



Retirement Systems of Minnesota

Minnesota State Retirement System • Public Employees Retirement Association • Teachers Retirement Association

Presentation to the State Board of Investment

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PRESENTED BY

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Retirement systems' mission + impact on state

- Retirement security for Minnesota public employees: teachers, state workers, city/county employees, police and fire
- Attract and retain skilled, experienced public employees who make possible a high-quality education system and excellent public services

Retirement systems...

- Serve nearly a half-million Minnesotans
- Distribute more than \$3 billion annually to 182,000 benefit recipients

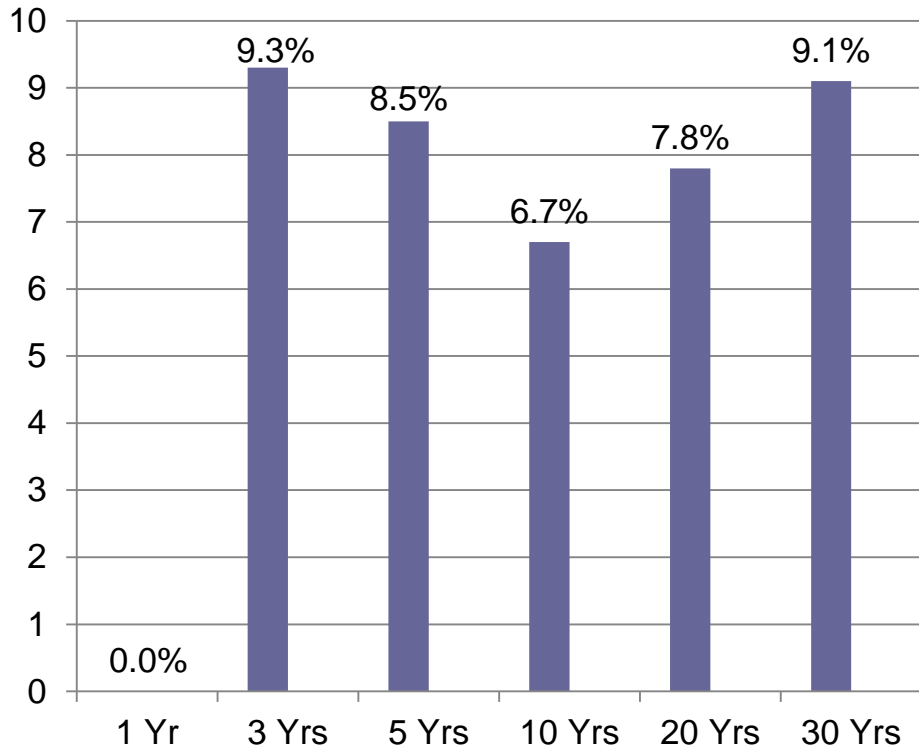
Economic impact

- About 90 percent of public-sector retirees live in Minnesota and pay taxes here, supporting local communities throughout the state
- \$7 billion impact on state economy
- 46,581 jobs
- \$1.2 billion annually in federal, state and local revenue



State Board of Investment returns

Periods ending 12/31/15



SBI returns by asset class

(10-year period ending 12/31/15)

Domestic stocks	7.2%
International stocks	3.6%
Alternatives	11.2%
Bonds	4.8%
TOTAL FUND	6.7%

SBI returns exceed other public funds

Annualized returns

(for periods ending 12/31/2015)

