



TRS Board of Trustees Meeting

March 26 – 27, 2015

**TEACHER RETIREMENT SYSTEM OF TEXAS MEETING
BOARD OF TRUSTEES**

AGENDA

March 26, 2015 – 8:00 a.m.

March 27, 2015 – 8:00 a.m. (If needed)

TRS East Building, 5th Floor, Boardroom

*The March 26-27 meeting of the TRS Board of Trustees will be held by telephone conference call as authorized under Texas Government Code Section 551.130. The Board intends to have a quorum physically present at the following location: **1000 Red River Austin, Texas 78701 in the TRS East Building, 5th Floor, Boardroom.***

NOTE: The Board may take up any item posted on the agenda during its meeting on Thursday, March 26, or the following day beginning at the time and place specified on this agenda. However, the Board expects to conclude its March 2015 meeting on Thursday March 26, 2015.

The open portions of the March 26-27, 2015, Board meetings are being broadcast over the Internet. Access to the Internet broadcast of the Board meeting is provided on TRS' website at www.trs.state.tx.us.

1. Call roll of Board members. *[Estimated time 8:00 - 8:15]*
2. Consider the following Board administrative matters– David Kelly: *[Estimated time 8:00 – 8:15]*
 - A. Approval of the February 11-13, 2015 meeting minutes.
 - B. Setting, rescheduling, or canceling future Board meetings.
3. Provide opportunity for public comments – David Kelly. *[Estimated time 8:15 – 8:30]*
4. Discuss and consider the following investment matters: *[Estimated time 8:30 – 11:30]*
 - A. Quarterly Public Strategic Partnership Update – Grant Birdwell.
 - B. Consider authorizing staff to negotiate and execute agreements concerning the following additional or new commitments relating to the Private Markets Strategic Partnership Network, including conferring with TRS staff, consultants or legal counsel or with a third party about an investment or potential investment in a private investment fund or the purchase, holding, or disposal of restricted securities by TRS or a private investment fund – Britt Harris and Courtney Villalta; Leon Black and James Zelter, Apollo; George Roberts and Scott Nuttall, KKR:
 - i. Review of current Private Strategic Partnership investments.

- ii. Additional commitments to the Private Markets Strategic Partnerships' investments in two existing master limited partnership funds of funds.
 - iii. New commitments to up to two new master limited partnership funds of funds for investments in potential tactical opportunities to be managed by affiliates of the general partners of the Private Markets Strategic Partnerships.
 - C. Performance Review: Fourth Quarter 2014 – Steve Voss and Brady O’Connell, Hewitt EnnisKnupp.
5. Review and discuss the Executive Director's report on the following matters – Brian Guthrie: *[Estimated time 11:30 - 12:00]*
- A. The most recent actuarial valuation of the TRS Pension Trust Fund.
 - B. Administrative operational matters, including updates on financial, audit, legal, staff services, board administration activities, special projects, long-term space planning, and strategic planning.
 - C. Board operational matters, including a review of draft agendas for upcoming meetings.

NOTE: *The Board meeting likely will recess after the last item above to conduct committee meetings and resume Thursday afternoon to take up the items listed below.*

- 6. Review the report of the Investment Management Committee on its March 26, 2015 meeting – Todd Barth. *[Estimated time 3:00 - 3:15]*
- 7. Review the report of the Risk Management Committee on its March 26, 2015 meeting – Karen Charleston. *[Estimated time 3:00 - 3:15]*
- 8. Review the report of the Policy Committee on its March 26, 2015 meeting, including adoption of a TRS Litigation Policy – Joe Colonna. *[Estimated time 3:00 - 3:15]*
- 9. Review the report of the Audit Committee on its March 26, 2015 meeting – Christopher Moss. *[Estimated time 3:00 – 3:15]*
- 10. Review the Deputy Director’s Report, including matters related to administrative, financial, and staff services operations – Ken Welch *[Estimated time 3:15 – 3:30]*
- 11. Receive a presentation from the TEAM Program Independent Program Assessment (IPA) Vendor – Michael Johnson, Bridgepoint Consulting. *[Estimated time 3:30 – 4:15]*
- 12. Receive a quarterly review of the TEAM Program, including a discussion of data management and an update on the Line of Business Project. – Adam Fambrough; Barbie Pearson; David Cook; and Jay Masci, Provaliant. *[Estimated time 4:15 – 5:15]*

13. Mid-year budget review for FY 2015 – Don Green. *[Estimated time 5:15 – 5:30]*
14. Review the report of the Chief Benefit Officer and consider the following related matters – Tom Guerin: *[Estimated time 5:30 – 5:45]*
 - A. Approve members qualified for retirement.
 - B. Approve minutes of Medical Board meetings.
15. Review the report of the General Counsel on pending and contemplated litigation, including updates on litigation involving benefit-program contributions, retirement benefits, health-benefit programs, and open records – Carolina de Onís. *[Only if needed]*
16. Consider personnel matters, including the appointment, employment, evaluation, compensation, performance, duties, discipline, or dismissal of the Executive Director, Chief Investment Officer, or Chief Audit Executive – David Kelly.
17. Consult with the Board's attorney(s) in Executive Session on any item listed above on this meeting agenda as authorized by Section 551.071 of the Texas Open Meetings Act (Chapter 551 of the Texas Government Code) – David Kelly.

Tab 2 A

Minutes of the Board of Trustees

February 11-13, 2015

The Board of Trustees of the Teacher Retirement System of Texas met on February 11, 2015 in the boardroom located on the fifth floor of the TRS East Building offices at 1000 Red River Street, Austin, Texas. The following board members were present:

David Kelly, Chair
Nanette Sissney, Vice-Chair
Todd Barth
Karen Charleston
Joe Colonna
David Corpus
Christopher Moss
Anita Palmer
Dolores Ramirez

Others present:

Brian Guthrie, TRS	Bob Jordan, TRS
Ken Welch, TRS	Dan Junell, TRS
Carolina de Onís, TRS	Eric Lang, TRS
Amy Barrett, TRS	Lynn Lau, TRS
Janet Bray, TRS	Ralph Linn, TRS
Don Green, TRS	Beckie Smith, TRS
Howard Goldman, TRS	Heather Traeger, TRS
T. Britton Harris IV, TRS	Courtney Villalta, TRS
Jerry Albright, TRS	Mike Pia, TRS
Amy Barrett, TRS	Yimei Zhao, TRS
Janet Bray, TRS	Sharon Toalson, TRS
Howard Goldman, TRS	Dr. Keith Brown, Investment Advisor
Jase Auby, TRS	Keith Johnson, Reinhart Boerner Van Deuren
Dr. Mohan Balachandran, TRS	Steve Huff, Reinhart Boerner Van Deuren
Ronnie Bounds, TRS	Steve Voss, Hewitt EnnisKnupp
Chi Chai, TRS	Brady O'Connell, Hewitt EnnisKnupp
Chris Cutler, TRS	Philip Mullins
John Dobrich, TRS	Ray Dalio, Bridgewater
Tom Guerin, TRS	R.T. Dukes, Wood Mackenzie
Jamie Pierce, TRS	Doug Kimmelman, Energy Capital
Darryl Gaona, TRS	Becca Slezak, Aetna
Cheryl Hines, TRS	Joni Lozano, Caremark
Andy Cronin, TRS	Maggie Parker, Aetna
Krista Kerr, TRS	David Myer, Accounting Securities

Mr. Kelly called the meeting to order at 10:15 a.m.

1. Call roll of Board members.

Ms. Lau called the roll. A quorum was present. Mr. Colonna arrived shortly after the roll call.

2. Consider the following Board administrative matters – David Kelly:

A. Approval of the November 20-21, 2014 meeting minutes.

On a motion by Ms. Palmer, seconded by Ms. Sissney, the board unanimously adopted the minutes of the November 20-21, 2014 meeting, as presented.

B. Excusing Board member absences from the November 20-21, 2014 Board meeting.

On a motion by Mr. Barth, seconded by Ms. Charleston, the board unanimously excused the absences of Mr. Kelly and Ms. Ramirez from the November 20-21, 2014 meeting.

C. Setting, rescheduling, or canceling future Board meetings.

The board did not take up agenda item 2.C.

3. Provide opportunity for public comment – David Kelly.

Mr. Kelly called for public comment. No public comment was received.

4. Review and discuss the Executive Director's report on the following matters – Ken Welch:

A. Receive an overview of the Board meeting agenda and theme.

Mr. Welch noted that Mr. Guthrie was presenting before the House Appropriations Committee and would be joining the board meeting upon conclusion of his testimony. Mr. Welch provided an overview of the February Board Meeting agenda.

5. Review the reports on the Historically Underutilized Business (HUB) Program, and consider related goals, as appropriate, for fiscal year 2015 – John Dobrich and Darryl Gaona.

Mr. Gaona provided a report concerning HUB program performance. He reported that HUB utilization increased 4.31 percent from 12.77 percent in FY 2013 to 17.08 percent in FY 2014, which was 4.5 percent higher than the state's overall HUB utilization. He noted that consultant and outside counsel services continued to be a challenge for the HUB utilization program because of the specialized nature of those services. He stated that because both the special trade and commodity purchase categories had exceeded their goals in FY 2014, the proposed FY 2015 goals for those two categories were raised to 35 percent and 45 percent, respectively.

Mr. Gaona highlighted TRS' future initiatives to promote and increase HUB opportunities. In response to a question from Mr. Kelly concerning the volatility of HUB utilization over the years, Mr. Gaona stated that HUB utilization and reporting were based on the dollar amount spent. Therefore, large-scale projects such as TEAM could affect the HUB percentage dramatically. He noted that whether TRS could find a HUB vendor for large-scale contracts would be based purely on chance. Per Mr. Kelly's request, staff would provide data on the number of HUB participants

in addition to the dollar amount spent in future reports. Responding to a question from Mr. Barth, Mr. Gaona stated that the Comptroller maintains the centralized master bidders list and all agencies are required to use the list as a primary source for notifying and selecting vendors in Texas. He confirmed for Ms. Sissney that there was no minimum requirement for agencies to meet their HUB goals. He also clarified for Ms. Charleston that all procurements over \$100,000, for which the prime contractor would subcontract with other vendors, require the prime contractor to submit a HUB Subcontracting Plan.

On a motion by Mr. Corpus, seconded by Ms. Charleston, the board unanimously adopted the following resolution to approve the proposed HUB goals for FY 2015:

Whereas, TRS staff met on January 20, 2015 and reviewed the report of the Texas Comptroller of Public Accounts on TRS HUB expenditures for fiscal year 2014 and discussed the 2014 HUB Program Annual Status Report to be presented to the TRS Board of Trustees (Board);

Whereas, TRS staff developed proposed HUB goals for fiscal year 2015 for the Board to consider; and

Whereas, The Board has received and discussed the HUB expenditure reports, and the Board desires to adopt TRS' HUB goals for fiscal year 2015; now, therefore, be it

Resolved, That the Board hereby adopts the following HUB expenditure goals for fiscal year 2015:

Category	TRS FY14 Goals	TRS FY14 Actual	TRS FY15 Goals
Special Trade	25%	41.95%	35%
Professional Services	5%	4.69%	5%
Other Services	15%	10.59%	15%
Commodity Purchases	35%	40.43%	45%

The board took up the rest of agenda item 4.

4. Review and discuss the Executive Director's report on the following matters – Brian Guthrie:

B. Discuss TRS' organizational structure, including a discussion of agency accomplishments and goals.

Mr. Guthrie provided a summary of agency accomplishments and goals. He provided an update on the development of the strategic plan and the status of the pension fund as of August 31, 2014, including investment returns, pension liabilities and contributions, membership growth, and legislative impact on the pension fund. He discussed the following agency goals:

- Sustain a financially sound pension trust fund;
- Build and maintain strong, customer-focused relationships;
- Facilitate access to competitive, reliable health care benefits for our members;
- Attract, retain, and develop a highly competent staff; and
- Meaningful and substantive inclusion of historically underutilized businesses (HUBs).

D. Receive the Board training calendar.

Mr. Guthrie provided a list of upcoming training opportunities for trustees.

C. Preview draft agendas for upcoming Board meetings.

Mr. Guthrie provided a summary of agenda items for upcoming board meetings.

E. Discuss and receive information on retirement plan benefits, investment activity and operations, health-benefit programs and operations, and administrative operations, including financial, audit, legal, and staff services and special projects.

The board did not take up agenda item 4E.

After a brief recess at 11:55 a.m., the meeting reconvened at 12:15 p.m.

6. Discuss the following investment management items:

A. Receive a presentation on and discuss historical economic cycles and investing – Brady O’Connell, Hewitt EnnisKnupp; and Dr. Keith Brown.

Mr. O’Connell of Hewitt EnnisKnupp and Dr. Brown provided a presentation on the impact of economic regimes on the performance of different asset classes and strategic asset allocation.

After a recess at 1:23 p.m., the meeting reconvened at 1:40 p.m.

B. Engage in a conversation about the evolving world and the economic machines behind it – Ray Dalio, Bridgewater and Britt Harris.

Mr. Dalio of Bridgewater and Mr. Harris discussed business, investment and economic principles. Mr. Dalio also discussed the outlook of the Chinese economy and the oil market.

The board took up agenda item 6.D. before 6.C.

D. Receive a presentation on and discuss the energy and natural resources markets – R.T. Dukes, Wood Mackenzie; Doug Kimmelman, Energy Capital; and Britt Harris.

Mr. Dukes of Wood Mackenzie, Mr. Kimmelman of Energy Capital, and Mr. Harris provided a presentation on the energy and natural resources markets.

C. Receive an update on the Emerging Manager Portfolio – Cheryl Hines.

Mr. Albright introduced Cheryl Hines, TRS’ new Director of the Emerging Manager Portfolio. Ms. Hines introduced herself and provided an update on the Emerging Manager Portfolio, including its organizational structure, allocation, performance, growth projections, and goals. Ms. Hines and Mr. Harris also discussed and analyzed the lifecycle of fund managers.

E. Review the Investment Management Division Best Ideas Survey results – Britt Harris.

Mr. Harris provided an overview of the 2014 IMD Best Ideas Survey. He provided background for the survey, which predicts the attractiveness of each asset class, sector, and stock in a year based on the recommendations from a network of investment firms around the world. He highlighted the attractiveness of the asset classes, sectors, and stocks projected in the 2014 survey and their actual performance results.

F. Receive an update on the preferred destination initiative – Britt Harris.

Mr. Harris discussed the top priorities for IMD: improving pricing skills, ability to manage risk and act, standardizing internal processes, and focusing on competence. Mr. Harris highlighted the priority of becoming the preferred destination for attractive large investments.

Mr. Lang further elaborated on the concept and methodology of becoming a preferred initial destination for attractive global investment opportunities. He stated that the process categorized the fund's premier list into four tiers—platinum, gold, silver, and bronze, based on the kind of principal investment deal flow the fund received from each manager. He stated that platinum managers mainly include strategic partners; gold managers are key relationships; silver managers are managers that provide diversification; and bronze managers are niche managers.

Mr. Lang provided an overview of the gold tour meeting with 20 gold managers. He also described the competitive landscape with the world's largest Sovereign Wealth Funds (SWF), profiled the SWFs' cash flow advantage, and discussed their challenges. He described the accomplishments from surveying all general partners in creating value-added relationships and attracting top-performing principal investments. He stated that current goals were to become a full underwriting partner and first call of choice with the flexibility to react quickly. Mr. Lang concluded his presentation by laying out the organization of the Principal Investments Team.

Whereupon, the board meeting recessed at 6:00 p.m.

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Nanette Sissney, Vice-Chair
Todd Barth
Karen Charleston
Joe Colonna
David Corpus
Christopher Moss
Anita Palmer
Dolores Ramirez

Others present:

Brian Guthrie, TRS
Ken Welch, TRS
Amy Barrett, TRS
Janet Bray, TRS
Chris Cutler, TRS
Carolina de Onís, TRS
Howard Goldman, TRS
Don Green, TRS
Tom Guerin, TRS
Rebecca Merrill, TRS
Britt Harris, TRS
Jerry Albright, TRS
Jase Auby, TRS
Christine Bailey, TRS
Michelle Bertram, TRS
Ronnie Bounds, TRS
John Dobrich, TRS
Rob Dunn, TRS
Dennis Gold, TRS
Cindy Haley, TRS
Dan Herron, TRS
Caasi Lamb, TRS
Lynn Lau, TRS
Jay LeBlanc, TRS
Gloria Nichols, TRS
Bob Jordan, TRS

Dan Junell, TRS
Michelle Pagan, TRS
Barbie Pearson, TRS
Mike Pia, TRS
Jamie Pierce, TRS
Shunne Powell, TRS
Cristi Rendon, TRS
Mike Rehling, TRS
Jimmie Savage, TRS
Beckie Smith, TRS
Robert Zapata, TRS
Keith Johnson, Reinhart Boerner Van Deuren
Steve Huff, Reinhart Boerner Van Deuren
Pattie Featherston, Legislative Budget Board
Ann Fickel, Texas Classroom Teachers Association
Jim Baker, Unite Here
Roberto Enriquerz, Health Matters
Becca Slezak, Aetna
Maggie Parker, Aetna
Suzanne Dugan, Cohen Milstein
Ray Sarola, Cohen Milstein
Luke Bierman, Cohen Milstein
Ted Melina Raab, Texas American Federation of Teachers
John Corey, Texas State Teachers Association
Josh Sanderson, Association of Texas Professional Educators
Melinda Macska, HP

Mr. Kelly called the meeting to order at 8:40 a.m.

1. Call roll of Board members.

Ms. Lau called the roll. A quorum was present. Mr. Barth and Mr. Colonna arrived shortly after the roll call.

7. Provide opportunity for public comment – David Kelly.

Mr. Jim Baker of Unite Here addressed the board concerning TRS' investments in distressed debt funds managed by Lone Star Funds. He stated his concerns regarding the current scarcity of distressed deals, high turnover rate of the firm's senior executives combined with a lack of a succession strategy, and its strategy of buying up distressed residential and corporate debt. He urged TRS staff to investigate these issues.

Mr. Roberto Enrique of Health Matters presented a wellness program to the board.

8. Receive an overview of the February 12, 2015 agenda – Brian Guthrie.

Mr. Guthrie provided a preview of agenda items being discussed this day.

Mr. Kelly announced that the board would take up agenda item 11.

11. Receive an update on TRS' long-term space planning project, including satellite offices and matters related to real property – Brian Guthrie

Mr. Guthrie discussed options for meeting the strategic goal of building strong customer-focused relationships, including expanding regional presence around the state, utilizing existing regional resources, and providing self-service through technology. He opined that setting up regional offices was not the best use of TRS resources for the future. Recapping the results of the 2014 CEM benchmarking survey, he noted that the wait time for counseling sessions at TRS headquarters had increased and that the number of field visits TRS offered was fewer than other pension plans. He addressed possible options to increase TRS' regional presence: having counselors stationed at or traveling to regional Educational Service Centers (ESC); having video counseling set up at the ESCs or at home; and offering more field visits. He confirmed for Mr. Kelly that staff was planning to create a training module to support the plan to expand and improve customer service. Responding to a question from Ms. Palmer regarding the expansion, Mr. Guthrie stated that the plan would start with larger counties, such as Harris County and, after that, continue to explore and expand into other areas. Mr. Cutler elaborated on technological tools that were available to offer members better customer service. Mr. Moss brought out the need for cross-training counselors in different areas, such as health care. Mr. Kelly suggested a hybrid plan that would offer both onsite counseling and remote access to subject matter experts. Mr. Moss also addressed the need to reach out to younger members. Mr. Guthrie stated that staff would present a pilot proposal for the board's consideration at a future meeting.

Whereupon, Mr. Kelly announced that the board would go into executive session on agenda item 11 under §§ 551.072, 551.074, and 551.071 of the Government Code to discuss real property matters related to space planning and personnel matters related to satellite offices and to seek the advice of legal counsel. He asked all members of the public and staff not needed for executive session to leave the meeting room and take their belongings with them.

Whereupon, the open session of the board meeting recessed at 9:35 a.m. to go into executive session.

The board meeting reconvened in open session at 10:35 a.m. Mr. Kelly announced that the board would take up agenda item 9.

9. Review the Deputy Director's report on the following matters – Ken Welch:

A. Board of Trustee election update.

Mr. Welch provided an update on the upcoming board election, including the positions, eligibility requirements, process, timeline, and candidates.

B. Matters related to administrative, financial, and staff services operations.

Mr. Welch provided an update on the process of filling the Chief Benefits Officer and Chief Health Care Officer positions. He also addressed issues relating to the high call volume in January and the new state contracting practices and staff's plan to address those issues. Mr. Welch introduced the graduates of the leadership development class and provided an update on agency events,

including holiday celebrations and the State Employee Charitable Campaign.

Mr. Kelly announced that the board would take up agenda item 12.

12. Receive a presentation on and discuss investment compliance and ethics – Heather Traeger.

Ms. de Onis introduced Heather Traeger, TRS' new Chief Compliance Officer and Compliance Counsel. Ms. Traeger provided a presentation on investment compliance and ethics. She described the goals and common aspects of effective ethics and compliance programs. She also discussed hypothetical scenarios and cases relating to ethics and compliance issues. She provided a road map for the future development and promotion of compliance at TRS.

Whereupon, Mr. Kelly announced that the board would go into executive session on agenda items 13A and 13B under § 551.071 to seek the advice of legal counsel. He asked all members of the public and staff not needed for executive session to leave the meeting room and take their belongings with them.

Whereupon, the open session of the board meeting recessed at 11:35 a.m. to go into executive session.

13. Receive fiduciary and legal training, and consider rule adoption, including:

- A. Review procurement and fiduciary responsibility – Steve Huff, Reinhart Boerner Van Deuren, s.c.**
- B. Discuss the roles of TRS General Counsel and the TRS fiduciary counsel; receive legal training on open government matters; and review trustee roles, responsibilities, fiduciary duties, qualifications for office, and governance – Keith Johnson and Steve Huff, Reinhart Boerner Van Deuren, s.c.; Luke Biernan, Raymond Sarola, and Suzanne Dugan, Cohen Milstein Sellers & Toll PLLC; and Carolina de Onís.**

The board meeting reconvened in open session at 2:00 p.m. Mr. Kelly announced that the board would take up agenda item 13C.

- C. Consider the adoption of proposed amendments to TRS Rule § 25.26 of Title 34 of the Texas Administrative Code, relating to Annual Compensation Creditable for Benefit Calculation.**

Ms. Smith explained the proposed amendments to rule §25.26 that would limit comparison of salaries using different school year standards to the 2012-2013 school year, rather than all prior years. She stated that the rule would apply to retirements and deaths that occurred after March 31, 2015. She stated that the rule had been published for 30 days and was ready for the board to consider for adoption.

On a motion by Mr. Barth, seconded by Ms. Charleston, the board unanimously adopted the board order adopting the proposed amendments to rule §25.26, as published in the *Texas Register*.

14. Receive an overview of the Division of Strategic Initiatives, including a discussion of the TRS Strategic Plan – Rebecca Merrill.

Ms. Merrill provided an overview of the Strategic Initiatives Division. She addressed the organization and functions of the division, including strategic planning, enterprise risk management, business continuity, insurance policy management, and safety planning. She discussed the strategic plan and its implementation process. Ms. Merrill also highlighted the updated Value Brochure and discussed the data relating to pension benefits and their economic impact on the state economy.

15. Discuss the following financial matters – Don Green:

A. Receive an overview of the Financial Services Division.

Mr. Green provided an overview of the Financial Services Division. He addressed the division's organizational structure, which consists of the Benefit Accounting, General Accounting and Budget, Investment Accounting, and Staff Services. He described each department's functions and its accomplishments. He noted staffing and training needs relating to the TEAM Program and the implementation of Governmental Accounting Standards Board (GASB) statements. He also noted the goal of improving internal controls for the performance incentive plan.

B. Receive a financial update through December 31, 2014, including the cash report.

Mr. Green provided a financial report as of December 31, 2014.

C. Discuss an update on implementation of Governmental Accounting Standards Board (GASB) Statement Nos. 67 and 68.

Mr. Green provided an overview of GASB Statements 67 and 68. He highlighted their impact on employers and staff's outreach efforts informing employers of those requirements.

Mr. Kelly announced that the board would take up agenda item 10.

10. Receive an overview of the Texas budgeting process and a legislative and appropriations update – Ken Welch, Don Green, and Ray Spivey.

Mr. Green provided an overview of the Texas budgeting process, including the general timeline, FY 2014-2015 state budget overview, constitutional limits, the flow of major revenues for the 2016-2017 biennium, sources of general revenue-related funds, budget drivers, Legislative Budget Board recommendations for TRS, and the new appropriation rider requests for FY 2016-2017. In response to a question from Mr. Colonna, he also explained the Economic Stabilization Fund, also known as the "Rainy Day" fund.

