ARIZONA STATE RETIREMENT SYSTEM

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Paul Matson
Director

AGENDA

NOTICE OF PUBLIC MEETING OF THE ARIZONA STATE RETIREMENT SYSTEM BOARD

3300 North Central Avenue, 10th Floor Board Room
Phoenix, AZ 85012

September 26, 2014
8:30 a.m.

Pursuant to A.R.S. § 38-431.02 (F), notice is hereby given to the Trustees of the Arizona State Retirement System (ASRS) Board and to the general public that the ASRS Board will hold a meeting open to the public on Friday, September 26, 2014, beginning at 8:30 a.m., in the 10th Floor Board Room of the ASRS offices at 3300 N. Central Avenue, Phoenix, Arizona 85012. Trustees of the Board may attend either in person or by telephone conference call.

The Chair may take public comment during any agenda item. If any member of the public wishes to speak to a particular agenda item, they should complete a "Request To Speak" form indicating the item and provide it to the Board Administrator.

This meeting will be teleconferenced to the ASRS Tucson office at 7660 East Broadway Boulevard, Suite 108, Tucson, Arizona 85710.

The Agenda for the meeting is as follows:

1. Call to Order; Roll Call; Opening Remarks .....Mr. Kevin McCarthy
   Board Chair

2. Approval of the Minutes of the August 22, 2014 Public Meeting of the ASRS Board
   (estimated time 1 minute to 8:31 a.m.) .....Mr. Kevin McCarthy

3. Presentation, Discussion and Appropriate Action Regarding Outcomes of the ASRS Strategic Plan for Fiscal Year 2014 *(estimated time 60 minutes to 9:31 a.m.)*
   .....Mr. Paul Matson
   Director
   .....Mr. Anthony Guarino
   Deputy Director and Chief Operations Officer
   .....Ms. Sara Orozco
   Strategic Planning Manager
   ..... Mr. Dave King
   Assistant Director Member Services
   .....Mr. Gary Dokes
   Chief Investment Officer

4. Presentation, Discussion and Appropriate Action Regarding Investment Compensation Plan (estimated time 20 minutes to 9:51 a.m.) ..... Mr. Paul Matson
..... Ms. Martha Rozen
Chief of Administrative Services

5. Presentation, Discussion, and Appropriate Action Regarding the Director's Report as well as Current Events *(estimated time 5 minutes to 9:56 a.m.)* ..... Mr. Paul Matson
Director
..... Mr. Anthony Guarino
Deputy Director and Chief Operations Officer
   A. 2014 Compliance Report
   B. 2014 Investments Report
   C. 2014 Operations Report
   D. 2014 Budget and Staffing Reports
   E. 2014 Cash Flow Statement
   F. 2014 Appeals Report
   G. 2014 Employers Reporting

6. Presentation and Discussion with Respect to Informational Updates from Prior and Upcoming Committee Meetings *(estimated time 15 minutes to 10:11 a.m.)*
   a. Operations and Audit Committee (OAC) ..... Mr. Jeff Tyne, Chair
   ..... Mr. Anthony Guarino
   The next OAC Meeting will be held on October 7, 2014
   b. External Affairs Committee (EAC) ..... Mr. Brian McNeil, Chair
   ..... Mr. Patrick Klein
   The next EAC Meeting will be held on October 6, 2014
   c. Investment Committee (IC) ..... Mr. Tom Connelly, Chair
   ..... Mr. Gary Dokes
   The next IC Meeting will be held on October 20, 2014

7. Board Requests for Agenda Items *(estimated time 1 minute to 10:12 a.m.)*
..... Mr. Kevin McCarthy

8. Call to the Public ..... Mr. Kevin McCarthy

   Those wishing to address the ASRS Board are required to complete a Request to Speak form before the meeting indicating their desire to speak. Request to Speak forms are available at the sign-in desk and should be given to the Board Administrator. Trustees of the Board are prohibited by A.R.S. § 38-431.01(G) from discussing or taking legal action on matters raised during an open call to the public unless the matters are properly noticed for discussion and legal action. As a result of public comment, the Board may direct staff to study and/or reschedule the matter for discussion and decision at a later date.

9. The next public ASRS Board meeting is scheduled for Friday, October 24. 2014, at 8:30 a.m., at 3300 N. Central Avenue, in the 10th Floor Board room, Phoenix, Arizona.

10. Adjournment of the ASRS Board.

A copy of the agenda background material provided to Board Trustees (with the exception of material relating to possible executive sessions) is available for public inspection at the ASRS offices located at 3300 North Central Avenue, 14th Floor, Phoenix, Arizona and 7660 East Broadway Boulevard, Suite 108, Tucson, Arizona. The agenda is subject to revision up to 24 hours prior to meeting. These materials are also available on the ASRS website (https://www.azasrs.gov/web/BoardCommittees.do) approximately 48 hours prior to the meeting.

Persons(s) with disabilities may request a reasonable accommodation such as a sign language interpreter or alternate formats of this document by contacting Tracy Darmer, ADA Coordinator at (602) 240-5378 in Phoenix, at (520) 239-3100, ext. 5378 in Tucson, or 1-800-621-3778, ext. 5378 outside metro Phoenix or Tucson. Requests should be made as early as possible to allow time to arrange the accommodations.

Dated September 19, 2014

ARIZONA STATE RETIREMENT SYSTEM

Gayle Williams	Date	Paul Matson	Date
Board Administrator		Director	

ARIZONA STATE RETIREMENT SYSTEM

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Paul Matson
Director

MINUTES

PUBLIC MEETING
ARIZONA STATE RETIREMENT SYSTEM BOARD

Friday, August 22, 2014
8:30 a.m., Arizona Time

The Arizona State Retirement System (ASRS) Board met in the 10th Floor Board Room, 3300 N. Central Avenue, Phoenix, Arizona. Mr. Kevin McCarthy, Chair of the ASRS Board, called the meeting to order at 8:35 a.m., Arizona Time.

The meeting was teleconferenced to the ASRS office at 7660 E. Broadway, Tucson, Arizona 85710.

1. Call to Order; Roll Call; Opening Remarks

Present: Mr. Kevin McCarthy, Chair
Mr. Mike Smarik, Vice-chair
Mr. Brian McNeil
Professor Dennis Hoffman
Mr. Jeff Tyne (via phone)
Mr. Marc Boatwright (via phone)
Dr. Richard Jacob
Mr. Tom Connelly
Mr. Tom Manos

Absent: None

A quorum was present for the purpose of conducting business.

2. Presentation Regarding PRIDE Award for Improvement

Mr. Anthony Guarino, Deputy Director and Chief Operations Officer, recognized the following nominees for the 2014 PRIDE Improvement award: Erin Higbee and Lana Menis; Aaron Chandler; Noaman Ahmed; Benefits Accounting Leadership Team (Tracy Rundle, Carrie Waith, Erica Dunphy, Athena Elliston); and MAC Leadership Team (Scott James, Judy Simpson, Leah Wagner, Jenalee Lewis).

All were nominated by staff because they exemplify the following PRIDE qualities of improvement: They drive the agency forward with new and innovative ideas and solutions; they promote new ideas; they solve problems; they enhance outcomes or performance; they improve relationships; they enhance morale and they increase efficiency, effectiveness or reduce costs.

Mr. Guarino presented the PRIDE Award for Improvement to the award winners, Erin Higbee and Lana Menis.

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3. Presentation Regarding Government Finance Officers Association (GFOA) Financial Reporting Awards

A. Comprehensive Annual Financial Report (CAFR) for Fiscal Year (FY) 2013

B. Popular Annual Financial Report (PAFR) for FY 2013

Mr. Guarino announced the ASRS has been recognized by GFOA for 25 consecutive years as recipient of the CAFR award, and in more recent years, the PAFR award. Mr. Guarino presented the 2013 awards to Ms. Nancy Bennett, Chief Financial Officer and Ms. Liz Rozzell, Controller.

The Certificate of Achievement is presented by the GFOA to government units whose annual financial reports are judged to adhere to program standards and it represents the highest award in government financial reporting. The following staff were recognized for having a substantial part in the ASRS receiving the CAFR award: Nancy Bennett, Liz Rozzell, Erin Higbee, Tanya Wright, John Maczko, Tonia Nemecek, Debbie Motta, Rebecca Fox, Kristin Berry, Lisa Dailey, Lupita Breland, Kerry White and Michael Copeland.

The following staff were recognized for having a significant part in the ASRS receiving the PAFR award: Nancy Bennett, Liz Rozzell, Erin Higbee, John Maczko and Rebecca Fox.

4. Approval of the Minutes of the June 27, 2014 Public Meeting of the ASRS Board

Motion: Professor Dennis Hoffman moved to approve the Minutes of the June 27, 2014 Public Meeting of the ASRS Board. Mr. Mike Smarik seconded the motion.

By a vote of 9 in favor, 0 opposed, 0 abstentions, and 0 excused, the motion was approved.

5. Appropriate Action Regarding a Member Appeal Request by Ms. Alice Schireman for Review and Reconsideration of a Final Decision

Mr. Christopher Munns, Assistant Attorney General, Solicitor General Section, was present to provide legal advice to the Board, if requested. Mr. Munns introduced Ms. Schireman, who was attending telephonically, and asked her to present to the Board.

Ms. Schireman addressed the Board and explained that she would like the Board to reconsider the decision they made at the June 27, 2014 Board meeting; that there were no survivor benefits payable to her on member Mr. Alvin Schireman's ASRS account.

Ms. Jothi Beljan, Assistant Attorney General, explained Mr. Alvin Schireman retired from the ASRS on August 13, 1986, electing a life annuity five-year term certain option. The five-year term certain option provides a member a period certain and life annuity actuarially reduced with payment for five years that are not dependent on the continued lifetime of the member but for whom payments will continue for the member's lifetime beyond the five-year period. The five-year term certain option only provides the member's beneficiary a survivor benefit from a pension if the member passes away within five years of retirement. Any possibility for a survivor benefit to Mr. Schireman's beneficiary ended in August 1991, five years after his retirement date of August 13, 1986. Upon Mr. Schireman's passing on October 30, 2013, there were no survivor benefits remaining, and the ASRS informed Mr. Schireman's estate of this in November 2013.

Motion: Mr. Tom Connelly moved to deny Mrs. Schireman's request for review. Professor Dennis Hoffman seconded the motion.

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By a vote of 9 in favor, 0 opposed, 0 abstentions, and 0 excused, the motion was approved.

6. Presentation, Discussion, and Appropriate Action Regarding the ASRS Retiree Health Insurance (HI) Program Request For Proposal Number ASRS14-00003727

Mr. Paul Matson, Director, explained the current HI RFP model and that because of the importance of the decision for the ASRS retirees; the decision comes to the Board. He further explained the factors considered by the HI Evaluation Committee which included the network of providers, the benefit structure, the premium cost, and the service level.

Mr. Pat Klein, Assistant Director External Affairs, discussed the responses received for the HI RFP and the items the Evaluation Committee considered prior to making their decision. He said the Evaluation Committee's decision was presented to the Operations and Audit Committee (OAC) for their input at their August 12 meeting. Mr. Jeff Tyne, OAC Chair, stated there was further discussion and input at the OAC meeting which resulted in agreement with the Evaluation Committee's recommendation.

Motion: Mr. Jeff Tyne moved to approve a five-year contract for a retiree medical benefit program with UnitedHealthcare, effective January 1, 2015, for the ASRS. Professor Dennis Hoffman seconded the motion.

By a vote of 8 in favor, 0 opposed, 1 abstention, and 0 excused, the motion was approved.

(Mr. Brian McNeil recused himself from the vote because of his position as ADOA Director.)

Mr. Klein followed up with an explanation that the five-year contract has four one-year renewals and at any one of the renewal periods, the ASRS can submit an RFP for a new contract. Mr. Klein also explained the Early Retiree Reinsurance Program (ERRP) money which will be used to mitigate the non-Medicare premium increase for 2015. Mr. Klein responded to Mr. Tom Manos' question and explained that yes, the ERRP money will go away at the end to 2015, but there is also the Retrospective Rate Adjustment Agreement (RRAA) money that possibly could be used for a further rate subsidy after December 2015.

7. Presentation, Discussion and Appropriate Action Regarding the ASRS Operational Capacity (A FY 2015 Strategic Topic)

A. Budget Process
B. Staffing Strategies
C. Risks: IT Security, Investment Management, Customer Service

Mr. Guarino stated that at the May 2014, Board meeting, the Board approved a list of Strategic Topics they would like presented at subsequent Board meetings, and the Operational Capacity presentation is the first of the approved discussions. Operational Capacity involves the ASRS' ability to do work and achieve goals and outcomes.

Ms. Martha Rozen, Chief of Administrative Services, stated some of the ASRS strengths lie in the seasoned ASRS team and the deliberate approach taken in recruitment and retention, tying together staffing, funding, technology and risk management which are all very interdependent and related. The ASRS also has a commitment to retention and incentive programs.

Ms. Sara Orozco, Manager of Strategic Planning, commented that the ASRS has generally had access to an amount of funding sufficient enough to maintain existing business applications, upgrade technology, and engage in some strategic applications development each year. Each year,

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the Senior Managers meet and prioritize how the agency will allocate its technology resources for the upcoming fiscal year. Thus far, the agency has been able to ensure systems are upgraded as needed and also continue to invest in business applications that will provide members with the tools they need.

Responses were provided to Trustee questions.

8. Presentation, Discussion and Appropriate Action Regarding the ASRS Budget Related Topics Including:

A. Presentation of the ASRS Appropriated Budget and the Estimated Administrative and Investment Spending Plan for FY 2015.

B. Presentation of the ASRS Appropriated Budget Request and Estimated ASRS Administrative and Investment Spending Plans for FY 2016 and FY 2017

Ms. Rozen explained the budget materials included in the packet and discussed highlights of the FY 2015 budget request. She stated the top item is data security which includes budget requests for equipment, FTEs and external resources. Ms. Rozen responded to Trustee questions regarding the budget.

Motion: Dr. Richard Jacob moved to approve the appropriated budget request for FY 2016 in the amount of $28,106,200 with an estimated administrative and total expenditure plan as presented. Mr. Jeff Tyne seconded the motion.

By a vote of 9 in favor, 0 opposed, 0 abstentions, and 0 excused, the motion was approved.

Motion: Dr. Richard Jacob moved to approve the appropriated budget request for FY 2017 in the amount of $27,659,200 with an estimated administrative and total expenditure plan as presented. Mr. Jeff Tyne seconded the motion.

By a vote of 9 in favor, 0 opposed, 0 abstentions, and 0 excused, the motion was approved.

9. Presentation, Discussion, and Appropriate Action Regarding ASRS Investment Program Updates

Mr. Gary Dokes, Chief Investment Officer, addressed the Board regarding ASRS investment program updates for the period ending July 31, 2014, highlighting specific areas of interest and concern. Mr. Dokes presented information on the following items: ASRS Fund Positioning, IMD Investment House Views – July 2014, Asset Class Committee Activities, Tactical Portfolio Positioning, Strategic Asset Allocation (SAA) Policy Implementation, IMD Projects, and Research and Initiatives. Also included was the State Street risk report for June 30, 2014.

10. Presentation, Discussion, and Appropriate Action Regarding Independent Reporting, Monitoring, and Oversight of the ASRS Investment Program Q2/2014

Mr. Allan Martin, Consultant, NEPC, addressed the Board regarding NEPC's independent reporting, monitoring, and oversight of the ASRS Investment Program including Total Fund performance through June 30, 2014.

The Total Fund Performance for the period ending June 30, 2014 is:

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	Quarter	**1 Year**	**3 Years**	5 Years	10 Years	Since Inception
Total Fund	3.9%	**18.6%**	**10.8%**	14.2%	7.5%	10.1%
Interim SAA Policy*	3.5%	**17.8%**	**10.4%**	13.6%	7.2%	9.8%
Excess Return	0.4%	**0.8%**	**0.4%**	0.6%	0.3%	0.3%

*Interim SAA Policy: 25% S&P 500/5% S&P 400/5% S&P 600/14% MSCI EAFE/3% MSCI EAFE Small Cap/6% MSCI, Emerging Markets/6% Russell 2000 (lagged one quarter)/14% Barclays Capital Aggregate/5% Barclays Capital High Yield/4% JP Morgan GBI-EM Global Diversified/3% S&P/LSTA Levered Loan Index + 250 basis points (lagged one quarter)/6% NCREIF ODCE (lagged one quarter)/4% Dow Jones/UBS Commodities Index

Note: Interim SAA Policy includes a proration of 1% Private Equity and 2% Real Estate, which are unfunded. Private Equity was prorated to domestic equity; Real Estate was prorated to domestic equity and fixed income. Recently approved Strategic Asset Allocation Policy effective July 1, 2012.

11. Presentation, Discussion, and Appropriate Action Regarding the Director's Report as well as Current Events

Mr. Matson had no additional comments regarding the Director's Report.

12. Presentation and Discussion with Respect to Informational Updates from Prior and Upcoming Committee Meetings

a. Operations and Audit Committee (OAC)
Mr. Jeff Tyne, said the next OAC meeting will be held on October 7, 2014.

b. External Affairs Committee (EAC)
Mr. Brian McNeil said the next EAC meeting will be held on October 10, 2014.

c. Investment Committee (IC)
Mr. Tom Connelly, Chair, said the next IC meeting, held on October 20, 2014.

13. Board Requests for Agenda Items

No requests were made.

14. Call to the Public

No members of the public requested to speak.

15. The next ASRS Board meeting is scheduled for Friday, September 26, at 8:30 a.m., at 3300 N. Central Avenue, 10th Floor Board room, Phoenix, Arizona.

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16. Adjournment of the ASRS Board

Motion: Mr. Tom Manos moved to adjourn the August 22, 2014 Board meeting. Dr. Richard Jacob seconded the motion.

By a vote of 9 in favor, 0 opposed, 0 abstentions, and 0 excused, the motion was approved.

Mr. Kevin McCarthy adjourned the August 22, 2014, Board meeting at 10:34 a.m.

ARIZONA STATE RETIREMENT SYSTEM

Gayle Williams Date	Paul Matson Date
Board Administrator	Director

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Paul Matson
Director

MEMORANDUM

TO: Mr. Kevin McCarthy, Chair, Arizona State Retirement System (ASRS) Board

FROM: Mr. Paul Matson, Director
Mr. Anthony Guarino, Deputy Director and Chief Operations Officer
Ms. Sara Orozco, Strategic Planning Manager

DATE: September 19, 2014

RE: **Agenda Item #3**: Presentation, Discussion and Appropriate Action Regarding Outcomes of the ASRS Strategic Plan for Fiscal Year 2014

Purpose
Progress report of the ASRS Strategic Plan.

Recommendation
Information only, no action required.

Background
As part of its review and approval of the ASRS Five-Year Strategic Plan in 2013, the Board stated it wished to focus on the following five agency priorities during its annual review of the Plan:

1. Maximize the sustainability of ASRS plan designs.
2. Organize an enterprise-wide risk management program to proactively monitor, manage and mitigate high impact risk events.
3. Organize an investment management program capable of meeting its long-term goals.
4. Ensure members, employers and stakeholders receive outstanding customer service.
5. Maximize productivity and be a high-service, low-cost pension plan provider.

The staff organized today's report to convey its view on the status of each. It includes an Executive Summary in addition to five sections corresponding to each priority.

For each priority, the report states a desired outcome and lists management objectives. In each case, progress and performance is rated and forecasts management's outlook on the ASRS' ability to successfully manage sustainable outcomes. Ratings are color-coded to indicate whether management's outlook is:

- **Green** = Positive Outlook
- **Red** = Negative Outlook
- **Yellow** = Neutral, or an Uncertain Outlook
- Some Combination: Positive to Neutral; Neutral to Negative

Ratings given represent management's "house view," and are based on professional perspectives and an assortment of available data and measures.

EXECUTIVE SUMMARY

STRATEGIC PRIORITY #1: ENSURE PLAN SUSTAINABILITY

DESIRED OUTCOMES, OBJECTIVES, AND PERFORMANCE MEASURES

Sustainability refers to the ability of employees and employers to afford the cost and volatility in cost of the programs, with relative cost and benefit equity, and with only modest future plan design modifications. The agency will perform regular analysis of ASRS benefit programs and make recommendations when necessary to ensure sustainability for the:

A. Defined Benefit Plan
B. Health Insurance Program and Health Benefit Supplement
C. Long Term Disability Program
D. The System (closed to new participants)
E. Optional, Supplemental Defined Contribution Plans

Desired Outcomes:

Maximize the likelihood of sustainable plan designs by ensuring:

I. Reasonable actuarial methods and assumptions are used.
II. The ASRS is fully funded; or has a plan to become fully funded.
III. Contribution rates are at or near the normal cost of the plan; or a plan is in place to reduce contribution rates toward normal cost.
IV. Significant cost and benefit equity is achieved among different generations.
V. The current plan design is affordable, and can be maintained or modified if needed.

1.A. DEFINED BENEFIT PLAN

OUTLOOK: NEUTRAL TO POSITIVE

Objectives:

1. Conduct a periodic review of actuarial methods and assumptions to ensure that liabilities are appropriately calculated.
2. Establish and implement a funding policy to ensure that the defined benefit plan (401a) is fully funded, or has a plan in place to achieve fully funded status over the adopted amortization period.
3. Ensure that methods are in place to mitigate contribution rate volatility and achieve contribution rates at or near normal cost over the adopted amortization period.
4. Ensure that significant cost and benefit equity is achieved among different generations.
5. Maintain a normal cost of the defined benefit plan that is affordable, relatively stable, and able to be modified, if needed.

Performance Measures:

a) On an annual basis, the ASRS actuary will conduct a valuation of the defined benefit plan and make recommendations, if necessary, for changes to actuarial methods and assumptions.
b) At least every five years, the ASRS actuary will conduct an experience study to assess the appropriateness of the actuarial methods and assumptions being used by the ASRS.
c) At least every five years, an independent actuary will review the work of the ASRS actuary and validate the appropriateness of the actuarial methods and assumptions being used.

d) The ASRS will establish a funding policy that outlines the principles and practices used by the ASRS to guide funding decisions, and will provide periodic reports to the Board regarding the defined benefit plan's current and projected funded status, as well as current and future projections of contribution rates.
e) Conduct periodic reviews of the plan design and provide technical and administrative information regarding potential initiatives resulting in cost savings.
f) Consider inter-generational cost equity and benefit equity when determining actuarial methods and assumptions that result in contribution rate levels. Consideration will be given to average contribution rates, normal costs, and benefit levels over a 20 or 30 year period.

1.B. HEALTH INSURANCE PROGRAM AND HEALTH BENEFIT SUPPLEMENT

OUTLOOK: POSITIVE

Objectives:

1. Conduct a periodic review of actuarial methods and assumptions to ensure that liabilities are appropriately calculated.
2. Establish and implement a funding policy to ensure that the health insurance supplement (401h) is fully funded, or has a plan in place to achieve fully funded status over the adopted amortization period.
3. Ensure that methods are in place to mitigate contribution rate volatility and achieve contribution rates at or near normal cost over the adopted amortization period.
4. Ensure that significant cost and benefit equity is achieved among different generations.
5. Maintain a normal cost of the health insurance supplement that is affordable, relatively stable, and able to be modified if needed.

Performance Measures:

a) On an annual basis, the ASRS actuary will conduct a valuation of the health benefit supplement and make recommendations, if necessary, for changes to actuarial methods and assumptions.
b) At least every five years, the ASRS actuary will conduct an experience study to assess the appropriateness of the actuarial methods and assumptions being used by the ASRS.
c) At least every five years, an independent actuary will review the work of the ASRS actuary and validate the appropriateness of the actuarial methods and assumptions being used.
d) The ASRS will establish a funding policy that outlines the principles and practices used by the ASRS to guide funding decisions, and will provide periodic reports to the Board regarding the health benefit supplement plan's current and projected funded status, as well as current and future projections of contribution rates.
e) Conduct periodic reviews of the plan design and provide technical and administrative information regarding potential initiatives resulting in cost savings.
f) Consider inter-generational cost equity and benefit equity when determining actuarial methods and assumptions that result in contribution rate levels. Consideration will be given to average contribution rates, normal costs, and benefit levels over a 20 or 30 year period.

1.C. LONG TERM DISABILITY PROGRAM

OUTLOOK: POSITIVE

Objectives:

1. Conduct a periodic review of actuarial methods and assumptions to ensure that liabilities are appropriately calculated.
2. Establish and implement a funding policy to ensure that the long term disability program is fully funded, or has a plan in place to achieve fully funded status over the adopted amortization period.
3. Ensure that methods are in place to mitigate contribution rate volatility and achieve contribution rates at or near normal cost over the adopted amortization period.
4. Ensure that significant cost and benefit equity is achieved among different generations.
5. Maintain a normal cost of the long term disability program that is affordable, relatively stable, and able to be modified if needed.

Performance Measures:

a) On an annual basis, the ASRS actuary will conduct a valuation of the long term disability program and make recommendations, if necessary, for changes to actuarial methods and assumptions.
b) At least every five years, the ASRS actuary will conduct an experience study to assess the appropriateness of the actuarial methods and assumptions being used by the ASRS.
c) At least every five years, an independent actuary will review the work of the ASRS actuary and validate the appropriateness of the actuarial methods and assumptions being used.
d) The ASRS will establish a funding policy that outlines the principles and practices used by the ASRS to guide funding decisions, and will provide periodic reports to the Board regarding the long term disability program's current and projected funded status, as well as current and future projections of contribution rates.
e) Conduct periodic reviews of the plan design and provide technical and administrative information regarding potential initiatives resulting in cost savings.
f) Consider inter-generational cost equity and benefit equity when determining actuarial methods and assumptions that result in contribution rate levels. Consideration will be given to average contribution rates, normal costs, and benefit levels over a 20 or 30 year period.

1.D. SYSTEM (CLOSED TO NEW PARTICIPANTS)

OUTLOOK: NEUTRAL TO POSITIVE

Objectives:

1. Conduct a periodic review of actuarial methods and assumptions to ensure that liabilities are appropriately calculated.
2. Establish and implement a funding policy to ensure that the system, which is closed to new participants, has funding sufficient to pay benefits for the lifetime of the system membership.
3. Develop and implement an investment strategy and asset allocation policy that reflects the appropriate risk profile for the System.

Performance Measures:

a) On an annual basis, the ASRS actuary will conduct a valuation of the system and make recommendations, if necessary, for changes to actuarial methods and assumptions.
b) At least every five years, the ASRS actuary will conduct an experience study to assess the appropriateness of the actuarial methods and assumptions being used by the ASRS.
c) At least every five years, an independent actuary will review the work of the ASRS actuary and validate the appropriateness of the actuarial methods and assumptions being used.
d) The investment management division will periodically review the System's investment strategy and asset mix to determine if a separate asset allocation study needs to be conducted or implemented.

1.E. OPTIONAL, SUPPLEMENTAL DEFINED CONTRIBUTION PLANS

OUTLOOK: POSITIVE

Objectives:

1. Provide employers with access to cost effective retirement savings products that are lower cost than competing defined contribution plans.
2. Ensure that ASRS supplemental defined contribution plans have diversified investment options.

Performance Measures:

a) Describe and analyze the Supplemental Defined Contribution Plans oversight structure.
b) Analyze the cost effectiveness of the ASRS supplemental retirement plans by comparing them to relevant competing public and/or private plans.
c) Describe and analyze the variety of investment options offered to participants of ASRS supplemental retirement programs.

STRATEGIC PRIORITY #2: OPTIMIZE RISK MANAGEMENT

DESIRED OUTCOMES, OBJECTIVES, AND PERFORMANCE MEASURES

Effectively organize an enterprise-wide risk management program designed to provide reasonable assurance that the ASRS is taking appropriate steps to manage and mitigate risks. The agency will proactively monitor and mitigate risks, including those related to:

A. Investment management and volatility
B. Data and systems security
C. Agency effectiveness and efficiency
D. Customer service and satisfaction
E. Diminished independence and autonomy of the ASRS
F. Contribution rate volatility
G. Benefit spiking

Desired Outcome:
Provide reasonable assurance that the agency is taking appropriate steps to manage and mitigate risks to the benefit plans and plan administration according to national standards of best practice.

2. ENTERPRISE-WIDE RISK MANAGEMENT PROGRAM

OUTLOOK: POSITIVE

Objective:
Demonstrate that the ASRS enterprise-wide risk management structure is capable of providing reasonable assurance that the ASRS is taking appropriate steps to manage and mitigate risks.

Performance Measures:

a) Document the characteristics of an effective risk management program, as defined by known authoritative sources (COSO, GFOA, etc.).
b) Document the agency's risk management program and governance structure, and demonstrate that it incorporates known best practices.

2.A. INVESTMENT MANAGEMENT AND VOLATILITY

OUTLOOK: NEUTRAL TO POSITIVE

Objective:
Provide reasonable assurance that the agency is taking appropriate steps to manage and mitigate risks related to investment management and volatility.

Performance Measures:

a) ASRS management risk assessments and associated remediation plans.
b) ASRS management analytics reports
c) Internal audit compliance reports
d) Results of the quarterly risk report done by the custody bank (currently State Street).

e) Risk metrics data contained in the independent consultant (currently NEPC) quarterly report.

2.B. DATA AND SYSTEM SECURITY

OUTLOOK: NEUTRAL TO POSITIVE

Objective:
Provide reasonable assurance that the agency is taking appropriate steps to manage and mitigate risks related to investment management and volatility.

Performance Measures:

a) ASRS risk assessment results or other relevant data presented to the Operations and Audit Committee and associated remediation plans.
b) Results of external audit testing.
c) Results of internal audit testing.

2.C. AGENCY EFFECTIVENESS AND EFFICIENCY

OUTLOOK: POSITIVE

Objective:
Provide reasonable assurance that the agency is taking appropriate steps to manage and mitigate risks related to the operational effectiveness and efficiency of the ASRS.

Performance Measures:

a) Highlights of relevant risk assessments and associated remediation plans.
b) Demonstrate the agency is operating within acceptable risk tolerances for effectiveness and efficiency through comparisons to peers in the CEM pension benefit administration benchmarking report.
c) Demonstrate the agency is operating within acceptable risk tolerances by its ability to meet relevant Operational Goals and Objectives.

2.D. CUSTOMER SERVICE AND SATISFACTION

OUTLOOK: NEUTRAL TO POSITIVE

Objective:
Provide reasonable assurance that the agency operation is taking appropriate steps to manage and mitigate risks related to customer service.

Performance Measures:

a) Highlights of relevant risk assessments and associated remediation plans.
b) Demonstrate the agency is operating within acceptable risk tolerances through its aggregate performance compared to peers and the universe contained in the CEM pension benefit administration benchmarking report.
c) Demonstrate the agency is operating within acceptable risk tolerances through its aggregate performance in meeting Operational Goals and Objectives.

2.E. DIMINISHED INDEPENDENCE AND AUTONOMY

OUTLOOK: NEUTRAL TO POSITIVE

Objective:
Provide reasonable assurance that the agency is taking appropriate steps to manage and mitigate risks related to independence and autonomy.

Performance Measures:

a) Highlights of relevant risk assessments (investment, procurement, budget, personnel, technology) and associated remediation plans.
b) Document current controls in place for the relevant areas, as well as the agency's risk tolerance.
c) Assess operational capacity.

2.F. CONTRIBUTION RATE VOLATILITY

OUTLOOK: NEUTRAL TO POSITIVE

Objective:
Provide reasonable assurance that the agency is taking appropriate steps to manage and mitigate risks related to contribution rate volatility.

Performance Measures:

a) Document relevant research conducted on this topic.
b) Document actions taken to mitigate risk, and their outcome.
c) Document planned efforts to further mitigate risk.
d) Assess the need for a formal risk assessment.

2.G. BENEFIT SPIKING

OUTLOOK: NEUTRAL TO POSITIVE

Objective:
Provide reasonable assurance that the agency is taking appropriate steps to manage and mitigate risks related to benefit spiking.

Performance Measures:

a) Document relevant research conducted on this topic.
b) Document actions taken to mitigate risk, and their outcome.
c) Document planned efforts to further mitigate risk.
d) Assess the need for a formal risk assessment.

STRATEGIC PRIORITY #3: OPTIMIZE INVESTMENT ORGANIZATION AND STRATEGIES

DESIRED OUTCOMES, OBJECTIVES, AND PERFORMANCE MEASURES

Effectively organize and manage an increasingly complex and sophisticated investment management program:

A. Design an organizational, staff, and consultant model that is congruent with the current, and forward-looking, relevant investment market place
B. Develop a program to retain and attract top investment related staff
C. Implement investment strategies and manage returns for given levels of risk

Strategic Priority #3 – Desired Outcome(s):

Demonstrate that an effective organizational, staff, and consultant model is in place and capable of meeting goals and objectives.

3.A. DESIGN AN ORGANIZATIONAL, STAFF, AND CONSULTANT MODEL THAT IS CONGRUENT WITH THE CURRENT, AND FORWARD-LOOKING, RELEVANT INVESTMENT MARKET PLACE

OUTLOOK: NEUTRAL TO POSITIVE

Objectives:

1. Review the organizational structure of the Investment Management Division.
2. Implement strategies to optimize utilization of consultants.
3. Implement strategies to optimize the use of relevant investment best practices.
4. Conduct periodic independent reviews of the ASRS investment organization, staff, and consultant model.

Performance Measures:

a) Document strategies in place to optimize the IMD organizational structure and the expected benefit.
b) Document strategies in place to optimize IMD's use of consultants and the expected benefit.
c) Document best practices that have recently been researched and/or implemented.
d) Document any independent reviews that have recently been conducted related to the IMD organization, staff, and consultant model.

3.B. DEVELOP A PROGRAM TO RETAIN AND ATTRACT TOP INVESTMENT RELATED STAFF

OUTLOOK: NEUTRAL

Objectives:

1. Implement strategies to improve the Investment Management Division's ability to retain top investment related staff.
2. Implement strategies to improve the Investment Management Division's ability to attract top investment related staff.

Performance Measures:

a) Document the strategies utilized by the ASRS to retain its investment professionals.
b) Document the strategies utilized by the ASRS to attract prospective investment candidates.

3.C. IMPLEMENT INVESTMENT STRATEGIES AND MANAGE RETURNS FOR GIVEN LEVELS OF RISK

OUTLOOK: POSITIVE

Objectives:

1. Implement strategies to meet investment objectives.
2. Implement strategies to manage risk within the Total Fund.

Performance Measures:

a) Document strategies that are expected to, or have (and have not) improved the agency's ability to meet investment objectives.
b) Document strategies that are expected to, or have (and have not) improved the agency's ability to manage or mitigate risk.

STRATEGIC PRIORITY #4: ENSURE OUTSTANDING CUSTOMER SERVICE

DESIRED OUTCOMES, OBJECTIVES, AND PERFORMANCE MEASURES

A quality workforce will deliver outstanding customer service directed toward:

A. Retirees
B. Active members
C. Inactive members
D. Employers
E. Other Stakeholders

Desired Outcome:

Demonstrate that members, employers and outside stakeholders are receiving outstanding customer service from the ASRS.

4. A. B. C. MEMBER TRANSACTIONS (RETIREES, ACTIVE, AND INACTIVE MEMBERS)

OUTLOOK: POSITIVE

Objectives:

1. Member transactions will be demonstrably timely and accurate.
2. Members will have access to a robust menu of self-service capabilities.
3. Members will receive relevant and reliable communication regarding their member transactions.
4. Members will be satisfied with ASRS transactions.
5. Member transaction service levels will compare favorably to peers.

Performance Measures:

a) Document the timeliness of new retiree payments, pension payments, refund payments, survivor benefit payments, service purchase invoices, and service purchase payments.
b) Document the accuracy reported in internal audit quality reviews of disbursements and service purchase.
c) Document the types of self-service transactions available, member utilization of those capabilities, and any upcoming initiatives to improve self-service for member transactions.
d) Document the types of communications members receive when they request a member transaction.
e) Document the levels of member satisfaction for the new retiree, refund, survivor benefit, and service purchase process (there is no survey for the pension process).
f) Document how the ASRS pension, new retiree, refund, survivor benefit, service purchase, and web self-service process performs in comparison to peers in the CEM peer universe.

4. A. B. C. MEMBER CONTACTS (RETIREES, ACTIVE, AND INACTIVE MEMBERS)

OUTLOOK: POSITIVE

Objectives:

1. Member contacts will be demonstrably timely.
2. Member contacts will be demonstrably accurate.
3. Members will have access to a wide variety of counseling and education services and mediums, and will be able to receive counseling in a setting that meets their needs.
4. Members will receive relevant and reliable communication to assist them in preparing for retirement.
5. Members will be satisfied with ASRS counseling and education services.
6. Member contact service levels will compare favorably to peers.