	3 Yr	5 Yr	10 Yr	20 Yr	25 Yr
SBI	9.3%	8.5%	6.7%	7.8%	8.9%
Public pension median	7.5%	7.0%	5.8%	7.2%	8.3%

Investment returns critical to funding

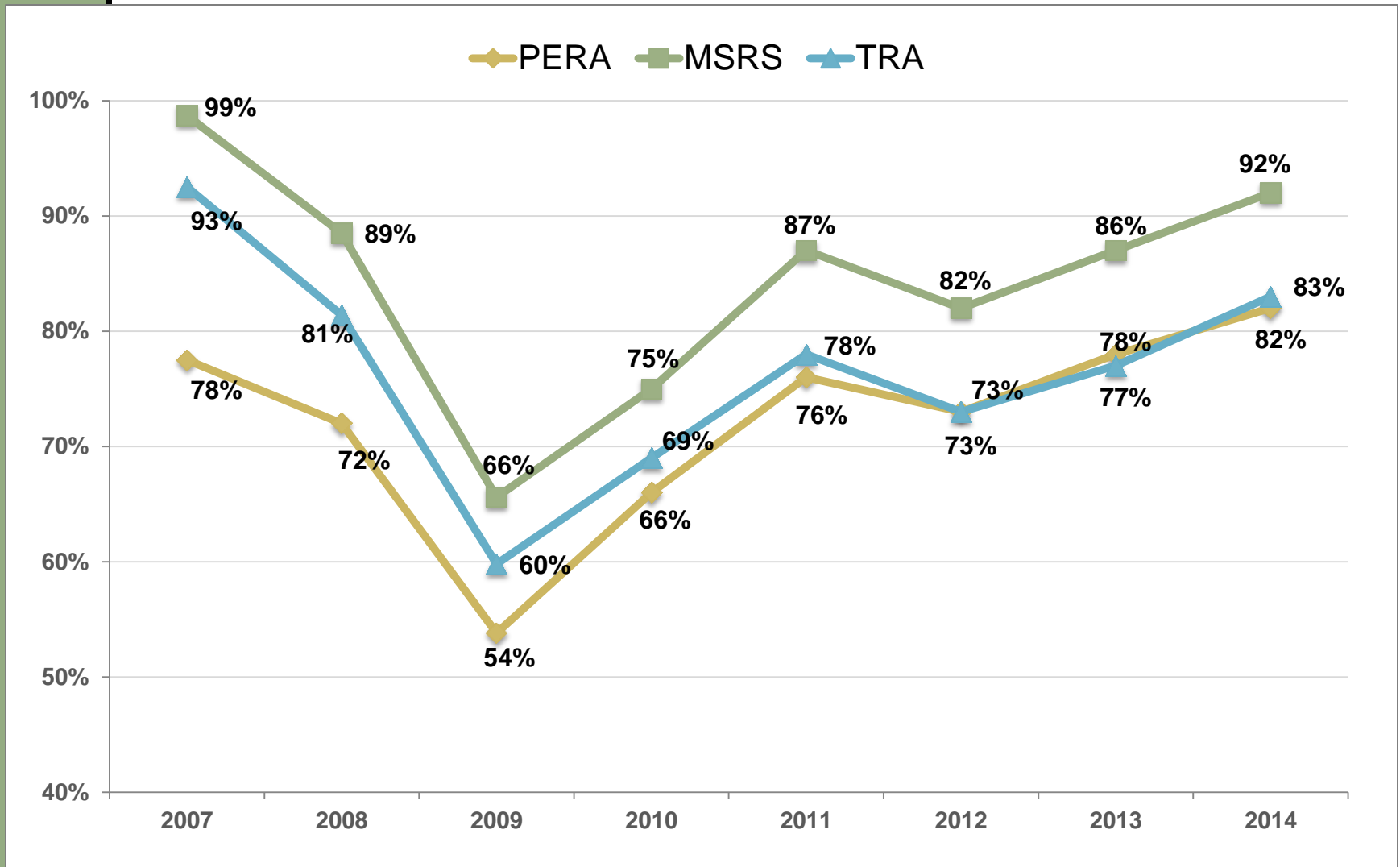


Sources of MN public pension fund revenue, 1990-2015
(PERA, MSRS, TRA)

National public pension average:
(Source: National Association of State Retirement Administrators)



