

SB

121

<TARGET><BILL>SB 121</BILL><SUBJECT>SB
121</SUBJECT><COMM>SFIN27</COMM></TARGET>

SENATE FINANCE COMMITTEE REPORT

DATE: 2/17/12

FURTHER:

DATE TURNED
IN TO OFFICE: _____

Finance Committee considered SENATE BILL NO. 121

SB 121-TEACHERS & PUB EMPLOYEE RETIREMENT PLANS

"An Act relating to the public employees' retirement system and the teachers' retirement system; and providing for an effective date."

and recommends:

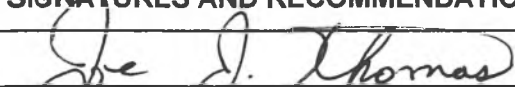


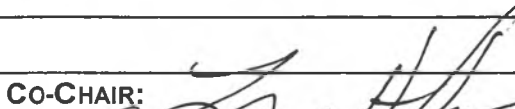
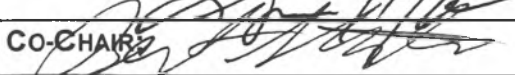
- be replaced with CS _____ (_____) Same Title New Title
- adopt previous CS SB 121 (STA) Same Title New Title
- attached amendment(s)
- adopt _____ Letter of Intent
- further referral to _____ Committee

Dept Abbr.	
ADM	LEG
CED	LAW
COR	LWF
CRT	MVA
EED	DNR
DEC	DPS
DFG	REV
GOV	DOT
DHS	UA

NEW FISCAL NOTE(S)				
Dept.	Fiscal	Indet.	Zero	FN #
ADM	X			
ADM		X		

PREVIOUS FISCAL NOTE(S)				
Dept.	Fiscal	Indet.	Zero	FN #
REV	X			2

APPROPRIATION - no fiscal note

SIGNATURES AND RECOMMENDATIONS:	PRINTED LAST NAME	DO PASS	DO NOT PASS	NO REC	AMEND
	Thomas	<input checked="" type="checkbox"/>			
	Egan	<input checked="" type="checkbox"/>			
	McGuire	<input checked="" type="checkbox"/>			
CO-CHAIR: 	Hoffman			<input checked="" type="checkbox"/>	
CO-CHAIR: 	Stedman				<input checked="" type="checkbox"/>

FISCAL NOTE

STATE OF ALASKA
2012 LEGISLATIVE SESSION

Bill Version CSSB121
Fiscal Note Number _____
() Publish Date _____

Identifier (file name) SB121CS(FIN)-DOA-OC-2-27-12 Dept. Affected Department of Administration
Title _____ Appropriation Centralized Administrative Services
Teachers and Pub Employee Retirement Plans Allocation Office of the Commissioner
Sponsor Senators Egan
Requester Senate Finance OMB Component Number 45

Expenditures/Revenues (Thousands of Dollars)

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

	FY13 Appropriation Requested	Included in Governor's FY13 Request	Out-Year Cost Estimates				
			FY14	FY15	FY16	FY17	FY18
OPERATING EXPENDITURES	FY13	FY13	FY14	FY15	FY16	FY17	FY18
Personal Services	122.0						
Travel	12.5		10.0	10.0	10.0	10.0	10.0
Services	623.9		9.3	9.3	9.3	9.3	9.3
Commodities	11.3						
Capital Outlay							
Grants, Benefits							
Miscellaneous							
TOTAL OPERATING	769.7	0.0	19.3	19.3	19.3	19.3	19.3

FUND SOURCE (Thousands of Dollars)

1002	Federal Receipts							
1003	GF Match							
1004	GF	769.7	0.0	19.3	19.3	19.3	19.3	19.3
1005	GF/Prgm (DGF)							
1037	GF/MH (UGF)							
1178	temp code (UGF)							
TOTAL		769.7	0.0	19.3	19.3	19.3	19.3	19.3

POSITIONS

Full-time							
Part-time							
Temporary	2.0	0	0	0	0	0	0

CHANGE IN REVENUES

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Estimated SUPPLEMENTAL (FY12) operating costs _____ (separate supplemental appropriation required)
(discuss reasons and fund source(s) in analysis section)

Estimated CAPITAL (FY13) costs _____ (separate capital appropriation required)
(discuss reasons and fund source(s) in analysis section)

Why this fiscal note differs from previous version (if initial version, please note as such)

Administrative fiscal note update for CS

Prepared by Jim Pucket, Director
Division Division of Retirement and Benefits
Approved by John Cramer, Deputy Commissioner
Department of Administration

Phone 465-4471
Date/Time 2/27/12 5:00 PM
Date 2/27/2012

FISCAL NOTE

STATE OF ALASKA
2012 LEGISLATIVE SESSION

BILL NO. CSSB121

Analysis

The Division of Retirement and Benefits will require two non-permanent employees to complete the preparation work to account for and produce the necessary documents and forms for the inception of the new tiers. Education to employers will be required to properly electronically report service and salaries of new employees and existing employees of the defined contribution plans who elect to convert to the new tier. Education to employees will be required for defined contribution employees to make an informed decision during the election period and for new members of the new tiers.

The division will be required to reprogram its existing system, the Combined Retirement System, which tracks all service and salaries reported by employers to the system, to accommodate the new provisions of the new tiers.

The estimated administrative costs by fiscal year are as follows:

Dollars are in thousands

	FY13	FY14	FY15	FY16	FY17	FY18
PERSONAL SERVICES						
1-Non Permanent Account III	106.0	0.0	0.0	0.0	0.0	0.0
1-Non Permanent Publications Technician III	16.0	0.0	0.0	0.0	0.0	0.0
	<u>122.0</u>	<u>0.0</u>	<u>0.0</u>	<u>0.0</u>	<u>0.0</u>	<u>0.0</u>
TRAVEL						
Employer Reporting Training/Plan Education	7.5	5.0	5.0	5.0	5.0	5.0
Reg. Counselor Travel/Employee Ed.	5.0	5.0	5.0	5.0	5.0	5.0
	<u>12.5</u>	<u>10.0</u>	<u>10.0</u>	<u>10.0</u>	<u>10.0</u>	<u>10.0</u>
SERVICES						
Communication/Postage						
-Choice Kit for new employee election	30.0	0.0	0.0	0.0	0.0	0.0
-Conversion notification to DC employees	8.1	0.0	0.0	0.0	0.0	0.0
-Update to PERS DB handbooks/brochures	322.3	0.0	0.0	0.0	0.0	0.0
Computer System Redesign	207.9	9.3	9.3	9.3	9.3	9.3
Computer System User Testing	36.6	0.0	0.0	0.0	0.0	0.0
Non Perm Training	13.4	0.0	0.0	0.0	0.0	0.0
Increased audit fees	5.6	0.0	0.0	0.0	0.0	0.0
	<u>623.9</u>	<u>9.3</u>	<u>9.3</u>	<u>9.3</u>	<u>9.3</u>	<u>9.3</u>
COMMODITIES						
Computer, phone, cubicle, supplies	11.3	0.0	0.0	0.0	0.0	0.0
	<u>11.3</u>	<u>0.0</u>	<u>0.0</u>	<u>0.0</u>	<u>0.0</u>	<u>0.0</u>
TOTAL	<u>769.7</u>	<u>19.3</u>	<u>19.3</u>	<u>19.3</u>	<u>19.3</u>	<u>19.3</u>

February 17, 2012

VIA EMAIL

Mr. Jim Puckett
 Director
 Division of Retirement and Benefits
 Department of Administration
 State of Alaska

333 Willoughby Avenue
 6th Floor State Office Building
 Juneau, AK 99811-0208

**RE: Fiscal Note for Committee Substitute Senate Bill No. 121, Draft Version "R"
 New Tier for PERS and TRS Healthcare**

Dear Jim:

As requested, we are providing the following information for a Fiscal Note on Committee Substitute SB 121, Draft Version "R" which allows current Defined Contribution Retirement (DCR) members and future members to have a choice between the DCR Plan and the Defined Benefit (DB) Plan. Current DCR members or any future members that elect to go into the DB Plan will enter Tier V for PERS and Tier IV for TRS. These tiers will have the same pension benefits as the latest DB tier but all members will be contributing at 8% of pay and they will have different healthcare benefits.

Under the new tiers, members will share the cost of healthcare benefits initially based on the same retiree premium sharing schedule as Tier IV for PERS and Tier III for TRS. Retiree pays full premium until Medicare eligible age (age 65) or retired with 25 years of service for TRS and PERS Peace Officer/Firefighters (30 years for PERS Others) instead of at age 60. On or after July 1, 2018 and every five years thereafter, the retiree premium sharing schedule percentages shall be adjusted, maintaining the five percent differences that exist in the current retiree premium sharing schedule, to cover the changes in the employer normal cost rates for members retiring on or after the date of the change in the schedule.

This bill affects the State of Alaska Public Employees' Retirement System Defined Benefit Plan (PERS DB) and the Teachers' Retirement System Defined Benefit Plan (TRS DB). We are assuming the proposed benefit changes would become effective as of July 1, 2013 and will first impact contribution rates during FY16 considering the two-year delay in budgeting contribution payments. Our results are based on the 2010 actuarial valuation data.

The table below shows the employer cost/(savings) of the bill for Fiscal Years 2016 through 2020. Dollars are in thousands.

PERS DB Plan	FY16	FY17	FY18	FY19	FY20
Increase in Normal Cost Amount	\$ (7,162)	\$ (7,229)	\$ (6,793)	\$ (6,506)	\$ (4,432)
General Fund Transfer to Pay Unfunded Past Service Cost	\$ 0	\$ 0	\$ 0	\$ 0	\$ 0
Total Increase in Annual Employer Contribution Amount	\$ (7,162)	\$ (7,229)	\$ (6,793)	\$ (6,506)	\$ (4,432)

TRS DB Plan	FY16	FY17	FY18	FY19	FY20
Increase in Normal Cost Amount	\$ (1,451)	\$ (1,616)	\$ (1,555)	\$ (1,601)	\$ (1,670)
General Fund Transfer to Pay Unfunded Past Service Cost	\$ 0	\$ 0	\$ 0	\$ 0	\$ 0
Total Increase in Annual Employer Contribution Amount	\$ (1,451)	\$ (1,616)	\$ (1,555)	\$ (1,601)	\$ (1,670)
Total PERS and TRS	\$ (8,613)	\$ (8,845)	\$ (8,348)	\$ (8,107)	\$ (6,102)

Comments on Actuarial Analysis

Our actuarial analysis indicates that the employer costs of the healthcare benefit are projected to increase faster than payroll for the future new employees expected to choose the DB plan benefits due to healthcare cost trend rates that are higher than the payroll growth rate. The DB pension benefit is projected to cost employers less due to a lower employer normal cost rate than the employer contribution rate to the DCR plan. The initial savings in employer costs for pension more than compensate for the cost of the healthcare benefit, resulting in a net savings over the five-period shown above. Without any changes, we would expect the rising healthcare benefit cost to exceed the pension savings resulting in a net employer cost some point in the future.

The latest Draft "R" of CS SB 121 includes a provision that allows for adjustments in the retiree premium sharing schedule to cover the costs associated with increasing employer normal cost rates. This increasing cost is then paid by members retiring after the date of the change in the schedule. This provision should prevent increases in employer costs due to anticipated rising healthcare benefit normal costs. However, a future increase in the retiree premium sharing schedule is likely to reduce enrollment in the healthcare benefit, resulting in only higher users of healthcare continuing to participate in the healthcare benefit. This will then exacerbate the need for future adjustments to the retiree premium sharing schedule. This provision has not been valued as part of this fiscal note since the first change in the retiree premium sharing schedule would not affect costs until FY21.

In addition, these calculations assume the assets of the funds achieve an annual investment rate of return of 8%. Volatility of returns due to the investment risk may periodically create actuarial losses, which may result in unfunded liabilities that will increase the employer costs not covered by the adjustments to the retiree premium sharing schedule.

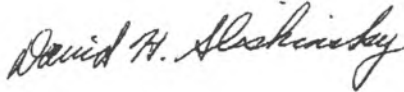
Summary for Analysis Continuation Section of Fiscal Note

The data, assumptions, plan provisions and methods used for the costs are described in the actuarial valuation reports for PERS and TRS as of June 30, 2010. The assets are based on the June 30, 2010 information provided by Christina Maiquis. We have assumed that the bill will become effective July 1, 2013. We have also assumed that 60% of current DCR members will elect to convert to the DB Plan and that 80% of future members will choose the DB Plans either by choice or by default. We have attached a detailed summary of the allocation of DB costs and DCR savings as a result of the expected elections.

Mr. Jim Puckett
February 17, 2012
Page 3

Please let us know if you need any further information.

Sincerely,



David H. Slishinsky, F.C.A., A.S.A., E.A.
Principal and Consulting Actuary

/mlp

attachment

c: Mr. Mike Barnhill, State of Alaska
Ms. Kathy Lea, State of Alaska
Mr. Chris Hulla, Buck Consultants
Ms. Melissa Bissett, Buck Consultants
Ms. Kyla Kaltenbach, Buck Consultants
Mr. Aaron Jurgaitis, Buck Consultants
Mr. Colin Wein, Buck Consultants

FISCAL NOTE

STATE OF ALASKA
2012 LEGISLATIVE SESSION

Bill Version CSSB121
Fiscal Note Number _____
() Publish Date _____

Identifier (file name) SB121CS(FIN)-DOA-DRB-2-27-12 Dept. Affected Administration
Title _____ Appropriation Centralized Administrative Services
Teachers and Public Employee Retirement Plans Allocation Division of Retirement and Benefits
Sponsor _____ Senator Egan
Requester _____ Senate Finance OMB Component Number 64

Expenditures/Revenues (Thousands of Dollars)

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

	FY13 Appropriation Requested	Included in Governor's FY13 Request	Out-Year Cost Estimates					
			FY13	FY14	FY15	FY16	FY17	FY18
OPERATING EXPENDITURES								
Personal Services	***	***	***	***	***	***	***	***
Travel								
Services								
Commodities								
Capital Outlay								
Grants, Benefits								
Miscellaneous								
TOTAL OPERATING	***	***	***	***	***	***	***	***

FUND SOURCE		(Thousands of Dollars)						
1002	Federal Receipts							
1003	GF Match							
1004	GF							
1005	GF/Prgm (DGF)							
1037	GF/MH (UGF)							
1178	temp code (UGF)							
TOTAL		***	***	***	***	***	***	***

POSITIONS							
Full-time							
Part-time							
Temporary							

CHANGE IN REVENUES							

Estimated SUPPLEMENTAL (FY12) operating costs _____ (separate supplemental appropriation required)
(discuss reasons and fund source(s) in analysis section)

Estimated CAPITAL (FY13) costs _____ (separate capital appropriation required)
(discuss reasons and fund source(s) in analysis section)

Why this fiscal note differs from previous version (if initial version, please note as such)

Initial version for this CS

Prepared by Jim Puckett, Director
Division Division of Retirement and Benefits
Approved by John Cramer, Deputy Commissioner
Department of Administration

Phone 465-4471
Date/Time 2/27/12 5:00 PM
Date 2/27/2012

FISCAL NOTE

STATE OF ALASKA
2012 LEGISLATIVE SESSION

BILL NO. CSSB121

Analysis

Actuarial Cost Analysis

The actuary for the PERS and TRS retirement systems, Buck Consultants, has prepared an actuarial analysis of CSSB 121(STA) under AS 24.08.036. Attachment A. This analysis shows that under the actuarial assumptions currently adopted by the Alaska Retirement Management Board (ARM Board), this bill will impose normal costs that are less than or equal to the normal costs of the defined contribution tiers created by SB 141 in 2005. CSSB 121(STA) accomplishes that by requiring that projected healthcare cost growth that exceeds current defined contribution (DC) employer normal costs be borne by future retirees in the form of increased premiums and increased premium cost share percentages.

Among the ARM Board-adopted actuarial assumptions that underlie this analysis is the investment rate of return assumption of 8 percent/year. The appropriateness of this return assumption has recently been challenged within the legislature in the context of the existing defined benefit tiers. It has been suggested that something closer to a 5 percent/year return assumption would be more appropriate when structuring a defined benefit system. Moreover, the investment advisor for the ARM Board, Callan and Associates, recently testified to the ARM Board and Senate Finance that over the next 5-10 years, an 8 percent/year investment return is not likely and that a 7 percent/year return would be a challenge to achieve.

The attached actuarial analysis assumes that all contributions to the new defined benefit tiers will be invested and return 8 percent/year. Should a lesser rate of return be assumed, that would normally result in an increase to the employer normal cost rate. But since the employer cost rate is essentially capped under CSSB 121 at the existing DC employer normal cost rate, the reduction of the investment return assumption will probably create a long-term unfunded liability. Unfunded liabilities are recovered by imposing a past-service cost rate on employers. If the normal employer cost rate under the bill equals the normal DC employer cost rate, then any additional employer past service cost rate will necessarily impose higher costs on employers than the existing DC tiers.

The actuary has not computed an analysis of the impact of a lesser rate of return assumption.

Because of the apparent uncertainty regarding the appropriate rate of return assumption, the actuarial cost analysis for this committee substitute is indeterminate at this time.

FISCAL NOTE

STATE OF ALASKA
2012 LEGISLATIVE SESSION

Bill Version CSSB 121(STA)
Fiscal Note Number 2
(S) Publish Date 2/17/12

Identifier (file name) SB121-DOR-TRS-01-24-12 Dept. Affected Revenue
Title An Act relating to the PERS and TRS Appropriation Taxation & Treasury
Allocation ARMB Custody & Mgmt Fee
Sponsor Senators Egan, Menard, Paskvan, Davis, Kookesh
Requester Senate State Affairs OMB Component Number 2812

Expenditures/Revenues (Thousands of Dollars)

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

	FY13 Appropriation Requested	Included in Governor's FY13 Request	Out-Year Cost Estimates					
			FY13	FY14	FY15	FY16	FY17	FY18
OPERATING EXPENDITURES								
Personal Services								
Travel								
Services	593.0		690.0	795.0	909.0	1,032.0	1,164.0	
Commodities								
Capital Outlay								
Grants, Benefits								
Miscellaneous								
TOTAL OPERATING	593.0	0.0	690.0	795.0	909.0	1,032.0	1,164.0	

FUND SOURCE		(Thousands of Dollars)						
1002	Federal Receipts							
1003	GF Match							
1004	GF							
1005	GF/Prgm (DGF)							
1029	PERS Trust (Other)	413.0	482.0	557.0	638.0	725.0	819.0	
1034	Teach Ret (Other)	180.0	208.0	238.0	271.0	307.0	345.0	
TOTAL		593.0	0.0	690.0	795.0	909.0	1,032.0	1,164.0

POSITIONS								
Full-time								
Part-time								
Temporary								

CHANGE IN REVENUES								
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Estimated SUPPLEMENTAL (FY12) operating costs _____ (separate supplemental appropriation required)
(discuss reasons and fund source(s) in analysis section)

Estimated CAPITAL (FY13) costs _____ (separate capital appropriation required)
(discuss reasons and fund source(s) in analysis section)

Why this fiscal note differs from previous version (if initial version, please note as such)

Initial note.

Prepared by Pam Leary, Comptroller
Division Treasury
Approved by Angela Rodell, Deputy Commissioner
Department of Revenue

Phone 465-2350
Date/Time 1/24/12 12:00 AM
Date 1/24/12 12:00 AM

FISCAL NOTE #2

**STATE OF ALASKA
2012 LEGISLATIVE SESSION**

BILL NO. CSSB 121(STA)

Analysis

SB 121 allows future and current defined contribution PERS and TRS members an opportunity to choose between a defined contribution (DC) and a defined benefit (DB) plan. Current DC members will have a one-time opportunity to convert to the DB plan. The DC member's employee and employer contributions will be transferred to the DB plan.

Assumptions:

60% of the current defined contribution plan will be elected by DC members to convert to the DB plan. 80% of future members will elect to be in the DB plan.

Rate of return assumed to be 8%

Management fees assumed at 35 basis points.

State of Alaska
 Summary of Normal Costs for New Tier Members under CS SB 121 R.2 DB/DC Choice Proposal
 (\$ in thousands)

	Headcount	Salary	PERS Others													DB / DCR Cost Difference	Pension Cost Difference	Healthcare Cost Difference	
			Employer Pension Normal Cost	Healthcare Normal Cost	Increase In Retiree Premium	Total Employer Normal Cost	Employer Pension Normal Cost Rate	Healthcare Normal Cost Rate (% of Pay)	Inc. Retiree Premium (% of Pay)	Employer Healthcare Normal Cost Rate	Healthcare Normal Cost Rate (per member)	Employer DCR Contribution Pension Rate	Employer DCR Contribution Pension Amount	Employer DCR Contribution Healthcare Rate	Employer DCR Contribution Healthcare Amount				Employer DCR Contribution Total Amount
FY16	7,838	\$388,169	\$5,614	\$20,365	\$0	\$25,979	1.45%	5.25%	0.00%	5.25%	\$2.60	5.22%	\$20,262	3.46%	\$13,508	\$33,770	(\$7,791)	(\$14,648)	\$6,857
FY17	10,183	516,548	7,471	29,116	0	36,587	1.45%	5.64%	0.00%	5.64%	2.86	5.22%	26,864	3.46%	17,876	44,840	(8,353)	(19,493)	11,140
FY18	12,261	644,756	9,326	38,257	0	47,583	1.45%	5.93%	0.00%	5.93%	3.12	5.22%	33,656	3.46%	22,438	56,094	(8,511)	(24,330)	15,819
FY19	14,124	773,166	11,183	47,388	0	58,571	1.45%	6.13%	0.00%	6.13%	3.36	5.22%	40,359	3.46%	26,906	67,265	(8,694)	(28,176)	20,482
FY20	15,822	902,785	13,058	58,157	0	71,215	1.45%	6.44%	0.00%	6.44%	3.68	5.22%	47,125	3.46%	31,417	78,542	(7,327)	(34,067)	26,740
FY21	17,368	1,034,880	14,968	69,065	0	84,033	1.45%	6.67%	0.00%	6.67%	3.98	5.22%	54,021	3.46%	38,014	90,035	(6,002)	(39,053)	33,051
FY22	18,788	1,167,293	16,884	81,042	0	97,926	1.45%	6.94%	0.00%	6.94%	4.31	5.22%	60,933	3.46%	40,622	101,555	(3,829)	(44,048)	40,420
FY23	20,112	1,300,957	18,817	93,612	0	112,428	1.45%	7.20%	0.00%	7.20%	4.65	5.22%	67,810	3.46%	45,273	113,183	(754)	(48,093)	48,339
FY24	21,341	1,436,195	20,773	106,376	2,200	124,949	1.45%	7.41%	0.16%	7.25%	4.98	5.22%	74,969	3.46%	49,980	124,949	0	(54,196)	54,196
FY25	22,482	1,572,938	22,751	119,633	5,539	136,845	1.45%	7.61%	0.36%	7.25%	5.32	5.22%	82,107	3.46%	54,738	136,845	0	(59,356)	59,356
FY26	23,537	1,713,490	24,784	133,446	9,157	149,073	1.45%	7.79%	0.54%	7.25%	5.67	5.22%	89,444	3.46%	59,629	149,073	0	(64,660)	64,660
FY27	24,515	1,854,714	26,826	148,016	13,482	161,360	1.45%	7.98%	0.73%	7.25%	6.04	5.22%	96,816	3.46%	64,544	161,360	0	(69,990)	69,990
FY28	25,425	1,997,567	28,892	163,358	18,462	173,788	1.45%	8.18%	0.93%	7.25%	6.43	5.22%	104,273	3.46%	69,515	173,788	0	(75,381)	75,381
FY29	26,274	2,142,821	30,993	179,230	23,788	186,425	1.45%	8.36%	1.11%	7.25%	6.82	5.22%	111,855	3.46%	74,570	186,425	0	(80,862)	80,862
FY30	27,063	2,290,631	33,131	195,939	29,785	198,285	1.45%	8.55%	1.30%	7.25%	7.24	5.22%	119,571	3.46%	79,714	198,285	0	(86,440)	86,440
FY31	27,797	2,441,255	35,310	213,963	36,883	212,390	1.45%	8.76%	1.51%	7.25%	7.70	5.22%	127,434	3.46%	84,956	212,390	0	(92,124)	92,124
FY32	28,486	2,594,136	37,521	233,990	45,821	225,690	1.45%	9.02%	1.77%	7.25%	8.21	5.22%	135,414	3.46%	90,276	225,690	0	(97,893)	97,893
FY33	29,131	2,751,373	39,795	255,440	55,865	239,370	1.45%	9.28%	2.03%	7.25%	8.77	5.22%	143,622	3.46%	95,748	239,370	0	(103,827)	103,827
FY34	29,739	2,912,828	42,131	278,474	67,189	253,416	1.45%	9.56%	2.31%	7.25%	9.36	5.22%	152,500	3.46%	101,366	253,416	0	(109,919)	109,919
FY35	30,315	3,079,156	44,536	299,460	79,139	267,887	1.45%	9.85%	2.44%	7.25%	9.85	5.22%	160,732	3.46%	107,155	267,887	0	(116,186)	116,186
FY36	30,864	3,253,273	47,055	319,711	93,731	283,036	1.45%	9.83%	2.56%	7.25%	10.36	5.22%	169,821	3.46%	113,214	283,036	0	(122,766)	122,766
FY37	31,388	3,430,424	49,617	342,720	93,890	298,447	1.45%	9.99%	2.74%	7.25%	10.92	5.22%	179,068	3.46%	119,379	298,447	0	(128,451)	128,451
FY38	31,892	3,611,739	52,240	367,366	105,384	314,222	1.45%	10.17%	2.92%	7.25%	11.52	5.22%	188,533	3.46%	125,689	314,222	0	(136,293)	136,293
FY39	32,373	3,797,938	54,933	394,278	118,791	330,420	1.45%	10.38%	3.13%	7.25%	12.18	5.22%	198,252	3.46%	132,168	330,420	0	(143,319)	143,319
FY40	32,837	3,989,893	57,709	422,850	133,439	347,120	1.45%	10.60%	3.35%	7.25%	12.88	5.22%	208,272	3.46%	138,848	347,120	0	(150,563)	150,563
FY41	33,287	4,188,059	60,576	454,300	150,511	364,365	1.45%	10.85%	3.60%	7.25%	13.65	5.22%	218,619	3.46%	145,746	364,365	0	(158,043)	158,043
FY42	33,724	4,390,900	63,509	488,888	170,389	382,008	1.45%	11.13%	3.88%	7.25%	14.50	5.22%	228,205	3.46%	152,803	382,008	0	(165,696)	165,696

State of Alaska
 Summary of Normal Costs for New Tier Members under CS SB 121 R.2 DB/DC Choice Proposal
 (\$ in thousands)

