RETIREMENT SYSTEM INVESTMENT COMMISSION

Commission Meeting Agenda

Thursday, June 14 – Friday, June 15, 2018

RSIC Presentation Center

Meeting to Convene Thursday, June 14, 2018 at 9:30 a.m.

I. Call to Order and Consent Agenda
   A. Adoption of Proposed Agenda
   B. Approval of April and May Minutes

II. Chair's Report
   A. Retiree Representative Election
   B. Chair and Vice-Chair Elections

III. Audit & Enterprise Risk Management Committee Report

IV. CEO Report
   A. SIOP Recommendations/Updates
   B. Communications Plan

V. CIO Report
   A. April Investment Performance Update and Review

VI. Consultant Report
   A. Asset Allocation/Benchmark Revisions

VII. Investment Recommendations
   A. Infrastructure – Macquarie Super Core Fund

VIII. Delegated Investment Report
   A. Industry Ventures Partners Holding V
   B. Providence Strategic Growth Fund

NOTICE OF PUBLIC MEETING

This notice is given to meet the requirements of the S.C. Freedom of Information Act and the Americans with Disabilities Act. Furthermore, this facility is accessible to individuals with disabilities, and special accommodations will be provided if requested in advance.

IX. Executive Session – To discuss investment matters pursuant to S.C. Code Sections 9-16-80 and 9-16-320; to discuss personnel matters pursuant to S. C. Code Section 30-4-70(a)(1); and receive advice from legal counsel pursuant to S.C. Code Section 30-4-70(a)(2).

X. Potential Action Resulting from Executive Session

XI. Recess

Meeting to Reconvene Friday, June 15, 2018 at 9:00 a.m.

I. Call to Order

II. Global Public Markets Discussion
   A. Aberdeen Standard Investments - Guy Stern, Global Head of Multi-Asset and Macro Investing
   B. PineBridge Investments - Mike Kelly, CIO, Global Head of Multi-Asset
   C. Morgan Stanley Investment Management - Mark Bavoso, Senior Portfolio Manager, Global Multi-Asset

III. Private Market Update - Barry Blattman, Vice-Chairman, Brookfield Asset Management

IV. Adjournment

South Carolina Retirement System Investment Commission
Meeting Minutes

April 12, 2018 9:30 a.m.
Capitol Center
1201 Main Street, 15th Floor
Columbia, South Carolina 29201
Meeting Location: Presentation Center

Commissioners Present:
Dr. Rebecca Gunnlaugsson, Chair
Dr. Ronald Wilder, Vice Chair
Ms. Peggy Boykin, PEBA Executive Director
Mr. Allen Gillespie
Mr. Edward Giobbe
Mr. Reynolds Williams (via telephone)
Mr. William H. Hancock
Mr. William J. Condon

I. CALL TO ORDER AND CONSENT AGENDA

Chair Rebecca Gunnlaugsson called the meeting of the South Carolina Retirement System Investment Commission ("Commission") to order at 9:30 a.m. Mr. Allen Gillespie made a motion to approve the proposed agenda as presented. Dr. Ronald Wilder seconded the motion, which was approved unanimously.

The Chair referred to the draft minutes from the Commission's February 8, 2018 meeting and noted that the draft minutes had been revised after being posted for review by the Commissioners. The Chair then asked whether there was a motion to approve the revised minutes as presented. Mr. Bill Condon made a motion to approve the revised minutes as presented. Mr. Gillespie seconded the motion, which passed unanimously.

II. CHAIR'S REPORT

The Chair began by stating that Dr. Wilder's term as the Commission's Retiree Representative Member ("Retiree Representative") would be coming to a close at the end of the current fiscal year. She explained that, under current law, Dr. Wilder is eligible to serve an additional four-year term. She then asked Mr. Michael Hitchcock, Chief Executive Officer, to review the Commission's Governance Policies regarding the process for nominating the Retiree Representative. Mr. Hitchcock explained that the Governance Policies require that the Commission solicit input from South Carolina's retiree stakeholder groups: the State Retirees Association of South Carolina and the South Carolina State Employees Association ("Retiree Groups"). He stated that Staff had prepared a letter to the Retiree Groups to solicit nomination suggestions for the position of Retiree Representative. Mr. Hitchcock stated that the

Commission could nominate Dr. Wilder during the meeting, and Staff would inform the Commission if the Retiree Groups made additional nominations. The Chair asked Dr. Wilder if he was willing to serve another term, and he responded in the affirmative. The Chair then asked for a motion to nominate Dr. Wilder to serve another term. Mr. Reynolds Williams made a motion to nominate Dr. Ronald Wilder to serve as the Retiree Representative to the Commission from July 1, 2018 to June 30, 2022 or until a successor is appointed and qualified, pursuant to state law. Mr. Gillespie seconded the motion.

Next, the Chair turned to the topic of nominations for the positions of Chair and Vice Chair of the Commission. She explained that the current Chair and Vice Chairs' two-year terms will come to a close at the end of the current fiscal year, and the Commission will need to hold elections for both positions. The Chair then made a motion to nominate Dr. Ronald Wilder to serve as Chair of the Commission for the term commencing on July 1, 2018 and ending on June 30, 2020. Mr. Gillespie seconded the motion. Mr. Williams asked if it would be permissible under the Governance Policies to close the nomination process. Mr. Hitchcock responded that the Governance Policies require that the nominations be kept open until the Commission's next meeting in June of 2018. The Chair then asked for nominations for the position of Vice Chair. Dr. Wilder made a motion to nominate Dr. Rebecca Gunnlaugsson, the current Chair, to serve as Vice Chair of the Commission for the term commencing on July 1, 2018 and ending on June 30, 2020. Mr. Condon seconded the nomination. Ms. Gunnlaugsson expressed her appreciation for the nomination and stated that it would be an honor to serve as Vice Chair.

III. AUDIT & ENTERPRISE RISK MANAGEMENT COMMITTEE REPORT

Mr. Gillespie began by stating the Committee last met in March. The Committee reviewed the Committee Charter and have a recommendation for proposed updates. He stated that the updates are primarily technical in nature and reflect more of an outsourced model as it relates to some of the audit functions. Mr. Gillespie made a motion that the Commission adopt the recommendation of the Committee to amend the Audit and Enterprise Risk Management Committee Charter as presented and authorize staff to make the technical revisions to the charter and other RSIC policy documents to reflect this decision. Mr. Hitchcock explained that this motion did not require a second because it is an active motion from the committee. The motion passed unanimously.

Mr. Gillespie explained that the next topic covered during the Committee meeting was the fiduciary performance audit, which is required by State law to be completed every four years. He explained that the Office of State Auditor selected Funston Advisory Services LLC ("Funston") through a request for proposal ("RFP") process to perform the audit which will begin in May 2018. Mr. Hitchcock noted that Funston will conducting onsite interviews after the Commission meeting in June and that Funston will be contacting Commissioners individually.

Lastly, Mr. Gillespie provided an update on the GIPS certification vendor selection. He stated that the Committee issued a RFP for GIPS compliance verification and explained that the procurement process is ongoing.

IV. HUMAN RESOURCES & COMPENSATION COMMITTEE REPORT

The Chair recognized Dr. Wilder, Chair of the Human Resources and Compensation Committee ("HRC Committee"), who presented the Commission with the HRC Committee's Report. Dr. Wilder began by informing the Commission that the HRC Committee is recommending changes to the HRC Committee's Charter ("Charter") that would roll the HRC Committee's self-evaluation into the broader Commission evaluation process and provide for the HRC Committee to make recommendations regarding the CEO's salary. Dr. Wilder then turned to a discussion of the Commission's Compensation Policy. He explained that the HRC Committee is recommending changes to the Compensation Policy to reflect governance changes made by the Pension Reform Act of 2017 as well as cost of living adjustments to salary ranges received from the Commission's compensation consultant, Towers Watson & Co. ("Towers Watson"). Dr. Wilder added that the HRC Committee also received an overview of the new CEO and Staff Evaluation Processes. At that point, Dr. Wilder turned the discussion to the Commission's compensation consultant. He explained that RSIC's contract with Towers Watson would be expiring soon and that the Governance Policies require that a compensation study be conducted once every three years. He stated that, as a consequence, a compensation study would need to be completed in 2018, but the HRC Committee is recommending that the Commission delay the compensation study until 2019.

Upon concluding his remarks, Dr. Wilder asked that Mr. Hitchcock address the motions recommended by the HRC Committee. Mr. Hitchcock first reminded the Commissioners that, because the motion comes as a recommendation from the HRC Committee, no second to the motion is required. He then stated that the motion recommended by the HRC Committee is that the Commission: (1) Approves the recommendations of the Human Resources and Compensation Committee that the Commission amend the Charter of the Human Resources and Compensation Committee ("Charter"); (2) Adopts the proposed revisions to the Charter as presented; and (3) Authorizes Staff to make technical revisions to the Charter and other RSIC policy documents to reflect this Commission decision.

Mr. Gillespie then referred to the Compensation Policy and asked about the mechanics of determining employee merit increases. Ms. Peggy Boykin added that, under the Compensation Policy, if the South Carolina General Assembly approves state employee pay increases, Staff could receive a State-mandated increase in addition to an increase under the Compensation Policy. Mr. Hitchcock explained that employee merit increases are determined based on an order of merit list that is created by the Executive Leadership Team ("Leadership Team"). The Leadership Team reviews all employee performance scores to ensure standardization of Staff's performance scores, and those scores are then compared to the overall merit increase pool to determine individual performance increases. Mr. Hitchcock then overviewed the methodology for the pay bands in the Compensation Policy. At the end of the discussion, the Chair called the question, and the motion was unanimously approved.

Next, Mr. Hitchcock presented the second motion from the HRC Commission, which was that the Commission: (1) Approves the recommendation of the Human Resources and Compensation Committee that the Commission amend the Compensation Policy; (2) Adopts the proposed revisions to the Compensation Policy as presented; and (2) Authorizes Staff to make technical revisions to the Compensation Policy and other RSIC policy documents to reflect this Commission decision. A vote was taken, and the motion was unanimously approved.

V. CEO'S REPORT

The Chair recognized Mr. Hitchcock for the CEO's Report. Mr. Hitchcock introduced Mr. Kevin Reinhard, Reporting Analyst, who joined RSIC from the South Carolina Attorney General's Office. Mr. Reinhard previously worked with a financial advisory firm. He brings with him a unique combination of investment knowledge and forensic accounting skills. Mr. Reinhard is originally from Florence, South Carolina and currently resides in Lexington, South Carolina. Mr. Hitchcock then welcomed Mr. Reinhard.

VI. INVESTMENT PERFORMANCE REPORT

The Chair recognized Mr. Geoffrey Berg, Chief Investment Officer ("CIO"), who stated that through the end of February, the Plan's fiscal year to date ("FYTD") return was slightly over 8 percent, which put the Plan slightly ahead of the median pension fund for the FYTD period. Mr. Berg noted that February and March had been challenging months, and indicated that the estimated FYTD return at the end of March was approximately 7.5 percent. Mr. Berg then introduced Mr. David King, Reporting Officer, to present the Investment Performance report.

Mr. King began his presentation by reviewing February FYTD performance. He stated that for the month of February, the Plan was down 2.17 percent versus a policy benchmark of 2.14 percent, which brought the Plan's FYTD performance to just above 8 percent versus a policy benchmark of 6.81 percent. Mr. King noted that the Plan was in compliance with all asset allocation ranges, with a slight overweight in GTAA and an underweight in non-portable alpha. Mr. King indicated that FYTD, the Plan had paid out $825 million in net benefits, with investment performance adding $2.4 billion to the Plan, bringing the Plan to a February month-end value of $31.7 billion.

After Mr. King reviewed the asset class contributions to performance and concluded his report, a lengthy discussion took place regarding investment performance, including the performance information from Bank of New York Mellon that is provided to the Commissioners.

VII. CONSULTANT REPORT

Mr. Berg introduced Mr. Frank Benham, Managing Principal and Director of Research for Meketa Investment Group ("Meketa") to provide a presentation on asset allocation and to provide follow up discussion on items from previous meetings. The first topic he discussed was target ranges for asset allocation. Mr. Benham explained that the first thing that should be done when adopting a new asset allocation policy, is the adoption of ranges around those targets. He explained that ranges allow you to stay in compliance with the investment policy as the market fluctuates. The more volatile asset classes will have more fluctuation, therefore those classes should have wider ranges. Mr. Benham stated that the second thing ranges do is provide the Staff the flexibility to be tactical.

Mr. Condon asked about the range for cash and short-term bonds and whether RSIC should have a cash target at zero. Mr. Benham explained that a good number of pension plans maintain a target of zero cash because they use their cash for frictional purposes. Mr. Benham explained that the plans must be able to pay benefits and make capital calls for private market asset classes, but because cash is the lowest returning asset class, plans try to minimize the cash allocation and the drag on returns.

Chair Gunnlaugsson asked whether there are any significant differences between Meketa's new proposed ranges and the previous ranges. Mr. Berg stated that the recommendation has a slightly wider band around global equity which is favorable because the narrower band had become a little burdensome. He explained that this is why he would like the Commission to make the adopted target ranges become effective immediately. He stated that RSIC is going to begin the process of transitioning to a slightly higher equity allocation in order to take advantage of the current environment.

Mr. Gillespie asked whether the ranges are closely tied to the volatility assumptions. He also stated that he believes the lower ranges need to come up a little and be tied with the volatility. A brief discussion ensued about the ranges and volatility. Dr. Wilder inquired about rebalancing the Portfolio on a monthly basis. Mr. Berg stated that Staff starts looking at rebalancing about one week before the end of the month, this way if there is a need to rebalance in the foreign market there still is time before the end of the month to implement changes. Mr. Berg explained that the range is of heightened importance for private equity, private debt and private real estate.

Mr. Benham explained that for some asset classes, specifically illiquid asset classes such as private equity and hedge funds, the benchmarks that are being used are benchmarks relevant to long term performance. Next Mr. Benham walked through the each of the proposed changes to the primary policy benchmarks beginning with global equity. Mr. Benham stated that Meketa recommends adopting a policy benchmark that is weighted according to target weights in US, Europe/Japan and emerging markets. The three benchmarks are MSCI USA, the MSCI World, and MSCI emerging markets. He stated that those benchmarks, when added together, are slightly different than the composition within the standard ACWI index. It is now weighted according to the Plan policy benchmark.

Mr. Benham reviewed the second proposed change, related to the equity option strategies. Currently RSIC is using a publicly available BuyWrite Index, which is an index that tracks the ability to write call options. The current implementation of the equity option strategies allows for two managers to do not just Buy-Writing but also Put-Writing. He recommended a mix of Put-Writing and Buy-Writing Index as more appropriate for RSIC.

The third and fourth recommendations Mr. Benham stated are changes to the global asset allocation and other opportunistic strategies. He explained that the rest of the assets that are not invested in the global assets mandates could theoretically be invested in the rest of the portfolio, and more specifically in the liquid portions of the Portfolio. Thus, Mr. Benham stated the recommendation is to use the total system's benchmark, minus the illiquid parts, to represent the true opportunity for where the global assets could otherwise be invested.

The next topic Mr. Benham discussed was real estate, and he recommended a technical change by changing the benchmark to one that is net of fees. Net fees are going to be a lower hurdle therefore Meketa recommend reviewing the expected "spread" over the benchmark. The non-core mix is 60 percent core and 40 percent non-core. Meketa expects the non-core to earn about 200-300 basis points over the core. A lengthy discussion ensued regarding the real estate market.

Dr. Wilder inquired about the global equity benchmark and targets for the Developed Market Equity (non-U.S.) and the Emerging Market Equity components of the global public equity benchmark. A discussion took place regarding the benchmarking process. During the discussion, Chair Gunnlaugsson suggested that it would be helpful to retain and use the current benchmark for global public equity as a secondary benchmark to the new benchmark. She stated that the secondary benchmark would provide a picture of value added from the benchmark changes to global public equity. Mr. Berg agreed that providing this secondary benchmark might offer valuable insight.

Dr. Wilder made a motion that the Commission adopts the recommendation of Meketa and the CIO, as amended, to approve the benchmarks and ranges set forth on red numbered pages 71-72 of the open session agenda materials as presented with the ranges to be effective as of April 12, 2018, to insert the current benchmark for global public equity as the secondary benchmark for global public equity, and the benchmarks to be effective July 1, 2018; directs that the approved benchmarks and ranges be incorporated and made part of the SIOP; and authorizes Staff to finalize the benchmark and asset allocation ranges by making any technical revisions or formatting edits consistent with the action taken by the Commission. Ms. Betsy Burn, Chief Legal Officer, clarified that the motion should reference red numbered pages 70-72. Mr. Edward Giobbe seconded the motion, which was unanimously approved.

A break was taken from 10:48 a.m. to 10:58 p.m.

Upon returning from break, Mr. Peter Woolley, Managing Principal and Co-Chief Executive Officer for Meketa, began his presentation by reviewing what was discussed at the February 8, 2018 meeting regarding sequence of return analysis and how RSIC can achieve a 7.25 percent average return over 20 years. Mr. Woolley pointed out that sequence of returns do not matter at all to the end result if cash flow is neutral, however because there is negative cash flows for the Plan, sequence of returns matters a great deal. He stated that additional analysis being presented demonstrates the impact of the fund becoming fully funded and the continuation of the funding status. A discussion ensued regarding projected levels of funded status based on different scenarios of expected returns, strong early versus strong late, and impact on funding percentage. Chair Gunnlaugsson noted that she would like the Commission to be provided with updates on the funded status and would like Staff to work with Meketa on developing insight regarding what other plans might be doing in terms of how are they reporting. Mr. Berg and Mr. Woolley both agreed to work on the reporting per Chair Gunnlaugsson's request.

Mr. Woolley's final topic of discussion was of the estimated impact of the Tax Cuts and Jobs Act ("TCJA") on the Retirement Systems. He stated that he believes that changes in the tax policy do not warrant a significant change to long-term strategic asset allocation. But there are three categories he wanted to go over, the first being positive impact. Global growth being the biggest positive impact. He stated economists are predicting a positive impact on the GDP over the next few years, possibly a half percent per year.

He explained the next category would be impacts of the TCJA that are neutral. The impact on domestic equities and international equities are neutral because it is already priced into the market today. The last category would be the negative impacts, specifically the effect on the U.S. dollar, fixed income, and debt level. After a discussion including the positive impacts on TIPS, Mr. Wooley concluded his presentation.

VIII. CIO'S REPORT

Mr. Berg began his report by discussing the increased volatility in the markets, particularly in the U.S. equity market. Mr. Berg reviewed the key challenges for markets: the Federal Reserve is motivated to raise interest rates, given continued strong U.S. economic growth; higher interest rates reduce the appeal of risk assets; most risky assets are perceived as expensive; the flattening of the yield curve, and a return to historically higher, more "normal" equity volatility may reduce the attractiveness of risk assets.

Mr. Berg went over the Portfolio's risk versus the 70 percent equity/30 percent fixed income risk benchmark which had recently been implemented by RSIC's Risk Team. He noted that while certain factors suggest elevated risk for investors, growth remains strong globally. Mr. Berg concluded by stating that the Investment Team does not expect a return to the low-volatility environment of recent years, and noting that rising volatility may create attractive opportunities.

The next order of business was the discussion and adoption of the Annual Investment Plan ("AIP") for Fiscal Year 2018. Mr. Berg noted that on March 17th, a draft of the AIP had been distributed and thanked all of the Commissioners for their helpful feedback. Mr. Berg stated that 34 different initiatives are being included in the AIP. He noted that many of the Investment Team's initiatives are ongoing in nature, and indicated that six of the initiatives reflect goals of both the Operations team as well as the Legal team. Mr. Condon asked if the initiatives are required to be part of the AIP, and suggested that the Commission should discuss how it monitors the progress of implementing the initiatives included in the AIP. Mr. Hitchcock responded by recommending that the Commission discuss this topic during the Commission's June meeting.

Mr. Gillespie asked about the rebalancing language in the AIP. After some discussion, Mr. Berg recommended that the Staff make a technical amendment to the draft AIP to address inter-asset class rebalancing. After additional discussion regarding the AIP, Dr. Ron Wilder moved that the Commission adopt the recommendation of the CIO and Staff to approve the proposed Annual Investment Plan for Fiscal Year 2018, as set forth in the red-numbered document beginning on page 93, with an effective date of July 1, 2018, and authorize Staff to finalize the AIP by making any technical revisions or formatting edits consistent with the action taken by the Commission. Mr. Gillespie seconded the motion, which passed unanimously.

IX. DELEGATED INVESTMENT REPORT

Mr. Berg noted that the next Agenda item was the report on an investment made pursuant to the delegation policy (the "Policy"). He reminded the Commission that the Policy authorizes the Chief Investment Officer to approve investments within certain limitations. The Policy also requires that Staff provide an update to the Commission about delegated investments once they are closed at the next Commission meeting. Mr. Berg introduced Mr. Derek Connor, Senior Investment Officer, to provide a summary regarding Digital Colony Partners, a private equity investment in digital infrastructure.

Mr. Connor stated that an investment of $125 million with Digital Colony Partners closed on March 22, 2018. He explained that Digital Colony is a joint venture between two different firms, Digital Bridge, an experienced owner and manager of digital infrastructure, and Colony NorthStar, a large real estate manager with approximately $46 billion in assets under management. Mr. Connor noted that Digital Bridge will be primarily responsible for the investment management function, while Colony NorthStar will provide back-office functions, including compliance, and assistance with fundraising.

Mr. Connor explained that Digital Colony Partners will invest in macro cell towers, small cells, data centers and fiber. He described how this investment fits into the private equity portfolio although it is focused on infrastructure-type investments, and indicated that co-investment opportunities may arise. After answering questions from the Commissioners regarding the investment, Mr. Connor concluded his report.

X. EXECUTIVE SESSION

Mr. William Hancock made a motion that the Commission recede into Executive Session to discuss investment matters pursuant to S.C. Code Sections 9-16-80 and 9-16-320; to receive advice from legal counsel pursuant to S.C. Code Section 30-4-70(a)(2) related to litigation filed by American Timberlands Fund II, LP and to receive advice from legal counsel pursuant to S.C. Code Section 30-4-70(a)(2). Mr. Williams seconded the motion, which passed unanimously.

XI. POTENTIAL ACTION RESULTING FROM EXECUTIVE SESSION

Upon return to open session at 2:19 p.m., Mr. Hitchcock noted that the Commission did take action while in executive session. Any such action that did occur while in executive session will be publicized when doing so would not jeopardize the Commission's ability to achieve its investment objectives or implement a portion of the annual investment plan.

XII. ADJOURNMENT

There being no further business, upon a motion made by Mr. Gillespie and seconded by Mr. Giobbe, the Commission voted unanimously to adjourn. The meeting adjourned at 2:20 p.m.

[Staff Note: In compliance with S.C. Code Section 30-4-0, public notice of and the agenda for this meeting was delivered to the press and to parties who requested notice and were posted at the entrance, in the lobbies and near the 15th Floor Presentation Center at 1201 Main Street, Columbia, S.C., at 3:58 p.m. on April 10, 2018]

South Carolina Retirement System Investment Commission
Meeting Minutes

May 17, 2018 3:30 p.m.
Capitol Center
1201 Main Street, 15th Floor
Columbia, South Carolina 29201
Meeting Location: Presentation Center

Commissioners Present:
Dr. Rebecca Gunnlaugsson, Chair
Dr. Ronald Wilder, Vice Chair
Ms. Peggy Boykin, PEBA Executive Director (via telephone)
Mr. Allen Gillespie (via telephone)
Mr. Edward Giobbe (via telephone)
Mr. Reynolds Williams (via telephone)
Mr. William H. Hancock
Mr. William J. Condon

I. CALL TO ORDER AND CONSENT AGENDA

Chair Rebecca Gunnlaugsson called the meeting of the South Carolina Retirement System Investment Commission ("Commission") to order at 3:30 p.m. Dr. Ronald Wilder made a motion to approve the proposed agenda as presented. Mr. Edward Giobbe seconded the motion, which was approved unanimously.

II. EXECUTIVE SESSION

Mr. William Hancock made a motion that the Commission recede into Executive Session to discuss investment matters pursuant to S.C. Code Ann. § 9-16-80 and § 9-16-320. Mr. Giobbe seconded the motion, which passed unanimously.

Upon return to open session at 4:50 p.m., Mr. Michael Hitchcock, CEO, noted the Commission did not take any reportable action while in executive session. Any action that did occur while in executive session will be publicized when doing so would not jeopardize the Commission's ability to achieve its investment objectives or implement a portion of the annual investment plan.

III. ADJOURNMENT

There being no further business, upon a motion made by Mr. Hancock and seconded by Mr. William Condon the Commission voted unanimously to adjourn. The meeting adjourned at 4:52 p.m.

[Staff Note: In compliance with S.C. Code Ann. Section 30-4-80, public notice of and the agenda for this meeting were delivered to the press and to parties who requested notice and were posted at the entrance, in the lobbies and near the 15th Floor Presentation Center at 1201 Main Street, Columbia, S.C., at 4:49 p.m. on May 15, 2018.]

Updating the SIOP and AIP

Michael Hitchcock, CEO
Geoff Berg, CIO
Robert Feinstein, Managing Director

Background

- State law requires that the Commission maintain both a Statement of Investment Objectives and Policies ("SIOP") and an Annual Investment Plan ("AIP"), and specifies certain content that must be included in these documents.

- The Commission recently approved the AIP. The SIOP, last reaffirmed in September 2017, is next up: it is in need of an update.

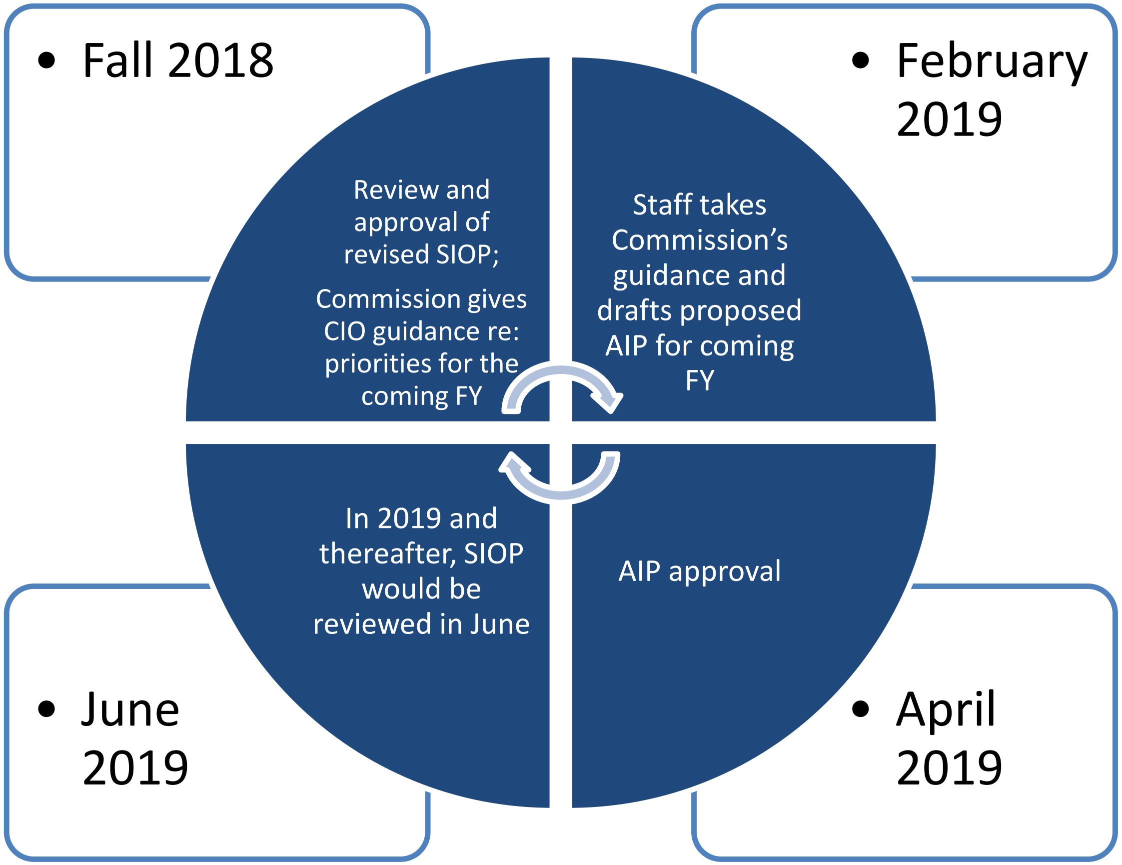
- As part of this update, we think that the opportunity exists to simplify the SIOP and AIP and make it easier for the Commission and Staff to track and demonstrate compliance with the requirements of State law.

