

Teacher Retirement System of Texas



Senate Committee on State Affairs

11/19/2012



TRS Legislative Update

- TRS-Care for retirees
- TRS-Care Interim Study
- TRS-ActiveCare
- Pension Fund Actuarial Valuation
- Pension Benefit Design Study
- Budget Update



TRS-Care for Retirees

TRS-Care

- Texas Insurance Code, Chapter 1575 requires that a basic health care plan be offered at no cost to retirees.
- Optional plans may be offered, including coverage for eligible dependents. Retirees selecting an optional plan pay a premium based on the plan selected, years of service, and Medicare status.
- TRS-Care currently offers three plan options. TRS-Care 1, the basic plan, provides catastrophic coverage. TRS-Care 2 and TRS-Care 3 offer more comprehensive benefits, including a carve-out prescription drug benefit.
- TRS-Care participants across plans:
(as of July 2012)

Plan Option	Participants
TRS-Care 1	31,653
TRS-Care 2	41,911
TRS-Care 3	152,635
Total	226,199



TRS-Care Plan Design

Program Redesigned Effective September 1, 2004

- TRS-Care 1
 - Catastrophic plan with different deductibles for retirees (1) under 65, (2) with Medicare Part B Only, and (3) with Medicare Parts A&B
- TRS-Care 2
 - Comprehensive plan with \$1,000 deductible and \$35 office visit copay and includes managed pharmacy program
- TRS-Care 3
 - Comprehensive plan with \$300 deductible and \$25 office visit copay and includes managed pharmacy program
- Retiree premium structure based on years of service and Medicare status
- Coinsurance limit \$3,000 effective 9/1/2007



TRS-Care

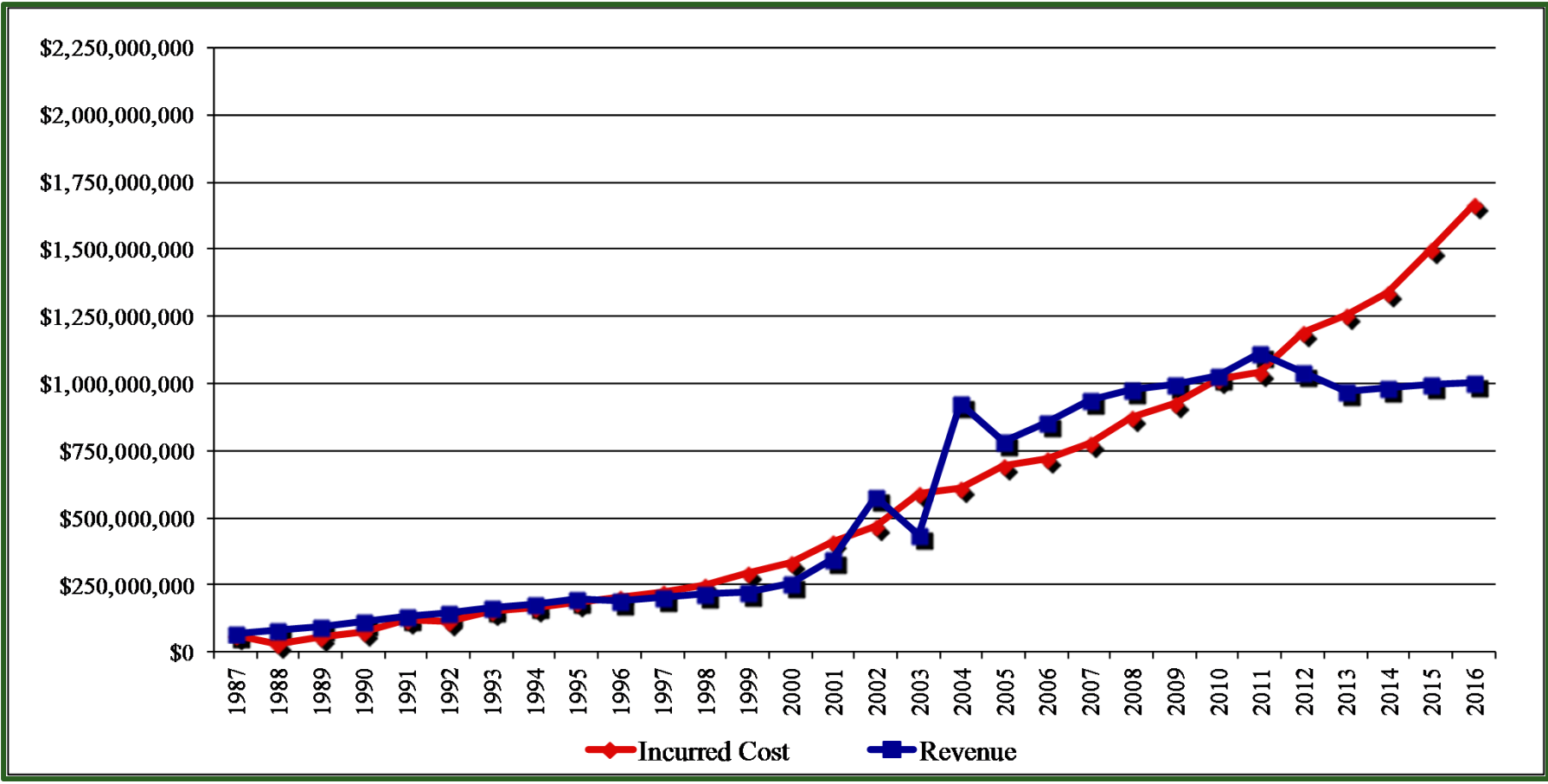
Funding sources

- The law provides that the state contribute 1.0% of active district payroll.
- School districts contribute between 0.25% and 0.75% of active district payroll. The current contribution rate is 0.55%.
- Active school district employees contribute 0.65% of payroll.
- Retirees pay premiums for any plan option other than TRS-Care 1 retiree-only coverage. Retiree premiums have not increased since 2005.
- Medicare Part D retiree drug subsidy.
- Investment income.
- Supplemental funding was provided from 2001 through 2005.

Assuming that the retirees' share of total costs includes both premiums and out-of-pocket costs, the projected retiree contribution for FY 2012 is 46.5% and the state contribution is 20.5%.