Performance Measures:

a) Document the timeliness of the member advisory center, one-on-one counseling, correspondence, benefit estimate, and appeals processes.
b) Document the quality ratings of the member advisory center, and any other relevant quality measures that have been conducted by staff or internal audit during the fiscal year.
c) Document the different ways members can receive counseling.
d) Document the types of communications available to members prior to retirement.
e) Document the levels of member satisfaction for the member advisory center, one-on-one counseling, group counseling, and benefit estimates.
f) Document how the call center, one-on-one counseling, presentations and group counseling, and benefit estimate processes perform in comparison to peers in the CEM peer universe.

4.D. EMPLOYERS

OUTLOOK: NEUTRAL

Objectives:

1. Develop a staff and service model capable of meeting employer expectations.
   - Identify the personnel within each employer who interact with the ASRS, or need to receive information from the ASRS.
   - Ask relevant employer personnel what their service needs and expectations are.
   - Develop an employer survey to assess employer satisfaction with ASRS services.
   - Develop relevant performance objectives related to employer services.
   - Review current internal organizational structure to ensure that agency resources are aligned with employer expectations.
2. Employers will receive relevant communications regarding updates or changes to ASRS laws, rules, and procedures.
3. Employers will have easy access to information needed to comply with ASRS laws, rules, and procedures.
4. Employers will have access to a robust menu of self-service capabilities.

Performance Measures:

a) Describe efforts that were conducted during the fiscal year to develop a staff and service model for employers.

b) Document the content and number of employer communications made during the fiscal year.
c) Document the different types of information available to employers to assist with compliance, as well as any new information being developed for employers.
d) Document the types of self-service capabilities available to employers, as well as any initiatives underway that are expected to improve service to employers.

4.E. OTHER STAKEHOLDERS

OUTLOOK: NEUTRAL TO POSITIVE

Objective:
Stakeholders will receive timely and relevant communications regarding updates or changes to ASRS laws, rules, and procedures.

Performance Measure:
Document communications sent to stakeholders during the fiscal year. Stakeholders include:

- Any group representing ASRS members
- Legislators and legislative staff
- Governor and governor's office staff
- General public
- Media

STRATEGIC PRIORITY #5: ENSURE HIGH PRODUCTIVITY

DESIRED OUTCOMES, OBJECTIVES, AND PERFORMANCE MEASURES

Maximize productivity by:

A. Effective development and deployment of technology
B. Reducing member reliance on physical and member contacts for service and transaction processing
C. Developing alternate ways for members and employers to receive education and counseling services without having to rely upon in-person counseling
D. Being a high service, low cost service provider when compared to other public retirement systems
E. Consolidating and reducing the need for physical work space
F. Mitigating the need for additional staff due to increases in service demand
G. Recruit, engage, utilize and retain a high caliber, professional staff capable of optimizing performance

Desired Outcome:

Demonstrate that the ASRS is a top-performing, cost effective and efficiently lead organization when compared to peers and best practice research.

5.A. EFFECTIVE DEVELOPMENT AND DEPLOYMENT OF TECHNOLOGY

OUTLOOK: POSITIVE

Objectives:

1. Implement processes and structures to ensure that new ways to use technology to improve productivity/efficiency are identified.
2. Implement new technology that has (or is expected to) increase technology productivity/efficiency.
3. Utilize a technology development process that is efficient and able to meet outcomes.

Performance Measures:

a) Document the process used by Management to identify new technology initiatives.
b) Document any technology upgrades recently implemented that are expected to increase technology productivity/efficiency.
c) Document the agency's success meeting technology objectives during the fiscal year.

5.B. REDUCING MEMBER RELIANCE ON PHYSICAL AND MEMBER CONTACTS FOR SERVICE AND TRANSACTION PROCESSING

OUTLOOK: POSITIVE

Objective:

Implement new projects that have, or are expected to, increase business productivity or efficiency.

Performance Measure:
Document recent technology projects that are expected to increase business productivity/efficiency.

5.C. DEVELOPING ALTERNATE WAYS FOR MEMBERS AND EMPLOYERS TO RECEIVE EDUCATION AND COUNSELING SERVICES WITHOUT HAVING TO RELY UPON IN-PERSON COUNSELING

OUTLOOK: POSITIVE

Objectives:

1. Continue to increase the number of members utilizing online benefit estimators while reducing the number of benefit estimates generated by ASRS staff.
2. Increase member educational touch points through the development of web content, e-newsletter articles, web tutorials, webinars, webcasts, and web applications that incorporate educational material into the application process.
3. Increase the number of members who utilize online educational materials.
4. Increase the number of one-on-one counseling sessions that are pre-scheduled, while reducing the overall number of members who receive one-on-one counseling.

Performance Measures:

a) Document utilization trends during the fiscal year for benefit estimators and manual benefit estimates.
b) Document new educational touch points implemented during the year (topics and medium).
c) Document utilization trends during the fiscal year for online educational materials.
d) Document utilization trends during the fiscal year for one-on-one counseling.

5.D. BEING A HIGH-SERVICE, LOW-COST SERVICE PROVIDER WHEN COMPARED TO OTHER PUBLIC RETIREMENT SYSTEMS

OUTLOOK: POSITIVE

Objectives:

1. Maintain operations performance (service) in the top quartile when compared to peers.
2. Maintain operations costs that are at or below average, at or below median, and trending toward the lowest quartile.

Performance Measures:

a) Document aggregate service performance of the ASRS vs. peers as reported in CEM.
b) Document aggregate cost per member of the ASRS vs. peers as reported in CEM.

5.E. CONSOLIDATING AND REDUCING THE NEED FOR PHYSICAL WORK SPACE

OUTLOOK: POSITIVE

Objectives:

1. Reduce the square footage of ASRS-occupied space in the 3300 building.
2. Promote alternative work schedules (telecommuting, compressed work weeks, etc.).
3. Reduce reliance on paper documents.

Performance Measures:

a) Document recent efforts to reduce our physical footprint and any other initiatives that are upcoming that are expected to use space more efficiently.
b) Document agency utilization of alternative work schedules as of the fiscal year end, as well as any initiatives undertaken this fiscal year to promote alternative work schedules.
c) Document any initiatives undertaken this fiscal year to reduce reliance on paper documents.

5.F. MITIGATING THE NEED FOR ADDITIONAL STAFF DUE TO INCREASES IN SERVICE DEMAND

OUTLOOK: POSITIVE

Objective:

Mitigate the need for additional staffing due to increases in service demand.

Performance Measure:

Document areas where service demand is increasing, and any new strategies that have been implemented to mitigate the need for additional staff.

5.G. RECRUIT, ENGAGE, UTILIZE AND RETAIN A HIGH CALIBER, PROFESSIONAL STAFF CAPABLE OF OPTIMIZING PERFORMANCE

OUTLOOK: POSITIVE

Objectives:

1. Complete recruitments in a timely fashion.
2. Conduct a biennial employee satisfaction survey to ensure that employees remain engaged and satisfied with their work environment.
3. Analyze employee survey results and identify and implement new strategies to engage employees and improve employee satisfaction, retention, and work environment.
4. Maintain a turnover rate that is within an acceptable range.
5. Implement compensation strategies to meet market demands, minimize turnover, motivate proactive behavior and reward achievement of goals, objectives and productivity and proficiency gains.

Performance Measures:

a) Document the agency's ability to meet performance objectives for recruitments.
b) Document the date of the most recent employee survey.
c) Document any new initiatives that will be undertaken as a result of the employee survey to improve employee satisfaction, retention, and work environment.

d) Document turnover rates this fiscal year and how those rates compare to state agencies as a whole or other appropriate comparisons that have been identified.
e) Document the various compensation strategies utilized this fiscal year, and how those strategies have helped the agency attract, retain, and reward employees.

Section 1

FISCAL YEAR 2014 PERFORMANCE REPORT

STRATEGIC PRIORITY #1 – ENSURE PLAN SUSTAINABILITY

Review Committee:

Paul Matson, Anthony Guarino, Gary Dokes, Pat Klein, Sara Orozco, Brian Crockett

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1.A. DEFINED BENEFIT PLAN

OUTLOOK: NEUTRAL TO POSITIVE

Performance Measures:

a) On an annual basis, the ASRS actuary will conduct a valuation of the defined benefit plan and make recommendations, if necessary, for changes to actuarial methods and assumptions.
b) At least every five years, the ASRS actuary will conduct an experience study to assess the appropriateness of the actuarial methods and assumptions being used by the ASRS.
c) At least every five years, an independent actuary will review the work of the ASRS actuary and validate the appropriateness of the actuarial methods and assumptions being used.
d) The ASRS will establish a funding policy that outlines the principles and practices used by the ASRS to guide funding decisions, and will provide periodic reports to the Board regarding the defined benefit plan's current and projected funded status, as well as current and future projections of contribution rates.
e) Conduct periodic reviews of the plan design and provide technical and administrative information regarding potential initiatives resulting in cost savings.
f) Consider inter-generational cost equity and benefit equity when determining actuarial methods and assumptions that result in contribution rate levels. Consideration will be given to average contribution rates, normal costs, and benefit levels over a 20 or 30 year period.

Actuarial Reviews: The ASRS' retained actuary, Buck Consultants, presented the results of the June 30, 2013 Valuation of the Pension Plan to the Board at its November 22, 2013 meeting. Based on the actuary's recommendation, the Board approved the adoption of a 30-year fixed amortization period for the Pension Plan.

Buck Consultants presented the five-year experience study covering the period from July 1, 2008 to June 30, 2012, to the Board at its May 24, 2013 meeting. The actuary constructed and presented actual to expected ratios on the assumptions and recommended changes to the following assumptions:

- Mortality
- Disability
- Withdrawal
- Retirement
- Adjustment for Contribution Timing
- Load for Optional Form Selection
- Alternate Contribution Rate
- Salary Scale

Based on the recommendation of the actuary the Board adopted the assumptions as presented to be incorporated in valuations beginning with the June 30, 2013 valuation.

In March 2014, the ASRS engaged Gabriel Roeder Smith & Company (GRS) to conduct an actuarial audit of the retained actuary, Buck Consultants. The scope of the audit included a review of the qualifications

of the actuaries who perform the valuations of the programs administered by the ASRS, a review of the results of the valuations completed for the year ended June 30, 2013, the reasonableness and appropriateness of the actuarial assumptions and methods applied to the valuations, and determining whether the Pension Plan's financial objectives of maintaining reasonably stable contribution rates and achieving an ultimate funded status of 100% are being met. GRS was also engaged to evaluate the general appropriateness, completeness and conclusions of the Experience Study for the period of July 2008 to June 2012, and express an opinion on whether the current funding method could reasonably be expected to increase the funded status over a fixed 30-year period for the Pension Plan.

GRS presented their findings to the Board at its June 27, 2014 meeting. GRS reported the valuation and Experience Study were prepared by qualified actuaries and in general, the assumptions and methods used provide a fair and reasonable assessment of the financial position of the Pension Plan. GRS further expressed that it expects the funded status of the plan to gradually improve and achieve the desired funded status if the ASRS funding policy is adhered to by ASRS employers. GRS recommended minor modifications to the assumptions used, and Buck Consultants is preparing a presentation for the Board to discuss incorporating the recommended changes in future valuations and experience studies.

Funding Policy: Additionally, GRS recommended that the ASRS consider adopting a formal funding policy to codify the decisions made by the Board. Although the ASRS currently has the funding policy elements recommended by GRS in place (Actuarial Cost Method, Actuarial Assumptions, Asset Valuation Method, Amortization Method, etc.), Management agrees it would be useful to draft a funding policy document that would be reviewed by the Board and placed in the Governance Policy Handbook.

Cost Savings Initiatives: The ASRS has conducted continuous reviews of the plan design and provided technical and administrative information regarding potential initiatives resulting in cost savings. Past cost savings initiatives include:

- Change cost basis for service purchases from normal cost to actuarial present value
- Decrease interest credited on withdrawn contributions from 8% to 4%
- Decrease interest credited on withdrawn contributions from 4% to 2%
- Redesign of non-retired survivor benefits
- Reimbursements for early retirement incentives
- Increase interest rate on payroll deduction agreements from 0% to 8%
- Pop-up restrictions
- Rescinding Modified Deferred Retirement Option Plan
- Recapture of unclaimed monies
- Eliminate 80% cap on retirement benefits
- Require 20/20 Rule for dual employment
- Eliminate enhanced refunds
- Replace Rule of 80 with Rule of 85
- Replace 36-month average salary with 60-month average salary
- Apply Alternative Contribution Rate to return-to-work
- Compute service purchases with 6% discount rate
- Eliminate service purchases through partial lump sums
- Eliminate Permanent Benefit Increases for future members

Historical Comparisons: The historic normal cost, contribution rates, and average normal cost rate and average contribution rate for a 20-year career employee are as follows:

Fiscal Year Ended June 30	Retirement Plan Normal Cost	Retirement Plan Contribution Rate	Average Normal Cost 20-Year Career	Average Contribution Rate Paid 20-Year Career
1981	10.78%	14.00%	-	-
1982	11.04%	14.00%	-	-
1983	11.06%	14.00%	-	-
1984	10.05%	14.00%	-	-
1985	9.78%	12.54%	-	-
1986	9.89%	11.34%	-	-
1987	10.50%	11.06%	-	-
1988	10.60%	8.00%	-	-
1989	9.16%	10.18%	-	-
1990	9.31%	4.00%	-	-
1991	9.58%	7.64%	-	-
1992	10.39%	7.20%	-	-
1993	10.59%	7.18%	-	-
1994	10.88%	6.28%	-	-
1995	9.95%	7.50%	-	-
1996	9.89%	5.12%	-	-
1997	9.98%	5.12%	-	-
1998	10.00%	4.62%	-	-
1999	10.62%	4.46%	-	-
2000	10.41%	3.42%	10.22%	8.58%
2001	11.03%	3.42%	10.24%	8.05%
2002	11.18%	3.94%	10.24%	7.55%
2003	12.34%	3.94%	10.31%	7.05%
2004	12.35%	9.30%	10.42%	6.81%
2005	12.52%	9.30%	10.56%	6.65%
2006	12.78%	12.67%	10.70%	6.72%
2007	12.36%	16.04%	10.80%	6.97%
2008	12.42%	17.15%	10.89%	7.42%
2009	12.55%	16.94%	11.06%	7.76%
2010	12.90%	17.34%	11.24%	8.43%
2011	12.92%	18.61%	11.40%	8.98%
2012	13.13%	20.37%	11.54%	9.64%
2013	13.06%	21.15%	11.66%	10.33%
Historic Average:	**11.09%**	**10.36%**		

1.B. HEALTH INSURANCE PROGRAM AND HEALTH BENEFIT SUPPLEMENT

OUTLOOK: POSITIVE

Performance Measures:

a) On an annual basis, the ASRS actuary will conduct a valuation of the health benefit supplement and make recommendations, if necessary, for changes to actuarial methods and assumptions.
b) At least every five years, the ASRS actuary will conduct an experience study to assess the appropriateness of the actuarial methods and assumptions being used by the ASRS.
c) At least every five years, an independent actuary will review the work of the ASRS actuary and validate the appropriateness of the actuarial methods and assumptions being used.
d) The ASRS will establish a funding policy that outlines the principles and practices used by the ASRS to guide funding decisions, and will provide periodic reports to the Board regarding the health benefit supplement plan's current and projected funded status, as well as current and future projections of contribution rates.
e) Conduct periodic reviews of the plan design and provide technical and administrative information regarding potential initiatives resulting in cost savings.
f) Consider inter-generational cost equity and benefit equity when determining actuarial methods and assumptions that result in contribution rate levels. Consideration will be given to average contribution rates, normal costs, and benefit levels over a 20 or 30 year period.

Actuarial Reviews: The ASRS' retained actuary, Buck Consultants, presented the results of the June 30, 2013 Valuation of the Health Benefit Supplement to the Board at its November 22, 2013 meeting. Based on the actuary's recommendation, the Board approved the adoption of a 15-year fixed amortization period for the Health Benefit Supplement.

Buck Consultants presented the five-year experience study covering the period from July 1, 2008 to June 30, 2012, to the Board at its May 24, 2013 meeting. The actuary constructed and presented actual to expected ratios on the assumptions and recommended changes to the following assumptions:

- Mortality
- Adjustment for Contribution Timing
- Alternate Contribution Rate
- HIB Elections
    - i. Percentage of Members receiving Health Supplements
    - ii. Percentage with Dependents' Coverage

Based on the recommendation of the actuary the Board adopted the assumptions as presented to be incorporated in valuations beginning with the June 30, 2013 valuation.

In March 2014 the ASRS engaged Gabriel Roeder Smith & Company (GRS) to conduct an actuarial audit of the retained actuary, Buck Consultants. The scope of the audit included a review of the qualifications of the actuaries who perform the valuations of the programs administered by the ASRS, results of the valuations completed for the year ended June 30, 2013, the reasonableness and appropriateness of the actuarial assumptions and methods applied to the valuations, and to determine whether the Health Benefit Supplement's financial objectives of maintaining reasonably stable contribution rates and achieving an ultimate funded status of 100% are being met. GRS was also engaged to evaluate the general appropriateness, completeness and conclusions of the Experience Study for the period of July 2008 to June 2012 and express an opinion on whether the current funding method could reasonably be

expected to increase the funded status over a fixed 15-year period for the Health Benefit Supplement Plan.

GRS presented their findings to the Board at its June 27, 2014 meeting. GRS reported the valuation and experience study were prepared by qualified actuaries and in general the assumptions and methods used provide a fair and reasonable assessment of the financial position of the Health Benefit Supplement Plan. GRS further expressed that it expects the funded status to gradually improve and achieve the desired funded status if the ASRS funding policy is adhered to by ASRS employers. GRS recommended minor modifications to the assumptions used and Buck Consultants is preparing a presentation for the Board to discuss incorporating the recommended changes in future valuations and experience studies.

Funding Policy: Additionally, GRS recommended that the ASRS consider adopting a formal funding policy to codify the decisions made by the Board. Although the ASRS currently has the funding policy elements recommended by GRS in place (Actuarial Cost Method, Actuarial Assumptions, Asset Valuation Method, Amortization Method, etc.), Management agrees that it would be useful to draft a funding policy document that would be reviewed by the Board and placed in the Governance manual.

Cost Savings Initiatives: The ASRS has conducted periodic reviews of the plan design and provided technical and administrative information regarding potential initiatives resulting in cost savings. Past cost savings initiatives include:

- Applying Alternative Contribution Rate to return-to-work

Historical Comparisons:
The historical normal cost and contribution rates of the Health Benefit Supplement are as follows:

Fiscal Year Ended June 30	Health Benefit Supplement Normal Cost	Health Benefit Supplement Contribution Rate
1995	0.44%	-
1996	0.52%	1.60%
1997	0.49%	1.28%
1998	0.47%	1.48%
1999	0.33%	1.24%
2000	0.31%	0.92%
2001	0.72%	0.92%
2002	0.72%	0.06%
2003	0.69%	0.06%
2004	0.67%	1.10%
2005	0.64%	1.10%
2006	0.63%	1.13%
2007	0.57%	1.16%
2008	0.48%	1.05%
2009	0.43%	0.96%
2010	0.43%	0.66%
2011	0.42%	0.59%

Fiscal Year Ended June 30	Health Benefit Supplement Normal Cost	Health Benefit Supplement Contribution Rate
2012	0.40%	0.63%
2013	0.39%	0.65%
Historic Average:	**0.51%**	**0.92%**

1.C. LONG TERM DISABILITY PROGRAM

OUTLOOK: POSITIVE

Performance Measures:

a) On an annual basis, the ASRS actuary will conduct a valuation of the long term disability program and make recommendations, if necessary, for changes to actuarial methods and assumptions.
b) At least every five years, the ASRS actuary will conduct an experience study to assess the appropriateness of the actuarial methods and assumptions being used by the ASRS.
c) At least every five years, an independent actuary will review the work of the ASRS actuary and validate the appropriateness of the actuarial methods and assumptions being used.
d) The ASRS will establish a funding policy that outlines the principles and practices used by the ASRS to guide funding decisions, and will provide periodic reports to the Board regarding the long term disability program's current and projected funded status, as well as current and future projections of contribution rates.
e) Conduct periodic reviews of the plan design and provide technical and administrative information regarding potential initiatives resulting in cost savings.
f) Consider inter-generational cost equity and benefit equity when determining actuarial methods and assumptions that result in contribution rate levels. Consideration will be given to average contribution rates, normal costs, and benefit levels over a 20 or 30 year period.

Actuarial Reviews: The ASRS' retained actuary, Buck Consultants, presented the results of the June 30, 2013 Valuation of the Long Term Disability Program to the Board at its November 22, 2013 meeting.

Buck Consultants presented the five-year experience study covering the period from July 1, 2008 to June 30, 2012 to the Board at its May 24, 2013 meeting. The actuary constructed and presented actual to expected ratios on the assumptions and recommended changes to the following assumptions:

- Long Term Disability Recovery Rates
- Pre-Existing Condition Period
- Offsets for Active and Disabled Members
- Load for Incurred but Not Reported Claims
- Demographic Assumption Changes for the Plan
- Contribution Timing Adjustment
- Alternate Contribution Rate

Based on the recommendation of the actuary the Board adopted the assumptions as presented to be incorporated in valuations beginning with the June 30, 2013 valuation.

In March 2014 the ASRS engaged Gabriel Roeder Smith & Company (GRS) to conduct an actuarial audit of the retained actuary, Buck Consultations. The scope of the audit included a review of the

qualifications of the actuaries who perform the valuations of the programs administered by the ASRS, results of the valuations completed for the year ended June 30, 2013, the reasonableness and appropriateness of the actuarial assumptions and methods applied to the valuations and to determine whether the Long term Disability Program's financial objectives of maintaining reasonably stable contribution rates and achieving an ultimate funded status of 100% are being met. GRS was also engaged to evaluate the general appropriateness, completeness and conclusions of the Experience Study for the period of July 2008 to June 2012 and express an opinion on whether the current funding method could reasonably be expected to increase the funded status over a fixed 15-year period for the Long term Disability Program.

GRS presented their findings to the Board at its June 27, 2014 meeting. GRS reported the valuation and experience study were prepared by qualified actuaries and in general the assumptions and methods used provide a fair and reasonable assessment of the financial position of the Long term Disability Program. GRS further expressed that it expects the funded status to gradually improve and achieve the desired funded status if the ASRS funding policy is adhered to by ASRS employers. GRS recommended minor modifications to the assumptions used and Buck Consultants is preparing a presentation for the Board to discuss incorporating the recommended changes in future valuations and experience studies.

Funding Policy: Additionally, GRS recommended that the ASRS consider adopting a formal funding policy to codify the decisions made by the Board. Although the ASRS currently has the funding policy elements recommended by GRS in place (Actuarial Cost Method, Actuarial Assumptions, Asset Valuation Method, Amortization Method, etc.), Management agrees that it would be useful to draft a funding policy document that would be reviewed by the Board and placed in the Governance manual.

Cost Savings Initiatives: The ASRS has conducted continuous periodic reviews of the plan design and provided technical and administrative information regarding potential initiatives resulting in cost savings. Past cost savings initiatives include:

- Long Term Disability program design changes
- Long Term Disability changes to offsets and pre-existing condition changes
- Apply Alternative Contribution Rate to return-to-work

Historical Comparisons: Historical normal costs, contribution rates, active and disabled membership counts and disabled to active ratios are as follows:

Fiscal Year Ended June 30	LTD Normal Cost	LTD Contribution Rate	Disabled Members	Active Members	% of Active Membership Disabled
1996	0.66%	0.98%	2,511	159,572	1.6%
1997	0.66%	0.98%	2,746	164,390	1.7%
1998	0.66%	0.98%	3,063	170,864	1.8%
1999	0.66%	0.98%	3,447	176,368	2.0%
2000	0.66%	0.98%	3,595	183,924	2.0%
2001	0.66%	0.98%	3,904	191,252	2.0%
2002	0.64%	0.98%	4,290	198,870	2.2%
2003	0.80%	0.98%	4,561	202,398	2.3%
2004	0.78%	1.00%	4,684	205,482	2.3%

Fiscal Year Ended June 30	LTD Normal Cost	LTD Contribution Rate	Disabled Members	Active Members	% of Active Membership Disabled
2005	0.56%	1.00%	4,939	212,202	2.3%
2006	0.56%	1.00%	5,018	217,676	2.3%
2007	0.52%	1.00%	5,071	224,001	2.3%
2008	0.48%	1.00%	4,882	226,415	2.2%
2009	0.34%	1.00%	4,712	222,515	2.1%
2010	0.32%	0.80%	4,724	213,530	2.2%
2011	0.32%	0.50%	4,609	208,939	2.2%
2012	0.30%	0.48%	4,440	202,693	2.2%
2013	0.18%	0.48%	4,307	203,994	2.1%
Historic Average:	**0.54%**	**0.89%**	**4,195**	**199,171**	**2.1%**

1.D. SYSTEM (CLOSED TO NEW PARTICIPANTS)

OUTLOOK: NEUTRAL TO POSITIVE

Performance Measures:

a) On an annual basis, the ASRS actuary will conduct a valuation of the system and make recommendations, if necessary, for changes to actuarial methods and assumptions.
b) At least every five years, the ASRS actuary will conduct an experience study to assess the appropriateness of the actuarial methods and assumptions being used by the ASRS.
c) At least every five years, an independent actuary will review the work of the ASRS actuary and validate the appropriateness of the actuarial methods and assumptions being used.
d) The investment management division will periodically review the System's investment strategy and asset mix to determine if a separate asset allocation study needs to be conducted or implemented.

Actuarial Reviews: The ASRS' retained actuary, Buck Consultants, presented the results of the June 30, 2013 Valuation of the System to the Board at its November 22, 2013 meeting. Based on the actuary's recommendation, the Board approved the valuation of the System, including the recommendation not to increase 13th check amounts.

Buck Consultants presented the five-year experience study covering the period from July 1, 2008 to June 30, 2012 to the Board at its May 24, 2013 meeting. The actuary constructed and presented actual to expected ratios on the assumptions and recommended changes to the following assumption: Mortality

Based on the recommendation of the actuary the Board adopted the assumptions as presented to be incorporated in valuations beginning with the June 30, 2013 valuation.

In March 2014 the ASRS engaged Gabriel Roeder Smith & Company (GRS) to conduct an actuarial audit of the retained actuary, Buck Consultations. The scope of the audit included a review of the qualifications of the actuaries who perform the valuations of the programs administered by the ASRS, results of the valuations completed for the year ended June 30, 2013, the reasonableness and appropriateness of the actuarial assumptions and methods applied to the valuations. GRS was also

engaged to evaluate the general appropriateness, completeness and conclusions of the Experience Study for the period of July 2008 to June 2012. GRS presented their findings to the Board at its June 27, 2014 meeting.

GRS reported the valuation and experience study were prepared by qualified actuaries and in general the assumptions and methods used provide a fair and reasonable assessment of the financial position of the System. GRS recommended minor modifications to the assumptions used and Buck Consultants is preparing a presentation for the Board to discuss incorporating the recommended changes in future valuations and experience studies.

Asset Allocation Review: The asset allocation of the System was last formally reviewed as part of the total fund SAAP conducted in 2012.

1.E. OPTIONAL, SUPPLEMENTAL DEFINED CONTRIBUTION PLANS

OUTLOOK: POSITIVE

Performance Measures:

a) Describe and analyze the Supplemental Defined Contribution Plans oversight structure.
b) Analyze the cost effectiveness of the ASRS supplemental retirement plans by comparing them to relevant competing, public and/or private plans.
c) Describe and analyze the variety of investment options offered to participants of ASRS supplemental retirement programs.

Management and Oversight Structure: Oversight of the Supplemental Salary Deferral Plan (SSDP), Supplemental Retirement Savings Plan (SRSP) and §38-955 Defined Contribution Retirement Plan (§38-955 Plan) has been delegated to the Management Committee. The Management Committee is comprised of ASRS personnel with diverse backgrounds and expertise including: Executive Director; Chief Investment Officer; Deputy Director, Chief Operations Officer and Assistant Director, External Affairs. The Management Committee is generally responsible for:

- Selection and retention of the Investment Consultant
- Selection and retention of the Plan Administrator
- Selection and termination of investment options
- Establishment and maintenance of the Investment Policy Statement (IPS)
- Reviewing fees and expenses
- Evaluation, in conjunction with the Investment Consultant, the performance of the designated investment options on , at least, a quarterly basis and recommending investment option changes as appropriate
- Monitoring plan-related education and communication to augment investment option information

The Management Committee has selected a Plan Administrator and Investment Consultant for each of the three plans, TIAA CREF for the SSDP and Nationwide Retirement Solutions for the SRSP and §38-955 Plan. Additionally an IPS has been adopted for each of the plans.

Peer Comparisons: In January 2014 Clifton Larson Allen completed a performance audit of the ASRS supplemental defined contribution plans. The performance audit included a review of the fees paid by

the Plan, or Plan participants, to determine if the fees are reasonable/competitive as compared to similar plans. The performance audit also included a review of the Investment Policy Statement and investment options specifically do the investment options available provide adequate diversification. The audit found that the average fee paid by participants in Arizona were the lowest of the peer group reviewed. Additionally the audit found that the Investment Policy Statement appeared to be sound when compared to other plans and that Arizona has a well-diversified menu of options available for participants.

Investment Offerings: Investment options offered in the ASRS supplemental retirement programs are as follows:

Supplemental Retirement Savings Plan (SRSP) investment options:

- Stable Value Fund
  - Morley Stable Value Retirement Fund
- Bond Funds
  - Vanguard Total Bond Market Index Fund
  - PIMCO Total Return Fund A (being replaced)
- Asset Allocation Fund: Active
  - Ivy Asset Strategy Fund A
- Asset Allocation Funds: Risk Profile
  - Nationwide Investor Destinations Conservative Fund Svc
  - Nationwide Investor Destinations Moderate Fund Svc
  - Nationwide Investor Destinations Aggressive Fund Svc
- Large Cap Equity Funds
  - Vanguard 500 Index Fund
  - Dreyfus Appreciation Fund
- Mid Cap Equity Funds
  - Vanguard Mid Cap Index Fund – Investor Shares
  - Dreyfus Premier Structured Mid Cap Fund I
- Small Cap Equity Funds
  - Vanguard Small Cap Index Fund
  - JP Morgan Small Cap Equity Fund
- International Equity Funds
  - Vanguard Total International Stock Index Fund
  - American Funds Euro-Pacific Growth Fund R4
  - Lazard Emerging Markets Fund – Open Class
- Real Estate Fund
  - Invesco Global Real Estate Fund A
- Charles Schwab Self-Directed Brokerage Option

Supplemental Salary Deferral Plan (SSDP) investment options:

- Guaranteed Funds
  - Plan Loan Default Fund
  - TIAA Traditional Annuity retirement Choice Plus Annuity
- Money Market
  - CREF Money Market Account
  - Vanguard Prime Money Market Fund Investor
- Fixed Income

        - Black Rock Inflation Protection Bond Fund A
        - Vanguard Total Bond Market Index Fund Signal
        - PIMCO Total Return Fund A (being replaced)
        - Templeton Global Bond Fund A
    - Multiple Assets
        - Manning & Napier Pro-Blend Conservative Term Series S
        - CREF Social Choice Account
        - Manning & Napier Pro-Blend Extended Term Series S
        - Manning & Napier Pro-Blend Maximum Term Series S
        - Ivy Asset Strategy Fund A
    - Real Estate
        - Voya Global Real Estate Fund A
    - Equity Funds
        - Large Cap Blend
            - CREF Stock Account
            - TIAA-CREF S&P 500 Index Fund Retirement
        - Large Cap Growth
            - TIAA-CREF Growth & Income Fund Retirement
        - World Stock
            - American Funds Capital World Growth and Income Fund R4
        - Mid Cap Blend
            - Invesco Mid Cap Core Equity Fund A
            - Vanguard Mid Cap Index Fund Signal
        - Small Cap Blend
            - TIAA-CREF Small Cap Blend Index Fund Retirement
        - Small Cap Growth
            - Royce Pennsylvania Mutual Fund Service
        - International – Foreign Large Blend
            - American Funds Euro-Pacific Growth Fund R4
            - TIAA-CREF International Equity Index Fund Retirement
        - Emerging Markets
            - Lazard Emerging Markets Equity Portfolio Open

<u>§38-955 Defined Contribution Plan investment options:</u>

- Short-Term Investments
    - Morley Stable Value
- Bonds
    - Vanguard Total Bond Market Index Investor
    - PIMCO Total Return Fund Class A (being replaced)
- Large Cap Equity
    - Vanguard Index 500 Fund
    - Dreyfus App
- Mid Cap Equity
    - Vanguard Mid Cap Index Investor
    - Dreyfus Stcd Mid cap
- International Equity
    - Vanguard Total International Stock Index Fund

    - American Funds Euro-Pacific Growth Fund R4
    - Lazard Emerging Markets Equity Portfolio Open
- Small Cap Equity
    - Vanguard Small Cap Index Investor
    - JP Morgan Small Cap Equity A
- Specialty Equity
    - Invesco Global Real Estate A
- Asset Allocation Funds
    - Nationwide Investor Destinations Conservative Fund Svc
    - Nationwide Investor Destinations Moderate Fund Svc
    - Nationwide Investor Destinations Aggressive Fund Svc
    - Ivy Asset Strategy Fund Class A

FISCAL YEAR 2014 PERFORMANCE REPORT

STRATEGIC PRIORITY #2 – OPTIMIZE RISK MANAGEMENT

Review Committee:

Paul Matson, Anthony Guarino, Gary Dokes, Pat Klein, Bernard Glick, Dave King, Kent Smith, Nancy Bennett, Martha Rozen, Lisa King, Sara Orozco, Brian Crockett

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2. ENTERPRISE-WIDE RISK MANAGEMENT PROGRAM

OUTLOOK: POSITIVE

Performance Measures:

a) Document the characteristics of an effective risk management program, as defined by known authoritative sources (COSO, GFOA, etc.).
b) Document the agency's risk management program and governance structure, and demonstrate that it incorporates known best practices.

The agency employs an Enterprise Risk Management (ERM) program to identify, assess, and mitigate risks. The ASRS conducts activities in accordance with the principles espoused by the Committee of Sponsoring Organizations of the Treadway Commission (COSO) and the best practices of the Government Finance Officers Association (GFOA).

According to COSO:

> *Enterprise risk management is a process, effected by an entity's board of directors, management and other personnel, applied in strategy setting and across the enterprise, designed to identify potential events that may affect the entity, and manage risk to be within its risk appetite, to provide reasonable assurance regarding the achievement of entity objectives.*

The ASRS Enterprise Risk Management Committee (ERMC) is set up to operate within the five COSO components of Internal Control.

1. **Control Environment**: The ASRS board and director set the ethical tone for the agency. The board is independent from management and oversees activities. Employees are held accountable for their control responsibilities.
2. **Risk Assessments**: Risk assessments are performed which identify and assess risks to attaining clearly defined objectives; the possibility of fraud is incorporated into the assessments.
3. **Control Activities**: Control activities to mitigate risks are identified and implemented. Remediation plans are developed for risks falling outside its risk tolerance. Action items are tracked.
4. **Information and Communication**: ASRS communicates both internally and externally to ensure controls are carried out.
5. **Monitoring Activities**: Program activities are monitored by the ASRS Internal Auditor and Operations and Audit Committee. Periodic outside reviews are conducted to ensure adequate control is in place.

The GFOA best practices indicate an effective risk management program identifies and evaluates risks, develops measures to treat risks, implements and finances risk management and performs program reviews; ASRS activities are compliant with these standards.

2.A. INVESTMENT MANAGEMENT AND VOLATILITY

OUTLOOK: NEUTRAL TO POSITIVE

Performance Measures:

a) ASRS management risk assessments and associated remediation plans.
b) ASRS management analytics reports.
c) Internal audit compliance reports.
d) Results of the quarterly risk report done by the custody bank (currently State Street).
e) Risk metrics data contained in the independent consultant (currently NEPC) quarterly report.

An Investment Management risk assessment is underway and should be completed in fiscal year 2015. The assessment will review risk events associated with investment volatility and the adequacy of current controls and strategies. The assessment will contain remediation plans to mitigate risks which fall outside of the agency's risk tolerance and enhanced controls with be reviewed and possibly implemented.

The agency has numerous controls in place to mitigate risks. The ASRS contracts NEPC to independently monitor, oversee, and report on the Investment Program. As a part of their report, NEPC provides Sortino Ratios, Sharpe Ratios and various other metrics to help the Board gauge risk. In fiscal year 2014, NEPC provided board reports in August and November 2013, and February and June 2014. In June 2014, NEPC reported:

- For the one-year period ending March 31, 2014, the Total Fund returned 13.8 percent, outperforming the Interim SAA Policy by 0.1 percent.
- For the three-year period, the Total Fund returned 9.6 percent per annum, outperforming the Interim SAA Policy by 0.1 percent.
- Over the past ten years, the Total Fund returned 7.0 percent per annum.
- Since inception, the Total Fund returned approximately 10 percent per annum.

NEPC also provides their perspective on the market risks to help the Board with their oversight function.

Asset class and other specialty consultants are used to assist the CIO in performing due diligence analysis and supplement the efforts and analysis by staff.