PERS Peace Officer/Firefighter

	Headcount	Salary	Employer Pension Normal Cost	Healthcare Normal Cost	Increase in Retiree Premium	Total Employer Normal Cost	Employer Pension Normal Cost Rate	Healthcare Normal Cost Rate (% of Pay)	Inc. Retiree Premium (% of Pay)	Employer Healthcare Normal Cost Rate	Healthcare Normal Cost Rate (per member)	Employer DCR Contribution Pension Rate	Employer DCR Contribution Pension Amount	Employer DCR Contribution Healthcare Rate	Employer DCR Contribution Healthcare Amount	Employer DCR Contribution Total Amount	DB / DCR Cost Difference	Pension Cost Difference	Healthcare Cost Difference
FY16	570	\$37,003	\$1,508	\$2,341	50	\$3,849	4.08%	6.33%	0.00%	6.33%	\$4.11	5.22%	\$1,832	3.48%	\$1,288	\$3,220	\$628	(\$424)	\$1,053
FY17	741	49,240	2,007	3,401	0	5,408	4.08%	6.91%	0.00%	6.91%	4.59	5.22%	2,570	3.48%	1,714	4,284	1,124	(563)	1,687
FY18	898	61,462	2,505	4,560	0	7,065	4.08%	7.42%	0.00%	7.42%	5.08	5.22%	3,208	3.48%	2,139	5,347	1,718	(703)	2,421
FY19	1,047	74,000	3,016	5,610	0	8,626	4.08%	7.58%	0.00%	7.58%	5.36	5.22%	3,863	3.48%	2,575	6,438	2,188	(847)	3,035
FY20	1,190	87,092	3,550	6,922	0	10,472	4.08%	7.95%	0.00%	7.95%	5.82	5.22%	4,548	3.48%	3,031	7,577	2,895	(696)	3,891
FY21	1,329	100,693	4,104	8,157	0	12,261	4.08%	8.10%	0.00%	8.10%	6.14	5.22%	5,256	3.48%	3,504	8,760	3,501	(1,152)	4,653
FY22	1,461	114,891	4,683	9,487	526	13,624	4.08%	8.24%	0.46%	7.78%	6.48	5.22%	5,997	3.48%	3,998	9,995	3,629	(1,314)	4,943
FY23	1,592	129,764	5,289	10,888	4,133	12,044	4.08%	8.39%	3.18%	5.21%	6.84	5.22%	6,774	3.48%	4,516	11,290	754	(1,485)	2,239
FY24	1,717	144,967	5,909	12,261	5,558	12,612	4.08%	8.46%	3.84%	4.62%	7.14	5.22%	7,567	3.48%	5,045	12,612	0	(1,658)	1,658
FY25	1,838	160,892	6,558	13,765	6,355	13,998	4.08%	8.57%	3.95%	4.62%	7.51	5.22%	8,399	3.48%	5,596	13,998	0	(1,841)	1,841
FY26	1,954	177,248	7,225	15,338	7,143	15,420	4.08%	8.65%	4.03%	4.62%	7.65	5.22%	9,252	3.48%	6,168	15,420	0	(2,027)	2,027
FY27	2,069	194,321	7,920	17,034	8,048	16,906	4.08%	8.77%	4.15%	4.62%	8.23	5.22%	10,144	3.48%	6,762	16,906	0	(2,224)	2,224
FY28	2,179	211,967	8,640	18,835	8,034	16,441	4.08%	8.89%	4.27%	4.62%	8.64	5.22%	11,065	3.48%	7,376	18,441	0	(2,425)	2,425
FY29	2,284	230,219	9,384	20,752	10,107	20,028	4.08%	9.01%	4.39%	4.62%	9.08	5.22%	12,017	3.48%	8,012	20,028	0	(2,633)	2,633
FY30	2,384	248,998	10,148	22,719	11,205	21,663	4.08%	9.12%	4.50%	4.62%	9.53	5.22%	12,988	3.48%	8,665	21,663	0	(2,849)	2,849
FY31	2,480	268,433	10,941	24,852	12,440	23,353	4.08%	9.26%	4.64%	4.62%	10.02	5.22%	14,012	3.48%	9,341	23,353	0	(3,071)	3,071
FY32	2,570	288,183	11,746	27,171	13,845	25,072	4.08%	9.43%	4.81%	4.62%	10.57	5.22%	15,043	3.48%	10,028	25,072	0	(3,297)	3,297
FY33	2,651	308,007	12,554	29,688	15,445	26,797	4.08%	9.64%	5.02%	4.62%	11.20	5.22%	16,078	3.48%	10,719	26,797	0	(3,524)	3,524
FY34	2,724	328,016	13,370	31,964	16,827	28,537	4.08%	9.75%	5.13%	4.62%	11.75	5.22%	17,122	3.48%	11,415	28,537	0	(3,752)	3,752
FY35	2,790	348,305	14,197	33,827	17,721	30,303	4.08%	9.71%	5.09%	4.62%	12.12	5.22%	18,182	3.48%	12,121	30,303	0	(3,985)	3,985
FY36	2,851	369,781	15,072	35,753	18,654	32,171	4.08%	9.67%	5.05%	4.62%	12.54	5.22%	19,303	3.48%	12,868	32,171	0	(4,231)	4,231
FY37	2,905	391,348	15,951	37,880	19,784	34,047	4.08%	9.58%	5.06%	4.62%	13.04	5.22%	20,428	3.48%	13,619	34,047	0	(4,477)	4,477
FY38	2,956	413,105	16,838	40,104	21,002	35,940	4.08%	9.71%	5.09%	4.62%	13.57	5.22%	21,564	3.48%	14,378	35,940	0	(4,726)	4,726
FY39	3,003	435,147	17,736	42,528	22,407	37,858	4.08%	9.77%	5.15%	4.62%	14.16	5.22%	22,715	3.48%	15,143	37,858	0	(4,978)	4,978
FY40	3,048	457,549	18,649	45,167	24,029	39,807	4.08%	9.88%	5.26%	4.62%	14.83	5.22%	23,884	3.48%	15,923	39,807	0	(5,235)	5,235
FY41	3,090	480,380	19,580	47,963	25,750	41,793	4.08%	9.98%	5.36%	4.62%	15.52	5.22%	25,076	3.48%	16,717	41,793	0	(5,496)	5,496
FY42	3,130	503,289	20,514	51,087	27,814	43,787	4.08%	10.15%	5.53%	4.62%	16.32	5.22%	26,272	3.48%	17,515	43,787	0	(5,758)	5,758

State of Alaska
Summary of Normal Costs for New Tier Members under CS SB 121 R.2 DB/DC Choice Proposal
(\$ in thousands)

		PERS Total																	
Headcount	Salary	Employer	Healthcare	Increase In	Total	Employer	Healthcare Normal	Inc. Retiree	Employer	Healthcare Normal	Employer	Employer	Employer	Employer	Employer	DB / DCR	Pension	Healthcare	
		Pension Normal Cost	Normal Cost	Retiree Premium	Employer Normal Cost	Pension Normal Cost Rate	Cost Rate (% of Pay)	Premium (% of Pay)	Healthcare Normal Cost Rate	Cost Rate (per member)	DCR Contribution Pension Rate	DCR Contribution Pension Amount	DCR Contribution Healthcare Rate	DCR Contribution Healthcare Amount	DCR Contribution Total Amount	Cost Difference	Cost Difference	Cost Difference	
FY16	8,408	\$425,172	\$7,122	\$22,706	\$0	\$29,828	1.68%	5.34%	0.00%	5.34%	\$2.70	5.22%	\$22,194	3.48%	\$14,796	\$36,990	(\$7,182)	(\$15,072)	\$7,910
FY17	10,924	585,788	9,478	32,517	0	41,995	1.68%	5.75%	0.00%	5.75%	2.98	5.22%	28,534	3.48%	19,690	49,224	(7,228)	(20,056)	12,827
FY18	13,159	706,218	11,831	42,817	0	54,648	1.68%	6.06%	0.00%	6.06%	3.25	5.22%	36,864	3.48%	24,577	61,441	(6,793)	(25,033)	18,240
FY19	15,171	847,166	14,199	52,998	0	67,197	1.68%	6.26%	0.00%	6.26%	3.48	5.22%	44,222	3.48%	29,481	73,703	(6,506)	(30,023)	23,517
FY20	17,012	989,877	16,608	65,079	0	81,687	1.68%	6.57%	0.00%	6.57%	3.83	5.22%	51,871	3.48%	34,448	86,119	(4,432)	(35,063)	30,631
FY21	18,697	1,135,573	19,072	77,222	0	96,294	1.68%	6.80%	0.00%	6.80%	4.13	5.22%	59,277	3.48%	39,518	98,795	(2,601)	(40,205)	37,704
FY22	20,249	1,282,184	21,567	90,509	526	111,550	1.68%	7.06%	0.04%	7.02%	4.47	5.22%	66,830	3.48%	44,620	111,550	0	(45,363)	45,363
FY23	21,704	1,430,721	24,106	104,500	4,133	124,473	1.68%	7.30%	0.28%	7.02%	4.81	5.22%	74,684	3.48%	49,769	124,473	0	(50,578)	50,578
FY24	23,058	1,581,162	26,682	118,637	7,758	137,561	1.68%	7.50%	0.49%	7.01%	5.15	5.22%	82,538	3.48%	55,025	137,561	0	(55,854)	55,854
FY25	24,320	1,733,830	29,309	133,428	11,894	150,843	1.68%	7.70%	0.69%	7.01%	5.48	5.22%	90,506	3.48%	60,337	150,843	0	(61,197)	61,197
FY26	25,491	1,890,738	32,009	148,784	16,300	164,483	1.68%	7.87%	0.86%	7.01%	5.84	5.22%	98,696	3.48%	65,797	164,483	0	(66,687)	66,687
FY27	26,584	2,048,035	34,746	165,050	21,530	178,266	1.68%	8.06%	1.06%	7.00%	6.21	5.22%	106,960	3.48%	71,306	178,266	0	(72,214)	72,214
FY28	27,604	2,209,534	37,532	182,193	27,496	192,228	1.68%	8.25%	1.25%	7.00%	6.60	5.22%	115,338	3.48%	76,891	192,229	0	(77,806)	77,806
FY29	28,558	2,373,040	40,377	199,982	33,805	206,454	1.68%	8.43%	1.43%	7.00%	7.00	5.22%	123,872	3.48%	82,582	206,454	0	(83,495)	83,495
FY30	26,447	2,539,629	43,280	218,659	40,990	220,948	1.68%	8.61%	1.61%	7.00%	7.43	5.22%	132,589	3.48%	88,379	220,948	0	(89,289)	89,289
FY31	30,277	2,709,688	46,251	238,815	49,323	235,743	1.68%	8.81%	1.82%	6.99%	7.89	5.22%	141,446	3.48%	94,297	235,743	0	(95,195)	95,195
FY32	31,056	2,892,319	49,267	261,161	59,666	250,762	1.68%	9.06%	2.07%	6.99%	8.41	5.22%	150,457	3.48%	100,305	250,762	0	(101,190)	101,190
FY33	31,782	3,059,380	52,349	285,128	71,310	268,167	1.68%	9.32%	2.33%	6.99%	8.97	5.22%	159,700	3.48%	106,467	268,167	0	(107,351)	107,351
FY34	32,463	3,240,844	55,501	310,488	84,018	281,953	1.68%	9.59%	2.59%	6.99%	9.56	5.22%	169,172	3.48%	112,781	281,953	0	(113,671)	113,671
FY35	33,105	3,427,461	58,733	332,317	92,860	299,100	1.68%	9.70%	2.71%	6.99%	10.04	5.22%	178,914	3.48%	119,276	299,100	0	(120,181)	120,181
FY36	33,715	3,623,054	62,127	355,464	102,385	315,206	1.68%	9.81%	2.82%	6.99%	10.54	5.22%	189,124	3.48%	126,082	315,206	0	(126,997)	126,997
FY37	34,293	3,821,773	65,568	380,600	113,674	332,494	1.68%	9.96%	2.98%	6.99%	11.10	5.22%	199,496	3.48%	132,898	332,494	0	(133,928)	133,928
FY38	34,848	4,024,844	69,078	407,470	126,386	350,182	1.68%	10.12%	3.14%	6.99%	11.69	5.22%	210,087	3.48%	140,065	350,182	0	(141,019)	141,019
FY39	35,376	4,233,085	72,669	436,807	141,198	368,278	1.68%	10.32%	3.34%	6.99%	12.35	5.22%	220,967	3.48%	147,311	368,278	0	(148,298)	148,298
FY40	35,885	4,447,442	76,358	468,037	157,468	386,927	1.68%	10.52%	3.54%	6.99%	13.04	5.22%	232,156	3.48%	154,771	386,927	0	(155,798)	155,798
FY41	36,377	4,668,479	80,156	502,263	176,261	406,158	1.68%	10.76%	3.78%	6.98%	13.81	5.22%	243,695	3.48%	162,463	406,158	0	(163,539)	163,539
FY42	36,854	4,894,199	84,023	539,975	198,203	425,795	1.68%	11.03%	4.05%	6.98%	14.65	5.22%	255,477	3.48%	170,318	425,795	0	(171,454)	171,454

State of Alaska
 Summary of Normal Costs for New Tier Members under CS SB 121 R.2 DB/DC Choice Proposal
 (\$ in thousands)

		Teachers' Retirement System																	
Headcount	Salary	Employer Pension Normal Cost	Healthcare Normal Cost	Increase in Retiree Premium	Total Employer Normal Cost	Employer Pension Normal Cost Rate	Healthcare Normal Cost Rate (% of Pay)	Inc. Retiree Premium (% of Pay)	Employer Healthcare Normal Cost Rate	Healthcare Normal Cost Rate (per member)	Employer DCR Contribution Pension Rate	Employer DCR Contribution Pension Amount	Employer DCR Contribution Healthcare Rate	Employer DCR Contribution Healthcare Amount	Employer DCR Contribution Total Amount	DB / DCR Cost Difference	Pension Cost Difference	Healthcare Cost Difference	
FY16	2,016	\$120,647	\$3,426	\$7,776	50	\$11,205	2.84%	6.45%	0.00%	6.45%	53.86	7.00%	\$8,445	3.49%	\$4,211	\$12,856	(\$1,451)	(\$5,019)	\$3,568
FY17	2,883	162,876	4,626	10,843	0	15,469	2.84%	6.68%	0.00%	6.68%	4.07	7.00%	11,401	3.49%	5,684	17,085	(1,616)	(6,775)	5,158
FY18	3,248	205,081	5,824	14,134	0	19,958	2.84%	6.89%	0.00%	6.89%	4.35	7.00%	14,356	3.49%	7,157	21,513	(1,555)	(8,532)	6,977
FY19	3,795	246,042	7,044	17,375	0	24,419	2.84%	7.00%	0.00%	7.00%	4.58	7.00%	17,383	3.49%	8,657	26,020	(1,601)	(10,319)	8,718
FY20	4,307	281,985	8,262	20,667	0	28,959	2.84%	7.08%	0.00%	7.08%	4.80	7.00%	20,439	3.49%	10,190	30,629	(1,670)	(12,147)	10,477
FY21	4,788	336,966	9,570	24,013	0	33,583	2.84%	7.13%	0.00%	7.13%	5.02	7.00%	23,588	3.49%	11,760	35,348	(1,785)	(14,018)	12,253
FY22	5,246	383,725	10,898	27,811	0	38,708	2.84%	7.25%	0.00%	7.25%	5.30	7.00%	26,861	3.49%	13,382	40,253	(1,644)	(15,963)	14,415
FY23	5,687	431,831	12,264	31,823	0	44,087	2.84%	7.37%	0.00%	7.37%	5.60	7.00%	30,228	3.49%	15,071	45,299	(1,212)	(17,964)	16,752
FY24	6,097	481,032	13,681	35,831	0	49,492	2.84%	7.45%	0.00%	7.45%	5.88	7.00%	33,672	3.49%	16,788	50,460	(968)	(20,011)	19,043
FY25	6,480	531,222	15,087	40,120	0	55,207	2.84%	7.55%	0.00%	7.55%	6.19	7.00%	37,186	3.49%	18,540	55,726	(519)	(22,099)	21,580
FY26	6,837	582,733	16,550	44,612	34	61,128	2.84%	7.65%	0.01%	7.65%	6.53	7.00%	40,791	3.49%	20,337	61,128	0	(24,241)	24,241
FY27	7,174	635,207	18,040	49,485	81	68,634	2.84%	7.78%	0.14%	7.65%	6.90	7.00%	44,465	3.49%	22,169	66,634	0	(26,425)	26,425
FY28	7,496	688,011	19,565	54,790	2,081	72,277	2.84%	7.95%	0.30%	7.65%	7.31	7.00%	48,231	3.49%	24,046	72,277	0	(28,683)	28,683
FY29	7,799	743,880	21,126	60,326	3,419	78,033	2.84%	8.11%	0.48%	7.65%	7.73	7.00%	52,072	3.49%	25,961	78,033	0	(30,946)	30,946
FY30	8,085	799,763	22,713	66,048	4,866	83,895	2.84%	8.26%	0.61%	7.65%	8.17	7.00%	55,983	3.49%	27,912	83,895	0	(33,270)	33,270
FY31	8,354	856,891	24,338	72,361	6,810	89,887	2.84%	8.44%	0.79%	7.65%	8.68	7.00%	59,982	3.49%	29,905	89,887	0	(35,646)	35,646
FY32	8,603	914,224	25,964	79,257	9,319	95,902	2.84%	8.67%	1.02%	7.65%	9.21	7.00%	63,996	3.49%	31,906	95,902	0	(38,032)	38,032
FY33	8,833	972,321	27,614	86,577	12,195	101,998	2.84%	8.90%	1.25%	7.65%	9.80	7.00%	68,062	3.49%	33,934	101,998	0	(40,448)	40,448
FY34	9,046	1,031,391	29,292	94,183	15,282	108,193	2.84%	9.13%	1.48%	7.65%	10.41	7.00%	72,167	3.49%	35,986	108,193	0	(42,905)	42,905
FY35	9,245	1,091,467	30,998	101,815	18,318	114,495	2.84%	9.33%	1.68%	7.65%	11.01	7.00%	76,403	3.49%	38,052	114,495	0	(45,405)	45,405
FY36	9,429	1,152,862	32,741	109,813	21,619	120,935	2.84%	9.53%	1.88%	7.65%	11.65	7.00%	80,700	3.49%	40,235	120,935	0	(47,959)	47,959
FY37	9,604	1,215,058	34,508	118,883	25,931	127,480	2.84%	9.78%	2.13%	7.65%	12.38	7.00%	85,054	3.49%	42,408	127,480	0	(50,548)	50,548
FY38	9,767	1,278,271	36,303	128,840	30,852	134,091	2.84%	10.06%	2.41%	7.65%	13.17	7.00%	89,479	3.49%	44,612	134,091	0	(53,178)	53,178
FY39	9,923	1,342,763	38,134	139,358	36,637	140,895	2.84%	10.38%	2.73%	7.65%	14.04	7.00%	93,993	3.49%	46,862	140,895	0	(55,859)	55,859
FY40	10,069	1,408,719	40,008	151,026	43,280	147,774	2.84%	10.72%	3.07%	7.65%	15.00	7.00%	98,610	3.49%	49,164	147,774	0	(58,602)	58,602
FY41	10,211	1,476,294	41,927	164,021	51,084	154,864	2.84%	11.11%	3.46%	7.65%	16.06	7.00%	103,341	3.49%	51,523	154,864	0	(61,414)	61,414
FY42	10,347	1,545,182	43,883	178,058	59,851	162,080	2.84%	11.52%	3.87%	7.65%	17.21	7.00%	108,183	3.49%	53,927	162,080	0	(64,280)	64,280
FY43	10,478	1,616,133	45,898	193,384	69,750	169,532	2.84%	11.97%	4.32%	7.65%	18.46	7.00%	113,129	3.49%	56,403	169,532	0	(67,231)	67,231
FY44	10,607	1,689,400	47,979	209,834	80,395	177,218	2.84%	12.41%	4.78%	7.65%	19.76	7.00%	118,259	3.49%	58,960	177,218	0	(70,279)	70,279

Alaska Senate Finance Hearing of SB 121

William B. Fornia

March 30, 2012

William B. Fornia Credentials

- Highest Actuarial Credentials
 - Fellow of the Society of Actuaries (1986)
 - Enrolled Actuary under ERISA (1984)
 - Member of the American Academy of Actuaries (1983)
 - Active in national actuarial organizations
- Author and Frequent Speaker
 - “A Better Bang for the Buck” (with National Institute on Retirement Security), 2008
 - “New Developments in DB/DC Plans”, National Council on Teacher Retirement, Anchorage, 2002
 - Frequent Testimony to Legislatures and City Councils
 - Regular Expert Witness

Sample Work History

- Corporate actuary for Boeing 1980-1984
- Alaska related experience
 - ARMB first ongoing review actuary 2005-2006
 - Audited Alaska PERS/TRS actuarial valuations 2009
 - Former leader of Buck Consultants' Denver retirement practice
- Consulting services for 22 statewide retirement systems in Alaska, Colorado, Missouri, North Dakota, Oklahoma, Puerto Rico, Utah, Texas, Wyoming and others.
 - Served as system actuary for most of these (including CO, MO, ND, OK, PR, UT, WY, Houston)
 - Currently working on pension reform with Ohio Retirement Study Council
- Expert testimony and consulting for pension systems, governments, and labor groups
- Other clients have included the US Department of State, Cities of Baltimore, Oakland and Philadelphia, IBM, US WEST and Ford Motor Company

Agenda

- Overview of SB 121
- Advantages of Including Defined Benefit Plan Option
- Financial Analysis of Defined Benefit Plan Option
- History of SB 121 Fiscal Notes and responses
- Discussion

Findings

- DB plan option is more economical for Alaska
 - DB more efficient delivery of retirement benefits
 - Helps keep jobs in Alaska
 - Provides the safety net others have from Social Security
- Have structured DB choice alternative at \$9,000,000 FY 2015 savings
 - Health cost risk shifted to employees
 - Higher employee contributions than current DB
 - Employee health cost sharing

SB 121 – History & Background

- Two general types of retirement programs
 - Defined Benefit (DB): Annual pension or health care benefit are fixed in statute, contributions based on actuarial calculations
 - Defined Contribution (DC): Periodic contribution to account is statutory, benefits depend on what account accumulations will provide
- SB 141 closed defined benefit retirement and health benefits to those hired after July 1, 2006
 - Workers hired since then have DC accounts only
 - No secure retirement option or Social Security

More Background on SB121

- Several proposals have been introduced to permit DB program for those hired after June, 2006
- Extensive modifications have been made to achieve cost neutrality and concerns of risk
 - Continued opportunity for DC approach for those who choose
 - No adjustment for 2006-2012 DCR investment returns; can only purchase service based on actual DCR account balances
 - Costs set to be same or lower than latest DC tier
 - Increased worker contributions versus latest DB tier
 - Reduced health care benefits – retirees pay larger share of costs
 - Further reductions in benefits if health care costs increase beyond break-even cost levels

Key Features of SB 121

- Gives employees a choice between DC and DB
 - DC tends to be preferred by shorter service & younger workers
 - DB still very popular, particularly for full career workers
- SB 121 structures DB option to be cost neutral
 - Costs will not be more than current tier DC program
 - Worker contributions same as current DC tier
 - SB 121 also shifts much of the risk from the employers to the workers
 - Healthcare benefit will be reduced if employer normal costs increase

Other motives for SB 121

- Alaska public servants not covered by Social Security
 - Every state other than Alaska and Michigan offers Defined Benefit Option
 - Michigan public servants get Social Security, Alaska public servants don't
 - All private US employers pay at least 6.2% to Social Security; Alaska PERS employers pay 5.22%
 - Soon, Alaska will be largest employer in America with workers not covered by any safety net DB plan
- Current DC structure facilitates short service workers leaving Alaska public service for DB plan after a few years of service
- Retirement in Alaska is good for the State economy

Why should Alaska public servants have a Defined Benefit Option?

- By their nature, Defined Benefit (DB) plans provide workers what they need for retirement
- DB plans deliver benefits more efficiently than Defined Contribution (DC) plans, thereby saving money for same retirement benefit
- Particularly necessary because vast majority of Alaska public servants not covered by Social Security

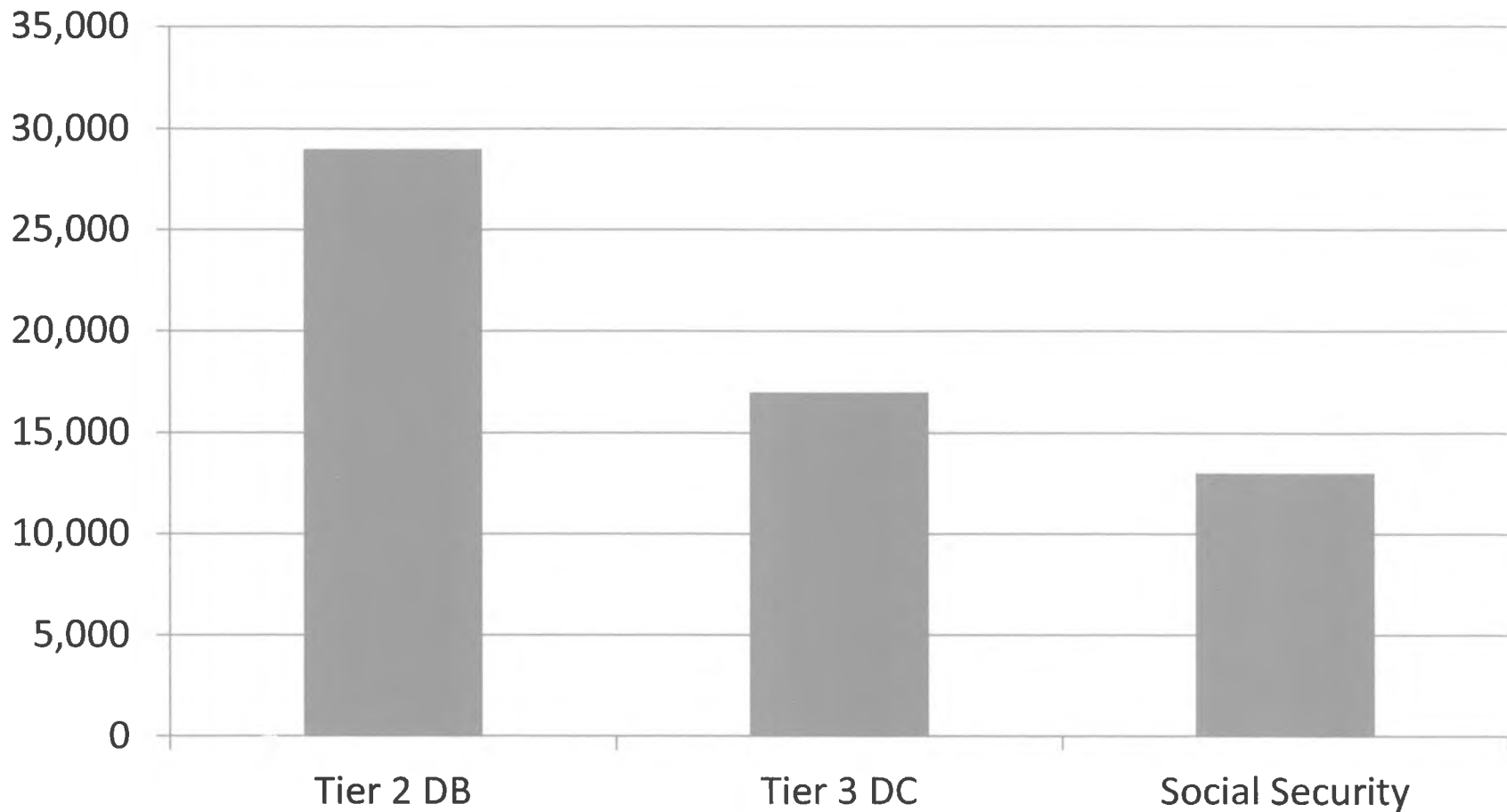
Why DB option? – Secure Retirement Benefit

- Because DB plans “define” the “benefit” received by retirees, they can ensure appropriate benefit levels
- Individuals do not need to be concerned with investment volatility under DB plans
- Individuals do not need to be concerned with outliving their savings under DB plans
- Because DC returns tend to be lower, greater contributions would be required to attain same benefit level as DB

Benefits Available from DCR Program are Substantially Lower than from Latest DB Tier

	Teachers	Police & Fire	Other PERS
Hire Age	34	31	37
Retirement Age	59	56	60
Years of Service	25	25	23
DB Benefit as Percent of Final Average Compensation (defined under the terms of the plan)	58%	63%	55%
DCR Benefit as Percent of Final Average Compensation (calculated based on assumptions above)	34%	30%	30%
Reduction of Benefit % due to DCR program	24%	33%	25%

Illustration of Hypothetical Teacher Benefits - \$50,000 Final Average Salary



Why DB option? – Economic Impact

- Pensions account for more than \$1 billion in Alaskan economy
- Retirement System provides health care benefits
- DB option can provide inflation protection
- Provide benefits consistent with objective of worker retention and job stability
- DB Plan eliminates the risk of destitute former employee citizens becoming a burden on the State, as “Payer of Last Resort”

DB Plans Provide a “Better Bang for the Buck”

- The DB approach saves money compared to the DC approach. Three reasons ...
 1. DB pension plans pool “longevity risks”
 2. DB pension plans can maintain a better diversified portfolio because, unlike individuals, they do not age
 3. DB pension plans achieve better investment returns because of professional asset management and lower fees

