AGENDA

BOARD OF RETIREMENT
Boardroom
832 12th Street Suite 600 Modesto, CA 95353

February 23, 2021
1:30 p.m.

The Board of Retirement welcomes you to its meetings, which are regularly held on the fourth Tuesday of each month. Your interest is encouraged and appreciated.

CONSENT/ACTION ITEMS: Consent matters include routine administrative actions and are identified under the Consent Items heading. All other items are considered to be action items "Action" means that the Board may dispose of any item by any action, including but not limited to the following acts: approve, disapprove, authorize, modify, defer, table, take no action, or receive and file.

BOARD AGENDAS & MINUTES: Board agendas, minutes and copies of items to be considered by the Board of Retirement are customarily posted on the Internet by Friday afternoon preceding a meeting at the following website: www.stancera.org.

AUDIO/VIDEO: All Board of Retirement regular meetings are audio and visually recorded. Audio/Video recordings of the meetings are available after the meetings at http://www.stancera.org/agenda.

NOTICE REGARDING NON-ENGLISH SPEAKERS: Board of Retirement meetings are conducted in English and translation to other languages is not provided. Please make arrangements for an interpreter if necessary.

Pursuant to California Governor Gavin Newsom's Executive Order N-29-20, The Board of Retirement ("StanCERA") is authorized to hold public meetings via teleconference and to make public meetings accessible telephonically or otherwise electronically to all members of the public who wish to participate and to provide public comment to the local legislative body during the current health emergency. We are unable to safely distance ourselves due to the COVID-19 Pandemic guidelines in our own boardroom. StanCERA's offices are currently closed to public access. The StanCERA Boardroom is being utilized for some Trustees and Staff who will be attending in person. All other Trustees, Staff and Consultants unable to attend in person will be attending remotely via teleconference.

If you wish to make either a general public comment or to comment on a specific agenda item in writing, please submit your comment (if your comment pertains to a specific agenda item, please include the agenda item number in the subject line) via email or fax prior to the meeting. Written comments regarding StanCERA's agenda items can be submitted by 4:30 p.m. on the day before the board meetings via email to Gomesk@Stancera.org or via fax to 209-558-4976. Pursuant to Government Code section 54954.3(a), Public Comment or public comment on an Agenda Item are limited to (400 words or less).

The public will not be granted access to Board of Retirement Boardroom to attend StanCERA's meeting. If you wish to join the meeting by teleconference as a member of the public and listen to the meeting, then please dial in using your phone and call **209-689-0007 Access Code: 414752**
When directed to do so please press 5* on your phone to alert the Chair you wish to a public comment. Pursuant to Government Code section 54954.3(a), Public Comment or public comment on an Agenda Item are limited to three (3) minutes StanCERA will provide its best effort to fulfill the request.

In compliance with the Americans with Disabilities Act, a person requiring an accommodation, auxiliary aid, or service to participate in this meeting should contact StanCERA at (209) 525-6393, as far in advance as possible but no later than 48 hours before the scheduled event.

Agendas and Minutes are on our website at www.stancera.org.

1. Call Meeting to Order
2. Pledge of Allegiance
3. Roll Call
4. Announcements
5. Public Comment
6. Consent Items

   a. Approval of the January 26, 2021 Meeting Minutes View

   b. Applications for Service Retirement(s) – **Government Code Sections 31499.14, 31670, 31662.2 & 31810** See attachment for details. View

   c. Applications for Deferred Retirement(s) – **Government Code Section 31700**

      1. Bumpus, Nicole – Stanislaus County – Effective 01-22-21
      2. Hannula, Jennifer – Stanislaus County – Effective 1-22-21
      3. Jordan, Jaren – Stanislaus County – Effective 12-31-20
      4. Kiely, Brenda – Stanislaus County – Effective 01-15-21
      5. Le, Gina – Stanislaus County – Effective 1-29-21
      6. Loftis, Denise – Stanislaus County Courts – Effective 12-18-20

   d. Application of Death Benefit – **Government Code Section 31781, 31781.1, 31781.3**
      1. Esther Cortez – Stanislaus County – Non-Service Connected – Effective 1/29/2021

   e. Trustee Education Report View

   f. Fiscal year 2020-2021 Mid-Year Budget Review

      Agenda Item View Attachment 1 View

   g. 2020 Cost of Living Adjustment
      Agenda Item View Attachment 1 View

   h. Information Technology Solutions (ITS) Project View

   i. SACRS Legislation Update View

   j. Investment Matrix View

7. NEPC – Investment Consultant

   a. Real Asset Education View
   b. January Flash View
   c. Investment Performance 2020 Quarter 4 Review View

8. Investment

   a. Transition Manager Overview
      Agenda Item View Attachment 1 View

9. Administrative

   None

10. Closed Session

    a. Government Code Section 54956.9(d)(2) – Anticipated Litigation
       Significant Exposure to Litigation
       One (1) Case

    b. Conference with Legal Counsel – Pending Litigation – One (1) Case:
       O'Neal et al v. Stanislaus County Employees' Retirement Association
       Stanislaus County Superior Court Case No. 648469
       Government Code Section 54956.9(d)(1)

    c. Conference with Legal Counsel – Pending Litigation – One (1) Case:
       Stanislaus County Employees' Retirement Association v. Buck Consultants, LLC, Mediation Pursuant to Evidence Code Sections 1115, 1119, 1152
       Government Code Section 54956.9d)(4)

11. Members' Forum (Information and Future Agenda Requests Only)

12. Adjournment

BOARD OF RETIREMENT MINUTES
January 26, 2021

1. Call Meeting to Order

Meeting called to order 1:30 pm by Trustee Grover, Chair

2. Pledge of Allegiance

3. Roll Call

Trustees Present by Conference Call Donna Riley, Jeff Grover, Michael O'Neal, Terry Withrow, Darin Gharat, Mike Lynch, Joshua Clayton, Sam Sharpe, Mandip Dhillon, Rhonda Biesemeier

Trustees Absent: None

Others Present by Conference Call:
Rick Santos, Executive Director
Stan Conwell, Retirement Investment Officer
Kellie Gomes, Executive Board Assistant
Natalie Davis, Part time, Fiscal Services Manager
Brittany Atkins-Smith, Fiscal Services Manager
Lisa Fraser, Benefits Manager
Fred Silva, General Legal Counsel
Daniel Hennessy, NEPC Investment Consultant
Sam Austin, NEPC Investment Consultant
Graham Schmidt, Cheiron Consultant

4. Announcements

Chairman Trustee Grover had the following announcement:
Due to the COVID-19 Pandemic, StanCERA's offices are currently closed to public access. We are meeting today virtually to accommodate COVID 19 distancing guidelines for this meeting. If you are joining the meeting today by teleconference as a member of the public your phone will be muted. When directed to do so please press 5* on your phone to alert the Chair that you wish to make a public comment.

Rick Santos, Director announced that there are two new Trustees on the Retirement Board: Terry Withrow has been appointed by the Board of Supervisors to the seat previously held by Jim DeMartini; and Sam Sharpe was elected to a full 3 year term to the seat previously held by Jeff Mangar.

5. Public Comment

None

6. Consent Items

a. Approval of the December 15, 2020 Meeting Minutes

b. Applications for Service Retirement(s) – **Government Code Sections 31499.14, 31670, 31662.2 & 31810 See the agenda attachment for details**.

c. Applications for Deferred Retirement(s) – **Government Code Section 31700**

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1. Bhakta, Jay – Stanislaus County – Effective 12-03-20
2. Chastain, Joyce – Stanislaus County – Effective 08-31-20
3. Dyson, Christina – Stanislaus County – Effective 10-09-20
4. Goulding, Jonathan – City of Ceres – Effective 12/21/20
5. Grimes, Emily – Stanislaus County – Effective 12/04/20
6. Lind, Melissa – Stanislaus County – Effective 12/14/20

d. Application for Service Connected Disability Retirement – **Government Code Section 31724**

1. Parker, Jason – Stanislaus County – Effective 02-12-2019
2. Faus, Kevin – Stanislaus County – Effective 05-12-2019

e. 2021 Committee Assignments

f. 2020 Qtr. 4 Executive Director Goals Update

g. Investment Matrix

h. Private Market Commitment Notice - Gryphon Partners VI fund (Gryphon VI)

i. Auxiliary Investment Report as of 9/30/20
1. AB2833 Auxiliary Report
2. Investment Fee Summary, Value Added Reports

Motion was made by Trustee Riley and seconded by Trustee O'Neal to accept the consent items as presented

Roll Call Vote was as follows:

Trustee Grover,	YES
Trustee O'Neal,	YES
Trustee Withrow,	YES
Trustee Riley,	YES
Trustee Sharpe	YES
Trustee Gharat,	YES
Trustee Lynch,	YES
Trustee Dhillon	YES
Trustee Clayton	YES

Motion carried unanimously

7. <u>NEPC – Investment Consultant</u>

a. December Flash
b. Real Assets (Real Estate and Infrastructure) Strategic Investment plan
c. Interim 1Q 2021 Plan Policy Recommendation

Dan Hennessy presented the information on all items as information only items

8. <u>Investment</u>

a. Preliminary Rebalance Plan
Stan Conwell presented this item as information only.

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b. Investment Policy Statement Directive #3

Motion was made by Trustee Dhillon and seconded by Trustee Lynch to accept staff recommendation to approve changing the private credit proxy to the BofA ML US High Yield Master II Constrained Index and the infrastructure proxy to a 67%/33%mix of publicly traded infrastructure equities and Treasury Inflation Protected Securities (TIPS).

Roll Call Vote was as follows:
Trustee Grover, YES
Trustee Riley, YES
Trustee O'Neal, YES
Trustee Withrow, YES
Trustee Sharpe YES
Trustee Gharat, YES
Trustee Lynch, YES
Trustee Dhillon YES
Trustee Clayton YES
Motion carried unanimously

9. Administrative

a. Quarterly Staff Update
b. Cheiron's Presentation of the June 30, 2020 Actuarial Valuation Final

Motion was made by Trustee Gharat and seconded by Trustee Riley to accept staff recommendation to accept the June 30, 2020 Actuarial Valuation Final as presented

Roll Call Vote was as follows:
Trustee Grover, YES
Trustee Riley, YES
Trustee O'Neal, YES
Trustee Withrow, YES
Trustee Sharpe YES
Trustee Gharat, YES
Trustee Lynch, YES
Trustee Dhillon YES
Trustee Clayton YES
Motion carried unanimously

c. Executive Director Goals for 2021

Motion was made by Trustee O'Neal and seconded by Trustee Lynch to accept the 2021 Executive Directors Goals as presented

Roll Call Vote was as follows:
Trustee Grover, YES
Trustee Riley, YES
Trustee O'Neal, YES
Trustee Withrow, YES
Trustee Sharpe YES
Trustee Gharat, YES
Trustee Lynch, YES
Trustee Dhillon YES
Trustee Clayton YES
Motion carried unanimously

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Motion was made by Trustee Gharat and seconded by Trustee Dhillon to go into closed session at 2:45 p.m.

Roll Call Vote was as follows:
Trustee Grover, YES
Trustee Riley, YES
Trustee O'Neal, YES
Trustee Withrow, YES
Trustee Sharpe YES
Trustee Gharat, YES
Trustee Lynch, YES
Trustee Dhillon YES
Trustee Clayton YES
Motion carried unanimously

10. Closed Session

a. Government Code Section 54956.9(d)(2) – Anticipated Litigation
Significant Exposure to Litigation
One (1) Case

b. Executive Director's Annual Review Public Employment
Government Code Section 54957(b) (1)(2)

c. Conference with Legal Counsel – Pending Litigation – One (1) Case:
O'Neal et al v. Stanislaus County Employees' Retirement Association
Stanislaus County Superior Court Case No. 648469
Government Code Section 54956.9(d)(1)

d. Conference with Legal Counsel – Pending Litigation – One (1) Case:
Stanislaus County Employees' Retirement Association v. Buck Consultants, LLC, Mediation Pursuant to Evidence Code Sections 1115, 1119, 1152
Government Code Section 54956.9d)(4)

Motion was made by Trustee Dhilion and seconded by Trustee Riley to go into open session at 3:20 pm

Roll Call Vote was as follows:
Trustee Grover, YES
Trustee Riley, YES
Trustee O'Neal, YES
Trustee Withrow, YES
Trustee Riley, YES
Trustee Sharpe YES
Trustee Gharat, YES
Trustee Lynch, YES
Trustee Dhillon YES
Trustee Clayton YES
Motion carried unanimously

There was no reportable action taken in closed session.

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11. Committee Reports and Recommendations for Action

a. Performance Review and Compensation Committee (PRCC) recommendation for a 3% salary increase for Executive Director, Rick Santos

Motion was made by Trustee O'Neal and seconded by Trustee Riley to approve the Performance Review and Compensation Committee to award Rick Santos a 3% increase in salary which will bring his hourly rate to $113.70.

Roll Call Vote was as follows:

Trustee Grover,	YES
Trustee Riley,	YES
Trustee O'Neal,	YES
Trustee Withrow,	YES
Trustee Sharpe	YES
Trustee Gharat,	YES
Trustee Lynch,	YES
Trustee Dhillon	YES
Trustee Clayton	YES

Motion carried unanimously

12. Adjournment

Meeting adjourned at 3:24 p.m.

Respectfully submitted,

Rick Santos, Executive

APPROVED AS TO FORM

By

Fred Silva, GENERAL LEGAL COUNSEL

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StanCERA Applications for Service Retirement(s) Government Code Sections 31499.14, 31670, 31662.2 & 31810

Anderson, John - Stanislaus County - Effective 01/20/2021
Balmain, Joanna - Stanislaus County - Effective 02/11/2021
Campanur Hall, Laura - Stanislaus County - Effective 01/19/2021
Casale, Karen - Stanislaus County - Effective 01/27/2021
Chaney, Michael - Stanislaus County - Effective 01/28/2021
Frandsen, Frieda - Stanislaus County - Effective 02/06/2021
Goodwin, Julie - Stanislaus County - Effective 02/02/2021
Perez, Cristina - Stanislaus County - Effective 02/02/2021
Roman, Esther - Stanislaus County - Effective 02/02/2021
Schuber, Debra - Stanislaus County - Effective 02/11/2021
Van Tassel, Jimmy - Stanislaus County - Effective 01/28/2021

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StanCERA Trustee Education Report 2018-2020

Board Member	3-Year Rolling Total Education Credits	2018 Total Education Credits	2019 Total Education Credits	2020 Total Education Credits
Mandip Dhillon Term started 7/1/2019	*110.00*	40	64	6
Donna Riley Ex Offico	*58.00*	26	26	6
Darin Gharat Term started 7/1/2019	*81.75*	25.75	50	6
Mike Lynch Term started 7/1/2020	*62.00*	40	16	6
Joshua Clayton Term started 7/1/2020	*0.00*			2.
Sam Sharpe Term started 1/1/2021	*70.00*	24.00	40	4
Michael O'Neal Term started 7/1/2020	*148.00*	63.00	79	6
Rhonda Biesemier Term started 7/1/2020	*200.25*	107.25	87.00	6.00
Jeff Grover Term started 7/1/2020	*62.00*	16.00	40.00	6.00

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February 23, 2021
Retirement Board Agenda Item

TO: Retirement Board

FROM: Brittany Smith-Atkins, Fiscal Services Manager
Rick Santos, Executive Director

I. SUBJECT: Fiscal Year 2020-2021 Mid-Year Budget Review

II. ITEM NUMBER: 6.f.

III. ITEM TYPE: Consent

IV. STAFF RECOMMENDATION: Accept Mid-Year Administrative Budget Review for Fiscal Year 2020-2021 (Attachment 1)

V. EXECUTIVE SUMMARY: Each year staff prepares a budget of general operating expenses for review and approval by the Board of Retirement (Board). The Fiscal Year 2020-2021 budget of $6,570,652 was approved on May 26, 2020. The formal mid-year review with Fiscal Year 2020-2021 expenses as of December 31, 2020 is shown below.

STANISLAUS COUNTY EMPLOYEES RETIREMENT ASSOCIATION
FISCAL YEAR 2020 - 2021 Mid-Year Budget Review

ADMINISTRATIVE EXPENDITURES	Fiscal Year 2020 - 2021 Final Budget	Fiscal Year 2020 - 2021 Mid-Year Actual	Percent of 2019-2020 Budget
Salaries & Benefits	2,208,244	1,021,061	
Technology	288,990	81,782	
I.T.S. PAS Project	30,000	43,440	
Legal Counsel & Services	591,700	245,603	
County Support Services	251,265	74,780	
Communication & Printing	80,000	15,703	
General Operations	57,170	20,565	
Education & Travel	182,900	107,590	
Total Administrative Expenses	3,690,269	1,610,524	43.64%
CAPITAL EXPENDITURES			
Pension Administration System	1,412,950	670,307	
PAS Project Management & Oversite	671,000	329,516	
Cubicle Redesign	40,000	-	
HVAC VAV Upgrade	15,000	-	
Formax Folding Machine	20,000	7,522	
6th Floor Lobby Upgrade	150,000	-	
12th St Lobby Upgrade	50,000	-	
Website/Logo Redesign & Implementation	14,550	-	
Total Capital Expenditures	2,373,500	1,007,344	42.44%
Capital Depreciation	612,500	180,599	
6th Floor Lease Revenue	(105,617)	(61,263)	
TOTAL BUDGET	6,570,652	2,737,205	41.66%

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VI. ANALYSIS:

StanCERA's budget is within expected range for mid-year. Salary and benefits are tracking as expected with two budgeted positions not filled as of December 31, 2020. Expenditures are expected to stay within budget.

The Technology budget includes the maintenance, support, and disaster recovery for the prior and current pension software system as well as County Information Technology (I.T.) services, computers and other I.T. related equipment used by StanCERA staff and is within range of approved funding. With the budgeted Software Developer/Analyst III position not filled, the Information Technology Solutions (I.T.S.) Project required the procurement of an Information Technology Consultant. As of mid-year, this support exceeded planned expenditures due to numerous conversions and data cleanup leading to the new pension system's go live. Overall, it is expected that the Technology expenditures will remain within budget.

StanCERA contracts with several specialized legal service providers which are utilized as needed, (fiduciary, litigation, real estate, information technology, disability administration, tax, domestic relations and general governance). Upon review the category of Legal Counsel-General has exceeded its annual allocated budget. This variance is due to unexpected legal matters, such as the Alameda decision, as well as the review of adherence to legal requirements impacted by the COVID-19 pandemic. It is expected that Legal Counsel & Services will stay within budget.

County Support Services includes building maintenance utilities, security, and mailroom services as well as some administrative services provided by the County, such as purchasing, some insurances, auditor, and personnel. StanCERA is well within budget in these areas.

Communication & Printing are basically funds set aside for postage and trustee elections, mass production of annual reports, member statements, and retiree payroll. These expenditures are expected to stay within budget.

General Operation funds are used for office supplies, 6th floor building expenses and other professional services such as our financial auditor or other professional consultants. These expenditures are expected to stay within budget.

Fiduciary Education & Travel includes fiduciary insurance, education, and educational travel for trustees, executive, and general staff. It is important to note that professional membership expenditures have met the planned budget due to the payment of annual dues. It is expected that in total these expenditures will stay within budget.

The pension software budget, project consulting services budget, and Formax folding machine budget approved by the Board are listed as capital expenditures and will be depreciated accordingly.

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Non- Administrative Expenses

Section 31596.1 of the CERL states: The following expenses shall not be considered a cost of administration to the retirement system but shall be considered as a reduction in earnings from those investments or a charge against the assets of the retirement system as determined by the Board. These expenses are governed by individual agreements and are reported in the audited financial statements presented to the Board of Retirement in the Comprehensive Annual Financial Report. The Other Investment Fees consist of mainly other professional fees and interest expense for the alternative assets, and Northern Trust sweep fees. The un-audited mid-year expenses are listed below.

Actuarial Fees	42,160
Investment Consultant Fees	105,575
Attorney Fees - Directly Related to Investments	70,091
Investment Manager Fees	3,229,420
Custodial Bank Fees	154,728
Other Investment Fees	526,683

VII. RISK: Government Code section 31580.2 allows for expenditures for administrative services (other than software, hardware and computer technology consulting services) to be the greater of 0.21% of the accrued actuarial liability or $2,000,000. In Fiscal Year 2020-2021, we continued to exercise prudence in budgeting administrative expenses and are monitoring expenses to ensure StanCERA stays within allotted appropriations.

VIII. STRATEGIC PLAN: Strategic Objective #4: Develop a formalized Operational Risk Management Plan.

IX. ADMINISTRATIVE BUDGET IMPACT: A total of $6,570,652 was approved for the Fiscal Year 2020-2021 Administrative budget. No additional administrative funds are being requested at this time.

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STANISLAUS COUNTY EMPLOYEES' RETIREMENT ASSOCIATION
FISCAL YEAR 2020 - 2021 MID YEAR BUDGET REVIEW

	Fiscal Year 2020 - 2021 Final Budget (1)(2)	Fiscal Year 2020 - 2021 Mid Year Expenditures	Percent of 2020 - 2021 Budget
SALARIES & BENEFITS			
Salary and Wages	1,231,905	634,219	
Project Help Wages	104,453	33,622	
Information Technology Wages & Benefits	126,116	0	
Employee Benefits	745,770	353,221	
Salaries & Benefits	2,208,244	1,021,061	46.24%
TECHNOLOGY			
Tyler Software Maint	18,290	13,719	
Tyler Disaster Maint	4,570	3,438	
Tegrit Hosting Fees	78,000	39,000	
I.T. Consulting Services	30,000	43,440	
Software Licenses & Fees	10,000	5,885	
StanCERA Website	2,500	263	
SBT - Data Processing Services	68,510	25,052	
SBT - Telecommunications	8,520	2,809	
SBT - Embedded Employees	57,600	(14,400)	
Computers & Office Equipment	25,000	594	
Copier Lease & Maint	16,000	5,424	
Technology	318,990	125,222	39.26%
Legal & Professional Services			
Legal Counsel - Disability	175,200	60,192	
Legal Counsel - O'Neal vs StanCERA	100,000	1,850	
Reimbursement from Travelers Ins	(20,000)	(18,916)	
Legal Counsel - Nasrawi vs StanCERA	80,000	0	
Legal Counsel - General	50,000	107,273	
Legal Counsel - Domestic Relation Orders	80,000	37,144	
Legal Counsel - StanCERA vs Buck	30,000	0	
Medical Exams, Reviews, Hearings	40,000	20,445	
Auditing Services	46,500	37,616	
Other Professional Services	10,000	0	
Legal & Other Professional & Services	591,700	245,603	41.51%
GENERAL OPERATIONS & CONDOMINIUM			
Office Supplies	8,000	819	
Other Office Expense	9,000	5,559	
6th Floor Maint	12,000	0	
6th Floor Janitorial & Supplies	26,000	12,763	
6th Floor Security	600	182	
6th Floor taxes (Downtown Redevelopment)	1,570	1,242	
General Operations & Condominium	57,170	20,565	35.97%
COMMUNICATION & PRINTING			
Member Statements, Trustee Elections	30,000	2,909	
Postage Services	50,000	12,794	
Communication & Printing	80,000	15,703	19.63%

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Attachment 1

STANISLAUS COUNTY EMPLOYEES' RETIREMENT ASSOCIATION
FISCAL YEAR 2020 - 2021 MID YEAR BUDGET REVIEW

	Fiscal Year 2020 - 2021 Final Budget (1)(2)	Fiscal Year 2020 - 2021 Mid Year Expenditures	Percent of 2020 - 2021 Budget
COUNTY SUPPORT & BUILDING SERVICES			
Building Maintenance	40,000	10,253	
Building Janitorial	10,000	2,584	
Building Security	75,000	15,221	
Building Utilities	40,000	20,934	
Auditor	14,000	3,939	
CEO/Personnel (true up)	21,500	7,272	
Central Services, Mail Room, Salvage	25,000	3,674	
GSA - ADA Compliance	720	182	
Purchasing	1,000	223	
Risk Management	3,245	849	
Salvage & Disposal	1,000	194	
Insurance (General Liability & Auto)	19,800	9,454	
County Support Services & Building Services	251,265	74,780	29.76%
FIDUCIARY EDUCATION & TRAVEL			
Professional Publications & Subscriptions	6,600	1,680	
Staff Education & Travel	35,000	3,777	
Professional Memberships	12,100	10,131	
Trustee Education & Travel	30,000	360	
Trustee Meeting Allowance	12,000	2,800	
Insurance (Fiduciary)	87,200	88,842	
Fiduciary Education & Travel	182,900	107,590	58.82%
CAPITAL EXPENDITURES			
Pension Administration System	1,412,950	670,307	
PAS Project Management & Oversite	671,000	329,516	
Cubicle Redesign	40,000		
HVAC VAV Upgrade	15,000		
Formax Folding Machine	20,000	7,522	
6th Floor Lobby Upgrade	150,000		
12th St Lobby Upgrade	50,000		
Website/Logo Redesign & Implementation	14,550	0	
Capital Expenditures	2,373,500	1,007,344	42.44%
Capital Depreciation	612,500	180,599	
6th Floor Lease Revenue	(105,617)	(61,263)	
TOTAL BUDGET	**6,570,652**	**2,737,205**	**41.66%**

Notes

(1) 2020 - 2021 Budget Adopted by the Board

(2) Includes Technology Adjustment §31580.2(b)

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February 23, 2021

Retirement Board Agenda Item

TO: Retirement Board

FROM: Rick Santos, Executive Director

I. SUBJECT: 2021 Cost of Living Adjustment

II. ITEM NUMBER: 6.g.

III. ITEM TYPE: Consent

IV. STAFF RECOMMENDATION: Approve Cheiron's recommendation for a 3% Cost of Living Adjustment (COLA) to StanCERA's non-tier 3 retired member's monthly benefit beginning April 1, 2021 for those that retired prior to April 2, 2019. For those non-tier 3 members that retired after April 1, 2019, approve a Cost of Living Adjustment of 2.0%, beginning April 1, 2021. Reduce the carry-over allowances by 1.0% for all non-tier 3 members retired on or before April 1, 2019.

V. EXECUTIVE SUMMARY: Attachment 1 contains Cheiron's recommendation for the Cost of Living Adjustments referenced in staff's recommendation.

Currently, StanCERA bases its COLA increases on the All Urban Consumer Index for the San Francisco/Oakland/Hayward (previously San Francisco/Oakland/San Jose) area. The COLA change for retirees' 2021 benefit is based on the change in the December over December measures (2019 to 2020). The 2019 and 2020 measures turned out to be 297.007 and 302.948, respectively. This equates to an increase of 2.00%, which when rounded, results in a final value of 2.0%.

However, based on Code Section 31870.1 which StanCERA and its employers adhere to, members are to receive the lesser of 3% or the actual year over year change in the index. Whenever the change is greater than 3%, the overage is banked for use in future years when the change is less than 3%. Currently, all non-tier 3 members that retired prior to April 2, 2019 had at least 1.0% in their accumulated banks. Consequently, all non-tier 3 members that retired prior to April 2, 2019 should receive a 3% cost of living adjustment to their benefit and a reduction of 1.0% in their accumulated bank. Those members that retired after April 1, 2019 should receive a 2.0% adjustment, since those members had no accumulated carry-over in their bank.

VI. RISK: None

VII. STRATEGIC PLAN: N/A

ADMINISTRATIVE BUDGET IMPACT: None

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January 20, 2021

6.g. Attachment 1

Mr. Rick Santos

Executive Director
Stanislaus County Employees' Retirement Association
832 12th Street, Suite 600
Modesto, CA 95354

Re: Cost of Living Adjustment (COLA) as of April 1, 2021

Dear Rick:

Pursuant to the scope of retainer services under Cheiron's agreement to provide actuarial services to the Stanislaus County Employees' Retirement Association (StanCERA), we have computed the Cost of Living Adjustment (COLA) percentages to be used as of April 1, 2021. The calculations outlined herein have been performed in accordance with 31870.1 of the County Employees Retirement Law of 1937.

Background

The cost of living adjustment (COLA) is determined annually based on increases in the December Consumer Price Index (CPI) for All Urban Consumers in the San Francisco-Oakland-Hayward (previously San Francisco-Oakland-San Jose) area, using a base period of 1982-1984. The ratio is calculated and rounded to the nearest one-half percent.

COLA Calculations

The CPIs described above were 302.948 and 297.007 for December 2020 and December 2019, respectively. This represents an increase of 2.000%, which is rounded to 2.00%. As a point of comparison, the U.S. City CPI increased by 1.36% over the same time period.

Retirees – other than members of Tier 3 - are subject to the provisions of Section 31870.1, which limits annual COLA increases to 3.0% annually. Therefore, these members should receive an increase in benefits of 2.0%, based on the current year change in the CPI. However, due to the accumulated carry-over balances as of April 1, 2020, members who retired prior to April 2, 2019 from these Tiers will receive an increase of 3.0%. The remaining carry-over balances will then be reduced by 1.0%, which is the difference between the rounded CPI change versus the current year COLA adjustment. Those who retired on or after April 2, 2019 will receive a 2.0% increase in their benefits, with no change in the carry-over balances. The enclosed exhibit summarizes the COLA calculations and carry-over balances for these Tiers. Tier 3 members do not receive an automatic COLA from the Association.

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Please contact us if you have any questions regarding these calculations.

Sincerely,
Cheiron

Graham A. Schmidt, ASA, FCA, MAAA, EA
Consulting Actuary

Jonathan B. Chipko, FSA, MAAA, EA
Consulting Actuary

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STANISLAUS COUNTY EMPLOYEES' RETIREMENT ASSOCIATION

COST OF LIVING ADJUSTMENTS (COLA) - Section 31870.1
As of April 1, 2021

Maximum Annual COLA: 3.0%

Initial Retirement Date	April 1, 2020	Increase in the Annual Average CPI [1]		April 1, 2021	
	Accumulated Carry-Over	Actual	Rounded	COLA	Accumulated Carry-Over
	(A)	(B)	(C)	(D)	(E)
On or Before 4/1/1970	68.0%	2.00%	2.0%	**3.0%**	67.0%
04/02/1970 to 04/01/1971	65.5%	2.00%	2.0%	**3.0%**	64.5%
04/02/1971 to 04/01/1972	63.5%	2.00%	2.0%	**3.0%**	62.5%
04/02/1972 to 04/01/1973	62.5%	2.00%	2.0%	**3.0%**	61.5%
04/02/1973 to 04/01/1974	62.0%	2.00%	2.0%	**3.0%**	61.0%
04/02/1974 to 04/01/1975	59.0%	2.00%	2.0%	**3.0%**	58.0%
04/02/1975 to 04/01/1976	52.0%	2.00%	2.0%	**3.0%**	51.0%
04/02/1976 to 04/01/1977	45.0%	2.00%	2.0%	**3.0%**	44.0%
04/02/1977 to 04/01/1978	42.5%	2.00%	2.0%	**3.0%**	41.5%
04/02/1978 to 04/01/1979	38.0%	2.00%	2.0%	**3.0%**	37.0%
04/02/1979 to 04/01/1980	31.5%	2.00%	2.0%	**3.0%**	30.5%
04/02/1980 to 04/01/1981	26.0%	2.00%	2.0%	**3.0%**	25.0%
04/02/1981 to 04/01/1982	14.0%	2.00%	2.0%	**3.0%**	13.0%
04/02/1982 to 04/01/1983	4.0%	2.00%	2.0%	**3.0%**	3.0%
04/02/1983 to 04/01/1984	1.5%	2.00%	2.0%	**3.0%**	0.5%
04/02/1984 to 04/01/1985	1.5%	2.00%	2.0%	**3.0%**	0.5%
04/02/1985 to 04/01/1986	1.5%	2.00%	2.0%	**3.0%**	0.5%
04/02/1986 to 04/01/1987	1.5%	2.00%	2.0%	**3.0%**	0.5%
04/02/1987 to 04/01/1988	1.5%	2.00%	2.0%	**3.0%**	0.5%
04/02/1988 to 04/01/1989	1.5%	2.00%	2.0%	**3.0%**	0.5%
04/02/1989 to 04/01/1990	1.5%	2.00%	2.0%	**3.0%**	0.5%
04/02/1990 to 04/01/1991	1.5%	2.00%	2.0%	**3.0%**	0.5%
04/02/1991 to 04/01/1992	1.5%	2.00%	2.0%	**3.0%**	0.5%
04/02/1992 to 04/01/1993	1.5%	2.00%	2.0%	**3.0%**	0.5%
04/02/1993 to 04/01/1994	1.5%	2.00%	2.0%	**3.0%**	0.5%
04/02/1994 to 04/01/1995	1.5%	2.00%	2.0%	**3.0%**	0.5%
04/02/1995 to 04/01/1996	1.5%	2.00%	2.0%	**3.0%**	0.5%
04/02/1996 to 04/01/1997	1.5%	2.00%	2.0%	**3.0%**	0.5%
04/02/1997 to 04/01/1998	1.5%	2.00%	2.0%	**3.0%**	0.5%
04/02/1998 to 04/01/1999	1.5%	2.00%	2.0%	**3.0%**	0.5%
04/02/1999 to 04/01/2000	1.5%	2.00%	2.0%	**3.0%**	0.5%
04/02/2000 to 04/01/2001	1.5%	2.00%	2.0%	**3.0%**	0.5%
04/02/2001 to 04/01/2002	1.5%	2.00%	2.0%	**3.0%**	0.5%
04/02/2002 to 04/01/2003	1.5%	2.00%	2.0%	**3.0%**	0.5%
04/02/2003 to 04/01/2004	1.5%	2.00%	2.0%	**3.0%**	0.5%
04/02/2004 to 04/01/2005	1.5%	2.00%	2.0%	**3.0%**	0.5%
04/02/2005 to 04/01/2006	1.5%	2.00%	2.0%	**3.0%**	0.5%
04/02/2006 to 04/01/2007	1.5%	2.00%	2.0%	**3.0%**	0.5%
04/02/2007 to 04/01/2008	1.5%	2.00%	2.0%	**3.0%**	0.5%
04/02/2008 to 04/01/2009	1.5%	2.00%	2.0%	**3.0%**	0.5%
04/02/2009 to 04/01/2010	1.5%	2.00%	2.0%	**3.0%**	0.5%
04/02/2010 to 04/01/2011	1.5%	2.00%	2.0%	**3.0%**	0.5%
04/02/2011 to 04/01/2012	1.5%	2.00%	2.0%	**3.0%**	0.5%
04/02/2012 to 04/01/2013	1.5%	2.00%	2.0%	**3.0%**	0.5%
04/02/2013 to 04/01/2014	1.5%	2.00%	2.0%	**3.0%**	0.5%
04/02/2014 to 04/01/2015	1.5%	2.00%	2.0%	**3.0%**	0.5%
04/02/2015 to 04/01/2016	1.5%	2.00%	2.0%	**3.0%**	0.5%
04/02/2016 to 04/01/2017	1.5%	2.00%	2.0%	**3.0%**	0.5%
04/02/2017 to 04/01/2018	1.0%	2.00%	2.0%	**3.0%**	0.0%
04/02/2018 to 04/01/2019	1.0%	2.00%	2.0%	**3.0%**	0.0%
04/02/2019 to 04/01/2020	0.0%	2.00%	2.0%	**2.0%**	0.0%
04/02/2020 to 04/01/2021	0.0%	2.00%	2.0%	**2.0%**	0.0%

[1] All Urban Consumers, San Francisco-Oakland-Hayward Area (1982-84 base). (G.C. 31870.1)

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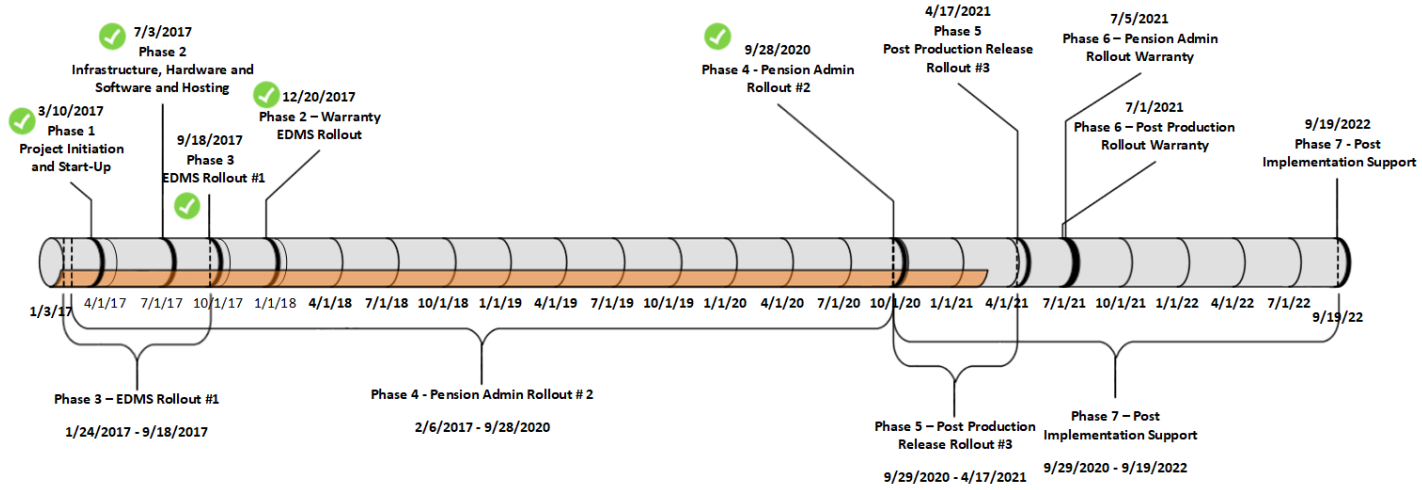
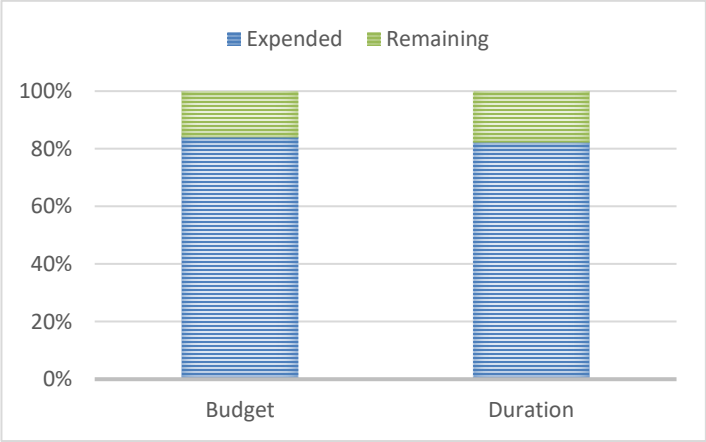
CHEIRON

PAS IMPLEMENTATION — ITEM 6.H
LINEA BI-WEEKLY STATUS UPDATE

SPONSOR:	Rick Santos	REPORT DATE:	02-05-2021



Baseline 12/01/2016 STATUS



Linea Budget as of 01/31/2021

Risks & Issues:

The project team is currently evaluating and prioritizing remaining project work and associated adjustments to the project timeline. Progress is currently slowed by uncertainty related to the outcome of these ongoing efforts. However, work continues on short-term project goals and stabilization of work processes.

Accomplishments:

- Newly created Project Planning Working Group began conducting meetings to review and make decisions regarding remaining project work priorities, timeline, and methodologies to finish out the project.
- Project management team began to restructure and reorganize Project Management meetings in anticipation of upcoming project acceleration.
- Tegrit and StanCERA completed 1099R processing for 2020 tax year and interest posting for 12/31/2020.

Upcoming:

- Project Planning Working Group will continue process of defining remaining project work to facilitate creation of remaining project timeline.
- Planning for release R24 including COLA processing and workflow functionality.

Erik Brischler ● Linea Solutions ● (310) 633-1497

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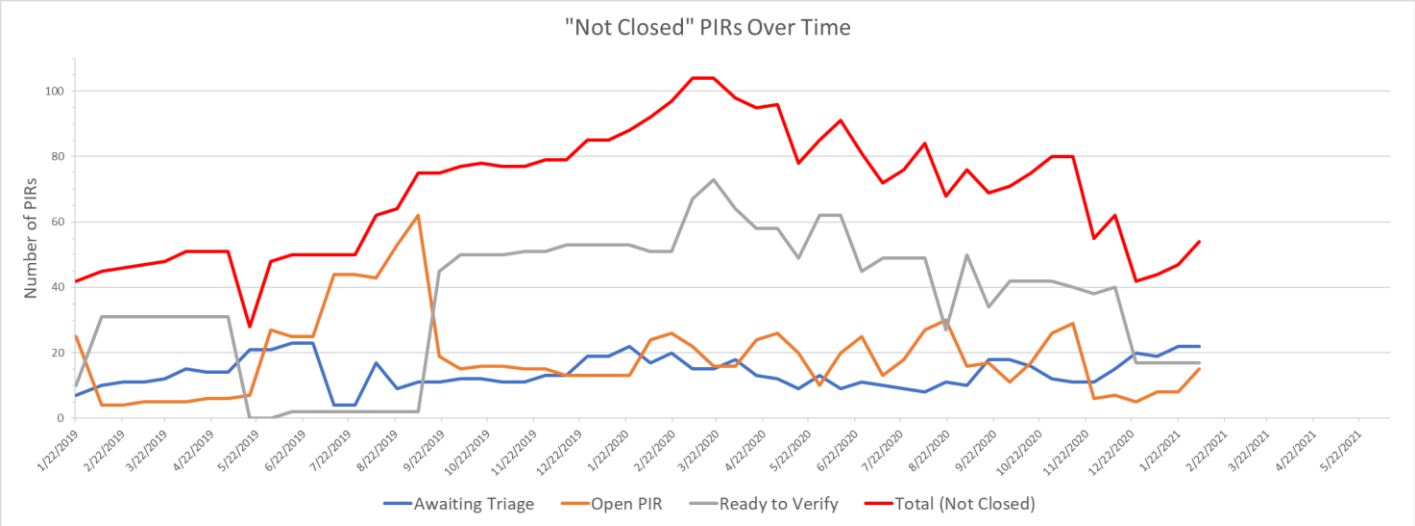
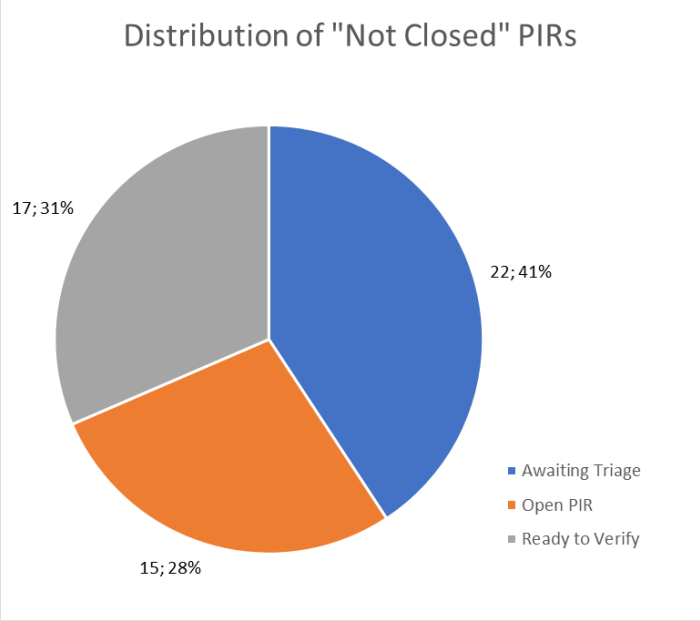
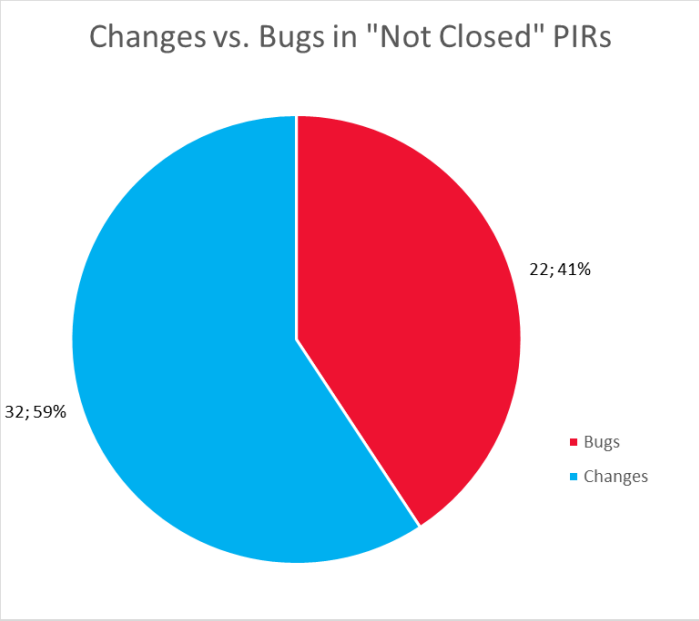
Ongoing Project Contributions

- Facilitate weekly Project Manager's meetings and create meeting minutes.
- Facilitate monthly Steering Committee Meetings and create meeting minutes.
- Participate in Tegrit work sessions, review meeting minutes, and compile resulting decision logs and action items.
- Regularly review action items for follow up and completion.
- Review and hold group review sessions for BSRD deliverables made by Tegrit (BSR080, BSR091, BSR093).
- Track requirements, as discussed in work sessions and BSRDs, using the RTM and meet with StanCERA PM to update requirements confirmation.
- Manage and participate in system testing efforts, including review of test scripts, compiling of results, input of PIRs, and tracking of issue resolution.