What changes would be made to the SIOP and AIP?

In updating the documents:

- The SIOP's principal role would be to house State law-mandated content, including:
  - big picture, strategic and policy matters that are unlikely to change frequently, and
  - items relevant to the Commission's long-term asset allocation (e.g., Meketa's annual capital market assumptions).
- The SIOP could also house any longer term portfolio management plans approved by the Commission.
- The AIP would have two parts:
  - State law-mandated content that is unlikely to change frequently, and
  - The Investment Team's annual initiatives.

Suggested annual review cycle for the SIOP and AIP



RETIREMENT SYSTEM INVESTMENT COMMISSION

RSIC COMMUNICATIONS PLAN

GOAL: Promote a sense of confidence that RSIC is a world class investment organization which performs solely in the best interest of our beneficiaries' financial future.

AUDIENCE:

- Beneficiaries
- Stakeholder Organizations
- Appointing Authorities, General Assembly, Co-Trustees, and other State agencies
- Media
- Public

APPROACH: RSIC should communicate in a frank, open, and honest manner to its audience. Messaging should be consistent, clear, and concise, and to the extent possible investment jargon free and easily digestible. Messaging should be targeted to engage all sections of the audience and when viewed comprehensively, the central theme of the aggregate of all communications should be to further the communications goal.

METHODS:

- RSIC Website
- Biannual stakeholder meetings
- Presentations to stakeholder group meetings
- Press releases, Op-Eds, and other direct outreach to local, state, and industry media
- Presentations to industry related meetings and conferences
- Testimony before legislative committees

RESPONSIBILITY: The Commission places primary responsibility for agency communications on the CEO. On an annual basis, the CEO will inform the Commission of specific key communications initiatives planned for the upcoming year that are specifically intended to further the communications goal. The CEO will also provide a progress report on the key communications initiatives from the prior year.

In addition to the CEO, RSIC also has significant capabilities to perform the day-to-day communications function through its External Relations Team comprised of the Director of External Communications and the Director of External Policy.

The Director of External Communications is the key staff member responsible for direct interaction and communication with our Beneficiaries, Stakeholder Representatives, Media, and the Public, regarding RSIC's investment activities, performance, and community involvement.

The Director of External Policy is the key staff member responsible for direct interaction and communication with the Appointing Authorities and their staffs, the Members, Committees, and staffs of the General Assembly, the Co-Trustees, and other state agencies, regarding RSIC's policy positions, budgetary needs, investment activities, and performance.

KEY INITIATIVES FOR FY-2019:

- Develop a series of short instructional video presentations accessible from the RSIC website that explain RSIC's purpose, the overall investment portfolio, and the role and benefit of the various asset classes included in the portfolio.
- Prepare a follow-up Op-Ed to the one published in the Fall of 2016 that tracks our progress from that point.
- Emphasize engaging directly with the public through presentations to civic organizations like Rotary and others.
- Increase stakeholder representative participation at the biannual stakeholder meetings.
- Increase communication of positive RSIC events like substantial promotions and achievements to industry media such as P&I.
- Enhance RSIC's national profile by continuing to encourage RSIC leadership and key staff to present to industry meetings and conferences.
- Ensure that RSIC is prepared for significant engagement with the General Assembly on continued efforts at Pension Reform.
- Make a presentation to the Joint Pension Committee that provides insight into and understanding of our asset allocation process, the role of the respective asset classes, and especially the balance of risk and return.

RETIREMENT SYSTEM
INVESTMENT COMMISSION

Performance Update

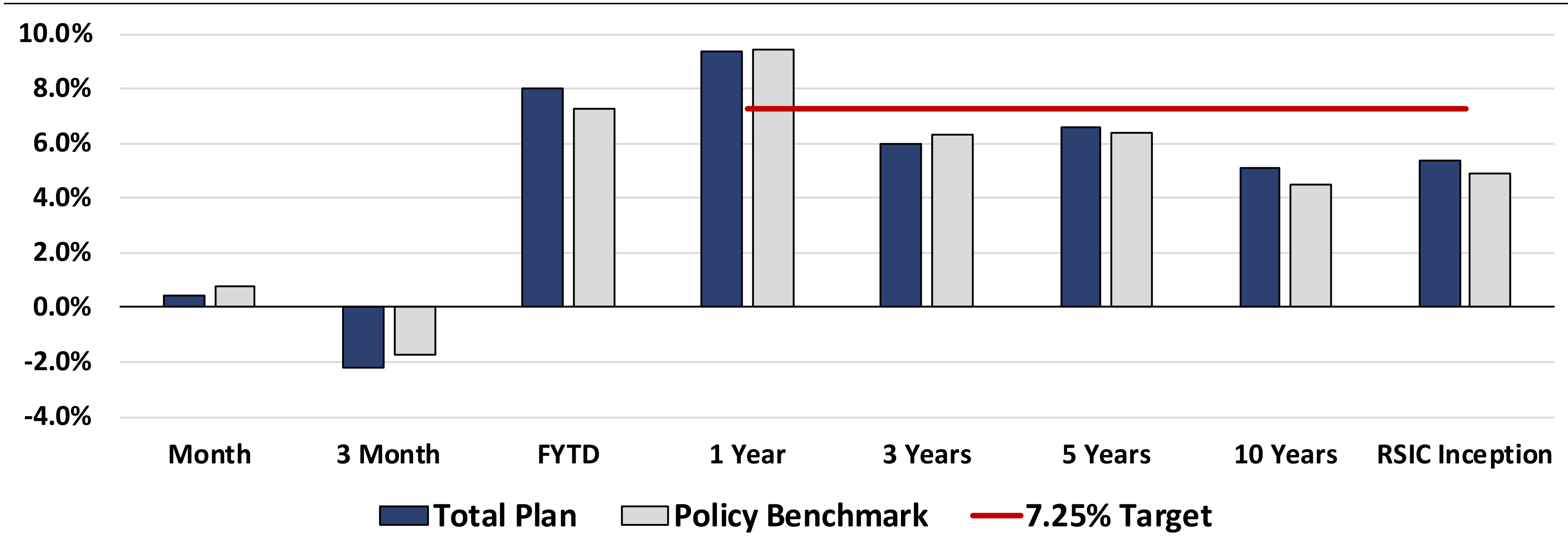
RSIC IIC Meeting

June 14, 2018

Data as of April 30th, 2018

Performance - Plan & Policy Benchmark[2]

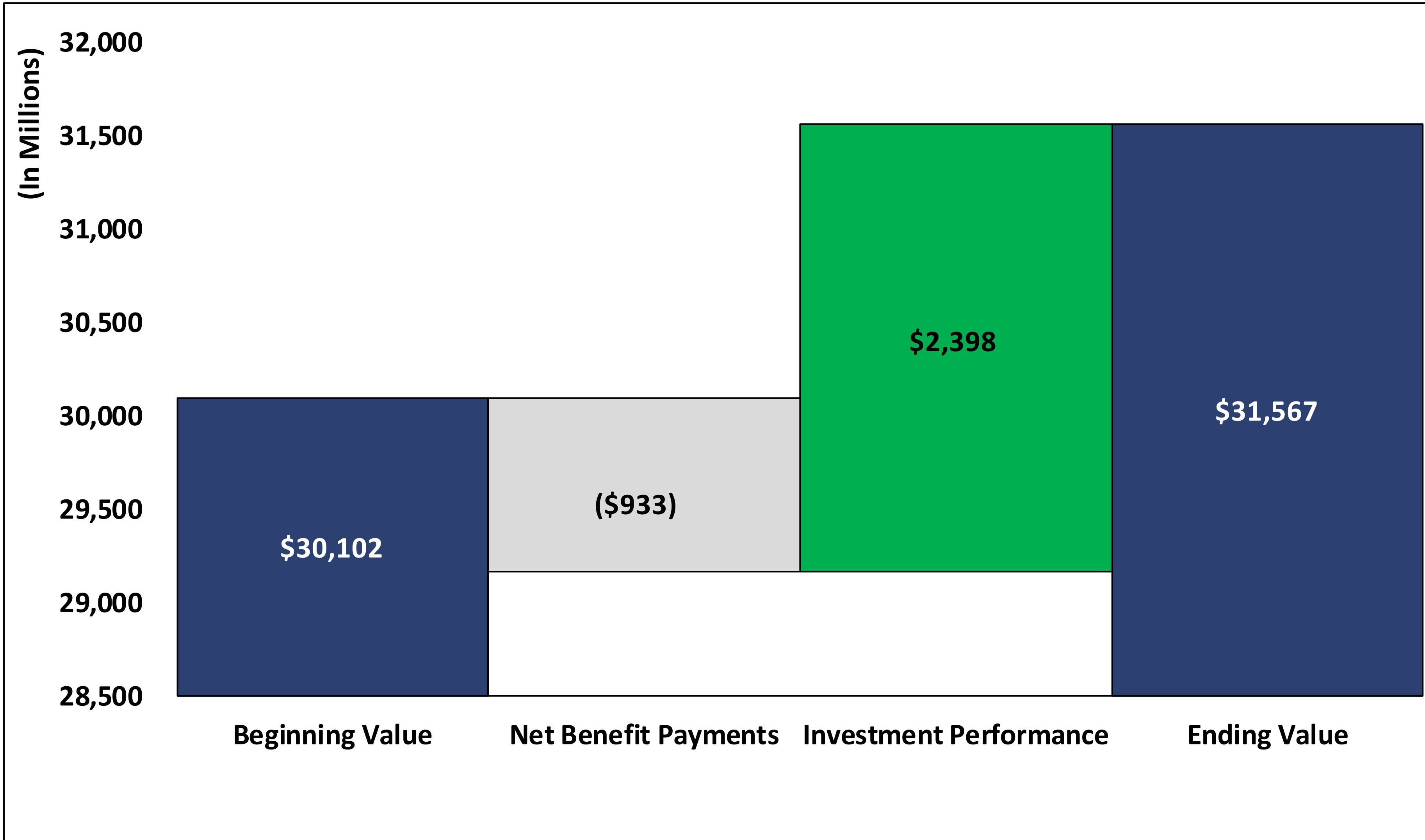
As of April 30, 2018



Historic Plan Performance As of 04/30/18	Market Value (In Millions)	Month	3 Month	FYTD	1 Year	Annualized 3 Years	Annualized 5 Years	Annualized 10 Years	Annualized RSIC Inception
Total Plan	**$31,567**	**0.42%**	**-2.19%**	**8.01%**	**9.39%**	**5.96%**	**6.60%**	**5.10%**	**5.38%**
Policy Benchmark		0.80%	-1.70%	7.29%	9.40%	6.32%	6.42%	4.49%	4.87%
Excess Return		-0.39%	-0.49%	0.72%	-0.01%	-0.35%	0.18%	0.61%	0.52%
Net Benefit Payments (In Millions)		($29)	($205)	($933)	($1,127)	($3,311)	($5,425)	($10,014)	($12,182)

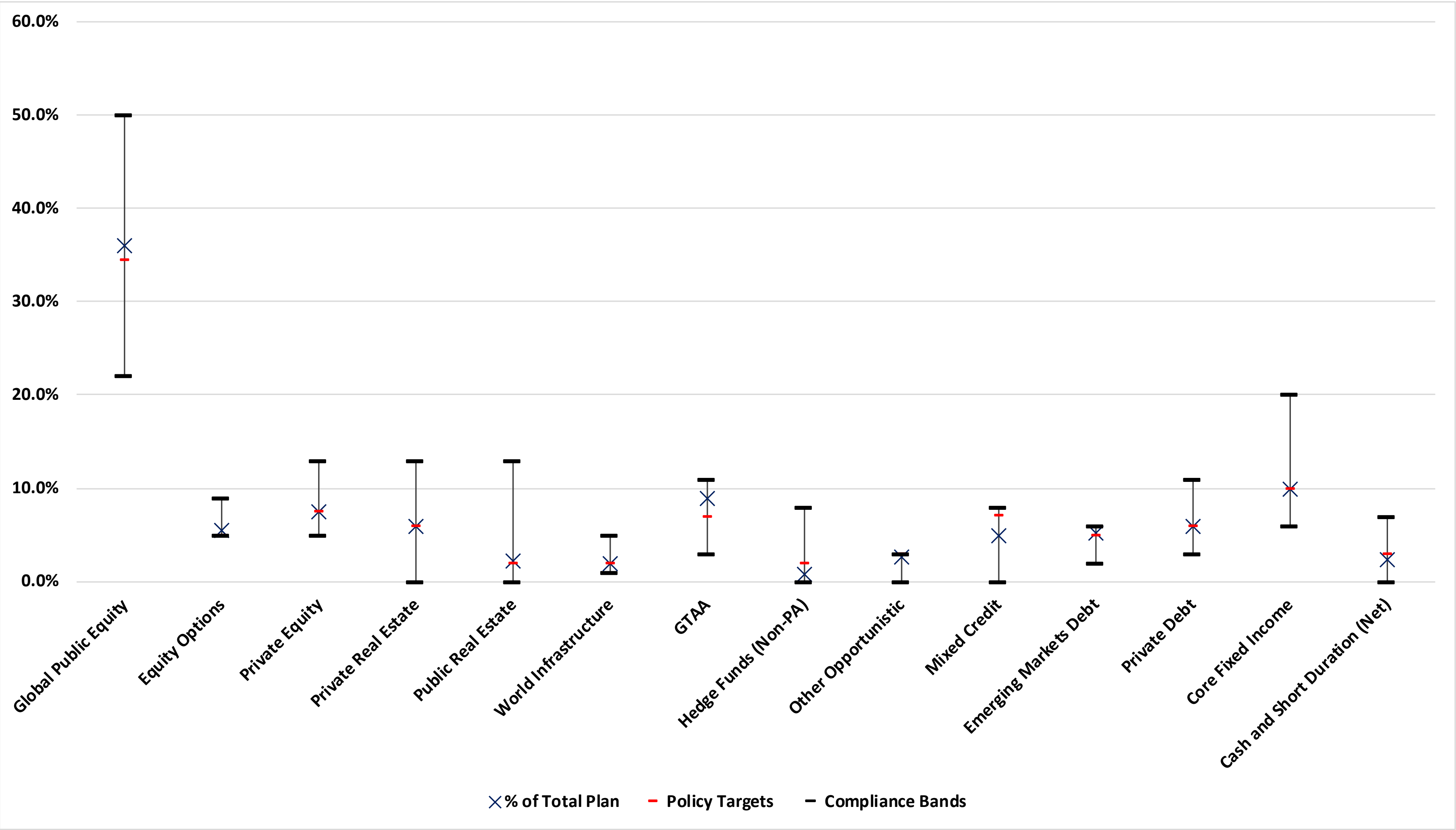
FYTD Benefits and Performance[2]

FYTD as of April 30, 2018



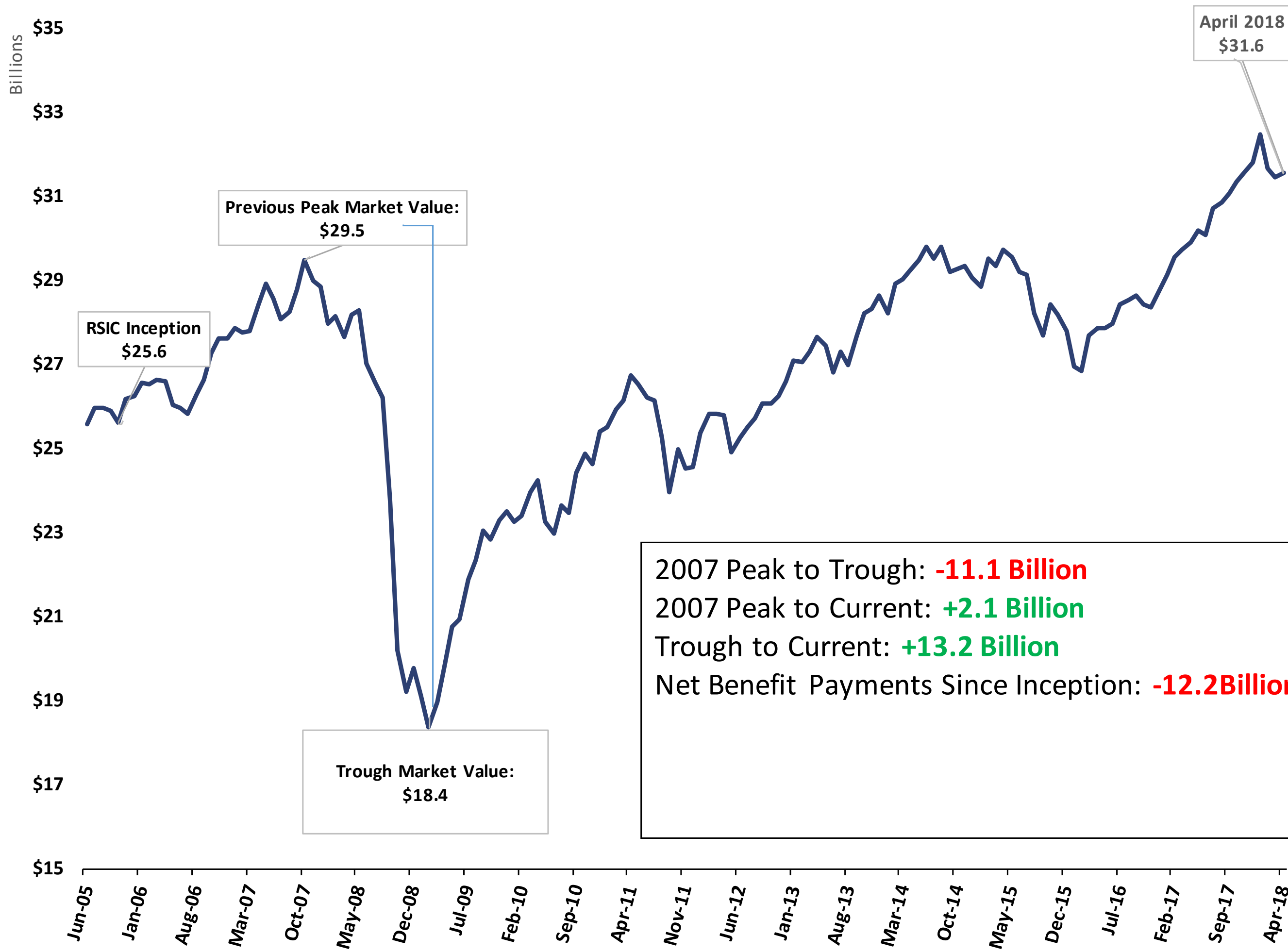
Portfolio Exposure & Policy Weights [4,8]

As of April 30, 2018



RSIC Market Value Through Time

As of April 30, 2018

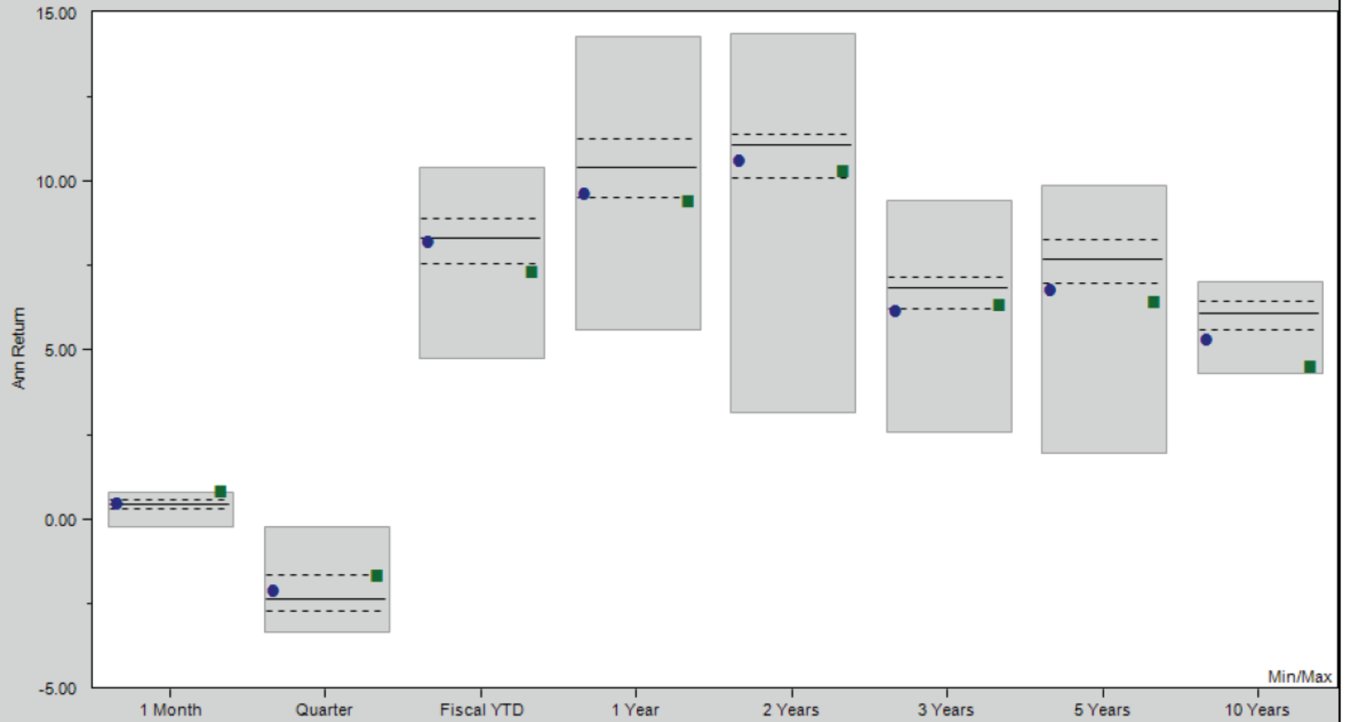


2007 Peak to Trough: **-11.1 Billion**
2007 Peak to Current: **+2.1 Billion**
Trough to Current: **+13.2 Billion**
Net Benefit Payments Since Inception: **-12.2Billion**

Bank of New York Public Funds > $5 billion[11]

As of April 30, 2018

Public > $5 Billion - Total Funds (USD) - Monthly
As of April 30, 2018
Quartile

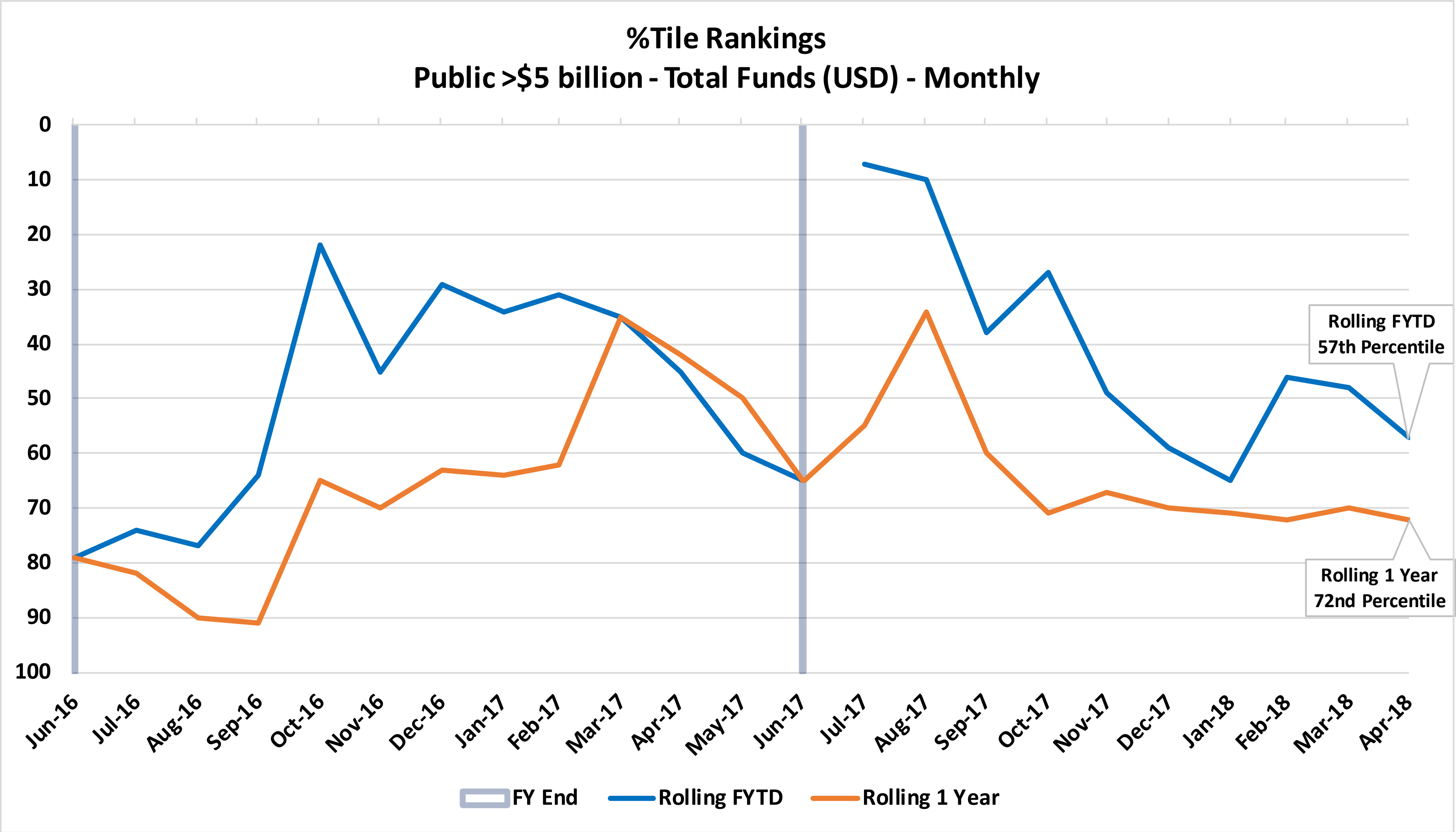


	1 Month Value	1 Month %Tile	Quarter Value	Quarter %Tile	Fiscal YTD Value	Fiscal YTD %Tile	1 Year Value	1 Year %Tile	2 Years Value	2 Years %Tile	3 Years Value	3 Years %Tile	5 Years Value	5 Years %Tile	10 Years Value	10 Years %Tile
Maximum	0.80		-0.25		10.39		14.30		14.37		9.45		9.88		7.02	
25th Percentile	0.57		-1.66		8.90		11.27		11.39		7.17		8.29		6.45	
Median Percentile	0.42		-2.39		8.34		10.41		11.06		6.87		7.68		6.11	
75th Percentile	0.31		-2.72		7.58		9.54		10.10		6.21		6.99		5.59	
Minimum	-0.23		-3.33		4.74		5.58		3.14		2.59		1.96		4.33	
# of Portfolios	36		36		36		35		35		34		33		32	
● Total SC with Overlay	0.44	47	-2.14	40	8.18	57	9.59	72	10.59	64	6.13	78	6.76	83	5.30	84
■ SC Policy Benchmark	0.80	4	-1.70	28	7.29	82	9.40	79	10.29	73	6.32	73	6.42	84	4.49	96