TRS-Care Funding

Revenue Versus Incurred Cost





TRS Care Cost Drivers

- Increase in medical costs
- Increase in Rx costs
- Maintaining access and choice in managing providers
- Increased utilization due to aging population
- Potential increase in number of retirees (Non-Medicare)
- Potential plan changes in Medicare program
- Technology increases and development of new biogenetic drugs



TRS-Care

- TRS added Aetna Medicare Advantage option for health care to begin January 1, 2013.
- In 2012, TRS selected Express Scripts for prescription drugs, achieving better pricing beginning September 1, 2012, and is offering a new Medicare Part D option beginning January 1, 2013.
- Assuming 80% participation rate in both plans, the fund is now projected to be solvent through 2014-2015 biennium with a balance of \$14.5 million.
- However, the **shortfall** for the 2016-2017 biennium is projected to be **approximately \$1.2 billion.**



TRS-Care

Significant savings to TRS-Care from Medicare Advantage
and Medicare Part D plan options

	Participation Assumption				
Fiscal Year	60%	70%	80%	90%	100%
FY2013	\$78.6 million	\$93.6 million	\$108.6 million	\$123.5 million	\$138.4 million
FY2014	\$148.1 million	\$172.8 million	\$197.6 million	\$222.4 million	\$247.2 million

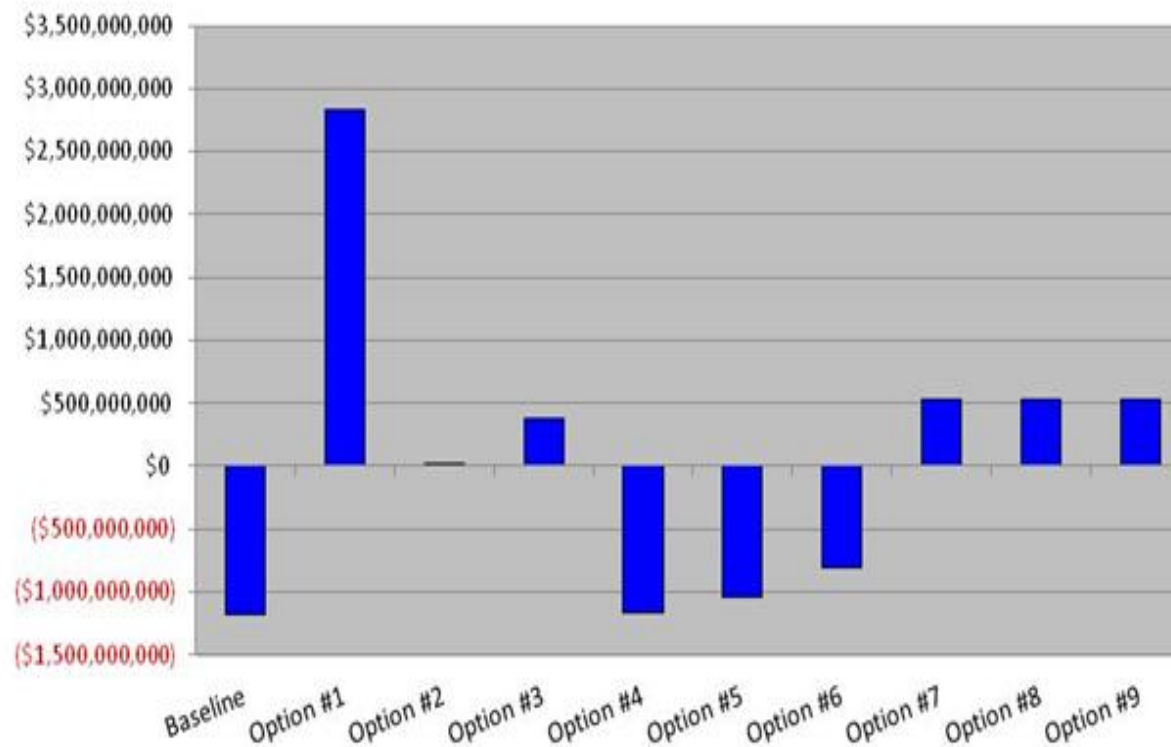


Interim Studies

- In 2011, the Texas Legislature directed TRS to conduct studies on the **sustainability of TRS-Care** for retirees and **pension benefit design**.
- For both studies, TRS presented updates at four TRS Board meetings and two town hall meetings. Three of the six meetings offered the public an opportunity to provide input and ask questions, in person and on the web site. All six of the meetings were web cast and archived at www.trs.state.tx.us.
- Full studies are online at: www.trs.state.tx.us

TRS-Care Study Overview

FY 2017 Projected Fund Balance



1. Pre-fund the long-term liability
2. Fund on a pay-as-you-go basis for the biennium
3. Retiree pays full cost for optional coverage
4. Require Medicare eligible enrollees to purchase Medicare Part B
5. Opt out consequence for participants eligible for the Medicare Advantage and Medicare Part D plans
6. Tighten eligibility requirements
7. TRS-Care 1 only for non-Medicare retirees
8. Defined contribution for non-Medicare retirees to shop in the private market
9. Move non-Medicare retirees to TRS-ActiveCare

Some options can be combined to increase the financial impact.



TRS-Care Study Options 1 & 2

Increase funding to TRS-Care and align the funding to medical costs

Option 1: Pre-fund the long-term liability.

Current 2.2% contribution increases to 5.34% with 80% participation in Medicare plans.

Option 2: Fund on a pay-as-you-go basis for the biennium.

Required Contribution Rates						
Biennium	Increase Begins FY 2014			Increase Begins FY 2016		
	State (Current Rate 1%)	Active Employee (Current Rate 0.65%)	District (Current Rate 0.55%)	State (Current Rate 1%)	Active Employee (Current Rate 0.65%)	District (Current Rate 0.55%)
FY 2014-15	1.49%	0.97%	0.82%	1.00%	0.65%	0.55%
FY 2016-17	1.49%	0.97%	0.82%	1.98%	1.29%	1.09%

This chart projects no retiree premium increases. Note the rates if delay until FY 2016.



TRS-Care Study Options 3-5

For all retirees

Option 3: Retiree pays full cost for optional coverage.

For Medicare retirees

Option 4: Require participants to purchase Medicare Part B.

The standard Part B premium is \$99.90 per month for 2012.

Option 5: Opt out of Medicare plans consequence.

If 80% participation rate in initial year, the remaining 20% would be automatically enrolled in the Medicare plans in the following year and those who opt out would be enrolled in TRS-Care 1.