Funds rebound from market downturn



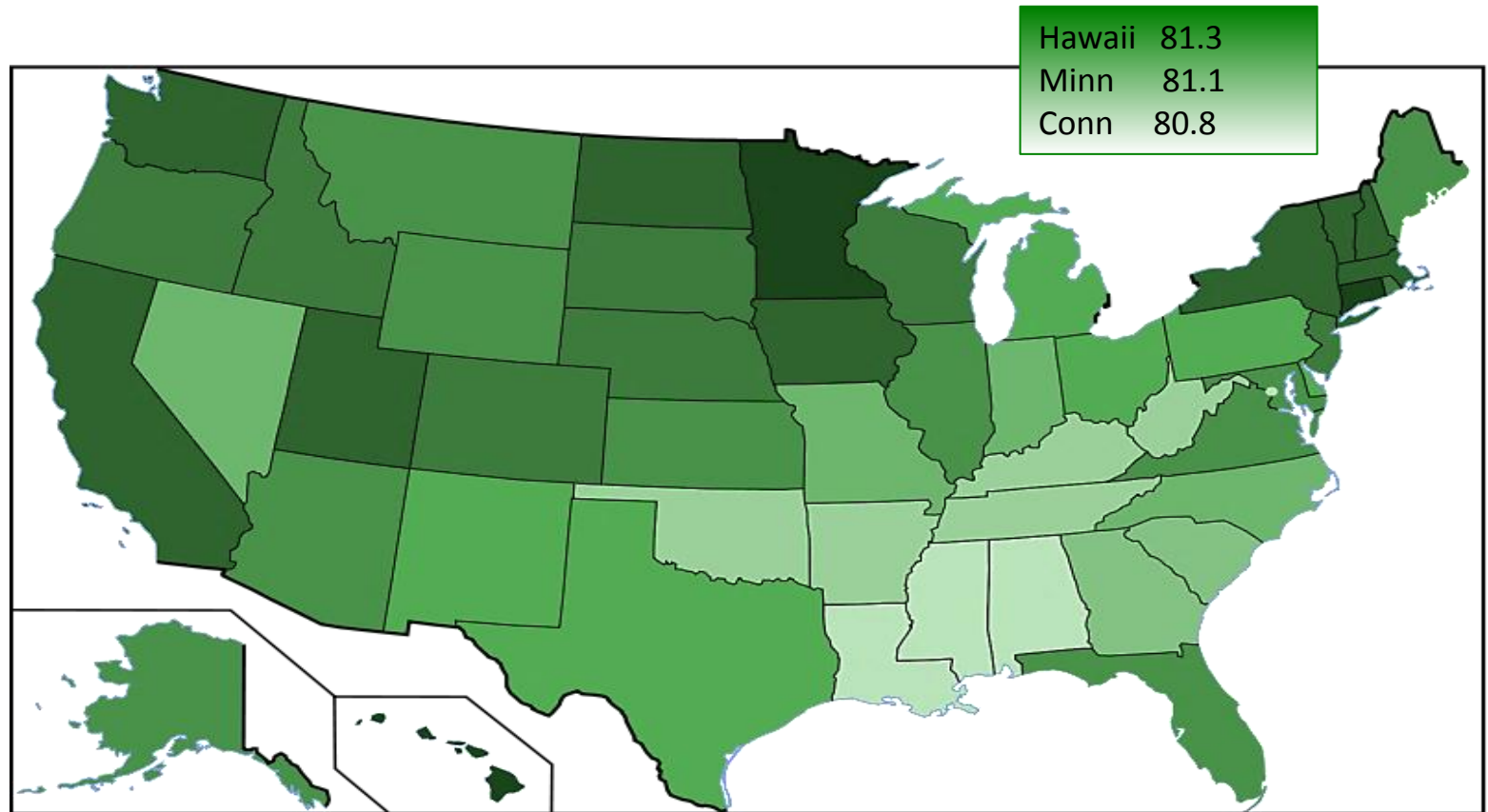
Experience study results

- Recently system actuaries completed experience studies which periodically evaluate actual vs expected experience with economic and demographic actuarial assumptions.
- Assumptions are long-term estimates that look to the future and cover 30-50-year projection periods.

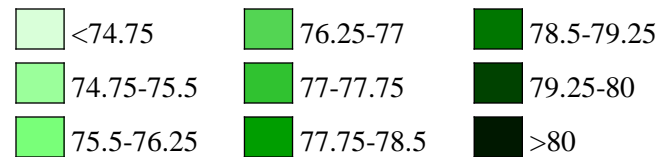
Experience study recommendations:

- Lower general wage inflation and payroll growth assumption from 3.75 percent to 3.5 percent.
- Lower long-term investment return assumption to 8 percent.
- Recognize mortality improvements (longer lifespans) occurring now and in the future. Members and retirees are living much longer – on average an extra **two years**.

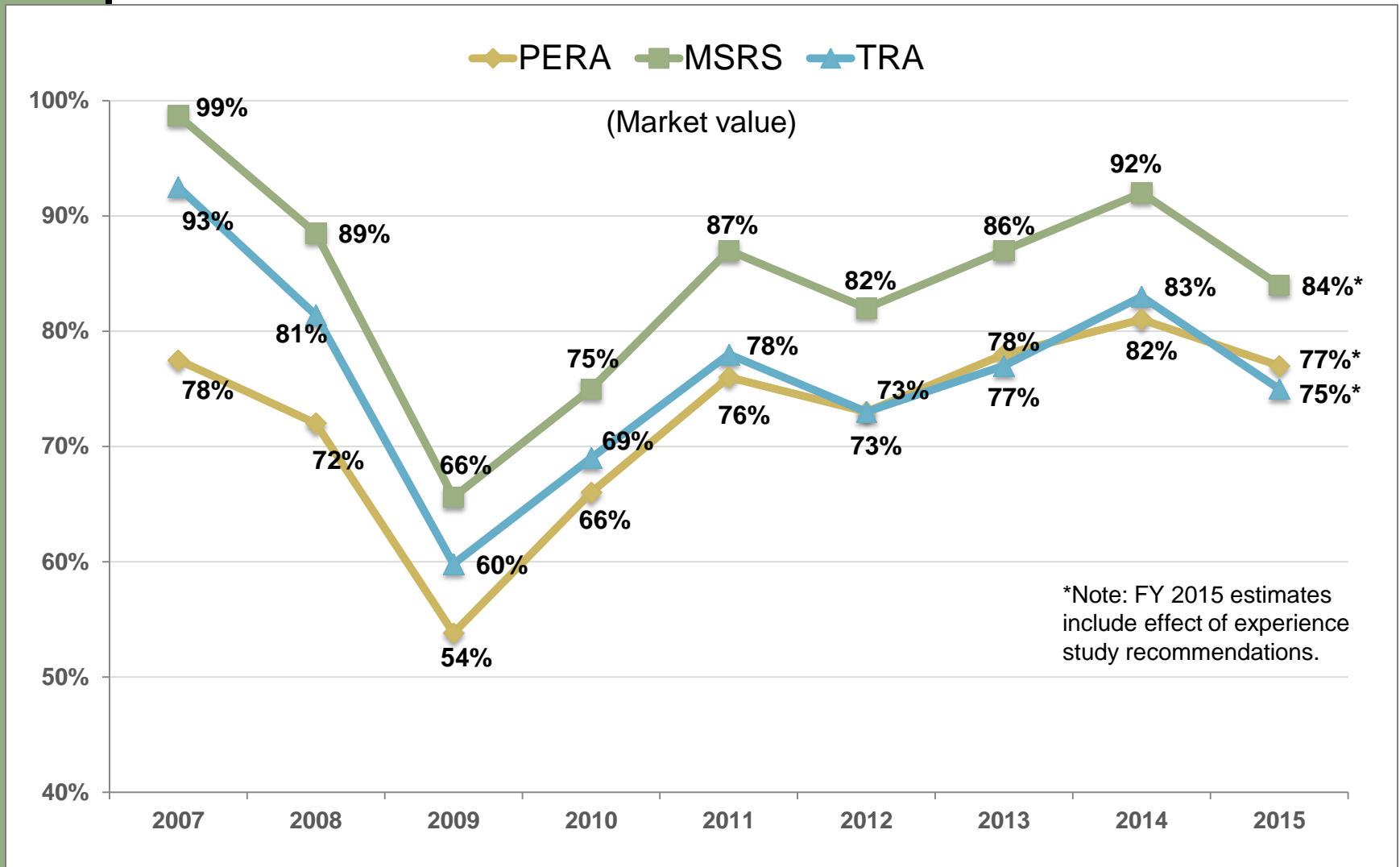
Geographic variations in life expectancy at birth



