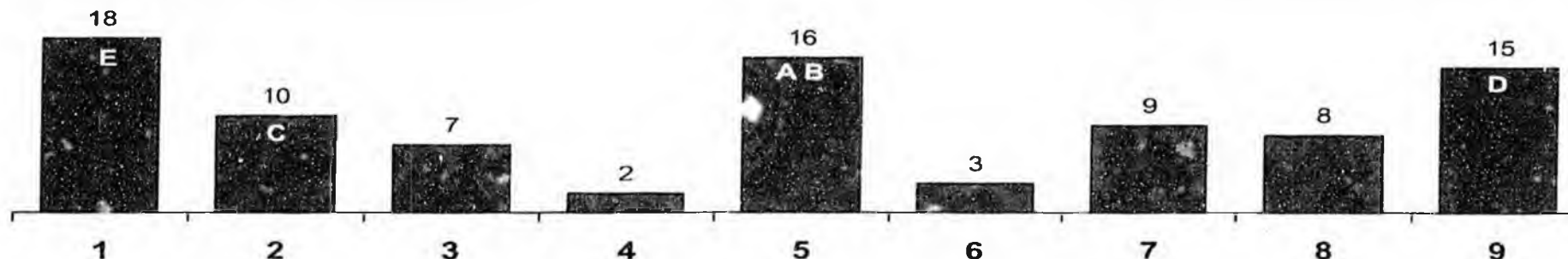
6. Med Coverage to Term. Vested Members

Importance



The System should provide medical coverage to terminated vested members

The System should **not** provide medical coverage to terminated vested member:



Key Comments

- *This area needs to be reviewed and modified to help control costs. It may be necessary to qualify, for benefits or look at providing a flat dollar amount for benefits with the retiree paying the difference.*
- *Perhaps the medical benefit could increase for those who retire from active service/decrease for those terminated vested members.*
- *Helps with recruitment. Many come to Alaska to get vested - we need to encourage this trend.*

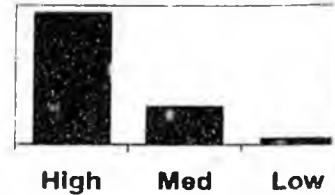
Key Implications

- *Opportunity for cost savings exists by cutting back medical benefits for terminated vested members*
- *By eliminating, employers would lose out on a recruiting tool.*

Employer Survey – PERS

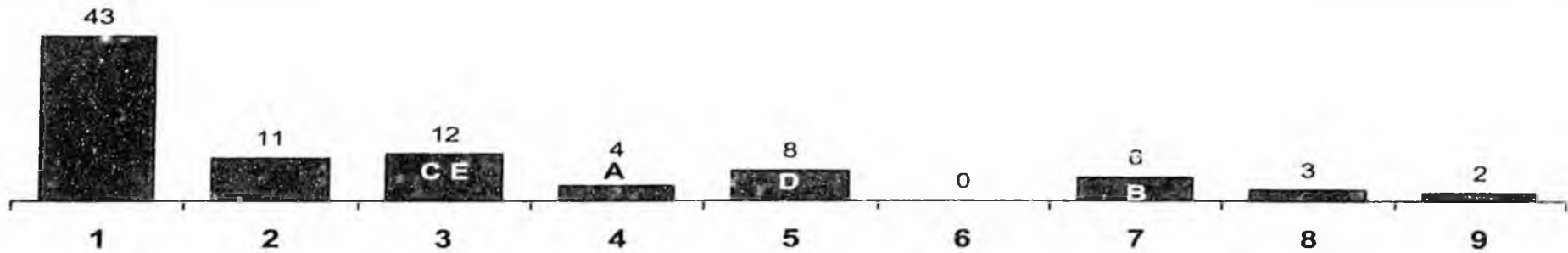
7. Medical Coverage

Importance



The retirement program should provide medical coverage

The program should **no** provide medical coverage



Key Comments

- *Biggest selling point in recruiting - medical.*
- *Coverage important, but retirees could pay a share, perhaps based on years of services.*
- *A must!*

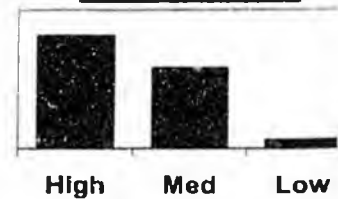
Key Implications

- *Elimination of medical coverage would lower System costs significantly over time.*
- *Eliminating medical coverage would drastically change current design and hinder attraction and retention of employees as well as possibly providing insufficient overall retirement benefits to meet retirees' needs.*

Employer Survey - PERS

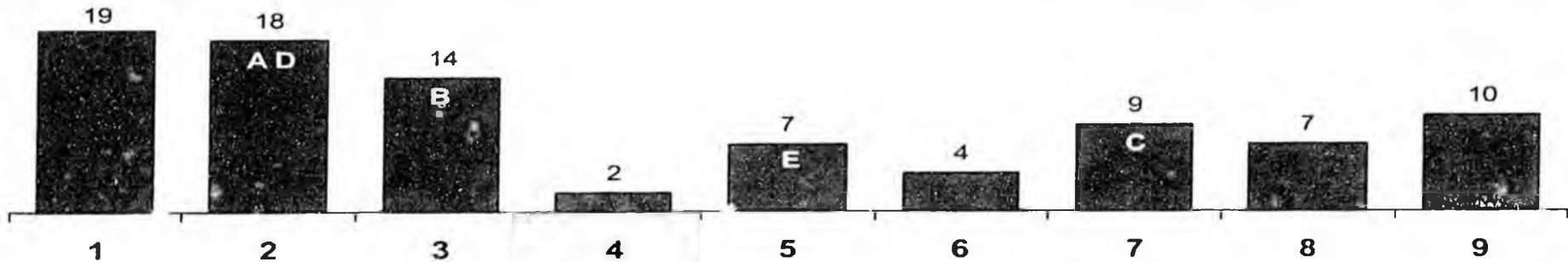
8. Medical Coverage based on Service

Importance



The System should provide levels of medical coverage that depend on years of service

The System should provide the same level of medical coverage regardless of years of service



Key Comments

- The system cannot afford to provide the same level of medical coverage. The years of service should be considered.
- If work 20-30 years benefits should be higher than someone who vest then quits.
- Vested at 10 years of service is adequate. After vested time is met, same level of coverage for all participants.

Key Implications

- Rewarding long-service employees supports career employment.
- Employees in same tier with differing years of service could potentially have different levels of medical coverage.



Employer Survey – PERS

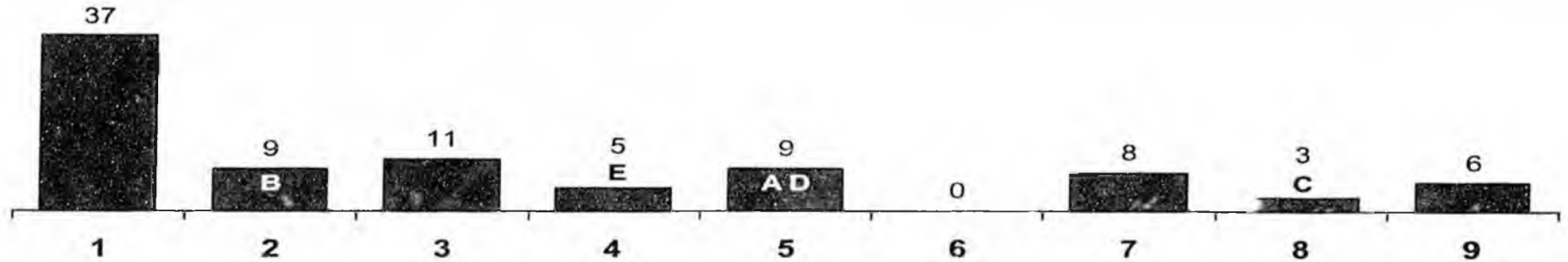
9. Medical Coverage and Medicare

Importance



The System should provide medical coverage to all retirees regardless of Medicare eligibility

The System should provide medical coverage only to those retirees **without** access to Medicare coverage



Key Comments

- Retirees receiving medical coverage should have coverage provided until the retiree reaches Medicare age and then it should become a supplemental policy and Medicare becomes the primary carrier.
- Coverage before Medicare should be based on the years of service, current employment of the retiree, and maximum contribution.
- Need to make sure Medicare gaps can be covered.
- Not confident that Medicare will be solvent down the road.

Key Implications

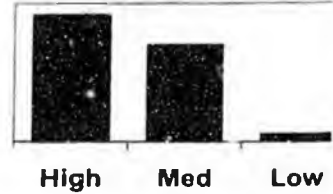
- Limiting coverage would decrease System costs over time.
- Could result in inadequate medical coverage for Medicare eligible retirees.



Employer Survey – PERS

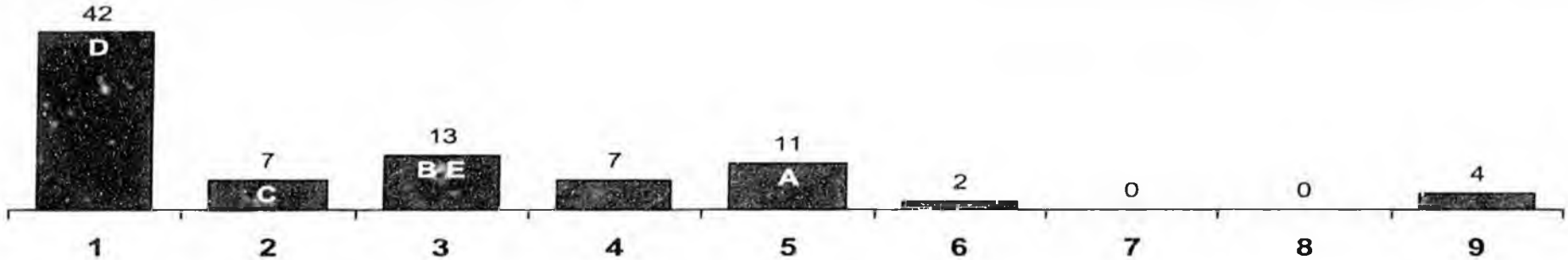
10. Medical Coverage and Medicare

Importance



The System should provide medical coverage to all retirees regardless of Medicare eligibility

The System should provide medical coverage only to those retirees **with** access to Medicare coverage



Key Comments

- *Medical coverage should supplement Medicare up to a maximum amount based on a formula determined by number of years of service.*
- *Reduce benefits when eligible for Medicare. If retire early should have option to purchase health insurance.*
- *Future retirees should pay their own medical if eligible for Medicare.*

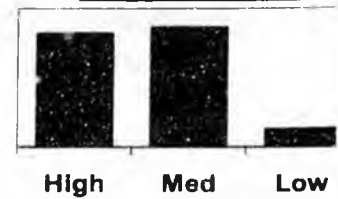
Key Implications

- *Limiting coverage would decrease System costs over time.*
- *Without retiree medical coverage before Medicare, members would be more inclined to work until Medicare eligible.*
- *If medical coverage is not offered by the System to pre-medicare retirees, access to health coverage will be significantly reduced.*

Employer Survey – PERS

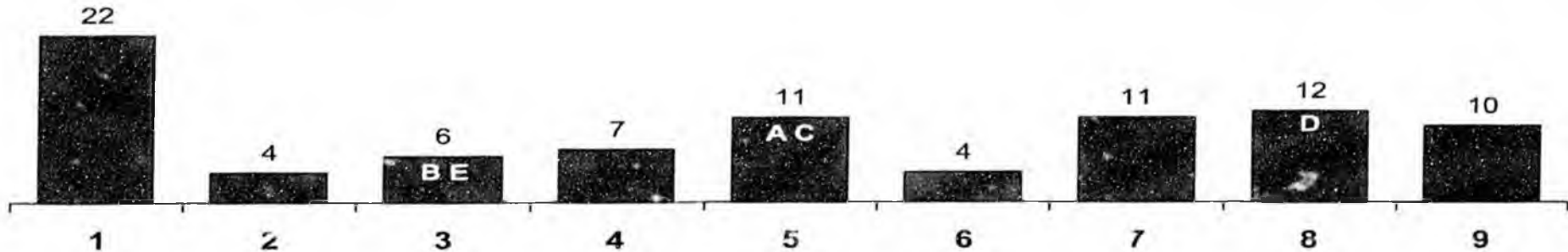
11. Medical Coverage

Importance



The System should offer the same medical coverage to active and retired members

The System should **not** offer the same medical coverage to active and retired member:



Key Comments

- Provide dollar amount of medical for retirees; if medical coverage for active employees provides better coverage, give retirees option to make co-pay.
- Those who are retired are less able to provide coverage.

Key Implications

- Potential cost savings by providing lesser medical coverage for retired members.
- Different benefit levels for active and retired members may lead to communication and potential equity challenges.