Mr. Spivey described the legislative landscape. He highlighted the statutory mandate that prohibits TRS trustees or staff from advocating or influencing legislative action or inaction or advocating for higher benefits. He profiled key participants in the legislative process. He also highlighted the TRS-Care and TRS-ActiveCare bills and the TRS omnibus bill for the 84th Legislative Session.

16. Receive an overview of the Benefits Division, including a review of the Telephone Counseling Center – Tom Guerin.

Mr. Guerin provided an overview of the Benefits Division which consists of the Benefit Counseling, Benefit Processing, and Member Data Services. He addressed the division's organizational structure and recent changes. Mr. Guerin provided an update on the performance and monitoring of the Telephone Counseling Center (TCC). He also gave a live demonstration of the TCC dashboard.

17. Receive an overview of the Human Resources Department, including a workforce overview – Janet Bray.

Ms. Bray provided an overview of the Human Resources (HR) Department. She described HR initiatives to attract, retain, and develop a highly competent staff, as part of TRS' Strategic Plan. She also discussed recruitment efforts in filling vacant positions, current and future employee development programs, and compensation programs.

18. Receive an overview of the Communications Department, including a screening of the updated Video Value Brochure – Howard Goldman.

Mr. Goldman provided an overview of the Communications Department. He addressed department functions relating to publications, media interviews and relations, market research, graphic design, media open record requests, and surveys. Mr. Goldman provided an update on the social media program and recent activity track records. He also provided an overview of the TRS website redesign project. He ended his presentation by presenting the new Value Brochure video.

Whereupon, the board meeting recessed at 5:45 p.m.

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Ronnie Bounds, TRS
David Cook, TRS
Adam Fambrough, TRS
Amanda Gentry, TRS
Dan Junell, TRS
Lynn Lau, TRS
T. A. Miller, TRS
Mike Pia, TRS
Jamie Pierce, TRS
Barbie Pearson, TRS
Garry Sitz, TRS

Beckie Smith, TRS
Heather Traeger, TRS
Michael Jones
Russell Montgomery
Jay Masci, Provaliant
Steve Huff, Reinhart Boerner Van Deuren
Michael Johnson, Bridgepoint Consulting
Tim Lee, Texas Retired Teachers Association
Christer Johnson, EY
James Walton, EY
Mariano Camarillo, Texas GovLink
David Toliver, Express Scripts
Steve Tolbert, HP
Victor Ferrero, HP
Melinda Maczko, HP
Ernie Sanders, HP
Mike Freese, HP
Prashant Jaiswal, HP
Danny Krause, ACI

Ms. Sissney called the meeting to order at 8:13 a.m.

1. Call roll of Board members.

Ms. Lau called the roll. A quorum was present. Mr. Kelly arrived at 8:45 a.m.

19. Provide opportunity for public comment – David Kelly.

Ms. Sissney called for public comment. No public comment was received.

20. Receive an overview of the February 13, 2015 agenda – Brian Guthrie.

Mr. Guthrie provided a preview of agenda items being discussed this day.

21. Receive the presentation “Maximize the Value from Analytics in the Context of Internal Audit” – Christer Johnson and James Walton, EY

Mr. Johnson and Mr. Walton provided a presentation on data analytics technology for decision making and risk management functions.

Whereupon, Ms. Sissney announced that the board would go into executive session on agenda item 22 under § 825.115(b) of the Government Code to discuss confidential audit matters. She asked all members of the public and staff not needed for executive session to leave the meeting room and take their belongings with them.

Whereupon, the open session of the board meeting recessed at 8:54 a.m. to go into executive session.

22. Discuss matters related to governance, risk management, internal control, compliance violations, fraud, regulatory reviews or investigations, new and outstanding complaints, fraud risk areas, audits for the annual internal audit plan, or auditors' ability to perform duties – Amy Barrett.

The board meeting reconvened in open session at 9:37 a.m.

Mr. Kelly announced that the board would take a moment to remember and honor Betsey Jones, former Chief Health Care Officer. Mr. Guthrie, Mr. Welch, and Mr. Jordan provided remarks remembering Ms. Jones. Mr. Kelly read the following memorial resolution into the record as trustees, staff, and all members of the audience stood to honor the resolution:

Whereas, Betsey Jones joined the Teacher Retirement System of Texas (TRS) in 1997, focusing her early work in the area of General Accounting; and

Whereas, She was transferred to TRS-ActiveCare in July 2001 and became director in June 2002, leading the implementation of the TRS-ActiveCare program that now provides quality health care coverage to over 480,000 Texans; and

Whereas, She was transferred to Health Benefits Finance in October 2004, was promoted to director in May 2005, and became an invaluable member of the TRS Executive Council; and

Whereas, Betsey for many years directed the development of several key documents for the agency: the popular brochure – “A Great Value For All Texans” – that illustrates the economic benefits TRS provides to the State of Texas; the “Fast Facts” report that highlights key operational statistics for the board of trustees on a monthly basis; and the CEM Benchmarking Inc. survey that measures TRS’ pension administration cost effectiveness and management with peer organizations on an international level; and

Whereas, Betsey made possible the organizational changes to the TRS-ActiveCare and TRSCare departments that prepared the consolidated division to better serve active and retired public school employees and their dependents; and

Whereas, Betsey led the Health and Insurance Benefits Department through a financially challenging time for TRS-Care and TRS-ActiveCare, directing several initiatives that resulted in significant savings to the programs: the introduction of the self-insured Medicare Part D program and the fully-insured Medicare Advantage plan; the incorporation of financial performance-based terms into the medical contract; and adopting the Accountable Care Organization medical care delivery model and plan options; and

Whereas, Betsey developed and updated the TRS-Care and TRS-ActiveCare studies to research funding options and to communicate to the legislature the financial challenges facing both plans; and

Whereas, Betsey was promoted to Chief Health Care Officer on April 1, 2014, having set an exemplary model of professionalism and decorum for everyone she encountered throughout her career and exhibiting the highest level of integrity; and

Whereas, Throughout her years in leadership, Betsey’s colleagues held her in the highest esteem for her affable nature, good sense of humor, and strong work ethic. She was admired for her approach to managing her division and partnerships with vendors; she embodied a fiduciary’s

duties of loyalty and care, always keeping the good of the retirement system and its participants foremost in her thoughts and actions; and now, therefore, be it

Resolved, That the board of trustees and staff of the Teacher Retirement System of Texas recognizes, posthumously, the accomplishments and contributions of Betsey Jones during her 17-year career with the retirement system and expresses appreciation on behalf of TRS members both present and future, and be it further

Resolved, That the Teacher Retirement System of Texas extends its sympathy to Betsey Jones' family after her death on January 9, 2015 and decrees that they be presented a copy of this resolution, which is entered into the record of the board for February 13, 2015.

A copy of the resolution was presented to Ms. Jones' sons, Mr. Michael Jones and Mr. Russell Montgomery.

Whereupon the board took a short recess at 9:50 a.m. and reconvened at 10:00 a.m.

Mr. Kelly announced that the board would take up agenda item 23.

23. Receive an overview of the Information Technology Division – Chris Cutler.

Mr. Cutler provided an overview of the Information Technology Division, including technology and human resources, organizational structure, functions, goals, and challenges. He discussed current technology trends, project initiatives, and activities. He also highlighted TRS' transition to the texas.gov domain name and the use of cloud computing technology.

Mr. Kelly announced that the board would take up agenda item 25.

25. Discuss Bridgepoint's role in TEAM now and looking ahead – Michael Johnson, Bridgepoint.

Mr. Johnson provided an overview of the functions of the Independent Program Assessment vendor, key deliverables for 2015, and related risks.

The board took up agenda item 24.

24. Receive an update on the TEAM Program – Adam Fambrough; David Cook; Jamie Pierce; and Jay Masci, Provaliant.

Per Mr. Kelly's request, Mr. Masci evaluated the progress of the TEAM Program in terms of planning, vendor selection, and initial requirements gathering. He also gave an overview of the TEAM components—Pension Line of Business (LOB), Decommissioning Legacy System, Reporting Entity Outreach, Business Procedures and Training, Data Management, Organizational Change Management, Business Rules, Financial System Replacement (FSR), and Website Redesign. He discussed lessons learned from visiting public pension organizations, as well as from the TEAM Program itself. He provided an update on the status of projects and milestones.

Ms. Pierce provided an update on the FSR project and highlighted progress on the Request for Offer process for the new financial system.

Mr. Fambrough provided an update on the LOB project.

Ms. Amanda Gentry of Benefit Accounting, a subject matter expert in the TEAM Program, shared her experience participating in the TEAM Program, her daily responsibilities and schedule and her perception on prospects for the program.

Mr. Fambrough provided a demonstration of the search functionality of the new TRUST system and compared it with the legacy system. He explained the rebase line schedule from FY 2014 through FY 2018 and related schedule shifts.

Mr. Cook laid out the cost impact related to the schedule shifts and provided an overall update on program budget. Responding to a question from Mr. Barth concerning the budget discrepancy, Mr. Cook stated that it could be attributed to the need for additional FTEs and the early underestimation of LOB contract costs. He also confirmed for Mr. Moss that the extra costs due to the schedule shifts had already been included in the cost discrepancy.

- 26. Consider personnel matters, including the appointment, employment, evaluation, compensation, performance, duties, discipline, or dismissal of the Executive Director, Chief Investment Officer, or Chief Audit Executive – David Kelly.**
- 27. Consult with the Board's attorney(s) in Executive Session on any item listed above on this meeting agenda as authorized by Section 551.071 of the Texas Open Meetings Act (Chapter 551 of the Texas Government Code) – David Kelly.**

The board took up no further business under agenda items 26 and 27.

The meeting was adjourned at 11:44 a.m.

APPROVED BY THE BOARD OF TRUSTEES OF THE TEACHER RETIREMENT SYSTEM OF TEXAS ON THE 26TH DAY OF MARCH, 2015.

ATTESTED BY:

Dan Junell
Secretary to the TRS Board of Trustees

Date

Tab 2 B

**Teacher Retirement System of Texas
Board of Trustees**

**Resolution Setting Date and Location for the February 2016 Meeting of the Board of
Trustees**

March 26-27, 2015

RESOLVED, That the Board of Trustees of the Teacher Retirement System of Texas (“board”) sets the following date and location for its February 2016 meeting: February 24 - 26, 2016 at the Region 10 Educational Service Center located at 400 E. Spring Valley Road, Richardson, Texas 75081, at convenient times to be determined by the board chairman and executive director.

Tab 4 A



Strategic Partnerships & Research (SPR) Update

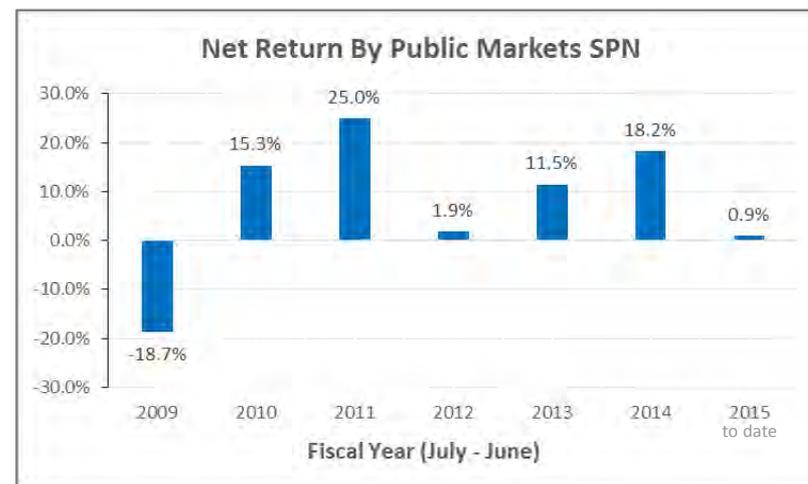
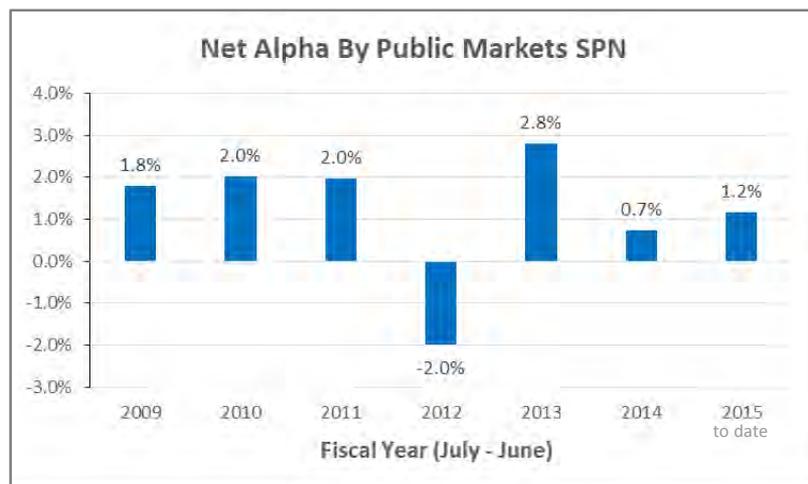
Grant Birdwell
Senior Investment Manager
March 2015

Public Markets SPN Performance

Performance as of December 31, 2014

PUBLIC STRATEGIC PARTNERSHIP NETWORK AS OF 12/31/2014

Program	Assets		Annualized Return %			Annualized Alpha %			Tracking Error			Information Ratio		
	NAV (\$m)	% of Trust	Since 1 Year	Since 3 Year	Since Incept.	Since 1 Year	Since 3 Year	Since Incept.	Since 1 Year	Since 3 Year	Since Incept.	Since 1 Year	Since 3 Year	Since Incept.
BlackRock	1,585.4	1.2%	8.8	11.7	7.0	1.3	1.2	1.0	2.1	1.9	2.1	0.6	0.6	0.5
JP Morgan	1,697.5	1.3%	8.3	13.4	8.0	0.9	2.9	1.9	1.9	1.9	2.3	0.5	1.6	0.8
Morgan Stanley	1,627.7	1.3%	8.2	13.3	7.4	0.7	2.8	1.4	3.2	2.5	1.9	0.2	1.1	0.7
Neuberger Berman	1,593.6	1.2%	6.3	10.8	7.0	-1.1	0.3	0.9	1.8	1.5	2.1	-0.6	0.2	0.4
Total Public SPN	6,504.1	5.0%	7.9	12.3	7.4	0.4	1.8	1.3	1.5	1.3	1.4	0.3	1.4	0.9



Note: Fiscal year for the Public Markets SPN runs from July to June due to inception of the structure in July 2008



Public Markets SPN Positioning

Positioning as of December 31, 2014

Asset Allocation As of 12/31/2014													
Partner	Global Equity					Stable Value				Real Return			
	Total	US		Non-US		Total	US Long Treasury	Non \$ Sov Debt	Credit	Total	Inflation		
		LC	SC	EAFE	EM						Linked	Com	REITs
BlackRock	6.7%	7.1%	-6.0%	4.4%	1.2%	-0.8%	-10.3%	2.6%	7.0%	-6.9%	-1.8%	-3.1%	-2.0%
JP Morgan	6.1%	7.8%	-0.6%	-0.4%	-0.7%	5.1%	-7.7%	3.8%	9.1%	-1.2%	-0.3%	-1.1%	0.2%
Morgan Stanley	-1.8%	3.2%	-0.2%	-2.6%	-2.1%	0.5%	0.0%	0.6%	0.0%	-6.8%	-2.9%	-4.0%	0.2%
Neuberger Berman	10.7%	5.0%	-0.4%	5.2%	0.9%	12.8%	-2.0%	10.3%	4.6%	-0.6%	0.0%	-0.7%	0.1%
Total (Average)	5.4%	5.8%	-1.8%	1.6%	-0.2%	4.4%	-5.0%	4.3%	5.1%	-3.9%	-1.3%	-2.2%	-0.4%

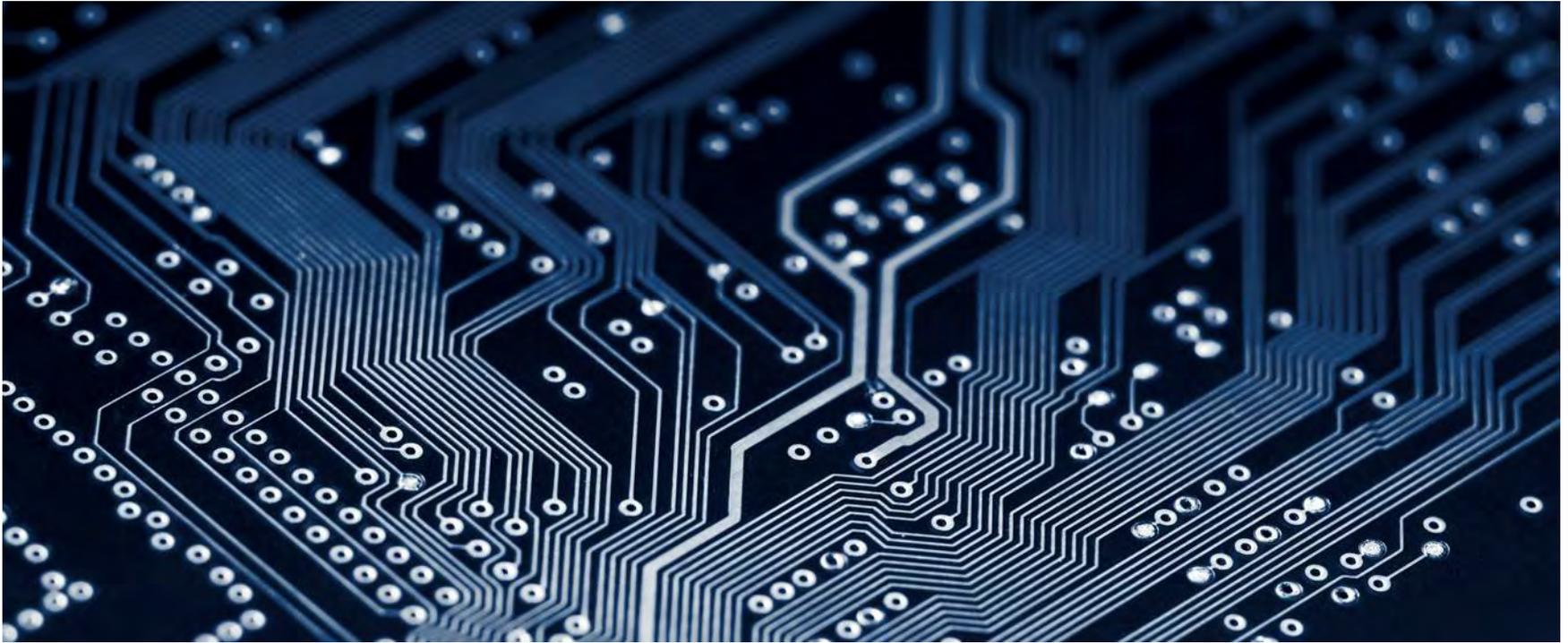
Change in Allocation Since 09/30/2014													
BlackRock	4.9%	5.2%	-2.0%	3.7%	-2.0%	7.7%	4.1%	2.6%	1.1%	-0.2%	0.8%	-1.1%	0.0%
JP Morgan	-0.3%	1.5%	-1.2%	-0.4%	-0.2%	-4.1%	-1.9%	-3.5%	1.3%	2.4%	2.9%	-0.8%	0.3%
Morgan Stanley	-1.2%	1.0%	0.3%	-4.1%	1.6%	15.9%	15.0%	1.0%	0.0%	-0.1%	0.0%	-0.3%	0.2%
Neuberger Berman	-3.9%	-2.7%	-0.8%	5.3%	-5.6%	5.5%	3.5%	2.3%	-0.2%	0.6%	1.0%	-0.6%	0.2%
Total (Average)	-0.1%	1.3%	-0.9%	1.1%	-1.6%	6.3%	5.2%	0.6%	0.6%	0.7%	1.2%	-0.7%	0.2%

Benchmark and Tactical Ranges													
Benchmark	Total	US		Non-US		Total	US Long Treasury	Non \$ Sov Debt	Credit	Total	Inflation		
		LC	SC	EAFE	EM						Linked	Com	REITs
Neutral	68%	28%	6%	20%	14%	20%	20%	0%	0%	12%	7%	3%	2%
Minimum	53%	8%	-4%	10%	4%	-10%	-5%	-5%	-5%	-5%	-3%	-2%	-3%
Maximum	83%	48%	16%	30%	24%	40%	30%	10%	10%	25%	17%	8%	7%

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Tab 4 C



Teacher Retirement System of Texas

Performance Review: Fourth Quarter 2014
March 2015

Aon Hewitt
Retirement and Investment

Investment advice and consulting services provided by Aon Hewitt Investment Consulting, Inc., an Aon Company.



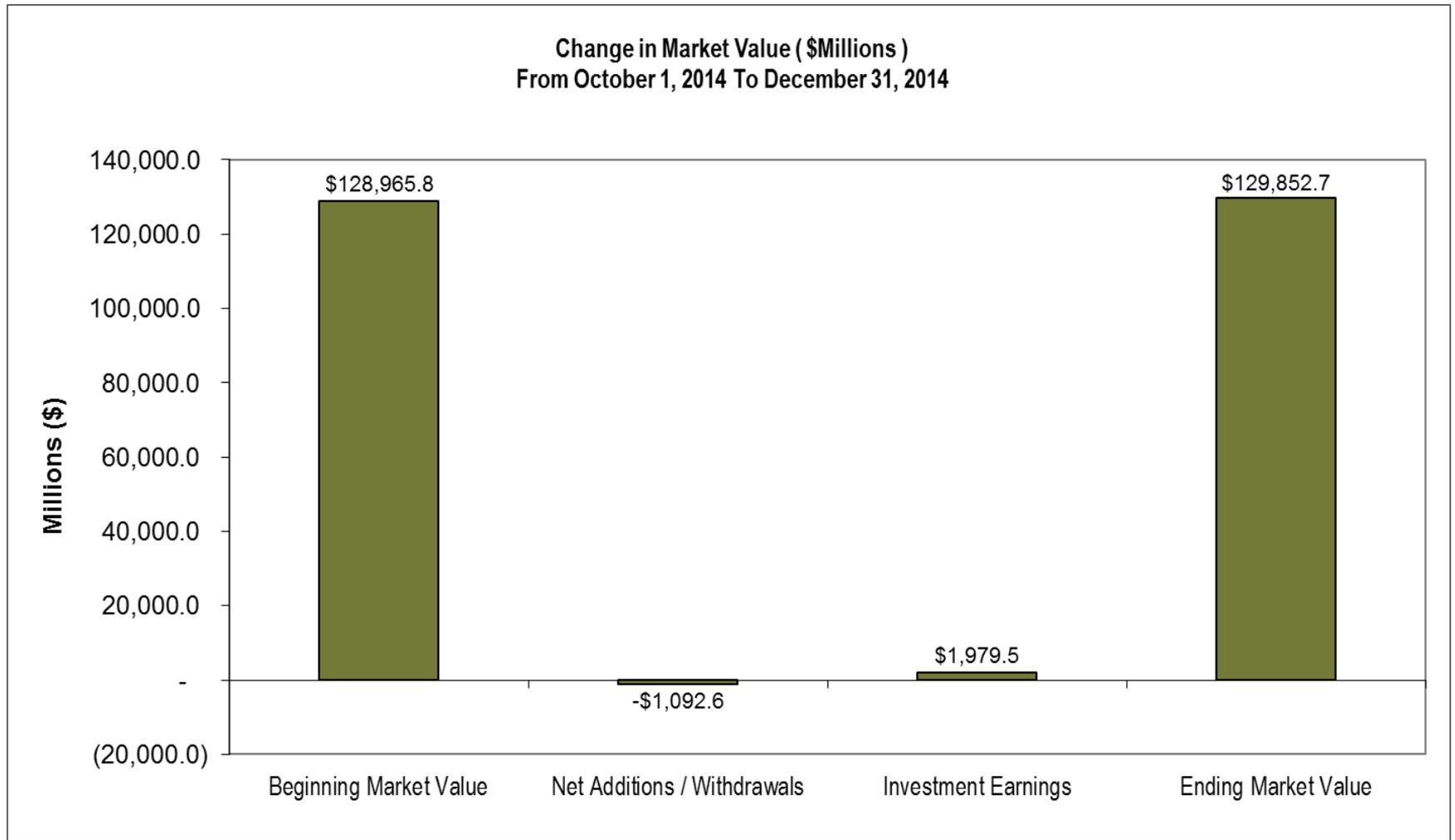
Summary

- Global equity markets, driven by positive U.S. equity performance that counteracted struggling markets elsewhere, rose modestly in value. Growth indicators continued to be weak, geopolitical risks remained a factor, and a stronger U.S. dollar held back returns for non-U.S. developed and emerging markets.
 - The Treasury yield curve flattened further during the fourth quarter as inflation remained subdued
- TRS gained 1.5% during the fourth quarter and underperformed its performance benchmark by 6 basis points
 - In 2014 TRS returned 8.5% , outperforming its performance benchmark by 4 basis points
 - TRS performance remains strong on an absolute and relative basis over the trailing 3, 5, and 10 year periods
- Major detractors from relative results during the quarter included:
 - Underperformance of Domestic Equities and Directional Hedge Funds
 - An overweight allocation to Emerging Markets Equities which declined during the quarter
 - Below-target allocation to Long Treasuries hurt as these investments continued to perform well during the fourth quarter
- Major contributors to relative returns during the quarter included:
 - Outperformance within Non-US Developed and Emerging Markets Equities
 - Outperformance of Long Treasuries offsetting the negative impact of below-target allocation
 - An overweight to Domestic Equities which posted strong positive results during the quarter

