

Oregon Public Employees Retirement System

2015-17

Governor's Budget

Day 2: Overview of PERS – The Agency

**Agency Presentation to the
Joint Ways & Means Committee
General Government Subcommittee**

**Steven Patrick Rodeman
Executive Director**

March 17, 2015



Table of Contents

Presentation Day One: Overview of PERS – The System	Pages
Presentation Overview	3
What Is PERS?	5
Who Is PERS?	6
System Overview – Benefit Components	7
Who Gets Paid How Much?	8
Where Do They Get Paid?	9
Who Will Get Paid by Member Type?	10
Who Is Eligible To Retire?	11
How Do We Affect System Balance?	12
How Has PERS Been Funded?	13
What Do Employer Contributions Look Like?	14
What Does This Mean for 2015-17 Rates?	15
How Variable Are The Projections?	16
Variable Model Stress Test	17
System Average Base Pension Rates	18
System Average Net Contribution Rates	19
Funded Status Excluding Side Accounts	20
PERS Fund Value At Calendar Year-End	21
What Has The PERS Board Done On The “C”?	22
What’s Been Done To The “B”?	23
The Results	24
What’s Left To Be Decided?	25
Where Does This Leave The System?	26

Presentation Day Two: Overview of PERS – The Agency	Pages
Where Does This Leave The System?	28
PERS Fundamentals Map	29
Agency Mission Statement, Shared Vision, and Core Values & Operating Principles	30
Agency Overview – Fundamentals Drive Alignment	31
Outcome-Based Management System	32
Performance And Outcome Measures	33
“Red” Measures Drive Strategic Plan And Budget Priorities	34
2015-20 Strategic Plan	35
PERS POPs Linked To Strategic Plan	36-37
POP 102 – Phase III	38
PERS POPs Linked To Strategic Plan	39-41
Other Strategic Plan Goals	42-44
PERS Legislatively Approved Budget Historical Comparison	45
Budget Comparison: 2013-15 to 2015-17	46
Major Cost Drivers – PERS Compared To Peers	47
PERS’ Total Relative Complexity	48
PERS Positions And Total Membership	49
PERS Positions And Retirees	50
PERS Positions And Benefit Payments	51
12-Year Operating Budget, Expenditure, And Staffing Trends	52
Policy Packages Summary	53-55

Presentation Day Three: Earnings Crediting, Required Reports, and Budget Notes	Pages
Preliminary 2014 Earnings Crediting	57
Progress On 2013 Budget Directives	58
Central Data Management (POP 103)	59
Storage Area Network (SAN) (POP 103)	60
Bring IAP In-House (Legislative Approval)	61
SB 861 COLA Tier And Supplementary Payment	62
SB 822 Tax Remedy	63
Budget Note Reports For SB 5537 (2013)	64

Appendices	Pages
Appendix 1: Strategic Plan And Process Improvements, Supporting Documentation, And Required Reports	65 (see table of contents on page 66)
Appendix 2: Program Funding Proposals	160 (see table of contents on page 161)
Appendix 3: Other Funds Ending Balances For The 2013-15 & 2015-17 Biennia	202 (see table of contents on page 203)

Presentation Overview

Day One: Overview of PERS – The System

- The “Who, What, Where” of PERS Benefits
- System “Balance” and Roles in Funding
- Employer Contributions and Future Projections

Day Two: Overview of PERS – The Agency

- Mission, Vision, and Core Values and Operating Principles
- Key Goals and Performance Measures Driving Outcome-Based Management
- Strategic Plan Focus Areas Connected to 2015-17 Policy Option Packages

Day Three: Report on 2013-15 Legislative Priorities and Earnings Crediting

- Progress on Completing 2013-15 Policy Option Packages
- Review of Budget Notes and Reports from 2013-15
- Report on 2014 Preliminary Earnings Crediting

Overview of PERS – The Agency

Where Does This Leave the System?

Transaction	2012	2013	2014
Retirements*	13,765	16,354	15,966
Withdrawals	5,971	5,030	5,076
Eligibility reviews	15,966	17,256	49,646
Telephone call (incoming/outgoing)	215,568	243,443	205,379
Emails (incoming)	112,737	118,337	134,844
Written benefit estimates	10,616	11,656	10,921
Online benefit estimates**	137,057	163,412	870,470