Employer Survey – PERS

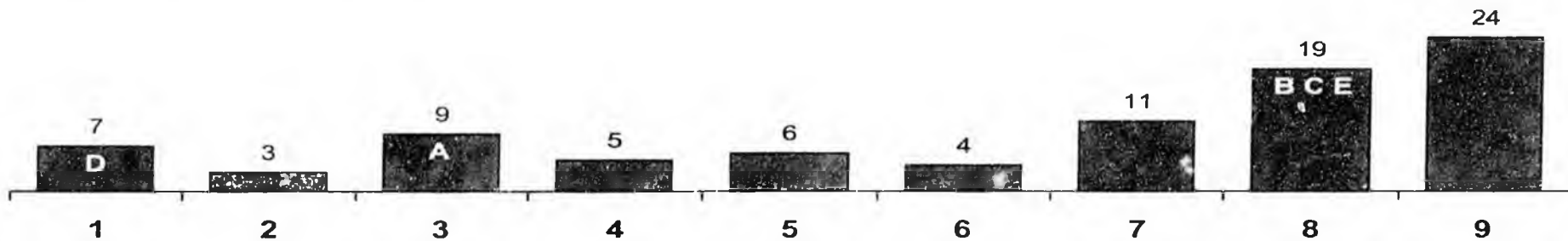
12. Retiring Age

Importance



We want to be able to encourage retirement at a particular age range

We don't care when people retire



Key Comments

- *Employee's productivity and contribution are not subject to age so mandatory retirement at a certain age may not be beneficial.*
- *I believe we will need to discourage early retirement as the available workforce decreases.*
- *20 and out needs to be changed. If anyone should be 20 and out it should be law enforcement.*

Key Implications

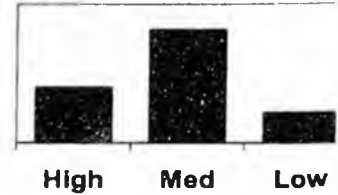
- *By encouraging retirement at a particular age, the System may run the risk of losing productive members too soon and/or unproductive members "hanging on" too long.*



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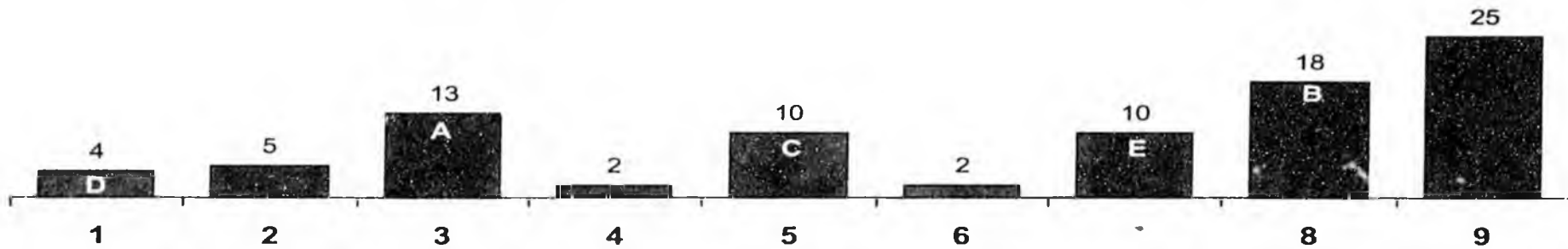
13. Retiring after Years of Service

Importance



We want to be able to encourage retirement after a particular number of years of service

We don't care when people retire

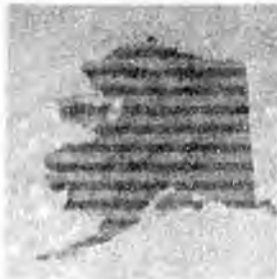


Key Comments

- Increasing the number of years of service required, when age is not a factor, would reduce the cost to the retirement system.
- While high salary people are a budget concern, their experience and expertise is a tremendous plus for a small organization.
- As long as the employee meets job qualifications and is productive. This is the real issue.

Key Implications

- By encouraging retirement at a particular number of years of service, the System may run the risk of losing productive members too soon and/or unproductive members "hanging on" too long.



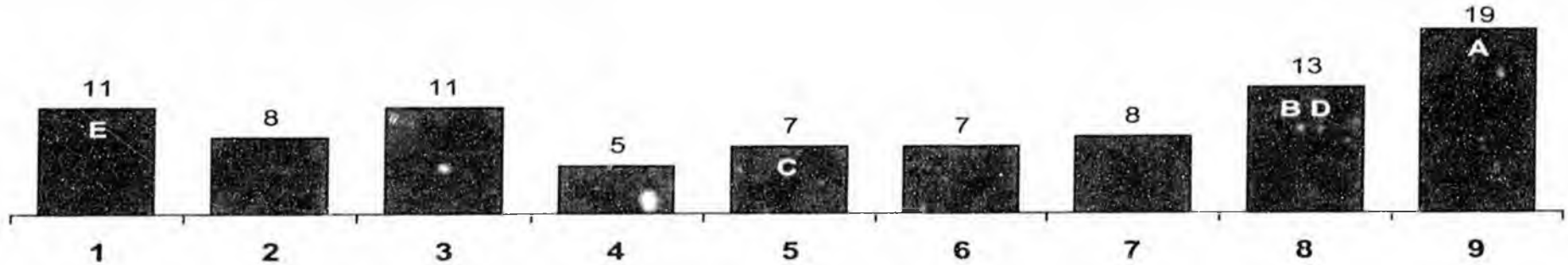
Employer Survey – PERS

14. Early Retirement



We want to be able to encourage early retirement with ad hoc enhanced benefits through the plan

We don't care about encouraging early retirement, or will handle it through other method



Key Comments

- *RIP and severance plans which offer early retirement have been shown to have a detrimental financial effect on the retirement system.*
- *This would help to manage the workforce and take advantage of the knowledge and skills of older workers.*

Key Implications

- *Being able to provide ad hoc enhanced retirement benefits gives the System and individual employers an additional tool to manage the workforce.*

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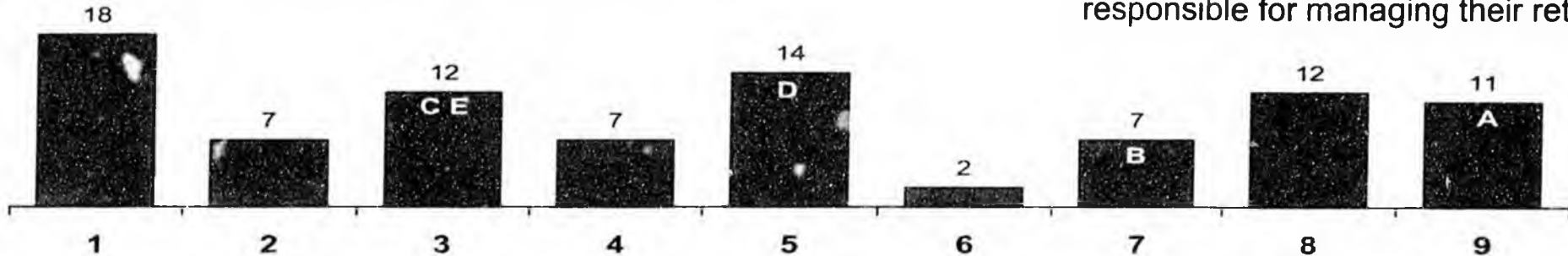
15. Retirement Income

Importance



We want to provide employees with a specific amount of retirement income they can count on at retirement

We will contribute to our employees retirement but each employee should be entirely responsible for managing their retirement



Key Comments

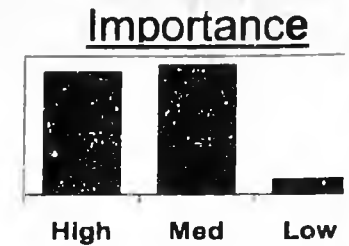
- Seems like this is defined benefits vs contribution -- which is the key issue for debate and cannot be answered this easily -- it needs economic and market analysis on long term ability to attract and retain employees.
- A defined contribution plan would be more predictable, in terms of costs to the retirement system, and less expensive than a defined benefit plan.
- People should be responsible for themselves. Investment advice should be available.
- Should not be a crapshoot.

Key Implications

- By not providing members with a specific amount of retirement income, members may not be saving enough or taking the appropriate responsibility to ensure a comfortable retirement.

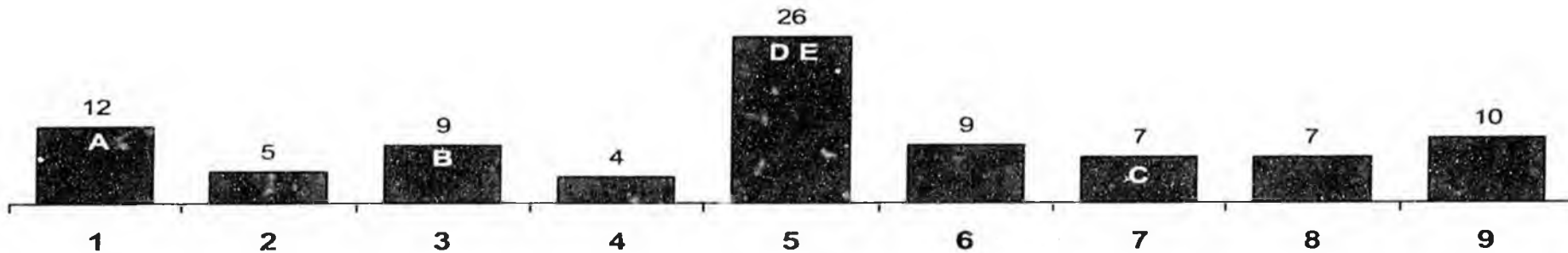
Employer Survey – PERS

16. Investment Risk Responsibility



Employees should assume investment risk

Employer should assume investment risk



Key Comments

- *Employees should assume responsibility. However employers may want to limit investment options to minimize risk.*
- *Employer should not assume investment risk.*
- *There should be a balance between the employee and employer.*

Key Implications

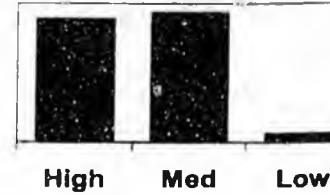
- *Bearing the investment risk exposes the System to cost increases and volatility, but can also often achieve higher returns than an individual due to a longer time horizon and professional management.*
- *Members can often invest too conservatively or too aggressively for their given situation and needs.*



Employer Survey – PERS

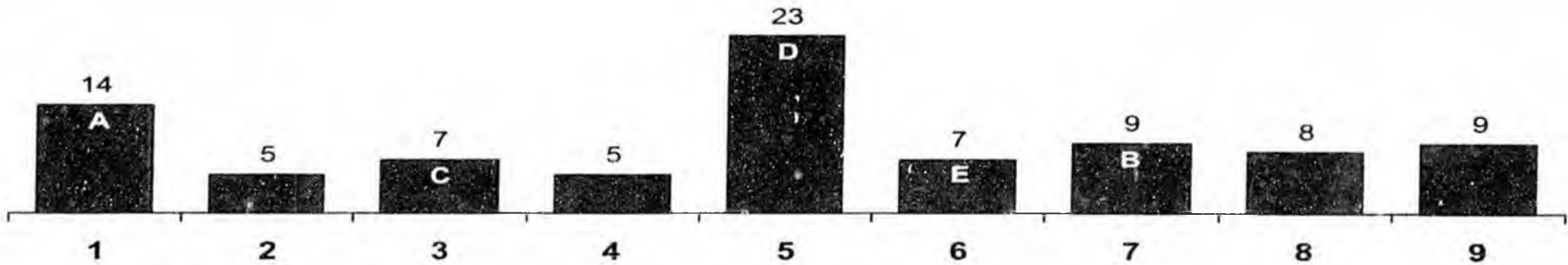
17. Inflation Risk Responsibility

Importance



Employees should assume pre-retirement inflation risk

Employers should adjust benefits for pre-retirement inflation



Key Comments

- *Their benefits should be equal to the inflation or what's the use of having a retirement plan if you can't pay.*
- *Don't support automatic increases for inflation. It's fine to offer it as investment returns and demands on the fund permit it*

Key Implications

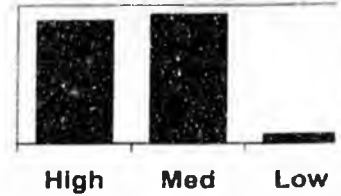
- *Value of benefits for members who terminate prior to retirement can erode over time from inflation.*
- *Providing pre-retirement inflationary protection is a cost to the System.*
- *The final average pay plan design provides some automatic pre-retirement inflation protection.*