Legend:



Funding ratios: Impact of assumption changes



Experience study: Cost impact on MSRS General Plan (market value)

<u>MARKET VALUE</u>	7/1/14 valuation	7/1/15 valuation (with all assumption changes except mortality) *	7/1/15 valuation (with all assumption changes including mortality)
Actuarial accrued liability	\$12.4 billion	\$13.1 billion	\$13.8 billion
Market value of assets	\$11.5 billion	\$11.6 billion	\$11.6 billion
Funded ratio	92.4%	88.9%	83.9%
Total required contribution as % of pay	10.0%	11.5%	13.8%
Employee plus employer contributions	11.0%	11.0%	11.0%
Sufficiency / (deficiency) as % of pay	1.0%	(0.5%)	(2.8%)

* Assumption changes include 8% investment return, lower wage/salary growth.

MSRS sustainability proposals

GOAL: Improve funded ratios and address deficiencies caused by economic and mortality changes.

MSRS General Plan

- Contribution rates starting July 1, 2017
 - Employee: Increase from 5.5 percent to 6 percent (\$13.6 million)
 - Employer: Increase from 5.5 percent to 7 percent (\$40.9 million)
- COLA (also applies to Unclassified Plan and Legislator's Plan)
 - Reduce COLA from 2.0 percent to 1.75 percent
 - Eliminate automatic trigger raising COLA to 2.5 percent

RESULT: Lowers MSRS liabilities by \$400 million, eliminates deficiency and creates small sufficiency

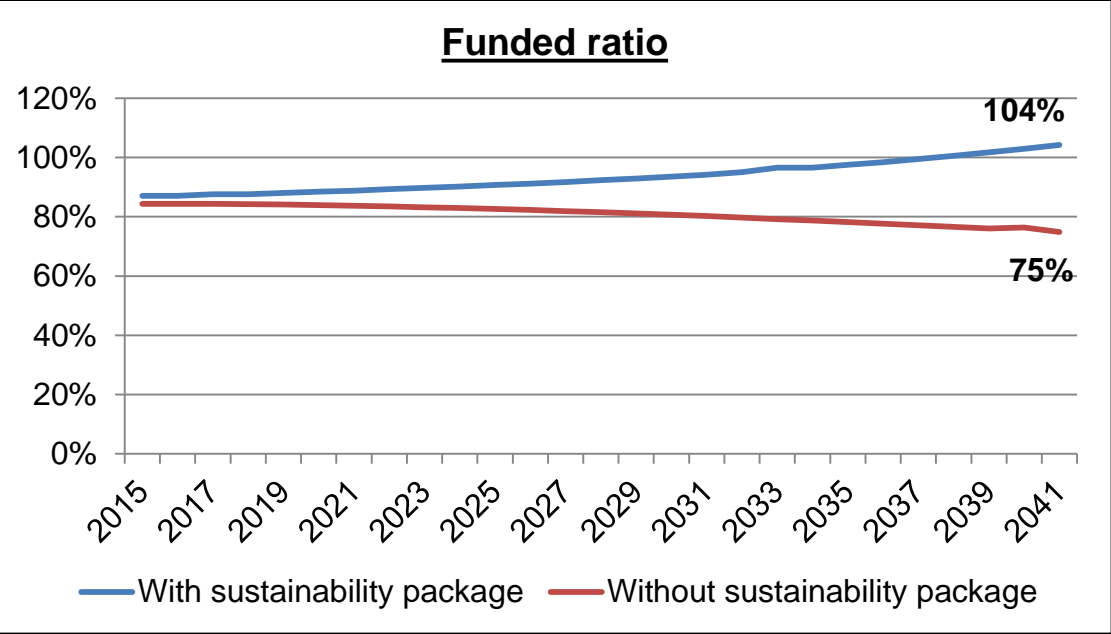
MSRS Correctional Plan

- COLA
 - Reduce COLA from 2.0 percent to 1.75 percent
 - Eliminate automatic trigger raising COLA to 2.5 percent