* Including IAP

** 2014 includes all activity; new estimates, reviewing old estimates, etc.

FOUNDATIONS

KEY GOALS

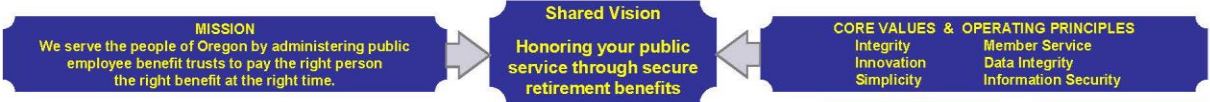
CORE PROCESSES

SUB PROCESSES

PROCESS MEASURES

PROCESS OWNER

OUTCOME MEASURES



OPERATING PROCESSES						SUPPORTING PROCESSES					
OP1: Managing Client Data and Services	OP2: Collecting Contributions	OP3: Assessing Benefit Eligibility	OP4: Processing Benefit Applications	OP5: Calculating Benefits	OP6: Paying Benefits	SP1: Communicating Internally & Externally	SP2: Managing Compliance & Risk	SP3: Leveraging Technology	SP4: Managing Organizational Finances & Resources	SP5: Managing & Developing the Workforce	SP6: Strategic & Operational Planning
<ol style="list-style-type: none"> Receiving member data Reconciling member data Correcting member data Maintaining member data Archiving and imaging member information Analyzing data and generating reports Generating and responding to general ledger correspondence Generating and responding to phone calls Creating and making presentations 	<ol style="list-style-type: none"> Creating and maintaining employer accounts Establishing an employer rate Generating an employer invoice Receiving employer contributions Posting contributions to invoices Crediting contributions to the general ledger Reconciling contributions submitted to State Treasury Collecting on delinquent employer invoices Receiving member purchases Accounting for supplemental member contributions 	<ol style="list-style-type: none"> Determining beneficiaries for pre- and post-retirement death benefits Requesting and reviewing divorce decrees Determining eligibility for disability Completing estimate requests Completing data verification requests Determining eligibility for PERS Health Insurance Program 	<ol style="list-style-type: none"> Receiving benefit application Reviewing benefit application Entering application data Corresponding with applicant and Employer Reviewing Membership Account for Readiness Initiating the benefit calculation process 	<ol style="list-style-type: none"> Reviewing account data Calculating initial benefit (service, death, divorce, disability, withdrawals) Recalculating benefit after an estimated benefit or when an adjusted or retro-active benefit is due Validating benefit calculations 	<ol style="list-style-type: none"> Ensuring cash is available to fund benefit payments Creating and transmitting payment files Processing manual checks Validating payment files Processing returns/cancels Maintaining payee information Maintaining deductions Ensuring tax reporting 	<ol style="list-style-type: none"> Developing communications strategy Creating and maintaining publications and forms Maintaining electronic & social media Communicating with Legislators and interest groups Responding to media requests Communicating with agency staff Responding to public record and discovery requests 	<ol style="list-style-type: none"> Providing policy advice Implementing new legal mandates Resolving disputes Managing legal services Maintaining tax-qualified status Managing strategic relationships Conducting enterprise risk management efforts Managing audit services Managing information (record & document) security Ensuring reliable, consistent and auditable data reporting 	<ol style="list-style-type: none"> Developing IT strategy and roadmap to meet agency technology needs Ensuring system availability and performance Delivering HelpDesk/desktop support Maintaining applications and systems Implementing new applications and systems Ensuring system security Developing, delivering and managing Enterprise Content Management System 	<ol style="list-style-type: none"> Administering accounting and payroll services Managing funds and investments Developing and administering budget and finance operations supporting agency strategic plan Developing and managing contracts and agreements Maintaining and managing facilities and equipment Managing actuarial services 	<ol style="list-style-type: none"> Managing the Workforce Plan Acquiring Talent On-Boarding Managing Performance Developing Employees Retaining Employees 	<ol style="list-style-type: none"> Nurturing the agency's mission, values and core operating principles Developing/maintaining the agency's strategic plan and ensuring organizational alignment Prioritizing and managing the completion of projects Governance and Maintaining the PERS Outcome-Based Management System Optimizing Business Processes
<p>OP1a: % reports received vs. expected OP1b: % of returned bulk mail OP1c: % of employer reports received are complete and accurate OP1d: Average number of days to process member forms OP1e: % of employer reports received within three business days of reporting cycle OP1f: Average length of wait before caller reaches live person OP1g: % of correspondence responded to with 10 days of receipt</p>	<p>OP2a: % of IAP contributions posted that are due OP2b: % of employers that rate the employer statement as good or excellent OP2c: % of total employers utilizing the Automated Clearing House OP2d: # of invoices outstanding more than 30 days OP2e: % of member purchases posted within 14 days of receipt</p>	<p>OP3a: % of appeals that are upheld compared to total # of eligibility, disability, and divorce appeals filed OP3b: % of disability and divorce determinations completed within 180 and 90 days respectively OP3c: % of estimates completed within 30 days of receipt OP3d: % of data verification requests completed within 180 days from receipt</p>	<p>OP4a: % of applications completed by the eligibility team within 30 days of the effective retirement OP4b: % of estimated payments per month OP4c: % of applications returned or rejected back to the applicant OP4d: % of applications with two or more requests made to an applicant or employer for information OP4e: % of non-canceled applications completed and ready for calculation within 30 days of the effective date OP4f: % of non-canceled applications completed and ready for calculation within 15 business days of all required documents received OP4g: % of non-canceled applications completed and ready for calculation within 60 days of the effective date</p>	<p>OP5a: # of calculations completed per FTE OP5b: % of sample calculations that are within plus or minus \$5 OP5c: % of calculations completed within 15 calendar days from completed application date</p>	<p>OP6a: # of manual checks processed OP6b: % of electronic payments over total payments OP6c: Average # of days to resolve returned payments OP6d: # of exceptions not deemed prior to pension lock OP6e: % of tax reports completed by Federal and State deadline</p>	<p>SP1a: # of emails to PERS Board email box with complaints SP1b: % who rate forms as easily understandable SP1c: % rating satisfaction as good or excellent SP1d: % of public records requests responded to with a cost estimate within 14 days of receipt</p>	<p>SP2a: % of operating budget expended for attorney and administrative hearing fees and risk management premiums SP2b: # of Member and Employer appeals and contested case matters, employment disputes, litigation disputes, notices of dispute and risk management, claims SP2c: % of staff determinations that are reversed on appeal SP2d: % of high risk audit findings resolved within committed time period</p>	<p>SP3a: # of business days in a month ORION systems are not available within the standard service window SP3b: % of survey respondents indicating satisfaction with our technology SP3c: # domains in the Information Security Business Risk Assessment report that meet agency goal SP3d: # of batch incidents/alerts in a month SP3e: # of outstanding Critical and High Priority ORION Enhancement Requests (non-defect-type CRs) SP3f: # of outstanding Critical and High Severity ORION Defects (defect-type CRs and PFCRs) SP3g: % of HelpDesk Tickets resolved within the Service Level Agreement SP3h: % of time systems are available during the service window</p>	<p>SP4a: % of months with no interest cost incurred due to borrowing SP4b: % of accounts receivable dollars collected (based on total dollars of accounts receivable) SP4c: % of actuarial services milestones met (e.g., experience studies, valuations, CAFR data, employer rates updated in Clarity, economic impact report) SP4d: % of invoices with payments released for payment within 30 business days of receipt by Accounts Payable</p>	<p>SP5a: % of employees' annual development plans created SP5b: % of employees receiving corrective action for violations SP5c: % of employees completing trial service SP5d: % of data fields entered correctly into the personnel database (PPDB) SP5e: % of employees evaluated overall performance rating SP5f: # of "meets expectations" SP5g: % of performance evaluations completed by due date</p>	<p>SP6a: % of outcome and process measures with new or current data reported for that quarter SP6b: # of problem solving initiatives in process SP6c: % of employees that rate mission relevance as high SP6d: Net # of measures that improve per each quarterly target review (QTR) SP6e: # of breakthroughs on schedule</p>
Yvette	Kyle	Yvette	Brian	Brian	Kyle	Steve	Steve	Jordan	Kyle	Kyle	Steve



Revised: 10/30/14



Agency Mission Statement, Shared Vision, and Core Values & Operating Principles

MISSION STATEMENT

We serve the people of Oregon by administering public employee benefit trusts to pay the right person the right benefit at the right time.



SHARED VISION

Honoring your public service through secure retirement benefits

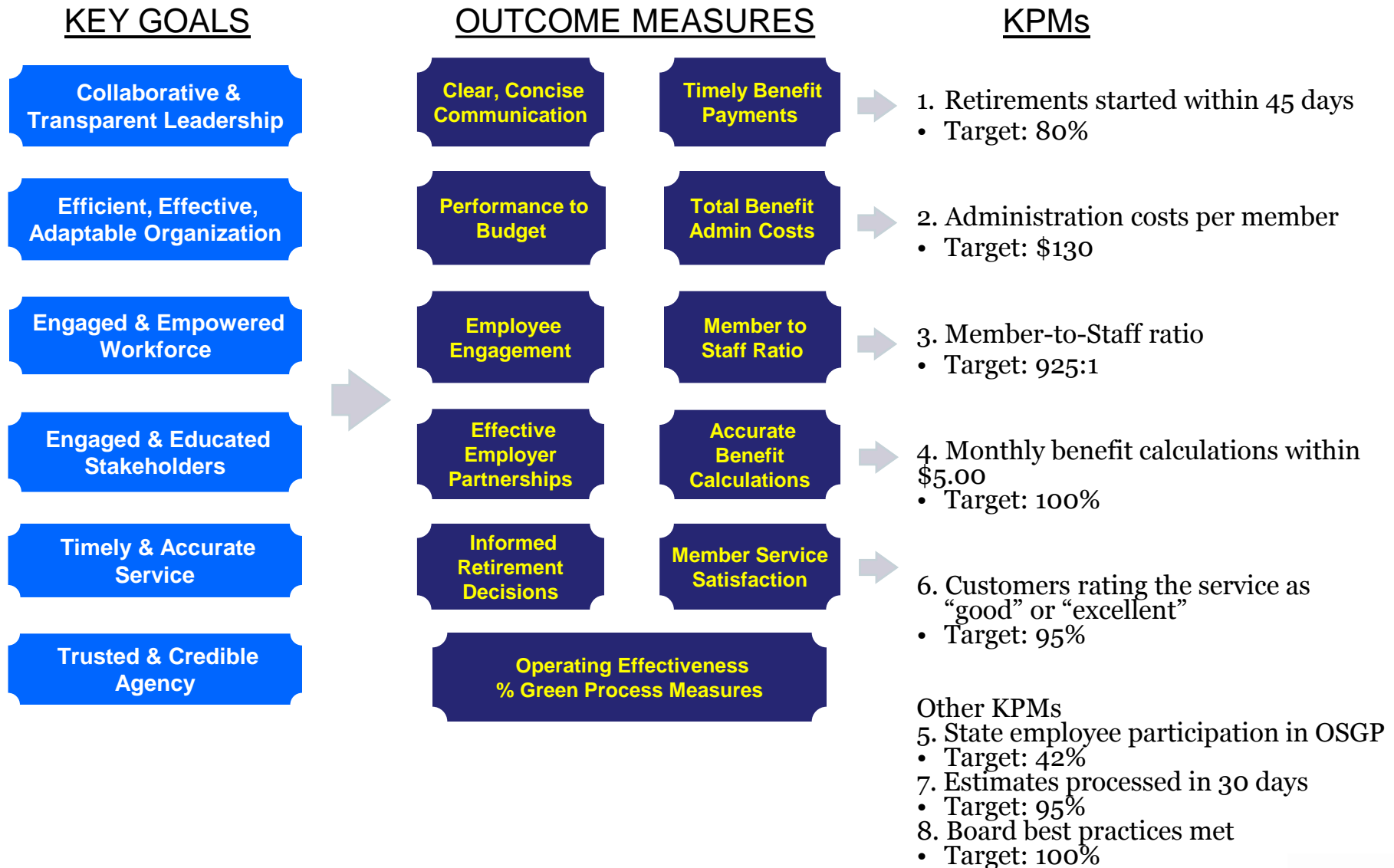


CORE VALUES & OPERATING PRINCIPLES

Integrity
Innovation
Simplicity

Member Service
Data Integrity
Information Security

Agency Overview – Fundamentals Drive Alignment



Outcome-Based Management System

Over 80 measures have been developed that gauge performance within PERS' Operating and Supporting Processes. These processes define the work we do, and the measures tell us where we need to improve on time, quality, or cost.