Why DB? – More Economically Efficient

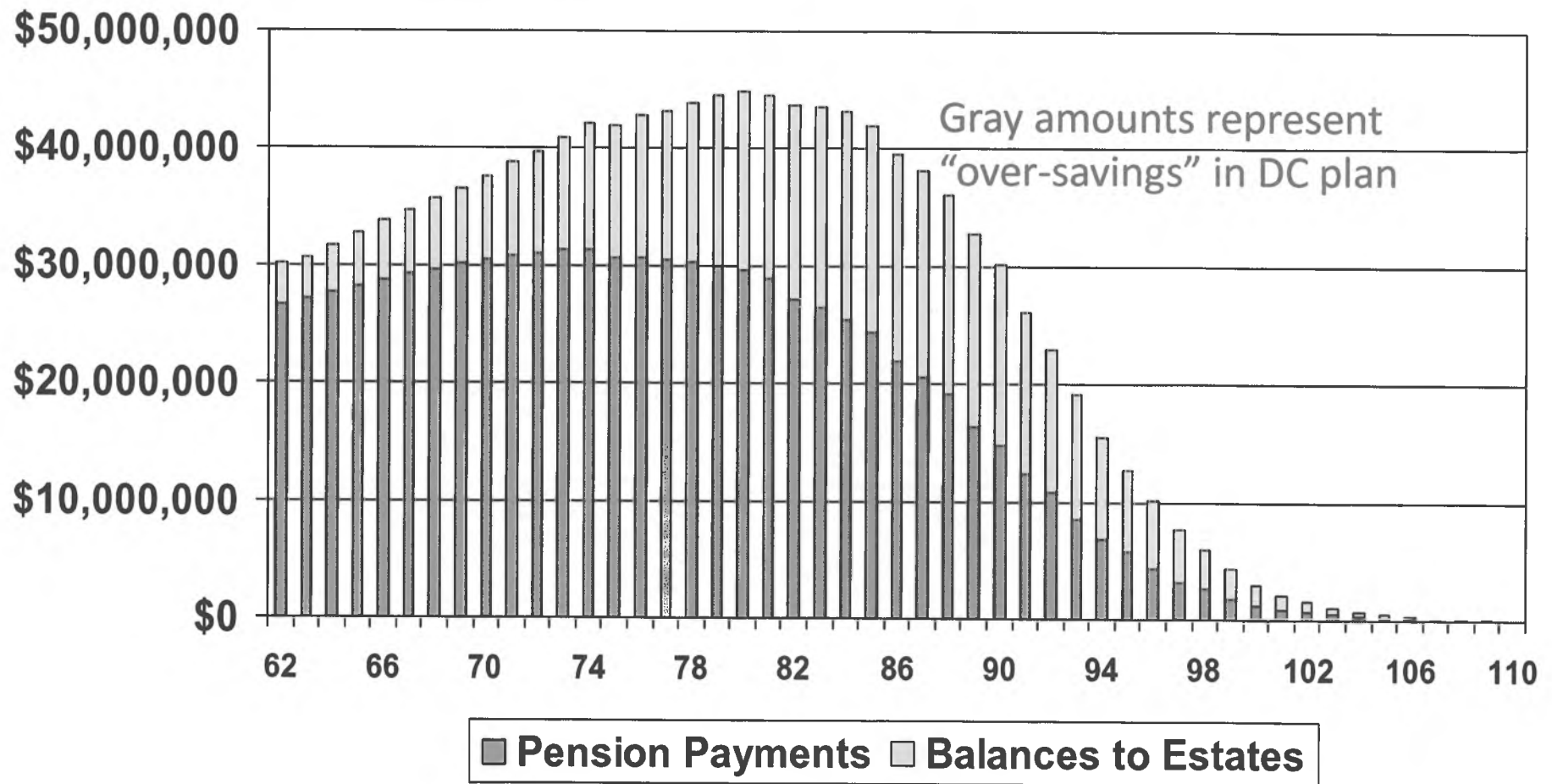
- ***Longevity Risk Pooling***
 - DB plans better manage longevity risk, or the chance of running out of money in retirement
 - DB plans avoid the “over-saving” dilemma and do more with less
- ***Maintenance of Portfolio Diversification***
 - DB plans are able to take advantage of the enhanced investment returns that come from a balanced portfolio throughout an individual’s lifetime
- ***Superior Returns***
 - DB plans, which are professionally managed, achieve greater investment returns versus those of individual accounts

1st Strength of DB Plans

Longevity Risk Pooling

- Because they cover large numbers of retirees, DB plans can pay out over the *average* life expectancy, not *maximum* life expectancy
- An individual under a DC plan will want to avoid the risk of running out of money if they live a long life
- Because individuals must plan for a maximum life expectancy, much more money must be accumulated in a DC plan, compared to a DB plan

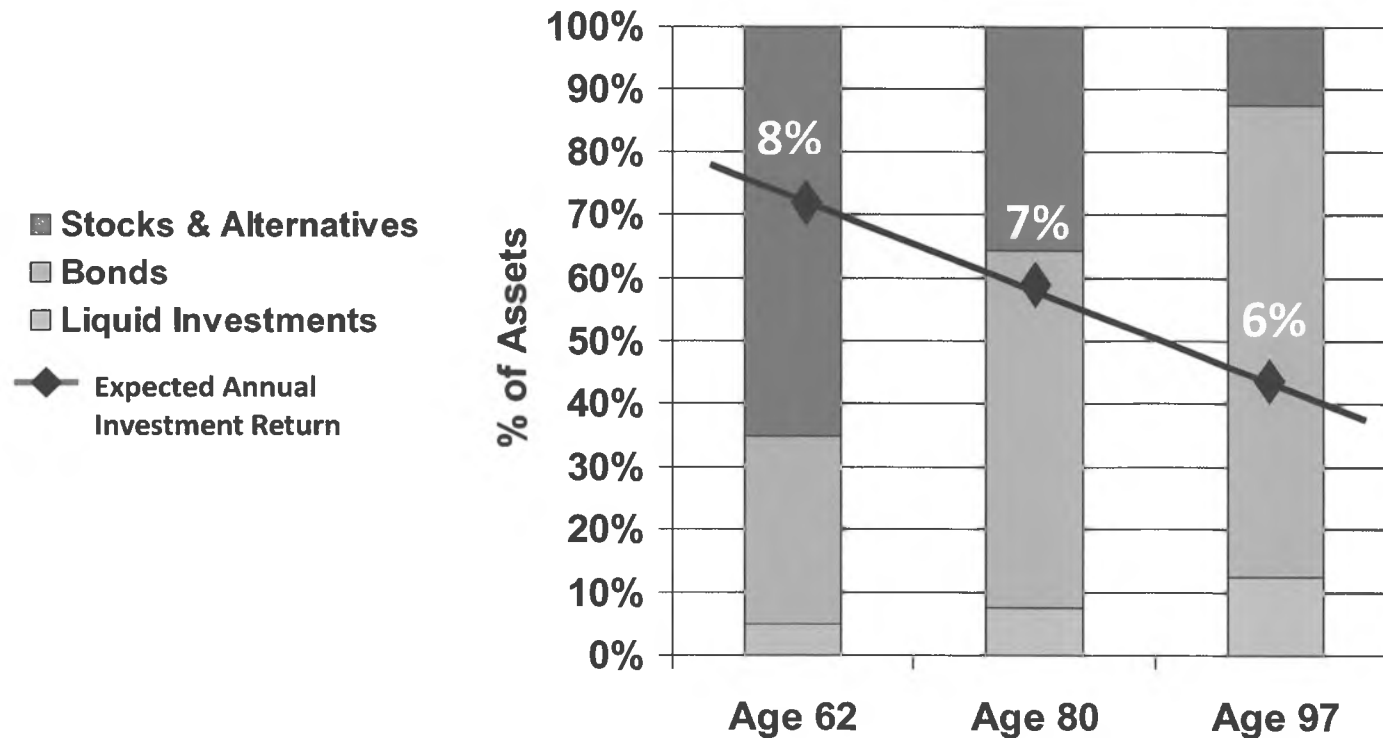
Under a DC Plan 24% of Assets Are Not Used for Retirement – 1,000 Sample Teachers



2nd Strength of DB Pension Plans More Effective Portfolio Diversification

- DB plans can maintain a well diversified portfolio over time – unlike individuals, DB plans do not age
- To protect against market shocks, individuals in DC plans are advised to shift toward more conservative investments as they age, sacrificing some expected return
- Lower returns mean more money must be contributed to deliver the same level of benefits

As Individuals Shift DC Portfolio Allocation, Expected Return Reduced



3rd Strength of DB Pension Plans Pooled, Professionally-Managed Assets

- Assets in DB plans are professionally managed. Despite their best efforts, individuals tend to underperform when it comes to investing in DC plans
- Pooled investments in DB plans can lower expenses
 - Large group pricing negotiation
 - Avoid expenses of individual recordkeeping, investment education, investment transactions
- Studies generally have shown that DB plan returns outperform DC plans by at least 1% annually
 - Towers Watson 1995-2008 large plans 1.27% outperformance
 - CEM Benchmarking 1998-2005 found 1.80% difference
 - Recent Alaska experience shows even larger DC shortfall
 - Even a mere 1% differential generates tremendous efficiencies – more than 20%

What about Unfunded Liabilities?

- Unfunded Liability has grown by more than \$5 billion since 2005
 - “Unfunded Liability” is attributable to prior benefits, not future benefits
 - SB 141 DC approach was not designed to solve unfunded liability
 - Several safeguards have been introduced to manage unfunded liability
- Addition of DB option not anticipated to increase unfunded liabilities
 - To the extent that actuarial assumptions’ conservatism is borne out, would actually decrease unfunded liabilities
- DB systems are advance funded, not left to future generations

Findings

- DB plan option is more economical for Alaska
 - DB more efficient
 - Helps keep jobs in Alaska
 - Provides the safety net others have from Social Security
- Have structured DB choice alternative at \$9,000,000 FY 2015 savings
 - Health cost risk shifted to employees
 - Higher employee contributions than current DB
 - Employee health cost sharing

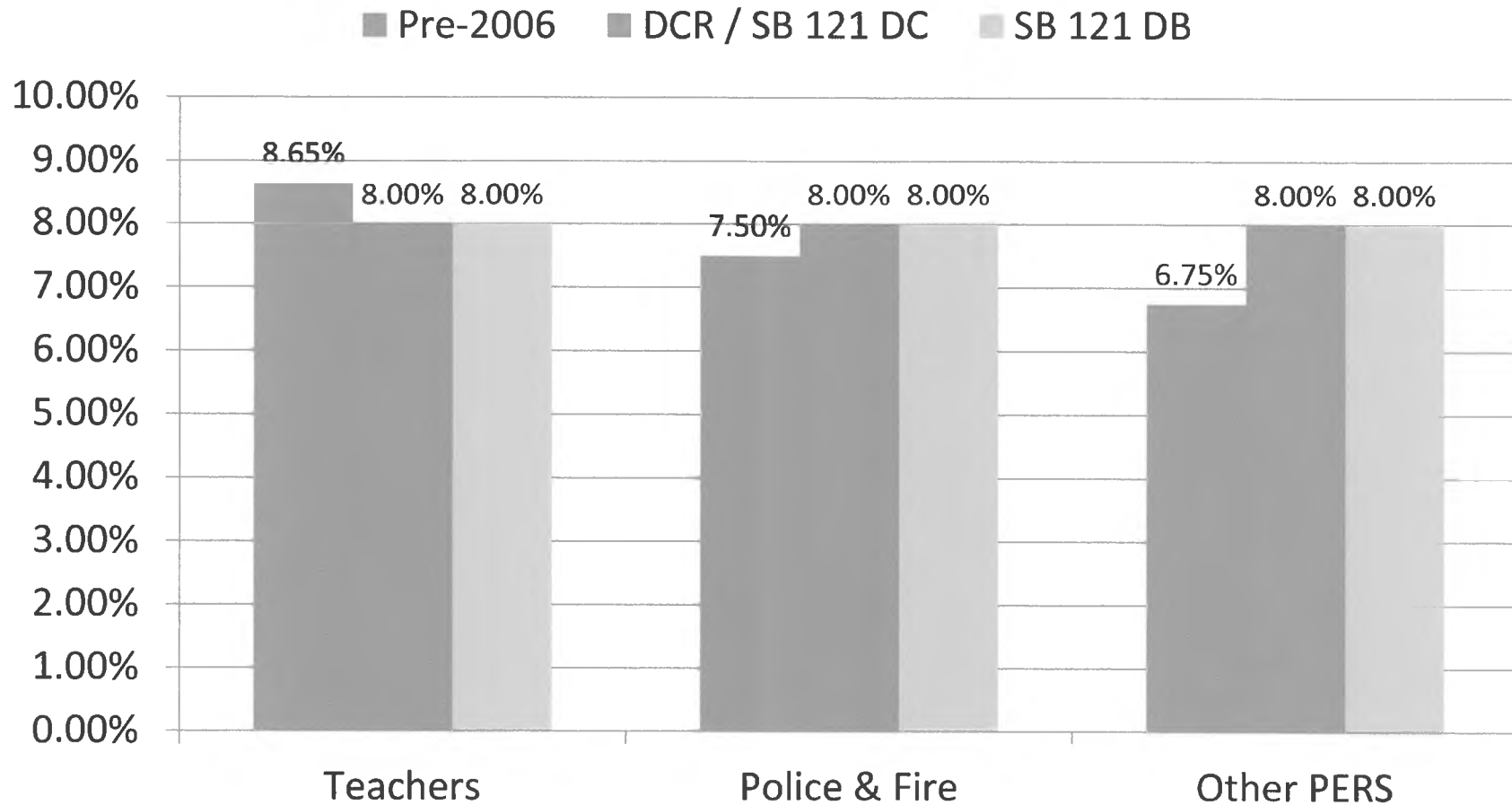
Challenge is to Design DB Option at Costs Comparable to DC Plan

- The actuary for the Alaska Department of Administration Division of Retirement Benefits regularly reports on the financial condition of the Alaska Public Employees' Retirement System (PERS) and Alaska Teachers' Retirement System (TRS).
- These analyses are conducted primarily through an “actuarial valuation”, which calculates the plans costs and liabilities.
- The actuary has calculated the Normal Cost under both the prior tier DB plans as well as under the DCR program.
 - “Normal Costs” are the cost of ongoing future benefits, not including cost to pay off “Unfunded Liability”
 - “Unfunded Liability” is attributable to prior benefits, not future benefits
- SB 121 has been modified to address initial cost concerns

Major implications of the proposal for those who elect DB

- Pension benefits will be the same as the prior defined benefit plan tiers for those hired prior to July 1, 2006
 - The tiers which were reduced in the 1990's
- Retiree DB health benefits will be stronger than those under DCR, but not as strong as those provided under the latest tier DB plans.

Contributions for Various Members



Retiree Medical Coverage

- Retirees eligible to receive retiree major medical coverage with subsidized premiums, under the following conditions:
 - Retired teachers are eligible with 25 years of service or at the age of Medicare eligibility [65] with at least 10 years of service.
 - Retired peace officers and firefighters are eligible with 25 years of service or at the age of Medicare eligibility [65] with at least 10 years of service.
 - Other PERS retirees are eligible with 30 years of service or at the age of Medicare eligibility [65] with at least 10 years of service.
- Retiree share of premiums range from 10% to 30% based on service at retirement
 - This range may increase or decrease in future based on experience

Cost Comparison Estimates - Teachers

Teachers Retirement System	DB Plan Tier 2	DCR Plan Tier 3	Proposed Tier 4
Total Retirement Normal Cost (including refunds)	11.39%	NA	10.84%
Member Contributions	(8.65%)	(8.00%)	(8.00%)
Net Employer Retirement Normal Cost	2.74%	NA	2.84%
DC Employer Contribution Rate	NA	7.00%*	NA
Medical Normal Cost Rate	5.33%	0.49%	6.39%
HRA Contribution Rate	NA	3.00%	NA
Total Employer Cost	8.07%	10.49%	9.23%
DCR Payroll during FY 2015	NA	\$116,432,000	\$116,432,000
Total Employer Cost on FY 2015 Basis	NA	\$12,213,000	\$10,748,000
Cost difference vs. DCR	NA		Saves \$1,465,000

* Includes DCR Occupational Death and Disability

Cost Comparisons – PERS Police Officers and Firefighters

Public Employees Retirement System – Peace Officers & Firefighters	DB Plan Tier 3	DCR Plan Tier 4	Proposed Tier 5
Total Retirement Normal Cost (including refunds)	12.30%	NA	12.08%
Member Contributions	(7.50%)	(8.00%)	(8.00%)
Net Employer Retirement Normal Cost	4.80%	NA	4.08%
DC Employer Contribution Rate	NA	5.22%*	NA
Medical Normal Cost Rate	5.90%	0.48%	6.00%
HRA Contribution Rate	NA	3.00%	NA
Total Employer Cost	10.70%	8.70%	10.08%
DCR Payroll during FY 2015	NA	\$35,710,000	\$35,710,000
Total Employer Cost on FY 2015 Basis	NA	\$3,107,000	\$3,598,000
Cost difference vs. DCR	NA		Costs \$491,000

* Includes DCR Occupational Death and Disability

Cost Comparisons – Other PERS Members

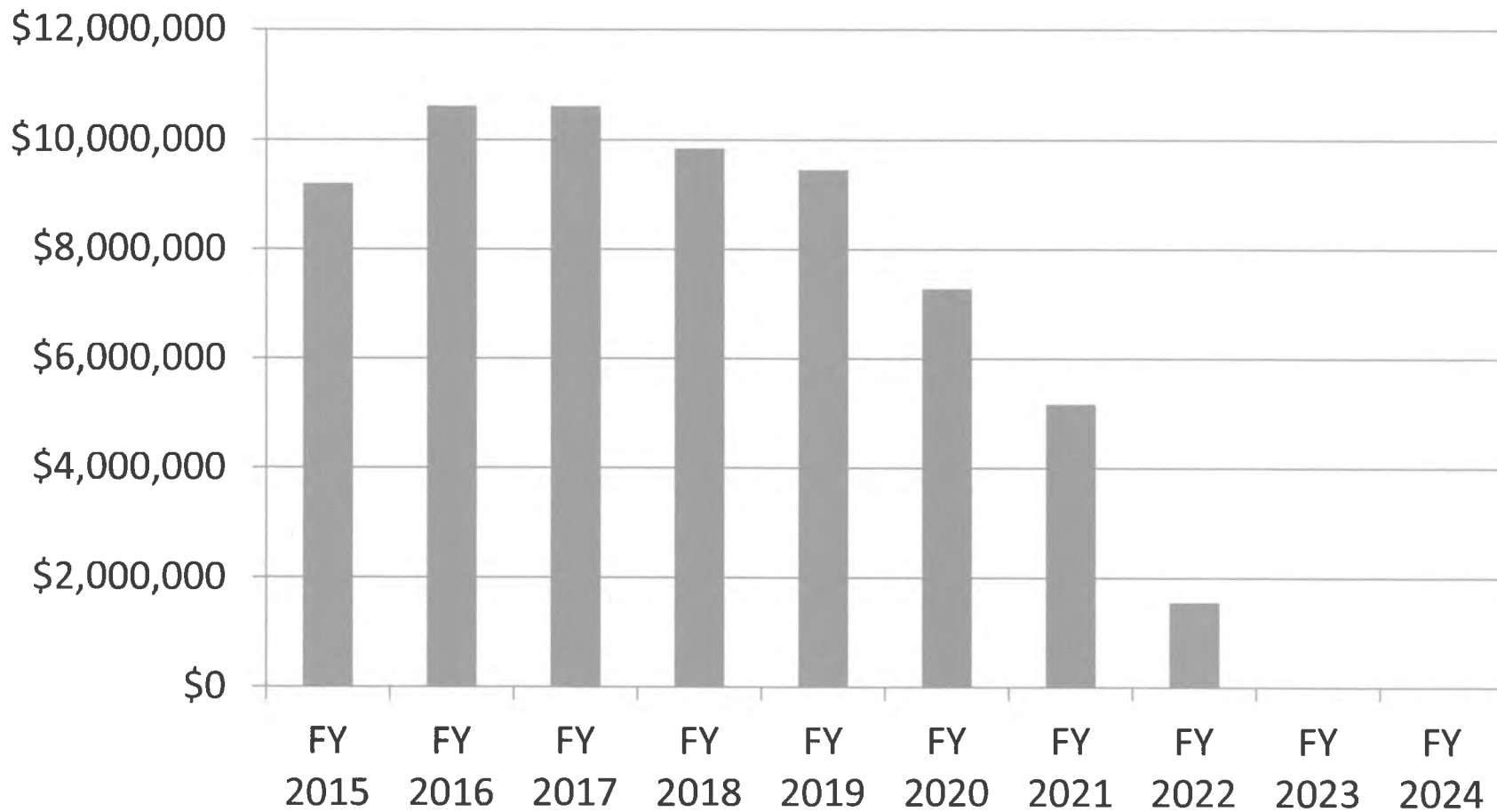
Other Public Employees Retirement System Members	DB Plan Tier 3	DCR Plan Tier 4	Proposed Tier 5
Total Retirement Normal Cost (including refunds)	9.58%	NA	9.45%
Member Contributions	(6.75%)	(8.00%)	(8.00%)
Net Employer Retirement Normal Cost	2.83%	NA	1.45%
DC Employer Contribution Rate	NA	5.22%*	NA
Medical Normal Cost Rate	7.00%	0.48%	5.06%
HRA Contribution Rate	NA	3.00%	NA
Total Employer Cost	9.83%	8.70%	6.51%
DCR Payroll during FY 2015	NA	\$374,608,000	\$374,608,000
Total Employer Cost on FY 2015 Basis	NA	\$32,591,000	\$24,355,000
Cost difference vs. DCR	NA	NA	Saves \$8,236,000

* Includes DCR Occupational Death and Disability

Results from Cost Comparison

- Stronger pension benefits through a Defined Benefit option for members hired since 2006.
- It would provide improved health care plan benefits, but no future HRA contributions.
- In total, 2015 employer costs would fall by about \$9 million.
 - More than \$60 million over eight years

Total savings anticipated of more than \$60 million over eight years



By 2023, based on fiscal note estimates, healthcare will decrease to maintain cost neutrality

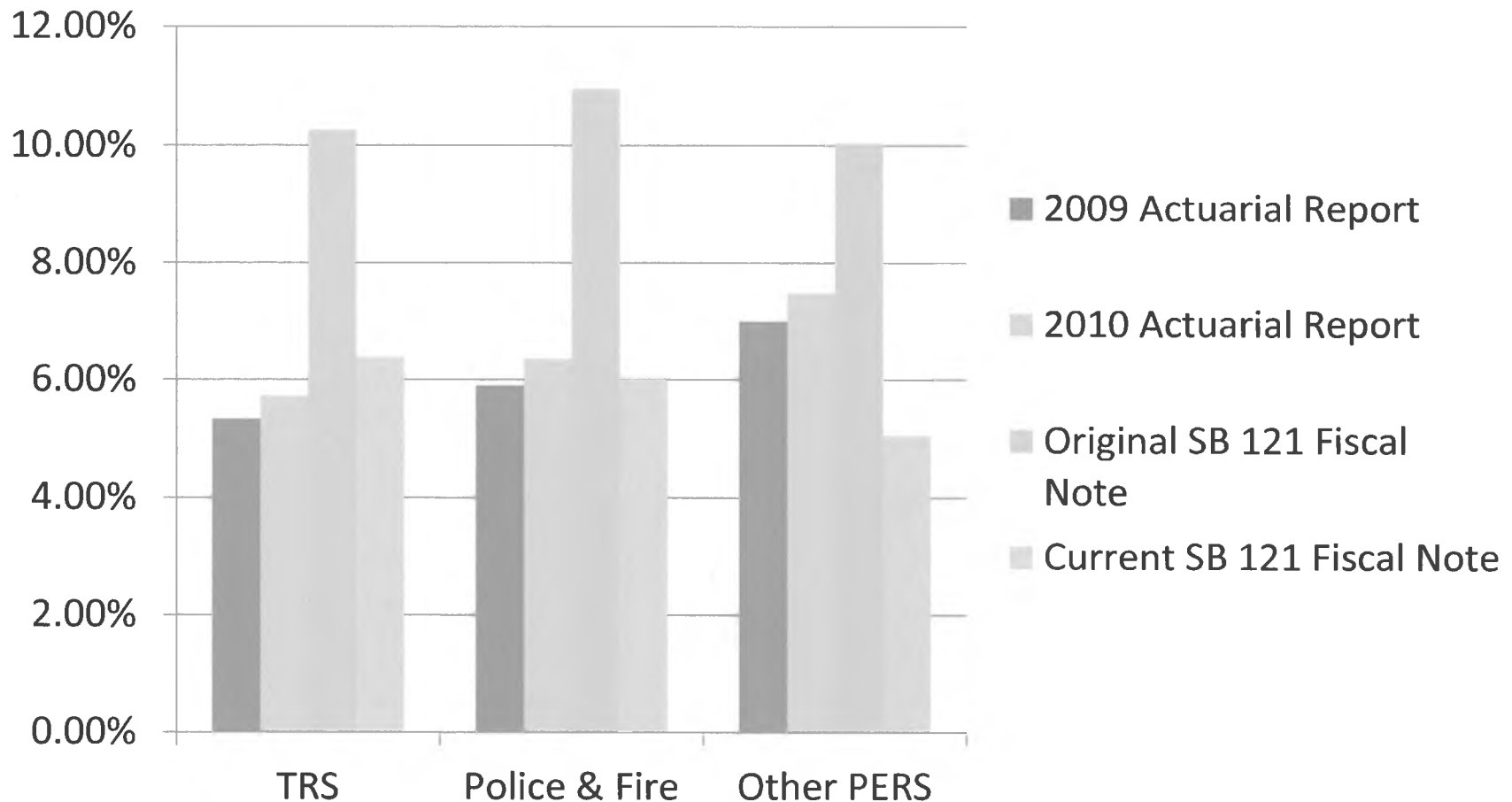


Alaska Senate Finance Hearing on SB 121 – March 30, 2012

Summary of Revisions to SB121

- Initial SB 121 essentially was return to prior tier
 - But with choice
 - Members could trade DCR accounts to get prior DB service
 - Future pension costs were neutral
 - But some past pension costs due to transition
 - And health costs were not neutral due to anticipated rapid increase in health care costs
- Revisions include
 - DB prior service can be purchased only, if DCR accounts not adequate, service limited
 - Increased worker contributions
 - Reduced healthcare benefits
 - premium share rather than full premium paid
 - only for full career retirees or post-Medicare
 - if normal costs increase, sharing would be reduced

Comparison of Healthcare Normal Costs



Conclusions

- DB plan option is more economical for Alaska
 - DB more efficient
 - Helps keep jobs in Alaska
 - Provides the safety net others have from Social Security
- Have structured DB choice alternative at \$9,000,000 FY 2015 savings
 - Health cost risk shifted to employees
 - Higher employee contributions than current DB
 - Employee health cost sharing

SB 121

Alaska Pensions

Retirement choices for the Last Frontier



New hires get a choice

- SB 121 creates a new defined benefit tier
 - New hires can choose a guaranteed benefit or to control their money
- The new tier is:
 - cost neutral
 - more predictable
 - shares risk
- Those who serve Alaskans can choose the retirement plan that fits their service

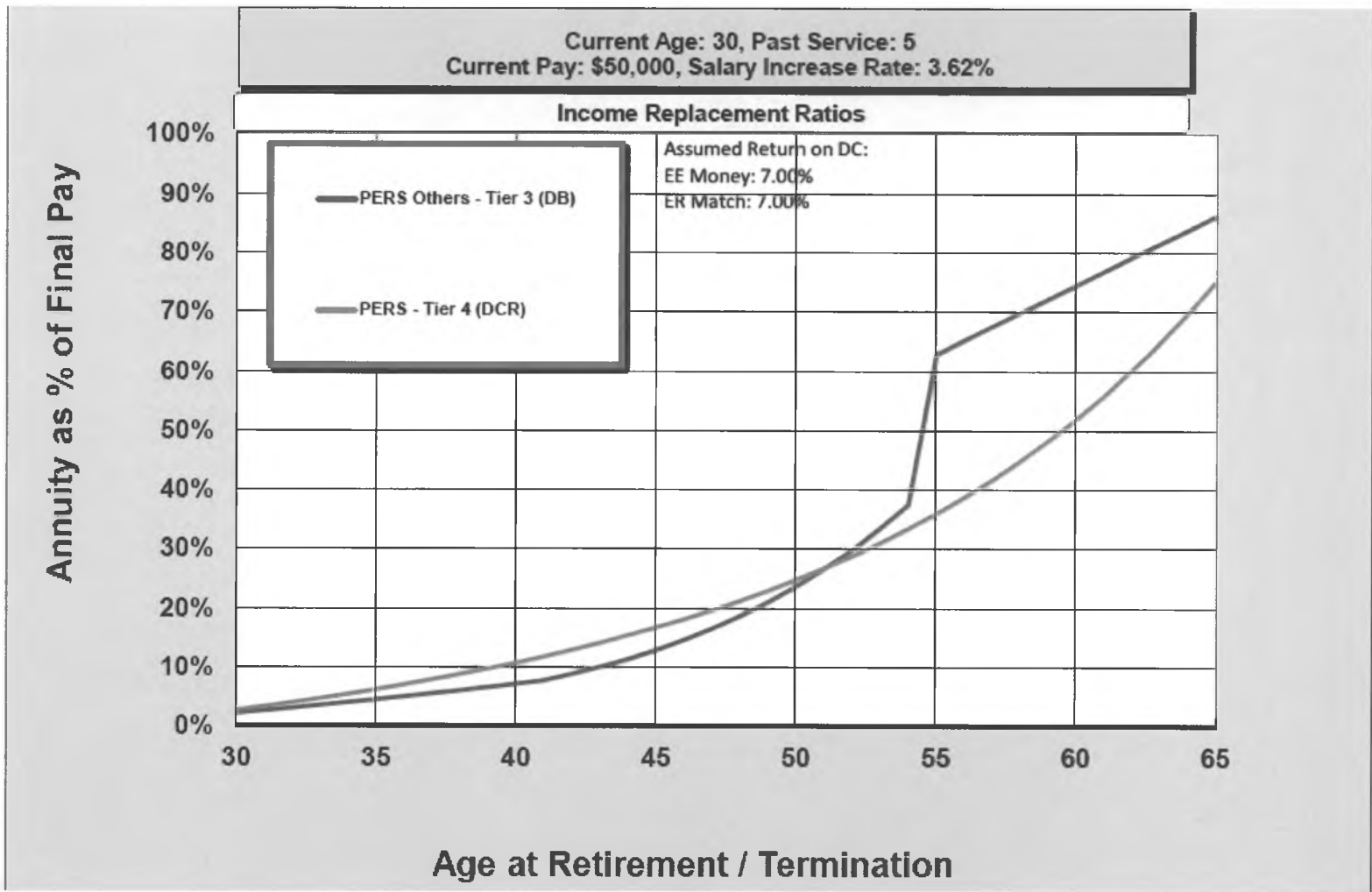
All Alaskans Benefit

- A choice of retirement plans gives states & cities the tools to recruit and retain.
 - They can deliver the best value for public dollars.
- The national employment situation is improving.
 - How does Alaska remain competitive?
 - Keeping good employees and attracting better.
- Economic impact of Defined Benefit pensions – total economic impact to Alaska of \$1.4 billion.

