

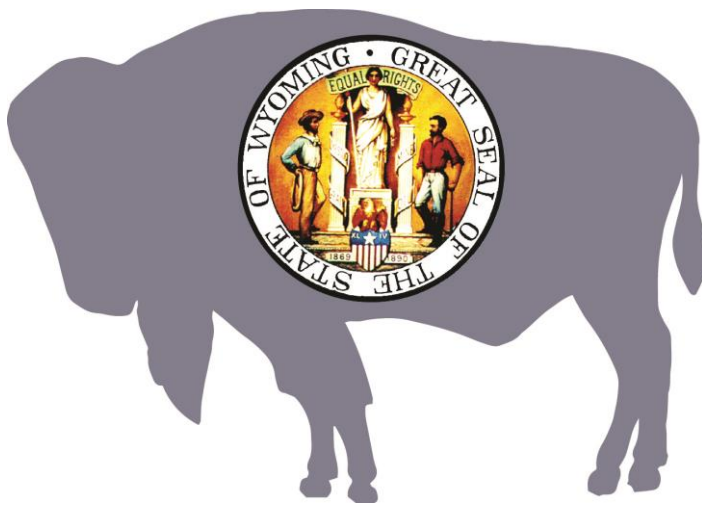


**RETIREMENT SYSTEM**

PARTNERING TO BUILD FINANCIAL SECURITY FOR MEMBERS AND THEIR FAMILIES

# Report to the JAC

Summer 2016







# Wyoming Retirement System

*Partnering to Build Financial Security for Members and their Families*

**Matt Mead**  
Governor

**Ruth Ryerson**  
Executive Director

August 10, 2016

Senator Tony Ross, Co-Chairman JAC  
Representative Steve Harshman, Co-Chairman JAC  
VIA EMAIL  
c/o Legislative Service Office  
213 Capitol Building  
Cheyenne, WY 82002

Dear Senator Ross and Representative Harshman:

Although WRS was not part of your summer meeting agenda, I wanted to provide a report to our home committee to give visibility into how we are managing Wyoming's pension plans and investments, as well as to comply with statutory reporting requirements.

With regard to the funding of our pension plans, the recent valuation reports show all plans, except the two smallest -- Judicial and Guard Fire, have a modest decrease in their funded ratios from last year. Common themes for all plans include lower than assumed investment return and lower than assumed salary increases. Our funding is still strong, although it will take some time to make up for investment returns not meeting the assumption.

I am appreciative of your support in building an investment team, which has been extremely valuable to the WRS membership. As you may be aware, financial markets were challenging in 2015 and WRS' annual investment return, although above the benchmark, did not achieve our assumed rate for actuarial purposes. WRS seeks to focus on long-term investment results and is prepared to weather occasional underperformance.

I continue to highlight the known funding problem of the Paid Firefighter A Plan, as assets are projected to last for twelve years, although volatility could dramatically shorten that timeframe.

Although there are more and more national reports seeking to rank public pension plans, each plan is unique and complex and rankings are never based on complete comparisons. I believe the best investment of policymakers' time is to understand our plans and partner with WRS to navigate any challenges together.

We are planning an actuarial experience study for early 2017, which will equip us to make adjustments, to our return assumption among others, or give legislative recommendations in the fall of 2017. On behalf of the Board and myself, I thank you for approving most of our recent budget request and for your ongoing interest in WRS and support. We welcome your feedback on how we can best partner to meet the interests of our members.

While there is more information I could include, I wanted to keep this report brief. Of course, I will be glad to provide any additional information the JAC may request.

Sincerely,

Ruth Ryerson  
Executive Director

Cc: Joint Appropriations Committee Members and Staff

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## Purpose of Report

This report is intended to provide the JAC members with an understanding of the process WRS uses to manage its pension plans, recent actuarial valuations of the pension plans, investment performance and also meet the system's annual statutory reporting requirements.

## Pension Plan Management

Maintaining the health of a pension plan requires ongoing careful management in terms of assets, liabilities, assumptions and contribution requirements. WRS seeks to keep the factors involved in a successful pension plan in long-term equilibrium as shown by the following equation. WRS, in partnership with state policymakers, has made adjustments to keep this balance and address challenges when necessary.

$$\text{Investment Gains/Losses} + \text{Contributions} = \text{Administrative Costs} + \text{Member Benefits}$$

WRS administers seven pension plans for most public employees in Wyoming and a plan for Volunteer Firefighters & Emergency Medical Technicians. The largest plan is the Public Employee Pension. Contributions to WRS' pension plan are a relatively small part of the State of Wyoming's spending compared to the benefit provided. In 2014, contributions to WRS' pension plans were 2 percent of Wyoming's state and local government direct general spending compared to 4.5 percent, the weighted average for all state plans.<sup>1</sup>

The economic benefits of pension payments to WRS members are significant. WRS paid over \$534 million in retirement benefits in 2015, about 78 percent of which was paid to retirees living in Wyoming. The National Institute on Retirement Security measures the economic impacts of pension expenditures. NIRS found in 2012, expenditures from state and local pensions supported 4,379 jobs that paid \$185.6 million in wages and salaries, \$758.4 million in total economic output, and \$119.5 million in federal, state and local tax revenues in the state of Wyoming.<sup>2</sup>

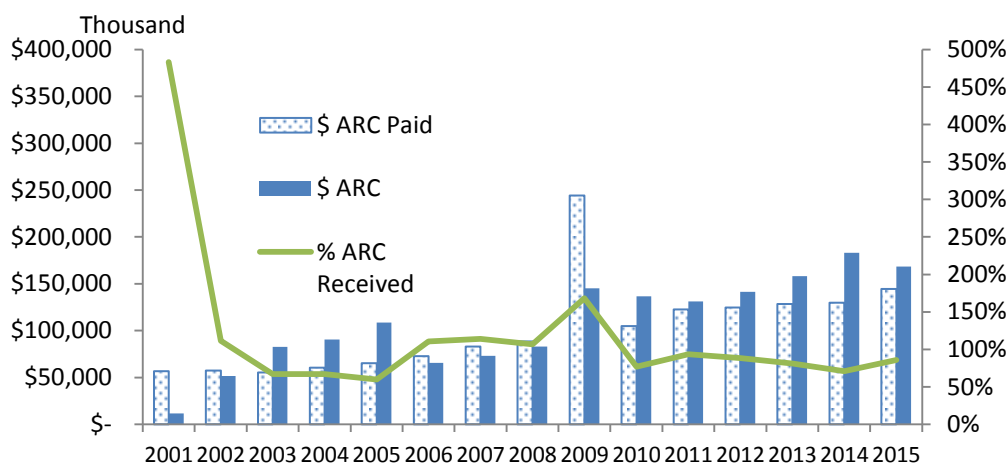
Maintaining the health of WRS' Public Employee Pension is a result of thoughtful adjustments recommended to, or developed in conjunction with, state policymakers. This was in keeping with a trend of reforms among many public pension plans. Since 2009, together we made contribution increases, reduced benefits for new hires, restricted COLA awards and strengthened investment capabilities. WRS has been proactive to communicate these changes to members and promote personal savings for retirement in order to offset future inflation.

