MICHIGAN OFFICE OF RETIREMENT SERVICES

Big Plans. Small Steps.

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House Financial Liability Reform Committee
March 22, 2017

MICHIGAN DEPARTMENT OF
DTMB TECHNOLOGY, MANAGEMENT AND BUDGET

Who We Are

Our Purpose Statement

ORS is an innovative retirement organization driven to empower our customers for a successful today and a secure tomorrow.

Who We Are

RANKING

18th largest public pension system in the U.S.

24th largest pension system in the U.S.
48th largest pension system in the world

ASSETS

$74.1 Billion

all systems
Defined Benefit (DB), Hybrid, Defined Contribution (DC) and Retiree Healthcare

MEMBERS

550,000

all systems

PAID IN '16

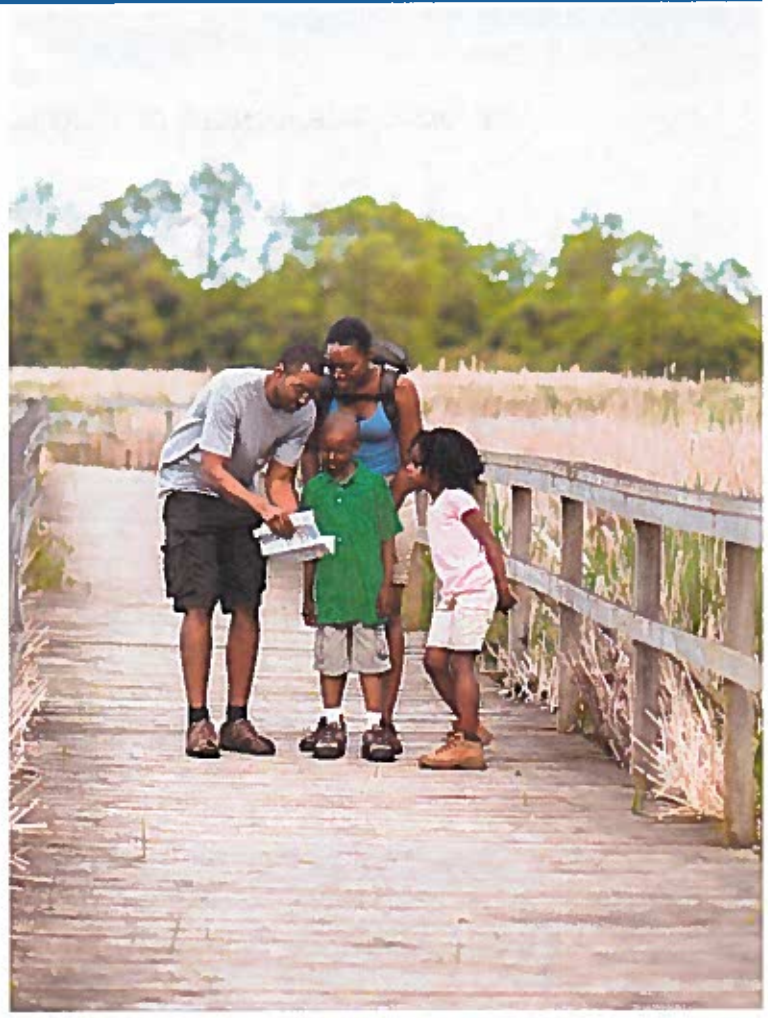
$7.3 Billion

in pension and healthcare benefits

Guiding Principles

1. Good public policy promotes financial security in retirement.

   → Our retirement programs provide our valuable members with **a means for a secure future**.



Guiding Principles

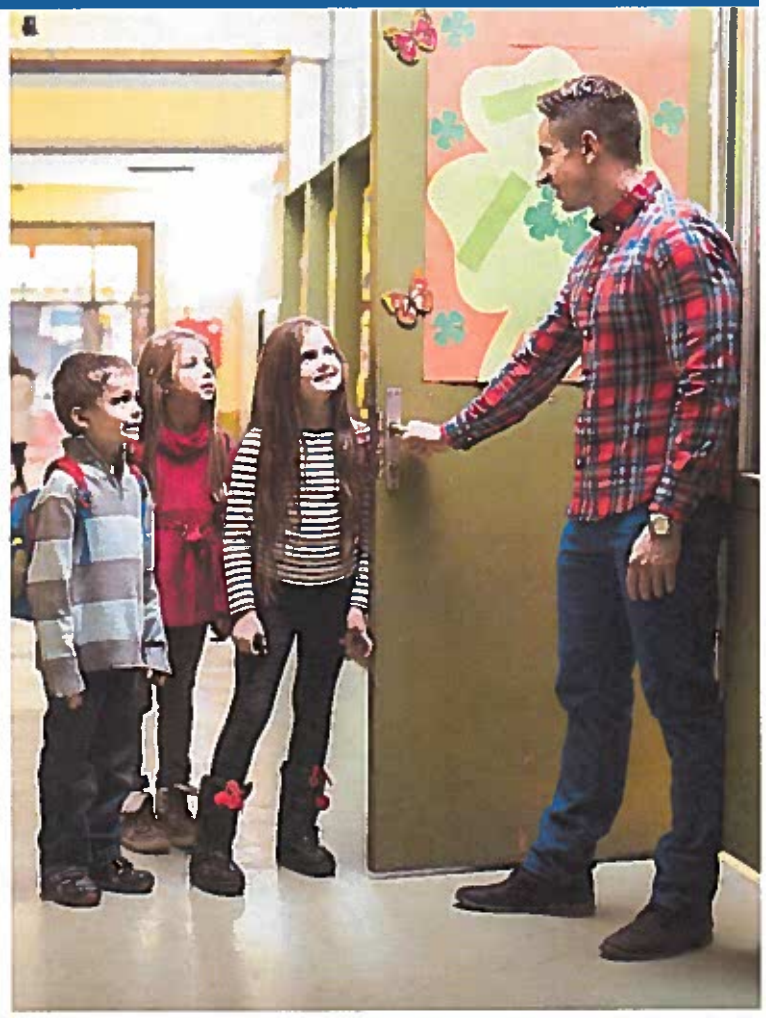
2. Planning for healthcare is critical for financial security in retirement.

   → More than **250,000** individuals are enrolled in our healthcare plans, which we review regularly to ensure we provide **quality plans** while **keeping costs low**.

Guiding Principles

3. Retirement benefits are valuable for employers in providing a quality workforce.

   → Our retirement and related retiree healthcare plans help more than **800** Michigan employers **attract**, **retain**, and **reward** a highly qualified workforce.