MSRS Judges Plan

- \$6 million appropriation request

MSRS: Impact of sustainability measures



<u>MARKET VALUE</u>	7/1/15 valuation (with all assumption changes including mortality)	7/1/15 valuation (estimated) with sustainability measures
Actuarial accrued liability	\$13.8 billion	\$13.4 billion
Market value of assets	\$11.6 billion	\$11.6 billion
Funded ratio	83.9%	87.0%
Total required contribution as % of pay	13.8%	12.5%
Employee plus employer contributions	11.0%	13%
Sufficiency / (deficiency) as % of pay	(2.8%)	0.5%

Experience study: Cost impact on TRA (market value)

<u>MARKET VALUE</u>	7/1/14 valuation	7/1/15 valuation (with no assumption changes)	7/1/15 valuation (with all assumption changes)*
Actuarial accrued liability	\$24.5 billion	\$25.6 billion	\$27.1 billion
Market value of assets	\$20.3 billion	\$20.4 billion	\$20.4 billion
Funded ratio	82.7%	80.0%	75.4%
Total required contribution as % of pay	15.7%	16.7%	20.5%
Employee plus employer contributions	15.7%	16.0%	16.0%
Sufficiency / (deficiency) as % of pay	(0%)	(0.7%)	(4.5%)

* Assumption changes include 8% investment return, lower payroll/salary growth and mortality improvements.

TRA sustainability proposals

TRA

Contribution rates

- Employee: Unchanged (7.5 percent)
Employer: Increase from 7.5 percent to 8.5 percent, effective 7/1/17, \$43 million per year

COLA – Affects **both** retirees and current actives

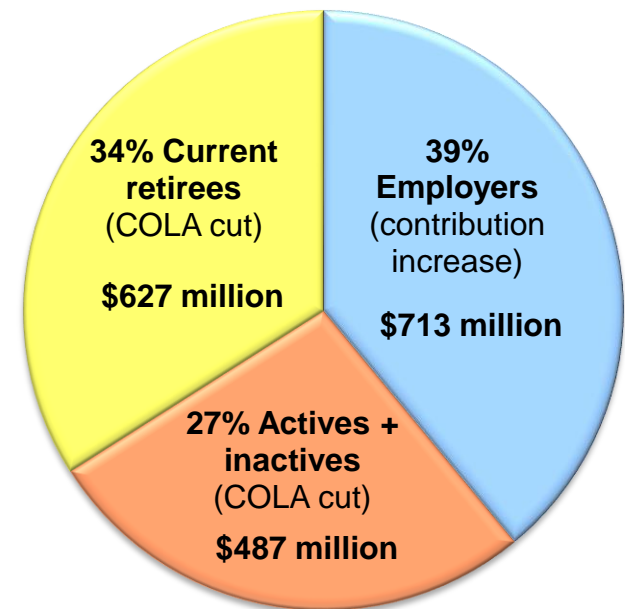
- Reduced COLA from 2 percent to 1 percent for 5 years, 1.75 percent after, effective 1/1/17
- Eliminate automatic trigger raising COLA to 2.5 percent

Amortization period: 30 years (2046)

RESULT:

- Reduces deficiency by 4.2 percent of pay
- Saves \$1 billion in liabilities
- Eliminating COLA trigger reduces required contributions by 1% of pay
- Attains 100 percent funded goal in 30 years

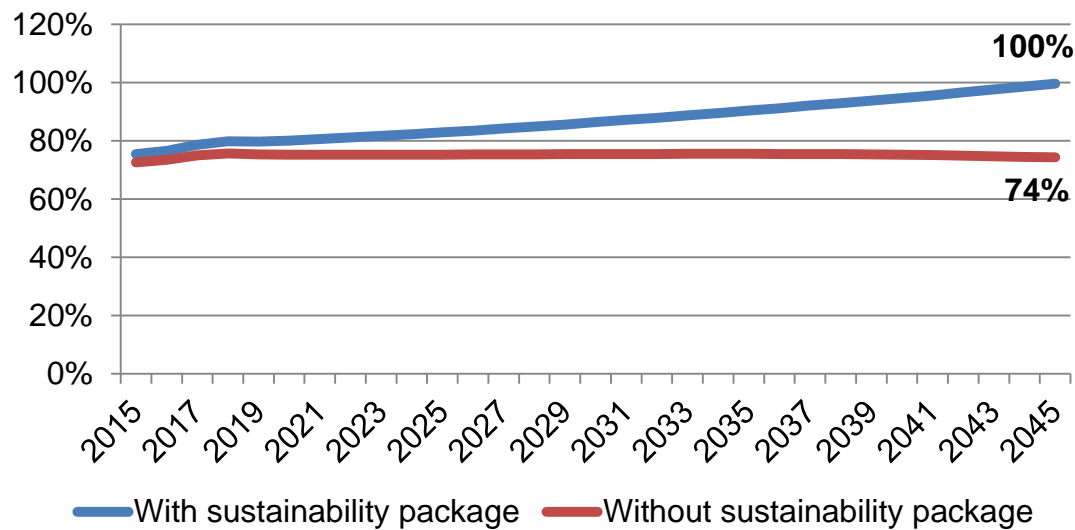
TRA SUSTAINABILITY PLAN:
Portion of solution borne by each group*