State Street Investment Analytics also provides Risk Reports to the Board to assist with risk management. The April 30, 2014 month-end risk profile (presented in June 2014) reflected:

- Historical Risk (95 percent VaR) for all asset classes remains relatively constant from prior months with no substantial deviation. Total Plan risk decreased a marginal 1 basis point with a corresponding 4 basis points decrease in the Policy Benchmark. A steady market environment has helped produce a stable risk profile since the beginning of last year.
- Excess risk over the Policy Benchmark is unchanged from the prior month at -0.7 percent.

Internal investment management utilizes POINT (fixed income) and BARRA (equity) portfolio management analytics. The analytic systems are broad and their features will continue to be investigated for broader application.

2.B. DATA AND SYSTEM SECURITY

OUTLOOK: NEUTRAL TO POSITIVE

Performance Measures:

a) ASRS risk assessment results and other relevant data presented to the Operations and Audit Committee along with associated remediation plans.
b) Results of external audit testing.
c) Results of internal audit testing.

The Agency Technology Development, Security, and Continuity of Operations risk assessment was completed in fiscal year 2014, and presented to the Operations and Audit Committee in August 2014. The risk assessment identified risks for the functional areas of Business Applications, Continuity of Operations and Network Applications. The assessment determined most risks are manageable and within appropriate risk tolerance levels but additional funding and resources are being requested to further mitigate security-related threats to achieve targeted security maturity levels.

As an additional control to ensure the ASRS is operating within acceptable risk tolerance levels, external vendors are hired to conduct biennial security and penetration audits. The latest audit was performed in January 2014 by CAaNES, a security assessment company.

- CAaNES used National Institute of Standards and Technology (NIST) controls to measure our security posture and the maturity of our security program.
- The results were presented to the OAC in Executive Session in April and August 2014.
- The agency developed a remediation list to address the issues identified.

Internal Audit will perform tests in years when biennial security and penetration audits are not conducted by external auditors. The ASRS Biennial Internal Audit plan has testing scheduled for fiscal year 2015.

2.C. AGENCY EFFECTIVENESS AND EFFICIENCY

OUTLOOK: POSITIVE

Performance Measures:

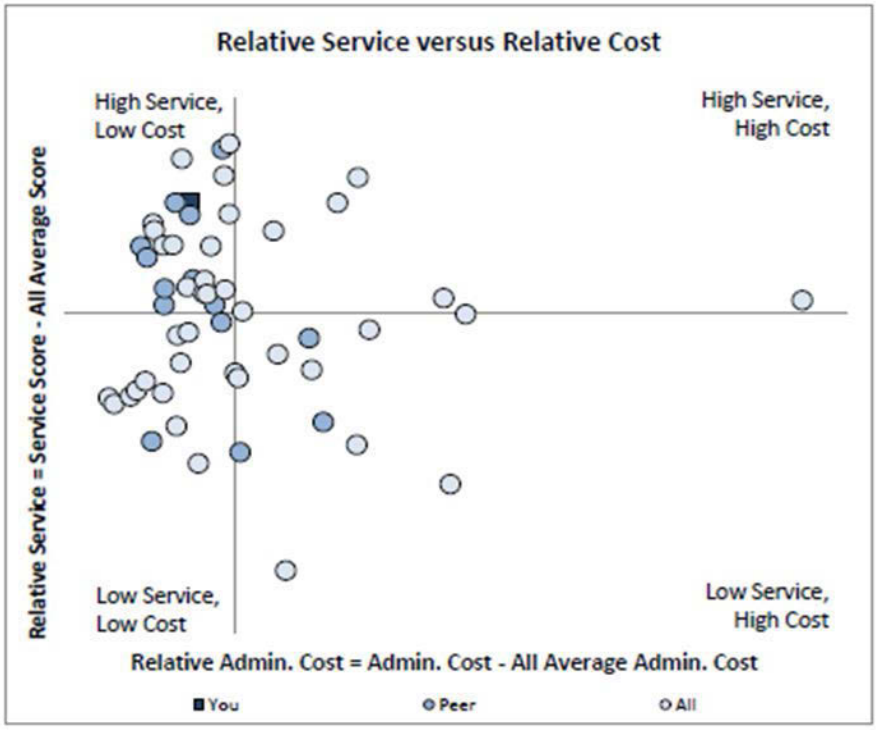
a) Highlights of relevant risk assessments and associated remediation plans.
b) Demonstrate the agency is operating within acceptable risk tolerances for effectiveness and efficiency through comparisons to peers in the CEM pension benefit administration benchmarking report.
c) Demonstrate the agency is operating within acceptable risk tolerances by its ability to meet relevant Operational Goals and Objectives.

The ASRS has a mature strategic planning model that enables it to use an array of benchmarks and measures to detect and control risk. Strategic objectives in the plan, that set standards and target performance, help designate the agency's risk tolerance for services and functions throughout the organization. Ongoing performance measurement and reporting allows the ASRS to monitor and respond to risks that threaten agency effectiveness and efficiency through various management control activities. This has allowed the ERMC to focus its formal risk assessments on other high profile risk areas.

Since the new ERM model was implemented, the agency has conducted risk assessments of pension payments and disbursements, the agency's budget and workforce, technology development, and network security. An assessment of investment management is underway.

Evidence suggests the ASRS conducts activities and has a control structure to manage risks impeding agency wide effectiveness and efficiency.

For example, The ASRS aims to be high-performing and cost-effective when measured against peers. The 2013 CEM Benchmarking report, issued April 2014, reflects the ASRS is operating within our risk tolerance.



2.D. CUSTOMER SERVICE AND SATISFACTION

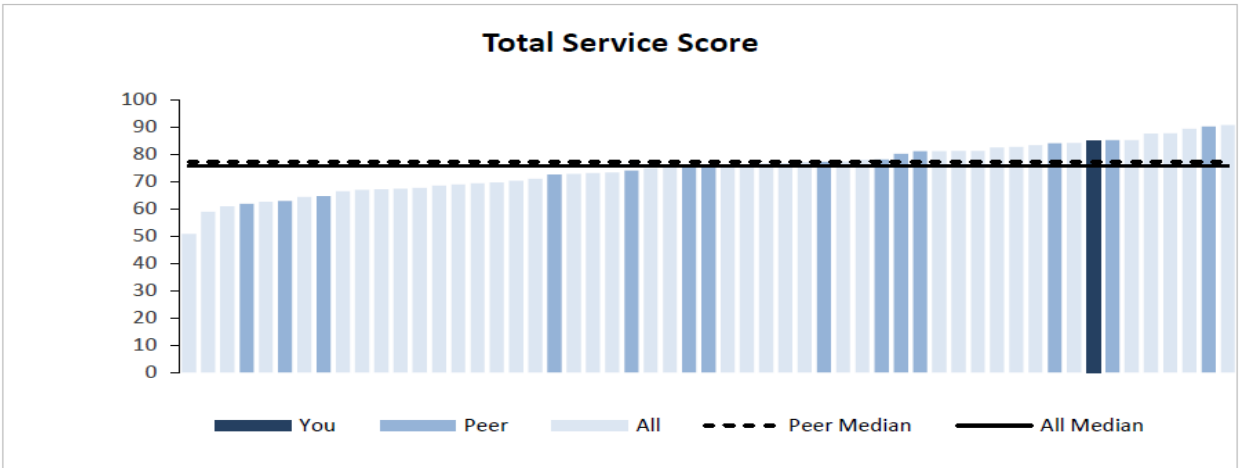
OUTLOOK: NEUTRAL TO POSITIVE

Performance Measures:

a) Highlights of relevant risk assessments and associated remediation plans.
b) Demonstrate the agency is operating within acceptable risk tolerances through its aggregate performance compared to peers and the universe contained in the CEM pension benefit administration benchmarking report.
c) Demonstrate the agency is operating within acceptable risk tolerances through its aggregate performance in meeting Operational Goals and Objectives.

As in the case of agency efficiency and effectiveness, the ASRS strategic planning model is used by the agency to set standards and its risk tolerance for member customer service and satisfaction. The agency conducts ongoing surveys and has numerous reports to identify, monitor, and assess when risk events occur that can impact member customer service and satisfaction. Data shows the ASRS operates consistently within acceptable service and risk tolerance levels, indicating the ASRS conducts activities and has the control structure needed to manage risks impeding, member customer service and satisfaction.

For example, the latest CEM report reflects the ASRS had a service score of 85 out of 100 - above the peer average of 77 and three points higher than our peer median. The ASRS score increased from 83 to 85 between 2010 and 2013.



Likewise, member customer survey results show member satisfaction has met or exceeded strategic plan objectives consistently over the years in most categories. Additional data confirming this assertion appears in the Customer Service section of the report.

Risks associated with employer customer service and satisfaction is a different matter. Performance standards and employer expectations are largely underdeveloped, as are the potential risks. Though this is being addressed, a formal risk assessment will need to be conducted in fiscal year 2015 to more fully identify risks and control strategies needed. Until then, the outlook on how well risks related to employer services is managed and mitigated is uncertain.

2.E. DIMINISHED INDEPENDENCE AND AUTONOMY

OUTLOOK: NEUTRAL TO POSITIVE

Performance Measures:

a) Highlights of relevant risk assessments (investment, procurement, budget, personnel, technology) and associated remediation plans.
b) Document current controls in place for the relevant areas, as well as the agency's risk tolerance.
c) Assess the operational capacity.

The risk that a lack of independence and autonomy will negatively impact ASRS strategic aims has been brought up on a number of occasions by Trustees and consultants in recent years. The issue was addressed by the ERMC in its two most recent risk assessments (Agency Budget and Workforce, and Agency Technology Development and Security and Continuity of Operations). In both instances the agency determined the current level of independence and autonomy to be within acceptable risk tolerance levels.

Moreover, at the August 2014 Board meeting, the agency's operational capacity to achieve priorities, goals, and objectives was discussed. Three keys that influence our ability to optimize operational capacity and performance were identified:

- Access to Funding
- Access to Qualified Staff
- Access to Safe, Modern Technology

The agency concluded that while independence and authority in each case is constrained in a variety of ways by laws and external entities, these checks and balances to Board authority have not proven to be a major impediment. The ASRS operates at an effective capacity, with performance that compares favorably to industry peers.

Risks associated with a lack of independence and autonomy will most likely be reviewed further during risk assessments of Investment Management and Contracts and Procurement.

2.F. CONTRIBUTION RATE VOLATILITY

OUTLOOK: NEUTRAL TO POSITIVE

Performance Measures:

a) Document relevant research conducted on this topic.
b) Document actions taken to mitigate risk, and their outcome.
c) Document planned efforts to further mitigate risk.
d) Assess the need for a formal risk assessment.

Controls to mitigate contribution rate volatility included contracting an independent, external vendor to conduct an actuarial audit of the retained actuary, Buck Consultants, and evaluate the Experience Study for the period of July 2008 to June 2012. The details and scope are discussed further in the Plan Sustainability section of this report.

Additional controls included utilizing Buck Consultants to provide ASRS management and the Board with supplemental information to assist them in their evaluation process of contribution rate volatility risks.

- In April 2014, Buck Consultants presented an analysis of the long-term sensitivity of contribution rates and funding status to changes in the investment rates of return and membership growth. The projected contribution rates and funded status given various scenarios were outlined.
- In November 2013, the ASRS actuarial presentation included long-term contribution rate projections given various growth levels and amortization methods.

Risk mitigation strategies implemented to protect against contribution rate volatility include moving from 5-year to 10-year smoothing, amortizing unfunded liabilities over a 15 or 30-year period, and adjusting mortality tables.

The agency will evaluate whether a formal risk assessment is needed for this issue.

2.G. BENEFIT SPIKING

OUTLOOK: NEUTRAL TO POSITIVE

Performance Measures:

a) Document relevant research conducted on this topic.
b) Document actions taken to mitigate risk, and their outcome.
c) Document planned efforts to further mitigate risk.
d) Assess the need for a formal risk assessment.

In fiscal year 2014, research was conducted in the area of pre-retirement salary changes for ASRS members to determine if unusual salary patterns exist and actuarial assumptions appear reasonable. In

May 2014, the analysis was presented to the Board with the findings:

- In general, there are limited salary increases as a member approaches retirement.
- The salary scale used to determine future liability accruals and contribution rates appears appropriate.

While there does not appear to be wide-spread occurrences, individual cases may materialize which can cause reputational injury. The External Affairs Division will contact employers to confirm salary when instances of possible salary spiking are brought to their attention through staff or Internal Audit.

The agency will continue to be vigilant about possible benefit spiking risks and will evaluate whether a formal risk assessment is needed for this issue. The agency is investigating legislation and/or creating a compensation rule to further mitigate risks.

Section 3

Fiscal Year 2014 Performance Report

Strategic Priority #3 – Optimize Investment Organization and Strategies

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Review Committee:

Paul Matson, Gary Dokes, Dave Underwood, Anthony Guarino, Martha Rozen, Sara Orozco

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3.A. DESIGN AN ORGANIZATIONAL, STAFF, AND CONSULTANT MODEL THAT IS CONGRUENT WITH THE CURRENT, AND FORWARD-LOOKING, RELEVANT INVESTMENT MARKET PLACE

OUTLOOK: NEUTRAL TO POSITIVE

Performance Measure:

a) Document strategies in place to optimize the IMD organizational structure and the expected benefit.

1. **Cross-pollination of investment asset class disciplines:** Engaged discussions between public and private debt/equity groups occur which center on Total Fund Rebalancing, Internal/External Cash Flow management, development and management of ASRS private debt program, asset class committee (IMD) member constituency.

   Expected Benefit: Promote further alignment and integration of IMD functional disciplines to reinforce the investment decision-making process.

2. **Investment Forums and Roundtables:** Discussion of relevant investment topics by staff, trustees, strategic partners and other external parties in a non-decision making, sharing of investment ideas and perspectives venue.

   Expected Benefit: Trustee and staff continuing education; valuable catalyst of potential strategic or tactical investment initiatives.

3. **Strategic partnerships with external resources:** Liaised with leading investment managers, service providers and academicians with proposed and/or current strategies and programs.

   Expected Benefit: To further leverage effectiveness of IMD and broadening its expertise.

Performance Measure:

b) Document strategies in place to optimize IMD's use of consultants and the expected benefit.

1. **Separation of investment consultant services:** decision-making vs. oversight/reporting.

   Expected Benefit: An optimal governance structure.

2. **Efficient use of consultants from a skill set and a budgetary perspective:** ASRS leverages the resources of specialty consultants (e.g., private markets, quantitative research, etc.) as a supplement to staff and negotiates fees only for the services needed.

Expected Benefit: Provides a depth of information intended to achieve a balanced, better investment decision.

Performance Measure:

c) Document best practices that have recently been researched and/or implemented.

The ASRS has engaged in the following activities over the past several years to improve the organization, governance, and decision-making model of the Investment Management Division:

- Conducted an internal review of internal practices
- Engaged an external entity (Cortex) to review agency practices compared with industry best practices and make recommendations
- Expanded its suite and use of analytical systems and automated former manual functions
- Implemented a new variable compensation program (ICP) to retain, align and reward performance

Performance Measure:

d) Document any independent reviews that have recently been conducted related to the IMD organization, staff, and consultant model.

An independent review of the ASRS investment governance structure and efforts to address compensations were last conducted in 2012 by Cortex Applied Research. Current practices are consistent with the recommended actions by Cortex.

3.B. DEVELOP A PROGRAM TO RETAIN AND ATTRACT TOP INVESTMENT RELATED STAFF

OUTLOOK: NEUTRAL

Performance Measure:

a) Document the strategies utilized by the ASRS to retain its investment professionals.

In 2013 the ASRS approved an Incentive Compensation Program (ICP) Plan for the Investment Management Division. The ICP seeks to promote retention of investment professionals and align objectives. The ICP was developed to:

- Assist in retaining investment professionals
- Assist in recruiting investment professionals
- Incentivize and align performance

And to contain the following characteristics:

- Result in enhanced investment performance
- Controlled or influenced by participants
- Fair
- Achievable
- Measurable
- Flexible for the agency

In developing the ICP, the ASRS reviewed other U.S. and non-U.S. public pension plans, discussed best practices with consultants, and conducted a review of literature.

Performance Measure:

b) Document the strategies utilized by the ASRS to attract prospective investment candidates.

The ASRS draws upon a variety of both visible and intangible attributes to attract prospective (and retain current) fiduciary-inclined investment candidates, notably:

- The experience to assist directly in managing substantial investment assets in a complex, multi-class structure
- Direct exposure to sophisticated investment concepts
- Direct exposure to preeminent investment firms and practitioners
- Opportunities to engage foremost and distinguished academics and economists not easily or readily accessed within the private sector
- A compensation and benefits package (health, disability, death, and retirement benefits) not often, or completely available in the private sector.
- Flexible work style in an often sought after area.

3.C. IMPLEMENT INVESTMENT STRATEGIES AND MANAGE RETURNS FOR GIVEN LEVELS OF RISK

OUTLOOK: NEUTRAL TO POSITIVE

Performance Measure:

a) Document strategies that are expected to, or have (and have not), improved the agency's ability to meet investment objectives

1. Periodic triennial review and refinement to ASRS Strategic Asset Allocation Policy (SAAP);
   - Revisit efficacy and current validity of existing strategies
   - Incorporate where feasible strategies that can extend Fund diversifications yet offer potentially rewarding investment return streams

2. Address capital markets dynamics within the context of adhering to the SAA policy allocation targets and range;
   - Increase cross-class and intra-class flexibility, including tactical use of cash reserves
   - Exploit tactical situations and valuation anomalies that arise

Performance Measure:

b) Document strategies that are expected to, or have (and have not), improved the agency's ability to manage or mitigate risk

The ASRS regularly utilizes the following to manage and mitigate risk:

- Custody Bank (currently State Street) risk reports
- An internal portfolio management and reporting system
- Supplemental independent consultant (currently NEPC) risk reports

Section 4

FISCAL YEAR 2014 PERFORMANCE REPORT

STRATEGIC PRIORITY #4 – ENSURE OUTSTANDING CUSTOMER SERVICE

Review Committee:

Paul Matson, Anthony Guarino, Pat Klein, Bernard Glick, Dave King, Nancy Bennett, Sara Orozco

4. A. B. C. MEMBER TRANSACTIONS (RETIREES, ACTIVE, AND INACTIVE MEMBERS)

OUTLOOK: POSITIVE

Performance measures:

a) Document the timeliness of new retiree payments, pension payments, refund payments, survivor benefit payments, service purchase invoices, and service purchase payments.
b) Document the accuracy reported in internal audit quality reviews of disbursements and service purchase.
c) Document the types of self-service transactions available, member utilization of those capabilities, and any upcoming initiatives to improve self-service for member transactions.
d) Document the types of communications members receive when they request a member transaction.
e) Document the levels of member satisfaction for the new retiree, refund, survivor benefit, and service purchase process (there is no survey for the pension process).
f) Document how the ASRS pension, new retiree, refund, survivor benefit, service purchase, and web self-service process performs in comparison to peers in the CEM peer universe.

Timeliness: Performance statistics indicate that a majority of ASRS members who initiated a transaction in fiscal year 14 received timely, outstanding customer service. With some notable exceptions, timeliness objectives were met in a majority of months this year.

Key Service Measures	Objective	# of Months met	Highest Month	Lowest Month
New Retirees: Disburse an estimated retirement benefit within 10 business days of the retirement date	90%	1	94%	74%
Monthly Pensions: Disburse pension payments on or before the first day of each month	99.5%	12	100%	99.89%
Refunds: Disburse refund within 10 business days following receipt of the application and any documents needed for processing	90%	12	100%	98%
System Member 13th Checks: Disburse 13th checks to eligible System members prior to the end of the calendar year, ensuring notification is provided to System members prior to the distribution date	on or before 12/31	Notification Provided: 11/25/2013 Checks Issued: 12/10/2013	n/a	n/a
Service Purchase Cost Invoices: Distribute cost invoices within 10 business days following receipt of the application and any documents needed for processing	90%	9	98%	73%
Service Purchase Payments: Process service purchase payments and payment-related documents within 5 business days following receipt	90%	8	100%	44%
Survivor Benefit Documents: Distribute within 10 business days of notification of death	90%	6	96%	82%
Survivor Benefit Payments: Disburse lump sum payments within 10 business days of document receipt	90%	9	100%	77%

New Retirees – The percentage of members who are eligible for, and receiving, an estimated retirement benefit in 10 business days has declined. This decline occurred as a result of the increase in the lump sum retirement threshold to $100 (from $20). To improve performance, Management will need to enhance its technology to permit payment of lump sum retirements through a daily disbursement process, similar to refunds. Until these technology changes are made, Management will need to consider lowering its timeliness expectation.

Survivor Benefit Documents – When a death is reported, staff must determine who the beneficiary is on the account, and whether a benefit is left to be paid. If the member died with no beneficiary on file, or the beneficiary cannot be located, the agency must conduct research to locate a beneficiary, which can take a significant amount of effort and impacts our ability to meet objectives.

Accuracy: Internal audit reviews of refund (100% accuracy rating) and service purchase (99% and 100% accuracy ratings) continued to indicate that the ASRS is accurately calculating benefits. As of this report, the fiscal year 14 review of survivor and new retiree payments had not been completed, however, reviews in previous years have been positive.

Online Services: This year, an increasing number of members used the website to initiate a transaction or make changes to their ASRS account.

Online Services	Objective	Monthly Utilization - FY14	
	(measured monthly)	Low (%)	High (%)
Refund Applications	90%	87%	92%
Retirement Applications	90%	41%	55%
Address Updates	75%	63%	87%
Beneficiary Updates	75%	74%	82%
Tax Withholding Updates	75%	72%	88%
Direct Deposit Updates	75%	28%	68%

In some areas, the ASRS is already meeting its strategic objectives for the five year period during some months.

Utilization of the online retirement application, although steadily increasing, has been the service where utilization has increased the most slowly. Despite its utilization rate, it is still on track to meet its target by the end of the five year period.

Retirees have also been slower to move toward the secure website when they need to make changes to their banking information. As of the end of the fiscal year, approximately half of retirees had registered for secure access. The ASRS is working on a number of items that it expects to help increase retiree utilization of the secure website:

- At the end of the year, the ASRS will cease mailing paper remittance advices to retirees.
- Information about retiree healthcare elections, premiums, and premium supplements is being added.
- A benefit details page is being created that will provide retirees with summary information regarding their retirement elections (age, salary, and service at retirement, retirement elections, etc.)

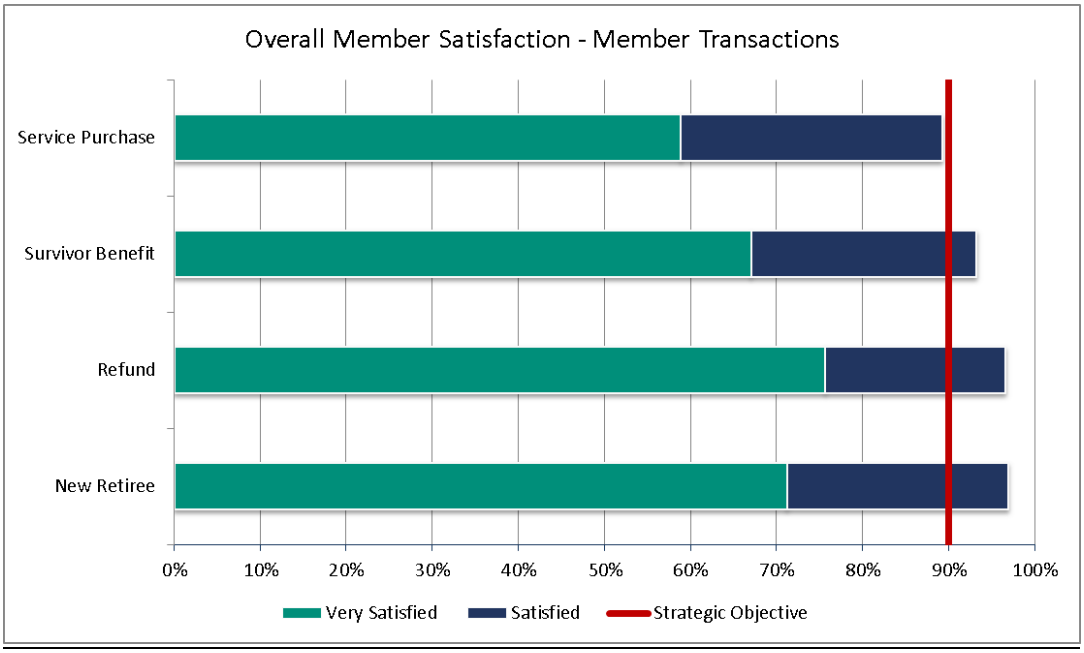
- The retiree beneficiary information and functionality is being enhanced to:
    - Allow retirees with straight life annuities to change their beneficiary online.
    - To show retirees with term certain and straight life annuities whether any benefit remains to be paid to a beneficiary.

- A pension verification letter is being created for retirees who need to provide a third party with information regarding their pension income (how much the benefit is and how long it will be paid)

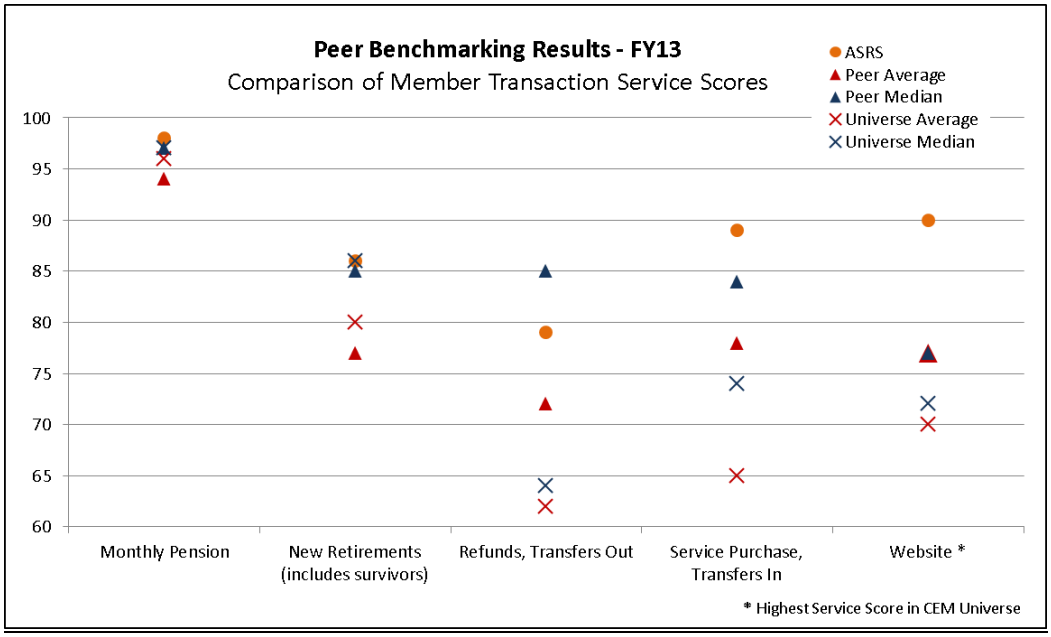
Communication: When members initiate a retirement or refund transaction online, they receive an acknowledgement of their request, as well as periodic emails at key steps in the process. Members can also view the current status of their request at any time by logging into the ASRS website. Members who initiate a refund or retirement transaction with a paper application do not receive an acknowledgement letter, but are still able to view their status by logging into the secure website. Members may also call or email if they have questions about the process. If there is something wrong with an application (data or signatures missing, etc.), the ASRS will contact the member by phone, email, or letter to notify them of what has occurred and the action they need to take. Lastly, when a transaction is completed, the relevant information about the transaction will be mailed to the member's home.

Member Satisfaction: Satisfaction levels remain high, with 90 percent or more of members rating that they were "very satisfied" or "satisfied" with the service they received in 3 of the 4 key transaction areas.

Service purchase narrowly missed its member satisfaction objective, with only 89 percent indicating they were satisfied overall. Service purchase, which can be highly complex, continues to be the area members are least likely to be 'very satisfied' with.



Benchmarking: The ASRS continues to compare favorably when it measures itself against the CEM pension benefit administration benchmarking universe.



In most transaction categories, ASRS service levels are equal to or better than the peer median and the median of the universe of participants.

The ASRS website is currently the highest scoring of those participating in the CEM universe.

The CEM service score for the refunds, transfers out category lags behind the peer median due to the length of time it currently takes to transfer funds out of the ASRS (54 vs. 21 business days). ASRS performance in this area is dependent on receiving the appropriate documents from the requesting entity, most commonly PSPRS. Transfers out took approximately 10 days longer in fiscal year 2013 than they did in 2012.

4. A. B. C. MEMBER CONTACTS (RETIREES, ACTIVE, AND INACTIVE MEMBERS)

OUTLOOK: POSITIVE

Performance measures:

a) Document the timeliness of the member advisory center, one-on-one counseling, correspondence, benefit estimate, and appeals processes.
b) Document the quality ratings of the member advisory center, and any other relevant quality measures that have been conducted by staff or internal audit during the fiscal year.
c) Document the different ways members can receive counseling.
d) Document the types of communications available to members prior to retirement.
e) Document the levels of member satisfaction for the member advisory center, one-on-one counseling, group counseling, and benefit estimates.
f) Document how the call center, one-on-one counseling, presentations and group counseling, and benefit estimate processes perform in comparison to peers in the CEM peer universe.

Timeliness: The ASRS exceeded its timeliness objectives for most months in fiscal year 2014. After struggling to meet service objectives for several years, the call center met its objectives in the early part of 2014 and has maintained high levels of service for the remainder of the year. Email response times have been the only area where timeliness objectives have not regularly been met this fiscal year. In the new strategic plan, the agency lowered its email turnaround time objective (from 3 business days to 24 hours). Although, on average, the agency has met this objective, the agency has not yet regularly met the 90% threshold it has set.

Key Service Measures	Objective	# of Months Met	Highest Month	Lowest Month
Telephone: Answer calls within 20 seconds of entering the queue.	80%	10	99%	23%
Email: Respond within 1 business day of receipt.	90%	2	100%	49%
One-on-One Appointments: Assist within 5 minutes of appointment or arrival time (whichever is later).	80%	12	97%	94%
One-on-one Walk-ins: Assist within 30 minutes of arrival.	80%	12	98%	93%
Benefit Estimates: Distribute within 3 business days of request.	95%	11	100%	91%
Health/Disability Appeals: Respond to assistant director and/or director level appeals within 15 business days.	90%	10 (data not available for 2 months)	100%	90%
Appeals: Respond to assistant director and/or director level appeals within 10 business days.	90%	10	100%	85%

Quality: All three of the call center quality ratings were met this fiscal year.

- Maintain a call abandonment rate of 5 percent or less. (met 10 of 12 months)
- Resolve 97 percent or more of member questions during the first contact. (met 12 months)
- Maintain a quality rating of 95 percent or higher. (met 12 months)

The one-on-one counseling center has also been working to implement a quality review system this year. To date, an evaluation tool has been created, but a quality rating has not yet been developed based on the evaluation tool.

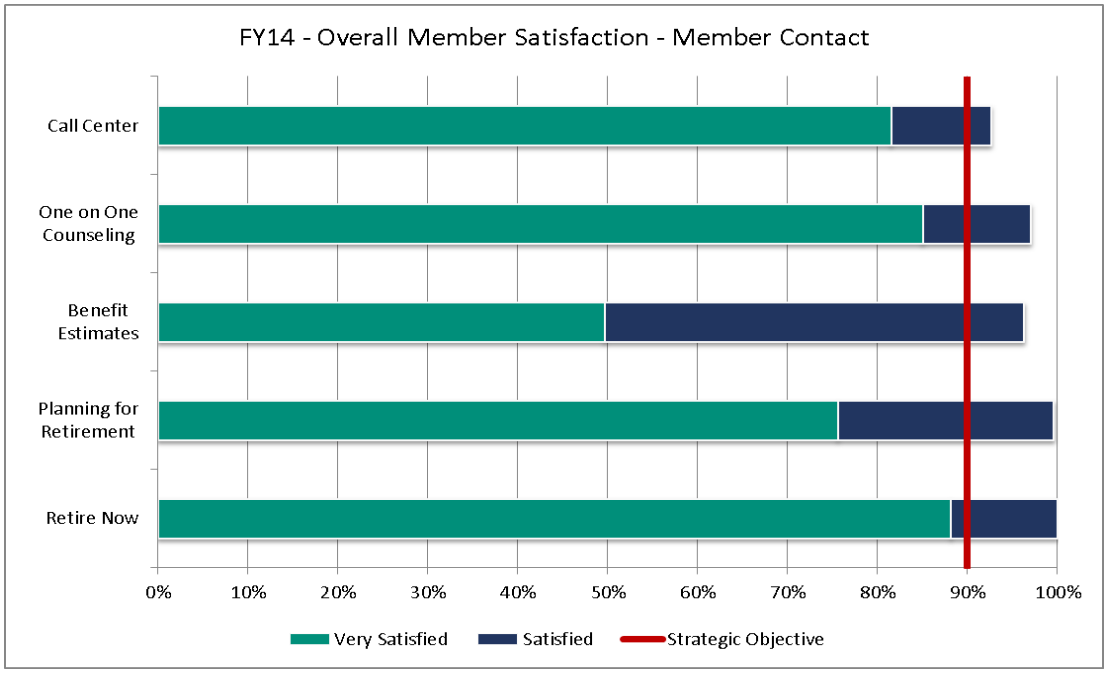
Access to Communications and Counseling: The ASRS provides a number of opportunities for members to learn about their ASRS benefits:

- One-on-one appointments: Pre-scheduled appointments are offered in the Phoenix and Tucson offices.
- Walk-in appointments: Members are permitted to walk in for service in the Phoenix and Tucson offices.
- Online one-on-one counseling: Remote counseling is available to members who live in Rural Arizona, and to those members who are not physically able to travel to an in-person session.
- In-person group counseling: The ASRS offers a number of group counseling sessions for members. These sessions are typically held in the Phoenix and Tucson offices of the ASRS, however, the ASRS also travels to most counties within Arizona at least once a year. The ASRS will also travel to an employer site for group counseling if there is enough interest.
- Online group counseling (webinars): The ASRS also offers most of its group counseling sessions online, in webinar format.
- Video tutorials: The ASRS continues to add new topics to its video library for members to view at their convenience.

- Interactive web tools: a Guide to Pre-Retirement Services application was developed this year to provide members with information about all the different questions they may have or information they meet at different stages of their career.
- Public web site: The public website was enhanced this year to provide members with more information about ASRS benefits and services.
- E-newsletters: Members who have provided the ASRS with an email will receive a quarterly e-newsletter that informs them of important news regarding their ASRS benefit.
- Paper newsletters: The ASRS continues to send one paper newsletter (Financial Horizons) to its entire membership once a year. In addition, retirees receive a separate newsletter (Your Retirement) a few times a year that contains information specific to retirees.
- Targeted emails: The ASRS has already begun sending targeted emails to all non-retired members on their birthday to remind them to check their ASRS account. Staff is also developing a number of other targeted emails it hopes to roll out in the coming years (new members who haven't enrolled, new members who haven't elected a beneficiary, members who have reached normal retirement, etc.)

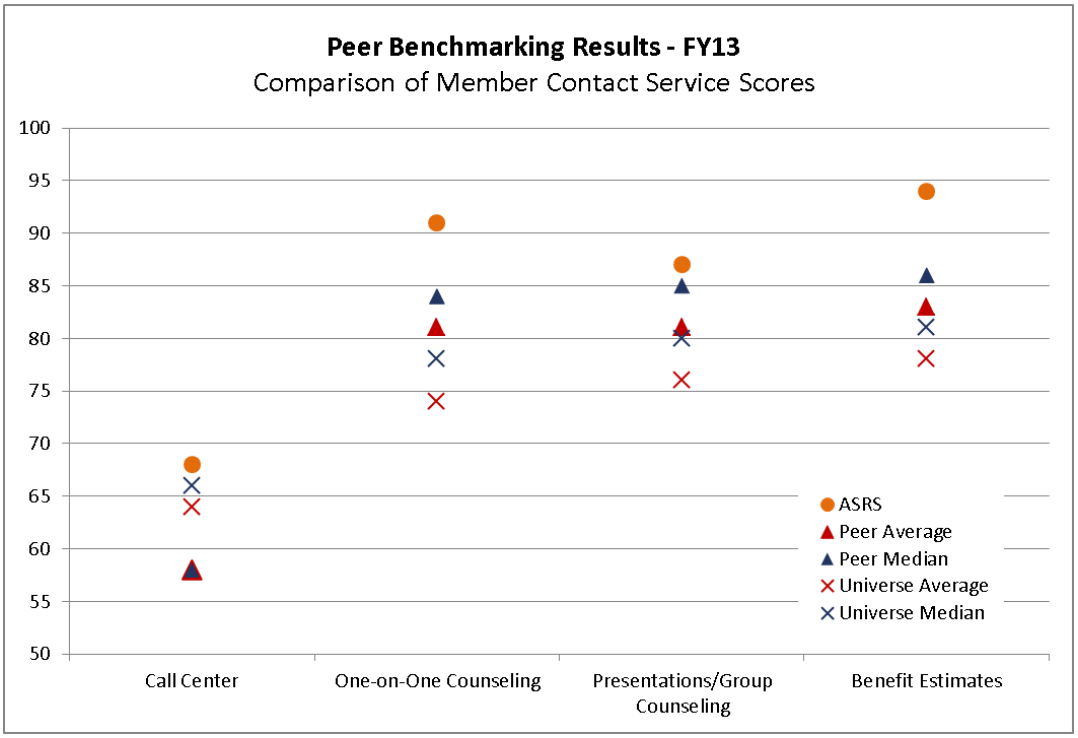
Member Satisfaction: Satisfaction levels remain high for ASRS member contacts, with 90 percent or more of members rating that they were "very satisfied" or "satisfied" with the service they received in all 5 of the areas measured.