Guiding Principles

People who are unable to be self-sufficient in retirement:

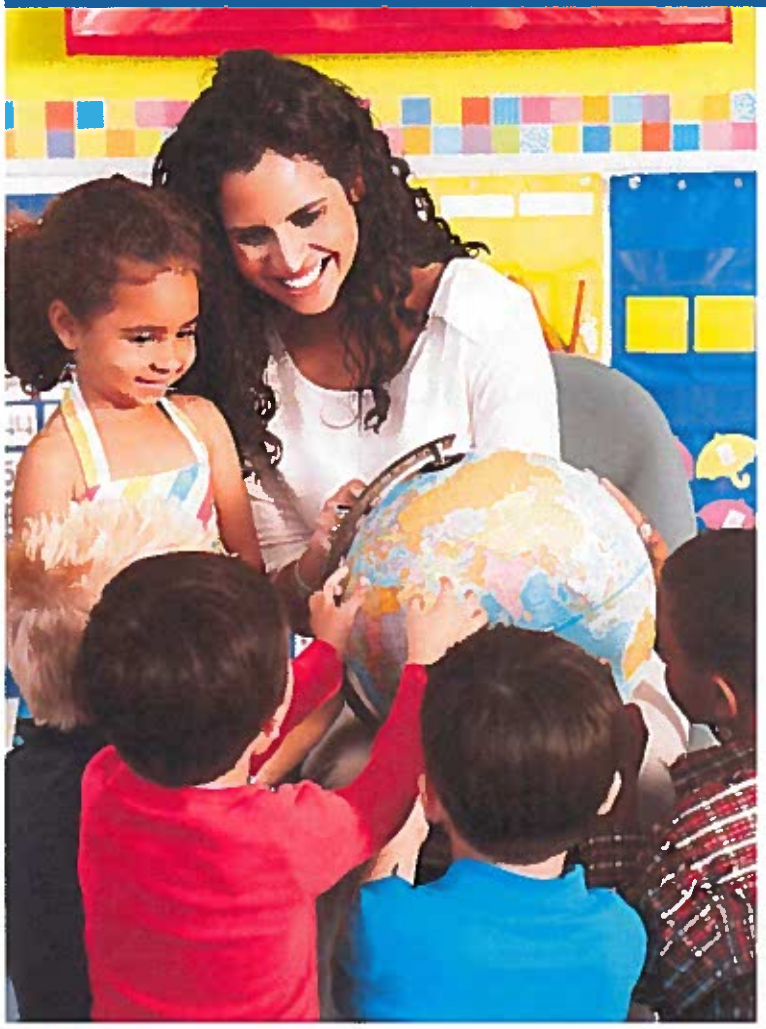
- Work indefinitely (if physically able and can find a job).
- Live in poverty.
- Turn to outside assistance – Family, Government (taxpayers).

76%

of Americans are concerned about their ability to retire in the current economic environment.

Source: National Institute on Retirement Security, *Retirement Security 2017: A Roadmap for Policy Makers* www.nirsonline.org.

ORS Customers



Public School Employees

Michigan Public School Employees' Retirement System (MPSERS)

217,581 Active Members

211,007 Retirees and Beneficiaries

Plan Types

- → Closed Defined Benefit (DB) Plan
- → Hybrid Plan
- → Defined Contribution (DC) Plan
- → Closed Retiree Healthcare Plan
- → Personal Healthcare Fund

ORS Customers

State Employees

State Employees' Retirement System (SERS)

50,288 Active Members

59,038 Retirees and Beneficiaries

Plan Types

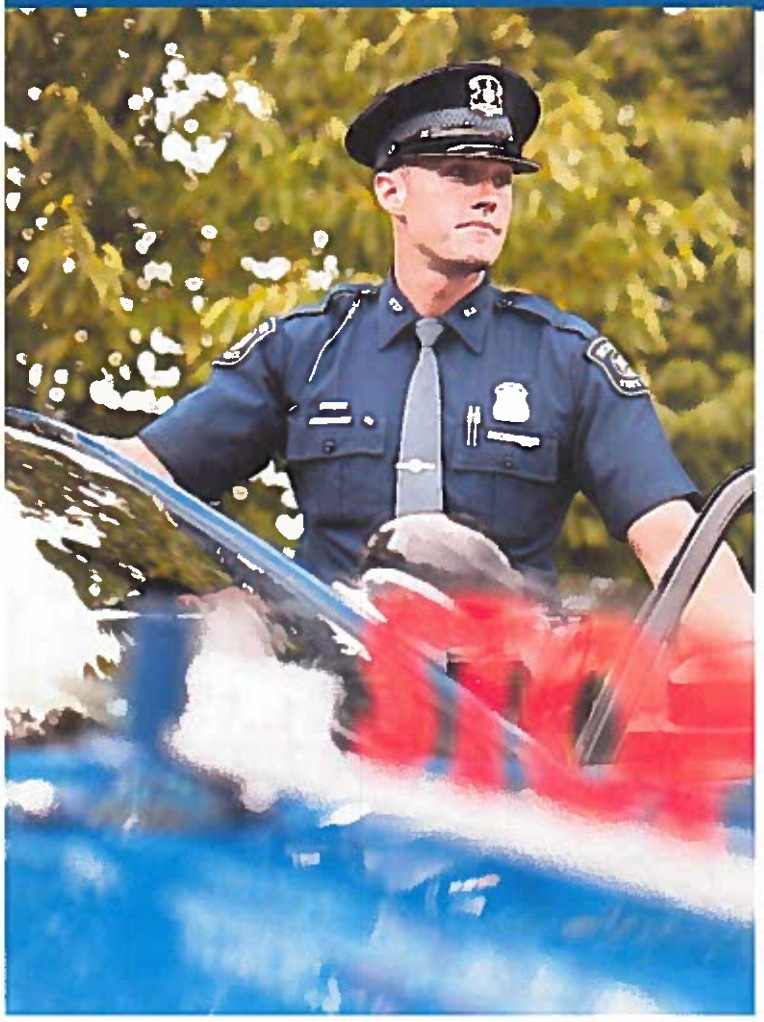
→ Closed DB Plan

→ DC Plan

→ Closed Retiree Healthcare Plan

→ Personal Healthcare Fund

ORS Customers



State Police

State Police Retirement System (SPRS)

1,688 Active Members

3,018 Retirees and Beneficiaries

Plan Types

- → Closed DB Plan
- → Hybrid Plan
- → Closed Retiree Healthcare Plan
- → Personal Healthcare Fund

ORS Customers

Judges

Judges Retirement System (JRS)

652 Active Members

547 Retirees and Beneficiaries

Plan Types

→ Closed DB Plan

→ DC Plan

→ Retiree Healthcare Plan (for some judges)

ORS Customers

Michigan National Guard

Military Retirement System (MRS)

10,047 Active Members

4,248 Retirees and Beneficiaries

Plan Types

→ DB Plan

→ Retiree Healthcare Plan (for some members)

ORS Customers

Michigan Legislators

148 Active Members

Plan Types

- → DC Plan
- → DB Plan administered by the Michigan Legislative Retirement System

Impact

$7.3 Billion

in pension and healthcare benefits was paid to our retirees in 2016.

Impact

Retiree Spending Ripples Through Michigan's Economy

Michigan retiree expenditures stemming from state and local pension plan benefits supported:

→ **77,228** Jobs.

→ **$11.1 Billion** in Total Economic Output.