The reforms Wyoming put in place over the last several years demonstrate a strong commitment to fund its pension plans by generally meeting its annual required contribution (ARC).

<sup>1</sup> State and Local Government Spending on Public Employee Retirement Systems, National Association of State Retirement Administrators, March 2016

<sup>2</sup> Pensionomics 2014: Measuring the Economic Impact of DB Pension Expenditures, National Institute on Retirement Security

## WRS Public Employee Pension Annual Required Contribution Experience



Source: ARC Analysis done by Gabriel, Roeder, Smith & Company. Explanatory Note: The statutory contribution rate exceeded the ARC for 2001. The funded ratio was 114% as of January 1, 2001 and the surplus made the ARC low. Benefit enhancements were enacted in July 2001, which increased the ARC going forward. There was an additional \$150 million contributed by the Legislature in 2009 to address an increase in school district pay.

**Timeline of Key Actuarial Events:** WRS is not currently seeking any legislative changes to benefits or contribution levels, but has a plan for evaluating any potential need for adjustments to the pension plans it administers. WRS plans to complete its next actuarial experience study in the **summer of 2017** to evaluate the appropriateness of its adopted assumptions, listed below. The Board changes assumptions gradually, usually as the result of a thorough experience study, and is not reactive to short term events. By conducting experience studies every five years, it provides a comprehensive data set useful for thoughtful evaluation.

As a result of the last experience study in 2012, the Board was proactive to adopt a “generational” assumption for mortality. While this assumption results in higher liability calculations, it most accurately reflects how each generation lives longer than the last in the United States. This is an example of adopting an industry best practice although it had an adverse effect on the funded status of the plans.

The Board also reduced the assumed investment rate of return from 8 percent to 7.75 percent. This assumption is the most impactful when it comes to quantifying liabilities, and will be carefully evaluated during the upcoming experience study. Note the inflation component of the assumed rate is 3.25 percent.

### Board Adopted Assumptions Effective 1/1/2013

Investment Return/Discount Rate (inflation + real rate of return)	7.75%
Inflation	3.25%
Real Rate of Return	4.50%
Wage Inflation	4.25%
Merit Raises	Up to 1.75% by age
Payroll Growth	4.25%
Amortization Period	30-Year Open
Mortality	Generational
Retirement	Age-based modified
Termination	Age-based modified
Disability	Age-based modified
Refunds	25.00%

Note: The Plan A Paid Firefighter Plan is a closed plan and uses a 10-year open amortization period.

WRS will be prepared to report to the JAC in the **fall of 2017** regarding any changes to assumptions and recommended statutory changes, including contribution increases. Because the contribution rates are set in state law, rather than the result of actuarial analysis, the Board closely monitors them and recommends adjustments when necessary. As an aside, WRS recently issued a Request for Proposal process for its actuarial services and rehired the incumbent, Gabriel, Roeder, Smith and Company. As a result, WRS is currently undergoing a Request for Proposal for an actuarial audit to verify the work of the incumbent actuary.

Given the economic downturn in Wyoming, there have been public sector layoffs or early retirement incentives which may possibly affect the funding mechanism for the WRS pension plans. This will be considered in the upcoming experience study. The valuation methodology and projection models used to quantify future pension liabilities and assets do not presently incorporate public sector employment reductions.

**2016 Valuations:** WRS received annual valuations showing the funding status of each of the pension plans it oversees, along with long-term projections. The valuations provide a snapshot of each plan’s assets and liabilities as of 1/1/2016. The projections provide a forecast of the long-term trends for each plan.

The valuation reports show all plans, except the two smallest plans Judicial and Guard Fire, have a decrease in their funded ratios from last year. Common themes include lower than assumed investment return and lower than assumed salary increases.

The assets of all the plans are invested according to the same strategy and all plans were negatively impacted by investment results for 2015. Investment return for 2015 was -0.3 percent, net of fees, which is below the actuarially assumed rate of 7.75 percent. However, the actuarial rate of return, which reflects a five-year smoothing of assets, was 5.87 percent. Smoothing is intended to even out market gains and losses and keep the actuarial required contribution stable. Deferred losses from 2015 may put upward pressure on contribution rates and this is being monitored.

The following table quantifies gains or losses by major categories for each plan. For example, below assumed investment return amounted to an actuarial loss of \$116 million and below assumed salary increases resulted in an actuarial gain of \$64 million for the Public Employee Pension. The smaller plans WRS administers were similarly impacted by investment return and salary experience.

### Major Categories of Experience Liability Impacts for 2015 – by Plan Gains/(Losses) in 000’s

Plan	Investment Return greater/(less) than expected	Contribution greater/(less) than ARC	Salaries (greater)/less than expected	Mortality for Retirees more/(fewer) deaths than expected	All Other	Total Experience Gain/(Loss) impact on liabilities during 2015	Total Experience as % of the accrued liability
Public Employee	(\$116,449)	(\$27,455)	\$63,836	\$3,879	(\$23,924)	(\$100,713)	-0.09%
Fire A	(\$2,522)	(\$10,091)	N/A	\$2,044	(\$937)	(\$11,506)	-0.49%
Fire B	(\$1,758)	\$23	\$1,555	(\$172)	(\$1,274)	(\$1,626)	-0.92%
Warden, Patrol & DCI	(\$2,111)	(\$559)	\$1,396	\$69	(\$1,501)	(\$2,707)	-0.36%
Law Enforcement	(\$8,965)	\$2,164	\$3,899	\$153	(\$551)	(\$3,301)	0.15%
Judges	(\$433)	\$321	\$476	(\$107)	(\$139)	\$117	-0.54%
Guard Fire	(\$119)	\$162	\$2	(\$4)	(\$64)	(\$23)	-0.07%
Volunteer	N/A	N/A	N/A	N/A	N/A	N/A	N/A

Note: The category “All Other” is comprised of retirement, termination, pre-retirement death and disability experience.

The Public Employee Pension, which is the largest of all WRS plans, had a funded ratio of 78.21 percent compared to 78.96 percent last year. Although there is much more to a pension plan than its funded ratio, it is

the most common method for ranking pension plans. The most recent national average is 71.8 percent for all of the plans in the Public Fund Survey of the National Association of State Retirement Administrators. The following table provides the 1/1/2016 funded ratio for each WRS plan.