Universe Source: The Bank of New York Mellon Corporation; Universe Status: Final, Calculated

RSIC Universe Rankings[11]

As of April 30, 2018



Performance – Plan & Asset Classes[1,3,4,10]

As of April 30, 2018

Asset Class / Benchmark returns as of 04/30/18	Plan Weight	Month	3 Month	YTD	FYTD	1 Year	3 Years	5 Years
Total Plan	100.0%	0.42%	-2.19%	0.47%	8.01%	9.39%	5.96%	6.60%
Policy Benchmark		0.80%	-1.70%	0.57%	7.29%	9.40%	6.32%	6.42%
Global Public Equity	36.0%	0.57%	-5.39%	-0.20%	11.41%	14.42%	7.35%	8.53%
Global Public Equity Blend		0.93%	-5.09%	0.03%	11.38%	14.27%	7.56%	8.87%
Equity Options	5.5%	0.73%	-3.28%	-1.59%	4.94%	6.60%	n/a	n/a
CBOE S&P 500 BuyWrite Index (BXM)		1.33%	-1.19%	-0.25%	5.14%	7.39%	n/a	n/a
Private Equity	7.5%	0.84%	4.54%	6.34%	14.42%	15.41%	11.38%	13.53%
Private Equity Blend		5.31%	9.82%	11.70%	23.10%	28.67%	16.21%	17.02%
GTAA	8.9%	0.37%	-3.56%	-0.66%	4.95%	5.86%	3.31%	3.70%
GTAA Blend		0.20%	-3.10%	-1.10%	4.69%	6.35%	5.05%	4.94%
Other Opportunistic	2.6%	1.02%	0.43%	1.36%	7.39%	n/a	n/a	n/a
50% MSCI World / 50% Bloomberg Barclays US Aggregate		0.20%	-3.10%	-1.10%	4.69%	n/a	n/a	n/a
Hedge Funds (Non-PA)	0.8%	0.65%	0.04%	0.67%	3.54%	3.01%	n/a	n/a
50% MSCI World / 50% Bloomberg Barclays US Aggregate		0.20%	-3.10%	-1.10%	4.69%	6.35%	n/a	n/a
Core Fixed Income	10.0%	-0.77%	-1.28%	-2.50%	-1.48%	-0.99%	0.80%	1.16%
Barclays US Aggregate Bond Index		-0.74%	-1.05%	-2.19%	-0.98%	-0.32%	1.07%	1.47%
Cash and Short Duration (Net)	2.4%	0.13%	0.37%	0.49%	1.04%	1.17%	0.57%	0.36%
ICE BofA Merrill Lynch 3-Month T-Bill		0.13%	0.37%	0.49%	1.04%	1.17%	0.57%	0.36%
Mixed Credit	5.0%	0.14%	-0.15%	0.70%	4.10%	4.74%	3.56%	3.42%
Mixed Credit Blend		0.53%	0.04%	0.82%	3.15%	3.84%	4.87%	4.34%
Private Debt	6.0%	0.70%	0.54%	1.48%	5.79%	5.15%	4.93%	7.20%
S&P/LSTA Leveraged Loan + 150 Bps on a 3-month lag		1.15%	1.89%	2.46%	5.11%	6.04%	6.16%	5.51%
Emerging Markets Debt	5.2%	-2.28%	-3.09%	-0.24%	3.73%	5.33%	5.61%	1.70%
Emerging Markets Debt Blend		-2.21%	-3.06%	-0.91%	1.70%	4.81%	4.12%	0.96%
Private Real Estate	6.0%	1.53%	3.72%	4.28%	10.58%	11.47%	11.51%	14.72%
NCREIF ODCE + 75 Bps		0.07%	2.16%	2.23%	6.43%	8.37%	11.17%	12.28%
Public Real Estate	2.2%	1.42%	-2.36%	-6.25%	-0.95%	0.52%	n/a	n/a
FTSE NAREIT Equity REITs Index		1.43%	-2.82%	-6.88%	-4.60%	-3.26%	n/a	n/a
World Infrastructure	1.9%	1.28%	-4.92%	-4.81%	-0.75%	1.01%	n/a	n/a
Dow Jones Brookfield Global Infrastructure Net Index		1.48%	-3.84%	-3.85%	-0.18%	2.02%	n/a	n/a
Ported Cash	3.4%	0.13%	0.37%	0.49%	1.04%	1.17%	n/a	n/a
3 Month LIBOR		0.19%	0.51%	0.65%	1.33%	1.53%	n/a	n/a
Ported Short Duration	3.7%	0.02%	0.06%	-0.04%	0.53%	0.82%	n/a	n/a
3 Month LIBOR		0.19%	0.51%	0.65%	1.33%	1.53%	n/a	n/a
Portable Alpha Hedge Funds	9.5%	0.37%	-0.57%	1.62%	7.19%	6.34%	n/a	n/a
3 Month LIBOR		0.19%	0.51%	0.65%	1.33%	1.53%	n/a	n/a

Performance – Plan & Asset Classes[1,3,4,10]

As of April 30, 2018

Asset Class / Benchmark returns as of 04/30/18	Plan Weight	Month	3 Month	YTD	FYTD	1 Year	3 Years	5 Years
Total Plan	100.0%	0.42%	-2.19%	0.47%	8.01%	9.39%	5.96%	6.60%
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Global Public Equity Blend		0.93%	-5.09%	0.03%	11.38%	14.27%	7.56%	8.87%
Equity Options	5.5%	0.73%	-3.28%	-1.59%	4.94%	6.60%	n/a	n/a
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GTAA Blend		0.20%	-3.10%	-1.10%	4.69%	6.35%	5.05%	4.94%
Other Opportunistic	2.6%	1.02%	0.43%	1.36%	7.39%	n/a	n/a	n/a
50% MSCI World / 50% Bloomberg Barclays US Aggregate		0.20%	-3.10%	-1.10%	4.69%	n/a	n/a	n/a
Hedge Funds (Non-PA)	0.8%	0.65%	0.04%	0.67%	3.54%	3.01%	n/a	n/a
50% MSCI World / 50% Bloomberg Barclays US Aggregate		0.20%	-3.10%	-1.10%	4.69%	6.35%	n/a	n/a
Core Fixed Income	10.0%	-0.77%	-1.28%	-2.50%	-1.48%	-0.99%	0.80%	1.16%
Barclays US Aggregate Bond Index		-0.74%	-1.05%	-2.19%	-0.98%	-0.32%	1.07%	1.47%
Cash and Short Duration (Net)	2.4%	0.13%	0.37%	0.49%	1.04%	1.17%	0.57%	0.36%
ICE BofA Merrill Lynch 3-Month T-Bill		0.13%	0.37%	0.49%	1.04%	1.17%	0.57%	0.36%
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Private Debt	6.0%	0.70%	0.54%	1.48%	5.79%	5.15%	4.93%	7.20%
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Emerging Markets Debt	5.2%	-2.28%	-3.09%	-0.24%	3.73%	5.33%	5.61%	1.70%
Emerging Markets Debt Blend		-2.21%	-3.06%	-0.91%	1.70%	4.81%	4.12%	0.96%
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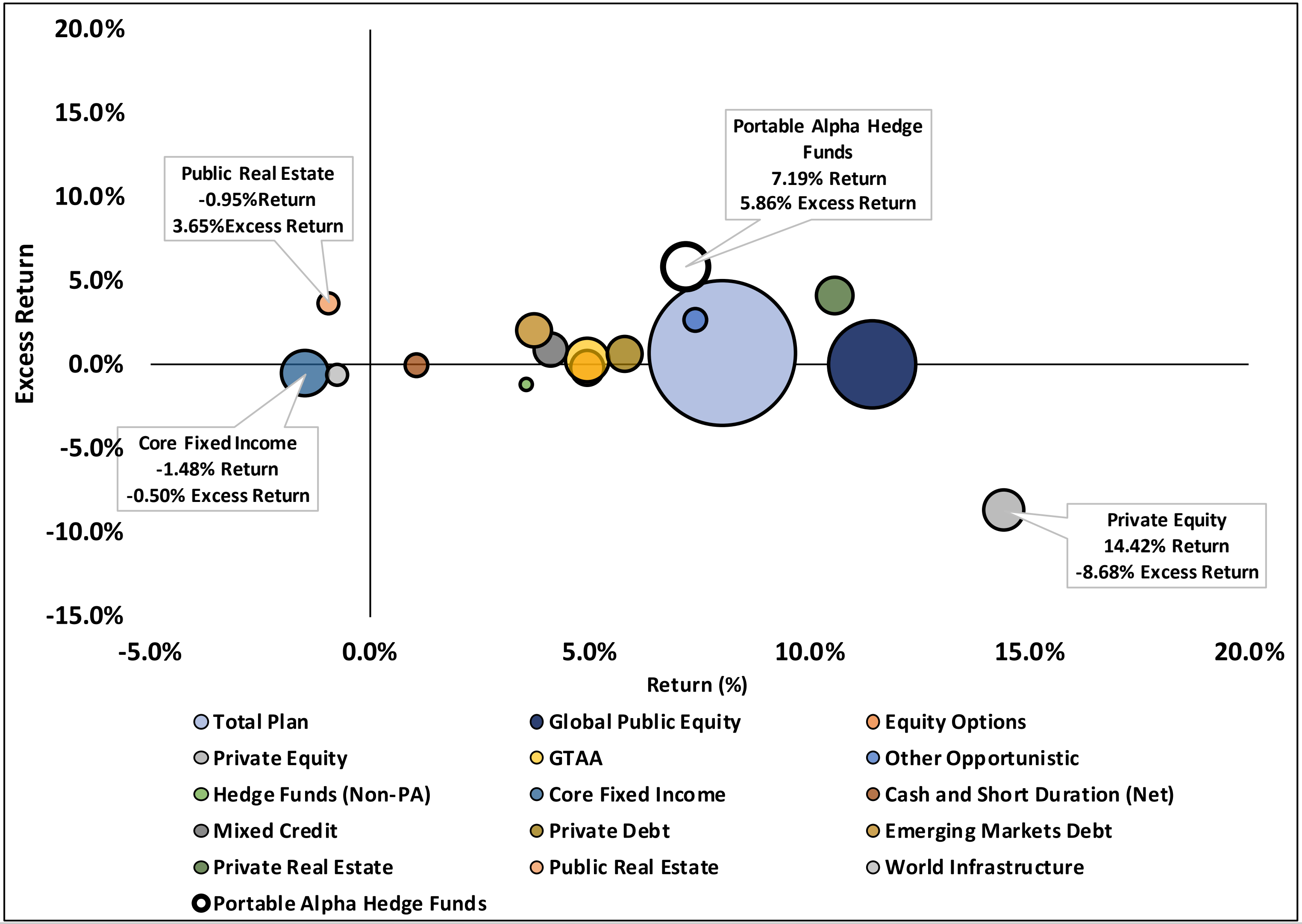
World Infrastructure	1.9%	1.28%	-4.92%	-4.81%	-0.75%	1.01%	n/a	n/a
Dow Jones Brookfield Global Infrastructure Net Index		1.48%	-3.84%	-3.85%	-0.18%	2.02%	n/a	n/a
Ported Cash	3.4%	0.13%	0.37%	0.49%	1.04%	1.17%	n/a	n/a
3 Month LIBOR		0.19%	0.51%	0.65%	1.33%	1.53%	n/a	n/a
Ported Short Duration	3.7%	0.02%	0.06%	-0.04%	0.53%	0.82%	n/a	n/a
3 Month LIBOR		0.19%	0.51%	0.65%	1.33%	1.53%	n/a	n/a
Portable Alpha Hedge Funds	9.5%	0.37%	-0.57%	1.62%	7.19%	6.34%	n/a	n/a
3 Month LIBOR		0.19%	0.51%	0.65%	1.33%	1.53%	n/a	n/a

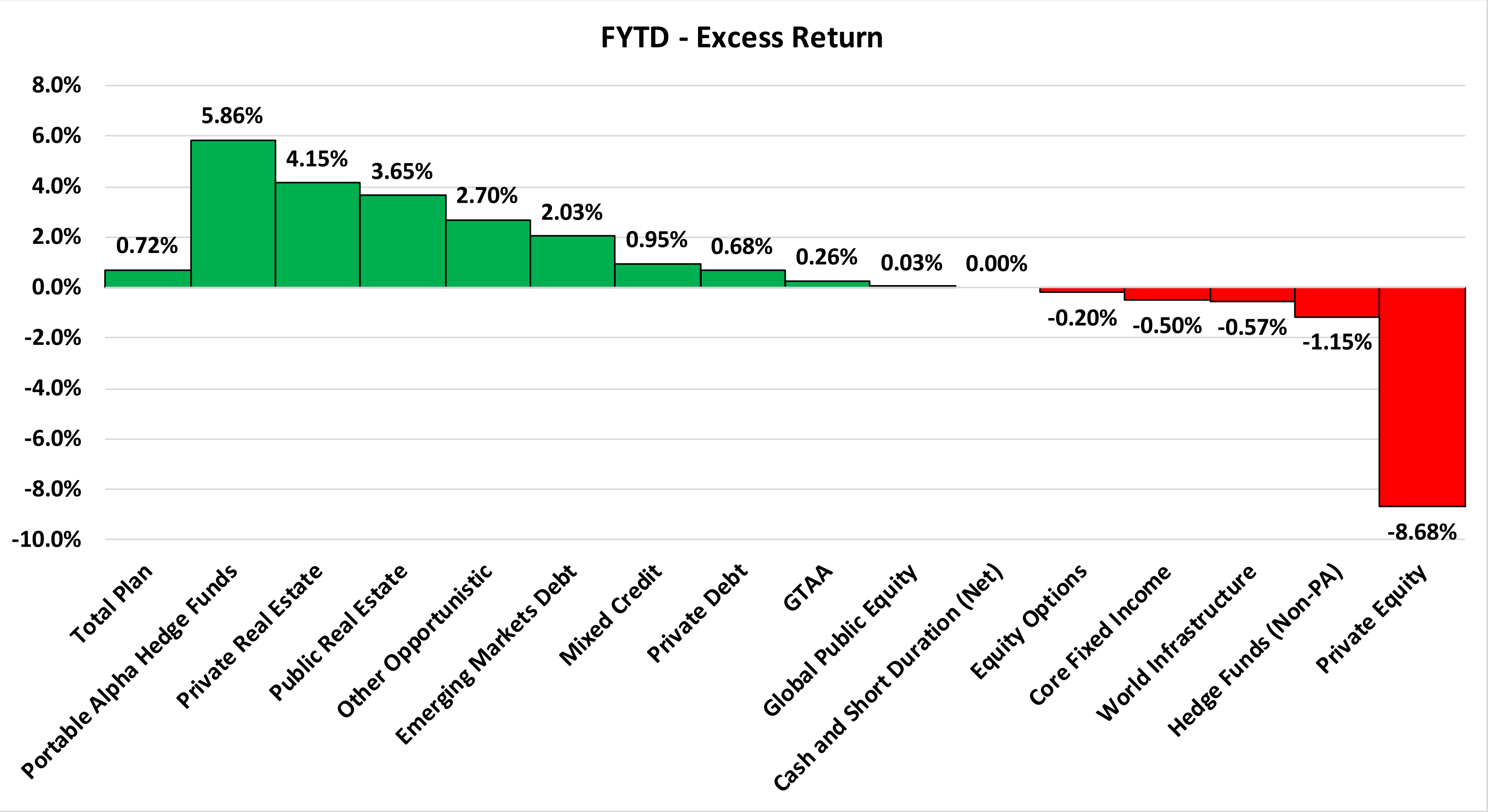
Asset Class Return & Excess[1,3,4,10]

FYTD as of April 30, 2018



Relative Performance to Policy Benchmarks[1,3,4,10]

FYTD as of April 30, 2018



Attribution of Excess Returns[1,3,4,7,10]

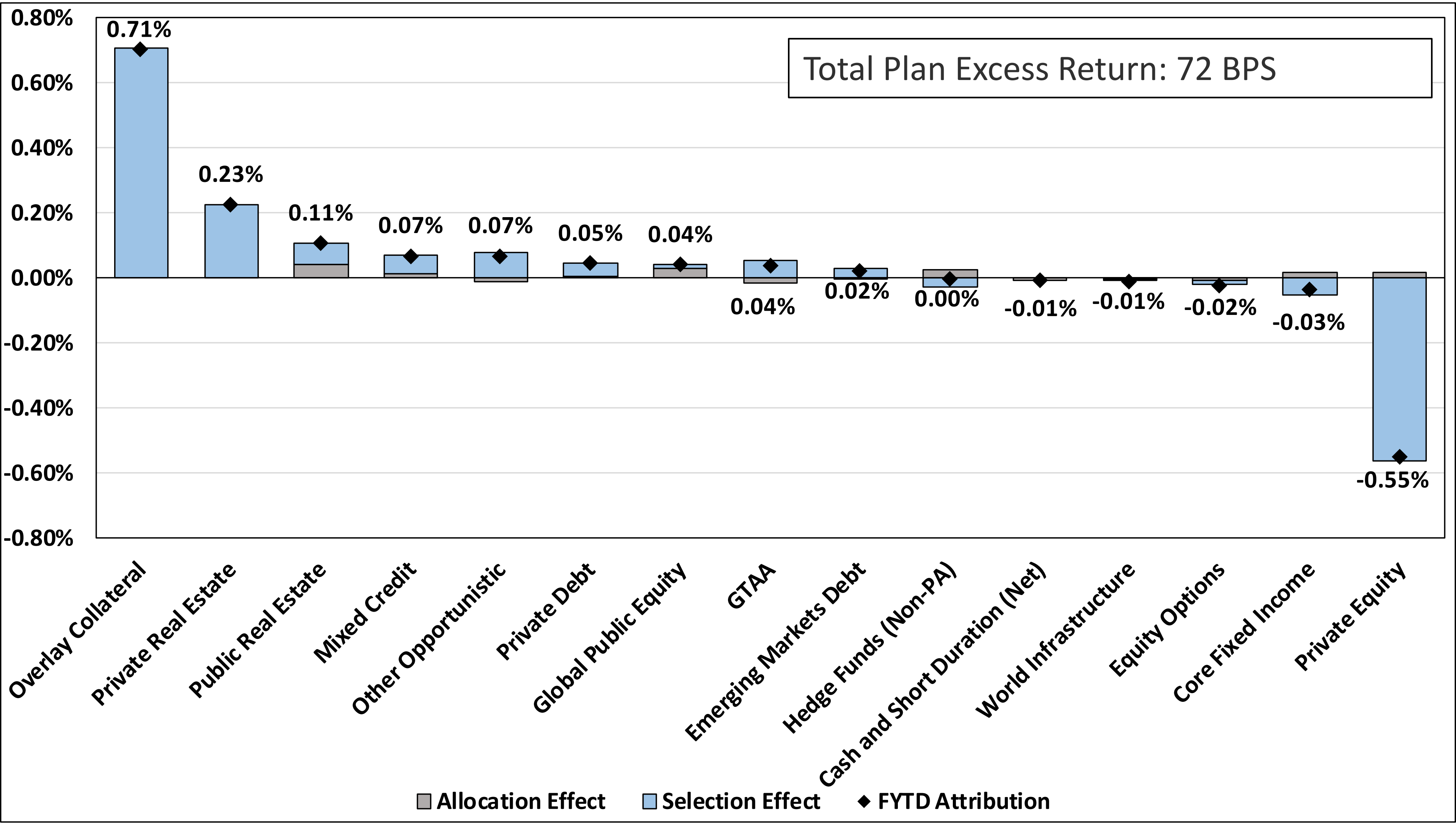
FYTD as of April 30, 2018

Fiscal Year Attribution	Total Attribution	Allocation Effect	Selection Effect	Average O/U Weight	Asset Class FY Return	Asset Class BM Return
Private Real Estate	0.23%	0.00%	0.22%	0.02%	10.58%	6.42%
Public Real Estate	0.11%	0.04%	0.07%	-0.07%	-0.95%	-4.60%
Mixed Credit	0.07%	0.01%	0.06%	-1.16%	4.10%	3.15%
Other Opportunistic	0.07%	-0.01%	0.08%	0.59%	7.39%	4.69%
Private Debt	0.05%	0.00%	0.04%	-0.01%	5.79%	5.11%
Global Public Equity	0.04%	0.03%	0.01%	0.43%	11.41%	11.38%
GTAA	0.04%	-0.01%	0.05%	0.19%	4.95%	4.69%
Emerging Markets Debt	0.02%	0.00%	0.03%	0.22%	3.73%	3.18%
Hedge Funds (Non-PA)	0.00%	0.02%	-0.03%	-0.82%	3.54%	4.69%
Cash and Short Duration (Net)	-0.01%	-0.01%	0.00%	0.45%	1.04%	1.04%
World Infrastructure	-0.01%	0.00%	-0.01%	-0.21%	-0.75%	-0.18%
Equity Options	-0.02%	-0.01%	-0.01%	0.42%	4.94%	5.14%
Core Fixed Income	-0.03%	0.02%	-0.05%	-0.10%	-1.48%	-0.98%
Private Equity	-0.55%	0.02%	-0.56%	0.03%	14.42%	23.10%
Overlay Collateral	0.71%	0.00%	0.71%	n/a	2.18%	1.33%
Portable Alpha Hedge Funds	0.63%	0.00%	0.63%	n/a	7.19%	1.33%
Ported Short Duration	0.02%	0.00%	0.02%	n/a	0.53%	1.33%
Ported Cash	0.05%	0.00%	0.05%	n/a	1.04%	1.33%

	Total Plan Excess Return	**Allocation Effect**	**Selection Effect**	**Interaction / Other**	**RSIC Return**	**RSIC Policy Benchmark Return**
FYTD Total	0.72%	0.10%	0.62%	0.00%	8.01%	7.29%

Attribution of Excess Returns[1,3,4,7,10]

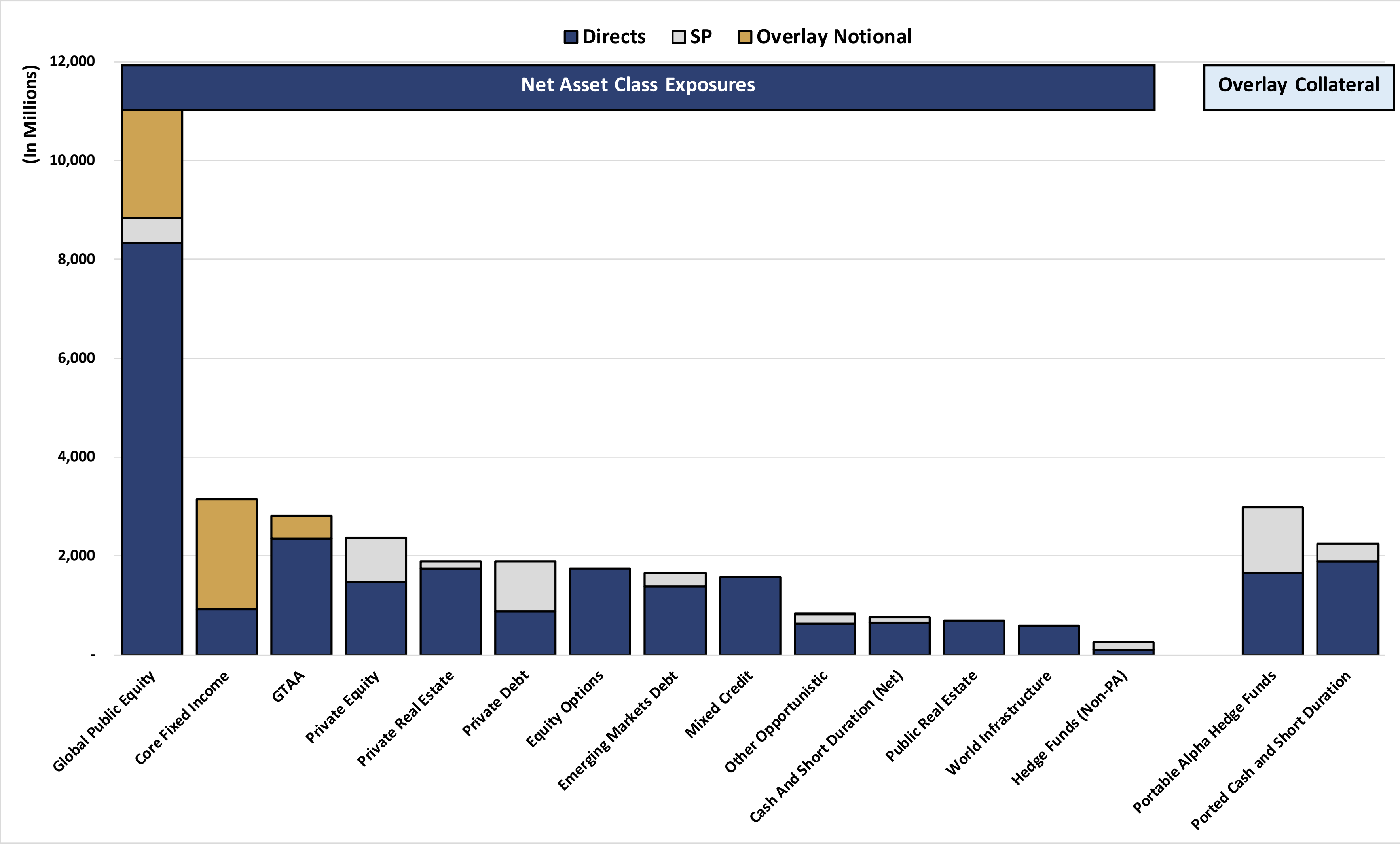
FYTD as of April 30, 2018



Appendix

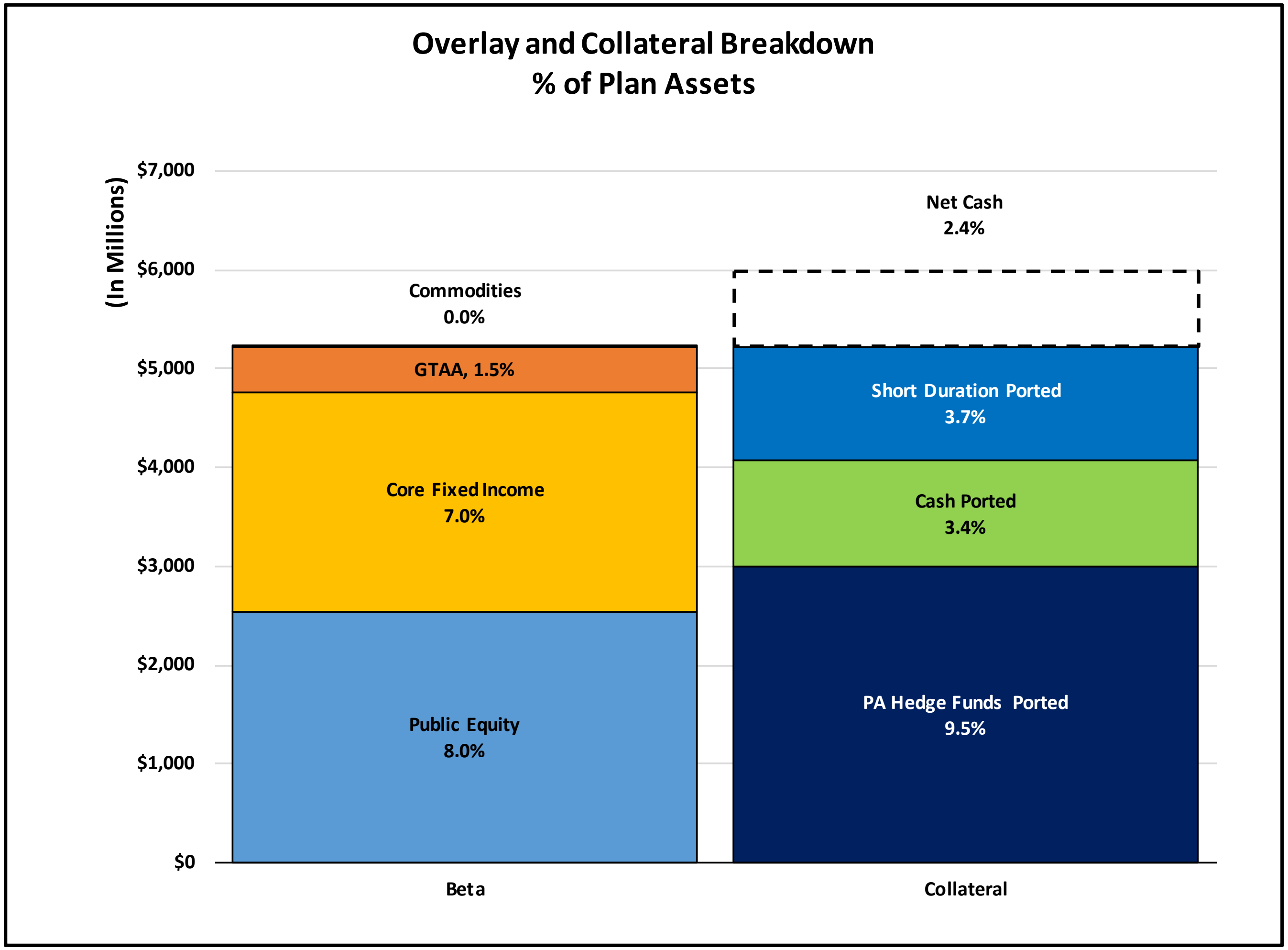
Asset Class Composition by Implementation[4]