Employer Survey – PERS

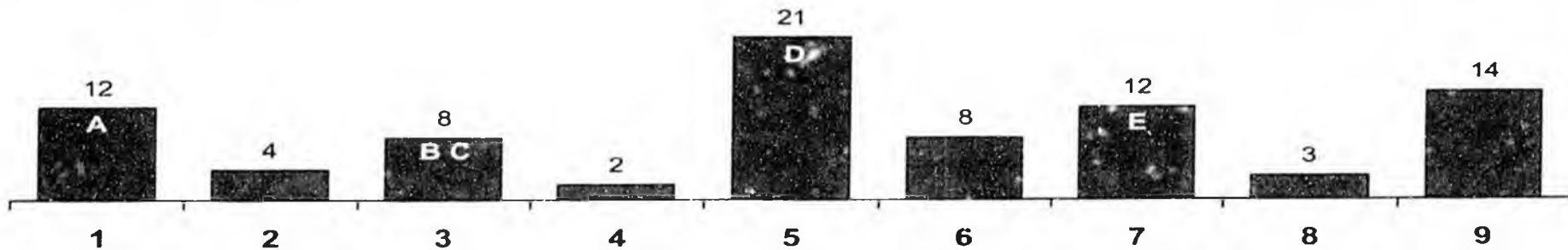
18. Inflation Risk Responsibility

Importance



Employees should assume post-retirement inflation risk

Employers should adjust benefit for post-retirement inflation



Key Comments

- *It needs economic and market analysis on long term ability to attract and retain employees.*
- *Employees should assume more risk for post-retirement inflation.*
- *Employer rates should reflect a more conservative estimated annual inflation rate and annual inflation adjustments should have an annual inflation cap.*

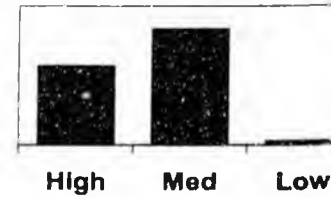
Key Implications

- *Providing post-retirement inflationary protection would ensure that the value of member's benefits at retirement continue to remain as valuable throughout their lifetime.*
- *Providing post-retirement inflationary protection is a cost to the System.*

Employer Survey – PERS

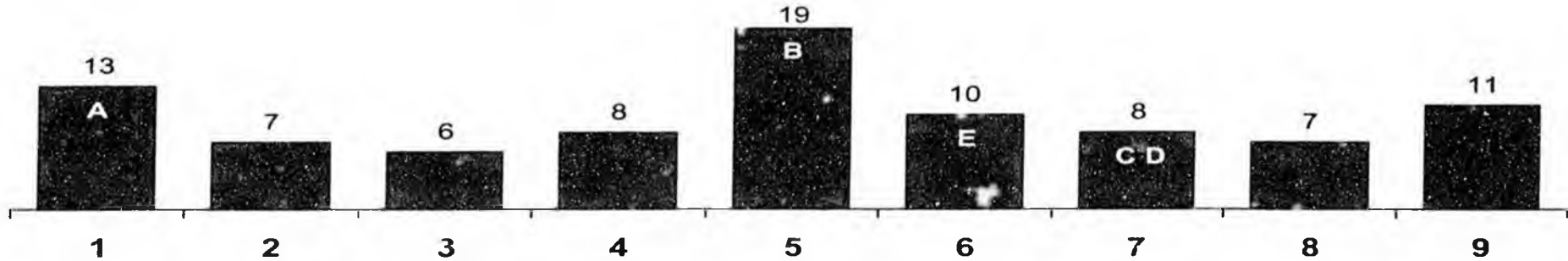
19. Longevity Risk Responsibility

Importance



Employees should assume longevity risk

Employers should assume longevity risk



Key Comments

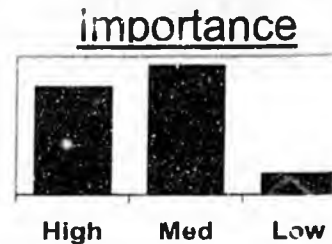
- *Employers can no longer afford to assume all future cost increases.*
- *Why should an Alaska employer become the lifetime guarantor (and lifetime risk taker) for all employees?*
- *Employers can assume this risk better.*
- *It should be the employees obligation to assume some risk.*

Key Implications

- *Providing longevity protection is a cost to the System.*
- *By assuming the longevity risk, the System could predict and manage it more accurately for the entire group than any employee could do individually.*

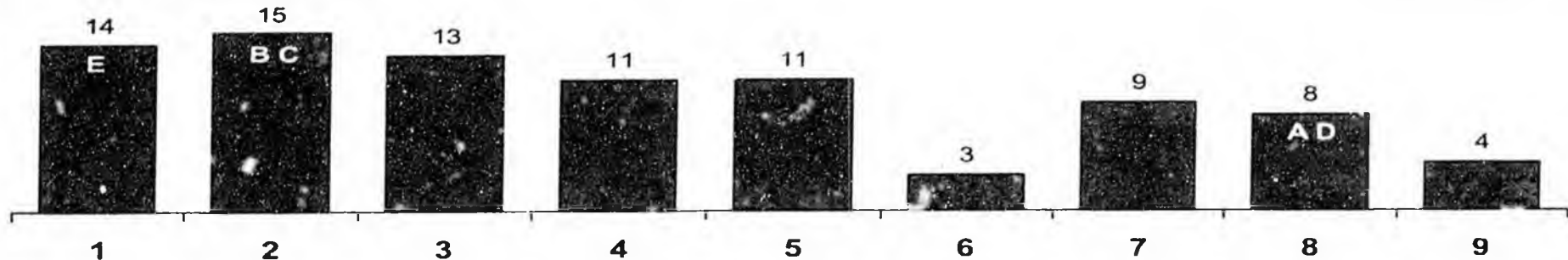
Employer Survey - PERS

20. Savings



The retirement program should heavily encourage savings in the plan

The program should perm but not push saving



Key Comments

- There are lots of other options - 401(K)'s, IRA's and 457 plans. But at least one should be heavily pushed to employee.
- Employees need to assume more responsibility for their retirement. Programs should be structured to educate and encourage employees to save for retirement.
- Employees should be allowed to contribute and enhance their retirement security.

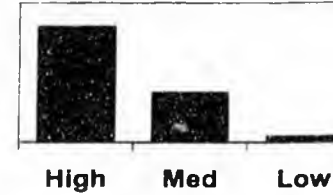
Key Implications

- Without strongly encouraging members to contribute to their retirement, many will not have adequate funds to retire comfortably.

Employer Survey – PERS

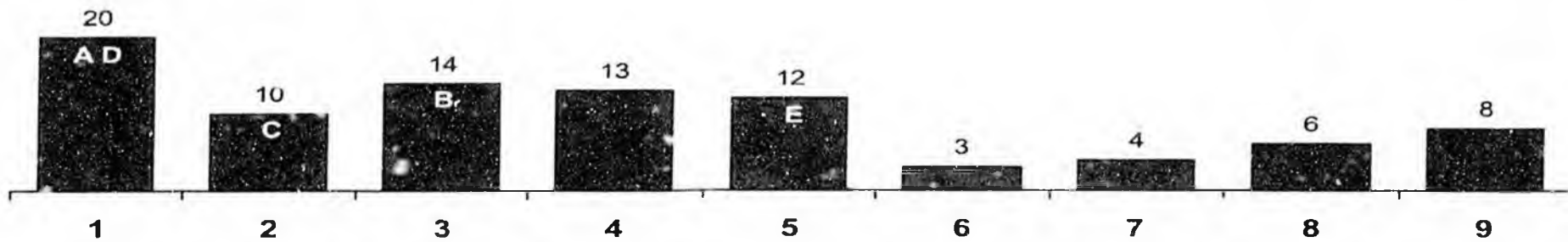
21. Cost of Medical Coverage

Importance



Employees should share in the cost of medical coverage

Employer should assume the cost of providing medical coverage



Key Comments

- *Employers can no longer afford to pay the entire amount for medical insurance. Employees should share in the cost.*
- *Teacher/administrator salary does not reflect "high wages," hence this benefit should be provided.*
- *The more you share in the cost, the more you make wise decisions.*

Key Implications

- *Members sharing in the cost of medical coverage would provide cost savings to the System over time.*
- *Would be a significant shift from current design and increase financial burden on retirees.*

Employer Survey – PERS

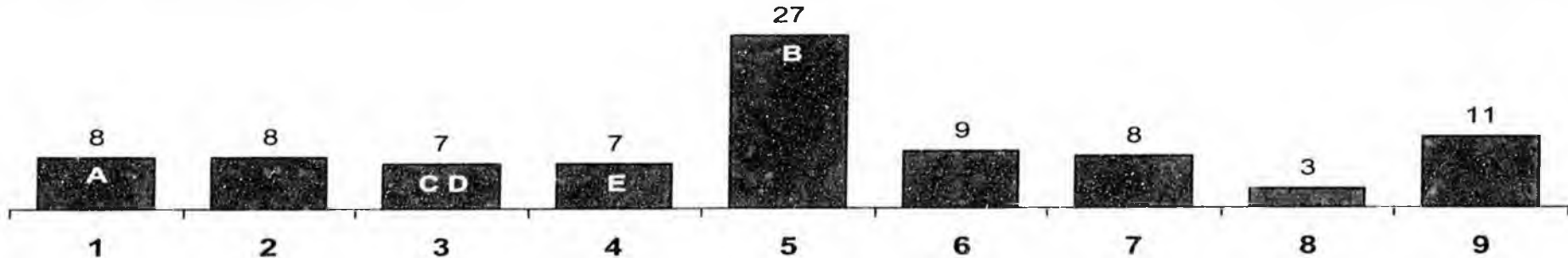
22. Cost of Medical Coverage

Importance



Employees should assume responsibility for medical cost increases

Employer should assume responsibility for medical cost increase



Key Comments

- *Employees should participate in medical cost increases.*
- *I think the employee should hold this responsibility along with some help from employer.*
- *Cost sharing is the key. Then employees will have an incentive to be wiser consumers and the system can manage cost increases more efficiently.*

Key Implications

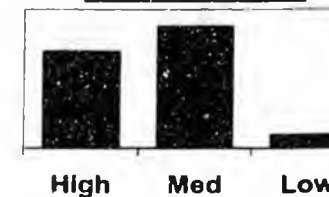
- *Members assuming the responsibility for medical cost increases would provide cost savings to the System over time.*
- *Would be a shift from current design and increase financial burden on retirees.*



Employee Survey – PERS

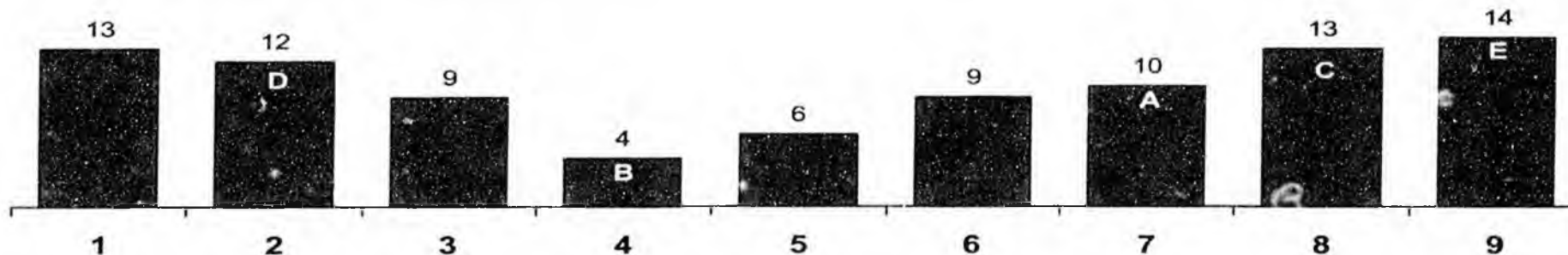
23. Access to Contributions

Importance



Employees should have access to as much of their own retirement contributions as legally possible

Employees should have **no** access to plan assets until retirement



Key Comments

- *Small portion should be available for "emergency only" situation.*
- *If the employee paid it out it should be their choice to have it whenever and how much they want.*
- *Employees generally have other deferred comp plans available to them to meet emergency needs. PERS is not a savings plan, but a long-term retirement vehicle.*

Key Implications

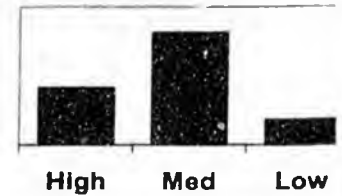
- *Members may spend retirement income during working lifetime and as a result may be unable to retire.*
- *The capability to use retirement plans for pre-retirement needs such as a home purchase can be a valuable benefit.*



Employer Survey – PERS

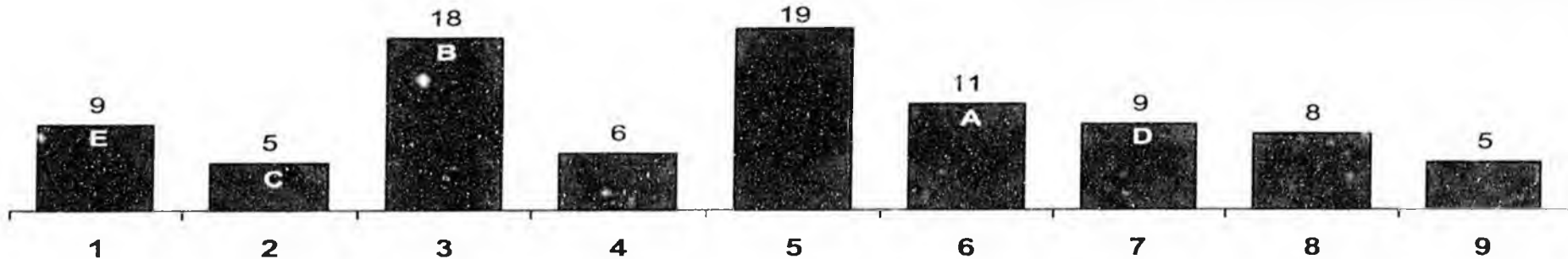
24. Understandability

Importance



Understandability is the primary concern

We'll sacrifice understandability if necessary to achieve our workforce and benefit objective.