### Contribution and Funded Ratio by Plan as of 1/1/2016

Plan	Total Normal Cost as % of Payroll	Amortization Payment of Unfunded Liability as % of Payroll	Admin. Expenses as % of Payroll	Total Cost as % of payroll	Current Total Statutory Contribution Rate	(Shortfall)/ Surplus	Funded Ratio	30 Year Projected Funded Ratio***	Year Full Funding Projected
Public Employee	11.83%	5.48%	0.32%	17.63%	16.62%	-1.01%	78.21%	86.43%	2056
Warden, Patrol, & DCI	23.19%	7.82%	0.45%	31.46%	29.71%	-1.75%	78.16%	83.14%	2087
Law Enforcement	14.46%	1.32%	0.29%	16.07%	17.20%	1.13%	93.34%	104.90%	2039
Judicial	19.07%	-1.40%	0.30%	17.97%	23.72%	5.75%	107.08%	154.00%	2016
Paid Fire B	21.03%	0.28%	0.37%	21.68%	21.25%	-0.43%	98.85%	85.95%	n/a
Guard Fire	15.04%	1.72%	0.23%	16.99%	23.77%	6.78%	90.19%	154.61%	2023
Paid Fire A (in \$)*	\$50,069	\$10,489,971	\$123,700	\$10,663,740	\$0	(\$10,663,740)	63.89%	0.00%	n/a
Volunteer (in \$)**	\$1,285,552	\$2,187,240	\$83,700	\$3,556,492	\$3,528,220	(\$28,272)	74.40%	109.79%	2044

\*State law requires a minimum 3% yearly increase.

\*\*\$15.00 monthly from members plus 70% of fire insurance premium tax

\*\*\*Projections are estimates only based on the current set of assumptions and statutory contribution rates. Actual results will almost certainly differ as actual experience

Along with funded ratios, it is also important to evaluate the adequacy of the contribution rates. WRS is not seeking changes to the contribution rates at this time. Although there is a current contribution rate shortfall in the Public Employee Pension, it is less than it was last year due to proactive measures already put in place, primarily the reduced tier of benefits for members hired on or after September 1, 2012. Likewise, the shortfall in the Warden, Patrol, & DCI Plan is also less than last year due to the contribution increase. Last year there was a small 0.10 percent contribution shortfall for the Paid Firefighter B Plan and it increased to 0.43 percent. The known problem for the Paid Firefighter A Plan worsened, as expected. The contribution shortfalls are shown in red on the above summary table.

**Link for 1/1/2016 Valuations & Projections:** The full valuation and projection reports can be found at the links provided in this document and a one-page summary of facts about each plan is provided in Appendix A.

One Page Summary of All Plans: <http://retirement.wyo.gov/Media.aspx?mediald=1396>

30 Year Projections: <http://retirement.wyo.gov/Media.aspx?mediald=1397>

Public Employee Pension Plan: <http://retirement.wyo.gov/Media.aspx?mediald=1398>

Warden, Patrol & DCI Pension Plan: <http://retirement.wyo.gov/Media.aspx?mediald=1399>

Law Enforcement Pension Plan: <http://retirement.wyo.gov/Media.aspx?mediald=1400>

Judicial Pension Plan: <http://retirement.wyo.gov/Media.aspx?mediald=1401>

Plan A Paid Firefighter Pension Plan: <http://retirement.wyo.gov/Media.aspx?mediald=1402>

Plan B Paid Firefighter Pension Plan: <http://retirement.wyo.gov/Media.aspx?mediald=1403>

Guard Firefighter Pension Plan: <http://retirement.wyo.gov/Media.aspx?mediald=1404>

Volunteer Firefighter & EMT Pension Plan: <http://retirement.wyo.gov/Media.aspx?mediald=1405>

**Projections:** The projections for all plans show lower funded ratios after 30 years than the projections based on last year's valuations. This is primarily due to the lower investment return in 2015. Projections show the Public Employee Pension would be 86.43 percent funded ratio in 2046 (the end of the 30 year amortization period) and 100 percent funded in 2056. There is still a positive sloping trend, although it does not reach full funding in 30 years. The projected funding trend for each plan is depicted in the following chart. Keep in mind these are forecasts and primarily indicate direction.



**Projected Trends of Funded Ratio by Plan over 30-year Amortization Period**  
Based on 1/1/2016 data

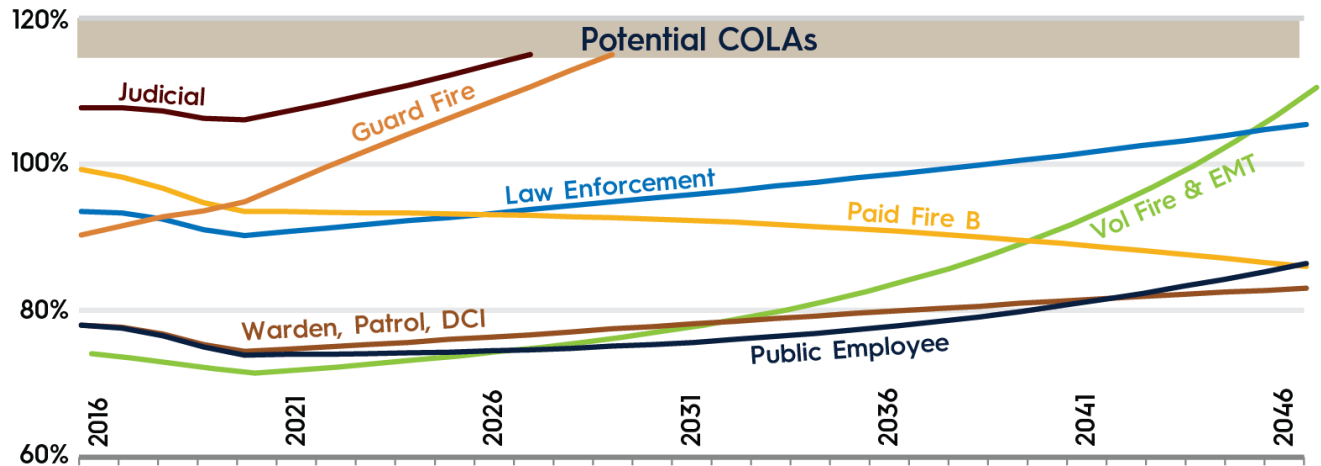


Chart excludes closed Plan A Paid Firefighter

**Important Information on Plan A Paid Firefighter:** With no current outside funding source, this plan is not expected to sustain the plan over the long term with the current level of benefits. Although the Board could re-instate contributions for active members, it would not resolve the funding problem since there are just a few actively employed members of this plan. Over time, either additional funding will be needed or the current benefit expectations will have to be reduced.