As of April 30, 2018



Overlay Percentage by Asset Class[6]

As of April 30, 2018



Portfolio Exposures[4,8]

As of April 30, 2018

Asset Allocation	Market Value as of 04/30/18	Overlay Exposures	Net Position	% of Total Plan	Policy Targets	Difference	Allowable Ranges	SIOP Compliance
Global Equity	**12,941**		**15,480**	**49.0%**	**47.0%**	**2.0%**	**31% - 59%**	YES
Global Public Equity	8,831	2,539	11,370	36.0%	34.5%	1.5%	22% - 50%	YES
Equity Options	1,734		1,734	5.5%	5.0%	0.5%	5% - 9%	YES
Private Equity	2,376	0	2,376	7.5%	7.5%	0.0%	5% - 13%	YES
Real Assets	**3,182**		**3,182**	**10.1%**	**10.0%**	**0.1%**	**7% - 17%**	YES
Private Real Estate	1,891		1,891	6.0%	6.0%	0.0%	0% - 13%	YES
Public Real Estate	695		695	2.2%	2.0%	0.2%	0% - 13%	YES
World Infrastructure	595		595	1.9%	2.0%	-0.1%	1% - 5%	YES
Opportunistic	**3,410**		**3,882**	**12.3%**	**12.0%**	**0.3%**	**12% - 24%**	YES
GTAA	2,343	471	2,814	8.9%	7.0%	1.9%	3% - 11%	YES
Hedge Funds (Non-PA)	246		246	0.8%	2.0%	-1.2%	0% - 8%	YES
Other Opportunistic	822	1	822	2.6%	3.0%	-0.4%	0% - 3%	YES
Diversified Credit	**5,111**		**5,111**	**16.2%**	**18.0%**	**-1.8%**	**10% - 20%**	YES
Mixed Credit	1,579		1,579	5.0%	7.0%	-2.0%	0% - 8%	YES
Emerging Markets Debt	1,650		1,650	5.2%	5.0%	0.2%	2% - 6%	YES
Private Debt	1,882		1,882	6.0%	6.0%	0.0%	3% - 11%	YES
Conservative Fixed Income	**3,933**		**3,912**	**12.4%**	**13.0%**	**-0.6%**	**4% - 24%**	YES
Core Fixed Income	931	2,215	3,146	10.0%	10.0%	0.0%	6% - 20%	YES
Cash and Short Duration (Net)	3,002	-2,236	766	2.4%	3.0%	-0.6%	0% - 7%	YES
Portable Alpha Hedge Funds	2,990	-2,990	0	9.5%*	n/a	n/a	0% - 12%	YES
Total Plan	**$31,567**	**-**	**$31,567**	**100.0%**				
Total Hedge Funds	3,457		**$3,457**	**11.0%**	n/a	n/a	0% - 20%	YES
Total Private Markets	6,149	**-**	**$6,149**	**19.5%**	n/a	n/a	14% - 25%	YES

Total Hedge Fund exposure: 11.0% and consisted of: 9.5% Portable Alpha Hedge Funds, 0.7% to a hedge fund in Mixed Credit, and 0.8% Hedge Funds (Non-PA). *Portable Alpha Hedge Funds are expressed as gross exposure but employed in conjunction with the Overlay Program and are offset when looking at total plan market value.

Footnotes & Disclosures

Footnotes

1. Represents asset class benchmarks as of reporting date. Benchmarks for asset classes may have changed over time.

2. Benefit payments are net of Plan contributions and disbursements.

3. "Cash" market value is the aggregate cash held at the custodian, Russell Investments, and strategic partnerships. Cash performance is estimated using the BofA Merrill Lynch 3-Month T-Bill rate.

4. Asset class exposures and returns include blended physical and synthetic returns and current notional values (EM Debt, GTAA, Global Public Equity, Real Estate, Core Fixed Income, Private Equity, and Commodities).

5. Performance contribution methodology: Contribution is calculated by taking the sum of the [beginning weight] X [monthly return].

6. Source: Russell Investments; Net notional exposure.

7. Allocation Effect: [Asset Class Weight – Policy Weight] * [Benchmark Return – Plan Policy Benchmark]
   Selection Effect: [Asset Class Return – Policy Benchmark Return] * Asset Class Weight in Plan

8. The target weights to Private Equity, Private Debt, and Private Real Estate will be equal to their actual weights, reported by the custodial bank, as of the prior month end. When flows have occurred in the asset classes, flow adjusted weights are used to more accurately reflect the impact of the asset class weights. In the case of Private Equity, the use of the flow adjusted weight will affect the target allocation to Public Equity, such that the combined target weight of both asset classes shall equal 42% of the Plan. For Private Debt, the use of the flow adjusted weight will affect the target allocation to Mixed Credit, such that the combined target weight of both asset classes shall equal 13% of the Plan. For Private Real Estate, the use of the flow adjusted weight will affect the target allocation to Public Real Estate, such that the combined target weight of both asset classes shall equal 8% of the Plan.

9. Policy Ending Value is an estimate of the Plan NAV had it earned the Policy Benchmark return.

10. Collateral held to support the overlay program represents opportunity cost associated with financing the overlay program. The Overlay collateral consists of Ported Cash, Ported Short Duration, and Portable Alpha Hedge Funds. The cost of holding these assets is proxied using 3 Month LIBOR. This benchmark is not a component of the Policy benchmark.

11. RSIC Peer Universe is Bank of New York Public Plans Greater than $5 Billion. The universe includes fund returns that are gross of invoiced fees. The RSIC percentile rank represents the RSIC return gross of invoiced fees.

Disclosures

- Returns are provided by BNY Mellon and are time-weighted, total return calculations. Net of fee performance is calculated and presented after the deduction of fees and expenses. Periods greater than one year are annualized. Past performance is no guarantee of future results. Policy benchmark is the blend of asset class policy benchmarks using policy weights. Asset class benchmarks and policy weights are reviewed annually by the Commission's consultant and adopted by the Commission and have changed over time. The policy benchmark return history represents a blend of these past policies.

- Overlay allocation detail is provided by Russell Investments.

- This report was compiled by the staff of the South Carolina Retirement System Investment Commission and has not been reviewed, approved or verified by the external investment managers. No information contained herein should be used to calculate returns or compare multiple funds, including private equity funds.

- Effective October 1, 2005, the State Retirement System Preservation and Investment Reform Act ("Act 153") established the Commission and devolved fiduciary responsibility for investment and management of the assets of the South Carolina Retirement Systems upon RSIC.

- Allocation / exposure percentages might not add up to totals due to rounding.

Footnotes & Disclosures

Benchmarks

- Global Public Equity Blend:
  7/2016 – Present: MSCI All-Country World Investable Markets Index (net of dividends)
  Prior to 7/2016: MSCI All-Country World Index (net of dividends)
- Equity Options Strategies: CBOE S&P Buy Write Index (BXM)
- Private Equity Blend: 80% Russell 3000 Index on a 3-month lag / 20% MSCI EAFE (net of dividends) on a 3-month lag Plus 300 basis points
- Core Fixed Income: Bloomberg Barclays US Aggregate Bond Index
- Emerging Market Debt: 50% JP Morgan EMBI Global Diversified (US Dollar) / 50% JP Morgan GBIEM Global Diversified (Local)
- Private Debt : S&P/LSTA Leveraged Loan Index + 150 basis points on a 3-month lag
- Mixed Credit Blend:
  7/2016 – Present: 1/2 Bloomberg Barclays US Corporate High Yield 2% Issuer Capped Bond Index
  1/2 S&P/LSTA Leveraged Loan Index
  Prior to 7/2016: 1/3 Bloomberg Barclays US Corporate High Yield 2% Issuer Capped Bond Index
  1/3 S&P/LSTA Leveraged Loan Index
  1/3 Bloomberg Barclays US Mortgage Backed Securities (MBS) Index
- GTAA Blend:
  7/2016 – Present: 50% MSCI World Index (net of dividends)
  50% Bloomberg Barclays US Aggregate Bond Index
  Prior to 7/2016: 50% MSCI World Index (net of dividends)
  50% Citi World Government Bond Index (WGBI)
- Other Opportunistic:
  7/2016 – Present: 50% MSCI World Index (net of dividends)
  50% Bloomberg Barclays US Aggregate Bond Index
- Non PA Hedge Funds
  7/2016 – Present: 50% MSCI World Index (net of dividends)
  50% Bloomberg Barclays US Aggregate Bond Index
- Private Real Estate: NCREIF Open-end Diversified Core (ODCE) Index + 75 basis points
- Public Real Estate: FTSE NAREIT Equity REITs Index
- Infrastructure: Dow Jones Brookfield Global Infrastructure Index
- Cash & Short Duration: ICE BofA Merrill Lynch 3-Month US Treasury Bill Index

F U N D E V A L U A T I O N R E P O R T

South Carolina Retirement System

Performance Report
As of March 31, 2018

M E K E T A I N V E S T M E N T G R O U P

Boston	Chicago	Miami	Portland	San Diego	London
Massachusetts	Illinois	Florida	Oregon	California	United Kingdom

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South Carolina Retirement System Investment Commission

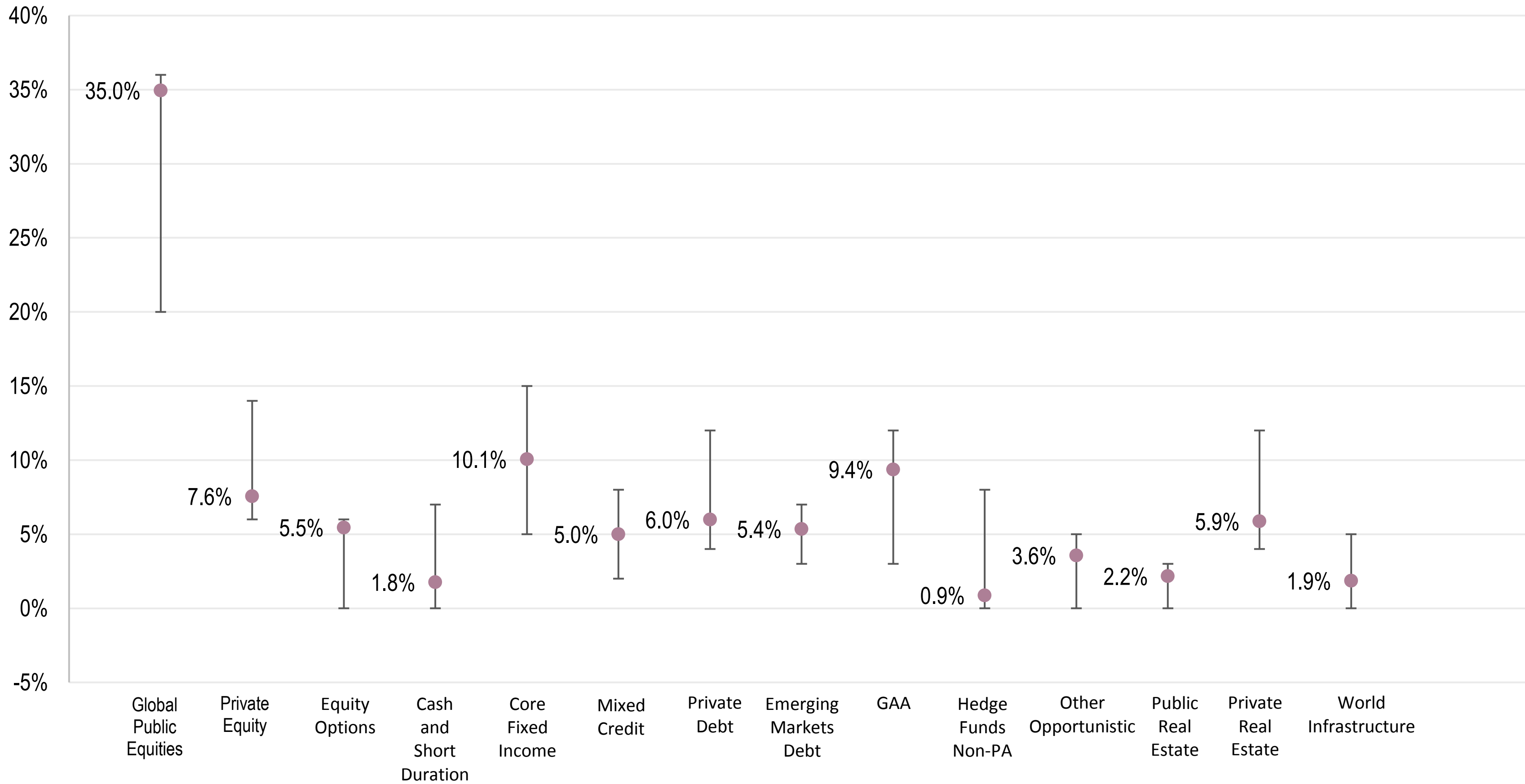
As of March 31, 2018

Allocation vs. Targets and Policy

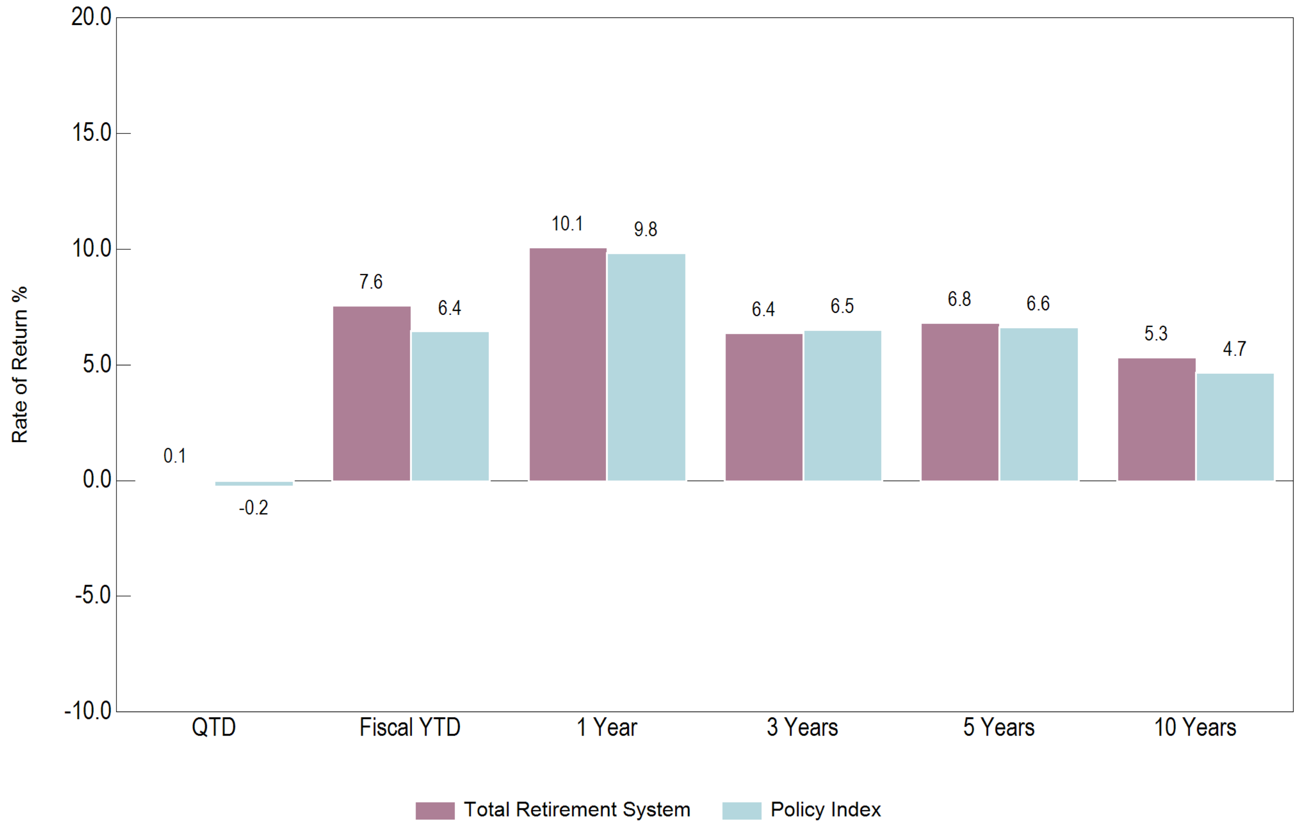
	MV at 3/31/18	Overlay Exposures	Net Position	% of Total System	% of Total System (Net)	FY 17-18 (b) Policy Targets	Allowable Ranges	SIOP Compliance?
Total System	**31,464,210,357**	**-**	**31,464,210,357**	**100%**	**100%**	**100%**	**-**	**-**
Equity	**12,887,925,350**	**2,214,997,819**	**15,102,923,168**	**41%**	**48%**	**47%**	**42-52%**	**Yes**
Global Equity	8,785,065,624	2,214,997,819	11,000,063,443	28%	35%	34%	20-36%	Yes
Private Equity	2,382,420,410	-	2,382,420,410	8%	8%	8%	6-14%	Yes
Equity Options	1,720,439,315	-	1,720,439,315	5%	5%	5%	0-6%	Yes
Conservative Fixed Income	**3,582,826,862**	**144,272,787**	**3,727,099,649**	**11%**	**12%**	**13%**	**10-16%**	**Yes**
Cash and Short Duration	2,644,320,586	(2,085,964,032)	558,356,554	8%	2%	3%	0-7%	Yes
Core Fixed Income	938,506,276	2,230,236,819	3,168,743,096	3%	10%	10%	5-15%	Yes
Diversified Credit	**5,152,203,439**	**-**	**5,152,203,439**	**16%**	**16%**	**18%**	**15-21%**	**Yes**
Mixed Credit	1,576,382,816	-	1,576,382,816	5%	5%	7%	2-8%	Yes
Private Debt	1,887,344,100	-	1,887,344,100	6%	6%	6%	4-12%	Yes
Emerging Markets Debt	1,688,476,522	-	1,688,476,522	5%	5%	5%	3-7%	Yes
Opportunistic	**3,739,054,211**	**619,154,001**	**4,358,208,212**	**12%**	**14%**	**12%**	**9-19%**	**Yes**
GAA	2,334,271,200	617,948,039	2,952,219,239	7%	9%	7%	3-12%	Yes
Hedge Funds Non-PA	280,398,012	-	280,398,012	1%	1%	2%	0-8%	Yes
Other Opportunistic	1,124,385,000	1,205,962	1,125,590,962	4%	4%	3%	0-5%	Yes
Real Assets	**3,123,775,890**	**-**	**3,123,775,890**	**10%**	**10%**	**10%**	**8-14%**	**Yes**
Public Real Estate	685,083,525	-	685,083,525	2%	2%	2%	0-3%	Yes
Private Real Estate	1,851,096,491	-	1,851,096,491	6%	6%	6%	4-12%	Yes
World Infrastructure	587,595,874	-	587,595,874	2%	2%	2%	0-5%	Yes
Hedge Funds PA	2,978,424,606	(2,978,424,606)	-	9%	0%	NA	0-12%	**Yes**

Includes cash in the Russell Overlay separate account.
Percentages may not sum to 100% due to rounding.

Actual vs. Policy Ranges: (Including Overlay)

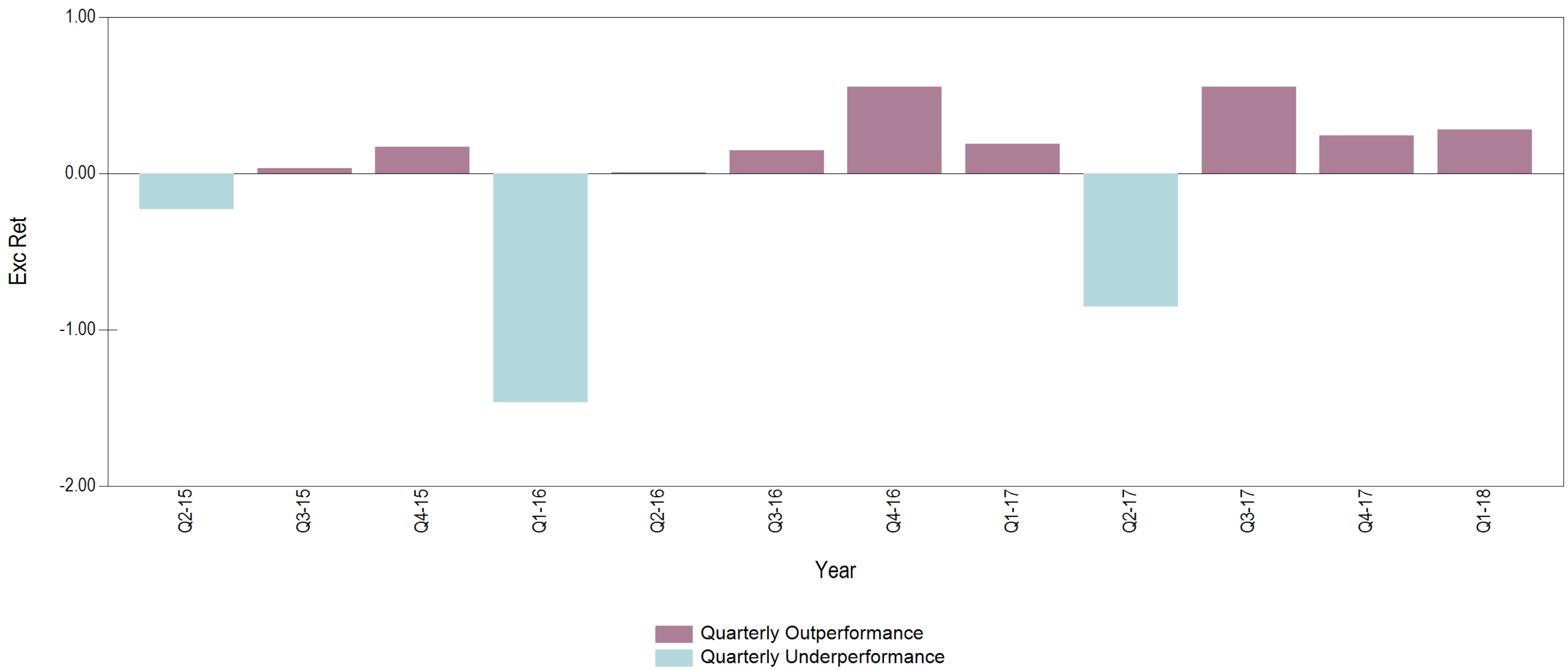


Net Return Summary
Ending March 31, 2018



Returns for periods greater than one year are annualized.

