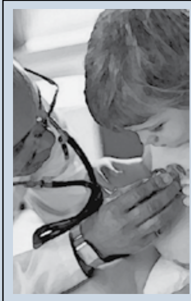

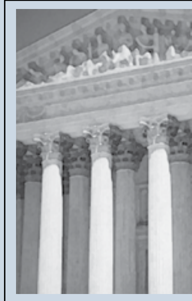
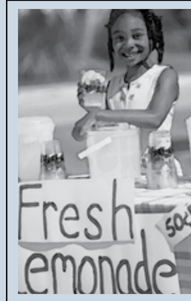

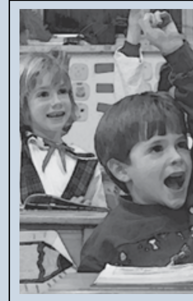

Preventing Bankruptcy in State and Local Pension Plans in Colorado

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Executive Summary

The Government Accounting Standards Board (GASB) has adopted new standards, numbers 67 and 68, to be implemented in 2013 and 2014, respectively. The new GASB standards will

- provide a more accurate measure of the funding status of state and local pension plans.
- significantly increase the cost of state and local pension plans.

Recent studies reveal that using the new GASB standards Colorado has one of the most underfunded pension plans in the nation.

- There is a high probability that Colorado's state and local pension plans will not be able to meet their obligations over the next decade.
- Merely muddling along with the current defined benefit plans will bring these pension plans to the brink of bankruptcy.

To preserve their pension system it is in the interest of public sector workers, as well as taxpayers, to enact the fundamental reforms now required to meet the new GASB standards.

- Those reforms can no longer be band aid solutions designed to prop up the defined benefit plan, such as the reforms the legislature has enacted to date.
- Because some municipal plans, such as those in Colorado Springs, are better funded they can enact a soft freeze, requiring new employees to enroll in a defined contribution plan, and reduce the costs and revenue requirements needed to meet GASB standards.
- A hard freeze, requiring all employees to enroll in a defined contribution plan, now may be the only alternative to bankruptcy for the Public Employees Retirement Association (PERA) and many municipal pension plans in Colorado.

Introduction

State and local governments report the funding status of their pension plans in financial statements following standards set by the Government Accounting Standards Board (GASB). Historically, those standards allowed state and local governments to use an actuarial model and to discount liabilities based on the long-term yield on the assets held in the pension fund. The Colorado Public Employees' Retirement Association (PERA) uses an 8 percent discount rate comparable to that used in most state and local pension plans. GASB also allowed state and local governments to use a smoothing technique to calculate the funding status of the plans. With this smoothing technique, losses incurred on assets in one year could be averaged over several years.

Most economists argue that these historical standards do not provide an accurate measure of the funding status of state and local pension plans.[1] This criticism increased with the devastating losses incurred by these pension plans during the recent recession, and the slow recovery from these losses in recent years. As criticism mounted, GASB conducted a review of the standards. As a result of the review GASB has adopted new standards, numbers 67 and 68, to be implemented in 2013 and 2014, respectively.

Recent studies reveal that Colorado has the most underfunded pension plans in the nation.

This Issue Paper explores the impact of the new GASB standards on the funding status of state and local pension plans in Colorado. The evidence shows that these pension plans are not on a sustainable path. Recent studies reveal that Colorado has the most underfunded pension plans in the nation. There is a high probability that Colorado's state and local pension plans will not be able to meet their obligations over the next decade. Merely muddling along with the current defined benefit plans will bring these pension plans to the brink of bankruptcy. This Issue Paper explores the options to reform these pension plans and prevent bankruptcy.

The New GASB Standards

The new GASB standards "require governments providing defined benefit pensions to recognize their long-term obligations for pension benefits as a liability for the first time, and to more comprehensively and comparably measure the annual costs of pension benefits."[2] There are three major revisions in these standards:

1. Discount Rate

Most economists argue that the discount rate used to estimate liabilities should reflect the risk associated with the liabilities in each plan. Since pension benefits are guaranteed under state law, the appropriate discount rate is a riskless rate. Finance professors Robert Novy-Marx and Joshua D. Rauh therefore suggest using the U.S. Treasury yield rate, about 2 percent, as a measure of this riskless discount rate, which is appropriate for guaranteed pensions.[3]

Most economists argue that the discount rate used to estimate liabilities should reflect the risk associated with the liabilities in each plan.

The new GASB standard is a compromise between a riskless rate and the traditional discounting rate based upon the expected return to assets in the plan. Liabilities will be discounted using a blended rate that reflects the expected return for that portion of liabilities covered by assets in the plan, and the return on high grade municipal bonds for the portion of liabilities not covered by assets, i.e. unfunded liabilities.

2. Asset Smoothing

Plan assets will be valued at current market values rather than averaged over a number of years.