*Present value of contributions and benefit cuts over 30 years

TRA: Impact of sustainability measures

Funded ratio



<u>MARKET VALUE</u>	7/1/15 valuation (with all assumption changes)*	7/1/15 valuation (estimated) with sustainability measures
Actuarial accrued liability	\$27.1 billion	\$26.1 billion
Market value of assets	\$20.4 billion	\$20.4 billion
Funded ratio	75.4%	78.4%
Total required contribution as % of pay	20.5%	17.3%
Employee plus employer contributions	16.0%	17.0%
Sufficiency / (deficiency) as % of pay	(4.5%)	(0.3)%

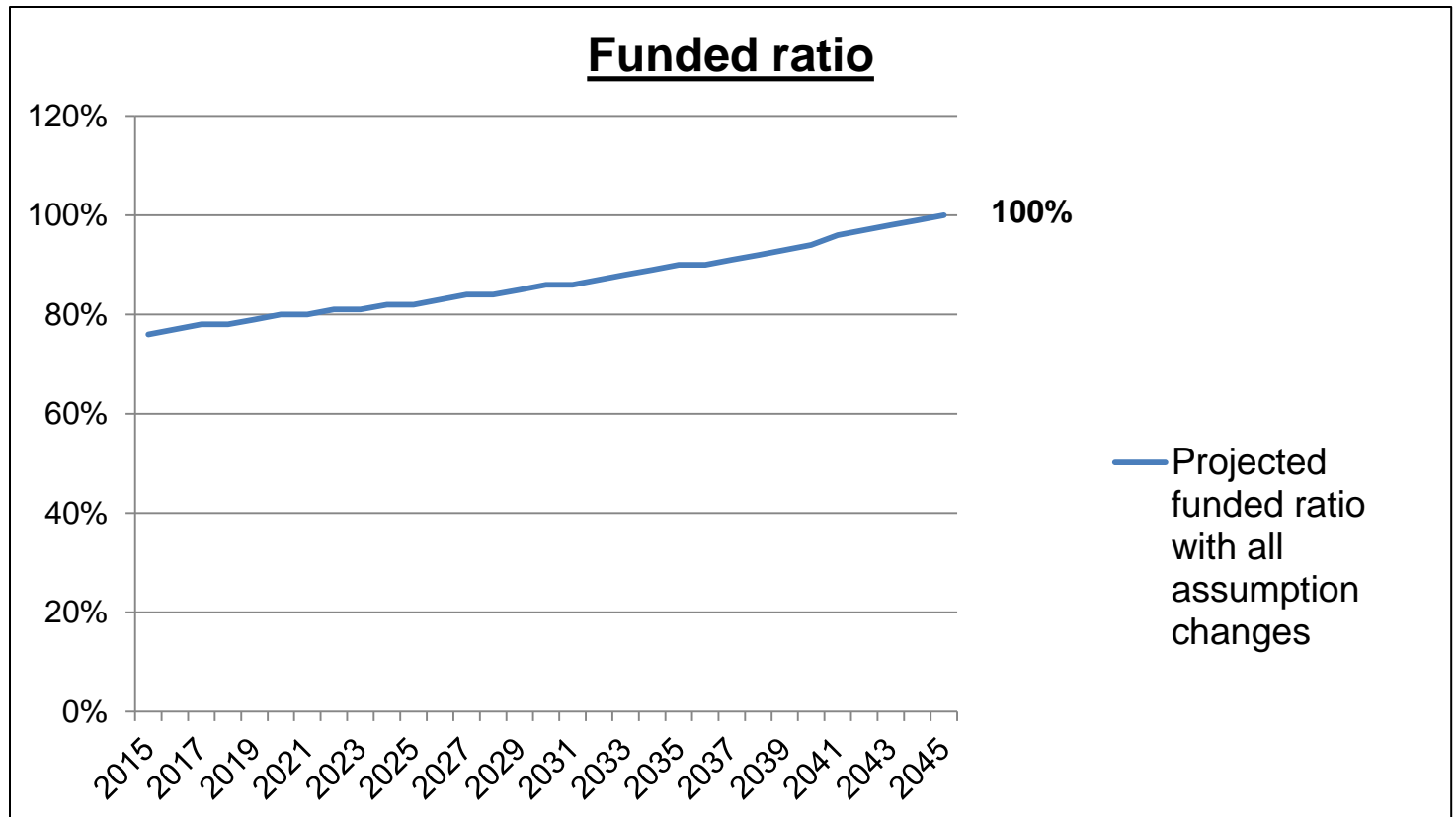
Experience study: Cost impact on PERA General Plan (market value)