TRS-Care Study Options 6-9

For non-Medicare retirees – Options 6-9:

Non-Medicare retirees, which make up 34% of the TRS retiree population, cost almost 6 X more than Medicare-eligible retirees.

Option 6: Tighten eligibility requirements.

Add a minimum age requirement of 62 or 60 for new retirees to enroll in TRS-Care.

Option 7: TRS-Care 1 only for non-Medicare Retirees

Option 8: Defined contribution for non-Medicare Retirees; establish a Health Reimbursement Account.

Option 9: TRS-ActiveCare for non-Medicare Retirees

Projections indicate that TRS-ActiveCare premiums would need an overall increase of 5% in FY 2014.



TRS Active-Care

- TRS-ActiveCare was created in 2001 and is funded by:
 - State contribution \$ 75 per month
 - School district contribution \$150 per month (minimum)
 - Employees Premiums
- The state contribution has remained the same since 2001 and is funded to the districts through the school finance formula.
- Premium increases
 - Since 2002, there have been five rate increases--- approximately 5% in 2003-2004, 7.5 % in 2007-2008, 4.5% in 2009-2010, 7% in 2010-2011, 9.5% in 2010-2011, and effective September 1, 2012, increases are 4%, 6%, and 9% for ActiveCare 1,2,3.



TRS Active-Care Plan Design

- TRS-ActiveCare 1
 - \$1,200 deductible; 80% network/60% non-network plan coinsurance; \$2,000 coinsurance maximum
- TRS-ActiveCare 1-HD
 - \$2,400 deductible; 80% network/60% non-network plan coinsurance; \$3,000 coinsurance maximum
- TRS-ActiveCare 2
 - \$750 deductible; \$150 per day hospital copay; 80% network/60% non-network plan coinsurance; \$30 office visit copay/\$50 specialist copay; \$2,000 coinsurance maximum; managed drug card program
- TRS-ActiveCare 3
 - \$300 network deductible, \$500 non-network deductible; \$150 per day hospital copay; \$20 office visit copay/\$30 specialist copay; \$1,000 network coinsurance maximum, \$3,000 non-network coinsurance maximum; managed drug card program



TRS-ActiveCare Participation

Entities Participating

Entity Type	# Eligible	# Participating	% Participating
Less than 500	820	805	98.2%
500 – 1,000	111	96	86.5%
More than 1,000	98	48	49.0%
Charter	190	146	76.8%
RSC	20	20	100.0%
Other Ed	5	5	100.0%
Total	1,244	1,120	90.0%



TRS Active-Care Cost Drivers

- Increase in number of participating entities and employees
- Increase in medical costs
- Increase in pharmacy costs
- State and district contribution toward premium not linked to industry trend
- Technology increases and development of new biogenetic drugs



Pension Trust Fund Status

- With the global economic decline, the TRS pension trust fund had decreased to \$70.6 billion, as of February 28, 2009.
- As of August 31, 2012, the fund was valued at \$111.5 billion.
- While the fund is secure, it is not “actuarially sound.” This means that the Legislature may not increase benefits to members or retirees.
- As of August 31, 2012, the fund could make benefit payments to 2065 under current funding.



Actuarial Valuation

- Investment rate of return decreased to 7.4% in 2012 (from 15.5% in 2011). The assumed rate of return is 8.0%.
- The trust fund's unfunded liability is \$26.1 billion (from \$24.1 billion in 2011) with a funded ratio of 81.9% (from 82.7 % in 2011).
- 30-year Annual Required Contribution rate (ARC) for the state increased to 8.62% of pay (from 8.13% in 2011).
 - Assumes member rate continues at 6.40%
 - Effective split rate between employers and employees would be 7.60%.
- Funding period continues to be "Never"