Benefit estimates, although meeting the objective, was the area members were least likely to be "very satisfied' with.



Benchmarking: Member contact areas, similar to member transactions, continue to compare favorably when measured against the CEM pension benefit administration benchmarking universe.

In each of the categories measured, ASRS service levels exceed both the ASRS peer group and also the CEM universe.



4.D. EMPLOYERS

OUTLOOK: NEUTRAL

Performance measures:

a) Describe efforts that were conducted during the fiscal year to develop a staff and service model for employers.
b) Document the content and number of employer communications made during the fiscal year.
c) Document the different types of information available to employers to assist with compliance, as well as any new information being developed for employers.
d) Document the types of self-service capabilities available to employers, as well as any initiatives underway that are expected to improve service to employers.

Employer Service Delivery Research and Enhancement: The ASRS has invested considerably in its member service model over the past decade, which has proved to be successful in providing high levels service to members. Although many online capabilities for employers were implemented as part of the agency's overall business re-engineering effort, there is a general consensus among Management that the employer service model at the ASRS could be improved. This year, as part of its Oracle Modernization technology effort, the agency began to examine how staff within the agency interacts with employers. The analysis found that:

- There are at least 7 different units within the agency that interact directly with employers on a daily basis, and a handful more that indirectly work with employers.
- The agency lacks a centralized employer contact list. As a result, each of the units maintains a separate sheet containing the employer representatives they work with on a regular basis.

- There is no centralized contact log where units can see the types of contact that have been made between the ASRS and an employer.
- Correspondence with employers is typically done via email or by letter; however, there is no centralized repository to store images of correspondence.
- The ASRS does not have a centralized number for employers to call. Instead, employers must maintain their own list of contacts at the ASRS.
- The ASRS does not have a feedback mechanism, such as an employer survey, to regularly assess employer satisfaction levels.

The Oracle Modernization project to update and re-engineer its employer modules has just begun. As part of this effort, the agency will begin to address some of the technological issues that are present. Staff is also planning to conduct an employer survey in the first quarter of 2015 to better understand employer perceptions and expectations of the ASRS.

Employer Communications and Reference Material: The Employer Relations Unit of the External Affairs Division sent out three e-newsletters to employers this fiscal year. In addition, a number of targeted emails were sent to employers related to:

- New GASB requirements (3)
- Online applications for employers (6)
- Employer conferences (5)
- New contribution rates
- New public website
- Legislation

The Employer Relations Unit also conducts a series of employer conferences each year throughout the state to brief employers on current issues. Last year approximately 50 percent of employers attended.

The employer portion of the ASRS public website was recently updated and will continue to evolve as the ASRS moves forward with more online programs. Currently, the employer site is organized according to topic and may include a general overview, Q & A, tutorial and guide. There are also various employer related forms, reference materials and there are statutes included in each chapter of the manual.

Lastly, approximately twenty employer related tutorials are under development and will soon be posted on the public website. Topic specific webinars will also be developed in the near future.

Online Services: The following services are currently available to employers on the ASRS secure website:

- Secure email
- Online contribution reporting and electronic payment submission
- Online alternate contribution rate reporting and electronic payment submission
- Online enrollment, which includes web registration and beneficiary election
- Ending payroll verification (needed for most retirement and refund applications)
- Return to work applications

As the Oracle Modernization effort progresses and the agency completes its employer survey, more information will be provided to the Board regarding the development of new features and employer services at the ASRS.

4.E. OTHER STAKEHOLDERS

OUTLOOK: NEUTRAL TO POSITIVE

Performance measure:

Document communications sent to stakeholders during the fiscal year. Stakeholders include:

- Any group representing ASRS members
- Legislators and legislative staff
- Governor and governor's office staff
- General public
- Media

External Affairs meet with members of legislative committees and bill sponsors to provide an overview of the ASRS and to discuss relevant legislation. Regular discussions also occur with legislative staff to discuss ASRS initiated bills, or non-ASRS bills that may impact the ASRS.

The ASRS, at the request of a policymaker, member group, or other stakeholder, will send a representative to provide general information about the ASRS or to discuss specific topics that have been requested.

Section 5

FISCAL YEAR 2014 PERFORMANCE REPORT

STRATEGIC PRIORITY #5 – ENSURE HIGH PRODUCTIVITY

Review Committee:

Paul Matson, Anthony Guarino, Dave King, Nancy Bennett, Kent Smith, Martha Rozen, Sara Orozco

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5.A. EFFECTIVE DEVELOPMENT AND DEPLOYMENT OF TECHNOLOGY

OUTLOOK: POSITIVE

Performance Measures:

a) Document the process used by Management to identify new technology initiatives.
b) Document any technology upgrades recently implemented that are expected to increase technology productivity/efficiency.
c) Document the agency's success meeting technology objectives during the fiscal year.

Technology Initiatives Process: Each year the Senior Management Team (SMT), consisting of the Deputy Director, Assistant Directors from each Division, and the Manager of Strategic Planning, identifies the total number of hours the agency will have available to allocate to technology development in the upcoming fiscal year, as well as how those hours will be allocated to:

- New initiatives or major business enhancements (projects, including Oracle Modernization)
- Production support (service requests, incident, bug fixes, and other support)
- Technology Upgrades (planned system upgrades for the year)
- Legislation Implementation (when required)

The total available hours, as well as the subset of hours allocated to each of the bullets listed above, are determined as a function of budget, skill set and resource availability over the coming fiscal year, incorporating models for expected staffing changes based on experience and external forces.

Once the SMT has chosen how to allocate the hours for the upcoming fiscal year and the Executive Management Team has been consulted, the SMT then prioritizes the projects and initiatives to implement in the coming fiscal year.

Strategic Planning maintains a master list of the different projects that have been requested by users. The project list is a compilation of enhancements requested by business users during the development of the strategic plan, items that are requested by an executive or senior manager, or items that have been recommended as a result of an audit. Prioritization and selection is based on a number of factors, including expected cost/benefit, business needs, and strategic priorities.

The project work is allocated among five different business application development teams (aka SCRUM teams), a production support team, and the network support area. Each SCRUM team will have a SCRUM Master (a TSD Project Manager) and a Product Owner (a primary decision-maker from the business), as well as a number of key stakeholders from other areas of the business.

The SMT holds a Change Control Board (CCB) meeting once a month to review the progress of each project underway to monitor ongoing production support activity to ensure that the number of production support incidents is manageable, and to monitor ongoing network support activity (security remediation plans, technology upgrades, and help desk activity).

Technology Upgrades: The following technology upgrades were implemented during the fiscal year to maintain or enhance the agency's technology infrastructure:

1. Public Website Spring 3.2 – Framework used to support internal applications; PERIS Online (POL), Image Viewing and Document Change Utility and public website.
2. Token Synchronization – Implemented token synchronization pattern in Spring 3.2 to enhance website security.
3. Oracle 11g Release 2 – Upgraded Oracle database from 11Gr1 to 11Gr2 to improve performance.
4. JIRA/Member Inquiry/Confluence upgrade – Implemented latest security patch.
5. Internet Explorer 10 – Updated browser for internal applications; POL, Image Viewing and Document Change Utility and public website.
6. Squirrel Mail – Updated application used for secure email on the website to improve security.
7. HTML Escaping – Improved security of the Public and Secure websites
8. Apache – Improved security of application used as a proxy to hand request to the public website and manage SSL on the website.
9. PHP – Improved security of server side scripting language used by the secure email package.
10. Crowd – Security upgrade for application used for Single Sign On (SSO) for ASRS applications.
11. POL Roles – Reviewed POL security, created higher level POL application groups based on user job function, validated and enforced POL role assignment, improved LAN/WAN form and POL profile page.

Technology Projects: This fiscal year the agency succeeded in completing seven of nine business enhancements projects within 15% of the original estimate of hours required to complete the project. In aggregate, the total number of hours spent on projects exceeded the original budget for the year, by 12%. The CCB compensated for this by reallocating hours from lower priority activities.

In addition, the agency also began a 5 year Oracle Modernization effort this fiscal year. This effort will convert remaining business applications (approximately 12) the ASRS has that were developed using Oracle Forms (PERIS), to Java, which is consistent with newer ASRS applications (PERIS Online, or POL). During the fiscal year, one application was completed (Infrastructure/Member Summary) and another two had begun, but are not yet completed (Participant Demographics and Membership Accounting).

Production Support: The number of hours required to address incidents and service requests relating to existing technology did not exceed the number of hours budgeted this year. However, the hours budgeted for data changes was exceeded as a result of a data integrity effort conducted by records management to identify and merge individual accounts reported under two or more social security numbers. The agency is working to improve the efficiency of the merge social security number process

as part of its Oracle Modernization project related to Membership Accounting, which will reduce the hours needed for data changes in the future.

During the fiscal year eight of the nine projects were completed within the original release plan schedule. One project that was originally scheduled for implementation in June 2014 is expected to be completed in November 2014.

5.B. REDUCING MEMBER RELIANCE ON PHYSICAL AND MEMBER CONTACTS FOR SERVICE AND TRANSACTION PROCESSING

OUTLOOK: POSITIVE

Performance Measure:
Document recent technology projects that are expected to increase business productivity/efficiency.

This fiscal year eight major business application development projects were completed that are expected to increase business productivity/efficiency, including:

1. Online Enrollment Upgrades – This project simplified the employer and member user interfaces and will also allow the ASRS to register members for secure web access and elect beneficiaries during the enrollment process.
2. Employer Contribution Data File – This project built the framework to allow the ASRS to collect additional contribution data including pay types and hours worked. A project to transition employers to the new file layout is currently underway. The additional data elements included in the new file layout will improve the ability of the ASRS to monitor membership eligibility and research and monitor changes in salary that may be attributable to salary spiking.
3. Public Web Site Content Management System (CMS) – Improved the look and feel of the public website and improved the ease of navigation of the website. Additionally the CMS reduces the reliance on technology resources to update content on the public website.
4. DES and AHCCCS Data Request – Created a single file layout that met the requirements of each agency eliminating the need to create, encrypt and send separate files.
5. Return to Work Enhancements – Replaced the manual paper process with a workflow enabled process and created a smart form in the member and employer secure website that allows for electronic submission of return to work forms.
6. Member Verification for Third Parties – Created a member account summary in the member secure site that members can print and send to third parties eliminating the need for staff to manually generate account summaries.
7. Domestic Relations Orders (DRO) Enhancements – Workflow enabled receipt and processing of DRO documentation and storing of data required for automated calculations of member/alternate pay splits. Automated calculation of splits for the various disbursement types will be implemented in fiscal year 2015.

5.C. DEVELOPING ALTERNATE WAYS FOR MEMBERS AND EMPLOYERS TO RECEIVE EDUCATION AND COUNSELING SERVICES WITHOUT HAVING TO RELY UPON IN-PERSON COUNSELING

OUTLOOK: POSITIVE

Performance Measures:

a) Document utilization trends during the fiscal year for benefit estimators and manual benefit estimates.
b) Document new educational touch points implemented during the year (topics and medium).
c) Document utilization trends during the fiscal year for online educational materials.
d) Document utilization trends during the fiscal year for one-on-one counseling.

Benefit Estimators: During fiscal year 2014, 237,964 unique members generated 622,728 benefit estimates in the secure website, an increase over fiscal year 2013 of 22.7% and 37.6% respectively. During fiscal year 2014 staff generated 6,227 manual benefit estimates; an increase of 12.4% over fiscal year 2013.

Education and Counseling Materials and Trends: During fiscal year 2014 the ASRS revised the information in the following brochures available in both hard copy and on the ASRS website:

i. Road to Retirement – ASRS Guidebook (combined the Member Handbook and Retirement Handbook into one new guidebook)
ii. Member Benefits
iii. Retiree Group Insurance
iv. Service Purchase
v. Board of Trustees

The following brochures/handouts were created during the fiscal year:

i. Member Education
ii. Member Education Checklist

Staff updated the following webcasts for content and format:

i. Non-Medicare Choice Plan
ii. Non-Medicare Choice Plus PPO
iii. Group Medicare Advantage HMO
iv. Senior Supplement
v. Freedom Advanced
vi. Freedom Basic
vii. Well Card Health Discount Card
viii. How to Read Your Payment Summary
ix. Becoming Medicare Eligible
x. Lobby Slide Show

New webcasts created during the fiscal year include:

i. GPS: Guide to Pre-Retirement Services (Multi-media interactive map that uses videos/audio. The GPS provides high level information and links to more detail throughout the website, showing members what they need to know at every step of their career.)
ii. Introduction to the ASRS
iii. Unlocking Your Secure Account
iv. How to Use the Playlist
v. Route 1: Your Journey Begins (replaced the Know Your Benefits group meeting)

Webinar meetings newly redesigned:

i. Route 3: Destination in Sight (replaced the Planning for Retirement group meetings)
ii. Route 4: Next Exit, Retirement (replaced the Retire Now group meetings)

Articles/Publications posted to the website:

i. 2013 Financial Horizon – one page article on member education
ii. Webinar meetings posted on ASRS's Facebook page
iii. E-Newsletters

In person group meeting presentation redesigned:

i. Know Your Insurance
ii. Route 3: Destination in Sight (replaced the Planning for Retirement group meetings)
iii. Route 4: Next Exit, Retirement (replaced the Retire Now group meetings)

During fiscal year 2014 the top five educational web pages (account information, member statement, refunds, survivor benefits and member education) had 628,349 unique page views compared to 508,295 unique page views in fiscal year 2013, an increase of 23.6%.

Staff currently does not have the capability to measure views, unique or otherwise, of webcasts for a specified time period and can only report on aggregate views. An effective measurement of webcast views is currently being researched.

One-on-One Counseling Utilization and Trends: During fiscal year 2014, ASRS staff assisted 20,380 members and beneficiaries with one-on-one counseling sessions (including walk-ins, pre-scheduled appointments, MAC Express/Receptionist, LTD Vendor and HI Vendor). This equates to a reduction in one-on-one counseling sessions of 12.0% from fiscal year 2013. There was a slight reduction in pre-scheduled appointments as a percentage of overall one-on-one counseling sessions from fiscal year 2013 to fiscal year 2014, 35.4% and 34.2% respectively. This is primarily a result of a static count of members counseled by the onsite health insurance vendors from fiscal year 2013 to fiscal year 2014, 5,427 members and 5,486 members respectively.

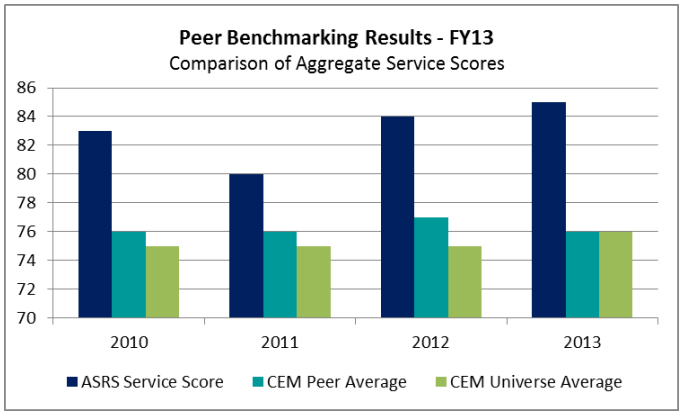
5.D. BEING A HIGH-SERVICE, LOW-COST SERVICE PROVIDER WHEN COMPARED TO OTHER PUBLIC RETIREMENT SYSTEMS

OUTLOOK: POSITIVE

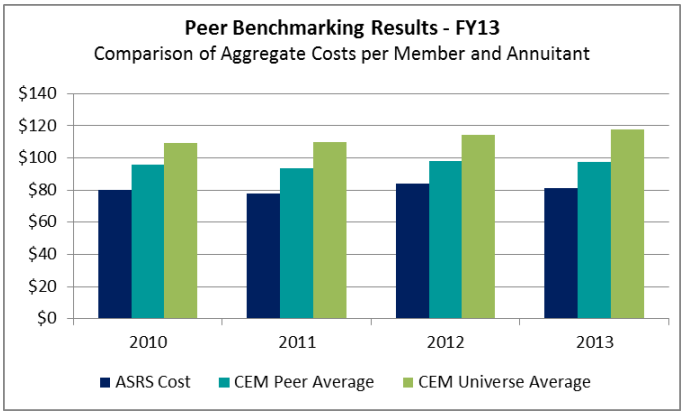
Performance Measures:

a) Document aggregate service performance of the ASRS vs. peers as reported in CEM.
b) Document aggregate cost per member of the ASRS vs. peers as reported in CEM.

For fiscal year 2013 the ASRS aggregate service score of 85 was 11.8% higher than the average CEM peer service score of 76.



Over the last four fiscal years the ASRS aggregate service score was on average 8.9% higher than the average CEM peer service score.



For fiscal year 2013 the ASRS aggregate cost per active member and annuitant was $81.09, 16.6% lower than the CEM peer average cost per member and annuitant of $97.25.

Over the last four fiscal years the ASRS aggregate cost per member and annuitant was on average 16.1% lower than the average CEM peer cost per active member and annuitant.

5.E. CONSOLIDATING AND REDUCING THE NEED FOR PHYSICAL WORK SPACE

OUTLOOK: POSITIVE

Performance measures used to support these objectives:

a) Document recent efforts to reduce our physical footprint and any other initiatives that are upcoming that are expected to use space more efficiently.
b) Document agency utilization of alternative work schedules as of the fiscal year end, as well as any initiatives undertaken this fiscal year to promote alternative work schedules.
c) Document any initiatives undertaken this fiscal year to reduce reliance on paper documents.

In fiscal year 2014 the agency was able to accommodate new staff without requesting or needing additional square footage by reconfiguring existing space. In fiscal year 2013 the ASRS had reduced our footprint in the 3300 North Central building by eliminating an entire floor and consolidating on the remaining floors.

During fiscal year 2014 the agency promoted alternative work schedules for employees. As of June 30, 2014 the ASRS had 108 employees trained to telecommute in Maricopa County, 48 percent of ASRS Maricopa County staff. Additionally, the agency allows many staff to work compressed work weeks.

The agency has taken undertaken multiple member and employer directed efforts to reduce reliance on paper documents.

- Self-service options on the website have increased. Members now enroll, file for forfeitures and retirement, and update their accounts (beneficiary changes, tax withholding and address changes, and etcetera) online.
    - In fiscal year 2014 the Return to Work Alternate Contribution Rate Smart Form was introduced.
    - PDF download options have been removed in places where self-service is available, replaced by a link to the web login page.
    - Members are encouraged to send documents to the ASRS via secure email rather than mailing them to the ASRS.
    - Members who request paper forms are encouraged to log in to the secure website.

- Digital communication programs have expanded reducing the reliance on paper.
    - Targeted messages and quarterly e-newsletters to members and employer are now sent via email covering topics such as new services, procedures, legislation and online resources.
    - The ASRS social media presence has expanded to include Facebook, Twitter and LinkedIn resulting in greater engagement with our membership, faster dissemination of information, aiding HR's recruitment efforts, and building on the agency's image as a helpful, customer service-oriented organization.

Internally, ASRS operations have also changed to reduce paper documents.

- The Oracle Modernization project will also reduce the reliance on paper. As an example, currently staff must fill out paper requests and attach printouts of supporting back-up details when maintenance is required on member accounts. While processing the request, the paper packet is passed between the staff keying the information and staff approving the updates, then the entire packet is imaged. The Oracle Modernization project will automate this process with the requestor entering the request into PERIS Online which will initiate a workflow process.
- Conference rooms are equipped with overhead projectors which are used to project meeting agendas and materials rather than distributing paper copies.

5.F. MITIGATING THE NEED FOR ADDITIONAL STAFF DUE TO INCREASES IN SERVICE DEMAND

OUTLOOK: POSITIVE

Performance Measure:
Document areas where service demand is increasing, and any new strategies that have been implemented to mitigate the need for additional staff.

In fiscal year 2014, The ASRS experienced decreases in the volume of refunds (-11%), retirements (-4%) and survivor benefits (-4%) this fiscal year, while the number of pensioners continued to increase (+5%). In addition, there was a significant decrease in demand at the Member Advisory Center (-17%) and one-on-one appointments (-12%), and only a small increase in the volume of email (3%).

Combined, there was an aggregate reduction of over 15% in service demand. Staff believes that this reduction, particularly in the member contact areas, is a direct result of the increased utilization of the ASRS website.

Although there was a slight increase in the number of staff-generated benefit estimates this year (a 12.4% increase, or approximately 50 additional estimates each month), the overall volume of estimates generated by staff remains small, and is far outweighed by the volume of self-generated estimates on the website. There was also a slight increase in overall members attending group meetings (0.6% increase or approximately 3 additional attendees each month).

As a result of the combination of reduced demand and increased utilization of the website, the ASRS was able to reallocate four member contact positions to other areas of need in the agency (rules writing, communications, strategic planning, and administrative services).

5.G. RECRUIT, ENGAGE, UTILIZE AND RETAIN A HIGH CALIBER, PROFESSIONAL STAFF CAPABLE OF OPTIMIZING PERFORMANCE

OUTLOOK: POSITIVE

Performance Measures:

a) Document the agency's ability to meet performance objectives for recruitments.
b) Document the date of the most recent employee survey.
c) Document any new initiatives that will be undertaken as a result of the employee survey to improve employee satisfaction, retention, and work environment.
d) Document turnover rates this fiscal year and how those rates compare to state agencies as a whole or other appropriate comparisons that have been identified.
e) Document the various compensation strategies utilized this fiscal year, and how those strategies have helped the agency attract, retain, and reward employees.

The agency conducted 38 recruitments in fiscal year 2014. Of those, 23 recruitments were or were less than 60 days and 15 recruitments were more than 60 days. Recruitments in the System Design area of Technology Services (TSD) routinely span more than 100 days and software and quality engineer recruitments may span up to 300 days due to candidate salary requirements.

Turnover remained below the 18 percent goal for 12 of 12 months and reflects a 5 percent decline over the course of the fiscal year. By the end of the year, turnover had declined to 12.81%.

Month	Turnover Rate
July 2013	17.87%
August 2013	16.93%
September 2013	17.13%
October 2013	17.74%
November 2013	16.78%
December 2013	17.15%
January 2014	17.09%
February 2014	16.25%
March 2014	16.98%
April 2014	14.72%
May 2014	12.89%
June 2014	12.81%

Preliminary figures from the 2014 State of Arizona Workforce Report, still in draft form, reflect a 15.5 percent average turnover rate for all regular, active State Personnel System employees.

To mitigate risks related to attracting and retaining qualified staff the agency prioritizes recruitments, the agency utilizes a variety of compensation strategies including variable pay incentive plans and base pay adjustments, and reviews position classification and compensation levels. Additionally, the PRIDE Initiative focuses on work environment improvements. These strategies appear to be working as the agency is experiencing lower turnover.

To measure employee engagement and morale, the ASRS contracted with an independent, third party vendor to conduct an Employee Satisfaction Survey in fiscal year 2014. The employee response level was outstanding, 93 percent of staff completed the survey. The results were received by June 30, 2014

and responses demonstrated an overall improvement compared to the results of a similar survey in 2012. The agency is currently in the evaluation phase. Human Resources staff is meeting with division heads and their direct reports to review and interpret results and design action plans. Voluntary agency-wide focus groups will be held to further clarify responses.

Highlights of the 2014 survey results include:

- More than 96 percent of staff indicated they are proud to work at the ASRS and more than 92 percent view working at the ASRS as a long-term career choice
- More than 96 percent of staff are familiar with the PRIDE values and more than 91 percent understand how to reflect those values in their daily job duties
- More than 87 percent are satisfied with communications overall at the ASRS
- More than 85 percent of staff are satisfied with their supervisor and ASRS leadership (Senior and Executive managers)

While the results are positive overall, the agency will be investigating a number of areas. The results of some lower scoring questions included:

- If given the option to change something in their job, 64 percent indicated they would change their pay.
- 31 percent of staff indicated that communication between divisions could be improved.
- 23 percent of staff indicated dissatisfaction with their opportunities to learn new skills at ASRS.

Once the focus groups are held, the PRIDE Steering Committee, consisting of senior management, a sampling of program managers and front line staff, will evaluate the results and assign projects to the workgroups. Projects resulting from prior survey results include the Bright Idea program where staff can submit improvement ideas and participate in the implementation process, Ask Paul and Anthony sessions where staff receives updates directly from Paul and Anthony and are encouraged to dialogue, and Info Quest (the agency's intranet), which is widely utilized by staff on a daily basis.

ARIZONA STATE RETIREMENT SYSTEM

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Paul Matson
Director

MEMORANDUM

TO: Mr. Kevin McCarthy, Chair, Arizona State Retirement System (ASRS) Board

FROM: Mr. Paul Matson, Director
Ms. Martha Rozen, Chief of Administrative Services

DATE: September 19, 2014

RE: **Agenda Item #4**: Presentation and Discussion Regarding Investment Compensation Plan

Purpose
To discuss the ASRS Incentive Compensation Plan for Internal Investment Professionals.

Background
On November 22, 2013, the ASRS Board of Trustees discussed and approved the ASRS Investment Compensation Plan (ICP) for Internal Investment Professionals. On November 29, 2013, a copy of the plan was provided to the Governor, the President of the Senate, the Speaker of the House of Representatives, the Office of Strategic Planning and Budgeting, the Joint Legislative Budget Committee, and the Department of Administration, as required by statute.

The ASRS investment professionals support the fiduciary responsibilities of the Board of Trustees by recommending, allocating, and investing fund assets to maximize risk-adjusted returns in order to meet long-term retirement liabilities and reduce required contributions. As such, the ASRS ICP was designed to contribute to the ASRS' ability to achieve the following objectives:

- Retain high caliber investment professionals
- Attract high caliber investment professionals
- Incentivize investment performance

Specifically, the ICP provides the opportunity for investment professionals to receive variable incentive-based pay based upon investment performance above various benchmarks. Each year, it is expected the annual costs of the ICP will range from approximately $0 - $350,000, depending on performance in various categories, staffing levels, and compensation levels.

Attachments:
1. ASRS Incentive Compensation Plan for Internal Investment Professionals
2. A.R.S. § 38-611.01 – Arizona state retirement system; incentive compensation plan; special pay plan

INCENTIVE COMPENSATION PLAN
for
Internal Investment Professionals

Arizona State Retirement System

November 2013

Arizona State Retirement System
Incentive Compensation Plan for Internal Investment Professionals

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Arizona State Retirement System
Incentive Compensation Plan for Internal Investment Professionals

Authority

A.R.S. § 38-611.01 provides that the ASRS, in consultation with the Director of the Arizona Department of Administration (ADOA), may establish and administer an incentive compensation plan (hereafter the "ICP") for investment-related personnel. This document describes the ICP and specifies the methods and procedures related to the administration of the ICP.

Nothing in this document is intended to alter the nature of ASRS employment or to create or be construed as creating an expressed or implied contract of employment or to define conditions of employment. This document does not provide a contract, guarantee of payment, guarantee of participation in the incentive plan in subsequent years, or guarantee of employment with the ASRS. The ICP and the payments that result from the ICP are public information and will be disclosed upon request.

In addition, upon consultation with the Director of ADOA, the ASRS reserves the right to alter, amend, modify, rescind, or otherwise change the content of the ICP at any time for any reason as permitted by law, in its sole discretion, and without advance notice to any employee affected by the provisions of the ICP.

Purpose and Objectives

The purpose of the ICP is to further enhance the investment management and performance of the ASRS Trust Fund.

In order to achieve this purpose, the ICP has been designed to contribute to the ASRS' ability to meet the following objectives:

1. Retain high caliber investment professionals
   (By providing performance based compensation.)

2. Attract high caliber investment professionals
   (By providing performance based compensation.)

3. Incentivize investment performance
   (By aligning investment personnel compensation with investment results.)

Eligibility for Participation

To be eligible to participate (a "Participant") in the ICP, an ASRS employee must be in a position that:

- Is allocated to Investment Management as determined by the Director or Board of Trustees, and

- Has a classification in the INV series in the Arizona Statewide Personnel System

If an employee begins employment in an eligible position after July 1 of any year, the employee will become a Participant on the first date of employment and participation will be prorated based on the total number of days employed during the Performance Period. Any eligible employee may opt out of the ICP at any time. Once an employee opts out of the ICP, that decision will be valid and binding on the employee for the fiscal year during which the employee opted out. An employee will not be eligible for any ICP payments for the full fiscal year during which they opted out. No partial ICP payments will be made for partial fiscal years during which an employee opted out. The performance of an employee who opts out will be documented and measured utilizing the same metrics.

Participant Eligibility for Other Approved Compensation Strategies
Participants in the ICP remain eligible to participate in compensation strategies such as merit, criteria-based, market or other base pay adjustments and variable pay incentives that are employed by the State of Arizona or the ASRS with the following exception:

- Any strategy or combination of strategies whose express purpose is to provide incentive to achieve performance-based goals and the opportunity to receive variable pay (i.e., pay that is not considered part of base salary).

The ICP will provide the only opportunity for Participants to receive variable pay for goal- and merit-based purposes.

Performance Period

For purposes of the ICP, the Performance Period is the state fiscal year, which begins on July 1 of each year and ends on June 30 of the following year. Due to lagged valuations, Private Market returns will be for the years ending March 31.

Maximum Incentive Compensation Opportunity

A Participant has the opportunity to earn incentive compensation up to 25% of the base salary in effect on July 1 of the Performance Period.

Performance Categories

Incentive compensation categories were developed to have the following characteristics:

- Result in enhanced investment performance
- Controlled or influenced by Participants
- Fair
- Achievable
- Measurable
- Flexible for the agency

Applicability of Performance Categories
Performance categories 1, 3, 5, 6 apply to the Chief Investment Officer (CIO). For the CIO, category 3 includes all asset classes including ‘Real Estate and Inflation Linked’ and Private

Equity' asset classes. The methodological approach utilized for the 'Real Estate and Inflation Linked' and Private Equity' asset classes will be consistent with the approach used to measure the Private Markets professionals for categories 2 and 4.

Performance categories 1, 3, 5, 6 apply to all eligible Public Markets Investment Professionals:

- **Assistant Chief Investment Officer/Senior Equities Manager**
- **Assistant Equity Portfolio Manager**
- **Assistant Equity Portfolio Manager**
- **Fixed Income Portfolio Manager**
- **Fixed Income Portfolio Analyst**
- **Fixed Income Investment Analyst**

Performance categories 2, 4, 5, 6 apply to all eligible Non-Public Markets Investment Professionals:

- **Head of Private Markets Investing**
- **Private Equity Portfolio Manager**
- **Private Markets Asset Manager**

Performance Categories:

1. *Internal Portfolio Performance: 25% Weight*
   Portfolio performance is measured on 1- and 3-year historical net returns, as of June 30, relative to established benchmarks (see Appendix B), with each period, including the implementation period, weighted equally at 50%. Each portfolio will be dollar weighted to determine the overall excess performance. Any new internally managed portfolios will be included during the first available full month of performance utilizing relevant benchmarks.

2. *Private Real Estate & Inflation Linked Portfolio Performance: 25% Weight*
   Portfolio performance is measured using inception-to-date internal rates of return (IRR's), as of June 30, relative to an absolute rate of return (see Appendix B).
   The inception IRR will be calculated using the combined flows and terminal values of all investments to determine the overall excess performance. Due to the more liquid nature of commodity investing, Commodities will be incorporated into the outperformance calculation by utilizing a time-weighted rate of return compared to the Dow Jones USB Commodity Index (DJUBS) time-weighted and capitalization weighting this return difference with the difference between the inception-to-date IRR and the absolute return target. For example, if commodities had a $1 billion Net Asset Value and inception outperformance of 100bp (relative to the DJUBS), and real estate had $2 billion Net Asset Value and inception outperformance of 200bp (relative to the absolute 7%), then the combined outperformance would be (100bp *1/3) + (200bp*2/3).

3. *Asset Class Performance: 25% Weight*
   Asset class performance is measured on 1- and 3-year historical asset class net returns, as of June 30, relative to established benchmarks (see Appendix B), with each period, including the implementation period, weighted equally at 50%. Opportunistic Debt and Private Debt will be included in the Fixed Income asset class.

4. *Private Equity & Opportunistic Equity Performance: 25% Weight*
   Portfolio performance is measured using inception-to-date IRR's, as of June 30, relative to an absolute rate of return (see Appendix B). The inception IRR will be calculated using the combined cash flows and terminal values of all investments will be dollar weighted to determine the overall excess performance.

5. *Total Fund Performance: 25% Weight*
   Total fund performance is measured on 1- and 3-year historical net rates of return, as of June 30, relative to the ASRS Strategic Asset Allocation Policy benchmark (see Appendix B), with each period, including the implementation period, weighted equally at 50%. Total fund represents aggregate Plan, System and Health Benefit Supplement (HBS) assets.

6. *Qualitative Performance: 25% Weight*
   Individual and team goals, objectives, and other contributions and attributes will be reviewed. Evaluation criteria may vary by Participant and will be designed to reflect desired organizational attributes such as leadership, organizational competence, interpersonal relationship skills, effective teamwork, accountability, training and mentoring, project participation, process improvement, and other factors. Each year, criteria will be developed and documented by the CIO and/or Director for each Participant as part of this program and the statewide Managing Accountability and Performance (MAP) process. Consideration will be given to compliance exceptions, investment risks, reputational risks, and ethics violations.

Participants may earn between 0% and 25% of their base pay as incentive compensation.

The points allocated to Participants for each category will be calculated based upon the proportionate Actual Outperformance as a ratio of the Excess Return Target. Achieving 80% of the Excess Return Target will result in receiving 80% of the points for that category. Achieving 20% of the Excess Return Target will result in receiving 20% of the points for that category.

Outperformance in at least one of the first five performance categories must occur for any incentive compensation to be earned. In other words, no incentive compensation will be paid if the only out-performance occurs in the qualitative category.

Total Fund performance must be greater than 0% for the current 1 year period in order for any incentive compensation to be earned. In other words, no incentive compensation will be paid in a year when the Total Fund rate-of-return is not greater than 0%.

In order to align and reward superior performance over the Excess Return Targets, up to 30 points can be earned in each category. If the sum of the points in each category totals more than 100, then 100 points will be allocated. Achieving superior performance in any category can make up for lower points in another category, but the total of all the points cannot exceed 100. If superior performance leads to surpassing the Excess Return Targets, then points above 25 up to a maximum of 30 will be allocated to Participants for the particular category and will be calculated based upon the proportional Actual Outperformance as a ratio of the Excess Return Target. Achieving 110% of the Excess Return Target will result in receiving

110% of the points for that category. Achieving 120% of the Excess Return Target will result in receiving 120% of the points for that category. Achieving in excess of 120% of the Excess Return Target will result in receiving 120% of the points for that category.

Private Market investment returns will be calculated using since-inception IRR beginning October 1, 2011, which is the beginning of the first full quarter since the retention of the new Private Markets Manager. All private market investments (excluding commodities which are included on an annual basis) that were authorized on or after September 20, 2010, which is the retention date of the new Private Markets Manager, will be included in the since inception IRR calculations. Private market investments that were authorized prior to September 20, 2010 will be excluded from the since inception IRR calculations.

All returns utilized will be calculated or reviewed by the ASRS external general investment consultant.

All weightings and other methodological issues will be determined or calculated by the ASRS Budget Manager or Strategic Planning analyst.

Incentive Compensation Distribution

The distribution of all and any incentive compensation is subject to available funding, as determined solely by the ASRS Director. If the Director determines funding is not available, ICP payments will be either pro-rated or not made at all. If ICP payments are pro-rated or not made at all, the Director, at his discretion, may, or may not, make retroactive payments in the future when funding is available.

Should an error be discovered after the payment date, the ASRS may make an adjustment and recover payments, including offsetting future compensation, or make additional payments.

Payment Date
When made, ICP payments will be made on or before September 30, following the close of the Performance Period (fiscal year ended June 30).

Treatment of Payments
All payments under the ICP are subject to any deductions and withholdings required by federal, state, or local law at the time of payment. The ASRS is not obligated to otherwise advise an employee of the existence of any amounts that ASRS is required to withhold.