Current PIR Summary







February 23, 2021

Retirement Board Agenda Item

TO: Retirement Board

FROM: Lisa Frazer, Member and Employer Services Manager

Rick Santos, Executive Director

I. SUBJECT: SACRS Legislation Update

II. ITEM: 6.i

III. ITEM TYPE: Consent

IV. RECOMMENDATION: None

V. ANALYSIS: Edelstein Gilbert Robson & Smith, LLC

A recall campaign targeting Governor Newsom has increased in the last two months. Political sources state there are too many variables to predict the outcome, however there are numerous items to consider.

To qualify the recall of an elected official, signatures must be collected equal to 12% of voters in the last gubernational election. In order to recall the Governor close to 1.5 million signatures must be collected. 1.2 million signatures have been collected and March 17 is the deadline for the collection of the remaining. 410,000 of the 1.2 million collected signatures have been verified so far.

County election officials will have until April 29 to verify any signatures collected. If the recall qualifies, and election would be held later in the year. During this election voters would be asked: should the Governor be recalled, and if so, who should replace him?

There are no limits to how many candidates can run in a recall election. Two Republican candidates appear to be ready to run should the opportunity arise. John Cox, Governor Newsom's opponent in the 2018 election and former San Diego Mayor Kevin Faulconer. Both Cox and Faulconer have been vocal supporters of the recall campaign and launched exploratory committees for the 2022 gubernatorial campaign.

It is too early to determine if the recall campaign will be successful and the recall election will occur. If the recall campaign is successful and qualified, the 2022 gubernatorial campaign will essentially begin a year early and will likely be a more serious threat to Newsom than it would have been otherwise. Secondly, if the recall qualifies and Newsom defeats it, it would not be positive for his political career.

VI. RISK: None

VII. SRATEGIC PLAN: None

VIII. BUDGET IMPACT: None

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February 23, 2021

Retirement Board Agenda Item

TO: Retirement Board

FROM: Stan Conwell, Retirement Investment Officer

I. SUBJECT: Investment Matrix

II. ITEM NUMBER: 6.j.

III. ITEM TYPE: Information Only

IV. STAFF RECOMMENDATION: N/A

V. ANALYSIS:

a) *Investment Program Activities & Governance:*

During the last month, staff worked with a couple of potential transition managers to produce pre-trade reports that provide details on the costs specific to StanCERA's planned rebalance toward the new strategic asset allocation. Staff also attended a private equity portfolio construction training course from the Institutional Limited Partner Association (ILPA) that will help enhance StanCERA's oversight of the private markets program implementation. Work also began on the agreements with the two new private market proxy managers. We can also report that Phase 1 of the rebalance plan is expected to be completed by the end of the month.

b) *Money Transfer Report:*

January:

From			To		
Manager	Asset Class	Amount	Manager	Asset Class	Amount
Northern Trust Russell 3000 Fund	Public Equity	$-223,432	Vista Foundation Fund IV, LP	Private Equity	$223,432

c) *Manager Meeting Notes:*

Attucks Asset Management

In late January, staff attended a firm and fund update call with Attucks Asset Management (formally Capital Prospects). Attucks runs a small cap value equity program for StanCERA through a fund of funds structure. The main subject of the

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call was to review the sub-manager changes and portfolio realignment plans. Attucks will terminate Bernzott due to recent key person resignations. Also, Keeley-Teton will be terminated due to business level changes. A new sub-manager, Seizert Capital Partners, will be added to the portfolio line-up. Seizert uses a quantitative process and will enhance the overall diversification of the current small cap value program. The manager changes were communicated well in advance and NEPC is aware of the changes. From a firm level, staff noted a net gain in AUM since the merger between Attucks and Capital Prospects last year.

Insight

Last month, staff met with the team at Insight for a portfolio review call. Insight manages the cashflow matched bond portfolio in StanCERA's liquidity sub-portfolio. Currently this portfolio prefunds about 6 years of cash shortfalls for monthly benefit payments. During the call we reviewed the portfolio exposures including changes to the security watchlist names. Overall, the portfolio is invested in stable corporate bonds and US treasury/agency bonds. The call concluded with a macroeconomic update for 2021 including their views on the labor market, inflation, and likely fiscal policy changes.

d) *Trainings/Conferences:*

Institutional Limited Partner Association (ILPA) Virtual Institute
Portfolio Construction February 8-9, 2021

Staff attended an intensive two-day training course focused on private equity portfolio construction. Learning objectives included establishing portfolio objectives, program development and execution as well as assessing program performance and portfolio management and monitoring. The course is particularly relevant now as StanCERA is in the process of implementing a private equity program and many of the learning objectives can be applied to other private markets asset classes like private credit and private real assets. The course followed a case study approach with good opportunities for networking. ILPA is an international network and the course was attended by LPs from across the globe including Canada, Europe and South America.

VI. RISK: None

VII. STRATEGIC PLAN: N/A

VIII. ADMINISTRATIVE BUDGET IMPACT: NONE

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REAL ASSETS EDUCATION

Item 7.a

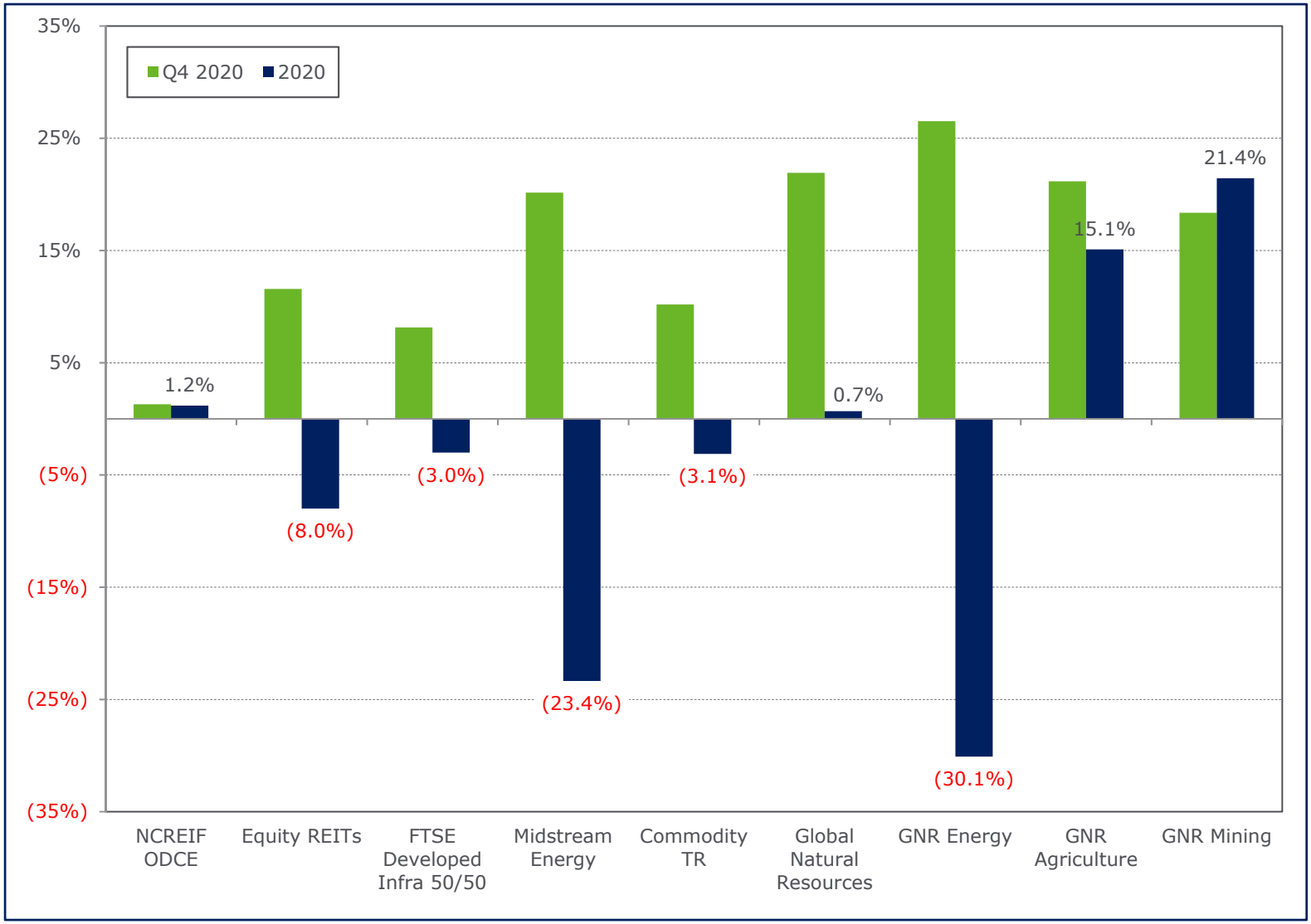
STANISLAUS COUNTY EMPLOYEES' RETIREMENT SYSTEM

February 23, 2021

NEPC Real Assets Beta Group

BOSTON | ATLANTA | CHARLOTTE | CHICAGO | DETROIT | LAS VEGAS | PORTLAND | SAN FRANCISCO

Q4 2020 REAL ASSET RETURNS



Source: NCREIF, FactSet; data as of December 31, 2020.

SUMMARY: REAL ASSETS BETA GROUP VIEWS

Beta Subset	Current Rating	YOY Change	Key Comments
Real Estate			
Core & Core-Plus	Neutral	No Change	• Favor core-plus over core; focus on funds with differentiated exposure and an ability to react to changing market environment • Continue to focus on demographic and "COVID-positive" sectors with secular tailwinds • Within debt, focus on senior debt positions
Non-Core	Positive	No Change	
Debt	Positive	No Change	
Illiquid Real Assets			
Energy	Neutral	Downgrade	• Energy capital markets remain challenging; expect continued volatility of commodities and limited (attractive) investment opportunities • Strong macro drivers supporting certain infrastructure asset classes; operational experience is critical • Renewable power generation adoption continues to ramp-up, but additional investment still required • Metals and mining and agriculture both have attractive return drivers but a limited manager universe • Timber fundamentals/return profile not attractive
Infrastructure	Positive	No Change	
Renewables	Neutral	No Change	
Metals and Mining	Positive	No Change	
Agriculture	Positive	No Change	
Timber	Negative	No Change	
Liquid Real Assets			
REITs	Neutral	No Change	• REITs provide attractive relative yields and offer strong diversification options • Natural resource equities provide a more efficient exposure to physical commodities
Commodities (Long)	Negative	Downgrade	
Natural Resource Equities	Neutral	Downgrade	

ILLIQUID REAL ASSET 2021 VIEWS

General Market Thoughts

- **Volatile Energy markets may present interesting entry points**
  - Macroeconomic and ESG headwinds persist
- **Attractive opportunities in Infrastructure and related operating businesses**
  - Focus on "buy-fix-sell" strategies and managers with operating expertise
  - Communications (towers, fiber) benefit from secular growth trends
- **Attractive long-term demand profile for metals in Mining strategies; challenging implementation in private markets**
- **Agriculture fundamentals interesting but limited manager universe**
- **Limited opportunities in Timber**

Implementation Views

Strategy	Outlook	Commentary
Energy	Neutral	Poor investment returns and capital constrained market provides potential upside over longer term but approach with caution
Infrastructure	Positive	Continue to find attractive opportunities and a need for capital outside of core assets; favor managers with operating expertise who can drive asset cash flow growth and/or managers targeting yield-oriented niche assets
Renewables	Neutral	Favorable financing opportunities exist but regulatory risk remain
Metals & Mining	Positive	Assets with near-term cash flow most attractive; limited implementation options, but focus on managers with diversified portfolios
Agriculture	Positive	Slowing appreciation creates attractive entry point; difficult to implement
Timber	Negative	Less attractive due to low yields and illiquidity

LIQUID REAL ASSET 2021 VIEWS

General Market Thoughts

- **REITs are trading at slight premium to implied private valuations**
  - Non-core exposure represents growth opportunity; wide disparity among underlying property types and by perceived asset quality
- **Commodity return potential challenged**
  - Futures curves for many commodities appear unappealing
  - Natural Resource Equities remain a somewhat more attractive option
- **Listed infrastructure partially rebounded after sell-off in early 2020**
  - Added volatility present during shorter time periods, similar to REITs
  - Asset-level cash flows over long-term periods generally in-line with private strategies

Implementation Views

Strategy	Outlook	Commentary
REITs	Neutral	Property-type selection important, many niche sectors outperforming
Commodities (long-only)	Negative	Low collateral yield and persistent negative roll yield have recently offset favorable supply/demand dynamics
Natural Resource Equities	Neutral	Focus on flexible mandates to be opportunistic with allocation to energy, agriculture, and mining; natural resource equities offer relatively efficient exposure to commodities
Listed Infrastructure	Neutral	Similar yields to private markets, but high sensitivity to equities

REAL ESTATE MARKET VIEWS

General Market Thoughts

- **COVID has accelerated several trends, and the divergence in performance across property types will likely continue**
  - Recovery will likely be uneven, with some property types facing substantial challenges while others have held up well
- **Evaluate core real estate exposure**
  - We continue to emphasize strategies that provide income durability and/or the potential for outsized income growth such as Debt and Core-Plus; REITs can provide differentiated exposure and added liquidity
- **Opportunity remains in non-core strategies**
  - In the US, continue to focus on property types with secular tailwinds such as data centers, last mile industrial, life science, and select rental housing strategies

Real Estate Implementation Views

Strategy		Outlook	Commentary
Core & Core-Plus	Private	Neutral	Favor core-plus strategies over core; focus on managers that have shown an ability to shift portfolios with changing market environments
	Public REITs	Neutral	Consider adding to private core exposure for greater diversification
Non-Core	Value-Add	Positive	Emphasize property types with strong demand tailwinds and managers with an opportunistic mandate; potential for distress but substantial dry powder may limit the opportunity set; select opportunities outside the US provide additional diversification
	Opportunistic	Positive	
Real Estate Debt		Positive	Overall lending levels declined in 2020 as some traditional lenders pulled back, providing opportunities for alternative lenders. Continue to focus on more conservative debt strategies and senior positions.

HARD ASSETS: INFRASTRUCTURE & RENEWABLE ENERGY

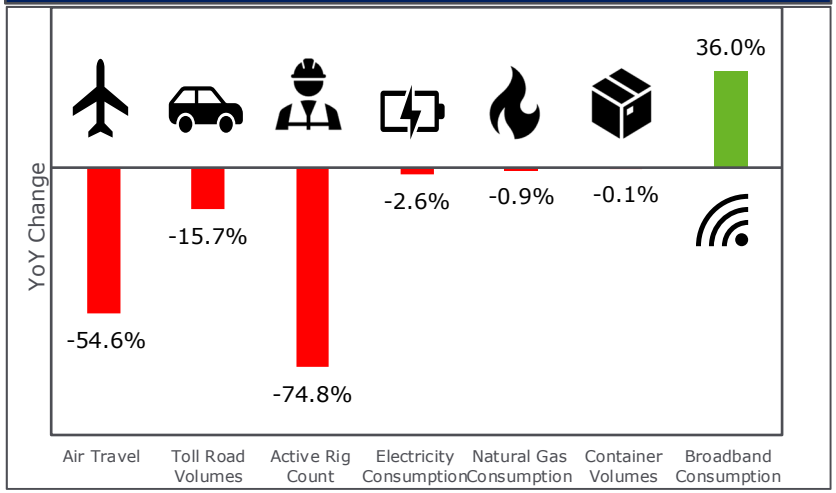
NEPC, LLC

INFRASTRUCTURE

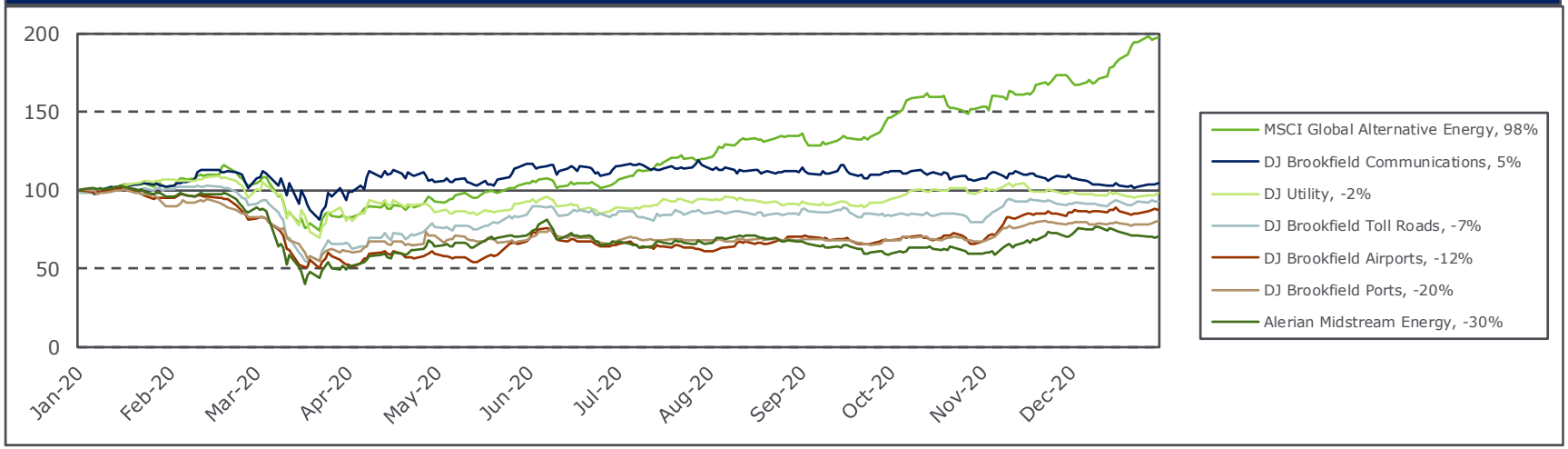
COVID's Uneven Impact

- **Digital infrastructure benefitting from push to modernize communications networks**
  - Proved critical to societal resilience and business continuity
- **Power demand remains resilient**
- **Transportation sector faces ongoing headwinds**
  - Passenger traffic most adversely impacted; freight volumes resilient

Changes in Consumption/Demand



2020 Infrastructure Performance



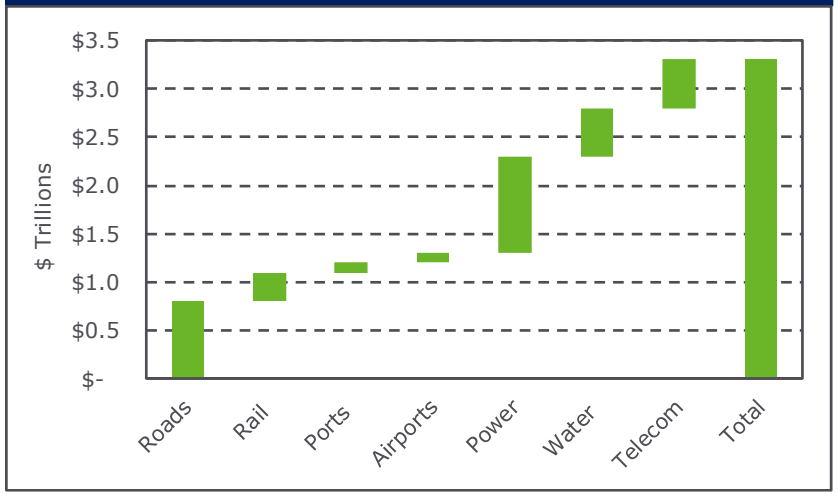
Source: JP Morgan as 6/30/20, FactSet as of 12/31/2020.

INFRASTRUCTURE NEEDS PRIVATE CAPITAL

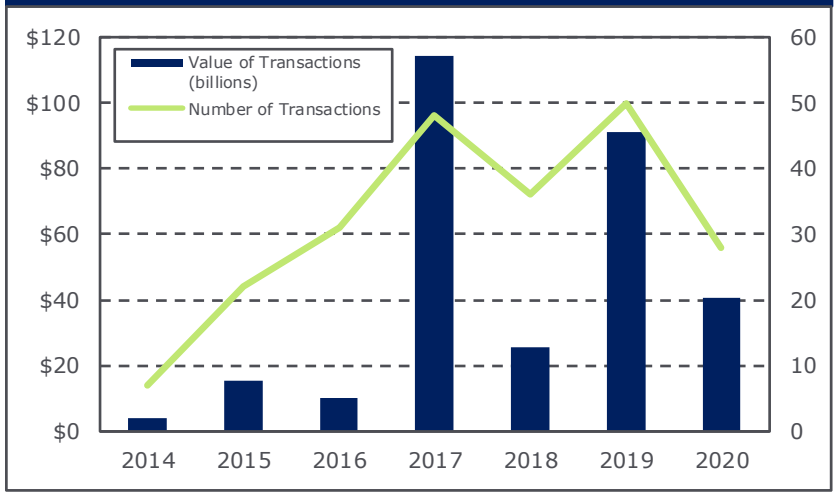
Significant Market Opportunity

- **The world needs to invest $3.3 trillion in infrastructure annually through 2030 to keep pace with projected growth**
- **U.S. infrastructure spending as a share of GDP continues to decline**
  - COVID impacts have exacerbated state and local budget shortfalls
- **Public-Private Partnership (PPP) deal activity muted in 2020**
  - Pandemic impacting pace of projects
  - Recovery likely in 2021 as focus shifts to a post-COVID world
- **Megatrends represent areas of growth**
  - Changing consumer preferences in energy & utilities (renewables), transportation (EV, autonomous) and communications (5G, data demand) needs to be accommodated
- **Interest rate environment favorable for yield producing assets**

Annual Global Infra Investment Required 2016-2030E



Public-Private Partnership Transactions



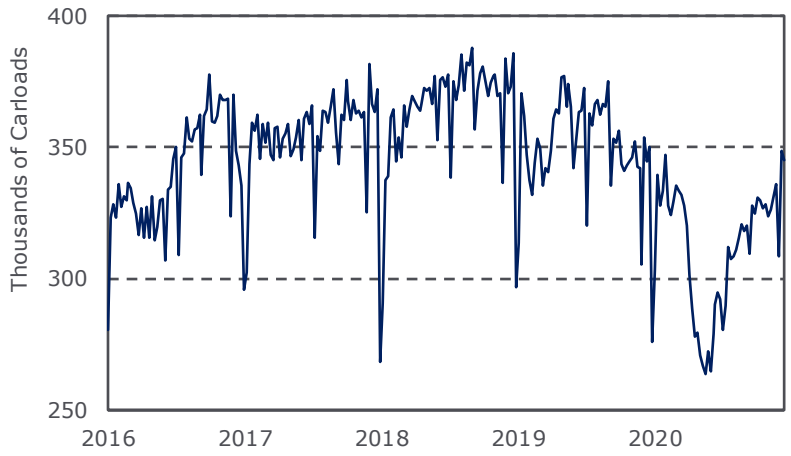
Source: McKinsey Global Institute, Oaktree

TRANSPORTATION & LOGISTICS

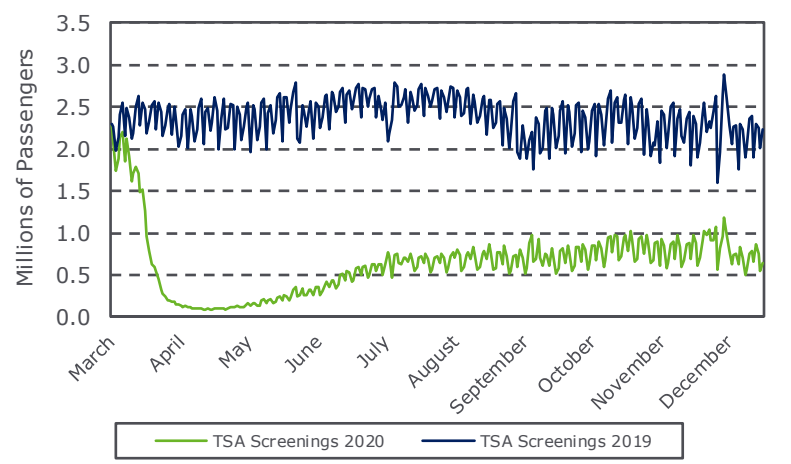
Opportunity & Uncertainty

- **Aging infrastructure and lack of public funding in US points to need for private capital**
- **E-commerce growth enhances need for distribution infrastructure (e.g. rail, cold storage)**
- **EM tailwinds support growth**
  - Air traffic recovery occurring at a faster pace than developed nations
- **Airports have been hardest hit by COVID**
  - Recovery of business and international travel uncertain
  - Distress unlikely as lenders have provided flexibility
- **Port and toll road volumes recovered from Q1 2020 lows**
  - Continued recovery dependent on strength of consumer, international trade and avoiding new lockdowns
- **Transport of goods more resilient than passenger volumes**

Freight Volumes Recovered Quickly



… While Airport Passenger Volumes Remain Anemic



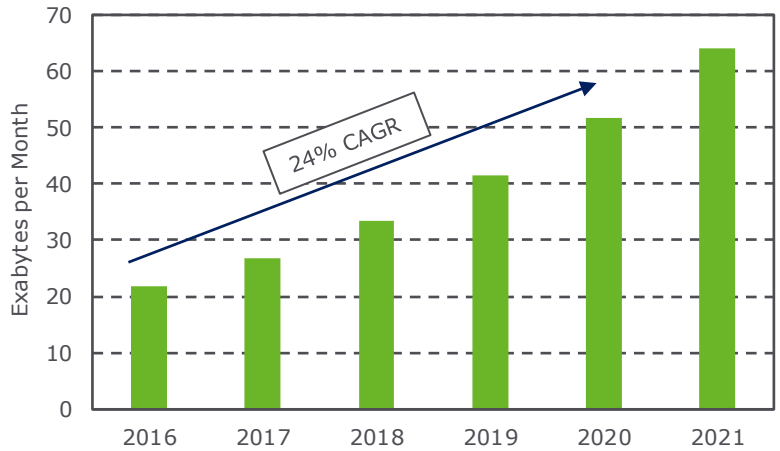
Source: TSA, FactSet.

COMMUNICATIONS

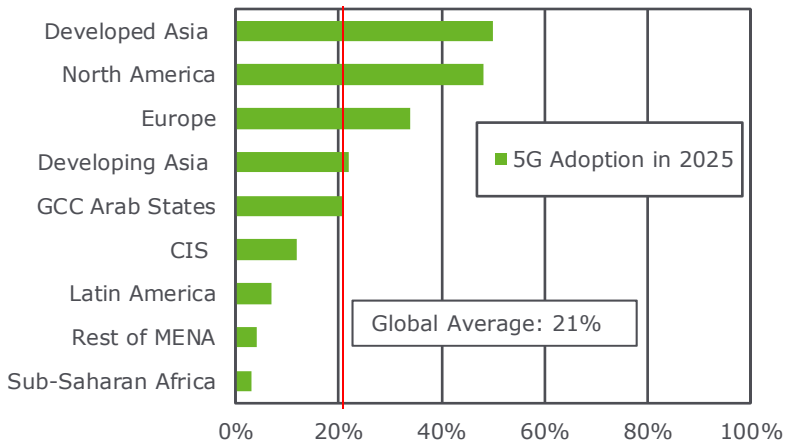
Data, Data, and More Data!

- **Macro tailwinds persist**
  - Data traffic growth and transition to the cloud accelerate fiber buildout
- **5G rollout requires significant private capital investment**
  - Developed Asia and US will lead
- **Valuations frothy relative to historical averages**
  - Long-term growth likely justifies elevated entry-points

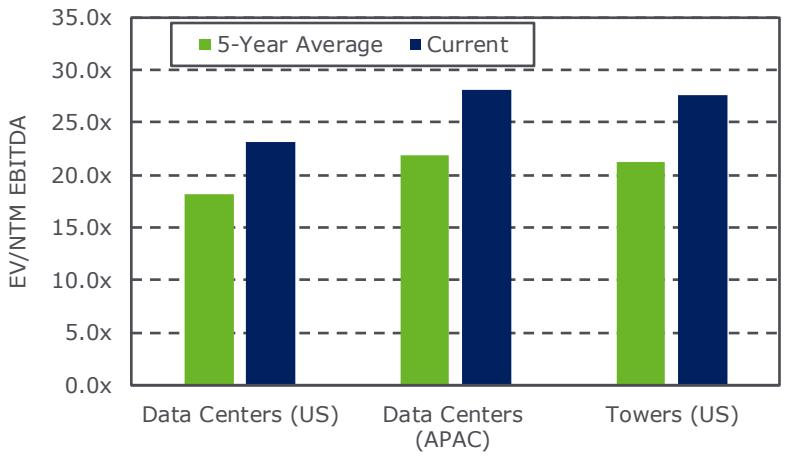
Bandwidth Demand Growth



5G Adoption Forecast



EV/NTM EBITDA Trading Multiples



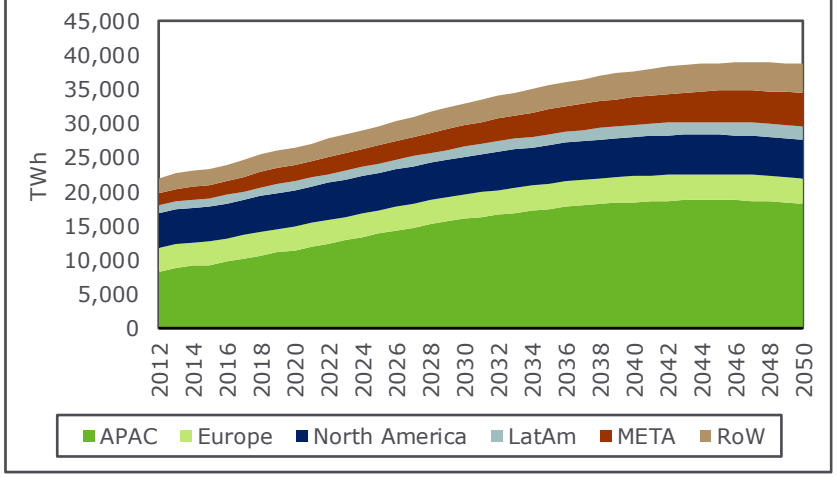
Source: Cisco VNI, GSMA Intelligence, Stonepeak.

POWER & UTILITIES

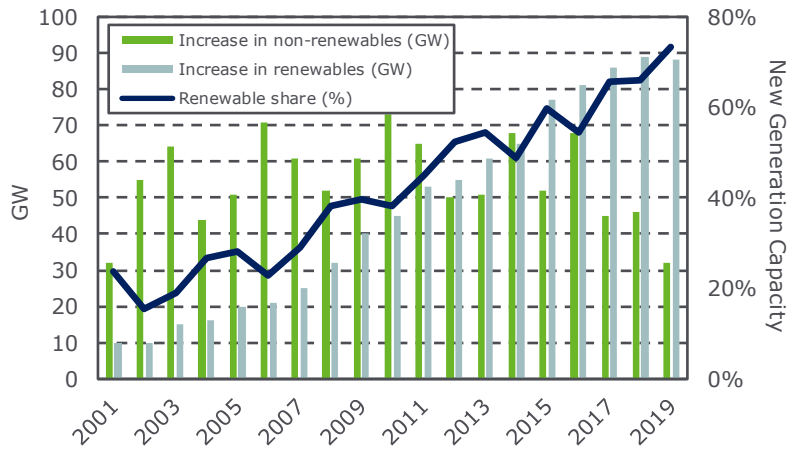
Evolving Utility Market

- **Global electricity demand growing at a moderate pace**
  - Vehicle electrification, digital transition, and EM middle class growth countered by energy efficiency
- **Evolving power grid presents complexity**
- **Regulatory risk persists**
  - Multiples may compress as investors digest unfavorable regulatory rulings

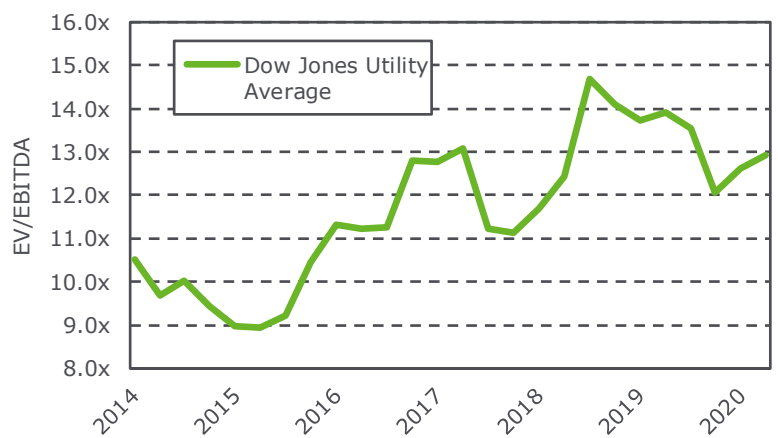
Global Power Demand Growing



Electricity Generation Capacity



Valuations May Have Peaked



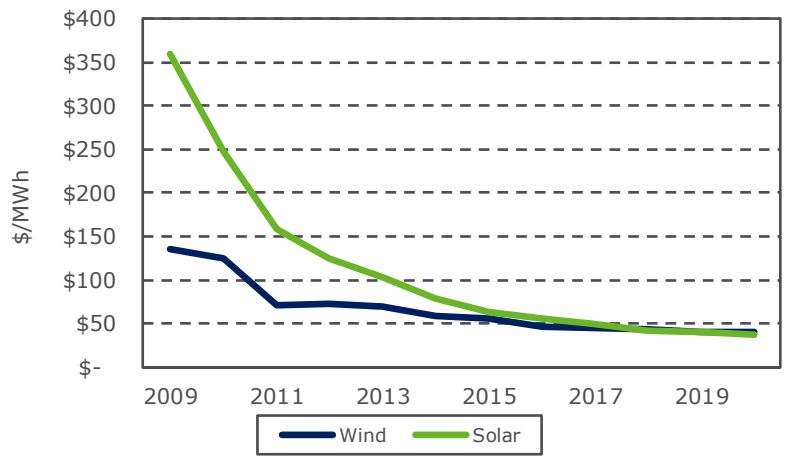
Source: Stonepeak, Bloomberg NEF, Bloomberg.

RENEWABLES

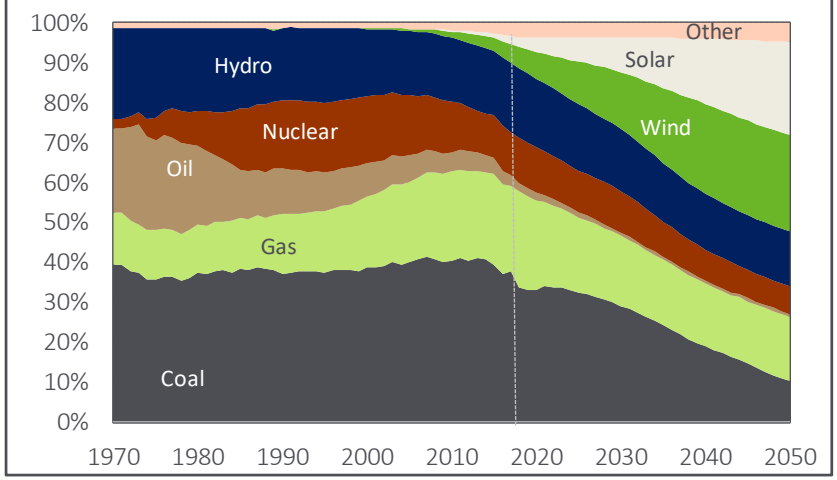
Evolving Power Market

- **Renewable energy costs have declined substantially**
  - Attractive on an unsubsidized basis
- **Renewables will take share over at increasing pace over next decade**
- **Intermittency and grid instability drives need for better battery/storage technology**

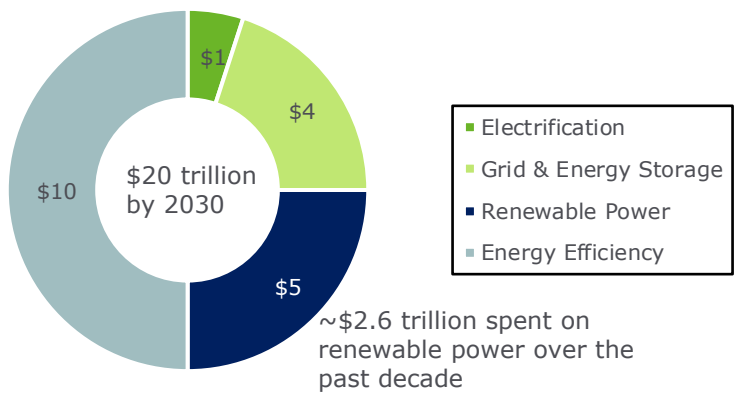
Cost of Renewables Declining (LCOE)



Global Share of Energy Production



Energy Transition Global Investment



~$2.6 trillion spent on renewable power over the past decade

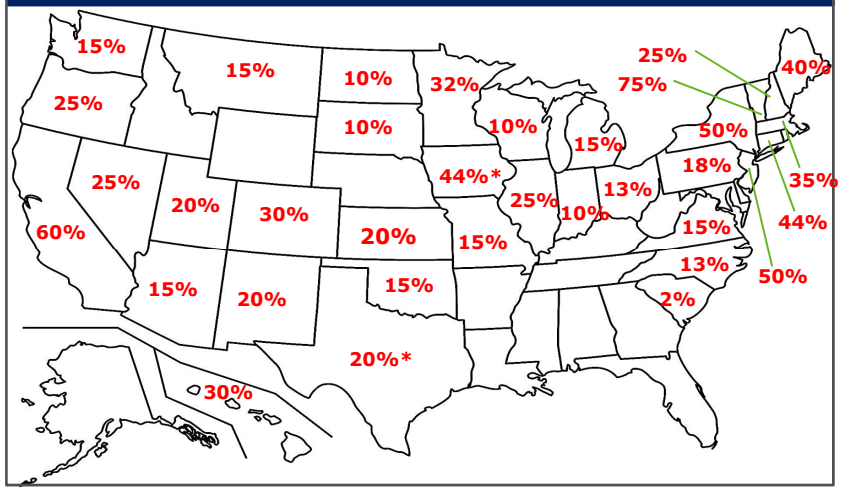
Sources: Lazard, IRENA, Bloomberg NEF. Note: LCOE stands for levelized cost of energy.

RENEWABLE IMPLEMENTATION

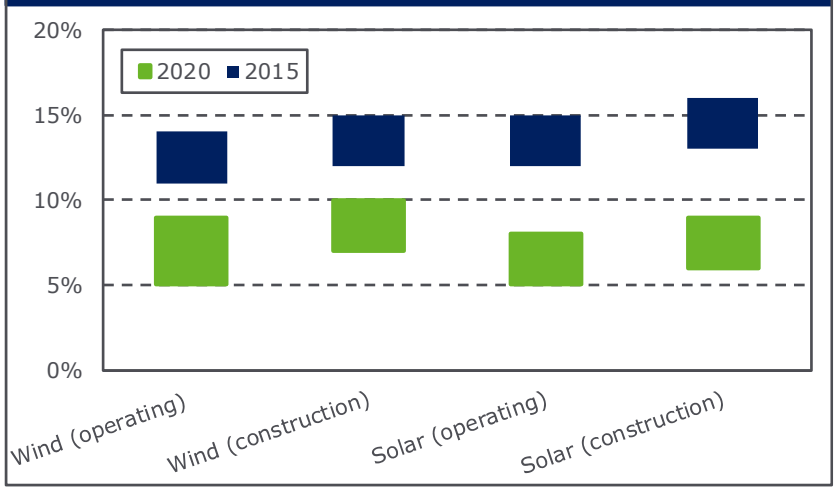
Strong Tailwinds Persist, But Return Expectations Moderating

- **Countries, states and corporations are increasingly adopting aggressive renewables targets**
  - Renewable Portfolio Standards ("RPS") require ramp up in private capital investment in renewable generation and storage capacity
  - RPS mandates have become increasingly common regardless of the political affiliation of state governments
- **Low cost of capital seeking yield driving returns lower**
  - Highly competitive market for contracted renewable assets and low PPA rates impact returns
  - Valuations for assets after contracts expire will dictate ultimate returns for long-term holders
  - More attractive returns require development or merchant risk
  - Emerging market opportunity presents higher return potential with associated risks

RPS Targets



Compressed Return Expectations



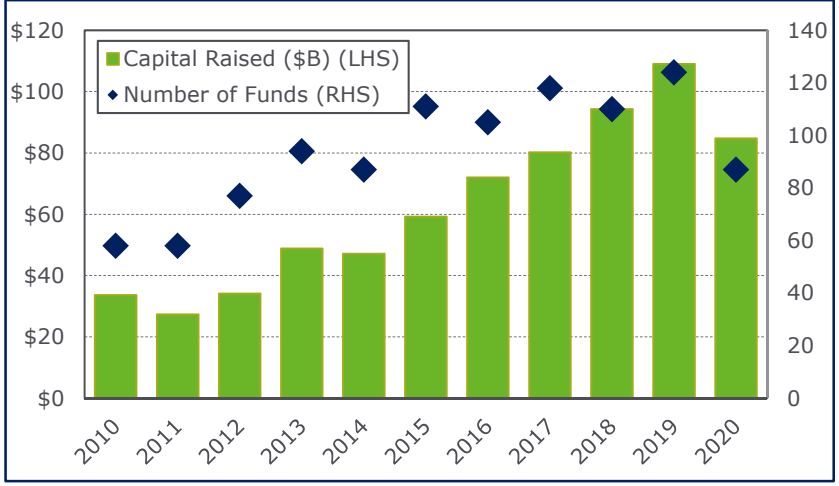
Source: CBRE, EIA. Note: * State RPS provided in total MW; figures shown represent share of 2019 generation derived from renewable sources.