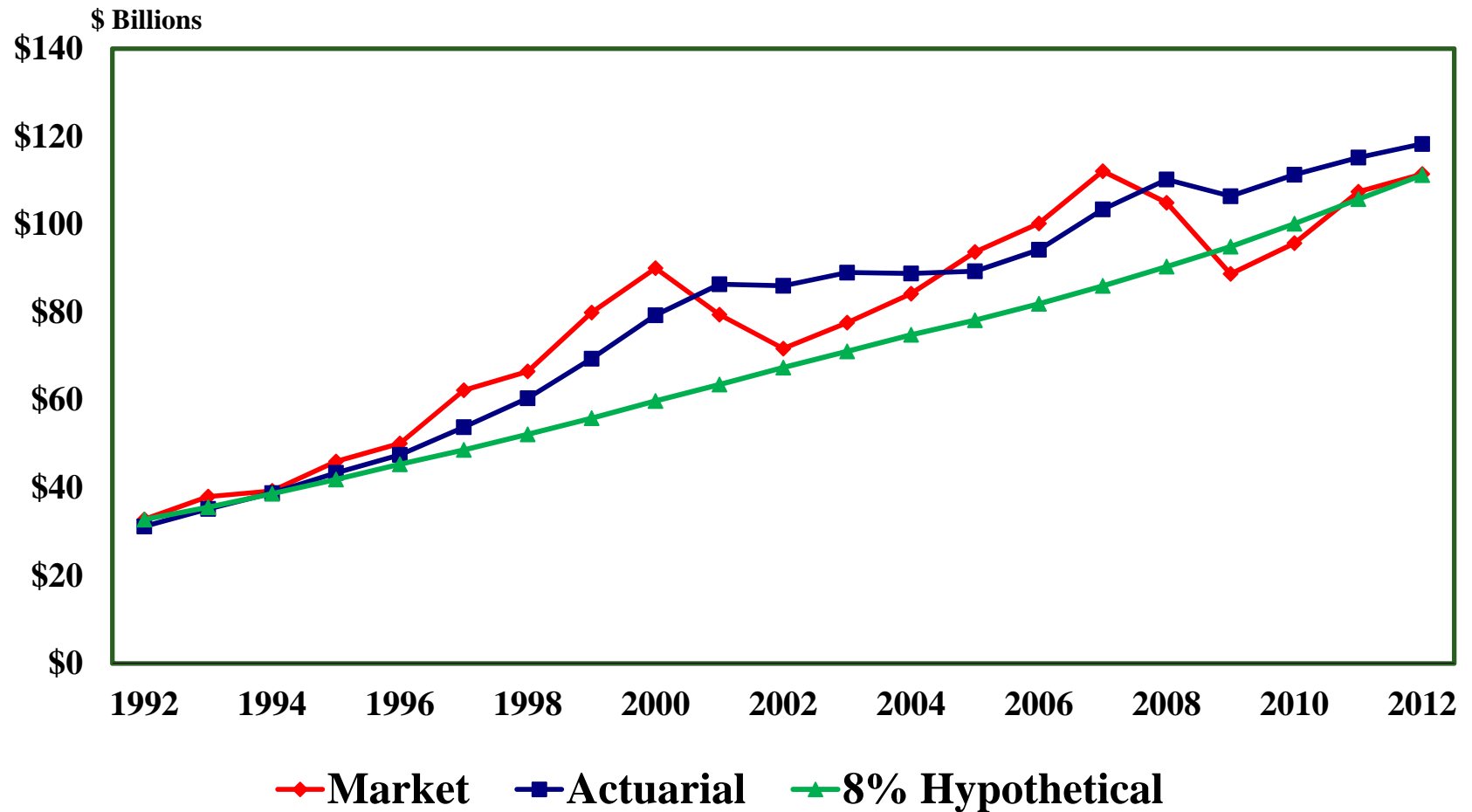


Actuarial Valuation

- Normal cost remains 10.6% of pay. With a total contribution rate of 12.8% (state & member each at 6.4%), the 2.2% difference helps pay down the unfunded liability of the plan.
- Total deferred net investment gains (losses)
 - at August 31, 2009 = \$(23.1) billion
 - at August 31, 2010 = \$(15.6) billion
 - at August 31, 2011 = \$(7.8) billion
 - at August 31, 2012 = \$(6.9) billion
- TRS actuarial valuations mitigate short-term fluctuations in rates of return through a process called “smoothing.” This allows the impact of annual gains and losses to be recognized over a five-year period.
- If there are no offsetting actuarial gains, TRS’s funded ratio of 81.9% should decrease over the next four years.



Market and Actuarial Values of Assets



8% Hypothetical assumes 8% had been earned on market every year since 1992, all cash flows unchanged

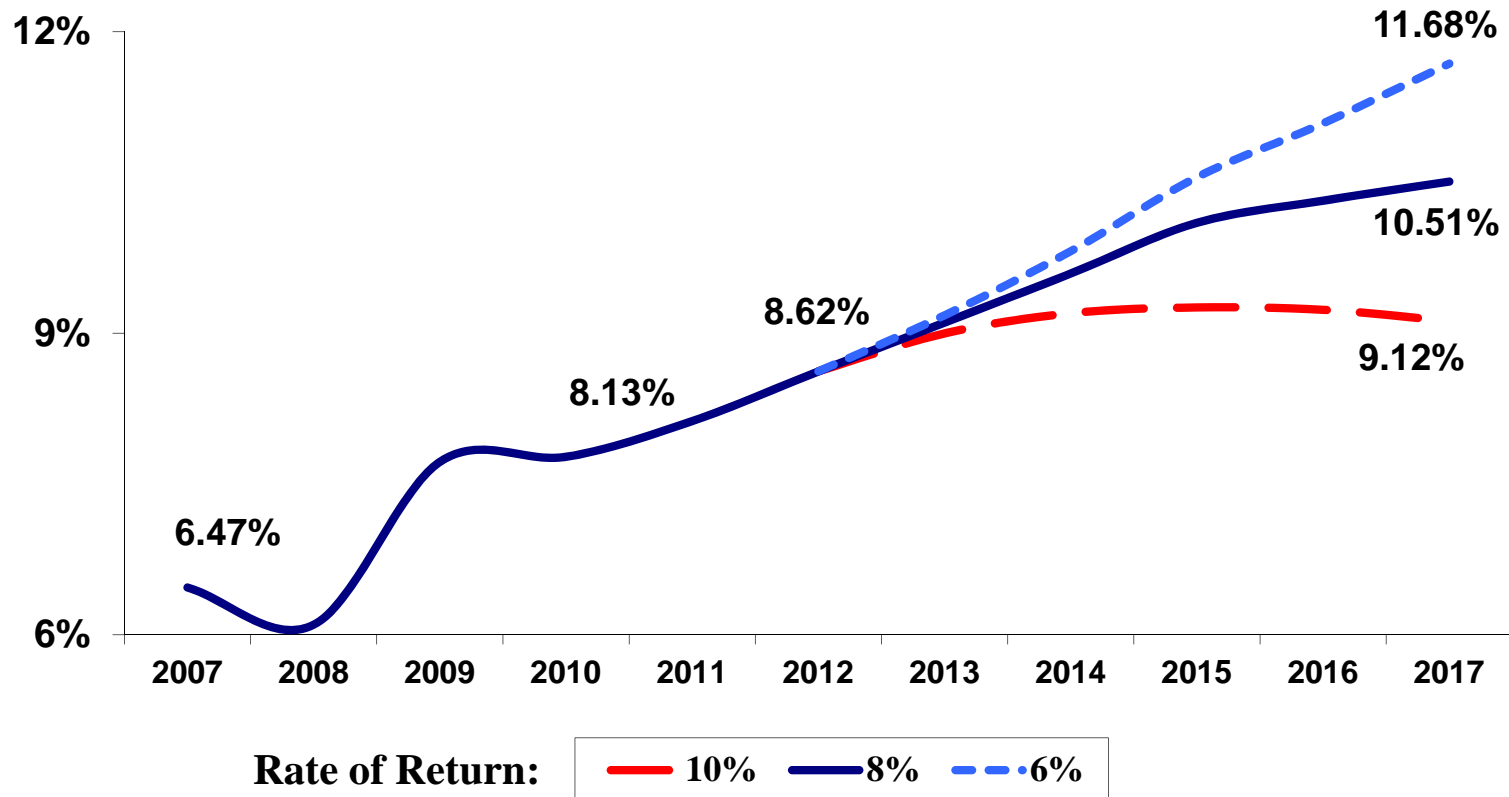


Next Year Projections

	Market Return for 12-month period ending August 31, 2013						
	16%	12%	8%	4%	0%	-4%	-8%
UAAL	\$27.1	\$28.3	\$29.7	\$30.6	\$30.5	\$32.3	\$33.2
Funded Ratio	82.1%	81.3%	80.4%	79.8%	79.2%	78.6%	78.1%
Funding Period based on 6.40%/6.40% rate	Never	Never	Never	Never	Never	Never	Never
30-Year employer ARC	8.68%	8.88%	9.11%	9.25%	9.40%	9.54%	9.68%

The TRS Actuary recommends the Legislature begin making moderate increases in the contribution rates (state, member, or both).