<u>MARKET VALUE</u>	7/1/14 valuation	7/1/15 valuation (with all assumption changes except mortality) *	7/1/15 valuation (with all assumptions including mortality)
Actuarial accrued Liability	\$21.3 billion	\$23.6 billion	\$24.1 billion
Market value of assets	\$17.4 billion	\$18.6 billion	\$18.6 billion
Funded ratio	81.8%	78.9%	77.2%
Total required contribution as % of pay	13.2%	15.0%	15.4%
Employee plus employer contributions	13.7%	14.7%	14.7%
Sufficiency / (deficiency) as % of pay	0.5%	(0.3%)	(0.7%)

* Assumption changes include 8% investment return, lower wage/salary growth.

PERA: Monitoring financial status

- Plan sufficiently stable now, no immediate need for corrective action
- Meeting with stakeholder groups



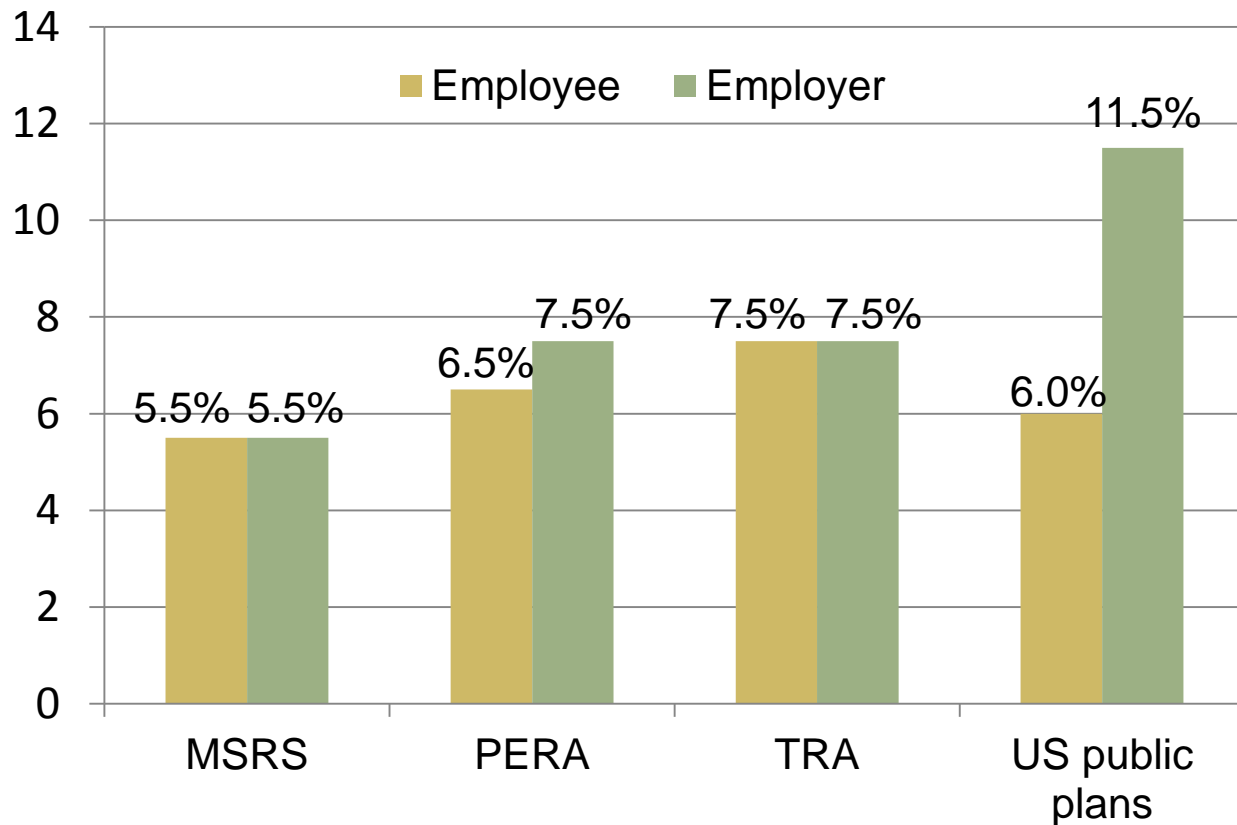
Previous + proposed reforms save \$8.2 billion

- Minnesota one of the first states to enact pension reforms in wake of Great Recession.
- Took bold corrective action in 2010-2013 with bipartisan support.