Quarterly Excess Performance vs. Policy Benchmark



Total Retirement System

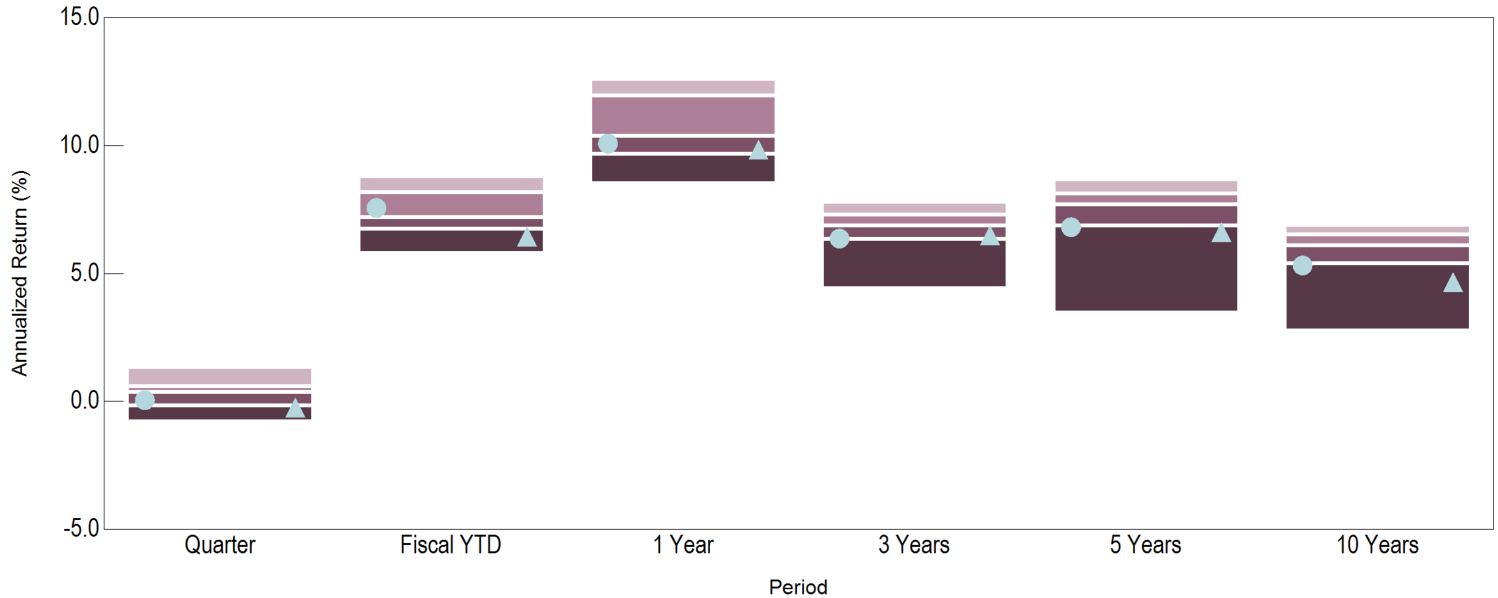
As of March 31, 2018

Net Asset Class Performance Summary

	Market Value ($)	% of Portfolio	QTD (%)	Fiscal YTD (%)	1 Yr (%)	3 Yrs (%)	5 Yrs (%)	10 Yrs (%)	Inception (%)	Inception Date
Total Retirement System	**31,464,210,357**	**100.0**	**0.1**	**7.6**	**10.1**	**6.4**	**6.8**	**5.3**	**6.4**	**Jul-94**
Policy Index			*-0.2*	*6.4*	*9.8*	*6.5*	*6.6*	*4.7*	*5.8*	*Jul-94*
Global Public Equities	**8,785,065,624**	**27.9**	**-0.4**	**11.4**	**16.6**	**8.5**	**8.6**	**6.5**	**4.8**	**Jun-99**
MSCI ACWI IMI Net USD			*-0.9*	*10.3*	*15.0*	*8.3*	*9.3*	*5.9*	*5.6*	*Jun-99*
Private Equity	**2,382,420,410**	**7.6**	**5.5**	**13.5**	**15.6**	**11.9**	**13.4**	**9.3**	**7.8**	**Apr-07**
80% Russell 3000/20% MSCI EAFE + 300 basis points on a 3-month lag			*6.1*	*16.9*	*24.9*	*13.5*	*17.1*	*13.4*	*15.2*	*Apr-07*
Equity Options	**1,720,439,315**	**5.5**	**-2.3**	**4.2**	**6.9**	**--**	**--**	**--**	**8.9**	**Jul-16**
CBOE S&P 500 BuyWrite USD			*-1.6*	*3.8*	*6.9*	*7.2*	*7.4*	*5.1*	*9.0*	*Jul-16*
Short Duration	**1,154,358,306**	**3.7**	**-0.1**	**0.5**	**1.2**	**1.4**	**1.3**	**--**	**1.7**	**Mar-10**
BBgBarc US Govt/Credit 1-3 Yr. TR			*-0.2*	*-0.1*	*0.2*	*0.7*	*0.8*	*1.6*	*1.1*	*Mar-10*
Cash and Overlay	**1,489,962,280**	**4.7**	**0.2**	**0.4**	**0.5**	**-0.2**	**0.0**	**0.1**	**1.1**	**Oct-05**
ICE BofAML 91 Days T-Bills TR			*0.4*	*0.9*	*1.1*	*0.5*	*0.3*	*0.3*	*1.2*	*Oct-05*
Core Fixed Income	**938,506,276**	**3.0**	**-1.7**	**0.2**	**1.8**	**1.9**	**2.1**	**4.1**	**6.0**	**Jul-94**
BBgBarc US Aggregate TR			*-1.5*	*-0.2*	*1.2*	*1.2*	*1.8*	*3.6*	*5.5*	*Jul-94*
Mixed Credit	**1,576,382,816**	**5.0**	**0.6**	**4.0**	**4.8**	**3.9**	**3.7**	**--**	**6.4**	**May-08**
50% S&P LSTA Leveraged Loan Index/50% Barclays High Yield Index			*0.3*	*2.6*	*4.1*	*4.9*	*4.4*	*6.3*	*6.1*	*May-08*
Private Debt	**1,887,344,100**	**6.0**	**0.8**	**5.1**	**4.8**	**5.2**	**7.5**	**--**	**7.2**	**Jun-08**
S&P LSTA Leveraged Loan Index + 150 basis points on a 3-month lag			*1.3*	*3.9*	*5.6*	*5.9*	*5.5*	*5.4*	*5.2*	*Jun-08*
Emerging Market Debt	**1,688,476,522**	**5.4**	**2.1**	**6.1**	**9.5**	**7.3**	**2.7**	**--**	**6.2**	**Jul-09**
50% JP Morgan EMBI Global Diversified (USD)/50% JP Morgan EMBI Global Diversified			*1.3*	*5.5*	*8.6*	*5.7*	*2.0*	*5.5*	*6.1*	*Jul-09*
GAA	**2,334,271,200**	**7.4**	**-0.6**	**5.1**	**6.7**	**3.5**	**3.9**	**4.6**	**5.2**	**Aug-07**
50% MSCI World Index/50% Barclays Aggregate Bond Index			*-1.3*	*4.5*	*7.3*	*4.7*	*5.8*	*5.1*	*4.8*	*Aug-07*
Other Opportunistic	**1,124,385,000**	**3.6**	**0.0**	**5.2**	**--**	**--**	**--**	**--**	**5.2**	**Jul-17**
50% MSCI World Index/50% Barclays Aggregate Bond Index			*-1.3*	*4.5*	*7.3*	*4.7*	*5.8*	*5.1*	*4.5*	*Jul-17*
Hedge Funds Non Portable Alpha	**280,398,012**	**0.9**	**0.0**	**2.9**	**2.8**	**1.0**	**2.8**	**2.6**	**2.5**	**Aug-07**
50% MSCI World Index/50% Barclays Aggregate Bond Index			*-1.3*	*4.5*	*7.3*	*4.7*	*5.8*	*5.1*	*4.8*	*Aug-07*
Hedge Funds Portable Alpha	**2,978,424,606**	**9.5**	**1.2**	**6.7**	**5.3**	**3.2**	**7.2**	**6.8**	**8.6**	**Jul-07**
3-Month Libor Total Return USD			*0.5*	*1.2*	*1.5*	*0.9*	*0.7*	*0.7*	*1.0*	*Jul-07*
Public Real Estate	**685,083,525**	**2.2**	**-7.6**	**-2.3**	**-1.2**	**--**	**--**	**--**	**-2.8**	**Jul-16**
FTSE NAREIT Equity REIT			*-8.2*	*-5.9*	*-4.5*	*1.1*	*5.9*	*6.4*	*-4.4*	*Jul-16*
Private Real Estate	**1,851,096,491**	**5.9**	**2.7**	**8.9**	**11.6**	**11.5**	**14.5**	**--**	**7.1**	**Jul-08**
NCREIF ODCE + 75 bps			*2.2*	*6.4*	*8.4*	*11.2*	*12.3*	*--*	*--*	*Jul-08*
World Infrastructure	**587,595,874**	**1.9**	**-6.0**	**-2.0**	**1.2**	**--**	**--**	**--**	**2.2**	**Jun-16**
DJ Brookfield Global Infrastructure			*-5.3*	*-1.6*	*2.0*	*2.2*	*5.7*	*7.1*	*6.2*	*Jun-16*

Returns are based on values obtained from BNYM.
Returns for periods greater than one year are annualized.

InvestorForce Public DB > $5B Net Return Comparison
Ending March 31, 2018



	Return (Rank)											
5th Percentile	1.3		8.8		12.6		7.8		8.7		6.9	
25th Percentile	0.6		8.2		12.0		7.3		8.1		6.5	
Median	0.4		7.2		10.4		6.9		7.7		6.1	
75th Percentile	-0.1		6.8		9.7		6.4		6.9		5.4	
95th Percentile	-0.8		5.8		8.6		4.4		3.5		2.8	
# of Portfolios	24		24		24		24		24		22	
Total Retirement System	0.1	(68)	7.6	(34)	10.1	(68)	6.4	(76)	6.8	(84)	5.3	(83)
Policy Index	-0.2	(77)	6.4	(88)	9.8	(72)	6.5	(65)	6.6	(88)	4.7	(91)

Statistics Summary

5 Years Ending March 31, 2018

	Anlzd Return	Anlzd Standard Deviation	Information Ratio	Beta	Sharpe Ratio	Tracking Error
Total Retirement System	6.8%	4.9%	0.2	1.0	1.3	1.1%
Policy Index	6.6%	4.9%	--	1.0	1.3	0.0%
Global Public Equities	8.6%	10.3%	-0.5	1.0	0.8	1.5%
MSCI ACWI IMI Net USD	9.3%	10.3%	--	1.0	0.9	0.0%
Private Equity	13.4%	4.0%	-0.4	0.0	3.2	9.9%
80% Russell 3000/20% MSCI EAFE + 300 basis points on a 3-month lag	17.1%	9.4%	--	1.0	1.8	0.0%
Short Duration	1.3%	0.6%	1.5	0.8	1.6	0.4%
BBgBarc US Govt/Credit 1-3 Yr. TR	0.8%	0.7%	--	1.0	0.6	0.0%
Cash and Overlay	0.0%	0.7%	-0.5	0.4	-0.5	0.7%
ICE BofAML 91 Days T-Bills TR	0.3%	0.1%	--	1.0	0.0	0.0%
Core Fixed Income	2.1%	3.0%	0.5	1.0	0.6	0.6%
BBgBarc US Aggregate TR	1.8%	2.9%	--	1.0	0.5	0.0%
Mixed Credit	3.7%	3.4%	-0.5	1.1	1.0	1.5%
50% S&P LSTA Leveraged Loan Index/50% Barclays High Yield Index	4.4%	2.8%	--	1.0	1.4	0.0%
Private Debt	7.5%	3.3%	0.6	0.5	2.2	3.4%
S&P LSTA Leveraged Loan Index + 150 basis points on a 3-month lag	5.5%	2.4%	--	1.0	2.2	0.0%
Emerging Market Debt	2.7%	8.8%	0.4	1.0	0.3	1.4%
50% JP Morgan EMBI Global Diversified (USD)/50% JP Morgan EMBI Global Diversified	2.0%	8.3%	--	1.0	0.2	0.0%
GAA	3.9%	6.6%	-0.7	1.1	0.5	2.8%
50% MSCI World Index/50% Barclays Aggregate Bond Index	5.8%	5.4%	--	1.0	1.0	0.0%
Hedge Funds Non Portable Alpha	2.8%	3.3%	-0.7	0.3	0.7	4.6%
50% MSCI World Index/50% Barclays Aggregate Bond Index	5.8%	5.4%	--	1.0	1.0	0.0%
Hedge Funds Portable Alpha	7.2%	4.3%	1.5	-2.2	1.6	4.4%
3-Month Libor Total Return USD	0.7%	0.1%	--	1.0	2.2	0.0%
Private Real Estate	14.5%	3.2%	0.4	0.1	4.4	5.4%
NCREIF ODCE + 75 bps	12.3%	4.7%	--	1.0	2.5	0.0%

Disclosure Appendix	
Item 1.	Fiscal year begins July 1.
Item 2.	All returns are presented net of management fees.
Item 3.	Policy index performance is calculated by multiplying each asset class target weight by the performance of its respective benchmark.
Item 4.	As stipulated in the Statement of Investment Objectives and Policies, the target weights to Private Equity, Private Debt and Real Estate will be equal to their actual weights, reported by the custodial bank, as of the prior month end. In the case of Private Equity, the use of the actual weight will affect the target allocation to Global Equity. For example, in FY 17-18, the combined target weight of both of these asset classes shall equal 42% of the Plan. For Private Debt, the use of the actual weight will affect the target allocation to Mixed Credit, such that the combined target weight of both asset classes in FY 17-18 shall equal 13% of the Plan. For private market Real Estate, the use of the actual weight will affect the target allocation to public market Real Estate (REITs), such that the combined target weight of both asset classes in FY 17-18 shall equal 8% of the Plan
Item 5.	Overlay exposure is reported from Russell. Market values and performance reported by BNYM are reconciled to manager reported data for public markets strategies.
Item 6.	Total retirement system performance is calculated inclusive of the overlay investments. Individual asset class performance is reported by BNYM excluding synthetic exposure from the overlay program.
Item 7.	Asset classes with less than five years of historical returns are excluded from the risk statistics summary.

South Carolina Retirement System Investment Commission

Additional Clarifications to Benchmarks and Ranges

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Background

- At the April 2018 Commission Meeting, asset class benchmarks and ranges were discussed and approved for the new asset allocation policy targets.
- Subsequent to the meeting, Staff and Meketa determined two sub-asset classes required additional clarification.
  - **TIPS**: no benchmark was assigned as it was included within the larger Core Bond allocation.
  - **Option-Based Equity Strategies:** no range was provided as it was included within the larger Global Equity allocation.

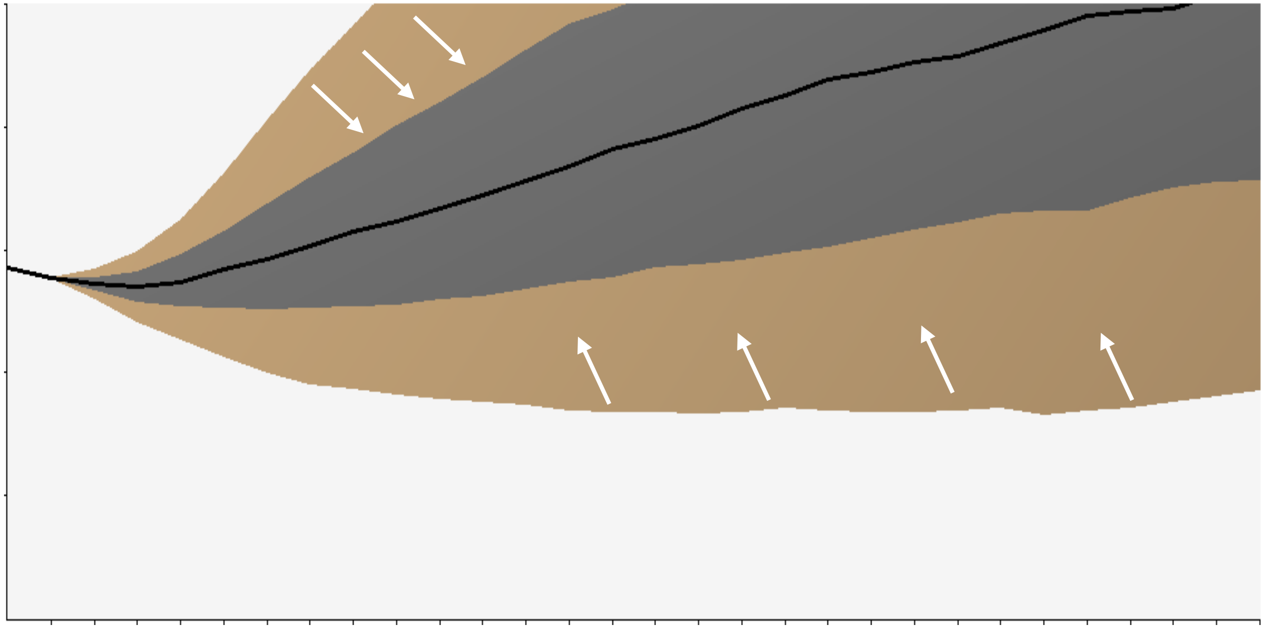
Recommendation

- We recommend TIPS be benchmarked against the Bloomberg Barclays US Treasury Inflation Notes TR Index Value Unhedged USD.
- We recommend Option-Based Equity Strategies (with a target of 7%) have an approved range of 5-9%.

Core Infrastructure

Why Infrastructure?

- Pension funds care about the impact of returns on funded status
  - A higher risk portfolio expands the range of outcomes (gold)
  - Pension funds benefit from investments that achieve their target (black) while reducing risk
- Offers more modest, predictable returns than traditional equities
  - Opportunity to narrow the range of outcomes without impairing expected return
  - Often have mechanisms to pass through changes in rates and inflation



Fund Life

- Proposed investment has 20-year fund life
- Infrastructure assets are typically very long-term assets
  - Ability to earn our assumed rate of return (most of which cash yield) at a modest level of risk for a longer period of time
- Pension funds have very long-term liabilities
- Fund life aligns long-term assets with long-term liabilities

Macquarie Super Core Infrastructure Fund

Ashli Aslin

Investing in Infrastructure

- **Regulated Utilities**
  - Water & Sewage
  - Electricity
  - District Heating
  - Gas Distribution
- **Transportation**
  - Toll Roads
  - Bridges
  - Tunnels
  - Airports
  - Ports
  - Rail
- **Midstream Energy**
  - Transport
  - Storage
- **Communications**
  - Towers
  - Cable/Fiber





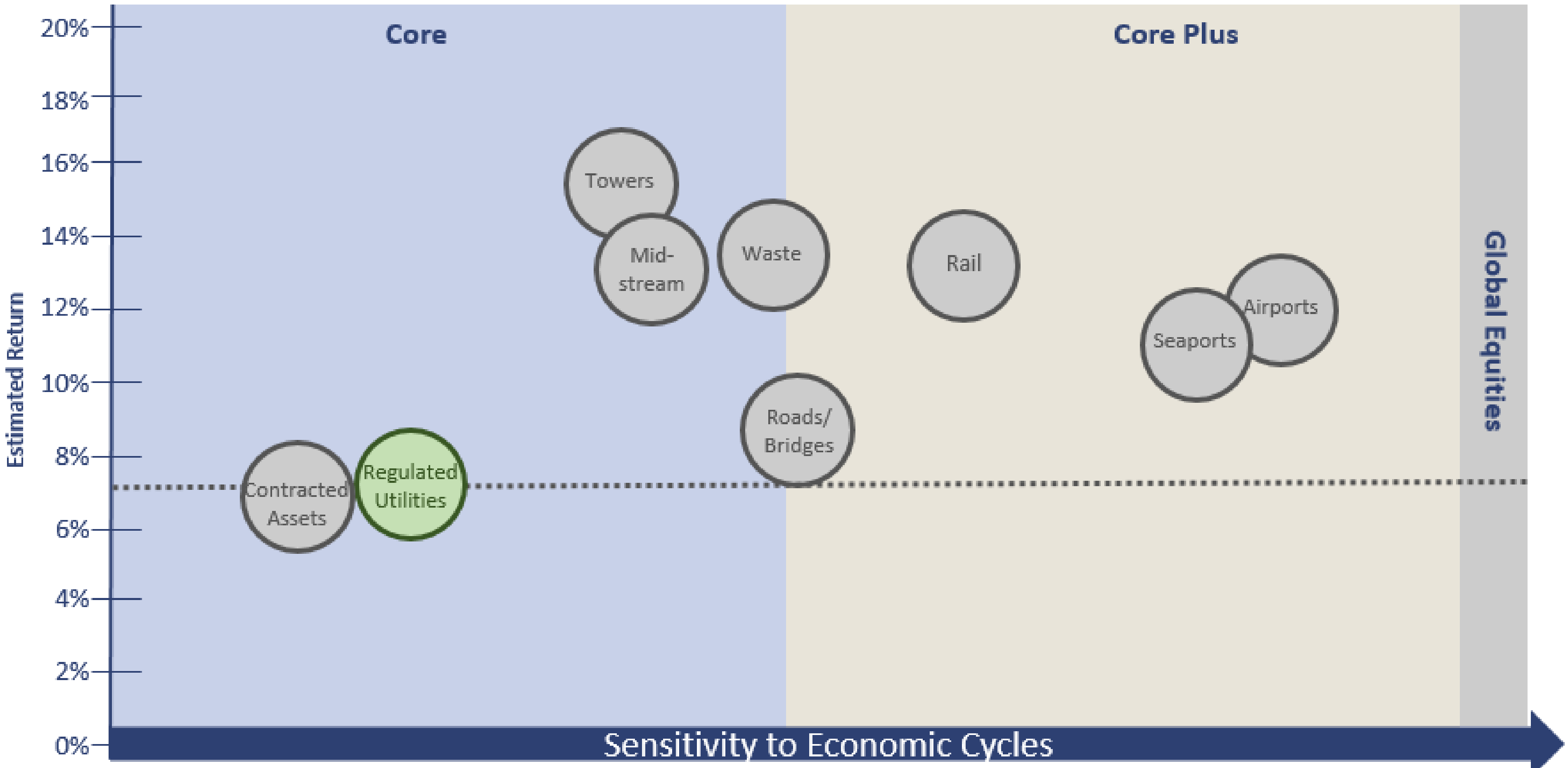



Infrastructure Characteristics

- Monopolistic market
  - Exceedingly high barriers to entry
  - High cost of initial investment
  - Often regulated to prevent excessive prices
- Stability through economic cycles
  - Provides essential service to the community
- Long-term predictable cash flows
  - Regulation leads to a consistency of cash flows
  - Non-regulated assets governed by long-term contracts/concession agreements
- Inflation-linked
  - Cash flows generally have pass-throughs or escalators for inflation

Infrastructure Sectors

Stability through economic cycles provides downside protection and diversification benefits.



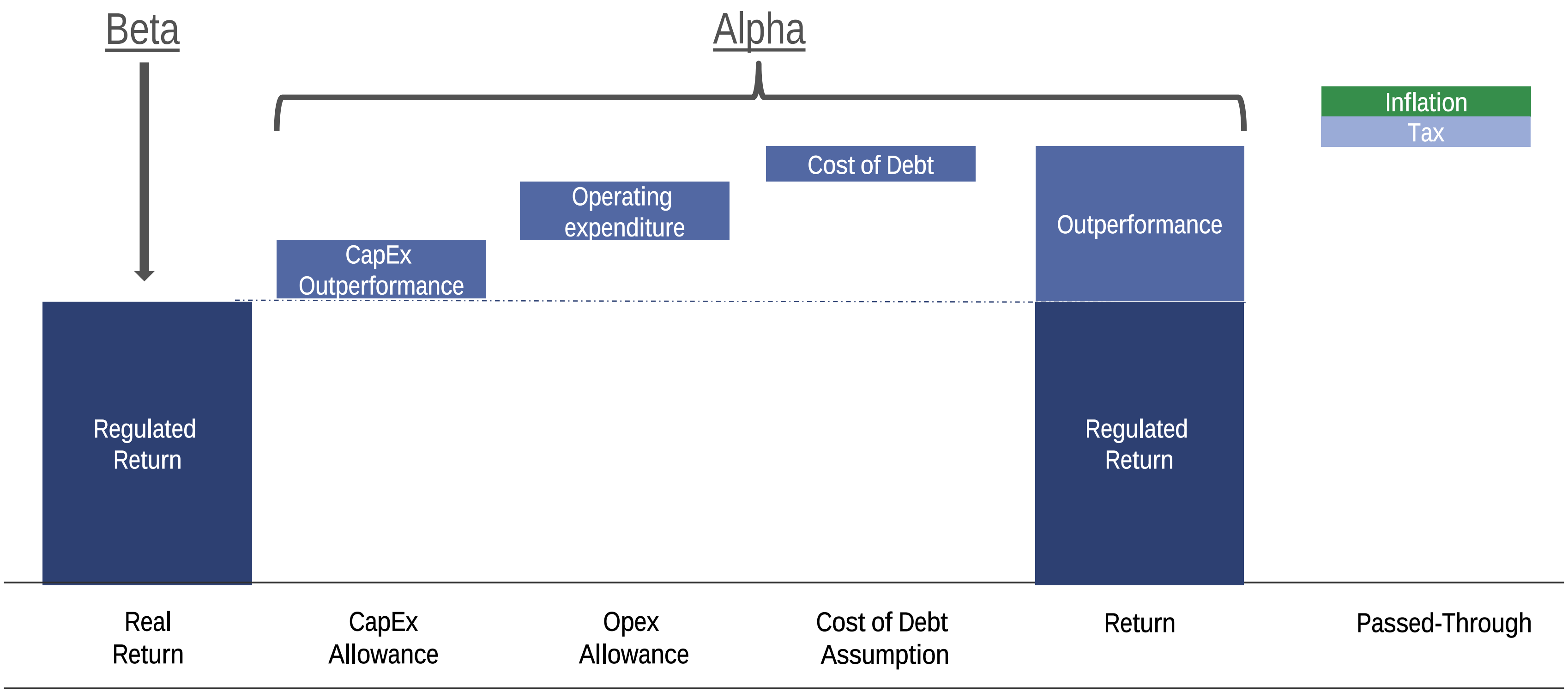
Source: RSIC/Macquarie

Benefits of Regulated Assets

- Regulator’s goal is to efficiently provide an essential service to the community
- Regulation narrows the range of return outcomes
  - High enough to incentivize investment in the asset
  - Not so high that rates are unreasonable
- Returns that are linked to inflation
  - Rates charged to end-users are tied to inflation
  - Regulated return directly linked to interest rates (via market-based cost of debt)
- Significant cash income component

Regulated Assets – Value Creation Levers

The regulator sets an allowed return, which has multiple levers for achieving outperformance.