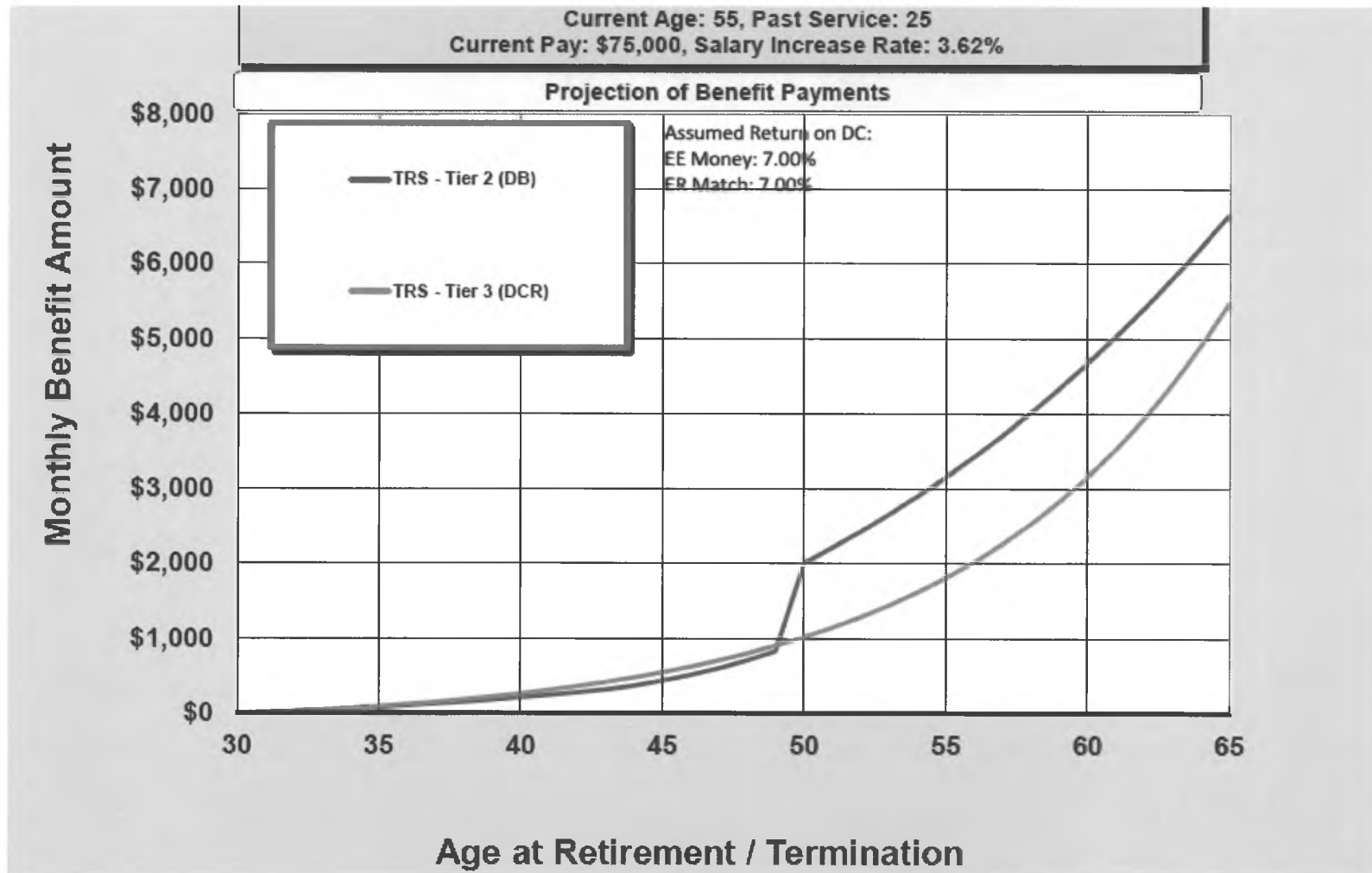
A balanced approach

- Each system has strengths:
 - Defined benefits means knowing how much you'll have
 - But you can't strike it rich
 - And it takes a long time to earn
 - Controlling your investments lets you 'beat the street'
 - And you can take it with you when you leave
 - But there are no guarantees

Two PERS employees:



Two TRS Employees:



5

What Stays the Same?

- The Defined Contribution systems do not change.
- The 2005 safeguards remain in place
- DB pension benefits
- Health plan coverage.

What's different?

- Most employees pay more into the new tier
- It takes longer to earn retiree health insurance
 - Medicare eligibility for most
 - Cost sharing
 - Risk Sharing
- DB retirement eligibility similar to DC tiers.
- DC employees get one chance to switch.

A responsible approach

- SB 121's new tier adjusts so it doesn't cost more than DC tiers
- SB 121 takes longer to earn retiree health insurance
 - Eliminates the most expensive years for most retirees
 - Shares the cost
 - Shares the risk until the employee retires
- Conversions to the new tier at employee's option – and cost.
- All the 2005 safeguards remain:
 - Review by a second actuary
 - Minimum salaries for elected officials
 - Experience studies
 - ARM Board
 - No paying less than the cost
 - Refunding DB contributions is permanent

More for Alaskans' Money

- Professional managers earn more
- No added costs – we're already running two systems
- \$762 million/year in DB benefits are a shock absorber for the Alaska economy
- Employees who prefer portability and control have a choice
- Cities, school districts, and the state have excellent recruiting tools

Cost Neutral

State of Alaska
 Summary of Normal Costs for New Tier Members under CS SB 121 R.2 DB/DC Choice Proposal
 (\$ in thousands)

Teachers' Retirement System

	Headcount	Salary	Employer Pension Normal Cost	Employer Healthcare Normal Cost	Increase in Retiree Premium	Total Employer Normal Cost	Employer Pension Normal Cost Rate	Healthcare Normal Cost Rate (% of Pay)	Inc. Retiree Premium (% of Pay)	Employer Healthcare Normal Cost Rate (per member)	Employer DCR Contribution Pension Rate	Employer DCR Contribution Pension Amount	Employer DCR Contribution Healthcare Rate	Employer DCR Contribution Healthcare Amount	Employer DCR Contribution Total Amount	DB/DCR Cost Difference	Pension Cost Difference	Healthcare Cost Difference
FY16	2,216	\$122,647	\$2,456	\$7,773	\$0	\$10,229	2.64%	6.45%	2.20%	\$3.93	7.02%	\$5,446	3.46%	\$4,211	\$12,358	(\$1,451)	\$6,219	\$5,665
FY17	2,351	182,376	4,325	10,640	2	14,967	2.64%	6.33%	2.20%	4.97	7.02%	11,401	3.46%	5,354	17,065	(1,316)	12,775	5,159
FY18	3,245	226,331	5,234	14,134	2	19,369	2.64%	6.33%	2.20%	4.36	7.02%	14,336	3.46%	7,157	21,513	(1,566)	15,522	5,877
FY19	3,225	248,242	7,244	17,575	2	24,821	2.64%	7.20%	2.20%	4.36	7.02%	17,385	3.46%	8,357	25,020	(1,301)	19,219	5,713
FY20	4,227	291,335	8,232	20,627	2	28,861	2.64%	7.20%	2.20%	4.36	7.02%	22,498	3.46%	12,130	32,629	(1,376)	22,147	10,477
FY21	4,288	326,331	9,570	24,012	2	33,583	2.64%	7.10%	2.20%	5.02	7.02%	22,386	3.46%	11,700	35,549	(1,706)	24,219	12,223
FY22	5,242	386,225	12,658	27,611	2	38,271	2.64%	7.25%	2.20%	5.36	7.02%	22,381	3.46%	12,592	40,223	(1,364)	26,220	14,415
FY23	6,227	431,331	12,254	31,623	2	44,081	2.64%	7.27%	2.20%	5.26	7.02%	22,226	3.46%	12,671	45,209	(1,212)	27,234	16,752
FY24	6,227	491,221	12,651	36,621	2	49,274	2.64%	7.45%	2.20%	5.36	7.02%	22,372	3.46%	12,736	50,480	(966)	28,211	19,043
FY25	6,422	531,222	15,057	40,122	2	55,181	2.64%	7.25%	2.20%	5.14	7.02%	22,136	3.46%	12,640	55,728	(516)	22,229	21,667
FY26	6,227	592,222	12,650	44,612	54	61,122	2.64%	7.20%	2.21%	7.65	7.02%	42,731	3.46%	22,537	61,129	0	24,241	24,241
FY27	7,174	636,227	15,040	46,455	52	66,554	2.64%	7.20%	2.46%	8.30	7.02%	44,485	3.46%	22,139	66,624	0	26,425	26,425
FY28	7,427	696,211	15,658	46,722	2,22	72,277	2.64%	7.25%	2.20%	7.31	7.02%	42,231	3.46%	24,046	72,277	0	28,220	28,653
FY29	7,222	748,222	21,126	60,522	3,419	78,222	2.64%	8.11%	2.40%	7.25	7.02%	52,272	3.46%	25,691	75,023	0	26,426	30,642
FY30	8,225	798,222	22,713	66,042	4,223	85,225	2.64%	8.20%	2.21%	7.65	7.02%	52,385	3.46%	27,912	82,625	0	26,220	33,272
FY31	8,224	856,221	24,226	72,221	8,210	90,227	2.64%	8.44%	2.20%	8.36	7.02%	52,382	3.46%	22,625	85,627	0	26,426	35,642
FY32	8,221	914,224	25,664	78,227	9,219	96,222	2.64%	8.27%	1.22%	7.65	7.02%	42,226	3.46%	21,626	92,622	0	26,226	38,022
FY33	8,221	972,221	27,614	86,227	12,185	102,300	2.64%	8.20%	1.22%	8.36	7.02%	42,222	3.46%	22,624	102,300	0	24,421	40,442
FY34	9,245	1,031,221	28,222	94,122	12,282	102,198	2.64%	8.10%	1.42%	7.65	7.02%	32,197	3.46%	22,926	103,192	0	22,221	42,622
FY35	9,245	1,091,467	32,663	121,216	12,518	144,406	2.64%	9.20%	1.22%	7.65	7.02%	32,406	3.46%	22,022	114,406	0	24,421	46,422
FY36	9,422	1,132,242	32,741	123,242	21,618	153,236	2.64%	9.20%	1.22%	7.65	7.02%	32,700	3.46%	42,235	123,236	0	27,226	47,022
FY37	9,224	1,212,222	34,626	119,226	22,261	157,400	2.64%	9.20%	2.10%	7.65	7.02%	32,224	3.46%	42,406	127,400	0	26,421	30,642
FY38	9,227	1,272,271	32,223	123,242	32,282	154,200	2.64%	12.00%	2.41%	7.65	7.02%	32,479	3.46%	44,612	134,221	0	26,170	33,172
FY39	9,222	1,342,205	32,124	123,286	32,267	162,356	2.64%	12.00%	2.20%	7.65	7.02%	32,206	3.46%	42,622	140,356	0	26,226	36,022
FY40	10,039	1,433,216	42,023	121,026	42,203	167,224	2.64%	12.72%	2.20%	7.65	7.02%	32,310	3.46%	42,124	147,224	0	26,221	38,022
FY41	10,211	1,473,224	41,627	124,021	50,264	164,304	2.64%	11.11%	2.40%	7.65	7.02%	36,231	3.46%	51,623	154,304	0	21,416	31,414
FY42	10,247	1,543,162	42,623	123,026	50,281	162,000	2.64%	11.62%	2.20%	7.65	7.02%	36,121	3.46%	52,627	162,026	0	24,220	34,222
FY43	10,478	1,613,122	42,626	123,264	36,720	162,522	2.64%	11.67%	4.22%	7.65	7.02%	36,123	3.46%	52,423	169,522	0	27,221	37,221
FY44	10,607	1,639,402	42,629	123,264	36,285	162,218	2.64%	12.41%	4.22%	7.65	7.02%	36,223	3.46%	52,620	172,218	0	27,226	28,272

SB 121: Good for Alaska

- I'm happy to take questions

SENATE FINANCE COMMITTEE REPORT

DATE: 3/16/12

FURTHER:

DATE TURNED _____
IN TO OFFICE: _____

Finance Committee considered CS FOR HOUSE BILL NO. 284(FIN)

HB 284-APPROP: OPERATING BUDGET/LOANS/FUNDS

"An Act making appropriations for the operating and loan program expenses of state government and for certain programs, capitalizing funds, amending appropriations, and making reappropriations; and providing for an effective date."

and recommends:

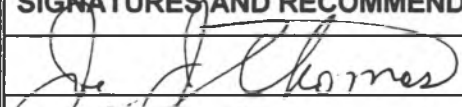
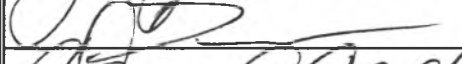
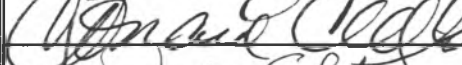
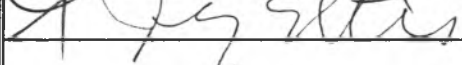


- be replaced with SCS CS HB 284 (FIN) Same Title Technical Title Change
 New Title/SCR No. _____
- adopt previous SCS _____ (_____) Same Title Technical Title Change
 New Title/SCR No. _____
- attached amendment(s)
- adopt _____ Letter of Intent
- further referral to _____ Committee

Dept Abbr.	
ADM	LEG
CED	LAW
COR	LWF
CRT	MVA
EED	DNR
DEC	DPS
DFG	REV
GOV	DOT
DHS	UA

NEW FISCAL NOTE(S)				
Dept.	Fiscal	Indet.	Zero	FN #

PREVIOUS FISCAL NOTE(S)				
Dept.	Fiscal	Indet.	Zero	FN #

APPROPRIATION - no fiscal note

SIGNATURES AND RECOMMENDATIONS:	PRINTED LAST NAME	DO PASS	DO NOT PASS	NO REC	AMEND
	Thomas	✓			
	EGAN	✓			
	OLSON	✓			
	ELLIS	✓			
CO-CHAIR: 	Stedman	✓			
CO-CHAIR: 	Hoffman	✓			

SENATE FINANCE COMMITTEE REPORT

DATE: 3/16/12

FURTHER:

DATE TURNED
IN TO OFFICE: _____

Finance Committee considered CS FOR HOUSE BILL NO. 285(FIN)

HB 285-APPROP: MENTAL HEALTH BUDGET

"An Act making appropriations for the operating and capital expenses of the state's integrated comprehensive mental health program; and providing for an effective date."

and recommends:

- be replaced with **SCS** CS HB 285 (FIN) Same Title Technical Title Change
 New Title/SCR No. _____
- adopt previous **SCS** _____ (_____) Same Title Technical Title Change
 New Title/SCR No. _____
- attached amendment(s)
- adopt _____ Letter of Intent
- further referral to _____ Committee

Dept Abbr.	
ADM	LEG
CED	LAW
COR	LWF
CRT	MVA
EED	DNR
DEC	DPS
DFG	REV
GOV	DOT
DHS	UA

NEW FISCAL NOTE(S)				
Dept.	Fiscal	Indet.	Zero	FN #

PREVIOUS FISCAL NOTE(S)				
Dept.	Fiscal	Indet.	Zero	FN #

APPROPRIATION - no fiscal note

SIGNATURES AND RECOMMENDATIONS:	PRINTED LAST NAME	DO PASS	DO NOT PASS	NO REC	AMEND
	Thomas	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
	Olson	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
	Ellis	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
CO-CHAIR:	Stedman	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
CO-CHAIR:	Hoffmann	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

**Alaska
Department of
Administration
SB 121: Making
Promises And
Keeping Promises**



Senate Finance
Mike Barnhill, Deputy Commissioner
March 30, 2012



Making DB Promises

- Defined Benefit Plan Promises
 - Pension up to 67% of average salary
 - Annual cost of living increases
 - System-paid medical premiums
- Membership: 95,667

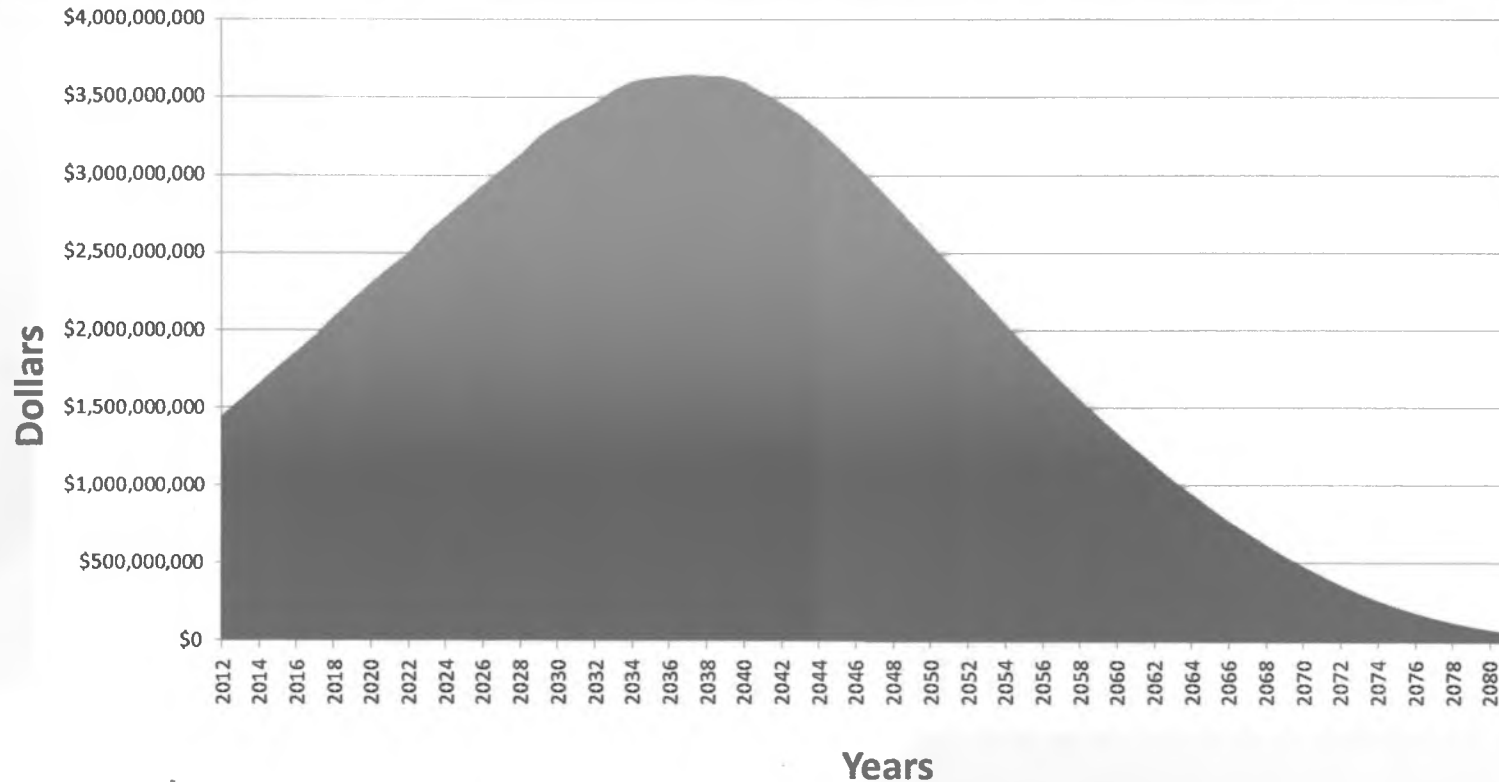
PERS	TRS
Tier I: 29,832	Tier I: 12,124
Tier II: 16,738	Tier II: 9,771
Tier III: 27,202	



Current DB Promises Must be Kept

- “Accrued benefits of these [retirement] systems shall not be diminished or impaired.”
Alaska Constitution, Article XII, Section 7
- Benefit payments –
 - at least \$1 billion per year from now until 2063
 - \$3 billion per year from 2027-2046

Cost of keeping existing PERS and TRS promises



Pay \$141 billion in benefits payments over next 70 years

Current PERS/TRS account balance: \$15.4 billion

Unfunded Liability: \$11.1 billion



How Long Will We Keep DB Promises?

At least through 2080...probably longer...

📅 02/10/2012

U.S. Government Still Pays Two Civil War Pensions

By LAUREN FOX

Despite the fact that the Civil War ended April 9, 1865 (53,630 days ago, for reference), the government is still paying out veterans' pensions.

Records from the Department of Veterans' Affairs show that two children of Civil War veterans, as of September, are receiving pensions from their fathers' service.

The Civil War ended 147 years ago....

Lessons Learned: DB Pensions Need Revenue Backstops



- Alaska's experience from the 2000s
- Unfunded liabilities arise for a variety of reasons, negligent and non-negligent
 - Rising medical costs
 - Longer life spans
 - Actuarial negligence
 - Investment loss
- When unfunded liabilities have developed in the Alaska, by and large the GF has provided the solution



Breaking Promises

- Retirement promises have been broken elsewhere
- Private employer retirement plan defaults prompted federal passage of ERISA in 1974
- Current threat of public pension defaults across the country (Jefferson County, AL; Vallejo, CA; Central Falls, RI; Harrisburg, PA)
- Some states have broken promises and cut benefits to retirees
- Alaska has moral and constitutional obligation to keep its promises



Reduced Post-Retirement Benefit Increases Enacted in 2010 and 2011 (NCSL)





Pension Headlines

***California Pension May Lower Assumed
Return for First Time Since Recession***

Bloomberg, March 6, 2012

***States Facing 'Sleeping Cancer' in 96%
Unfunded Retiree Benefits***

Bloomberg, March 6, 2012

***Pension Benefit Costs Cut by Record 43
States, Study Says***

Bloomberg, March 14, 2012

***STATE AND LOCAL GOVERNMENT
PENSION PLANS***

***Economic Downturn Spurs Efforts to
Address Costs and Sustainability***

GAO Report, March 2012

***EDITORIAL: State pensions in the red
Public employee retirement system crisis
continues to worsen***

The Washington Times March 1, 2012

Falling short

***People in rich countries are living longer.
Without big reforms they will not be
able to retire in comfort***

Special Report, Economist, Apr 7th 2011

***Federal benefits, pensions explode;
Retirement plans almost as costly as
Social Security***

USA TODAY, September 29, 2011



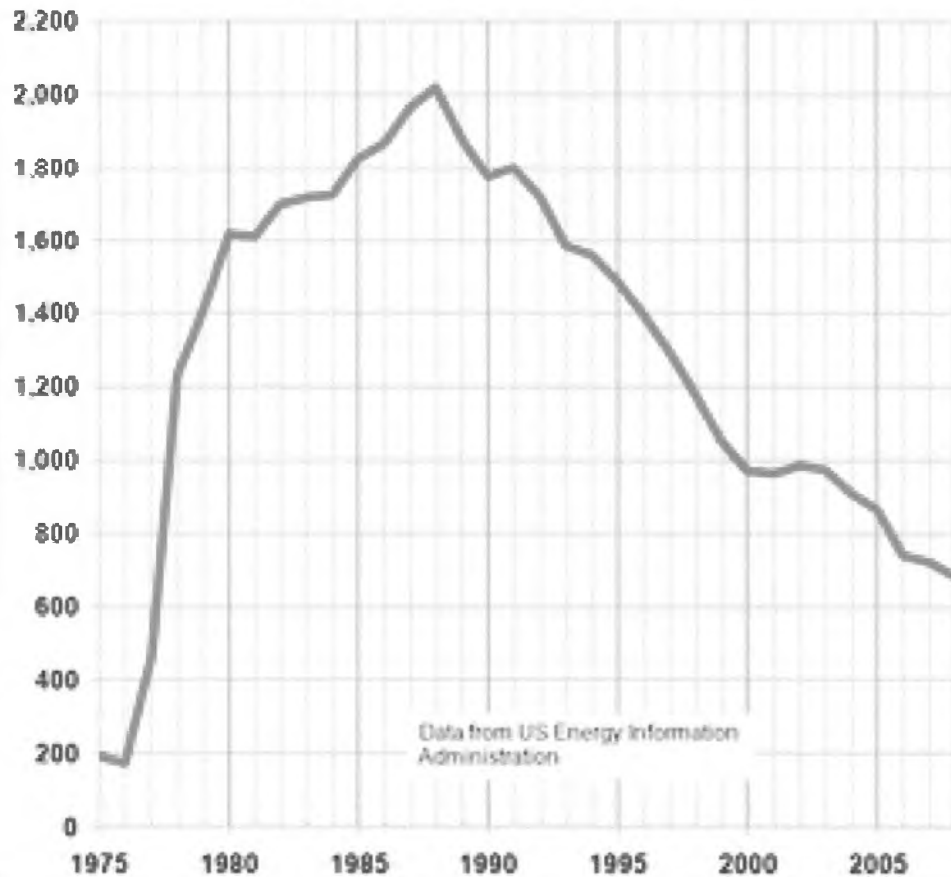
SB 121: Making New DB Promises

- SB 121 makes new DB retirement promises to the next generation of state employees
- The State will need to keep those promises until at least 2080-2090
- \$3 billion in current annual DB payment obligations will extend beyond 2047
- Where is the GF income in the future to backstop these new DB retirement promises in 2070, 2080, 2090....?



What is the Long-Term Future of GF Revenues?

Alaska Crude Oil Production
(thousand barrels per day)



Can we make new promises that retirees and their families will be able to rely on in 2060-2090?



Will SB 121 Save Money?

- SB 121 will cost employers the same or less than the current DCR plan if all of the ARMB-adopted actuarial assumptions remain true indefinitely
 - Inflation
 - Mortality
 - Retirement date
 - Investment return



PERS / TRS Annualized Returns

Annualized Returns through 6/30/2011	PERS	TRS	Average
1 Year	21.18%	21.36%	21.27%
3 Year	2.36%	2.41%	2.39%
5 Year	4.32%	4.36%	4.34%
10 Year	5.43%	5.46%	5.44%

Source: Callan Associates



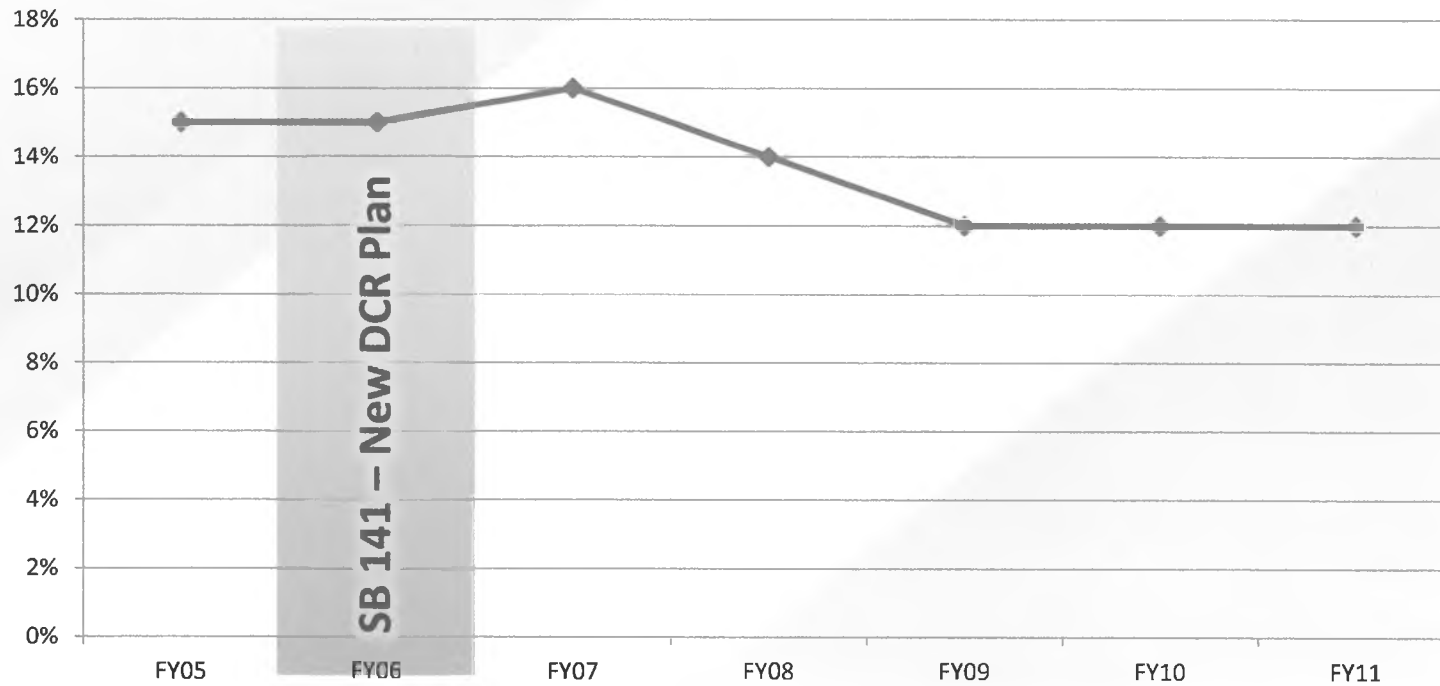
What is the appropriate rate of return?