Estimated Changes in ARC Rates Over Next Five Years



- Expected ARC at each valuation date based on stated return during each year
- Assumes continuation of 6.4% State contribution rate
- Constitutional Maximum = 10.00% State contribution rate



Pension Benefit Design Study

The pension benefit design study charge directed TRS to examine the actuarial and fiscal impacts of:

- Changing the benefit factors of the current plan, which includes changes in retirement eligibility and the final average salary and benefit multiplier provisions of the current plan; and
- Moving to an alternative plan design, such as a cash balance plan or defined benefit-defined contribution hybrid plan.



Pension Benefit Design Study

Significant Factors

- TRS contribution rates are among the lowest in the nation.
- Two significant periods are 1980-1995, during which the state contribution rate ranged from 7.1% to 8.5%, and 1996-2007, during which the state contributed the constitutional minimum of 6.0%.
- Over the past 25 years, the TRS pension plan has earned a return of approximately 8.6% despite a decade of highly volatile markets. TRS assumed return rate is 8.0%.
- The Texas Constitution requires that the state and members regularly contribute to TRS, and neither have taken a “funding holiday.”



Pension Benefit Design Study

Features to Control Plan Liabilities

Present	<ul style="list-style-type: none"> TRS has never enacted an automatic cost-of-living adjustment (COLA). No permanent COLA since 2001.
2011	<ul style="list-style-type: none"> Purchase of most types of service credit requires payment of actuarial cost
2005, 2011	<ul style="list-style-type: none"> Controlling salary “spiking”
2005	<ul style="list-style-type: none"> Retirement age: For members joining after 8-31-07, member must be at least age 60 and meet the rule of 80 to retire without actuarial reductions.
2005	<ul style="list-style-type: none"> Final average salary (FAS): For most members, retirement benefits now are calculated using a 5 year FAS instead of a 3 year FAS.
2005	<ul style="list-style-type: none"> Service credit purchases: Members may no longer purchase up to 3 years of service credit (“air time”) to reach retirement eligibility earlier or increase benefit amount.
2005	<ul style="list-style-type: none"> Eligibility for a partial lump sum increased to a Rule of 90.
2005	<ul style="list-style-type: none"> Enacted the nation’s toughest laws regarding return-to-work after retirement. Public education employers who hire retirees must pay TRS pension and health care surcharges.



Pension Benefit Design Study

Finding 1: While the TRS Pension Fund can pay benefits through 2065, the state needs to begin addressing the unfunded liability. Delays will only increase costs.

- The current funded ratio (ratio of assets to liabilities) exceeds 80% but will trend downward over time without a change in contribution rates, investment returns, or benefit levels.
- Current funding policy of a 6.4% state contribution and 6.4% member contribution is insufficient to amortize the current \$26.1 billion unfunded actuarially accrued liability (UAAL).
- Changing benefits only for new hires does not have an immediate impact on the current UAAL (may have a long-term impact). Adjusting benefits for active members does have immediate impact.



Pension Benefit Design Study

Defined Benefit Representative Changes for Current Active Members (updated since release of study to reflect latest valuation)

Provision	Representative Change	Unfunded Liability	State Contribution Rate for Actuarial Soundness*
Current Provisions as of August 31, 2012		\$26.1B	8.62%
Retirement Eligibility For Current Members Not Yet Eligible to Retire	From Rule 80 & Minimum Age 60 to Rule of 80 & Minimum Age 62	\$13.9B	6.35%
Salary Averaging Period	From 5 Years to 7 Years	\$23.0B	7.77%
Accrual Multiplier	From 2.3% Per Year to 2.0% Per Year	\$24.5B	7.26%
Member Contribution Rate	From 6.4% Per Year to 7.4% Per Year	\$25.4B	7.80%

* State contribution rate for actuarial soundness is based on smoothed assets and is the rate necessary to pay for new benefit accruals and amortize the unfunded liability of \$26.1 billion over a period that is less than 31 years.



Pension Benefit Design Study

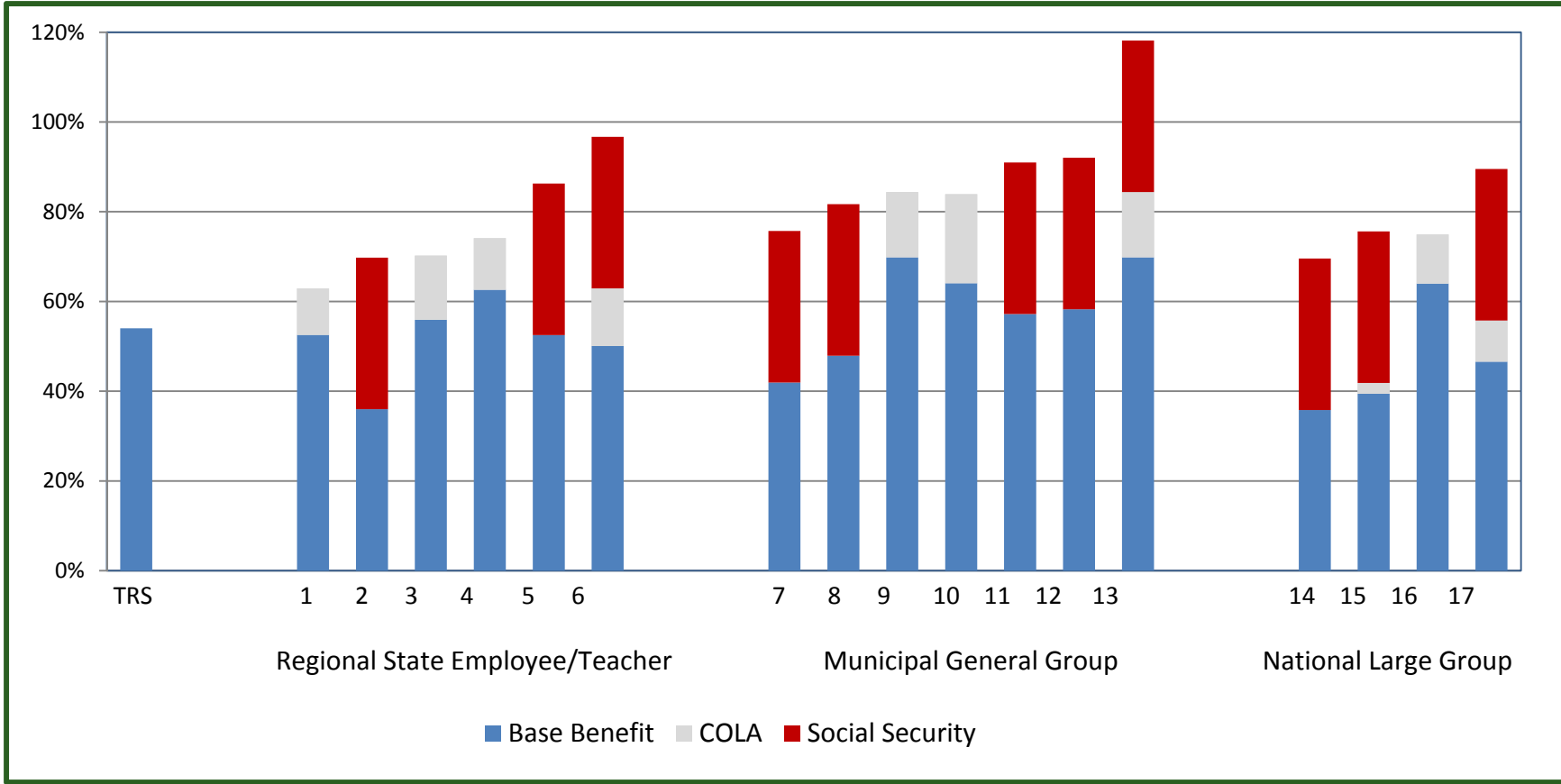
Finding 2: The value of the TRS retirement benefit is 36% less than the average benefits of members of peer systems.