The payments will be lump sum, not added to base pay, and not spread out over the year. The payments must be re-earned each year.

Incentive compensation payments will be considered “compensation” and will have standard retirement, health benefit supplement and LTD contributions paid on it by either or both the employee and the employer at the time it is paid.

Due to the temporal effect on Private Market IRR’s (both Real Estate and Private Equity) caused by the lagged valuation nature of portfolio assets, the deferred drawdown of committed capital, and the J-Curve effect, there will be a two-year look-back period for

Private Market IRR's. In order to implement this, the current year inception-to-date IRRs will also be utilized for the two prior year periods. If, after utilizing the current year inception-to-date IRRs for the past two years results in previously unpaid ICP amounts, then these previously unpaid ICP amounts will be paid in the current year.

Employment Status
A Participant must be considered in "good standing" on the payment date to be eligible to receive an incentive compensation payment. That is, the employee must not be subject to current or pending corrective action, which includes working under a performance improvement plan.

A Participant also must be employed by the ASRS on the scheduled payment date to be eligible to receive an incentive compensation payment. A Participant will not receive any payment, either in full or on a pro-rated basis, if they separate for any reason, including resignation, retirement, disability, death, or involuntary termination, prior to the date of payment.

Administration

The ASRS Director will administer the ICP, with oversight by the ASRS Board of Trustees. Specifically, the Director will notify the Board of the individual and aggregate ICP payments made to each employee on or before September 30, following the close of the Performance Period (fiscal year ended June 30). The Director will also notify the Board if ICP payments are not made due to non-availability of funding.

The ICP will be in compliance with all applicable state or federal laws, regulations, policies, and guidelines. The ASRS Director will have full discretion to decide all questions or matters relating to the interpretation of the ICP and its administration.

Power to Amend
The ICP may be amended by the Director upon:

1. Presenting amendments to the ASRS Investment Committee for acceptance; and
2. Presenting amendments to the full Board for acceptance; and
3. Consultation with the Director of ADOA

Effective Date
The initial Performance Period for the ICP will begin July 1 of the year the plan is adopted and a copy filed with the governmental offices required by A.R.S. § 38-611.01.

Record Keeping and Reporting
All performance, salary, and incentive compensation records for the ICP will be maintained by the ASRS Human Resources in accordance with established records retention schedules and requirements.

Performance Category Weightings and Net Excess Return Targets

Public Market performance objectives will be weighted as follows:

Internal Portfolio(s) Performance	Asset Class Performance	Total Fund Performance	Qualitative Performance	TOTAL Points
25	25	25	25	100

Public Market net (after investment expenses) excess return targets as follows:

Internal Portfolio(s) Excess Return Target (bps)	Asset Class Excess Return Target (bps)	Total Fund Excess Return Target (bps)	Qualitative Performance
10	25	40	Determined by CIO and/or Director

Private Market performance objectives will be weighted as follows:

Private Real Estate, REIT and Inflation Linked Performance	Private Equity Performance	Total Fund Performance	Qualitative Performance	TOTAL Points
25	25	25	25	100

Private Market net (after investment expenses) excess return targets as follows:

Private Real Estate, REIT and Inflation Linked Excess Return Target (bps)	Private Equity Excess Return Target (bps)	Total Fund Excess Return Target (bps)	Qualitative Performance
100	300	40	Determined by CIO and/or Director

APPENDIX A: Responsibility Matrices

Chief Investment Officer

Internal Portfolio Performance	Asset Class Performance	Total Fund Performance	Qualitative Performance	TOTAL Points
All Internal Portfolios	All Asset Classes	Total Fund	MAP	100

Assistant Chief Investment Officer/Senior Equities Manager

Internal Portfolio Performance	Asset Class Performance	Total Fund Performance	Qualitative Performance	TOTAL Points
All Internal E Portfolios	All Public U.S. and Non-U.S. Equities	Total Fund	MAP	100

Assistant Equity Portfolio Manager

Internal Portfolio Performance	Asset Class Performance	Total Fund Performance	Qualitative Performance	TOTAL Points
All Internal E Portfolios	All Public U.S. and Non-U.S. Equities	Total Fund	MAP	100

Assistant Equity Portfolio Manager

Internal Portfolio Performance	Asset Class Performance	Total Fund Performance	Qualitative Performance	TOTAL Points
Securities Lending, All Internal E Portfolios	Externally-managed U.S. and Non-U.S. Equity Portfolios	Total Fund	MAP	100

Fixed Income Portfolio Manager

Internal Portfolio Performance	Asset Class Performance	Total Fund Performance	Qualitative Performance	TOTAL Points
All Internal F Portfolios	All Public and Private Fixed Income & Opportunistic Debt	Total Fund	MAP	100

Fixed Income Portfolio Analyst

Internal Portfolio Performance	Asset Class Performance	Total Fund Performance	Qualitative Performance	TOTAL Points
All Internal F Portfolios	All Public and Private Fixed Income & Opportunistic Debt	Total Fund	MAP	100

Fixed Income Investment Analyst

Internal Portfolio Performance	Asset Class Performance	Total Fund Performance	Qualitative Performance	TOTAL Points
All Internal F Portfolios	All Public and Private Fixed Income & Opportunistic Debt	Total Fund	MAP	100

Head of Private Markets Investing

Real Estate and Inflation Linked Performance	Private Equity Performance	Total Fund Performance	Qualitative Performance	TOTAL Points
All Private Real Estate, REIT and Inflation Linked investments authorized on or after September 20, 2010	All Private Equity investments authorized on or after September 20, 2010	Total Fund	MAP	100

Private Equity Portfolio Manager

Real Estate and Inflation Linked Performance	Private Equity Performance	Total Fund Performance	Qualitative Performance	TOTAL Points
All Private Real Estate, REIT and Inflation Linked investments authorized on or after September 20, 2010	All Private Equity investments authorized on or after September 20, 2010	Total Fund	MAP	100

Private Markets Asset Manager

Real Estate and Inflation Linked Performance	Private Equity Performance	Total Fund Performance	Qualitative Performance	TOTAL Points
All Private Real Estate, REIT and Inflation Linked investments authorized on or after September 20, 2010	All Private Equity investments authorized on or after September 20, 2010	Total Fund	MAP	100

APPENDIX B: Performance Benchmarks

Internal Portfolios

E2:	S&P 500 Index
E3:	S&P 400 Growth Index
E4:	S&P 400 Value Index
E6:	S&P 600 index
E7:	MSCI USA High Dividend Yield Index
E8:	MSCI USA Minimum Volatility Index
F2:	Barclays Capital Aggregate Index
Securities Lending:	Included in Total Fund performance

Asset Classes

Public Markets:

Asset Class benchmarks as explicitly denoted on the ASRS Strategic Asset Allocation Policy Schematic (SAAP). Public Markets investment returns will be calculated using time-weighted rates of return. Asset Class sub-categories will be measured on a standalone basis and then aggregated based upon market value weights.

Opportunistic Debt will be included for Fixed Income professionals. Opportunistic Debt returns will be calculated using since-inception internal rates of return (IRR) and compared to the absolute benchmark on a 1 quarter lag (due to third-party pricing methodologies).

Opportunistic Debt Benchmark: 8% Absolute

Private Debt will be included for Fixed Income professionals. Private Debt returns will be calculated using since-inception internal rates of return (IRR) and compared to the relative benchmark on a 1 quarter lag (due to third-party pricing methodologies). Both the since-inception internal rates of return (IRR) and the benchmark will therefore be for the periods ending March 31.

Private Debt Benchmark: S&P/ LSTA Levered Loan Index plus 250 bps

Private Markets (including REITS & Commodities):

The Asset Class return for Real Estate & Inflation Linked will be a dollar-weighted composite of Real Estate, REITS and Inflation Linked Assets (Commodities, Farmland, and Infrastructure).

Real Estate & Inflation Linked: 7% Absolute

The Asset Class return for Private Equity will be a dollar weighted composite of Private Equities and Opportunistic Private Equities.

Private Equity: 8% Absolute

Private Market investment returns will be calculated using since-inception IRRs beginning October 1, 2010, which is the beginning of the first full quarter since the retention of the new Private Markets Manager. These from-inception-IRRs will include all investments authorized on or after September 2010, which is the date the current portfolio manager was hired.

Commodities:	DJUBS Commodity Index

Total Fund

ASRS Total Fund Return:	Strategic Asset Allocation Benchmark Returns

APPENDIX C: Example

Steps to calculate amounts for distribution:

For purposes of this example, we use the following assumptions:

- Position is Public Markets Portfolio Manager
- July 1 base salary is $100,000
- Maximum incentive opportunity is 25%
- Total Fund 1 year rate of return is greater than 0%
- Each category (Internal Portfolio, Asset Class, Total Fund, and Qualitative) is worth a possible 25 points (or 30 points for excess) to equal 100 points
- Expected net excess return is 10 bps for internal portfolios, 25 bps for asset class, and 40 bps for total fund
- Actual Excess Returns (illustrative only):

Category	1-year (50%)	3-year (50%)
Internal Portfolio	33 bps	29 bps
Asset Class	-10 bps	10 bps
Total Fund	-100 bps	10 bps
Qualitative	Meets	Exceeds

1. Determine maximum incentive compensation opportunity
(See Maximum Incentive Compensation Opportunity section)

$100,000 X 25% = $25,000

2. Identify established performance categories and compare to actual performance
(See Performance Categories section)

Category	1-year Expected	1-year Actual	3-year Expected	3-year Actual
Internal Portfolio	10 bps	33	10 bps	29
Asset Class	25 bps	-10	25 bps	10
Total Fund	40 bps	-100	40 bps	10
Qualitative^		Meets		Exceeds

(^Note: The qualitative performance points are determined by the CIO and the Director, depending on individual objectives achieved and contributions made.)

3. Convert actual performance (in bps) to points
(See Performance Category Weightings and Net Excess Return Targets section)

Category	1-year (12.5 pts)	+	3-year (12.5 pts)	=	25 pts
Internal Portfolio	15 (33>=120% of points)		15 (29>=120% of points)		30.00
Asset Class	0 (-10=0% of points)		5 (10=40% of points)		5.00
Total Fund	0 (-100=0% of points)		3.13 (10=25% of points)		3.13
Qualitative^	Meets		Exceeds		20.00
					58.13

4. Convert points to a percentage

Total Points	= Percentage
58.13	58.13%

5. Determine incentive compensation amount to distribute

58.13% * $25,000 **$14,532.50**

38-611.01. Arizona state retirement system; incentive compensation plan; special pay plan

The Arizona state retirement system established by chapter 5, article 2 of this title:

1. May administer an incentive compensation plan for investment related personnel established in consultation with the director of the department of administration. The Arizona state retirement system shall file a copy of any incentive compensation plan for investment related personnel with the governor, the president of the senate, the speaker of the house of representatives, the office of strategic planning and budgeting, the joint legislative budget committee and the department of administration within ten business days of its adoption or readoption.

2. Except for the incentive compensation plan for investment related personnel, shall not establish any other compensation plans without the approval of the director of the department of administration.

3. May request that the director of the department of administration establish a special pay plan for the Arizona state retirement system director, deputy director, chief investment officer, investment related personnel and fiduciary or investment counsel. The director of the department of administration, pursuant to section 41-742, subsection C, paragraph 4, shall establish the special pay plan after considering the recommendations of the Arizona state retirement system board and using relevant market data. The director of the department of administration may adopt other special pay plans determined necessary for certain classes or groups of Arizona state retirement system employees, taking into consideration such factors as occupational patterns, economic conditions and pay ranges common to government, business and industry, and shall work with the Arizona state retirement system in establishing the plans.

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ARIZONA STATE RETIREMENT SYSTEM

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Paul Matson
Director

MEMORANDUM

TO: Mr. Kevin McCarthy, Chair, Arizona State Retirement System (ASRS) Board

FROM: Mr. Paul Matson, Director
Mr. Bernard Glick, Chief Internal Auditor

DATE: September 19, 2014

RE: Internal Audit Review of Internal Investment Validation for the month ending August 31, 2014

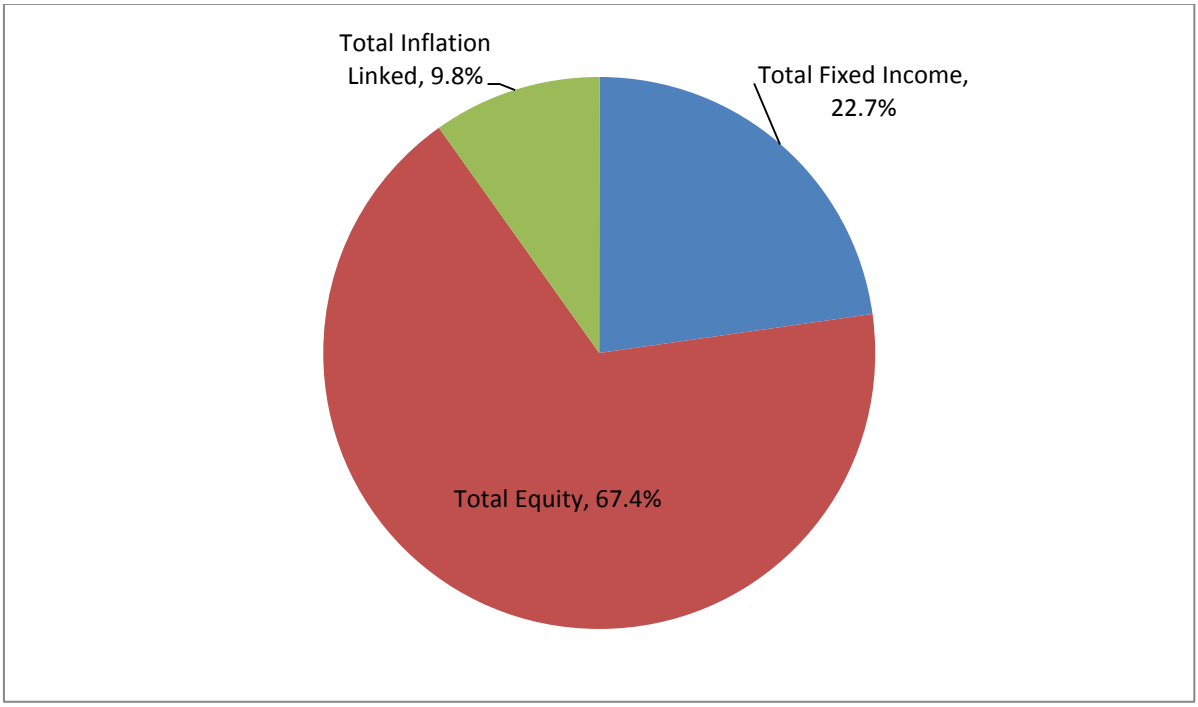
The Internal Audit Division reviewed 1,826 trade transactions in the month of August on all the activity in the E2, E3, E4, E6, E7, E8, E9 and F2 accounts. Our review included:

- Determining that the transaction was properly approved.
- Reviewing the transaction for mathematical accuracy.
- Ensuring the description and ticker symbol matched the CUSIP number.
- Reconciliation of transaction from trade ticket to custody bank transaction download
- Other tests we deemed appropriate

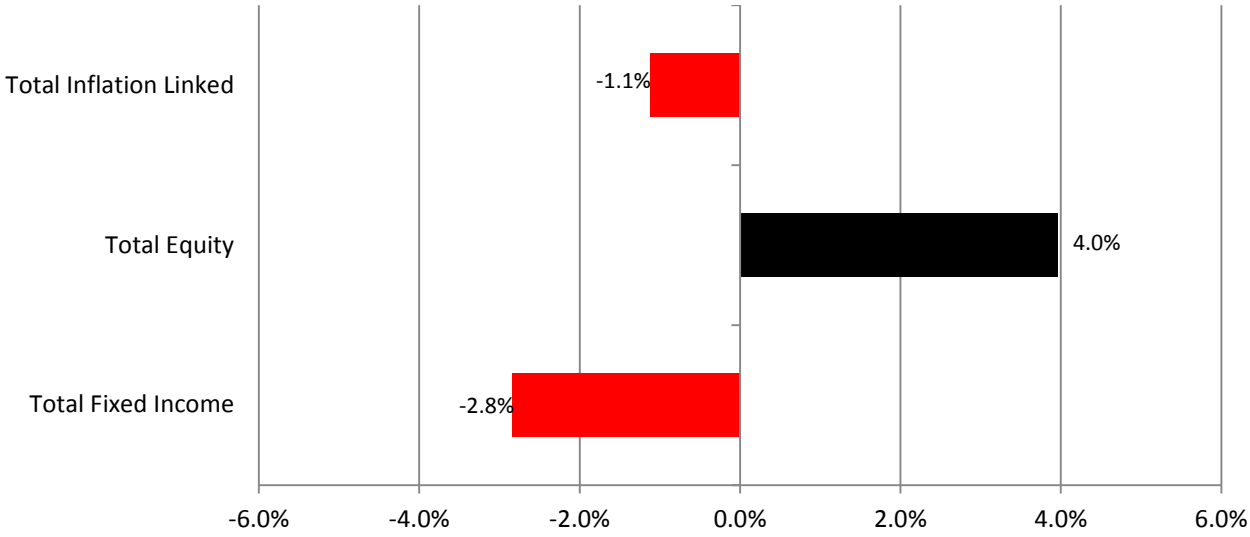
No infractions were noted during our review. Based on this review, we believe the procedures for executing and reporting internal investment transactions have been followed for this time reportable period.

TOTAL FUND POSITIONING – 8/31/14

ACTUAL PORTFOLIO



ACTUAL PORTFOLIO (ASSUMED GTAA ALLOCATION VS. ADJUSTED SAA POLICY *)



**Real Estate and Private Equity actual weight is equal to policy weight during the implementation of the asset class.*

**Over/Underweights include both GTAA positions as well as IMD tactical considerations.*

Note: Opportunistic & Private Debt, Opportunistic Private Equity, Farmland & Timber, Real Estate and Private Equity market values are reported on a quarter-lag and adjusted to include the current quarter's cash flows. Within the Assumed GTAA Allocation vs. Adjusted SAA Policy chart, Real Estate was prorated to domestic equity, international equity and fixed income. Private Equity was prorated to domestic equity.

Pension (Plan, System, HBS Assets) — ASRS Market Value Report — As of: Friday, August 29, 2014

Account Manager	Account Manager Style	Fixed Income		Equity		Inflation Linked		Total	Pct of Fund
		Active	Enh/Passive	Active	Enh/Passive	Active	Enh/Passive		
State Street B&T: Boston	Master Cash & Pension Acct.		141,827,348					141,827,348	0.41%
	Cash Total							**$141,827,348**	0.41%
GTAA Managers (2)	Active GTAA	1,067,126,094						1,067,126,094	3.10%
Blackrock: San Francisco	Passive (Intermediate Gov Credit)		23,989,870					23,989,870	0.07%
ASRS: Phoenix	Enhanced Passive F2		1,935,124,583					1,935,124,583	5.62%
Blackrock: San Francisco	Passive (US Debt Index)		718,010,078					718,010,078	2.09%
	Core Fixed Income Total							**$3,744,250,625**	10.88%
								Core Fixed Income Policy	**13.00%**
Columbia: Minneapolis	Active	651,181,012						651,181,012	1.89%
JP Morgan: Indianapolis	Active	331,662,680						331,662,680	0.96%
	High Yield Fixed Income Total							**$982,857,447**	2.86%
								High Yield Fixed Income Policy	**5.00%**
	US Fixed Income Total							**$4,727,108,072**	13.73%
								US Fixed Income Policy Range: 8% - 28%	**18.00%**
PIMCO (local): Newport Beach	Active	353,098,237						353,098,237	1.03%
Ashmore (blended): London	Active	417,888,925						417,888,925	1.21%
	EM Debt Total							**$770,987,162**	2.24%
								EM Debt Policy	**4.00%**
	Opportunistic Debt							**$969,566,500**	2.82%
								Opportunistic Debt Policy Range: 0% - 10%	**0.00%**
	Private Debt Total							**$1,215,774,443**	3.53%
								Private Debt Policy	**3.00%**
	Fixed Income Total							**$7,825,263,524**	22.73%
								Total Fixed Income Policy Range: 15% - 35%	**25.00%**
Intech: FL	Active (Growth)			473,805,294				473,805,294	1.38%
LSV: Chicago	Active (Value)			822,175,350				822,175,350	2.39%
GTAA Managers (2)	Active GTAA			1,206,410,118				1,206,410,118	3.50%
ASRS: Phoenix	Passive E2				5,025,561,971			5,025,561,971	14.60%
ASRS: Phoenix	Enhanced Passive E7				784,658,220			784,658,220	2.28%
ASRS: Phoenix	Enhanced Passive E8				507,962,990			507,962,990	1.48%
ASRS: Phoenix	Risk Factor Portfolio				523,611,597			523,611,597	1.52%
	Large Cap Equity Total							**$9,344,517,928**	27.15%
								Large Cap Policy	**23.00%**
Wellington: Boston	Active (Core)			417,801,394				417,801,394	1.21%
CRM: New York	Active (Value)			102,061,051				102,061,051	0.30%
ASRS: Phoenix	Passive E3 (Growth)				510,209,309			510,209,309	1.48%
ASRS: Phoenix	Passive E4 (Value)				529,243,378			529,243,378	1.54%
	Mid Cap Equity Total							**$1,559,315,133**	4.53%
								Mid Cap Policy	**5.00%**
TimesSquare: New York	Active SMID (Growth)			454,232,349				454,232,349	1.32%
DFA: Santa Monica	Active (Value)			403,085,770				403,085,770	1.17%
Champlain:Vermont	Active (Core)			90,392,247				90,392,247	0.26%
ASRS: Phoenix	Passive E6				477,567,778			477,567,778	1.39%
	Small Cap Equity Total							**$1,425,278,144**	4.14%
								Small Cap Policy	**5.00%**
	U.S. Equity Total							**$12,329,111,205**	35.82%
								US Equity Policy Range: 26% - 38%	**33.00%**
Brandes: San Diego	Active (Value)			595,160,765				595,160,765	1.73%
GTAA Managers (2)	Active GTAA			1,061,646,314				1,061,646,314	3.08%
American Century	Active (EAFE)			519,092,848				519,092,848	1.51%
Trinity Street	Active (EAFE)			335,282,959				335,282,959	0.97%
Thompson Siegel Walmsley	Active (EAFE)			158,375,710				158,375,710	0.46%
Blackrock: San Francisco	Passive (EAFE)				2,389,698,918			2,389,698,918	6.94%
	Large Cap Developed Non-US Equity Total							**$5,061,633,999**	14.70%
								Large Cap Developed Policy	**14.00%**
AQR: Greenwich	Active (EAFE SC)			179,378,851				179,378,851	0.52%
DFA: Santa Monica	Active (EAFE SC)			224,121,024				224,121,024	0.65%
Franklin Templeton: San Mateo	Active (EAFE SC)			408,796,363				408,796,363	1.19%
Blackrock: San Francisco	Passive (EAFE SC)				465,532,878			465,532,878	1.35%
	Small Cap Developed Non-US Equity Total							**$1,277,832,021**	3.71%
								Small Cap Developed Policy	**3.00%**
William Blair: Chicago	Active (EM)			491,550,343				491,550,343	1.43%
Eaton Vance: Boston	Active (EM)			533,185,093				533,185,093	1.55%
LSV: Chicago	Active (EM)			332,375,887				332,375,887	0.97%
Blackrock: San Francisco	Passive (EM)				727,768,940			727,768,940	2.11%
	Emerging Markets Equity Total							**$2,084,880,264**	6.06%
								Emerging Markets Policy	**6.00%**
	Non-US Equity Total							**$8,424,346,284**	24.47%
								Non-US Equity Policy Range: 16% - 28%	**23.00%**
	Private Equity Total							**$2,146,081,820**	6.23%
								Private Equity Policy Range: 5% - 9%	**7.00%**
	Opportunistic Equity							**$308,467,118**	0.90%
								Opportunistic Equity Policy Range: 0% - 3%	**0.00%**
	Equity Total							**$23,208,006,426**	67.42%
								Total Equity Policy Range: 53% - 73%	**63.00%**
Gresham: New York						817,514,114		817,514,114	2.37%
GTAA Managers (2)	Active GTAA					366,746,304		366,746,304	1.07%
	Commodities Total							**$1,184,260,418**	3.44%
								Commodities Policy Range: 1% - 7%	**4.00%**
GTAA Manager (1)	Active GTAA					56,436,582		56,436,582	0.16%
	Real Estate Total							**$2,100,447,875**	6.10%
								Real Estate Policy Range: 6% - 10%	**8.00%**
	Infrastructure Total							**$0**	0.00%
								Infrastructure Policy Range: 0% - 3%	**0.00%**
	Farmland & Timber Total					105,648,179		**$105,648,179**	0.31%
								Farmland & Timber Policy Range: 0% - 3%	**0.00%**
	Opportunistic Inflation Linked Total							**$0**	0.00%
								Opportunistic I/L Policy Range: 0% - 3%	**0.00%**
	Inflation Linked Total							**$3,390,356,472**	9.85%
								Inflation Linked Policy Range: 7%-15%	**12.00%**
	TOTAL Amounts	$4,036,745,146	$3,788,518,379	$11,265,858,060	$11,942,148,366	$3,496,004,651	$0	**$34,423,626,423**	**Total Fund**
	TOTAL Percent	11.73%	11.01%	32.73%	34.69%	10.16%	0.00%		

Asset Class	Actual Portfolio	SAA Policy: Target (Range)	Rebalancing Assumed Port	Rebalancing Adj Policy	Assumed - Adjusted % diff	Assumed - Adjusted $ diff	Policy Band check Actual - Adj	Passive Min	Passive Actual
Cash	0.41%								
Core	10.88%	13%						**50%**	**72%**
High Yield	2.86%	5%							
US Fixed Income	13.73%	18% (8-28%)	14.10%	18.53% (9-29%)	-4.43%	-$1,525,064,942	**OK**		
EM Debt	2.24%	4%		4.00%					
Opportunistic Debt	2.82%	0% (0-10%)	2.82%	0% (0-10%)	2.82%	$969,566,500	**OK**		
Private Debt	3.53%	3%		3.00%					
Total Fixed Income	**22.73%**	**25% (15-35%)**	**22.69%**	**25.53% (16-36%)**	**-2.84%**	**-$978,390,687**	**OK**		
Large Cap	27.15%	23%							
Mid Cap	4.53%	5%							
Small Cap	4.14%	5%							
US Equity	**35.82%**	**33% (26-38%)**	**37.01%**	**34.58% (28-40%)**	**2.42%**	**$834,449,302**	**OK**	**50%**	**66%**
Developed Large Cap	14.70%	14%							
Developed Small Cap	3.71%	3%							
Emerging Markets	6.06%	6%							
Non-US Equity	**24.47%**	**23% (16-28%)**	**24.12%**	**23.47% (16-28%)**	**0.64%**	**$221,496,686**	**OK**	**30%**	**49%**
Private Equity	6.23%	7% (5-9%)	6.23%	6.23% (4-8%)	0.00%	$0	**OK**		
Opportunistic Equity	0.90%	0% (0-3%)	0.90%	0% (0-3%)	0.90%	$308,467,118	**OK**		
Total Equity	**67.42%**	**63% (53-70%)**	**68.25%**	**64.29% (54-71%)**	**3.96%**	**$1,364,413,106**	**OK**		
Commodities	3.44%	4% (1-7%)	2.81%	4.08% (1-7%)	-1.26%	-$435,234,015	**OK**		
Real Estate	6.10%	8% (6-10%)	5.94%	6.1% (4-8%)	-0.16%	-$56,436,582	**OK**		
Infrastructure	0.00%	0% (0-3%)	0.00%	0% (0-3%)	0.00%	$0	**OK**		
Farmland & Timber	0.31%	0% (0-3%)	0.31%	0% (0-3%)	0.31%	$105,648,179	**OK**		
Opportunistic I/L	0.00%	0% (0-3%)	0.00%	0% (0-3%)	0.00%	$0	**OK**		
Total Inflation Linked	**9.85%**	**12% (8-16%)**	**9.06%**	**10.18% (6-14%)**	**-1.12%**	**-$386,022,419**	**OK**		
Total	**100.00%**	**100%**	**100.00%**	**100.00%**	**0.00%**	**$0**		**30%**	**43%**
								Internally Managed Portfolios:	
Total GTAA								**$9,770,328,229**	**28%**
Bridgewater	$3,141,572,167	9.1%							
Windham	$616,793,246	1.8%							
Total	**$3,758,365,413**	**10.9%**							
Policy	**10% ±5%**	**OK**							

Opportunistic definitions:
1) Tactical in nature: Function of market dislocation AND
2a) Outside SAA benchmark, OR
2b) Within SAA benchmark but absolute return oriented

ARIZONA STATE RETIREMENT SYSTEM
Investment Management Division

ASRS Pension and HBS Assets
Public Securities Markets
Investment Managers Performance Summary

Period Ending Aug 31, 2014
FINAL

				Net Returns (%)								Excess Returns (basis points)							
								Annualized								Annualized			
	Style	Inception	Amount ($mil.)	Month	3 Months	YTD	1 Year	3 Years	5 Years	10 Years	ITD	Month	3 Months	YTD	1 Year	3 Years	5 Years	10 years	ITD
US EQUITY LARGE CAP																			
E2 MODEL	INDEXED	04/01/1997	5,026	4.00	4.70	9.89	25.26	20.58	16.86	8.42	7.78	0	1	1	1	-2	-1	5	8
S&P 500 INDEX				4.00	4.69	9.89	25.25	20.61	16.88	8.38	---								
INTECH LARGE CAP	QUANTITATIVE	01/01/2003	474	3.48	3.63	7.70	25.96	18.69	17.17	8.63	10.08	-87	-157	-287	-156	-161	-71	-41	47
S&P/CITIGROUP 500 GROWTH				4.35	5.19	10.57	27.53	20.30	17.88	9.05	---								
LSV ASSET MANAGEMENT	QUANTITATIVE	01/01/2003	822	3.76	4.50	10.05	26.86	24.59	18.31	10.03	11.89	15	37	91	403	359	245	238	251
LSV CUSTOM INDEX				3.62	4.13	9.14	22.83	21.01	15.86	7.65	---								
E7	INDEXED	08/01/2012	785	3.80	3.93	10.57	22.73	---	---	---	19.08	1	0	-4	-5	---	---	---	13
MSCI USA High Dividend Yield Index				3.80	3.92	10.61	22.78	---	---	---	---								
E8	INDEXED	08/01/2012	508	4.07	3.86	8.86	20.23	---	---	---	16.61	0	2	15	40	---	---	---	69
MSCI USA Minimum Volatility Index				4.07	3.84	8.71	19.82	---	---	---	---								
TOTAL US EQUITY LARGE CAP			$ 7,614																
US EQUITY MID CAP																			
WELLINGTON MANAGEMENT COMPANY LLP	FUNDAMENTAL	07/01/2002	418	4.56	4.74	9.99	25.91	22.13	18.14	12.81	11.90	-52	-1	186	267	234	-62	168	113
S&P 400 MIDCAP INDEX				5.08	4.75	8.13	23.25	19.79	18.77	11.13	---								
E3 MODEL	INDEXED	12/01/2000	510	4.90	4.44	5.62	21.17	17.92	19.47	11.95	8.83	1	-1	2	10	26	49	55	57
S&P/CITIGROUP 400 GROWTH				4.89	4.45	5.60	21.07	17.66	18.98	11.40	---								
CRM MID CAP VALUE	FUNDAMENTAL	01/01/2004	102	4.14	2.84	5.07	20.19	17.80	14.89	10.15	10.11	-114	-222	-574	-534	-424	-371	-66	-28
E4 MODEL	INDEXED	07/01/2002	529	5.25	5.04	10.72	25.36	21.85	18.55	11.07	11.04	-2	-2	-9	-18	-18	-4	26	21
S&P/CITIGROUP 400 VALUE				5.28	5.06	10.81	25.54	22.04	18.60	10.81	---								
TOTAL US EQUITY MID CAP			$ 1,559																
US EQUITY SMALL CAP																			
DIMENSIONAL FUND ADVISORS EQFD	QUANTITATIVE	09/01/1998	403	6.17	5.88	7.12	26.23	24.02	20.21	11.10	12.81	169	279	348	531	204	209	97	143
DFA BLENDED BENCHMARK				4.48	3.09	3.63	20.92	21.98	18.12	10.13	---								
TIMESSQUARE CAPITAL MANAGEMENT	FUNDAMENTAL	04/01/2005	454	4.56	4.68	0.81	18.32	22.70	20.13	---	12.70	-93	-79	-335	-193	285	73	---	253
RUSSELL 2500 GROWTH				5.49	5.47	4.16	20.25	19.84	19.41	---	---								
CHAMPLAIN INVESTMENT PARTNERS LLC	FUNDAMENTAL	01/01/2008	90	4.26	3.97	-0.61	12.45	16.44	16.44	---	9.74	-3	75	-235	-624	-425	-228	---	10
E6	INDEXED	02/01/2007	478	4.31	3.25	1.68	18.66	20.62	18.55	---	8.46	1	4	-6	-4	-7	-17	---	37
S&P 600 SMALL CAP				4.29	3.21	1.74	18.70	20.69	18.72	---	---								
TOTAL US EQUITY SMALL CAP			$ 1,425																
TOTAL US EQUITY			$ 10,599																
INTERNATIONAL DEVELOPED LARGE CAP																			
BRANDES INVESTMENT PARTNERS INT EQ	FUNDAMENTAL	10/01/1998	595	-0.33	-1.51	4.61	19.30	12.69	7.65	7.15	9.67	-17	-34	205	280	96	-180	-134	296
BRANDES CUSTOM INDEX				-0.15	-1.17	2.56	16.50	11.73	9.46	8.49	---								
AMERICAN CENTURY	FUNDAMENTAL	07/01/2014	519	0.66	---	---	---	---	---	---	-2.18	82	---	---	---	---	---	---	-7
BGI EAFE INDEX	INDEXED	07/01/2009	2,392	-0.15	-1.13	2.82	16.69	11.66	8.53	---	11.22	0	4	26	19	-7	-9	---	-9
THOMSON, SIEGEL & WALMSLEY	FUNDAMENTAL	07/01/2014	158	-0.17	---	---	---	---	---	---	-1.99	-1	---	---	---	---	---	---	13

ARIZONA STATE RETIREMENT SYSTEM
Investment Management Division

ASRS Pension and HBS Assets
Public Securities Markets
Investment Managers Performance Summary

Period Ending Aug 31, 2014
FINAL

				Net Returns (%)								Excess Returns (basis points)							
								Annualized								Annualized			
	Style	Inception	Amount ($mil.)	Month	3 Months	YTD	1 Year	3 Years	5 Years	10 Years	ITD	Month	3 Months	YTD	1 Year	3 Years	5 Years	10 years	ITD
TRINITY STREET	FUNDAMENTAL	07/01/2014	335	-0.88	---	---	---	---	---	---	-3.28	-72	---	---	---	---	---	---	-116
MSCI EAFE NET				-0.15	---	---	---	---	---	---	---								
TOTAL INTERNATIONAL DEVELOPED LARGE CAP			$ 4,000																
INTERNATIONAL DEVELOPED SMALL CAP																			
AQR CAPITAL	FUNDAMENTAL	06/01/2013	179	0.19	0.50	3.37	20.39	---	---	---	18.22	37	158	53	164	---	---	---	151
BLACKROCK EAFE SMALL CAP	INDEXED	06/01/2010	465	-0.21	-1.14	2.77	18.52	12.42	---	---	14.19	-4	-6	-7	-23	-31	---	---	-24
DIMENSIONAL FUND ADVISORS INTL SC	QUANTITATIVE	09/01/2005	224	-0.30	-1.17	4.80	22.20	13.59	9.54	---	6.78	-12	-9	196	346	86	-196	---	17
FRANKLIN TEMPLETON INVESTMENTS	FUNDAMENTAL	04/01/2011	409	0.71	-1.89	-2.00	10.06	15.35	---	---	10.76	89	-81	-484	-868	262	---	---	243
MSCI EAFE SMALL CAP NET				-0.18	-1.08	2.84	18.74	12.73	---	---	---								
TOTAL INTERNATIONAL DEVELOPED SMALL CAP			$ 1,277																
INTERNATIONAL EMERGING MARKETS																			
BLACKROCK EMERGING MARKETS	INDEXED	10/01/2010	728	2.22	6.98	10.38	19.79	4.11	---	---	2.61	-3	-2	-25	-26	-49	---	---	-48
EATON VANCE EMERGING MARKET EQUITY	QUANTITATIVE	12/01/2010	533	2.20	4.31	9.90	20.12	5.30	---	---	3.73	-5	-269	-73	7	70	---	---	55
LSV EMERGING MARKET EQUITY	QUANTITATIVE	12/01/2010	330	2.39	7.67	13.09	24.36	6.21	---	---	4.62	14	67	246	431	160	---	---	144
WILLIAM BLAIR & COMPANY	FUNDAMENTAL	11/01/2010	493	3.54	7.45	12.32	25.14	8.49	---	---	4.69	129	45	169	509	389	---	---	230
MSCI EMF NET				2.25	7.00	10.63	20.05	4.60	---	---	---								
TOTAL INTERNATIONAL EMERGING MARKETS			$ 2,084																
TOTAL INTERNATIONAL EQUITY			$ 7,362																
RISK FACTOR PORTFOLIO																			
RISK FACTOR PORTFOLIO	OVERLAY	06/01/2013	524	3.82	4.59	9.17	24.44	---	---	---	19.63								
TOTAL RISK FACTOR PORTFOLIO			$ 524																
TOTAL EQUITY W/ RISK FACTOR OVERLAY			$ 18,487																
CORE FIXED INCOME																			
BGI US DEBT FD	INDEXED	04/01/2014	718	1.09	0.96	---	---	---	---	---	---	-2	6	---	---	---	---	---	---
F2 MODEL	INDEXED	10/01/2000	1,935	1.04	0.90	4.60	5.61	3.15	4.64	4.94	5.69	-6	0	-21	-5	24	16	22	15
Barclays Aggregate				1.10	0.90	4.81	5.66	2.91	4.48	4.72	---								
BGI GOVT/CRDTBD INDEX	INDEXED	11/01/2008	24	0.68	0.43	2.82	3.66	2.26	3.79	---	5.05	-2	3	8	11	11	8	---	9
Barclays Gov/Credit Int				0.70	0.41	2.74	3.55	2.15	3.70	---	---								
TOTAL CORE FIXED INCOME			$ 2,677																
HIGH YIELD FIXED INCOME																			
COLUMBIA MANAGEMENT INV. ADVISORS, LLC	FUNDAMENTAL	10/01/2009	651	1.86	1.09	5.56	10.32	10.38	---	---	10.56	27	2	-15	-26	-27	---	---	-67
JP MORGAN HIGH YIELD	FUNDAMENTAL	07/01/2013	332	1.63	0.90	4.81	10.04	---	---	---	9.45	5	-17	-89	-54	---	---	---	-72
Barclays Corp High Yield				1.59	1.07	5.70	10.58	---	---	---	---								
TOTAL HIGH YIELD FIXED INCOME			$ 983																

STATE STREET.