1. Market Summary – Fourth Quarter 2014

	Fourth Quarter	One Year	Three Years	Five Years	Ten Years
Global Equity:					
MSCI U.S.A. IMI Index	5.1%	12.5%	20.4%	15.7%	8.2%
MSCI EAFE + Canada Index	-3.7	-4.3	10.5	5.2	4.6
MSCI Emerging Markets Index	-4.5	-2.2	4.0	1.8	8.4
HFRI Fund of Funds Composite Index	0.9	3.4	5.7	3.3	3.0
State Street Private Equity Index (qtr lagged)	-0.2	14.4	13.8	13.8	12.0
Global Equity Policy Benchmark	0.2	5.4	12.9	9.5	
Stable Value:					
Barclays Capital Long Treasury Index	8.6%	25.1%	4.2%	10.0%	7.5%
HFRI Fund of Funds Conservative Index	0.5	3.4	5.1	3.3	2.5
3 Month LIBOR + 2%	0.6	2.2	2.3	2.3	4.0
90 Day US Treasury Bill	0.0	0.0	0.1	0.1	1.6
Stable Value Policy Benchmark	6.3	18.5	4.3	8.3	
Real Return:					
Barclays Capital US Treasury TIPS Index	0.0%	3.6%	0.4%	4.1%	4.4%
NCREIF ODCE (qtr lagged)	3.0	11.4	11.3	11.3	
Cambridge Nat. Resources (75) / CPI (qtr lagged) (25)	-0.7	7.1			
Goldman Sachs Commodities Index	-27.7	-33.1	-12.9	-6.5	-4.8
Real Return Policy Benchmark	1.8	9.0	8.6	9.5	
Risk Parity:					
Risk Parity Benchmark	-1.0%	7.5%			
TRS Policy Benchmark	1.6%	8.5%	10.6%	9.7%	6.4%

2. Market Value Change

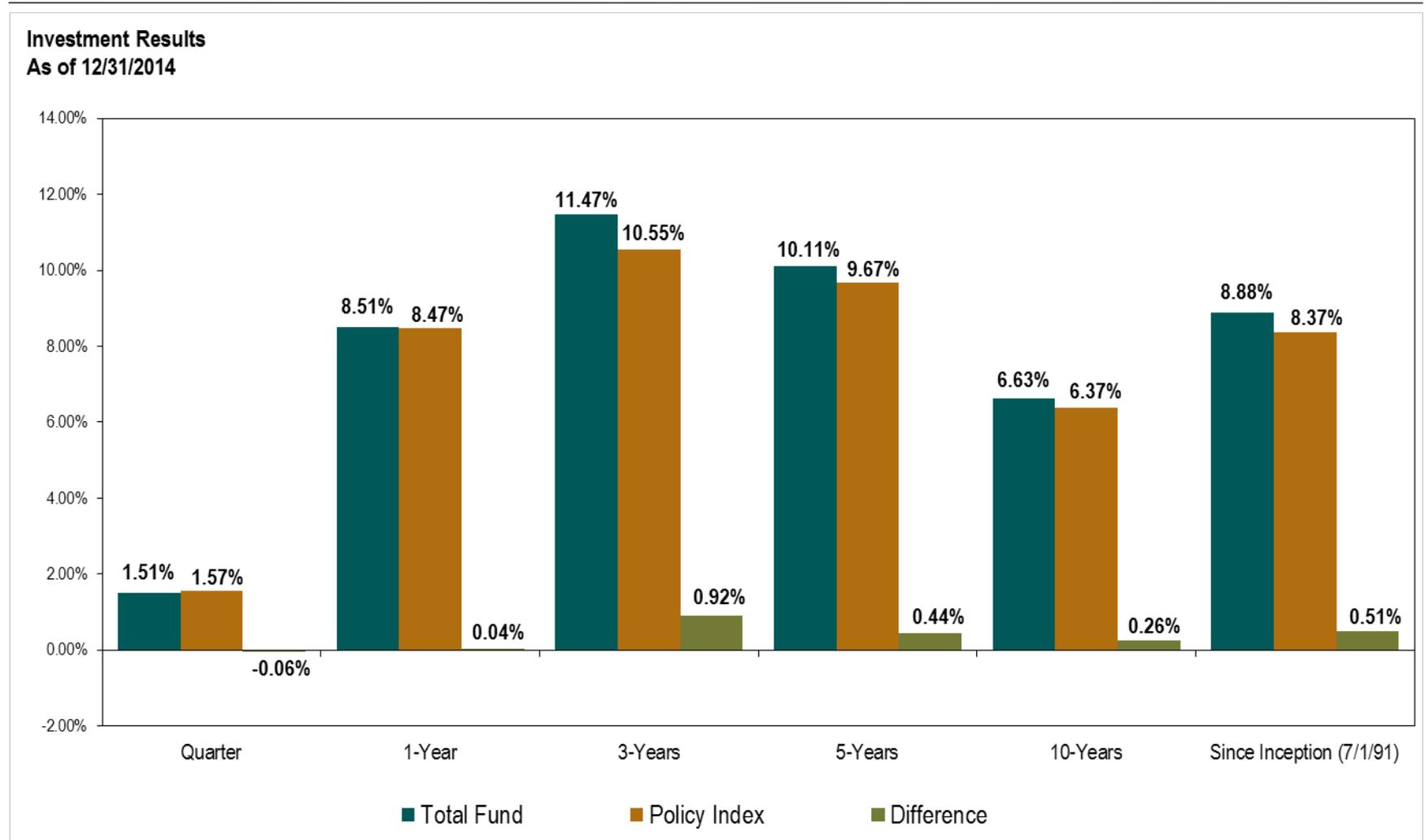


3. Asset Allocation Detail

	Market Value (\$ in millions) as of 12/31/2014		Interim Policy Target	Relative Allocation to Interim Policy Target	Long Term Policy Target	Long Term Policy Ranges
	(\$)	(%)				
Total Fund	\$129,853	100.0%	100%	---	100%	--
Total U.S.A.	\$30,541	23.5%	20%	+3.5%	18%	13-23%
Non-U.S. Developed	\$19,094	14.7%	15%	-0.3%	13%	8-13%
Emerging Markets	\$13,905	10.7%	10%	+0.7%	9%	4-14%
Directional Hedge Funds	\$6,002	4.6%	5%	-0.4%	4%	0-10%
Private Equity	\$15,272	11.8%	12%	-0.2%	13%	8-18%
Global Equity	\$84,813	65.3%	62%	+3.3%	57%	50-64%
Long Treasuries	\$12,187	9.4%	13%	-3.6%	11%	0-20%
Stable Value Hedge Funds	\$5,441	4.2%	4%	+0.2%	4%	0-10%
Absolute Return (including OAR)	\$786	0.6%	0%	+0.6%	0%	0-20%
Cash	\$852	0.7%	1%	-0.3%	1%	0-5%
Stable Value	\$19,266	14.8%	18%	-3.2%	16%	11-21%
TIPS	\$6,050	4.7%	5%	-0.3%	3%	0-10%
Real Assets	\$15,590	12.0%	12%	+0.0%	16%	7-17%
Energy and Natural Resources	\$2,537	2.0%	2%	-0.0%	3%	0-7%
Commodities	\$154	0.1%	0%	+0.1%	0%	0-5%
Real Return	\$24,331	18.7%	19%	-0.2%	22%	17-27%
Risk Parity	\$1,442	1.1%	1%	+0.6%	5%	0-10%
Risk Parity	\$1,442	1.1%	1%	+0.1%	5%	0-5%

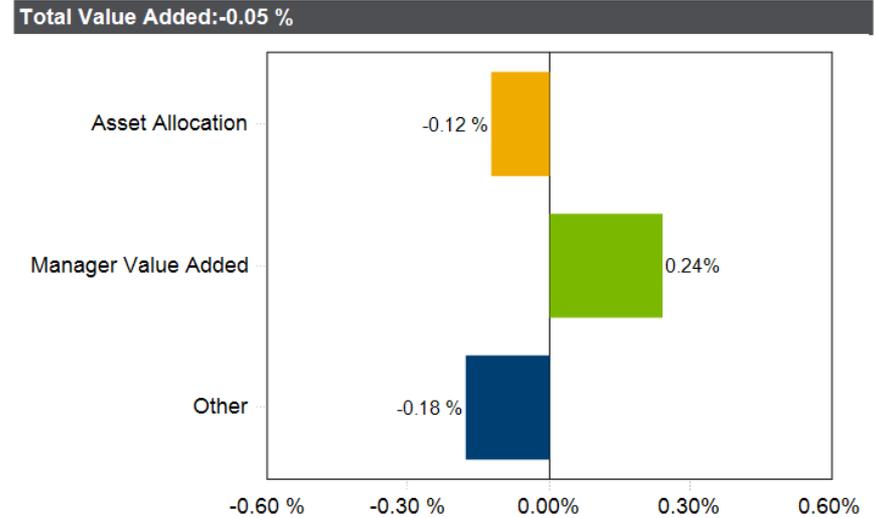
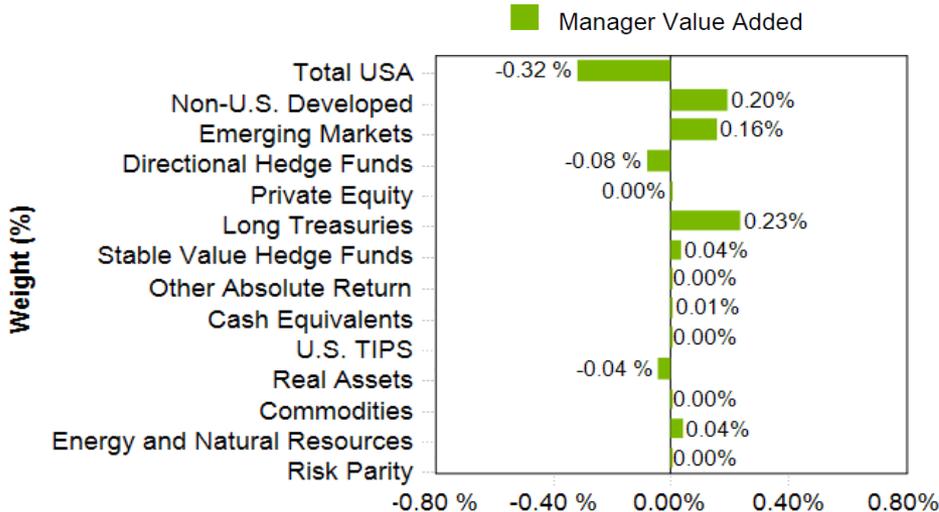
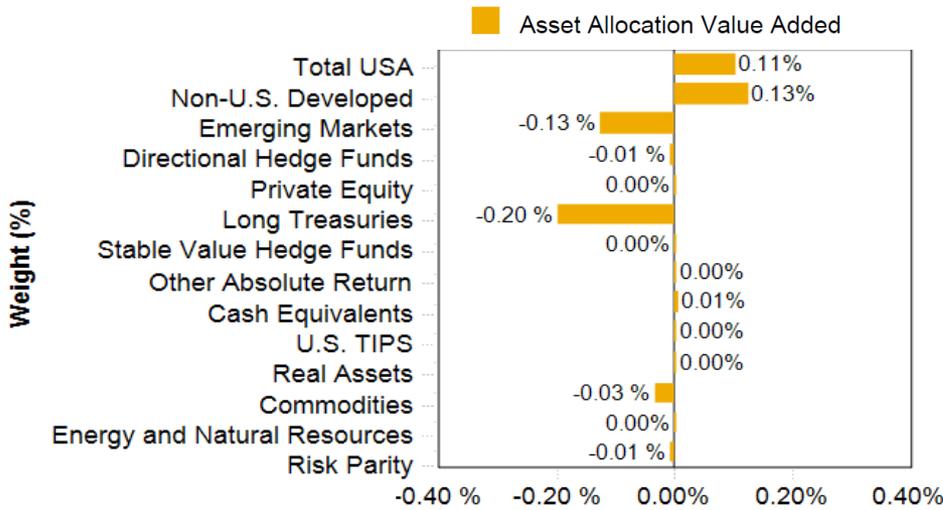
Note: Actual allocations above are based upon Account Level information

4. Total TRS Performance Ending 12/31/2014



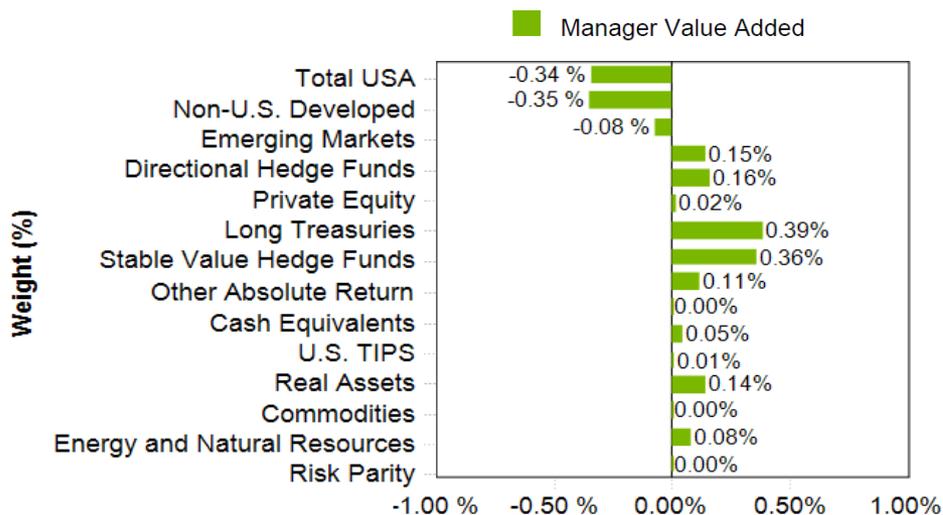
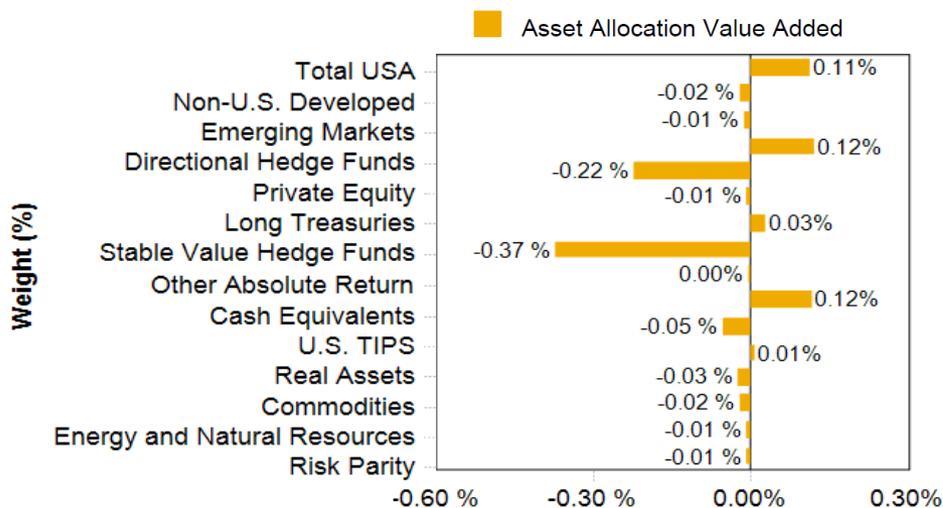
Note: The excess returns shown above may not be a perfect difference between the actual and benchmark returns due entirely to rounding.

5. Total Fund Attribution - Quarter Ending 12/31/2014

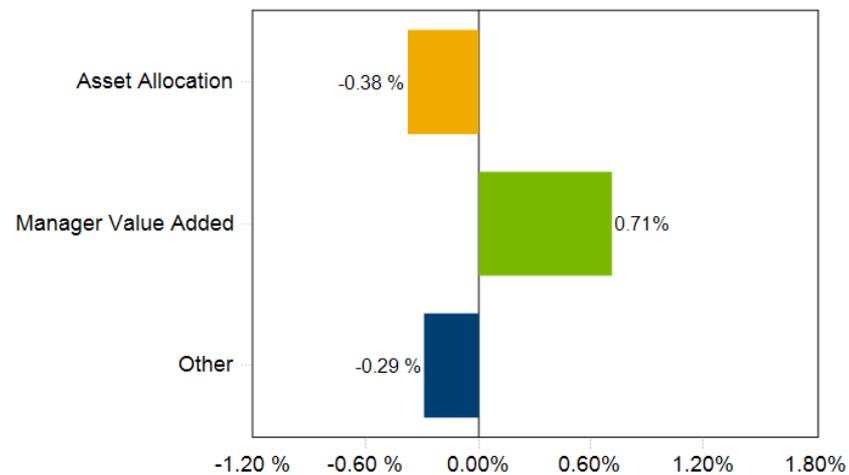


Note: Differences in value-added figures reported here (5 basis points) and on the previous page (6 basis points) are due entirely to rounding.

5. Total Fund Attribution – Trailing One Year Ending 12/31/2014



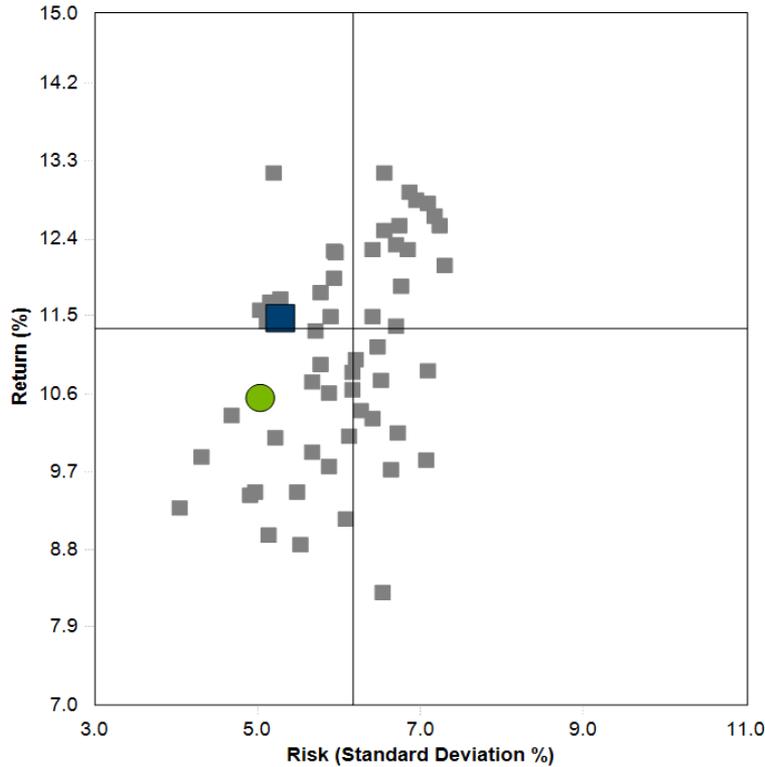
Total Value Added: 0.04%



6. Risk Profile: Total Fund Risk-Return vs. Peers

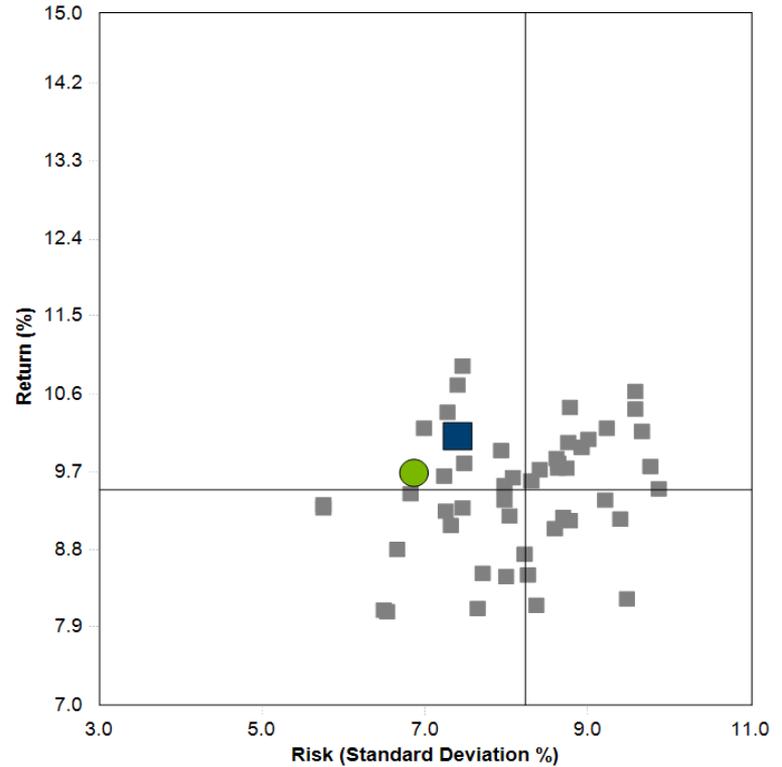
All Public Plans > \$1B-Total Fund

Annualized Return vs. Annualized Standard Deviation
3 Years Ending December 31, 2014



	Return	Standard Deviation
■ Total Fund	11.47	5.29
● Total Fund Benchmark	10.55	5.03
— Median	11.35	6.18

Annualized Return vs. Annualized Standard Deviation
5 Years Ending December 31, 2014

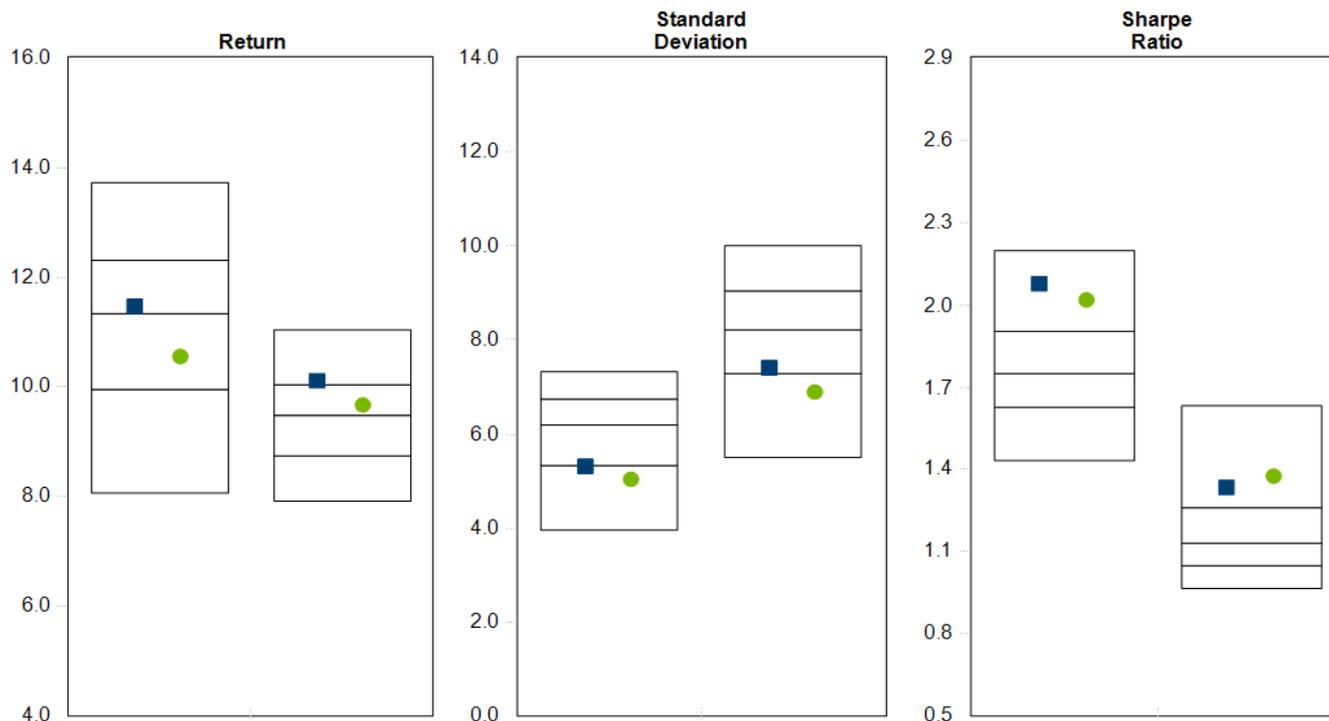


	Return	Standard Deviation
■ Total Fund	10.11	7.40
● Total Fund Benchmark	9.67	6.88
— Median	9.49	8.23

Plan Sponsor Peer Group composed of 63 public funds with total assets in excess of \$1B as of 12/31/14.