As expected, the funding for this plan worsened in 2015 and it is projected to exhaust assets in 12 years, which is prior to when all benefit obligations would be met. If there is a big deviation from assumptions, plan assets could run out sooner. The funding trajectory for the Paid Firefighter Plan A is not shown on the line chart depicting funding projections for all other plans; however, it reaches 0% funded in 2028 and continues a sharp decline thereafter.

Prefunding future benefits is a way to reduce the amount of contributions ultimately needed. The unfunded liability of the plan increased from \$67 million last year to \$74 million this year. If the plan assets were to be exhausted, table 23 of the valuation report for this plan shows it would take between \$17.5 million and \$12.75 million each year (decreasing annually as annuitants pass away) to pay for benefits with direct appropriations. WRS will provide any analysis requested by the JAC to support decision making.

**New Governmental Accounting Standards Board Requirements:** WRS complied with the new requirements of the Government Accounting Standards Board (GASB) pertaining to changes in the accounting rules for governmental pension plans. These requirements are specifically known as GASB 67 and 68 and they entail providing additional information for employers to incorporate into their financial statements.

According to GASB, the new standards are designed to improve financial reporting performed by government plans. However, WRS believes the best way to ascertain the funding status of the plans it administers is with the actuarial funding valuation reports that have been provided to the legislature and stakeholders for many years.

Although the new accounting rules require employers to include a proportionate share of any unfunded pension liability on their financial statements, it is not something the employer must pay. The liability will decrease over time with normal contribution rates, except in the case of Paid Firefighter Plan A which has no incoming contributions.

A helpful article from State Legislatures Magazine addressing the GASB standards is available at <http://www.ncsl.org/research/fiscal-policy/go-figure-sl-magazine-july-2013.aspx> and is also provided in Appendix B of this report.

**Review of Statutory COLA Criteria:** In keeping with W.S. 9-3-454, for a COLA to be granted from pension plan funds the funded ratio of the plan must remain 100 percent plus a margin after the COLA. In addition, the actuary must deem the award affordable. The Board may then recommend a COLA from internal funds to the legislature. The final determination for any COLA award would be made through legislation except in the case of the Paid Firefighter A Plan.

In the same manner as with contribution requirements, the Board annually evaluates the affordability of COLAs in light of the requirements of state law. The actuary found no plan met Wyoming’s requirement of full funding, including a margin for future adverse experience, needed to fund a COLA award.

## Investment Overview

**Performance:** WRS’ investment performance since the inception of a professional investment staff in March of 2009 has shown considerable improvement, but there is still room for further progress. WRS appreciates the legislature’s support of this effort and looks forward to the challenge and opportunity to produce superior long-term risk adjusted returns. The chart below illustrates the improvement in return (relative to benchmark) since staff was hired in 2009. The impact of 1.97% of relative outperformance over five years would translate to more than \$300 million dollars for the overall plan.

	<b>Annualized Returns Relative to Fund Benchmark*</b>			
	<b>1 year</b>	<b>3 year</b>	<b>5 year</b>	<b>10 year**</b>
<b>Current Investment Team (Performance as of 12/31/15)</b>	<b>+0.10%</b>	<b>-0.10%</b>	<b>+0.10%</b>	<b>N/A</b>
<b>Pre-Investment Team (as of 3/31/09)</b>	<b>-4.85%</b>	<b>-2.88%</b>	<b>-1.87%</b>	<b>-1.23%</b>
<b>Difference (Current – Pre Investment Team)</b>	<b>+4.95%</b>	<b>+2.78%</b>	<b>+1.97%</b>	<b>N/A</b>

\*Annualized returns with investment team are as of 12/31/2015 and pre investment team is as of 3/31/2009

\*\*WRS has had an internal investment staff only since March of 2009

Since establishing an investment team in 2009, WRS has systematically restructured every asset class in the portfolio and dramatically improved its risk-adjusted return profile. The risk-adjusted return is a way of measuring how much risk is involved in producing a given return as measured by the volatility of the return. WRS tries to make sure that it is not taking on uncompensated risk in the portfolio without commensurate return.

WRS believes its investment success depends heavily on establishing a robust, sustainable investment operation. As such, WRS continues to offer the investment intern and analyst program started in 2014 in partnership with Wyoming educational institutions, and has been extremely pleased with the results to date. The program achieves many important goals including building depth of staff, hiring Wyoming natives, and completing work that is critical to the operations of the investment group.

As noted in the following table, WRS outperformed its benchmark for the one-year period ending December 31, 2015 by 0.1 percent. For the three, five and ten-year periods ending December 31, WRS was within 0.4 percent of the portfolio benchmark, though it should be noted that WRS has only had an investment staff for slightly over 5 years so the 10 year return figure is accounting for nearly 5 years of relatively poor performance with no investment staff. It is also important to note that during the first three years the investment staff was small and was built out slowly from having only one investment person to four, which allowed for much more specialization.

In terms of absolute performance, in 2015 markets did not provide the opportunity to produce the assumed rate of return, which is 7.75 percent. Although a return below this threshold is disappointing, WRS is a long-term investor, and as such, realizes that the short term fluctuations of the market are largely out of its control.

The 2015 returns of the major asset class indexes are listed below for context:

MSCI World (Aggregate Global Equity)	-2.4%
S&P 500 (US Large Cap equity index)	+1.4%
Barclays US Aggregate (Fixed Income Aggregate in US)	+0.5%
Citi World Government Bond Index (Aggregate Global Government Fixed Income)	-3.6%
Bloomberg Commodity Index (Global Commodity Index)	-24.7%

WRS' investment program is designed to meet the actuarial return hurdle over the long-term. In doing so, WRS accepts that there will be periods, perhaps even multi-year periods, where we fail to achieve the long-term actuarial rate of return because of short-term market weakness.