ARIZONA STATE RETIREMENT SYSTEM
Investment Management Division

ASRS Pension and HBS Assets
Public Securities Markets
Investment Managers Performance Summary

Period Ending Aug 31, 2014
FINAL

				Net Returns (%)								Excess Returns (basis points)							
								Annualized								Annualized			
	Style	Inception	Amount ($mil.)	Month	3 Months	YTD	1 Year	3 Years	5 Years	10 Years	ITD	Month	3 Months	YTD	1 Year	3 Years	5 Years	10 years	ITD
EMERGING MARKETS DEBT																			
ASHMORE EMERGING MKT DBT BLEND	FUNDAMENTAL	01/01/2013	418	0.13	0.42	5.55	7.48	---	---	---	-0.44	-58	-53	-141	-304	---	---	---	-69
EMERGING MARKETS BLENDED INDEX				0.71	0.96	6.96	10.52	---	---	---	---								
PIMCO EMERGING MARKET DEBT LC	FUNDAMENTAL	01/01/2013	352	0.85	0.78	6.73	8.84	---	---	---	-2.85	37	37	135	52	---	---	---	-38
JPM GBI-EM Global Diversified Index				0.48	0.41	5.38	8.32	---	---	---	---								
TOTAL EMERGING MARKETS DEBT			$ 769																
TOTAL PUBLIC FIXED INCOME			$ 4,429																
GTAA																			
BRIDGEWATER ASSOCIATES GLBL TAA	FUNDAMENTAL	01/01/2004	3,231	2.37	2.17	8.13	19.21	14.11	15.39	9.98	9.39	42	43	183	295	128	397	287	259
GTAA CUSTOM BENCHMARK				1.95	1.74	6.30	16.26	12.84	11.42	7.11	---								
WINDHAM	QUANTITATIVE	10/01/2011	617	2.32	2.60	6.84	16.00	---	---	---	12.58	26	66	-53	-96	---	---	---	-309
WINDHAM CUSTOM INDEX				2.06	1.95	7.37	16.96	---	---	---	---								
TOTAL GTAA			$ 3,848																
GLOBAL INFLATION LINKED																			
GRESHAM	FUNDAMENTAL	09/01/2010	818	-1.18	-3.86	1.46	-1.89	-5.84	---	---	2.17	-14	156	78	104	246	---	---	292
Bloomberg Commodity Index Total Return				-1.05	-5.42	0.68	-2.92	-8.30	---	---	---								
TOTAL GLOBAL INFLATION LINKED			$ 818																
TOTAL PUBLIC MARKET			$ 27,724																

STATE STREET.

ARIZONA STATE RETIREMENT SYSTEM
Investment Management Division

ASRS Long Term Disability Assets
Investment Managers Performance Summary

Period Ending Aug 31, 2014
FINAL

			Net Returns (%)								Excess Returns (basis points)							
							Annualized								Annualized			
	Inception	Amount ($mil.)	Month	3 Months	YTD	1 Year	3 Years	5 Years	10 Years	ITD	Month	3 Months	YTD	1 Year	3 Years	5 Years	10 years	ITD
BLACKROCK - US DEBT FUND B	01/01/2011	31.8	1.08	0.94	4.92	5.71	2.96	---	---	4.01	-3	4	11	5	4	---	---	3
Barclays Aggregate			1.10	0.90	4.81	5.66	2.91	4.48	4.72	---								
BLACKROCK - US HIGH YIELD FUND B	01/01/2011	18.4	1.83	1.23	5.87	10.87	10.44	---	---	8.91	24	16	17	30	-21	---	---	-29
Barclays Corp High Yield			1.59	1.07	5.70	10.58	10.64	12.28	8.72	---								
BLACKROCK-LTD-EM BD INDX FD B	01/01/2013	10.2	0.43	0.29	5.09	7.37	---	---	---	-3.28	-5	-12	-29	-95	---	---	---	-81
JPM GBI-EM Global Diversified Index			0.48	0.41	5.38	8.32	0.49	6.22	9.68	---								
BLACKROCK - RUSSELL 1000 FUND B	01/01/2011	100.3	4.10	4.77	9.85	25.28	20.78	---	---	16.11	-3	-1	-4	-8	-2	---	---	1
RUSSELL 1000			4.13	4.78	9.90	25.36	20.80	17.24	8.78	---								
BLACKROCK - RUSSELL 2000 FUND B	01/01/2011	17.2	4.96	3.93	1.86	17.84	19.19	---	---	13.37	0	8	11	16	19	---	---	18
RUSSELL 2000			4.96	3.85	1.75	17.68	19.00	17.03	9.36	---								
BLACKROCK - EAFE INDEX FUND B	01/01/2011	38.8	-0.18	-1.20	2.60	16.41	11.42	---	---	7.46	-3	-3	4	-8	-31	---	---	-32
MSCI EAFE NET			-0.15	-1.17	2.56	16.50	11.73	8.61	---	---								
BLACKROCK EAFE SMALL CAP FUND B	01/01/2011	9.4	-0.18	-1.09	2.82	18.62	12.46	---	---	8.36	0	-1	-2	-12	-27	---	---	-27
MSCI EAFE SMALL CAP NET			-0.18	-1.08	2.84	18.74	12.73	11.50	---	---								
BLACKROCK MSCI EMERGING MARKETS FUND B	01/01/2011	17.1	2.21	6.94	10.31	19.67	4.10	---	---	0.81	-4	-6	-31	-38	-51	---	---	-51
MSCI EMF NET			2.25	7.00	10.63	20.05	4.60	---	---	---								
BGI-LTD- R ESTATE FD	01/01/2005	22.7	2.78	3.88	21.59	24.06	13.72	18.56	---	7.28	-9	-9	21	-49	-133	-92	---	-48
WILSHIRE RESI			2.87	3.97	21.38	24.55	15.05	19.48	9.12	---								
BLACKROCK DJ UBS COMM FUND B	01/01/2011	6.9	-1.15	-5.50	0.41	-3.37	-8.64	---	---	-6.86	-11	-9	-27	-45	-35	---	---	-34
Bloomberg Commodity Index Total Return			-1.05	-5.42	0.68	-2.92	-8.30	0.21	0.26	---								
LONG TERM DISABILITY - CASH	07/01/1995	1.1	0.00	0.00	0.00	0.00	0.01	0.09	1.71	2.77	0	-1	-3	-5	-6	-1	9	-5
91 DAY TREASURY BILL			0.00	0.01	0.03	0.05	0.07	0.10	1.62	---								
TOTAL LTD		$ 273.8																

STATE STREET.

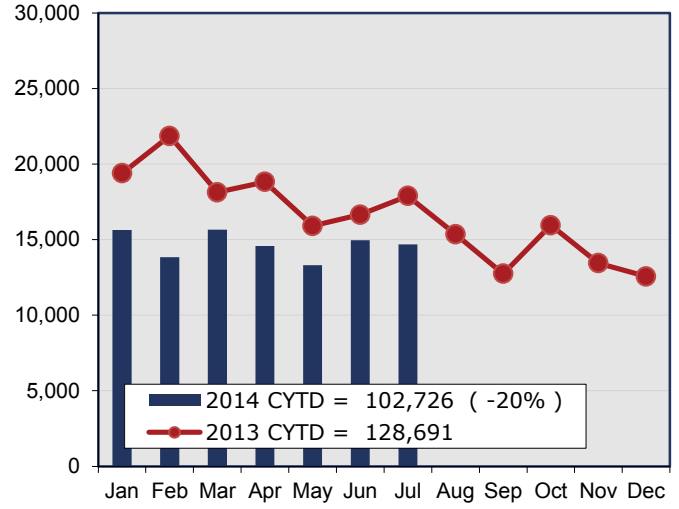
Long Term Disability (LTD)

Friday, August 29, 2014

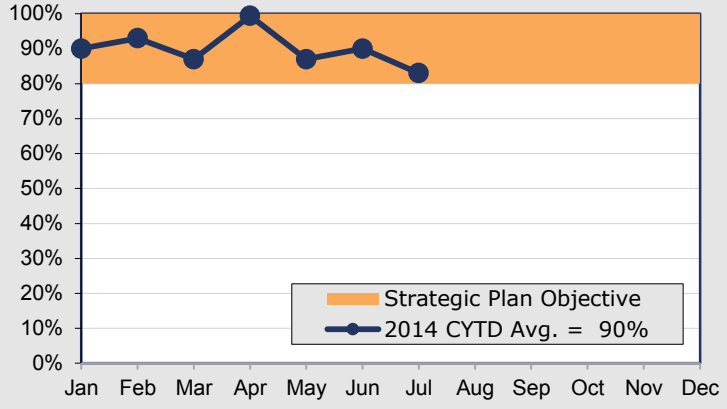
Account Manager	Account Manager Style	Fixed Income	Equity	Inflation Linked	Total	Pct of Fund	Target (Range)
StateStreet B&T: Boston	Cash	$1,068,502			$1,068,502	0.39%	
BlackRock: San Francisco	Fixed Core (Passive)	$31,825,714			$31,825,714	11.62%	13%
BlackRock: San Francisco	Fixed High Yield (Passive)	$18,424,339			$18,424,339	6.73%	8%
BlackRock: San Francisco	Emerging Market Debt (Passive)	$10,162,100			$10,162,100	3.71%	4%
						22.06%	**25% (15-35%)**
BlackRock: San Francisco	Russell 1000 (Passive)		$100,263,352		$100,263,352	36.62%	34%
BlackRock: San Francisco	Russell 2000 (Passive)		$17,175,862		$17,175,862	6.27%	6%
						42.89%	**40% (33-45%)**
BlackRock: San Francisco	EAFE (Passive)		$38,786,381		$38,786,381	14.17%	14%
BlackRock: San Francisco	EAFE SC (Passive)		$9,371,845		$9,371,845	3.42%	3%
BlackRock: San Francisco	Emerging Markets (Passive)		$17,094,221		$17,094,221	6.24%	6%
						23.83%	**23% (16-28%)**
BlackRock: San Francisco	Dow Jones UBS Commodities (Passive)			$6,874,628	$6,874,628	2.51%	4% (1-7%)
BlackRock: San Francisco	US Real Estate (Passive)			$22,745,267	$22,745,267	8.31%	8% (6-10%)
						10.82%	**12% (8-16%)**
	TOTAL Amounts	$61,480,655	$182,691,661	$29,619,895	**$273,792,211**		
	TOTAL Percent	22.46%	66.73%	10.82%			
	Actual Portfolio	**22.46%**	**66.73%**	**10.82%**			
	Policy	**25% (15-35%)**	**63% (53-70%)**	**12% (8-16%)**			

Member Advisory Center: Phone

Volume
comparison of calls by month and year



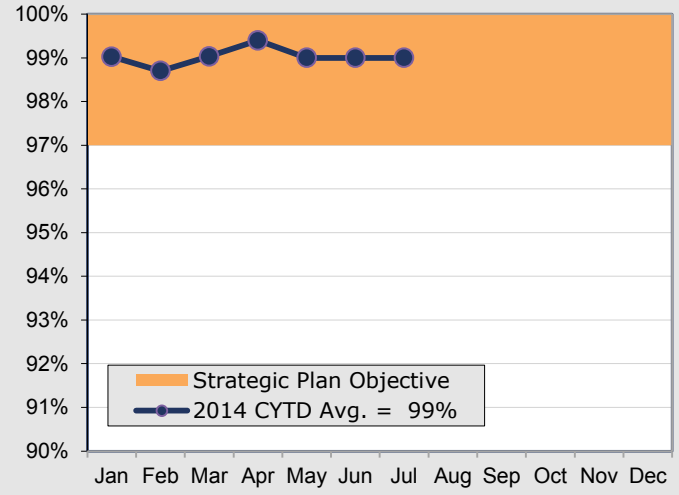
Timeliness
percent answered in 20 seconds or less



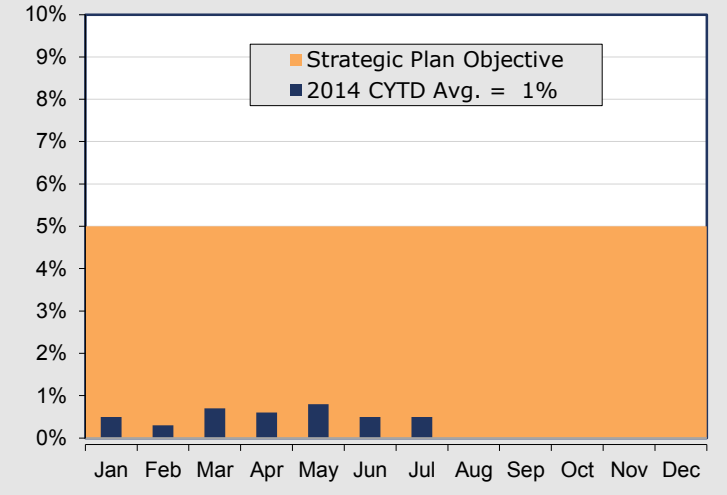
Timeliness (average wait time in seconds)

Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
55	7	14	12	15	9	12					

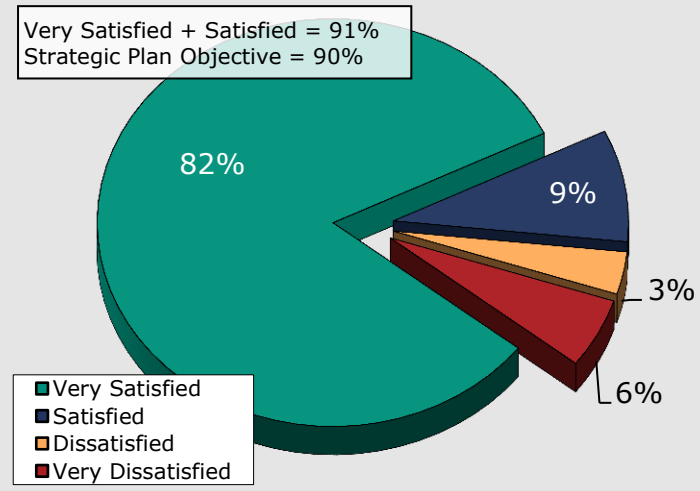
Resolution Rate
percent resolved on first contact



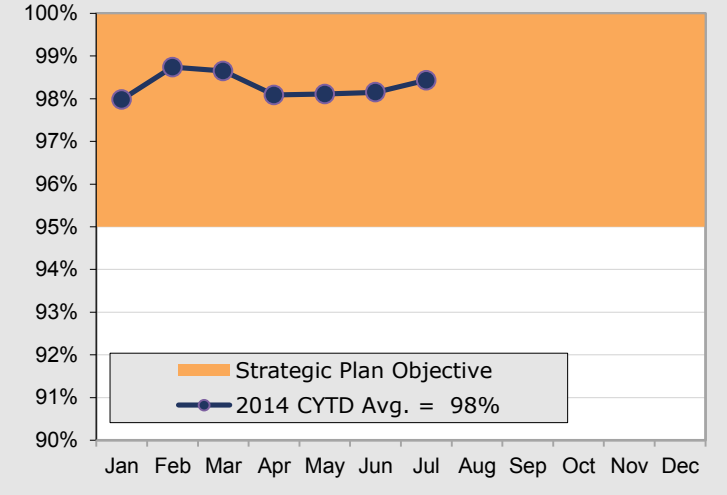
Abandonment Rate
percent of calls abandoned



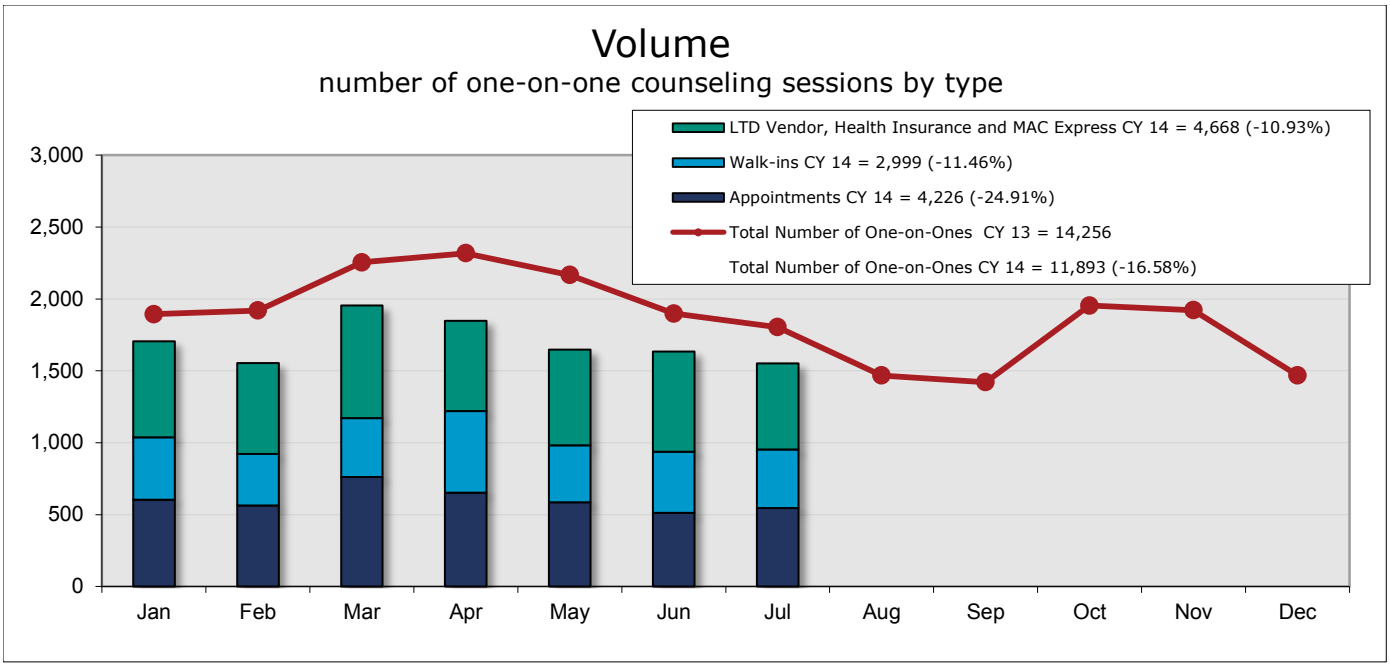
Member Satisfaction
2nd Quarter 2014

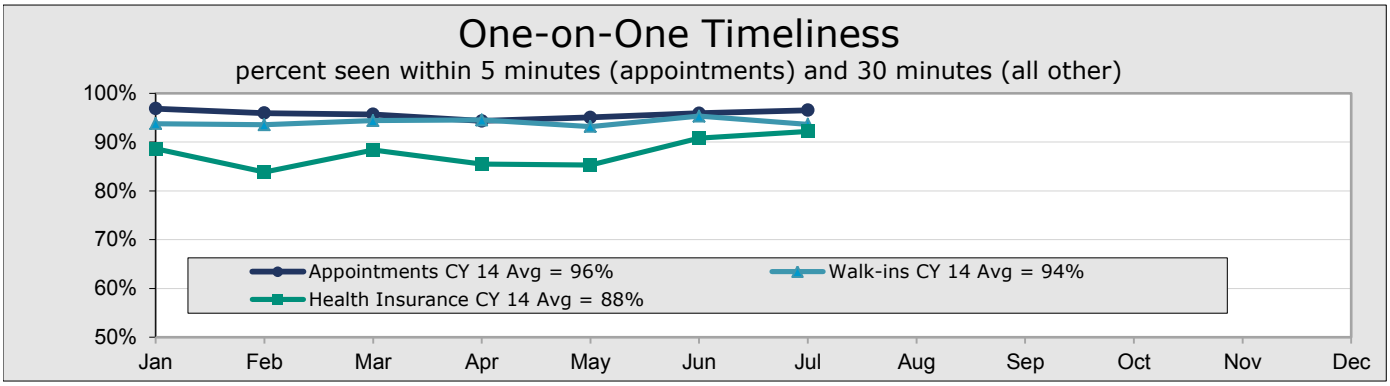


Quality
of agent response to member inquiries



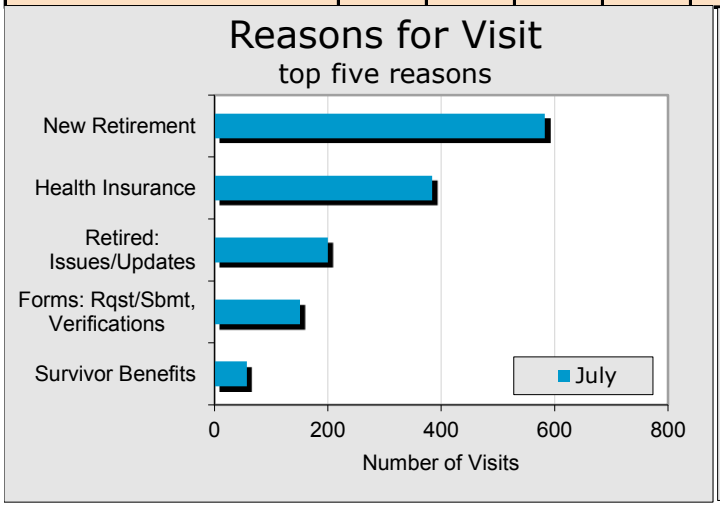
Member Advisory Center: One-on-One

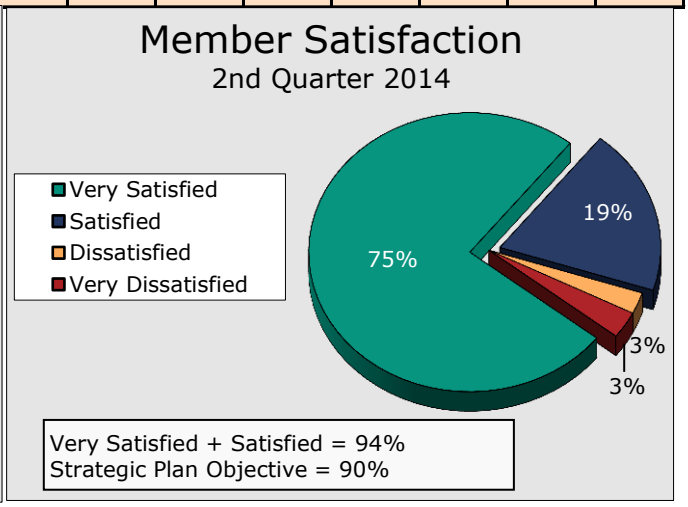




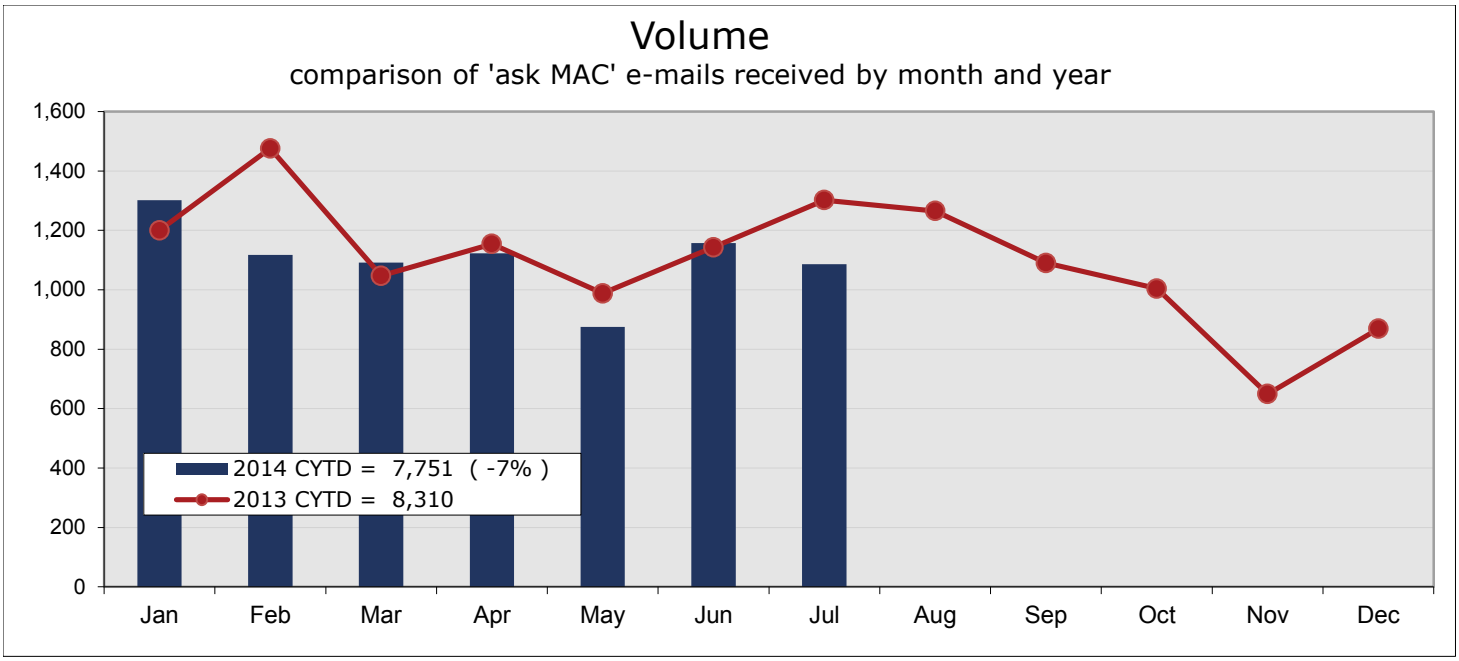
Timeliness (average wait time in minutes)

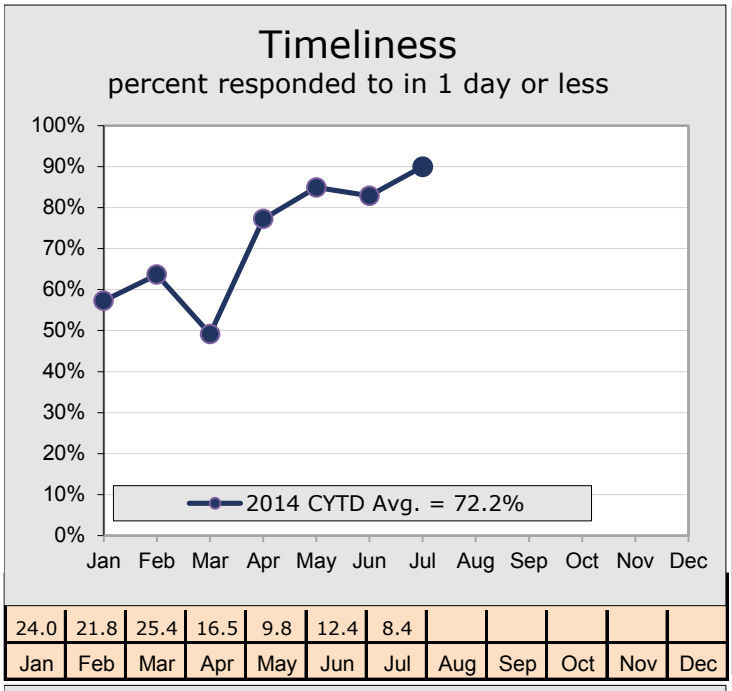
	Jan	Feb	Mar	April	May	June	July	Aug	Sept	Oct	Nov	Dec
Appointments	1	1	1	2	1	1	1					
Walk-Ins	9	10	8	7	7	7	7					
Reception/MAC Express	0	0	0	0	0	0	0					
Health Insurance	6	7	7	7	7	5	4					
LTD Vendor	0	n/a	n/a	0	n/a	0	0					

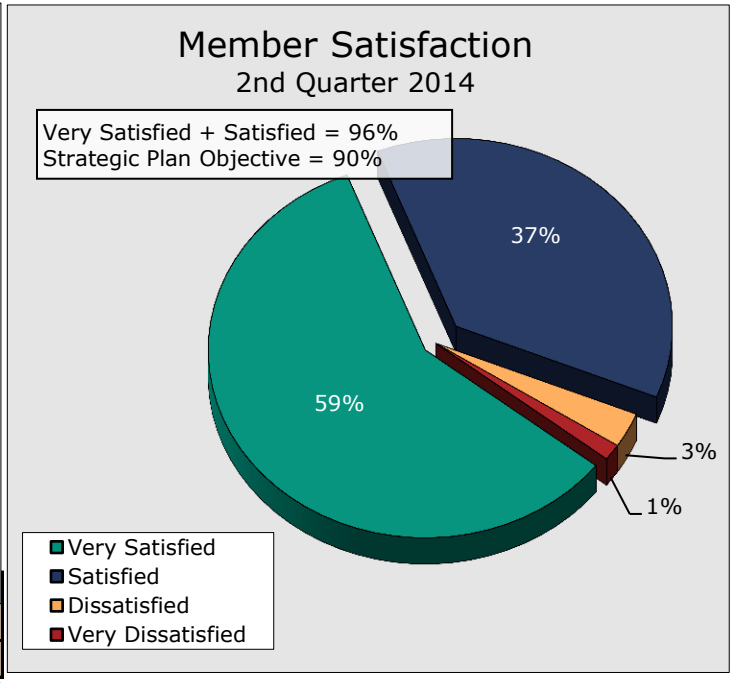


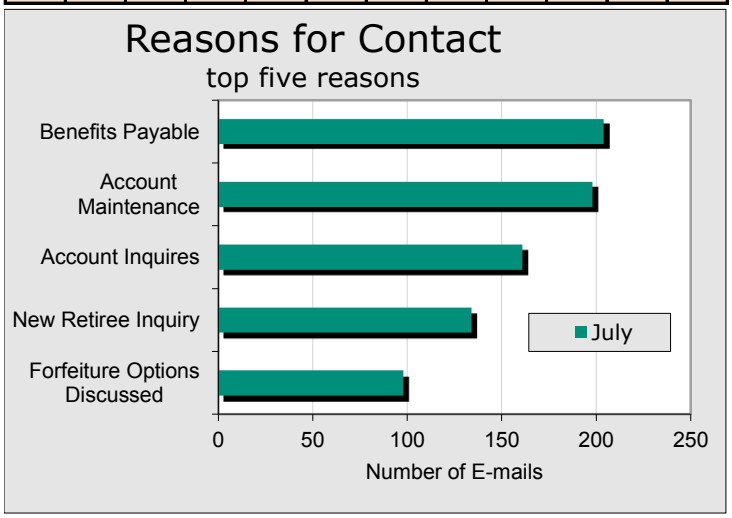


Member Advisory Center: E-Mail

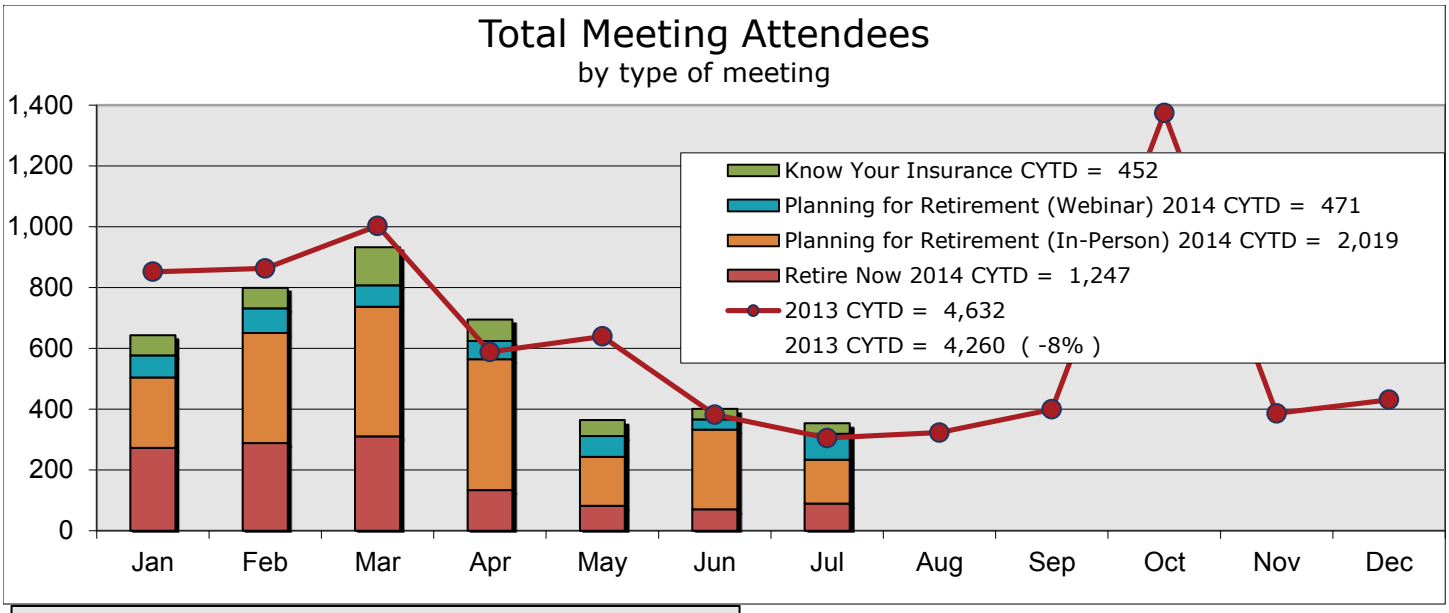




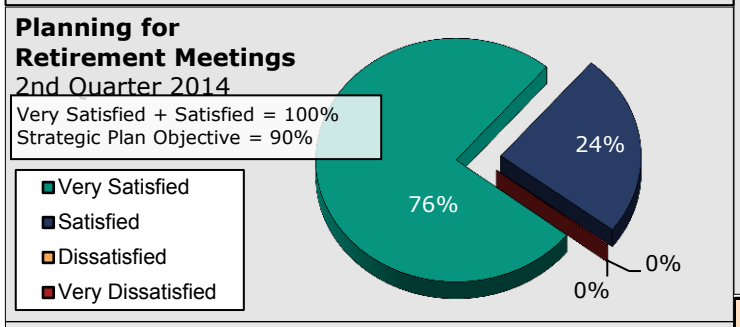


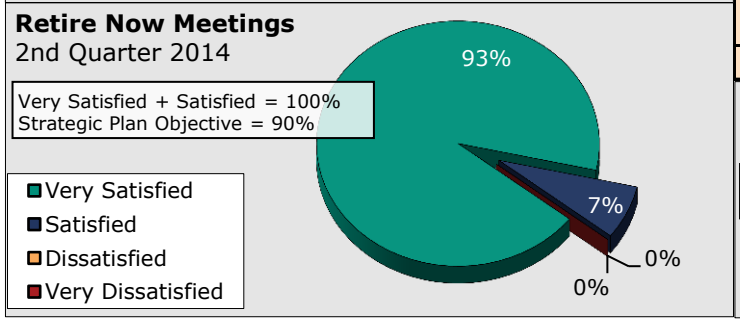


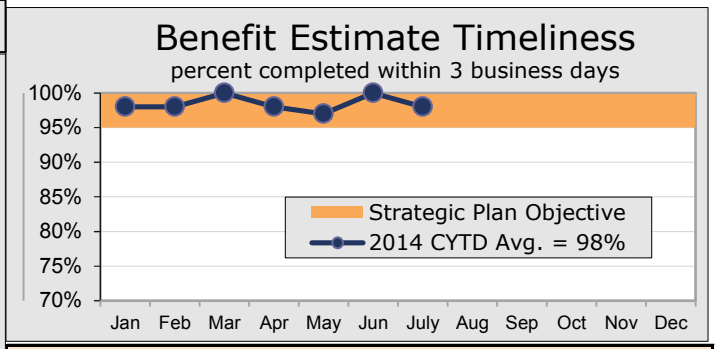
Outreach Education and Benefit Estimates