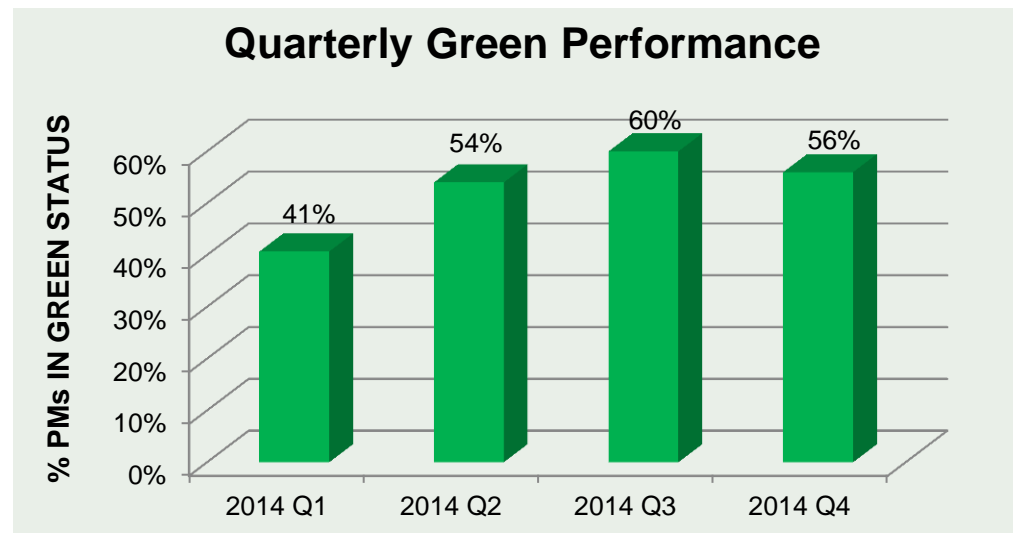
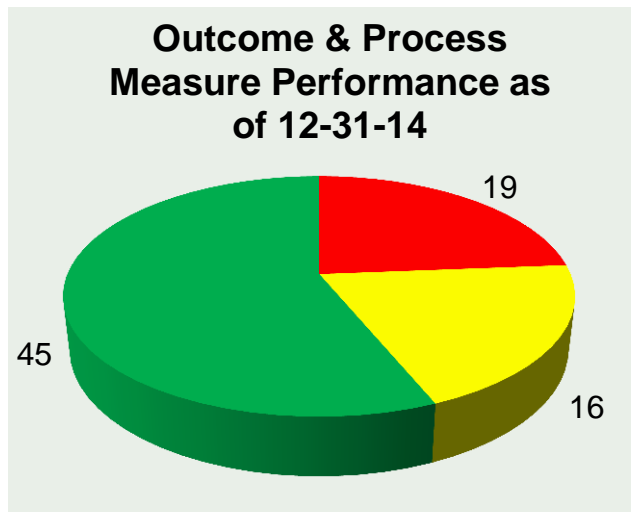
Operating Processes	Supporting Processes
Managing client data & services	Communicating internally & externally
Collecting contributions	Managing compliance & risk
Assessing benefit eligibility	Leveraging technology
Processing benefit applications	Managing organizational finances & resources
Calculating benefits	Managing & developing the workforce
Paying benefits	Strategic & operational planning

Performance and Outcome Measures

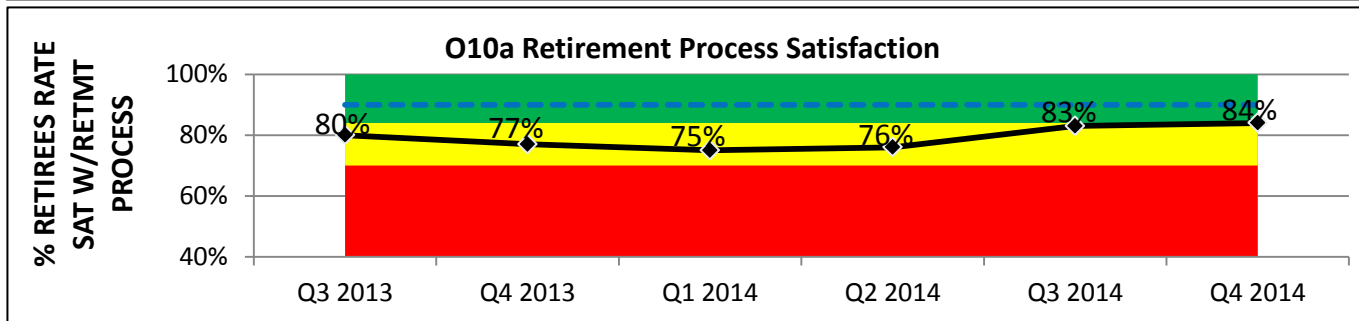
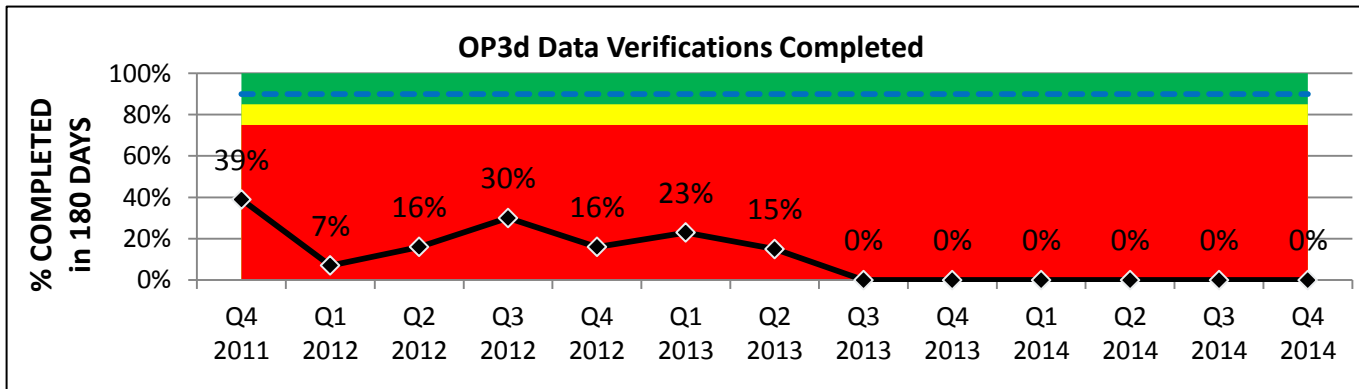
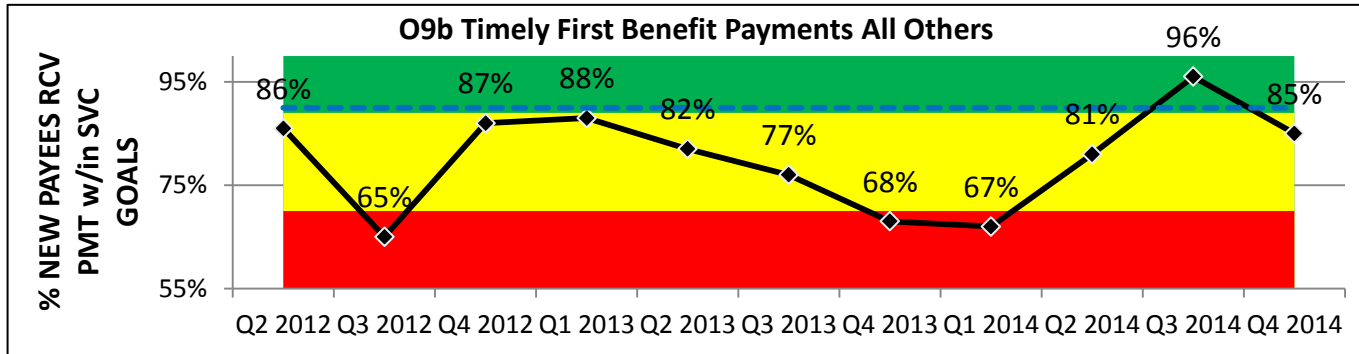
Outcome and Process Measures foster accountability and transparency. The results quantify where problems need solutions, and drive resource allocation.