### Investment Performance Ending December 31, 2015

	May-16	Annualized Returns as of 12/31/15				
	YTD	1yr	3yr	5yr	10yr*	Since Inception****
WRS Total Fund (net)	1.5%	-0.3%	5.8%	5.9%	4.5%	8.4%
Benchmark (Target Asset Allocation)	1.3%	-0.5%	5.8%	5.7%	4.9%	9.8%
Outperformance (Underperformance)**	0.2%	0.1%	(-0.1%)	0.1%	(-0.4%)	(-1.4%)
Actuarial Required Return***	7.75%	7.75%	8.0%	8.0%	8.0%	8.0%

\*WRS has had an internal investment staff only since March of 2009

\*\*Numbers may not sum due to rounding

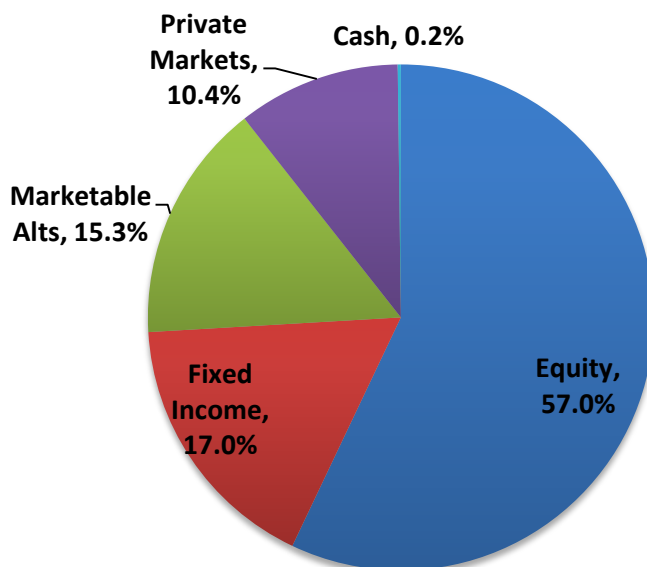
\*\*\*Actuarial Rate of Return was changed as of 3/31/13 from 8.0% to 7.75%

\*\*\*\*Returns for diversified portfolio's inception date = Feb. 1983

To provide some qualitative context for 2015 relative returns, WRS has structured its portfolio with a greater equity bias than many of its peers. This embedded equity bias should result in higher expected return over the long-term; however, it also has more potential for volatility.

Despite the return backdrop, WRS feels very positive about many of the enhancements made to the portfolio over the last year. For example, WRS selected several private equity managers to initiate investments in this asset class and is pleased to have a program in place. The benefit of a private equity allocation is a better risk/return profile for the plan. WRS expects to see the rewards of this over the next several years as the allocation is built out.

## Asset Allocation as of 12/31/15



Note: The composition of the Private Markets asset class was 15.8% Infrastructure, 13.6% Natural Resources, 24.7% Private Debt, 2.0% Private Equity, and 43.9% Real Estate.

Equity plays a crucial role within the total portfolio by providing a combination of long-term capital appreciation (primarily driven by overall economic growth in GDP) and dividend income. Equities have historically delivered returns well in excess of fixed income, albeit with significantly higher volatility. WRS believes it will continue to be necessary to maintain a meaningful exposure to equities over time in order to meet the actuarial return objective required to pay the system's liabilities.

Given this large allocation to equity risk, the fixed income portion of the portfolio is meant to act as ballast in times of equity market stress. To achieve this goal, WRS maintains a very conservative position in fixed income with over half of the fixed income exposure in Treasury securities that tend to be safe haven investments when equity markets sell off. Because WRS has meaningfully lower prospective return expectations for this asset class, the fixed income positioning is somewhat low relative to the equity holdings to avoid being too large of a drag on returns.

The marketable alternatives asset class is designed to access investment opportunities that a pure long-only equity manager or fixed income manager cannot. This might include shorting stocks, buying alternative liquid assets like commodities, or any number of other liquid strategies that provide unique diversifying exposures to the portfolio. Due to the very different strategies employed within that asset class, it can be fairly difficult to make generalizations on performance of the asset class as a whole.

Lastly, WRS has a dedicated allocation to private markets opportunities including such investments as real estate, private equity and private debt. These strategies are very illiquid (cannot be sold very easily without taking large price concessions) but will typically compensate investors accordingly. Over the past several years, the system has been under-allocated relative to its peers and as mentioned above, has made great efforts to build out and properly manage a larger shift into this more complex asset class.

WRS is appreciative of the investment the JAC and state policymakers have made in the Investment Team and intends to produce the desired results. In addition to the information presented above, supplementary information about the investments and operations for the plan are available upon request by the JAC.

# Key Organizational Updates

During the last legislative session, Governor Mead appointed and the Senate confirmed two new Board members. The WRS Board is comprised of:

## Representing the Community At Large

Laura Ladd, Chair of the Board

Michael Ceballos (new)

Tom Chapman, Chair of Investment Committee and Chair of Deferred Compensation Committee

Keith Hay

Eric Nelson, Chair of Legislative & Benefits Committee

## Representing Public Employers & Employees

Tim Sullivan

Steve Wolff, Chair of Strategic Planning & Governance Committee

## Representing Educational Employers & Employees

Garth Shanklin, Vice Chair of the Board

Kay Watson (new)

## Representing Retirees

Vicci Colgan, Chair of Audit Committee

## Wyoming State Treasurer

The Honorable Mark Gordon

The Board and senior staff recently engaged in a strategic planning retreat in May. Succession planning and leadership development were targeted as key undertakings. The two newly appointed members were in attendance. WRS is continuing to work on its strategic plan and will release a revised version in the fall.

WRS brought on a new external audit firm, Eide Bailly, LLP, for the 2015 audit and received a clean opinion. The 2015 CAFR is available at <http://retirement.wyo.gov/Media.aspx?mediaId=1407>. An overview of WRS is online at <http://retirement.wyo.gov/Media.aspx?mediaId=1442>.

WRS continues to refine and enhance its new pension administration system that went live in May 2014. WRS used an online method for the release of annual pension statements which was very successful. WRS is undertaking the development of a new website that will be compatible with the pension administration system and support expansion into digital communications with members.

Pursuant to legislation passed in 2015, WRS implemented automatic enrollment into the 457 Plan for state employees hired on or after July 1, 2015. As a result, through May of 2016, 389 state employees have been automatically enrolled and are positioned for better retirement outcomes. There was a 97 percent “stick rate” which refers to the percent of employees remaining enrolled. Full detail is provided in the following table. Albany County was the first non-state employer to elect automatic enrollment for employees hired on or after February 1, 2016.

### Auto Enrollment Summary 7/1/15-5/31/16

<b>Eligible new employees</b>	<b>498</b>
Returned mail (excluded)	3
<b>Gross eligible new employees</b>	<b>495</b>
Electively enrolled	66
Terminated (before 30 day waiting period ended)	25
Pre-July hire	5
Updated address from prior month (added)	3
<b>Net New Eligible Employees</b>	<b>402</b>
Opt outs	12
Permissible withdrawal	1
<b>Auto enrolled employees</b>	<b>389</b>
<b>Auto enrollment "stick" rate</b>	<b>389/402 = 97%</b>

WRS will be implementing an enhanced investment menu for the 457 Plan in the fall of 2016. The new menu allows participants choice in how active they want to be in managing and customizing 457 Plan investments. The menu will still offer target date funds, a simpler mix-your-own menu, and for more experienced investors, the flexibility to choose from a greatly expanded list of mutual funds through a self-directed brokerage account. WRS worked on this strategy for approximately two years prior to implementation. More detail on the changes can be found in Appendix C.