3. Allocation Method

Early age normal/level percentage of payroll will be the only allocation method used for reporting purposes

The new GASB standards will provide a more accurate measure of the funding status of state and local pension plans, and the cost of meeting those standards. The cost of these plans is measured using another GASB standard, the annual required contribution rate (ARC). ARC is the contribution required to fully fund the pension plan over a 30-year amortization period. It is comprised of normal costs—the present values of liabilities accrued in a given year—plus the payment required to amortize the unfunded liability over a 30-year period. State and local pension plans are required to report the ratio of actual to required contributions in their Comprehensive Annual Financial Report (CAFR).

The new GASB standards will significantly increase the cost of state and local pension plans in Colorado as measured by the ARC...

The new GASB standards will significantly increase the cost of state and local pension plans in Colorado as measured by the ARC:

- The requirement to use current market values rather than actuarial values and the new liability measure will increase unfunded liabilities
- The requirement to use a blended rate of discount will increase both normal cost and the cost of paying off unfunded liabilities over a thirty year period.

The Funding Status of State and Local Pension Plans Using the New GASB Standards

How Does Colorado Compare to the Rest of the Nation

Like most state and local pension plans, the state and local pension plans in Colorado have discounted liabilities at 8 percent, the expected yield on assets in these plans. The new GASB standards require that for reporting purposes these liabilities should be discounted at a rate that reflects risk.

The Center for Retirement Research at Boston College has published two recent studies measuring the impact of the new GASB standards on the funding status of state and local pension plans.[4] In the first study, liabilities in state and local pension plans are recalculated at a 5 percent discount rate. The funding status of Colorado's state and local

pension plans is broken down as follows:

Table 1. Ratio of Assets to Liabilities for State and Local Plans 2000-2010 and Projections to 2011 (percent)

Year	Colorado State	Colorado School	Colorado Municipal	National
2001	98.2%	98.2%	104.3%	101.9%
2002	87.9	87.9	93.6	94.4
2003	75.2	75.2	80.2	89.4
2004	70.1	70.1	77.2	87.3
2005	71.5	73.9	78.0	86.0
2006	73.0	74.1	79.5	85.8
2007	73.3	75.5	81.2	87.1
2008	67.9	70.1	76.4	83.8
2009	67.0	69.2	76.2	79.7
2010	62.8	64.8	73.0	76.1
2011	56.9	59.4	69.8	74.8

Source: The Funding of State and Local Pensions: 2011-2015, Center for Retirement Research at Boston College, Number 24, May 2012, p.10

The lower discount rate results in funding ratios below 70 percent for all three pension plans in 2011. The funding ratios are significantly below that using an 8 percent discount rate as reported in their Comprehensive Annual Fiscal Report. The funding ratios for Colorado's pension plans are also well below the average for the nation as a whole.

The funding ratios for Colorado's pension plans are also well below the average for the nation as a whole.

In a more recent study, the Center for Retirement Research estimates the funding status of state and local pension plans reflecting the change in GASB standards. In that study the discount rate is the blended rate; assets are not smoothed over time; and the entry age normal/level percentage of payroll is used as the allocating method. The newer study identifies the funding status of Colorado pension plans as follows:

Table 2. Funded Ratios for State and Local Plans under GASB Guidelines, 2010 (percent)

Pension Plan	Current Liabilities	Current Liabilities With Market Valued Assets	Blended Liabilities With Market Valued Assets	Blended Rate
Colorado State	62.8%	61.3%	48.4%	6.2%
Colorado School	64.8	63.4	51.6	6.4
Colorado Local	73.0	72.0	44.3	5.0
National	76.4	67.1	56.8	6.6

Source: How Would GASB Proposals Affect State and Local Pension Reporting, Center for Retirement Research at Boston College, Number 23, November 2011, updated June 2012, Appendix B, p.11.

The study reveals that state and local pension plans in Colorado are among the most underfunded plans in the nation. The funding ratio of the state and local pension plans falls below 50 percent, while that for the school plan is slightly above 50 percent.

The Cost of State and Local Pension Plans in Colorado

The new GASB rules will significantly increase both the costs and the required contribution rates for state and local pension plans to meet these standards. At this point there is no estimate of this increased cost. However, in a recent study Novy-Marx and Rauh estimate the cost of state and local pension plans using a risk free rate of discount.[5] They calculate the annual economic cost of retirement benefits earned by workers. This cost is the present value of new benefit promises, otherwise known as service cost. Real Treasury yields (based on TIPS, Treasury Inflation-Protected Securities) are used to discount the liability resulting from an additional year of work. They then calculate the contribution necessary to pay off the unfunded liability in 30 years, plus the present value of all new benefit accruals over that time period. They use the entry age normal (EAN) method, which leads to service accruals that are constant over the employee's career, the standard

The new GASB rules will significantly increase both the costs and the required contribution rates for state and local pension plans to meet these standards.

adopted in the new GASB rules.