Macquarie Super Core – Investment Recommendation

- Recommending a €125 million commitment in Macquarie's Super Core Infrastructure Fund
- Fund Size: €2.5 billion for Series 1
- Return Target:
  - 7-8% net return expectation
  - 5% cash yield
- Management Fees:
  - 50bps on un-invested capital
  - No greater than 65bps on Fund NAV
- Performance Fee:
  - 20% of the YIELD over a 4% yield hurdle per year, after fees and expenses
- Fund Term:
  - 20 year term with two 2-year extensions
  - Investors can choose to extend beyond 20 years in 5-year increments

Macquarie Super Core – Rationale

- Experienced team
  - Largest and most experienced infrastructure team
  - Extensive experience with regulated utilities

- Asset characteristics that match the goals of our infrastructure allocation
  - **Inflation Protection:** Regulated utilities have mechanisms to pass through changes in rates and inflation.
  - **Stable Yield:** Fund is expected to have a consistent yield of ~5%
  - **Diversification:** The essential nature of the regulated utilities leads to stability through the economic cycle with a low correlation to other risk exposures in the portfolio.
  - **Return:** The net return expectation of 7-8% is in line with the return expectations for core assets

- Disciplined Approach to Core Infrastructure
  - Target Asset List
  - Performance fee tied to cash distribution

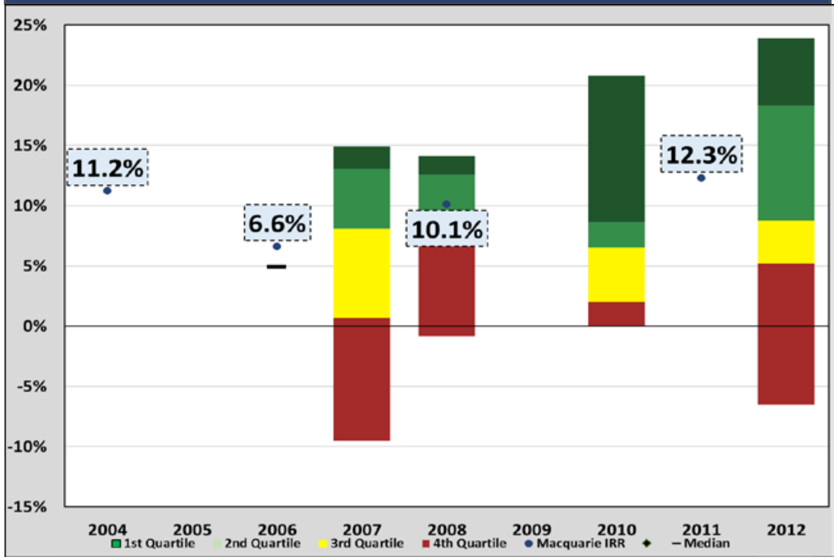
Macquarie Super Core – Considerations

- Regulatory risk
  - Mitigants:
    - Diversification across geographies and regulatory authorities
    - Long fund life that spans several regulatory cycles
- Returns in a rising rate environment
  - Mitigants:
    - Impact on discount rates used in valuations
    - Impact on operational cash flows from asset financing
    - Regulatory returns increase as rates increase
- Limited liquidity options
  - Mitigants:
    - Periodic structured secondary sales
    - LPs can sell shares on the secondary market any time
    - Cash distributions provide liquidity
- Allocation policy
  - Mitigant:
    - Limited overlap due to strategy differences

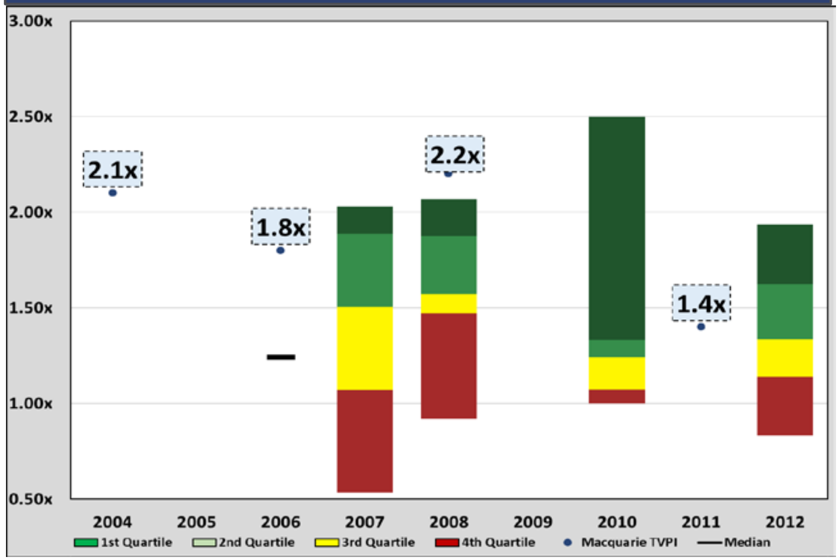
Macquarie Europe Infrastructure (MEIF) Fund Performance

€	Vintage	Gross (€) IRR	Gross (€) Multiple	Net (€) IRR	Net (€) Multiple
MEIF1	2004	15.0%	2.6x	11.2%	2.1x
MEIF2	2006	8.4%	2.0x	6.6%	1.8x
MEIF3	2008	13.4%	2.6x	10.1%	2.2x
MEIF4	2011	16.2%	1.5x	12.3%	1.4x
MEIF5	2015			n.m.	

MEIF Quartile Chart IRR (%)



MEIF Quartile Chart (TVPI)



Macquarie has invested over €13 billion across 11 utility assets with a combined gross IRR of 12.4%, 1.8X gross multiple, and an annual yield of 6.5%.

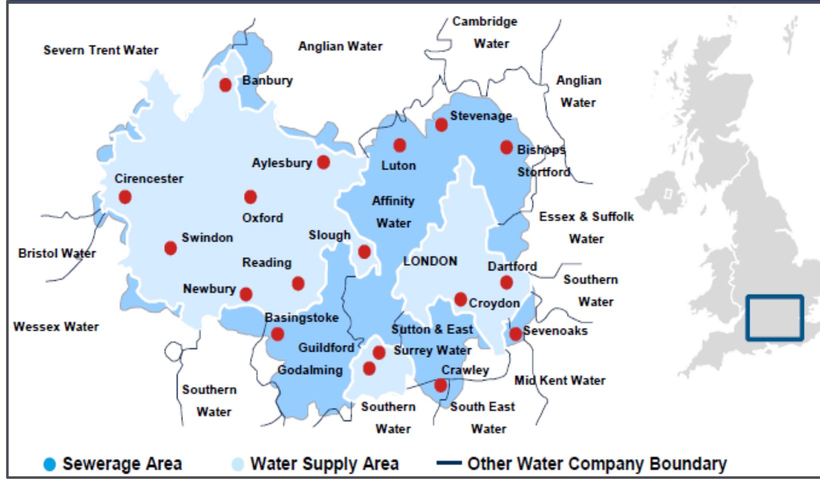
Returns as of December 31, 2017

Thames Water – Overview

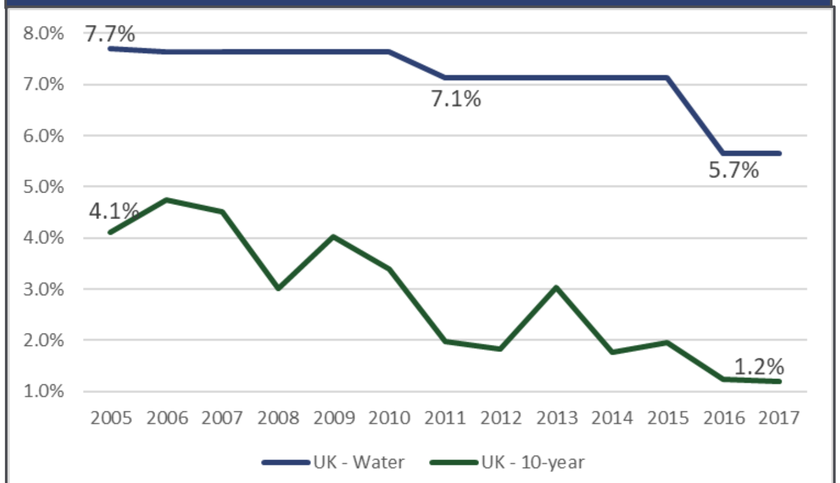
Asset Profile

- With a service area of 5,000 miles, Thames serves 25% of the population of England and Wales, making it the UK's largest water and sewer company.
- Thames Water treats and supplies 2.6 billion liters of water per day to 9 million customers in London and Thames Valley.
- The company transports and treats 4.6 billion liters of sewage for 15 million customers.
- Third cheapest provider, with customers paying an average of **£1.03 per day.**

Operational Area



UK Water – Regulated Return



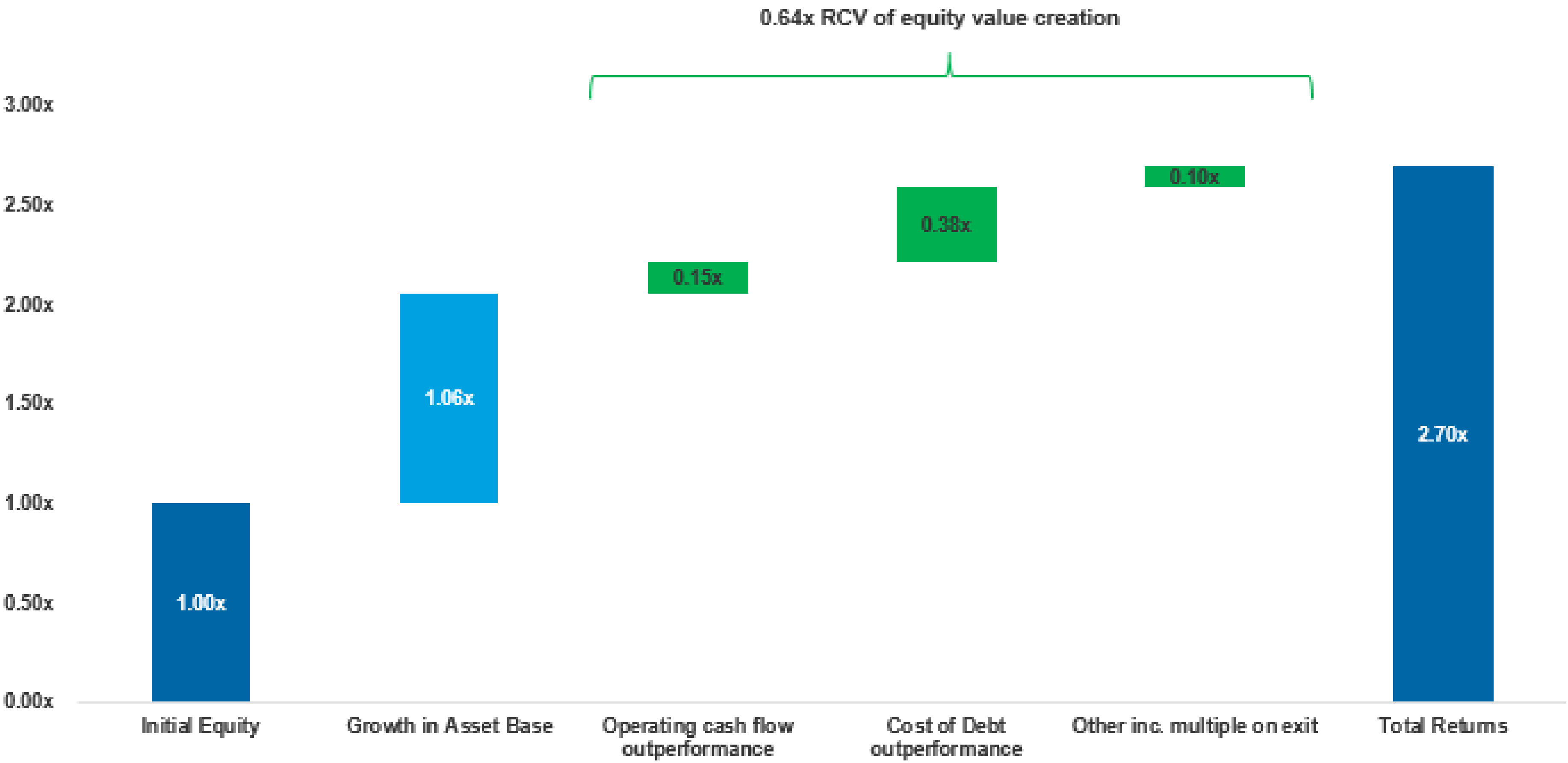
Key Metrics

Investment Period	Dec 2006-May 2017
MIRACo Ownership	47.2%
MIRACo Equity	€1.6 billion
MIRACo IRR	12%
Asset Base	£13 billion
Water Treatment Works	98
Pumping Stations	308
Clean Water Service Reservoirs	235
Sewerage Treatment Works	351

Source: Macquarie

Thames Water – Value Bridge

The value bridge below outlines the total returns from Macquarie's investment in Thames Water, attributing exit price and distributions to performance this is over the allowable regulatory return:



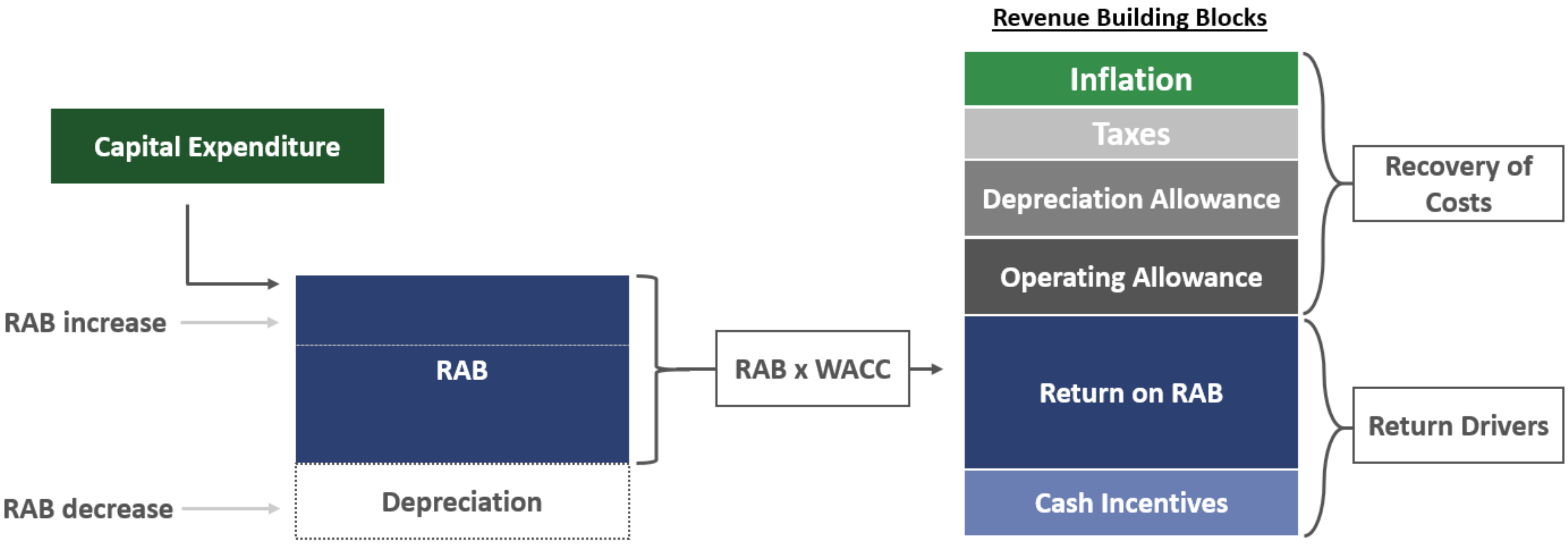
Source: Macquarie

Macquarie Super Core – Investment Recommendation

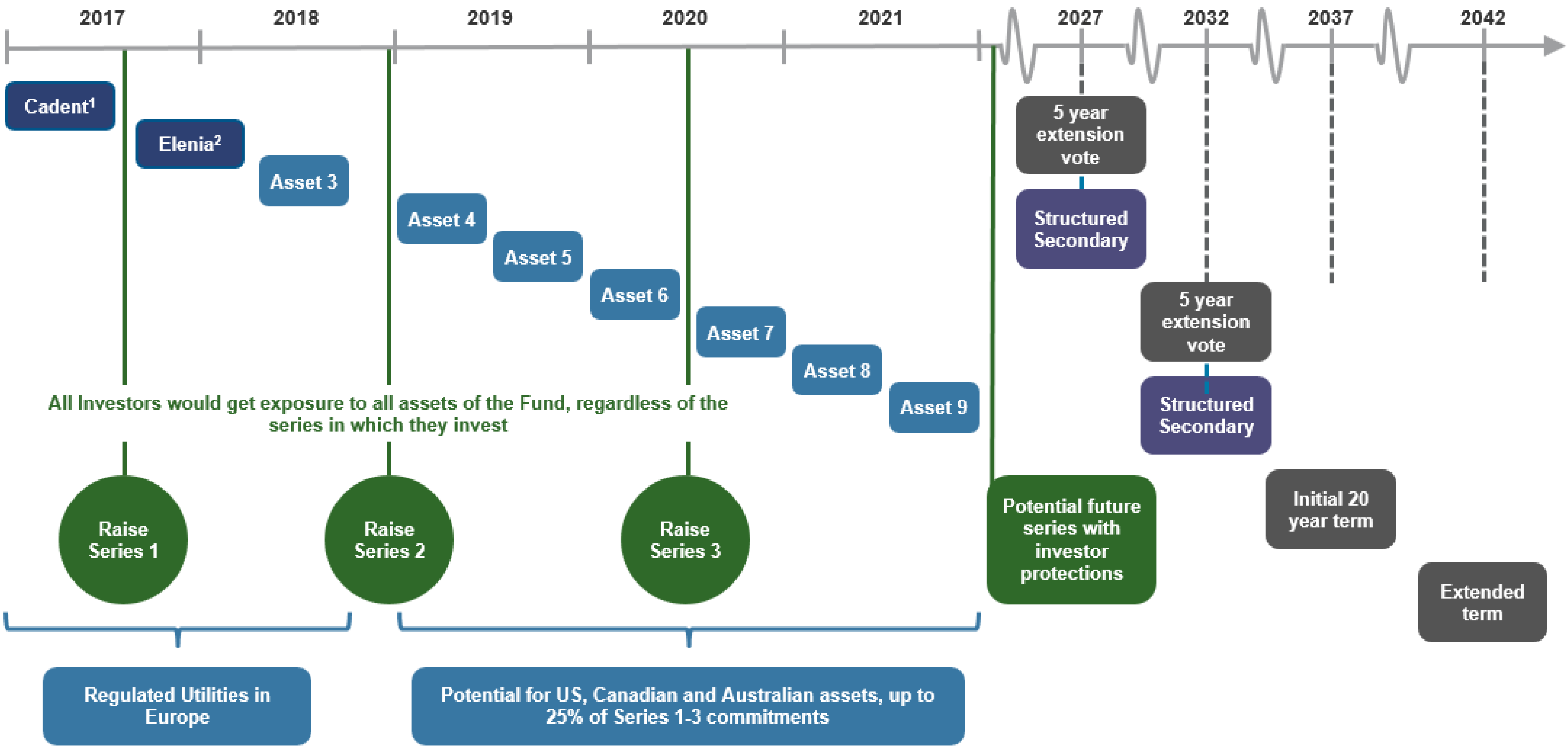
- Recommending a €125 million commitment in Macquarie's Super Core Infrastructure Fund
- Fund Size: €2.5 billion for Series 1
- Management Fees:
  - 50bps on un-invested capital
  - No greater than 65bps on Fund NAV
- Performance Fee:
  - 20% of the YIELD over a 4% yield hurdle per year, after fees and expenses
- Return Target:
  - 7-8% net return expectation
  - 5% cash yield
- Fund Term:
  - 20 year term with 2+ 2-year extensions
  - Investors can choose to extend beyond 20 years in 5-year increments

Appendix

A Primer on Regulation



Macquarie Super Core – Fund Structure



Source: Macquarie

RETIREMENT SYSTEM INVESTMENT COMMISSION

May 30, 2018

To: **Members of the Investment Commission**

From: **Ashli Aslin**

Re: **INVESTMENT RECOMMENDATION – Macquarie Super Core Infrastructure Fund**

Fund Name	Macquarie Super Core Infrastructure Fund ("Super Core" or "the Fund")
Firm Name	Macquarie Infrastructure and Real Assets (Europe) Limited, a member of the Macquarie Group ("MIRA" or "the Manager")
Asset Class	Infrastructure
Sub-asset class	Core
Geography	Europe
Commitment	€125 million
Fund Size	€2.5 billion (estimated)
Co-Invest Opportunities	Not contemplated
Final Close	June 22, 2018 (estimated)
Management Fee (Committed/Invested, %)	• 0.50% per annum on Undrawn Commitments; and • not more than 0.65% on Fund Net Asset Value
Performance Fee (%)	20% of yield
Preferred Return (Y/N), %	Yes – 4% yield per annum
Investment Period	3 years
Fund Life	20 years from the final closing date of Series 1, with the possibility of five-year extensions in perpetuity.
Manager Commitment	€30 million
RSIC ODD / Albourne ODD	Pass / B
Albourne Investment DD Rating	B3

Investment Summary:

MIRA (Europe) is launching the Macquarie Super Core Infrastructure Fund, which will invest in core regulated assets, primarily in Europe, that exhibit the following characteristics: 1) substantially all revenues will be regulated; 2) limited exposure to volume risk and merchant price risk; 3) provides an essential service to the community; and 4) a large proportion of return comes from cash income.

The Fund will be raised through a number of series of discrete capital raisings, with at least nine assets by the end of Series 3. The Fund has an initial 20-year term starting at the close of Series 1, with the possibility to extend in five-year increments into perpetuity, based on a majority vote of the Total Common Unit Holders. The Fund expects to deliver a 7-8% net annual return with a 5% annual cash yield.

Manager Overview:

The Fund is a product within MIRA, the largest infrastructure asset manager in the world. MIRA formed in the early 1990s, when the Australian state and federal governments privatized a significant portion of Australia's infrastructure including airports, toll roads, telecommunications, and electric and gas utilities. Through this process, Macquarie Group Ltd provided investment banking and advisory services, which gave them expertise and insight into the sector. In 1994, the Macquarie Group purchased the Hills Motorway Express, an Australian toll road, and concurrently established MIRA. MIRA can be credited with institutionalizing the infrastructure asset class.

MIRA has invested in infrastructure as a standalone business for 23 years, with approximately $A142 billion in AUM across 47 funds and mandates across their regionally-oriented teams in North America, Europe, and Asia Pacific. Today, MIRA has over 470 infrastructure investment professionals across 23 global offices.

MIRA (Europe) has a strong track record of investing in regulated utilities. Across the five European infrastructure funds, the team has invested approximately €7 billion (€14 billion, including co-investments) across 11 utility assets, with a combined gross IRR of 12.4%, a 1.8x gross multiple, and an annual yield of 6.5%.

Investment Thesis:

The Investment Team has outlined the following rationale for making the investment:

1. **Experienced team**
2. **Asset characteristics that match the goals of our infrastructure allocation**
3. **Disciplined approach to core infrastructure**

As RSIC seeks to build out the infrastructure allocation, the Fund provides access to one of the biggest and most experienced infrastructure teams managing core assets that align well with the goals of the infrastructure allocation. In today's low-return environment it has become common for infrastructure managers to take on riskier investments to meet the return expectations for their strategies. The Super Core strategy protects against this style drift by requiring that assets be purchased from a published Target Asset List and by aligning the performance fee to yield, incentivizing the manager to invest in mature core assets that have high cash flow stability.

Portfolio Fit:

RSIC's infrastructure portfolio has the stated goals of providing a link to inflation, offering stable and predictable cash income, having diversification benefits, and achieving a return in-line with our consultant's view of the asset class.

Due to the essential nature and monopolistic characteristics of the assets contemplated in this strategy, a substantial portion of the revenues of the assets in the Fund will be regulated, which have a direct tie to rates and inflation. The essential nature of the assets in the strategy leads to stability through the economic cycle with a low correlation to other risk exposures in the portfolio. The assets targeted are mature assets and a substantial portion of their return comes in the form of income. A diversified portfolio of these assets should provide a very stable return with predictable cash flows that correlate with rates and inflation.

The Infrastructure Asset Class Baseline establishes that 65% of the allocation to infrastructure should consist of core, core-plus, and listed strategies, which will contribute to achieving the risk/return profile desired from the allocation.

Risks and weaknesses:

The investment team has noted five main concerns with the Fund and Manager:

1. **Political/Regulatory Risk**
2. **Returns in a rising rate environment**
3. **Limited liquidity options**
4. **Macquarie European Infrastructure Funds (MEIF) has priority over infrastructure opportunities**

When investing in regulated utilities, regulatory risk is one of the largest risks RSIC is assuming. However, the Fund will have diversification among regulatory bodies and the long fund life will protect against forced-selling during a period of regulatory disruption. In addition, regulatory risk is driven by unique factors that should be uncorrelated to many of the other risks in our portfolio.

There is also some uncertainty about the impact that rising rates would have on infrastructure returns. However, the appraisers have not lowered the discount rates to the same extent that interest rates have decreased and because most regulatory authorities moved to using a long-term average cost of debt allowance, utility assets have built in protections against rising rates. It is also important to consider that since regulated returns are based on a weighted average cost of capital, which reflects a market-determined cost of equity and cost of debt, as rates increase, the cost of debt should be reflected in a higher regulated return for the asset.

Given the long fund term, investments in the Fund should be considered illiquid. However, there are several opportunities for liquidity, including a structured secondary program that will be offered at least every ten years. In addition, RSIC would not be prohibited from issuing shares of the Fund on the secondary market at any time.

MIEF funds have priority over assets available to the Fund. However, there is limited opportunity for overlap, because MEIF funds have a higher return expectation.