**Wyoming Retirement System**  
Summary of Results as of January 1, 2016

	State	Law Enforcement	Wardens	Judges	Fire A <sup>(1)</sup>	Fire B	Guard Fire	Volunteer <sup>(2)</sup>
<b>Member Statistics</b>								
Number of actives	36,577	2,761	317	46	3	372	36	2,379
Average age	46.24	39.32	40.49	57.96	58.15	39.54	38.68	44.49
Average service	9.93	8.08	10.46	9.44	36.96	10.14	9.54	11.01
Average entry age	36.31	31.24	30.03	48.52	21.19	29.40	29.14	33.48
Total payroll	\$1,858,678,687	\$161,357,314	\$24,641,033	\$6,624,052	\$195,221	\$27,512,076	\$2,243,456	N/A
Average salary	\$50,816	\$58,442	\$77,732	\$144,001	\$65,074	\$73,957	\$62,318	N/A
Accumulated contributions	\$1,472,111,790	\$133,911,728	\$33,664,383	\$6,234,876	\$96,203	\$17,297,744	\$3,715,740	\$5,369,518
Average accumulated contributions	\$40,247	\$48,501	\$106,197	\$135,541	\$32,068	\$46,499	\$103,215	\$2,257
Number of Deferred vesteds	6,096	300	20	-	-	36	2	283
Total contributions	\$197,288,124	\$13,532,863	\$2,630,166	\$0	\$0	\$1,408,677	\$304,168	\$551,072
Number of employees due refunds	21,196	759	33	-	1	30	3	1,107
Total contributions	\$48,461,353	\$3,102,450	\$466,251	\$0	\$1,544	\$226,118	\$27,150	\$410,499
Number of pensioners	24,728	1,070	320	18	282	100	6	1,307
Total benefits	\$460,903,483	\$26,287,373	\$9,147,362	\$981,321	\$14,859,608	\$3,936,191	\$152,480	\$5,289,000
Average benefits	\$18,639	\$24,568	\$28,586	\$54,518	\$52,694	\$39,362	\$25,413	\$4,047
Total count	88,597	4,890	690	64	286	538	47	5,076
<b>Funded Status (No COLA)</b>								
Actuarial value of assets	\$6,814,919,591	\$557,125,768	\$128,597,582	\$24,633,859	\$130,776,292	\$124,496,124	\$6,616,954	\$76,097,619
Market value of assets	\$6,427,796,404	\$525,237,686	\$121,352,880	\$23,202,291	\$123,898,322	\$117,313,946	\$6,198,550	\$71,065,986
Actuarial accrued liability	\$8,713,353,524	\$596,856,177	\$164,522,386	\$23,004,559	\$204,689,787	\$125,941,369	\$7,336,724	\$102,278,423
Unfunded actuarial accrued liability	\$1,898,433,933	\$39,730,409	\$35,924,804	(\$1,629,300)	\$73,913,495	\$1,445,245	\$719,770	\$26,180,804
Actuarial rate of return	5.87%	5.89%	5.86%	5.87%	5.84%	5.89%	5.21%	6.03%
Market rate of return*	(0.26%)	(0.26%)	(0.26%)	(0.26%)	(0.26%)	(0.26%)	(0.26%)	(0.26%)
<b>Funded ratios</b>								
- Actuarial value	78.21%	93.34%	78.16%	107.08%	63.89%	98.85%	90.19%	74.40%
- Market value	73.77%	88.00%	73.76%	100.86%	60.53%	93.15%	84.49%	69.48%
<b>Contributions (No COLA)</b>								
Normal cost	11.83%	14.46%	23.19%	19.07%	\$50,069	21.03%	15.04%	\$1,285,552
Employee statutory contribution requirement	(8.25%)	(8.60%)	(14.56%)	(9.22%)	\$0	(9.25%)	(16.65%)	(\$428,220)
Other contribution	0.00%	0.00%	(0.27%)	0.00%	\$0	0.00%	0.00%	\$0
Net employer normal cost	3.58%	5.86%	8.36%	9.85%	\$50,069	11.79%	(1.61%)	\$857,332
Amortization of unfunded liability	5.48%	1.32%	7.82%	(1.40%)	\$10,489,971	0.28%	1.72%	\$2,187,240
Administrative expenses	0.32%	0.29%	0.45%	0.30%	\$123,700	0.37%	0.23%	\$83,700
Total employer cost, not less than \$0	9.38%	7.47%	16.63%	8.75%	\$10,663,740	12.44%	0.34%	\$3,128,272
Total cost (Employee + Employer)	17.63%	16.07%	31.46%	17.97%	\$10,663,740	21.68%	16.99%	\$3,556,492
Employer statutory contribution requirement	8.37%	8.60%	14.88%	14.50%	\$0	12.00%	7.12%	\$3,100,000
Total statutory requirement	16.62%	17.20%	29.44%	23.72%	\$0	21.25%	23.77%	\$3,528,220
Shortfall/(surplus)	1.01%	(1.13%)	1.75%	(5.75%)	\$10,663,740	0.43%	(6.78%)	\$28,272
<b>Actual Asset Values for Prior Year</b>								
Employer contributions	\$142,665,839	\$12,468,304	\$3,289,373	\$920,867	\$0	\$3,273,301	\$158,287	\$0
Other contributions <sup>(3)</sup>	\$1,956,534	\$238,579	\$66,315	\$0	\$0	\$367	\$34,907	\$2,238,612
Administrative expenses	\$5,410,522	\$442,876	\$101,768	\$18,905	\$109,462	\$95,882	\$4,913	\$76,882
<b>Key Assumptions</b>								
Discount rate	7.75%	7.75%	7.75%	7.75%	7.75%	7.75%	7.75%	7.75%
Amortization period	30	30	30	30	10	30	30	30
<b>Notes</b>								
* Market rate of return is supplied by NEPC, LLC.								
(1) Fire A guarantees at least a 3.0% COLA, so the funding and contribution amounts above include a 3% COLA for Fire A								
(2) For the Volunteer plan, "Employer statutory contribution requirement" is the premium tax allocation								
(3) Excludes service purchase contributions and member redeposits								

**Wyoming Retirement System**  
 Summary of Results as of January 1, 2016

	<u>State</u>	<u>Law Enforcement</u>	<u>Wardens</u>	<u>Judges</u>	<u>Fire A</u>	<u>Fire B</u>	<u>Guard Fire</u>	<u>Volunteer</u>
<u>Member Statistics</u>								
Number of actives	36,577	2,761	317	46	3	372	36	2,379
<u>Retirement Eligibility (Normal or Early)</u>								
Number of actives eligible for normal (unreduced) retirement in 2016	6,426	288	65	9	3	47	5	129
Percentage of actives eligible for normal retirement in 2016	17.6%	10.4%	20.5%	19.6%	100.0%	12.6%	13.9%	5.4%
Number of actives eligible for early retirement in 2016	7,722	273	N/A	21	N/A	N/A	3	N/A
Percentage of actives eligible for early retirement in 2016	21.1%	9.9%		45.7%			8.3%	



# Go Figure!

## Appendix B

New guidelines are changing how public pension accounting affects the books, budget and bond ratings.