The following table shows the economists' estimate of service cost for Colorado's state and local pension plans in 2009. Table 3 compares the stated service cost with that using the Treasury rate. The stated cost is 15.2 percent of payroll; the cost using the Treasury rate is 38.5 percent of payroll, a 23.3 percent increase. In that year Colorado contributed 19.8 percent of payroll to state and local pension plans. The true cost of these plans was almost double the amount of contributions. The service cost of state and local pension plans is significantly higher in Colorado than for the nation.

Table 3. Service Costs as a Percent of Payroll

Pension Plans	Stated Cost	Revised Cost Using Treasury Discount Rate	Actual Contri-bution Rate	Revised Cost/ Actual Contribu-tion Rate
Colorado	15.2%	38.5%	19.8%	1.9
National	13.9	28.2	17.7	1.6

Source: Robert Novy-Marx and Joshua Rauh, The Revenue Demands of Public Employee Pension Promises, p.45.

The increased cost of Colorado's state and local pension plans with a Treasury discount rate results in a significant increase in required contributions to fully fund the plans. The following table shows the actual contributions, required contributions, and the increases required to achieve full funding.

Table 4. Current Contributions and Required Contribution Increases for Full Funding in Colorado

Current Contri-butions ($Bil-lions)	Re-quired Contri-butions ($bil-lions)	Increase in Re-quired Contribu-tions % of payroll	Increase in Re-quired Contri-butions % of Tax Revenue	In-crease in Re-quired Contri-butions Per house-hold ($Dol-lars)
$0.9	$4.3	42.5%	19.0%	$1,739

Source: Robert Novy-Marx and Joshua Rauh, The Revenue Demands of Public Employee Pension Promises, p.47.

In that year Colorado contributed $0.9 billion to state and local pension plans. The contribution required for full funding with the Treasury discount rate is $4.3 billion. The increase in contributions required for full funding is equal to 42.5 percent of payroll, and 19.0 percent of tax revenue. The increase in annual required contribution per household for full funding is $1,739.

Novy-Marx and Rauh find that on a per capita basis Colorado has the most underfunded state and local pension plans in the nation. Full funding would require that contributions to these plans increase to a level equal to 53.9 percent of payroll. In no other state do pension plans impose such a burden on taxpayers.

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The Cost of the Public Employee's Retirement Association (PERA) Plan

In Colorado the Public Employees' Retirement Association Plan accounts for most of the pension benefits offered to public employees. PERA is a multiemployer pension plan offering pension benefits to state, school, local, and judicial employees. PERA recently expanded to include Denver Public Schools.

The new GASB standards will impact the funding status of each of these plans. In their most recent Comprehensive Annual Financial Report (2011) PERA compares the funded ratio for each plan using the current 8 percent discount rate with that using a 6.5 percent discount rate. The 6.5 percent discount rate is a good approximation to the blended rate that PERA will use under the new GASB standards (see table 2). The funded ratio using a 6.5 percent discount rate is significantly below that using the 8 percent discount rate.

Table 5. Ratio of Assets to Liabilities in PERA Plans (percent)

PERA Plan	Current Ratio 8 % Discount Rate	Current Ratio 6.5% Discount Rate
State Plan	57.7%	48.3%
School Plan	60.2	50.2
Local Plan	69.3	57.1

Source: Colorado Public Employees' Retirement Association Comprehensive Annual Financial Report p.79.

PERA also compares the annual required contribution rate (ARC) using the 8 percent discount rate with that using a 6.5 percent discount rate. The ARC using the 6.5 percent discount rate is about 8 or 9 percentage points above that using the 8 percent discount rate.

Table 6. Annual Required Contribution Rates in PERA Plans (percent)

PERA Plan	Required Contribution Rate 8 % Discount Rate	Required Contribution Rate 6.5% Discount Rate
State Plan	20.0%	27.7
School Plan	19.8	28.6
Local Plan	10.6	18.1

Source: Colorado Public Employees' Retirement Association Comprehensive Annual Financial Report p.79.

PERA does not report the funding status of their plans using a discount rate below 6.5 percent. While the 6.5 percent rate is a good approximation to the blended discount rate set in new GASB standards, it is well above the riskless discount rate proposed by Novy-Marx and Rauh and other economists. Their estimate that the contribution required for full funding of these plans will increase to 53.9 percent of payroll is roughly four times greater than the estimate in PERA's financial report.[6]

As noted earlier, the new GASB standard requiring a blended rate represents a compromise on this issue. Whether the blended rate or a riskless rate is a more accurate measure of the funding status of pension plans will continue to be debated. Regardless, the funding status of these pension plans clearly is much worse than that currently reported in PERA's financial statements. PERA is severely underfunded, and there is a high probability that the plan will not be able to meet its obligations over the next decade.

The Cost of Local Pension Plans in Colorado: The Colorado Springs Pension Plans

Local as well as state governments will be required to report pension obligations using the new GASB standards. As noted in table 2, the funded ratio for municipal plans in Colorado will fall significantly using the new standards, from 73.0 percent to 44.3 percent. To fully fund these municipal pension plans under the new standards the annual required contribution rates will increase substantially. To assess the new standards' impact on the cost of municipal pension plans in Colorado we will examine the pension plans offered to municipal employees in Colorado Springs.