- A prototypical TRS career employee (retires at age 62 with 32 years of service credit) receives a lifetime benefit that equates to 52% of pre-retirement income (after losing purchasing power).
- The average peer plan benefit TRS studied was 82% of pre-retirement income.
- The main reason: TRS retirees do not have Social Security or COLAs.



Pension Benefit Design Study

TRS Benefit Relative to Peers





Pension Benefit Design Study

Alternative Plans Overview

Structure	Features	Risk	Unfunded Liability
Cash Balance Plan	Member receives pay and investment credits into a “virtual account.” Contributions invested through TRS trust fund. At retirement account balance can be annuitized.	Shared between member and state	\$24.1 B
Side by Side Hybrid	Members and State contribute to both a small defined benefit plan and a small defined contribution plan with the idea that both plans, together, provide the targeted level of benefits. Defined benefit contributions are invested through TRS trust fund. The defined benefit is annuitized. Defined contribution investments are self-directed and are taken as lump sum at retirement.	Shared between member and state	\$24.1 B
Capped Hybrid	Similar to Side by Side Hybrid, but the State contribution is capped. All contributions from the members and the State go first towards paying the actuarially required contribution (ARC). Any remaining contributions after ARC is paid go toward defined contribution plan. Members are responsible for paying any portion of the ARC above the State’s capped contribution.	Shared between member and state	\$24.1 B
Pooled Defined Contribution	Like a traditional defined contribution plan but contributions are pooled and invested by TRS. Lump sum distribution is taken at retirement.	Member	\$35.8 B
Traditional Defined Contribution	Investments are self-directed and member must manage account for duration of retirement.	Member	\$35.8 B

Note: Modeling on this page is based on 2011 TRS Actuarial Valuation



Pension Benefit Design Study

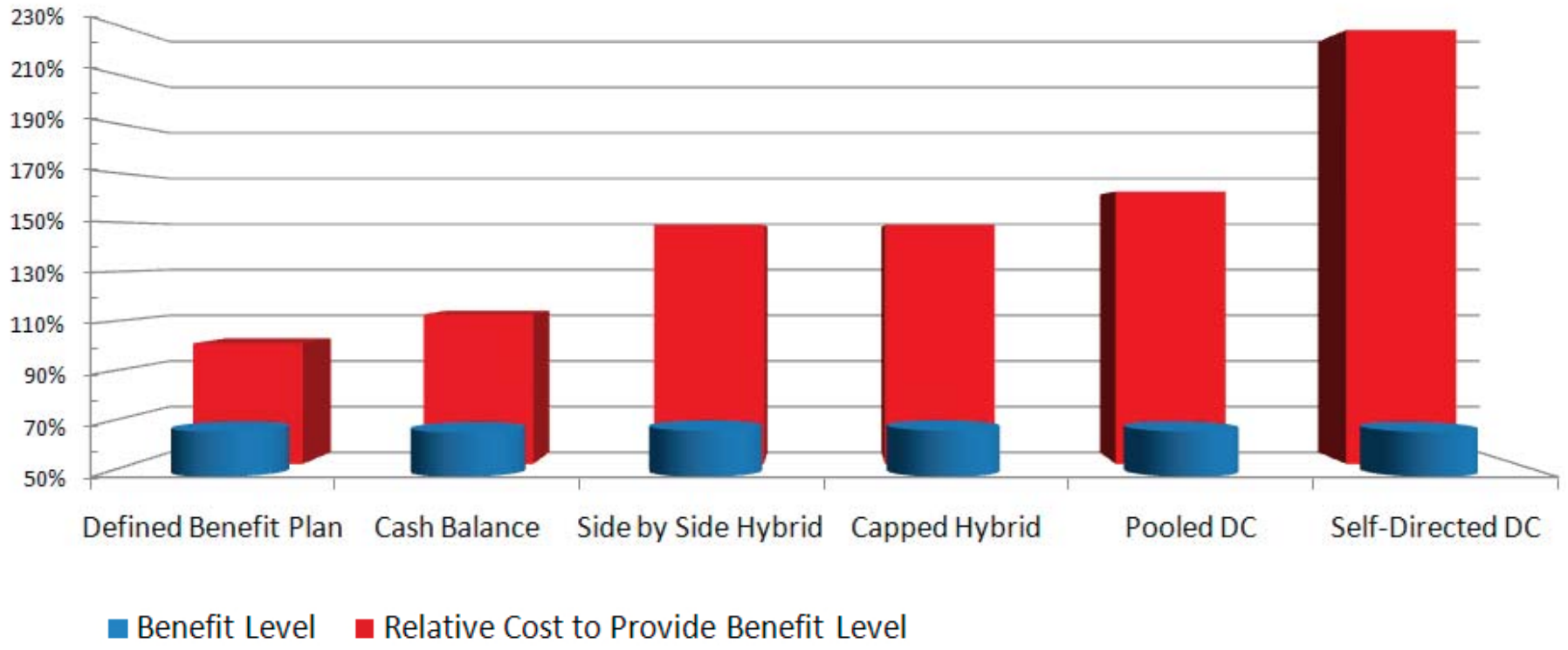
Finding 3: The TRS defined benefit plan provides current benefits at a lower cost than alternative plans.