Member Satisfaction

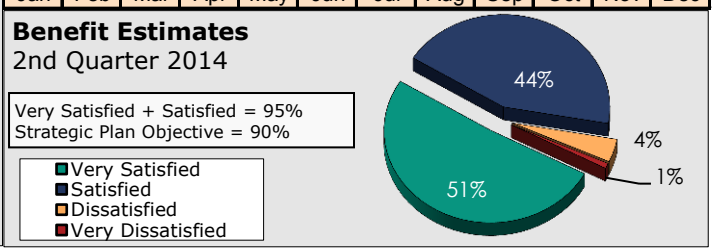


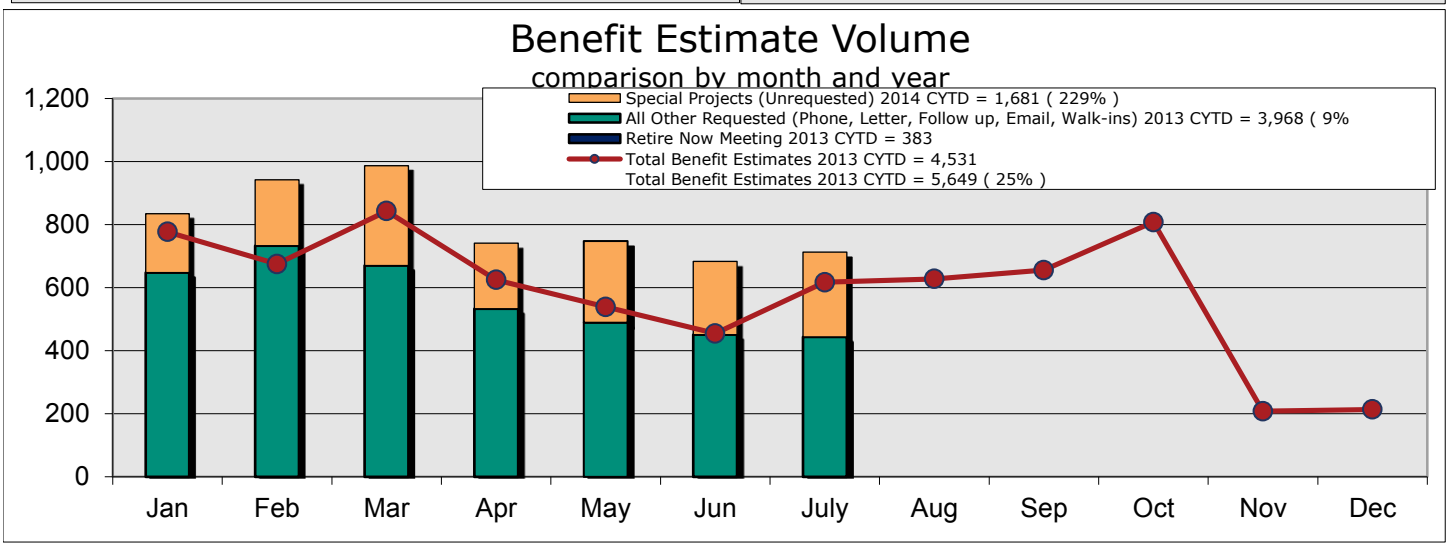




Benefit Estimate Timeliness (average TAT in days)

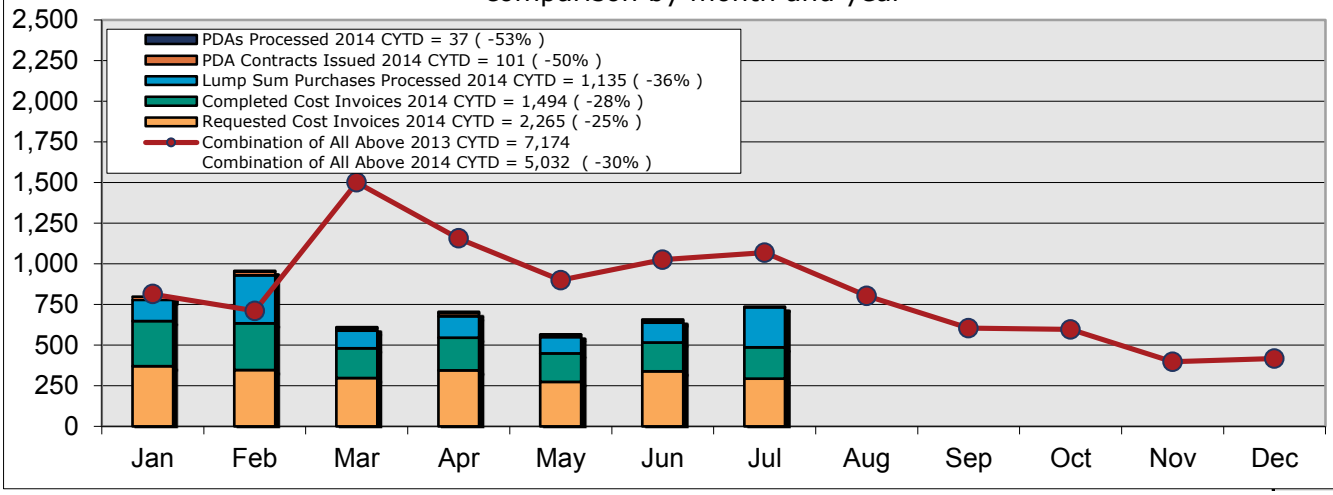
Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
1.0	1.0	1.0	1.0	1.0	1.0	1.0					





Service Purchase

Total Volume
comparison by month and year



Requests Pending

as of July 31, 2014

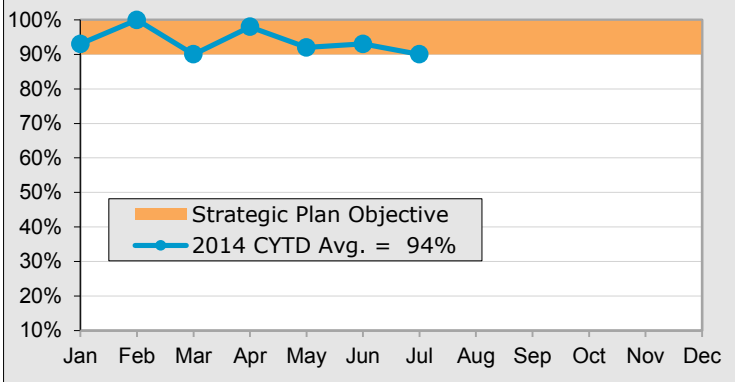
Cost Invoices Pending

476

Payments Pending

8

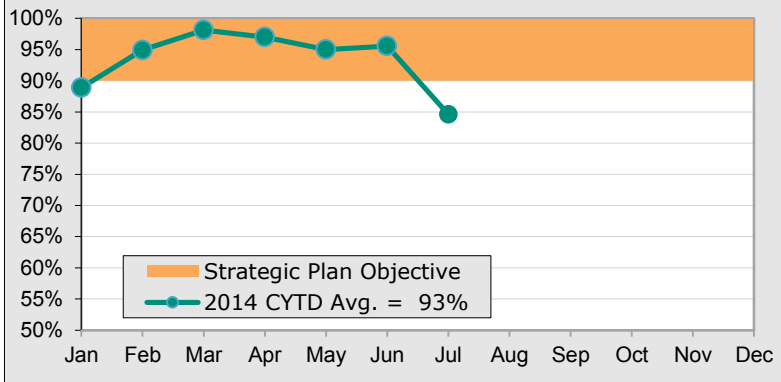
Lump Sum Timeliness
percent within 5 business days



Timeliness (average turnaround time in business days)

Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
2	1	2	1	2	2	4					

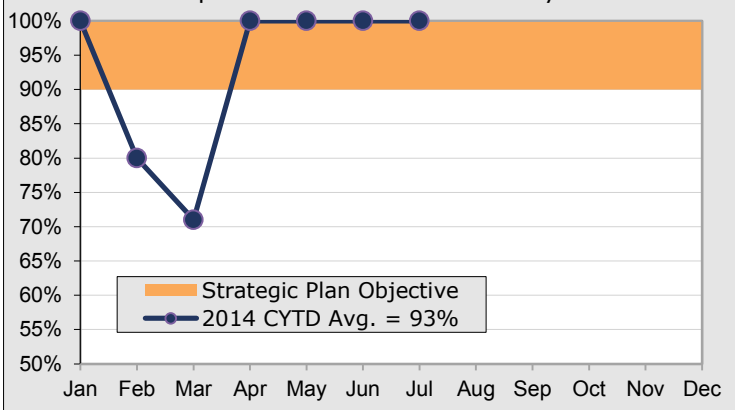
Cost Invoices Timeliness
percent within 10 business days



Timeliness (average turnaround time in business days)

Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
6	3	3	4	5	4	7					

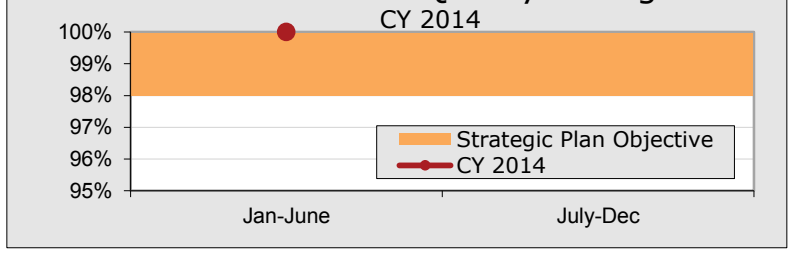
Payroll Deduction Agreement Timeliness
percent within 5 business days



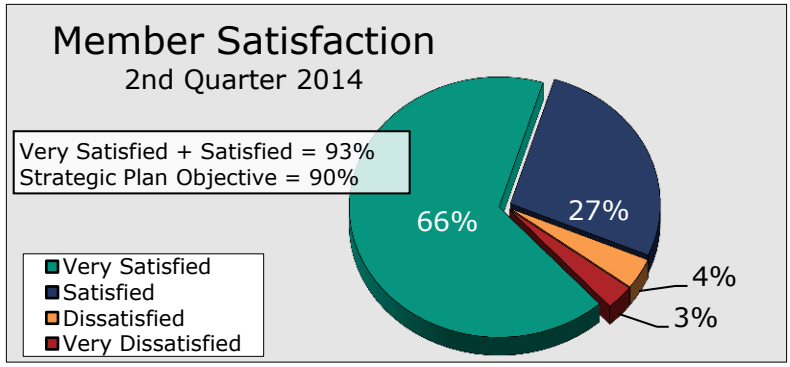
Timeliness (average turnaround time in business days)

Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
1	2	3	1	1	1	2					

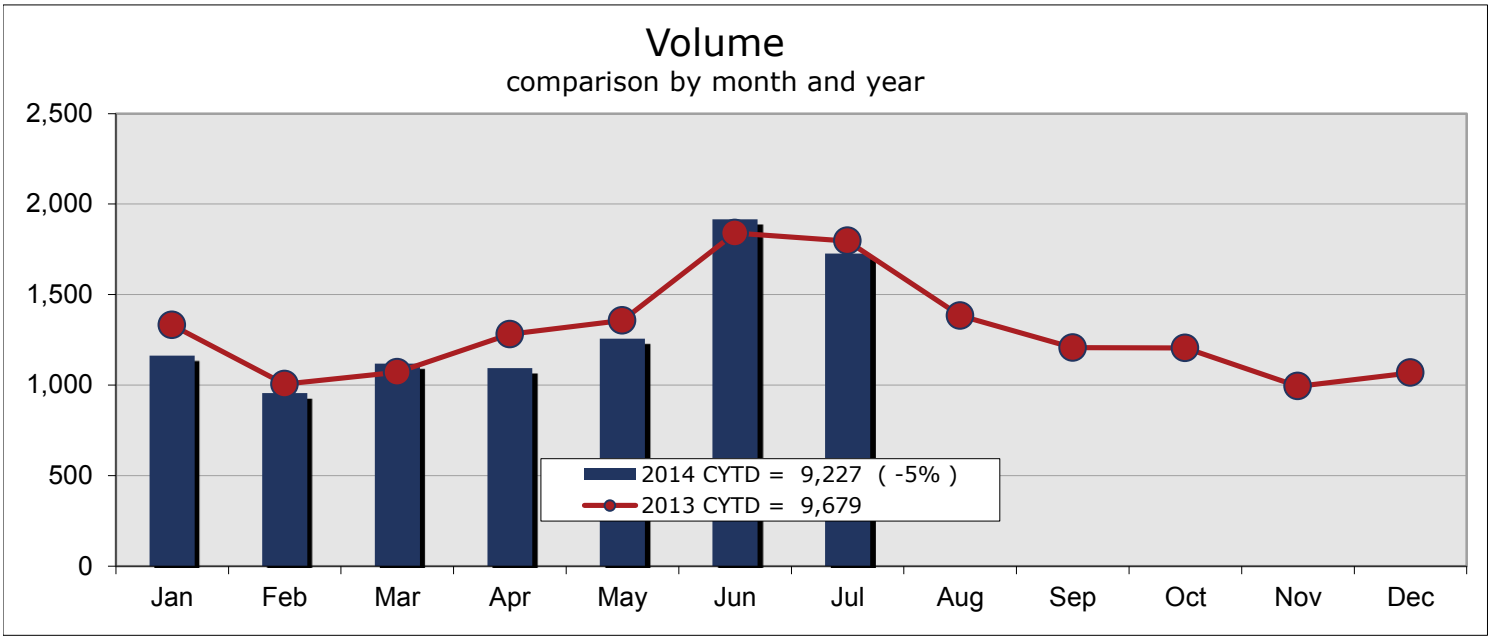
Cost Invoice Quality Rating
CY 2014

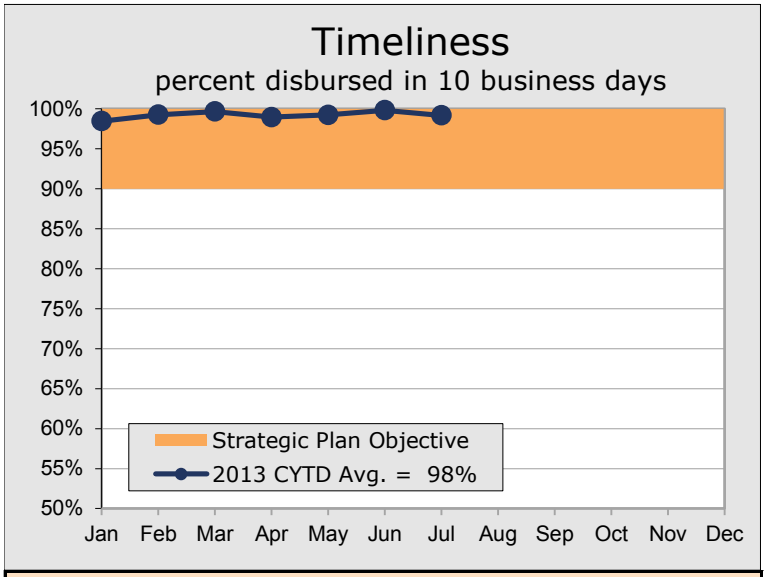


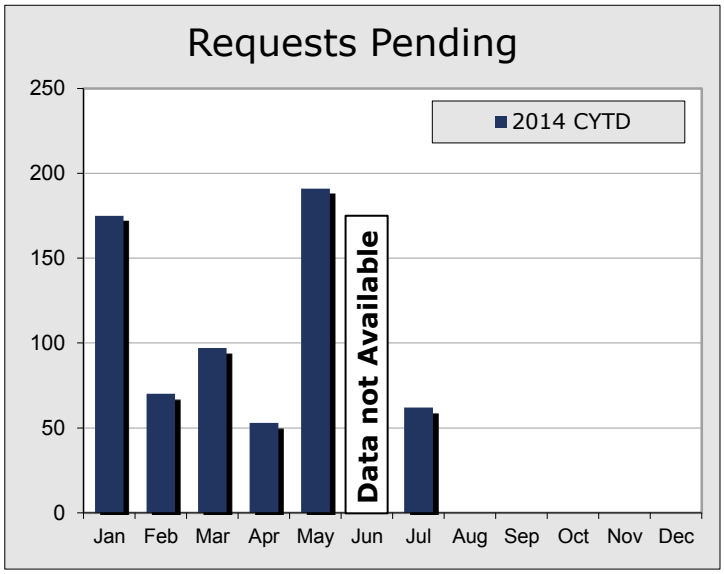
Member Satisfaction
2nd Quarter 2014



Refunds

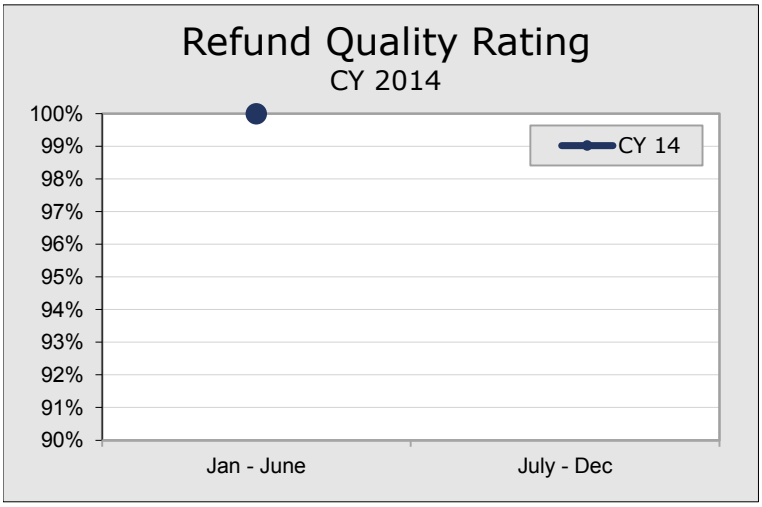


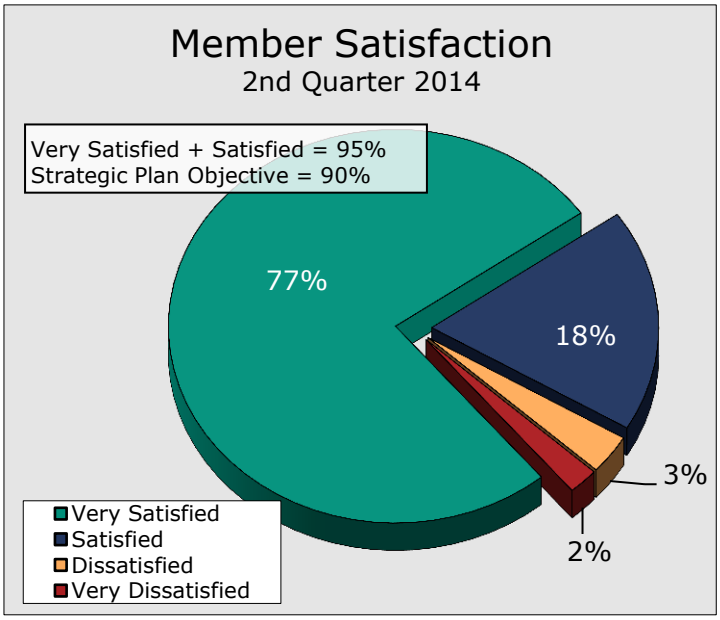




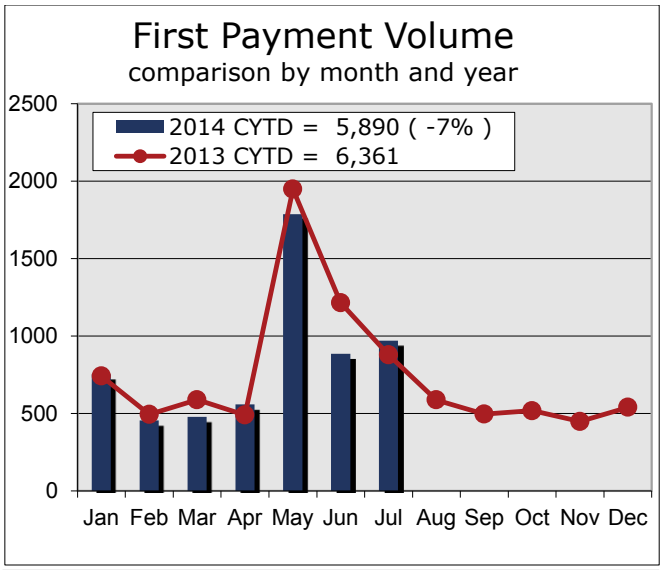
Timeliness (average turnaround time in business days)

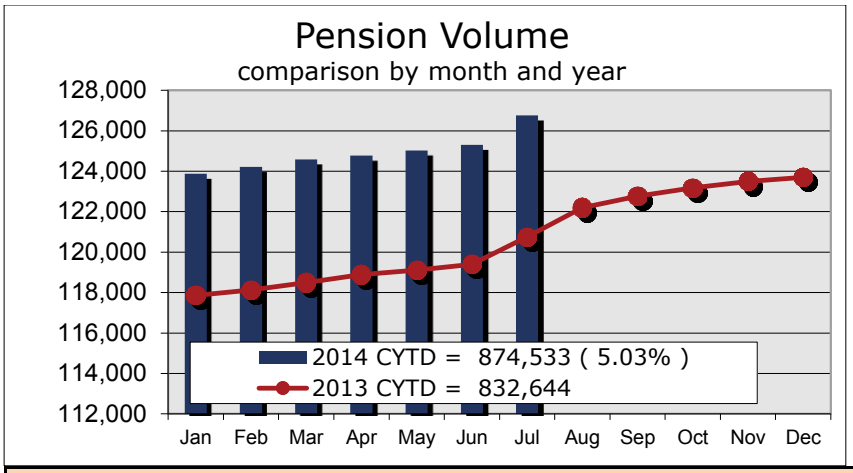
Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
3	2	2	1	1	2	2					





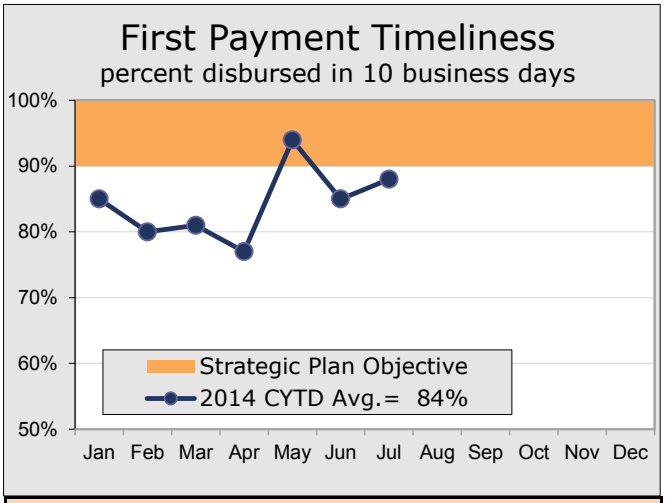
New Retirees





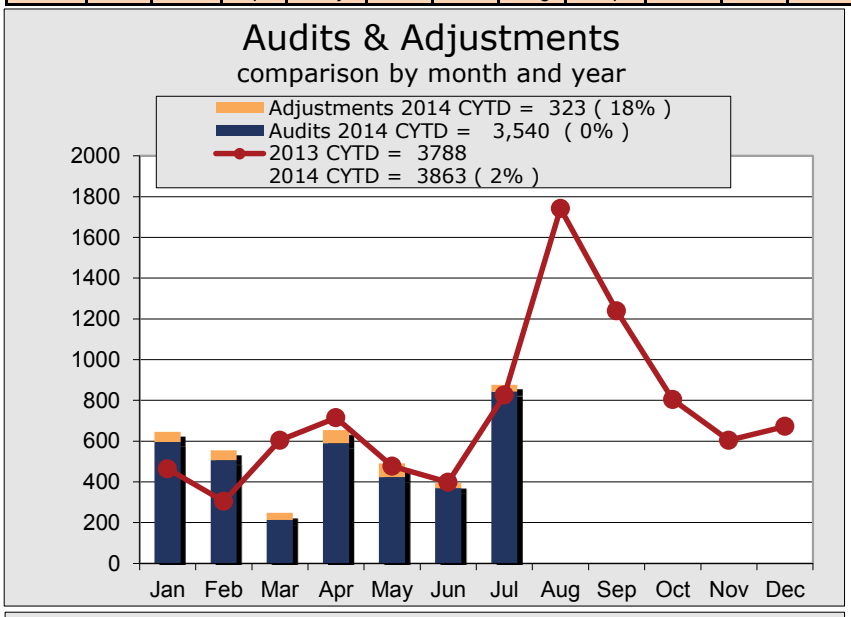
Pension Payment (percent disbursed by 1st of the month)

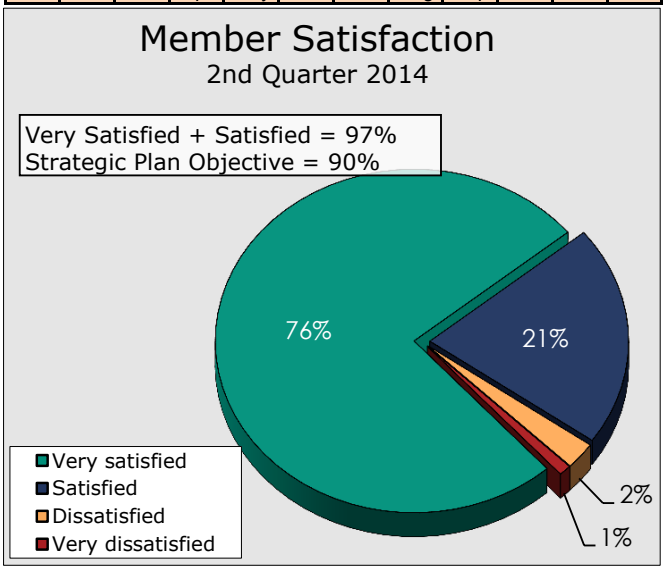
Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
100%	100%	100%	100%	99.9%	100%	100%					

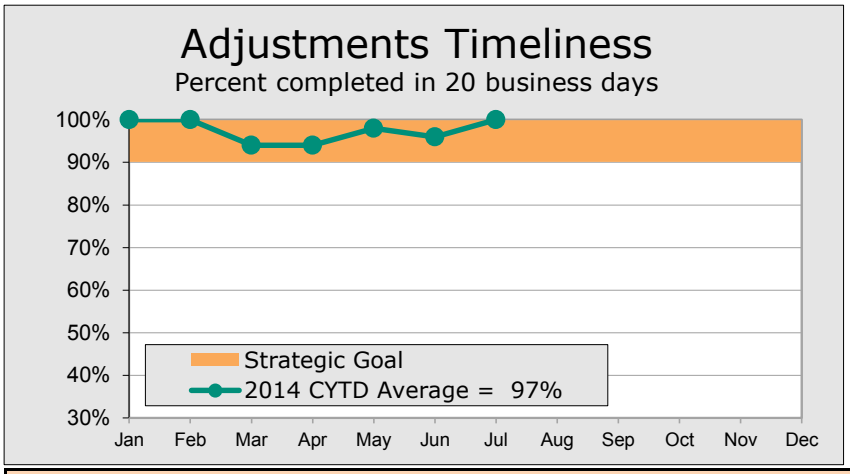


First Payment Timeliness (average turnaround time in days)

Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
6	8	7	9	3	6	5					



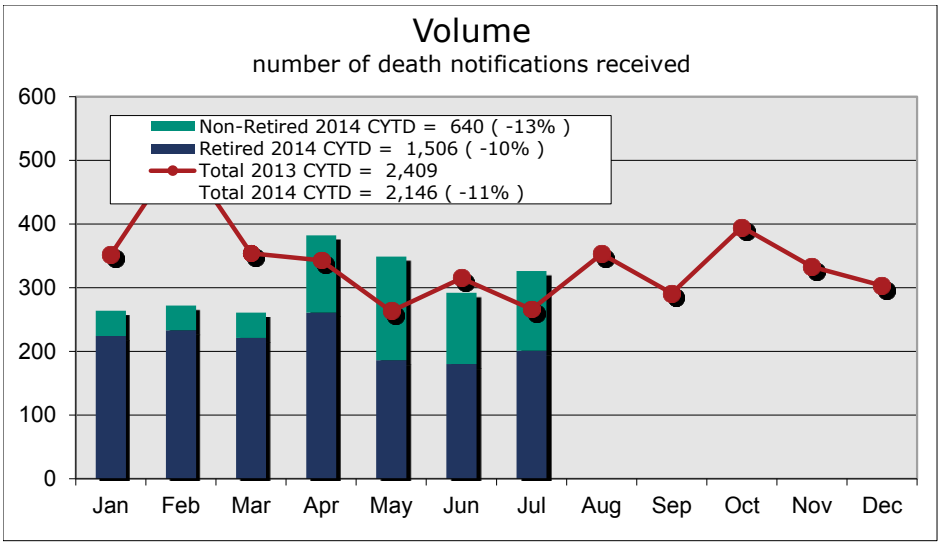


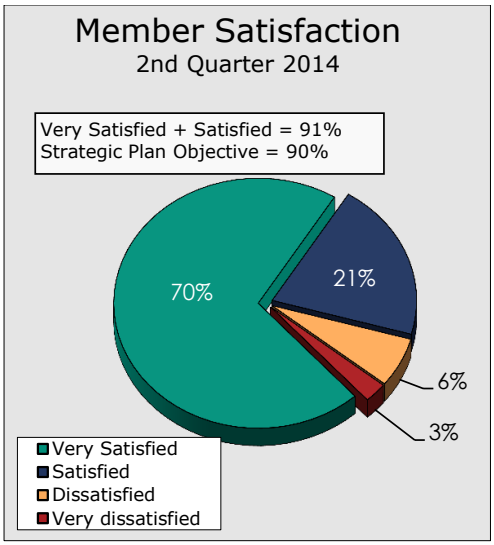


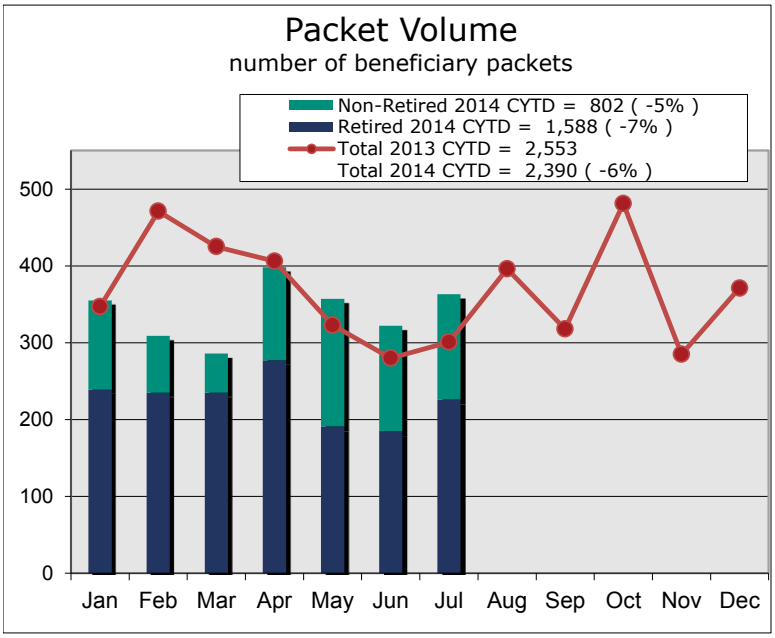
Adjusments Timeliness (average turnaround time in days)

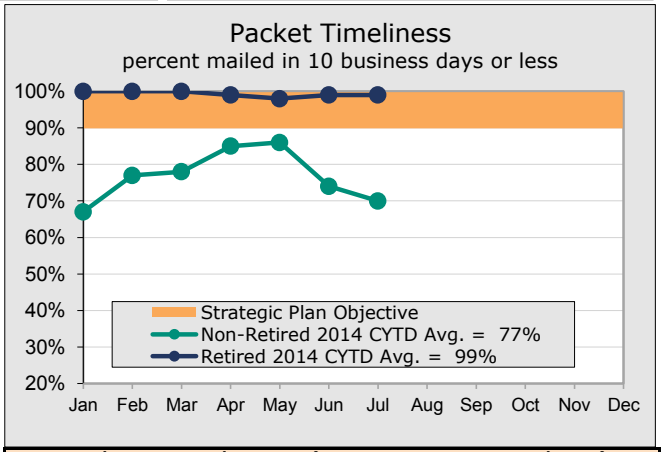
Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
1	2	3	6	5	4	4					

Survivor Benefits



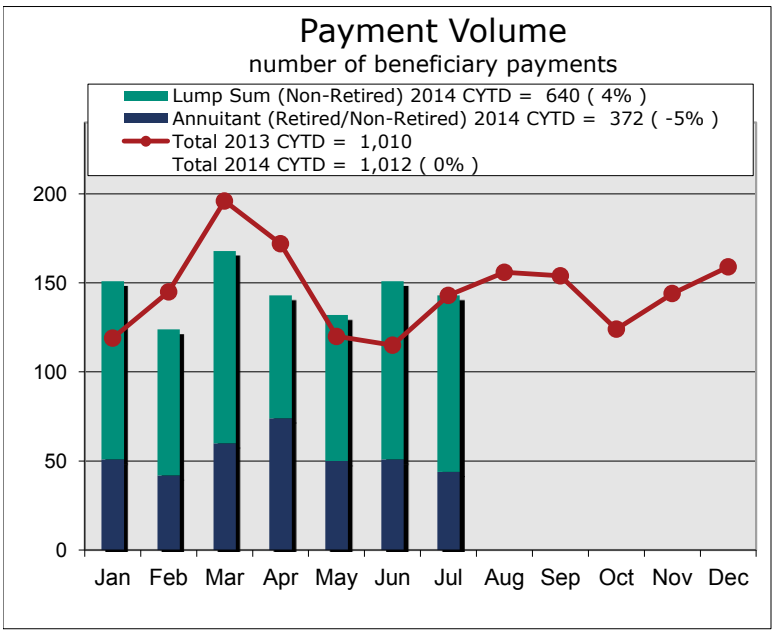


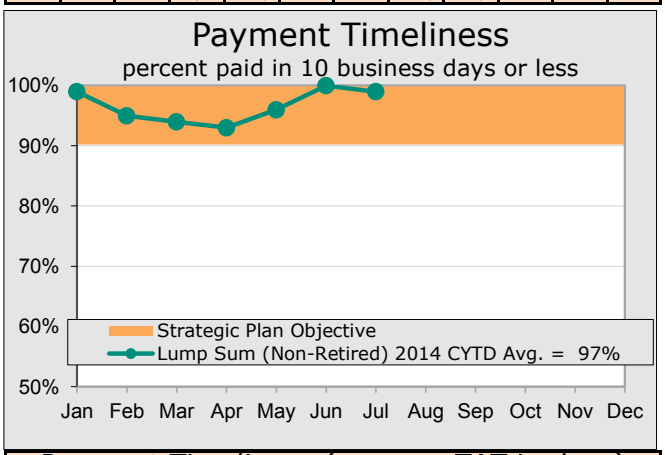




Packet Timeliness (average TAT in days)

	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
Retired	2	2	2	2	2	2	2					
Non Retired	19	8	17	9	6	8	18					