The City of Colorado Springs administers several pension plans for municipal employees.[7] The two largest are the New Hire Pension Plans for fireman and police. In the City's most recent Comprehensive Annual Financial Reports of January 1, 2011, these pension plans use the current 8 percent discount rate to report unfunded liabilities, funded ratio, required contribution and actual contribution.

Table 7. Funding Status of Colorado Springs New Hire Pension Plans for Police and Fire Components, January 1, 2011

Pension Plan	Assets/Liabilities (percent)	Annual Required Contribution Rate (Percent of Salary)	Actual Contribution Rate (Percent of salary)
Police Component	82.8%	28.5%	28.5%
Fire Component	85.1%	25.5%	25.5%

Source: Comprehensive Annual Financial Report, Fire Component, p.3; Comprehensive Annual Report, Police Component, p.3.

The evidence shows these two pension plans are in better shape than most state and local plans. The funding ratios are higher than for other Colorado pension plans, and the actual contribution rates are equal to the current required contribution rates,

which is unusual for state and local pension plans.

These financial reports also compare the annual required contribution using the current 8 percent discount rate with a 4 percent discount rate. The fact that these pension plans are better funded than most means there is not a huge difference between the required contribution rates at different rates of discount. In 2013 the ARC at a 4 percent discount rate is about 2.5 percent above the current rate. However, this gap widens over time. By 2016 the ARC with a 4 percent discount rate projects to be about 21 percent higher than that using the current 8 percent discount rate. While these pension plans in Colorado Springs are in better shape than most municipal plans, meeting the new GASB standards still will be a challenge.

Table 8. Annual Required Contribution Rate Colorado Springs New Hire Pension Plan Police Component, January 1, 2011 ($thousand)

Year	Current Discount Rate 8%	Assumed Discount Rate 4%
2012	$9,619	$9,619
2013	9,621	9,859
2014	9,565	10,234
2015	9,467	10,716
2016	9,409	11,376

Source: Comprehensive Annual Financial Report, Police Component, p.3.

Table 9. Annual Required Contribution Rate Colorado Springs New Hire Pension Plan Fire Component, January 1, 2011 ($thousand)

Year	Current Discount Rate 8%	Assumed Discount Rate 4%
2012	$5,200	$5,200
2013	5,270	5,409
2014	5,317	5,701
2015	5,315	6,034
2016	5,279	6,408

Source: Comprehensive Annual Financial Report, Fire Component, p.3.

Like most municipalities Colorado Springs experienced a sharp drop in revenues and a revenue shortfall during the recent recession. Colorado Springs received national attention because of the budget cuts and service reductions required to balance the budget. Despite these budget cuts, Colorado Springs is projected to incur deficits and run out of money over the forecast period.

In Colorado Springs, recent projections of General Fund Balances reveal that the city is going broke.[8] Expenditures will exceed revenues in 2014, and reserves in the General Fund will be exhausted by 2018. The culprit in this financial crisis is the rapid growth in benefits paid to public employees. Over the past three years benefits paid to public employees have increased on average 10.9 percent per year. Projections of these benefit costs show health inflation increasing 7.5 percent and pension benefits increasing 10.1 percent per year over the next decade. Colorado Springs is not unique in this regard. Other municipalities and jurisdictions face double-digit growth in pension benefits.

Table 10. Colorado Springs Eight Year Financial Outlook

Year	Surplus/ (Deficit) ($thousand)	Available Fund Balance ($thousand)	Available Fund Balance (% of Expenditures)
2011	$4,554	$38,685	15.9%
2012	5,131	43,816	18.1
2013	5,571	49,387	20.0
2014	1,917	51304	20.0
2015	(2,040)	49,264	18.6
2016	(6,320)	42,944	15.6
2017	(10,947)	31,997	11.2
2018	(15,948)	16,049	5.4
2019	(21,348)	(5,299)	-1.7

Revenue Growth	2.0%
General Expense Inflation	2.0%
Healthcare Inflation	7.5%
Pension Inflation	10.1%
Wage Inflation	2.8%
Additional Headcount	50
Ave Cost per Head	$85000
Additional Services (in $000's)	$4000

Source: City of Colorado Springs 2012 Budget, Eight Year Financial Outlook, p.1-31.

It is clear that pension and health care obligations are major drivers of higher costs in Colorado

Springs. Pension costs increased 12.5 percent in 2011. Those costs are projected to fall 4.4 percent in 2012, but will increase 8 percent per year over the remaining forecast period. These forecasts are based on current GASB rules that use an 8 percent discount rate. As the recent Colorado Springs Budget concludes, the City is not confident that these assumptions are realistic.