PRIVATE INFRASTRUCTURE SNAPSHOT

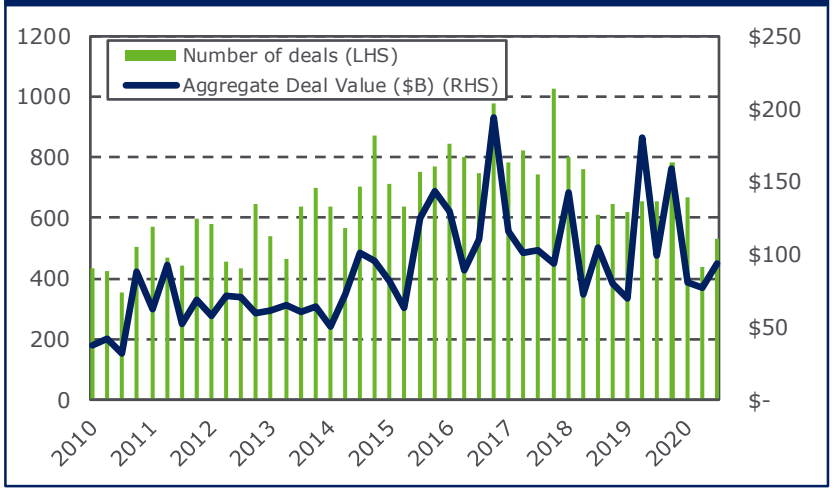
Robust Fundraising Fuels Transaction Volume

- **Competitive market**
  - Premium bids from investors with low costs of capital and long time horizons drive pricing
- **Robust fundraising**
  - Significant dry powder in search of deal-flow
  - Transaction size increasing
- **Dry powder grows**
  - As transaction activity declined in 2020 due to COVID, dry powder has reached an all time high of ~$250 billion
- **Low interest rate environment will continue to drive search for yield**
  - Expectation transaction activity resumes to pre-COVID levels in 2021
- **Capital structures highly levered**
  - Attractive total returns require strong exits
- **Unlisted opportunities provide better less volatility than listed allocations**

Strong Fundraising Environment



Transaction Activity Slowed in 2020



Source: Preqin; data as of June 30, 2020.

LISTED INFRASTRUCTURE

NEPC, LLC

RELIABLE YIELDS, EQUITY-LIKE VOLATILITY

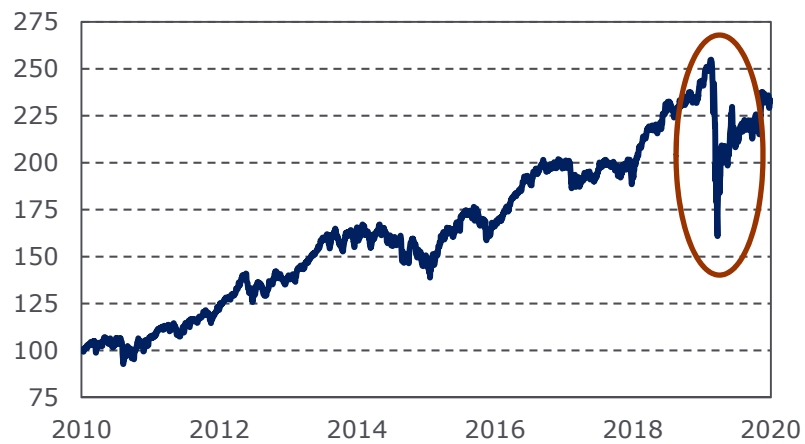
How Listed Infrastructure Can Fit in a Real Assets Portfolio

- **Liquid infrastructure has historically generated yields similar to those in open-end private infrastructure strategies**
  - These companies have, on average, paid out 60% of free cash flow
  - Private infrastructure strategies' payout ratios have varied from 40% to 90%, depending on the mandate of each fund
- **Volatility, especially during economic turbulence, needs to be considered**
  - Listed infrastructure sold off quickly during early 2020, but also rebounded rapidly
  - Performance lagged broader equity markets as transportation assets struggled
- **Listed infrastructure may be a reasonable alternative for investors that cannot allocate to private market strategies**

Historical Yields

Time Period	Avg. Dividend Yield
1 Year	3.19%
3 Year	3.44%
5 Year	3.45%
10 Year	3.50%
15 Year	3.56%
20 Year	3.46%

Listed Infrastructure Performance



Sources: FactSet as of December 31, 2020; FTSE Global Core Infrastructure 50/50 Index
Indexed to 100 as of December, 31, 2010

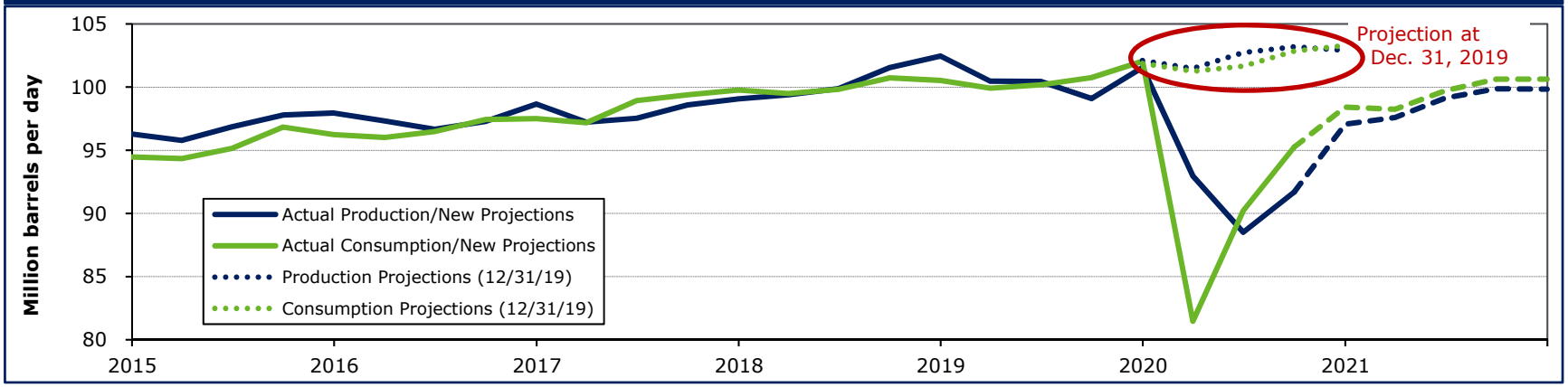
NATURAL RESOURCES: ENERGY & MINING

NEPC, LLC

ENERGY MARKET VOLATILITY PERSISTS

- **Oil markets entered 2020 over-supplied; production cuts from OPEC+ were expected in early March, but negotiations failed**
- **Demand has partially recovered from lows, but outlook remains uncertain**
  - Demand is *currently* projected to outpace supply into 2021, but this may be optimistic as supply is likely to increase as prices rise
- **Accelerated distress in North American oil and gas from demand shock**
- **In early 2021, Saudi Arabia committed to further production limits, in an effort to boost prices**

Global Supply and Demand



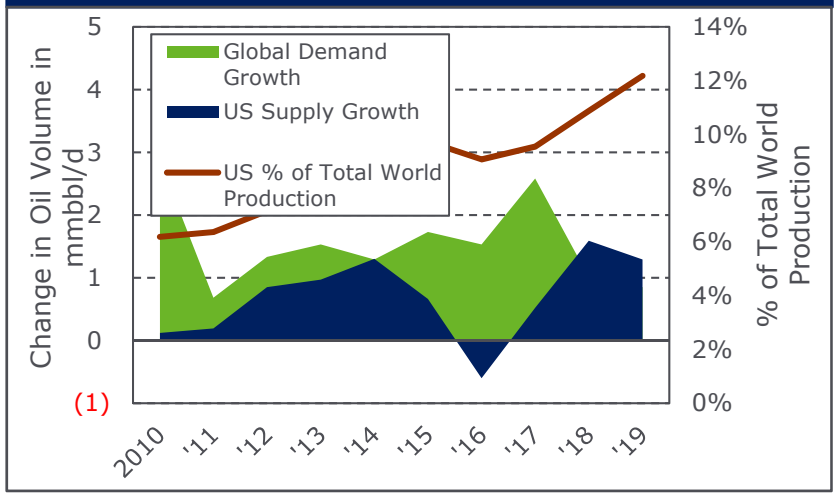
Source: EIA as of September 30, 2020.

ENERGY RETURNS LAGGING EXPECTATIONS

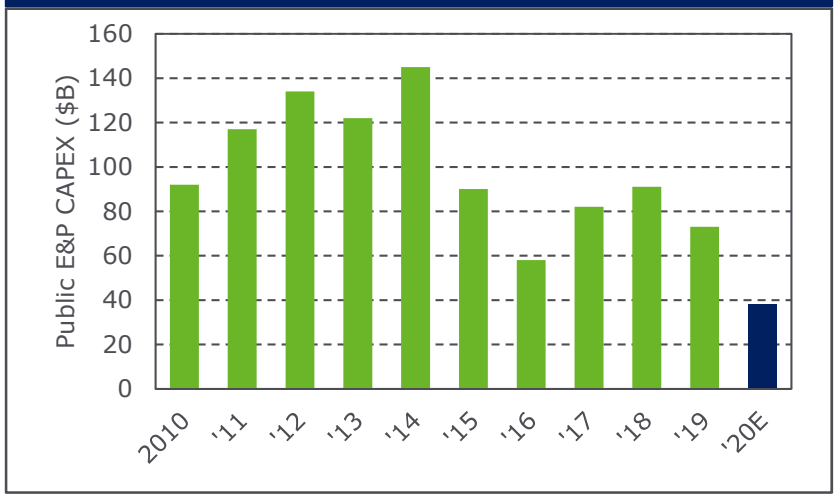
New Wave of Capital Drove Production

- **U.S. shale production has driven global supply growth over the past ten years**
  - Capital deployed into this boom has failed to generate the returns expected by investors
- **Production should decline in 2021**
  - Public E&P companies pressured by shareholders to cut reinvestment rates

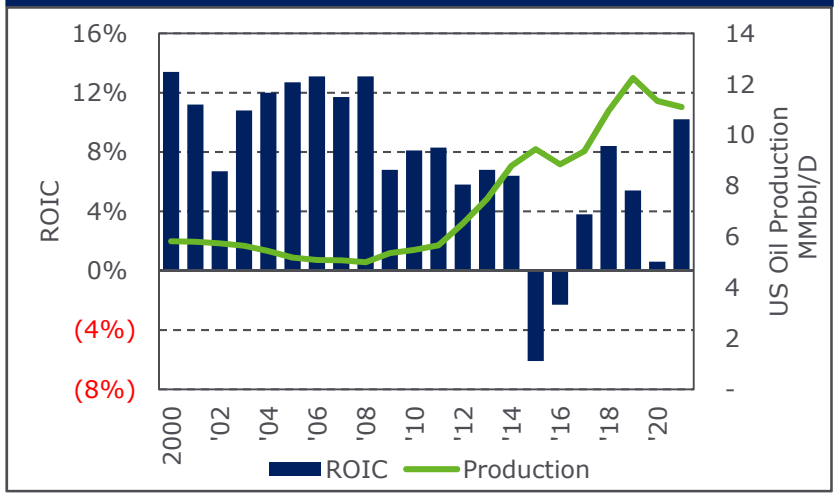
US Production Has Recently Outpaced Global Demand



CAPEX Budgets Continue to Come Down



Growth Has Not Equaled Solid Returns



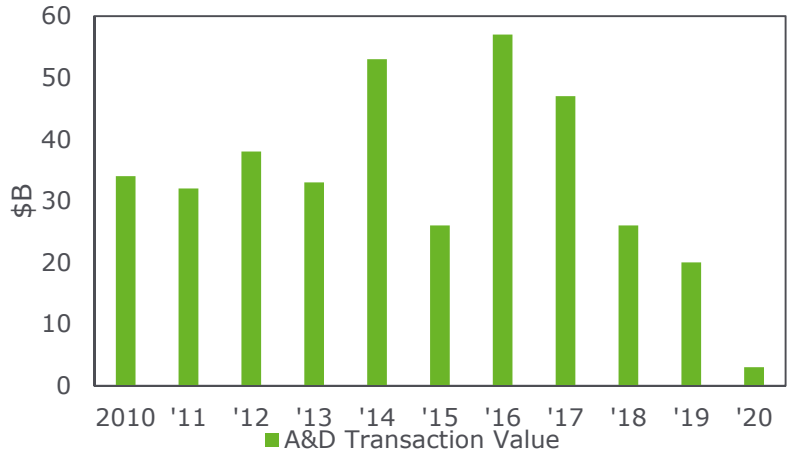
Sources: EIA as of December 31, 2019, Kimmeridge, EnCap as of September 30, 2020

SECULAR DECLINE OR CYCLICAL BOTTOM?

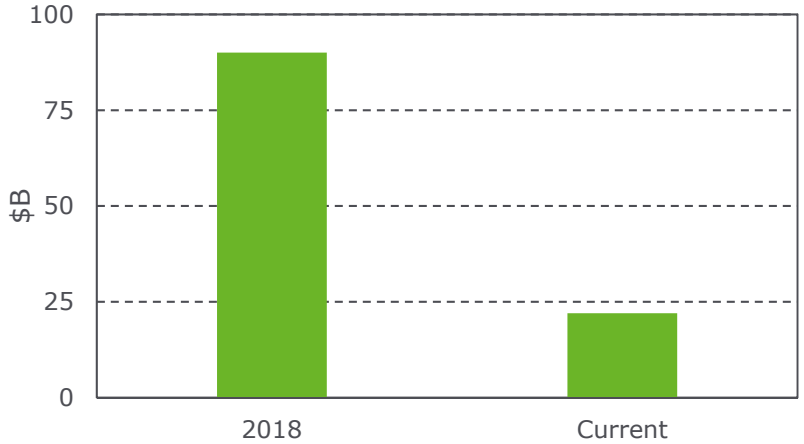
The Case For New Investment

- **Decreasing interest from banks and private equity**
- **A&D (Acquisition & Divestment) market currently non-existent**
  - Transaction volumes should pick up if oil and gas prices continue to increase
- **Energy demand will be met by traditional (gray) and renewable sources (green)**

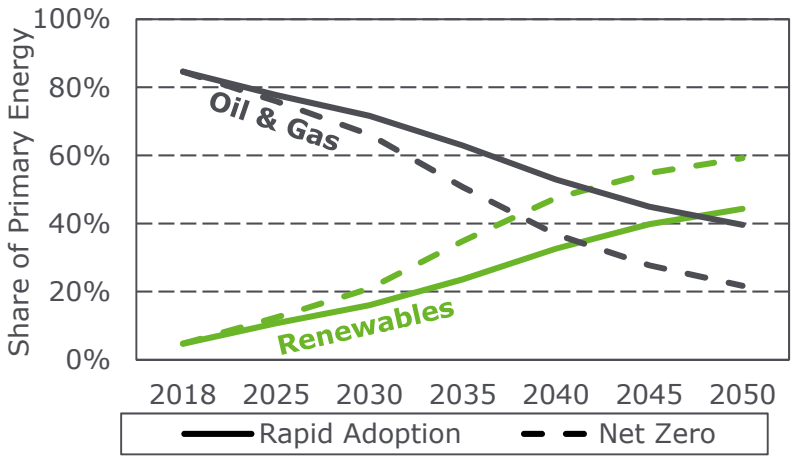
Transaction Market Frozen



Private Equity Dry Powder



Global Share of Energy Production



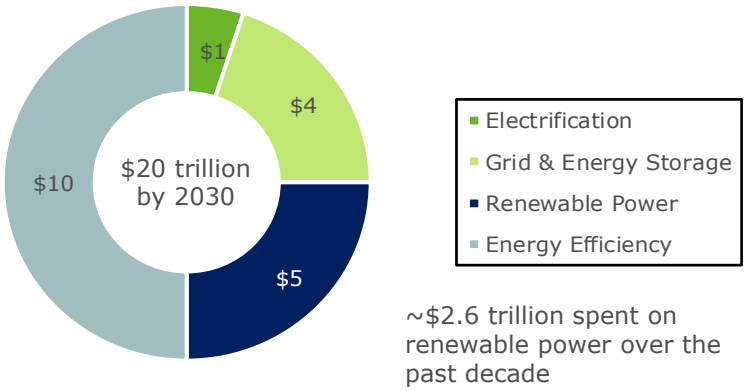
Sources: Carnelian Energy, RBC Capital Markets, DrillingInfo, Dealogic, as of September 30, 2020, BP Plc

U.S ENERGY USE IN PERSPECTIVE

Complex and Capital Intensive

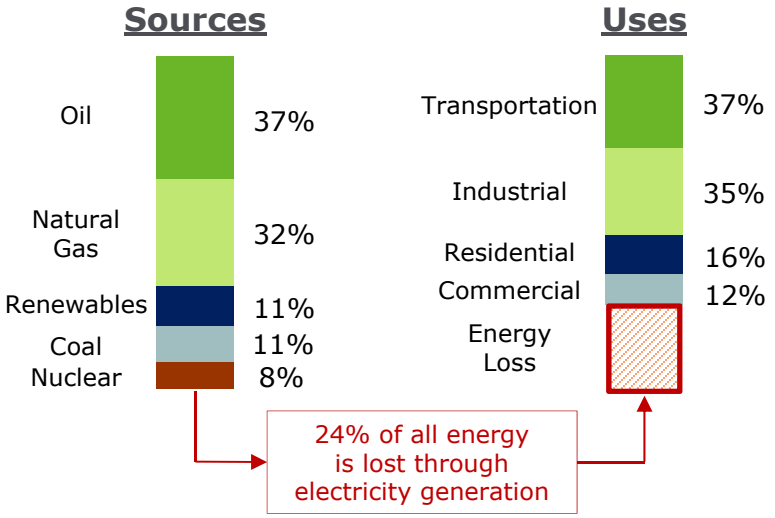
- **Material amounts of energy lost during electrification**
- **Energy transition is complicated and expensive**
- **More than just solar panels and wind turbines**

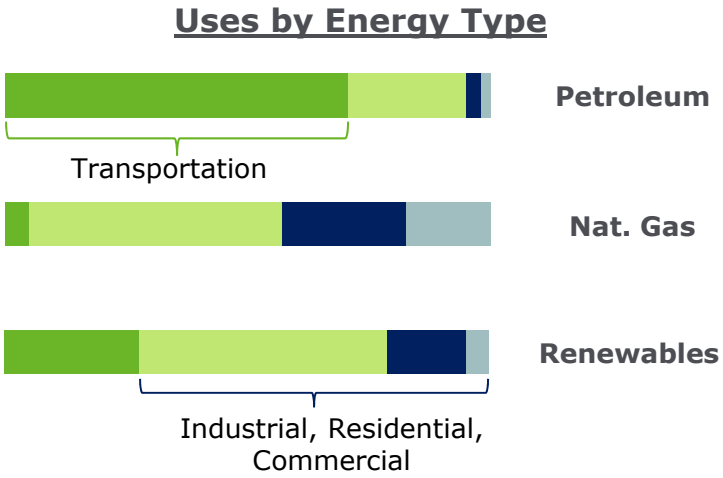
Energy Transition Global Investment



~$2.6 trillion spent on renewable power over the past decade

Sources & Uses of Energy





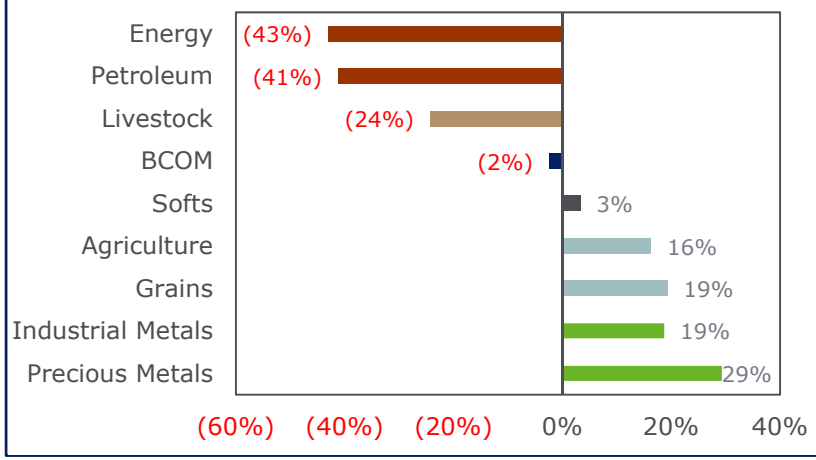
Sources: IRENA, EIA as of December 31, 2019.

MINING OVERVIEW

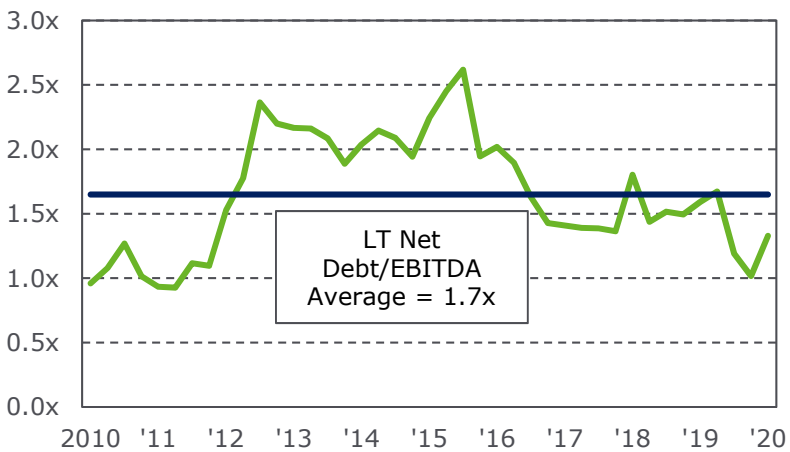
Investment Outlook

- **Metals have demonstrated diversification benefits**
  - Both precious and industrial metals generated strong returns
- **Equity valuations lower than long-term averages**
- **Debt levels have been reduced**
  - Companies may have capacity to borrow to finance new projects

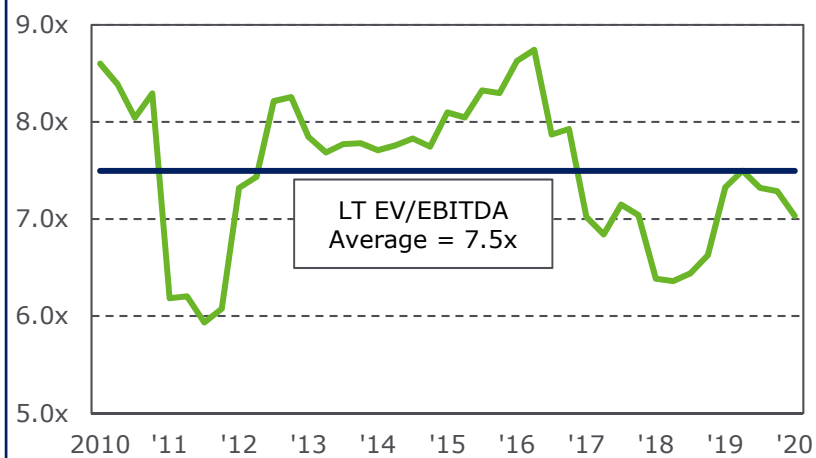
Bloomberg Commodity Breakdown



Large Cap Balance Sheets Healthy



Valuations Appear Attractive



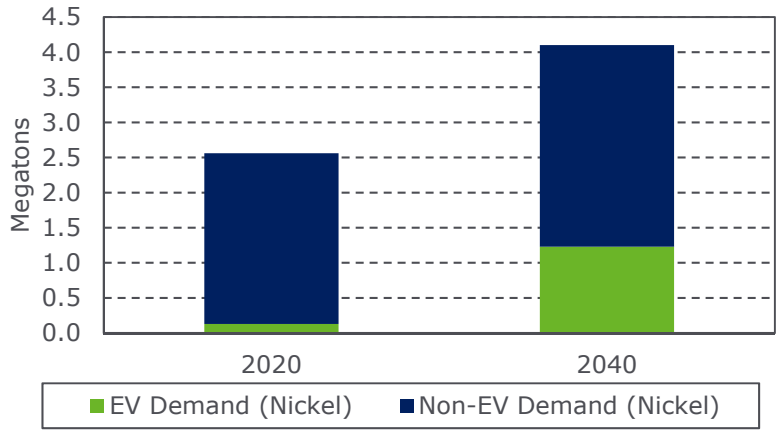
Source: FactSet, MSCI World M&M as of December 31, 2020

MULTIPLE SOURCES OF DEMAND GROWTH

Diversification

- **Consumer base for metals and materials continues to diversify**
  - Electrification of vehicles expected to create demand for a wide spectrum of metals
- **NEPC prefers to invest with managers that can create diversified portfolios**
  - Portfolio construction key to mitigate sector-specific risks (development, operational, commodity price)

Batteries to Drive Demand



End-User Demand is Important

Agriculture	Industrial Metals	Specialty Metals
Phosphate Salt Potash	Limestone Graphite Bauxite Copper	Titanium Lithium Cobalt Tungsten
↓	↓	↓
Fertilizer Food Meat Substitutes	Constructions Materials Pipes/Coatings Glass and Paper	Alloys Batteries Magnets Corrosion Resistance

Source: Goldman Sachs, Orion Resource Partners, NEPC Research

REAL ESTATE

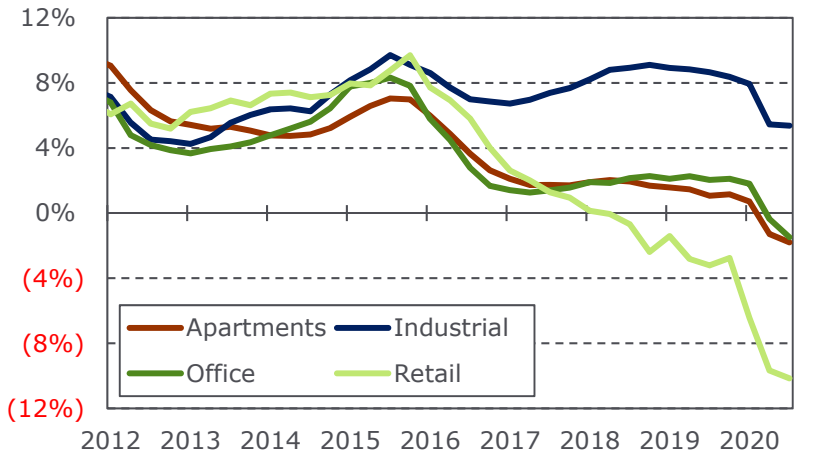
NEPC, LLC

OVERVIEW

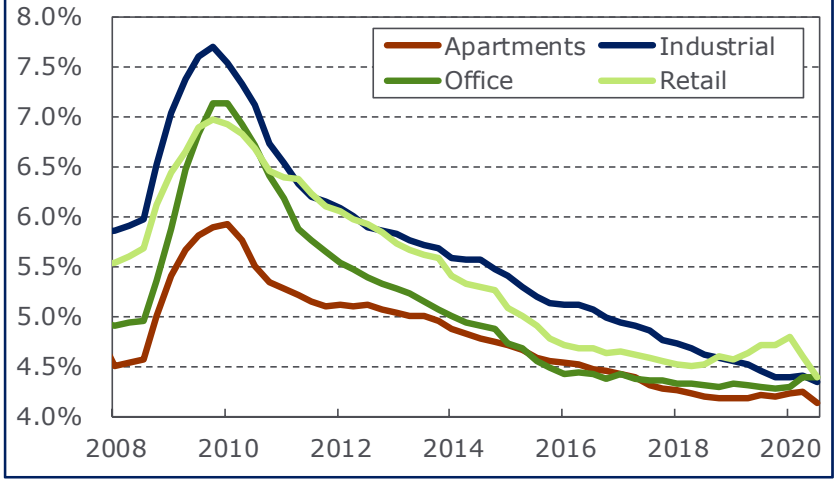
Return Trends Vary by Property Type

- **COVID had accelerated some trends, and reversed others**
  - Accelerated: eCommerce (good for industrial, bad for retail)
  - Reversed: Gateway market favorability
- **Uncertainty persists – what changes in preferences will be permanent?**
- **Expect transaction volumes to increase as lender patience wears thin**
  - May also generate attractive deal flow for distressed investors
- **Vintage years during and following periods of distress tend to perform well**
  - However, large amount of dry powder tempers expectations of broad distressed opportunities

Rolling 1-Year Appreciation Returns



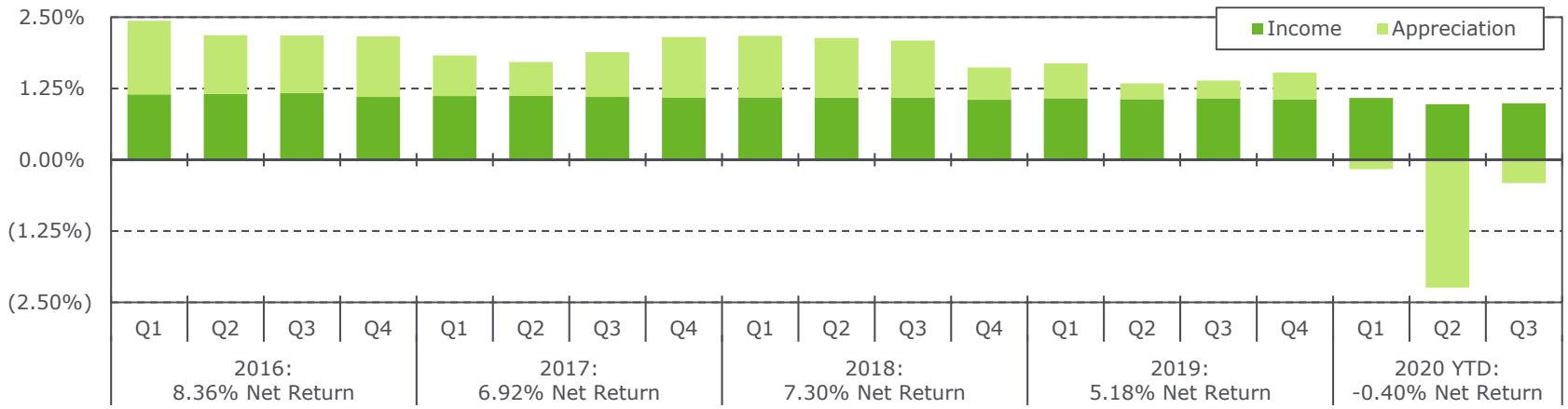
Cap Rates



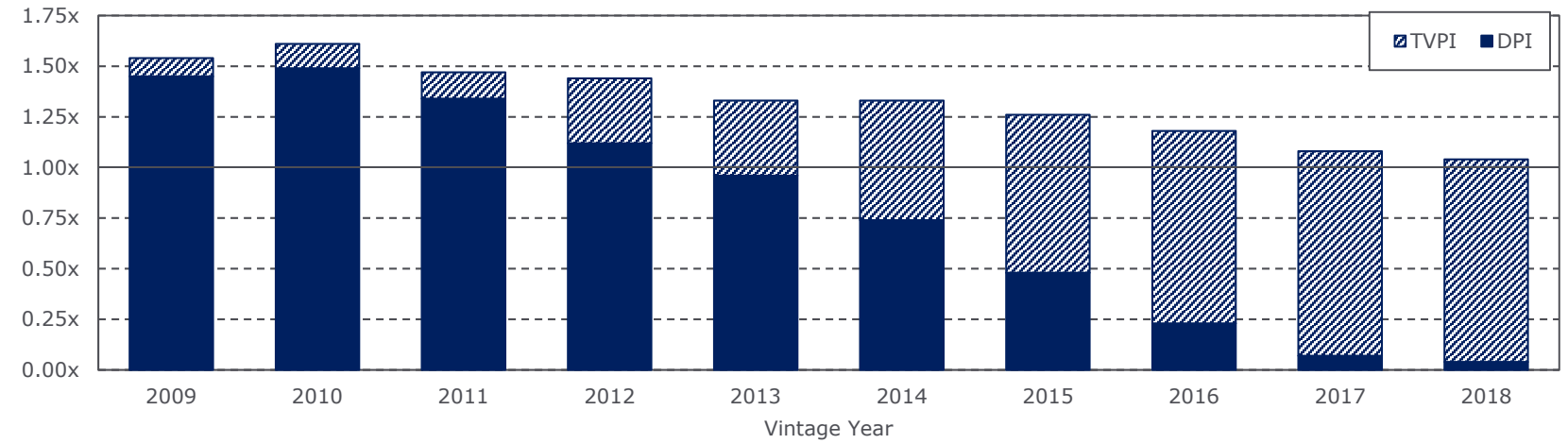
Sources: NCREIF; data as of September 30, 2020. Appreciation returns are unlevered.

REAL ESTATE PERFORMANCE

Core Real Estate: 2nd Quarter Write-Downs Drive Negative YTD Performance



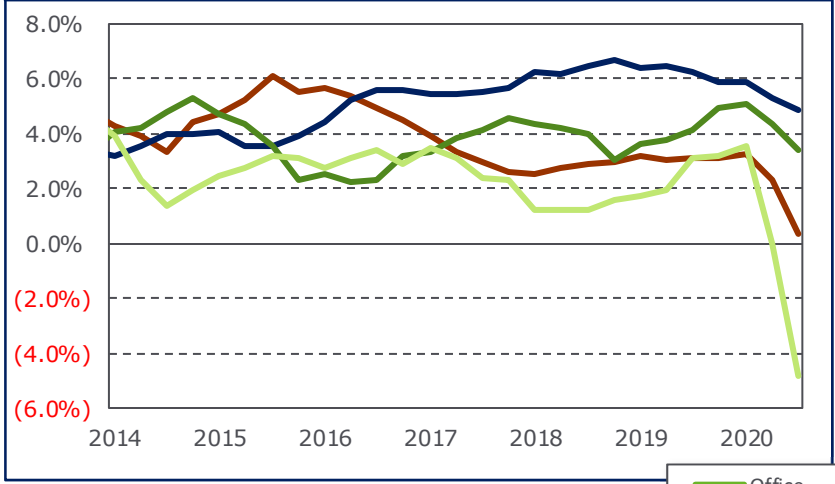
Value-Add & Opportunistic: Median Fund Returns Tick Down Slightly in 1H 2020



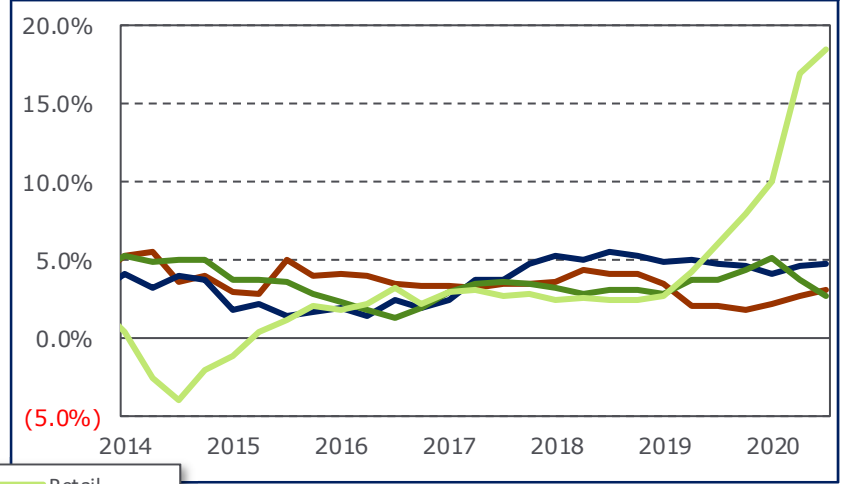
Sources: Core Real Estate returns represented by the NCREIF Open-End Diversified Core Equity Index (ODCE) as of September 30, 2020. Value-Add & Opportunistic Real Estate returns represented by the C|A Global Value-Add & Opportunistic Real Estate benchmark as of June 30, 2020.

REAL ESTATE FUNDAMENTALS

Revenue Growth (Rolling 1-Year)

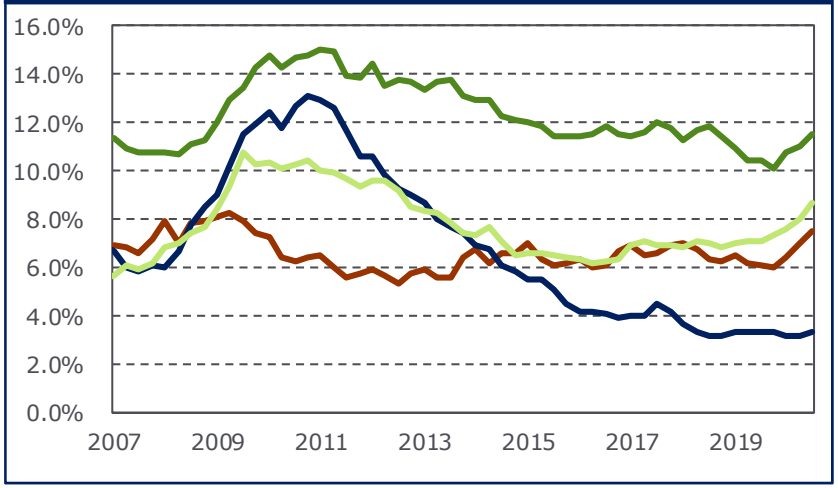


Expense Growth (Rolling 1-Year)

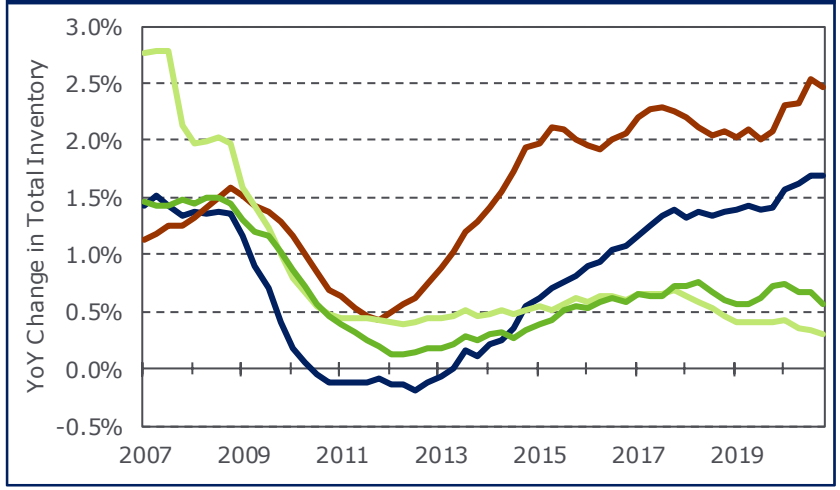


Office
Retail
Industrial
Multifamily

Vacancy Rates



New Supply



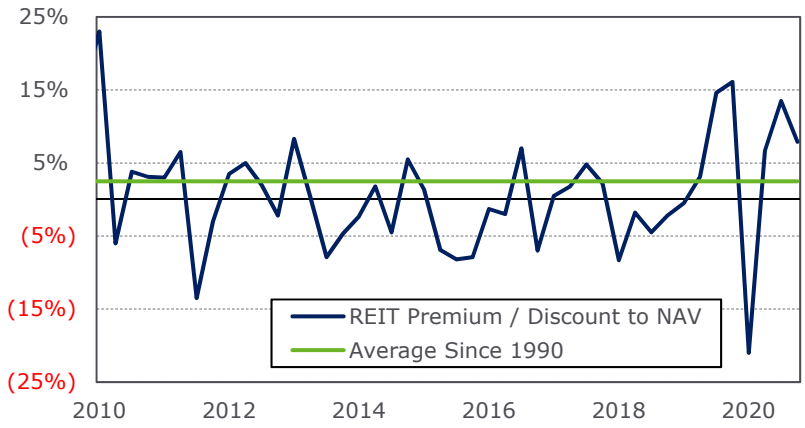
Sources: New Supply data from CoStar as of December 31, 2020; all other data from NCREIF, as of September 30, 2020.

US REIT MARKET UPDATE

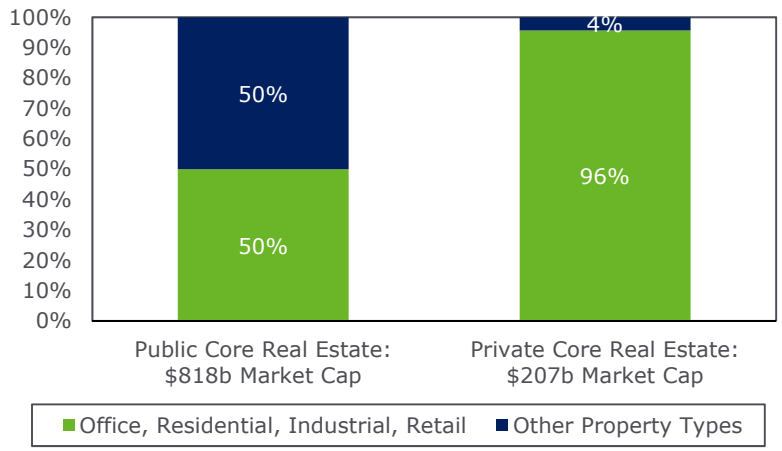
Volatility and Property Type Dispersion in 2020

- **Retail, Hospitality, Seniors Housing hardest hit during COVID-19 pandemic**
- **Overall REIT market pricing implies premium vs. implied NAV**
  - Industrial, Data Centers, and Triple Net Lease driving increased valuations
- **Forward valuation multiples are generally in-line with long-term averages**
- **Higher short-term volatility possible**
  - REITs perform like private core over longer periods of time but will exhibit more volatility should equity market volatility increase
- **REITs can provide exposure to alternative property types not typically accessed by private core real estate funds**

REIT Pricing at Wide Premiums to NAV



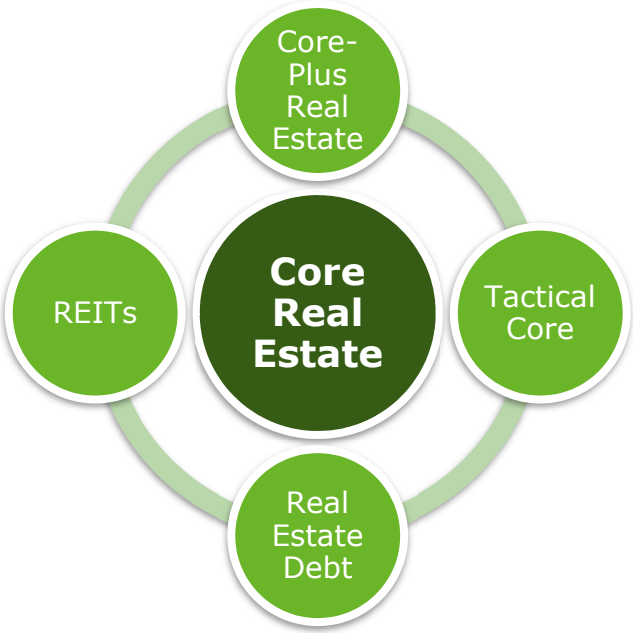
REITs Offer Diversification to Private Core

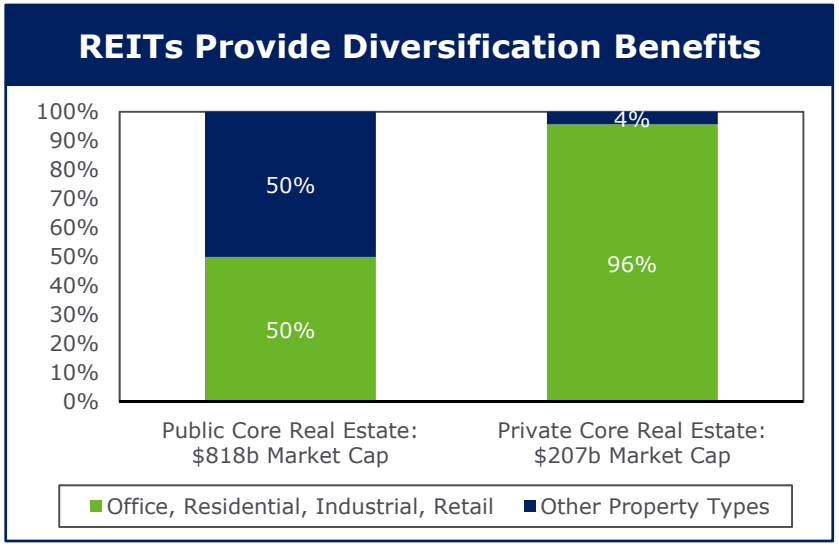


Source: Wells Fargo, Green Street; as of December 31, 2020. Diversification data from NAREIT, NCREIF, NEPC Analysis; as of September 30, 2020. "Public Core" represented by the FTTSE NAREIT Equity REITs Index; "Private Core" represented by NCREIF ODCE Index.