Targeted performance ranges are in place for each measure:

- “Green” – at or above acceptable levels
- “Yellow” – needs attention to advance into acceptable levels
- “Red” – problem area; manager reports on corrective action plan



“Red” Measures Drive Strategic Plan and Budget Priorities



2015-20 Strategic Plan

Theme				
	Organizational Management & Development	Member Services & Communication	Data Reliability	Information Technology (IT)
Focus Areas	<p>Workforce Development</p> <p>Organizational Communication</p> <p>PERS Outcome-Based Management System</p>	<p>Quality Delivery Methods</p> <p>Member Relations</p>	<p>Member Accountability</p> <p>Data Constancy</p> <p>Agency Data Warehouse</p>	<p>IT Governance & Management</p> <p>Agile System Technology</p> <p>Disaster Recovery</p>

PERS POPs Linked to Strategic Plan

POP 101 – Current Service Metrics Staffing

Add six permanent positions:

- Four Call Center staff (transition from LD positions added in 2013-15)
- One Retirement Counselor for OPSRP calculations
 - 58% increase in OPSRP retirements from 2012-2014
- One Custodial Staff (complete transition from DAS custodians)

LINK: Member Services and Communications

- Member Relations
- Quality Delivery Methods

	Call Volume	Abandonment Rate (%)	Average Wait Time (minutes)
2012	162,726	21.03	6.52
2013	169,561	19.97	5:17
2014*	154,735	12.71	5:09

* Four additional Call Center staff began answering phones in March 2014.

PERS POPs Linked to Strategic Plan

POP 102 – Phase III to Fully Integrate IAP into the ORION System

Complete Phase III to transition all aspects of the Individual Account Program (IAP) to PERS' internal administration and eliminate a third-party administrator (TPA). Phase III constructs the IAP functionality in the agency's benefit administration system and migrates to the new platform.

LINK: Member Services and Communications

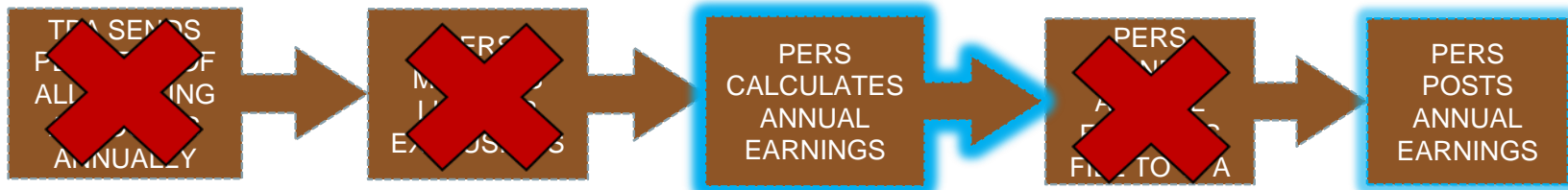
- Member Relations
- Quality Delivery Methods

POP 102 – Phase III to Fully Integrate IAP into the ORION System

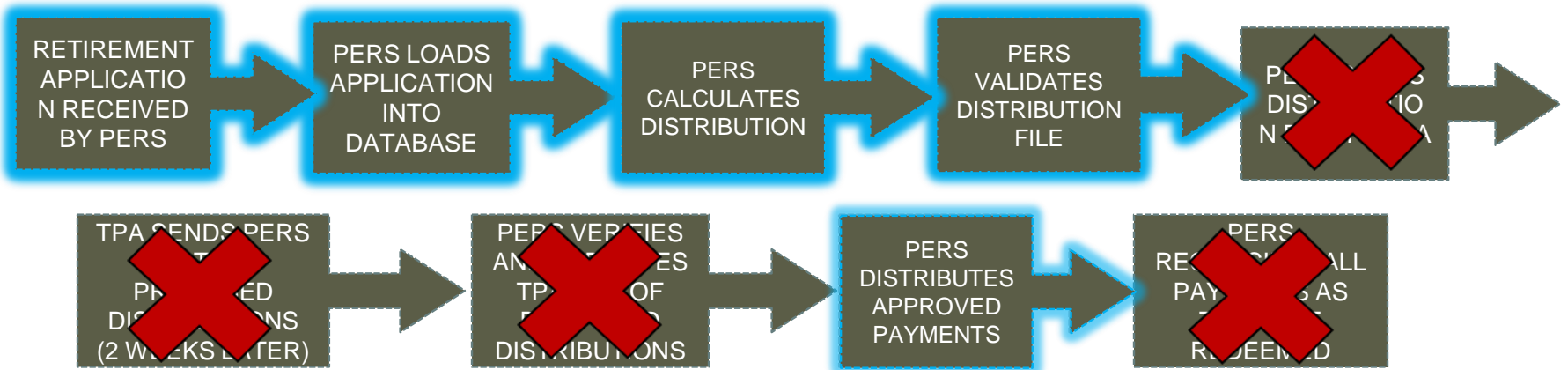
Contribution Reporting Activities - Ongoing



Earnings Activities - Annually



Distribution Activities - Daily



PERS POPs Linked to Strategic Plan

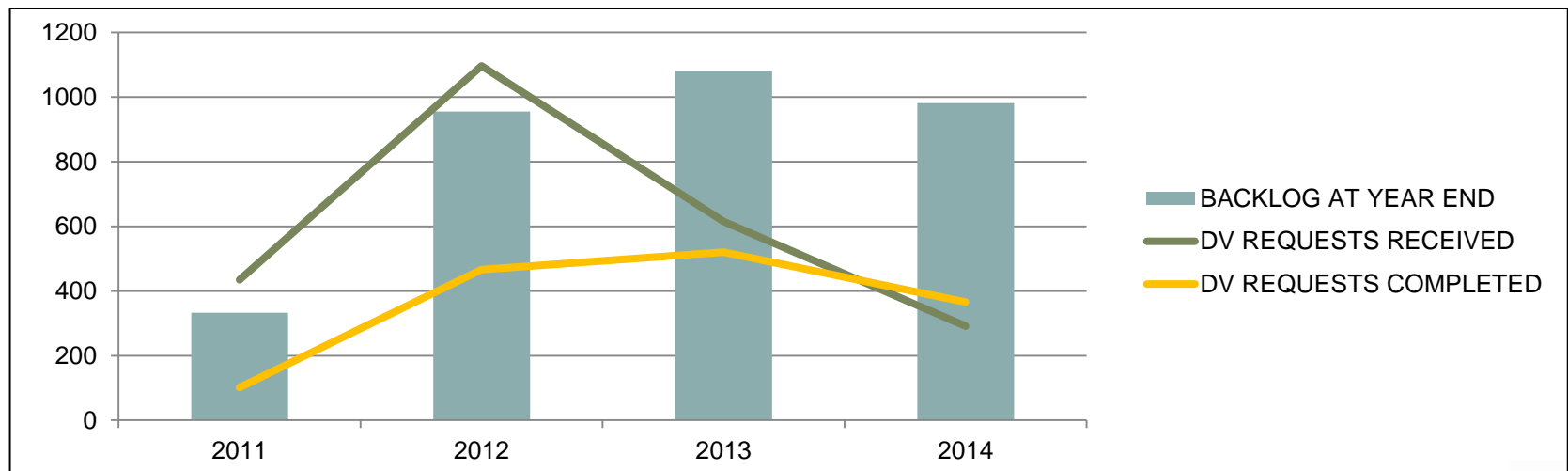
POP 103 – Enhanced Staffing for the Data Verification Unit

Properly staffing this program that was created in 2009 to improve the team’s ability to provide verifications in a timely manner. This request proposes to properly size the work unit based on the level of demand.

Link: Data Reliability

- Member Accountability
- Data Constancy

Data Verification (DV) Requests Received, Completed, and Year-End Backlog



PERS POPs Linked to Strategic Plan

POP 104 – Technology Maintenance & Enhancements

The jClarety system architecture was designed over a decade ago, and limitations, flaws, and inefficiencies have emerged in its operation. Code and integration components need to be updated to keep the system scalable, maintainable, and meet current industry standards.

Link: Information Technology

- Agile Technology System

Member Services and Communications

- Quality Delivery Methods

PERS POPs Linked to Strategic Plan

POP 105 – Disaster Recovery Infrastructure Upgrades

The agency's infrastructure needs to be upgraded to enhance our ability to provide reliable payment services. Three areas need attention:

1. Upgrade Disaster Recovery and Business Continuity solutions to resume critical business and infrastructure services after a localized disruption.
2. Replace desktop systems with a virtual environment to improve data security and reduce life-cycle replacement costs.
3. Establish a single sign-on protocol to streamline access and improve information security.