> Pension costs are assumed to increase 8% per year beginning in 2013. Pension costs are projected to increase as there is wide spread skepticism that the assets can perform as assumed by the actuaries. If assets do not perform as well as assumed, the annual required contributions increase.[9]

By 2016 Colorado Springs will need to contribute about $3 million more annually to fully fund the new hire fire and police pension plans under the new GASB rules. Unfortunately, that is about the same time the City is projected to run out of money, so coming up with an additional $3 million for these pension plans will not be easy. The implication is that the city will incur deficits and run out of money much sooner than projected in their forecasts.

By 2016 Colorado Springs will need to contribute about $3 million more annually to fully fund the new hire fire and police pension plans under the new GASB rules.

Colorado Springs faces several options. The city could increase taxes or issue new debt to cover these deficits. Under TABOR this approach would require voter approval. Given the past history of proposed tax and debt increases in Colorado Springs, it is not a promising option, especially when taxpayers learn the taxes or debt would be used to cover liabilities in the pension plan, rather than to improve government services.

The city could cut back on government services and use that revenue to cover unfunded liabilities in the pension plan. But Colorado Springs already faces taxpayer backlash over cuts in government services required to meet pension obligations and balance the budget.

Given the failure to address the funding crisis thus far, it is conceivable that Colorado Springs could muddle along to the brink of bankruptcy. That of course is not unprecedented; municipal governments in California and other states have already entered bankruptcy. Under actuarial necessity, the courts have allowed jurisdictions in bankruptcy proceedings to renegotiate wage and benefit packages for public sector employees.

The challenges facing other Colorado municipalities in funding pension plans are even greater than the challenge Colorado Springs faces in fully funding its police and fire pension plans. After all, most Colorado municipal pension plans are less well funded than the Colorado Springs plans. The funding ratio for municipal pension plans for Colorado is 73 percent using the current 8 percent discount rate, and 44.3 percent using the blended rate (see table 2).

The funding ratio of PERA's local division is 69.3 percent using the current 8 percent discount rate (table 5). We do not have an estimate of the funding ratio for PERA's local plan using a blended rate, but it is likely to be below 44.3 percent (table 2). The new standards will significantly increase the cost and required contribution rate (ARC) for each PERA plan, including the local plan. PERA is severely underfunded and will find it very difficult to fully fund its pension plans under the new GASB standards. Much of the burden will fall on municipal governments such as Colorado Springs, which offers a PERA pension plan to other municipal employees. As table 2 shows, the funding ratio for each of the PERA plans is likely to fall below 50 percent with the new standards.

In some states, when municipalities have faced bankruptcy the state has taken over their finances. Colorado's precedent is the bankruptcy of the Denver Police and Firefighters pension plan.

In some states, when municipalities have faced bankruptcy the state has taken over their finances. Colorado's precedent is the bankruptcy of the Denver Police and Firefighters pension plan. The State of Colorado assumed these obligations, which remain a line item in the state budget. However, a state takeover of bankrupt pension plans for multiple employers

in the PERA pension plan would be a formidable task. The State most likely would have to propose increased taxes or debt to cover these obligations. Under TABOR this course of action would require voter approval and would also encounter taxpayer resistance. It is conceivable that such a funding crisis could bankrupt the state as well as municipal governments. While such an outcome may seem unlikely, it is not inconceivable in light of new studies of state and local government pension plans.

Reforming State and Local Pension Plans

Many state and local jurisdictions have constitutional and statutory provisions guaranteeing pension benefits for public employees. Public employee unions argue that these guarantees prohibit modifications in benefits for their members. While scholars debate this issue, recent court rulings have set new precedents for pension reform.

Judges in Minnesota and Colorado have thrown out lawsuits challenging recent cuts in retiree pension benefits in those states. The judges ruled in separate decisions that the Minnesota and Colorado legislatures had the right to reduce cost-of-living adjustments in retiree benefits, saying that the benefits were not contractually protected.[10]

A growing number of municipal governments have restructured their pension plans by filing for bankruptcy, including: Vallejo, California; Prichard, Alabama; and Central Falls, Rhode Island.

New legal precedents for modifying pension benefits at the local level have been even more dramatic. If a municipal pension fund runs out of money the city can file for bankruptcy under the Chapter 9 municipal code. A growing number of municipal governments have restructured their pension plans by filing for bankruptcy, including: Vallejo, California; Prichard, Alabama; and Central Falls, Rhode Island.[11] Faced with an actuarial emergency and the threat of bankruptcy, municipal public employee unions are increasingly willing to renegotiate their pension benefits.

Reform of State Pension Plans

The taxpayer revolt in the funding crises of state and local pension plans has forced politicians to enact some fundamental reforms in these plans. Taxpayers no longer are willing to bear the increasing costs of these plans in the form of higher employer contribution rates, or decreased government services. They are demanding reforms that will bring pension plans into line with benefits offered in the private sector.

Defined benefit plans are in fact becoming a rarity in the private sector. New economy companies, such as Google and Cisco Systems, do not offer employees a defined benefit plan. Most of these new companies offer only a defined contribution plan.