AUGMENT CORE REAL ESTATE PORTFOLIO

- **Core real estate (ODCE Funds) can continue to serve as the base of a real estate portfolio**
- **Clients with core real estate allocations should consider adding core-adjacent strategies**
- **Several options exist depending on client objectives:**
  - Core-Plus Real Estate – Generally diversified (like ODCE) but unconstrained; slightly higher target risk/return profile
  - Tactical Core – Differentiated or targeted exposure, similar risk/return profile to core
  - Real Estate Debt – Strong current income; capital stack seniority provides downside protection but also limits upside potential
  - REITs – Greater liquidity but also more volatile (as they're publicly traded); provide meaningful diversification benefits





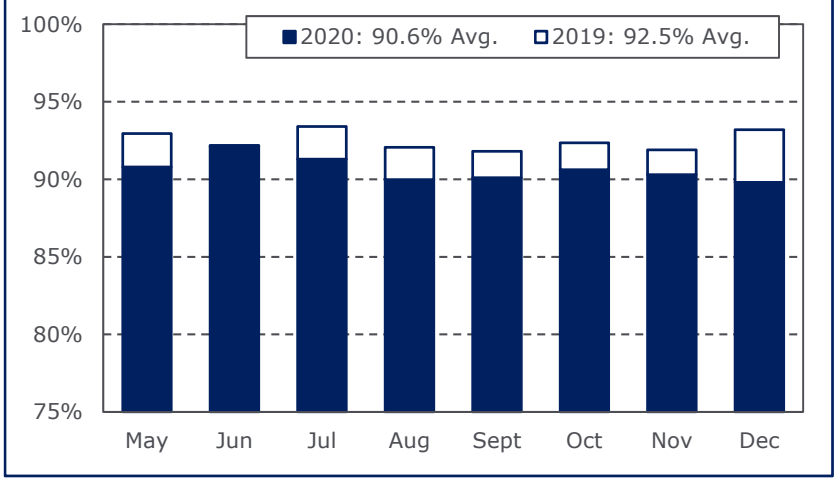
Source: NAREIT, NCREIF, NEPC Analysis; as of September 30, 2020. "Public Core" represented by the FTTSE NAREIT Equity REITs Index; "Private Core" represented by NCREIF ODCE Index.

RESIDENTIAL

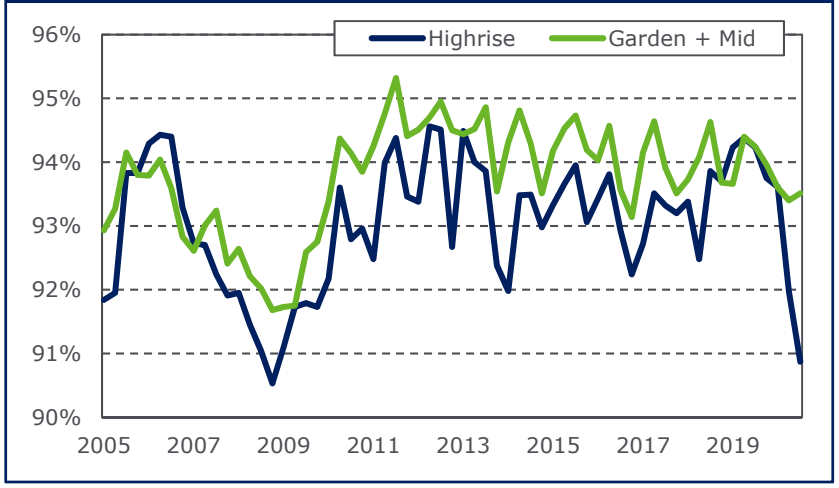
Tale of Two Markets

- **Rent collections remain generally strong nationwide**
- **Pandemic impact varies by property type, location, and tenant profile**
  - Suburban, less-dense product has performed well
  - Urban, more-dense assets have struggled
- **Class B multifamily and workforce housing remain attractive**
  - Stable demand; prices and rents less sensitive to economic growth
  - Limited new construction
- **Future trajectory of dense urban living remains challenged**
  - Most new development has been focused on urban luxury multifamily
  - Rent levels have deteriorated and vacancies ticked up in 2020
- **Single family housing is likely to benefit from current migration trends away from gateway cities**

Multifamily Rent Collections vs. 2019



Occupancy Rates Diverge



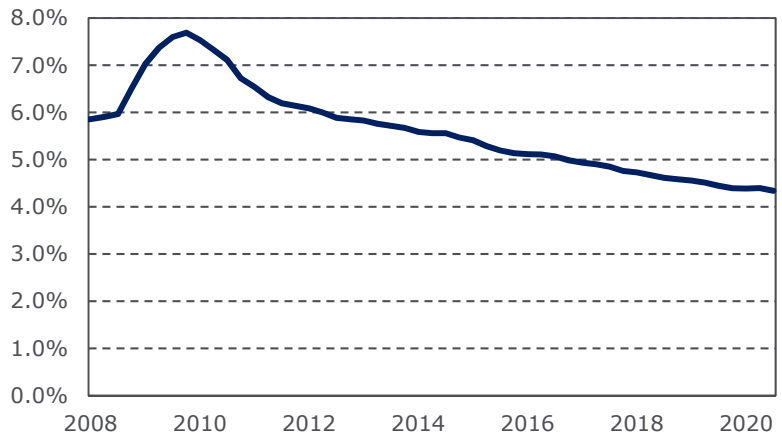
Source: NCREIF as of September 30, 2020; NMHC, rent collection data is from a nationwide survey of professionally-managed apartment units conducted by NMHC, percentages indicate percent of rents collected by the 20th of each month, average is for May-Dec of each year.

INDUSTRIAL

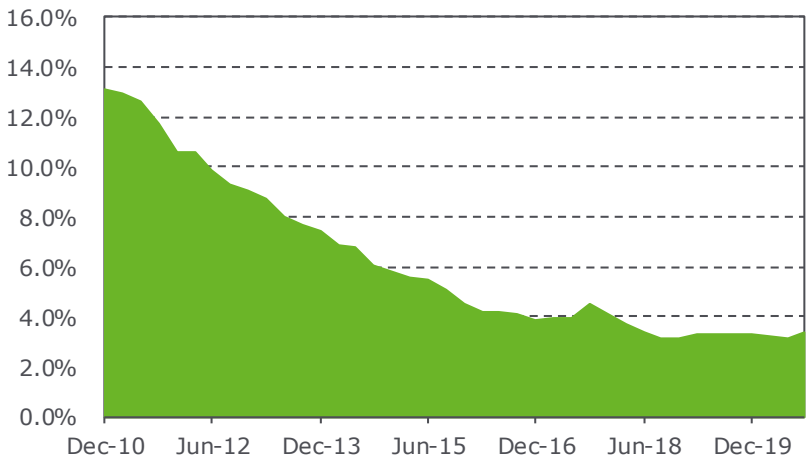
eCommerce Growth, Boosted by Pandemic, Continues to Drive Demand

- **eCommerce continues to be dominated by Amazon, but other retailers forced to catch-up in 2020**
- **Supply of infill industrial assets declining in many markets due to more valuable uses of land**
- **Growing focus on cold storage and other specialty industrial sectors**
  - Increased demand from for grocery and pharmaceutical needs
  - Historically low occupancy levels and very limited new supply; older facilities are less efficient and increasingly becoming obsolete
- **Asset quality and location still matters; even with record high demand**
  - Manager skill and tenant relationships also remain critical

Industrial Cap Rates



Industrial Vacancy at All Time Lows



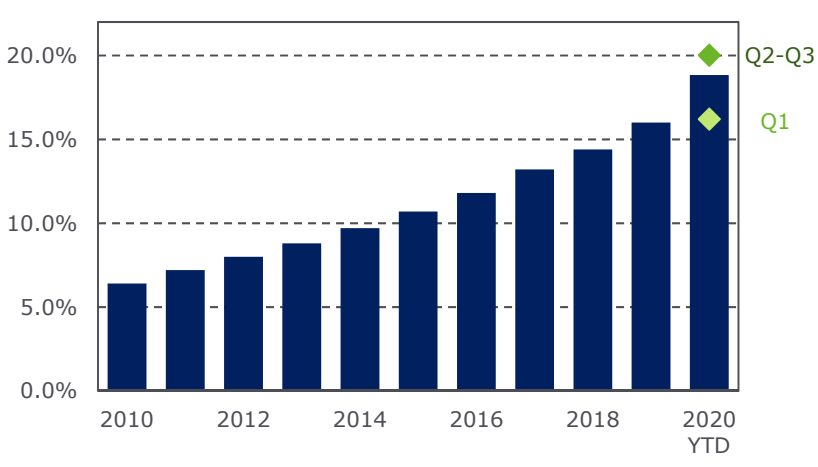
Source: NCREIF, as of September 30, 2020.

RETAIL WOES PERSIST

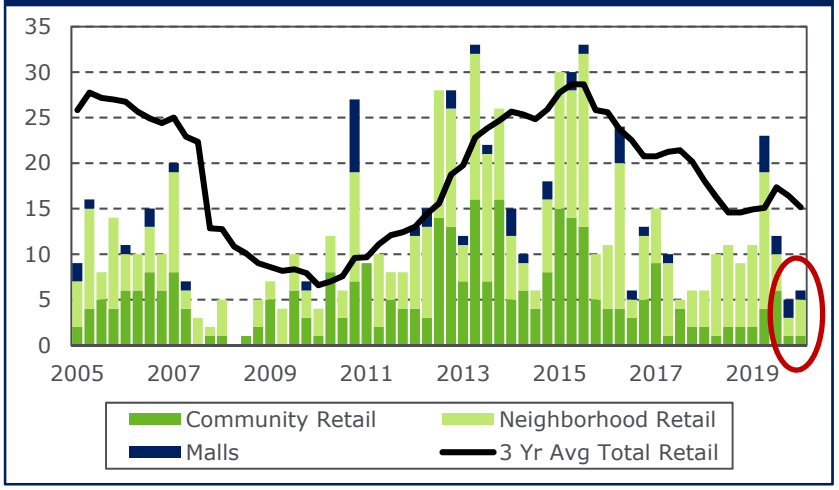
COVID-19 Exacerbates Challenges for Retail

- **Pre-COVID, there was "good" retail and "challenged" retail; today all retail is facing challenges**
  - Even grocer-anchored retail has had challenges due to performance of in-line tenants
- **Recovery is expected for certain types of retail and/or certain tenants**
  - It's likely going to be a lengthy recovery as retailers look to rebound and landlords look to capture deferred rent
- **Market pricing for retail assets is unclear, with only 11 private core transactions in the second and third quarters of 2020**

eCommerce % of Total Retail Sales



Private Core Asset Transaction Volumes



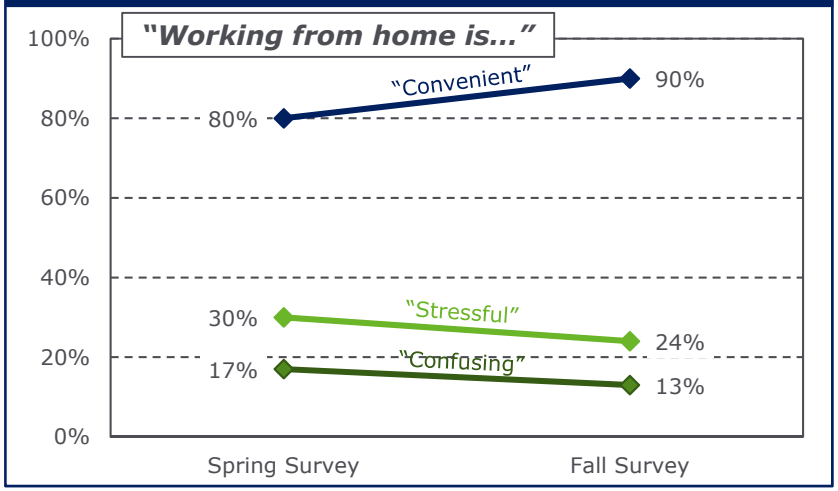
Sources: Digital Commerce 360 analysis of US Department of Commerce data; NCREIF. eCommerce data excludes sales of items "not normally purchased online such as spending at restaurants, bars, automobile dealers, gas stations and fuel dealers."

OFFICE: A YEAR (MOSTLY) EMPTY

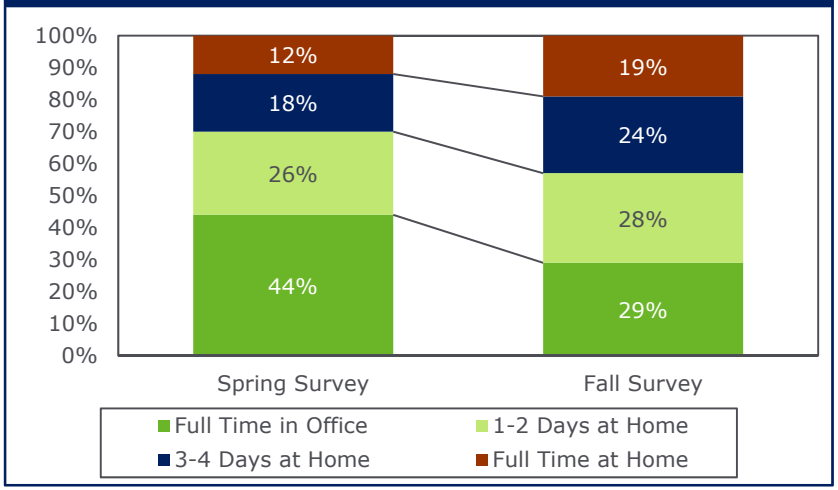
Working From Home Goes Mainstream

- **Worker preferences have continued to evolve during the pandemic**
  - 11% of workers worked from home "regularly" prior to the pandemic; a recent survey shows that over 40% would prefer to work from home 3-5 days per week[1]
  - Preferences vary by industry, job function, age, and commute time
- **Potential permanent increase in working from home**
  - Saving money, lack of formal dress code, no commute, and better work-life balance are among the top-cited employee benefits of working from home[2]
- **Convenience of working from home may increase after the pandemic**
  - Childcare and home schooling has been a challenge for many, but should be alleviated
  - Increased ability to work remotely (such as from a coffee shop)

Acclimating to Working From Home



Worker Preferences Still Evolving



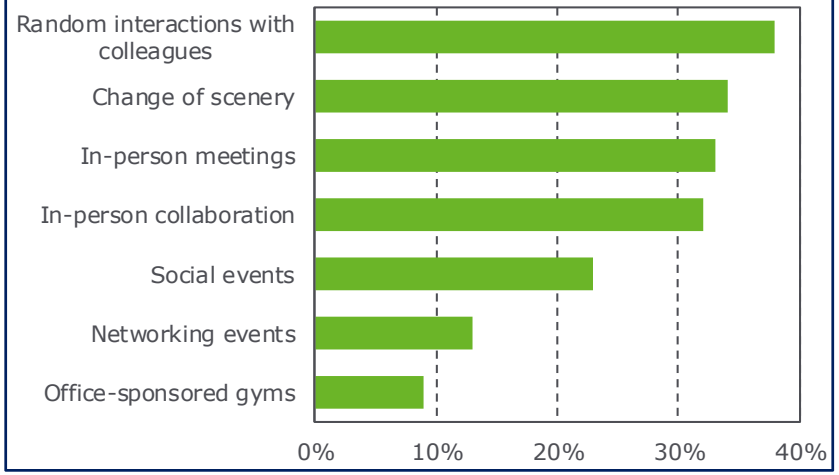
1 - Gensler US Workplace Surveys, percentages correspond to percent of those surveyed; "Spring Survey" refers to survey published in May 2020, "Fall Survey" refers to survey published Fall 2020. 2 – The Harris Poll, June 2020.

OFFICE: REASONS FOR OPTIMISM

Return to Office Expected

- **Clear benefits to working in an office For both employee and employer**
  - Most office workers still want to be in an office at least 3 days per week
- **Reductions in workers may be offset by de-densification**
- **Overall, business leaders expect to use more office space, not less[1]**

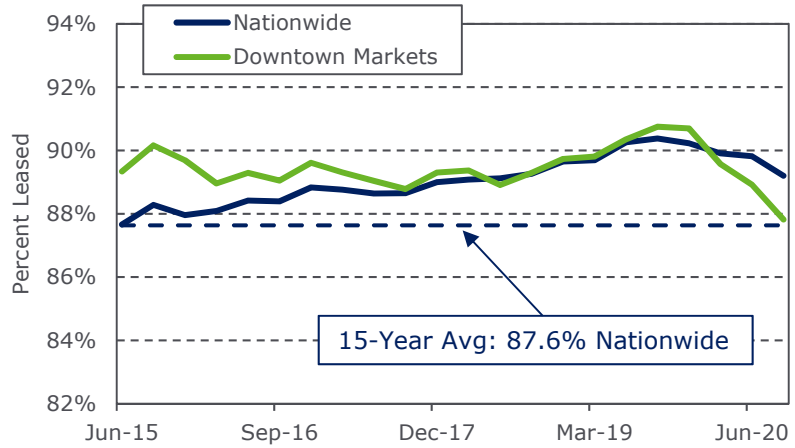
Most Missed Benefits of Working in Office
(% Total Respondent)



US Office Rent Forecast
(% average annual rent growth 2020-2024)

Work From Home	Space per Worker: A: No Change	B: +10%	C: +20%
1: No Change	1.7%	4.4%	7.0%
2: +10.5%	-1.4%	1.3%	3.4%
3: +21.0%	-4.8%	-2.2%	-0.6%

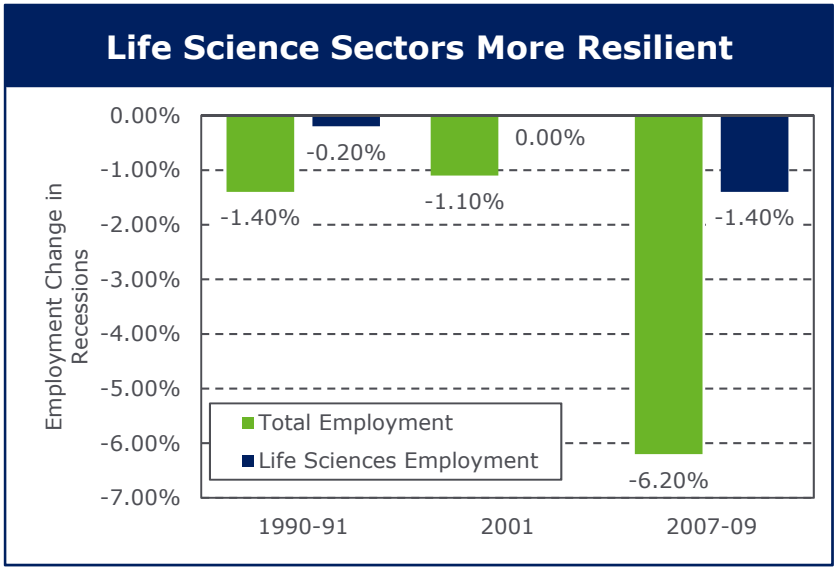
Healthy Occupancy & Long-Term Leases



1 – November 2020 poll conducted by PwC found that 63% of COOs expect an increase in office space of at least 5% in the next 3 years.
Additional sources: CBRE; The Harris Poll June 2020, NCREIF.

THE FUTURE OF OFFICE

- **Office demand is shifting in yet-to-be determined ways**
  - Office occupancy was healthy going into 2020, and long-term leases mean that a permanent change in tenant preferences will take years to play out
  - Most expiring leases in 2020 were extended with short-term leases
- **COVID-19 pandemic merely accelerated several existing trends:**
  - Growth of non-traditional office markets (e.g., Salt Lake City, Austin, Nashville)
  - Adoption of flexible work structures (such as part-time work from home)
  - Increased the favorability of new office buildings
    - Pre-COVID, were favored for modern design, more natural light, and sustainability
    - Added benefits due to COVID include their faster and larger elevator systems and their better filtration and airflow
- **Does urbanization trend reverse?**
  - Companies compete for talent, therefore generating demand for office space in the cities where people want to live
  - Question of long-term living preferences remains unanswered
- **Office assets represent 1/3rd of assets in core real estate funds, but not all office is the same**
  - Medical office, engineering spaces, life science/lab space, media, are among sectors with more resilient demand drivers



Source: Breakthrough Properties.

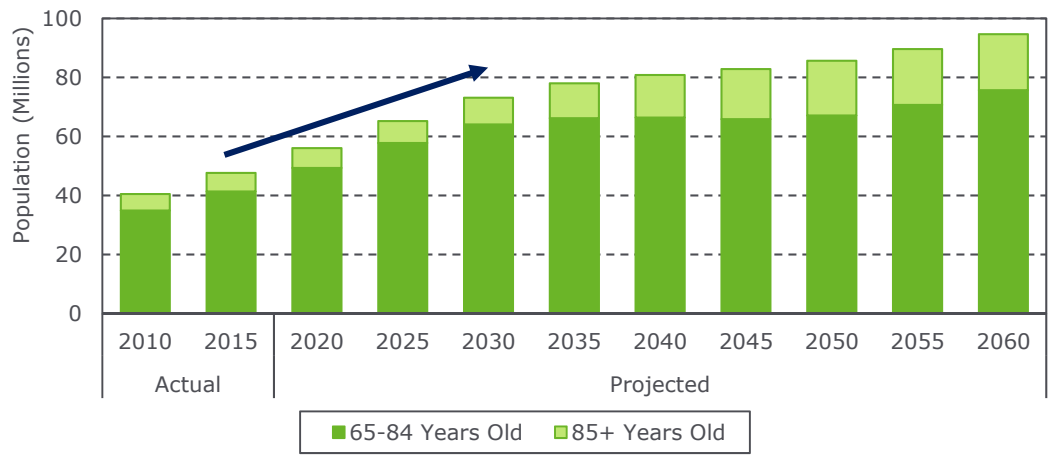
OPPORTUNITIES IN ALTERNATIVE SECTORS

COVID-Accelerated Sectors

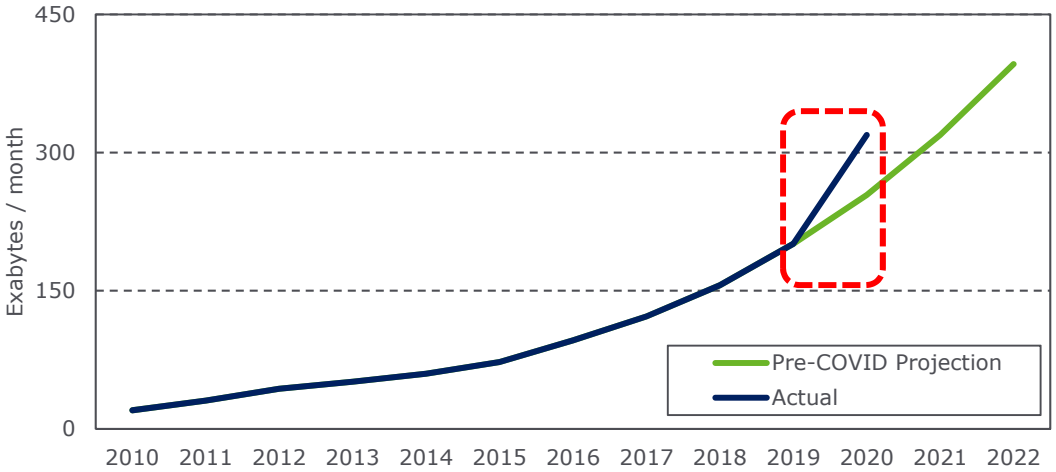
- **Long-term fundamentals vs. cyclical demand**
  - Driven by R&D innovation (genomics, gene and cell therapy, and artificial intelligence)
  - Aging population with longer life expectancies

- **Exponential growth "digital real assets" including data centers, fiber, and wireless infrastructure**
  - Growing internet infrastructure needs to keep up with technology demands

Healthcare & Seniors: Long-Term Demand Tailwinds



COVID-19 Accelerated Growth in Internet Usage



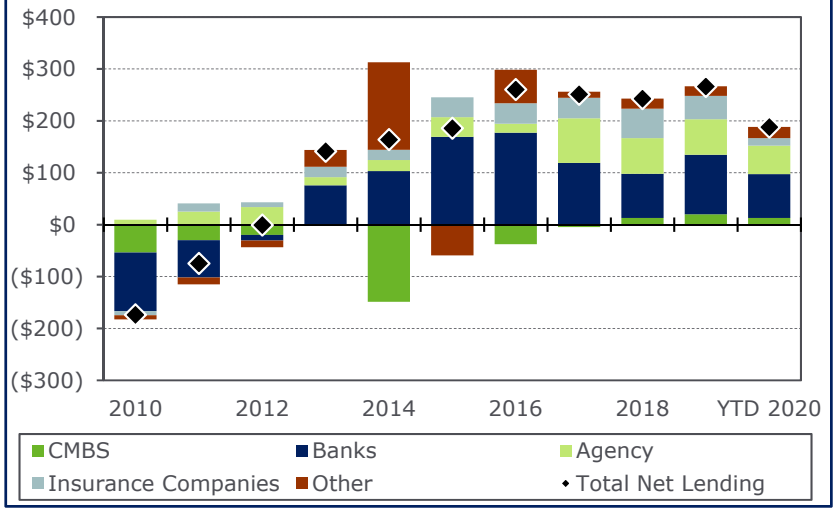
Source: US Census Bureau; Cisco Annual Internet Report.

COMMERCIAL REAL ESTATE LENDING

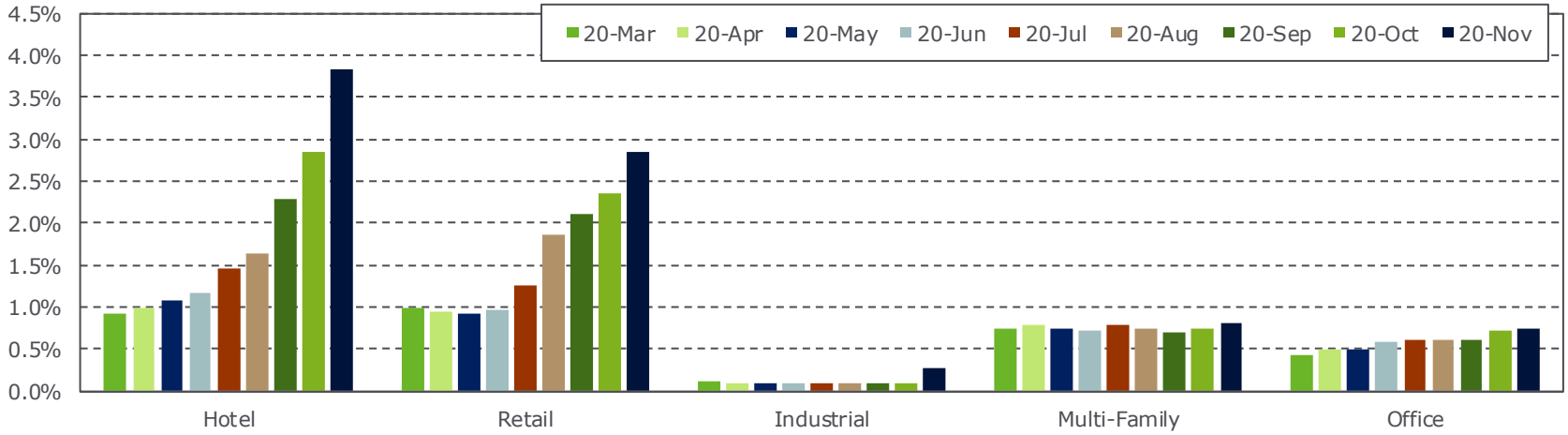
Lending Commentary

- **CMBS portends distress ahead**
  - Foreclosures on the rise for hotel and retail – and conditions may get worse when forbearance modifications expire
- **Net commercial real estate lending levels down**
  - Leveraged lenders particularly sidelined
- **Opportunities remain for well-capitalized lenders**
  - Spreads have widened, advance rates decreased, terms have improved from pre-pandemic

Net Loan Originations



CMBS Loans in Foreclosure by Asset-type



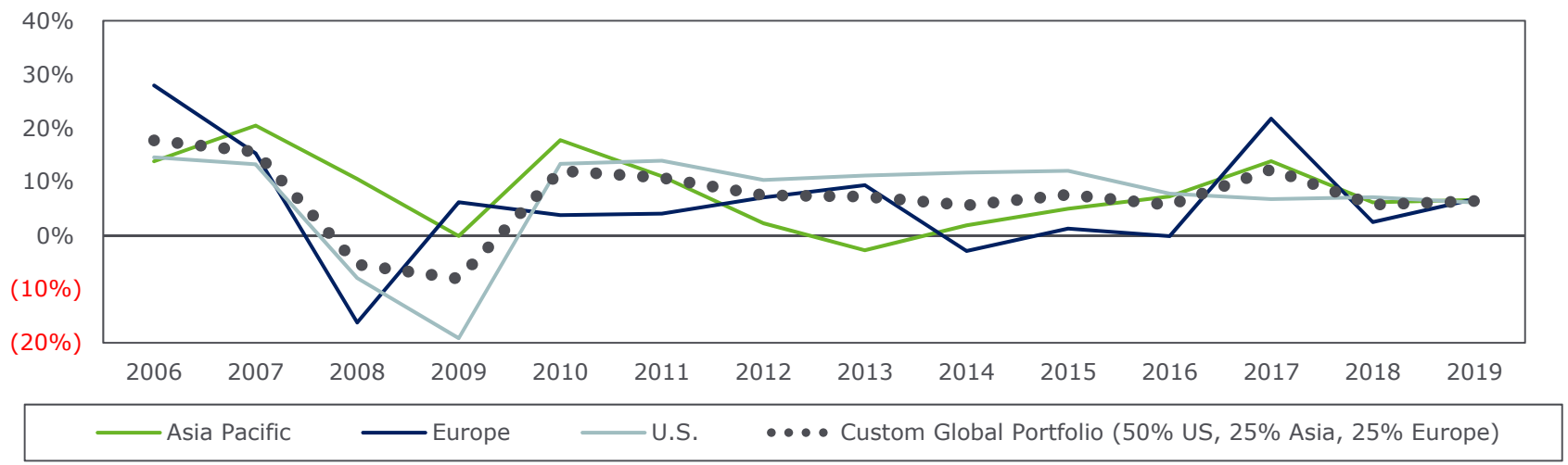
Sources: Federal Reserve; BofA Merrill Lynch, as of September 30, 2020.

GLOBAL MARKETS DON'T MOVE IN LOCKSTEP

Cyclicality

- **Capitalize on asynchronous nature of global economic and property market conditions**
- **Markets fell and recovered at different times and magnitudes before and after the GFC**
- **Maintain focus on tactical allocations within regions**
  - Note that consensus return expectations are lower for APAC and Europe than the U.S

Annual Global Property Returns (USD Unhedged, Gross)



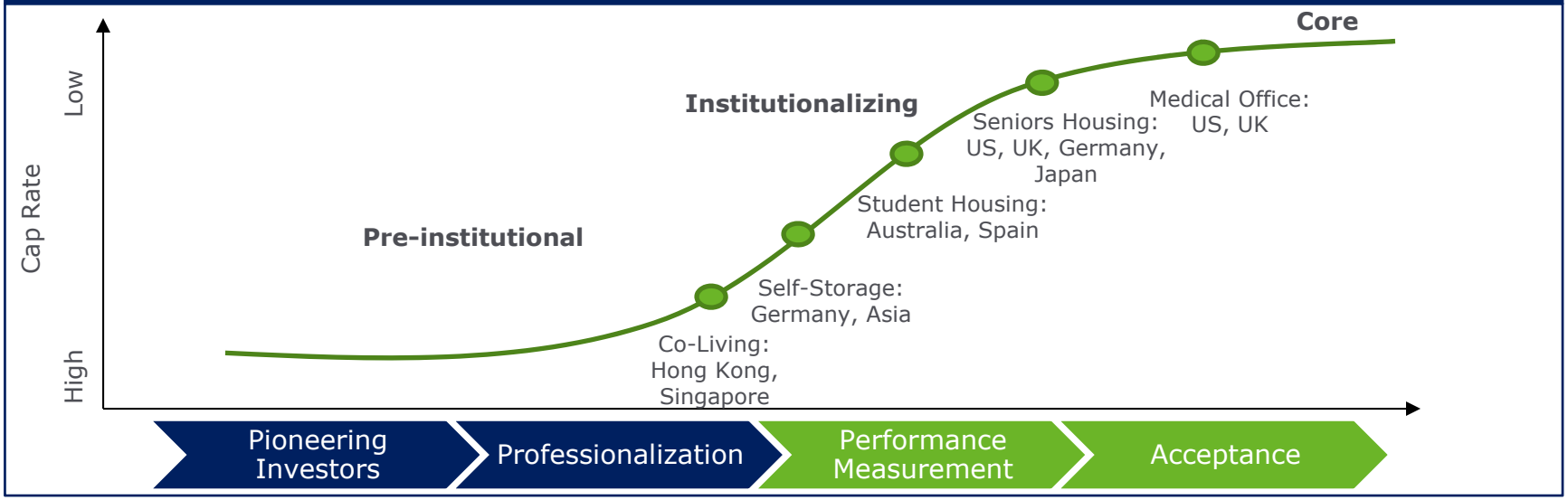
Source: MSCI World Real Estate Indices, as of December 31, 2019.

PROPERTY TYPE INSTITUTIONALIZATION

Alpha Generation Opportunities

- **Property type life cycles provide opportunity for first-mover advantage, capturing alpha through investing in targeted themes early**
- **Institutionalization of assets**
  - Global markets offer ability to invest in a broader set of unique/niche strategies
  - Niche strategies are particularly large in Japan, UK, Sweden, China, France, and Sweden
- **Access greater universe of low-correlation cash flows across markets**

Institutionalizing Property Types



APPENDIX

DISCLAIMERS AND DISCLOSURES

- Past performance is no guarantee of future results.
- The opinions presented herein represent the good faith views of NEPC as of the date of this report and are subject to change at any time.
- Information used to prepare this report was obtained directly from the investment manager, and market index data was provided by other external sources. While NEPC has exercised reasonable professional care in preparing this report, we cannot guarantee the accuracy of all source information contained within.
- NEPC may provide background information on fund structures or the impact of taxes but you should contact your legal counsel or tax professional for specific advice on such matters.
- This report may contain confidential or proprietary information and may not be copied or redistributed to any party not legally entitled to receive it.

In addition, it is important that investors understand the following characteristics of non-traditional investment strategies including hedge funds, real estate and private equity:

1. Performance can be volatile and investors could lose all or a substantial portion of their investment
2. Leverage and other speculative practices may increase the risk of loss
3. Past performance may be revised due to the revaluation of investments
4. These investments can be illiquid, and investors may be subject to lock-ups or lengthy redemption terms
5. A secondary market may not be available for all funds, and any sales that occur may take place at a discount to value
6. These funds are not subject to the same regulatory requirements as registered investment vehicles
7. Managers may not be required to provide periodic pricing or valuation information to investors
8. These funds may have complex tax structures and delays in distributing important tax information
9. These funds often charge high fees
10. Investment agreements often give the manager authority to trade in securities, markets or currencies that are not within the manager's realm of expertise or contemplated investment strategy

Item 7.b

MONTHLY PERFORMANCE REPORT

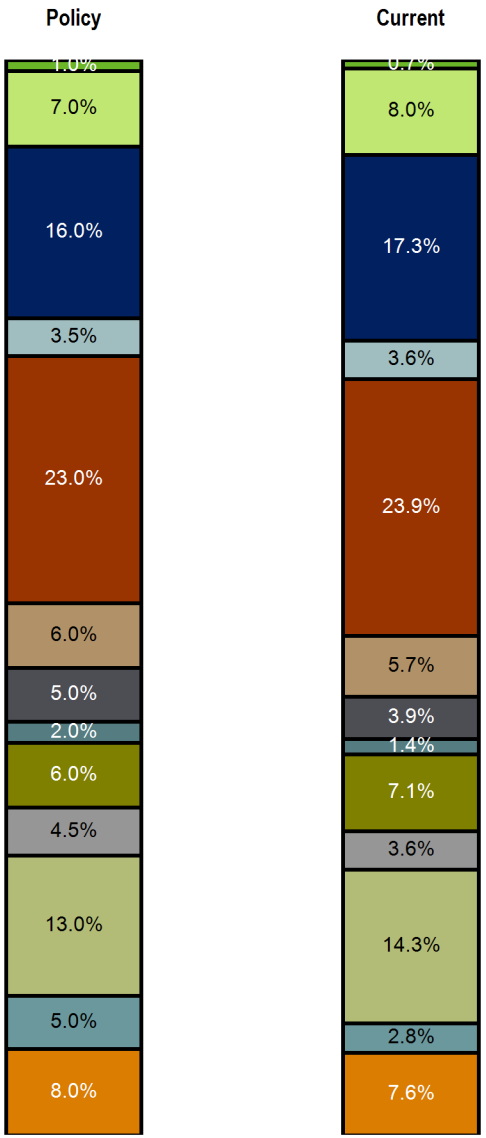
Stanislaus County ERA

January 31, 2021

BOSTON | ATLANTA | CHARLOTTE | CHICAGO | DETROIT | LAS VEGAS | PORTLAND | SAN FRANCISCO

Stanislaus County ERA

TOTAL FUND ASSET ALLOCATION VS. POLICY



Asset Allocation vs. Target

	Current	Policy	Current	Policy Range	Within Range
Cash	$18,418,461	1.0%	0.7%	0.0% - 4.0%	**Yes**
Cashflow-Matched Bonds	$198,751,821	7.0%	8.0%	3.0% - 9.0%	**Yes**
US Large Equity	$428,193,101	16.0%	17.3%	12.0% - 20.0%	**Yes**
US Small Equity	$88,664,182	3.5%	3.6%	0.0% - 7.0%	**Yes**
International Equity	$592,782,659	23.0%	23.9%	14.0% - 32.0%	**Yes**
Core Real Estate	$140,347,827	6.0%	5.7%	0.0% - 11.0%	**Yes**
Value-Add Real Estate	$97,225,446	5.0%	3.9%	0.0% - 10.0%	**Yes**
Infrastructure	$35,902,426	2.0%	1.4%	0.0% - 5.0%	**Yes**
Private Equity	$176,436,482	6.0%	7.1%	0.0% - 11.0%	**Yes**
Private Credit	$88,593,960	4.5%	3.6%	0.0% - 10.0%	**Yes**
Risk Parity	$355,124,295	13.0%	14.3%	8.0% - 18.0%	**Yes**
US Treasury Bonds	$68,286,687	5.0%	2.8%	2.0% - 8.0%	**Yes**
Short-Term Bonds	$189,346,374	8.0%	7.6%	0.0% - 9.0%	**Yes**
Total	**$2,478,073,722**	**100.0%**	**100.0%**		

- The Private Equity allocation includes the Private Equity Proxy account value.