BY KEITH BRAINARD

**A**cross the nation, public pension funds hold some \$3 trillion in assets in trust for 15 million state and local government employees and 8 million retirees and their family members. How these benefits are funded and accounted for is a matter of consequence and vigorous debate.

Until recently, state and local lawmakers needed to focus only on a single set of calculations, within parameters set by the Governmental Accounting Standards Board (GASB), to assess both the condition and costs of their public pension plans. But the days of a single set of numbers are gone. In June 2012, the GASB approved new standards for public pensions and the employers that sponsor them: states, cities, school districts, etc.

Known officially as GASB Statement No. 67 and No. 68, the revised standards for public pension plans apply to fiscal years that began after June 15, and will take effect for employers after June 15, 2014.

Lawmakers will now have at least three sets of pension numbers for three different purposes—books, bonds and budget. As sponsors of public pension plans, state and local governments must understand the source, purpose and audience for each to make sound policy decisions and accurately communicate with constituents about the condition of the retirement plan.

### **BOOKS: Computing an annual financial position for pensions for governmental accounting**

Since the mid-1990s, financial reporting standards set by the GASB have been based on an actuarial calculation of the amount needed to fund the pension plan.

The new GASB standards set forth different guidelines for employers, depending on the type of their pension plan:

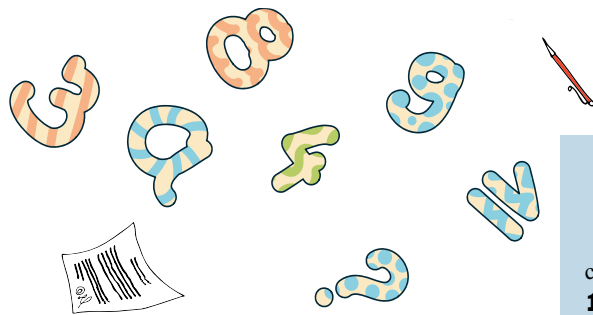
- ◆ **Single-employer:** The pension covers only one governmental entity.
- ◆ **Agent:** The pension covers several governmental entities that make individually calculated contributions for their respective portions of the costs.
- ◆ **Cost-sharing:** The pension covers several governmental entities that proportionally split the costs.

Under the new standards, any review of a pension should begin with understanding which type of plan it is. Plans covering the vast majority of public employees are either agent or cost-sharing plans.

Another important change under the new GASB standards is that the computation of a “net pension liability” will now appear in the government’s basic financial statement. It is the calculation of the difference between the market value of the pension’s assets and its obligations to pension beneficiaries on a specific date.

Employers that participate in cost-sharing plans will be required to report their share of the net pension liability. For some, this new requirement will result in placing a liability on their books that is disproportionately larger than other liabilities. In addition, because the amount of this liability will be based on the assets’ market value (not actuarial, or smoothed value), it is also likely to introduce an unprecedented level of year-to-year volatility.

*Keith Brainard is research director at the National Association of State Retirement Administrators. This article was adapted from Government Finance Review with permission from the Government Finance Officers Association.*



### **BUDGETS: Determining the appropriate annual contribution to the pension plan needed for sound funding**

Of the many changes, perhaps the most notable will be the separation of public pension accounting from public pension funding. The new standards are focused on accounting, but not on financing pension benefits.

The previous standards created a single calculation that was used to identify the cost of the plan, expressed through the annual required contribution (ARC). The new accounting number is separate from an ARC and does not contain guidelines for calculating one.

State and local pension funding policies usually exist in statute and vary in how specific they are and in what elements they address. Most of these funding policies comport with accounting and actuarial standards in how they calculate an annual required contribution and are not required to change; but, they should be assessed for their effectiveness.

To guide lawmakers in reviewing the effectiveness of existing practices and governing statutes, 10 national associations representing state and local governments (including NCSL) established a Pension Funding Task Force that released “Pension Funding: A Guide for Elected Officials” in March. According to the guide, “The ultimate goal is to ensure that pension promises can be paid, employer costs can be managed, and the plan to fund pensions is clear to everyone.”

In it, the task force recommends that pension funding policies:

- ◆ Be based on an actuarially determined contribution.
- ◆ Be disciplined to ensure that promised benefits can be paid.
- ◆ Maintain intergenerational equity so that the cost of employee benefits is paid by the generation of taxpayers that receives services.
- ◆ Make employer costs a consistent percentage of payroll.
- ◆ Require clear reporting to show how and when pension plans will be fully funded.

### **BONDS: Calculating how pension obligations affect a government’s creditworthiness**

Bond-rating agencies assess the creditworthiness of issuers of municipal debt based on a number of metrics, a government’s pension plan being one of them.

Some ratings agencies have announced that in their credit analytics they will adjust pension data using uniform, and generally more conservative, assumptions for comparative purposes.

In 2011, Fitch Ratings announced that it would apply a uniform 7 percent investment return assumption to calculate the pension cost of plan sponsors. Fitch also indicated that it would allocate costs to individual employers participating in cost-shar-

## What Legislators Need to Ask

Although similar terms and multiple numbers have the potential to cause confusion, legislators should be asking three main questions:

- 1. How much should we be paying?** An actuarially determined annual contribution within some established parameters (most likely in statute) is what the Pension Funding Task Force recommends to ensure sound funding practices.
- 2. What should I know about the new pension liabilities figure that now will be on the basic financial statements?** The actual liability is the same as it always was, but the calculation will move from being a mere footnote to a more visible place on the financial statement. Nothing has changed as far as the liability itself.
- 3. What should we know about the bond-rating agencies?** Some of the agencies have announced that in their credit analytics, they will adjust pension data using uniform, generally more conservative assumptions regarding amortization periods and investment returns. However, pensions are just one of many metrics they use to determine bond ratings.

ing, multiple-employer pension plans and would reconsider its criteria after the new GASB standards were issued.

Moody’s published a revised approach to assessing pension liability in April. Among other changes, it intends to use a risk-free discount rate (currently around 3.8 percent) instead of accepting projections of pension fund returns, and a uniform 20-year amortization period for all plans. These changes will make pension liabilities appear much greater—and also will be yet a different number than those used for accounting and funding.