Basically, the same pressures creating a funding crisis in public sector pension plans have been encountered in the private sector. In 2009, 80 percent of private multiemployer defined benefit plans were classified as safe by government standards, i.e. possessed enough assets to cover 80 percent of pension benefits.[12] In 2010 only 20 percent of these pension plans were considered safe, while 39 percent were classified as ‘critical’, meaning they have just 65 percent of the required funding.[13]

Defined benefit plans are in fact becoming a rarity in the private sector. New economy companies, such as Google and Cisco Systems, do not offer employees a defined benefit plan. Most of these new companies offer only a defined contribution plan.[14]

Many older private companies that offered defined benefit plans have chosen to freeze the plans.[15] When a private company freezes the pension plan, some or all of the covered employees stop receiving some or all of the benefits from the point of the freeze moving forward.

1. A Hard Freeze

A hard freeze bars employees from earning any further benefits from a defined benefit pension plan. Employers cannot take away pension benefits employees have already earned. Employees become vested in all the benefits they have earned under the plan, but lose the right to continue earning future benefits.

A variation of the hard freeze bars employees from getting pension credit for future years under the

plan, but allows their benefits to be determined by pay at the time they leave the plan, rather than at the date of the freeze.

A growing number of private employers have imposed such a hard freeze in their defined benefit pension plans. A recent poll of both large- and medium-sized firms showed that 40 percent had frozen or closed their defined benefit plans.[16] Most of these private companies offer a defined contribution plan as an alternative.

2. A Soft Freeze

A soft freeze precludes some, but not all, employees from receiving benefits from the defined benefit pension plan. A soft freeze is usually imposed when an employer precludes new employees from participating in a defined benefit plan, but continues the plan for existing employees. According to the Government Accounting Office (GAO), nearly half of private sector defined benefit pension plans are currently closed to new employees.[17]

The defined benefit plans offered to employees in the public sector provide greater benefits than the plans provided to their private sector counterparts.

Most state and local governments, on the other hand, continue to offer defined benefit pension to public employees. The most recent data show that 80 percent of public employees rely on a defined benefit pension plan.[18] The defined benefit plans offered to employees in the public sector provide greater benefits than the plans provided to their private sector counterparts.

The widening gap between assets and liabilities in defined benefit pension plans has led many state and local governments, including Colorado, to enact reforms.[19] Nearly every state has reduced pension benefits and increased employee and/or employer contributions to these plans.

However, a growing number of states have enacted more fundamental reforms, replacing defined benefit plans with some form of defined contribution plan. These states have concluded that reforming defined benefit plans will not be sufficient to control growing costs, and that they cannot afford the risk of underfunding.

The risk is reflected in a growing number of municipal bankruptcies triggered by unsustainable costs of wages, pension and health benefits offered to municipal employees.

The previous sections of this Issue Paper highlight the fact that in Colorado, despite the reforms that have been enacted in defined benefit plans, the state and local pension plans are among the most underfunded in the nation. This Issue Paper argues that replacing these defined benefit plans with defined contribution plans is the only hope to prevent bankruptcy in Colorado's state and local pensions. We next explore how this reform has been enacted in other states. This is followed by a discussion of the prospects for this reform in Colorado's state and local pension plans.

In response to funding crises, a growing number of state and local governments have also frozen their defined benefit pension plans. State and local governments face constraints in freezing pension plans that are not encountered in the private sector. Table 11 surveys these reforms in state defined benefit plans.

Nine states have at some point enacted a soft freeze to replace a defined benefit pension plan for state workers and/or teachers. In some states the defined benefit plan is replaced by a defined contribution plan, while in other states the new plan is a hybrid combining a defined contribution plan with elements of a defined benefit plan. In a soft freeze, only new employees are required to enroll in the defined contribution or hybrid plan.

An additional nine states, including Colorado, offer employees a defined contribution plan as an option. When the defined contribution plan is offered as an option, only a small percentage of public employees have enrolled.

An additional nine states, including Colorado, offer employees a defined contribution plan as an option. When the defined contribution plan is offered as an option, only a small percentage of public employees have enrolled.

Thus far, no state has imposed a hard freeze on the defined benefit plans offered to public employees. The explanation usually offered is that benefits received by employees enrolled in public sector defined benefit pension plans are legally protected.

Table 11. State Defined Contribution (DC) Plans and Hybrid Defined Contribution and defined Benefit (DC/DB) Plans

State	Legislative Year	Plan Type*
Alaska	2005	Mandatory DC
Colorado	2004	Optional DC
District of Columbia	1987	Mandatory DC
Florida	2000	Optional DC
Georgia	2008	Optional DC/DB
Indiana	1997	Mandatory DC/DB
Michigan	1996	Mandatory DC
Montana	1999	Optional DC/DB
Nebraska	2002	Mandatory DC/DB
North Dakota	1999	Optional DC/DB
Ohio	2000	Optional DC/DB
Oregon	2003	Mandatory DC/DB
Rhode Island	2011	Mandatory DC/DB
South Carolina	2000	Optional DC/DB
Vermont	1998	Optional DC/DB
Utah	2010	Mandatory DC/DB
Washington	1998-99	Optional DC/DB
West Virginia**	1991	Mandatory DC

*DC - Defined Contribution
DB - Defined Benefit
Hybrid – DC/DB

**The West Virginia defined contribution plan for teachers was introduced in 1991, but was switched back to a defined benefit plan in 2005.