- The current defined benefit replaces roughly 68% of a career employee's pre-retirement income before loss of purchasing power.
- Other alternative plan structures are from 12% to 138% more expensive than the current plan (not including the cost to pay off any unfunded liability) to provide the same level of benefits.
- TRS determined that when the alternative plans were modeled to cost the same as the current plan, they replaced 27.7% to 59.7% of pre-retirement income for a career employee retiring at age 62.



Pension Benefit Design Study

Targeted Benefit Approach

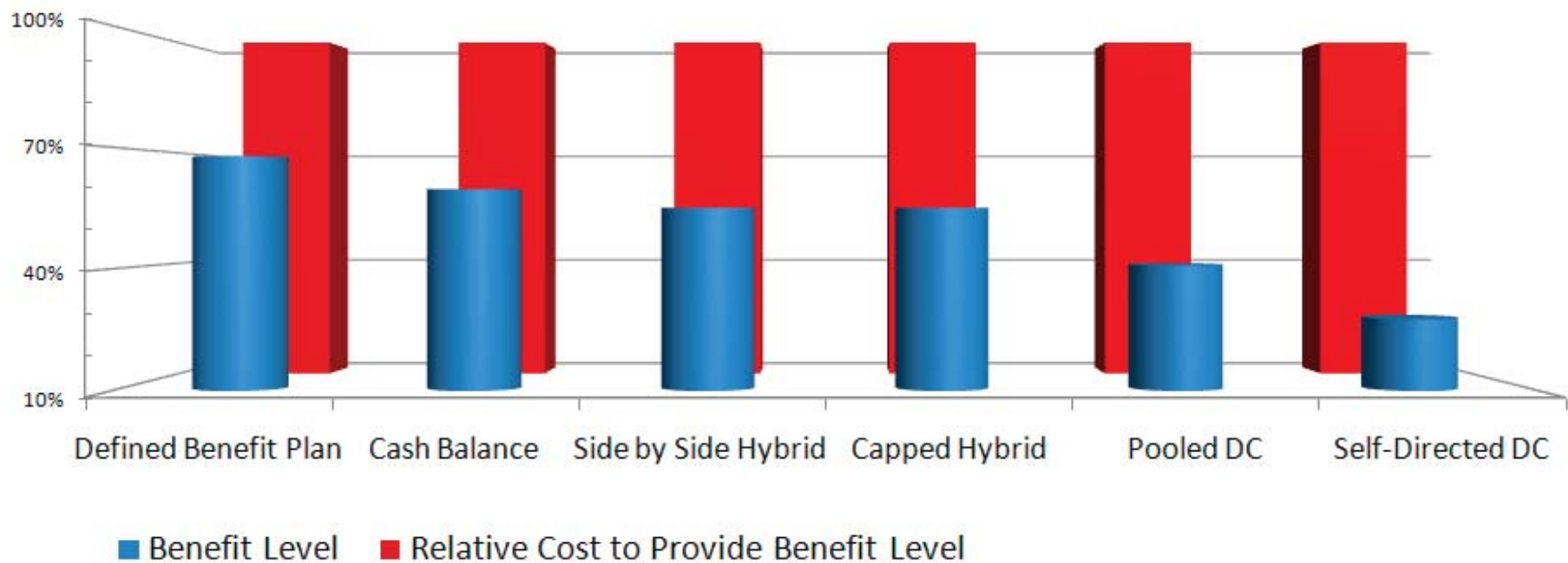


Source: Teacher Retirement System of Texas and Gabriel, Roeder, Smith & Company



Pension Benefit Design Study

Targeted Contribution Approach



Source: Teacher Retirement System of Texas and Gabriel, Roeder, Smith & Company



Pension Benefit Design Study

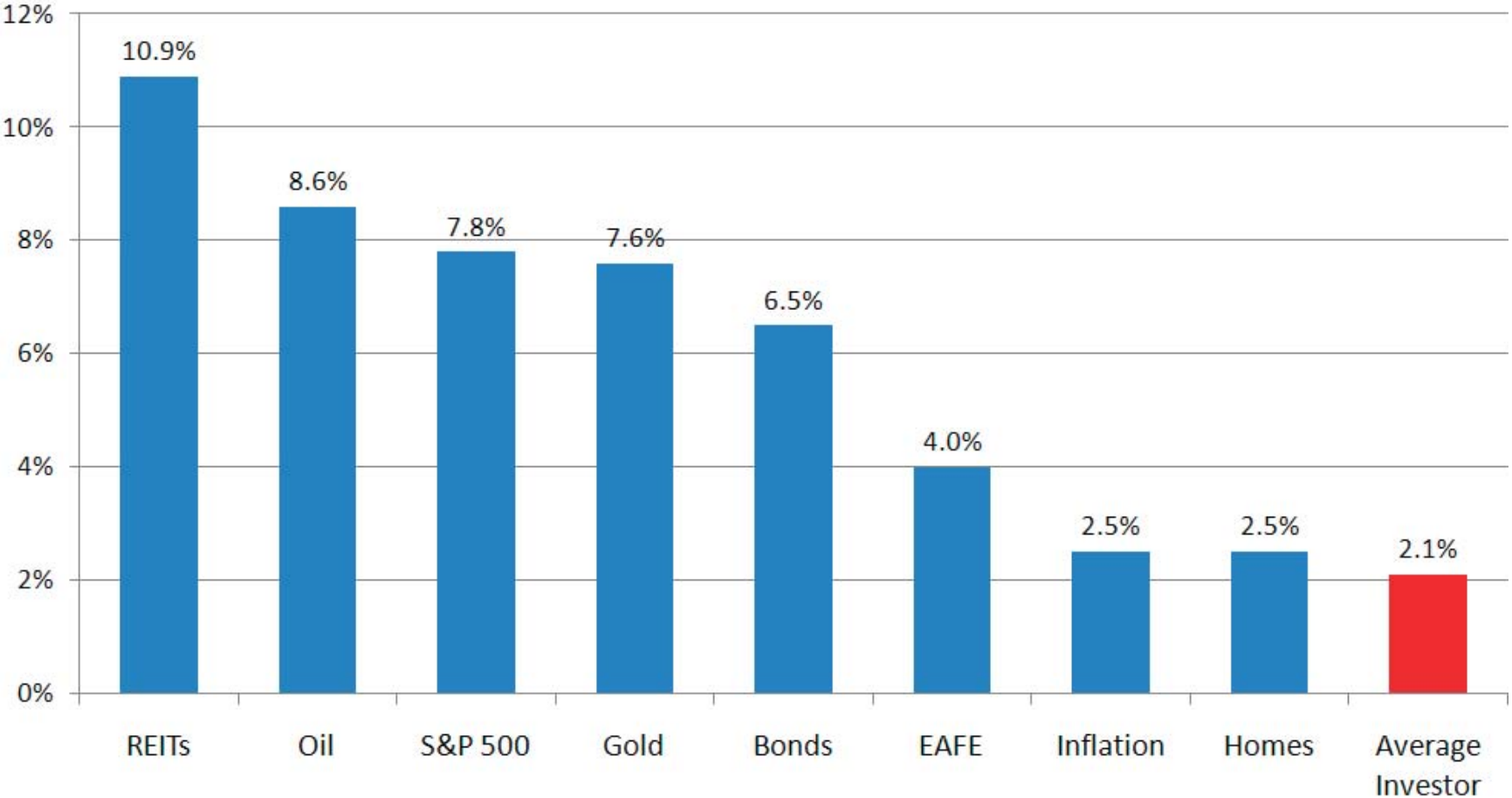
Finding 4: The majority of TRS members will do significantly worse investing on their own in a plan with a defined contribution component.