SC Due Diligence Team:
Ashli Aslin

Summary Terms Chart		
	Investment Officer Summary:	**Source Location:**
Manager Name:	Macquarie Infrastructure and Real Assets (Europe) Limited, a member of the Macquarie Group	LPA – Clause 7.1 (“Appointment of a Manager”) PPM – Section 2 (“Key Features”)
Fund/Investment Name:	Macquarie Super Core Infrastructure Fund SCSp	LPA – Clause 2.3 (“Name”) PPM – Section 1 (“Executive Summary”)
Primary Custodian(s) or Safekeeping Agent(s) (together with point of contact information if other than BONY Mellon):	Alter Domus Depositary Services S.à r.l 5, rue Guillaume Kroll L-1882 Luxembourg BP 2501 • L-1025 Luxembourg Grand Duchy of Luxembourg T +352 48 18 28 1 F +352 48 18 63	LPA – Clause 8 (“Appointment of Depositary”) PPM – Section 11 (“Additional Information”) and Section 12 (“Address and contact details of relevant parties”)
RSIC Investment Size & Limitations (Commitment):	€125 million	
Management Fee:	• 0.50% per annum on Undrawn Commitments; and • 0.60% per annum on Fund Net Asset Value	LGA – Clause 14 (“General Partner’s Fee”) PPM – Section 10 (“Summary of terms”)
Performance Fees/Carried Interest:	20% of the yield over a hurdle of 4% yield per annum, providing that the Fund NAV has not fallen more than 10% during that year.	PPM – Section 10 (“Summary of Terms”) LPA – Clause 16 (“Distributions of Income Proceeds and Capital Proceeds Between Partners”)
Hurdle Rate/Preferred Return:	4% of the Fund yield per annum (calculated as a percentage of NAV, on a three-year rolling average and on a “whole of fund” basis)	PPM – Section 2 (“Key Features”) LPA – Schedule 3 (“Hurdle Calculation”)
Organizational Expenses:	Not to exceed €3 million, exclusive of VAT	PPM – Section 10 (“Summary of terms”)
Other Expenses/Fees:	Yes	
Manager Commitment:	Macquarie and staff in aggregate will commit the lesser of an amount equal to 10% of Total Commitments or €30 million to the Fund.	LPA – Clause 2.8 (“Macquarie’s Commitment”) PPM – Section 10 (“Summary of terms”)
Anticipated Investment Period:	Three years from the final closing date of such Series, or earlier if determined by the Manager. The commitment period of a Series may be extended for a period of up to one year by the	PPM – Section 10 (“Summary of terms”)

	Manager with the prior approval of the Investors' Prudential Review Committee (IPRC).	
Anticipated Investment/Fund Term:	20 years from the final closing date of Series 1, with the ability to extend the vehicle in five-year increments into perpetuity. A structured secondary program will be offered every five years from and including year 10.	LPA – Clause 2.5 ("Commencement and duration) PPM – Section 2 ("Key features"), Section 10 ("Summary of terms")
Withdrawal Rights:	The Fund does not provide for redemption or repurchase of the Units of investors at their request. The Manager will offer investors the ability to divest their interest through a structured secondary process, as mentioned above, subject to the respective terms of the Fund Partnership Agreements.	PPM – Section 10 ("Summary of terms")
Placement Agent Used in Obtaining Investment by RSIC:	No	Placement Agent Disclosure Letter

Industry Ventures Partnership Holdings V

Joshua Greene, CFA, CAIA
Joshua Restauri

IVPH V Investment Summary

- $50 Million venture capital fund of funds investment
- Broad, diversified exposure to the venture capital market
- Access Industry Ventures' expertise and network
- Targets three main investment strategies below

40%	*Primary Funds*	Investing in early stage funds capture a high returning, underserved market
40%	*Secondary Funds*	Targets high conviction mid-stage funds at a discount and better liquidity/J-curve profiles
20%	*Direct/Co-Investments*	Concentrated investments in high conviction mid-stage companies from within fund investments

Industry Ventures Overview

Relationship with RSIC

- Our consultant has communicated that Industry Ventures is a very valuable relationship for the portfolio
- *RSIC has made 3 investments since 2008 for a combined 25% IRR*

Firm

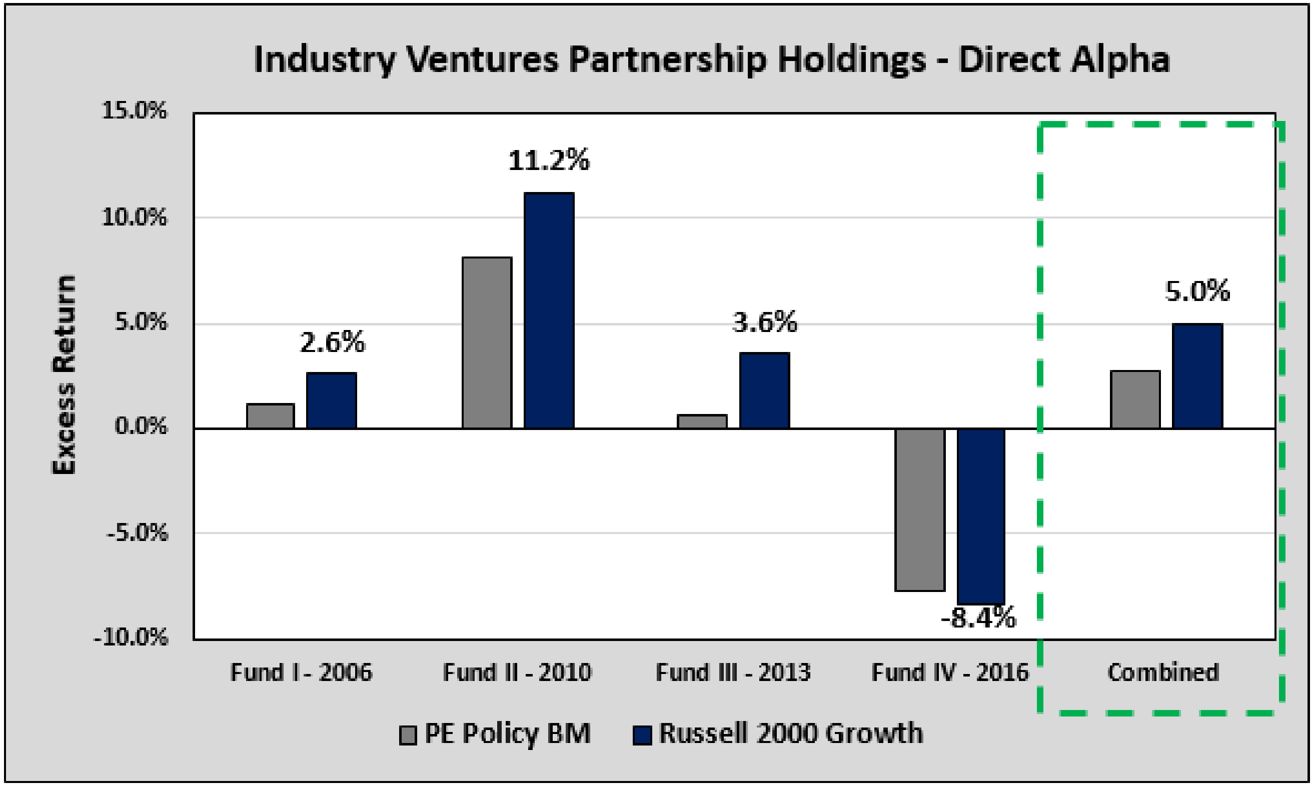
- Venture capital fund of funds business in San Francisco founded in 2000
- Completed 275+ fund investments and 240+ direct investments
- 24 professionals with cross strategy coverage and carry allocation intended to promote a collaborative environment.

Performance

- The Industry Ventures Partnership Holdings fund series has meaningfully outperformed public markets across funds, investment types, and deal professionals
- They have done so with a persistent return profile of higher growth and right skew than achievable in the public markets

Public Markets Equivalent – Partnership Holdings Funds

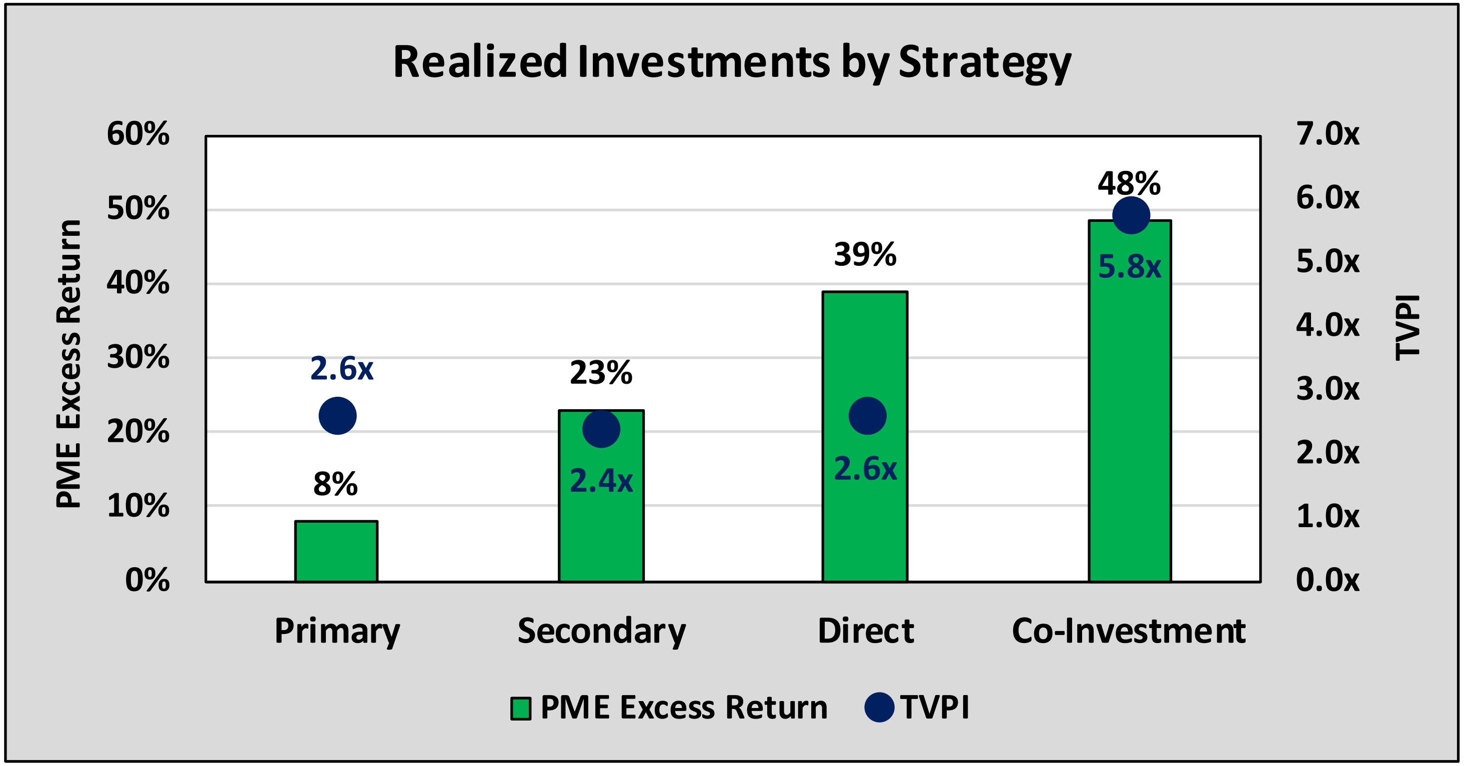
- Combined annualized excess returns of 500 BPS over the broad small growth index.
- 35% of Fund III and 70% of Fund IV is still held at cost.
- 1st or 2nd quartile performance for Funds I-IV



The Private Equity Policy Benchmark is 80% R3000 / 20% EAFE + 300bps

Public Markets Equivalent - Strategy

- Positive excess returns for each investment type (for all realized transactions)
- Ability to source, select and underwrite Direct and Co-Investments has resulted in returns in excess of Primary and Secondary Funds



Direct Alpha is calculated utilizing the Russell 2000 Growth as the benchmark

Data is gross of IVPH Fees

IVPH V Summary

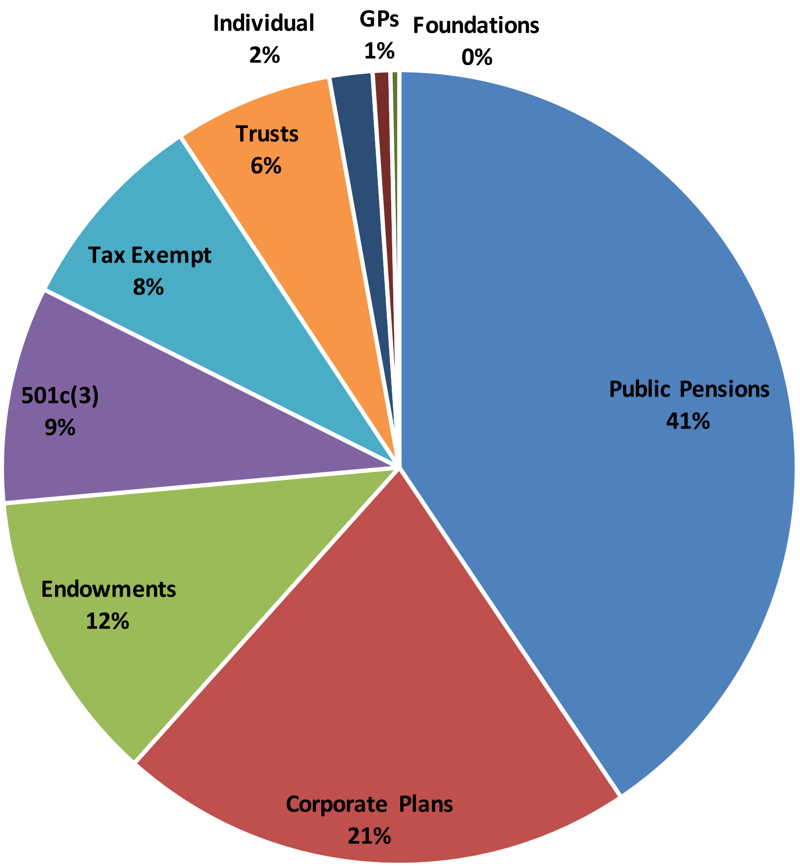
Commitment Size:	$50M
Target Fund Size:	$250M
GP Commitment:	2% up to $5m in cash
Investment Period:	4 Years
Management Fee:	1% on committed capital
Carried interest:	5% on Primary ; 10% on Secondary ; 20% on Direct (**10% Blended**)
Preferred Return:	6% ; 100% catchup
Term:	10 Years ; Two 2 year extensions at GP's discretion
Timing:	Fund Close 6/30/2018

Appendix

IV Partnership Holdings Public Markets Equivalent

Public and corporate pension plans make up >60% of capital committed to IVPH IV.

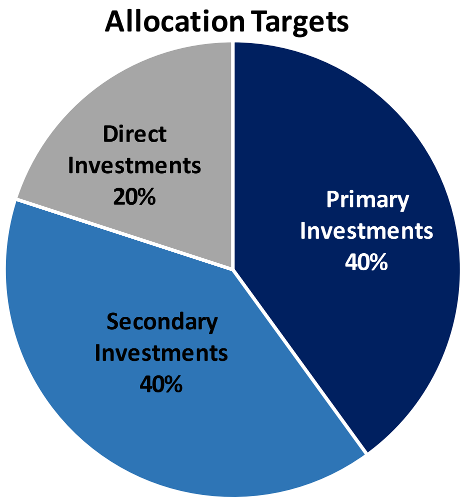
Similar percentages are expected to hold for IVPH V, dependent on RSIC's commitment



LP Type	Commitment
Public Pensions	85,000,000
Corporate Plans	44,100,000
Endowments	25,000,000
501c(3)	18,500,000
Tax Exempt	17,400,000
Trusts	13,550,000
Individual	3,680,000
General Partner	1,500,000
Foundations	750,000

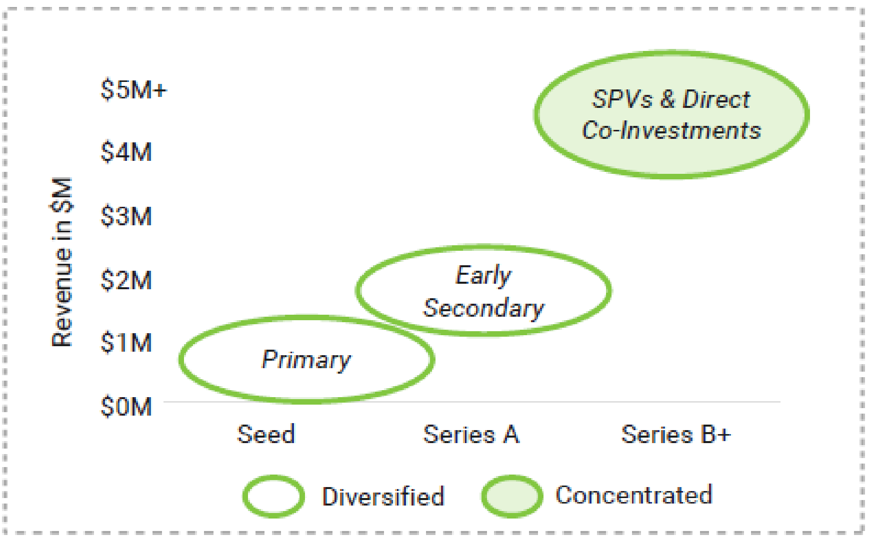
Target Portfolio Summary

More concentrated positions are taken in later stage companies



Each fund will be diversified across approximately 1000 companies

Revenue and Stage of Underlying Companies



Portfolio Concentration and Diversification

	Approx. number underlying companies*	Approx. avg. invested $$ per company*
Primary Fund Commitments	750	$133k
Early Secondaries	300	$167k
SPVs	20-30	$1.6M
Direct Co-Investments	15-25	$2.5M

Diversified / Concentrated

Investment Types – Primary Transactions (40% of Fund)

- Targeting early stage or seed companies (<$1M revenue) with potential investment in first time venture funds and emerging managers.
- Typically commits $1M - $3M to funds less than $250M.
- Better alignment of interests in terms of compensation, motivation, and business expansion.
- Less dependent on IPO for exit, vast majority realized through M&A.
- Higher probability of accessing subsequent funds of successful GPs that are otherwise unavailable to outside investors.

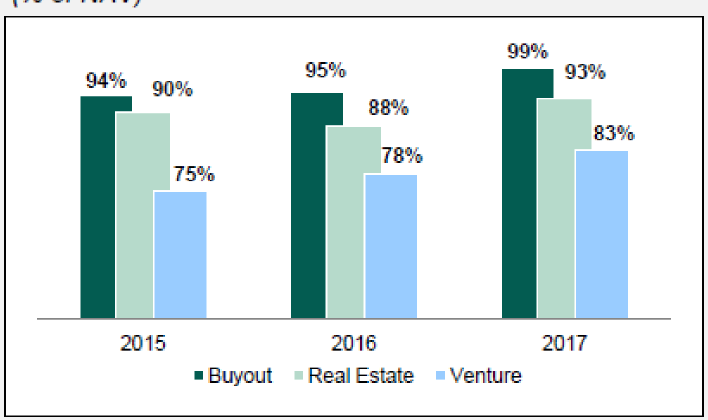
	Seed - Stage	Early-Stage	Mid - Stage	Late - Stage
Growth Stage	Initial product development and market testing	Early customer adoption	Scaling product and go-to-market strategy	Growth of established product
Financial Profile	<$1M of revenue	$1-5M of revenue, negative cash flow	$5-20M of revenue, negative cash flow	$20M+ of revenue, path to positive cash flow

Investment Types – Secondary Transactions (40% of Fund)

- Targeting mid-stage companies ($1-5M Revenue) by buying interest in venture funds that are less than 50% called.
- Visibility into funds' early portfolios allows for targeting specific, sought after companies, and faster projected liquidity.
- Buying from motivated sellers has historically earned significant discounts to NAV, a return driver that is negatively correlated to market risk.
- Positioning itself as a solutions provider enhances the relationship with the GP and allows for negotiation of accretive terms and structuring.

Historical Pricing by Strategy

(% of NAV)



Source: Greenhill

	Seed - Stage	Early-Stage	Mid - Stage	Late - Stage
Growth Stage	Initial product development and market testing	Early customer adoption	Scaling product and go-to-market strategy	Growth of established product
Financial Profile	<$1M of revenue	$1-5M of revenue, negative cash flow	$5-20M of revenue, negative cash flow	$20M+ of revenue, path to positive cash flow

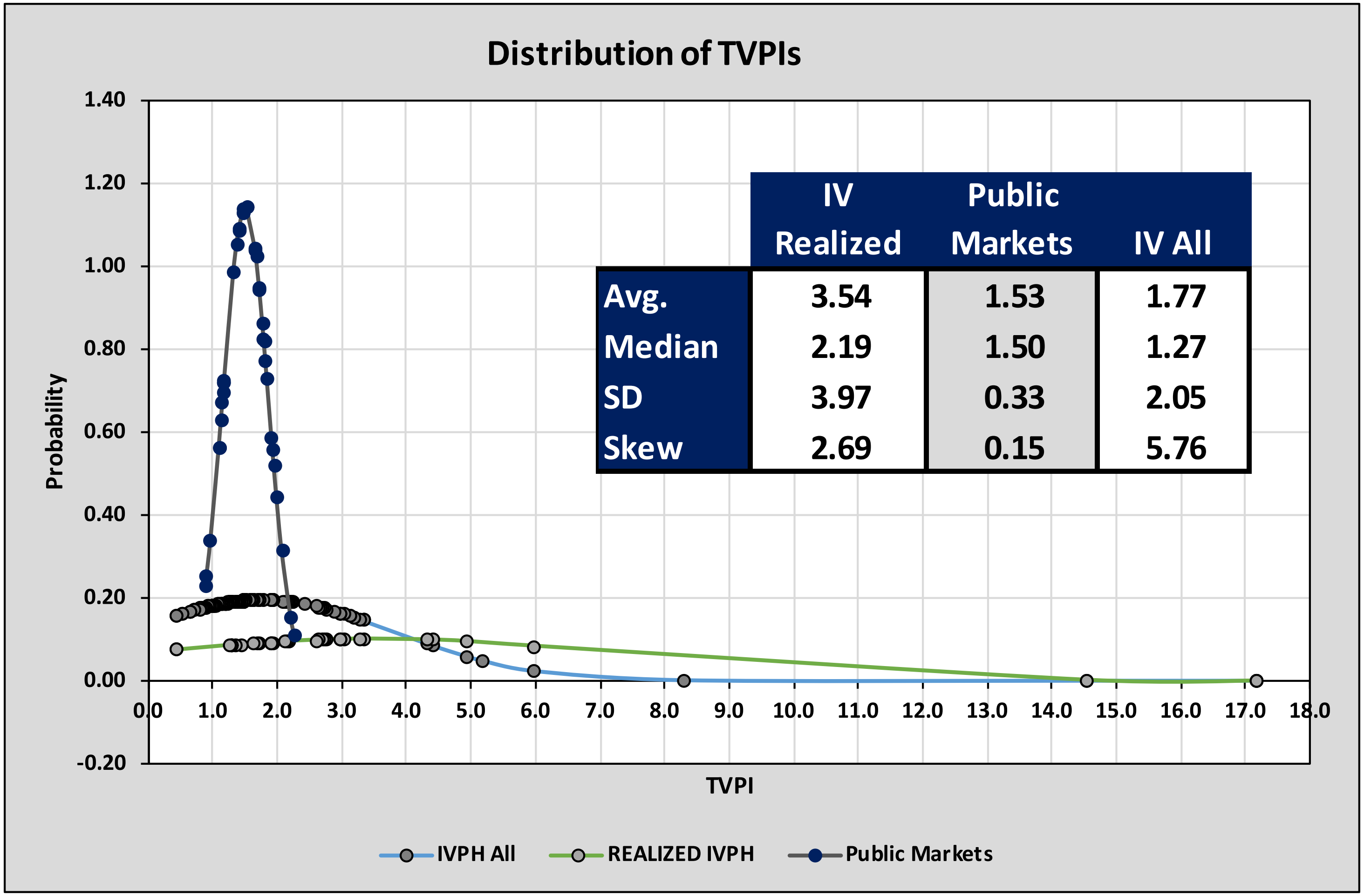
Investment Types – Direct Investments (20% of Fund)

- Targeting mid to latestage companies ($5 - 20M Revenue) by investing directly in subsequent rounds of fundraising when the GP is unable to provide the capital.
- Concentrated positions are taken in high conviction/breakout companies.
- Being an LP provides information on company development and allows.
- GPs prefer to build ownership with existing LPs, making many opportunities exclusive to those in the early / seed funds.

	Seed - Stage	Early-Stage	Mid - Stage	Late - Stage
Growth Stage	Initial product development and market testing	Early customer adoption	Scaling product and go-to-market strategy	Growth of established product
Financial Profile	<$1M of revenue	$1-5M of revenue, negative cash flow	$5-20M of revenue, negative cash flow	$20M+ of revenue, path to positive cash flow

IV Partnership Holdings Public Markets Equivalent

- The Industry Venture holdings have outperformed public markets with a higher right skew profile, around a higher mean, and a higher standard deviation than the Russell 2000 Growth



	IV Realized	Public Markets	IV All
Avg.	3.54	1.53	1.77
Median	2.19	1.50	1.27
SD	3.97	0.33	2.05
Skew	2.69	0.15	5.76

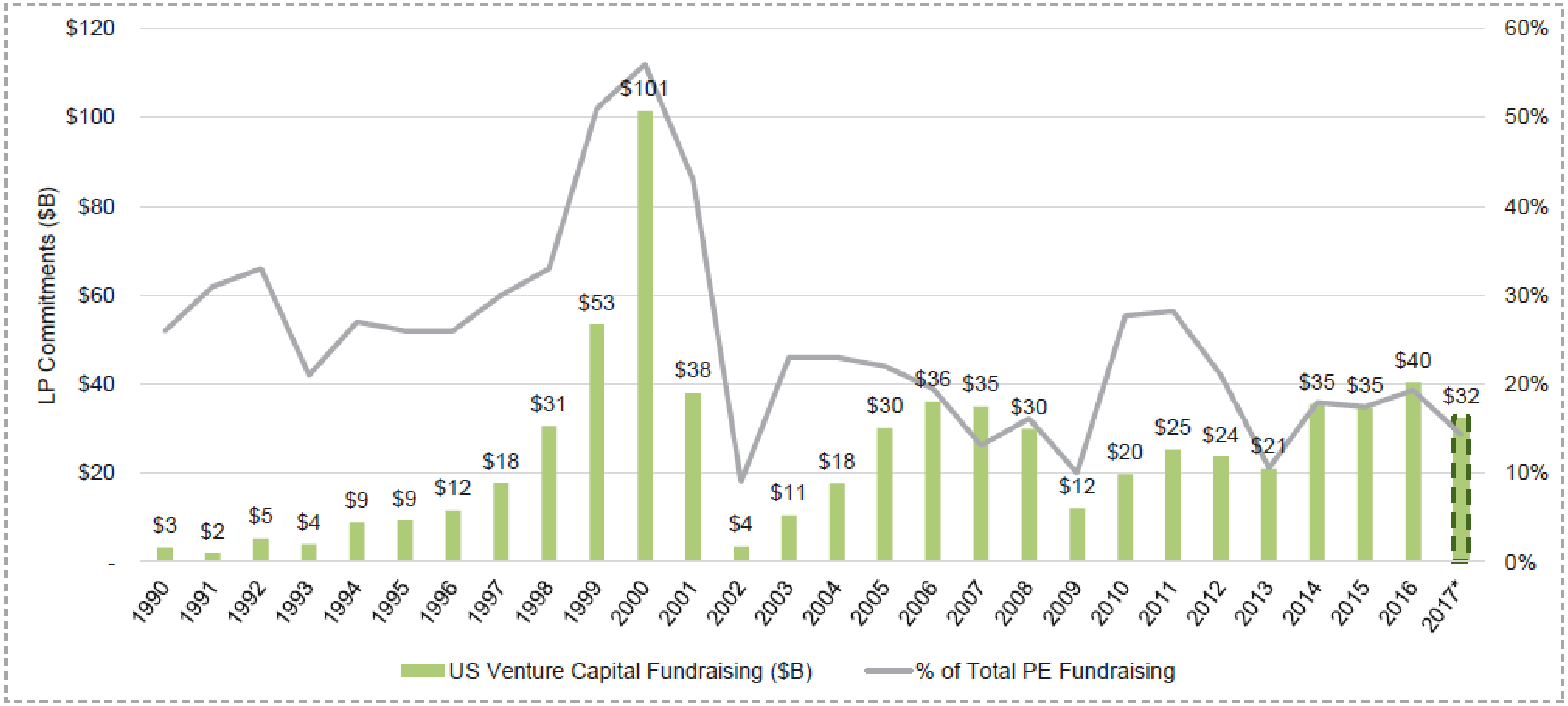
Direct Alpha is calculated utilizing the Russell 2000 Growth as the benchmark

Data is gross of IVPH Fees

Venture Fundraising Environment

- Fundraising has reached 2007 levels but remained within a narrow annual range

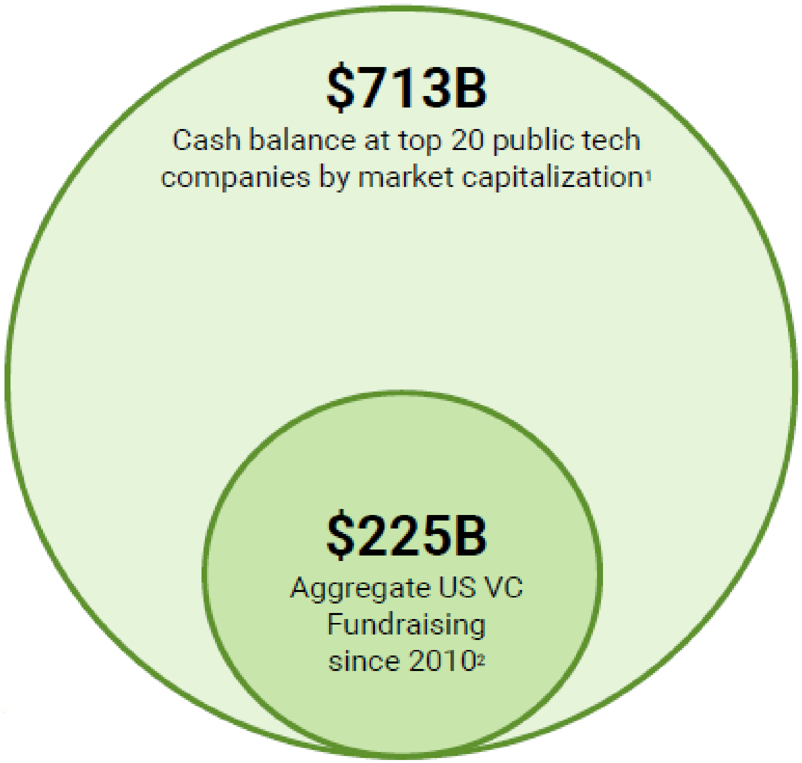
US VC FUNDRAISING BETWEEN 1990 – 2017*



Venture Company Exit Environment

- The top 20 public technology companies have grown cash balances to a level that can handle 3x the last 7 years of venture fundraising
- This is supportive of the venture exit environment in the intermediate term