Source: Comprehensive Annual Financial Reports of each state system

Reforming PERA

As noted earlier the funding status of PERA is much worse than that currently reported in their financial statements. PERA is severely underfunded, and there is a high probability that the plan will not be able to meet obligations over the next decade. The Novy-Marx and Rauh study using the Treasury rate of discount shows that on a per capita basis PERA is the most underfunded pension plan in the country.[20] They estimate that full funding of the PERA plan would require annual contributions in excess of 50 percent of payroll. PERA is already meeting resistance to tax increases and service reductions enacted to fund the pension plan at current contribution rates. It is inconceivable that taxpayers would bear the cost of full funding PERA if more than half of salary is earmarked to fund the pension plan. When taxes are increased to those levels, taxpayers flee to other states that have successfully reformed their pension plans.

Increasing taxes or issuing debt to fund PERA would require voter approval under the TABOR Amendment. Given the past history of proposed tax increases this is not a promising option for Colorado. Of the 10 tax increases proposed at the state level over the past two decades, only one was approved by voters. Recent votes in Wisconsin and in San Diego and San Jose, California, suggest that voters are no longer willing to pay taxes to bail out failed state and local pension plans.[21] When taxpayers learn that proposed tax increases are earmarked to pay off unfunded liabilities in pension plans, rather than to fund new government services, the increases tend to fail at the polls.

Cutting government services to increase funding for state and local pension plans also has encountered resistance in Colorado. State and local governments have cut services in order to sustain funding for their pension plans and balance their budgets. The service cuts in Colorado Springs have received national attention.

Novy-Marx and Rauh find that in states with severely underfunded pension plans, such as PERA, enacting the reforms required to meet the new GASB standards is very difficult. In most states a soft freeze will significantly reduce the costs of the pension plan and enable the state to meet GASB standards. But, Novy-Marx and Rauh identify seven states, including Colorado, with severely underfunded pension plans where a soft freeze will not reduce pension costs. In

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those states the reforms must also reduce the costs of the defined benefit plan to be successful.[22]

Rhode Island has set a precedent for the kind of reforms that must be enacted in PERA.[23] Rhode Island enacted a soft freeze requiring new employees to enroll in a hybrid plan. Current workers keep the benefits they have earned in the defined benefit plan, but will earn new benefits at a lower rate. While their benefits have been cut, current employees will have access to newly-created individual retirement accounts, which will add benefits based on contributions from both workers and the state. Rhode Island is projected to save $3 billion from these reforms.

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Given the severe underfunding in the PERA plan, it is possible that only a hard freeze will have revenue-saving effects and reduce the required contributions needed to meet GASB standards. With a hard freeze current and new employees alike are required to enroll in the defined contribution plan. In a hard freeze, all accounts are stopped and replaced with a defined contribution plan plus Social Security. In addition to new employee, all future work by existing employees is compensated in the new defined contribution plan. A substantial portion of the employer contribution that would have gone to these employees in the defined benefit plan then can be earmarked to pay off the unfunded liabilities already incurred in the defined benefit plan. No additional unfunded liabilities are incurred because all employees have been enrolled in the defined contribution plan. With these reforms the required increase in contributions required to fully fund the plan are significantly reduced

Even with fundamental reforms in PERA, substantial revenue increases and/or spending cuts will be required to meet GASB standards. Because the benefits offered in the current defined benefit plan are so generous and few employees are currently in the Social Security System, the transition to a defined contribution plan will be costly. Nonetheless, it is imperative that the State declare an actuarial necessity and enact these reforms to reduce revenue demands and required contributions. Additional cost savings could be achieved with a less generous defined contribution plan, and also a requirement that employees newly enrolled in Social Security pay a significant share of the cost of that enrollment.

Reforming Municipal Pension Plans in Colorado: The Colorado Springs Pension Plans

The new GASB standards underscore the fact that municipal pension plans in Colorado are not on a sustainable path. In recent years a dozen municipal governments across the country have entered bankruptcy due to unsustainable increases in the cost of pension benefits offered to public employees, including Boise, Idaho; Central Falls, Rhode Island; and Stockton and San Bernardino, California. It is in the interest of all citizens, and most importantly public employees, to enact reforms in these pension plans to prevent bankruptcy.

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As noted earlier, the Colorado Springs pension plans are in better financial shape than most municipal plans. The City has increased contributions to these pension plans in recent years to meet GASB standards. Nonetheless, the new GASB standards reveal that the current defined benefit plans are not sustainable. Replacing these plans with defined contribution plans could significantly reduce costs and assure that the City meet pension obligations.