- ARM Board: 8.0 %
- CalPERS: 7.5 %
- Fitch: 7.0%
- Prof. Josh Rauh: 4.0%
(default-free government bond yield)
- Senate Finance ??



Impact of DCR Plan on Retention?

Executive Branch – Separation Total



Source: <http://doa.alaska.gov/dop/resources/publications/>



Retirement security is important

Defined Contribution Retirement (DCR) Contributions...

	Employee	Employer
DCR Contributions	5%	8%
SBS Contributions	6.13%	6.13%
Total Contributions	11.13%	14.13%

25.26% of payroll for State of Alaska employees goes to individual retirement accounts



Administration Position re SB 121

- Keep the retirement promises we have made to date
- Don't make the problem worse
- Don't make new DB retirement promises that we are not sure we can keep
- A revenue backstop is necessary to ensure new promises are kept; until Alaska's long term fiscal situation is solved this discussion is premature



SB 121 Actuarial Fiscal Note Timeline

AS 24.08.036:

Before a bill which would have an effect on the retirement systems of the state is reported to the rules committee, there shall be attached to the bill an analysis of the long-term and short-term costs to the state if the bill is adopted, as well as the impact of the bill on the actuarial soundness of the fund. The analysis is in addition to the fiscal note requirements of AS 24.08.035.

04/07/2011: SB 121 introduced (version I)

04/14/2011: Hearing Senate State Affairs

04/17/2011: Regular session adjourns

08/04/2011: Governor's legislative office transmits actuarial fiscal note (version I) to sponsor and Senate State Affairs

09/07/2011: Kiehl asks DRB whether actuary (Buck) correctly understands bill

09/15/2011: Hearing Senate State Affairs; DOA acknowledges actuarial fiscal note in error

10/07/2011: DOA transmits revised actuarial fiscal note (version I) to sponsor and Senate State Affairs

10/13/2011: Hearing in Senate State Affairs; revised actuarial fiscal note discussed; actuary explains why the actuarial note is positive; DOA agrees to make actuary available to achieve neutral actuarial note

01/26/2012: Hearing in Senate State Affairs; version R. introduced

02/07/2012: DOA provides Buck 30 year actuarial analysis on version R to sponsor and Senate State Affairs; analysis shows that note will remain positive; DOA offers to refrain from filing a second positive fiscal note pending amendment to version R.

02/9/2012: Hearing in Senate State Affairs; amendment R.2 introduced

02/16/2012: Hearing in Senate State Affairs; version R, amended, moved from committee

03/09/2012: Governor's legislative office transmits indeterminate actuarial fiscal note (version R, amended) to sponsor and Senate Finance



Thank you!

www.DOA.alaska.gov for more information.

Questions?

Major Changes in SB 121

Substantive changes in Sen. L&C "U" version:

- The changes in the bill take effect 7/1/2013
- All employees in the new tier contribute eight percent of pay to the system.
- Employees currently in the DC plan who convert are not automatically entitled to credit for all the time they've worked:
 - The actuarial 'time value' of the DC account will be credited automatically.
 - The employee may choose to create an indebtedness to make up any shortage, up to the actual years of service.
- Retirees in the new Defined Benefit tiers will pay a share of medical insurance premiums. These initially follow the same schedule as DC retirees:
 - If the retiree is eligible for Medicare, the retiree pays:
 - 30 percent with 10-15 years of service
 - 25 percent with 15-20 years of service
 - 20 percent with 20-25 years of service
 - 15 percent with 25-30 years of service
 - 10 percent with 30 or more years of service
 - If a teacher, peace officer, or firefighter works 25 years or more, the retiree pays the percentages above, even if not eligible for Medicare.
 - If a PERS employee who is not a peace officer or firefighter works 30 years or more, the retiree pays 10 percent of the premium even if not yet eligible for Medicare.
 - These percentages can be changed by the actuary until the date an individual retires. The changes will be made in five year blocks to keep the cost of prefunding the system no greater than the DC system.

Technical and mechanical changes:

- The title is more descriptive of the bill.
- When an employee converts from one plan to another, the change is retroactive to the date of hire. (This does not change the service credit provisions in the bill.)
- Time limits for several irrevocable choices were changed from 60 to 90 days.
- Language was clarified to ensure survivors of Defined Benefit employees' survivors are eligible for survivor benefits.
- References to the Alaska Retirement Management Board transferring funds and adopting regulations were changed to the administrator (Department of Administration) to reflect current practice.
- Language requiring individual accounts to be transferred with "interest" was changed to "with investment earnings and losses" to avoid confusion with statutory interest rates under other retirement statutes.

Alaska Division of Retirement and Benefits
Teachers' Retirement System (TRS) Plan Comparison Chart

Feature	Tier I July 1, 1955 – June 30, 1990	Tier II Entered on or after July 1, 1990	Tier III Entered on or after July 1, 2006
Employee Contribution	Pre-tax employee contribution: 8.65% beginning 1/1/91	Pre-tax employee contribution: 8.65% beginning 1/1/91	Pre-tax employee contribution: 8% Employee may make additional contributions.
Employer Contribution	Determined by annual actuarial valuation.	Determined by annual actuarial valuation.	7% - DC account 1.75% Health Plan - determined by annual actuarial valuation after FY07. HRA - Flat dollar amount per employee based on 3% of the employer's average annual employee compensation.
Vesting	Members vest with 8 years of service.	Members vest with 8 years of service.	100% vested in employee contributions from inception. Vested in employer contributions based on the following schedule: 25% after 2 years of service, 50% after 3 years, 75% after 4 years and 100% after five years.
Qualifications for Retirement	Normal retirement age is 55, with early retirement at age 50; teachers can retire at any age after 20 years of membership service.	Normal retirement age is 60, with early retirement at age 55; teachers can retire at any age after 20 years of membership service.	None for investment account. Taxes and penalties may apply if withdrawn before age 59 1/2. See requirements for Retirement Medical Coverage.
Benefit Calculation Formula	Benefit formula is 2% for the first 20 years and all years of service prior to July 1, 1990 , 2.5% thereafter. Benefit calculation is determined on the average of the high three contract salaries.	Benefit formula is 2% for the first 20 years, 2.5% thereafter. Benefit calculation is determined on the average of the high three contract salaries.	DC account balance plus investment earnings.
Alaska Cost-of-living Increases (COLA)	An Alaska Cost-of-Living Allowance is payable to benefit recipients who remain domiciled in Alaska after retirement. The allowance is 10% of the base benefit.	An Alaska Cost-of-Living Allowance is payable to benefit recipients 65 or older or disability benefit recipients regardless of age who remain domiciled in Alaska after retirement. The allowance is 10% of the base benefit.	None provided.

More detailed information may be found on the Division website, www.state.ak.us/dr/b, or in the TRS Information Handbook.

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Feature	Tier I July 1, 1955 – June 30, 1990	Tier II Entered on or after July 1, 1990	Tier III Entered on or after July 1, 2006
Post Retirement Pension Adjustments (PRPA) (Inflation protection)	PRPA increases granted on an ad hoc basis. If an ad hoc is not granted, tier I employees must be age 60 or over or receiving benefits for 8 years to qualify for the automatic PRPA. The automatic PRPA legislated in 1990 applied to all members regardless of hire date.	Automatic PRPA adjustments to disabled members, retirees 60 and over, and those who have received benefits for 8 years.	None provided.
Retirement Medical Coverage	Medical coverage is provided to all benefit recipients and their eligible dependents. The retiree medical plan premium is paid by the retirement system.	The retirement system pays the retiree medical plan premium for all disabilitants regardless of age, for retirees and survivors over age 60 and for retirees with at least 25 years of membership service. This coverage includes eligible dependents. Retirees and survivors under age 60, with less than 25 years of membership service must pay the full premium cost if they want coverage.	<p>Access to medical coverage at Medicare eligible age with 10 years of service or at any age with 30 years of service. Must retire directly from the system. If not eligible for Medicare, must pay full premium. May use health reimbursement arrangement (HRA) account to pay premiums. Once the HRA is exhausted, member self- pays premiums.</p> <p>When eligible for Medicare, the percentage of premium paid by the retiree or surviving spouse is:</p> <p>10-14 years of service - 30% 15-19 years - 25% 20-24 years - 20% 25-29 years - 15% 30 years or more - 10%</p>
Disability Benefits	Disability benefits are 50% of base salary, plus 10% for each eligible dependent child up to a maximum of 4 children.	Disability benefits are 50% of base salary, plus 10% for each eligible dependent child up to a maximum of 4 children.	<p>Must be a total and presumably permanent disability whose cause is directly related to performance of duties of the job or an on the job injury. Benefit is 40% of salary, earns service while on occupational disability. Employer continues to make all required contributions as if the member were working, plus the member's required contributions to the DC account, without deduction from the member's disability payment.</p> <p>Disability benefits cease when the member becomes eligible for normal retirement at Medicare eligible age and 10 years of service or at any age with 30 years of service. No medical insurance until eligible for normal retirement.</p>

More detailed information may be found on the Division website, www.state.ak.us/drb, or in the TRS Information Handbook.

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Accrued Liability by Tier

PERS-All Members

As of June 30, 2009 (in thousands)	Normal Cost	Accrued (Past Service) Liability	
Tier 1			
- Pension	\$ 36,947	\$ 6,704,610	
- Medical, Net of Part D Subsidy	35,713	4,336,451	
Combined			\$ 11,041,061
Tier 2			
- Pension	45,918	2,012,438	
- Medical, Net of Part D Subsidy	22,512	1,464,647	
Combined			3,477,085
Tier 3			
- Pension	83,191	985,038	
- Medical, Net of Part D Subsidy	57,074	1,076,187	
Combined			2,061,225
Total	\$ 281,355	\$ 16,579,371	

Teachers' Retirement System

As of June 30, 2009 (in thousands)	Normal Cost	Accrued (Past Service) Liability	
Tier 1			
- Pension	\$ 19,028	\$ 4,487,063	
- Medical, Net of Part D Subsidy	5,564	1,719,303	
Combined			\$ 6,206,366
Tier 2			
- Pension	48,317	976,924	
- Medical, Net of Part D Subsidy	22,606	664,224	
Combined			1,641,148
Total	\$ 95,515	\$ 7,847,514	

Active Count and Average Salary for Upcoming Year

PERS P/F	Tier 3	Tier 4
Count	1,493	650
Avg Salary	81,326	64,311

PERS Others	Tier 3	Tier 4
Count	12,838	8,582
Avg Salary	56,355	48,160

TRS	Tier 2	Tier 3
Count	6,068	2,246
Avg Salary	72,374	56,331

Based on data used for the June 30, 2010 valuation.

Summary of Counts by Tier for Active and Inactive Members

All information is as of June 30, 2009

PERS	Tier 1	Tier 2	Tier 3	Total
Actives	5,381	7,327	14,857	27,565
Terminated Vested	1,848	3,126	1,592	6,566
Terminated Non Vested	1,667	2,781	10,178	14,626
Retirees	20,936	3,504	575	25,015

TRS	Tier 1	Tier 2	Total
Actives	1,941	6,285	8,226
Terminated Vested	270	614	884
Terminated Non Vested	173	2,357	2,530
Retirees	9,740	515	10,255

ALASKA

Pensionomics:

Measuring the Economic Impact of State and Local Pension Plans

Key Findings

Benefits paid by state and local pension plans support a significant amount of economic activity in the state of Alaska.

Pension benefits received by retirees are spent in the local community. This spending ripples through the economy, as one person's spending becomes another person's income, creating a multiplier effect.

Expenditures stemming from state and local pensions supported...

- 6,270 jobs that paid \$385.2 million in wages and salaries
- \$1.0 billion in total economic output
- \$155.5 million in federal, state, and local tax revenues

... in the state of Alaska

Each dollar paid out in pension benefits supported \$1.25 in total economic activity in Alaska.

Each dollar "invested" by Alaska taxpayers in these plans supported \$6.35 in total economic activity in the state.

Overview

Expenditures made by retirees of state and local government provide a steady economic stimulus to Alaska communities and the state economy. In 2006, 34,962 residents of Alaska received a total of \$819.50 million in pension benefits from state and local pension plans, with \$808.64 million paid from plans within the state and the remainder originating from plans in other states.

The average pension benefit received was \$1,953 per month or \$23,440 per year. These modest benefits provide retired teachers, public safety personnel and others who served the public during their working careers income to meet basic needs in retirement.

Impact on Jobs and Incomes

Retiree expenditures stemming from state and local pension plan benefits supported 6,270 jobs in the state. The total income to state residents supported by pension expenditures was \$385.2 million.

Of this, the greatest share, \$188.0 million, was comprised of employee compensation (wages and salaries). Proprietors' income (self-employment income) represented \$33.6 million, and other property income (including payments from interest, rent, royalties, profits and dividends) totaled \$163.6 million.

Economic Impact

State and local pension funds in Alaska and other states paid a total of \$819.50 million in benefits to Alaska residents in 2006. Retirees' expenditures from these benefits supported a total of \$1.0 billion in total economic output in the state, and \$430.7 million in value added in the state.

\$790.8 million in direct economic impacts were supported by retirees' expenditures on goods and services from businesses in the state. An additional \$120.4 million in indirect economic impact resulted when these businesses purchased additional goods and services, generating additional income in the local economy. \$112.8 million in induced impacts occurred when employees hired by businesses as a result of the direct and indirect impacts made expenditures, supporting even more additional income.



Economic Multipliers



* Caution should be used in interpreting this number, because the Census data used reflect the taxable status of contributions only; because employee contributions may be reported as taxpayer contributions, the multiplier here may be underestimated.

Impact on Tax Revenues

State and local pension payments made to Alaska residents supported a total of \$155.5 million in revenue to federal, state and local governments. Taxes paid by retirees and beneficiaries directly out of pension payments totaled \$28.7 million. Taxes attributable to direct, indirect and induced expenditures accounted for \$126.8 million in tax revenue.

Federal Tax	87.5 million
State/Local Tax	67.8 million
Other Corporate Taxes	0.2 million
Total	\$155.5 million

Economic Impacts by Industry Sector

The economic impact of state and local pension benefits was broadly felt across various industry sectors in the state. The ten industry sectors with the largest employment impacts are presented in the table below.

Industry	Employment Impact (# Jobs)	Value Added Impact (\$ millions)	Income Impact (\$ millions)	Output Impact (\$ millions)
Health Care and Social Assistance	1,354	\$75.0	\$74.2	\$119.1
Retail Trade	1,331	64.4	50.9	97.0
Accommodation and Food Services	839	26.7	23.8	50.0
Other Services (Except Public Administration)	479	14.2	13.3	27.1
Real Estate and Rental and Leasing	452	33.8	28.2	50.8
Professional, Scientific, and Technical Services	229	11.8	11.5	23.2
Arts, Entertainment, and Recreation	229	6.2	5.6	10.8
Finance and Insurance	227	24.2	23.3	43.9
Public Administration	196	10.1	10.1	20.7
Transportation and Warehousing	187	11.4	10.8	22.0



National Conference on Public
Employee Retirement Systems

NCPERS Research Series

May 2007



The Top Ten Advantages of Maintaining Defined Benefit Pensions

Legislation has been proposed in several states to replace state and local government defined benefit (DB) retirement plans with defined contribution (DC) plans. At issue is not whether state and local employees should have access to DC plans—many already do in conjunction with their DB plans or else through supplemental DC-type plans, which play a useful role in providing additional tax-deferred retirement savings.¹ Rather the issue is whether defined benefit plans should be eliminated and replaced with defined contribution plans.

While recognizing that DC plans are useful in providing supplemental retirement benefits, this paper discusses the advantages of maintaining state and local DB plans and argues against replacing them with DC plans. Eliminating the DB plan and switching to a DC plan is likely to be a lose-lose situation for governments, their employees, and taxpayers for many reasons. After briefly describing how DB and DC plans work, this paper will discuss the following 10 advantages of retaining DB plans:

- Retaining a DB plan is likely to cost state and local governments less over the short term. The long-term cost savings of switching to a DC plan are uncertain at best.
- Almost all state and local DB plans provide disability and survivor benefits as well as retirement income. Switching to a DC plan would require employers to obtain these benefits from another source, likely at a higher cost.
- DB plans enhance the ability of state and local governments to attract qualified employees and retain them throughout their careers. Switching to a DC plan would limit this ability, possibly producing or exacerbating labor shortages in key service areas by increasing employee turnover rates. Higher turnover rates result in increased training costs and lower levels of productivity that can, in turn, result in the need for a larger total workforce.

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How DC Plans Work	5
Advantages	6
Conclusion	14

Illustration by James Endicott © images.com

¹ Examples of DC-type plans available to state and local employees include governmental deferred compensation plans (also known as “457 plans”) and 403(b) annuities. In addition, some state and local employees are also covered by 401(k) plans, if the plans were established before May 6, 1986. As reported by the Nationwide Retirement Education Institute in their 2004 report *America’s Retirement Voice: Public Sector Retirement Yesterday, Today, and Tomorrow*, governmental 457 plans are in place for most large and mid-size cities and counties and all 50 states, covering approximately 3 million participants. According to a 2006 survey by the National Association of Government Defined Contribution Administrators (NAGDCA), 7.4 million governmental employees are eligible to participate in some form of defined contribution plan. This represents about half of current state and local government employees.

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- DB plans help state and local governments manage their labor force by providing flexible incentives that encourage employees to work longer or retire earlier, depending on the circumstances. Switching to a DC plan would limit this flexibility and make these incentives more expensive for the employer.
- By pooling risk over a relatively large number of participants, DB plans lower the overall risk due to investment losses and participants outliving retirement benefits. Switching to a DC plan would require each individual to bear these risks alone, consequently requiring higher contributions than if the risks were pooled.
- DB plans earn higher investment returns and pay lower investment management fees, on average, than DC plans. Switching to a DC plan is likely to lower investment earnings used to finance retirement benefits and increase management costs, to the detriment of plan participants.
- DB plan investment earnings reduce future employer contributions. Switching to a DC plan would prevent state and local governments from reducing employer contributions through investment earnings, which currently fund over two-thirds of public retirement benefits.
- DB plans provide secure retirement benefits based on a person's salary and period of service. Switching to a DC plan is likely to result in lower and less secure retirement benefits for many long-term governmental employees, including firefighters, police officers, and teachers, who constitute over half of state and local government workers.² State and local employees who are without Social Security coverage would be put at even greater risk.
- DB plans help sustain state and local economies by providing adequate and steady retirement benefits for a significant portion of the workforce. Switching to a DC plan may slow state and local economies, since a large number of retirees would likely receive lower retirement benefits.
- DB plans provide benefits that help ensure an adequate standard of living throughout retirement. Switching to a DC plan likely would result in pressure on state and local governments to augment DC plan benefits and require increased financial assistance for retirees.

Background

State and local government retirement plans in the United States cover 14.1 million active employees (about 10 percent of the U.S. labor force) and 6.9 million retirees,³ including teachers, police officers, firefighters, legislators, judges, and general employees. Ninety percent of state and local governmental employees are covered by defined benefit retirement plans.⁴ Approximately 25 percent are not covered by Social Security, including close to half of public school teachers and about 70 percent of police officers and firefighters. State and local retirement plans paid annual benefits of \$141 billion in 2005, averaging about \$20,400 per retiree.⁵ As of December 31, 2006, state and local plans had accumulated \$3 trillion in assets, which were invested in a broadly diversified mix of equity and fixed-income securities.⁶

² U.S. Census Bureau, *Statistical Abstract of the United States 2004-2005* (Washington, DC: U.S. Government Printing Office, 2004), Table No. 454. Teachers, school employees, police officers, and firefighters constitute approximately 60 percent of state and local government employees.

³ U.S. Census Bureau, *State and Local Government Employee-Retirement Systems*, Fiscal Year 2005, Table 5a. In addition to active employees and retirees, state and local plans also cover 3.8 million inactive members who are eligible for retirement benefits upon reaching retirement age. (www.census.gov/govs/www/retire05.html)

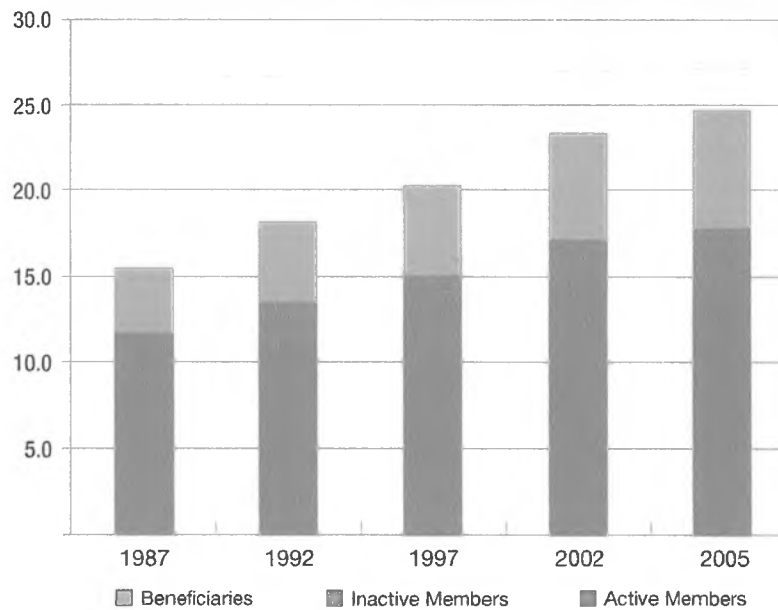
⁴ U.S. Bureau of Labor Statistics, *Employee Benefits in State and Local Governments*, 1998. (Washington, DC: U.S. Government Printing Office, 2000), p. 5.

⁵ U.S. Census Bureau, *State and Local Government Employee-Retirement Systems*, Fiscal Year 2005, Table 1. Average benefit calculated by the author and rounded to the nearest hundred dollars.

⁶ Board of Governors of the Federal Reserve System, *Flow of Funds Accounts of the United States: Flows and Outstandings, Fourth Quarter 2006*, Table L-119. (www.federalreserve.gov/releases/z1/current/z1.pdf)



Chart I: Participants in State and Local Government DB Plans



Source: U.S. Census Bureau, State and Local Government Employee-Retirement Systems, annual

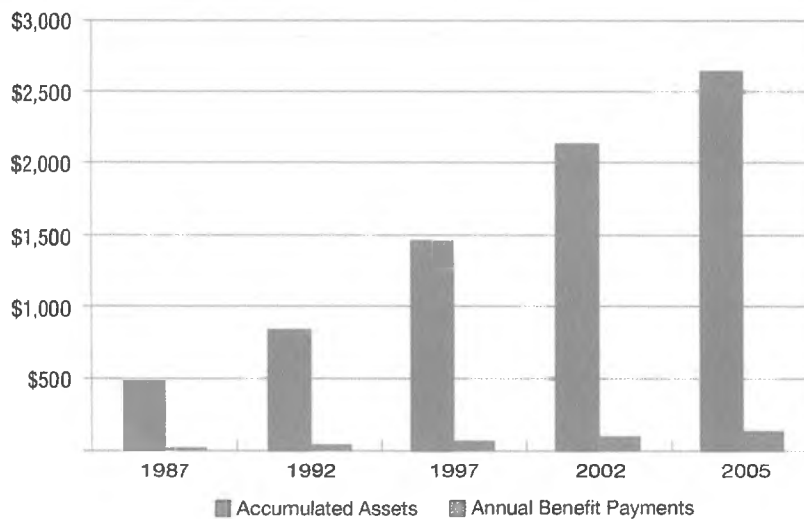
Since the mid-1990s, legislation has been proposed in several states to replace state and local DB plans with DC plans. The pace of these proposals increased from 2003 through 2006, partly due to equity market downturns in 2000 through 2002 that resulted in increased contribution rates for many DB plans, both public and private. Proponents of the change argue that switching to a DC plan would lower the government's cost of providing retirement benefits, thereby reducing state and local taxes. They also argue that DC plans would benefit public employees by giving them higher benefits through DC plan investment earnings and by making it easier for employees to take their benefits with them when they change jobs.

As this paper shows, it is likely that switching to a DC plan would increase retirement costs over the short-term and possibly over the long-term as well. In addition, recent studies indicate that retirement benefits provided through DC plans are, on average, significantly lower than those provided through DB plans. Moreover, while DC plans are useful for providing supplemental, tax-deferred retirement savings, replacing DB plans with DC plans could cause severe, unintended consequences:

- Governments could lose a valuable tool for attracting and retaining qualified employees;
- Public employees could lose a significant amount of retirement income, potentially affecting state and local economies; and
- Legislators could face additional pressure to increase DC retirement benefits and provide additional financial assistance for public-sector retirees.



Chart 2: Accumulated Assets and Annual Benefit Payments of State and Local Government DB Plans



Source: U.S. Census Bureau, State and Local Government Employee-Retirement Systems, annual

How DB Plans Work

In a typical DB plan, employers promise to pay retirement benefits based on an employee's period of service and final average salary. A typical benefit formula for state and local general employees is 2 percent times final average salary times years of service.⁷ Under this formula, an employee who works 20 years and retires with a final average salary of \$40,000 would earn an annual benefit of \$16,000.

Eligibility for the benefit (i.e., vesting) usually requires employees to work for a minimum period of time, typically 5 years.⁸ Upon retirement, the benefit is provided as a series of monthly payments over the retiree's lifetime (and the surviving spouse's lifetime if this option is selected by the member who, in return, receives a reduced benefit). Most state and local employees are in DB plans that provide cost-of-living adjustments as protection against inflation. In addition, most also provide disability and pre-retirement death benefits.

DB plan benefits are financed by contributions from the employer (and most often from employees as well) and investment income. Employee contributions are usually established at a fixed rate of pay, averaging a little over 4 percent for general employees and almost 7 percent for public safety employees and teachers.⁹ Employer contributions are calculated so

⁷ The "2 percent" portion of this benefit formula is referred to as the "benefit multiplier." Benefit multipliers vary, depending on occupation and Social Security coverage. According to the NASRA/NCTR 2003 Public Fund Survey, the median benefit multiplier is 1.85 percent for state and local employees covered by Social Security and 2.20 percent for those not covered by Social Security.

⁸ National Education Association, *Characteristics of Large Public Education Pension Plans* (Washington, DC: National Education Association, 2004). The 88 statewide plans surveyed cover 9.4 million active workers. Fifty-seven percent of the plans had vesting periods of five years.

⁹ Public Pension Coordinating Council, *2000 Survey of State and Local Government Employee Retirement Systems*, April 2000, Table VII-7. Employee contributions as a percentage of payroll averaged 4.2 percent for general employees, 6.8 percent for teachers, and 6.9 percent for public safety employees.



that, over the long-run (50 years or more), annual contributions plus expected investment earnings are enough to pay the promised benefits plus administrative expenses. These calculations are done by actuaries and designed to maintain employer contribution rates at a level percent of payroll, by smoothing short-term investment fluctuations and using other actuarial techniques.¹⁰ Plan assets are invested in professionally managed, broadly diversified portfolios, with investment fees paid by the plan or employer. Retirement benefits are paid from accumulated contributions and investment earnings.

For employers, a key advantage of DB plans is that investment earnings reduce future employer contributions. In other words, employer and employee contributions generate investment earnings that, in turn, are used to pay benefits that would otherwise have to be paid from future employer contributions. From 1986 through 2005, state and local DB plan investments earned \$2.26 trillion, reducing the need for additional employer contributions and taxpayer revenues.¹¹

A potential disadvantage of DB plans is that when investment earnings are less than expected, additional employer contributions are required. However, it should be noted that the \$2.26 trillion earned by state and local investments over the past 20 years includes investment losses that occurred in 2000 through 2002, as well as in 1987 and 1994.

For employees, a key advantage of DB plans is that they provide secure and predictable retirement income over their lifetimes based on pre-retirement earnings. A key disadvantage is that employees who do not remain employed long enough to become vested often lose their DB plan benefits, although employee contributions are nearly always returned with interest.