Key Comments

- *Employees need to understand this plan.*
- *Employers need to provide good communication and seminars to explain plans, but the plan must be structured so it is simple enough for the majority of people to understand.*
- *Raise the bar. Ask people to be more responsible.*
- *Employees need to be involved in their retirement.*
- *College should teach it!*

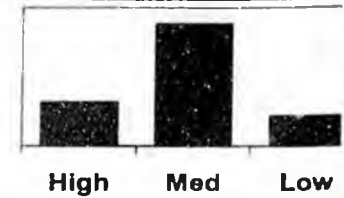
Key Implications

- *Generally a more complex formula can meet a wider variety of specific objectives.*
- *Members may perceive more value in a retirement plan that is more understandable.*

Employer Survey - PERS

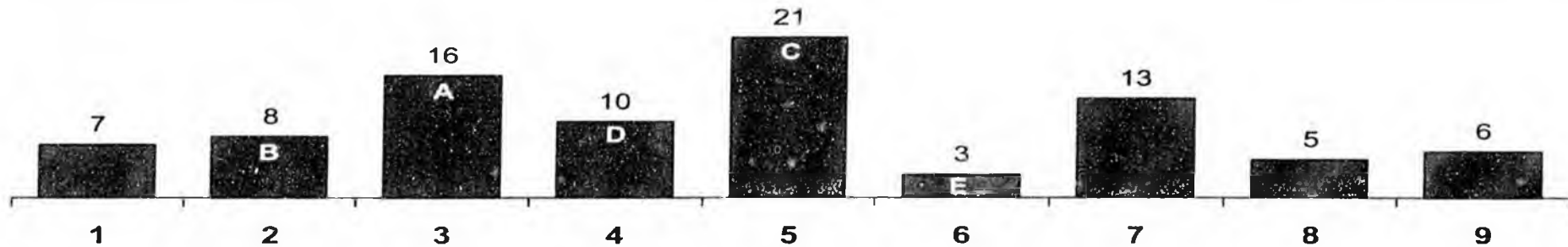
25. Tangible and Relevant Plan

Importance



All employees should find the plan tangible and relevant

It's OK if the plan is tangible and relevant mainly to older employees



Key Comments

- *Human nature is such that retirement benefits are valued more as you approach retirement. If you want young employees to become wildly enthusiastic you have to give away the farm.*
- *All employees should be responsible for their own decisions.*
- *All employees need to see the benefits of the plan.*

Key Implications

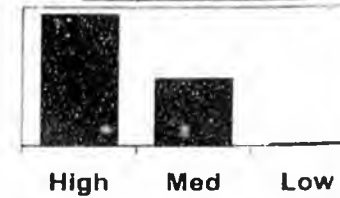
- *Members may perceive more value in a retirement plan that is tangible and relevant.*



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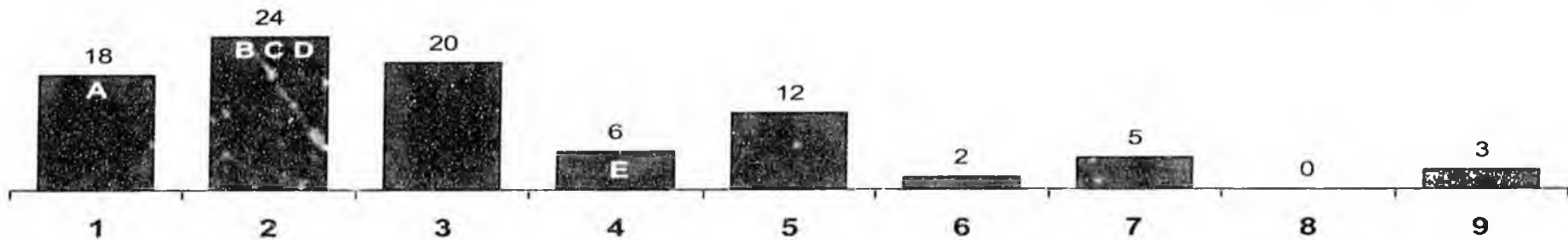
26. Predictability and Stability

Importance



We want maximum predictability and stability of contributions

We're willing to accept volatility as part of our asset strategy



Key Comments

- For budgeting purposes, employers need a high degree of predictability.
- Governments have to budget. They need to know what to expect.
- Wide budget swings are hard to deal with.
- As an employer, we're willing to accept volatility as part of our asset strategy, as long as fluctuation isn't too drastic. Such as our increase over the next two years.

Key Implications

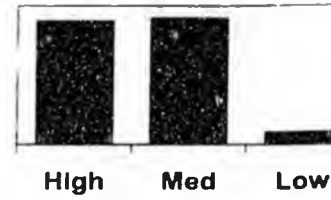
- Volatility is the result of a higher-risk asset strategy with higher potential rewards.



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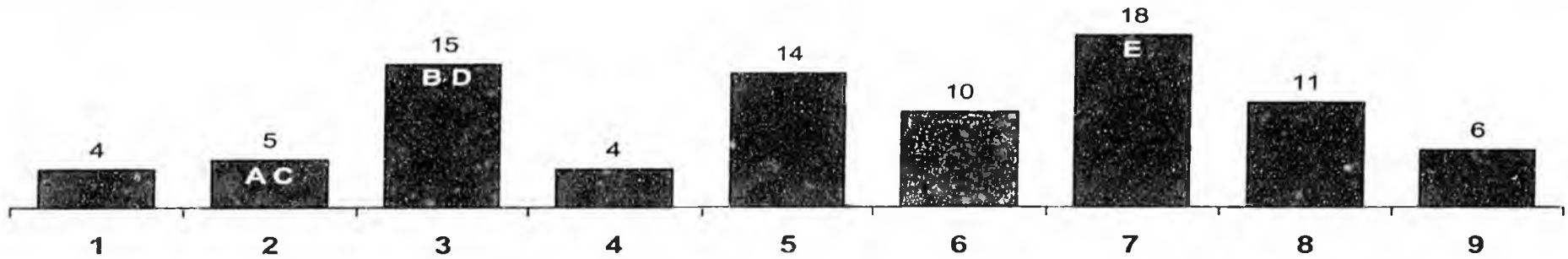
27. Change in Cost

Importance



Aggregate retirement contributions should be less than they are now

Marginal cost increases are appropriate to meet other design goals



Key Comments

- *Employees contribution rates may need to increase!!*
- *We understand that costs are increasing. Want to keep plans competitive while keeping plan costs reasonable.*
- *It would be a fairy tale to want aggregate retirement contributions to be less than they are now.*

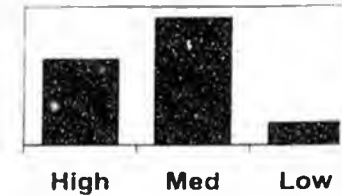
Key Implications

- *Lowering contributions will result in generally lower level of benefits for retirees.*
- *System benefits may or may not be competitive against peer group if benefits are decreased.*

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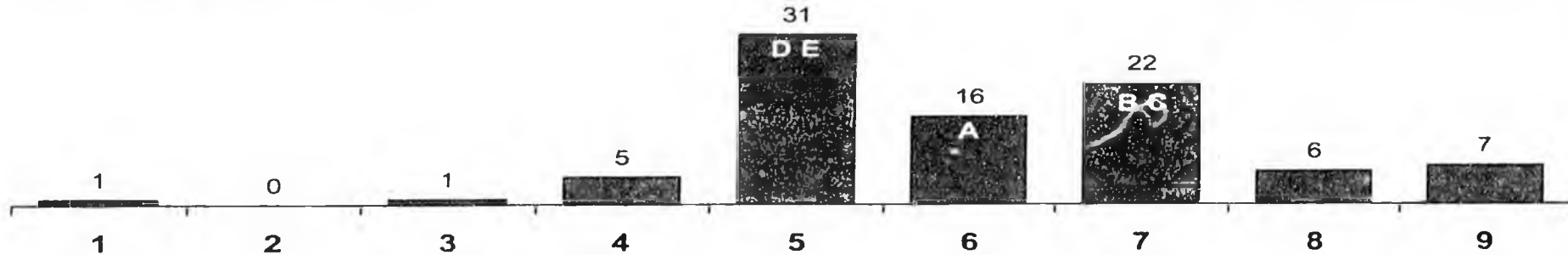
28. Comparison with the Market

Importance



We would like our retirement program to be low compared to the market

We would like our retirement program to be high compared to the market

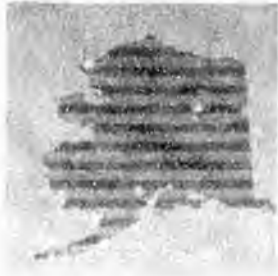


Key Comments

- *Our compensation is low compared to the market, so benefits have to be high in order to attract quality employees.*
- *Want the plan to be competitive or better to retain or hire employees.*
- *This provides for retention of good employees.*
- *A good running Chevy will be fine.*

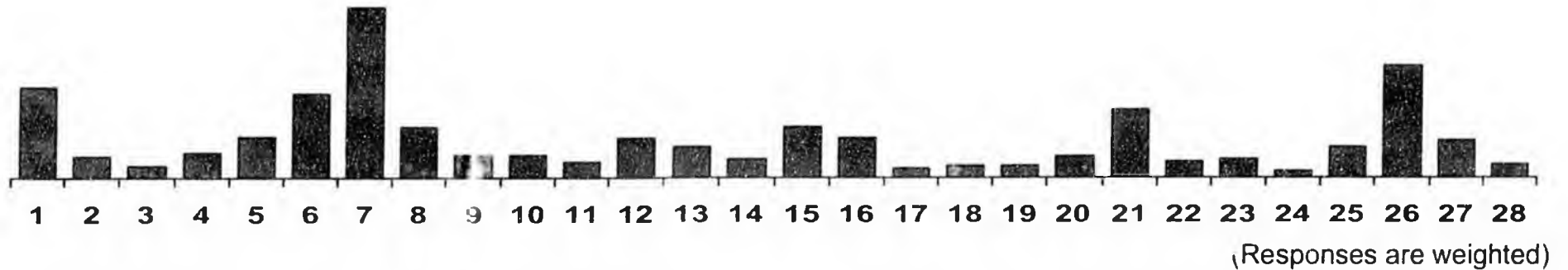
Key Implications

- *High-end benefits are an important attraction and retention tool.*
- *High-end benefits can be costly.*



Employer Survey – PERS

29. Most Important Questions



The four most important questions with preferred spectrum comment

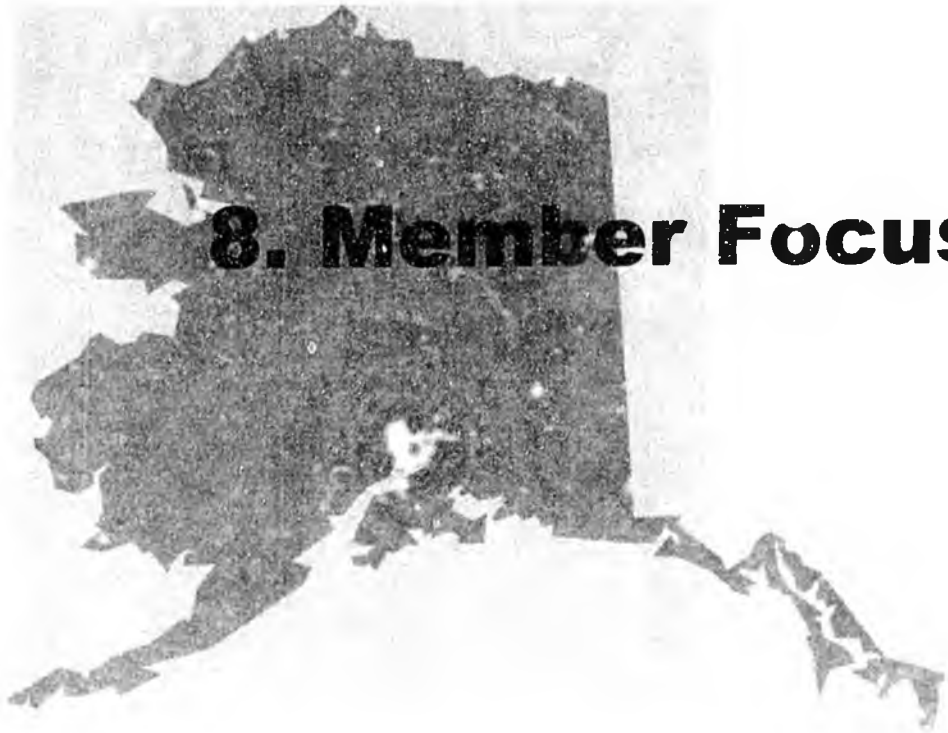
- **Question # 7:** “The retirement program should provide medical coverage”
- **Question #26:** “We want maximum predictability and stability of contributions”
- **Question #1:** “Plan should favor long-service employees”
- **Question #6:** (The responses did not indicate a significant difference between the two)
 - “The System should provide medical coverage to terminated vested members”
 - “The System should **not** provide medical coverage to terminated vested members”