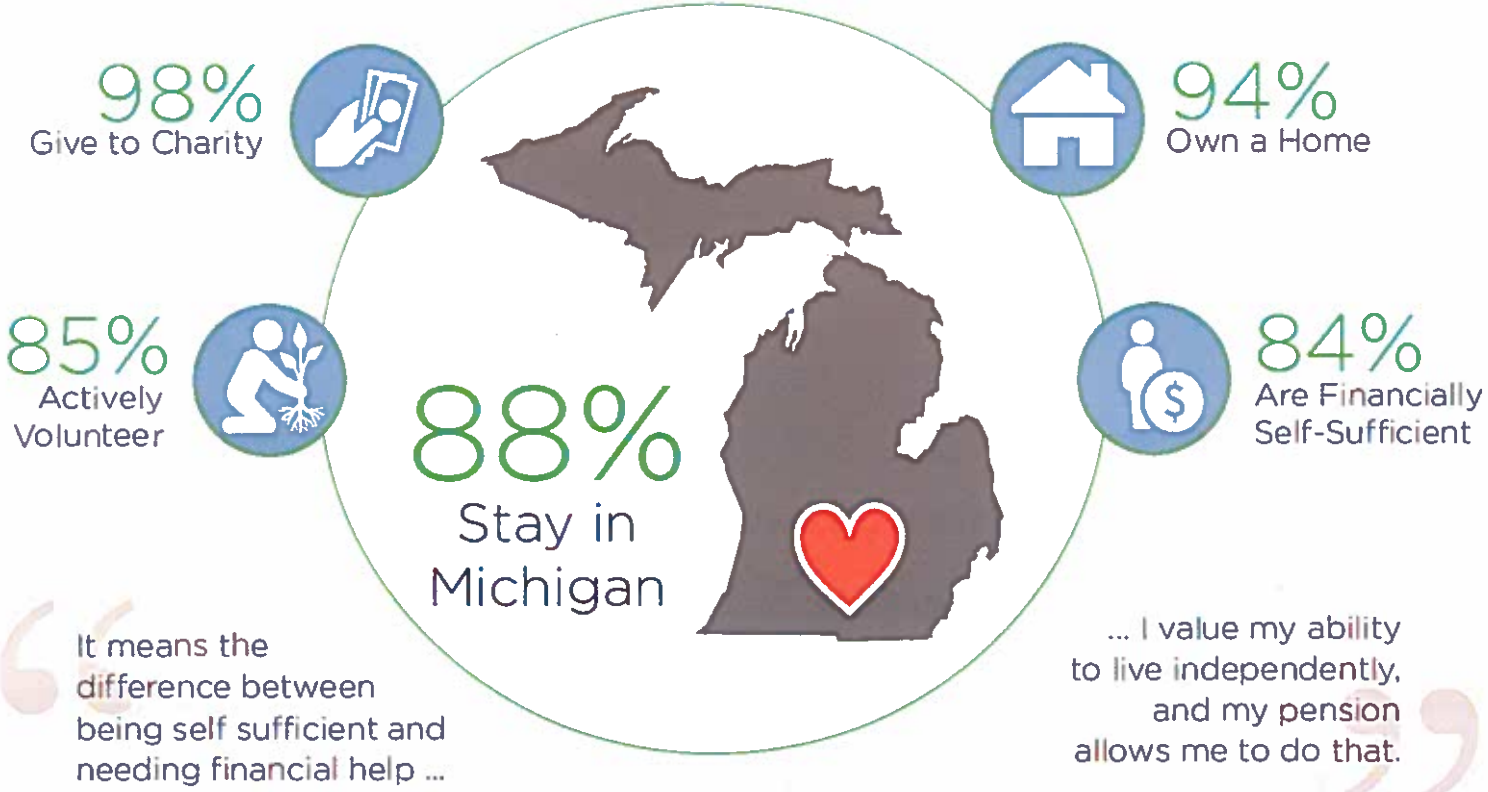
→ **$3.5 Billion** in Wages and Salaries.

→ **$2.1 Billion** in Federal, State, and Local Tax Revenues.

Source: National Institute on Retirement Security, *Pensionomics 2016: Measuring Impact of DB Pension Expenditures, Michigan* 2016 www.nirsonline.org.

Impact

Retirees in Michigan



Source: 2014 ORS Retiree Survey

Impact

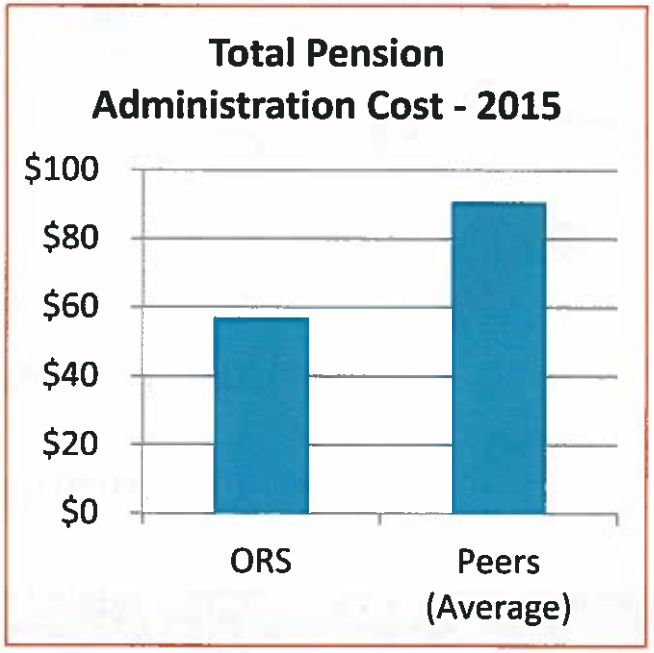
We provide these benefits **cost-effectively** while achieving **high customer satisfaction** scores.

Total pension administration cost in 2015:

→ **$57** per active member and retiree

→ **$34 Below** the peer average of $91.

Percentage of customers satisfied with our service: **89%**



Source: CEM Benchmarking

Back to Basics

Retirement plans are funded throughout an employee's career.

Generally speaking, there are three types of retirement plans:

1. Defined Benefit (DB) Plans
2. Defined Contribution (DC) Plans
3. Hybrid Plans

Back to Basics

Defined Benefit (DB) Pension Plans

DB plans provide a specified monthly benefit for the retiree's life.

- The DB pension amount is generally calculated through a formula based on age, years of service, and compensation.
- The DB pension amount typically increases proportionately based on the years of service with the employer offering the plan.
- Pension plans accrue assets to provide pension benefits to retirees.
- Risk is carried by the employer.

Back to Basics

ORS DB Pension Plans

- All of our DB pension plans are **closed** to new members except for the Michigan National Guard plan.
- The pension benefits we provide are modest.
  - → The average annual pension amount is **$22,101**.
- Nearly **70 percent** of each system's funding comes from investment earnings.

Source: National Institute on Retirement Security, *Pensionomics 2016: Measuring Impact of DB Pension Expenditures, Michigan* 2016 www.nirsonline.org.

Back to Basics

Defined Contribution (DC) Plans

In a DC plan, individual accounts for each plan participant are established to accumulate assets for retirement.

- Individual may make voluntary contributions to the individual account.
- The employer makes contributions to the individual's account.
- The net retirement benefit is the amount in the account at the time of retirement.
- Risk is carried exclusively by the employee.

Back to Basics

ORS DC Plans

- We partner with Voya Financial® to provide our State of Michigan 401(k) and 457 Plans.
- Our plans offer a wide range of low-cost investment options and access to the Advisor Service and other resources.
- Our plan design helps set up participants for success.
  - → Autoenrollment.
  - → Small Steps Program.
  - → Target Date Funds.
- 92% of our participants are taking full advantage of employer matching contributions.

Back to Basics

Hybrid Plans

A Hybrid plan offers a more economical, guaranteed DB benefit paired with a DC benefit.

- It is funded through member and employer contributions.
- Risk is shared between the employer and the employee.

Back to Basics

ORS Hybrid Plans

The Hybrid plan was introduced in conjunction with closing the DB plan to help lower risk associated with the systems' retirement plans.