Link: Information Technology

- Disaster Recovery

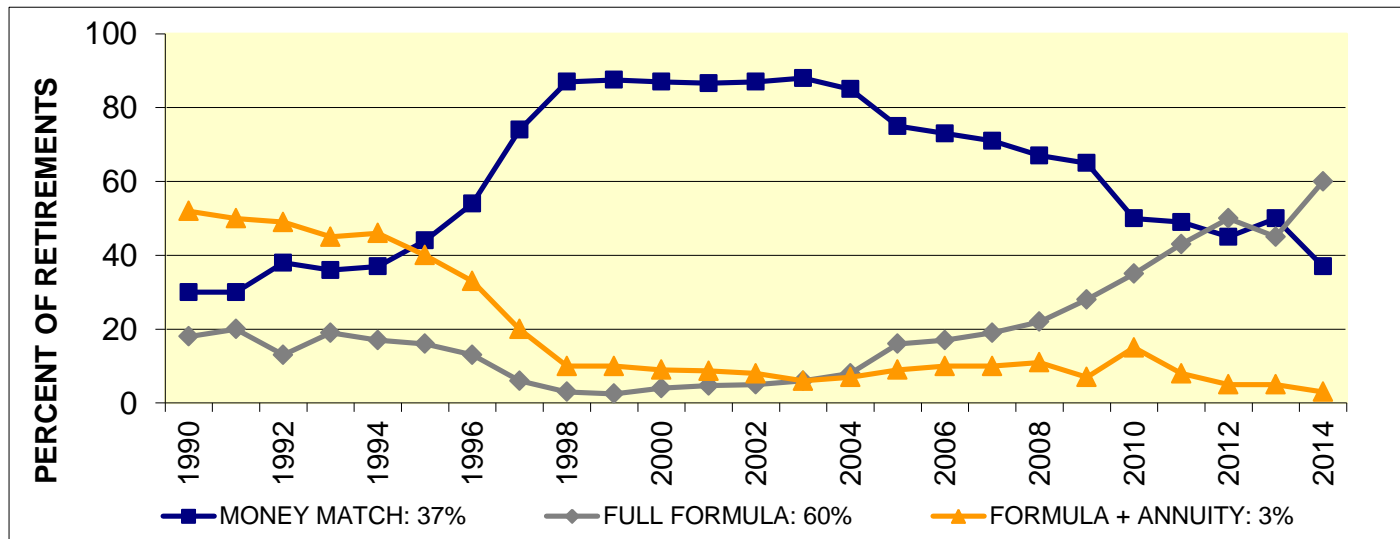
Other Strategic Plan Goals

There are other elements of the strategic plan that will be addressed through allocation of existing resources, such as:

Data Reliability – Member Accountability

Establish members as the primary quality check-point on their data of record

- 2003 PERS Reforms shifted Tier One/Tier Two retirements to “formula” calculations driven by employment data (years of service, salary, etc.); eligibility and benefit amounts can hinge on small changes to this data
- Employers have submitted reports for every work segment; members are in the best position to gauge the accuracy and completeness of those reports



Other Strategic Plan Goals

Data Reliability – Data Constancy

Ensure data remains static after it is used in a transaction or payment

Employers can amend reports even after a member has retired or withdrawn, putting PERS in the position of collecting on overpaid benefits and disrupting financial plans of members who have moved on in their lives. To bring finality to benefit payments, PERS is pursuing two objectives:

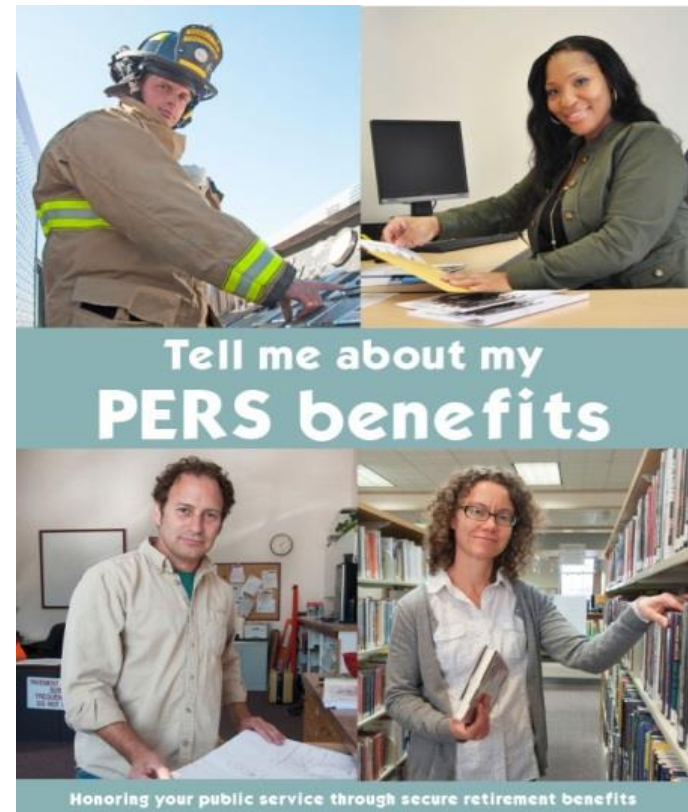
- Lock submitted data for each calendar year
- Lock previously submitted data (i.e., prior calendar years) after allowing employers to review and correct prior records

Other Strategic Plan Goals

Member Services and Communications – Member Relations

PERS members' retirement will only be successful with a solid “three-legged stool” of PERS benefits, Social Security, and personal savings; we are dedicated to giving members the education and tools so they can succeed in that life phase

- Engage members throughout their career so they are better prepared for retirement
- Improve members' on-line access to secure content and process status



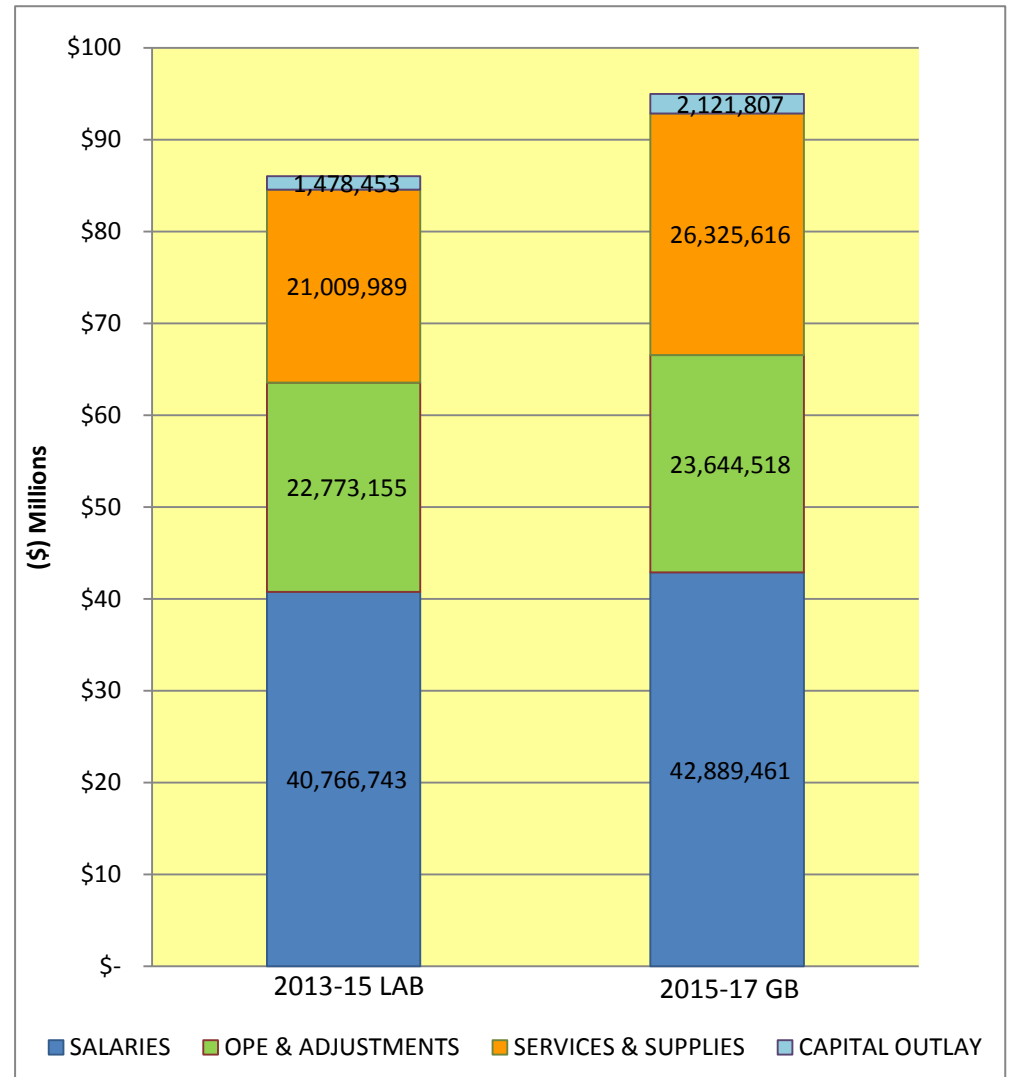
PERS Legislatively Approved Budget Historical Comparison