Employer Survey – PERS

Important Conclusions

- Employers want the retirement program to continue to provide medical coverage
- Many employers open to the possibility of providing differing levels of medical coverage based on service or having members share in the cost of coverage
- Other potential cost savings areas that some employers seem open to:
 - Lowering the post-retirement cost-of-living adjustment
 - Not providing medical coverage to vested terminated members
- Some responses seem to favor continuing a defined benefit approach
 - Reward long service
- However, responses leaned towards shifting investment risk to members



8. Member Focus Group Results



Employer Survey – PERS

Important Conclusions

- Employers want the retirement program to continue to provide medical coverage
- Many employers open to the possibility of providing differing levels of medical coverage based on service or having members share in the cost of coverage
- Other potential cost savings areas that some employers seem open to:
 - Lowering the post-retirement cost-of-living adjustment
 - Not providing medical coverage to vested terminated members
- Some responses seem to favor continuing a defined benefit approach
 - Reward long service
- However, responses leaned towards shifting investment risk to members



Member Focus Group Results

Focus Group Findings

- Retiree benefits overall are viewed as very important in the decision to work within the System and stay in their jobs long term
- “Tier 1 guilt” may have implications for communication of any new tiers
- All elements of the retirement package are highly valued, but general priorities emerged:
 - Retiree medical is the most highly valued part of the retirement package
 - Disability benefits and COLAs are the least highly valued part of the package



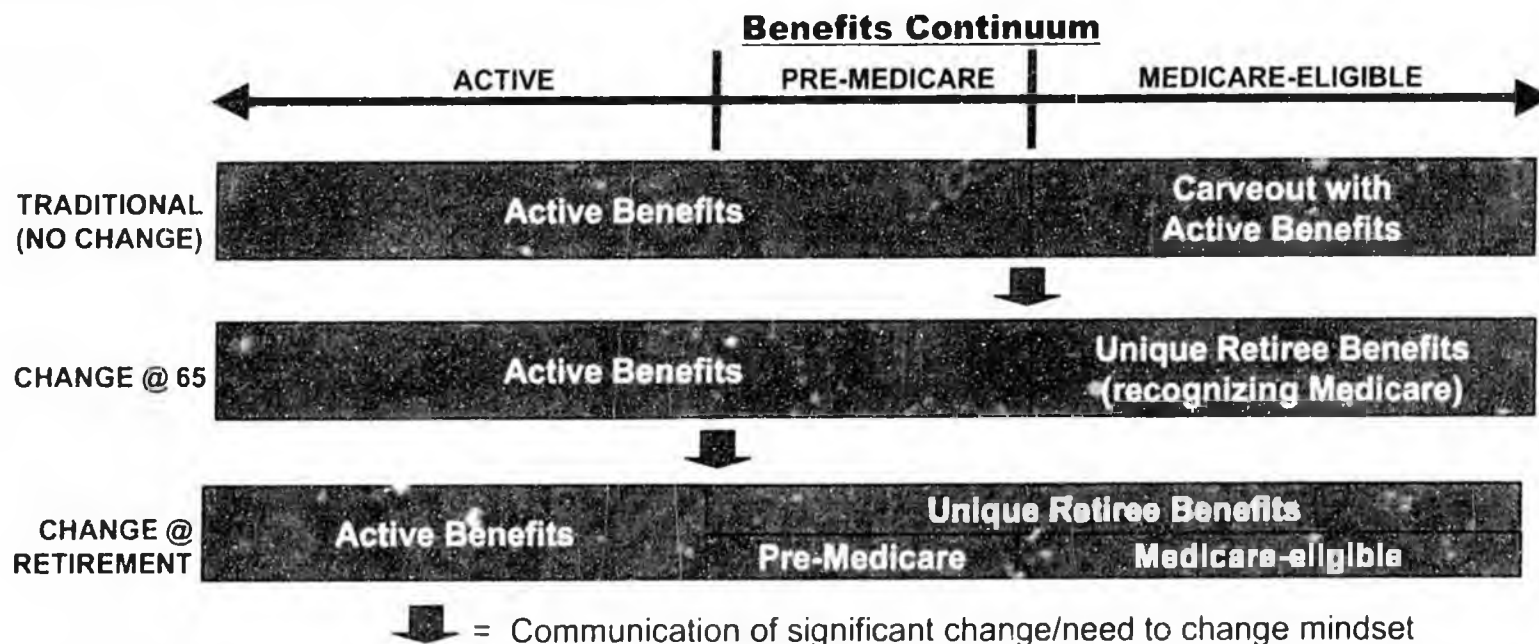
9. Medical Program Issues and Alternatives

Medical Program Issues and Alternatives

Current State

Retiree medical design/redesign is part of a broader strategy

- Benefit decisions tied more closely to business plan
- Approaches are multi-phased/multi-year
- Strategic decision: Is coverage primarily a retirement benefit or an extension of active medical benefits?





Medical Program Issues and Alternatives

Current State

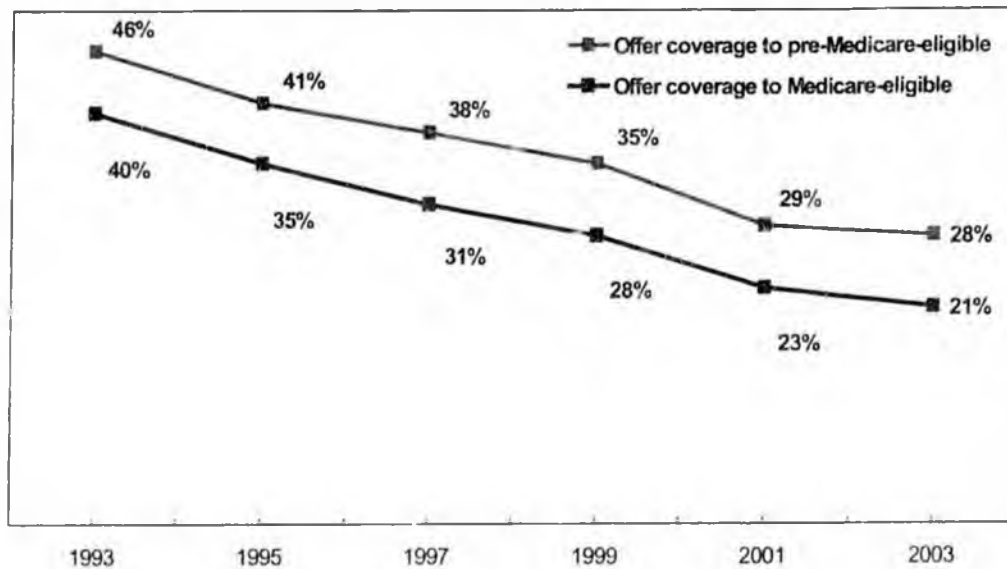
- Pre-65 programs
 - Enables less productive employees to retire
 - Helps to enable proper promotion flow
 - Can be used to reward long-service employees
 - Retiree access to coverage is a critical issue
 - Per capita medical costs are significantly higher than both active employee and Post-65 costs
- Post-65 programs
 - Rewards long-term service
 - Can relieve pressure on Retirement benefits
 - Less need for plan sponsor involvement:
 - Medicare, Medicare HMOs, Medigap plans
 - Spending accounts (limited availability prior to Medicare reform)

Pre-65 and Post-65 programs have different objectives, structures and challenges

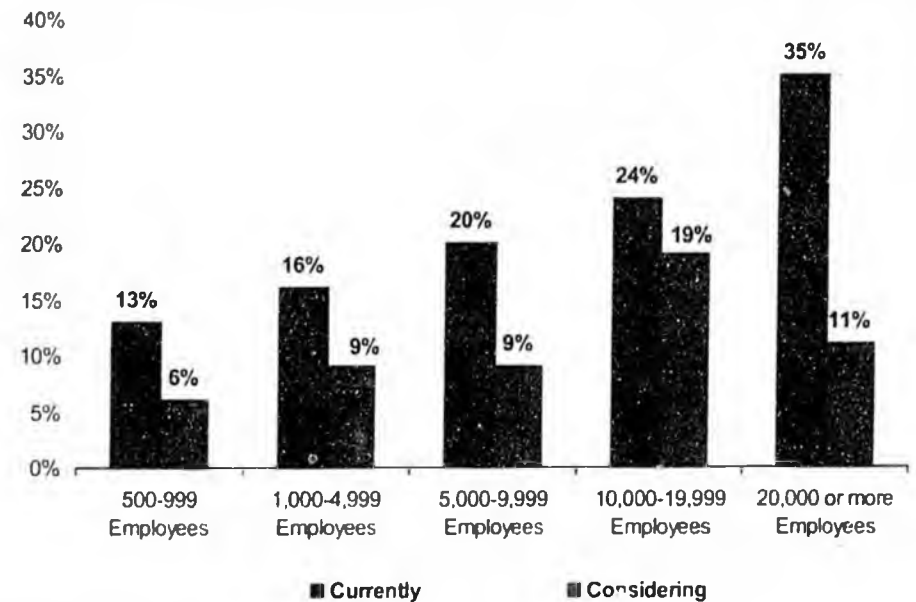
Medical Program Issues and Alternatives

Current State

Percentage of Retirees with PRM



Percentage of Employers Capping Contributions by Employer Size



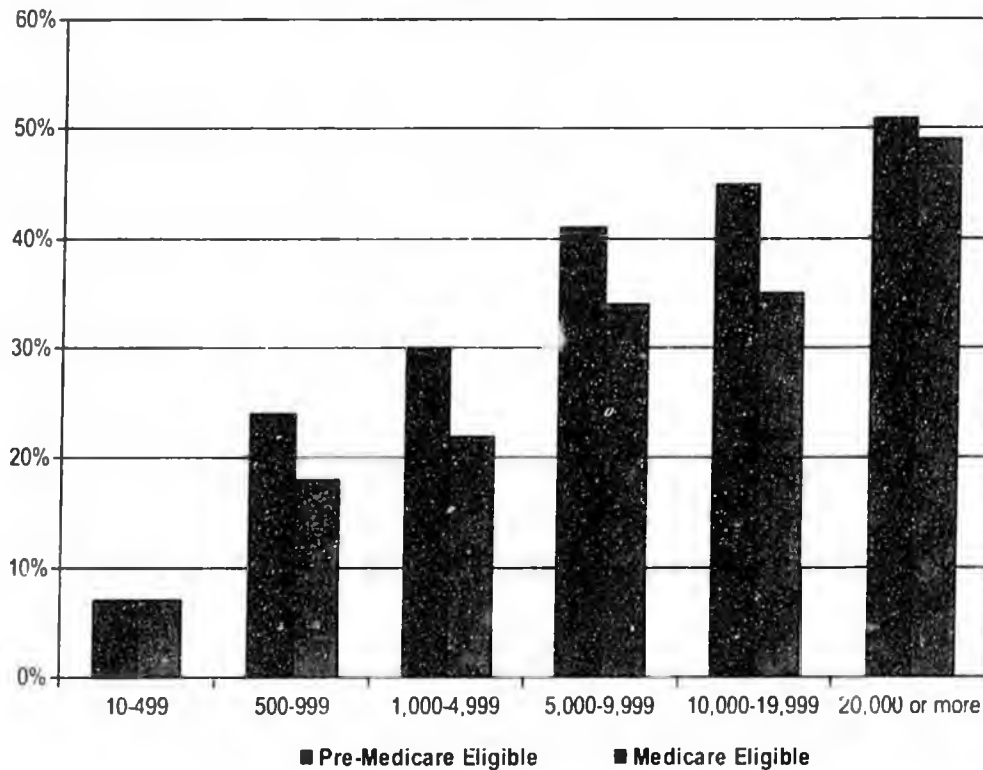
**Plan Sponsors are promising less;
Retirees are paying more when coverage is offered;
plan changes shift cost to retirees**

Source: 2003 Mercer National Survey of Employer-Sponsored Health Plans
Employers with 10-499 employees did not report coverage separately for pre-Medicare-eligible and Medicare-eligible.