Stanislaus County ERA

TOTAL FUND NET PERFORMANCE DETAIL

	Market Value ($)	% of Portfolio	1 Mo (%)	Fiscal YTD (%)	1 Yr (%)	3 Yrs (%)	5 Yrs (%)	10 Yrs (%)	Inception (%)	Inception Date
Total Fund	**2,478,073,722**	**100.0**	**-0.2**	**14.1**	**9.6**	**5.9**	**9.7**	**7.9**	**9.0**	**Jan-95**
Policy Index			*0.0*	*14.7*	*12.2*	*6.9*	*10.0*	*8.1*	*8.2*	*Jan-95*
Liquidity Sub-Portfolio	**217,170,282**	**8.8**	**0.0**	**1.8**	**5.1**	**5.1**	**3.3**	**--**	**--**	**Apr-11**
StanCERA Liquidity Blended BM			*-0.3*	*2.3*	*9.6*	*5.3*	*3.4*	*2.2*	*2.2*	*Apr-11*
Cash	**18,418,461**	**0.7**	**0.1**	**0.7**	**1.3**	**1.5**	**1.4**	**--**	**--**	**Apr-11**
FTSE T-Bill 1 Month TR			*0.0*	*0.1*	*0.3*	*1.5*	*1.1*	*0.6*	*0.6*	*Apr-11*
Cashflow-Matched Bonds	**198,751,821**	**8.0**	**0.0**	**1.9**	**5.3**	**5.5**	**--**	**--**	**4.6**	**Jun-17**
BBgBarc US Govt/Credit Int TR			*-0.3*	*0.8*	*4.7*	*4.9*	*3.3*	*3.0*	*3.9*	*Jun-17*
Insight	198,751,821	8.0	0.0	1.9	5.3	5.5	--	--	4.6	Jun-17
BBgBarc US Govt/Credit Int TR			*-0.3*	*0.8*	*4.7*	*4.9*	*3.3*	*3.0*	*3.9*	*Jun-17*
Growth Sub-Portfolio	**1,648,146,084**	**66.5**	**-0.2**	**17.8**	**10.8**	**6.2**	**11.5**	**9.4**	**8.2**	**Dec-03**
StanCERA Growth Blended BM			*0.0*	*17.7*	*13.0*	*7.2*	*11.6*	*--*	*--*	*Dec-03*
US Equities	**516,857,284**	**20.9**	**-0.3**	**26.5**	**18.8**	**10.2**	**15.1**	**12.6**	**9.9**	**Dec-03**
Russell 3000			*-0.4*	*24.7*	*20.5*	*12.4*	*16.7*	*13.5*	*9.8*	*Dec-03*
US Large Equity	**428,193,101**	**17.3**	**-0.7**	**24.3**	**20.6**	**12.3**	**16.5**	**13.7**	**12.8**	**Dec-94**
Russell 1000			*-0.8*	*23.4*	*19.8*	*12.5*	*16.7*	*13.6*	*10.6*	*Dec-94*
BlackRock Russell 1000 Growth	235,546,769	9.5	-0.7	25.2	34.5	19.9	22.2	16.9	18.1	Jul-10
Russell 1000 Growth			*-0.7*	*25.2*	*34.5*	*19.9*	*22.2*	*16.8*	*18.1*	*Jul-10*
BlackRock Russell 1000 Value	93,593,852	3.8	-0.9	21.6	4.2	4.5	10.8	10.2	11.7	Jul-09
Russell 1000 Value			*-0.9*	*21.6*	*4.1*	*4.4*	*10.7*	*10.2*	*11.6*	*Jul-09*
Dodge & Cox-Equity	99,052,480	4.0	-0.4	24.9	8.8	4.9	13.1	11.3	11.7	Dec-94
Russell 1000 Value			*-0.9*	*21.6*	*4.1*	*4.4*	*10.7*	*10.2*	*9.7*	*Dec-94*
US Small Equity	**88,664,182**	**3.6**	**1.7**	**38.4**	**11.4**	**2.8**	**10.2**	**9.0**	**12.0**	**Dec-08**
Russell 2000			*5.0*	*44.8*	*30.2*	*11.1*	*16.5*	*11.8*	*14.1*	*Dec-08*
Attucks Small Cap	88,664,182	3.6	1.7	38.4	11.4	2.8	11.7	9.4	12.3	Dec-08
Russell 2000 Value			*5.3*	*44.0*	*16.4*	*5.1*	*12.3*	*9.2*	*11.2*	*Dec-08*
International Equity	**592,782,659**	**23.9**	**-0.2**	**24.7**	**12.4**	**2.0**	**10.2**	**5.1**	**6.7**	**Sep-04**
MSCI ACWI ex USA			*0.2*	*24.6*	*14.0*	*3.1*	*10.5*	*4.8*	*6.4*	*Sep-04*
LSV Int'l Large Cap Value	276,019,851	11.1	-0.3	21.0	4.7	-1.4	8.6	4.1	5.9	Sep-04
MSCI ACWI ex USA			*0.2*	*24.6*	*14.0*	*3.1*	*10.5*	*4.8*	*6.4*	*Sep-04*
Fidelity Int'l Growth	316,762,808	12.8	-0.2	28.0	20.1	5.4	11.4	6.0	4.9	Apr-06
MSCI ACWI ex USA			*0.2*	*24.6*	*14.0*	*3.1*	*10.5*	*4.8*	*4.0*	*Apr-06*

Stanislaus County ERA

TOTAL FUND NET PERFORMANCE DETAIL

	Market Value ($)	% of Portfolio	1 Mo (%)	Fiscal YTD (%)	1 Yr (%)	3 Yrs (%)	5 Yrs (%)	10 Yrs (%)	Inception (%)	Inception Date
Core Real Estate	**140,347,827**	**5.7**	**0.0**	**4.0**	**-0.8**	**4.7**	**4.3**	**3.7**	**2.2**	**Mar-08**
NCREIF Property Index			*0.0*	*1.9*	*1.6*	*4.9*	*5.9*	*9.0*	*5.8*	*Mar-08*
Prime Property Fund	59,685,560	2.4	0.0	2.6	1.3	5.1	6.6	--	6.8	Sep-15
NCREIF ODCE			*0.0*	*1.8*	*1.2*	*4.9*	*6.2*	*9.9*	*6.5*	*Sep-15*
BlackRock Real Estate Securities	20,348,777	0.8	-0.2	13.5	-11.9	2.8	3.7	--	6.1	Sep-12
DJ US Select RESI TR USD			*-0.2*	*13.6*	*-11.7*	*2.9*	*3.8*	*7.1*	*6.2*	*Sep-12*
PGIM Real Estate US Debt Fund	60,313,489	2.4	0.0	2.5	4.5	--	--	--	5.0	Sep-18
BBgBarc US CMBS Investment Grade			*0.1*	*3.2*	*5.1*	*6.0*	*4.5*	*4.3*	*7.1*	*Sep-18*
Value-Add Real Estate	**97,225,446**	**3.9**	**0.0**	**1.7**	**1.9**	**8.3**	**9.6**	**--**	**9.7**	**Jul-14**
NCREIF Property Index +2%			*0.2*	*3.1*	*3.6*	*7.0*	*8.0*	*11.2*	*9.6*	*Jul-14*
American Strategic Value Realty	69,366,282	2.8	0.0	1.6	2.7	6.8	8.4	--	9.9	Dec-14
NCREIF Property Index			*0.0*	*1.9*	*1.6*	*4.9*	*5.9*	*9.0*	*7.0*	*Dec-14*
Greenfield Acquisition Partners VII	6,596,023	0.3	0.0	2.2	-2.5	8.4	10.6	--	10.5	Jul-14
NCREIF-ODCE +1%			*0.1*	*2.4*	*2.2*	*6.0*	*7.3*	*11.0*	*9.2*	*Jul-14*
Greenfield Acquisition Partners VIII	21,263,141	0.9	0.0	1.4	1.6	--	--	--	16.0	Apr-18
NCREIF-ODCE +1%			*0.1*	*2.4*	*2.2*	*6.0*	*7.3*	*11.0*	*5.4*	*Apr-18*
Infrastructure	**35,902,426**	**1.4**	**0.0**	**-1.4**	**-3.3**	**6.9**	**9.4**	**--**	**6.4**	**May-15**
CPI + 5% (Unadjusted)			*0.8*	*4.4*	*6.5*	*6.9*	*7.1*	*6.8*	*6.8*	*May-15*
MS Infrastructure Partners II	35,902,426	1.4	0.0	-1.4	-3.3	6.9	9.4	--	6.3	May-15
CPI + 5% (Unadjusted)			*0.8*	*4.4*	*6.5*	*6.9*	*7.1*	*6.8*	*6.8*	*May-15*
Private Equity	**176,436,482**	**7.1**	**-0.4**	**24.4**	**20.0**	**--**	**--**	**--**	**--**	
Russell 3000 + 3%			*-0.2*	*26.8*	*24.0*	*15.7*	*20.1*	*16.9*	*--*	
Private Equity	**8,379,745**	**0.3**	**0.0**	**11.8**	**--**	**--**	**--**	**--**	**11.8**	**Apr-20**
Russell 3000 + 3%			*-0.2*	*26.8*	*24.0*	*15.7*	*20.1*	*16.9*	*55.8*	*Apr-20*
Private Equity Proxy	**168,056,737**	**6.8**	**-0.4**	**24.6**	**20.4**	**14.2**	**17.5**	**14.2**	**10.2**	**Nov-03**
Russell 3000			*-0.4*	*24.7*	*20.5*	*12.4*	*16.7*	*13.5*	*10.0*	*Nov-03*
Private Credit	**88,593,960**	**3.6**	**0.0**	**-4.4**	**-9.0**	**-2.8**	**-0.9**	**--**	**1.6**	**May-13**
S&P/LSTA Leveraged Loan Index +2%			*1.4*	*10.6*	*5.8*	*6.2*	*7.7*	*6.3*	*6.0*	*May-13*

Stanislaus County ERA

TOTAL FUND NET PERFORMANCE DETAIL

	Market Value ($)	% of Portfolio	1 Mo (%)	Fiscal YTD (%)	1 Yr (%)	3 Yrs (%)	5 Yrs (%)	10 Yrs (%)	Inception (%)	Inception Date
Risk-Diversifying Sub-Portfolio	**612,757,356**	**24.7**	**-0.2**	**0.2**	**3.3**	**4.0**	**4.0**	**4.0**	**4.8**	**Nov-03**
StanCERA Risk-Diversifying Blended BM			*-0.3*	*-0.2*	*3.5*	*4.1*	*2.5*	*2.4*	*--*	*Nov-03*
Risk Parity	**355,124,295**	**14.3**	**-0.1**	**13.1**	**8.2**	**7.5**	**--**	**--**	**7.4**	**Nov-17**
60% MSCI ACWI (Net)/ 40% BBgBarc Global Agg			*-0.6*	*16.0*	*13.5*	*6.7*	*10.1*	*6.6*	*8.0*	*Nov-17*
AQR Global Risk Premium - EL	174,106,142	7.0	0.2	11.8	5.2	--	--	--	7.7	Apr-18
60% MSCI ACWI (Net)/ 40% BBgBarc Global Agg			*-0.6*	*16.0*	*13.5*	*6.7*	*10.1*	*6.6*	*8.6*	*Apr-18*
PanAgora Risk Parity Multi Asset	181,018,153	7.3	-0.3	14.4	11.3	8.5	--	--	8.4	Nov-17
60% MSCI ACWI (Net)/ 40% BBgBarc Global Agg			*-0.6*	*16.0*	*13.5*	*6.7*	*10.1*	*6.6*	*8.0*	*Nov-17*
US Treasury Bonds	**68,286,687**	**2.8**	**-1.3**	**-2.2**	**4.4**	**5.7**	**5.0**	**4.5**	**5.1**	**Nov-03**
BBgBarc US Treasury 7-10 Yr TR			*-1.1*	*-2.1*	*5.4*	*6.8*	*3.7*	*4.5*	*--*	*Nov-03*
Northern Trust Intermediate Gov't Bond	48,993,327	2.0	-0.3	-0.4	3.9	4.3	--	--	3.3	Jul-17
BBgBarc US Govt Int TR			*-0.2*	*-0.3*	*4.0*	*4.4*	*2.5*	*2.4*	*3.3*	*Jul-17*
Northern Trust Long Term Gov't Bond	19,293,360	0.8	-3.8	-6.6	5.6	9.5	--	--	8.2	Jul-17
BBgBarc US Govt Long TR			*-3.6*	*-6.3*	*6.2*	*9.7*	*6.0*	*7.6*	*8.3*	*Jul-17*
Short-Term Bonds	**189,346,374**	**7.6**	**0.0**	**0.9**	**2.7**	**3.4**	**--**	**--**	**2.8**	**Jul-17**
BBgBarc US Govt/Credit 1-3 Yr. TR			*0.0*	*0.5*	*2.8*	*3.1*	*2.1*	*1.6*	*2.5*	*Jul-17*
DFA	189,346,374	7.6	0.0	0.9	2.7	3.4	--	--	2.8	Jul-17
BBgBarc US Govt/Credit 1-3 Yr. TR			*0.0*	*0.5*	*2.8*	*3.1*	*2.1*	*1.6*	*2.5*	*Jul-17*

- Invesmtent data is estimated as of 01/31/2021 and is subject to change.

NOTES

- All performance is shown net of investment management fees.

- Performance history is provided by Verus through June 2020. As of July 1, 2020 performance is calculated and reported by NEPC. Policy Index History:

- **Policy Index makeup history:**

  - **Inception - 6/30/2017**: 14.4% Russell 1000 Value, 11.3% Russell 1000 Growth, 4.8% S&P 500, 4% Russell 2000 Value, 3.7% Russell 2000 Growth, 18% MSCI ACWI ex USA Gross, 29.8% BBgBarc US Aggregate TR, 3.5% DJ US Select RESI TR USD, 7.5% 9% Annual, 3% CPI + 4%

  - **7/1/2017 - 8/31/2018**: 18.5% Russell 1000, 5.5% Russell 2000, 24% MSCI ACWI ex USA Gross, 19% BBgBarc US Govt/Credit 1-3 Yr. TR, 1% FTSE T-Bill 1 Month TR, 3%BBgBarc US Treasury 7-10 Yr TR, 7.7% NCREIF Property Index, 1.7% NCREIF Property Index +2%, 0.6% CPI + 5%, 5% BBgBarc US High Yield + 2%, 14% 60% MSCI ACWI Net/40% BBgBarc Global Aggregate

  - **9/1/2018 - 5/30/2019**: 10% Russell 1000, 3% Russell 2000, 6% Russell 3000 +3%, 27% MSCI ACWI ex USA Gross, 20% BBgBarc US Govt/Credit 1-3 Yr. TR, 1% FTSE T-Bill 1 Month TR, 3% BBgBarc US Treasury 7-10 Yr TR, 5% NCREIF Property Index, 5% NCREIF Property Index +2%, 1% CPI + 5%, 6% S&P/LSTA Leveraged Loan Index+2%, 13% 60% MSCI ACWI Net/40% BBgBarc Global Aggregate

  - **6/1/2019 - 6/30/2020**: 14% Russell 1000, 3% Russell 2000, 6% Russell 3000 + 3%, 23% MSCI ACWI ex-USA, 19% BBgBarc US Gov't/Credit 1-3 Yr, 1% Citi 1 Month T-Bills, 3% BBgBarc US Treasury 7-10 Yr, 5% NCREIF Property, 5% NCREIF Property +2%, 2% CPI +5%, 6% S&P/LSTA Leveraged Loan Index + 2%, 13% 60% MSCI ACWI / 40%BBgBarc Global Aggregate

  - **7/1/2020 - 12/31/2020**: 14% Russell 1000, 3% Russell 2000, 6% Russell 3000 + 3%, 23% MSCI ACWI ex-USA, 8% BBgBarc US Gov't/Credit 1-3 Yr, 1% Citi 1 Month T-Bills, 3% BBgBarc US Treasury 7-10 Yr, 5% NCREIF Property, 5% NCREIF Property +2%, 2% CPI +5%, 6% S&P/LSTA Leveraged Loan Index + 2%, 13% 60% MSCI ACWI / 40%BBgBarc Global Aggregate, 11% BBgBarc US Intermediate.

  - **1/1/2021 - Present**: 16% Russell 1000, 3.5% Russell 2000, 6% Russell 3000 + 3%, 23% MSCI ACWI ex-USA, 8% BBgBarc US Gov't/Credit 1-3 Yr, 1% Citi 1 Month T-Bills, 5% BBgBarc US Treasury 7-10 Yr, 6% NCREIF Property, 5% NCREIF Property +2%, 2% CPI +5%, 4.5% S&P/LSTA Leveraged Loan Index + 2%, 13% 60% MSCI ACWI / 40%BBgBarc Global Aggregate, 7% BBgBarc US Intermediate.

- Starting July 1, 2020, the small Capital Prospects transition cash balance is moved from the Cash composite to the Capital Prospects account. Historical performance for Capital Prospects, US Small, US Equities, Growth Sub-Portfolio, Cash, and Liquidity Sub-Portfolio prior to July 1, 2020 reflects performance of these composites before this change.

- Private Equity investments are valued one quarter lagged and adjusted for capital calls and distributions between quarter-end months.

- Value-Add Real Estate managers are valued quarterly adjusted for current cashflows.

DISCLAIMERS & DISCLOSURES

- Past performance is no guarantee of future results.
- Returns for pooled funds, e.g. mutual funds and collective investment trusts, are collected from third parties; they are not generally calculated by NEPC. Returns for separate accounts, with some exceptions, are calculated by NEPC. Returns are reported net of manager fees unless otherwise noted.
- A "since inception" return, if reported, begins with the first full month after funding, although actual inception dates (e.g. the middle of a month) and the timing of cash flows are taken into account in Composite return calculations.
- NEPC's preferred data source is the plan's custodian bank or record-keeper. If data cannot be obtained from one of the preferred data sources, data provided by investment managers may be used. Information on market indices and security characteristics is received from additional providers. While NEPC has exercised reasonable professional care in preparing this report, we cannot guarantee the accuracy of all source information contained within. In addition, some index returns displayed in this report or used in calculation of a policy index, allocation index or other custom benchmark may be preliminary and subject to change.
- All investments carry some level of risk. Diversification and other asset allocation techniques are not guaranteed to ensure profit or protect against losses.
- The opinions presented herein represent the good faith views of NEPC as of the date of this presentation and are subject to change at any time. Neither fund performance nor universe rankings contained in this report should be considered a recommendation by NEPC.
- This report may contain confidential or proprietary information and may not be copied or redistributed to any party not legally entitled to receive it.

Item 7.c.

QUARTERLY PERFORMANCE REPORT

STANISLAUS COUNTY EMPLOYEES' RETIREMENT SYSTEM

December 31, 2020

BOSTON | ATLANTA | CHARLOTTE | CHICAGO | DETROIT | LAS VEGAS | PORTLAND | SAN FRANCISCO

MARKET UPDATE

NEPC, LLC

RETURNS FOR KEY INDICES RANKED IN ORDER OF PERFORMANCE (12/31/20)

2006	2007	2008	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020
MSCI EMERGING MARKETS 32.17	MSCI EMERGING MARKETS 39.39	BC AGGREGATE 5.24	MSCI EMERGING MARKETS 78.51	RUSSELL 2000 GROWTH 29.09	BC AGGREGATE 7.84	MSCI EMERGING MARKETS 18.22	RUSSELL 2000 GROWTH 43.30	S&P 500 13.69	RUSSELL 1000 GROWTH 5.67	RUSSELL 2000 VALUE 31.74	MSCI EMERGING MARKETS 37.28	BC AGGREGATE 0.01	RUSSELL 1000 GROWTH 36.39	RUSSELL 1000 GROWTH 38.49
MSCI EAFE 26.34	RUSSELL 1000 GROWTH 11.81	RUSSELL 2000 VALUE -28.92	RUSSELL 1000 GROWTH 37.21	RUSSELL 2000 26.85	RUSSELL 1000 GROWTH 2.64	RUSSELL 2000 VALUE 18.05	RUSSELL 2000 38.82	RUSSELL 1000 VALUE 13.45	S&P 500 1.38	RUSSELL 2000 21.31	RUSSELL 1000 GROWTH 30.21	RUSSELL 1000 GROWTH -1.51	S&P 500 31.49	RUSSELL 2000 GROWTH 34.63
RUSSELL 1000 VALUE 22.25	MSCI EAFE 11.17	RUSSELL 2000 -33.79	RUSSELL 2000 GROWTH 34.47	RUSSELL 2000 VALUE 24.5	S&P 500 2.11	RUSSELL 1000 VALUE 17.51	RUSSELL 2000 VALUE 34.52	RUSSELL 1000 13.24	RUSSELL 1000 0.92	RUSSELL 1000 VALUE 17.34	MSCI EAFE 25.03	S&P 500 -4.38	RUSSELL 1000 31.43	RUSSELL 2000 19.96
RUSSELL 2000 VALUE 23.48	RUSSELL 2000 GROWTH 7.06	RUSSELL 1000 VALUE -36.85	MSCI EAFE 31.78	MSCI EMERGING MARKETS 18.88	RUSSELL 1000 1.50	MSCI EAFE 17.32	RUSSELL 1000 GROWTH 33.48	RUSSELL 1000 GROWTH 13.05	BC AGGREGATE 0.55	RUSSELL 1000 12.05	RUSSELL 2000 GROWTH 22.17	RUSSELL 1000 -4.78	RUSSELL 2000 GROWTH 28.48	RUSSELL 1000 20.96
RUSSELL 2000 18.37	BC AGGREGATE 6.97	S&P 500 -37.0	RUSSELL 1000 28.43	RUSSELL 1000 GROWTH 16.71	RUSSELL 1000 VALUE 0.39	RUSSELL 1000 16.42	RUSSELL 1000 33.11	BC AGGREGATE 5.97	MSCI EAFE -0.81	S&P 500 11.96	S&P 500 21.83	RUSSELL 1000 VALUE -8.27	RUSSELL 1000 VALUE 26.54	S&P 500 18.40
S&P 500 15.8	RUSSELL 1000 5.77	RUSSELL 1000 -37.6	RUSSELL 2000 27.16	RUSSELL 1000 16.10	RUSSELL 2000 GROWTH -2.91	RUSSELL 2000 16.35	RUSSELL 1000 VALUE 32.53	RUSSELL 2000 GROWTH 5.60	RUSSELL 2000 GROWTH -1.38	RUSSELL 2000 GROWTH 11.32	RUSSELL 1000 21.69	RUSSELL 2000 GROWTH -9.31	RUSSELL 2000 25.52	MSCI EMERGING MARKETS 18.31
RUSSELL 1000 15.46	S&P 500 5.49	RUSSELL 1000 GROWTH -38.44	S&P 500 26.46	RUSSELL 1000 VALUE 15.51	RUSSELL 2000 -4.18	S&P 500 16.00	S&P 500 32.39	RUSSELL 2000 4.89	RUSSELL 1000 VALUE -3.83	MSCI EMERGING MARKETS 11.19	RUSSELL 2000 14.65	RUSSELL 2000 -11.01	RUSSELL 2000 VALUE 22.39	MSCI EAFE 7.82
RUSSELL 2000 GROWTH 13.35	RUSSELL 1000 VALUE -0.17	RUSSELL 2000 GROWTH -38.54	RUSSELL 2000 VALUE 20.58	S&P 500 15.06	RUSSELL 2000 VALUE -5.50	RUSSELL 1000 GROWTH 15.26	MSCI EAFE 22.78	RUSSELL 2000 VALUE 4.22	RUSSELL 2000 -4.41	RUSSELL 1000 GROWTH 7.08	RUSSELL 1000 VALUE 13.66	RUSSELL 2000 VALUE -12.86	MSCI EAFE 22.01	BC AGGREGATE 7.51
RUSSELL 1000 GROWTH 9.07	RUSSELL 2000 -1.56	MSCI EAFE -43.38	RUSSELL 1000 VALUE 19.69	MSCI EAFE 7.75	MSCI EAFE -12.14	RUSSELL 2000 GROWTH 14.59	BC AGGREGATE -2.02	MSCI EMERGING MARKETS -2.19	RUSSELL 2000 VALUE -7.46	BC AGGREGATE 2.65	RUSSELL 2000 VALUE 7.84	MSCI EAFE -13.79	MSCI EMERGING MARKETS 18.44	RUSSELL 2000 VALUE 4.63
BC AGGREGATE 4.33	RUSSELL 2000 VALUE -9.78	MSCI EMERGING MARKETS -53.33	BC AGGREGATE 5.93	BC AGGREGATE 6.54	MSCI EMERGING MARKETS -18.42	BC AGGREGATE 4.21	MSCI EMERGING MARKETS -2.60	MSCI EAFE -4.90	MSCI EMERGING MARKETS -14.93	MSCI EAFE 1.00	BC AGGREGATE 3.54	MSCI EMERGING MARKETS -14.58	BC AGGREGATE 8.72	RUSSELL 1000 VALUE 2.79

QTD	3 year	5 Year	10 Year
RUSSELL 2000 VALUE 33.36	RUSSELL 1000 GROWTH 22.99	RUSSELL 1000 GROWTH 21.00	RUSSELL 1000 GROWTH 17.21
RUSSELL 2000 31.37	RUSSELL 2000 GROWTH 16.19	RUSSELL 2000 GROWTH 16.36	RUSSELL 1000 14.01
RUSSELL 2000 GROWTH 29.61	RUSSELL 1000 14.82	RUSSELL 1000 15.60	S&P 500 13.88
MSCI EMERGING MARKETS 19.70	S&P 500 14.18	S&P 500 15.22	RUSSELL 2000 GROWTH 13.48
RUSSELL 1000 VALUE 16.25	RUSSELL 2000 10.25	RUSSELL 2000 13.26	RUSSELL 2000 11.20
MSCI EAFE 16.05	MSCI EMERGING MARKETS 6.17	MSCI EMERGING MARKETS 12.81	RUSSELL 1000 VALUE 10.50
RUSSELL 1000 13.69	RUSSELL 1000 VALUE 6.07	RUSSELL 1000 VALUE 9.74	RUSSELL 2000 VALUE 8.66
S&P 500 12.15	BC AGGREGATE 5.34	RUSSELL 2000 VALUE 9.65	MSCI EAFE 5.51
RUSSELL 1000 GROWTH 11.39	MSCI EAFE 4.28	MSCI EAFE 7.45	BC AGGREGATE 3.84
BC AGGREGATE 0.67	RUSSELL 2000 VALUE 3.72	BC AGGREGATE 4.44	MSCI EMERGING MARKETS 3.63

MARKET OVERVIEW

Macro

US Dollar	VIX	US 10-Year
-4.2%	-3.6	23.7 bps

Equity

S&P 500	MSCI EAFE	MSCI EM
12.1%	16.0%	19.7%

Credit

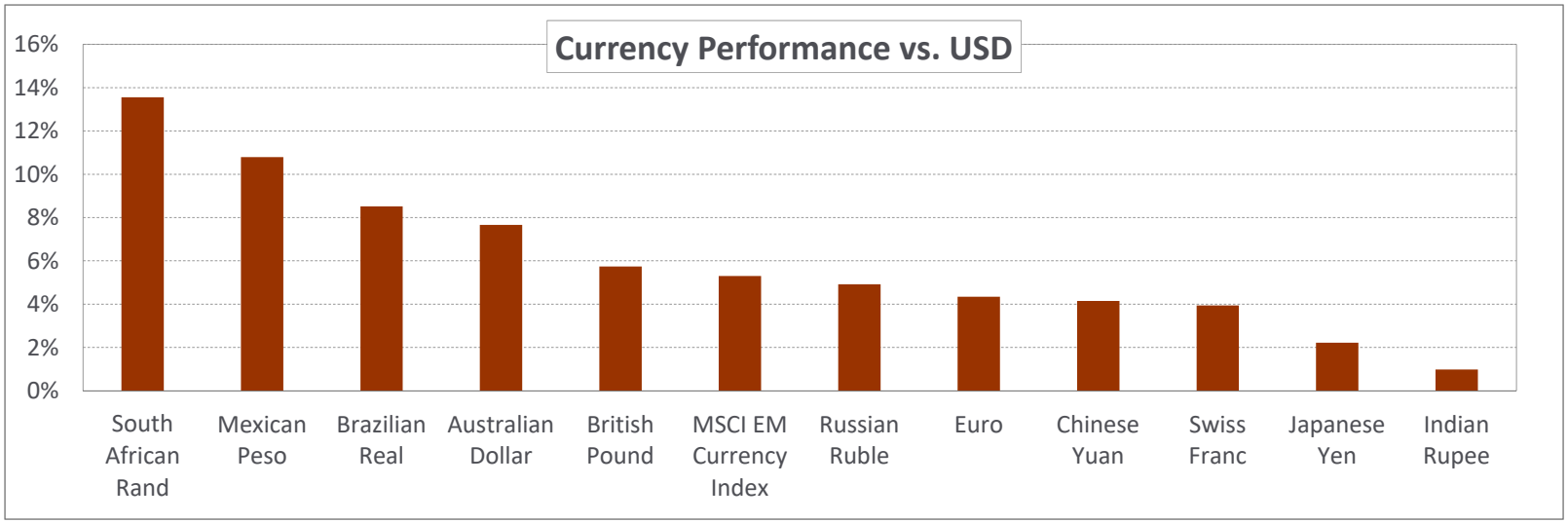
US Agg.	High Yield	Dollar EMD
0.7%	6.5%	5.8%

Real Assets

Oil	Gold	REITS
20.7%	0.7%	9.0%

Market segment (index representation) as follows: US Dollar (DXY Index), VIX (CBOE Volatility Index), US 10-Year (US 10-Year Treasury Yield), S&P 500 (US Equity), MSCI EAFE Index (International Developed Equity), MSCI Emerging Markets (Emerging Markets Equity), US Agg (Barclays US Aggregate Bond Index), High Yield (Barclays US High Yield Index), Dollar EMD (JPM EMBI Global Diversified Index), Crude Oil (WTI Crude Oil Spot), Gold (Gold Price Spot), and REITs (NAREIT Composite Index). Source: FactSet

MACRO OVERVIEW

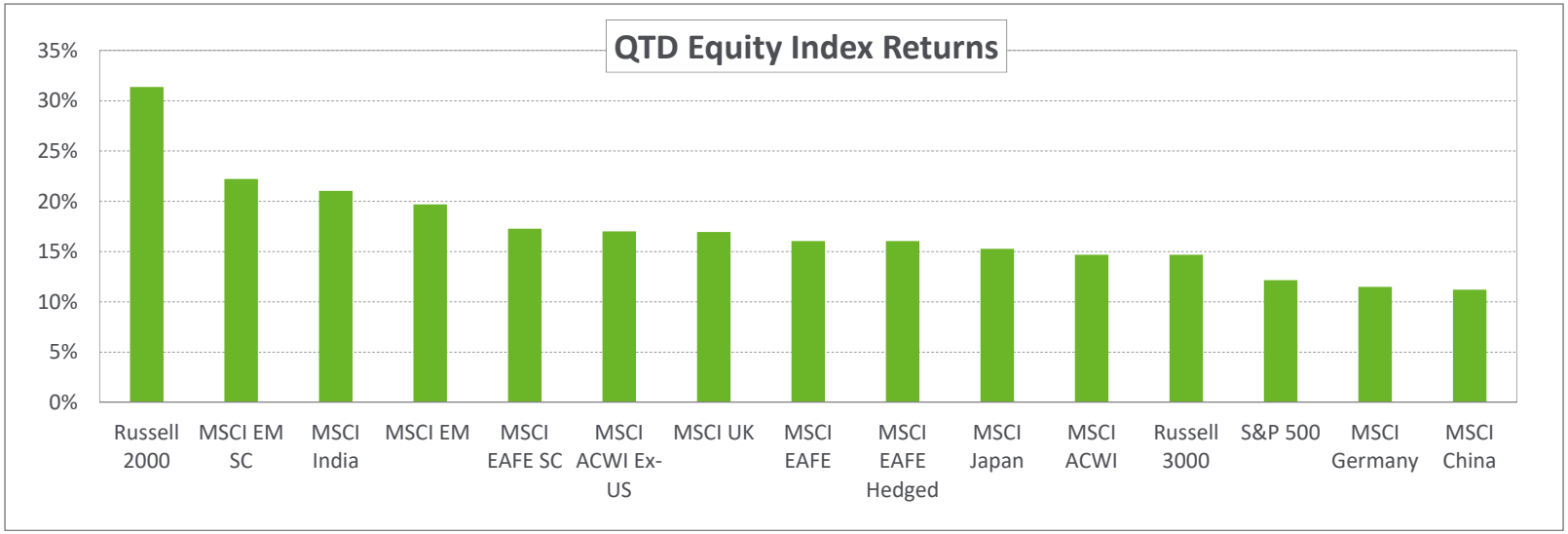


Source: MSCI, FactSet

Central Banks	Current Rate	CPI YOY	Notes from the Quarter
Federal Reserve	0.00% - 0.25%	1.2%	The Fed maintained current levels of monthly asset purchases and indicated that federal funds rate would remain near zero levels for the foreseeable future
European Central Bank	0.00%	-0.3%	The ECB increased its emergency bond-buying program by €500B to €1,850B and extended the program for nine months to the end of March 2022
Bank of Japan	-0.10%	-1.0%	The BoJ extended its pandemic support programs by six months and announced plans to review its current ultra-easy QE program to achieve its inflation target

Source: FactSet

EQUITY OVERVIEW

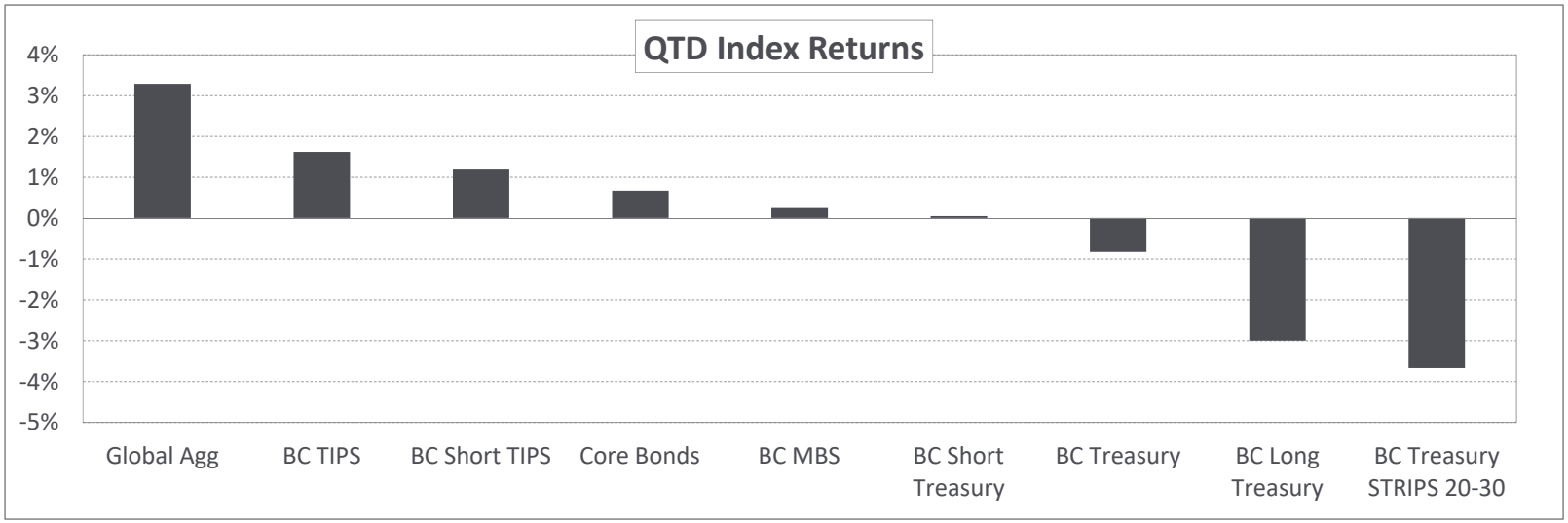


Source: S&P, MSCI, Russell, FactSet

Russell 3000 QTD Sector Returns	QTD	YTD
Technology	13.4%	46.5%
Health Care	10.1%	19.3%
Consumer Discretionary	16.2%	42.1%
Consumer Staples	7.8%	7.8%
Energy	31.9%	-28.9%
Materials & Processing	17.0%	19.2%
Producer Durables	16.9%	11.6%
Financial Services	24.5%	6.6%
Utilities	7.7%	0.3%

Source: FactSet

RATES OVERVIEW

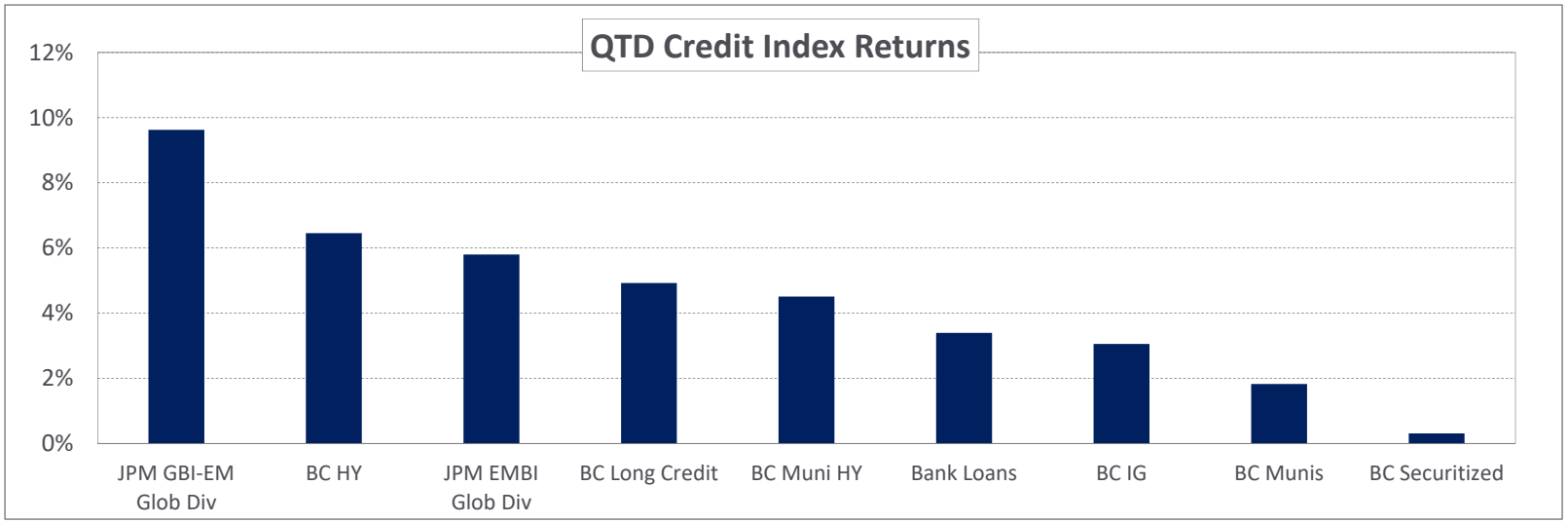


Source: S&P, MSCI, Russell, FactSet

	Previous Quarter Yield	Current Quarter Yield	|Δ|
US 10-Year	0.68%	0.92%	0.24%
US 30-Year	1.45%	1.65%	0.20%
US Real 10-Year	-0.94%	-1.06%	-0.12%
German 10-Year	-0.53%	-0.58%	-0.05%
Japan 10-Year	0.03%	0.04%	0.01%
China 10-Year	3.16%	3.19%	0.03%
EM Local Debt	4.48%	4.22%	-0.26%

Source: Barclays, JPM, FactSet

CREDIT OVERVIEW

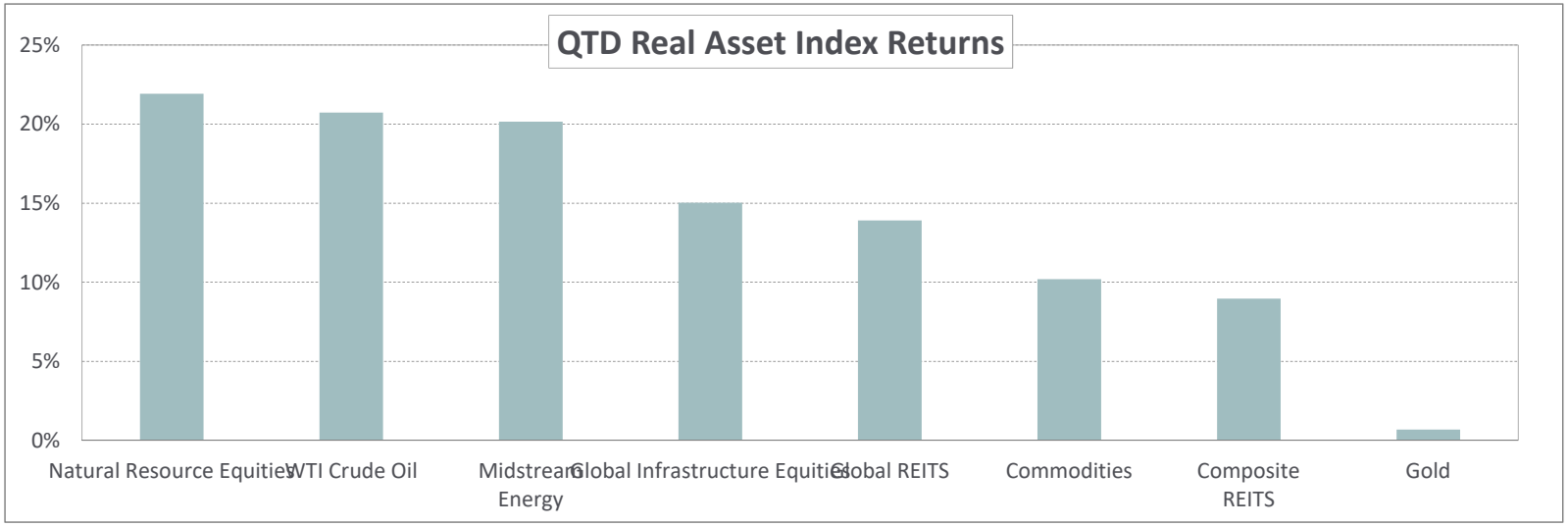


Source: S&P, MSCI, Russell, JPM, FactSet

	Previous Quarter Spread (bps)	Current Quarter Spread (bps)	|Δ|	Median
BC IG Credit	136	96	-40	137
BC Long Credit	188	141	-47	176
BC Securitized	64	42	-22	49
BC High Yield	517	360	-157	479
Muni HY	454	382	-72	634
JPM EMBI Glob Div	432	352	-80	344
Bank Loans - Libor	469	374	-96	448

Source: Barclays, JPM, FactSet;
Medians calculated since 11/30/2000

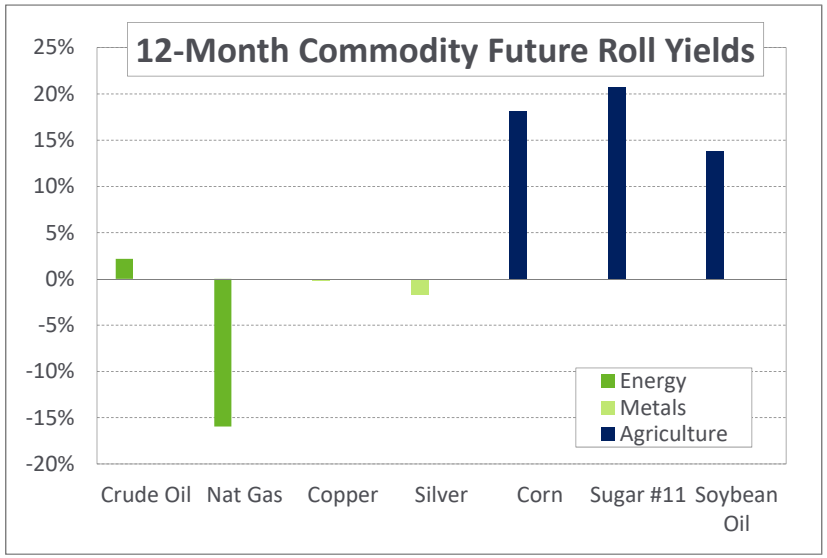
REAL ASSETS OVERVIEW



Source: S&P, MSCI, Russell, FactSet

Real Asset Yields	Previous Quarter	Current Quarter
Midstream Energy	9.9%	7.9%
Core Real Estate*	4.4%	4.3%
Composite REITs	4.1%	3.8%
Global REITs	4.8%	4.3%
Global Infrastructure Equities	4.1%	3.1%
Natural Resource Equities	4.5%	3.5%
Commodity Index Roll Yield	-6.7%	-0.1%

Sources: Alerian, NAREIT, Barclays, NEPC, FactSet
Core Real Estate* yields are subject to a one quarter lag



Source: FactSet

Q4 2020 PERFORMANCE

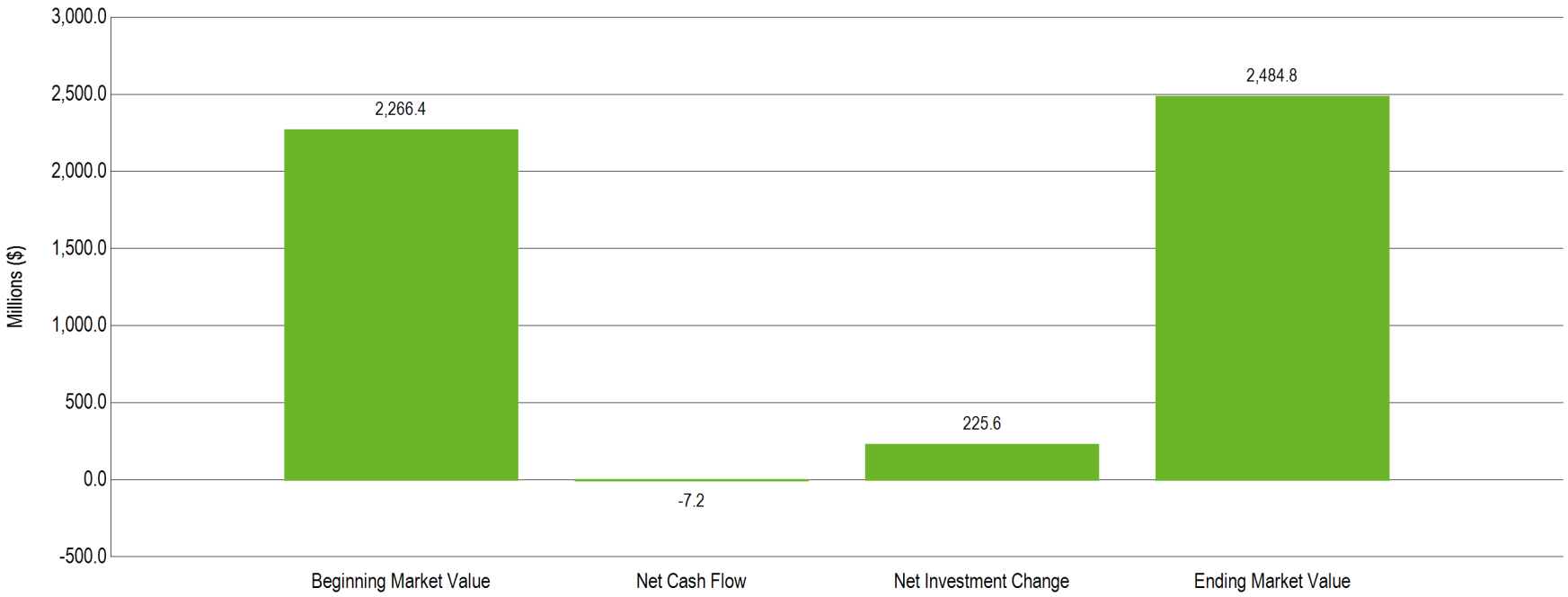
NEPC, LLC

Stanislaus County ERA

TOTAL FUND PORTFOLIO RECONCILIATION

Summary of Cash Flows	Fourth Quarter	Fiscal Year-To-Date	Year-To-Date
Beginning Market Value	$2,266,393,699	$2,183,922,647	$2,305,291,730
Net Cash Flow	-$7,153,795	-$14,430,880	-$37,814,627
Net Investment Change	$225,582,080	$315,330,218	$217,344,881
Ending Market Value	$2,484,821,985	$2,484,821,985	$2,484,821,985