PUBLIC CO. CASH VS. VC FUNDRAISING

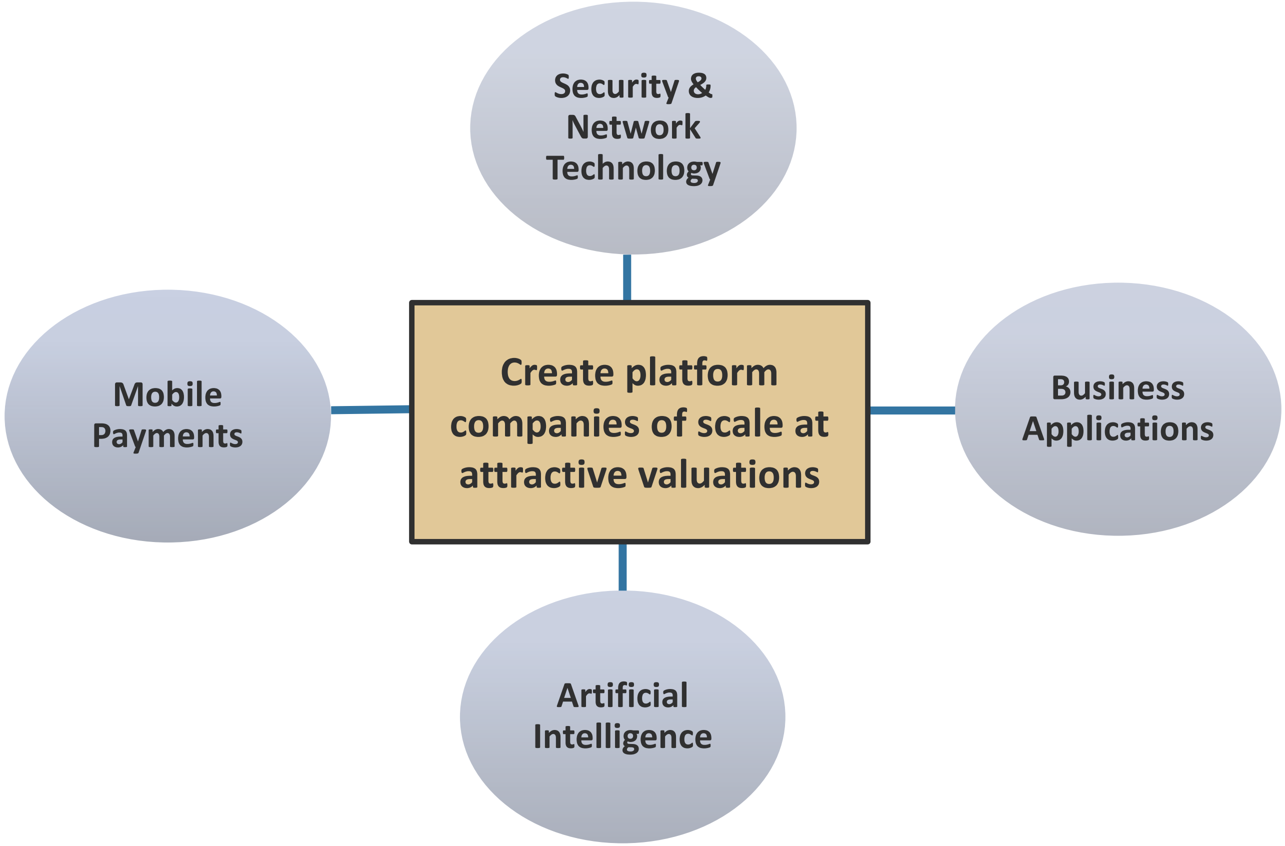


Providence Strategic Growth III (“PSG III”)

Derek Connor, CFA, CAIA

PSG III Investment Summary

- $75 Million Software-focused growth equity investment
- Target Company Size: $10M-$200M enterprise value
- Macro opportunity around the rapid growth of data and cloud computing
- Expands companies rapidly through acquisition and organic growth
- PSG targets the following investment themes:



PSG Overview

Relationship with RSIC

- This is a new relationship for RSIC
- Growth equity is an under-represented exposure in the RSIC PE portfolio

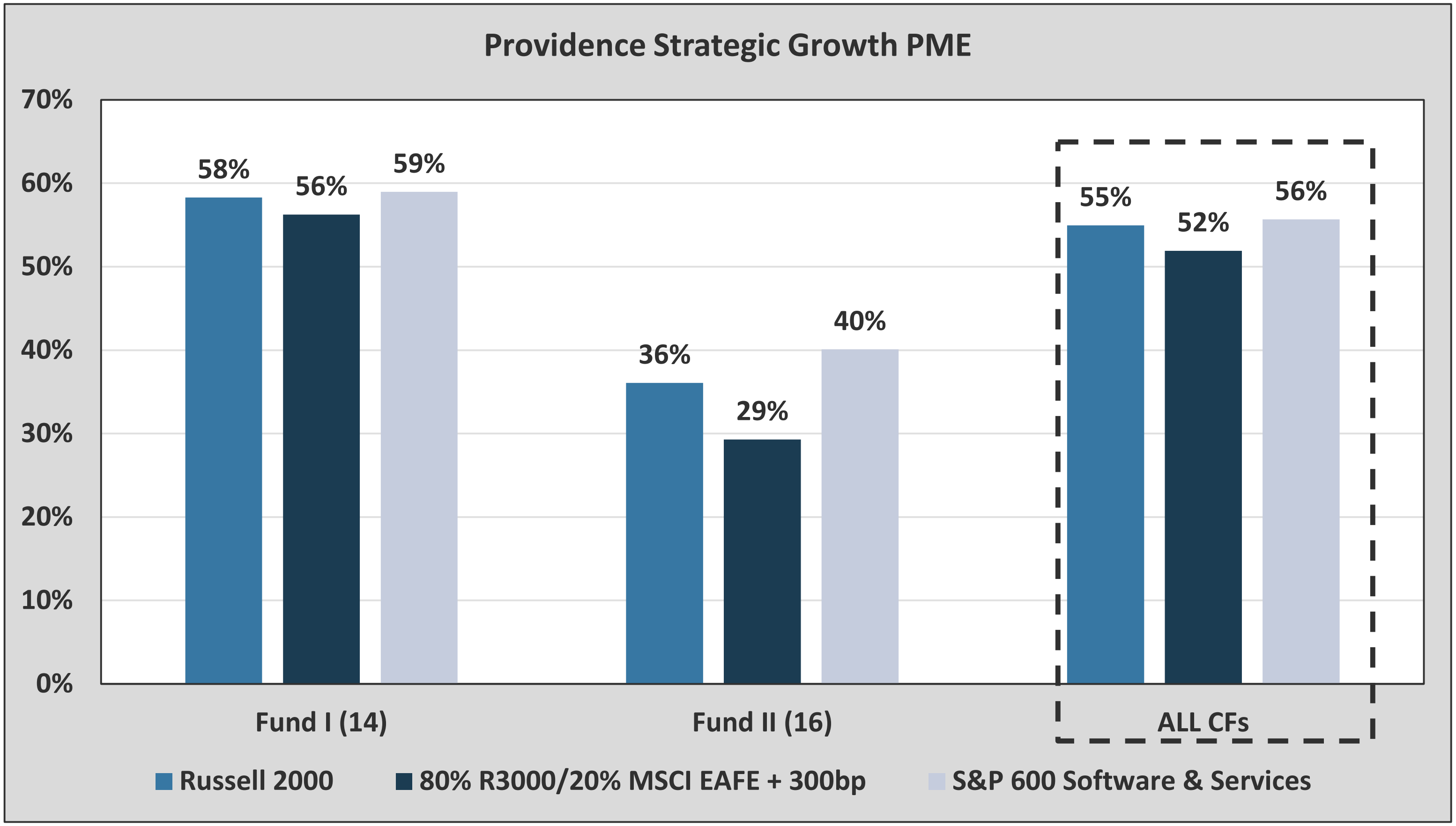
Firm

- PSG was founded in 2013 and is affiliate of Providence Equity Partners
- Invested over $1.3 billion across 25 companies and executed 89 add-ons
- 24 professionals utilizing relationship-driven and collaborative approach

Performance

- PSG has meaningfully outperformed public and private markets across funds and portfolio companies
- PSG I, a vintage 2014 fund, has already generated realized proceeds of nearly 90% of fund size

Public Markets Equivalent



- *PSG I and PSG II significantly outperforming all public market benchmarks over comparable time period*

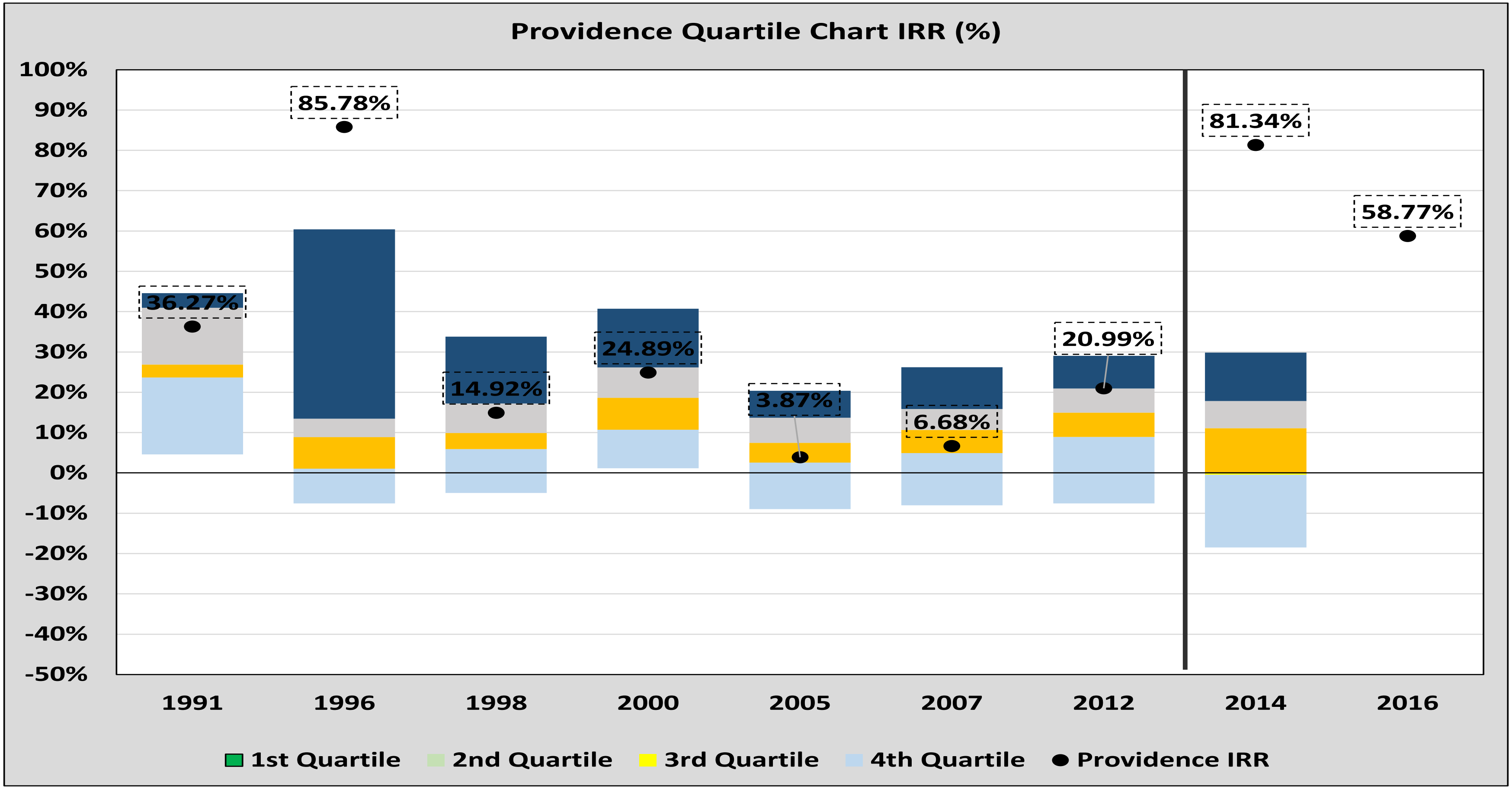
Note:
* Policy benchmark is 80% Russell 3000 + MSCI EAFE + 300 basis points

PSG III Terms

Commitment Allocation:	$75M
Fund Size:	$1.25B
GP Commitment:	At least $50M
Investment Period:	5 Years
Management Fee:	2% on committed capital
Carried interest:	20%
Preferred Return:	8%; 100% catchup
Term:	10 Years ; Three 1 year extensions with Advisory Committee consent
Timing:	Fund Close 6/12/2018

Appendix

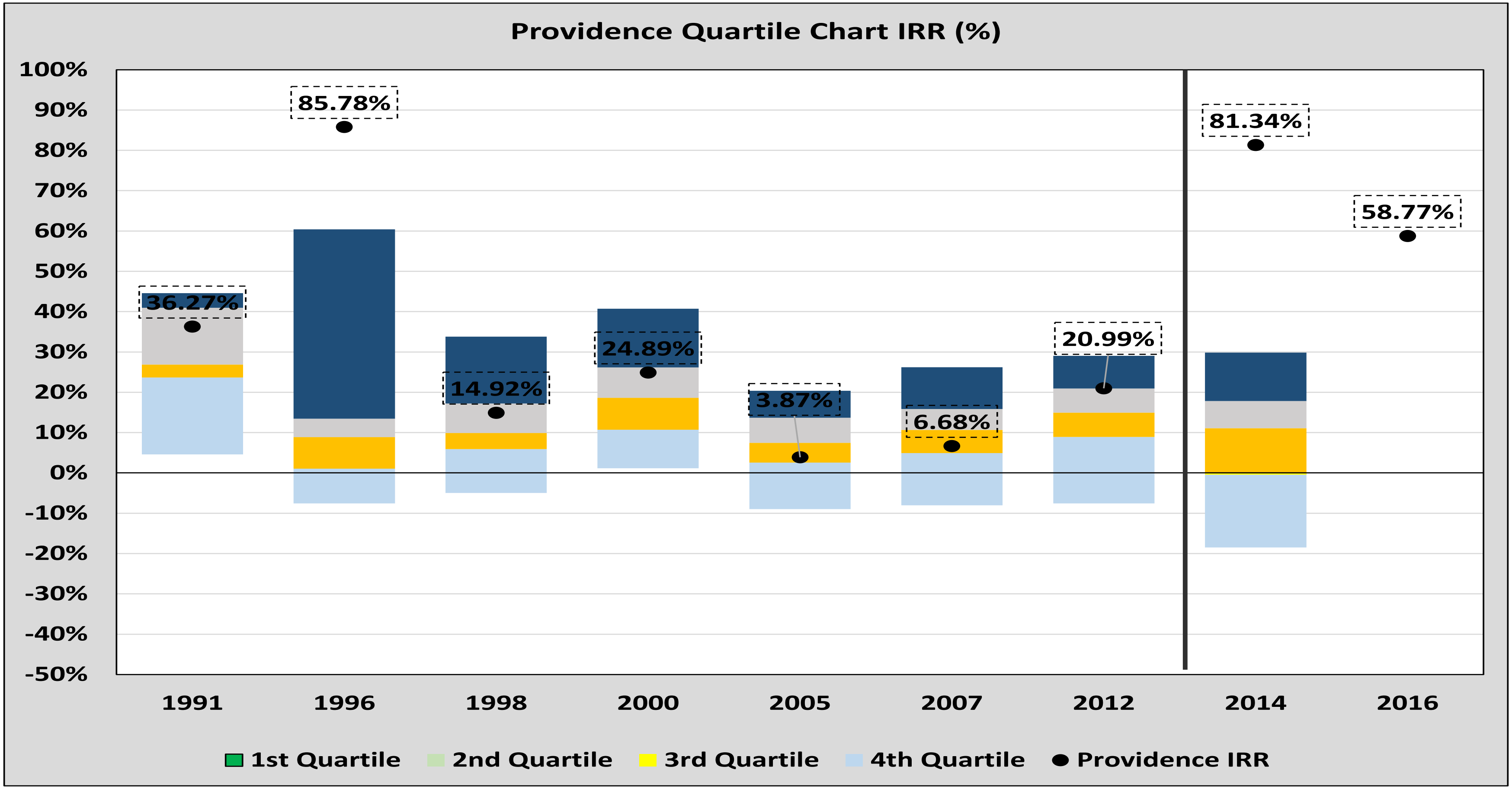
Providence Performance Quartiles (Net IRR)



- *Vintage 2014 and vintage 2016 investments are PSG funds*
- *PSG II performance too early to be meaningful*

Data Source: Providence (as of 9/30/17) and Cambridge Associates U.S. and European Buyout universe (as of 6/30/17) ; PSG benchmarked against Growth Equity universe

Providence Performance Quartiles (Net IRR)



- *Vintage 2014 and vintage 2016 investments are PSG funds*
- *PSG II performance too early to be meaningful*

Data Source: Providence (as of 9/30/17) and Cambridge Associates U.S. and European Buyout universe (as of 6/30/17) ; PSG benchmarked against Growth Equity universe

PSG Case Study: Ministry Brands

Business Description:

- Ministry Brands is a leading provider of cloud-based digital giving platforms, church management software and marketing solutions for faith-based organizations

Transaction Summary:

- PSG I invested a total of $23 million at a $44 million enterprise value in March 2015

Value Creation:

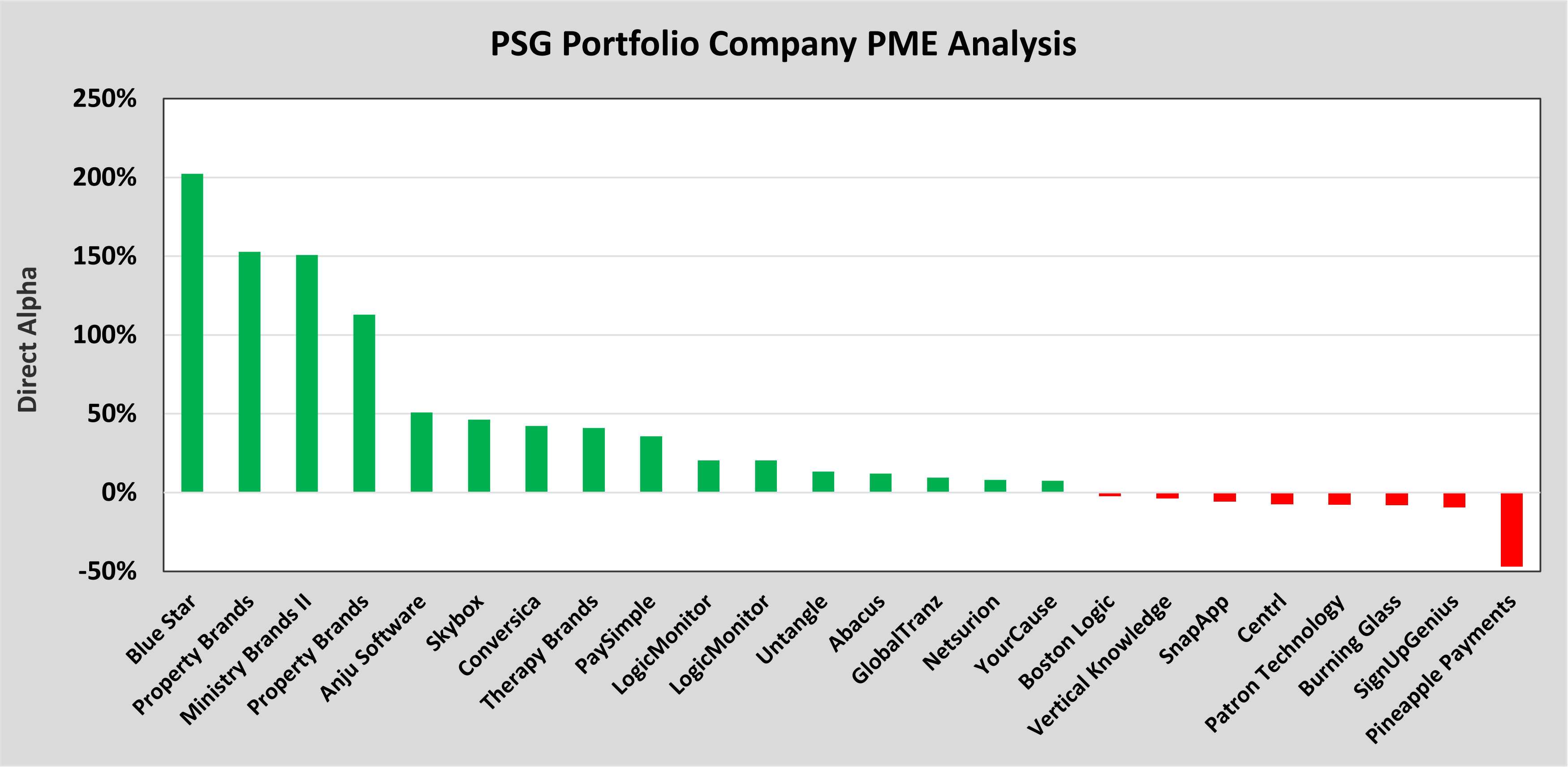
- Ministry Brands grew revenue from $11 million at acquisition to nearly $55 million through September 2015
- Between March and November 2015, the PSG team and company management worked in conjunction to:
  - Double size of customer base to over 25,000 organizations
  - Expand software solution set to include financial reporting and accounting software, live streaming and mass communication services
  - Executed aggressive M&A strategy, completing 11 accretive acquisitions at average 6.0x EBITDA

Exit and Performance:

- In November 2015, PSG sold a majority stake of the company to Genstar Capital at a $350 million enterprise value
- This represented a gross MOIC of 8.0x and gross IRR of 699% for PSG I
- Concurrent with the transaction, PSG I made a new $46 million investment alongside Genstar for 15% fully diluted ownership

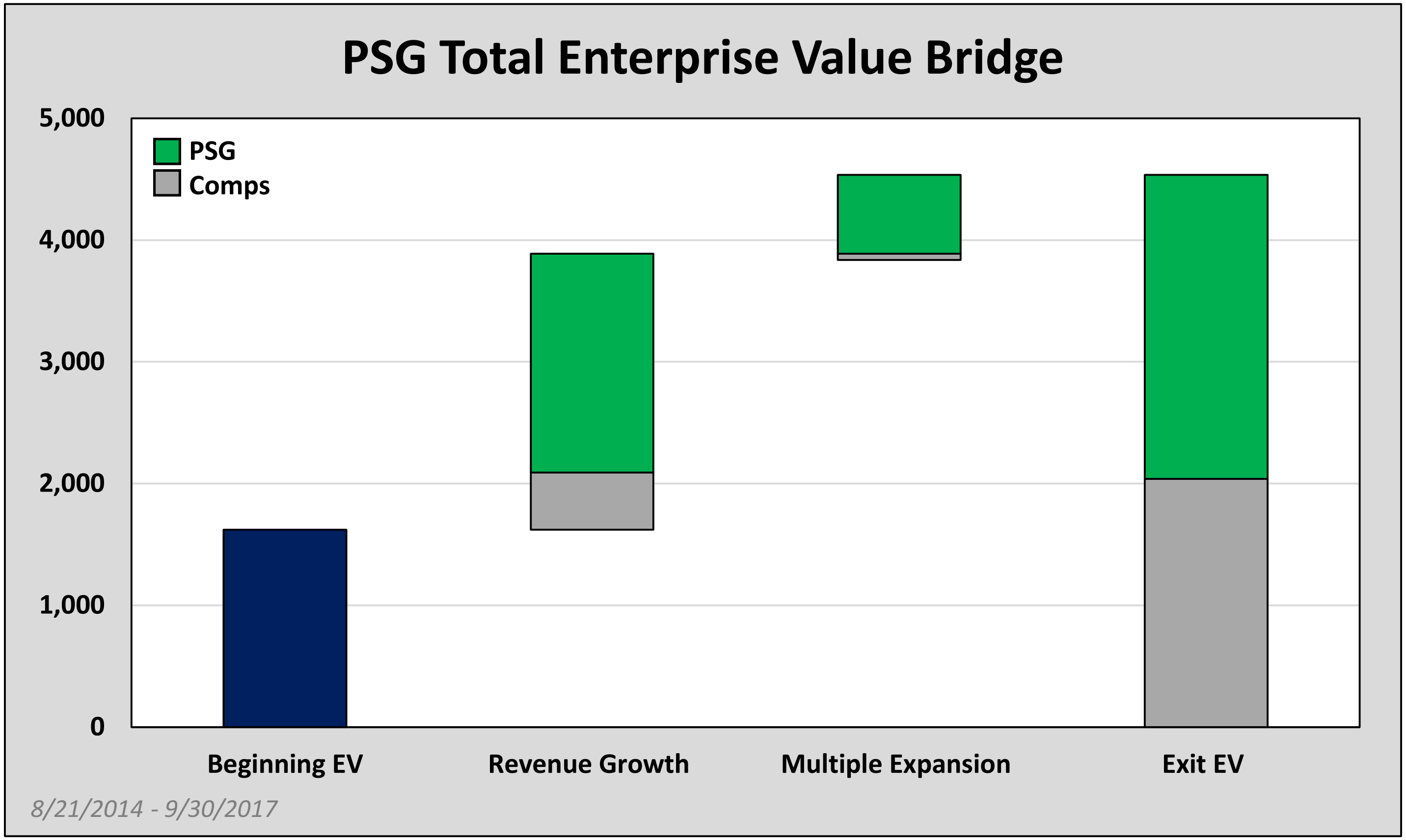
Providence Strategic Growth PME Analysis by Company

Total Annualized Excess Return: 34.8%
Removing Outliers (2 best/2 worst): 26.8%



Note:
- PSG companies benchmarked against the Russell 2000 Growth Index
-- Excludes Ministry Brands I investment (PME of 1391%)

Providence Strategic Growth PME Analysis



- ***PSG is experiencing significantly higher revenue growth and multiple expansion vs. public market comps***
- ***Multiple expansion is driven by aggressive acquisition strategy***

Note:
- PSG companies benchmarked against the Russell 2000 Growth Index