How DC Plans Work

In a DC plan, employers provide employees with individual investment accounts and promise to contribute a certain amount to the accounts ranging from 3.5 percent to 8 percent (or more) of pay while the employee is employed. Employees can also contribute to their accounts and decide how the assets are invested, choosing from a number of funds representing major investment categories. Investment management fees are paid from the employee's account, reducing the funds available to pay benefits. At retirement, the employee's benefit is paid solely from the contributions and investment earnings that have accumulated in the individual's account.

For employers, one advantage of DC plans is that the employer's contribution rate is fixed and unaffected by downturns in investment markets. Moreover, the employer has no financial liability for the employees after they retire, even if the DC accounts are insufficient to provide an adequate retirement benefit. (While this may be an advantage for private-sector employers, it is a disadvantage for state and local governments—and taxpayers—who may have to pay increased public financial assistance as a result.)

A disadvantage for employers is that DC plans may not be a strong incentive for attracting and retaining qualified employees, especially if competing employers are offering DB

¹⁰ These smoothing techniques work well when investment fluctuations are moderate and short-lived.

¹¹ U.S. Department of Commerce, U.S. Census Bureau, through 1996, *Finances of Employee-Retirement Systems of State and Local Governments*, Series GF, No. 2, annual; beginning 1997, *State and Local Government Employee-Retirement Systems*, annual.



plans. Moreover, if employees' account balances are inadequate to provide retirement benefits when the employees intend to retire, employers can end up with a number of active employees who are not performing at peak productivity (also known as being "retired in place"). Another disadvantage is that, since the employer's contribution rate is fixed in a DC plan, upturns in the investment markets do not reduce the employer's contribution rate, as they do in DB plans.

For employees, one advantage of DC plans is that the vesting period is typically shorter than for DB plans. Six months to two years is typical.¹² Moreover, DC accounts are more "portable"—that is, easier to transfer if the employee changes jobs. A major disadvantage is that DC accounts are subject to investment risk and may not be enough to sustain employees throughout their retirement. Another disadvantage is that a high percentage of employees cash-out and spend some or all of their DC accounts when they change jobs, significantly reducing the amounts available to pay retirement benefits.¹³

The remainder of this paper describes the advantages of retaining DB plans.

Advantage 1: Retaining a DB plan is likely to cost state and local governments less over the short term. The long-term cost savings of switching to a DC plan are uncertain at best.

- **DC plans are costly to establish and maintain.** A DC plan must be designed, vendors must be selected, its operation must be monitored, and employees must be informed about plan features and available investments. Staff time is spent throughout this process, and the sponsoring government must pay legal and consulting fees. If a third-party administrator is not hired to operate the plan, the government must do this as well. Even if a third-party administrator is hired, the government will still have operating costs related to the DC plan, possibly ranging in the millions of dollars.
 - ❖ For example, the budget for the State of Florida's DC plan, established in 2000, totaled \$89 million from FY 2001 through FY 2004. This includes \$55 million to educate Florida's 650,000 government employees about the new plan.¹⁴ As of 2004, approximately 3 percent of DB participants had chosen to transfer to the DC plan.¹⁵
- **Pension benefits currently promised to state and local employees and retirees may not be abandoned. Switching to a DC plan does not reduce accrued DB plan benefits already earned.** Most governmental DB plan benefits are protected by the state's constitution or statutes that prevent accrued benefits from being reduced. Consequently, when an alternative DC plan is established, current DB plan members remain in the DB plan but may be given the option to transfer to the new DC plan. For current DB plan members who elect the DC plan, the value of the member's accrued DB benefit is often transferred to the DC plan.¹⁶

¹² However, some public-sector DC plans require 5 years of service (or more) for employees to completely vest in the employer's contributions.

¹³ This is surprising since the cashed-out amounts are subject to income taxes. In many cases they are also subject to a 10 percent penalty tax on early distributions.

¹⁴ Information provided by the Pension Protection Coalition, based on an analysis of the Florida Public Employee Optional Retirement Program's approved budgets and revenue collections. The analysis was done for the Coalition by the law firm of Olson, Hagel & Fishburn, LLP, January 18, 2005. The budgeted amounts exclude investment management fees paid by plan participants. Used with permission.

¹⁵ Anya Sostek, "Pension Pendulum," *Governing Magazine*, March 2004: 28.

¹⁶ If the member's accrued DB benefit is not transferred to the DC plan, it is maintained in the DB plan.



- **When given the option, most employees remain in the DB plan.** In most cases, only a small percent of employees elect to transfer from the DB plan to the DC plan.¹⁷ To increase the number of employees who eventually enter the DC plan, some governments have restricted the DB plan to current employees and have required newly hired employees to join the DC plan.¹⁸
- **Even when new hires are required to join the DC plan, long-term cost savings for employers are uncertain and may take many years to realize.** When a DB plan is closed to new hires, it still covers current employees and retirees, and benefits continue to accrue to active employees as a result of their service. To the extent that plan assets are less than accrued liabilities, unfunded liabilities remain. For DB plans with unfunded liabilities, closing the DB plan to new hires will likely increase the employer's annual required contribution rate. Because new hires are not entering the plan, the cost of funding the liabilities is spread over a declining number of active members,¹⁹ thereby increasing the employer's contribution rate as a percent of covered payroll. In addition, since a growing portion of plan assets must be used to pay benefits, a growing portion of assets will likely be held in short-term securities, thereby reducing investment returns.
 - ❖ For example, the Los Angeles County Employees Retirement Association (LACERA) estimated that the County's DB plan contribution rate would increase by 3.66 percent if employees hired after July 1, 2007, were required to join a DC plan. This would increase County contributions to the closed DB plan by \$206 million in 2008. While the contributions would gradually decline over time, the County would have to wait until 2018 to see any savings in DB plan costs as a result of the change.²⁰
- **In several cases, states have replaced (or have considered replacing) DC plans due to inadequacy of plan benefits or increased costs.**
 - ❖ In 1977, the North Dakota Public Employees Retirement System, originally established as a DC plan in 1966, was changed to a DB plan. Reasons given include the need to provide adequate retirement benefits and the need to attract and retain quality employees.²¹
 - ❖ In 2000, the State of Nebraska reviewed its two DC retirement plans for state and county workers and found that between 1983 and 1999 the DC plans' investment returns averaged only 6 percent compared with 11 percent for the state's DB plans. Recognizing these returns were inadequate to

¹⁷ Sostek, 2004. Three percent of employees covered by the DB plan elected to join the new DC plan in Florida, 6 percent in Michigan, and 2.5 percent in Ohio.

¹⁸ National Association of State Retirement Administrators, "Overview of Plan Types." Of the 14 state retirement systems discussed in this paper, only two (Michigan and West Virginia) required newly hired employees to join the DC plan. The remaining systems offered DC plans as a voluntary alternative to the DB plan or offered a new plan that combined DB and DC plan features. Available on the NASRA web site (www.nasra.org).

¹⁹ Governmental Accounting Standards Board, Statement No. 27, *Accounting for Pensions by State and Local Governmental Employers* (Norwalk, CT: Governmental Accounting Standards Board, 1994), p. 7. In situations where a DB plan is closed to new members, unfunded liabilities are amortized as a level percent of projected payroll, including projected decreases in the number of active plan members.

²⁰ Los Angeles County Employees Retirement Association, "Proposals to Close Public Defined Benefit Plans." (<http://www.lacera.com/home/ProposalsToClosePublicDefinedBenefitPlans.html>).

²¹ North Dakota Legislative Council, Employee Benefits Program Committee, "Public Employees Retirement Programs - History," October 1998.



sustain retirement benefits, the state responded by creating a new hybrid plan for state and county workers, combining both DB and DC plan features.²²

- ❖ In 2005, the West Virginia Legislature passed a law requiring teachers in the Teacher's Defined Contribution (TDC) Plan (created in 1991) to transfer into the State Teachers' Retirement System, a DB plan, effective upon approval by TDC plan members. According to the West Virginia Consolidated Public Retirement Board's actuary, the change would save the State \$1.9 billion over the next 30 years, because lower employer contributions were required for the DB plan (4.3 percent of payroll) than for the DC plan (7.5 percent of payroll). State teacher representative also indicated the change would help prevent teachers from leaving their jobs.²³ In 2006, TDC plan members voted to merge with the DB plan. However, because the law required the transfer of vested DC assets, it was contested and overturned in circuit court.²⁴

Advantage 2: Almost all state and local DB plans provide disability and survivor benefits as well as retirement income. Switching to a DC plan would require employers to obtain these benefits from another source, likely at a higher cost.

- Almost all state and local DB plans provide disability and survivor benefits. According to the U.S. Bureau of Labor Statistics, 97 percent of state and local government employees in DB plans have disability coverage through the plan and 93 percent may elect joint and survivor benefits.²⁵ These benefits are largely funded through contributions and investment earnings. Disability and survivor benefits are especially important for employees in hazardous occupations such as firefighters and police officers who may die or become disabled in the line of duty.
- Few DC plans provide disability benefits. Moreover, DC plan survivor benefits are usually limited to the participant's account balance. In the absence of a DB plan, employers would need to obtain disability and pre-retirement death benefits through commercial insurance or else would have to self-fund the benefits. Either of these options would result in additional administrative costs. If the benefits were obtained through commercial insurance, the employer's cost would also include the insurer's profit margin.

Advantage 3: DB plans enhance the ability of state and local governments to attract qualified employees and retain them throughout their careers. Switching to a DC plan would limit this ability, possibly producing or exacerbating labor shortages in key service areas by increasing employee turnover rates. Higher turnover rates result in increased training costs and lower levels of productivity that can, in turn, result in the need for a larger total workforce.

- Employers offer retirement plans as a way to attract qualified employees and retain them so their skills and experience are used efficiently. According to the Diversified

²² Anya Sostek, p. 28.

²³ Jim Wallace, "Teacher pension bill has hurdles," *Charleston Daily Mail*, March 31, 2005.

²⁴ *Antony J. Barbario v. West Virginia Consolidated Public Retirement Board*, Civil Action 06-C-687, Circuit Court of Kanawha County, West Virginia.

²⁵ U.S. Department of Labor, Bureau of Labor Statistics, *Employee Benefits in State and Local Governments, 1998* (Washington, DC: U.S. Government Printing Office, December 2000), pp 94-98.



Investment Advisors' Report on Retirement Plans, most large employers see a tangible value in offering a defined benefit plan to their employees – despite the high costs sometimes associated with it. Fifty-eight percent of plan sponsors with 25,000 or more employees believe that their DB plans have a major impact on employee retention.²⁶

- **DB plan provisions encourage employees to remain with an employer longer than DC plan provisions.** The vesting period for DB plans is typically longer (e.g., 5 years) than the vesting period for DC plans (e.g., 6 months to 2 years). Consequently, employees have a financial incentive to continue working for the employer at least until they vest. After that, DB plan benefit accruals based on continued service provide an additional financial incentive to remain.
- **Key governmental service areas, such as education and public safety, require skilled and dedicated employees to work in positions involving high levels of stress or physical activity or both.** Individuals with the skills and temperament to take on these roles usually have other opportunities in the labor market. DB plans provide strong incentives by rewarding long-term, dedicated service with a secure retirement.

Advantage 4: DB plans help state and local governments manage their labor force by providing flexible incentives that encourage employees to work longer or retire earlier, depending on circumstances. Switching to a DC plan would limit this flexibility and make these incentives more expensive for the employer.

- **Governments can use DB plan benefits as a way to manage their labor force by rewarding longer employment and encouraging retirement after a certain period of employment.** DB plan benefit formulas can be structured to provide incentives for longer employment by increasing the benefit multiplier after a certain period of service.
 - ❖ For example, the formula could provide benefits of 2.0 percent of final average earnings for the first 20 years of service and 2.2 percent for service over 20 years. To encourage retirement after a certain period of employment, DB benefit formulas can limit benefit accruals to a maximum percent of final average earnings or a maximum years of service. In this example, if the benefit accrual was limited to 62 percent of final average earnings, it would encourage employees to retire after 30 years of service. Other options, such as early retirement incentives (ERIs) and deferred retirement option plans (DROPs), are also available.

Advantage 5: By pooling risk over a relatively large number of participants, DB plans lower the overall risk do to investment losses and participants outliving retirement benefits. Switching to a DC plan would require each individual to bear these risks alone, consequently requiring higher contributions than if the risks were pooled.

- **DC plan participants must save enough to ensure they will not outlive their accumulated assets while protecting their funds against financial market fluctuations.** According to the Society of Actuaries RP-2000 mortality tables, 50 percent of U.S.

²⁶ "Majority of U.S. Companies That Offer a Pension Plan Say It Impacts Employee Retention," *Business Wire*, September 7, 2004.



males who reach age 65 will live to age 83, 10 percent will live to age 93, and about 1 percent will live to 100. Moreover, 50 percent of U.S. females who reach age 65 will live to age 85, 10 percent will live to age 96, and 2 percent will live to 100. To ensure their DC accounts will sustain them over their expected lifetimes, DC plan participants must save enough to ensure their benefits will be paid into their 90s.

- ❖ A 25 year old male would have to save 17 percent of his salary each year to age 65 in order to replace 75 percent of his pre-retirement income from age 65 to age 93 (assuming 7 percent annual investment returns). A 25 year old female would have to save 18 percent of her salary to assure 75 percent income replacement to age 96. However, if these longevity risks were pooled over a large enough group to allow the risks to be fully averaged, the required savings rate would fall to 13.6 percent of salary for both males and females.²⁷ Risk pooling is one of the main advantages of a DB plan.
- **In order to lower investment risk, DC plan participants usually shift a greater portion of their assets from stocks into bonds as they grow older. While this helps protect against equity market downturns, it also lowers likely investment return.** According to a 2004 Employee Benefit Research Institute study, 401(k) plan participants in their 20s invest 65 percent of their account balances in equities (including company stock) and 21 percent in fixed-income securities, on average. Participants in their 60s invest 49 percent in equities and 40 percent in fixed-income securities.²⁸ In contrast, large public retirement systems hold 60 percent of assets in equities, 29 percent in fixed-income securities, and the remaining 11 percent in other investments.²⁹ This pooling of assets allows DB plans to maintain a more diversified portfolio and helps to lower investment management fees.
- **By averaging longevity and investment risks over a large number of participants, DB plans lower the total costs of providing retirement benefits.** Instead of requiring contributions large enough to fund retirement benefits through each individual's maximum life expectancy, DB plans only need to fund benefits through the average life expectancy of the group. This lowers required contributions. Moreover, by spreading investment risk over a longer period, DB plans can maintain an investment mix that includes a higher percentage of equity investments. This increases likely investment returns, which further lower required contributions. In the example presented earlier in this section, if the pooling of funds could increase investment returns from 7 percent to 8 percent, then the required savings rate for the pooled participants would fall from 13.6 percent to 10.0 percent.³⁰

²⁷ Gabriel, Roeder, Smith & Company, "The Advantages of Risk Pooling for Financing Retirement Benefits," *GRS Insight*, July 2006. (<http://www.gabrielroeder.com/pubs/GRSInsight-2006-07.pdf>)

²⁸ Sara Holden and Jack VanDerhei, "401(k) Plan Asset Allocation, Account Balances, and Loan Activity in 2004," *EBRI Issue Brief*, No. 272, August 2004. Employee Benefit Research Institute.

²⁹ Keith Brainard, *Public Fund Survey Summary of Findings for FY 2005*, National Association of State Retirement Administrators, September, 2006, p. 5.

³⁰ Gabriel, Roeder, Smith & Company, "The Advantages of Risk Pooling for Financing Retirement Benefits," *GRS Insight*, July 2006. (<http://www.gabrielroeder.com/pubs/GRSInsight-2006-07.pdf>)



Advantage 6: DB plans earn higher investment returns and pay lower investment management fees, on average, than DC plans. Switching to a DC plan is likely to lower investment earnings used to finance retirement benefits and increase management costs, to the detriment of plan members.

- **On average, investment returns for DC plans are lower than for DB plans, resulting in significantly lower investment earnings over an individual's lifetime.** According to Boston College economist Alicia Munnell, DB plans outperformed DC plans by one percentage point annually, on average, between 1988 and 2004.³¹ For a person contributing \$5,000 to a DC plan each year for 40 years, the difference between an 8.0 percent annual return and a 7.0 percent return amounts to a loss of over \$279,000.³² Other studies show that individual, non-professional investors may underperform the market by as much as 2.0 percent annually.³³ The difference between an 8.0 percent annual return and a 6.0 percent return amounts to a loss of over \$521,000.³⁴
- **Administration and investment costs for DC plans can be more than four times higher than for DB plans. In DC plans, these costs are borne directly by individual plan participants through deductions from their DC accounts.** According to the Investment Management Institute, the operating expense ratio for DB plans averaged 31 basis points in 2003 (31 cents per \$100 of assets) compared with 96 to 175 basis points for DC plans.³⁵ According to the Illinois Municipal Retirement Fund, the total annual administrative and investment cost for their DB plan amounted to 44 basis points in 1999. Had they switched to a DC plan, total annual administrative and investment costs could have increased up to 225 basis points, or up to \$250 million more than the annual administrative and investment costs paid by the DB plan.³⁶
- **Employees direct their own investments in a DC plan, usually selecting from among several funds that reflect major investment categories. Generally, employees have limited investment experience or training.** According to a 2007 study by Watson Wyatt Worldwide, many DC plan participants "don't start saving soon enough, don't save enough, and don't follow sound investment principles in managing their retirement assets." The study also found that assets are more effectively managed in DB plans, in part because plan administrators work with consultants and professional asset managers to set and implement investment goals.³⁷
- **DC plan participants often cash-out and spend some or all of their DC accounts when they switch jobs. As a result, the accounts contain less money to earn investment returns and to pay benefits at retirement.** According to Alicia Munnell, more than half of DC plan participants withdraw funds from their DC accounts when they change jobs, removing between one-quarter and one-third of their total DC plan assets before they reached retirement.³⁸

³¹ Alicia H. Munnell et al, "Investment Returns: Defined Benefit vs. 401(k) Plans," *Issue Brief*, Center for Retirement Research at Boston College, September 2006.

³² Author's calculations.

³³ W. Michael Carter, Actuary. February 6, 1998. Letter comment on "Pension Liberation: A Proactive Solution to the Nation's Public Pension Systems." Letter is posted on the National Council on Teacher Retirement website (www.nctr.org).

³⁴ Author's calculations.

³⁵ Sean Collins, "The Expenses of Defined Benefit Pension Plans and Mutual Funds," *Perspective*, Vol. 9, No. 6, December 2003. DC plan expenses include 12-b1 marketing and distribution fees.

³⁶ Louis W. Kosiba, "The Defined Benefit vs. Defined Contribution Debate: The \$250 Million Question," Illinois Municipal Retirement Fund, October 13, 1999, p. 2. IMRF serves over 360,000 active employees, inactive members, retirees and beneficiaries.

³⁷ Watson Wyatt Worldwide, *Pension Aspirations and Realizations: A Perspective on Yesterday, Today, and Tomorrow*, March 2007.

³⁸ Alicia H. Munnell and Annika Sunden, *Coming Up Short. The Challenge of 401(k) Plans*, (Washington, DC: Brookings Institution Press, 2004), p. 132.



Advantage 7: DB plan investment earnings help to reduce future employer contributions. Switching to a DC plan would prevent state and local governments from reducing future employer contributions as a result of investment earnings, which currently fund over two-thirds of public retirement benefits.

- **State and local governments have benefited from investment returns overall and many have used investment earnings to reduce employer contributions.** Over the long-term, an employer's cost of providing DB plan benefits depends on investment earnings. Although investment earnings can fluctuate sharply at times (as happened from 2000 through 2002), over the last 20 years state and local governments have substantially benefited from investment returns and have used the accumulated assets to lower employer contributions. As provided in governmental accounting standards, plan assets that are greater than plan liabilities are amortized to reduce employer contributions.³⁹ A 2002 survey of Michigan state and local government retirement systems shows that of 115 independent local government retirement plans surveyed, employer contributions for 102 (89 percent) were below the normal cost of benefits as a result of this amortization.⁴⁰
- **Most of the money paid into state and local retirement plans comes from investment earnings.** Over the 20-year period from 1986 through 2005, state and local government investment earnings amounted to about \$2.3 trillion, compared with employer contributions of \$790 billion and employee contributions of \$400 billion.⁴¹ This means two out of every three dollars paid into state and local retirement plans over the last 20 years was received from investment earnings. According to a paper on state and local retirement plans prepared for the Wharton School's Pension Research Council: "Setting aside all the other benefits to employers and employees of DB plans, contributions to public pension plans may be among the best investments a state or local government can make."⁴²

Advantage 8: DB plans provide secure retirement benefits that are based on a person's salary and period of service. Switching to a DC plan is likely to result in lower and less secure retirement benefits for many long-term governmental employees, including firefighters, police officers, and teachers, who constitute over half of state and local government workers. State and local employees who are without Social Security coverage would be put at even greater risk.

- **Retirement benefits paid from DC plans are significantly less than those paid from DB plans.** The U.S. Congressional Research Service found that, for current older workers, DC-type plans will provide annual benefits of less than \$5,000 for half the workers.⁴³ This is one-quarter of the \$20,400 average annual benefits currently paid by governmental DB plans to state and local workers.
- **If average state and local retirement benefits fell from \$20,000 to \$5,000, it would mean a loss of approximately \$106 billion in annual U.S. personal income.**⁴⁴ This loss would be felt by state and local economies, since many retirees remain in the

³⁹ Governmental Accounting Standards Board, Statement No. 27, p. 6.

⁴⁰ Gabriel, Roeder, Smith & Company, 2002 *Michigan Public Employee Retirement Systems Survey*, (Southfield, MI: Gabriel, Roeder, Smith & Company, 2002).

⁴¹ U.S. Department of Commerce, U.S. Census Bureau, through 1996, *Finances of Employee-Retirement Systems of State and Local Governments*, Series GF, No. 2, annual; beginning 1997, *State and Local Government Employee-Retirement Systems*, annual.

⁴² Gary W. Anderson and Keith Brainard, "Profitable Prudence: The Case for Public Employer Defined Benefit Plans," Pension Research Council, Wharton School, University of Pennsylvania, 2004, p. 14.

⁴³ Patrick J. Purcell, "Retirement Savings and Household Wealth: A Summary of Recent Data," Washington, DC: Library of Congress, Congressional Research Service, December 11, 2003.

⁴⁴ Author's calculation based on \$141 billion in annual pension benefits paid by state and local government retirement plans in 2005.



same location when they retire. These pension benefits are also, in most cases, subject to federal and state income taxes, thus resulting in a loss of tax revenues. Tax losses would also be seen in reductions of state sales tax revenues.

- The change would have an even greater effect on the 25 percent of state and local government employees who are not covered by Social Security, including about half of school teachers and about 70 percent of police officers and firefighters. When first enacted in 1935, Social Security excluded state and local employees, due largely to constitutional questions about the federal government's right to tax state and local governments. In 1950, Congress amended Social Security to allow state and local governments to voluntarily elect coverage. By then, however, half of the largest state and local plans had already been established, including many plans for teachers and public safety employees.⁴⁵ These DB plans provide benefits that compensate for the lack of Social Security coverage. Replacing them with defined contribution plans would put members at even greater risk, since they would not have Social Security benefits to fall back on.

Advantage 9: DB plans help sustain state and local economies by providing adequate retirement benefits for a significant portion of the workforce. Switching to a DC plan would likely slow state and local economies, since a large number of retirees would likely receive lower retirement benefits.

- Public DB plans have a substantial impact on state and local economies. For example, a 2006 economic impact study by the Perryman Group found that the \$5.4 billion in annual benefits paid by the Teacher Retirement System of Texas (TRS) to approximately 250,000 retired teachers and beneficiaries generates \$9.9 billion in total economic activity within the state. Moreover, as a result of TRS's strong investment performance, the overall return on state (and therefore taxpayer) contributions is significant: every \$1 of state funds contributed to TRS leads to \$7.85 in total spending in the Texas economy.⁴⁶
- The overall economic value added by the investment income of state and local DB plans over what would otherwise have been earned in DC plans is estimated to be about \$200 billion annually, or 2.0 percent of U.S. Gross Domestic Product.⁴⁷ In essence, state and local retirement plans act as financial engines, using employer and employee contributions to generate investment income that, when paid as retirement benefits, bolsters state and local economies by \$200 billion a year. State and local retirees purchase a wide range of goods and services with their retirement income. These purchases, in turn, promote employment and create additional economic demand, generating additional economic activity. As a result of this multiplier effect, the economic activity generated by the higher investment earnings amounts to 2.0 percent of U.S. Gross Domestic Product. As a growing number of state and local employees retire, this percentage will likely increase.

⁴⁵ Olivia S. Mitchell, et al, *Pensions in the Public Sector*, (Philadelphia, PA: University of Pennsylvania Press, 2001) p. 13.

⁴⁶ The Perryman Group, *Beyond the Classroom: The Impact of Pension Benefits Paid by the Teacher Retirement System of Texas (TRS) on Business Activity in Texas, Its Regions, Metropolitan Areas, and Counties*, July 2006.

⁴⁷ Anderson and Brainard, p. 14.



Advantage 10: DB plans provide benefits that help to ensure an adequate standard of living throughout retirement.

Switching to a DC plan would likely result in pressure on state and local governments to augment DC plan benefits and require increased financial assistance for retirees.

- If DC plan benefits are less than what is needed to ensure an adequate standard of living during retirement, continued pressure will be placed on state and local governments, legislators, and taxpayers as retirees outlive their retirement income. Since DC benefits are not indexed to inflation, extended periods of even modest inflation will mean almost constant pressure for some form of additional financial support for retirees, who would make up a growing portion of the electorate. When DC plan benefit improvements are granted, they will be paid from current government revenues and will not be offset by investment earnings.

Conclusion

This paper addresses the question, “Should state and local government defined benefit plans be eliminated and replaced with defined contribution plans?” It concludes that such a move would have significant, long-term, detrimental effects on state and local governments, their employees, their economies, and ultimately the taxpayers.

In the final analysis, the real question is, “How can state and local governments efficiently provide secure, sufficient, and sustainable retirement benefits for their employees?” To answer this question, retirement benefits should be viewed in total, including benefits from Social Security, defined benefit plans, defined contribution plans, and individual savings. No single source alone is sufficient, but together they can be used to provide effective and efficiently funded retirement income. Eliminating defined benefit plans would only intensify future problems rather than provide solutions.

Instead, decisions should be based on a clear understanding of the goals that current plan design is intended to achieve for the various stakeholders, including the employer sponsoring the plan, plan participants, and taxpayers. Retirement plan design represents a significant public policy. Therefore, the plan sponsor contemplating changes must understand the policy implications of current plan design as well as any new proposals.

Success is most likely to happen after careful analysis. With proper analysis and an understanding of the needs of a changing population, fine-tuning the basic pension plan design can produce excellent results for all – sponsors, employees, retirees, and taxpayers.



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Decisions, Decisions:

Retirement Plan Choices for Public Employees and Employers

By Mark Olleman, FSA, MAAA, EA, and Ilana Boivie

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EXECUTIVE SUMMARY

In 2008, 14.7 million active state and local government employees had defined benefit (DB) pension coverage through their employers.¹ DB pensions play an important role in the human resource strategies of government employers. DB pensions have been shown to be an effective retention tool, and government employers are well suited to offer them. At the same time, DB pensions are highly valued by employees in the public sector. Pensions' staying power in the public sector stems from the fact that these systems serve employees, employers, and taxpayers well.²

In recent years, however, a handful of states have begun to offer public employees a choice between a traditional DB pension and a defined contribution (DC) account as their primary retirement plan.

This paper studies those states that offer employees a choice between primary DB and DC plans, and finds that:

- When given the choice between a primary DB or DC plan, public employees overwhelmingly choose the DB pension plan.
- DC plans are less cost efficient than DB plans, due to lower investment returns, and the lack of longevity risk pooling.
- Some states have considered moving from a DB-only to a DC-only structure in an attempt to address an unfunded

liability. Making this shift, however, does nothing to close any funding shortfalls, and can actually increase retirement costs.

- Traditionally, employers bear most of the risk in DB plans, and employees bear most of the risk in DC plans. The hybrid plan for new employees in Utah provides a unique case study, in that it has capped the DB funding risk to the employer, and shifted the rest to employees.

The experience in the public sector thus far indicates that public employees highly value their DB pension benefits. This fact, coupled with the fact that DB pensions remain the most cost-effective way to fund a retirement benefit, suggests that the public sector is unlikely to mimic the trend away from DB pensions in the private sector.

INTRODUCTION

DB Plans and DC Plans Are Very Different

Defined benefit (DB) pension plans are designed to provide employees with a predictable monthly benefit for life. The amount of the monthly pension is typically a function of the number of years an employee devotes to the job and the worker's pay, usually at the end of his or her career. This plan design is attractive to employees because of the security it provides. Employees know they will have a steady, predictable income that will enable them to maintain a stable portion of their pre-retirement income.