Medical Program Issues and Alternatives

Current State

**Employer Trends:
Retiree Coverage by Employer Size**



**Employers offering Retiree Medical
to Medicare-eligible Retirees**

Industry	1998	2003
Manufacturing	23%	19%
Wholesale/Retail	14%	11%
Services	31%	21%
Transportation/Communication/ Utility	54%	29%
Health Care	17%	8%
Financial Services	57%	32%
Government	55%	58%
All Large Employers	30%	21%

**Coverage is directly related to
employer size and industry**

Source: Mercer's 2003 National Survey of Employer-Sponsored Health Plans

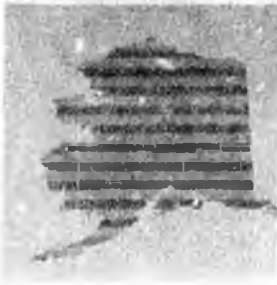


Medical Program Issues and Alternatives

General Trends

Decline in Coverage Availability and Changes in Design

- Costs and risks will drive decline
- Increased cost sharing with employees
- Limit on cost and scope of post-retirement medical program
- These limits may create adverse selection (healthy retirees purchase coverage outside program), increasing cost per participating retiree

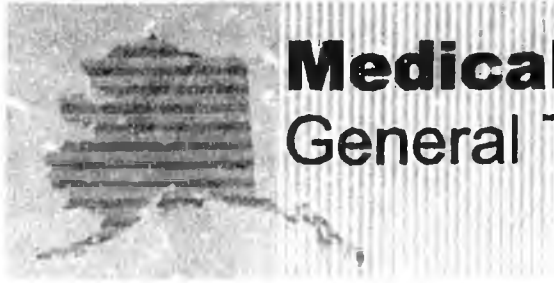


Medica! Program Issues and Alternatives

General Trends

Costs and Need for Benefits are Increasing

- Aging population living longer - longer retirements
- Prescription drug costs increasing dramatically - Medicare coverage possible but design is uncertain
- Semi-retirement phenomenon - 'bridge' jobs
- Labor supply inadequate - employers must be innovative
- Workplace issues - being attractive to right workers while being fair (non-discriminatory)



Medical Program Issues and Alternatives

General Trends

Attraction and Retention Tool

- Retiree medical is a key issue for mid-career employees/ new hires
- Retiree medical is an integral factor in the linkage between workforce management and retirement strategy
- Retiree Medical is a key factor in the retention and recruitment of valuable employees for the State of Alaska and participating subdivisions



Medical Program Issues and Alternatives

General Trends

Cost Sharing

- Average retiree contribution as a percent of “premium” for large employers pre-Medicare retiree coverage was 34% and for post-Medicare retiree coverage was 38% for those requiring contributions.
- For Government Plan Sponsors, retiree contributions were 25% and 28% of premium for pre–Medicare and post-Medicare retiree medical coverage, respectively.

Source: Mercer's 2003 National Survey of Employer-Sponsored Health Plans



Medical Program Issues and Alternatives

Key Retiree Medical Objectives

- Access to medical and prescription drug coverage for Retirees
- Competitive program to aid in attraction and retention of workforce
- Cost sharing with Retirees
- Long term cost control
- Cost stability and risk management



Medical Program Issues and Alternatives

Current Cost Sharing Philosophy

■ PERS

- Full Retiree Contributions
 - Under age 60 with less than 30 years of service (25 for Police and Fire)
 - Not tier 1
- Zero Retiree Contributions
 - Tier 1
 - Over age 60
 - 30 years of service (25 for Police and Fire)
- 87% of current PERS pensioners and vested terminations get free medical
- 29% of current PERS actives are immediately eligible for free medical upon retirement

■ TRS

- Full Retiree Contributions
 - Under age 60 with less than 25 years of service
 - Not tier 1
- Zero Retiree Contributions
 - Tier 1
 - Over age 60
 - 25 years of service
- 97% of current TRS pensioners and vested terminations get free medical
- 37% of current TRS actives are immediately eligible for free medical up on retirement

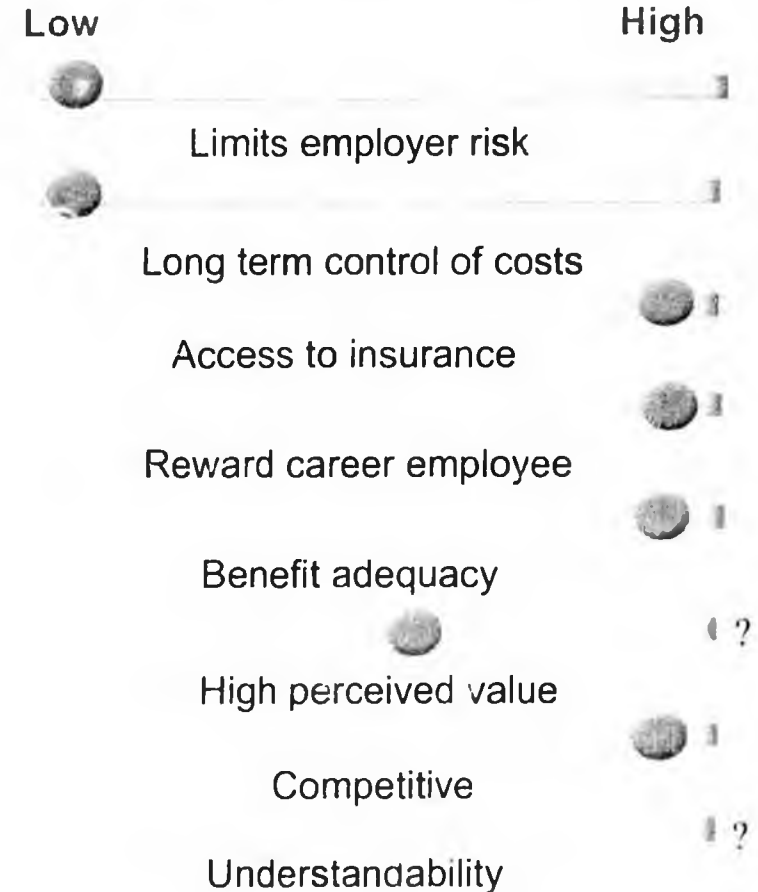


Medical Program Issues and Alternatives

Alignment with Objectives

Eligibility	PERS Tier 1 and Tier 2 – 5 years PERS Tier 3 – 10 years TRS – all Tiers 8 years
Plan Description	<p>Indemnity major medical plan with prescription drug, dental, vision and audiology coverage</p> <ul style="list-style-type: none"> - Medical \$150 deductible, 80% coins, \$800 OOP - Prescription drug \$4 generic, \$8 brand, \$0 mail order - Dental \$50 deductible, coins by class, \$2,000 annual max - Vision 80% coins, 1 exam per year - Audiology – 80% coins, \$2,000 every three years
Contribution	<p>PERS – retiree pay all under 60 and <30 years, no contributions over 60, 30+ years, or Tier 1</p> <p>TRS – retiree pay all under 60 and <25 years, no contributions over 60, 25+ years, or Tier 1</p> <p>No cap on company subsidy</p>
Plan Liabilities (APBO) - PERS & TRS	<p>\$5.9 billion (as of 6/30/03)</p> <ul style="list-style-type: none"> - 48% retirees - 35% actives - 17% terminated vested

Current Traditional Plan





Medical Program Issues and Alternatives

Options to Consider

Objectives

- Cost Control
- Risk Management

Cost Control

■ Focus on:

- Plan design
 - Traditional
 - Defined dollar
 - Account based
- Cost sharing – before and after retirement
- Eligibility
- Prescription drug plans



Medical Program Issues and Alternatives

Options to Consider – Traditional Designs

- Sometimes called a defined benefit approach
- Benefit to retiree is specified in the plan design
- Contributions are typically based on years of service
- Liability and risk after retiree contribution is System's
- Retiree contributions are often specified as a percentage of program cost
- Increasingly, these plans are being designed with a dollar "cap" on employer contributions (may be tied to inflation)



Medical Program Issues and Alternatives

Options to Consider – Traditional Designs

- Change eligibility
 - Increase age and service requirements or eliminate coverage
- Benefit design changes

Pre and Post	Pre	Post
Deductibles, copays, maximum	Disease management	Carveout/non-duplication
Catastrophic plan	Health promotion/employee education	Supplement to Medicare
Pharmacy management	Catastrophic case management	Rx only plan
	E-health plans	

- Change retiree cost-sharing
- Phased retirement



Medical Program Issues and Alternatives

Options to Consider

■ Cost Sharing

- Wide range of contribution alternatives available
 - Fixed retiree contribution ◀ . . . ▶ fixed System contribution
 - Percent of plan cost
 - Fixed regardless of service, or based on service
 - Same for retiree and dependent, or less for dependent
 - Contribution percent based on years of service and age at retirement
- Changes in retiree cost-sharing are common approaches
 - Tie contribution to age and/or service

EXAMPLE Age @ Retirement	Percent Paid by System Years of Service at Retirement		
	10 – 19	20 – 28	30+
55-59	40%	50%	60%
60-64	55%	65%	75%
65+	70%	80%	90%

- Cap or index for System contribution
- Higher amounts for dependents, especially those with coverage elsewhere
- Account-based approaches (Health Savings Account, Health Reimbursement Arrangement, defined dollar contribution) are becoming more common

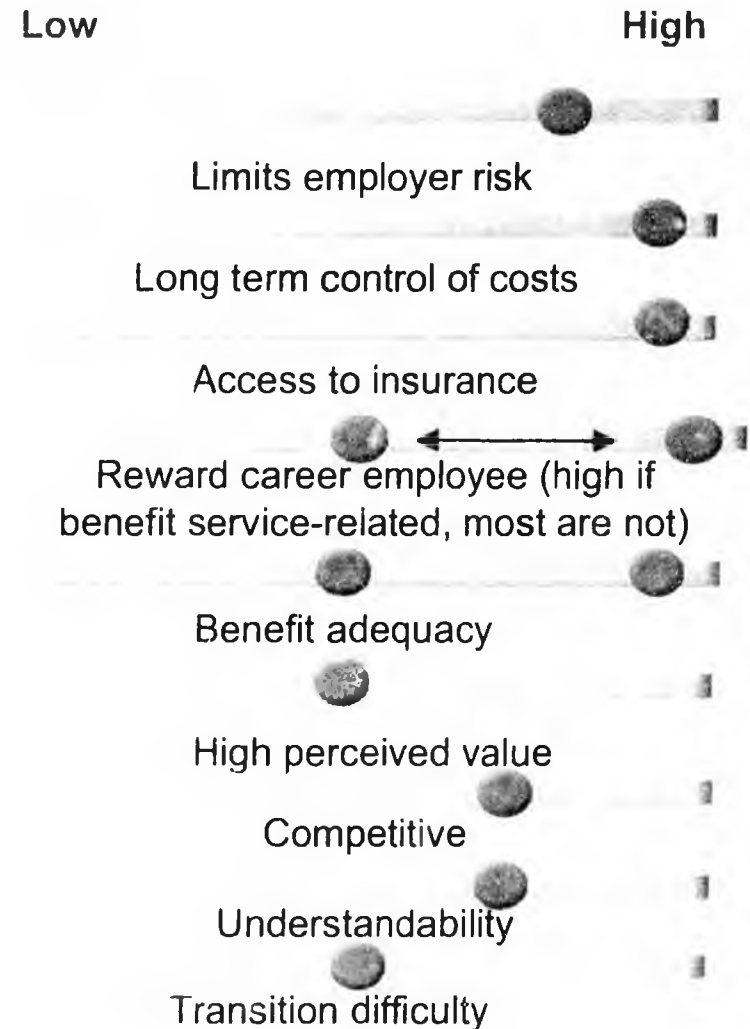


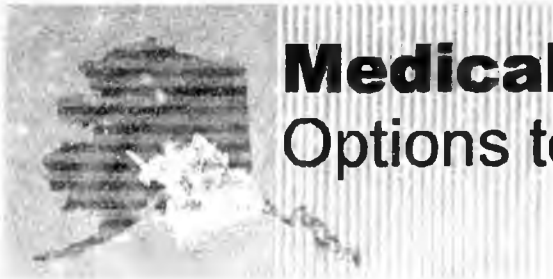
Medical Program Issues and Alternatives

Options to Consider – Defined Dollar Designs

■ Defined Dollar Benefit

- Fixed dollar subsidy at retirement for medical coverage
- May or may not sponsor a health plan
- May structure subsidy to be based on service