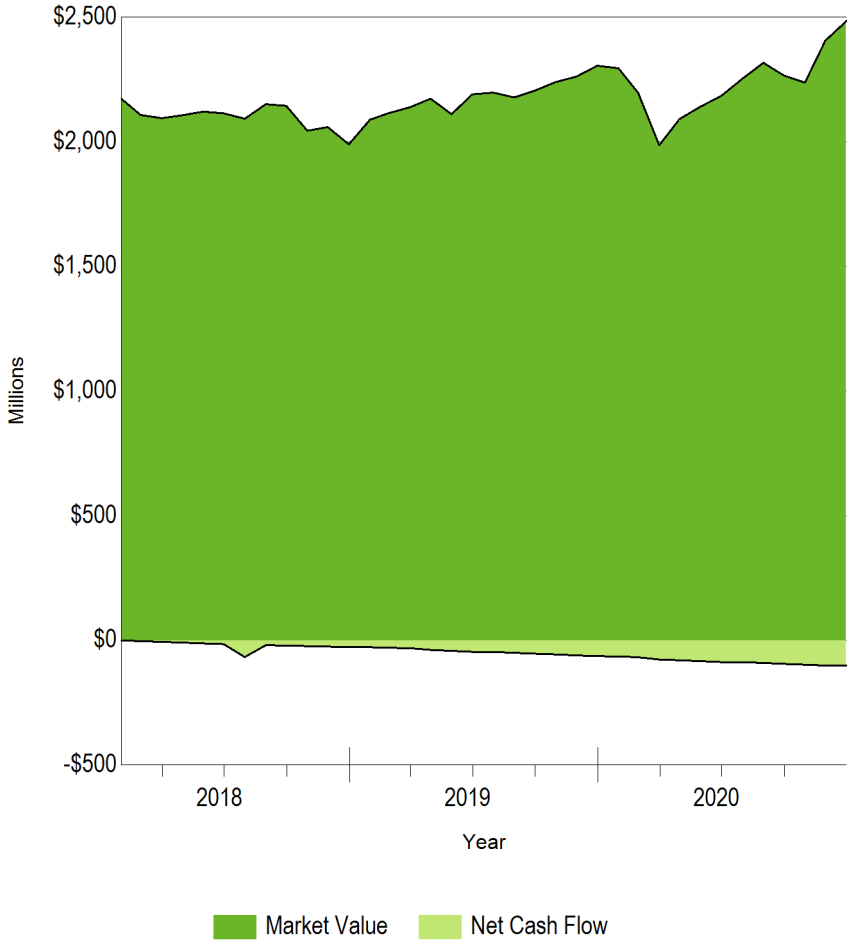
Change in Market Value
From October 01, 2020 To December 31, 2020



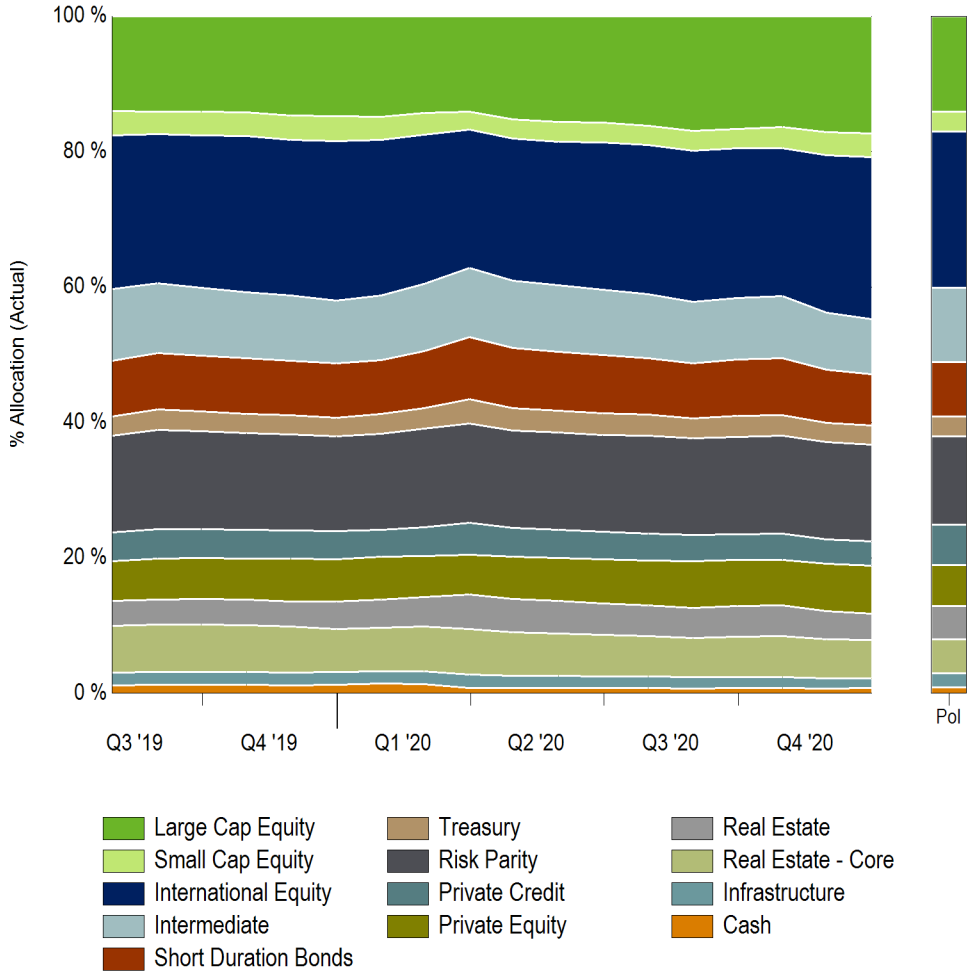
Stanislaus County ERA

TOTAL FUND ASSET ALLOCATION HISTORY

Market Value History
3 Years Ending December 31, 2020

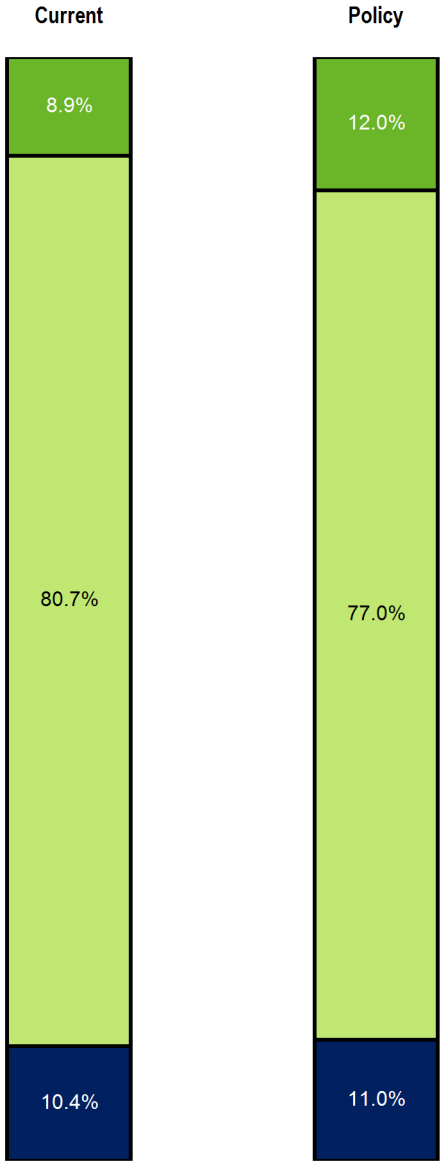


Asset Allocation History
1 Year 5 Months Ending December 31, 2020



Stanislaus County ERA

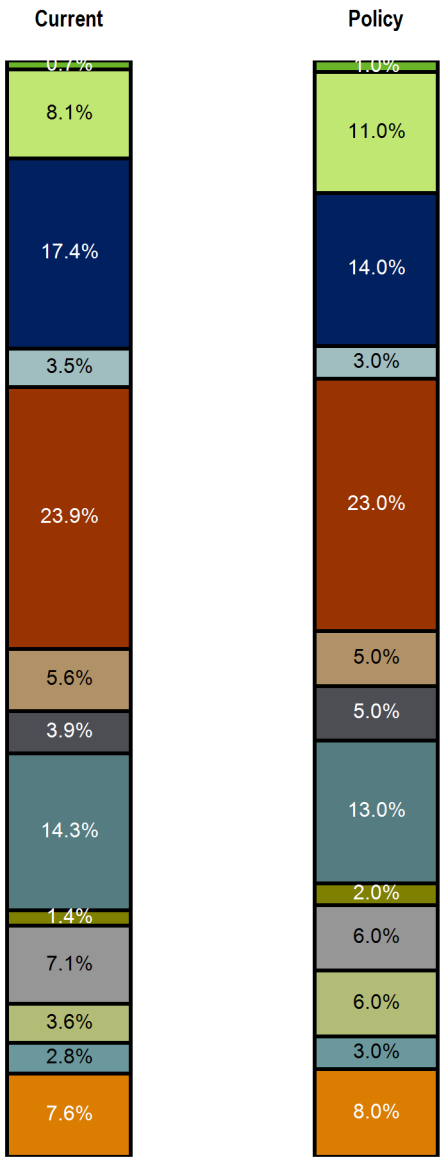
TOTAL FUND ASSET ALLOCATION VS TARGET



Allocation vs. Targets and Policy						
	Current Balance	Current Allocation	Policy	Policy	Policy Range	Within IPS Range?
Liquidity Sub-Portfolio	$220,299,350	8.9%	$298,178,638	12.0%	5.0% - 16.0%	Yes
Growth Sub-Portfolio	$2,006,039,685	80.7%	$1,913,312,928	77.0%	50.0% - 80.0%	No
Risk-Diversifying Sub-Portfolio	$258,482,950	10.4%	$273,330,418	11.0%	5.0% - 18.0%	Yes
Total	**$2,484,821,985**	**100.0%**		**100.0%**		

Stanislaus County ERA

TOTAL FUND ASSET ALLOCATION VS TARGET



Allocation vs. Targets and Policy						
	Current Balance	Current Allocation	Policy	Policy	Policy Range	Within IPS Range?
Cash	$18,614,266	0.7%	$24,848,220	1.0%	0.0% - 4.0%	**Yes**
Cashflow-Matched Bonds	$201,685,083	8.1%	$273,330,418	11.0%	5.0% - 12.0%	**Yes**
US Large Equity	$431,136,229	17.4%	$347,875,078	14.0%	10.0% - 18.0%	**Yes**
US Small Equity	$87,160,433	3.5%	$74,544,660	3.0%	0.0% - 6.0%	**Yes**
International Equity	$593,999,533	23.9%	$571,509,057	23.0%	14.0% - 32.0%	**Yes**
Core Real Estate	$140,389,203	5.6%	$124,241,099	5.0%	0.0% - 10.0%	**Yes**
Value-Add Real Estate	$96,527,550	3.9%	$124,241,099	5.0%	0.0% - 10.0%	**Yes**
Risk Parity	$355,374,870	14.3%	$323,026,858	13.0%	8.0% - 18.0%	**Yes**
Infrastructure	$35,902,426	1.4%	$49,696,440	2.0%	0.0% - 5.0%	**Yes**
Private Equity	$176,955,480	7.1%	$149,089,319	6.0%	0.0% - 10.0%	**Yes**
Private Credit	$88,593,960	3.6%	$149,089,319	6.0%	0.0% - 10.0%	**Yes**
US Treasury Bonds	$69,196,371	2.8%	$74,544,660	3.0%	1.0% - 6.0%	**Yes**
Short-Term Bonds	$189,286,579	7.6%	$198,785,759	8.0%	4.0% - 12.0%	**Yes**
Total	**$2,484,821,985**	**100.0%**		**100.0%**		

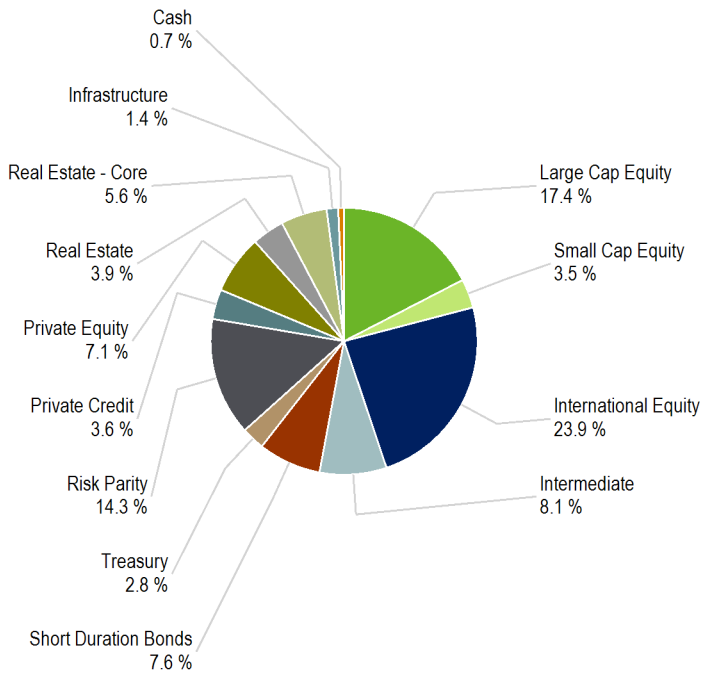
- The Private Equity allocation includes the Private Equity Proxy account value.

Stanislaus County ERA

TOTAL FUND PERFORMANCE

	QTD (%)	Fiscal YTD (%)	Ending December 31, 2020 1 Yr (%)	3 Yrs (%)	5 Yrs (%)	10 Yrs (%)
Total Fund	**9.9**	**14.3**	**9.3**	**7.1**	**8.8**	**8.1**
Policy Index	*9.4*	*14.7*	*11.7*	*7.9*	*9.3*	*8.2*
InvMetrics Public DB > $1B Net Rank	*61*	*76*	*70*	*66*	*58*	*34*
Liquidity Sub-Portfolio	**0.6**	**1.8**	**6.5**	**5.0**	**3.3**	**--**
StanCERA Liquidity Blended BM	*1.4*	*2.6*	*10.6*	*5.3*	*3.6*	*2.2*
Cash	**0.5**	**0.5**	**1.3**	**1.5**	**1.4**	**--**
FTSE T-Bill 1 Month TR	*0.0*	*0.0*	*0.5*	*1.5*	*1.1*	*0.6*
Cashflow-Matched Bonds	**0.6**	**1.9**	**6.8**	**5.3**	**--**	**--**
BBgBarc US Govt/Credit Int TR	*0.5*	*1.1*	*6.4*	*4.7*	*3.6*	*3.1*
eV US Government Fixed Inc Net Rank	*1*	*1*	*46*	*7*	*--*	*--*
Growth Sub-Portfolio	**12.5**	**18.1**	**10.0**	**7.7**	**10.2**	**9.6**
StanCERA Growth Blended BM	*11.8*	*17.7*	*12.0*	*8.7*	*10.6*	*--*
US Equities	**17.0**	**26.9**	**17.8**	**12.3**	**13.6**	**12.9**
Russell 3000	*14.7*	*25.2*	*20.9*	*14.5*	*15.4*	*13.8*
US Large Equity	**14.3**	**25.2**	**21.1**	**14.9**	**15.3**	**14.1**
Russell 1000	*13.7*	*24.5*	*21.0*	*14.8*	*15.6*	*14.0*
eV US Large Cap Equity Net Rank	*33*	*24*	*34*	*32*	*31*	*30*
US Small Equity	**32.2**	**36.2**	**4.5**	**2.9**	**7.7**	**8.9**
Russell 2000	*31.4*	*37.9*	*20.0*	*10.2*	*13.3*	*11.2*
eV US Small Cap Value Equity Net Rank	*32*	*33*	*50*	*54*	*67*	*53*
Attucks Small Cap	32.2	36.2	4.5	2.9	9.7	9.3
Russell 2000 Value	*33.4*	*36.8*	*4.6*	*3.7*	*9.7*	*8.7*
eV US Small Cap Value Equity Net Rank	*32*	*33*	*50*	*54*	*37*	*38*
International Equity	**18.7**	**24.9**	**9.2**	**3.9**	**8.5**	**5.3**
MSCI ACWI ex USA	*17.0*	*24.3*	*10.7*	*4.9*	*8.9*	*4.9*
eV ACWI ex-US Large Cap Equity Net Rank	*24*	*57*	*68*	*69*	*53*	*65*

Current Allocation

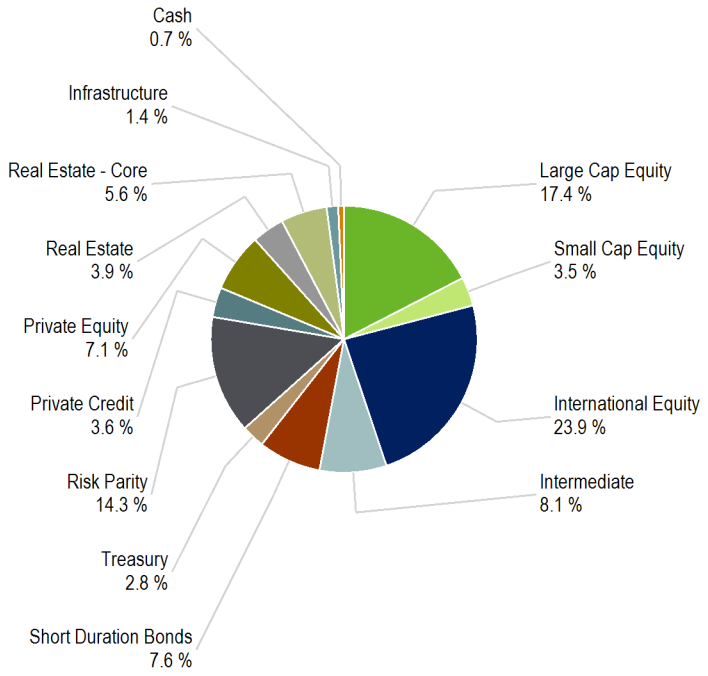


Stanislaus County ERA

TOTAL FUND PERFORMANCE

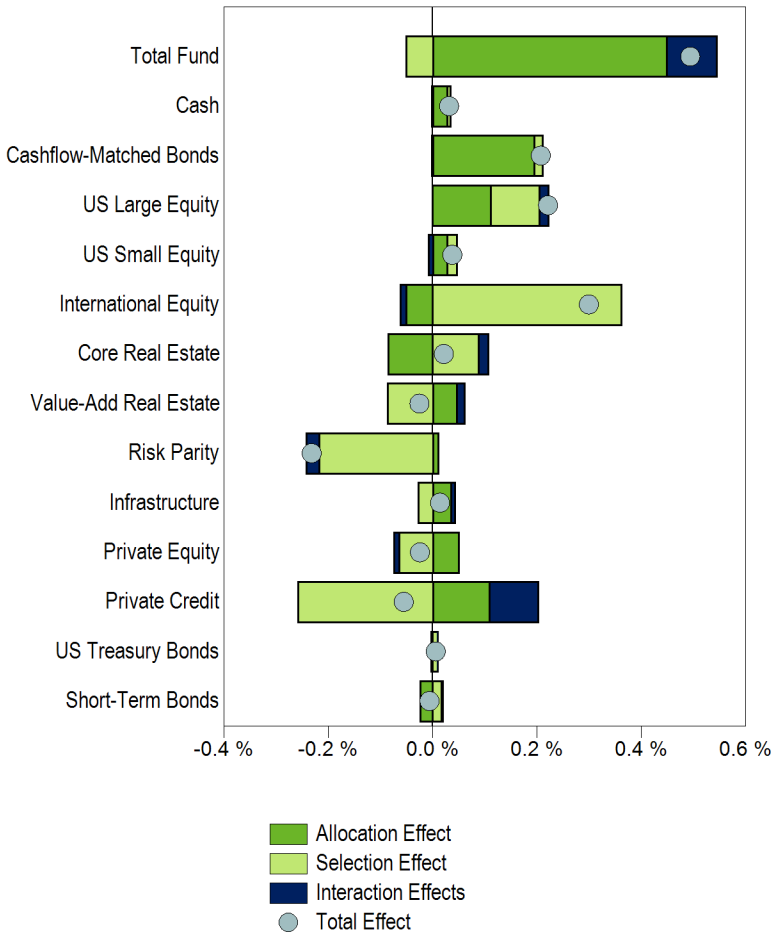
	QTD (%)	Fiscal YTD (%)	Ending December 31, 2020 1 Yr (%)	3 Yrs (%)	5 Yrs (%)	10 Yrs (%)
Core Real Estate	**2.9**	**4.0**	**-0.7**	**3.5**	**4.2**	**3.8**
NCREIF Property Index	*1.2*	*1.9*	*1.6*	*4.9*	*5.9*	*9.0*
InvMetrics Public DB Real Estate Priv Net Rank	--	--	--	--	--	--
Value-Add Real Estate	**0.0**	**0.9**	**6.0**	**8.9**	**9.5**	**--**
NCREIF Property Index +2%	*1.7*	*2.9*	*3.6*	*7.0*	*8.0*	*11.2*
Risk Parity	**8.5**	**13.3**	**9.5**	**7.5**	**--**	**--**
60% MSCI ACWI (Net)/ 40% BBgBarc Global Agg	*10.1*	*16.7*	*14.0*	*8.3*	*9.5*	*6.8*
Infrastructure	**0.0**	**-1.4**	**1.8**	**7.7**	**9.4**	**--**
CPI + 5% (Unadjusted)	*1.3*	*3.5*	*6.4*	*6.9*	*7.0*	*6.8*
eV Infrastructure Net Rank	*99*	*99*	*30*	*17*	*17*	--
Private Equity	**4.9**	**11.8**	**--**	**--**	**--**	**--**
Russell 3000 + 3%	*15.5*	*27.0*	*24.5*	*17.9*	*18.9*	*17.2*
Private Equity Proxy	**14.7**	**25.2**	**20.8**	**16.5**	**16.4**	**14.5**
Russell 3000	*14.7*	*25.2*	*20.9*	*14.5*	*15.4*	*13.8*
eV US Large Cap Equity Net Rank	*31*	*24*	*34*	*27*	*26*	*27*
Private Credit	**0.1**	**-4.4**	**-13.6**	**-1.9**	**-0.9**	**--**
S&P/LSTA Leveraged Loan Index +2%	*4.3*	*9.2*	*5.2*	*6.1*	*7.3*	*6.4*
Risk-Diversifying Sub-Portfolio	**0.0**	**0.4**	**4.6**	**3.9**	**4.1**	**4.0**
StanCERA Risk-Diversifying Blended BM	*-0.2*	*0.0*	*5.1*	*3.9*	*2.9*	*2.4*
US Treasury Bonds	**-1.1**	**-0.9**	**8.8**	**5.6**	**5.4**	**4.7**
BBgBarc US Treasury 7-10 Yr TR	*-1.3*	*-1.0*	*10.0*	*6.4*	*4.5*	*4.6*
eV US Government Fixed Inc Net Rank	*99*	*99*	*2*	*2*	*1*	*1*
Short-Term Bonds	**0.4**	**0.9**	**3.2**	**3.2**	**--**	**--**
BBgBarc US Govt/Credit 1-3 Yr. TR	*0.2*	*0.4*	*3.3*	*3.0*	*2.2*	*1.6*
eV US Short Duration Fixed Inc Net Rank	*51*	*53*	*82*	*44*	--	--

Current Allocation



ATTRIBUTION ANALYSIS

Attribution Effects
3 Months Ending December 31, 2020



Performance Attribution
Quarter Ending December 31, 2020

	Quarter
Wtd. Actual Return	9.91%
Wtd. Index Return *	9.41%
Excess Return	**0.49%**
Selection Effect	-0.05%
Allocation Effect	0.45%
Interaction Effect	0.09%

*Calculated from benchmark returns and weightings of each component.

Attribution Summary
3 Months Ending December 31, 2020

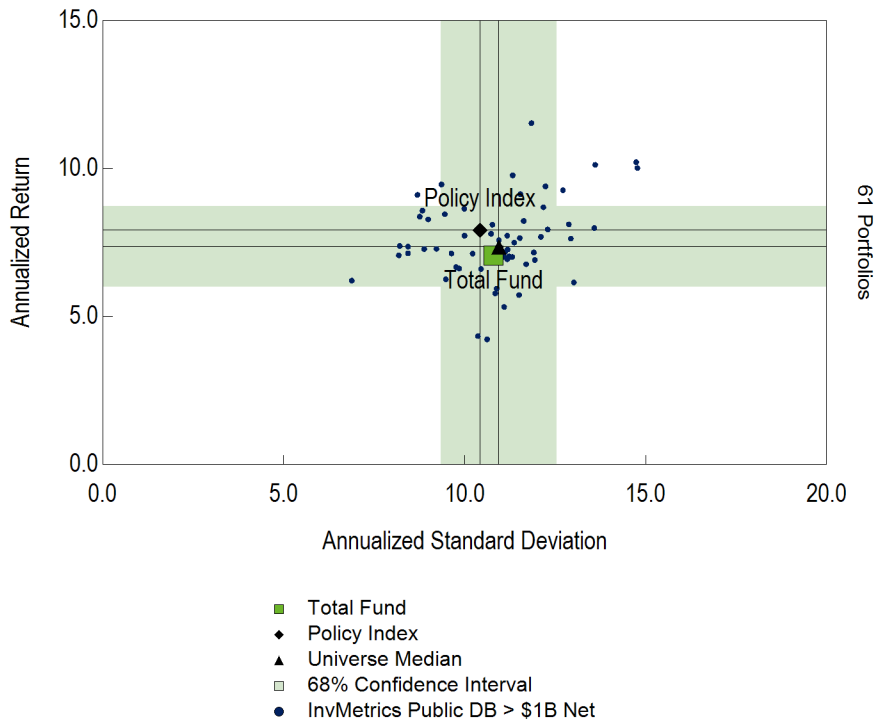
	Wtd. Actual Return	Wtd. Index Return	Excess Return	Selection Effect	Allocation Effect	Interaction Effects	Total Effects
Cash	0.5%	0.0%	0.5%	0.0%	0.0%	0.0%	0.0%
Cashflow-Matched Bonds	0.6%	0.5%	0.1%	0.0%	0.2%	0.0%	0.2%
US Large Equity	14.3%	13.7%	0.6%	0.1%	0.1%	0.0%	0.2%
US Small Equity	32.2%	31.4%	0.8%	0.0%	0.0%	0.0%	0.0%
International Equity	18.7%	17.1%	1.6%	0.4%	-0.1%	0.0%	0.3%
Core Real Estate	2.9%	1.2%	1.7%	0.1%	-0.1%	0.0%	0.0%
Value-Add Real Estate	0.0%	1.7%	-1.7%	-0.1%	0.0%	0.0%	0.0%
Risk Parity	8.5%	10.1%	-1.7%	-0.2%	0.0%	0.0%	-0.2%
Infrastructure	0.0%	1.3%	-1.3%	0.0%	0.0%	0.0%	0.0%
Private Equity	14.4%	15.5%	-1.1%	-0.1%	0.0%	0.0%	0.0%
Private Credit	0.1%	4.3%	-4.2%	-0.3%	0.1%	0.1%	-0.1%
US Treasury Bonds	-1.1%	-1.3%	0.3%	0.0%	0.0%	0.0%	0.0%
Short-Term Bonds	0.4%	0.2%	0.2%	0.0%	0.0%	0.0%	0.0%
Total	**9.9%**	**9.4%**	**0.5%**	**0.0%**	**0.4%**	**0.1%**	**0.5%**

Stanislaus County ERA

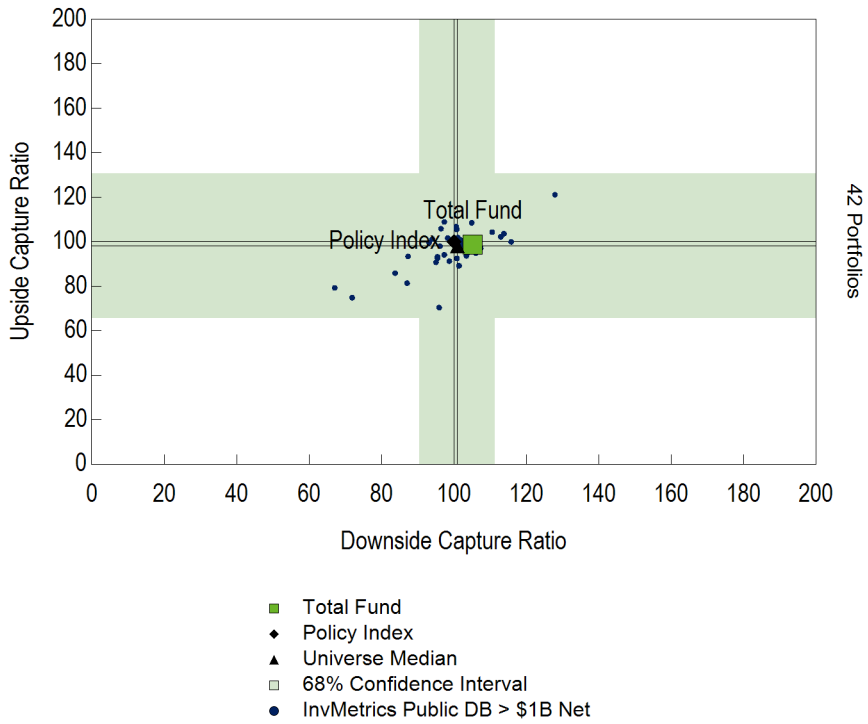
TOTAL FUND RISK/RETURN

3 Years Ending December 31, 2020	Anlzd Return	Ann Excess BM Return	Anlzd Standard Deviation	Anlzd Alpha	Beta	Tracking Error	R-Squared	Sharpe Ratio	Information Ratio	Up Mkt Capture Ratio	Down Mkt Capture Ratio
Total Fund	7.06%	-0.87%	10.80%	-1.11%	1.03	1.04%	0.99	0.52	-0.83	98.71%	105.19%
Policy Index	7.92%	0.00%	10.43%	0.00%	1.00	0.00%	1.00	0.62	--	100.00%	100.00%

Annualized Return vs. Annualized Standard Deviation
3 Years Ending December 31, 2020



Upside Capture Ratio vs. Downside Capture Ratio
3 Years Ending December 31, 2020



Stanislaus County ERA

TOTAL FUND PERFORMANCE DETAIL

	Market Value ($)	% of Portfolio	3 Mo (%)	Fiscal YTD (%)	1 Yr (%)	3 Yrs (%)	5 Yrs (%)	10 Yrs (%)	2020 (%)	2019 (%)	2018 (%)	2017 (%)	2016 (%)	Inception (%)	Inception Date
									Ending December 31, 2020						
Total Fund	**2,484,821,985**	**100.0**	**9.9**	**14.3**	**9.3**	**7.1**	**8.8**	**8.1**	**9.3**	**17.4**	**-4.4**	**15.3**	**7.8**	**9.0**	**Jan-95**
Policy Index			*9.4*	*14.7*	*11.7*	*7.9*	*9.3*	*8.2*	*11.7*	*16.9*	*-3.7*	*14.3*	*8.5*	*8.3*	*Jan-95*
InvMetrics Public DB > $1B Net Rank			*61*	*76*	*70*	*66*	*58*	*34*	*70*	*35*	*64*	*54*	*44*	*1*	*Jan-95*
Liquidity Sub-Portfolio	**220,299,350**	**8.9**	**0.6**	**1.8**	**6.5**	**5.0**	**3.3**	**--**	**6.5**	**7.7**	**0.8**	**0.4**	**1.3**	**--**	**Apr-11**
StanCERA Liquidity Blended BM			*1.4*	*2.6*	*10.6*	*5.3*	*3.6*	*2.2*	*10.6*	*3.9*	*1.6*	*0.8*	*1.2*	*2.3*	*Apr-11*
Cash	**18,614,266**	**0.7**	**0.5**	**0.5**	**1.3**	**1.5**	**1.4**	**--**	**1.3**	**1.6**	**1.6**	**0.9**	**1.3**	**--**	**Apr-11**
FTSE T-Bill 1 Month TR			*0.0*	*0.0*	*0.5*	*1.5*	*1.1*	*0.6*	*0.5*	*2.2*	*1.8*	*0.8*	*0.2*	*0.6*	*Apr-11*
Cashflow-Matched Bonds	**201,685,083**	**8.1**	**0.6**	**1.9**	**6.8**	**5.3**	**--**	**--**	**6.8**	**8.5**	**0.6**	**--**	**--**	**4.7**	**Jun-17**
BBgBarc US Govt/Credit Int TR			*0.5*	*1.1*	*6.4*	*4.7*	*3.6*	*3.1*	*6.4*	*6.8*	*0.9*	*2.1*	*2.1*	*4.1*	*Jun-17*
eV US Government Fixed Inc Net Rank			*1*	*1*	*46*	*7*	*--*	*--*	*46*	*1*	*87*	*--*	*--*	*7*	*Jun-17*
Insight	201,685,083	8.1	0.6	1.9	6.8	5.3	--	--	6.8	8.5	0.6	--	--	4.7	Jun-17
BBgBarc US Govt/Credit Int TR			*0.5*	*1.1*	*6.4*	*4.7*	*3.6*	*3.1*	*6.4*	*6.8*	*0.9*	*2.1*	*2.1*	*4.1*	*Jun-17*
Growth Sub-Portfolio	**2,006,039,685**	**80.7**	**12.5**	**18.1**	**10.0**	**7.7**	**10.2**	**9.6**	**10.0**	**20.9**	**-6.1**	**19.3**	**8.9**	**8.3**	**Dec-03**
StanCERA Growth Blended BM			*11.8*	*17.7*	*12.0*	*8.7*	*10.6*	*--*	*12.0*	*20.7*	*-4.9*	*19.1*	*8.1*	*--*	*Dec-03*
US Equities	**518,296,662**	**20.9**	**17.0**	**26.9**	**17.8**	**12.3**	**13.6**	**12.9**	**17.8**	**29.4**	**-7.2**	**19.1**	**12.2**	**9.9**	**Dec-03**
Russell 3000			*14.7*	*25.2*	*20.9*	*14.5*	*15.4*	*13.8*	*20.9*	*31.0*	*-5.2*	*21.1*	*12.7*	*9.9*	*Dec-03*
US Large Equity	**431,136,229**	**17.4**	**14.3**	**25.2**	**21.1**	**14.9**	**15.3**	**14.1**	**21.1**	**30.6**	**-4.0**	**21.1**	**10.8**	**12.9**	**Dec-94**
Russell 1000			*13.7*	*24.5*	*21.0*	*14.8*	*15.6*	*14.0*	*21.0*	*31.4*	*-4.8*	*21.7*	*12.1*	*10.7*	*Dec-94*
eV US Large Cap Equity Net Rank			*33*	*24*	*34*	*32*	*31*	*30*	*34*	*39*	*36*	*50*	*39*	*11*	*Dec-94*
BlackRock Russell 1000 Growth	237,295,423	9.5	11.4	26.1	38.5	23.0	21.0	17.2	38.5	36.4	-1.5	30.2	7.2	18.4	Jul-10
Russell 1000 Growth			*11.4*	*26.1*	*38.5*	*23.0*	*21.0*	*17.2*	*38.5*	*36.4*	*-1.5*	*30.2*	*7.1*	*18.3*	*Jul-10*
BlackRock Russell 1000 Value	94,451,659	3.8	16.2	22.8	3.0	6.2	9.8	10.6	3.0	26.7	-8.2	13.8	17.3	11.9	Jul-09
Russell 1000 Value			*16.3*	*22.8*	*2.8*	*6.1*	*9.7*	*10.5*	*2.8*	*26.5*	*-8.3*	*13.7*	*17.3*	*11.8*	*Jul-09*
Dodge & Cox-Equity	99,389,147	4.0	20.0	25.3	5.6	7.0	11.7	11.7	5.6	23.9	-6.5	16.9	21.2	11.8	Dec-94
Russell 1000 Value			*16.3*	*22.8*	*2.8*	*6.1*	*9.7*	*10.5*	*2.8*	*26.5*	*-8.3*	*13.7*	*17.3*	*9.8*	*Dec-94*
US Small Equity	**87,160,433**	**3.5**	**32.2**	**36.2**	**4.5**	**2.9**	**7.7**	**8.9**	**4.5**	**25.1**	**-16.7**	**14.8**	**16.2**	**12.0**	**Dec-08**
Russell 2000			*31.4*	*37.9*	*20.0*	*10.2*	*13.3*	*11.2*	*20.0*	*25.5*	*-11.0*	*14.6*	*21.3*	*13.7*	*Dec-08*
eV US Small Cap Value Equity Net Rank			*32*	*33*	*50*	*54*	*67*	*53*	*50*	*35*	*67*	*16*	*95*	*60*	*Dec-08*
Attucks Small Cap	87,160,433	3.5	32.2	36.2	4.5	2.9	9.7	9.3	4.5	25.1	-16.7	14.7	27.1	12.2	Dec-08
Russell 2000 Value			*33.4*	*36.8*	*4.6*	*3.7*	*9.7*	*8.7*	*4.6*	*22.4*	*-12.9*	*7.8*	*31.7*	*10.9*	*Dec-08*
eV US Small Cap Value Equity Net Rank			*32*	*33*	*50*	*54*	*37*	*38*	*50*	*35*	*67*	*17*	*39*	*56*	*Dec-08*

TOTAL FUND PERFORMANCE DETAIL

	Market Value ($)	% of Portfolio	3 Mo (%)	Fiscal YTD (%)	1 Yr (%)	3 Yrs (%)	5 Yrs (%)	10 Yrs (%)	2020 (%)	2019 (%)	2018 (%)	2017 (%)	2016 (%)	Inception (%)	Inception Date
					Ending December 31, 2020										
International Equity	**593,999,533**	**23.9**	**18.7**	**24.9**	**9.2**	**3.9**	**8.5**	**5.3**	**9.2**	**21.8**	**-15.8**	**27.4**	**5.3**	**6.7**	**Sep-04**
MSCI ACWI ex USA			*17.0*	*24.3*	*10.7*	*4.9*	*8.9*	*4.9*	*10.7*	*21.5*	*-14.2*	*27.2*	*4.5*	*6.4*	*Sep-04*
eV ACWI ex-US Large Cap Equity Net Rank			*24*	*57*	*68*	*69*	*53*	*65*	*68*	*66*	*58*	*61*	*17*	*63*	*Sep-04*
LSV Int'l Large Cap Value	276,703,455	11.1	19.0	21.4	0.8	0.4	6.9	4.4	0.8	20.8	-16.9	27.5	8.2	6.0	Sep-04
MSCI ACWI ex USA			*17.0*	*24.3*	*10.7*	*4.9*	*8.9*	*4.9*	*10.7*	*21.5*	*-14.2*	*27.2*	*4.5*	*6.4*	*Sep-04*
Fidelity Int'l Growth	317,296,078	12.8	18.5	28.2	17.7	7.2	9.8	6.1	17.7	22.8	-14.7	27.0	1.8	4.9	Apr-06
MSCI ACWI ex USA			*17.0*	*24.3*	*10.7*	*4.9*	*8.9*	*4.9*	*10.7*	*21.5*	*-14.2*	*27.2*	*4.5*	*4.0*	*Apr-06*
Core Real Estate	**140,389,203**	**5.6**	**2.9**	**4.0**	**-0.7**	**3.5**	**4.2**	**3.8**	**-0.7**	**10.0**	**1.6**	**5.2**	**5.2**	**2.2**	**Mar-08**
NCREIF Property Index			*1.2*	*1.9*	*1.6*	*4.9*	*5.9*	*9.0*	*1.6*	*6.4*	*6.7*	*7.0*	*8.0*	*5.8*	*Mar-08*
InvMetrics Public DB Real Estate Priv Net Rank			*5*	*3*	*79*	*81*	*92*	*99*	*79*	*6*	*99*	*89*	*94*	*91*	*Mar-08*
Prime Property Fund	59,685,560	2.4	1.5	2.6	1.3	5.1	6.6	--	1.3	6.2	8.0	8.8	9.2	6.9	Sep-15
NCREIF ODCE			*1.3*	*1.8*	*1.2*	*4.9*	*6.2*	*9.9*	*1.2*	*5.3*	*8.3*	*7.6*	*8.8*	*6.6*	*Sep-15*
BlackRock Real Estate Securities	20,390,153	0.8	12.8	13.7	-11.3	1.5	2.9	--	-11.3	23.1	-4.2	3.7	6.6	6.2	Sep-12
DJ US Select RESI TR USD			*12.9*	*13.9*	*-11.2*	*1.5*	*3.0*	*7.5*	*-11.2*	*23.1*	*-4.2*	*3.8*	*6.6*	*6.3*	*Sep-12*
PGIM Real Estate US Debt Fund	60,313,489	2.4	1.3	2.5	4.5	--	--	--	4.5	6.0	--	--	--	5.2	Sep-18
BBgBarc US CMBS Investment Grade			*1.2*	*3.2*	*7.6*	*5.6*	*4.7*	*4.5*	*7.6*	*8.3*	*1.0*	*3.5*	*3.5*	*7.3*	*Sep-18*
Value-Add Real Estate	**96,527,550**	**3.9**	**0.0**	**0.9**	**6.0**	**8.9**	**9.5**	**--**	**6.0**	**9.0**	**11.7**	**11.9**	**8.8**	**9.7**	**Jul-14**
NCREIF Property Index +2%			*1.7*	*2.9*	*3.6*	*7.0*	*8.0*	*11.2*	*3.6*	*8.5*	*8.8*	*9.1*	*10.1*	*9.7*	*Jul-14*
American Strategic Value Realty	68,668,380	2.8	0.0	0.6	1.7	6.4	8.2	--	1.7	8.5	9.2	10.1	11.7	9.8	Dec-14
NCREIF Property Index			*1.2*	*1.9*	*1.6*	*4.9*	*5.9*	*9.0*	*1.6*	*6.4*	*6.7*	*7.0*	*8.0*	*7.1*	*Dec-14*
Greenfield Acquisition Partners VII	6,596,029	0.3	0.0	2.2	4.4	10.8	10.6	--	4.4	15.4	12.9	14.7	6.1	10.6	Jul-14
NCREIF-ODCE +1%			*1.5*	*2.3*	*2.2*	*6.0*	*7.3*	*11.0*	*2.2*	*6.4*	*9.4*	*8.7*	*9.8*	*9.3*	*Jul-14*
Greenfield Acquisition Partners VIII	21,263,141	0.9	0.0	1.4	19.9	--	--	--	19.9	6.4	--	--	--	16.5	Apr-18
NCREIF-ODCE +1%			*1.5*	*2.3*	*2.2*	*6.0*	*7.3*	*11.0*	*2.2*	*6.4*	*9.4*	*8.7*	*9.8*	*5.6*	*Apr-18*
Risk Parity	**355,374,870**	**14.3**	**8.5**	**13.3**	**9.5**	**7.5**	**--**	**--**	**9.5**	**22.0**	**-7.0**	**--**	**--**	**7.7**	**Nov-17**
60% MSCI ACWI (Net)/ 40% BBgBarc Global Agg			*10.1*	*16.7*	*14.0*	*8.3*	*9.5*	*6.8*	*14.0*	*18.6*	*-6.0*	*17.1*	*5.7*	*8.5*	*Nov-17*
AQR Global Risk Premium - EL	173,775,599	7.0	7.3	11.5	5.6	--	--	--	5.6	21.9	--	--	--	7.9	Apr-18
60% MSCI ACWI (Net)/ 40% BBgBarc Global Agg			*10.1*	*16.7*	*14.0*	*8.3*	*9.5*	*6.8*	*14.0*	*18.6*	*-6.0*	*17.1*	*5.7*	*9.1*	*Apr-18*
PanAgora Risk Parity Multi Asset	181,599,271	7.3	9.6	15.0	13.6	8.6	--	--	13.6	22.1	-7.6	--	--	8.8	Nov-17
60% MSCI ACWI (Net)/ 40% BBgBarc Global Agg			*10.1*	*16.7*	*14.0*	*8.3*	*9.5*	*6.8*	*14.0*	*18.6*	*-6.0*	*17.1*	*5.7*	*8.5*	*Nov-17*