6. Risk Profile: Trailing 3-Year and 5-Year Risk Metrics Peer Comparison

All Public Plans > \$1B-Total Fund vs. 90 Day U.S. Treasury Bill



	3 Years	5 Years	3 Years	5 Years	3 Years	5 Years
■ Total Fund	11.47 (47)	10.11 (24)	5.29 (76)	7.40 (72)	2.08 (16)	1.33 (19)
● Total Fund Benchmark	10.55 (65)	9.67 (43)	5.03 (85)	6.88 (81)	2.01 (17)	1.37 (17)
5th Percentile	13.74	11.05	7.33	10.02	2.20	1.63
1st Quartile	12.31	10.05	6.75	9.06	1.90	1.26
Median	11.35	9.49	6.18	8.23	1.75	1.13
3rd Quartile	9.97	8.75	5.33	7.28	1.63	1.05
95th Percentile	8.06	7.91	3.97	5.52	1.43	0.97

Plan Sponsor Peer Group composed of 63 public funds with total assets in excess of \$1B as of 12/31/14.

7. Global Equity: Performance Summary Ending 12/31/2014

	Fourth Quarter	One Year	Three Years	Five Years
Total Global Equity	0.2%	5.3%	13.9%	9.9%
Global Equity Benchmark	0.2	5.4	12.9	9.5
<i>Difference</i>	+0.0	-0.1	+1.0	+0.4
Total U.S. Equity	3.7	9.5	19.5	14.6
Total U.S. Equity Benchmark	5.1	12.9	20.5	15.5
<i>Difference</i>	-1.4	-3.4	-1.0	-0.9
Non-U.S. Equity	-3.0	-2.7	8.8	4.5
Non-U.S. Benchmark	-4.0	-3.4	7.9	3.9
<i>Difference</i>	+1.0	+0.7	+0.9	+0.6
<u>Non-U.S. Developed</u>	-2.2	-3.3	11.6	6.2
MSCI EAFE + Canada	-3.7	-4.3	10.5	5.2
<i>Difference</i>	+1.5	+1.0	+1.1	+1.0
<u>Emerging Markets</u>	-3.2	-0.9	5.7	2.7
MSCI Emerging Markets	-4.5	-2.2	4.0	1.8
<i>Difference</i>	+1.3	+1.3	+1.7	+0.9

Note: The excess returns shown in this presentation may differ from State Street statements due entirely to rounding. These differences are generally within a few basis points and are not material.

7. Global Equity: Performance Summary Ending 12/31/2014 (cont'd)

	Fourth Quarter	One Year	Three Years	Five Years
Directional Hedge Funds	-0.7%	3.5%	7.4%	--
HFRI Fund of Funds Composite Index	0.9	3.4	5.7	--
<i>Difference</i>	-1.6	+0.1	+1.7	--
Total Public Equity	0.1	2.9	13.0	8.6
Public Equity Benchmark	0.1	3.6	12.7	8.6
<i>Difference</i>	+0.0	-0.7	+0.3	+0.0
Total Private Equity	0.5	17.2	17.9	16.8
Private Equity Benchmark	0.5	13.3	13.2	13.5
<i>Difference</i>	+0.0	+3.9	+4.7	+3.3

Note: The excess returns shown in this presentation may differ from State Street statements due entirely to rounding. These differences are generally within a few basis points and are not material.

8. Stable Value: Performance Summary Ending 12/31/2014

	Fourth Quarter	One Year	Three Years	Five Years
Total Stable Value	7.7%	21.4%	6.3%	9.5%
Total Stable Value Benchmark	6.3	18.5	4.3	8.3
<i>Difference</i>	+1.4	+2.9	+2.0	+1.2
Long Treasuries	11.0	29.0	5.6	11.1
Treasury Benchmark	8.6	25.1	4.2	10.0
<i>Difference</i>	+2.4	+3.9	+1.4	+1.1
Stable Value Hedge Funds	1.4	6.2	4.5	3.7
Hedge Funds Benchmark	0.5	3.4	5.1	3.9
<i>Difference</i>	+0.9	+2.8	-0.6	-0.2
Other Absolute Return	2.2	22.9	22.0	16.1
Other Absolute Return Benchmark	0.6	2.2	2.3	2.3
<i>Difference</i>	+1.6	+20.7	+19.7	+13.8
Cash Equivalents	1.7	4.8	2.4	1.1
Cash Benchmark	0.0	0.0	0.1	0.1
<i>Difference</i>	+1.7	+4.8	+2.3	+1.0

Note: Performance of Cash Equivalents is shown net of fees paid to TRS Strategic Partners

Note: The excess returns shown in this presentation may differ from State Street statements due entirely to rounding. These differences are generally within a few basis points and are not material.

9. Real Return: Performance Summary Ending 12/31/2014

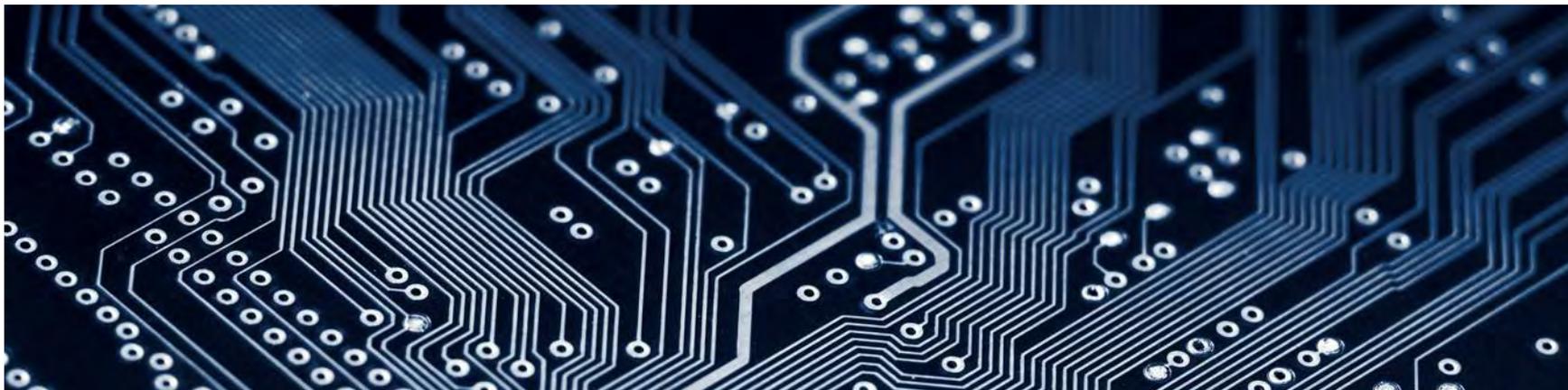
	Fourth Quarter	One Year	Three Years	Five Years
Total Real Return	1.7%	10.2%	8.3%	9.5%
Real Return Benchmark	1.8	9.0	8.6	9.5
<i>Difference</i>	-0.1	+1.2	-0.3	+0.0
TIPS	0.0	3.8	0.6	4.3
U.S. TIPS Benchmark	0.0	3.6	0.4	4.1
<i>Difference</i>	+0.0	+0.2	+0.2	+0.2
Real Assets	2.7	12.8	12.8	13.1
Real Asset Benchmark	3.0	11.4	11.3	11.3
<i>Difference</i>	-0.3	+1.4	+1.5	+1.8
Energy and Natural Resources	1.5	12.4	--	--
Energy and Natural Resources Benchmark	-0.7	7.1	--	--
<i>Difference</i>	+2.2	+5.3	--	--
Commodities	-32.5	-23.9	-23.4	-13.5
Commodities Benchmark	-27.7	-33.1	-12.9	-6.5
<i>Difference</i>	-4.8	+9.2	-10.5	-7.0

Note: The excess returns shown in this presentation may differ from State Street statements due entirely to rounding. These differences are generally within a few basis points and are not material.

10. Risk Parity: Performance Summary Ending 12/31/2014

	Fourth Quarter	One Year	Three Years	Five Years
<u>Total Risk Parity</u>	-0.7%	8.1%	--	--
Risk Parity Benchmark	-1.0	7.5	--	--
<i>Difference</i>	+0.3	+0.6	--	--

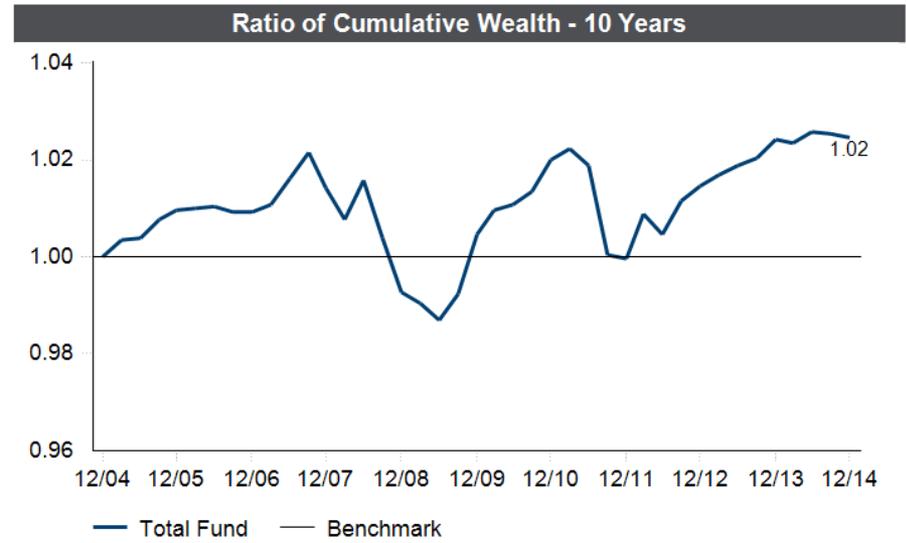
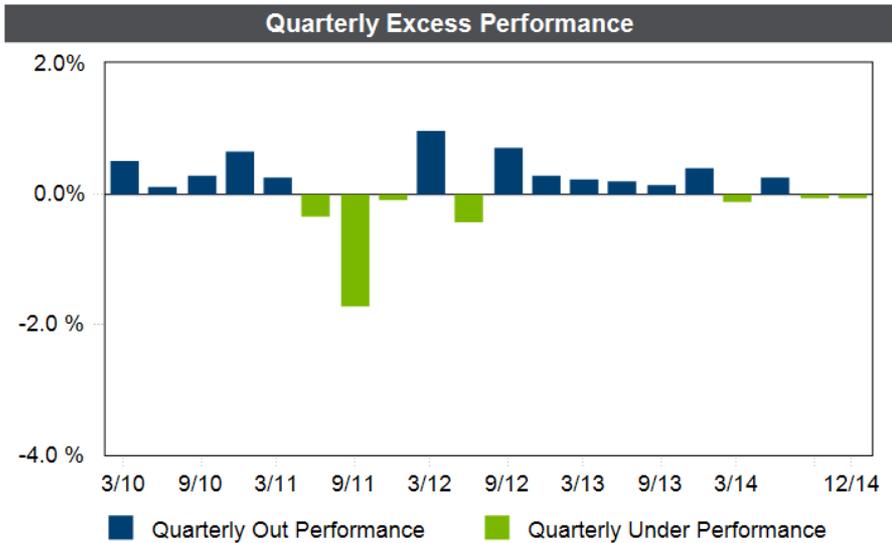
Note: The excess returns shown in this presentation may differ from State Street statements due entirely to rounding. These differences are generally within a few basis points and are not material.



Appendix – Supplemental Reporting

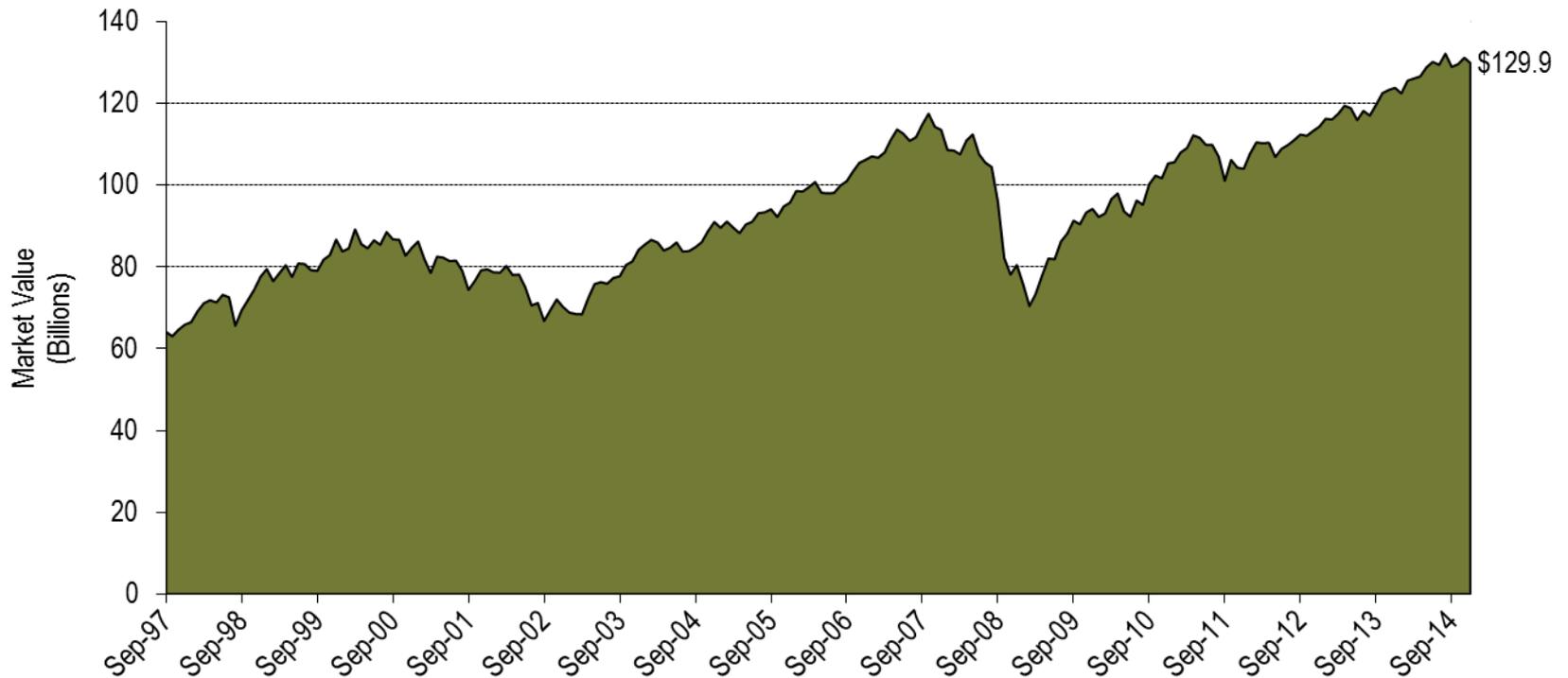
Historical Excess Performance

Quarterly and Cumulative Excess Performance
Total Fund vs. Total Fund Benchmark



TRS Asset Growth

Total Fund Historical Growth (September 1997 - December 2014)



External Manager Program: Public Equity Performance as of 12/31/2014

	Allocation (\$ in billions)	Fourth Quarter	One Year	Three Years
EP Total Global Equity	\$33.4	-0.6%	1.5%	12.6%
EP Global Equity Benchmark	--	0.0	3.3	12.0
<i>Difference</i>	--	-0.6	-1.8	+0.6
EP U.S. Large Cap	\$6.9	2.6	7.8	18.7
EP Large Cap Benchmark	--	4.8	13.4	20.4
<i>Difference</i>	--	-2.2	-5.6	-1.7
EP U.S. Small Cap	\$2.0	9.5	10.2	22.3
EP Small Cap Benchmark	--	7.1	7.5	20.7
<i>Difference</i>	--	+2.4	+2.7	+1.6
EP Non-U.S. Developed	\$4.7	-2.7	-6.3	10.6
MSCI EAFE + Canada Index	--	-3.7	-4.3	10.5
<i>Difference</i>	--	+1.0	-2.0	+0.1
EP Emerging Markets	\$7.9	-4.6	-2.1	5.4
MSCI Emerging Markets Index	--	-4.5	-2.2	4.0
<i>Difference</i>	--	-0.1	+0.1	+1.4
EP World Equity	\$5.9	-0.5	0.7	15.5
EP World Equity Benchmark	--	0.5	4.2	14.1
<i>Difference</i>	--	-1.0	-3.5	+1.4
EP Directional Hedge Funds	\$6.0	-0.7	3.7	8.5
HFRI Fund of Funds Composite Index	--	0.9	3.4	5.7
<i>Difference</i>	--	-1.6	+0.3	+2.8

Note: The excess returns shown in this presentation may differ from State Street statements due entirely to rounding. These differences are generally within a few basis points and are not material.

External Manager Program: Stable Value/Total Program Performance as of 12/31/2014

	Allocation (\$ in billions)	Fourth Quarter	One Year	Three Years
EP Total Stable Value	\$5.7	1.6%	7.7%	8.2%
EP Stable Value Benchmark	--	0.5	3.4	4.9
<i>Difference</i>	--	+1.1	+4.3	+3.3
EP Stable Value Hedge Funds	\$5.4	1.4	6.2	4.5
EP Stable Value Hedge Funds Benchmark	--	0.5	3.4	5.1
<i>Difference</i>	--	+0.9	+2.8	-0.6
EP Absolute Return	\$0.2	5.8	35.3	47.6
EP Absolute Return Benchmark	--	0.6	2.2	2.3
<i>Difference</i>	--	+5.2	+33.1	+45.3
Total External Public Program	\$39.0	-0.3	2.3	12.1
EP External Public Benchmark	--	0.1	3.4	11.0
<i>Difference</i>	--	-0.4	-1.1	+1.1

Note: The excess returns shown in this presentation may differ from State Street statements due entirely to rounding. These differences are generally within a few basis points and are not material.

Public Strategic Partnership Program (SPN): Performance Summary as of 12/31/2014

	Allocation (\$ in billions)	Fourth Quarter	One Year	Three Years
Public Strategic Partnership	\$6.5	1.7%	7.9%	12.3%
Public SPN Benchmark	--	1.4	7.4	10.5
<i>Difference</i>	--	+0.3	+0.5	+1.8
Blackrock	\$1.6	1.8%	8.8%	11.7%
J.P. Morgan	\$1.7	3.0%	8.3%	13.4%
Neuberger Berman	\$1.6	1.5%	6.3%	10.8%
Morgan Stanley	\$1.6	0.4%	8.2%	13.3%

- The Public SPNs in aggregate outperformed the benchmark during the fourth quarter, as well as trailing one-year and three-year periods
 - All managers have 3-year returns above that of the benchmark

Note: The excess returns shown in this presentation may differ from State Street statements due entirely to rounding. These differences are generally within a few basis points and are not material.

Benchmarks

- Total Fund Performance Benchmark – 20.1% MSCI USA IMI, 10.2% MSCI Emerging Markets, 15.1% MSCI EAFE plus Canada, 4.9% HFRI FoF Composite Index, 12.0% State Street Private Equity (1 qtr lagged), 13.1% BC Long Term Treasury, 4.0% HFRI FoF Conservative Index, 1.0% Citigroup 3 Mo T-Bill, 5.1% BC US TIPS, 11.8% NCREIF ODCE (1 qtr lagged), 2.0% Energy and Natural Resources Benchmark, and 0.6% Risk Parity Benchmark.
- Global Equity Benchmark– 24.3% MSCI EAFE plus Canada, 32.3% MSCI USA IMI, 16.4% MSCI Emerging markets index, 7.8% HFRI FoF Composite Index, and 19.2% State Street Private Equity (1 qtr lagged)
 - US Equity Benchmark - MSCI USA IMI Index
 - Emerging Markets Equity Benchmark – MSCI Emerging Markets
 - Non-US Developed Equity Benchmark– MSCI EAFE plus Canada
 - Directional Hedge Funds – HFRI Fund of Funds (FoF) Composite Index
 - Private Equity Benchmark - State Street Private Equity (1 qtr lagged)

Note: Returns and market values (based on account level) reported are provided by State Street. Net additions/withdrawals are reported on a gross (adjusted for expenses) total fund level as provided by State Street. All rates of return for time periods greater than one year are annualized. The excess returns shown in this presentation may differ from State Street statements due entirely to rounding. These differences are generally within a few basis points and are not material.

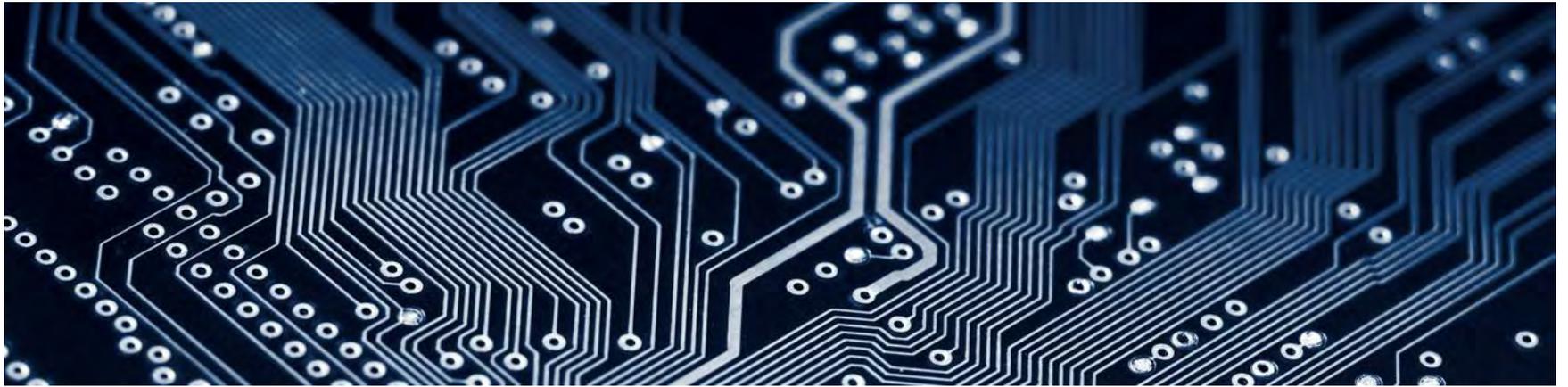
Benchmarks (cont'd)

- Stable Value Benchmark – 22.1% HFRI FoF Conservative Index, 72.4% BC Long Term Treasury, and 5.5% Citigroup 3 mo T-Bill.
 - US Treasuries Benchmark – Barclays Capital (BC) Long Term Treasury
 - Stable Value Hedge Funds – HFRI Fund of Funds (FoF) Conservative Index
 - Other Absolute Return Benchmark - 3 Mo LIBOR + 2%
 - Cash Benchmark - Citigroup 3 Mo T-Bill
- Real Return Benchmark – 27.1% BC US TIPS, 62.5% NCREIF ODCE, and 10.5% Energy & Natural Resources Benchmark
 - US TIPS Benchmark – BC US TIPS Index
 - Real Assets Benchmark – NCREIF ODCE (1qtr lagged)
 - Energy and Natural Resources – 75% Cambridge Associates Natural Resources (reweighted) / 25% quarterly Seasonally-Adjusted Consumer Price Index (1qtr lagged)
 - Commodities Benchmark – Goldman Sachs Commodity Index

Note: Returns and market values (based on account level) reported are provided by State Street. Net additions/withdrawals are reported on a gross (adjusted for expenses) total fund level as provided by State Street. All rates of return for time periods greater than one year are annualized. The excess returns shown in this presentation may differ from State Street statements due entirely to rounding. These differences are generally within a few basis points and are not material.

Description of Performance Attribution

- A measure of the source of the deviation of a fund's performance from that of its policy benchmark. Each bar on the attribution graph represents the contribution made by the asset class to the total difference in performance. A positive value for a component indicates a positive contribution to the aggregate relative performance. A negative value indicates a detrimental impact. The magnitude of each component's contribution is a function of (1) the performance of the component relative to its benchmark, and (2) the weight (beginning of period) of the component in the aggregate.
- The individual Asset Class effect, also called Selection Effect, is calculated as
Actual Weight of Asset Class x (Actual Asset Class Return – Asset Class Benchmark Return)
- The bar labeled Allocation Effect illustrates the effect that a Total Fund's asset allocation has on its relative performance. Allocation Effect calculation = (Asset Class Benchmark Return – Total Benchmark Return) x (Actual Weight of Asset Class – Target Policy Weight of Asset Class).
- The bar labeled Other is a combination of Cash Flow Effect and Benchmark Effect:
 - Cash Flow Effect describes the impact of asset movements on the Total Fund results. Cash Flow Effect calculation = (Total Fund Actual Return – Total Fund Policy Return) – Current Selection Effect – Current Allocation Effect
 - Benchmark Effect results from the weighted average return of the asset classes' benchmarks being different from the Total Funds' policy benchmark return. Benchmark Effect calculation = Total Fund Policy Return – (Asset Class Benchmark Return x Target Policy Weight of Asset Class)
- Cumulative Effect
Cumulative Effect calculation = Current Effect t *(1+Cumulative Total Fund Actual Return t-1) + Cumulative Effect t-1*(1+Total Fund Benchmark Return t)



Disclaimers and Notes

Disclaimers and Notes

As of December 31, 2014

Disclaimers:

The client portfolio data presented in this report have been obtained from the custodian. Aon Hewitt Investment Consulting (AHIC) has compared this information to the investment managers' reported returns and believes the information to be accurate. AHIC has not conducted additional audits and cannot warrant its accuracy or completeness.