	2003-05	2005-07	2007-09	2009-11	2011-13	2013-15	2015-17 GB
Limited:							
Other Funds- Personal Svcs	39,846,965	46,953,972	50,682,707	52,751,494	56,744,618	64,362,688	66,533,979
Other Funds - Srvcs/Supplies	36,471,820	30,384,327	29,620,738	29,916,870	21,660,024	21,009,989	26,325,616
Other Funds - Capital Outlay	8,972,339	1,033,494	947,701	593,588	927,588	1,478,453	2,121,807
Other Funds	85,291,124	78,371,793	81,251,146	83,261,952	79,332,230	86,851,130	94,981,402
Other Funds Debt Srvc	3,629,282	5,720,950	5,709,200	1,423,075	1,418,600	1,302,850	1,290,750
Total	88,920,406	84,092,743	86,960,346	84,685,027	80,750,830	88,153,980	96,272,152
Permanent Positions	269	264	294	327	332	362	374
Limited Positions	151	137	100	41	33	5	6
Total Positions	420	401	394	368	365	367	380
Non-Limited:							
Other Funds	5,709,547,757	5,646,765,074	6,286,947,122	6,781,885,664	7,434,035,699	9,277,875,000	9,553,923,062
Other Funds Debt Srvc					3,140,326		
Total	5,709,547,757	5,646,765,074	6,286,947,122	6,781,885,664	7,437,176,025	9,277,875,000	9,553,923,062
Total Expenditures	5,798,468,163	5,730,857,817	6,373,907,468	6,866,570,691	7,517,926,855	9,366,028,980	9,650,195,214
% Limited Budget	1.53%	1.47%	1.36%	1.23%	1.07%	0.94%	1.00%

Budget Comparison: 2013-15 to 2015-17

PERS' 2015-17 budget increases:

- Other Personnel Expenses (OPE) and Adjustments: \$871,363
- Salaries: \$2,122,718
- Capital Outlay: \$643,354



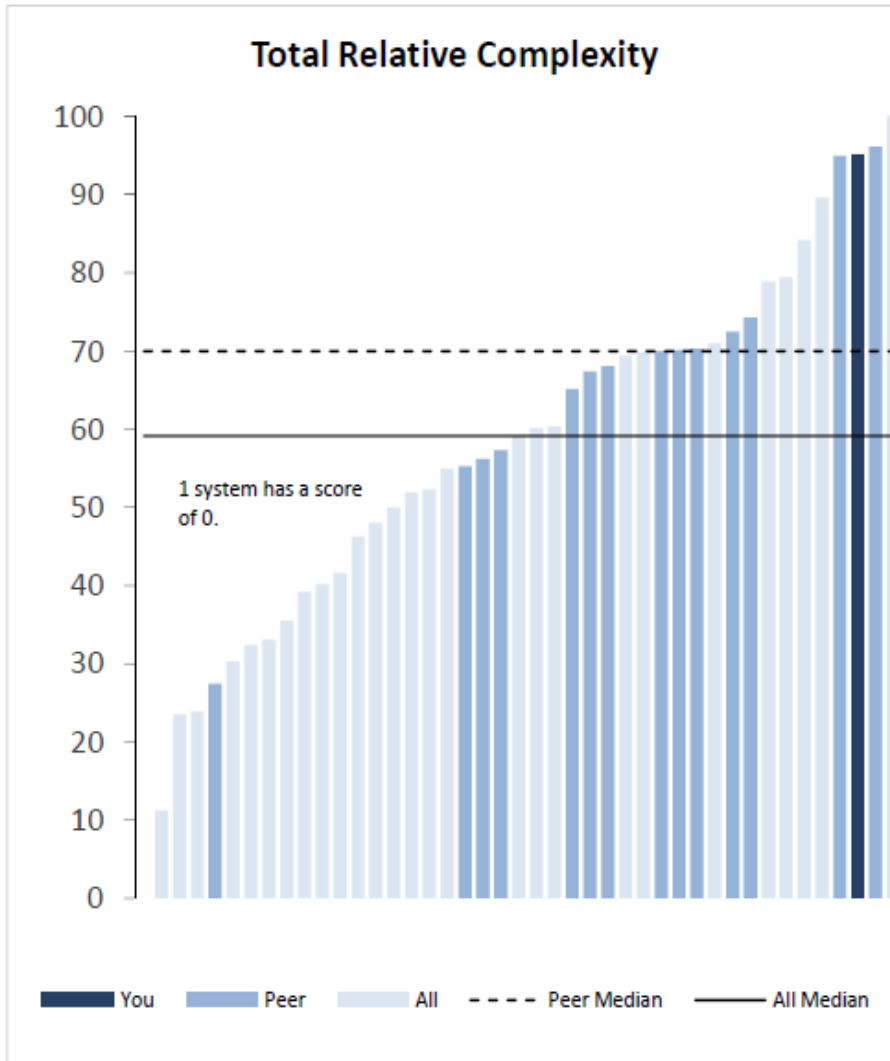
Major Cost Drivers – PERS Compared to Peers*

Reason	Impact
1. Economies of scale advantage	-\$1.91
2. Higher transactions per member (workloads) ¹	\$3.03
3. Lower transactions per FTE (productivity) ¹	\$20.76
4. Lower costs per FTE for: salaries and benefits, building and utilities, HR and IT desktop	-\$12.45
5. Lower third-party and other costs in front-office activities	-\$3.92
6. Paying more/-less for back-office activities:	
- Governance and Financial Control	\$1.20
- Major Projects	\$4.79
- IT Strategy, Database, Applications (excl. major projects)	\$11.66
- Actuarial, Legal, Audit, Other Support Services	\$6.45
Total	\$29.60

¹ PERS administers four programs (Tier One, Tier Two, OPSRP Pension Program, IAP); we process two retirements per member and use up to three calculation methods to determine the benefit amount

* Data from CEM, Inc.