- Introduced in 2010 for public school employees and in 2012 for state police troopers.
- The Hybrid plans are:
  - → Cost effective.
  - → 1/3 less risky than the DB plan.
  - → Provide adequate retirement benefits.
  - → 100% funded.
- More than **38,000** members are enrolled in the Hybrid plan.

Back to Basics

The Hybrid Plan is 1/3 Less Risky Than The DB Plan

- The Assumed Rate of Return (AROR) is lower.
- There are no Cost of Living Adjustments (COLA).
- Service credit purchases are prohibited.
- Higher retirement age.
- Final average compensation is based on 5 years instead of 3 years.

Back to Basics

The Hybrid Plan is 100% Funded

- The Hybrid Plan's assets equal its liabilities.
  - → The plan has all the money it needs to pay the accrued benefits for the membership.
- The Hybrid plan assets are pooled with non-hybrid assets to take advantage of economic efficiencies of a larger investment pool.
- Even though the two plans are invested together, they are accounted for separately and valued separately by the actuary.

Michigan Public School Employees' Retirement System
Retirement Plan Provisions

	DB Plan (Closed to new hires in 2010)	Hybrid Plan (Opened to new hires in 2010)	DC Plan (Opened to new hires in 2012)
		Since September 4, 2012, new hires choose between the Hybrid and DC Plans.	
Benefit Earned	Monthly benefit for life	A more economical, guaranteed DB Plan alongside a modest DC Plan	Employer match/contributions to SOM 401(k) & 457 Plans
Vesting	10 years of service (for most members)	DB Plan: 10 years of service Employee DC Contributions: Immediately 100% vested Employer DC Contributions: 100% vested after 4 years of service	Employee Contributions: Immediately 100% vested Employer Contributions: 100% vested after 4 years of service
Benefit Amount	Final Average Compensation (highest 3 or 5 years) times pension factor (1.5% or 1.25%) times years of service	DB Plan: Final Average Compensation (highest 5 years) times pension factor (1.5%) times years of service DC Component: Based on employee and employer contributions and investment performance	Based on employee and employer contributions and investment performance
Eligibility	For most members, Age 60 with 10 years of service; or any age 30 years of service	DB Plan: 60 with 10 DC Component: Based on vesting requirements and IRS rules	Based on vesting requirements and IRS rules
Cost to Employee	For most members, 3%-7% of pay	DB Plan: Graded amount based on amount of compensation, 3%-6.4% of pay DC Component: Automatically enrolled at 2% to receive full employer match of 50% (up to 1%)	Automatically enrolled at 6% to receive full employer match of 50% (up to 3% of pay)
Cost to Employer (Normal Cost)	3.76% of pay	4.13% of pay	Up to 3% of pay

State Employees' Retirement System
Retirement Plan Provisions

	DB Plan (Closed to new hires in 1997)	DC Plan (Opened to new hires in 1997)
Benefit Earned	Monthly benefit for life	Employer match/contributions to SOM 401(k) & 457 Plans
Vesting	10 years of service	Employee Contributions: Immediately 100% vested Employer Contributions: 100% vested after 4 years of service
Benefit Amount	For most members: Final Average Compensation (highest 3 years) times pension factor (1.5%) times years of service	Based on employee and employer contributions and investment performance
Eligibility	For most members: Age 55 with 30 years of service or 60 with 10	Based on vesting requirements and IRS rules
Cost to Employee	4% of pay	Automatically enrolled at 3% of pay to receive full employer match of 100% of first 3% of employee contributions
Cost to Employer (Normal Cost)	3.26%	Mandatory Contribution: 4% of pay Matching Contribution: up to 3% of pay

State Police Retirement System
Retirement Plan Provisions

	DB Plan (Closed to new hires in 2012)	Hybrid Plan (Opened to new hires in 2012)
Benefit Earned	Monthly benefit for life	A more economical, guaranteed DB Plan alongside a modest DC Plan
Vesting	10 years of service	DB Plan: 10 years of service Employee DC Contributions: Immediately 100% vested Employer DC Contributions: 100% vested after 4 years of service
Benefit Amount	Final Average Compensation (average salary earned for last 2 years of service) times 60%	DB Plan: Final Average Compensation (last 5 years) times pension factor* times years of service *The pension factor is calculated at 2 percent for the first 25 years of service. For each year over 25 years of service, the pension factor declines by 0.4 percent until it reaches 0 percent at 30 years of service. The reduced pension factor applies only to years 26 through 30, not the first 25 years DC Component: Based on employee and employer contributions and investment performance
Eligibility	Any age with 25 years of service	DB Plan: Age 55 with 25 years of service or 60 with 10 DC Component: Based on vesting requirements and IRS rules
Cost to Employee	2% - Troopers and Sergeants, only	DB Plan: 4% of pay DC Component: Automatically enrolled at 2% to receive full employer match of 50% (up to 1%)
Cost to Employer (Normal Cost)	16.92%	10.59%

Judges Retirement System
Retirement Plan Provisions

	DB Plan (Closed to new hires in 1997)	DC Plan (Opened to new hires in 1997)
Benefit Earned	Monthly benefit for life	Employer match to SOM 401(k) & 457 Plans
Vesting	8 years of service	Employee Contributions: Immediately 100% vested Employer Contributions: 100% vested after 4 years of service
Benefit Amount	Benefit calculation based on position category	Based on employee and employer contributions and investment performance
Eligibility	For most members, Age 60 with 8 years of service	Based on vesting requirements and IRS rules
Cost to Employee	5-7% of pay based on position category	Automatically enrolled at 3% of pay to receive full employer match of 100% of first 3% of employee contributions
Cost to Employer (Normal Cost)	Employer normal cost not funded as a % of payroll. Funded through annual appropriation	Mandatory Contribution: 4% of pay Matching Contribution: Up to 3% of pay

Legislative Retirement System
Retirement Plan Provisions

	DC Plan
Benefit Earned	Employer match to SOM 401(k) & 457 Plans
Vesting	Employee Contributions: Immediately 100% vested Employer Contributions: 100% vested after 4 years of service
Benefit Amount	Based on employee and employer contributions and investment performance
Eligibility	Based on vesting requirements and IRS rules
Cost to Employee	Automatically enrolled at 3% of pay to receive full employer match of 100% of first 3% of employee contributions
Cost to Employer (Normal Cost)	Mandatory Contribution: 4% of pay Matching Contribution: Up to 3% of pay

Military Retirement System
Retirement Plan Provisions

	DB Plan
Benefit Earned	Monthly benefit for life
Vesting	-
Benefit Amount	$50/month
Eligibility	Age 55 with 19 years , 6 months, and 1 day of service
Cost to Employee	-
Cost to Employer (Normal Cost)	Employer normal cost not funded as a % of payroll. Funded through annual appropriation

Back to Basics

ORS Retiree Healthcare Plans

- We handle eligibility and enrollment into retiree healthcare plans for retirees of the state, state police, judges, and military systems.
- We administer the retiree healthcare plans for public school retirees.

Back to Basics

ORS Retiree Healthcare Plans

- Retiree healthcare plans were closed in 2011-2012 to new employees in all retirement systems, except judges and military.
- The Personal Healthcare Fund was introduced in 2012.
  - → Provides an additional 2% employer matching contribution to the State of Michigan 401(k) and 457 Plans to help members save for healthcare expenses in retirement.
- The state began prefunding in 2012, which allows investment gains to help fund the system.

Back to Basics

Public School Retiree Healthcare

Premium Subsidy: Provides a subsidy for retiree healthcare paid in part by the school employers.