DB plans are pre-funded retirement systems. That is, employers—and, in the public sector, employees—make contributions to a common pension trust fund over the course of each employee's career. These funds are invested by professional asset managers whose activities are overseen by trustees and other fiduciaries. The earnings that build up in the fund, along with the dollars contributed while working, pay for the lifetime benefits an employee receives when s/he retires.

Defined contribution (DC) plans, such as 401(k) plans, function very differently than DB plans. First, there is no implicit or explicit guarantee of retirement income in a DC plan. Rather, employees (and usually employers) contribute to the plan over the course of a worker's career. Whether the funds in the account will ultimately be sufficient to meet retirement income needs will depend on a number of factors, such as the level of employer and employee contributions to the plan, the investment returns earned on assets, whether loans are taken or funds are withdrawn prior to retirement, and the number of years retirees will live after they leave work.

DC plans consist of separate, individual accounts for each participant. Plan assets are typically "participant directed," meaning that each individual employee can decide how much to save, how to invest the funds in the account, how to

modify these investments over time, and at retirement, how to withdraw the funds.

Along with differences in contributions and investments during employees' careers, another important difference between DC and DB plans becomes apparent at retirement. Unlike in DB plans, where retirees are entitled to receive regular, monthly pension payments for life, in DC plans it is typically left to the retiree to decide how to spend one's retirement savings. Research suggests that many individuals struggle with this task. Since they find it difficult to estimate how long they will live, they either draw down funds too quickly and run out of money, or hold onto funds too tightly and self-impose a lower standard of living as a result.³ In theory, employers that offer DC plans could provide annuity payout options, but in practice they rarely do.⁴ See Table 1.

Public Plan DB/DC Choices

Unlike employees in the private sector, who have seen a drastic decrease in DB plan coverage, most public employees still participate in a DB plan. For example, a 2008 study by the Bureau of Labor Statistics (BLS) showed that whereas private sector participation in DB plans dropped from 76% of full time employees in 1986 to 24% in 2008, public employee

Table 1. Selected Differences Between DB Plans and DC Plans

	Defined Benefit Plan (Traditional Pension)	Defined Contribution Plan (such as 401(k), 403(b), 457)
Contributions	In the public and private sectors, contributions are made on behalf of each employee by the employer. In the public sector, many pensions are "contributory," meaning that employees also contribute to the plan out of their own paychecks.	Employees make their own contributions to their savings account at whatever rate they choose. In the private sector, employers will often make a certain match—for example, 50 cents on the dollar up to 6% of pay—but they are not required to contribute at all. In the public sector, employers that offer a choice between DB and DC often contribute the same amount to the DC accounts as to DB accruals.
Investments	Contributions for all employees are pooled, and invested by professional asset managers in a diversified portfolio of assets—stocks, bonds, real estate, etc.	Investment portfolios consist of individual accounts for each employee. Employees make all investment decisions themselves, and can choose from a range of investment options offered.
Amount of Money in Retirement	The monthly benefit is determined by a set calculation, usually based on years of service and pay at the end of one's career.	The money available in retirement is simply the amount that one has accumulated in the savings plan, through contributions and investment earnings.
Lifetime Income	Payouts are provided as a monthly income stream that is guaranteed for the remainder of the retiree's life.	Plans are not required to offer a lifetime income option, and typically pay out benefits as a one-time lump sum.
Supplemental Benefits	Spousal protections, disability benefits, and cost of living adjustments are common.	Supplemental benefits are not applicable, and generally not available. If provided, they require extra contributions to some structure outside the DC plan.

participation in DB plans only dropped from 93% of full time employees in 1987 to 88% in 2008.⁵

Thus, while private sector DB coverage has declined in the last two decades, public sector coverage has remained relatively stable;⁶ most state and local government employees still provide DB pension coverage to their employees. Yet a handful of states have begun to offer public employees a choice between a traditional DB pension and a DC account as the primary retirement plan.

This paper analyzes the following questions:

- When given the choice, what do public employees choose: the DB pension plan or a DC plan?
- What happens when employees choose their own investments?
- Can employers choose to offer meaningful supplemental benefits to DC members?
- What are the implications of an employer choosing to change from a DB to a DC plan?

- What are the implications for risk sharing in each of the systems, and is there a way to shift some of the risk to employees under the DB system?
- Finally, do employers give employees the chance to choose a second time?

This paper looks at the recent experience of statewide retirement systems that offer a choice between DB and DC plans, and seeks to provide some answers.

To conduct the study, we requested information directly from the retirement systems that allow new hires to choose between DB and DC. These systems provided the actual statistics of what percent of members have chosen each option. We also asked for other important provisions relating to benefits and contributions. Finally, each system reviewed their portion of our final report to ensure its accuracy. This primary source material provides a valuable insight into what really happens when public employees are allowed to choose between DB and DC.

OVERWHELMINGLY, PUBLIC EMPLOYEES CHOOSE THE DB PLAN

Although there is a common perception that DC plans may be more attractive to new employees than DB plans, relevant research seems to show the opposite—especially among state and local employees. Recent public opinion polling finds that DB plans are highly valued by public employees and are an important consideration for those who choose a career in public service.

A 2006 nationally representative survey indicated that public employees were much more favorable to traditional DB pensions and much less likely than other workers to express a preference for 401(k)-type plans.⁷ When asked about proposals to switch public employees out of DB plans and into 401(k)-type plans, public employees were strongly opposed.⁸ A 2003 survey also found that public employees place a very high value on their pension programs, with almost two-thirds of public sector employees stating a preference in favor of DB pensions as compared with DC plans.⁹

So, what do public employees really prefer? Seven statewide systems have been giving new hires the choice between participating in a DB plan or a DC plan for various periods over the last 12 years. These systems are Colorado Public Employees' Retirement Association, Florida Retirement System, Montana Public Employee Retirement Administration, North Dakota Public Employees Retirement System, Ohio Public Employees Retirement System, State Teachers Retirement System of Ohio, and South Carolina Retirement Systems. Tables 2 and 3 and Figure 1 summarize the experience of these systems, all of which allow their members to choose between a DB plan and a DC plan. Ohio and Washington members also have the choice of a "combined" plan, where employer contributions fund a DB plan and employee contributions fund a DC plan. Washington state members do not have the option of an all-DC plan.

Across the board, the experience of these seven systems indicates that public employees overwhelmingly choose the

DB plan. In the most current year, North Dakota's DB plan has the highest take up rate at 98%; the lowest DB take up rate is in Florida, which still saw a full 75% of employees opting for the DB pension. This means the percentage of new employees electing DC plans currently ranges from 2% in North Dakota to 25% in Florida.

The trend of overwhelming DB coverage in states with a choice has been consistent over time. As shown in Figure 1, the DB take up rates in all of these states have been above 70% in all years, and three of the states have take-up rates of 90% or more during most years studied.

It should be noted, however, that many employees who do not actively elect one plan or another are defaulted into the DB plan. Unlike the private sector which uses defaults into 401(k) savings plans to build plan participation rates, most workers in the public sector are covered by a retirement plan as a condition of employment. Defaulting employees into the traditional DB plan is similar to a private-sector employer investing employee contributions into an appropriate investment allocation with the intent of reducing risk to the participant.

The overwhelmingly high take-up rates, then, could be at least partially driven by inertia on the part of employees, a large number of whom do not make an affirmative choice. In most states with choice, members must actively choose the DC plan; it is often the case that many DB members never submit an election and are placed in the DB plan by default.

Table 2. New Hire Elections in Most Recent Complete Year*

System	DB Plan Enrollments	DC Plan Enrollments	Combined Plan Enrollments
Colorado Public Employees' Retirement Association	88%	12%	Not offered
Florida Retirement System	75%	25%	Not offered
Montana Public Employee Retirement Administration	97%	3%	Not offered
North Dakota Public Employees Retirement System**	98%	2%	Not offered
Ohio Public Employees Retirement System	95%	4%	1%
State Teachers Retirement System of Ohio	89%	9%	2%
South Carolina Retirement Systems	82%	18%	Not offered

"Not offered" means enrollment in a combined DB/DC plan is not offered.

**Data for Colorado, North Dakota, and Ohio PERS are for January 2010 through December 2010. Data for Florida, Montana, STRS Ohio, and South Carolina are for July 2010 through June 2011.*

*** One new employee out of the 63 eligible joined the North Dakota DC plan in 2010.*

Three states separate out DB take-up rates by active choice and default. See the Technical Appendix for more information on default and elected DB take-up rates by state.

Another possible reason that public employees may go with the DB default is that their preferences for DB pensions are "revealed" preferences—that is, they reflect a preference realized by deliberately seeking out an employer that offers this type of plan. For instance, a Florida survey found that "up to 41% of the defaulters may be using this option as their active election in the belief that by defaulting there could be no mistakes made in their plan choice."¹⁰

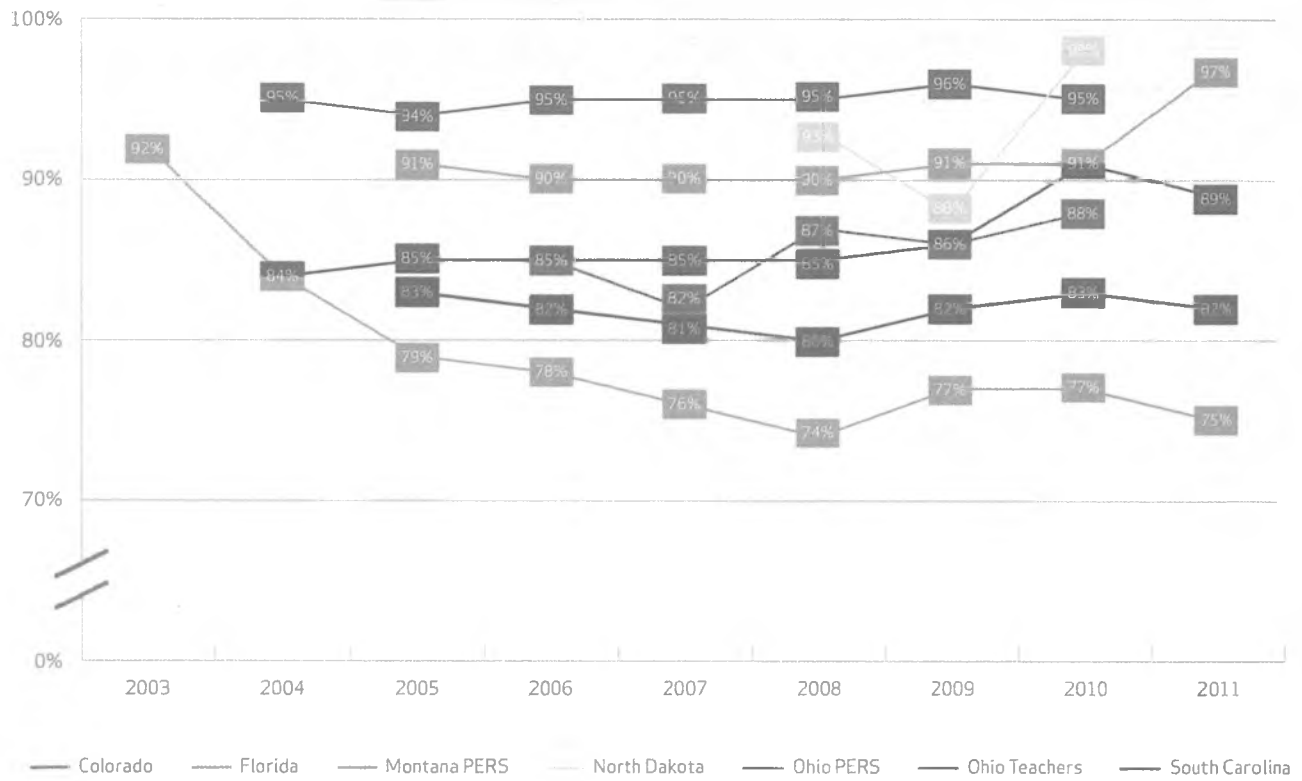
The experience in Washington PERS is illuminating as well. This is the only choice state in which the traditional DB plan is not the default; the default option is a combined DB and DC plan. Table 3 shows that an impressive 68% of new members in Washington have actively chosen an all-DB plan over the default of a combined DB and DC plan, and only 11% of new hires actively selected the combined DB and DC plan. This suggests that most public employees in other states that are "defaulted" into the DB plan would actively choose DB even if it were not the default.

Table 3. Cumulative Washington PERS New Hire Elections, March 2002 through June 2011

DB Plan Active Enrollments	Total Elections for DB & DC Combined Plan	Combined DB & DC Plan by Default	Combined DB & DC Plan Active Enrollments
68%	32%	21%	11%

Figure 1 shows that most of these DB/DC choice plans have had relatively stable election percentages in the short time they have existed. That is, the vast majority of public employees have consistently chosen the DB option. However, this is not to say that members will continue to make the same choices in the future. The stock market declines of 2000 to 2002 and 2008 have certainly influenced many members. It is possible that the future of the stock market, or the experiences of people retiring with only DC plans, could influence future member choices.

Figure 1. Total DB Elections over Time



Please see the Technical Appendix for detailed information on each state's take-up rates over time.

WHEN EMPLOYEES CHOOSE THEIR OWN DC INVESTMENTS, RETURNS ARE LOWER

Research indicates the average employees directing their own investments tend to earn lower investment returns than statewide DB systems, for a variety of reasons.

DB plans tend to achieve higher investment returns than DC plans because assets are pooled and professionally managed. Expenses paid out of plan assets to cover the costs of administration and asset management reduce the amount of money available to provide benefits. As a result, a plan that can reduce these costs will require fewer contributions. By pooling assets, large DB plans are able to drive down asset management and other fees. For example, researchers at Boston College find that asset management fees average just 0.25% of plan assets for public sector DB plans. By comparison, asset management fees for private sector 401(k) plans range from 0.60% to 1.70% of assets. Thus, private DC plans suffer from a 0.35% to 1.45% fee disadvantage, as compared with public DB plans.¹¹ On their face, these differentials may appear small, but over a long period of time, they compound to have a significant impact. To illustrate, over 40 years, a 1% difference in fees compounds to a 24% reduction in the value of assets available to pay for retirement benefits.¹²

But fees are only part of the story; differences in the way retirement assets are managed in DB and DC plans play a substantial role. Research has found that DB plans have broadly diversified portfolios and managers who follow a long-term investment strategy.¹³ On the other hand, individuals in DC plans, despite their best efforts, often fall short when it comes to making good investment decisions. Thus, it should not be surprising that researchers find a large and persistent gap when comparing investment returns in DB and DC plans. Munnell and Sunden put the difference in annual return at 0.80%.¹⁴ A 2007 report from the global benchmarking firm, CEM, Inc., concluded that between 1998 and 2005, DB plans showed annual returns 1.80% higher than DC plans, largely due to differences in asset mix.¹⁵ And Towers Watson

found that, between 1995 and 2006, DB plans outperformed DC plans by 1.09%, on average.¹⁶ In 2006 and 2007, DB plans outperformed DC plans by an average of about 1.0% per year based on asset-weighted returns, while in 2008, DB plans outperformed DC plans by roughly 2.7%.¹⁷

The experience of two states, Nebraska and West Virginia, are consistent with this research.

Nebraska's state and county employees hired between 1964 and 2003 had only a DC plan. During the same period, Nebraska maintained separate DB plans for its school employees, judges, and state patrol. Over the 20 years leading up to 2002, the average return in the DB plans was 11% and the average return in the DC plans was between 6% and 7%. One reason for this large difference is that nearly 50% of DC member contributions were invested in the stable value fund, which was the default for members not making a specific investment election. Although the stable value fund is very conservative and the investor's balance will not decrease, the investor also has a lower expected rate of return. Partially due to the lower returns, employees were receiving a replacement ratio of their pre-retirement income closer to 30% rather than the projected 50% to 60%. Nebraska has since decided that employees hired since 2003 will go into a cash balance DB plan.

West Virginia had a similar experience. While teachers hired between 1991 and 2005 had only a DC plan, after July 1, 2005, all newly hired teachers went back into the old DB plan. One of the reasons for this change is that average DC returns lagged DB returns. Between 2001 and 2010, the average DB return was 1.6% higher than the average DC return. For more details, see the Technical Appendix.

DC MEMBERS CAN POOL INVESTMENT EXPERTISE WITH THE DB PLAN, ACHIEVE HIGHER RETURNS

In response to the lower returns generally earned in DC plans, some states offer employees with DC accounts the option of investing in the same manner as the DB pension system—and thereby earning exactly the same returns as the DB plan. For example, members of Washington State Plan 3 have the option to invest in the Total Allocation Portfolio (TAP), which mirrors the investments in the state DB plan and therefore earns the same returns. Washington has made the TAP the default investment option for Plan 3, and approximately 56% of members' DC assets are invested in the TAP option.

All employee contributions of members in the Oregon Public Service Retirement Plan are invested in the state's Individual Account Program (IAP). Like Washington's TAP, Oregon's IAP money is invested in the same manner as the DB plan. However, unlike Washington's TAP, which is one of many investment choices, Oregon's IAP offers no other investment choices.

Both Washington and Oregon provide members with a professionally managed portfolio. Washington's approach leaves room for individual risk tolerance, for instance, members near retirement may prefer to invest more

conservatively. Oregon's approach ensures that all member funds are invested in a carefully managed portfolio. In both states, by foregoing the ability to choose their own investments, members are able to earn returns competitive with the DB plan.

It is also worth noting that both the Washington and Oregon plans are hybrid plans, in which employer contributions fund a DB plan, and employee contributions fund an account. This is significant because the DB plan provides some level of guaranteed income regardless of the account's investment returns.

WITH EXTRA CONTRIBUTIONS, DC PLANS CAN PROVIDE DEATH AND DISABILITY BENEFITS

Meaningful death and disability benefits can be provided in a DC environment, but it will require extra contributions that are not deposited to the members' DC accounts. Consider the choices three states have made to respond to the criticism that DC accounts do not provide adequate spousal and disability benefits.

In Florida, where members choose between a DB and a DC plan, disabled members can choose to surrender their DC account balance and receive the same disability benefits as provided by the DB plan. To finance this benefit, the employer pays a separate charge ranging from 0.25% of pay for general members to 1.33% of pay for special risk members, and a side account is maintained to finance the difference between the cost of the disability benefits and the dollar amount of the DC accounts surrendered by the members. (On the other hand, if DC members die in Florida, their death benefit is the DC account balance.) Montana PERA has a similar provision, where 0.30% of DC member pay is set aside to finance long-term disability benefits.

Alaska has a different approach. Alaska public employees hired after July 1, 2006, are only offered a DC plan. Here the occupational death and disability benefit is 40% of salary until normal retirement (50% of salary for the occupational death of police and fire members). The employer continues both the employer and employee contributions into a special occupational death and disability trust account until the member reaches normal retirement, or until the date the member would have reached normal retirement in the case of occupational deaths. At normal retirement age, the 40% (or 50%) of salary benefit stops, and the member, or survivor, receives the DC account as well as the accumulated contributions from the occupational death and disability trust account with actual returns net of expenses. Employers make contributions into a separate fund to finance the extra benefit not provided by the DC account.

MOVING FROM DB TO DC CAN INCREASE COSTS

Several states around the country have looked at eliminating the DB plan altogether, and moving all new hires into DC accounts. DB funding problems are often one of the reasons behind these efforts. Yet freezing the DB plan and moving to a DC plan that provides a similar level of retirement income can increase costs to the employer/taxpayer at exactly the wrong time. This occurs for three distinct reasons.

First and most important, DC plans do not have the economic efficiencies of DB plans. This drives up retirement costs. DB plans save money by pooling risks and achieving greater investment returns. According to one estimate, a DB plan can provide the same retirement income at about half the cost of a DC plan.¹⁸ Thus, when a DB plan is frozen and replaced with a DC plan, far greater contributions from both employers/taxpayers and employees will be required to maintain the same level of benefit in the DC plan.

Second, maintaining two plans is more costly than operating just one. State and local governments typically do not have the option of transferring current employees out of a DB plan and into a new DC plan.¹⁹ This means the employer will have to bear administrative costs for two plans, at least until the DB plan is finally phased out completely, a process that could take many decades as employees in the system complete their careers, retire, and ultimately die.

Finally, when a DB plan is closed, payments to amortize the unfunded liability for the DB plan may be accelerated which increases short term contributions and lowers long term contributions. This is actuarially consistent with the DB plan's shorter future lifetime. The current GASB rules (Statements 25 and 27) actually require this acceleration of unfunded liability payments when a DB plan is closed to be recognized on financial statements; not all plans determine their actual contributions according to the GASB rules.

These factors have influenced many states studying whether to switch from DB to DC. As a result, the vast majority have chosen to keep their DB plan, in the best interests of employers, taxpayers, and employees.

MOVING TO DC DOES NOT SOLVE FUNDING PROBLEMS, AS SEEN IN WEST VIRGINIA

Regardless of potential cost increases, changing from DB to DC does not solve the underlying funding problem a state may be experiencing. One interesting case study is the West Virginia Teachers Retirement System (TRS). In 1991, West Virginia closed TRS to new members, and all new hires were put into a DC plan. The state later found, however, that this “funding solution” had overlooked some important considerations.

Specifically:

- New members do not start with any unfunded obligation.
- Projected DC contributions for new members were worth more than the projected DB costs for those members.
- No unfunded obligations for existing members are reduced when new members go into a DC plan.

As a result, the loss of new members made it more difficult to finance the unfunded obligations of the DB plan.

By 2003, the state began reexamining this switch. The 4,500 members who were transferred from the DB to the DC plan in 1991 found it hard to retire after the bear market of 2000–2002. Additionally, as mentioned previously, DC member accounts had achieved much lower investment returns than TRS. After studying the issue extensively, the state decided that starting in 2005 all new hires would go into the DB plan. It was also found that providing equivalent benefits would be less expensive under the DB structure than in the DC plan. The state has shown discipline to achieve a better funded position, with extra contributions of \$290.1 million in fiscal

year 2006 and \$313.8 million in fiscal year 2007. In addition, West Virginia completed a tobacco bond securitization in fiscal year 2007 and deposited \$807.5 million of those proceeds into TRS as another special appropriation. Most recently, in June of 2008, the teachers in the DC plan were given the choice to switch to the DB plan, and a full 78% chose to switch, including 76% of young teachers (under 40 years old).²⁰

West Virginia projected a \$1.2 billion savings in the first 30 years by moving new entrants from the DC to the DB plan. This relies on an assumed return of 7.5%. When the Legislature asked the impact of lower returns, calculations showed an investment return of 6.0% or more was needed for the DB plan to save money.²¹

One way to finance preexisting unfunded liabilities and to defray employer expenses is to require specific contributions to the DB plan as a percent of DC member pay. Colorado, Florida, Montana PERA, Ohio PERS, Ohio Teachers, and South Carolina all require contributions paid as a percentage of DC member salaries that are not credited to DC member accounts. See the Technical Appendix for details.

EMPLOYERS DO NOT ALWAYS TAKE THE DB RISK: UTAH GIVES EMPLOYEES A NEW CHOICE

Traditionally, employers take most of the risks in DB plans and employees take most of the risks in DC plans. For example, in traditional DB plans, employers take on all of the funding risk; that is, if an unfunded liability in the pension plan develops, the employer is solely responsible for filling that funding gap. Of course, employees may indirectly take on some of that risk, for example, through increased employee contributions or decreased benefits. But the legal and fiduciary responsibility to pay down the unfunded liabilities remains with the employer. Under DB plans, employers are largely responsible for investment risk, inflation risk, and longevity risk. Under DC plans, on the other hand, the funding risk, investment risk, inflation risk, and longevity risk is solely assumed by employees. See Table 4.

The new retirement system in Utah challenges this tradition of employers bearing the entire DB risk. Starting July 1, 2011, Utah allows new hires to choose between a DC plan and a hybrid plan that includes both a DB and a DC account. Employees who choose the hybrid plan assume DB funding and investment risk. That is, employers will contribute 10% of salary to the hybrid plan regardless of future experience. If this contribution is insufficient to fund the DB plan, employees will have to make up the difference through an automatic payroll deduction. However, employer contributions not needed to fund the DB plan will be deposited into employees' DC accounts. Since 7.5% of pay is estimated to provide for the DB benefits, employees would get 2.5% of pay deposited to their DC accounts if all future experience matched the assumptions. Employees can also voluntarily contribute more to their DC accounts under the hybrid plan. If employees choose the DC plan instead of the hybrid, employers will contribute 10% of salary to the employees' DC account.²² See Table 4.

Employees in Utah, then, must make a unique decision: in order to get the advantages of a DB plan, including a guaranteed benefit for life, professional investment management, and the benefits provided by longevity pooling, they must also take on the funding and investment risks. Employees are not *forced* to take on the DB risk, however; it is a choice, and they can opt for the DC plan instead—which, of course, comes with its own set of risks. If the employee chooses the DC plan, the employer will contribute 10% of pay to the DC account. If the employee chooses the hybrid plan, the employer will contribute 10% of pay as described above. Thus, under either plan, the employer contribution is a flat 10% of pay. The employer is neutral to the employee's decision. See Table 5.

Interestingly, the changes in Utah were intended to avoid future funding problems rather than solving any immediate funding issues. Although Utah had a funded ratio close to 100% before the market crisis, the stock market decline of 2008-2009 did impact its funding status. Therefore the State

Table 4. Risks in Traditional DB and DC Plans, and Utah's New Hybrid Plan

	Typical DB Plan (Traditional Pension)	Typical DC Plan (401(k), 403(b), 457)	Utah's New Hybrid Plan
Funding Risk	Employer assumes most of the funding risk. Although the employer is responsible for fully funding the plan, employees can share this risk through increased employee contributions or reduced benefits, should an unfunded liability develop.	Employees assume all funding risk.	Employees assume all funding risk above the 10% employer contribution.
Investment Risk	Employer assumes most of the investment risk. The employer is responsible for making all investment decisions, however, should unfunded liabilities develop as a result of low investment returns, employees can share this risk through increased employee contributions or reduced benefits.	Employees assume all investment risk.	Employers assume all investment decisions, but employees assume investment risk in terms of any unfunded liabilities that may develop.
Inflation Risk	If the plan offers a cost of living adjustment (COLA), depending on the COLAs structure, employers may assume all inflation risk, or may share the inflation risk with employees. If the plan offers no COLA, employees assume all inflation risk.	Employees assume all inflation risk.	The plan offers an automatic CPI COLA, but it is capped at 2.5%.
Longevity Risk	Employers assume all longevity risk.	Employees assume all longevity risk.	Employees assume DB risk in terms of any unfunded liabilities that may develop as a result of members living longer than assumed.
Portability/Leakage Risk	Employees bear portability risk, in that they are likely to receive lower benefits should they terminate before retirement. Career employees bear no leakage risk, as withdrawals cannot be taken prior to retirement. Employees who terminate before retirement may withdraw their contributions and forfeit their benefit.	Employees bear no portability risk, as assets accumulated in the account can be taken without penalty when terminating employment. Employees bear leakage risk, in that accounts are not always rolled over when changing jobs, and loans and pre-retirement withdrawals are often allowed, which can reduce account balances available at retirement.	As this plan combines a base DB benefit with a DC account, portability and leakage risks are proportionate as described in the first two columns.

Legislature commissioned a study to project the system's funding and to gauge the impact of putting new hires in a less expensive plan. The study projected that if no changes were made and the system earned 7.75% returns in 2009 and each year thereafter, the employer contribution rate would increase from 13.25% to 23.10% of pay, and the funded ratio would decrease to 70.5% before starting to improve.

The old DB plan had a normal cost rate of 11.71% of pay, meaning contributions equal to 11.71% of pay for future hires were projected to finance their retirement benefits, but this contribution amount would not finance the large unfunded liabilities created by the asset losses of 2008-2009. In addition, the old plan included an employer DC contribution of 1.5% of pay. In other words, the entire employer contribution toward accrued retirement benefits for future hires was projected to be 13.21% of pay.

Since the plan design finally adopted for new hires has a cost of 10.00% of pay, it is projected to have cost savings that slowly build to 3.21% of pay as new employees are hired (3.21% = 13.21% - 10.00%).

What differentiates the change in Utah is not cost savings, however; it is risk shifting. If another market downturn occurs, the employers' contributions for new hires will remain 10% of pay; the employees in the hybrid plan will absorb the risk through a combination of smaller deposits to their DC accounts, as well as possible payroll deductions.

The normal cost rate for the DB portion of the new hybrid plan is 7.5% of pay. Thus, if all assumptions come true in the future, 2.5% of pay will be available to deposit to the DC portion of the hybrid plan. Table 5 summarizes the differences between the old and new plan designs.