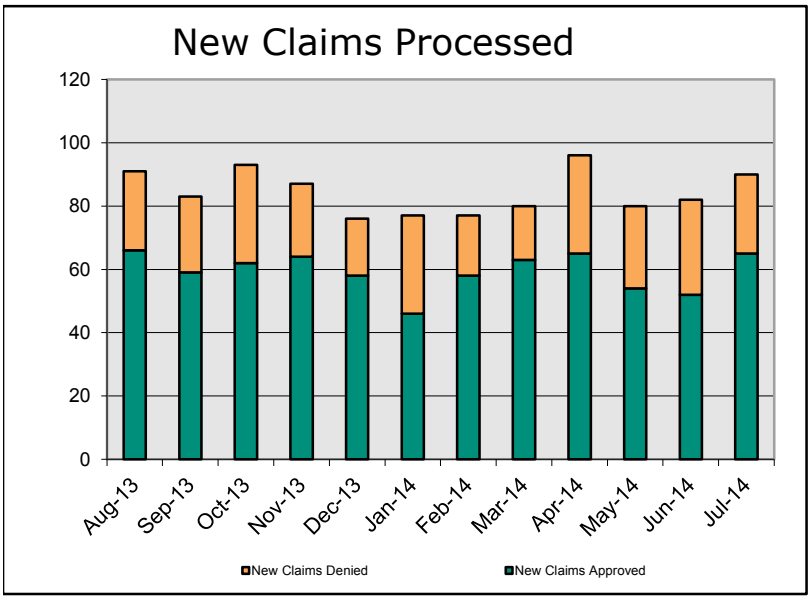


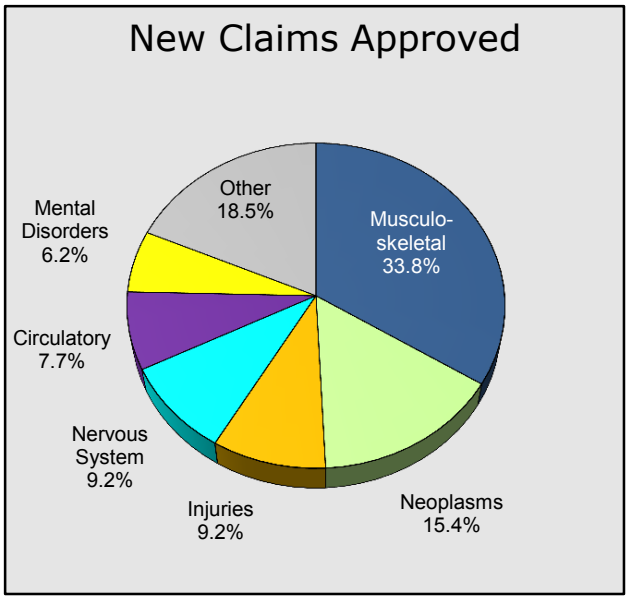


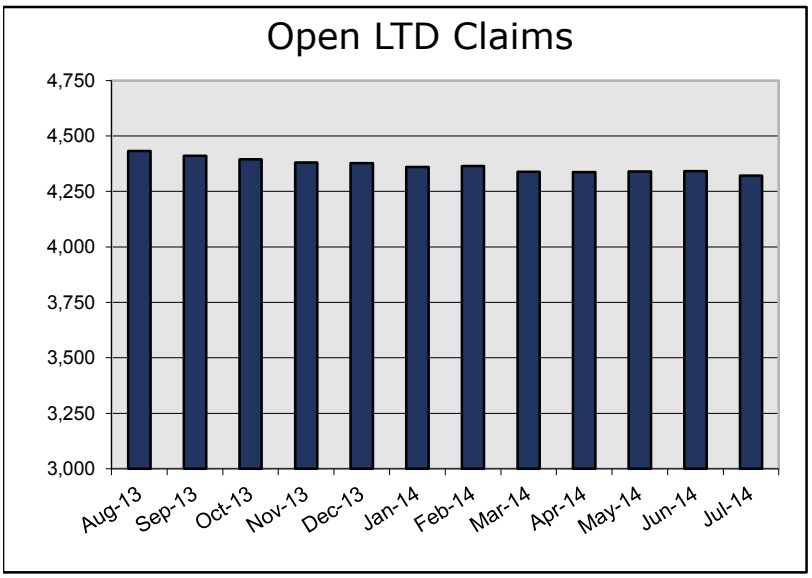
Payment Timeliness (average TAT in days)

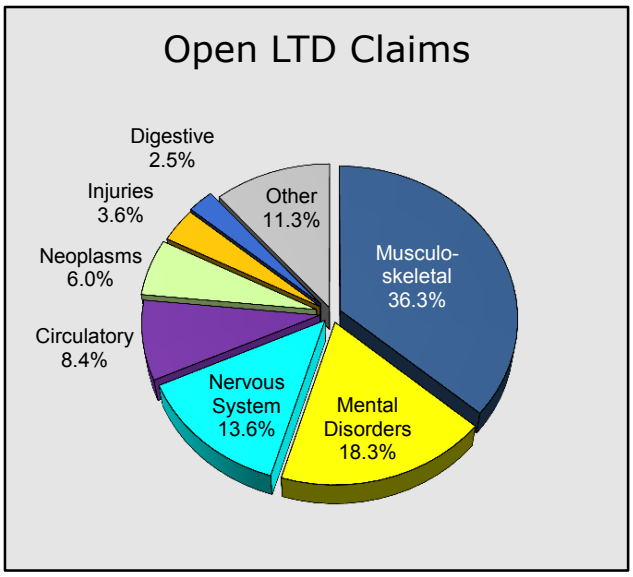
	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
Lump Sum (Non-Retired)	2	2	3	5	4	2	3					

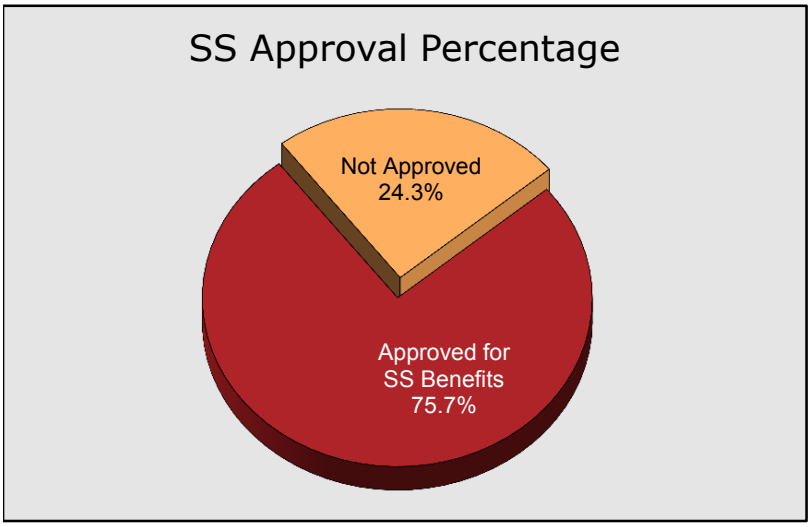
ASRS Disability Plans - Monthly Highlights
July 2014

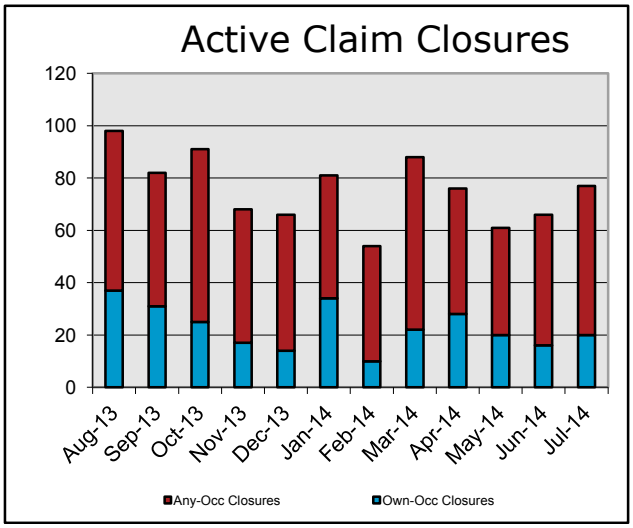












Prepared by Sedgwick

Arizona State Retirement System
FY 2015 Appropriated Budget
(as of August 31, 2014)

	APPROPRIATIONS FISCAL YEAR 2015	EXPENDED YTD	% EXPENDED
OPERATING BUDGET			
Personal Services	$ 12,757,000	$ 1,711,400	13.42%
Employee Related Expenses	$ 5,021,000	$ 697,200	13.89%
Professional & Outside Services	$ 1,079,300	$ 152,600	14.14%
Travel	$ 78,600	$ 6,000	7.63%
Other Operating Expenses	$ 2,684,800	$ 280,100	10.43%
Equipment	$ 389,500	$ 1,900	0.49%
Operating Subtotal	$ 22,010,200	$ 2,849,200	12.94%
OTHER APPROPRIATIONS			
Long Term Disability Administration	$ 2,800,000	$ 211,400	7.55%
Oracle Forms and Reports Modernization (Yr. 2)	$ 4,484,500	$ 142,800	3.18%
TOTAL FY 2014 Appropriated Funds	**$ 29,294,700**	**$ 3,203,400**	**10.94%**

	APPROPRIATIONS PRIOR YEAR	EXPENDED TO DATE	% EXPENDED
PRIOR YEAR LEGISLATIVE APPROPRIATIONS (NON-LAPSING)			
FY 2014 - Oracle Forms and Reports Modernization (Yr. 1)	$ 1,390,000	$ 1,173,300	84.41%
FY 2014 - HB 2562 - 401(a) and LTD for Ineligibles	$ 502,400	$ 32,100	6.39%
FY 2012 - SB 1614 - ASRS Contribution Rate	$ 600,000	$ 595,400	99.23%
FY 2011 - HB 2389 - ASRS Plan Design Changes	$ 1,341,700	$ 1,232,900	91.89%

	APPROPRIATIONS REMAIINING	EXPENDED YTD	% EXPENDED
PRIOR YEAR OPERATING APPROPRIATIONS (NON-LAPSING)			
FY 2011, ASRS Operating Budget & LTD Admin	$ 796,800	$ -	0.00%

Budget Summary for Fiscal Year 2015
As of August 31, 2014

Operating Budget
The operating budget information on the previous page is based on funding approved by the Board and the Legislature for fiscal year July 1, 2014 through June 30, 2015. These ASRS operating expenses are distinguished from other areas of ASRS spending authority: such as expenditures for investment management and benefits payments. Administrative salaries and employee benefits, supplies, equipment and ongoing operational costs associated with information and financial systems for the ASRS Board and ASRS employees are funded from the operating budget. Expenditures to date include four pay periods (15.4 % of the annual payrolls) of fiscal year 2015.

Other Appropriations
Other appropriations, which are considered part of the annual budget, represent other appropriations for specific programs or services authorized by the Board and the Legislature.

- **Long Term Disability Administration Fund**
  The amount appropriated for the administration costs of the LTD program. Expended year-to-date amounts reflect payments for services through 7/31/2014.

- **Oracle Forms and Reports Modernization**
  The amount appropriated (non-lapsing) for the second year of the software modernization project.

Non-Lapsing Appropriations for Legislative Initiatives

The amount appropriated by the Legislature for the implementation of:
- FY 2014 - Oracle Forms and Reports Modernization (Yr. 1)
- FY 2014 - HB 2562 - 401(a) and LTD for Ineligibles
- FY 2012 - SB 1614 - ASRS Contribution Rate
- FY 2011 - HB 2389 - ASRS Plan Design Changes
- FY 2011 - ASRS Operating Budget and LTD Admin
  - HB 2024, Section 93 modified the FY 2011 ASRS appropriations to be non-lapsing appropriations. The ASRS has the ability to utilize the unspent portion of these appropriations in ensuing fiscal years.

Explanation of Columns

1) The *Appropriations* column represents funds that have been approved by the Legislature and the ASRS Board for FY 2015, and includes prior year legislative appropriations.

2) The *Expended* column represents the expenditures to date.

3) The *% Expended* column identifies the portion of each line item that has been expended to date. This column is intended to be a guide to the rate of spending during the fiscal year.

ASRS FISCAL YEAR 2015, CONTINUOUSLY APPROPRIATED REPORT

(with summarized Appropriated Expenses)

DESCRIPTION	ESTIMATED ANNUAL EXPENSES (Projections updated quarterly)	EST. ANNUAL EXPENSES AS % OF AUM	EST. ANNUAL EXPENSES PER MEMBER
Custodial Banking, Security Lending and Master Cash STIF Fees	2,692,000		
Internal Investment Management (Salaries and Benefits)	1,500,000		
Public Markets			
External Investment Management Fees	77,298,000		
Transactional and Other Fees	3,865,000		
Private Markets			
Private Equity Management Fees	39,160,000		
Private Equity Performance Incentive and Other Fees	33,286,000		
Real Estate Management Fees	25,523,000		
Real Estate Performance Incentive and Other Fees	24,246,000		
Opportunistic Management Fees	15,000,000		
Opportunistic Performance Incentive and Other Fees	30,000,000		
Investment Management Expenses	**$ 252,570,000**	**0.730%**	**$ 465.74**
Investment Consulting Services	4,310,000		
Investment Related Legal Services	881,000		
Investment Electronic Information Services	1,714,000		
External Financial Consulting Services	75,000		
Investment Related Consulting, Legal and Information Services	**$ 6,980,000**	**0.020%**	**$ 12.87**
Rent	**1,505,000**	**0.004%**	**$ 2.78**
Actuarial Consulting Fees	**$ 1,225,000**	**0.004%**	**$ 2.26**
Retiree Payroll (Disbursement Administration)	**$ 2,215,500**	**0.006%**	**$ 4.09**
Total Continuously Appropriated Expenses	**$ 264,495,500**	**0.765%**	**$ 487.73**
***Total Current Year Appropriated Expenses**	**$ 29,794,700**	**0.086%**	**$ 54.94**
*Includes estimate prior year non-lapsing legislative appropriations of $500,000			
Total Expenses (Continuously Appropriated and Appropriated)	**$ 294,290,200**	**0.851%**	**$ 542.67**

ASRS Estimated Total Market Value of Assets Under Management (AUM) as of June 30, 2014	$ 34,584,497,000
ASRS Total Membership as of June 30, 2013	542,300

Continuously Appropriated Expenses for FY 2015
Estimated Expenditures

The Arizona State Retirement System (ASRS) investment and administrative costs are expended in accordance with Arizona Revised Statutes (A.R.S.), Title 38, Chapter 5, Article 2, Section 38-721. A.R.S. Section 38-721, Subsection C, lists specific expenditures that are continuously appropriated and are allowable in the amount deemed necessary by the Board.

These specific expenditures are described below:

1. **Investment management fees and related consulting fees necessary to meet the Board's investment objectives**

   Internal Investment management
   - ASRS Investment Management Division staff base salaries and employer portion of staff benefits and payroll taxes.

   External investment management fees
   - Public Markets
     - External investment management fees (public).
     - Transactional and other fees include foreign taxes and commissions on derivatives and other incidental costs.
   - Private Markets
     - Private Equity, Real Estate and Opportunistic investment management fees.
     - Performance incentive fees include performance incentives and carried interest, which are only paid upon successful performance of the manager after other return hurdles are met. Other fees are the ASRS proportional share of the transactional and operational cost of the underlying investment structure. Each of these fees is only paid if earned or incurred, and therefore may vary each quarter.

   Investment consulting fees
   - Includes investment related consulting and legal fees, electronic information services and subscriptions, custodial banking administrative fees, external auditing service fees.

2. **Rent**
   - Costs associated with rent as tenants for occupancy in the 3300 Tower in Phoenix and in the satellite office in Tucson.

3. **Actuarial consulting fees**
   - Costs associated with actuarial services related to plan design, administration and valuations.

4. **Retiree Payroll**
   - Costs associated with administering retiree pension benefits and disbursements, including third-party payroll administration fees, postage and benefit related consulting fees.

The report includes projected expenditures for the current fiscal year. Actual expenditures will be reported monthly and estimated annual expenses will be reviewed and adjusted quarterly.

ASRS Cost Savings Initiatives
Estimated as of June 30, 2013, in Millions of Dollars

	Action	Calendar Year Proposed	Calendar Year Adopted	Reduction in Total Contribution Rate*	Annual Reduction in Total Contribution Amount	Present Value of Savings on Closed Group Basis		Present Value of Savings on Open Group (No Growth**) Basis	
	Cost Savings Initiatives Contained in Current Valuation & Reflected in Lower Current Contribution Rate[1]					Past	Future	Past	Future
1	Change basis for service purchases from normal cost to actuarial present value (APV)	2003	2004	0.60%	$52.51	$667.40	$366.18	$667.40	$1,141.52
2	Correction of Permanent Benefit Increase (PBI) reserve	2003	2004	0.04%	$3.50	$44.30	$24.41	$44.30	$24.41
3	Decrease interest credited on withdrawn contributions from 8% to 4%	2004	2004	0.27%	$23.63	$349.95	$164.79	$349.95	$513.70
4	Decrease interest credited on withdrawn contributions from 4% to 2%	2012	2012	0.44%	$38.51	$40.58	$268.55	$40.58	$837.17
5	Redesign non-retired survivor benefits***	2013	2013	0.02%	$1.75	$1.84	$12.20	$1.84	$38.04
	sub-total, past and future			**1.37%**	**$119.90**	**$1,104.07**	**$836.13**	**$1,104.07**	**$2,554.84**
	sub-total, savings in current valuation			**1.37%**	**$119.90**	**$1,940.20**		**$3,658.91**	
	Cost Savings Initiatives Contained in Future Experience[2]					Past	Future	Past	Future
6	Long Term Disability (LTD) program design changes	2003	2004	0.02%	$1.75	$26.52	$12.20	$26.52	$38.04
7	Reimbursements for early retirement incentives	2003	2004	0.18%	$15.75	$233.08	$109.83	$233.08	$342.39
8	Increase interest rate on payroll deduction agreements (PDAs) from 0% to 8%	2004	2004	0.16%	$14.00	$207.62	$97.63	$207.62	$304.35
9	Pop-up restrictions	2005	2006	0.41%	$37.51	$415.67	$261.58	$415.67	$815.43
10	Rescinding modified Deferred Retirement Option Plan (mDROP)	2005	2006	0.50%	$43.72	$499.68	$304.89	$499.68	$950.43
11	LTD changes to offsets and pre-existing condition period	2005	2007	0.15%	$13.13	$128.03	$91.56	$128.03	$285.43
12	Recapture of unclaimed monies	2007	2008	0.01%	$0.56	$5.59	$3.91	$5.59	$12.17
13	Eliminate 80% cap on retirement benefits	2008	2009	0.04%	$3.50	$18.13	$24.41	$18.13	$76.09
14	Require 20/20 Rule for dual employment situations	2009	2009	0.04%	$3.25	$16.77	$22.66	$16.77	$70.65
15	Eliminate enhanced refunds****	2005	2010	0.16%	$14.07	$31.19	$98.12	$31.19	$305.87
16	Replace Rule of 80 with Rule of 85****	2006	2010	0.30%	$26.38	$58.47	$183.96	$58.47	$573.48
17	Replace 36-month average salary with 60-month average****	2006	2010	0.25%	$21.99	$48.73	$153.35	$48.73	$478.04
18	Apply Alternative Contribution Rate (ACR) to return-to-work****	2011	2011	0.25%	$21.99	$48.73	$153.35	$48.73	$478.04
19	Compute service purchases with 6% discount rate	2012	2012	0.08%	$7.08	$7.46	$49.37	$7.46	$153.91
20	Eliminate service purchases through partial lump sums	2012	2012	0.07%	$5.74	$6.05	$40.03	$6.05	$124.78
21	Eliminate Permanent Benefit Increases for future members	2013	2013	0.11%	$9.63	$10.15	$67.16	$10.15	$209.35
	Non-ASRS Initiatives					Past	Future	Past	Future
22	Replace Rule of 85 with 55&30 or 60&25****	2011	2011	0.00%	$0.60	$1.30	$4.18	$1.30	$13.04
23	Change pre-retirement death benefit to sum of employee and employer balances (ASRS Initiative)	2011	2011	0.04%	$3.22	$7.13	$22.45	$7.13	$70.00
24	Adopt 6-month delay in contributions from state members*****	2011	2011	-0.13%	$0.00		$0.00		$0.00
25	Prospective cost-shift of 6-month delay (not included in totals)*****	2011	2011	N/A	($11.63)	($25.48)	($81.08)	($25.48)	($252.74)
	sub-total, past and future			2.64%	$243.87	$1,770.30	$1,700.64	$1,770.30	$5,301.49
	sub-total, savings emerging in experience			**2.64%**	**$243.87**	**$3,470.94**		**$7,071.79**	
	GRAND TOTAL			**4.01%**	**$363.77**	**$5,411.14**		**$10,730.70**	

*These changes to the total contribution rate are multiplied by current payroll to give annual savings amounts in the next column. The annual savings amounts are then converted to the present values shown in the last two columns. These values include both accumulated past savings and estimated future savings. The savings from basing service purchases on actuarial present value is a reduction in future service liabilities. For the reduction in the interest crediting rate and the changes to LTD offsets and pre-existing condition period, the savings arise from reductions in future service and past service liabilities. Other Actuarial Valuation Basis savings are reductions to past service liabilities, i.e., capitalizations of the annual savings amounts over 30 years. Recapture of unclaimed monies will occur every year, but the numbers above are converted to a level annual savings amount.

** No growth scenario means that the projection maintains the size and age distribution characteristics of the current active population.

*** Redesign includes removal of $5,000 requirement to elect an annuity and elimination of the present value calculation.

**** Savings will increase each year, from zero to the open-group amount, as new hires become subject to the new provisions.

*****6-month delay will eliminate contributions for members with less than 6 months of service at the valuation date, but will transfer costs to other members and employers.
Cost will increase each year, from zero to the open-group amount as new hires are subject to the new rules.
Costs above give the combined effect of each bill -- if a bill changes three plan provisions, the cost of each reflects the adoption of the other two provisions.

Some of these changes will not be reflected in their entirety in the current valuation report, but will be captured in future reports as actuarial gains. For example, the Plan valuation contains no assumption on Payroll Deduction Agreements (PDAs), so the absence of interest charges in the past has been reflected as an actuarial loss. The change to 8% interest charges will end the losses and eventually reduce the total contribution rate by 0.16%.

Explanation of Cost Reduction Initiatives

[1]ASRS changed the basis for service purchases from the average normal cost rate to the actuarial present value rate. In this way, members who buy service pay the entire cost of their service purchases, and the purchases have no effect on contribution rates.
[1]ASRS reduced the rate of interest credited on members' account balances from 8% to 4% as of July 1, 2005.
[1]The 2001 addition to the Permanent Benefit Increase reserve was overstated in that year. ASRS corrected the reserve and thereby reduced the reserve committed to future Permanent Benefit Increase awards.

[2]Members can enter into Payroll Deduction Agreements to purchase service over time through payroll deduction. ASRS revised the method of calculating payments under these agreements to include 8% annual interest.
[2]ASRS members have been able to change the form of benefit they elect (e.g., joint & survivor to straight life) after they have begun to receive payments, and to do so as many times as they want whenever they want. By legislative action, this ability will be limited to a one-time election to change to a single life pension.
[2]Some ASRS employers have offered their employees incentives to retire early. These incentives can increase ASRS liabilities. By legislative action, future incentives will be funded by the employers who offer them.
[2]By legislative action, the modified Deferred Retirement Option Plan, which would have allowed members to earn as much as six years of service for three years of work, was rescinded.
[2]The legislature closed certain loopholes in the Long Term Disability program that allowed members to receive benefits for a longer period than intended.
[2]Legislation increased the offsets for Social Security income to 85% and extended the pre-existing condition period to six months.
[2]2008 Legislation exempts ASRS from unclaimed property procedures and allows ASRS to recapture assets abandoned after participant's age 73.5.
[2]2009 Legislation eliminated the 80% cap on benefits that had been in place since 2001.
[2]2009 Legislation requires a member to meet membership (20/20 Rule) in ASRS before contributing to a second employer, subject to a grandfathering clause.
[2]Upon withdrawal, members receive 25-100% of employer contributions depending on years of service. 2010 Legislation eliminates the return of employer contributions for members hired on or after July 1, 2011. Since 2010 changes are for prospective members only, we show open-group present values.
[2]Normal retirement can be achieved when a member's age + years of service equals 80 (points). 2010 Legislation requires members hired on or after July 1, 2011 to reach 85 points for normal
[2]Retirement benefits are calculated based on an average of the member's highest 36 months of salary in the 10 years prior to retirement. 2010 Legislation substitutes a 60 month average for members hired on or after July 1, 2011.

These rows represent legislative initiatives from non-ASRS sources.
2011 legislation replaced rule of 85 for members hired after 6/30/2011 with age 55 and 30 years of service or age 60 with 25 years of service.
2011 legislation changed the split of member/employer contributions from 50%/50% to 53%/47%, effective 7/1/2011
2011 legislation instituted a 6-month delay in contributions from or on behalf of members with less than 6 months of service, effective 7/1/2011.

Arizona State Retirement System
Staffing Report
(August 31, 2014)

ASRS by Division	247 Full Time Equivalents (FTEs)	New Hires	New Exits	Vacancies	Vacancy Rate
Administrative Services Division (ASD)	16	0.0	0	2.5	15.63%
Director's Office (DIR)	11	0	0	2.0	18.18%
External Affairs (EAD)	11	0	0	1.0	9.09%
Financial Services (FSD)	62	1.0	0	2.5	4.03%
Technology Services (TSD)	48	0	0	5.0	10.42%
Internal Audit (IAD)	5	0	0	0	0.00%
Investment Management (IMD)	11	0	0.0	2.0	18.18%
Member Services (MSD)	83	3.0	0	1.0	1.20%
	247	**4.0**	**0.0**	**16.0**	**6.48%**

Turnover	August 2014 New Hires	August 2014 Exits	Total Exits (Last 12 Months)	Annualized Turnover %
	4.0	0	28	12.09%

ASD – Management Analyst: Recruitment complete, start date 09/29/2014
DIR – Strategic Planning Analyst: Recruitment complete, start date 09/15/2014
DIR – Administrative Project Analysts (2): Currently recruiting for two positions
EAD – Rules Writer: Recruitment complete, start date 09/15/2014
IMD – Assistant Portfolio Manager: Currently recruiting
TSD – Build/Release Engineer: Currently recruiting
TSD – Help Desk Analyst: Currently recruiting
TSD – Software Engineer (2): Currently recruiting for two positions
TSD – Project Management/Business Analyst: Currently recruiting

Impact of Staffing (Vacancies, Recruitments, Internal Transfers) on ASRS Operational Performance

Agency Divisions	Services and Functions	Staffing Impact	Comments
Impact of Staffing on ASRS Operations:	**Green = Normal risk**	**Yellow = Greater than normal risk**	**Red = Negative impact**
MSD	MAC (Call Center)	● ○ ○	
MSD	One-on-one Counseling (Appointments/Walk-ins)	● ○ ○	
MSD	E-mail and Written Correspondence	● ○ ○	
MSD	Outreach Education	● ○ ○	
MSD	Tucson: Appointments/Walk-ins/Outreach	● ○ ○	
MSD	Benefit Estimates	● ○ ○	
FSD	Monthly Pension Payroll Processing	● ○ ○	
FSD	New Retiree Processing	○ ● ○	During August 2014, New Retiree Processing did not meet their strategic objectives. Three experienced FTEs are on extended leave and three new hires are in training. New Retiree Processing will return to normal risk once training has been completed and all FTEs have returned.
MSD	New Retiree Processing	● ○ ○	
FSD	Survivor Benefit Processing	● ○ ○	
MSD	Survivor Benefit Processing	● ○ ○	

Impact of Staffing (Vacancies, Recruitments, Internal Transfers) on ASRS Operational Performance

Agency Divisions	Services and Functions	Staffing Impact	Comments
Impact of Staffing on ASRS Operations:	**Green = Normal risk**	**Yellow = Greater than normal risk**	**Red = Negative impact**
MSD	Refund Processing	● ○ ○	
MSD/FSD	Service Purchase Processing	● ○ ○	
FSD	Records Management (data processing/imaging)	● ○ ○	
IA	Internal Audit	● ○ ○	
EA	Employer Relations	● ○ ○	
EA	Rule Writing	○ ● ○	Limited rule writing functions have been carried out by ASRS staff and through the procurement of outside professional services. Executive management has prioritized recently several rulemakings that will impact the ability of limited and external resources to accomplish objectives in a timely manner. The Rules Writer position has been filled and will start September 2014.
EA	Legislative Relations	● ○ ○	
EA	Communications/Media Relations	● ○ ○	
EA	Web Services	● ○ ○	
EA	Health Insurance/LTD Benefits Administration and Communication	● ○ ○	

Impact of Staffing (Vacancies, Recruitments, Internal Transfers) on ASRS Operational Performance

Agency Divisions	Services and Functions	Staffing Impact	Comments
Impact of Staffing on ASRS Operations:	**Green = Normal risk**	**Yellow = Greater than normal risk**	**Red = Negative impact**
MSD	LTD Member Contacts, Benefit Processing	● ○ ○	
FSD	Health Insurance Member Contacts, Benefit Processing Transfer Processing	● ○ ○	
MSD	Health Insurance	● ○ ○	
FSD	Transfer Processing	● ○ ○	
FSD	General Accounting	● ○ ○	
FSD	Contribution Collections and Posting	● ○ ○	
TSD	Network Support	○ ● ○	The addition of the security professional has helped in our security activities while demonstrating the need for more resources to continue to mature the security program. In addition, our current daily tasks continue to consume our Tier I and Tier II resources making it difficult to manage user requests and complete the system upgrades. Network Support is currently recruiting for a Build/Release Engineer and a Help Desk Analyst.
TSD	Business Applications Development and Support	● ○ ○	The planned workload requires a complement of 44 total resources (31 FTEs and 13 external resources). Our current complement of resources is 43 (28 FTEs and 15 external resources). In August 2014, one external resource was added. Currently recruiting for three FTEs, two Software Engineers and one Project Manager/Business Analyst.

Impact of Staffing (Vacancies, Recruitments, Internal Transfers) on ASRS Operational Performance

Agency Divisions	Services and Functions	Staffing Impact	Comments
Impact of Staffing on ASRS Operations:	**Green = Normal risk**	**Yellow = Greater than normal risk**	**Red = Negative impact**
IMD	Investment Management	● ○ ○	
DIR	Board/Executive Staff Support	○ ● ○	For the months of June, July, and August 2014, the management support staff struggled to meet business needs and strategic objectives. A temporary resource has been added to assist the team until staffing levels return to normal. Recruitment for two positions started in August 2014.
DIR	Strategic Planning/Analysis	○ ● ○	Enhancements to the agency's enterprise wide risk management program implemented as a result of an internal audit, coupled with an increasing need throughout the agency for analysis, project management, and survey development/administration, are impacting the current resources' ability to develop, monitor, and report on strategic priorities, goals, and objectives. Recruitment for one position has been completed and will start September 2014.
ASD	Human Resources	● ○ ○	
ASD	Training and Development	● ○ ○	
ASD	Contracts and Procurement	● ○ ○	
ASD	Facilities Management	● ○ ○	
ASD	Budget Administration	● ○ ○	

ARIZONA STATE RETIREMENT SYSTEM
COMBINED STATEMENT OF CHANGES IN TOTAL FUND CASH
FOR THE MONTH ENDED AUGUST 31, 2014

	Retirement Plan Fund	Retirement System Fund	Health Benefit Supplement Fund	Long-Term Disability Fund	Current Period August	Fiscal 2015 YTD August	Fiscal 2014 YTD August
ADDITIONS							
Contributions							
Member contributions	$ 77,015,527	$ 3,058	$ -	$ 805,924	$ 77,824,509	$ 140,989,925	$ 139,622,625
Employer contributions	72,648,160	3,058	3,949,355	805,937	77,406,509	141,157,337	140,183,500
Alternative contributions (ACR)	1,650,551	-	35,482	10,917	1,696,950	3,062,999	2,863,681
Transfers from other plans	-	-	-	-	-	46,317	85,672
Purchased service	1,656,593	-	-	-	1,656,593	5,116,087	7,182,465
TOTAL CONTRIBUTIONS	152,970,831	6,116	3,984,836	1,622,778	158,584,561	290,372,666	289,937,944
DEDUCTIONS							
Investment management fees	8,572,806	-	-	72,399	8,645,205	17,455,271	15,339,446
Retirement and disability benefits	219,154,532	3,348,733	8,941,379	5,232,681	236,677,325	475,289,831	458,886,824
Survivor benefits	3,557,984	50	-	-	3,558,035	7,120,073	5,252,956
Refunds to withdrawing members, including interest	24,929,826	-	-	-	24,929,826	55,436,762	55,939,129
Administrative expenses	1,905,878	-	-	211,366	2,117,244	5,119,206	5,078,121
Transfers to other plans	96,939	-	-	-	96,939	183,764	226,559
Other	454	-	-	-	454	4,229	12,284
TOTAL DEDUCTIONS	258,218,421	3,348,783	8,941,379	5,516,446	276,025,029	560,609,137	540,735,319
INCREASE (DECREASE)	(105,247,590)	(3,342,666)	(4,956,543)	(3,893,669)	(117,440,468)	(270,236,471)	(250,797,375)
From securities lending activities:							
Security loan program	117,557	-	-	-	117,557	263,612	610,707
Security loan interest expense / (Rebate)	(28,281)	-	-	-	(28,281)	(60,140)	42,772
Net income from securities lending activities	145,838	-	-	-	145,838	323,752	567,934
Capital Calls / (Distributions)							
Opportunistic Debt	10,029,450	95,146	457,169	-	10,581,765	67,361,361	4,126,028
Opportunistic Equity	(15,085,966)	(234,193)	(679,375)	-	(15,999,534)	(17,659,665)	8,335,198
Private Debt	46,412,972	547,708	2,043,823	-	49,004,504	41,300,557	37,452,562
Private Equity	34,357,381	-	1,529,306	-	35,886,687	57,521,939	(16,108,919)
Real Estate	50,825,457	582,823	2,259,914	-	53,668,195	43,643,288	(48,459,745)
TOTAL Capital Calls	126,539,294	991,485	5,610,837	-	133,141,616	192,167,481	(14,654,876)
NET INCREASE (DECREASE)	$ (231,641,046)	$ (4,334,151)	$ (10,567,380)	$ (3,893,669)	$ (250,436,245)	$ (462,080,200)	$ (235,574,565)

OUTSTANDING ASRS APPEALS

Date Received	Appeals	Issues/Questions Regarding	Status/Comments
01/23/2012	Arizona State University	Appellant is disputing an ASRS employer termination incentive program invoice.	ASU appealed to the Court of Appeals 02/12/2014. Court of Appeals case number is CA-CV 14-0083. Briefing completed 09/03/2014.
06/21/2012	Bonnie Pendergast	Appellant is seeking to purchase 9.89 service years.	OAH decision affirming ASRS staff decision; affirmed by ASRS Board 09/21/2012; MCSC appeal Case No. LC2012-000596 ASRS Board decision on 02/12/2013. Overturned. ASRS filed appeal to the Court of Appeals on 03/12/2013. Decision Affirming Superior Court. ASRS filed Petition for Review.
04/22/2013	Luz Academy of Tucson & Adalberto M. Guerrero Middle School	Appellant is disputing an ASRS audit that designated four individuals as ineligible for ASRS membership.	OAH decision partially affirming ASRS staff decision; accepted by ASRS Board on 09/27/2013. Luz Academy appealed to Superior Court. MCSC Case No. LC2013-000572-001DT. Oral Argument held August 4, 2014. **Superior Court affirmed final decision of the ASRS Board.**
02/4/2014	Alice Schireman	Appellant is disputing that there are no ASRS survivor benefits remaining on ASRS member, Alvin Schireman's account.	OAH hearing held on 04/10/2014. Recommended decision on 06/27/2014 agenda for Board action. Motion for Reconsideration received 07/31/2014. **Denied ASRS Board motion 08/22/2014.**
07/01/2014	Lenny Tasa-Bennett	Disputing the denial of his LTD benefits.	OAH hearing held on 08/18/2014.
07/08/2014	Paula C. Winter	Disputing the denial of her LTD benefits.	**OAH hearing cancelled. Settlement reached.**
07/14/2014	Richard K. Hillis & Sharon Di Giacinto	Disputing the ASRS determination that term DRO is unacceptable.	**OAH hearing re-scheduled for 10/22/2014.**

- Please note: updates have been bolded.

ARIZONA STATE RETIREMENT SYSTEM

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Paul Matson
Director

MEMORANDUM

TO: Mr. Tom Manos, Chair, Arizona State Retirement System (ASRS) Board

FROM: Mr. Paul Matson, Director

DATE: September 15, 2014

RE: Delinquent Employers

As of September 15, 2014, the following employers have failed to remit contributions by a date certain. These employers have received a letter advising them that the ASRS will initiate collection procedures unless they contact us within five days:

Starshine Academy	$ 15,000*
Destiny School	$ 23,000*
American Heritage Academy	$ 8,000*
White Mt Summer Home Water Improv	$ 2,000*
Harquahala Valley Irrig District	$ 10,000*
NO AZ Academy for Career Development	$ 30,000*
Grand Canyon USD	$ 60,000*
Ajo USD	$ 27,300*
Westwind Academy	$ 14,000*
Caurus Academy	$ 4,000*
Park View Middle School	$ 4,000*
Town of Miami	$ 13,000*
Sonoran Science Academy-Broadway	$ 6,000*
Sonoran Science Academy-Tucson	$ 14,000*
Sonoran Science Academy-Phoenix	$ 4,000*
Total	$234,300*

*Estimated amount

Additionally, the following employer has filed for Chapter 11 Bankruptcy Protection and are delinquent in their ASRS contributions:

Luz Academy of Tucson	$ 18,600
Total	**$252.900.***