- Closed plan – only available to members hired before September 4, 2012.
- Access to health, prescription drug, dental, and vision insurance plans administered by ORS.
- Maximum subsidy is 80%
  - Retirees who were Medicare-eligible and enrolled in the plan on January 1, 2013, have a 90% premium subsidy.

Back to Basics

Public School Retiree Healthcare Plans

Healthcare Mission

To maintain a quality health care plan that is affordable to both the member and the employer.

Quality Goal

Measurably improve the quality of care enjoyed by members.

Cost Goal

Limit the rate of cost growth to the compound rate of inflation (CPI) and real economic growth.

Back to Basics

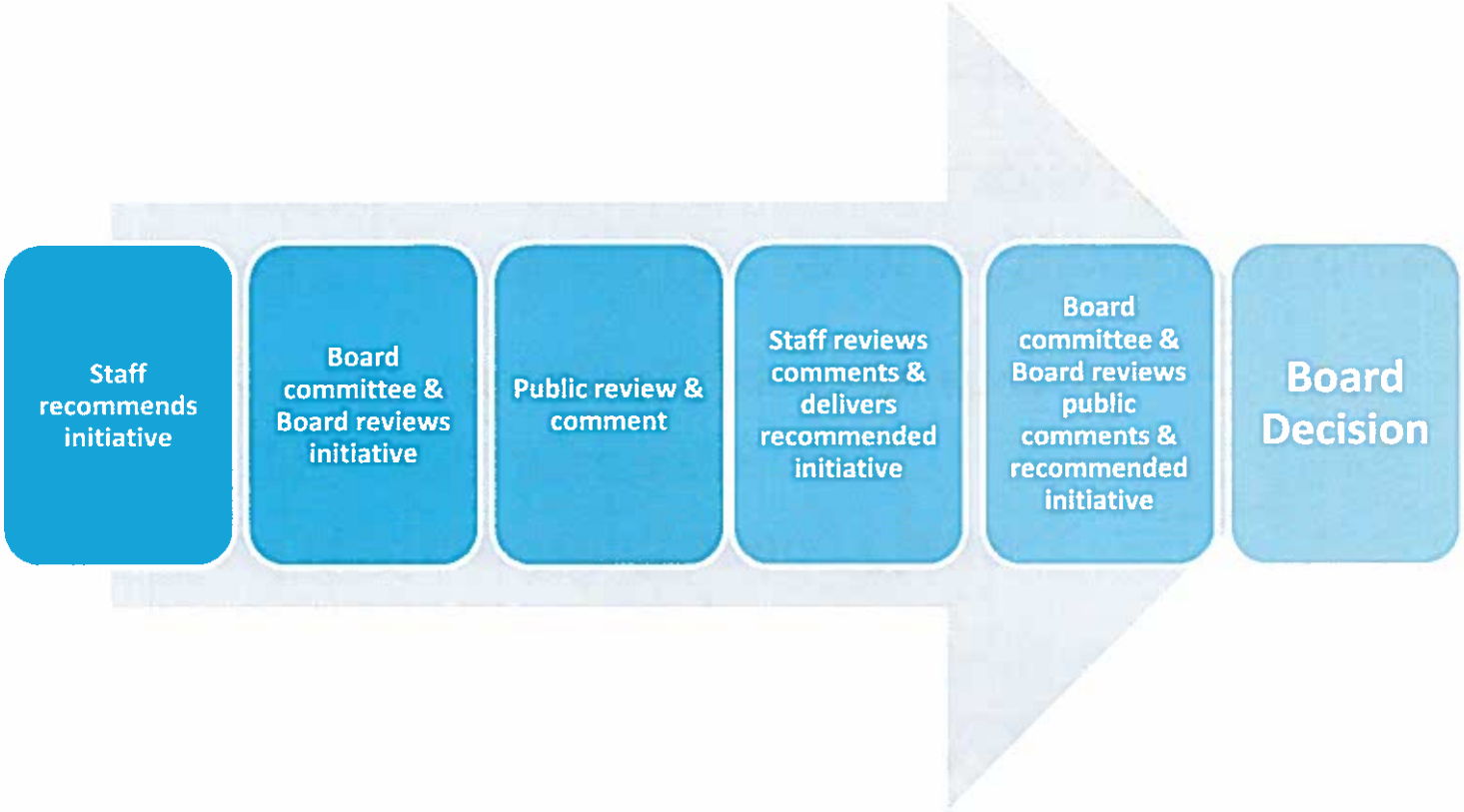
Public School Retiree Healthcare Plans

Quality and Cost Control Measures

- Currently, 255,000 Michigan citizens are covered.
- Implemented **21** quality and cost saving initiatives since the early 1990s, resulting in cumulative savings in excess of **$1.4 billion**.
- The average annual cost increase for the retiree healthcare plan has been only 0.94% per year, well below the 6% average increase in national health expenditures.