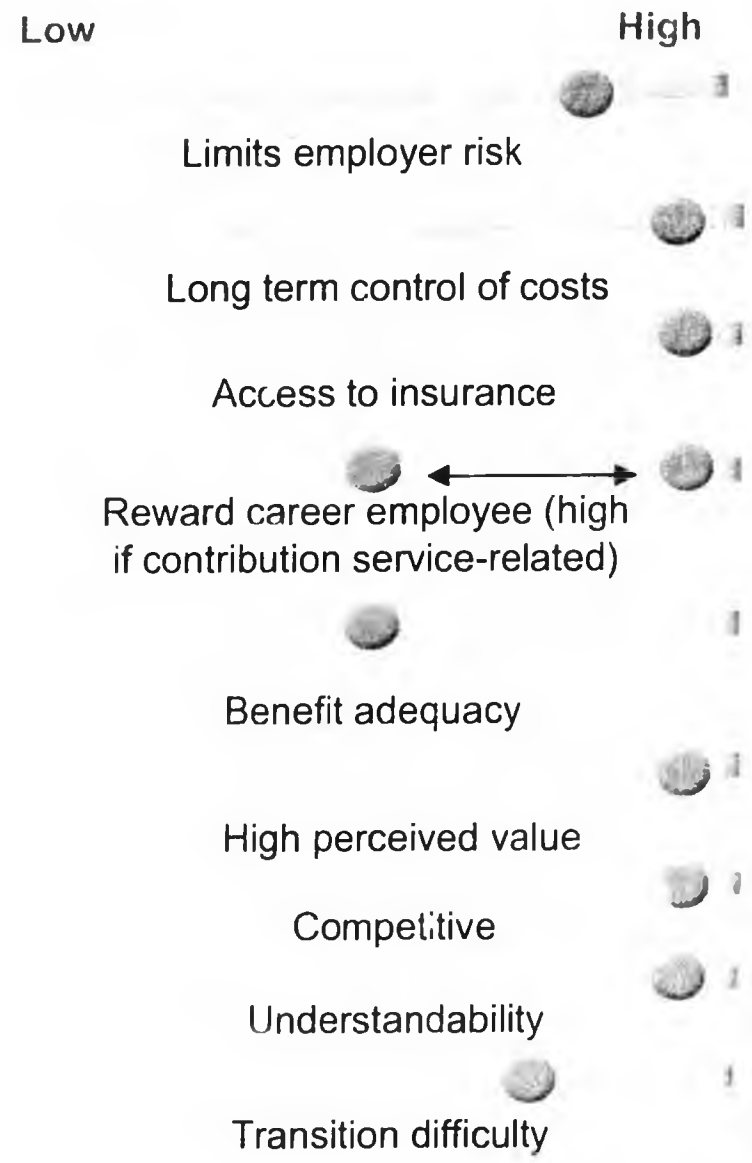




Medical Program Issues and Alternatives

Options to Consider – Account Based Designs

- **Defined Contribution**
 - Basic concept: plan credits “account” with a fixed amount for each year of service
 - System generally maintains medical plan for retirees and dependents (except for premium reimbursement approach)
 - Credits typically vary by service
 - Eligibility generally no different than with traditional plans
 - Account balance only available for retiree medical benefits
 - May or may not be funded





Medical Program Issues and Alternatives

Options to Consider – Account Based Designs

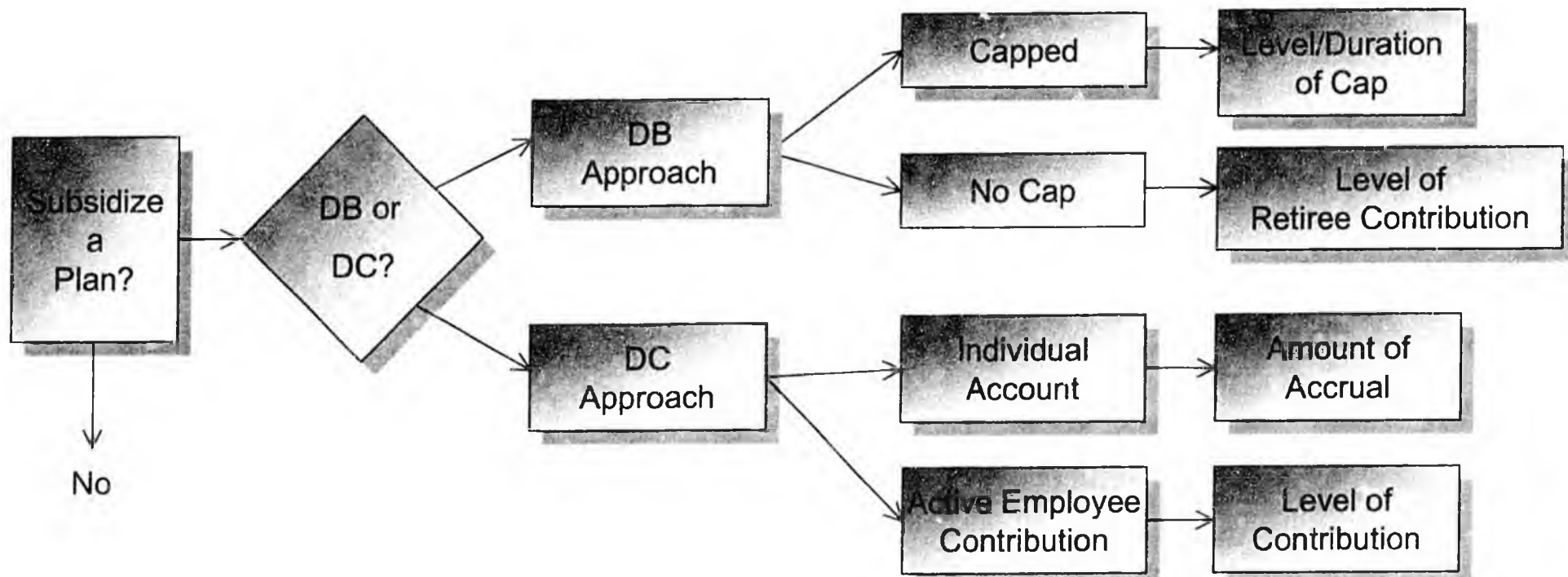
Advantages

- Employer's annual or aggregate cost is capped
- Benefits are still tax-free
- New plan is more visible and more easily understood by employees
- Not vested – account is forfeited if not eligible for retiree medical benefits when employee terminates

Medical Program Issues and Alternatives

Options to Consider

Subsidy





Medical Program Issues and Alternatives

Benefit Strategy Considerations

- Attraction, motivation and retention of employees
- Target position within relevant industry
- Markets for labor talents
- Ownership in success
- Employee ease of use
- Administration
- Flexibility
- Reflection of employee demographics and life cycle needs



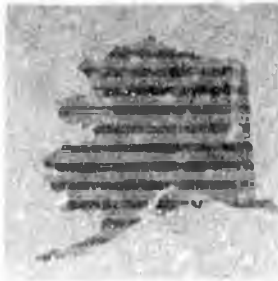
Medical Program Issues and Alternatives

Benefit Strategy Considerations

- Internal equity
- Critical employee groups/skills
- Consistency across geographies and employee groups
- Cost and risk to retirement System
- Perceived value to employees
- Communication openness



**10. Retirement (Non-medical) Program
Observations, Trends and
Alternatives**



Trends and Alternatives Contents

- General comments
- Defined benefit observations
- Defined contribution observations
- Alternative plan designs



Trends and Alternatives

General Comments

- Defined benefit or defined contribution
 - Each approach has advantages/disadvantages
 - Many states are adopting combined approaches
- There are true “hybrid” plans
 - Cash balance plans (California)
 - Pension equity plans
 - Legislative uncertainty (court rulings that they are age-discriminatory)
- There are other types of defined benefit plans
 - Career average plans
 - Dollars times years of service



Trends and Alternatives

General Comments (*continued*)

- There is greater reliance on account based plans as a source of retirement income
 - Participation in defined benefit plans has declined in private sector from almost 40 percent in 1980 to about 17 percent now
 - Traditional pension still prevalent in public sector
 - 90 percent of state and local government workers are covered by defined benefit plans
 - Several states have reduced the defined benefit component and introduced defined contribution plans
- Many plan sponsors (both private and public sector) have reevaluated their benefit programs
 - Both level of benefits and pattern of benefit accruals



Trends and Alternatives Defined Benefit Observations

- Plans have experienced higher cost levels and greater cost volatility
- Funded status has declined in last 3 years



Trends and Alternatives

Defined Benefit Observations (*continued*)

- Advantages (to employer) of defined benefit plans
 - Retention incentives, lower turnover cost
 - Workforce management
 - Cost allocated to longer-service employees

- Advantages (to employee) of defined benefit plans
 - Pooling of longevity risk
 - In most cases, employer bears investment risk
 - Predictable, stable retirement income



Trends and Alternatives Defined Benefit Observations (*continued*)

- Disadvantages (to employer) of defined benefit plans
 - Investment risk
 - Cost volatility



Trends and Alternatives

Defined Contribution Observations

- Advantages (to employer) of defined contribution plans
 - Predictable cost
 - Stable cost
 - Employee assumes investment risk
 - No long-term administrative commitment
 - Contribution equity among employees

- Advantages (to employee) of defined contribution plans
 - Portability
 - Ability to direct investments
 - Contribution equity among employees



Trends and Alternatives

Defined Contribution Observations (*continued*)

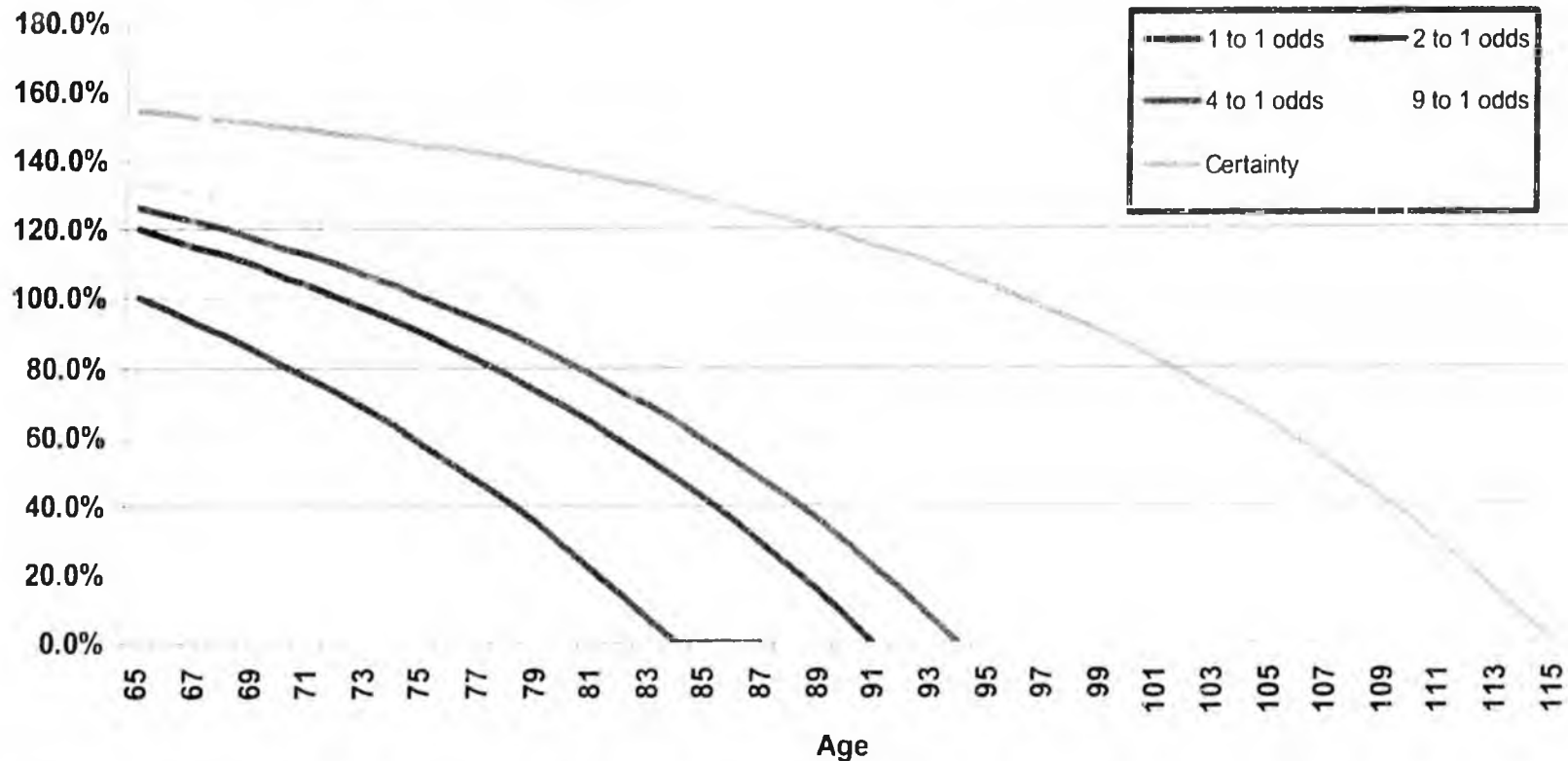
- Challenges for defined contribution plans
 - More difficult to manage workforce
 - Employee directed money often earns less
 - Amount needed at retirement is often underestimated
 - Employees need to contribute in excess of 10 percent, but most do not
 - Retirees generally not equipped to transform lump sum into monthly payments that last for a lifetime