TOTAL FUND PERFORMANCE DETAIL

	Market Value ($)	% of Portfolio	3 Mo (%)	Fiscal YTD (%)	1 Yr (%)	3 Yrs (%)	5 Yrs (%)	10 Yrs (%)	2020 (%)	2019 (%)	2018 (%)	2017 (%)	2016 (%)	Inception (%)	Inception Date
					Ending December 31, 2020										
Infrastructure	**35,902,426**	**1.4**	**0.0**	**-1.4**	**1.8**	**7.7**	**9.4**	**--**	**1.8**	**13.1**	**8.3**	**20.9**	**4.1**	**6.5**	**May-15**
CPI + 5% (Unadjusted)			*1.3*	*3.5*	*6.4*	*6.9*	*7.0*	*6.8*	*6.4*	*7.4*	*7.0*	*7.2*	*7.2*	*6.7*	*May-15*
eV Infrastructure Net Rank			*99*	*99*	*30*	*17*	*17*	*--*	*30*	*99*	*1*	*25*	*99*	*25*	*May-15*
MS Infrastructure Partners II	35,902,426	1.4	0.0	-1.4	1.8	7.7	9.4	--	1.8	13.1	8.3	20.9	4.1	6.4	May-15
CPI + 5% (Unadjusted)			*1.3*	*3.5*	*6.4*	*6.9*	*7.0*	*6.8*	*6.4*	*7.4*	*7.0*	*7.2*	*7.2*	*6.7*	*May-15*
Private Equity	**8,156,313**	**0.3**	**4.9**	**11.8**	**--**	**--**	**--**	**--**	**--**	**--**	**--**	**--**	**--**	**11.8**	**Apr-20**
Russell 3000 + 3%			*15.5*	*27.0*	*24.5*	*17.9*	*18.9*	*17.2*	*24.5*	*34.9*	*-2.4*	*24.7*	*16.1*	*56.1*	*Apr-20*
Private Equity Proxy	**168,799,167**	**6.8**	**14.7**	**25.2**	**20.8**	**16.5**	**16.4**	**14.5**	**20.8**	**31.1**	**-0.2**	**21.2**	**11.7**	**10.3**	**Nov-03**
Russell 3000			*14.7*	*25.2*	*20.9*	*14.5*	*15.4*	*13.8*	*20.9*	*31.0*	*-5.2*	*21.1*	*12.7*	*10.1*	*Nov-03*
eV US Large Cap Equity Net Rank			*31*	*24*	*34*	*27*	*26*	*27*	*34*	*37*	*14*	*50*	*34*	*40*	*Nov-03*
Private Credit	**88,593,960**	**3.6**	**0.1**	**-4.4**	**-13.6**	**-1.9**	**-0.9**	**--**	**-13.6**	**4.8**	**4.2**	**-0.4**	**1.9**	**1.6**	**May-13**
S&P/LSTA Leveraged Loan Index +2%			*4.3*	*9.2*	*5.2*	*6.1*	*7.3*	*6.4*	*5.2*	*10.8*	*2.4*	*6.2*	*12.3*	*5.9*	*May-13*
Risk-Diversifying Sub-Portfolio	**258,482,950**	**10.4**	**0.0**	**0.4**	**4.6**	**3.9**	**4.1**	**4.0**	**4.6**	**5.9**	**1.1**	**3.8**	**5.2**	**4.8**	**Nov-03**
StanCERA Risk-Diversifying Blended BM			*-0.2*	*0.0*	*5.1*	*3.9*	*2.9*	*2.4*	*5.1*	*5.3*	*1.4*	*1.3*	*1.3*	*--*	*Nov-03*
US Treasury Bonds	**69,196,371**	**2.8**	**-1.1**	**-0.9**	**8.8**	**5.6**	**5.4**	**4.7**	**8.8**	**7.6**	**0.7**	**5.0**	**5.2**	**5.2**	**Nov-03**
BBgBarc US Treasury 7-10 Yr TR			*-1.3*	*-1.0*	*10.0*	*6.4*	*4.5*	*4.6*	*10.0*	*8.5*	*0.9*	*2.6*	*1.1*	*--*	*Nov-03*
eV US Government Fixed Inc Net Rank			*99*	*99*	*2*	*2*	*1*	*1*	*2*	*1*	*86*	*1*	*1*	*1*	*Nov-03*
Northern Trust Intermediate Gov't Bond	49,138,100	2.0	-0.2	-0.1	5.7	4.1	--	--	5.7	5.2	1.4	--	--	3.5	Jul-17
BBgBarc US Govt Int TR			*-0.2*	*0.0*	*5.7*	*4.1*	*2.9*	*2.5*	*5.7*	*5.2*	*1.4*	*1.1*	*1.1*	*3.5*	*Jul-17*
Northern Trust Long Term Gov't Bond	20,058,271	0.8	-3.0	-2.9	17.3	9.8	--	--	17.3	14.7	-1.7	--	--	9.6	Jul-17
BBgBarc US Govt Long TR			*-3.0*	*-2.8*	*17.6*	*9.8*	*7.8*	*7.7*	*17.6*	*14.7*	*-1.8*	*8.5*	*1.4*	*9.7*	*Jul-17*
Short-Term Bonds	**189,286,579**	**7.6**	**0.4**	**0.9**	**3.2**	**3.2**	**--**	**--**	**3.2**	**5.4**	**1.2**	**--**	**--**	**2.8**	**Jul-17**
BBgBarc US Govt/Credit 1-3 Yr. TR			*0.2*	*0.4*	*3.3*	*3.0*	*2.2*	*1.6*	*3.3*	*4.0*	*1.6*	*0.8*	*1.3*	*2.6*	*Jul-17*
eV US Short Duration Fixed Inc Net Rank			*51*	*53*	*82*	*44*	*--*	*--*	*82*	*11*	*75*	*--*	*--*	*49*	*Jul-17*
DFA	189,286,579	7.6	0.4	0.9	3.2	3.2	--	--	3.2	5.4	1.2	--	--	2.8	Jul-17
BBgBarc US Govt/Credit 1-3 Yr. TR			*0.2*	*0.4*	*3.3*	*3.0*	*2.2*	*1.6*	*3.3*	*4.0*	*1.6*	*0.8*	*1.3*	*2.6*	*Jul-17*

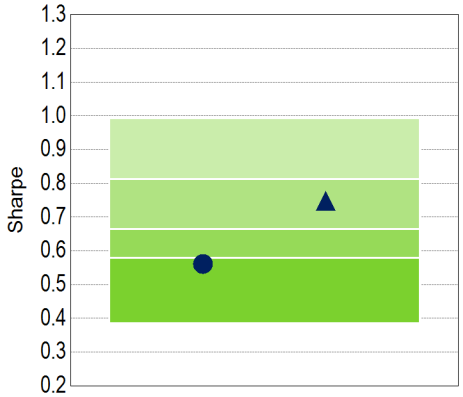
PERFORMANCE ANALYSIS

3 Years Ending December 31, 2020											
	Anlzd Return	Ann Excess BM Return	Anlzd Standard Deviation	Anlzd Alpha	Beta	Tracking Error	R-Squared	Sharpe Ratio	Information Ratio	Up Mkt Capture Ratio	Down Mkt Capture Ratio
BlackRock Russell 1000 Growth	22.98%	0.00%	19.90%	0.02%	1.00	0.03%	1.00	1.08	-0.12	99.92%	99.94%
BlackRock Russell 1000 Value	6.20%	0.13%	19.87%	0.14%	1.00	0.06%	1.00	0.24	2.17	100.30%	99.78%
Dodge & Cox-Equity	6.99%	0.92%	22.53%	0.23%	1.11	4.56%	0.97	0.24	0.20	117.10%	106.79%
Bernzott	11.21%	7.49%	25.40%	7.84%	0.91	8.70%	0.89	0.38	0.86	111.32%	90.86%
Channing	6.37%	2.64%	27.65%	2.56%	1.02	5.72%	0.96	0.18	0.46	114.32%	100.89%
InView	-0.89%	-4.62%	31.34%	-5.21%	1.16	7.71%	0.96	-0.08	-0.60	99.10%	107.61%
Keeley	2.00%	-1.73%	29.55%	-2.11%	1.10	5.23%	0.98	0.02	-0.33	109.21%	106.42%
Pacific Ridge	-0.43%	-4.76%	30.28%	-5.24%	1.11	6.49%	0.96	-0.06	-0.73	106.54%	110.22%
Walthausen	0.31%	-3.41%	25.66%	-3.22%	0.95	5.35%	0.96	-0.05	-0.64	91.69%	102.68%
Capital Prospects Transition	-0.05%	-3.77%	0.22%	-0.05%	0.00	26.48%	0.00	-7.01	-0.14	-0.08%	--
LSV Int'l Large Cap Value	0.43%	-4.45%	20.61%	-5.04%	1.12	3.76%	0.98	-0.05	-1.18	102.23%	113.86%
Fidelity Int'l Growth	7.23%	2.35%	18.22%	2.38%	0.99	2.19%	0.99	0.32	1.07	104.71%	95.69%
Prime Property Fund	5.09%	0.18%	2.93%	0.10%	1.02	0.71%	0.94	1.23	0.25	105.60%	119.67%
BlackRock Real Estate Securities	1.48%	-0.06%	20.42%	-0.06%	1.00	0.06%	1.00	0.00	-1.01	99.64%	99.99%
American Strategic Value Realty	6.42%	1.53%	3.25%	0.51%	1.21	1.28%	0.87	1.52	1.19	126.28%	31.46%
Greenfield Acquisition Partners VII	10.78%	4.83%	8.67%	13.99%	-0.54	9.57%	0.03	1.07	0.50	173.48%	--
PanAgora Risk Parity Multi Asset	8.63%	0.31%	10.59%	2.24%	0.77	6.09%	0.74	0.68	0.05	67.29%	56.58%
MS Infrastructure Partners II	7.65%	0.72%	6.24%	-10.09%	2.56	5.92%	0.16	0.99	0.12	120.87%	768.33%
Medley Capital	-16.28%	-22.37%	9.30%	-15.21%	-0.18	13.81%	0.03	-1.91	-1.62	-87.60%	38.89%
Raven Opportunity I	-28.57%	-34.66%	35.30%	-28.04%	-0.09	36.57%	0.00	-0.85	-0.95	-149.96%	-6.57%
Raven Opportunity III	7.49%	1.41%	6.20%	6.99%	0.08	10.15%	0.01	0.97	0.14	49.68%	-15.34%
White Oak Pinnacle	1.67%	-4.42%	9.72%	3.09%	-0.23	14.41%	0.04	0.02	-0.31	7.49%	-11.30%

Stanislaus County ERA

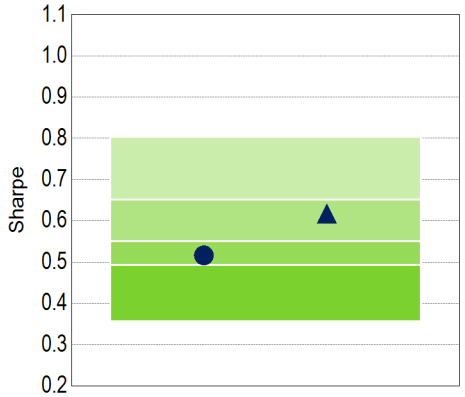
TOTAL FUND SHARPE RATIO RANKINGS

Sharpe Ratio
1 Year



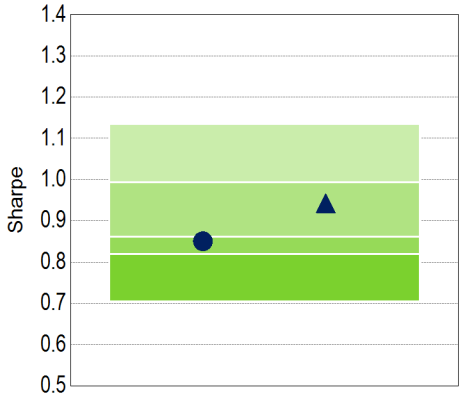
● Total Fund	
Value	0.6
Rank	78
▲ Policy Index	
Value	0.7
Rank	33
Universe	
5th %tile	1.0
25th %tile	0.8
Median	0.7
75th %tile	0.6
95th %tile	0.4

Sharpe Ratio
3 Years



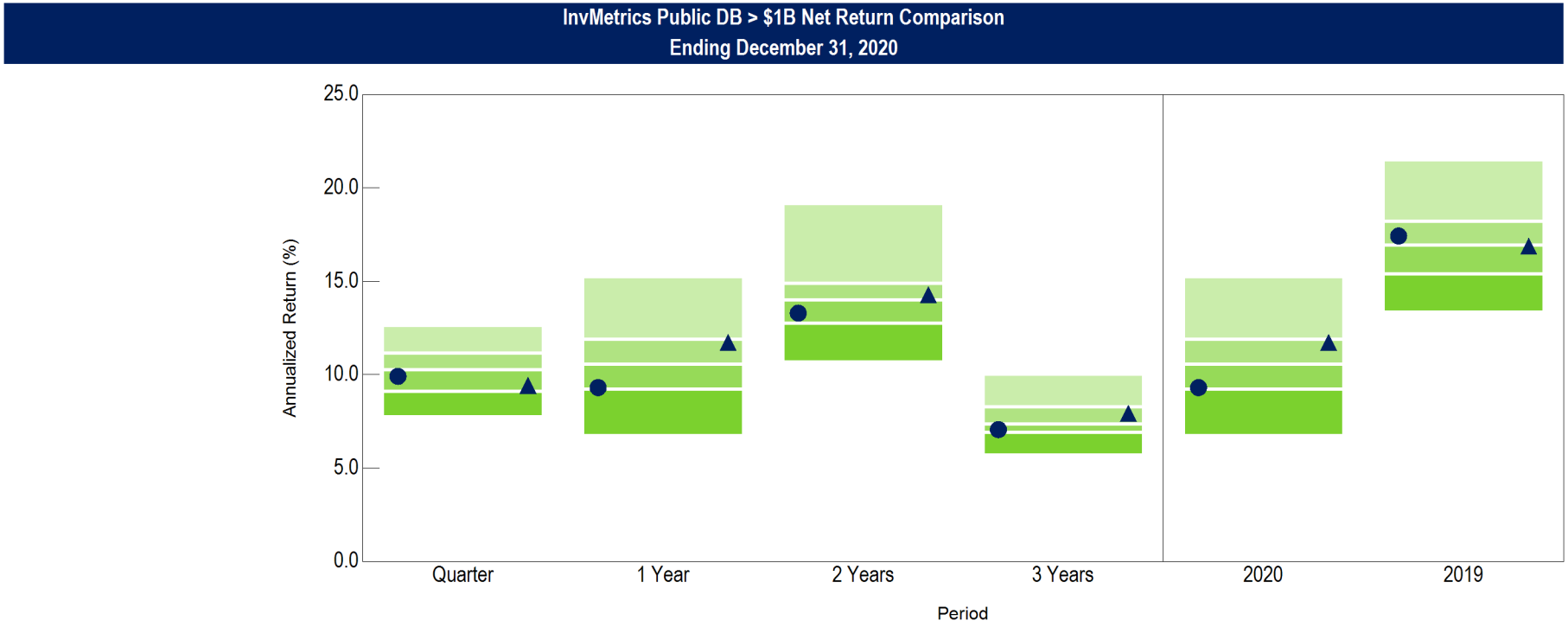
● Total Fund	
Value	0.5
Rank	62
▲ Policy Index	
Value	0.6
Rank	33
Universe	
5th %tile	0.8
25th %tile	0.7
Median	0.6
75th %tile	0.5
95th %tile	0.4

Sharpe Ratio
5 Years



● Total Fund	
Value	0.9
Rank	59
▲ Policy Index	
Value	0.9
Rank	33
Universe	
5th %tile	1.1
25th %tile	1.0
Median	0.9
75th %tile	0.8
95th %tile	0.7

TOTAL FUND RETURN SUMMARY VS. PEER UNIVERSE



	Return (Rank)											
5th Percentile	12.6		15.2		19.1		10.0		15.2		21.5	
25th Percentile	11.2		11.9		14.9		8.3		11.9		18.2	
Median	10.3		10.6		14.0		7.4		10.6		17.0	
75th Percentile	9.1		9.2		12.8		6.9		9.2		15.4	
95th Percentile	7.8		6.8		10.7		5.7		6.8		13.4	
# of Portfolios	61		61		61		61		61		69	
● Total Fund	9.9	(61)	9.3	(70)	13.3	(63)	7.1	(66)	9.3	(70)	17.4	(35)
▲ Policy Index	9.4	(73)	11.7	(30)	14.3	(43)	7.9	(34)	11.7	(30)	16.9	(52)

Stanislaus County ERA

INVESTMENT MANAGER FEES

Account	Fee Schedule	Market Value As of 12/31/2020	Est. Minimum Annual Fee ($)	Estimated Annual Fee ($)	Estimated Annual Fee (%)
Cash Account	0.10% of Assets	$18,614,266		$18,614	0.10%
Insight	0.12% of Assets	$201,685,083		$242,022	0.12%
BlackRock Russell 1000 Growth	0.02% of Assets	$237,295,423		$47,459	0.02%
BlackRock Russell 1000 Value	0.02% of Assets	$94,451,659		$18,890	0.02%
Dodge & Cox-Equity	0.40% of First 10.0 Mil, 0.20% of Next 90.0 Mil, 0.15% Thereafter	$99,389,147		$218,778	0.22%
Bernzott	0.50% of Assets	$13,894,796		$69,474	0.50%
Channing	0.50% of Assets	$19,164,467		$95,822	0.50%
InView	0.50% of Assets	$16,567,182		$82,836	0.50%
Keeley	0.50% of Assets	$11,259,715		$56,299	0.50%
Pacific Ridge	0.60% of Assets	$15,274,379		$91,646	0.60%
Walthausen	0.50% of Assets	$10,999,837		$54,999	0.50%
LSV Int'l Large Cap Value	0.25% of Assets	$276,703,455		$691,759	0.25%
Fidelity Int'l Growth	0.25% of Assets	$317,296,078		$793,240	0.25%
Prime Property Fund	0.84% of Assets	$59,685,560		$501,359	0.84%
BlackRock Real Estate Securities	0.09% of First 100.0 Mil, 0.07% Thereafter	$20,390,153		$18,351	0.09%
American Strategic Value Realty	0.75% of First 25.0 Mil, 0.65% of Next 25.0 Mil, 0.55% of Next 50.0 Mil, 0.45% Thereafter	$68,668,380		$452,676	0.66%
AQR Global Risk Premium - EL	0.38% of Assets	$173,775,599		$660,347	0.38%
PanAgora Risk Parity Multi Asset	0.35% of Assets	$181,599,271		$635,597	0.35%
Northern Trust Russell 3000	0.02% of Assets	$168,799,167		$33,760	0.02%

Stanislaus County ERA

INVESTMENT MANAGER FEES

Account	Fee Schedule	Market Value As of 12/31/2020	Est. Minimum Annual Fee ($)	Estimated Annual Fee ($)	Estimated Annual Fee (%)
Northern Trust Intermediate Gov't Bond	0.05% of First 25.0 Mil, 0.04% Thereafter	$49,138,100		$22,155	0.05%
Northern Trust Long Term Gov't Bond	0.05% of First 25.0 Mil, 0.04% Thereafter	$20,058,271		$10,029	0.05%
DFA	0.20% of First 25.0 Mil, 0.10% Thereafter	$189,286,579		$214,287	0.11%
Investment Management Fee		**$2,263,996,568**		**$5,030,401**	**0.22%**

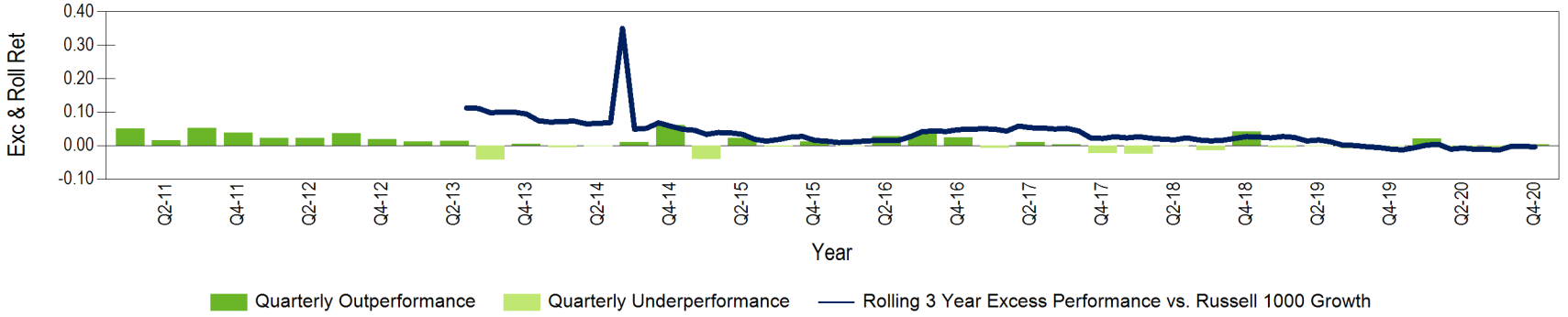
Closed end funds excluded from fee analysis.

Domestic Equity Managers

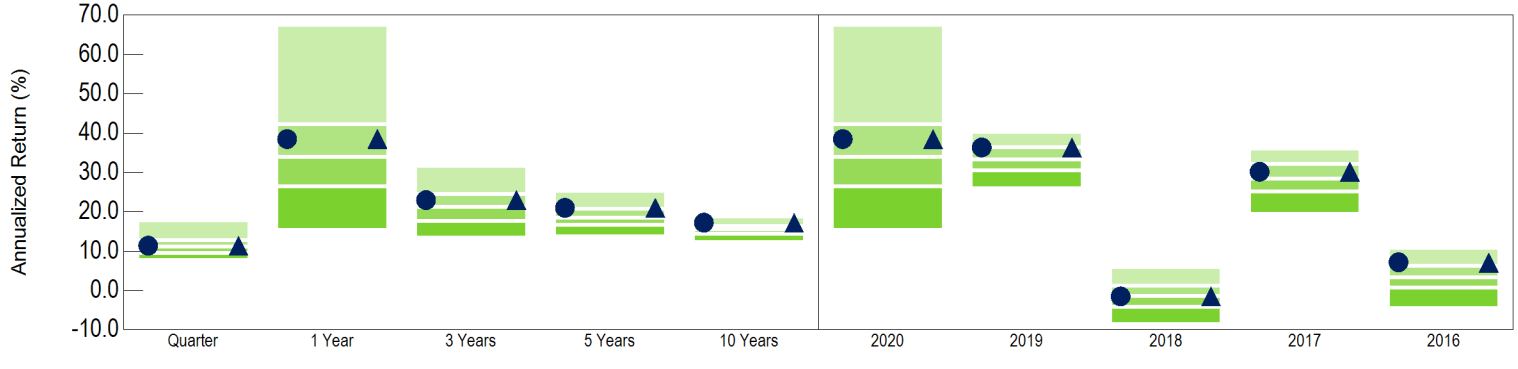
BlackRock Russell 1000 Growth

MANAGER PERFORMANCE COMPARISONS

Rolling Annualized Excess Performance



eV US Large Cap Growth Equity Net Return Comparison
Ending December 31, 2020

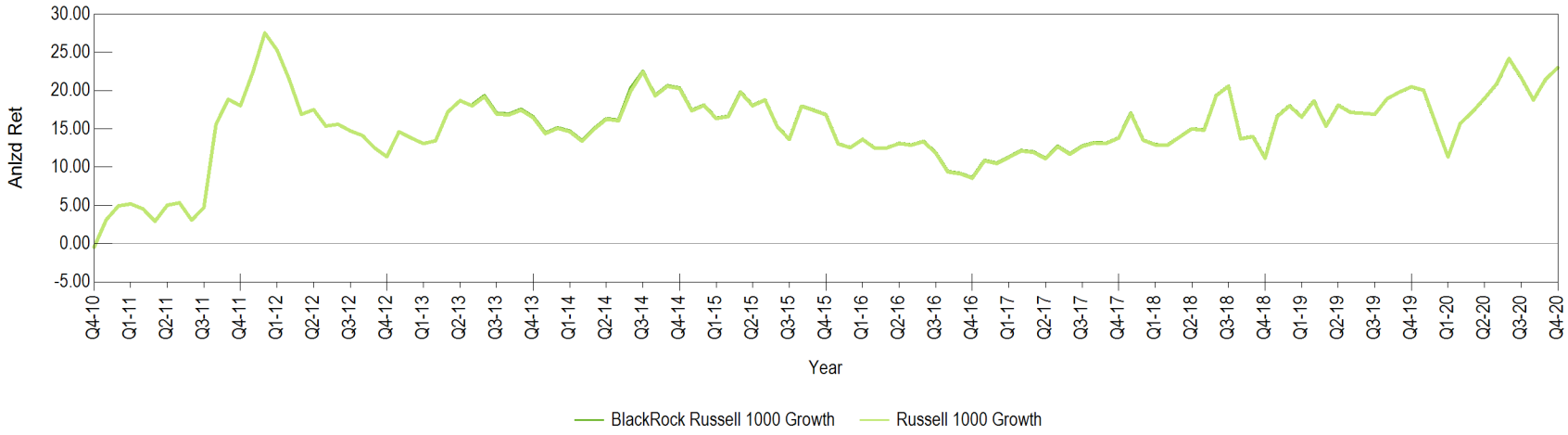


	Return (Rank)																			
5th Percentile	17.7		67.5		31.7		25.3		18.7		67.5		40.3		5.8		36.0		10.8	
25th Percentile	12.8		42.4		24.7		20.9		16.5		42.4		36.5		1.4		32.2		6.3	
Median	11.3		34.1		21.3		18.6		15.6		34.1		33.4		-1.3		28.5		3.4	
75th Percentile	9.6		26.6		17.8		16.8		14.5		26.6		30.6		-4.1		25.2		0.8	
95th Percentile	7.9		15.5		13.6		13.9		12.5		15.5		26.1		-8.4		19.5		-4.5	
# of Portfolios	199		198		187		174		151		198		186		179		182		182	
● BlackRock Russell 1000 Growth	11.4	(49)	38.5	(33)	23.0	(38)	21.0	(23)	17.2	(17)	38.5	(33)	36.4	(28)	-1.5	(52)	30.2	(39)	7.2	(19)
▲ Russell 1000 Growth	11.4	(49)	38.5	(33)	23.0	(38)	21.0	(23)	17.2	(17)	38.5	(33)	36.4	(27)	-1.5	(52)	30.2	(38)	7.1	(20)

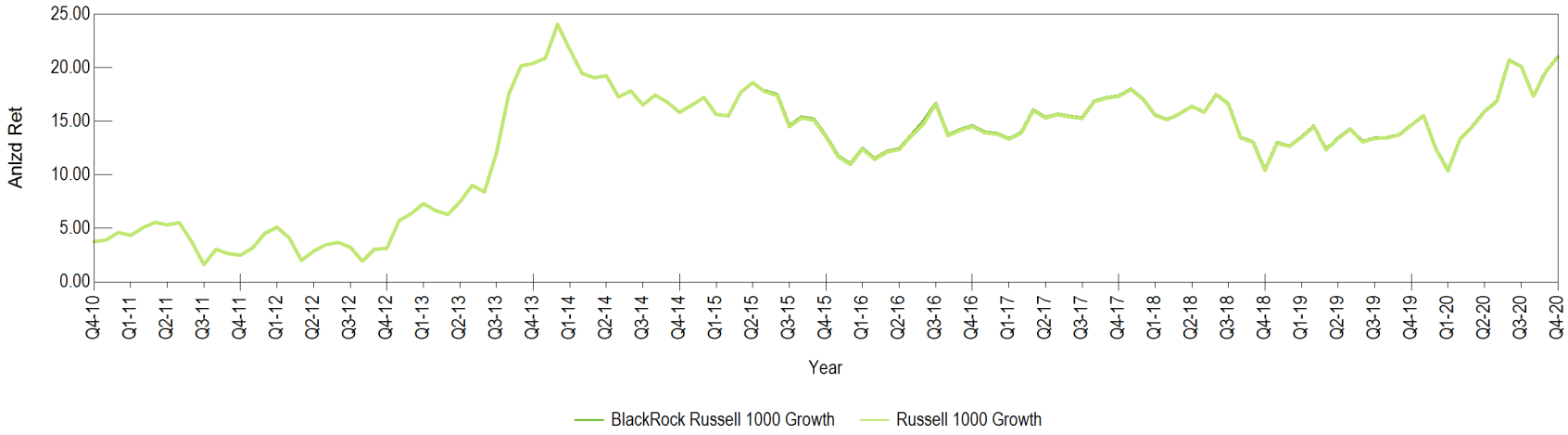
BlackRock Russell 1000 Growth

MANAGER PERFORMANCE - ROLLING 3 & 5 YEAR

Rolling 3 Year Annualized Return (%)



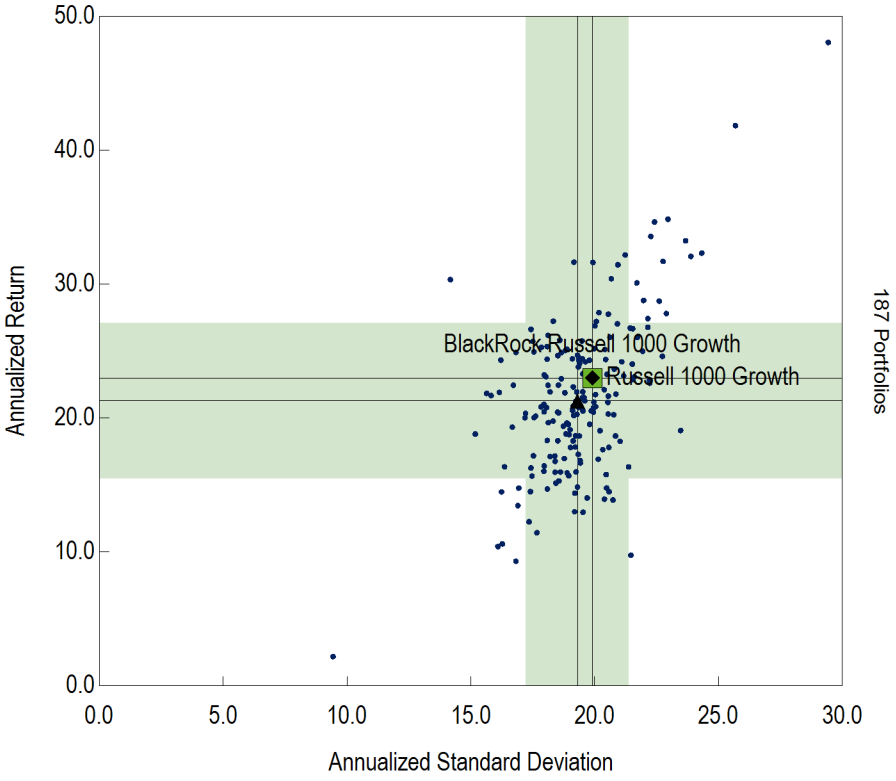
Rolling 5 Year Annualized Return (%)



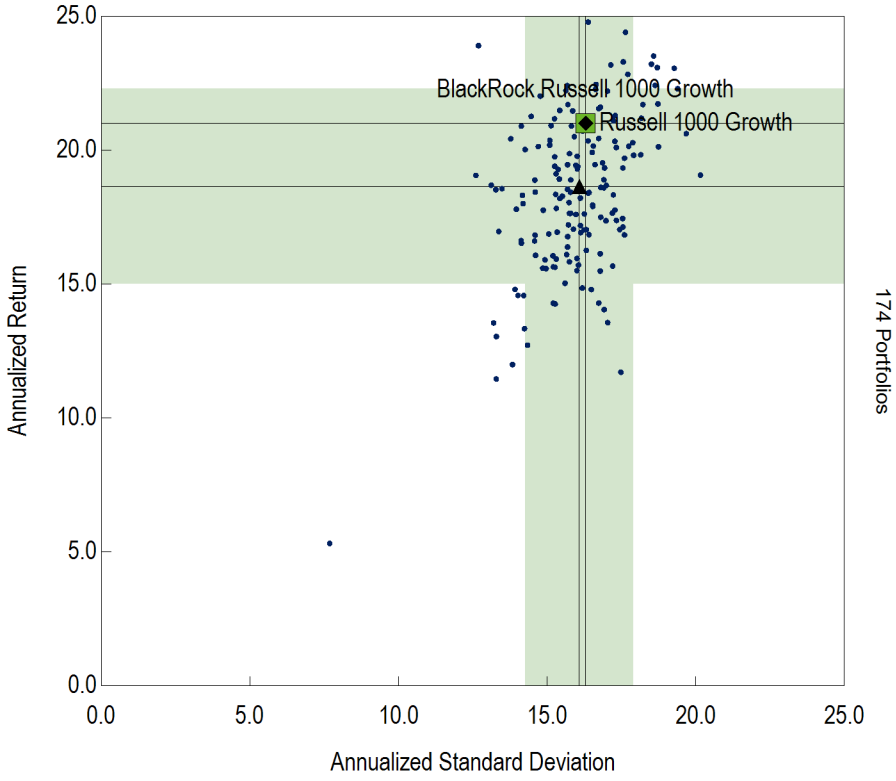
BlackRock Russell 1000 Growth

RISK VS. RETURN 3 & 5 YEAR

3 Years Ending December 31, 2020



5 Years Ending December 31, 2020



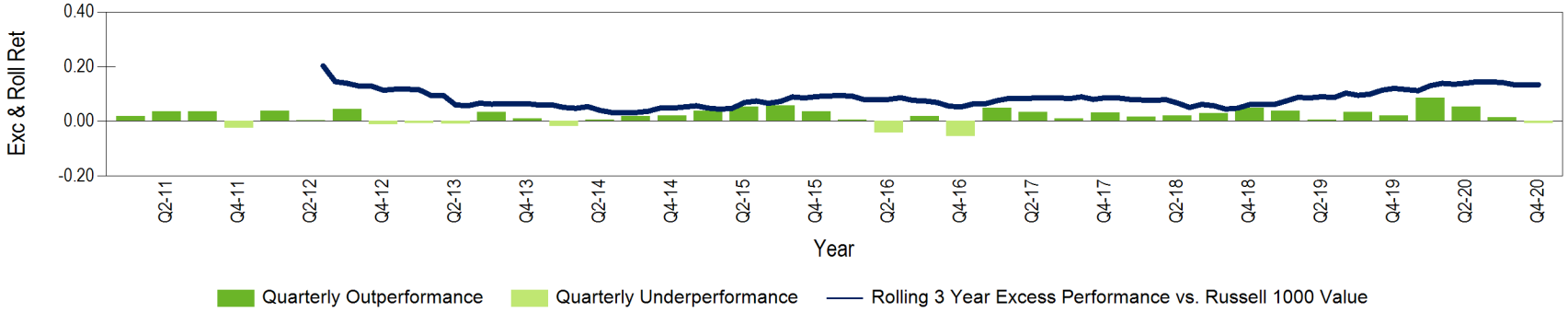
3 Years Ending December 31, 2020	Anlzd Return	Anlzd Standard Deviation	Sharpe Ratio
BlackRock Russell 1000 Growth	22.98%	19.90%	1.08
Russell 1000 Growth	22.99%	19.92%	1.08
eV US Large Cap Growth Equity Net Median	21.27%	19.31%	1.02

5 Years Ending December 31, 2020	Anlzd Return	Anlzd Standard Deviation	Sharpe Ratio
BlackRock Russell 1000 Growth	21.01%	16.29%	1.22
Russell 1000 Growth	21.00%	16.30%	1.22
eV US Large Cap Growth Equity Net Median	18.64%	16.09%	1.09

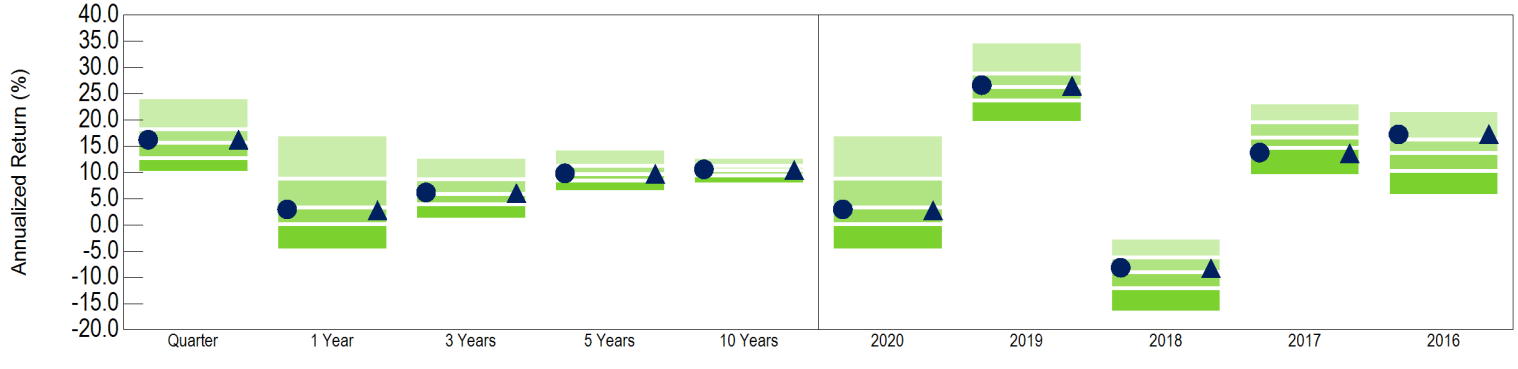
BlackRock Russell 1000 Value

MANAGER PERFORMANCE COMPARISONS

Rolling Annualized Excess Performance



eV US Large Cap Value Equity Net Return Comparison
Ending December 31, 2020

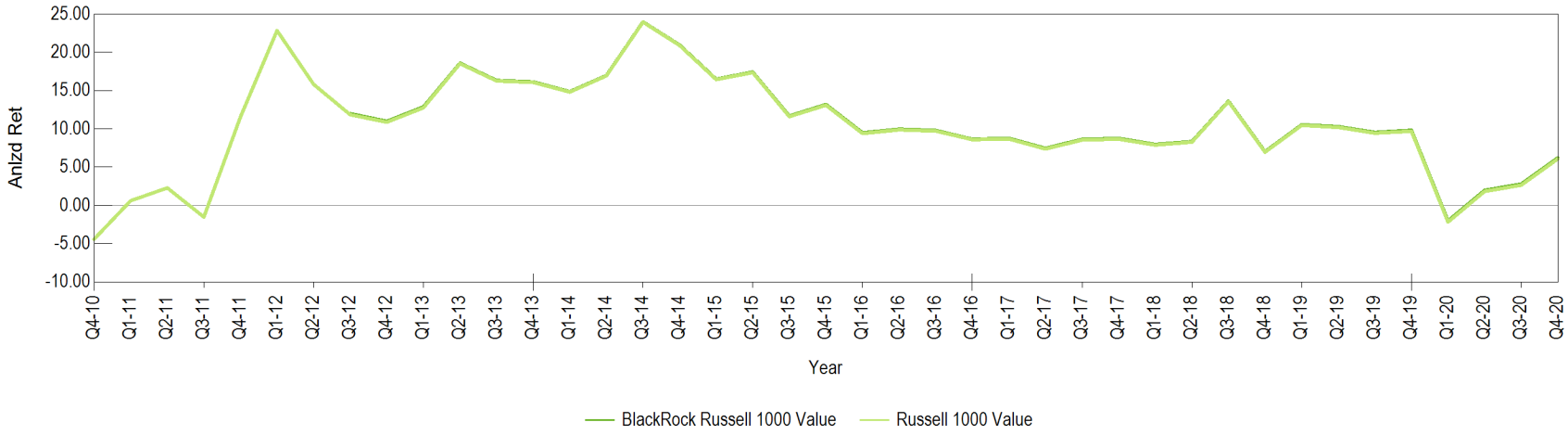


	Return (Rank)																			
5th Percentile	24.3		17.2		12.9		14.5		12.9		17.2		34.9		-2.5		23.3		21.8	
25th Percentile	18.4		8.9		8.8		11.4		11.4		8.9		28.9		-6.1		19.7		16.3	
Median	15.7		3.4		6.0		9.8		10.4		3.4		26.3		-9.0		16.7		13.8	
75th Percentile	12.8		0.2		4.0		8.6		9.5		0.2		23.8		-12.0		14.8		10.4	
95th Percentile	10.0		-4.8		1.1		6.3		7.8		-4.8		19.5		-16.7		9.4		5.6	
# of Portfolios	239		239		235		225		183		239		249		239		231		225	
● BlackRock Russell 1000 Value	16.2	(42)	3.0	(53)	6.2	(48)	9.8	(49)	10.6	(46)	3.0	(53)	26.7	(47)	-8.2	(41)	13.8	(83)	17.3	(20)
▲ Russell 1000 Value	16.3	(42)	2.8	(54)	6.1	(49)	9.7	(51)	10.5	(48)	2.8	(54)	26.5	(49)	-8.3	(43)	13.7	(86)	17.3	(19)

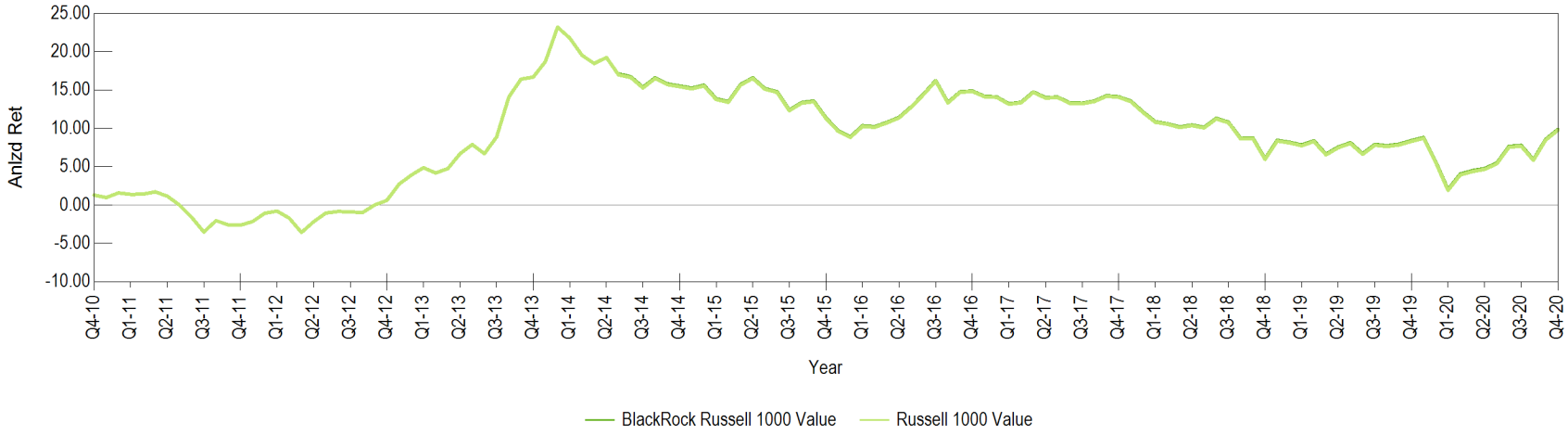
BlackRock Russell 1000 Value

MANAGER PERFORMANCE - ROLLING 3 & 5 YEAR

Rolling 3 Year Annualized Return (%)



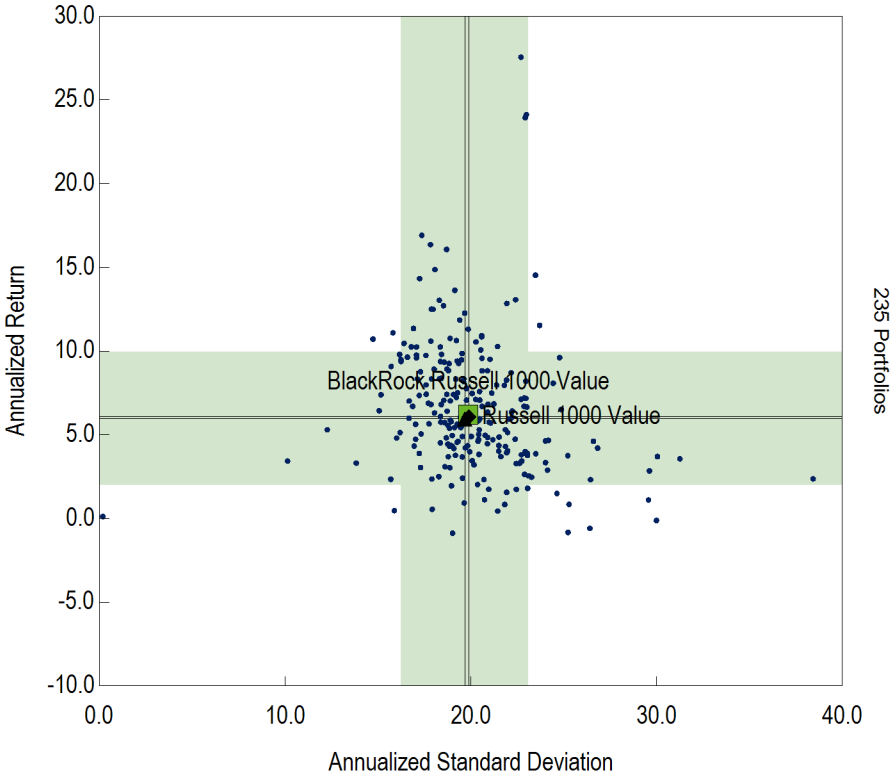
Rolling 5 Year Annualized Return (%)