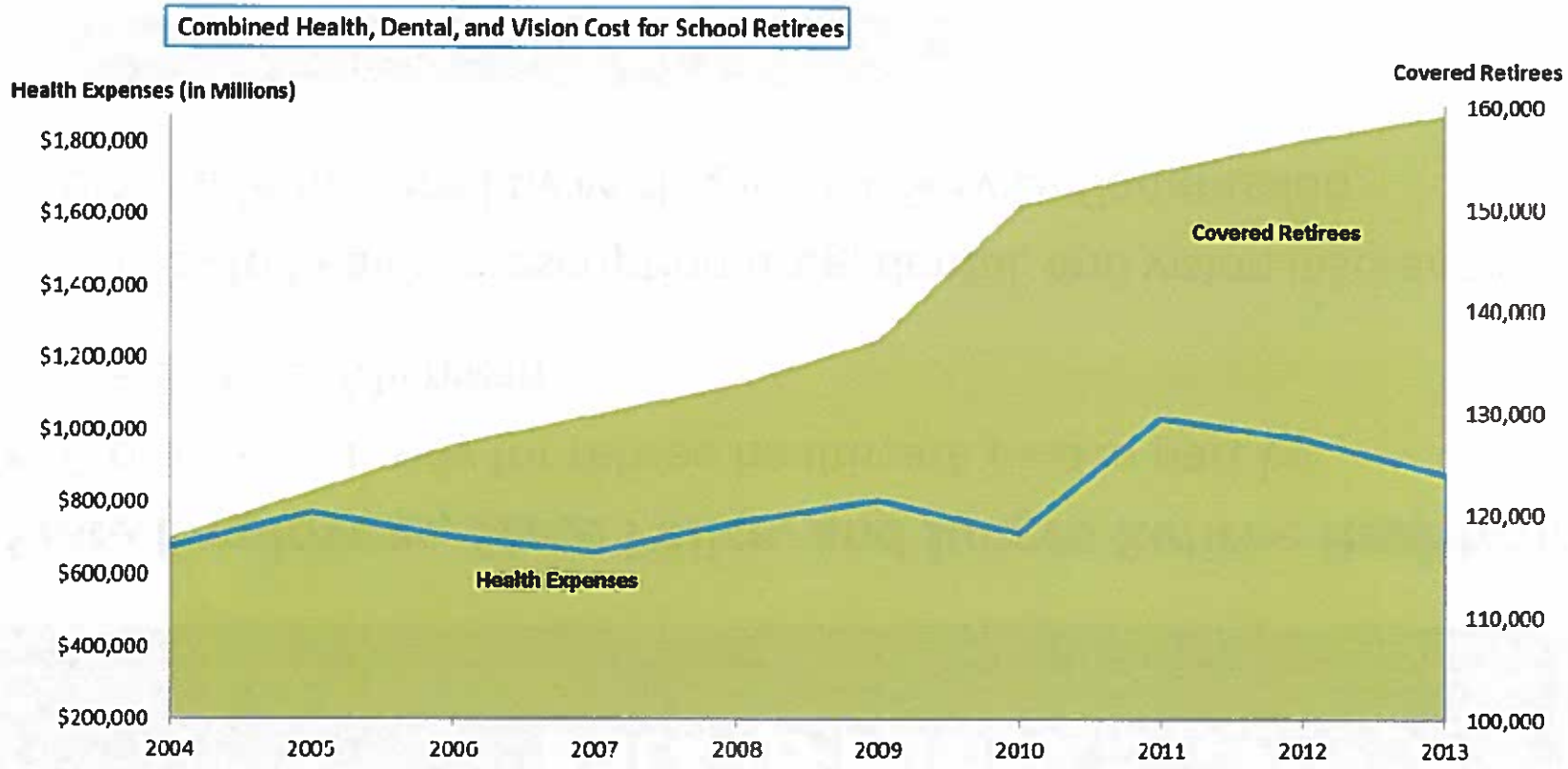
Back to Basics

Retiree Healthcare Initiative Process



Back to Basics

Retiree Healthcare Costs: Defying Trends



Back to Basics

State Employees, State Police, and Judges Retiree Healthcare

- Provides a subsidy for retiree healthcare paid in part by the State of Michigan.
- Access to health, prescription drug, dental, and vision insurance plans administered by Michigan Civil Service Commission.

System	Status	Health Premium Subsidy
State Employees	Closed	80% Maximum
State Police	Closed	95%
Judges	Open	80% Maximum

Back to Basics

Recent Retirement Reforms

Pension and retiree healthcare reforms for state and public school employees have reduced risk, implemented cost-sharing initiatives, and reduced unfunded long-term liabilities by **more than $20 billion** since 2012.

Year	System	Reform
1997	State Employees, Judges, Legislators	• Closed DB plan and introduced DC plan for new employees.
2008	Public Schools	• Retiree healthcare premium subsidy based on career length.
2010	Public Schools	• Closed DB plan and introduced 1/3 less risky Hybrid Plan.
2012	State Employees	• Closed retiree healthcare plan, and began prefunding existing healthcare liabilities. New hires enroll in Personal Healthcare Fund. • Employees given option of increasing contributions for DB pension or converting to DC plan.
2012	State Police	• Closed DB plan and introduced 1/3 less risky Hybrid Plan.
2012	Public Schools	• Closed retiree healthcare plan. New hires enroll in Personal Healthcare Fund. • New hires given choice of Hybrid plan or DC. • Employees given option of increasing contributions for DB pension or reducing their multiplier for future service or converting to DC plan.
2013	Public Schools	• Began prefunding existing retiree healthcare liability.

Back to Basics

Retirement System Administration Roles & Responsibilities

Entity	Responsible For:
Legislature	• Appropriates funds for required contributions. • Decides plan design through legislative action.
State Treasurer/ Bureau of Investments	• Sole investment fiduciary and custodian of retirement system assets. • Invests retirement system assets.
DTMB Director & Retirement Boards	• Jointly approve actuarial assumptions. • Jointly approves retiree healthcare plan. • Provide oversight of ORS.
ORS	• Collect contributions and information from employers. • Distribute earned retirement benefits. • Advise Governor and Legislature on benefit and contribution policies.
Actuary	• Performs actuarial valuations. • Reviews actuarial assumptions every five years through the Experience Study process.

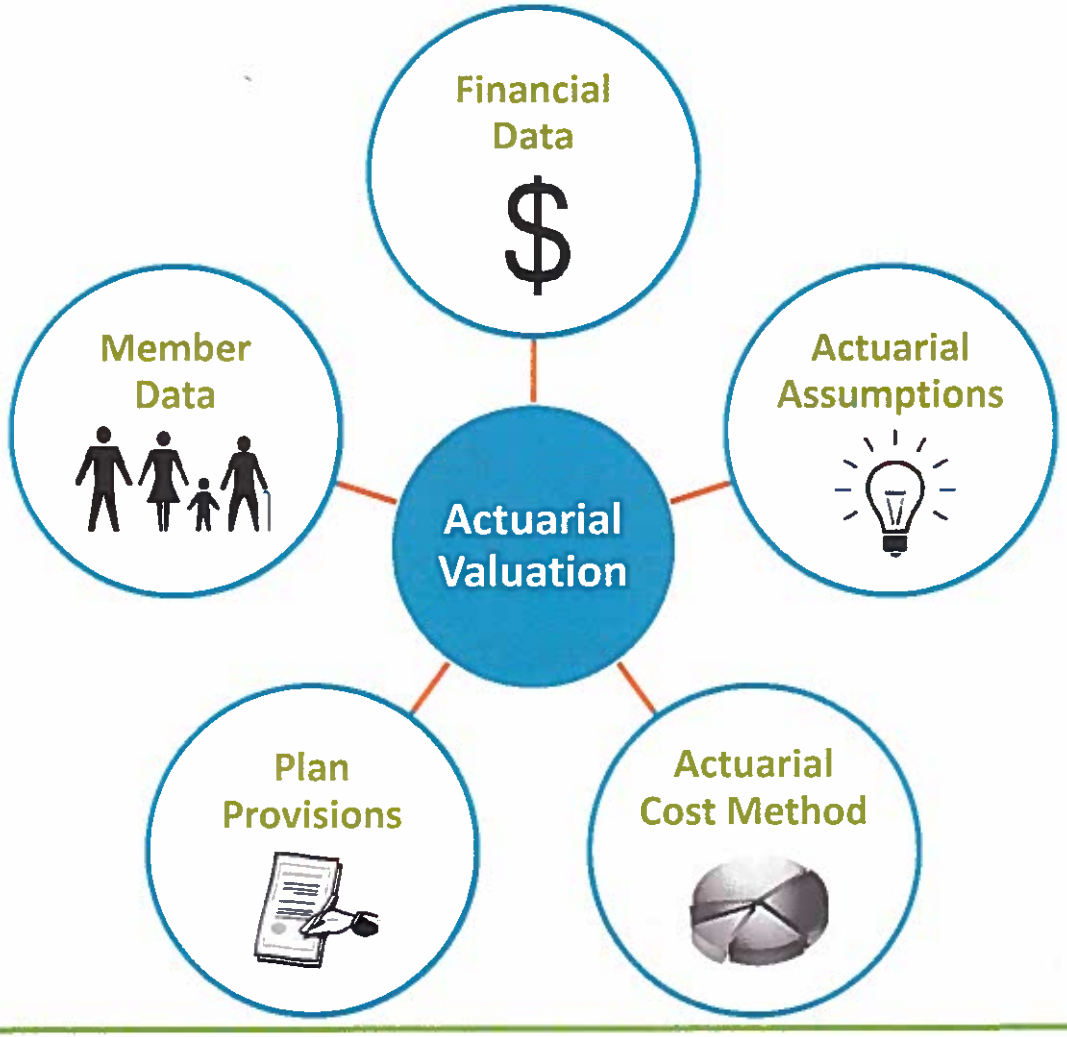
Actuarial Process 101

What is an actuarial valuation?