Trends and Alternatives

50% More Wealth Needed to Reach the Certainty Provided by an Annuity

Comparative Spend Down Balances with Varying Degrees of Certainty (100% = lump sum value of annuity)





Trends and Alternatives

Alternative Plan Designs

Career Average Plans

- Benefits are based on compensation over the employee's entire working career, not final average
- Benefits accrue more slowly than under a final average pay plan

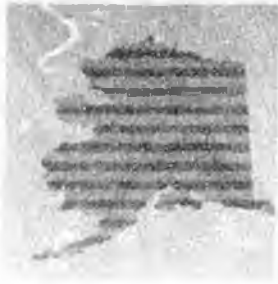


Trends and Alternatives

Alternative Plan Designs (*continued*)

DB/DC Combination

- This is the structure usually employed by large private sector employers
- A modest defined benefit structure is supplemented by a defined contribution plan
- The two plans are not linked and the benefits from each are separately determined
- This is the design of the State of Oregon's new benefit plan



Trends and Alternatives

Alternative Plan Designs *(continued)*

Floor Offset Plan

- Like the DB/DC combination, each employee has both a defined benefit and a defined contribution benefit
- In the floor offset plan, the DB benefit is the “floor” or the smallest benefit you can get
- If the DC account provides a larger monthly benefit upon conversion to an annuity, that is the benefit paid to the member

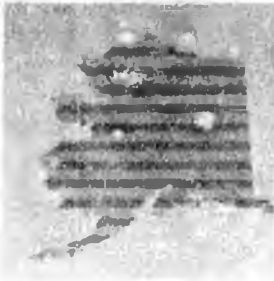


Trends and Alternatives

Alternative Plan Designs (*continued*)

Cash Balance Plan

- A cash balance plan is a defined benefit plan which uses the language of a defined contribution plan to determine the benefit
- Each year the benefit is increased by additional accruals as well as interest on the previous account balance
- Upon retirement, the account can be converted to an annuity or paid out as a lump sum
- Legal issues should be considered



Trends and Alternatives

Alternative Plan Designs (*continued*)

Pension Equity Plan

- A pension equity plan is a defined benefit plan which defines the benefit as a lump sum based on final average pay and service
- Upon retirement, the account can be converted to an annuity or paid out as a lump sum
- The lump sum increases with service and pay increases rather than with interest, as in the cash balance plan
- Legal issues should be considered



Trends and Alternatives

Alternative Plan Designs *(continued)*

Variable-Annuity Defined Benefit Plans

- Key features
 - Defined benefit plans
 - Benefits increase or decrease in response to investment returns
 - Participant bears some or all of investment risk
 - Cost is highly predictable



Trends and Alternatives

Alternative Plan Designs (*continued*)

Variable-annuity defined benefit plans have many familiar features:

- Plan defines accrual as an annuity payable at retirement
- Accrual pattern is the same as a traditional DB plan
- Benefit formulas are often the same as in a traditional career average or flat benefit plan designs
- Same vesting provisions
- Plans can have optional forms, and subsidies

Essentially, variable plans are the same as traditional plans, except the benefit provided (or portion of benefit) is a variable annuity instead of a fixed annuity

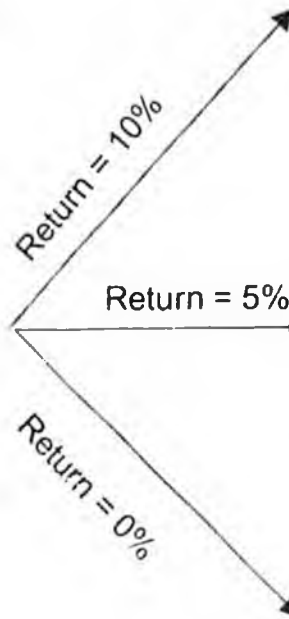


Trends and Alternatives

Benefit variability example

Plan Hurdle Rate 5%
Monthly Benefit 1000 units
Unit Value at Time 1 (UV1) 2.0

\$Ret Bent Yr. 1 = 1000 x 2.0 = \$2,000



\$Ret Ben Yr. 2 = 1000 x 2.095 = **\$2,095**

(UV₂ = UV₁ x 1.10/1.05 = 2.095)

\$Ret Ben Yr. 2 = 1000 x 2.000 = **\$2,000**

(UV₂ = UV₁ x 1.05/1.05 = 2.000)

\$Ret Ben Yr. 2 = 1000 x 1.905 = **\$1,905**

(UV₂ = UV₁ x 1.00/1.05 = 1.905)



Trends and Alternatives

Funding for variable plans

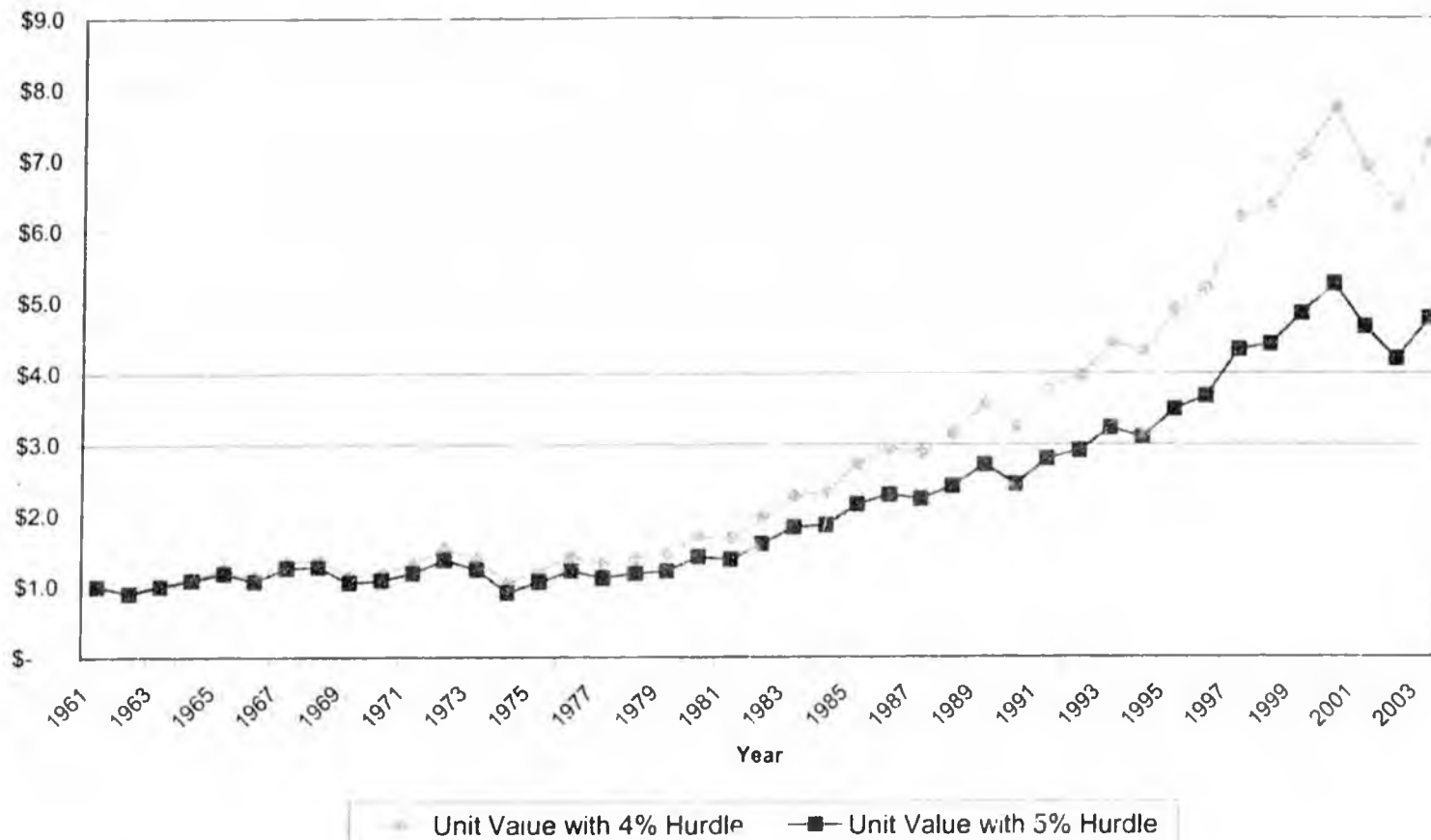
- Fully funded variable plans have no investment risk to the plan sponsor
 - Demographic assumptions can create gains or losses
 - Plans that are under- or over-funded can experience investment gains and losses

- Funding cost for a fully funded variable plan, is the normal cost with interest regardless of current interest rate levels.
 - Normal cost only fluctuates with changes in demographics
 - Demographic assumptions can create gains or losses
 - Cost to keep plan free of investment risk is normal cost plus demographic gains/losses

Trends and Alternatives

Variable benefits – effect of Hurdle Rate

Variable Fund Unit Value
(1961 - 2003)





Trends and Alternatives

Variable benefits – what people like

Longevity pooling

- Big financial advantage to retiree
 - Eliminates risk of outliving assets
 - Creates economic value
 - Takes smaller asset amount to fund retirement
- Sponsor assumes longevity risk
 - Risk is highly predictable
 - Can fund with conservative assumption or appropriate margin
 - Any gains/losses generally emerge very slowly



Trends and Alternatives

Variable benefits – what people like (*continued*)

Favorable investment results produce increasing benefits

- Participants share in investment gains
- If hurdle rate is reasonable, expectation of increasing benefits

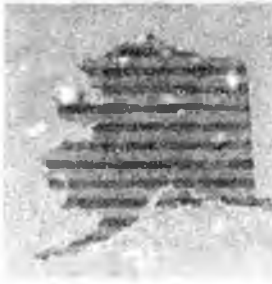


Trends and Alternatives

Variable benefits – what people like (*continued*)

Sponsor cost pattern

- Cost and funding are highly predictable, generally a level percent of pay
- Investment gains or losses are generally very small, related only to the surplus or deficit of the plan
- If Plan is fully funded (no surplus or deficit), no investment gain/loss
- Demographic gains/losses generally much smaller, will result in some amortizations and surplus/deficit, but magnitude is generally small



Trends and Alternatives

Legal concerns

■ **Key messages**

- These issues are unknowns
- Plan sponsor needs to be aware of legal risks
- Legal counsel should be involved

■ **Age discrimination**

- Pre-retirement indexing is similar to interest credits in a cash balance plan
 - Does a younger employee, with more years of future (pre-retirement) indexing, earn a higher “rate of accrual” than an older employee with fewer years of future indexing?
- Risk may vary with hurdle rate
- To mitigate risk, use a higher hurdle rate



Trends and Alternatives

Legal concerns (*continued*)

■ **Fiduciary litigation risk**

- Employees' benefits depend on investment performance of trust
- Greater participant scrutiny of investment decisions
- Greater potential for fiduciary litigation if investments perform poorly
- To mitigate risk – tie benefits to an external index

■ **Definitely determinable benefits**

- Employee's benefit depends on investment performance, which is subject to employer control/discretion
- 1953 Rev. Rul. 185 – variable benefits are deemed to be definitely determinable
- IRS may be rethinking position
- To mitigate risk – tie benefits to an external index



Trends and Alternatives

Legal concerns (*continued*)

■ **Age 70-1/2 minimum distribution rules**

- Final regulations prohibit annuity indexation after 70-1/2 unless tied to CPI or annuity purchased
 - IRS delayed effective date to reconsider
 - additional guidance expected this year
- To mitigate risk, **wait for IRS guidance**

■ **Reduction in immediate benefit**

- Normal retirement benefit cannot be less than early retirement benefit
 - Key issue: Are “benefits” measured in *dollars* or *units*?
- Potential violation if benefits are measure in dollars and unit value declines between early and normal retirement age



Trends and Alternatives

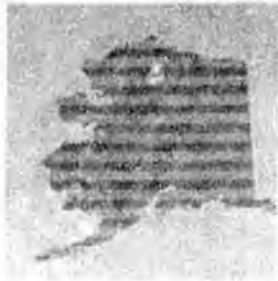
Best of both DB & DC worlds?

Key attributes (blue = desirable; red = undesirable)

	DC Plans	Traditional DB Plan	Variable DB plan
Investment Risk	Employee	Employer	Employee
Investment Management	Participant Directed	Professionally Managed	Professionally Managed
Longevity Risk			
To Employee	High	None	None
To Sponsor	None	Moderate (pooling)	Moderate (pooling)
Retirement Benefit/Cost Efficiency	Low	High	High
Work Force Management	No	Yes	Yes
Purchasing Power	Real	Nominal	Real
Portability	Yes	No	No
Employee Understanding & Appreciation	High	Low	Low
Legal Uncertainties	No	No	Yes



11. Next steps



Next Steps

- Agree on alternatives for further study
 - Medical alternatives?
 - Incorporate defined contribution component?
 - Explore alternative design?