- The mutual fund information found in this report is provided by Lipper Inc. and AHIC cannot warrant its accuracy or timeliness.
- Russell Investment Group is the source and owner of the trademarks, service marks and copyrights related to the Russell Indexes. Russell® is a trademark of Russell Investment Group.

Notes:

- The rates of return contained in this report are shown on an after-fees (*or before-fees*) basis unless otherwise noted. They are geometric and time weighted. Returns for periods longer than one year are annualized.
- Universe percentiles are based upon an ordering system in which 1 is the best ranking and 100 is the worst ranking.
- Due to rounding throughout the report, percentage totals displayed may not sum up to 100.0%. Additionally, individual fund totals in dollar terms may not sum up to the plan totals.

Tab 5

Teacher Retirement System of Texas



Executive Director's Report

Brian Guthrie
April 19, 2013





Presentation Objectives

- Mid-Year actuarial valuation.
- Legislative update.
- Discuss May and June Board meeting agendas.



Mid-Year Actuarial Valuation

Mid-Year Actuarial Valuation

TRS Trust Fund Valuation	2/28/15	8/31/14	Change 8/31/14 - 2/28/15
Market Value	\$132.8 billion	\$132.8 billion	\$0
Unfunded Actuarial Accrued Liability	\$32.1 billion	\$31.6 billion	+466 million
Funded Ratio	80.4%	80.2%	+0.2%
Funding Period (years)	29.3	29.8	-0.5
State Contribution Rate	6.8%	6.8%	0.00%
Member Contribution Rate	6.7%	6.7%	0.00%
Non-Social Security Covered Employer Contribution Rate	1.5%	1.5%	0.00%
Are contributions sufficient to fund future liabilities?	Yes*	Yes*	N/A

*Calculated based on a member contribution rate of 6.70% for fiscal year 2015, 7.20% for fiscal year 2016, 7.70% for fiscal year 2017 and beyond, and a 3.50% payroll growth



Mid-Year Actuarial Valuation

- As of February 28th, 2015 the fund has net deferred asset gains of just over \$1.1 billion, down from \$4.4 billion as of August 31, 2014.
- Despite a slight decrease in funding period, the Unfunded Actuarial Accrued Liability increased – as expected – due to the ramp-up in contributions.
- Experience study conducted this summer will re-examine assumptions such as mortality expectations, investment return; inflation; retirement rates; and disability.



Legislative Update



Upcoming Agendas



Upcoming Agendas

May 1, 2015 Potential items include (1 Day Off-Quarter Meeting):

Board

- FY 2016 Budget preview, including discussion on development of Red River compensation plan.
- Amendments to Contractor Code of Ethics.
- Overview of the pension fund experience study process and timeline.
- Legislative update.
- Deep dive on Trustee Ethics Policy.



Upcoming Agendas

June 11-12, 2015 Major items include (Quarterly Meeting):

Board

- Report on Q1 earnings.
- TRS-Care and TRS-ActiveCare Rates and Plan Design Adoption.
- Legislative update.
- Quarterly SPN Update.
- Update on Trustee elections.
- TEAM.

Committees

- **Audit Committee Meeting**
 - SAO Performance Incentive Pay Plan Audit and various ISD Audits.
- **Benefits Committee Meeting**
 - Recommend adoption of TRS-Care and TRS-ActiveCare Rates and Plan Design.
- **Budget Committee Meeting**
 - FY 2016 Operating Budget (Discuss only – adopt in July).
- **Investment Management Committee Meeting**
 - Private Equity Review.
 - Real Assets Review.
 - Energy and Natural Resources Portfolio.
- **Policy Committee Meeting**
 - Trustee Procurement Policy (Discussion and possible recommended Board adoption)
- **Risk Management Committee Meeting**
 - Enterprise Risk Management Update.



2015 Board Agendas

July 24, 2015 Major items include (1 Day Off-Quarter Meeting):

Board

- Adopt TRS FY 2016 Operating Budget.
- Consider selection of fiduciary counsel.
- Pension Fund Experience Study.
- Executive Evaluations.
- Recognize outgoing Trustees.
- Legislative implementation.

Committees

- **Audit Committee Meeting**
 - Evaluate the Chief Audit Executive.
- **Budget Committee Meeting**
 - Recommend adoption of FY 2016 Operating Budget.

Tab 11

Teacher Retirement System of Texas

TEAM Program:

Independent Program Assessment Board Presentation

March, 2015



- Independent Program Assessment (IPA):
 - Provide independent reporting and oversight to the TRS Board and Executive Director or designee regarding critical risks related to the TRS Enterprise Application Modernization (TEAM) Program to enable informed decision-making.

 - Critical Risks Focus:
 - Failure to meet TEAM objectives
 - Lack of user acceptance
 - Program substantially delayed
 - Program substantially over budget

Overview of Work Performed

- Bridgepoint Consulting reviewed and evaluated current project schedules and related project management documentation
- Observed and assessed the Line of Business (LOB) Post - Performance Improvement Plan (PIP) - LOB Detail Level Requirements (DLR) sessions and project management meetings
- Reviewed completed and approved Post-PIP phase LOB DLR deliverables and Internal Release 1 technical documentation
- Evaluated project progress and performance based on best practices – completed Earned Value Management (EVM) Analysis
- Followed up on management action item which were assigned to prior observations

Area of focus – Execution Risks

1. Tracking to baseline project plan – verify that each project is executing work according to approved published schedule:
2. Quality and acceptance of deliverables – verify quality of deliverables, acceptance documentation and confirm conformance to vendor contract
3. Risks and Issues Management – verify that project issues are addressed timely, including tracking of Risk, Action and Decision items
4. Planning for LOB code development, testing, documentation, training and conversion.

IPA Overall Scorecard

TEAM Program Governance	Prior Score	Current Score	Observations
1. Program/Project Management	3	4	4,5, 16, 21
2. Risk Management	1	2	23
3. Issues Management and Tracking	2	2	19
4. Program Communication	1	1	
5. Change Management/ Quality Control	2	3	18 ,22
6. Staffing and Organization	3	3	4, 13 – 15, 20
7. Budget Tracking	1	2	Cost overrun
TEAM Projects			
1. LOB Implementation	3	4	13 15, 16, 17, 18, 21-27
2. FSR Implementation	2	2	9
3. Data Management	2	2	16
4. Reporting Entity Outreach	1	2	23,24
5. Organizational Change Management	1	1	24
6. Business Procedures and Training	2	2	20 , 23, 24
7. Decommissioning Legacy Systems	1	1	24
8. External Website Enhancement	NA	1	

Legend

- 1= LOW
- 2= GUARDED
- 3= CAUTION
- 4= ELEVATED
- 5= SEVERE



N/A= Project not started, rating is not applicable at this time

TEAM Performance Assessment – EVM Analysis



Provide an objective evaluation of TEAM program performance with Earned Value Management Analysis

- EVM is a commonly used methodology that combines scope, schedule and resource measurements to assess project performance and progress.

- Project performance can be objectively assessed based on the following basic EVM elements:
 - Budget At Completion (BAC) – Total program budget authorized, all EV calculations based on this
 - Planned Value (PV) – the authorized budget assigned to the project to date (FY2013 – to 12/31/14)
 - Actual Cost (AC) – the realized cost incurred for the work performed as reported through 12/31/2014
 - **Earned Value (EV)** – aka “Budgeted Cost of Work Performed”, is a measure of work performed expressed in terms of the budget authorized for that work
 - **Cost Performance Index (CPI)** – measures of the cost efficiency rate of budgeted resources
 - **Schedule Performance Index (SPI)** – efficiency rating for work accomplishments, comparing actual accomplishments to what should have been accomplished or what was planned

1. Improved documentation of deliverable approval process following Process Improvement Phase:
 - Documented Detail Level Requirements (DLR) are reviewed by subject matter experts
 - Business process owners are identified for each functional area and
 - Acceptance documented by the business process owner

2. Detail Level Requirements sessions are better managed
 - Meeting agendas with Purpose and Expected Outcomes are more consistently documented and reviewed at the beginning of meetings
 - Improved meeting time and scope management by HP Business Analysts (BA) and TRS Business Process Managers (BPM)
 - Meeting minutes and follow up action items are clearly documented

LOB Project by Major Milestones

High Level Overview



HP LOB High Level Project Schedule Baseline set in February 2014

LOB Phases and All Major Milestones	Baseline Finish	Revised (RW3)	Revised (RW5)	Status
MS Phase 1 – High Level Requirements (Active Mem)	4/22/14	n/a	4/30/14	100%
MS Phase 1 – Detail Level Requirements – Increment 1	6/30/14	7/21/14	12/12/14	100%
– Detail Level Requirements – Increment 2	9/22/14	11/25/14	9/2015	
MS Phase 1A – Design and Build All Increments	1/08/15	1/23/15	10/2015	
MS Phase 1A – User Acceptance Testing All Increments	2/09/15	3/16/15	1/2016	
MS Phase 1A – GO LIVE (RE Certification only)	2/20/15	3/23/15	2/2016	
MS Phase1B – Design and Build All Increments	7/02/15	7/23/15	3/2016	
MS Phase 1B – User Acceptance Testing	9/04/15	9/17/15	7/2016	
MS Phase 1 – GO LIVE (Active Membership)	9/21/15	9/25/15	9/2016	
MS Phase 2 – Requirements Definition Complete (Benefits)	5/27/16	6/10/16	4/2017	
MS Phase 2 – Design and Build all Increments	2/17/17	3/3/17	12/2017	
MS Phase 2 – User Acceptance Testing All Increments	5/23/17	5/30/17	4/2018	
MS Phase 2 – GO LIVE (Benefits)	5/23/17	5/30/17	4/2018	

Observations – Execution Risk

March 2015



Observation #23

Substantial delays in the early phases of the program indicate a high likelihood of subsequent phase delays.

Risk

Further delays may result in continued increased program cost and extended timeline.

Recommendations

- Implement previous recommendations regarding a resource loaded plan
- Make decisions timely
- Hold vendors responsible for quality deliverable products

Observation #23 – Management Response

- *TRS agrees that delays early in the program increase the likelihood in subsequent phases.*
 - *This is one of the reasons TRS and HP implemented the Process Improvement Phase (PIP). While this does not guarantee there will not be future delays, one of the goals was to improve the quality of deliverables and to reduce the likelihood of delays. TRS will also update the existing resource plan and provide additional detail to identify where resource issues may exist. TRS has also recently implemented a new escalation process to assist in making timely decisions and communicating those decisions to stakeholders. TRS has also implemented a quality review for deliverables before they are sent to subject matter experts.*
- Owner: Project Management Office (PMO)
 - Implementation Date: 3/31/2015

Observations – Execution Risk

March 2015

Observation #24

Project schedules have not been consistently maintained with current projections, resource allocations and interdependencies.

Risk

TRS may not have the resources necessary to deliver on their responsibilities, resulting in increased cost and delays

Recommendations

Develop a resource loaded plan for the next 12 months and incorporate major interdependencies between the various projects within the program

Observation #24 – Management Response

- *TRS agrees that project schedules should be updated with current projections and resources allocations.*
 - *Project schedules have not been updated while TRS was waiting on the updated schedule from HP on the Line of Business Project. Project schedules are being updated with the revised dates and resources that reflect the updated schedule we received from HP on February 25. TRS has maintained a Project Interdependency Schedule for over a year. This Project Interdependency Schedule will be updated as well with additional details.*
-
- Owner: PMO
 - Implementation Date: 4/15/2015

Observations – Execution Risk

March 2015



Observation #25

Outstanding items from requirements sessions are not consistently documented.

Risk:

LOB deliverables could potentially be incomplete or inaccurate. Requirements may not be fully met, resulting in lack of user acceptance.

Recommendations:

Continue to improve quality of LOB DLR deliverables and consider assigning a quality review process for all completed deliverables prior to signing off.

Observation #25 – Management Response

- *TRS agrees with this observation.*
- *One goal of the PIP was to help reduce the number of outstanding items that remain in requirements documents. The quality improvements implemented during PIP should reduce the number of outstanding items. However, outstanding items still exist. TRS currently uses a spreadsheet called the DLR Log to track these items. This has been difficult to manage. TRS is also implementing a method to consistently track and document all requirements defects (or outstanding items) in a common tool called Application Lifecycle Manager (ALM).*

- Owner: PMO
- Implementation Date: 4/15/2015

Observations – Execution Risk

March 2015



Observation #26

Overall deliverable approval process has improved, but some documents are taking longer than the contractual period for review.

Risk:

Longer than planned acceptance may cause further project delays and increased project cost.

Recommendations:

If deliverables do not meet quality standards, they should be rejected and the vendor should correct the quality issues prior to resubmission.

Deliverables that do meet quality standards should be approved within the contractual timeframes.

Observations – Execution Risk

March 2015

Observation #26 – Management Response

- *TRS agrees with this observation.*
- *Post-PIP review of requirements documents have improved and thus far have been completed ahead of schedule. However, the risk of delayed deliverable acceptance will exist. Two mitigations have been implemented to reduce this risk: TRS staff have more opportunity to informally review artifacts prior to formal delivery from HP and TRS has also implemented a quality check upon initial submission of the documents. Both of these mitigations were implemented as a result of the Process Improvement Phase and they are helping the review process. TRS and HP need to ensure that these steps continue to work.*

- Owner: PMO
- Implementation Date: 3/31/2015

Observations – Execution Risk

March 2015

Observation #27

Initial technical artifacts are accepted without proper documentation.

Risk:

Missing or incorrect technical documentation may indicate unacceptable code quality.

Recommendations:

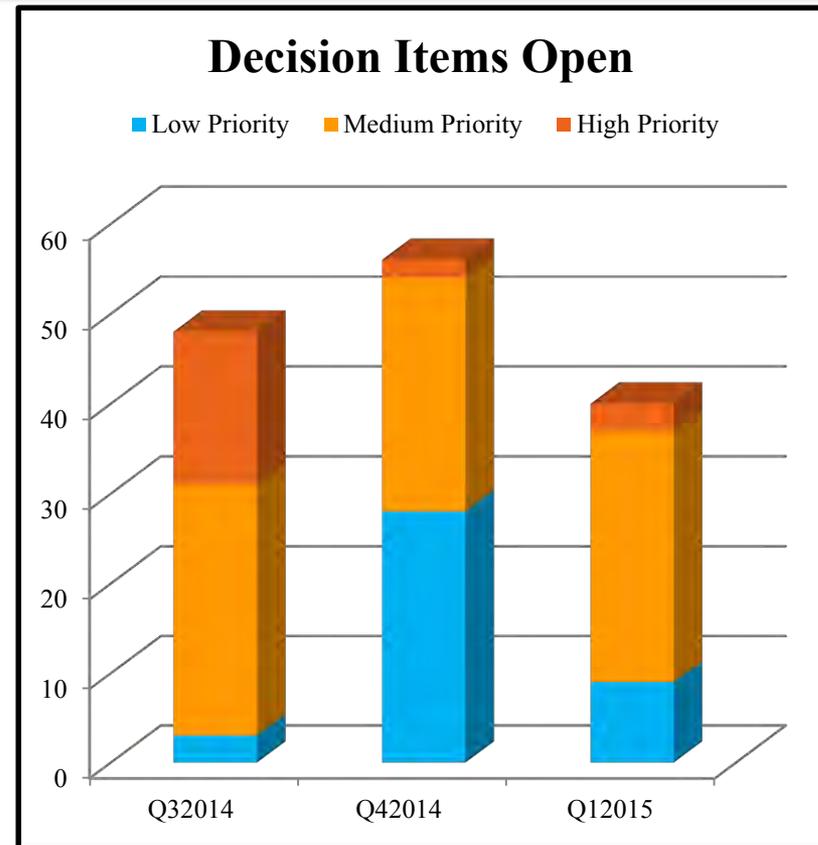
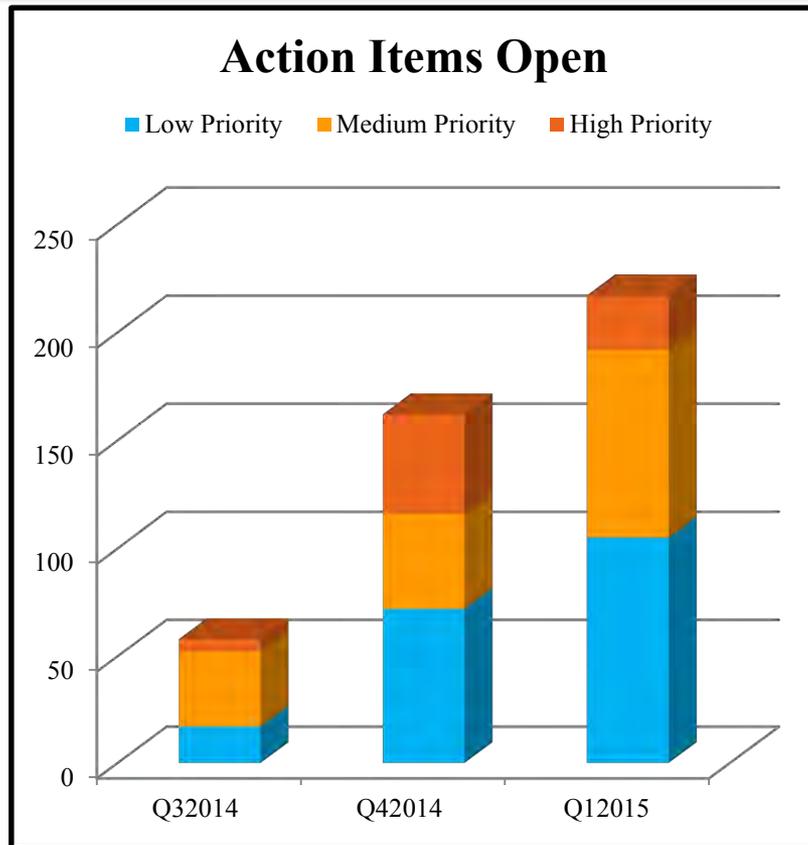
Implement a TRS IT quality control process to ensure that technical artifacts are reviewed and approved by TRS IT staff prior to acceptance.

Observation #27 – Management Response

- *TRS agrees with this observation.*
 - *The review process will be modified to include an approval by a representative from the IT Team.*
-
- Owner: IT
 - Implementation Date: starting with IR2

TEAM Risks & Issues Management

Open Actions & Decisions (as of 3/2/15)



➤ Total Current Open Actions:

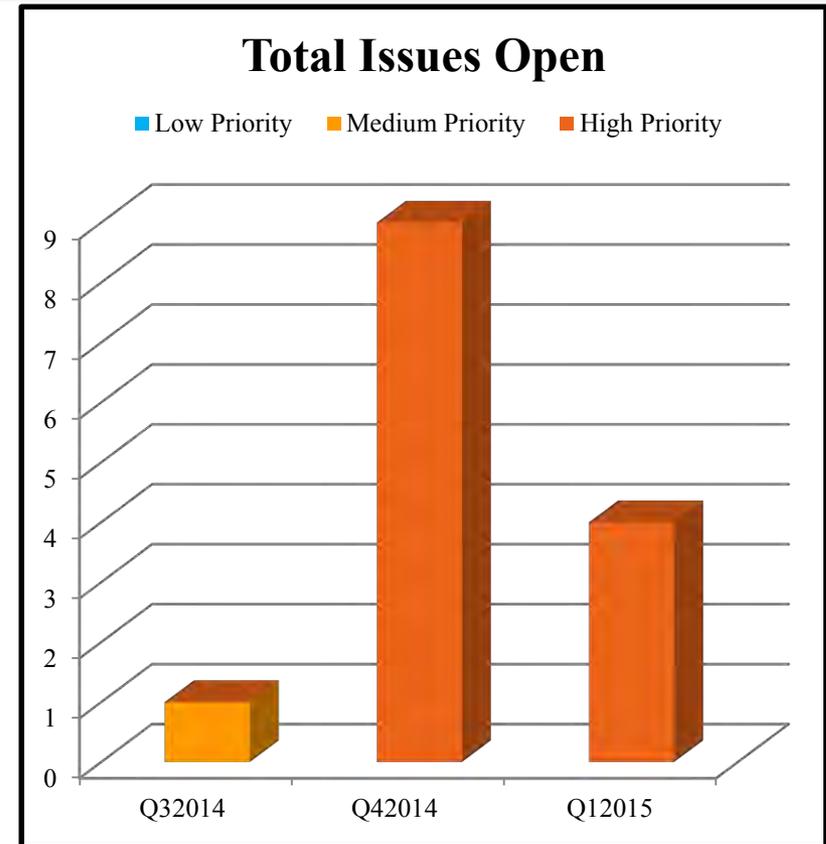
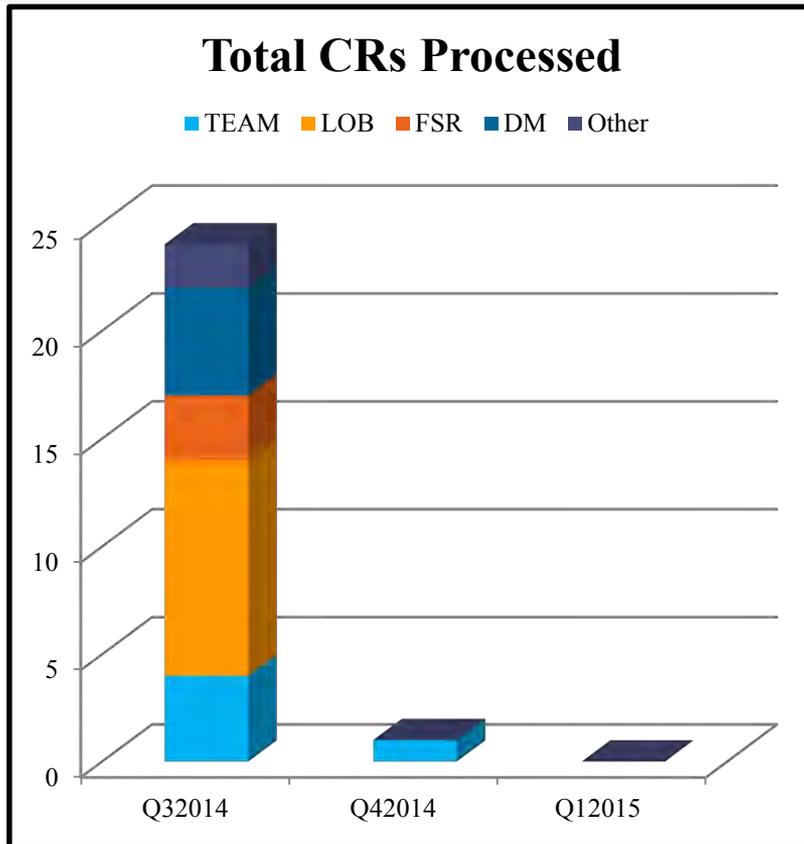
- 217 action items open
- 25 of total are HIGH priority action items
- 131 of total logged over a month ago (65%);

➤ Total Current Open Decisions:

- 40 decision items open
- 3 of total are HIGH priority decision items
- 28 of total logged over a month ago (70%)

TEAM Issues & Change Management

Open CRs and Issues (as of 3/2/15)