An annual report of the actuarial condition of the retirement system and required contributions to fund the system.

- Analysis of financial experience.
- Analysis of demographic data to determine what is happening to the workforce.
- Provides basis for plan financial measures.

Actuarial Process 101



Actuarial Process 101

Valuations provide us with the following details:

- Total plan assets and liabilities.
- Unfunded liabilities.
- Funded status.
- Required contributions.
  - → Normal Cost and Unfunded Accrued Actuarial Liability (UAAL) Amortization payment.
  - → Calculated based on the practice of prefunding.
  - → Prefunding is a best practice that invests assets and allows investment returns to help fund the plan.

Actuarial Process 101

The accuracy of your valuation depends on the accuracy of your actuarial assumptions and reported data. For example:

- Long-term rates of investment return generated by the assets of the system.
- Rates of retirement among active members.
- Rates of mortality among active members, retirees, and beneficiaries.

Unrealistic assumptions can lead to under- or over-stated costs.

Actuarial Process 101

Experience Studies

- Every 5 years, the assumptions are evaluated to see how closely they are matching actual experience.
- The package of assumptions is then adjusted to reflect basic experience trends — but not random year to year fluctuations.
- With each experience study, the actuarial assumptions should more accurate representations of actual experience.

Actuarial Process 101

Annual Required Contribution (ARC)

- The ARC is composed of the Normal Cost and the UAAL amortization payment.
- Normal cost is the cost of funding an additional year of service.
  - → If employees earn less than the actuary predicted, it reduces the normal cost payment without harming the system.
- UAAL amortization is the cost of funding the legacy debt.
  - → Economic losses: e.g. investment losses.
  - → Demographic losses: e.g. mortality experience.

Actuarial Process 101

UAAL Payment Calculation

Calculated based on the amortization *period* and *method*.

Amortization Period. Liability will be paid off on a specified date. (e.g. 2038)

Amortization Method. There are 2 methods used by our systems:

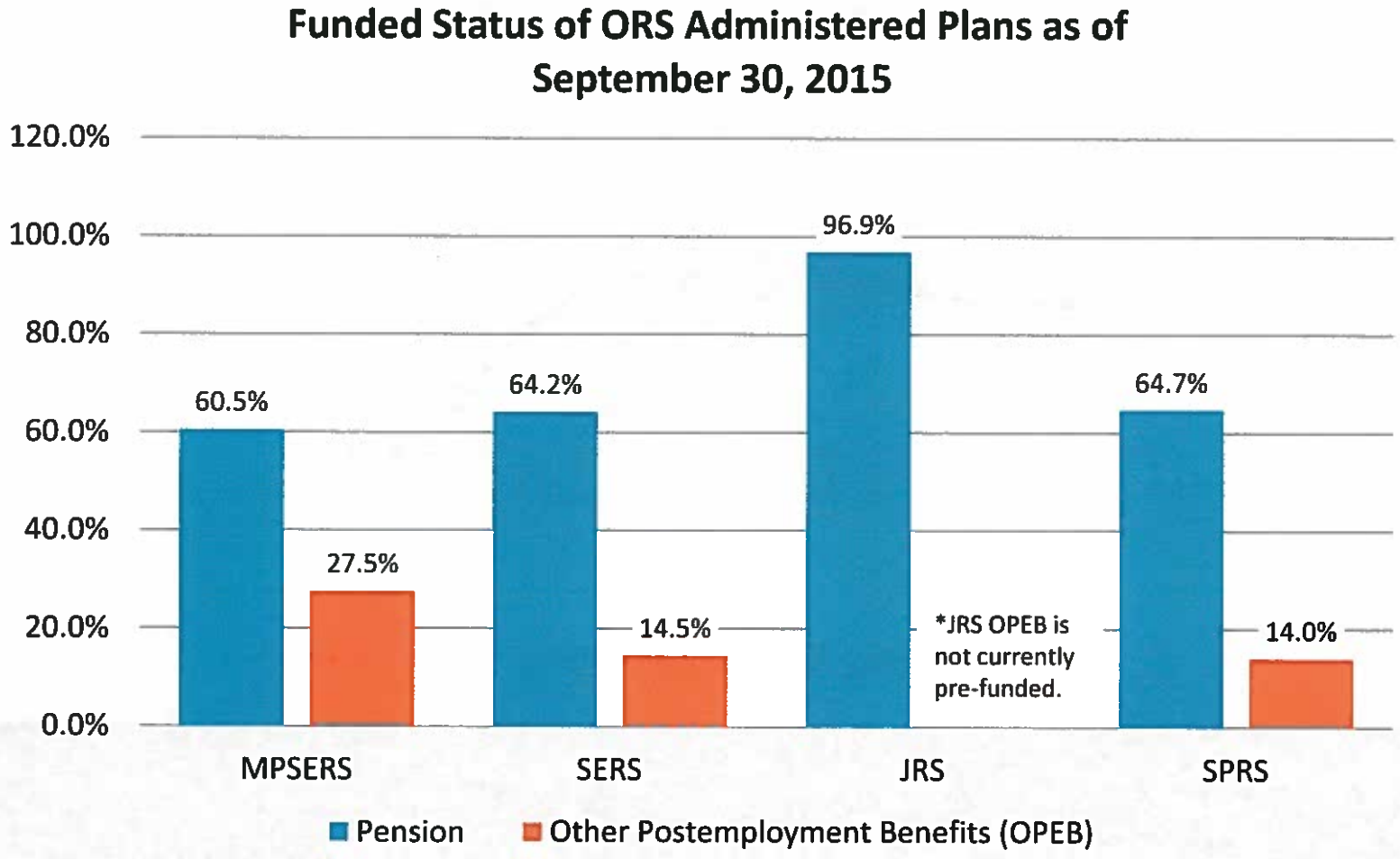
1. Level Dollar. Payment amount is the same every year.
   - → Payments "front-loaded"—start out higher but stays level over time.
   - → Used for closed systems like State Employees and Judges.
2. Level % of Payroll. Payment increases by payroll growth assumption.
   - → Payments "back-loaded"—start out smaller but grow annually.
   - → Used for open systems like Public School Employees and State Police.