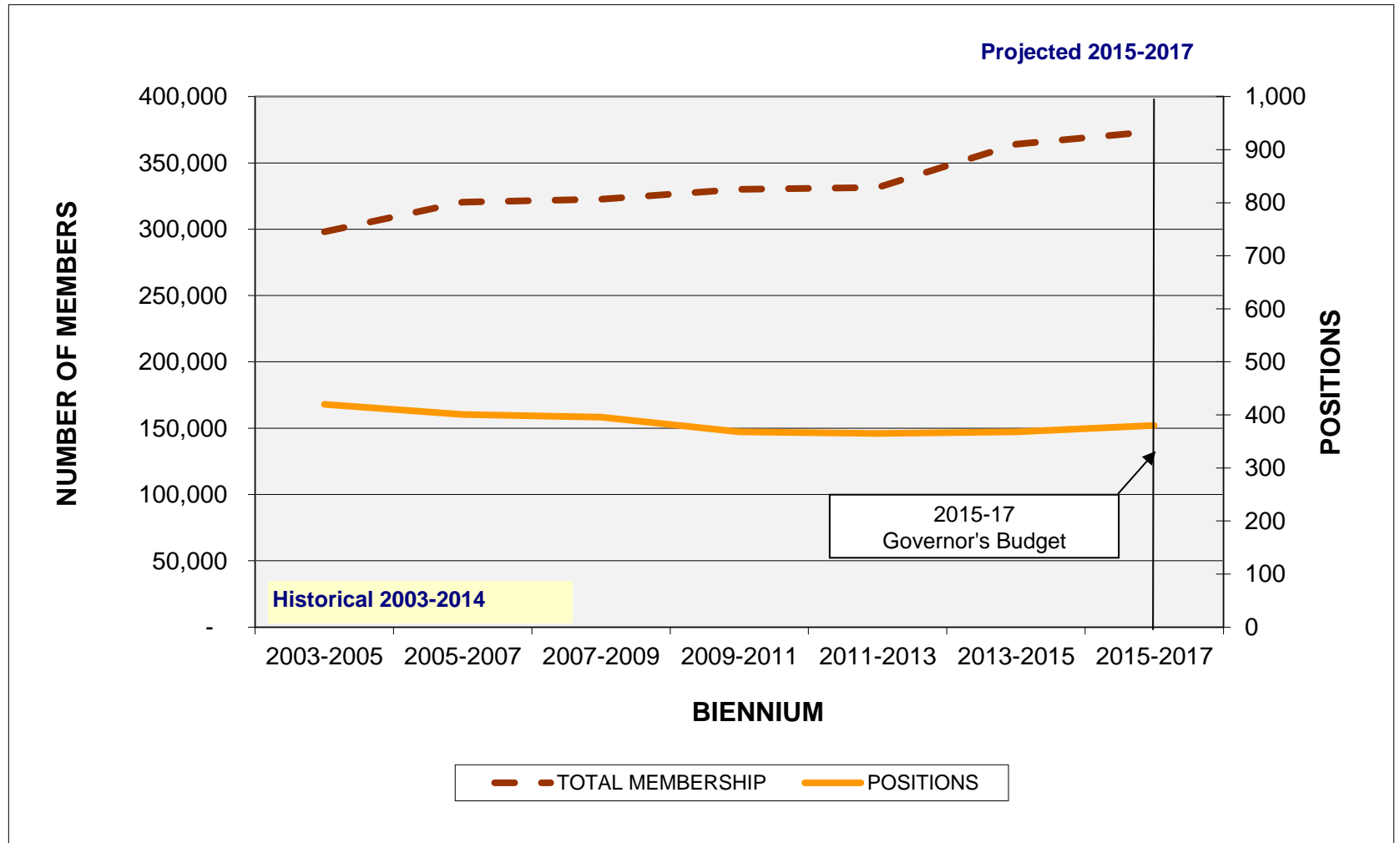
PERS' Total Relative Complexity*



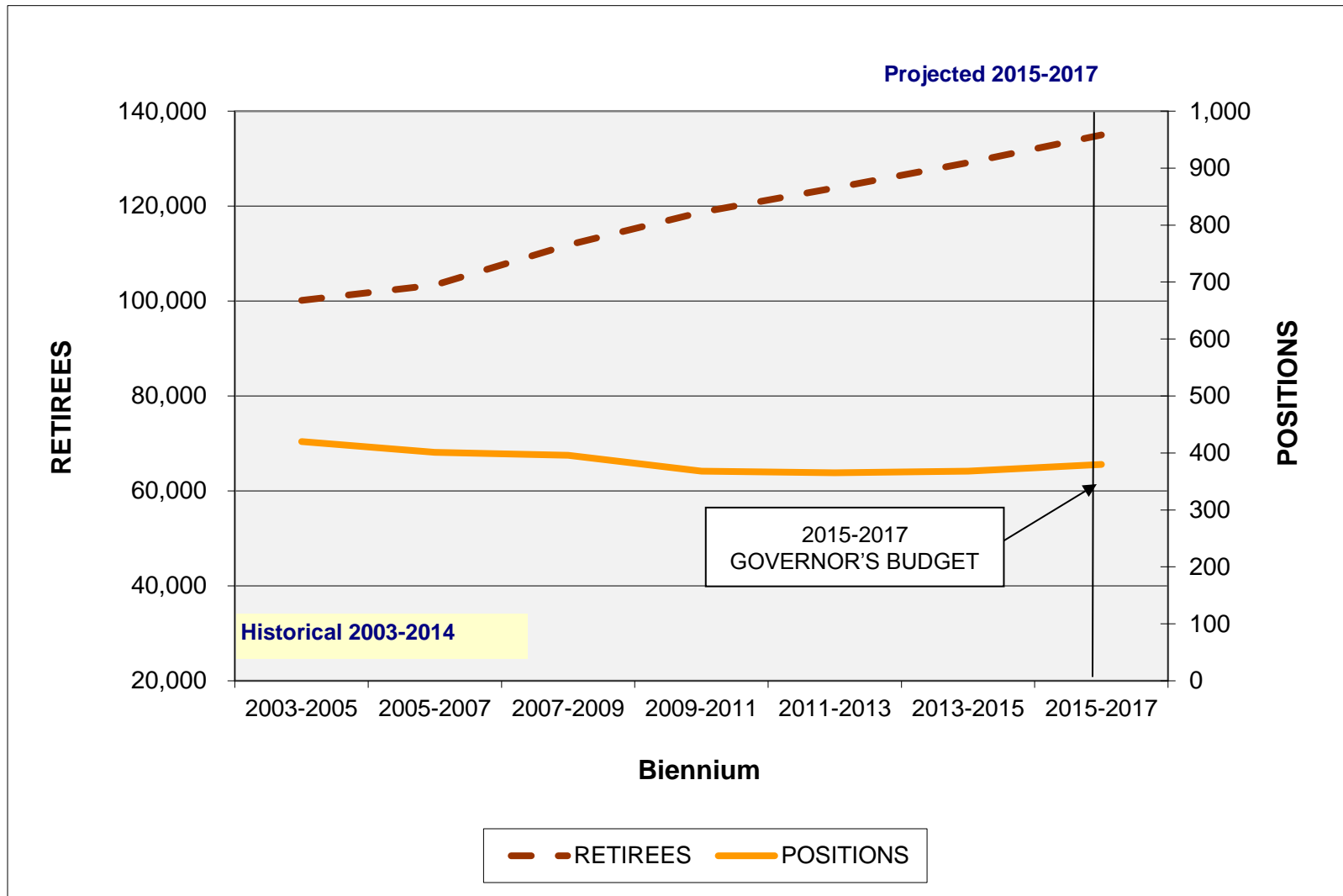
Parameter	Averages	
	PERS	Peers
Pension payment options	61	53
Customization choices	22	18
Multiple plan types & overlays	100	50
Multiple benefit formulas	80	55
External reciprocity	0	29
COLA rules	57	33
Contribution rates	75	54
Variable compensation	100	81
Service credit rules	61	57
Divorce rules	100	63
Purchase rules	80	65
Refund rules	27	46
Disability rules	100	82
Translation	20	8
Defined contribution plan rules	100	67
Total relative complexity	95	69

* Data from CEM, Inc.