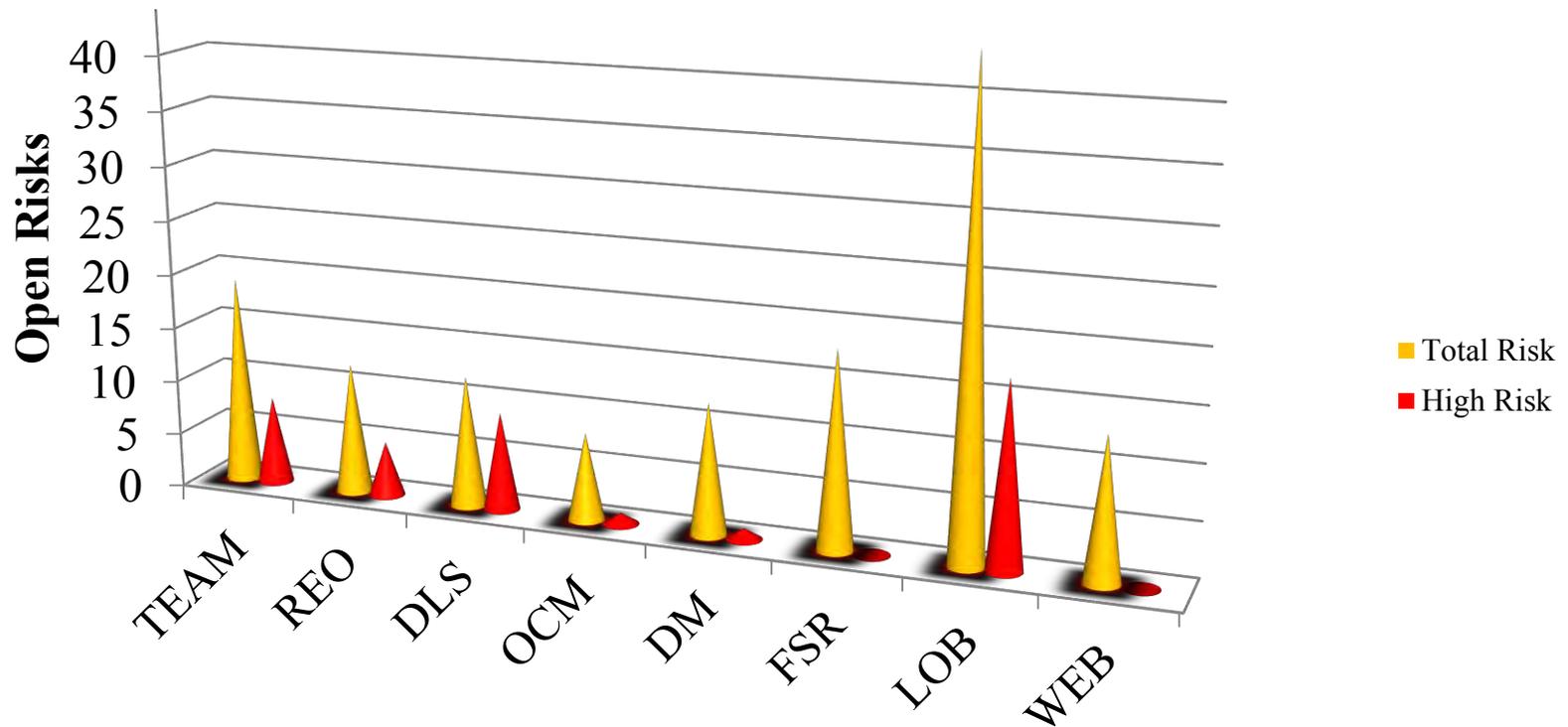
- **Total Changes Requests (CR) Processed:**
 - 25 Total Change Requests logged
 - 10 LOB Related Changes completed through 2014 (LOB DLR Log of 189 items not included)

- **Total Current Open Issues:**
 - 4 issues open
 - All HIGH priority
 - 3 LOB related issues

TEAM Risk Distribution

Open Current Period (as of 3/2/2015)

TEAM Program Risk Distribution by Project



Activities Completed – Current Period

1. Attended weekly CMT status meetings, Executive Briefing or ESC, LOB, Project Interdependency, DM and PMO Team Meetings.
2. Continued with a detailed project management documentation review, including: overall TEAM Program Management status reports, individual project schedules and status reports, project Action and Decision Logs and other program/project related reports.
3. Assessed LOB and Data Management, Decommissioning Legacy Systems, and Business Procedures and Training Project Team meetings, observed interaction between vendors and TRS teams, current project issues and risks identified during team meetings.
4. Reviewed completed LOB Detail Level Requirements deliverables and artifact acceptance documentation. Discussed minor follow up questions/suggestions with PMO and LOB Program Manager.
5. Attended and observed LOB Detail Level Requirements development sessions, related to the following functional areas: Benefit Calculations, Reporting Entity Setup, Reporting Entity Reporting and Cash Receipts related sessions.
6. Reviewed completed LOB Internal Release 1 Technical deliverables, including 11 Use Cases related Unit Testing and artifact acceptance documentation. Identified specific observations and discussed questions/suggestions with PMO and IT Management.
7. Drafted new IPA observations and presented to Core Management TEAM.

Activities for Next Period

1. Continue to attend and observe weekly Executive Steering Committee (ESC) and Core Management Team (CMT) meetings.
2. Evaluate updated LOB Project schedule and dependent TEAM Project schedules to verify that project plans are updated to reflect new milestone dates.
3. Review Business Procedures and Training Project Plan and detailed schedule when developed and assess completeness and adequacy of TRS end user training plan.
4. Review and evaluate updated consolidated TEAM Program level resource allocation plans; verify that resource requirements are aligned with schedule within each project plan and resource contentions across projects are clearly identified.
5. Review and evaluate updated and consolidated TEAM Interdependency schedule (when available) including updated LOB, REO, BPT, DLS and Data Management project schedules and related interdependencies.
6. Obtain and review LOB Development plan documentation and detail level project schedule to verify timeline and technical resource allocations.
7. Continue to monitor TRS risk mitigation activities related to execution risks.

IPA Budget Status NEEDS Update

IPA Financial summary status through February 28, 2015

➤ Total hours incurred	3,032
➤ Total calculated cost incurred	\$534,540
➤ Total billings for deliverables	\$515,000
➤ Variance	\$19,540

- Supporting Details:
 - List of prior IPA identified Risks and Recommendations with Status to date

SUMMARY List of all IPA Risks & Recommendations to Date

ID	Area	Risks Identified	Recommendations	Status
1	Internal Controls	Inadequate internal controls environment Increased cost to design post go-live	Incorporate internal controls assessment and design into applicable project plans (LOB, FSR etc.)	Addressed & Monitor
2	Staffing	Inadequate investment in IT staffing to accomplish TEAM objectives and ongoing sustainability	Consider including cost/benefit analysis for Hire new graduates and train/develop, Train and develop existing staff, Hire experienced staff, Outsource or combination of the above	Addressed & Monitor
3	Project Plan and Reporting	Incomplete or inaccurate project plan Delays in projects may not be accurately reported	Update project schedules or all projects currently in-progress with tasks and milestones.	Addressed & Monitor
4	Staffing	Inadequate investment in staffing to accomplish TEAM objectives and ongoing sustainability	<ol style="list-style-type: none"> 1. Update project plans to include detail roles and responsibilities by each team member 2. Develop a detailed staffing matrix for all TEAM projects and a resource management plan 	RACI developed, but not individual level
5	Project Interdependencies	Data source may not be cleansed in time Program Management structure may not operate effectively. Lack of resources or conflicts in staffing allocation to projects	<ol style="list-style-type: none"> 1. Develop a consolidated MS Project Plan with interdependencies identified 2. Establish Monthly Project Interdependency meetings. 	Addressed & Monitor

SUMMARY List of all IPA Risks & Recommendations to Date

ID	Area	Risks Identified	Recommendations	Status
6	FSR	New Financial Systems may not be implemented within TEAM program on time and/or within budget	<ol style="list-style-type: none"> 1. Develop a contingency plan with cost/benefit analysis to facilitate Go/No-Go decision 2. PM schedule should be updated to reflect current project direction. 	FSR Delayed & Monitor
7	OCM	Lack of clarity as to who has the overall responsibility for organizational readiness. Lack of staff acceptance. Unclear communication	<ol style="list-style-type: none"> 1. Clarify roles between HR, OCM, TEAM Communications Sub-Team and the "Business Procedures and Training" projects. 2. Consider adding HR representation to the CMT 	Addressed & Monitor
8	CM /QA	Lack of visibility and appropriate authorization to changes that impact scope, schedule and/or cost	<ol style="list-style-type: none"> 1. Develop Change Management procedures 2. Procedures should identify quality standards and plan in place to manage quality. 	Addressed & Monitor
9	Resource Allocation	LOB and FSR executed concurrently Increase demand on TRS staff IT expertise	Develop a consolidated MS Project Plan fully resources loaded; plan should incorporate estimated major milestones and interdependencies from each key project in order to determine proper resource allocation.	FSR delayed. Monitor.
10	DM	Delayed deliverables may impact overall schedule and timeline	<ol style="list-style-type: none"> 1. MS Deliverable delays should be reported and highlighted within the published TEAM Dashboard. 2. Ensure that deliverables accepted according to the acceptance criteria in the contract. 	Addressed & Monitor

SUMMARY List of all IPA Risks & Recommendations to Date

ID	Area	Risks Identified	Recommendations	Status
11	FSR	Scope of project may expand substantially during the design phase	Reevaluate FSR implementation timeline and consider reducing scope. Recommend using the same approach as LOB for ease of maintenance.	FSR Delayed & Monitor
12	Budget	Unclear program and project level financial results – specifically life-to-date and annual Actual to Budget variance	<ol style="list-style-type: none"> 1. Include TEAM program and project level life-to-date financial information within status reports to ESC (and Board). 2. Determine cost categories to include in financial reporting and allocate project cost 	Addressed & Monitor
13	Resource Allocation	The lack of fully resource loaded project schedule increases the risk of inadequate TRS resource levels. Conflicting priorities for key project staff may not be detected and resolved on time	<ol style="list-style-type: none"> 1. Identify LOB Core Project Team members and document their specific area of project roles 2. Update project schedule or TEAM – Resource Plan to include resource allocations and resolve over allocations (level resources) 3. Consider adding a TEAM Project Controller position to provide additional help 	Not Addressed Risk Accepted
14	Business Resource Allocation	Key functional decisions may not always be made timely without adequate allocation of resources. Conflicting priorities for key staff	Assign designated business leads from significant functional areas to work on the project closer to 100% of their time as possible.	Not Addressed Risk Accepted
15	IT Resource Allocation	Partially dedicated IT staff may not be able to develop the appropriate technology skills to provide sufficient technical support	<ol style="list-style-type: none"> 1. Assign designated IT staff to work on the project closer to 100% of their time as possible 2. Develop an individual training plan for each IT staff according to HP technology training plan 	In Progress

SUMMARY List of all IPA Risks & Recommendations to Date

ID	Area	Risks Identified	Recommendations	Status
16	TEAM/ LOB/DM	Key milestone delays may impact critical path and could result in increased project cost, timeline and other implementation issues.	Improve project schedule estimating task duration and monitoring progress, including resource allocations.	Due: 6/14 In Progress
17	LOB	The LOB project may take longer and require more effort than anticipated if the contract functional fit estimate is incorrect.	Ensure that vendor deliverables conform to contract required Gap Analysis documentation before acceptance.	Due: 8/14 Rev.:10/15 In Progress
18	LOB	LOB deliverables are potentially incomplete or inaccurate.	Improve quality control of LOB deliverables and consider assigning first level review/approval responsibility to SMEs instead of having all artifact's approved by PMO only.	Addressed & Monitor
19	Issues Managem ent	Issues/actions/decisions may not be completed or resolved on time and may result in delayed or incomplete project tasks.	Improve issues management by keeping original assigned due date and add another column for "revised" due date in order to accurately determine aging and impact of delays.	Due: 6/14 In Progress
20	TEAM Resource Allocation s	The lack of fully resource loaded project schedule increases the risk of inadequate resource levels and potentially could impact overall project cost and timeline.	Assign specific resources to all project tasks to allow for fully resource loaded project schedules, including the BPT project.	Due: 9/14 In Progress

SUMMARY List of all IPA Risks & Recommendations to Date

ID	Area	Risks Identified	Recommendations	Status
21	LOB Project Delay	Key milestone delays may impact critical path and could result in increased project cost, timeline and other implementation issues.	Improve project schedule estimating task duration and monitoring progress, including resource allocations.	Due: 10/14 In Progress
22	LOB DLR Quality	LOB DLR deliverables are potentially incomplete or inaccurate.	Continue to improve quality of LOB DLR deliverables and consider assigning first level review/approval responsibility to appropriate key business Subject Matter Experts (SME).	Addressed & Monitor

Tab 12

Teacher Retirement System of Texas



TEAM Program Management Update

Adam Fambrough

Barbie Pearson

David Cook

Jay Masci (Provaliant)

March 26, 2015



Update Items

- TEAM Program Progress
- Line of Business (LOB) Update
- TEAM Program Project Interdependencies
- TEAM Project Milestones
- TEAM Project Accomplishments
- TEAM Program Budget Summary
- Data Conditioning Update



TEAM Program

TEAM Progress as of January 30, 2015





TEAM Program

TEAM Progress as of March 13, 2015





TEAM Program

Line of Business Update Adam Fambrough



TEAM Program

Line of Business Update

- Recap from February 2015
 - 8 month schedule impact due to:
 - Process Improvement Phase
 - Realistic Schedule – additional time for development activities

	Original Go-Live Date	8 Month Impact Go-Live Date
Phase 1	September 2015	May 2016
Phase 2	May 2017	January 2018



TEAM Program

Line of Business Update

- Change Requests
 - 8 major change requests; 18 minor change requests
 - Represents enhanced functionality over base commitments
- TRS and HP worked to reduce overall cost and schedule impact
- Cost Impact = \$2.065 million

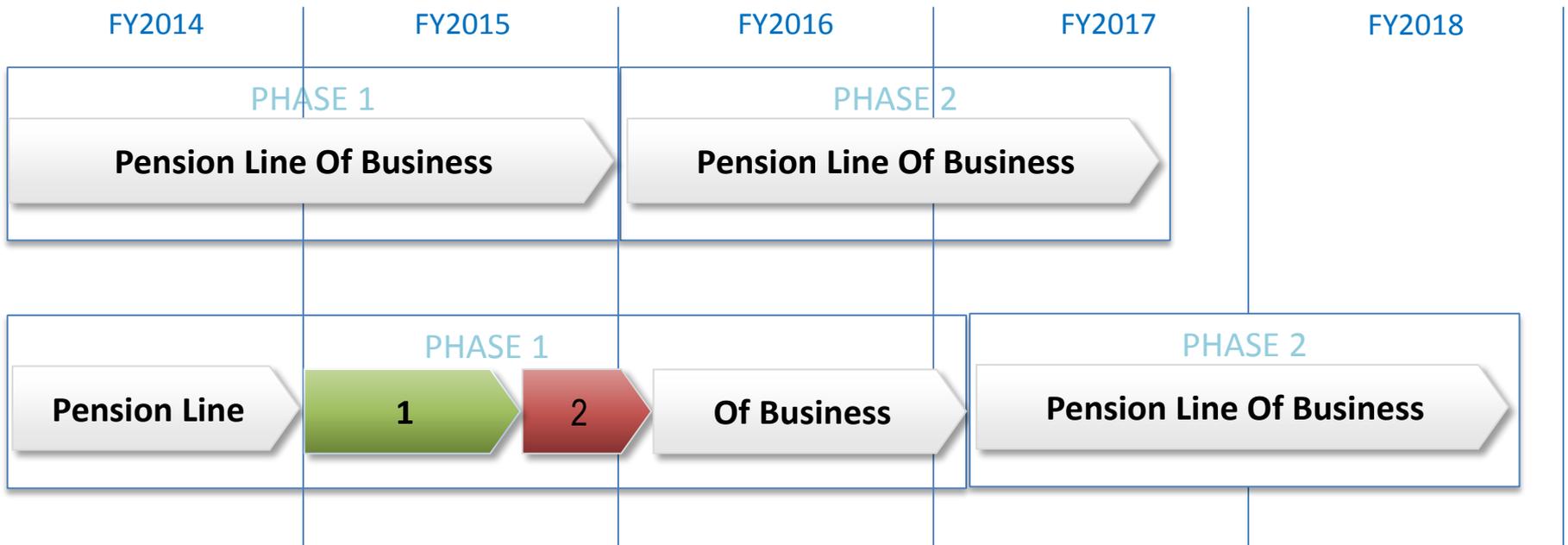
	Original Go-Live Date	8 Month Impact Go-Live Date	Change Requests Go-Live Dates
Phase 1	September 2015	May 2016	September 2016
Phase 2	May 2017	January 2018	May 2018



TEAM Program

Line of Business Update

Schedule Rebaseline – February Board Meeting

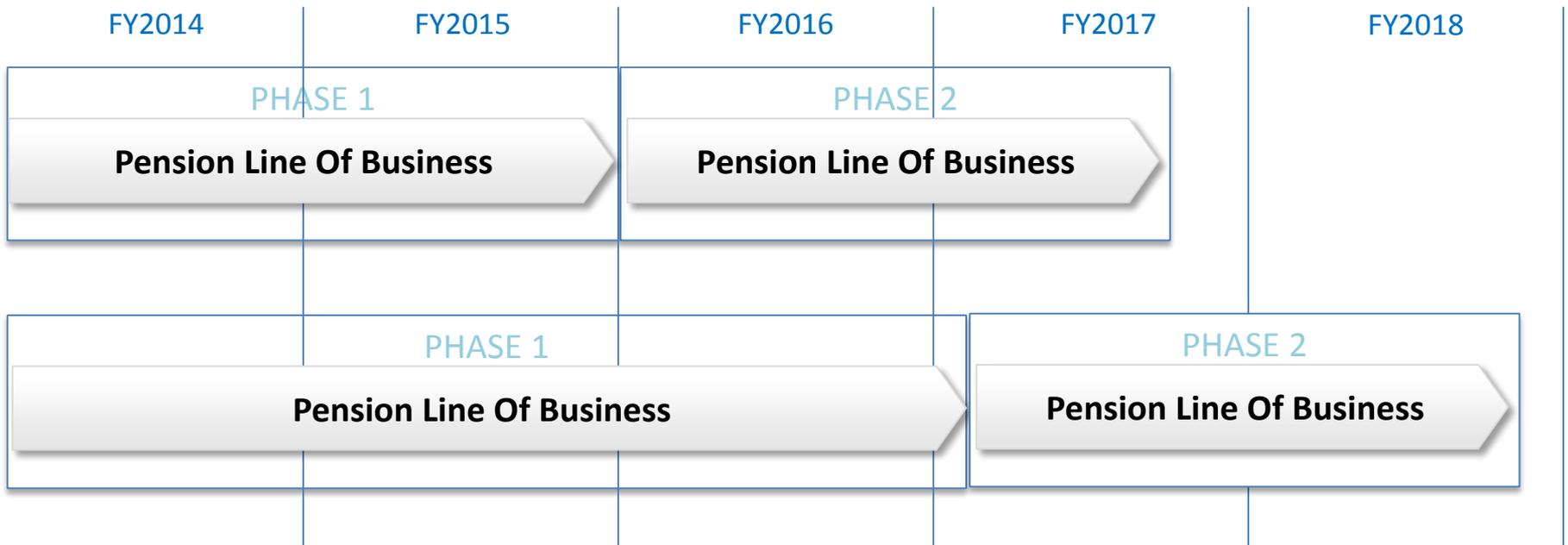




TEAM Program

Line of Business Update

Schedule Rebaseline to Reflect Change Requests (CRs)





TEAM Program

TEAM Program Update Jay Masci (Provaliant)

TEAM Program

Milestones

Planned Milestones (current fiscal quarter: March - May)	Previous Planned Date	Current Planned Date	Status
WEB - Website Redesign RFO Procurement		March, 2015	Completed
REO - Draft RE Reporting Layout sent to REs		March, 2015	On Schedule
LOB - DLR Health Insurance Package 1		April, 2015	On Schedule
LOB – DLR Service Credit Package 1		April, 2015	On Schedule
LOB - DLR Cash Receipts Package 2		April, 2015	On Schedule
LOB - DLR Mbr Acct Maintenance Package 4		May, 2015	On Schedule
LOB - DLR Check Payment Package 2		May, 2015	On Schedule



TEAM Program

Milestones

Upcoming Milestones (next fiscal quarter: June - August)	Previous Planned Date	Current Planned Date	Status
LOB - DLR RE Reporting Package 4		June, 2015	On Schedule
LOB - DLR Member Statements Package 1		June, 2015	On Schedule
LOB - DLR Sub-ledger Package 1		July, 2015	On Schedule
LOB – DLR Audit Package 1		July, 2015	On Schedule
LOB - DLR Statistical Reporting Package 1		August, 2015	On Schedule
LOB – Workflow Refunds		July, 2015	On Schedule
LOB – Workflow Benefit Estimates		August, 2015	On Schedule

Accomplishments

Pension Line of Business (LOB)

- Completed the negotiations for the Change Requests
- Rebaselined the project schedule
- Signed-off on several Detailed Level Requirements (DLR) packages

Financial System Replacement (FSR)

- Posted the FSR RFO on the State ESBD site

Accomplishments

Reporting Entity Outreach (REO)

- Presented information about the new Reporting Entity Portal at the TASBO conference (Texas Association of School Business Officials)
- Met with UT Austin regarding the new Reporting Entity Portal
- Shared the Report Formatting Guide with Reporting Entities and software providers

Accomplishments

Data Management (DM)

- Completed Assessment of Data Level 7 INSURANCE
- Completed Assessment of Data Level 5 MEMBER BENEFITS
- Developed a process and graph/chart to track the Data Conditioning progress.

Accomplishments

Data Management (DM) - continued

- Formed the Data Conditioning Business Core Team. The team is comprised of seven TRS business staff. The team is providing in-depth analysis for more complex data conditioning items where research is needed.

Organizational Change Management (OCM)

- Completed stakeholder interviews of all IT employees (87 interviews) and reviewed findings with IT management

Accomplishments

Decommissioning Legacy System (DLS)

- Continued with the creation of the testing environment for bridging and decommissioning
- Continued discussions about bridging and decommissioning requirements with HP

Website Redesign (WEB)

- Completed the final scoring (proposals, reference checks, and demonstrations/interviews) of the finalists

Accomplishments

Quality Assurance (QAP)