To date, Fitch has not publicly released new criteria, and S&P’s has not indicated whether the criteria it uses to evaluate pension plans will change as a result of the new GASB standards.

### **Understanding Changes is Crucial**

Assessing the health of a public pension plan has always been complex, but at least it was largely confined to understanding GASB standards. These standards provided insight into a pension’s funding condition and annual cost, which the bond-ratings agencies also factored into their assessment of creditworthiness.

The new world of public pension data promises to be more confusing with different factors and methods being used—and published—by different groups for different purposes.

Although policymakers should continue to use an actuarial calculation to determine the necessary pension contribution to put in their budgets, the net pension liability will now be a distinct computation on the financial statement. And yet another calculation—entirely different from the others—may be made by credit rating agencies to determine how pension commitments affect a municipal bond issuer’s ability to meet obligations.

These numbers will need to be explained and put into the proper context for other lawmakers, for the media and for constituents—both public employees and the general public. Failing to do so could result in the proliferation of misunderstanding and misinformation, rather than relevant and factual data on which to base sound policy.



# INVESTMENT MENU CHANGE

*Partnering to Build Financial Security for Members and Their Families*

## UPCOMING INVESTMENT ENHANCEMENTS PROVIDE ADDITIONAL FLEXIBILITY AND VALUE

Beginning in the fall of 2016, you can benefit from the Plan's new, simplified investment menu, plus a self-directed brokerage account option.

This new menu will still offer **pre-mixed target date funds**, a simpler **mix-your-own investment menu**, and for more experienced investors, the flexibility to choose from a greatly expanded list of mutual funds through a **self-directed brokerage account**. This three-level investment menu will offer you a choice in how active you want to be in managing and customizing your 457 Plan investments.

### LEVEL 1 FOR "DO-IT-FOR-ME" INVESTORS: PRE-MIXED TARGET DATE FUNDS

If you are invested in a target date fund there is nothing for you to do. The only change to the target date funds is even lower fees starting in June of 2016. However, there will be a freeze period from 2 p.m. MT on Fri., Sept. 30 through Mon., Oct. 3, 2016, during which you won't be able to access or make changes to your 457 Plan account.

### LEVEL 2 FOR "DO-IT-MYSELF" INVESTORS: NEW MIX-YOUR-OWN FUND OF FUNDS\*

WRS Small/Mid Cap U.S. Equity Fund	WRS Real Assets Fund
WRS International Equity Fund	WRS Fixed Income Fund
WRS Large Cap U.S. Equity Fund	WRS Capital Preservation Fund (stable value fund)

The new mix-your-own investment menu consists of options that were developed by WRS to help participants achieve their retirement goals. Each option was carefully constructed to consider expected returns, risk, and fees. The benefits to participants from this new menu include: a full range of custom asset class options; a streamlined decision-making process focused on investment mix rather than individual managers; lower fees on average than prior mix-your-own fund options; diversified and complementary investments with minimal overlap across options; and continued ongoing WRS oversight and monitoring of custom fund options.

**\* You can learn more about each new fund by reviewing the fund data sheets and hypothetical return information available at [retirement.wyo.gov](http://retirement.wyo.gov).**

### Important Information on How Your Current Mix-Your-Own Funds Will Transfer

Existing balances in the outgoing funds will be automatically exchanged for shares of the new mix-your-own funds according to the "mapping strategy" shown in the table on the next page. Future monies directed to these funds will automatically be invested in the new funds. Your third quarter statement will reflect any mapping done to your account.

If you don't want to follow the automatic mapping, you have until 2 p.m. MT on Fri., Sept. 30, 2016, to move assets to the target date funds or the stable value fund. Investment changes can be made by calling our recordkeeper directly at **(800) 701-8255** or visiting **[www.wrsdcp.com](http://www.wrsdcp.com)** and logging into your account with your PIN.

In order to transition to the new mix-your-own funds, WRS will impose a freeze period from 2 p.m. MT on Fri., Sept. 30 through Mon., Oct. 3, 2016. You will not be able to access or make changes to your 457 Plan account during the freeze period.

*Mapping Details on the Next Page* →

### LEVEL 3 FOR EXPERIENCED INVESTORS: SELF-DIRECTED BROKERAGE ACCOUNT

A self-directed brokerage account (SDBA) will be made available through TD Ameritrade starting Oct. 3, 2016. The SDBA will allow experienced investors to select from a wide variety of **mutual funds**, provided they acknowledge and accept the risks associated with the investments available in the SDBA. These securities are offered through TD Ameritrade and additional fees apply. Call our recordkeeper at **(800) 701-8255** for more information on this new option.

## INVESTMENT MENU CHANGES AT A GLANCE

*Reminder: In order to transition to the new mix-your-own funds, WRS will impose a freeze period from 2 p.m. MT on Fri., Sept. 30 through Mon., Oct. 3, 2016. You will not be able to access or make changes to your 457 Plan account during the freeze period.*

### LEVEL 1: PRE-MIXED TARGET DATE FUNDS

LifePath Index Target Date Funds — No changes

### LEVEL 2: MAPPING STRATEGY FOR MIX-YOUR-OWN FUND OF FUNDS

OUTGOING FUNDS	MAPPING 9/30/16	NEW FUNDS
Artisan Mid Cap Fund		
Vanguard S&P Mid Cap 400 Value Index Fund	→	WRS Small/Mid Cap U.S. Equity Fund
T. Rowe Price New Horizons Fund		
T. Rowe Price Small Cap Value Fund		
Artisan International Growth Trust Fund	→	WRS International Equity Fund
Dodge & Cox International Stock Fund		
Oppenheimer Global Fund	→	<b>Existing Balances:</b> 50% to WRS International Equity Fund and 50% to WRS Large Cap U.S. Equity Fund <b>Future Contributions:</b> 100% to WRS Large Cap U.S. Equity Fund
BlackRock Russell 1000 Growth Index Fund		
T. Rowe Price Equity Income Fund	→	WRS Large Cap U.S. Equity Fund
GE U.S. Equity Fund		
SSgA S&P 500 Index Fund		
PIMCO All Asset Fund	→	WRS Real Assets Fund
Dodge & Cox Income Fund	→	WRS Fixed Income Fund
JP Morgan Prime Money Market Stable Value Fund	→	WRS Capital Preservation Fund (stable value fund)

### LEVEL 3: SELF-DIRECTED BROKERAGE ACCOUNT

New feature provided by TD Ameritrade starting 10/3/16

Contact WRS at (307) 777-3325, email [457pln@wyo.gov](mailto:457pln@wyo.gov) or visit [www.wrsdcp.com](http://www.wrsdcp.com) if you have any questions or would like further information.