Plan	Liability reduction 2010-2013	Liability reduction (proposed) 2016
MSRS General	\$ 650,000,000	\$ 400,000,000
MSRS Correctional	\$ 45,000,000	\$ 31,000,000
MSRS State Patrol	\$ 97,000,000	
MSRS Judges Plan	\$ 38,000,000	
PERA General	\$ 2,800,000,000	
PERA P&F	\$ 1,082,000,000	
PERA Correctional	\$ 15,000,000	
TRA	\$ 1,750,000,000	\$ 1,000,000,000
TOTAL	\$ 6,819,000,000	\$ 1,431,000,000

* Reduction in liabilities for all current active and retired members

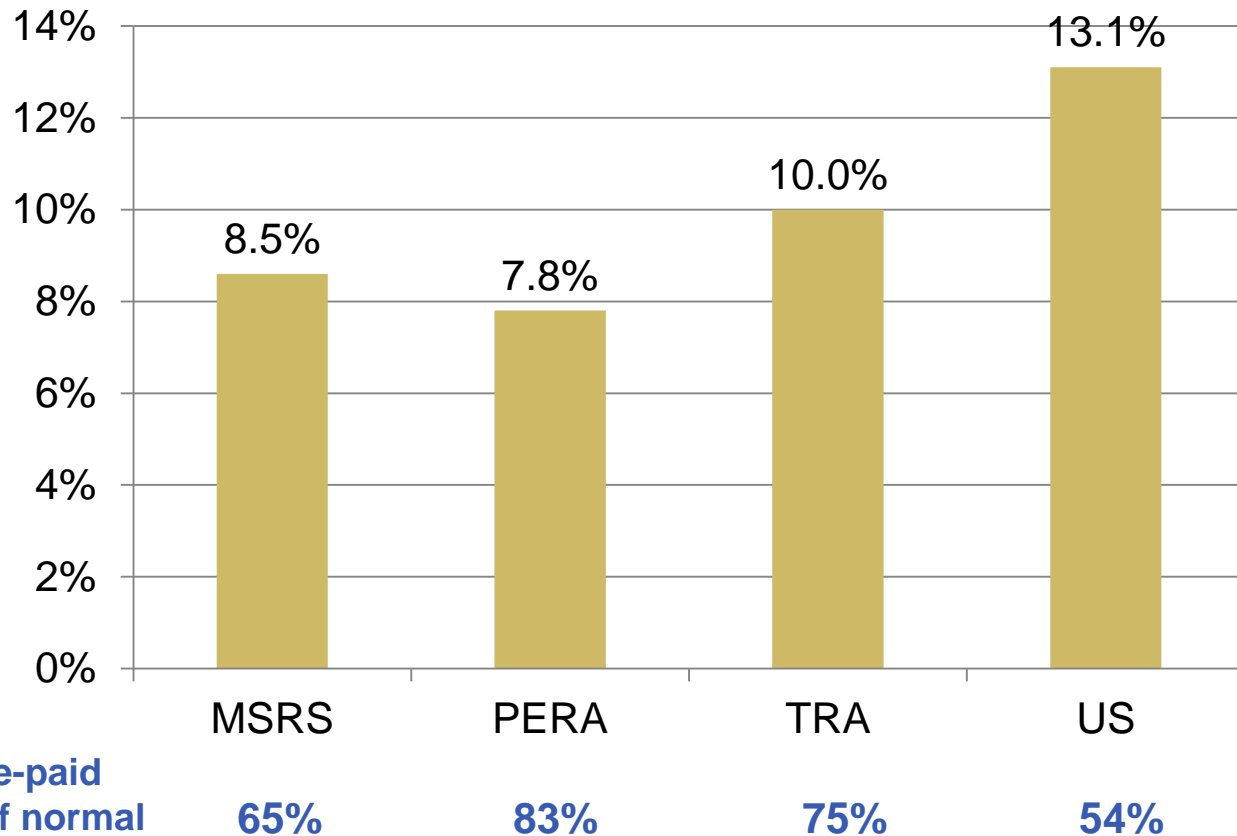
Employer contribution rates in MN lower



Source: NASRA FY2014 for Social Security-covered plans

Employees pay higher portion of costs

Normal cost comparison



Employee-paid
portion of normal
costs

Sources: NASRA, FY2014 for Social Security-covered plans (U.S.); Minnesota retirement systems FY2015 estimates reflecting all assumption changes.

Minnesota: Unlike other states

- **Disciplined funding.** Problems are corrected as they occur, with positive effect on state's bond rating.
- **Proactive pension reforms.** 2010-2013 sustainability legislation was critical, cost savings: over \$6.4 billion
- **Modest benefits.** The average pension for PERA is \$1,100/month; for MSRS, \$1,600/month; for TRA, \$2,200. Minnesota pension systems moved to a very high (age 66) normal retirement age over 24 years ago which has lowered costs.
- **Employer contributions** in Minnesota are 2 percent of state and local government spending, compared to 3.7 percent in other states. (Census Bureau)
- **Benefits promote self-sufficiency** and reduce elder poverty and long-term health care costs.