- Developed the Project Charter



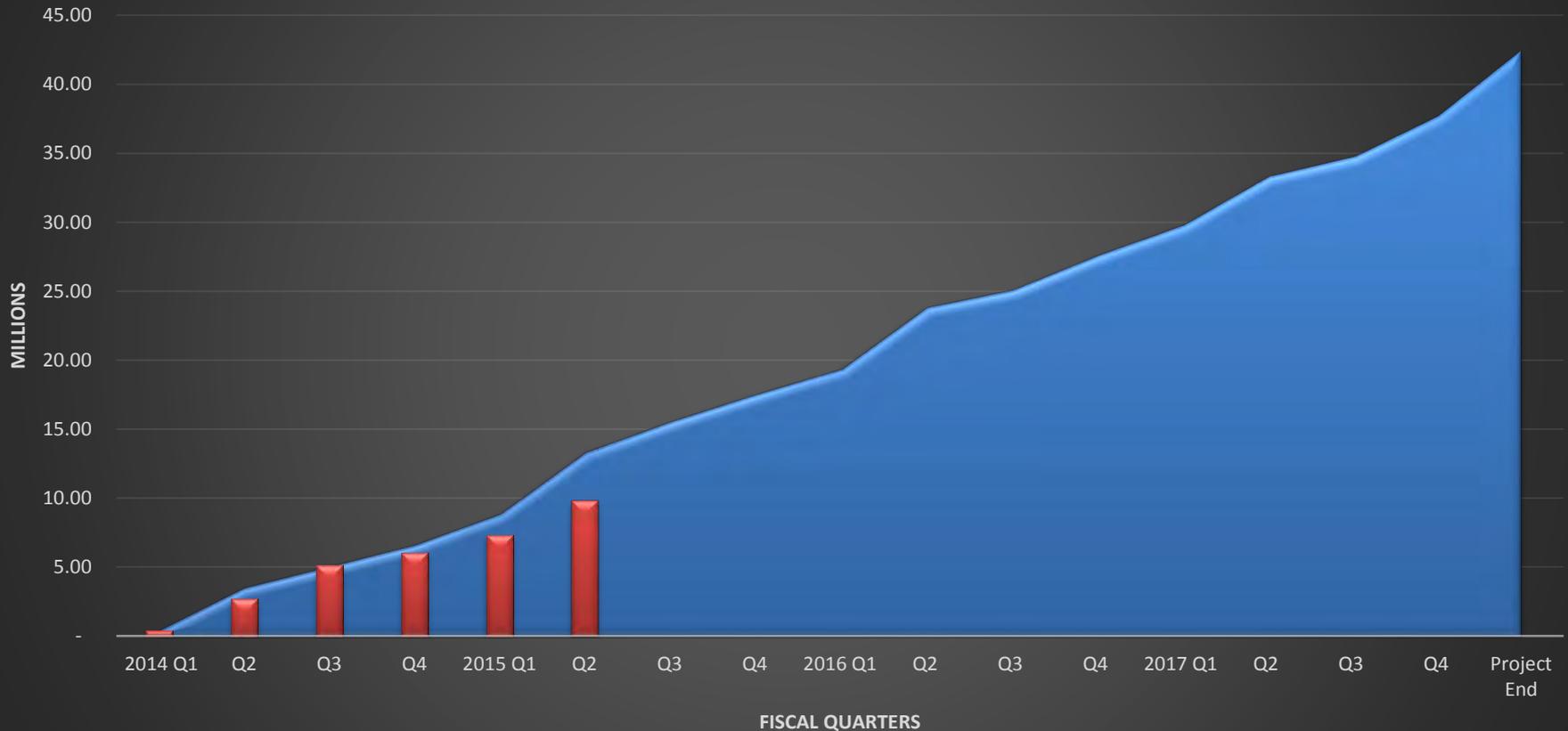
TEAM Program

TEAM Program Budget Update **David Cook**

TEAM Program



LOB Project
Actual vs Projected Cumulative Expenditures*



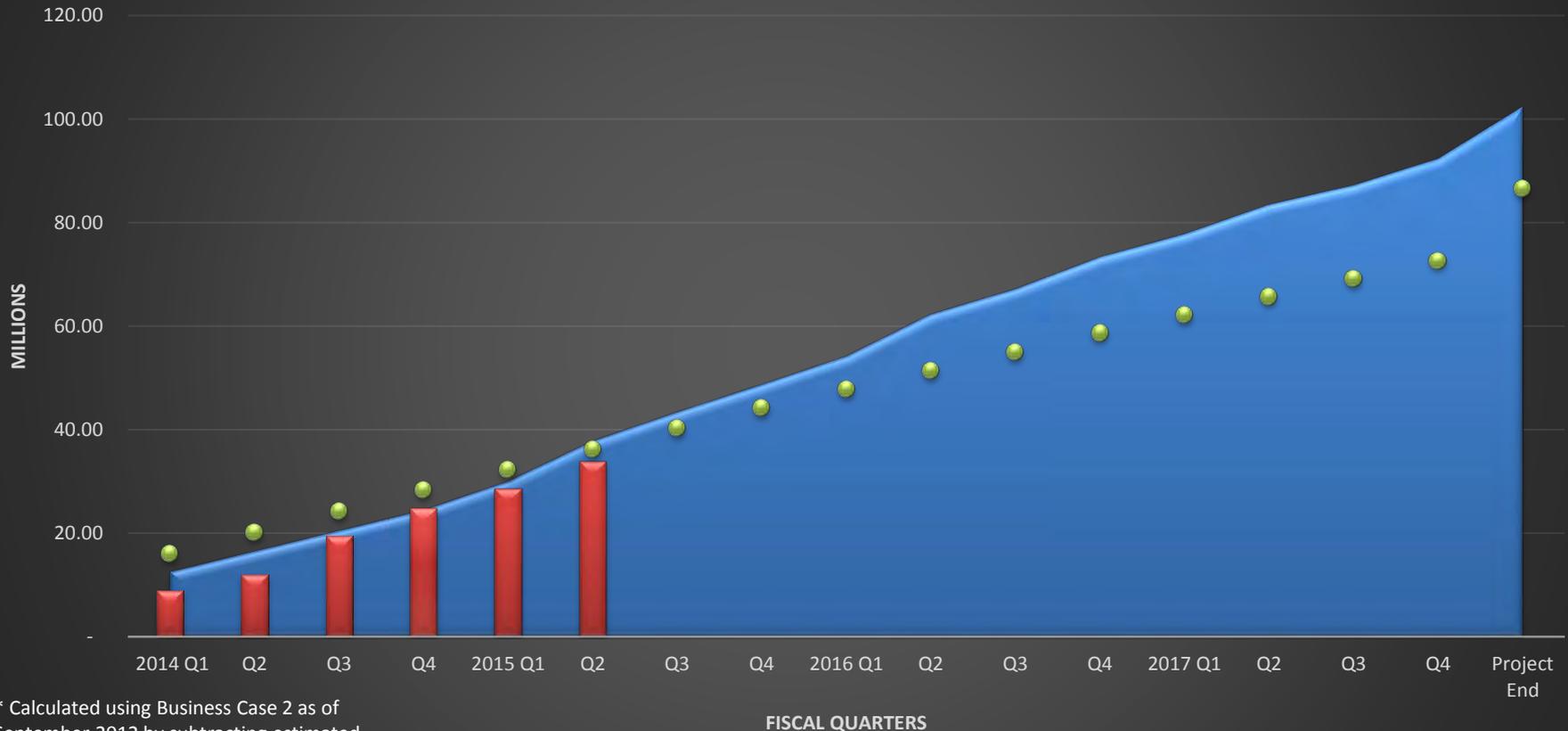
* Includes \$7.2 million contingency

■ LOB Projected Cumulative Expenditures ■ LOB Actual Cumulative Expenditures



TEAM Program

**TEAM Program Total Cumulative Expenditures
Current Expected vs. Actual. vs Original Forecast***



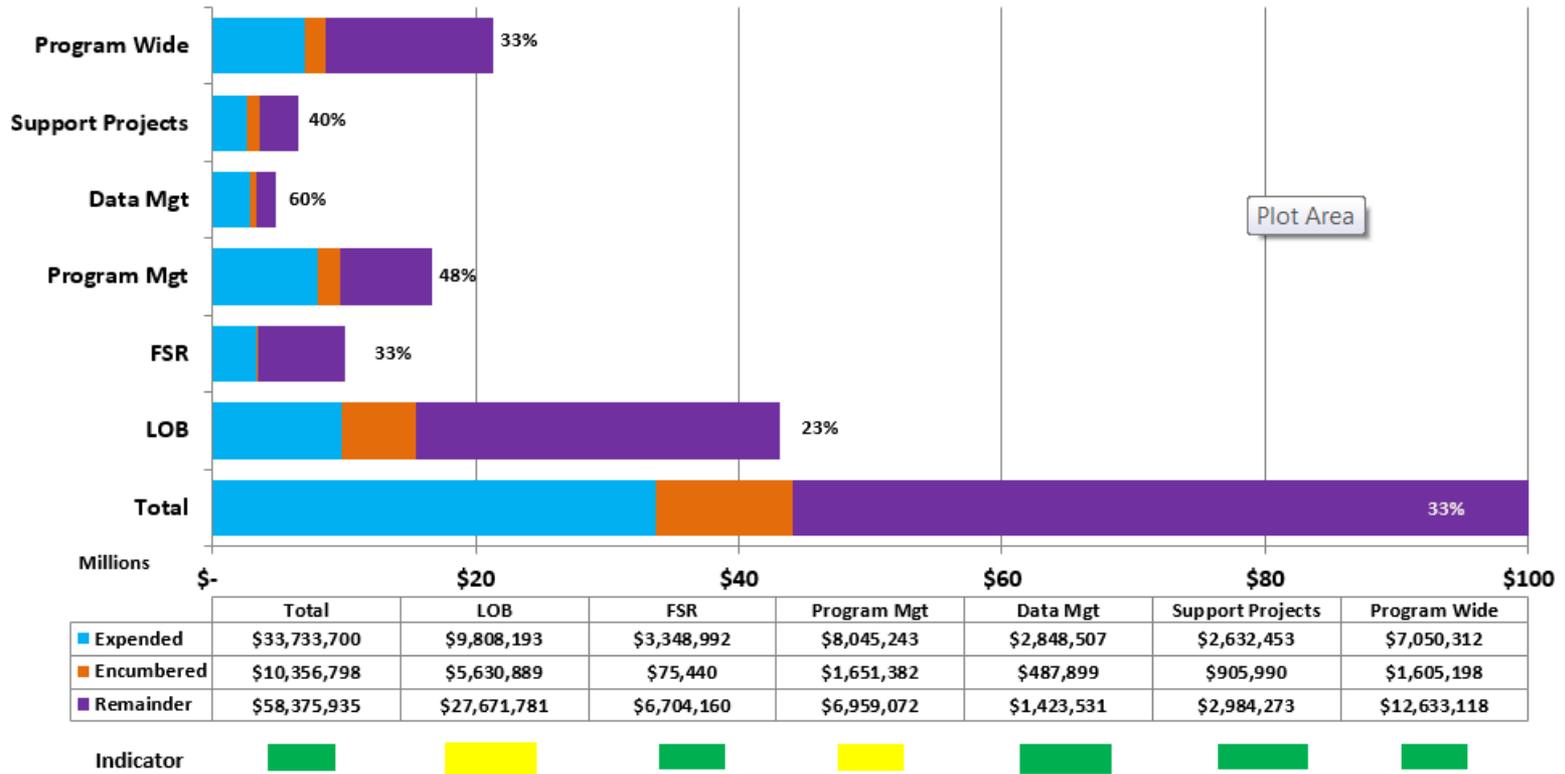
* Calculated using Business Case 2 as of September 2012 by subtracting estimated agency personnel costs from estimated total project costs including contingency

■ Current Expected Expenditures
 ■ Actual Expenditures
 ● Original Forecasted Expenditures



TEAM Program

Program Budget by Project (% spent indicated)



Notes: Total Project cost is \$102.5 million. Does not include services or maintenance beyond 2017. FSR figure is estimate only.



TEAM Program

Data Conditioning Update

Barbie Pearson



TEAM Program

Data Conditioning Update

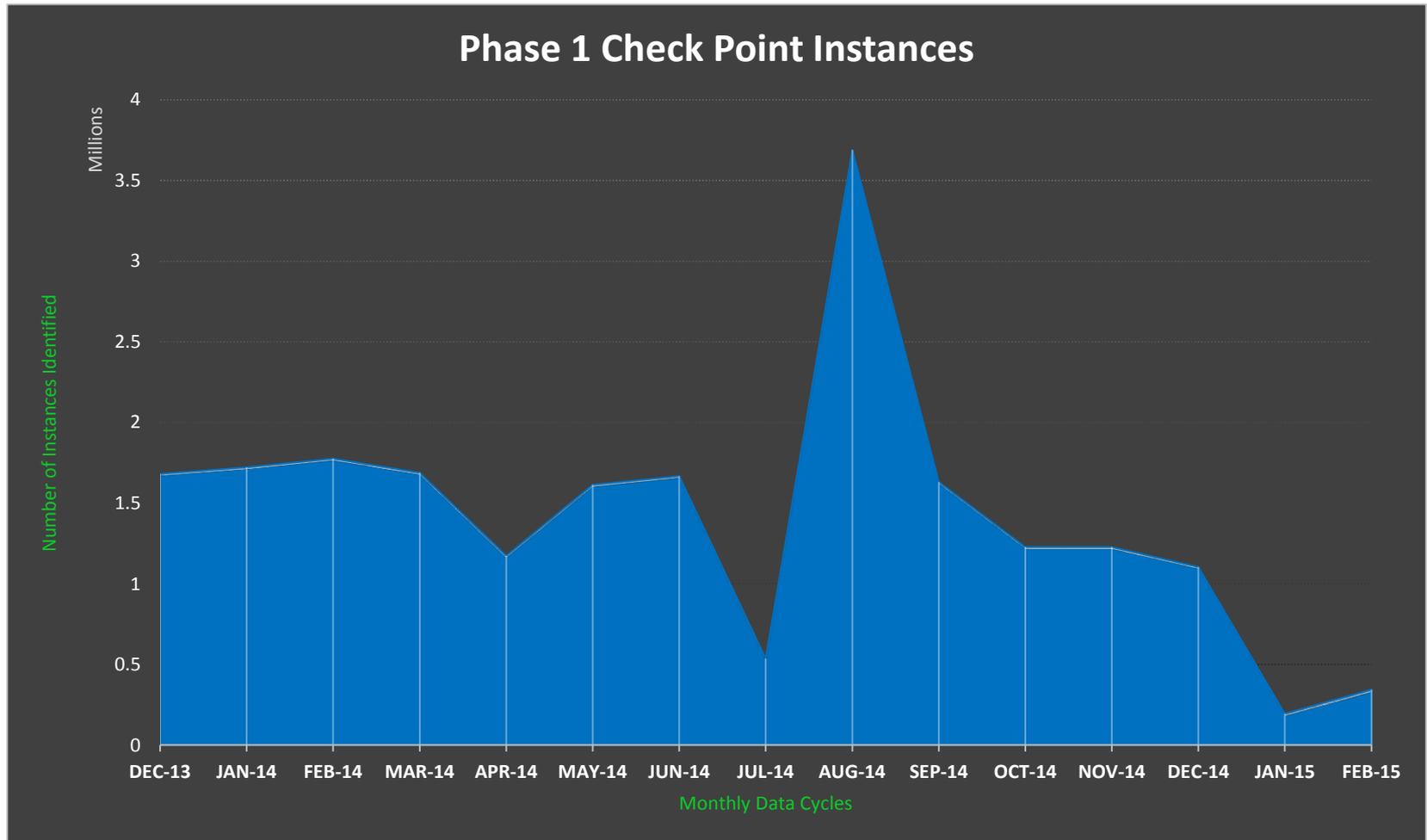
The Data Assessment vendor (Allied Consultants, Inc.) is performing 1.5 billion checks on data for the almost 4 million active and past (retired or refunded) TRS members to verify the quality TRS data being migrated in Phase 1.

The results of these quality checks are provided to the TRS Data Conditioning Team on a monthly basis.



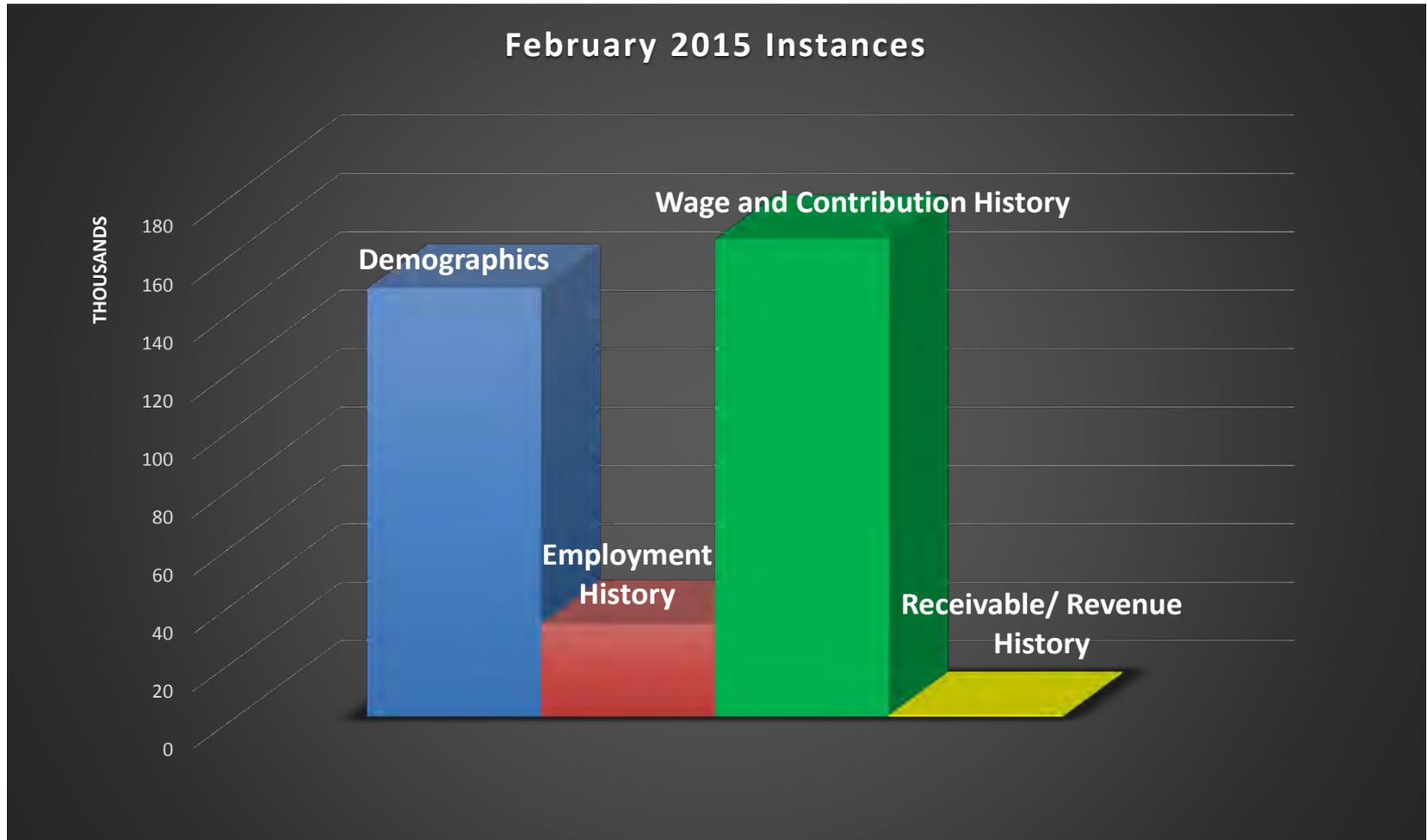
TEAM Program

Data Conditioning Update



TEAM Program

Data Conditioning Update



Questions and Answers



Tab 13

Teacher Retirement System of Texas



FY2015 Mid-Year Review

Don Green, Chief Financial Officer

Board of Trustees Meeting
March 2015





Pension Trust Fund Cash Disbursements

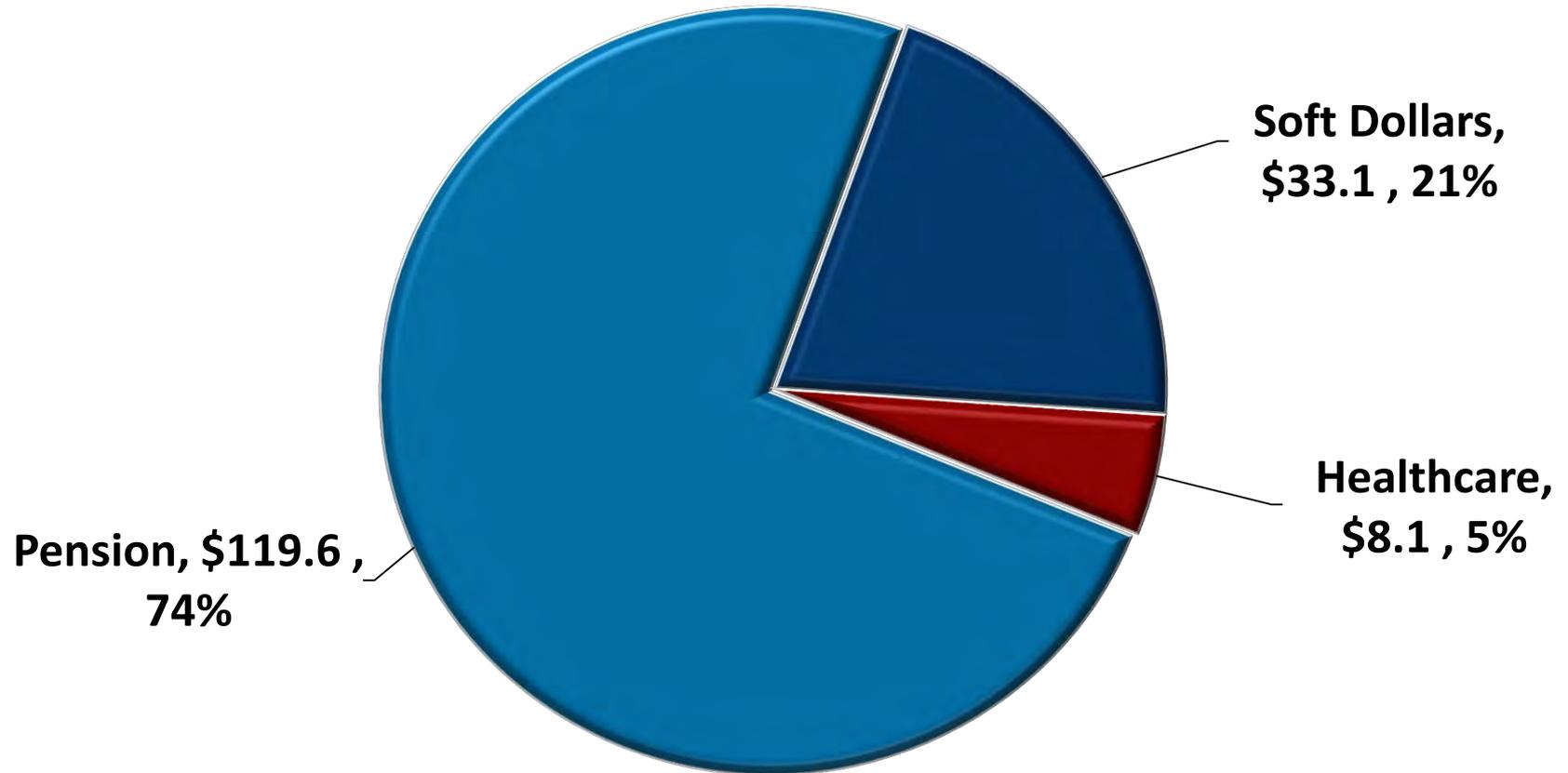
	FY 2014 *	FY 2015	Variance
September	\$6,970,179	\$8,329,726	\$1,359,547
October	6,917,337	8,291,727	1,374,390
November	6,708,686	5,966,718	(\$741,968)
December	6,566,553	9,042,869	\$2,476,316
January	15,411,211	13,819,515	(\$1,591,696)
February	6,792,019	8,004,871	\$1,212,852
Totals	\$49,365,985	\$53,455,425	\$4,089,440

* Cash disbursements totaled \$95,107,668 as of August 31, 2014.



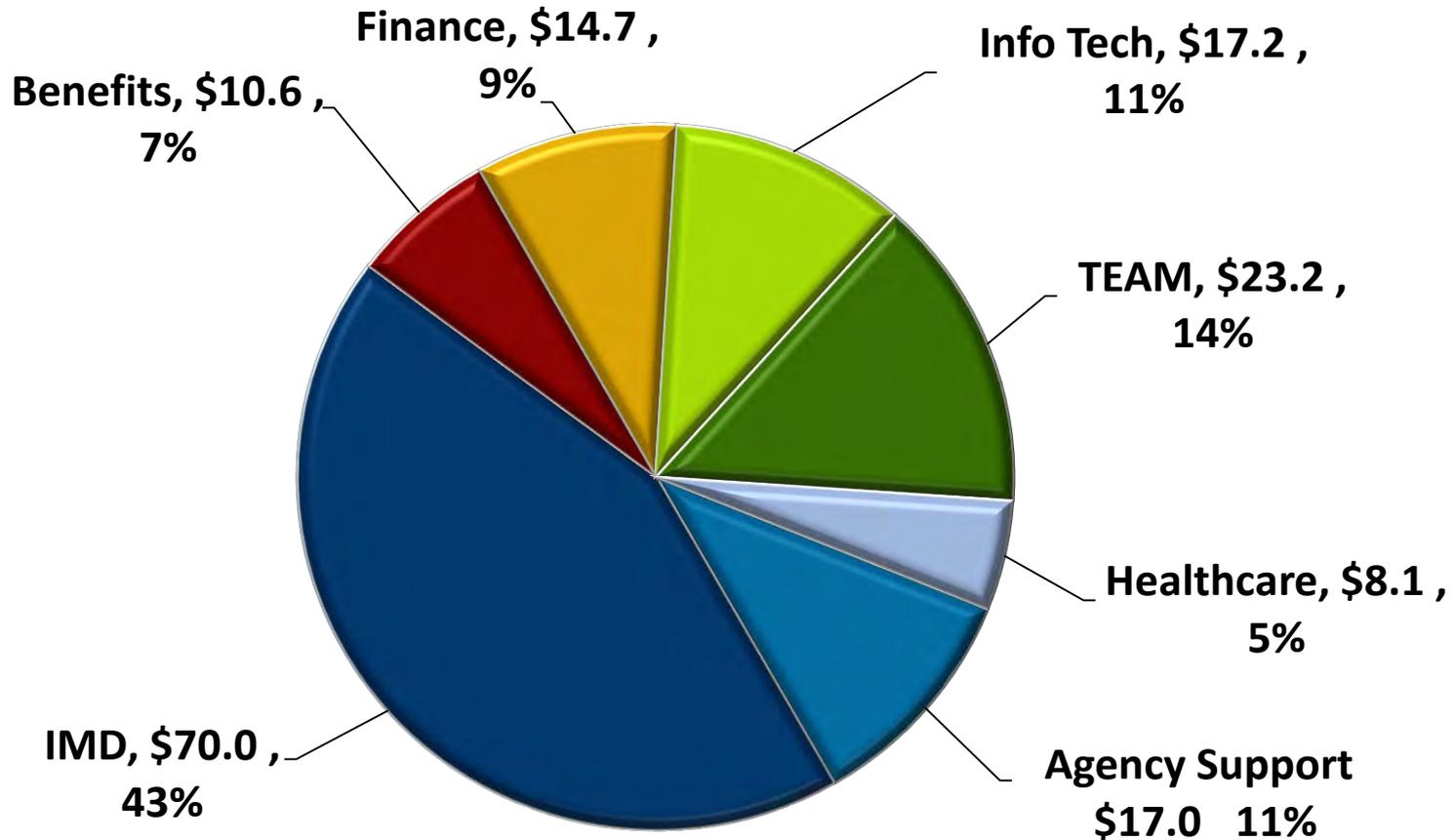
Recap of FY2015 Budget by Fund

The total operating budget is \$160,816,484 across all funds.