PERS Positions and Total Membership

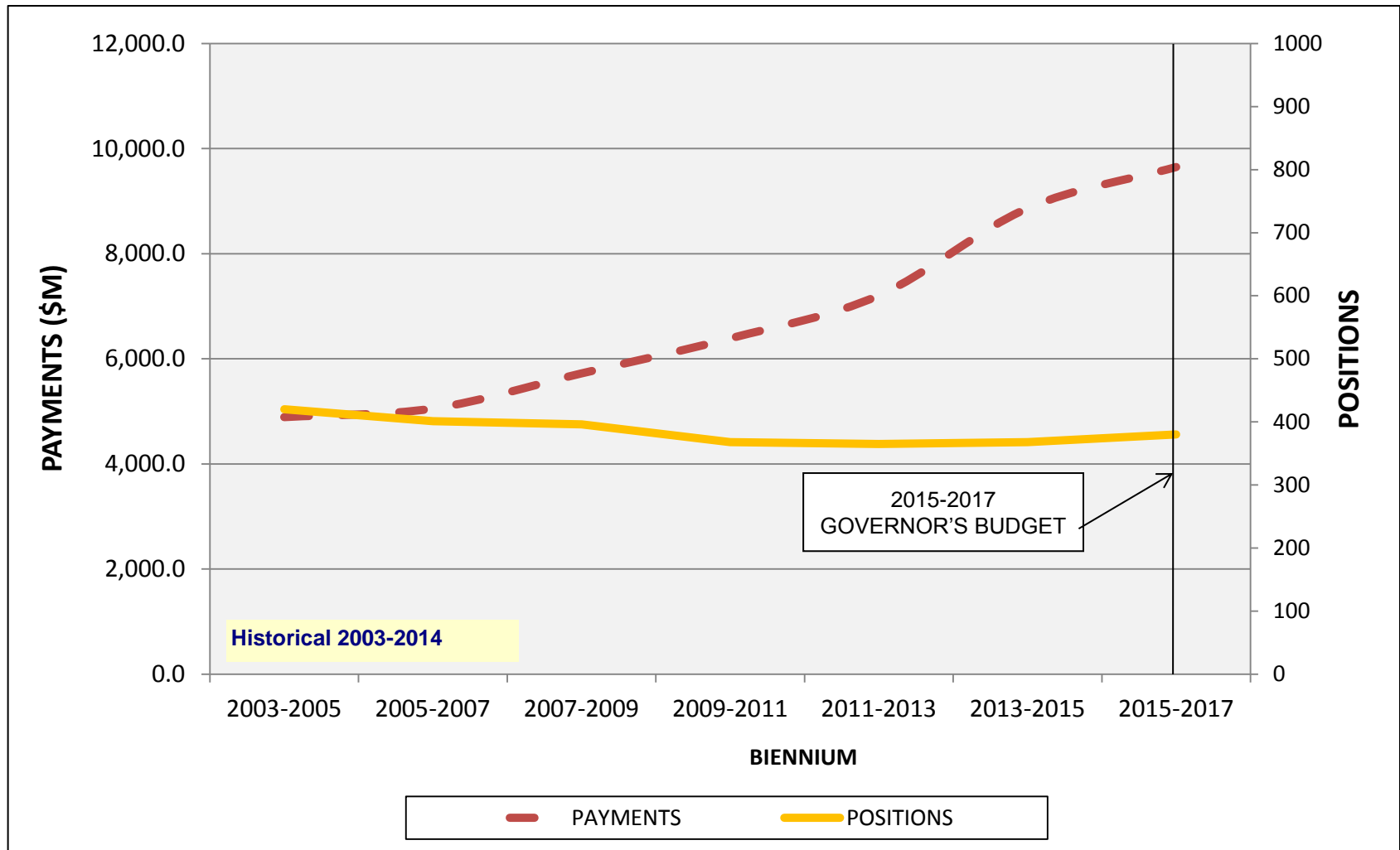


PERS Positions and Retirees

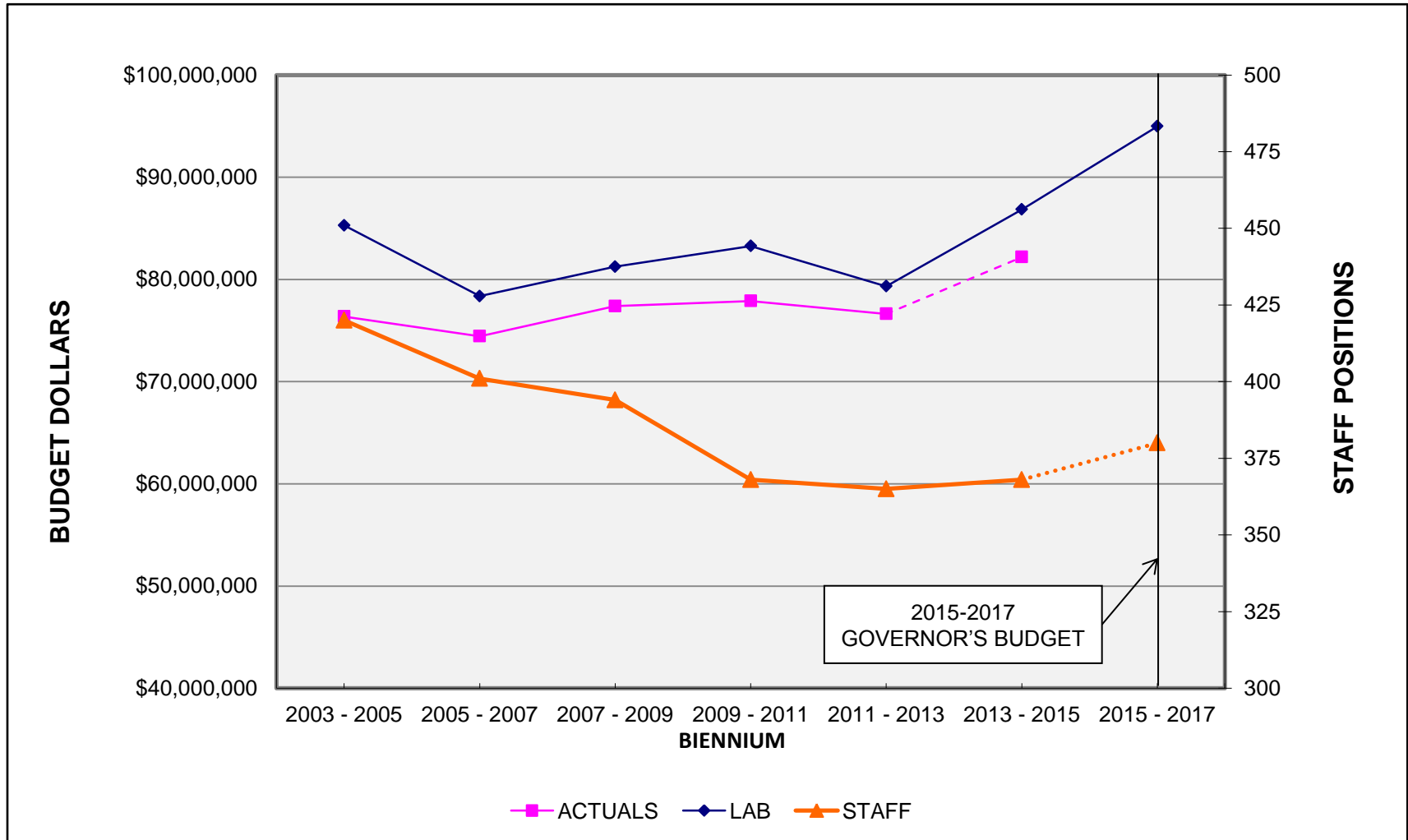


PERS Positions and Benefit Payments

Projected 2015-2017



12-Year Operating Budget, Expenditure, and Staffing Trends



Policy Packages Summary

Policy Package 090: - Analyst Adjustment - PERS received a total reduction of \$1,150,521 in operating expenditures. \$665,582 Other Funds from Personal Services and an additional \$484,939 in Services and Supplies. The Governor's budget requires increased efficiency in the operation of state government, calls for additional savings in administrative expenditures, and allows for the reinvestment of some of the savings realized through efficiencies into agency programs or to other initiatives that will further improve the administrative operations of state government.

Policy Package 101: – Current Service Metrics Staffing Request - PERS requests \$644,083 Other Funds, the establishment of one full-time permanent position (1.00 FTE), the transfer of one permanent position (1.00 FTE) from DAS, and converting 4 limited duration staff from the current biennium to four full-time permanent positions (4.00 FTE) to enhance our service delivery in three key areas. The three necessary components in this package are: Call center staff, Benefit calculation staff, and Custodial staff.

Policy Package 102: - Fully Integrating IAP Administration into the PERS ORION System (Phase III) – PERS requests \$1,914,399 Other Funds limitation and the establishment of three new full-time limited duration positions (3.00 FTE) in the Information Services Division. This proposal completes the transfer to PERS of all aspects of the Individual Account Program (IAP) administration by January 1, 2017, and eliminates over \$2.2 million in annual costs for an outside third-party administrator (TPA).

Policy Packages Summary (continued)

Policy Package 103: – Enhanced Staffing for the Data Verification Unit - PERS requests \$956,875 Other Funds limitation, the establishment of seven full-time permanent positions (7.00 FTE) in the Customer Services Division to expand the Data Verification Unit from the current five staff with an additional seven permanent staff. The permanent staff will allow us to keep up with new data verification requests as they are received monthly.

Policy Package 104: - Technology Maintenance and Enhancements (M&E) -

PERS requests \$3,281,250 Other Funds limitation in the Information Services Division to address necessary system enhancements to existing jClarety architecture. PERS has been administering its benefit programs on the jClarety platform, a system architecture that was designed and developed over a decade ago. Over time, technologies have changed, requirements for data volume and transactions have increased, and the jClarety limitations, flaws, and inefficiencies have emerged in its operation. This proposal is to create a team of existing staff and contractors to analyze and implement architectural updates to the jClarety system. Technical debt and system enhancements are the two areas addressed in this package.

Policy Packages Summary (continued)

Policy Package 105: – Disaster Recovery Infrastructure Upgrades - PERS requests \$1,581,200 Other Funds limitation in the Information Services Division to further develop the agency's Disaster Recovery (DR) and Business Continuity (BC) technology infrastructure in support of the Oregon Retirement Information Online Network (ORION). Once implemented, the DR and BC solutions will allow the resumption of critical business and infrastructure services within 48 hours of a localized catastrophic event. Through this initiative, the agency's Business Continuity Plan (BCP) will be updated to reflect current technology systems and business expectations. Infrastructure changes to a Virtual Desktop Environment and Single Sign-On capabilities will facilitate more robust and efficient recovery and resumption activities. The Virtual Desktop replaces the approximately 400 desktop and laptop systems currently distributed throughout the agency with a virtual desktop hosted in a data center which can be accessed remotely. This new environment will also improve data security, reduce life-cycle replacement and other maintenance costs, and provide more efficient and flexible deployments of software upgrades agency-wide. A Single Sign-On infrastructure provides enhanced end-user and application access security, which will be more important in a DR or BC scenario.