Because the Colorado Springs pension plans are better funded than most municipal pension plans in the state, the City could enact a soft freeze and reduce the costs and revenue requirements needed to meet GASB standards. Novy-Marx and Rauh provide a blueprint for a soft freeze.[24] The defined benefit plan is closed to new hires who are required to enroll in a new defined contribution plan. The City could contribute 10 percent of salary to the defined contribution plan for new hires, and cover the cost of Social Security enrollment for these new employees. A substantial portion of the

employer contribution that would have gone to new employees under the defined benefit plan then could be earmarked to pay off unfunded liabilities in the defined benefit plan.

Under these assumptions the required contribution the City must make to meet GASB standards is significantly lower than the requirements of the current defined benefit plan. Novy-Marx and Rauh estimate that the cost savings from such a soft freeze could be as high as 10 percent of salary.[25] The cost savings are even higher if employees as well as employers bear a portion of the cost of Social Security for new entrants.

The stakes in this battle over pension reform are high for a City such as Colorado Springs. The cost of the current defined benefit plans is projected to increase by $2 million per year, posing a risk of bankruptcy. The increased costs are projected to impact the budget at a crucial time when the City will have incurred deficits that exhaust the reserve funds. Saving 10 percent of salary by implementing a soft freeze in the two pension plans examined in this Issue Paper could save the City about $5 million per year.

Conclusion

Implementing the new GASB standards will be important in Colorado to reveal the magnitude of underfunding in state and local pension plans and the need for fundamental reform. The City of Colorado Springs could enact a soft freeze in the pension plans administered by the City and meet the new standards. Such an approach could set a precedent for reform in other municipal and state pension plans.

What is clear is that muddling along with the current defined benefit plans is no longer an option because of the high risk that these plans will not meet their obligations, exposing both the stateand municipal governments to bankruptcy.

But it will be more difficult for the state and other municipal governments with more severely underfunded plans to enact the needed reforms. PERA is now so severely underfunded that a hard freeze may be required to rescue the plan. What is clear is that muddling along with the current defined benefit plans is no longer an option because of the high risk that these plans will not meet their obligations, exposing both the stateand municipal governments to bankruptcy.

In the past, PERA administrators have successfully blocked fundamental reforms in order to preserve their defined benefit plans. The author of this Issue Paper served on a Commission to reform PERA in 2005. The Chairman of that Commission, former Governor Dick Lamm, in response to pressure from PERA administrators, blocked any discussion of fundamental reforms. The Commission recommended changes in the defined benefit plan that proved to be inadequate, and PERA continued to accumulate unfunded liabilities.

At that time a soft freeze was a viable option for reform. The author of this Issue Paper submitted a minority report to the General Assembly pointing out the cost-saving potential of a soft freeze, savings that had already been achieved in states such as Michigan. The legislature in that year, and again in 2010, chose to enact reforms designed to prop up the failed defined benefit plan, reforms that have done little to reduce the unfunded liabilities in the plan. Today the unfunded liabilities have more than doubled, and the state has lost the opportunity to enact a soft freeze to successfully address unfunded liabilities in PERA.

Many private employers faced with bankruptcy due to rising pension costs have in fact enacted a hard freeze of their pension plans, but a hard freeze of a state pension plans has yet to be enacted.

Many private employers faced with bankruptcy due to rising pension costs have in fact enacted a hard freeze of their pension plans, but a hard freeze of a state pension plans has yet to be enacted. Given the history of failed pension reform it is highly unlikely that the legislature will muster the will to enact the more stringent reform, a hard freeze, that is now required to fully fund PERA and put the pension system on a sustainable path to meet GASB standards.

The most likely prospect is that Colorado will continue to muddle along with PERA's defined benefit pension plan and hope for the best. At least the new GASB standards will require PERA to report the funding status of the plan using a realistic rate

of discount.

Novy-Marx and Rauh forecast that with high probability severely underfunded pension plans, such as PERA, will default on their obligations at some point over the next decade. A growing number of municipal governments have entered bankruptcy due to unsustainable costs in their pension plans. The prospect of default in severely underfunded pension plans is already reflected in lower credit ratings in States such as California and Illinois, and we should expect the same in Colorado.

If the state does not have the resources to bail out a PERA default, then few options are left. Colorado could turn to the federal government to help bail out the pension system. But resistance to a federal bailout of failed state pension systems is already evident in legislation introduced in Congress that would prevent such bailouts.

The bottom line is that if PERA defaults on their obligations, beneficiaries could lose part or all of their benefits. To preserve their pension system it is in the interest of PERA members as well as taxpayers to enact the fundamental reforms now required to meet the new GASB standards.

The bottom line is that if PERA defaults on their obligations, beneficiaries could lose part or all of their benefits. To preserve their pension system it is in the interest of PERA members as well as taxpayers to enact the fundamental reforms now required to meet the new GASB standards. Those reforms can no longer be band-aid solutions designed to prop up the defined benefit plan, such as the reforms the legislature has enacted to date. A hard freeze is difficult medicine to take, but now may be the only alternative to bankruptcy of PERA.

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