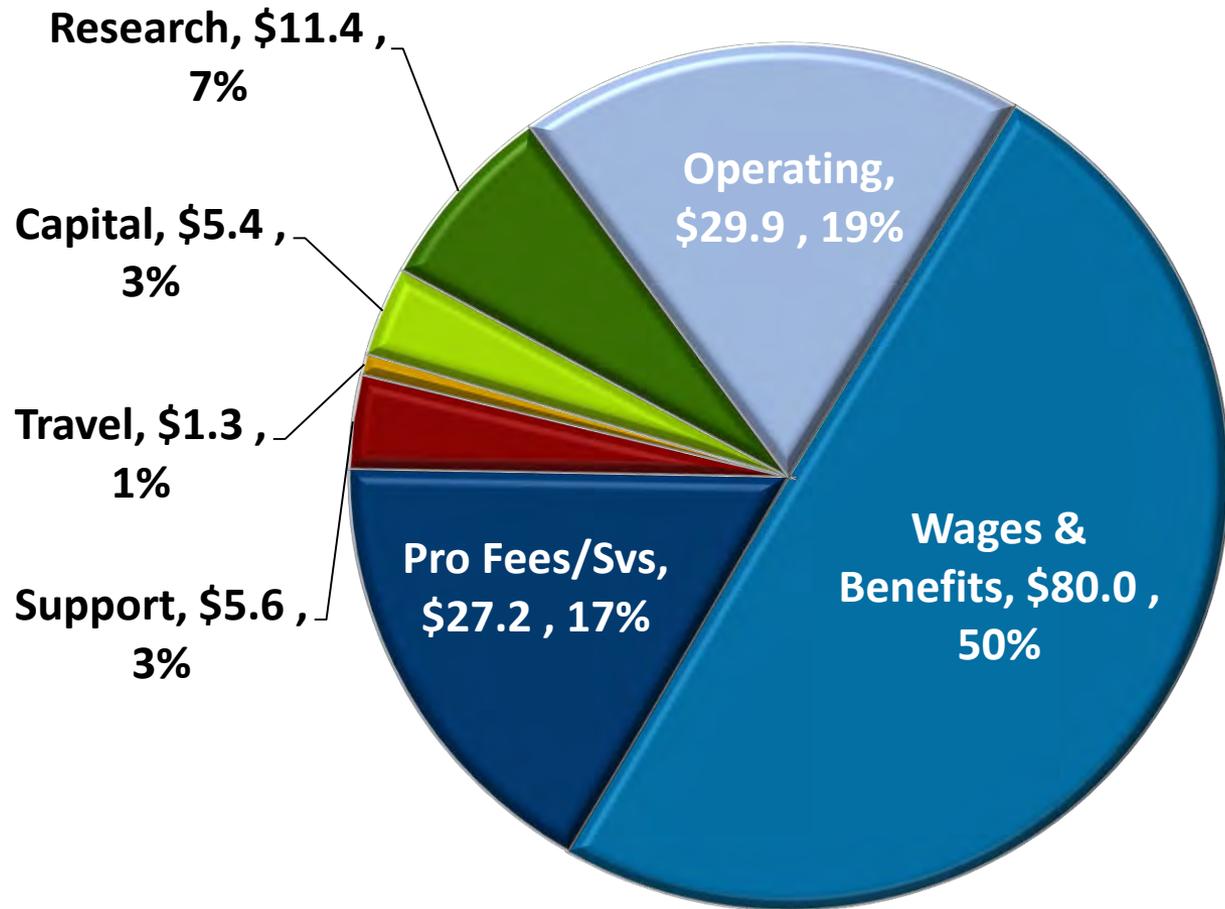
Recap of FY2015 Budget by Division



The Agency Support Division includes executive, human resources, communications, internal audit, strategic initiatives, risk management and legal. Label amounts in millions.



Recap of FY2015 Budget by Expense



Label amounts in millions.

Operating costs:

- Software
- Hardware
- Postage
- Printing
- Equipment
- Reference materials

Professional fees and services:

- Contractors
- Consultants
- Contractual services

Support:

- Rent
- Bldg/equip maint
- Utilities
- Supplies



Summary By Fund

Fund	Budget	Exp/Enc	% Spent	Projected
Pension	119,597,857	60,785,447	51%	105,185,521
Soft Dollars	33,085,494	11,850,187	36%	33,085,494
Care	4,575,407	2,513,081	55%	4,446,032
ActiveCare	3,350,198	1,978,652	59%	3,071,248
403(b)	207,528	33,158	16%	68,057
Totals	160,816,484	77,160,525	48%	145,856,352

Summary By Division

Division	Budget	Exp/Enc	% Spent	Projected
Agency*	17,004,155	7,381,757	43%	14,277,257
IMD	69,988,452	31,500,014	45%	64,971,930
Benefits	10,613,343	5,009,934	47%	10,093,846
Finance	14,738,443	5,657,779	38%	13,703,288
Info Tech	17,158,783	8,499,321	50%	14,668,713
TEAM	23,180,175	14,586,830	63%	20,555,980
Healthcare	8,133,133	4,524,891	56%	7,585,337
Totals	160,816,484	77,160,525	48%	145,856,352

*The Agency Support Division includes executive, human resources, communications, internal audit, strategic initiatives, risk management and legal.



Summary By Category

Category	Budget	Exp/Enc	% Spent	Projected
Wages/Benefits	80,048,176	38,367,299	48%	72,300,858
Pro Fees and Services	27,171,100	15,976,059	59%	24,239,868
Support Costs	5,616,520	3,280,132	58%	4,825,735
Travel	1,282,578	705,975	55%	1,116,092
Capital Projects	5,405,291	214,251	4%	5,405,291
Research	11,361,520	2,886,058	25%	11,361,520
Operating Costs	29,931,299	15,730,750	53%	26,606,988
Totals	160,816,484	77,160,525	48%	145,856,352



Capital Budget (non TEAM)

Project	Budget	Exp/Enc	% Spent	Projected
Investment Systems	203,494	0	0%	203,494
PC Upgrades	350,000	5,159	1%	350,000
Telecom Upgrades	410,000	181,567	44%	410,000
Pension Legislation	200,000	0	0%	200,000
Mainframe Upgrades	108,807	13,035	12%	108,807
Bldg Renovations	175,000	0	0%	175,000
Air Handlers	3,597,990	13,640	0%	3,584,350
Stairwells	360,000	850	0%	360,000
Totals	5,405,291	214,251	4%	5,405,291



Conclusions

- In FY 2014, 19% (or \$29 million) of the budget remained unspent. 66% (\$19 million) was for TEAM, Healthcare, soft dollars, and capital projects.
- The remaining 34% (\$10 million) lapsed was for wages/benefits and operational costs.
- This fiscal year, based on current projections, an estimated 9.3% (\$15 million) of the budget will be unspent.
- Only 18% (\$2.6 million) relates to TEAM. The remaining 82% (\$12.4 million) relates to wages/benefits, and operating costs.

Tab 14 A

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TEACHER RETIREMENT SYSTEM OF TEXAS
BOARD REPORT
SUMMARY OF DISBURSEMENTS

PAGE 1

	December 1, 2014 through February 28, 2015		
	NUMBER OF	GROSS	AVERAGE
	PAYMENTS	PAYMENT TOTAL	PAYMENT
Service Retirees	4,372	9,092,532.57	2,079.71
Disability Retirees	162	187,278.21	1,156.03
Survivor Benefits	271	67,349.98	248.52
Survivor Benefit Lump Sum Payment	2,667	15,702,918.77	5,887.85
Life Annuity as Death Settlement	44	63,640.09	1,446.36
60 Monthly Payments as Death Settlement	43	59,519.48	1,384.17
Refund of Deposit as Death Settlement	119	2,654,941.33	22,310.43
Twice Annual Salary as Death Settlement	252	8,773,655.55	34,816.09
Lump Sum DROP Member Payment	5	995,850.15	199,170.03
5 Annual DROP Member Payments			
10 Annual DROP Member Payments			
60 Monthly DROP Member Payments			
120 Monthly DROP Member Payments			
DROP Payments to Beneficiary of Active Member			
12 Month Partial Lump Sum Option Payment	339	9,565,051.32	28,215.49
24 Month Partial Lump Sum Option Payment	199	11,202,832.32	56,295.63
36 Month Partial Lump Sum Option Payment	437	39,737,423.22	90,932.31
Totals:	8,910	98,102,992.99	11,010.43

SUMMARY OF DISBURSEMENTS

Glossary

The Summary of Disbursements on the preceding page provides data related to annuitants added to the payroll during the quarter. Specifically, for each category listed, the data includes: (1) the number of new payment inceptions, (2) the gross total of all new payments, and (3) the average of all payments. The categories are defined as follows:

Service Retirees: Members who have met the eligibility requirements and applied for a monthly service retirement annuity.

Disability Retirees: Members who have met the eligibility requirements, applied and been approved for a monthly disability retirement annuity.

Survivor Benefits: Monthly survivor benefits paid to eligible beneficiaries of deceased active members and retirees.

Survivor Benefit Lump Sum Payment: Single lump-sum survivor benefit, or reduced lump-sum in conjunction with monthly survivor benefit, paid to eligible beneficiaries of deceased active members and retirees.

Life Annuity as Death Settlement: Actuarially reduced monthly life annuity payment to eligible beneficiary of deceased active member. (One of several options which may be payable upon the death of an active member.)

60 Monthly Payments as Death Settlement: Monthly standard annuity payment, for a period of 60 months, to eligible beneficiary of deceased active member.

Refund of Deposit as Death Settlement: Payment of accumulated contributions and interest to beneficiary of deceased active member.

Twice Annual Salary as Death Settlement: Lump-sum payment equal to twice the member's annual salary rate, not to exceed \$80,000, paid to beneficiary of deceased active member.

Lump Sum DROP Member Payment: One-time, lump-sum distribution, at retirement, of member's DROP account balance. (One of several DROP distribution options that may be elected by a retiree.)

5 Annual DROP Member Payments: Initial or subsequent annual DROP payment under this DROP distribution election.

10 Annual DROP Member Payments: Initial or subsequent annual DROP payment under this DROP distribution election.

60 Monthly DROP Member Payments: Initial or subsequent monthly DROP payment under this DROP distribution election.

120 Monthly DROP Member Payments: Initial or subsequent monthly DROP payment under this DROP distribution election.

DROP Payments to Beneficiary of Active Member: Lump-sum distribution of DROP account balance to beneficiary of deceased active member who participated in DROP prior to death.

12 Month Partial Lump Sum Option Payment: Lump-sum payment to retiree who elected a partial lump-sum option (PLSO) distribution equal to 12 months of standard annuity.

24 Month Partial Lump Sum Option Payment: Lump-sum payment to retiree who elected a partial lump-sum option (PLSO) distribution equal to 24 months of standard annuity.

36 Month Partial Lump Sum Option Payment: Lump-sum payment to retiree who elected a partial lump-sum option (PLSO) distribution equal to 36 months of standard annuity.

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TEACHER RETIREMENT SYSTEM OF TEXAS
BOARD REPORT
SUMMARY OF DISBURSEMENTS

PAGE 1

	September 1, 2014 through November 30, 2014		
	NUMBER OF	GROSS	AVERAGE
	PAYMENTS	PAYMENT TOTAL	PAYMENT
Service Retirees	6,594	15,023,407.02	2,278.34
Disability Retirees	248	300,382.20	1,211.21
Survivor Benefits	237	59,450.00	250.84
Survivor Benefit Lump Sum Payment	2,448	14,962,600.71	6,112.17
Life Annuity as Death Settlement	42	66,777.47	1,589.93
60 Monthly Payments as Death Settlement	60	85,529.96	1,425.49
Refund of Deposit as Death Settlement	146	3,693,650.33	25,298.97
Twice Annual Salary as Death Settlement	250	9,333,944.86	37,335.77
Lump Sum DROP Member Payment	6	1,288,130.67	214,688.44
5 Annual DROP Member Payments			
10 Annual DROP Member Payments	1	39,093.16	39,093.16
60 Monthly DROP Member Payments			
120 Monthly DROP Member Payments	1	1,510.21	1,510.21
DROP Payments to Beneficiary of Active Member			
12 Month Partial Lump Sum Option Payment	493	16,087,962.72	32,632.78
24 Month Partial Lump Sum Option Payment	272	18,384,373.20	67,589.60
36 Month Partial Lump Sum Option Payment	669	62,842,070.10	93,934.33
Totals:	11,467	142,168,882.61	12,398.08

SUMMARY OF DISBURSEMENTS

Glossary

The Summary of Disbursements on the preceding page provides data related to annuitants added to the payroll during the quarter. Specifically, for each category listed, the data includes: (1) the number of new payment inceptions, (2) the gross total of all new payments, and (3) the average of all payments. The categories are defined as follows:

Service Retirees: Members who have met the eligibility requirements and applied for a monthly service retirement annuity.

Disability Retirees: Members who have met the eligibility requirements, applied and been approved for a monthly disability retirement annuity.

Survivor Benefits: Monthly survivor benefits paid to eligible beneficiaries of deceased active members and retirees.

Survivor Benefit Lump Sum Payment: Single lump-sum survivor benefit, or reduced lump-sum in conjunction with monthly survivor benefit, paid to eligible beneficiaries of deceased active members and retirees.

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5 Annual DROP Member Payments: Initial or subsequent annual DROP payment under this DROP distribution election.

10 Annual DROP Member Payments: Initial or subsequent annual DROP payment under this DROP distribution election.

60 Monthly DROP Member Payments: Initial or subsequent monthly DROP payment under this DROP distribution election.

120 Monthly DROP Member Payments: Initial or subsequent monthly DROP payment under this DROP distribution election.

DROP Payments to Beneficiary of Active Member: Lump-sum distribution of DROP account balance to beneficiary of deceased active member who participated in DROP prior to death.

12 Month Partial Lump Sum Option Payment: Lump-sum payment to retiree who elected a partial lump-sum option (PLSO) distribution equal to 12 months of standard annuity.

24 Month Partial Lump Sum Option Payment: Lump-sum payment to retiree who elected a partial lump-sum option (PLSO) distribution equal to 24 months of standard annuity.

36 Month Partial Lump Sum Option Payment: Lump-sum payment to retiree who elected a partial lump-sum option (PLSO) distribution equal to 36 months of standard annuity.

Tab 14 B

**TEACHER RETIREMENT SYSTEM OF TEXAS
MEDICAL BOARD MEETING
OPEN SESSION AGENDA
JANUARY 13, 2015**

The Medical Board of the Teacher Retirement System of Texas met at 12:00 p.m. Tuesday, January 13, 2015 in the TRS offices.

The following members were present:

Dr. Alice Cox, Fredericksburg
Dr. James Allen Reinartz, Austin
Dr. Larry Wilson, Austin

Others present:

Mr. Tom Guerin, Interim Chief Benefit Officer, TRS
Ms. Kirsten Morgan, Legal Services, TRS
Mr. Mike Rehling, Manager, Benefit Processing, TRS
Ms. Denise Hope, Benefit Consultant, Benefit Processing, TRS
Mr. Steven Preuss, Benefit Consultant, Benefit Processing, TRS

Dr. Wilson called the meeting to order at 12:06 p.m.

1. REVIEW OF MINUTES FROM THE NOVEMBER 17, 2014 MEETING.

The minutes of the November 17, 2014 meeting were reviewed and approved.

2. CONSIDERATION OF FILES OF TRS MEMBERS WHO ARE CURRENTLY APPLYING FOR DISABILITY RETIREMENT AND THE FILES OF DISABILITY RETIREES WHO ARE DUE A RE-EXAMINATION REPORT.

Dr. Wilson announced that the Medical Board would enter into Executive Session, as provided by section 551.078 of the Texas Government Code, to deliberate medical information of individual members and retirees.

The Board entered into closed session at 12:17 p.m.
The meeting was re-opened at 12:34 p.m.

3. REVIEW OF DISABILITY STATISTICS.

**PG. 2 TRS Medical Board Minutes
January 13, 2015**

4. "Memory" presentation.

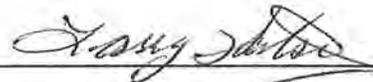
Dr. Wilson gave a presentation on memory loss and recent research in this field.

5. ITEMS TO BE PLACED ON FUTURE AGENDAS.

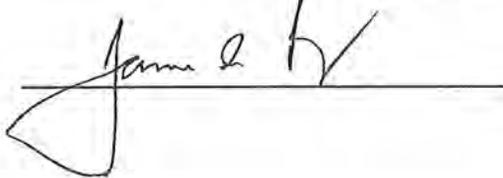
6. DISCUSSION OF THE DATE OF NEXT BOARD MEETING.

The next Medical Board meeting was scheduled for March 10, 2015.
The meeting was adjourned at 1:04 p.m.

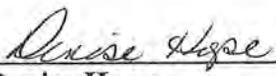
**Dr. Larry Wilson, Chairman
TRS Medical Board**







Attest:



Denise Hope

**TEACHER RETIREMENT SYSTEM OF TEXAS
MEDICAL BOARD MEETING
OPEN SESSION AGENDA
NOVEMBER 17, 2014**

The Medical Board of the Teacher Retirement System of Texas met at 12:00 p.m. Monday, November 17, 2014 in the TRS offices.

The following members were present:

Dr. Alice Cox, Fredericksburg
Dr. James Allen Reinartz, Austin
Dr. Larry Wilson, Austin

Others present:

Ms. Marianne Woods Wiley, Chief Benefit Officer, TRS
Mr. Tom Guerin, Interim Chief Benefit Officer, TRS
Ms. Kirsten Morgan, Legal Services, TRS
Mr. Mike Rehling, Manager, Benefit Processing, TRS
Ms. Denise Hope, Benefit Consultant, Benefit Processing, TRS
Mr. Steven Preuss, Benefit Consultant, Benefit Processing, TRS

Dr. Wilson called the meeting to order at 12:09 p.m.

1. REVIEW OF MINUTES FROM THE SEPTEMBER 9, 2014 MEETING.

The minutes of the September 9, 2014 meeting were reviewed and approved.

2. CONSIDERATION OF FILES OF TRS MEMBERS WHO ARE CURRENTLY APPLYING FOR DISABILITY RETIREMENT AND THE FILES OF DISABILITY RETIREES WHO ARE DUE A RE-EXAMINATION REPORT.

Dr. Wilson announced that the Medical Board would enter into Executive Session, as provided by section 551.078 of the Texas Government Code, to deliberate medical information of individual members and retirees.

The Board entered into closed session at 12:12 p.m.
The meeting was re-opened at 12:27 p.m.

3. REVIEW OF DISABILITY STATISTICS.

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November 17, 2014**

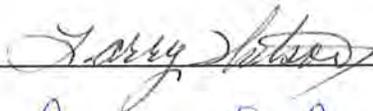
4. DISCUSSION OF ITEMS TO BE PLACED ON FUTURE AGENDAS.

Dr. Wilson will do a short presentation on memory at our next meeting.

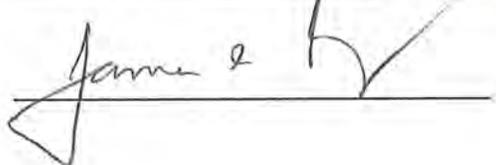
5. DISCUSSION OF THE DATE OF NEXT BOARD MEETING.

The next Medical Board meeting was scheduled for January 13, 2015.
The meeting was adjourned at 12:47 p.m.

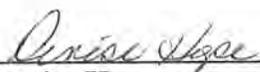
**Dr. Larry Wilson, Chairman
TRS Medical Board**







Attest:



Denise Hope

**TEACHER RETIREMENT SYSTEM OF TEXAS
MEDICAL BOARD MEETING
OPEN SESSION AGENDA
SEPTEMBER 9, 2014**

The Medical Board of the Teacher Retirement System of Texas met at 12:00 p.m. Tuesday, September 9, 2014 in the TRS offices.

The following members were present:

Dr. Alice Cox, Fredericksburg
Dr. James Allen Reinartz, Austin
Dr. Larry Wilson, Austin

Others present:

Ms. Marianne Woods Wiley, Chief Benefit Officer, TRS
Ms. Kirsten Morgan, Legal Services, TRS
Mr. Mike Rehling, Manager, Benefit Processing, TRS
Mr. Adam Fambrough, Assistant Manager, Benefit Processing, TRS
Ms. Denise Hope, Benefit Consultant, Benefit Processing, TRS
Mr. Steven Preuss, Benefit Consultant, Benefit Processing, TRS

Dr. Wilson called the meeting to order at 12:12 p.m.

1. REVIEW OF MINUTES FROM THE JULY 8, 2014 MEETING.

The minutes of the July 8, 2014 meeting were reviewed and approved.

2. CONSIDERATION OF FILES OF TRS MEMBERS WHO ARE CURRENTLY APPLYING FOR DISABILITY RETIREMENT AND THE FILES OF DISABILITY RETIREES WHO ARE DUE A RE-EXAMINATION REPORT.

Dr. Wilson announced that the Medical Board would enter into Executive Session, as provided by section 551.078 of the Texas Government Code, to deliberate medical information of individual members and retirees.

The Board entered into closed session at 12:17 p.m.
The meeting was re-opened at 12:41 p.m.

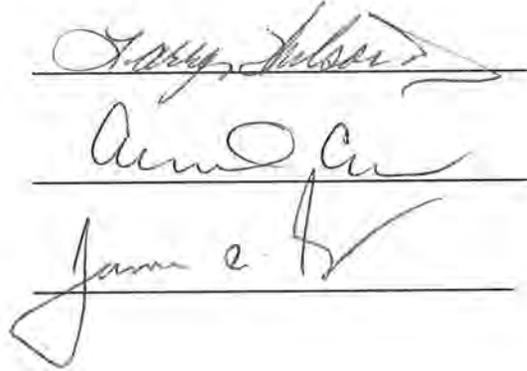
3. REVIEW OF DISABILITY STATISTICS.

**PG. 2 TRS Medical Board Minutes
September 9, 2014**

- 4. DISCUSSION OF ITEMS TO BE PLACED ON FUTURE AGENDAS.**
- 5. DISCUSSION OF THE DATE OF NEXT BOARD MEETING.**

The next Medical Board meeting was scheduled for November 17, 2014.
The meeting was adjourned at 12:53 p.m.

**Dr. Larry Wilson, Chairman
TRS Medical Board**



Three handwritten signatures are present, each written over a horizontal line. The top signature is the most legible and appears to be 'Larry Wilson'. The middle signature is less legible but appears to be 'Amanda'. The bottom signature is also less legible but appears to be 'James'.

Attest:



A handwritten signature, 'Denise Hope', is written over a horizontal line.

Denise Hope

**TEACHER RETIREMENT SYSTEM OF TEXAS
MEDICAL BOARD MEETING
OPEN SESSION AGENDA
JULY 8, 2014**

The Medical Board of the Teacher Retirement System of Texas met at 12:00 p.m. Tuesday, July 8, 2014 in the TRS offices.

The following members were present:

Dr. Alice Cox, Fredericksburg
Dr. James Allen Reinartz, Austin
Dr. Larry Wilson, Austin

Others present:

Ms. Marianne Woods Wiley, Chief Benefit Officer, TRS
Ms. Kirsten Morgan, Legal Services, TRS
Mr. Mike Rehling, Manager, Benefit Processing, TRS
Mr. Adam Fambrough, Assistant Manager, Benefit Processing, TRS
Ms. Denise Hope, Benefit Consultant, Benefit Processing, TRS
Mr. Steven Preuss, Benefit Consultant, Benefit Processing, TRS

Dr. Wilson called the meeting to order at 12:11 p.m.

1. REVIEW OF MINUTES FROM THE MAY 13, 2014 MEETING.

The minutes of the May 13, 2014 meeting were reviewed and approved.

2. CONSIDERATION OF FILES OF TRS MEMBERS WHO ARE CURRENTLY APPLYING FOR DISABILITY RETIREMENT AND THE FILES OF DISABILITY RETIREES WHO ARE DUE A RE-EXAMINATION REPORT.

Dr. Wilson announced that the Medical Board would enter into Executive Session, as provided by section 551.078 of the Texas Government Code, to deliberate medical information of individual members and retirees.

The Board entered into closed session at 12:14 p.m.
The meeting was re-opened at 12:43 p.m.

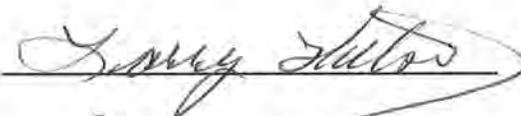
3. REVIEW OF DISABILITY STATISTICS.

**PG. 2 TRS Medical Board Minutes
July 8, 2014**

- 4. DISCUSSION OF ITEMS TO BE PLACED ON FUTURE AGENDAS.**
- 5. DISCUSSION OF THE DATE OF NEXT BOARD MEETING.**

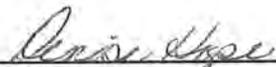
The next Medical Board meeting was scheduled for September 9, 2014.
The meeting was adjourned at 12:58 p.m.

**Dr. Larry Wilson, Chairman
TRS Medical Board**





Attest:


Denise Hope