- Based on modeling, for members in a plan with a defined contribution component, the spread of returns would likely be very wide.
- An estimated 2/3's of the members would earn returns below 60% of the current defined benefit, while over 90% would accrue less than their estimated current annuity.
- Only about 8% of the members would accrue an annuity that exceeds the current defined benefit plan.
- The estimated underperformance is due to lower investment returns from a shorter investment period, access to fewer classes, less disciplined investment approaches, and potentially higher fees.



Pension Benefit Design Study

20-Year Annualized Returns by Asset Class (1992 - 2011)



Source: J.P. Morgan Guide to the Markets, Q3 2012.



Pension Benefit Design Study

- In a defined contribution plan, poor investment choices or not enough savings will likely cause the employee to have to continue working past normal retirement age.
- Market timing is important – in which economic cycle are the investment returns adequate.
- Members who retire with inadequate retirement savings in a defined contribution plan could have difficulty with retirement self-sufficiency and have to rely on public services.
- These potential outcomes shift some of the longevity and poverty risk back to the employer and taxpayers.



Pension Benefit Design Study

Finding 5: Alternative plan structures carry differing levels of risk for the state and TRS members.

- While alternative plan structures, as modeled, are more expensive than the current plan to provide a comparable level of benefit, they can shift risk away from the state and to the members who become responsible for managing their own investments for the remainder of their lives.
- Other risks are how to manage the unfunded liability of the old defined benefit plan, the regular transition of workers into retirement at a manageable pace, and diminished retirement income could increase use of social services.



Pension Benefit Design Study

Finding 6: Other states changing structures have lowered benefits to realize savings.

- TRS identified six systems that moved to an alternative plan.
 - Georgia Employees Retirement System, Kansas Public Employees Retirement System, Louisiana State Employees Retirement System, Michigan Public School Employees Retirement System, Rhode Island Employees Retirement System, and Utah Retirement System.
- TRS measured the systems' benefit levels before and after the changes and determined that benefits were reduced by an average of 30% as part of moving to an alternative plan.



Pension Benefit Design Study

Finding 7: Moving new hires to an alternative plan will not eliminate existing plan liabilities.

- TRS' unfunded liability represents benefits earned by current participants; therefore, the state cannot eliminate the unfunded liability by closing the plan to new hires. Regardless of plan structure, the unfunded liability will have to be addressed eventually by paying it off or a reduction of benefits.
- If the state were to close the current plan to new hires, then the plan's liquidity needs will increase as the plan matures, and the liability is expected to grow by an estimated **\$11.7 billion** due to lower investment returns from a less effective asset allocation.



Pension Benefit Design Study

Finding 8: Approximately 95% of TRS public school members do not participate in Social Security, leaving the TRS benefit as their only lifetime annuity.

- Non-participation in Social Security saves Texas public school employers an estimated \$1.5 billion annually.
- The level of benefit offered governs mandatory Social Security participation. Therefore, if benefits were reduced enough, the state could find itself in a situation where it must contribute to a pension plan, as required by the Texas Constitution, and the school districts and members must each contribute 6.2% to Social Security.



Pension Benefit Design Study

Other issues

- While the Texas Constitution, Article XVI, Section 67, does not mandate that TRS operate as a defined benefit plan, the Constitution does provide operational and funding requirements such as the 10% state maximum contribution rate and requiring the TRS board to invest the funds in accordance with its fiduciary duty.
- New accounting standards from Governmental Accounting Standards Board (GASB) will impact how the state reports TRS' unfunded liability.



Budget Update

FY 2014-15 Legislative Appropriations Request:

- For the pension trust fund, the base request assumes a state contribution rate of 6.4% each year and assumes payroll growth of 0% per year for public education and 2% per year for higher education.
- An exceptional item requests that the contribution rate be increased to 6.9% for FY 2014 and 7.4% for FY 2015 and is consistent with recommendations made by the TRS actuary in the past three biennia. Each 1.0% increase costs approximately \$250 million per year in general revenue.
- For retiree health insurance (TRS-Care), the base request assumes a state contribution rate of 1.0% for FY 2014 and 0.5% for FY 2015 with the same payroll growth assumptions as noted above.



Budget Update

FY 2014-15 Legislative Appropriations Request (cont'd):

- An exceptional items request increases the state contribution by 0.5% in 2015, consistent with the statutory contribution rate of 1.0%. The cost is approximately \$125 million more than the base request.
- Because of recent policy changes, the TRS-Care Fund should remain solvent through the FY 2014-15 biennium. However, there will be significant funding issues for FY 2016 and beyond.
- The administrative budget for TRS is funded entirely from the Pension Trust Fund and no General Revenue is being requested. The FY 2014-15 request does include 13 additional FTEs for workload-related issues and a request for \$25 million as the second increment in a three biennia plan to replace legacy computer systems for the benefits administration and financial systems.