Table 5. The Utah Retirement System

	All Employees Hired Before July 1, 2011	Employees Hired after July 1, 2011: Hybrid and DC Options	
	Tier 1 DB	Tier 2 Hybrid Plan	Tier 2 DC Plan
Employer Contribution	Employer pays total cost with no cap	Always 10% of pay	Always 10% of pay
Employee Contribution	0% of pay into DB plan	Automatic payroll deduction required if DB contributions are greater than 10%	Employees may contribute, but contributions are not mandatory
DB Normal Cost Rate	11.71% of pay	7.50% of pay	N/A
DC Account Contribution	1.5% of pay	10% of pay less required DB contribution	10% of pay
Final Average Salary Period	3 years	5 years	N/A
Percent of Final Average Salary Replaced per Year of Service	2.0% multiplier	1.5% multiplier	N/A
Unreduced Benefit	Age 65, or 30 years of service, age 62 at 10 years of service with actuarial reductions, or age 60 at 20 years of service with actuarial reductions	Age 65 or 35 years of service	N/A
Cost of Living Adjustment	CPI up to 4%	CPI up to 2.5%	N/A
Vesting Period	4 years of service	4 years of service	4 years of service

What About Do-Overs?

One plan design choice employers face is whether to give employees a chance to change their mind, and switch to the alternative retirement system. Having a do-over option may be particularly valuable to employees whose situations change unexpectedly. For example, a teacher who is married to a member of the military and expects to move frequently may initially choose the DC plan, as the portability aspect may be most attractive. However, if the couple's plans change and they decide to settle more permanently, the teacher may then wish to switch over into the DB plan.

Montana PERA, North Dakota, Vermont, and Washington require new hires to make a one-time irrevocable decision, but several other systems do allow for a change. Colorado allows members to change their election one time in years two through five after they are hired. Ohio Teachers allows members in the DC or combined plan to change in their fifth year of membership, and South Carolina allows members to change their election once in the first five years, but the change can only be from the DC plan to the DB plan. Florida allows members to change once at any time before retirement or termination of employment. Ohio PERS allows members to change up to three times: once in their first five years of employment, once in their second five years, and one more at any time after 10 years of service through retirement.

Different systems handle employees' switches in different ways. Florida allows two choices when members switch from DB to DC. The members can either (1) freeze their current DB benefits based on service and salary to date and have future contributions accumulate in their DC accounts, or (2) convert their DB benefits into DC accounts based on the present value of

the normal retirement benefit. If a Florida member wants to switch from DC to DB, the member must pay the full cost based on either the present value or the actuarial accrued value, depending upon whether the member has previous DB service prior to joining the DC plan. The DC account is used first. If there is more money than needed in the DC account, the member keeps the excess assets in the DC account. If there is not enough money in the DC account, then the member must pay the difference or stay in the DC plan.

In Florida, only 53,112 employees have chosen to take up the do-over option since its inception in 2002. With nearly 700,000 active members when the option was implemented, and between 45,000 and 98,000 new hires each year for the past ten years who could take advantage of the option, this represents a small take up rate. See the Technical Appendix for more information.

Ohio PERS, which allows up to three changes, takes a somewhat different approach. Changes are prospective only, but members transferring to the DB or combined plan have the option to purchase service in the new plan using their DC or combined plan assets. Frozen DB benefits are based on salary and service during DB membership only.

In Ohio, out of a total of nearly 400,000 eligible members, only 866 members have opted for a do-over since 2003. Thus, with an average of about 2 in 1,000 eligible employees choosing to change their retirement plan, it is clear that Ohio's do-over option is not very popular. This suggests that the vast majority of public employees, at least within Ohio, are satisfied with their initial decision. See the Technical Appendix for more information.

IMPLICATIONS

When given the choice between a primary DB or DC plan, public employees overwhelmingly choose the DB plan. This suggests that DB plans are more attractive than DC plans to public employees. This is not surprising, as research has shown that public employees tend to favor DB plans in general.²³

In the final analysis, it's a question of accumulation and distribution. The accumulation of contributions and investment earnings determines available retirement income. A plan that maximizes investment earnings and pools longevity risk over many employees maximizes the benefits provided by contributions. Public employees seem to favor plans that provide lifetime income.

There is not yet much experience on how many public employees with DC plans have been able to make their assets last a lifetime, although the experience in West Virginia suggests that this could be quite challenging for some workers. Unfortunately, the consequences of outliving one's assets are severe. DC plans rarely measure whether assets accumulated will provide adequate retirement

income. It remains an open question to understand how public (and private) sector employees with DC plans can be sufficiently educated and empowered to navigate the risks of pre-retirement accumulation, as well as post-retirement distribution.

Although employers have traditionally taken on most of the risk in DB plans and employees have taken on most of the risks in DC plans, the experience of some states suggests that risks can be more shared between employers and employees. Examples include the combined DB/DC plans in Washington, Oregon, and Ohio, as well as certain DB plans in which any increases in contribution rates are shared by employees. The new hybrid plan in Utah shifts the entire DB funding risk from the employer to the employees.

State and local DB pension plans provide a critical source of reliable income for more than 19 million Americans, including 7.6 million retirees and 14.7 million active employees.²⁴ These plans are a cost effective way to provide broad-based coverage, secure money for retirement, a lifetime income, and economic protections for spouses for our nation's police officers, firefighters, schoolteachers, and other public servants.

A handful of states offer public employees a choice between primary DB and DC plans. This paper analyzes the choices made by employees in these states, and finds that:

- When given the choice between a primary DB or DC plan, public employees overwhelmingly choose the DB pension plan.
- DC plans are less cost efficient than DB plans, due to lower investment returns, and the lack of longevity risk pooling.
- DC plans lack supplemental benefits such as death and disability protection. Some plans have attempted to address these discrepancies, but these provisions require extra contributions that are not deposited to the members' accounts.
- Making a complete shift from a DB to a DC structure does nothing to close any funding shortfalls, and can actually increase costs. The experience in West Virginia finds that employees with an initial DC benefit overwhelmingly chose the DB plan when offered.
- The hybrid plan for new employees in Utah provides a unique case study, in that it has capped the DB funding risk to the employer, and shifted the rest to employees.

The experience in the public sector thus far indicates that public employees value their DB pension benefits quite highly. This fact, coupled with the fact that DB pensions remain the most cost-effective way to fund a retirement benefit, suggests that the public sector is unlikely to mimic the trend away from DB pensions witnessed in the private sector.

TECHNICAL APPENDIX

A1. State Systems Referenced

System	Current plan	Effective date
Alaska PERS & TRS	DC	July 1, 2006
Colorado PERA	DB/DC choice	January 1, 2006
Florida RS	DB/DC choice	July 1, 2002
Montana PERA	DB/DC choice	July 1, 2002
Nebraska PERS	Cash Balance DB plan	January 1, 2003
North Dakota PERS	DB/DC choice (limited group)	January 1, 2000
Ohio PERS	DB/DC/combined choice	January 1, 2003
Ohio STRS	DB/DC/combined choice	July 1, 2001
Oregon PERS	DB combined w/ DC-like account	August 29, 2003
South Carolina RS	DB/DC choice	July 1, 2001
Utah	Hybrid/DC choice	July 1, 2011
Vermont SRS	DB/DC choice (limited group)	January 1, 1999
Washington State	DB/combined choice	March 1, 2002
West Virginia TRS	DB	July 1, 2005

Systems with Supplemental Contributions

The following systems have contributions paid as a percentage of DC member salaries that are not credited to DC member accounts. Supplemental contributions required to fund DB liabilities show that introducing a DC plan does not reduce the unfunded liabilities of the existing DB plan.

Colorado PERA

- Amortization Equalization Disbursement (AED): The total AED percentage for 2011 is 2.6% of pay, and is scheduled to increase 0.4% each year to a maximum of 5% in 2017.
- Supplemental Amortization Equalization Disbursement (SAED): The total SAED percentage for 2011 is 2% of pay, and is scheduled to increase 0.5% each year to a maximum of 5% in 2017.

- In Colorado, the AED and SAED are both contributions to the DB plan to account for adverse selection. Both are applied to both DB and DC payroll. The AED is paid by employers. The SAED, although technically an employer contribution, is considered to be an employee contribution because it comes out of the foregone employee compensation package.

Florida RS

- To fund supplemental disability benefits for DC members, a contribution ranging from 0.25% of DC member pay for general members to 1.33% of DC member pay for special-risk members is paid by employers into a separate side account.
- Employers contribute 0.03% of pay to fund communication and administration.
- Beginning July 1, 2011, the Florida legislature required funding of a portion of the unfunded actuarial liability (UAL) for the Florida Retirement System Pension Plan. The Florida Retirement System has been doing this since the first of the alternative DC plans for selected State University System employees became effective July 1, 1984. The practice continued through the 1998 FRS valuation when the system was determined to be in surplus actuarial funding and all existing UAL bases were fully amortized. The Florida Retirement System Pension Plan was in actuarial surplus through the 2008 valuation. The Florida Legislature required some by class in the contributions for the 2011-2012 fiscal year. Employers are paying the UAL rate on all persons in a regularly established position, including the Investment Plan and the non-integrated DC plans created before the Investment Plan.

Montana PERA

The following contributions are made by Montana PERA employers as a percent of DC member pay:

- A Plan Choice Rate (PCR) contribution equal to 2.64% of pay is made to the DB plan to prevent DB costs from increasing due to financing unfunded liabilities over a smaller payroll and increases in the normal cost rate due to anti-selection. The PCR was 2.37% from inception at July 1, 2002, until July 1, 2007, and 2.505% of pay from July 1, 2007 until July 1, 2009. The PCR has been 2.64% of pay since July 1, 2009.
- A payment of 0.30% is made to finance long-term disability benefits.
- A payment of 0.04% is made to the education fund.

Ohio PERS

- A contribution of 0.77% of pay from employer contributions was made for all DC and combined plan members to the DB plan by the employer in 2011 as a "mitigation rate." The board reviews the mitigation rate annually, and it can vary between 0% and 6%. The highest level to date is 0.77%.

Ohio STRS

- 3.5% of pay from employer contributions for all DC members is used to pay for the unfunded liabilities of the DB plan.

South Carolina RS

- Of the total employer contribution made for the South Carolina Retirement System (SCRS), each employer contributes 5 percent directly to participant accounts and the remainder is remitted to the retirement system. SCRS may retain from this employer contribution an amount as determined by the director to defray any reasonable expenses incurred in performing services regarding the plan. Table A2 summarizes contribution levels.

A2. South Carolina Employer Contributions

Fiscal Year	% Allocated to Member	% Retained by SCRS	Total Employer Contribution
2006-2007	5.000%	3.050%	8.050%
2007-2008	5.000%	4.060%	9.060%
2008-2009	5.000%	4.240%	9.240%
2009-2010	5.000%	4.240%	9.240%
2010-2011	5.000%	4.240%	9.240%
2011-2012	5.000%	4.385%	9.385%
2012-2013	5.000%	4.530%	9.530%

Further System Details

The following section provides a brief summary of information relevant to this article for each system.

Alaska

Starting July 1, 2006, Alaska's public employee and teachers defined benefit plans are closed. New hires will go into the defined contribution plan.

The default percent of pay contribution rates are 5% employer and 8% employee in PERS and 7% employer and 8% employee in TRS.

Alaska teachers do not participate in Social Security and many Alaska public employers, like the state of Alaska, have opted out of Social Security participation.

Colorado Public Employees' Retirement Association (PERA)

Starting Jan. 1, 2006, Colorado allowed new state employees (people without a tie to the PERA DB plan within the last year) to choose between the PERA DB plan, the PERA DC plan, and the state-offered DC plan. In 2008, the Colorado General Assembly expanded choice to include the new employees within the Community College system. The Community College members have the choice between the PERA DB plan and the PERA DC Plan. The state-offered DC plan was not available to the Community College employees. In 2009, the Colorado General Assembly passed legislation that moved participants in the state-offered DC plan into the PERA DC plan. Choice for new hires of both the State of Colorado and the Community Colleges is now solely between the PERA DB plan and the PERA DC plan.

Members have a 60-day election window and can then change their minds once between the PERA DB and PERA

A3. Colorado PERA New Hire Choices* (Effective January 1, 2006)

	DB by default	DB active enrollments	DC active enrollments
2006	37%	48%	14%
2007	39%	43%	18%
2008	58%	29%	13%
2009	53%	33%	15%
2010	33%	55%	12%

*Based on 28,322 new hires.

DC plans either way in years two through five. If a member changes to the DC plan, s/he must completely refund the DB account, and leave the DB plan for DC plan. DB service can't be frozen for an active member. If the member changes to the DB plan, the member has the option to purchase his or her original time in the DB plan after one year based on actuarial value.

The DB and DC plans require the same employer and employee percentage of pay contributions. The base contribution rates are 10.15% employer and 8% employee for state and school employees, and 12.85% employer and 10% employee for state troopers. For DB members, 1.02% of pay from the base employer contribution is used to fund retiree health care instead of pension benefits. For DC members, the 1.02% of pay goes into the members' DC accounts as part of the employer contribution and it is up to the members to pay for health care when they retire although they may participate in the association's health care program, PERACare. The AED and SAED supplemental contributions described earlier are in addition to these base contribution rates.

Table A3 is a historical record of the choices of new hires in Colorado PERA.

Florida Retirement System (FRS)

Starting July 1, 2002, Florida allowed new employees to choose between a DB plan and a DC plan.

There are no employee contributions to either the DB or the DC plan. Employer contributions to members' DC accounts range from 9% of pay for general members to 20% of pay for special risk. Employer contributions to fund additional disability benefits for DC members range from 0.25% of pay for general members to 1.33% of pay for special-risk members. Employers contribute 0.03% of pay to fund communication and administration.

DC accounts vest 100% at one year of service. DB benefits vest 100% at six years of service. Accounts and benefits are 0% vested before these dates.

**A4. Florida Retirement System New Hire Choices*
(Effective July 1, 2002)**

	DB by default	DB active enrollments	DC active enrollments
9/02 - 6/03	86%	6%	8%
7/03 - 6/04	73%	11%	16%
7/04 - 6/05	61%	18%	21%
7/05 - 6/06	59%	19%	22%
7/06 - 6/07	58%	18%	24%
7/07 - 6/08	55%	19%	26%
7/08 - 6/09	55%	22%	23%
7/09 - 6/10	56%	21%	23%
7/10 - 6/11	53%	22%	25%

**At June 30, 2011 there are 552,984 DB members and 105,250 DC members.*

A5. Take Up Rates of Florida's "Do-Over" Options, 2002-2011

Do-Over Option	Total members who have made this change
Pension Plan to Investment Plan	51,055
Pension Plan to Hybrid Plan	138
Investment Plan to Pension Plan	1,919
Total	53,112

Table A4 is a historical record of the choices of new hires in Florida. Florida has an active education campaign. The overall DC election percentage of 25% in the year ending June 30, 2011, is the highest of any system in this study.

Members have a six-month election window and can change their minds once at any time before retirement or termination. Details of how the switch is treated are given in the main body of the article.

**A6. Montana PERA New Hire Choices
(Effective July 1, 2002)**

	DC active enrollments
7/04 - 6/05	9%
7/05 - 6/06	10%
7/06 - 6/07	10%
7/07 - 6/08	10%
7/08 - 6/09	9%
7/09 - 7/10	9%
7/10 - 7/11	3%

Montana Public Employees' Retirement Administration (PERA)

Starting Jan. 1, 2002, Montana PERA allowed new employees to choose between a DB plan and a DC plan.

Members have 12 months after hire to make a one-time irrevocable decision between the DB plan and the DC plan.

The DB and DC plans require the same employer and employee percentage of pay contributions. Employers contribute 7.17% of pay. Employees contribute 6.90% of pay. Employer DC contributions can be broken down as 4.19% to the DC account, 2.64% plan choice rate (DB funding), 0.30% for long-term disability benefits, and 0.04% for the education fund. The entire employee contribution is credited to the DC account.

Table A6 is a historical record of the choices of new hires in Montana PERA. Members not making a choice are placed in the DB plan by default; however, statistics are not available on what portion of new hires entering the DB plan did so by default.

North Dakota Public Employees Retirement System (NDPERS)

Starting Jan. 1, 2000, North Dakota allowed nonclassified state employees to choose between a DB plan and a DC plan. As only nonclassified state employees are eligible, there were only 228 active members in the DC plan as of December 31, 2010.

Members have six months after hire to make a one-time irrevocable decision between the DB plan and the DC plan.

The DB and DC plans require the same employer and employee percentage of pay contributions. Employers contribute 4.12% of pay and employees contribute 4% of pay for a total contribution of 8.12% of pay.

Table A7. North Dakota PERS New Hire Elections (January 2001–December 2010;* Effective January 1, 2000)

	DB by default	DC active enrollments
1/2001 - 6/2008	88%	12%
2008	93%	7%
2009	88%	12%
2010*	98%	2%

* There are 228 active members in the DC plan as of 2010. Statistics are maintained by calendar year starting in 2008. One new employee out of the 63 eligible joined the DC plan in 2010.

Table A7 shows that 12% or fewer of the new hires have actively elected the DC plan and 88% or more have either actively elected the DB plan or been placed in the DB plan as the default. Breakouts of the portion of DB elections that were active versus default are not available.

Ohio Public Employees Retirement System (OPERS)

Starting Jan. 1, 2003, OPERS allowed new employees to choose between an all-DB plan (the Traditional Pension Plan), an all-DC plan (the Member-Directed Plan), and the Combined Plan. In the Combined Plan, employer contributions fund DB benefits and all member contributions are credited to DC accounts.

The employer contribution is 14% of pay and the employee contribution is 10% of pay for all three plans and for all groups. Members in the all-DC and combined plans have all employee contributions credited to their DC accounts. However, a portion of the employer contribution is used to fund retiree health care (4.5% of pay in 2010; for DC participants, this contribution is deposited into a VEBA). Also, the mitigation rate, which is currently 0.77% of pay, comes out of the 14% employer contribution and is not credited to DC accounts.

Table A8 is a historical record of the choices of new hires in OPERS.

Members have a 180-day selection window. Members have three chances to change their minds about their choice—once in the first five years of total service credit, once between five to ten years, and once at any time after ten years. Changes are prospective only, but members transferring to the all-DB or combined plan have the option to purchase service in the new plan using their DC accounts. Service purchases are based on service in the plan the member is opting out of; must use the DC account first; and if the DC account is less than the total cost, then the member may still purchase all service with an additional lump sum, rollover, or payroll deduction. Frozen DB benefits are based on salary and service during DB membership only.

Table A8. Ohio PERS New Hire Choices* (Effective January 1, 2003)

	DB by default	DB active enrollments	DC active enrollments	Combined plan active enrollments
2004	84%	11%	3%	2%
2005	84%	10%	3%	3%
2006	83%	12%	3%	2%
2007	82%	13%	3%	2%
2008	81%	14%	3%	2%
2009	84%	12%	3%	1%
2010	78%	17%	4%	1%

* Based on 349,490 new hires.

Table A9. Take Up Rates of Ohio PERS "Do-Over" Options, 2003-2011

Do-Over Option	Total members who have made this change
DB Plan to DC Plan	419
DB Plan to Combined Plan	114
Combined Plan to DC Plan	17
Combined Plan to DB Plan	120
DC Plan to Combined Plan	30
DC Plan to DB Plan	166
Total	866

A10. Ohio Teachers New Hire Choices* (Effective July 1, 2001)

	DB by default	DB active enrollments	DC active enrollments	Combined plan active enrollments
7/01 - 6/04	69%	15%	10%	6%
7/04 - 6/05	70%	15%	11%	4%
7/05 - 6/06	72%	13%	11%	4%
7/06 - 6/07	72%	13%	11%	4%
7/07 - 6/08	71%	14%	11%	4%
7/08 - 6/09	71%	15%	10%	4%
7/09 - 6/10	81%	10%	7%	2%
7/10 - 6/11	79%	10%	9%	2%

*Based on 171,568 new hires through June 30, 2011.

State Teachers Retirement System of Ohio (STRS)

Starting July 1, 2001, STRS allowed new employees to choose between an all-DB plan, an all-DC plan, and a combined plan. In the combined plan, employer contributions fund DB benefits and all member contributions are credited to DC accounts.

Members have a six-month election window. After the member is put in the all-DB plan either by default or by active election, he or she cannot elect out. Members who choose the DC or combined plan have a one-time option at the end of the fiscal year following the fourth anniversary of the hire date to switch to one of the other two plans that were not chosen at the time membership began. Members must positively elect to stay in the combined or all-DC plan during this reselection period or they will default into the all-DB plan. If members change into the all-DB plan, they forfeit their DC accounts and are treated as if they had been in the all-DB plan since hire. There are no changes after the end of the fifth fiscal year of participation after hire.

The employer contribution is 14% of pay and the employee contribution is 10% of pay for all three plans. Members in the all-DC and combined plans have all employee contributions credited to their DC accounts. However, a portion of the employer contribution to the all-DC plan is used to fund unfunded liabilities for the all-DB plan (3.5% of pay in 2008).

Table A10 is a historical record of the choices of new hires in STRS of Ohio.

Oregon Public Service Retirement Plan (OPSRP)

Oregon has chosen that starting Aug. 29, 2003, all new hires go into a combined pension plan with two components: the defined benefit pension program and the defined contribution-like Individual Account Program (IAP).

The pension program provides a defined benefit equal to 1.5% of final average salary (1.8% for police officers and firefighters) for every year of service and is funded entirely by employer contributions and investment earnings.

The IAP is funded by the employee contributions, which are 6% of pay. All IAP assets are invested in the same portfolio as the DB assets; there is no difference. Employees have no choice in how IAP assets are invested. As a result, the members' IAP accounts earn comparable returns, positive or negative, to the DB assets. Earnings are credited annually to member accounts. Administrative fees are deducted from the fund's earnings as part of the annual crediting process. Members receive an annual statement after earnings are credited each year.

South Carolina Retirement Systems

South Carolina allows new employees of State agencies, institutions of higher education, and employees of k-12 schools to choose between a DB plan and a DC plan. Employees of municipalities, counties or special purpose districts cannot participate in the DC plan. This arrangement was made effective over the period from July 1, 2001, to July 1, 2003, varying by group.

DC members choose between four authorized investment providers. Members must choose investment options from their chosen investment provider. Members may change investment providers during the annual open-enrollment period subject to the investment provider's contractual limitations.

A11. South Carolina Retirement Systems Percent of New Hires Electing DC* (Effective July 2, 2001, and July 1, 2003)

	Higher Education	K - 12 Schools	State Agencies	Overall
7/04 - 6/05	32%	14%	11%	17%
7/05 - 6/06	34%	14%	12%	18%
7/06 - 6/07	37%	15%	13%	19%
7/07 - 6/08	35%	16%	13%	20%
7/08 - 6/09	33%	14%	11%	18%
7/09 - 6/10	31%	12%	10%	17%
7/10 - 6/11	33%	11%	13%	18%

*Based on 201,466 new hires through June 30, 2011.

Members have a 30-day election window after hire to choose between the DB plan and the DC plan. During their first five years, members can change from the DC plan to the DB plan. Members cannot change from the DB plan to the DC plan. If a member changes to the DB plan during this five-year period, the member has the option to purchase his or her original time in the DB plan. The cost is 16% of the member's highest career salary for each year of service. The member has the option, but is not required, to use his or her DC account for these service purchases.

The DB and DC plans require the same employer and employee percentage of pay contributions. Employers currently contribute 9.24% of pay. Employees contribute 6.50% of pay. Five percent of employer DC contributions are deposited to the DC account; the South Carolina Retirement System collects the difference between the employer contribution and the 5% allocated to member accounts and may retain an amount as determined by the director to defray any reasonable expenses incurred in performing services regarding the plan. The entire employee contribution is credited to the DC account. Participants are immediately vested.

Table A11 is a historical record of the choices of new hires in South Carolina. Like most other systems, the DB plan is the default election. It is interesting to note that the percent of new hires electing DC varies widely by group. The percent of higher education employees choosing DC has varied from 31% to 37%, whereas the DC choice for other groups has only varied from 10% to 16%.

Vermont

Starting Jan. 1, 1999, all new exempt state employees were given a choice between a DB plan and a DC plan. In addition, beginning in July of 2000, the governing body of employers in the Vermont Municipal Employees' Retirement System (VMERS) can elect to offer employees a choice between a DB plan and a DC plan. To date, about 92 of the over 400 VMERS employers have chosen to offer this choice to their employees.

Employees make a one-time irrevocable choice at hire.

In the state DC plan, employers contribute 7% of pay and employees contribute 2.85% of pay. In the VMERS DC plan, employers contribute 5% of pay and employees contribute 5% of pay.

Statistics on the percentage of members electing the DC plan or DB plan are not available.

Washington State Department of Retirement Systems

Starting March 1, 2002, Washington allowed new hires in the Public Employees' Retirement System (PERS) to choose between an all-DB plan (Plan 2), and a combined plan (Plan 3). In the combined plan, employer contributions fund DB benefits equal to 1% of final average earnings for each year of service and all member contributions are credited to DC accounts. Starting July 1, 2007, new hires in the Teachers' Retirement System (TRS) and the School Employees' Retirement System (SERS) were given the same choice between Plan 2 and Plan 3.

Members have 90 days after hire to make a one-time irrevocable decision between the all DB plan and the combined plan.

At the same time the plan election is made in the first 90 days, members in the combined plan (Plan 3) also choose between six employee contribution-rate options. Once the employee contribution-rate option is chosen, it cannot be changed as long as the member remains with the same employer. If members separate from the employer, they may

change their contribution rate with the next employer. All employee contributions are credited to the DC account.

The six employee contribution options in the combined plan are as follows:

- Option A: 5% of pay contribution at all ages
- Option B: 5% to age 35, 6% at ages 35 to 44, 7.5% at ages 45 and up
- Option C: 6% to age 35, 7.5% at ages 35 to 44, 8.5% at ages 45 and up
- Option D: 7% of pay contribution at all ages
- Option E: 10% of pay contribution at all ages
- Option F: 15% of pay contribution at all ages

Employees who do not make an election in the first 90 days after hire are placed in the combined plan (Plan 3) with employee contribution option A. Approximately 65% of combined plan members are in option A, with the remainder spread fairly evenly between the other five contribution options.

One of the DC investment options is the Total Allocation Portfolio (TAP), which mirrors the investments in the state DB plan and therefore earns the same returns. Washington has made the TAP the default investment option for Plan 3 and approximately 56% of the members' DC assets are in the TAP option. Starting in October of 2008, target date funds managed by an outside provider have also been available. The target date funds allocate investments without the member's involvement and automatically change the asset mix as the member moves closer to retirement.

Table A12 shows that approximately 68% of the PERS members hired between March 1, 2002, and June 28, 2011, have actively chosen the all DB plan over the combined plan, which is the default. Breakouts of choices by year are not available.

A12. Cumulative Washington PERS New Hire Elections, March 2002 – June 2011

Plan 3 Combined DB & DC by default	Plan 3 Combined DB & DC active enrollments	Plan 2 All DB active enrollments
21%	11%	68%

West Virginia Teachers Retirement System

The following chronology of the West Virginia TRS fills in some holes not described in the article.

- 1941: West Virginia TRS was established as a DC plan.
- 1960s and 1970s: DB benefits were added to counter the inadequate DC benefits, but the benefits were never properly funded.
- 1991: The DC plan (TDC) was established for new hires in response to funding problems, and 4,500 former DB participants also switched from the DB to DC.
- 2003: Many of the 4,500 who switched felt misled and said they could not afford to retire. Other DC members were also not satisfied.
- 2005: The state decided that a given level of benefits could be funded for a lower cost through a DB plan. Average DC returns had been lower than DB returns in both up and down markets. Changing to a DC plan did not solve the state's funding problems. All members hired after July 1, 2005, go into the DB plan instead of the DC plan. West Virginia projected a \$1.2 billion savings in the first 30 years due to moving new entrants from the DC to the DB plan.
- 2006 and 2007: Special appropriations of \$290.1 million in FY2006 and \$313.8 million in FY2007 were deposited into TRS. In addition, West Virginia completed a tobacco bond securitization in FY2007 and deposited \$807.5 million of those proceeds into TRS as another special appropriation. All these amounts were in addition to the regular contribution determined under the ARC, which was converted to a level dollar amortization (from level percentage of payroll).
- 2008: DC members are given the option to switch to the DB plan. Of those DC members, 78.6% (14,925 members) chose to switch to the DB plan. Surprisingly, the switch, which was expected to cost the state up to \$78 million before the elections were made, is now expected to save the state about \$22 million. Fewer older TDC members than expected transferred. More young TDC members than expected transferred. 50% of those over 70 transferred; 69% of those age 65 to 69 transferred; 81% of those 45 to 64 transferred; and 76% of members under age 40 transferred.

Table A13 shows the investment returns for the 10 years ended June 30, 2001, through June 30, 2010. The ten-year average DB return was 1.6% higher than the average DC return.

Table A13. West Virginia Teachers' DC Returns Compared to TRS Returns

Year ending June 30	DC plan	DB plan
2001	-2.60%	-0.25%
2002	-3.76%	-2.94%
2003	4.84%	4.75%
2004	8.83%	15.08%
2005	6.33%	10.56%
2006	6.67%	9.55%
2007	11.85%	17.43%
2008	-3.28%	-7.64%
2009	-12.16%	-16.77%
2010	9.16%	15.20%
10 Yr Average	2.32%	3.93%

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