Actuarial Process 101

Funding the ARC

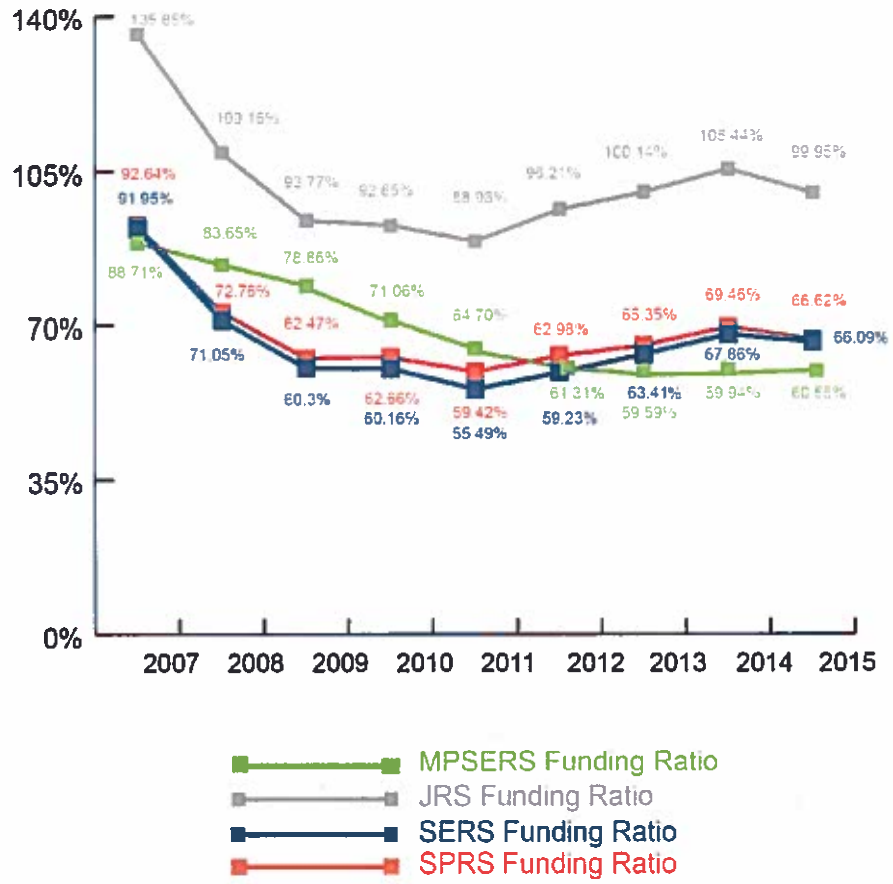
- Because of budget timelines, there is a time lag inherent between the ARC being established and the dollars being collected. ORS must submit the ARC and estimated payroll figures 2-3 years in advance.
  - → For example, the contribution rates for 2017 were set in 2015, based on information from the 2014 valuation.
- In the event that contributions do fall short of the ARC — for example, if reported payroll is lower than expected — the deficiency is reconciled over the subsequent 5 years, with interest.

System Funding Status

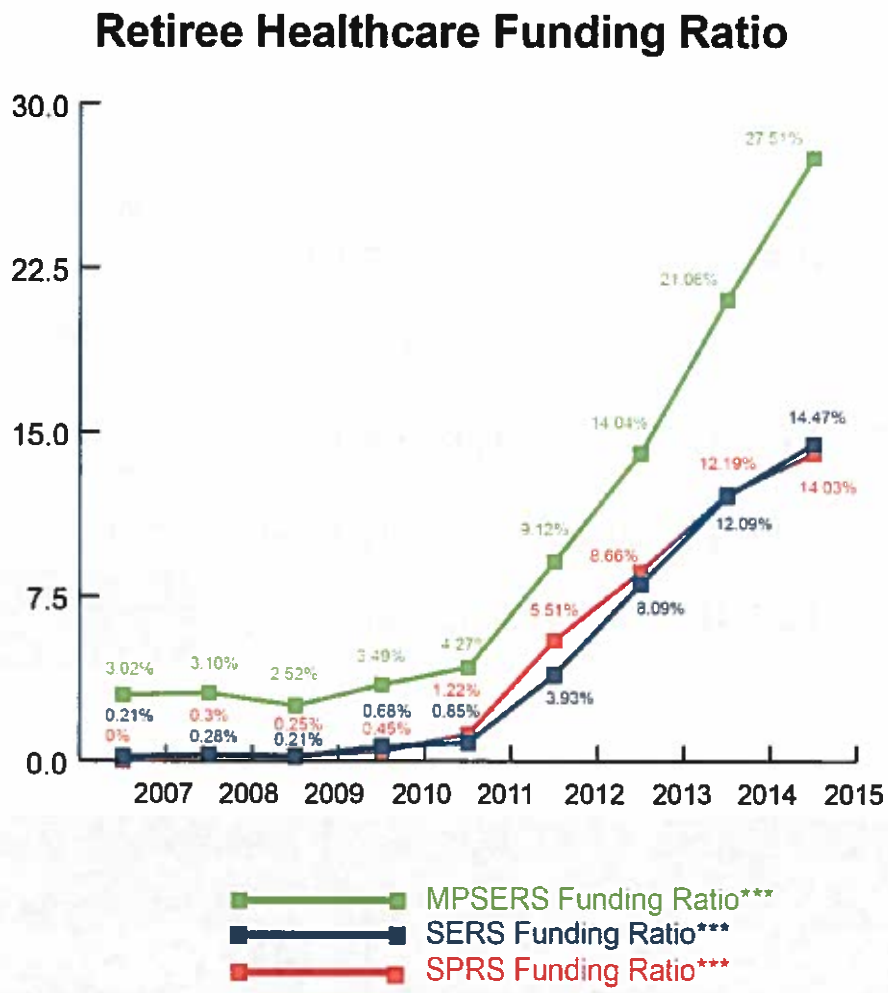


System Funding Status

Pension Funding Ratio



System Funding Status



System Funding Status

Pension and OPEB UAAL in Dollars as of September 30, 2015		
System	Pension UAAL	OPEB UAAL
MPSERS	$26.7 B	$9.3 B
SERS	$5.8 B	$7.7 B
SPRS	$654.2 M	$580.8 M
MRS	$47.3 M	N/A
JRS	$7.9 M	$9.1 M

Our pension plans are on a schedule to be **fully funded** in less than 21 years.

→Public schools' retirement system in 2038.

→All other systems in 2036.

→Judges' system is currently 96% funded.

System Funding Status

What Factors Impact the Funding Status?

The biggest explanatory factors in the current funded status of the retirement systems are:

- Large market losses from global economic downturns in the early 2000's and 2008-2009.
- Early retirement incentives.
  - → SERS: 1984, 1988–89, 1992, 1997, 2002, 2003, 2010.
  - → MPSERS: 2010, and other district-sponsored retirement incentives.

Lowering the Assumed Rate of Return (AROR)

Reducing Future Retirement System Risk

Executive budget recommends lowering each retirement system's AROR from 8.0% to 7.5%.

- Follows actuarial and Bureau of Investments' guidance.
- Reduces risk to the systems and to the state.
  - → Helps to ensure available funds are sufficient to pay benefits that have been earned.
- Moves the systems toward the 7.0% assumption utilized by the Hybrid plans.

Lowering the Assumed Rate of Return (AROR)

Fiscal Implications

Because investment income plays a large role in determining the required contributions for the retirement systems, a reduction in the AROR requires a corresponding increase in employer contributions.

The basic retirement system funding equation:

Contributions + Investments = Benefits + Expenses

Lowering the Assumed Rate of Return (AROR)

Fiscal Implications

Pension and retiree healthcare contributions* with lowered AROR:

	Baseline Contribution	Additional Contribution
	8.0% AROR	7.5% AROR
MPSERS	$ 3,020,657,000	$ 306,125,000
SERS	1,304,964,000	83,651,000
SPRS	114,499,000	8,987,000
MRS	6,849,000	225,000
JRS	2,138,000	1,034,000
Total	$ 4,449,107,000	$ 400,022,000

*Estimates based on the FY 2015 actuarial valuations

Lowering the Assumed Rate of Return (AROR)

Effect of Lowering AROR on Funded Status

A reduction in AROR will likely mean a reduction in the funded ratio.

- The liabilities of the system will increase due to the change.
- Based on 2015 actuarial valuations, the expected reduction in the funded ratio for each system is 3% for pension, and 1% for retiree healthcare.
  - → Positive actuarial experience in 2016 could offset some of the decrease in the funded ratio on account of the AROR.

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