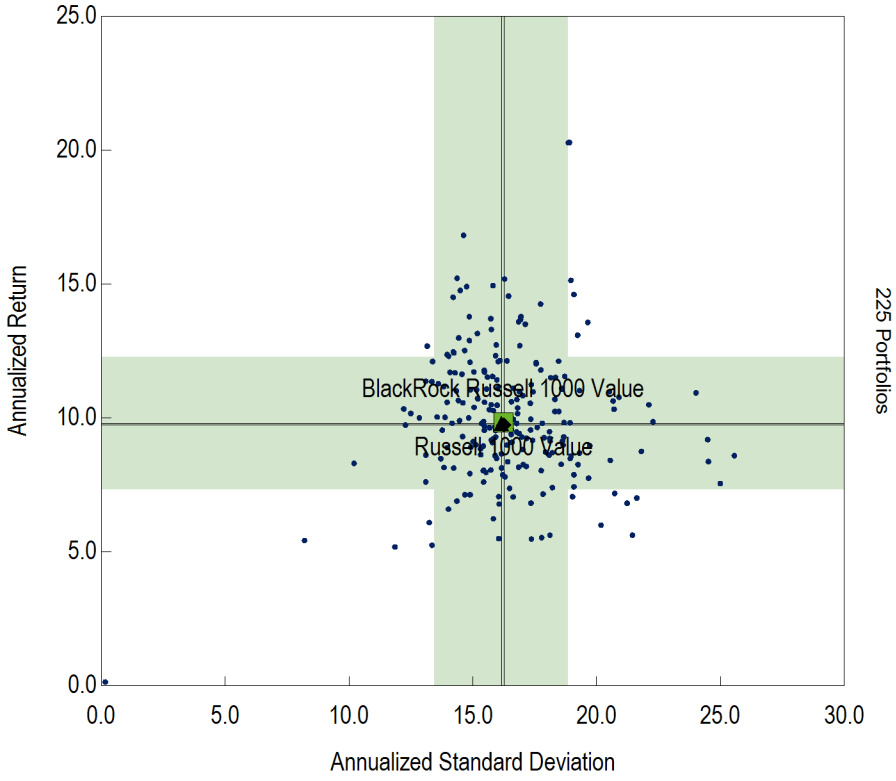
BlackRock Russell 1000 Value

RISK VS. RETURN 3 & 5 YEAR

3 Years Ending December 31, 2020



5 Years Ending December 31, 2020



3 Years Ending December 31, 2020

	Anlzd Return	Anlzd Standard Deviation	Sharpe Ratio
BlackRock Russell 1000 Value	6.20%	19.87%	0.24
Russell 1000 Value	6.07%	19.90%	0.23
eV US Large Cap Value Equity Net Median	5.95%	19.67%	0.23

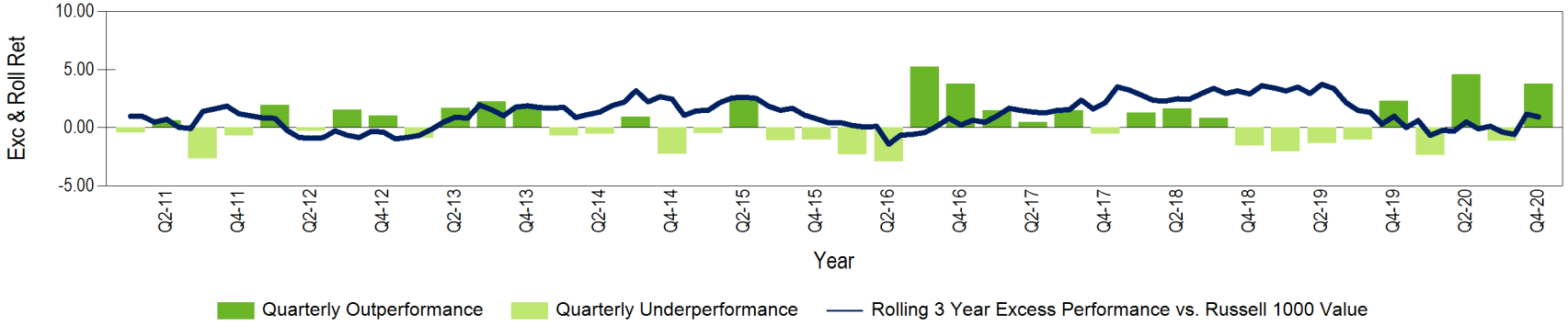
5 Years Ending December 31, 2020

	Anlzd Return	Anlzd Standard Deviation	Sharpe Ratio
BlackRock Russell 1000 Value	9.83%	16.24%	0.54
Russell 1000 Value	9.74%	16.26%	0.53
eV US Large Cap Value Equity Net Median	9.80%	16.15%	0.53

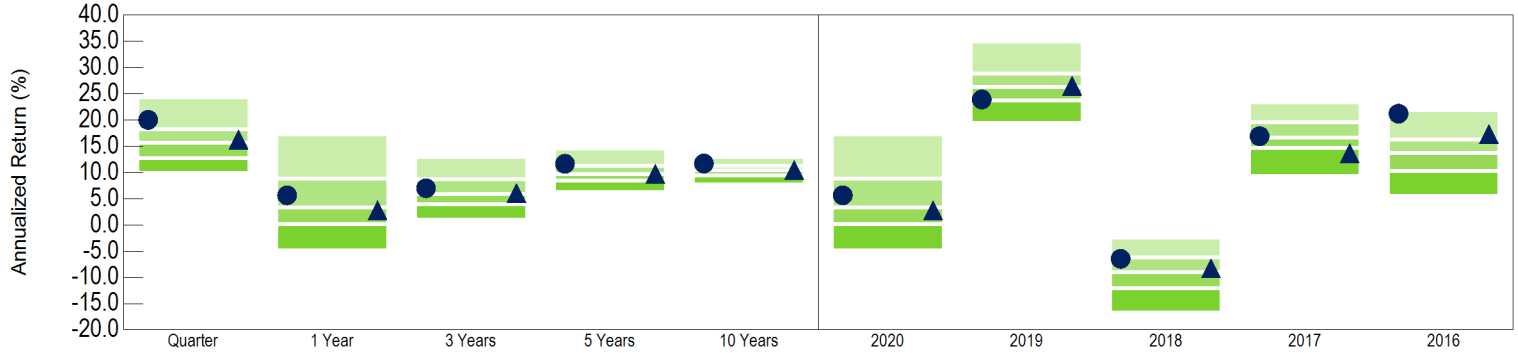
Dodge & Cox-Equity

MANAGER PERFORMANCE COMPARISONS

Rolling Annualized Excess Performance



eV US Large Cap Value Equity Net Return Comparison
Ending December 31, 2020

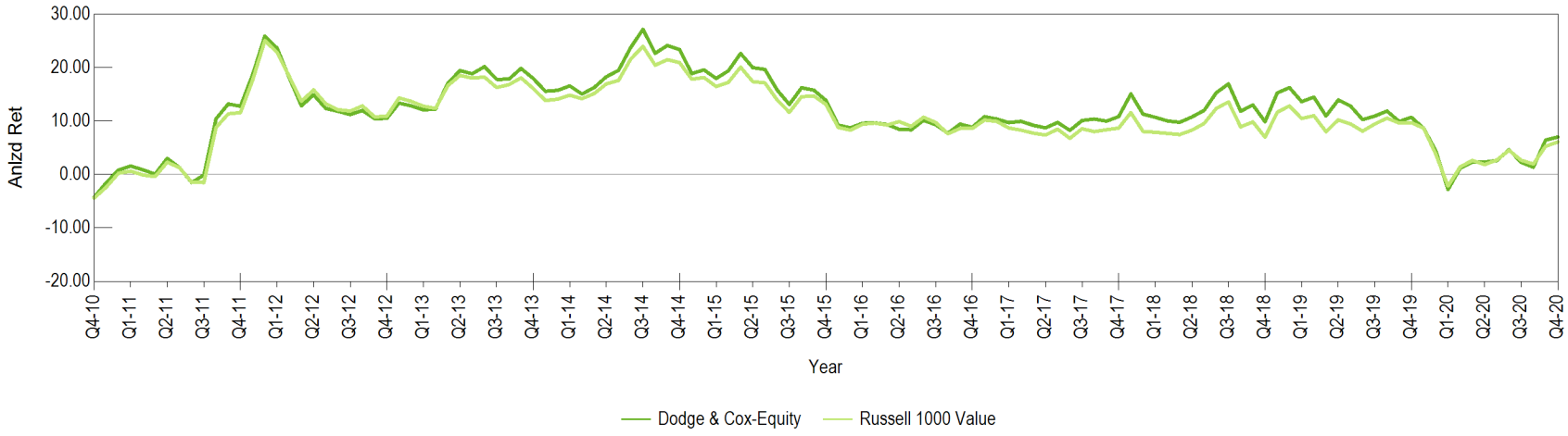


	Return (Rank)																			
5th Percentile	24.3		17.2		12.9		14.5		12.9		17.2		34.9		-2.5		23.3		21.8	
25th Percentile	18.4		8.9		8.8		11.4		11.4		8.9		28.9		-6.1		19.7		16.3	
Median	15.7		3.4		6.0		9.8		10.4		3.4		26.3		-9.0		16.7		13.8	
75th Percentile	12.8		0.2		4.0		8.6		9.5		0.2		23.8		-12.0		14.8		10.4	
95th Percentile	10.0		-4.8		1.1		6.3		7.8		-4.8		19.5		-16.7		9.4		5.6	
# of Portfolios	239		239		235		225		183		239		249		239		231		225	
● Dodge & Cox-Equity	20.0	(18)	5.6	(41)	7.0	(40)	11.7	(22)	11.7	(19)	5.6	(41)	23.9	(74)	-6.5	(27)	16.9	(49)	21.2	(6)
▲ Russell 1000 Value	16.3	(42)	2.8	(54)	6.1	(49)	9.7	(51)	10.5	(48)	2.8	(54)	26.5	(49)	-8.3	(43)	13.7	(86)	17.3	(19)

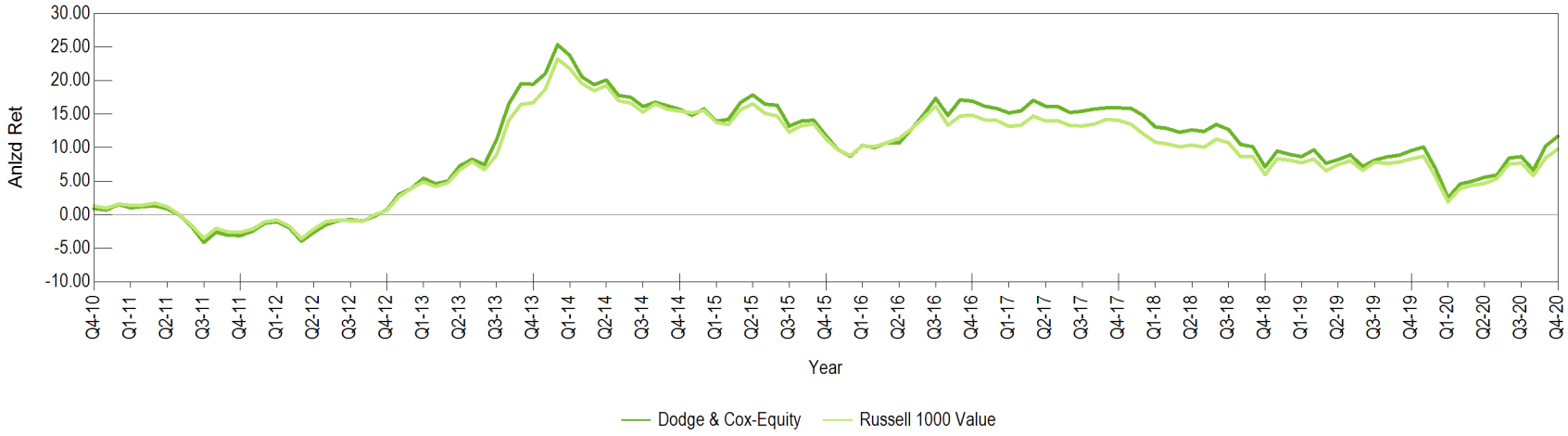
Dodge & Cox-Equity

MANAGER PERFORMANCE - ROLLING 3 & 5 YEAR

Rolling 3 Year Annualized Return (%)



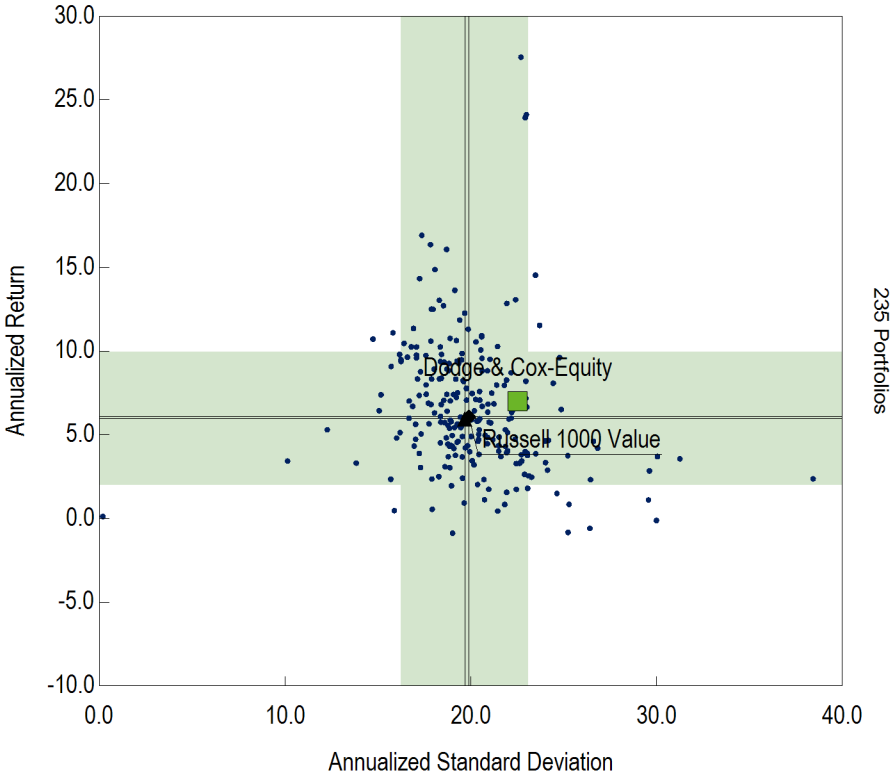
Rolling 5 Year Annualized Return (%)



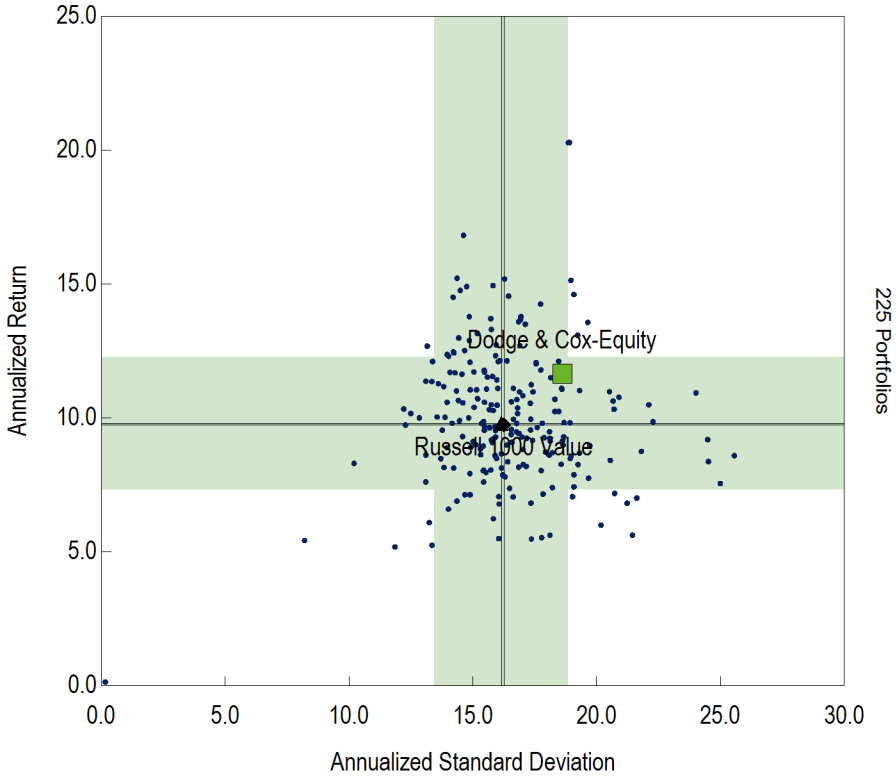
Dodge & Cox-Equity

RISK VS. RETURN 3 & 5 YEAR

3 Years Ending December 31, 2020



5 Years Ending December 31, 2020



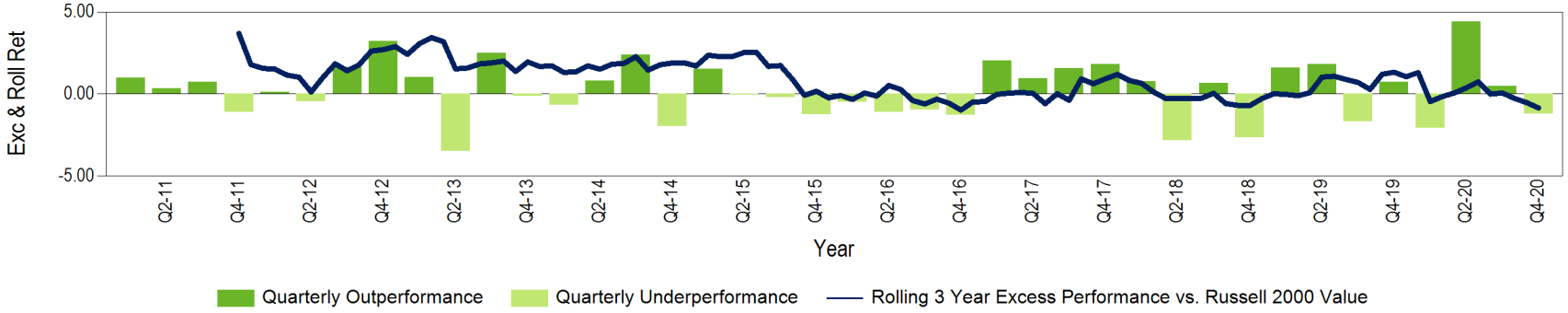
3 Years Ending December 31, 2020	Anlzd Return	Anlzd Standard Deviation	Sharpe Ratio
Dodge & Cox-Equity	6.99%	22.53%	0.24
Russell 1000 Value	6.07%	19.90%	0.23
eV US Large Cap Value Equity Net Median	5.95%	19.67%	0.23

5 Years Ending December 31, 2020	Anlzd Return	Anlzd Standard Deviation	Sharpe Ratio
Dodge & Cox-Equity	11.65%	18.62%	0.57
Russell 1000 Value	9.74%	16.26%	0.53
eV US Large Cap Value Equity Net Median	9.80%	16.15%	0.53

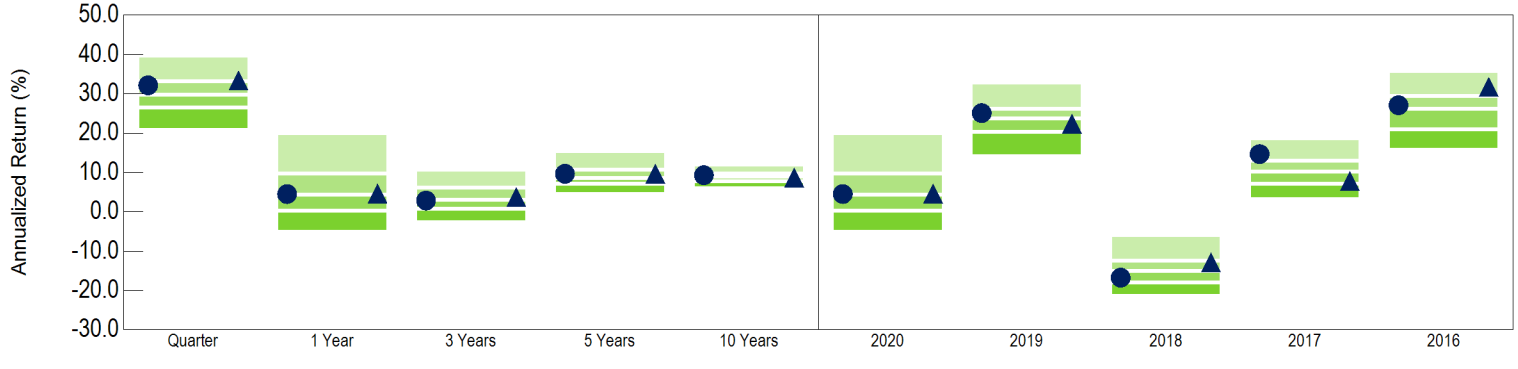
Attucks Small Cap

MANAGER PERFORMANCE COMPARISONS

Rolling Annualized Excess Performance



eV US Small Cap Value Equity Net Return Comparison
Ending December 31, 2020

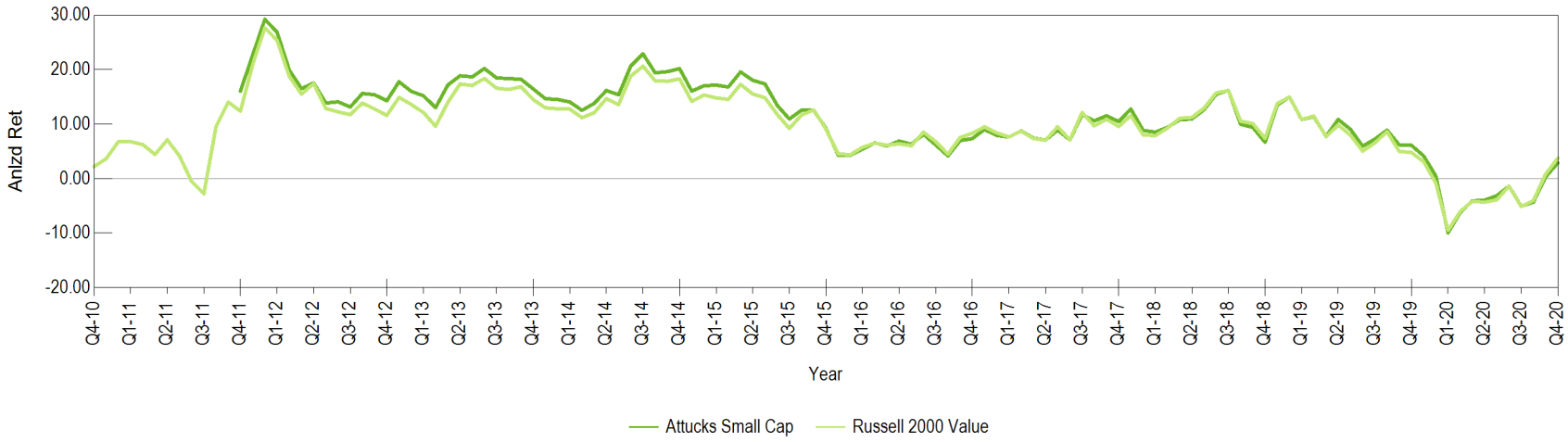


	Return (Rank)																			
5th Percentile	39.6		19.9		10.6		15.3		11.9		19.9		32.8		-6.0		18.6		35.7	
25th Percentile	33.3		9.9		6.2		10.8		9.9		9.9		26.3		-12.4		13.1		29.5	
Median	29.8		4.4		3.2		8.6		8.9		4.4		23.8		-15.0		10.3		26.2	
75th Percentile	26.7		0.4		0.8		7.2		7.8		0.4		20.4		-17.8		7.2		21.1	
95th Percentile	20.9		-4.9		-2.5		4.7		6.1		-4.9		14.2		-21.3		3.3		15.9	
# of Portfolios	178		178		171		165		142		178		176		168		170		151	
● Attucks Small Cap	32.2	(32)	4.5	(50)	2.9	(54)	9.7	(37)	9.3	(38)	4.5	(50)	25.1	(35)	-16.7	(67)	14.7	(17)	27.1	(39)
▲ Russell 2000 Value	33.4	(25)	4.6	(50)	3.7	(47)	9.7	(37)	8.7	(56)	4.6	(50)	22.4	(60)	-12.9	(31)	7.8	(70)	31.7	(15)

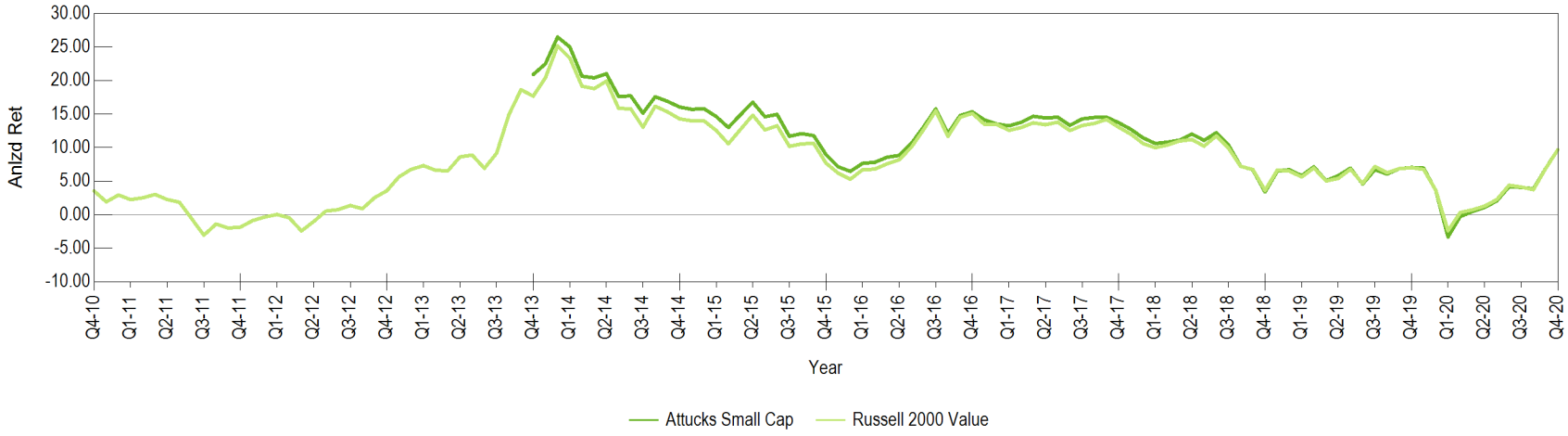
Attucks Small Cap

MANAGER PERFORMANCE - ROLLING 3 & 5 YEAR

Rolling 3 Year Annualized Return (%)



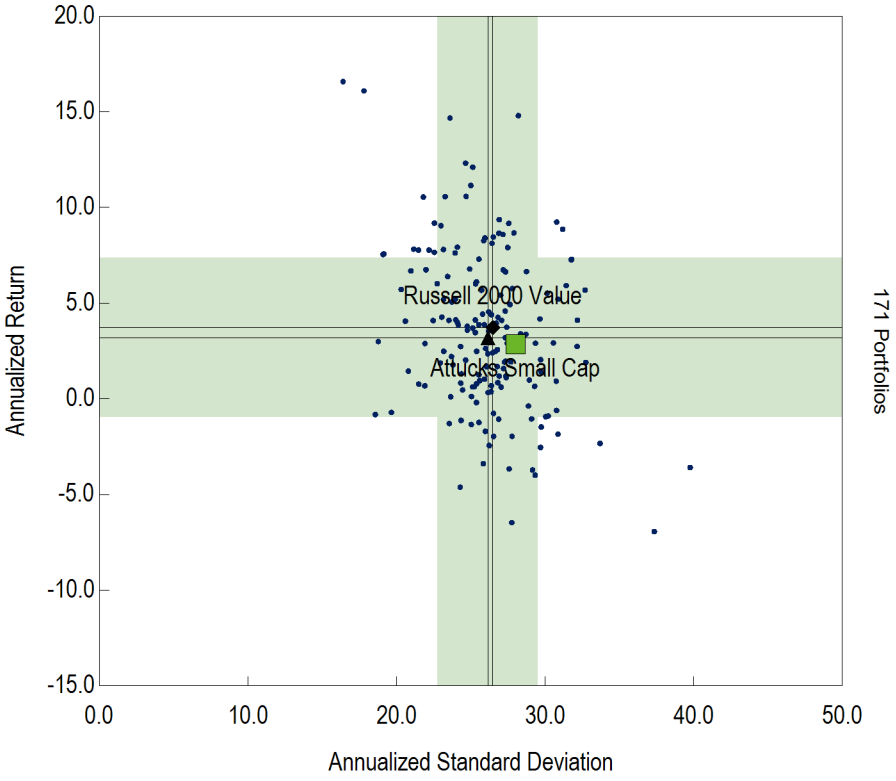
Rolling 5 Year Annualized Return (%)



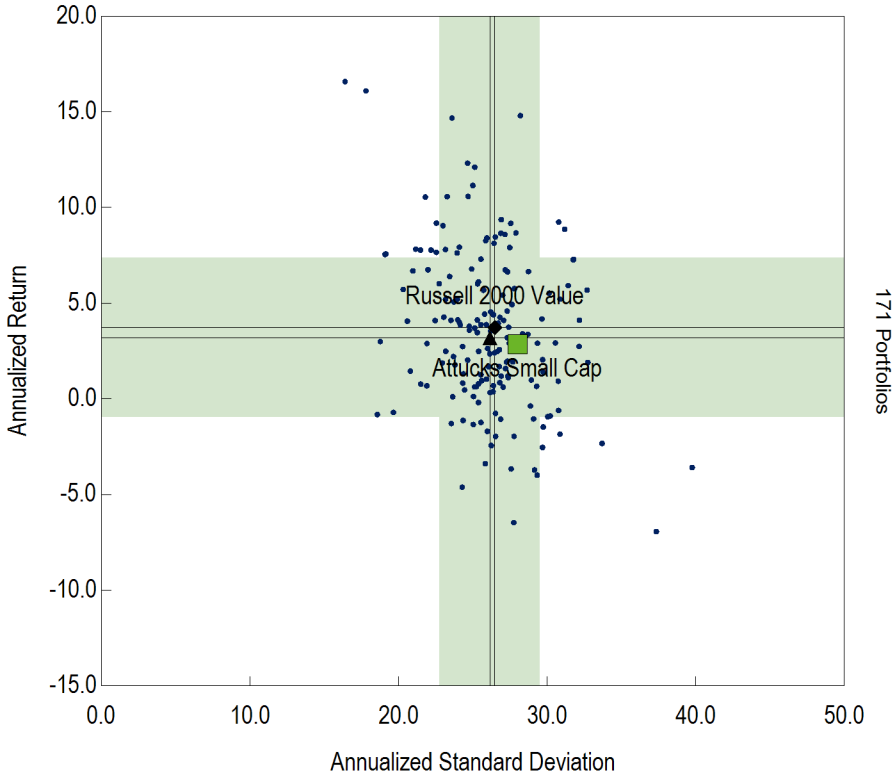
Attucks Small Cap

RISK VS. RETURN 3 & 5 YEAR

3 Years Ending December 31, 2020



3 Years Ending December 31, 2020



1 Year Ending December 31, 2020

	Anlzd Return	Anlzd Standard Deviation	Sharpe Ratio
Attucks Small Cap	4.52%	41.24%	0.10
Russell 2000 Value	4.63%	38.97%	0.11
eV US Small Cap Value Equity Net Median	4.42%	36.68%	0.11

5 Years Ending December 31, 2020

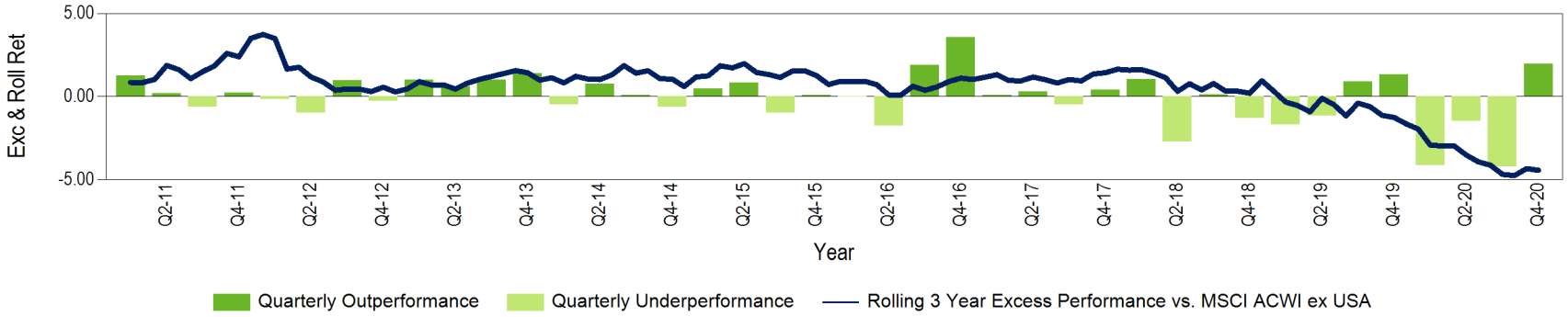
	Anlzd Return	Anlzd Standard Deviation
Attucks Small Cap	9.67%	23.14%
Russell 2000 Value	9.65%	22.34%
eV US Small Cap Value Equity Net Median	8.62%	22.11%

International Equity Managers

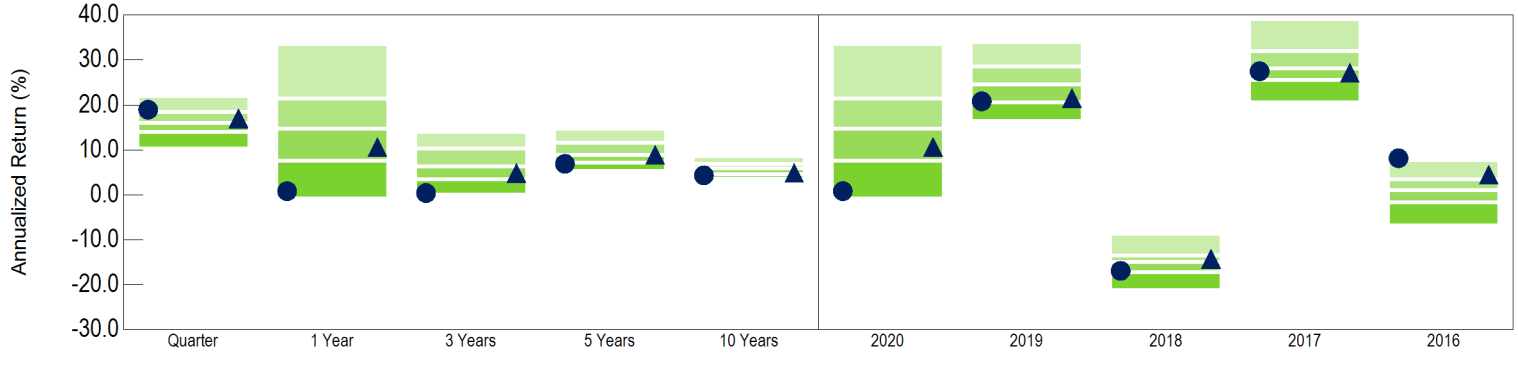
LSV Int'l Large Cap Value

MANAGER PERFORMANCE COMPARISONS

Rolling Annualized Excess Performance



eV ACWI ex-US Large Cap Equity Net Return Comparison
Ending December 31, 2020

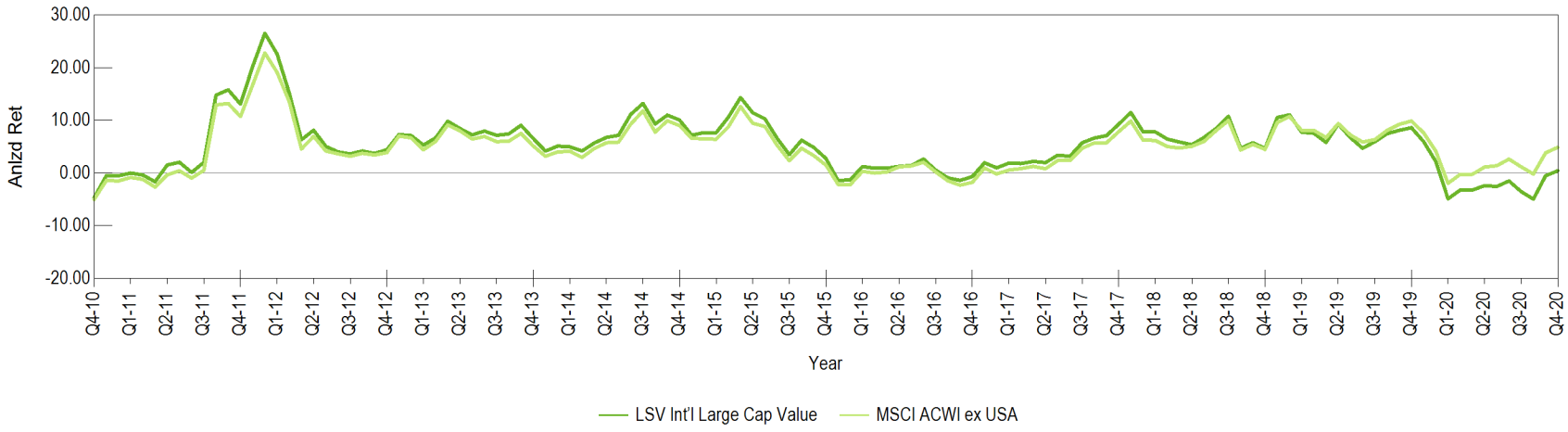


	Return (Rank)																			
5th Percentile	21.9		33.5		14.0		14.7		8.5		33.5		33.9		-8.7		39.0		7.7	
25th Percentile	18.6		21.5		10.5		11.7		7.1		21.5		28.6		-13.4		32.1		3.5	
Median	16.0		14.8		6.4		9.0		6.0		14.8		24.7		-14.8		28.3		1.1	
75th Percentile	14.1		7.7		3.5		7.2		4.7		7.7		20.7		-17.1		25.7		-1.6	
95th Percentile	10.4		-0.7		0.1		5.5		3.8		-0.7		16.5		-21.1		20.7		-6.7	
# of Portfolios	76		75		73		69		48		75		82		79		71		71	
● LSV Int'l Large Cap Value	19.0	(21)	0.8	(92)	0.4	(93)	6.9	(83)	4.4	(82)	0.8	(92)	20.8	(75)	-16.9	(74)	27.5	(61)	8.2	(3)
▲ MSCI ACWI ex USA	17.0	(41)	10.7	(60)	4.9	(55)	8.9	(51)	4.9	(71)	10.7	(60)	21.5	(67)	-14.2	(41)	27.2	(64)	4.5	(20)

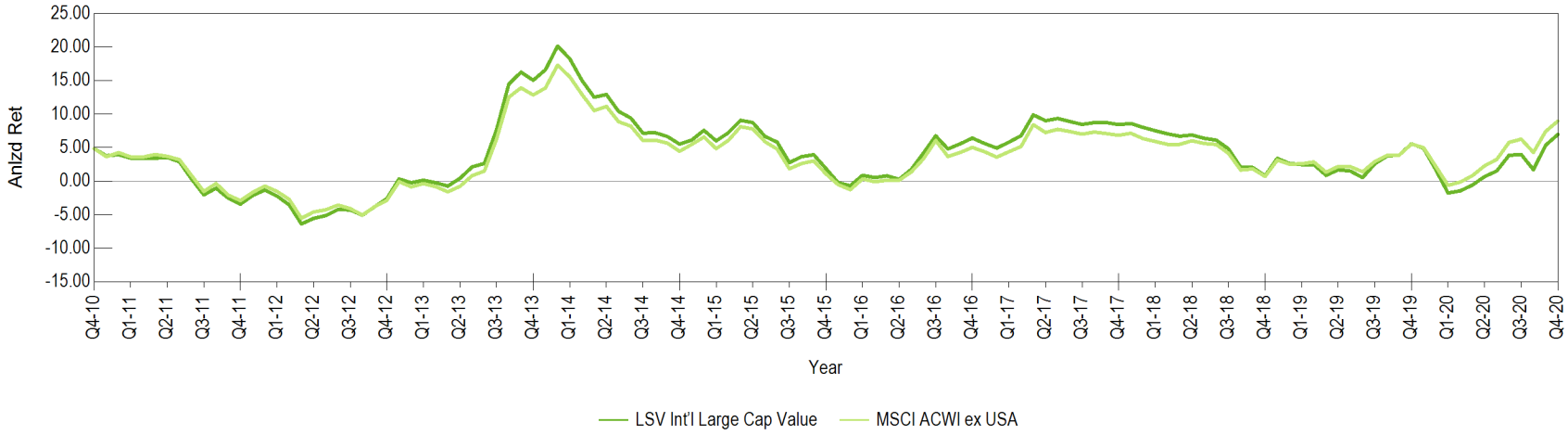
LSV Int'l Large Cap Value

MANAGER PERFORMANCE - ROLLING 3 & 5 YEAR

Rolling 3 Year Annualized Return (%)



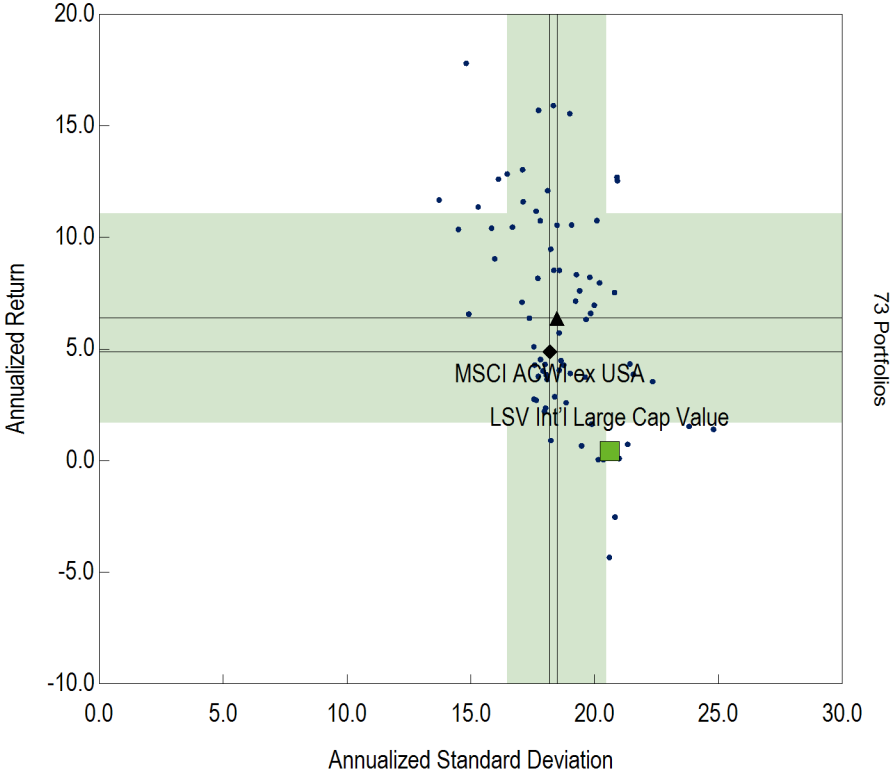
Rolling 5 Year Annualized Return (%)



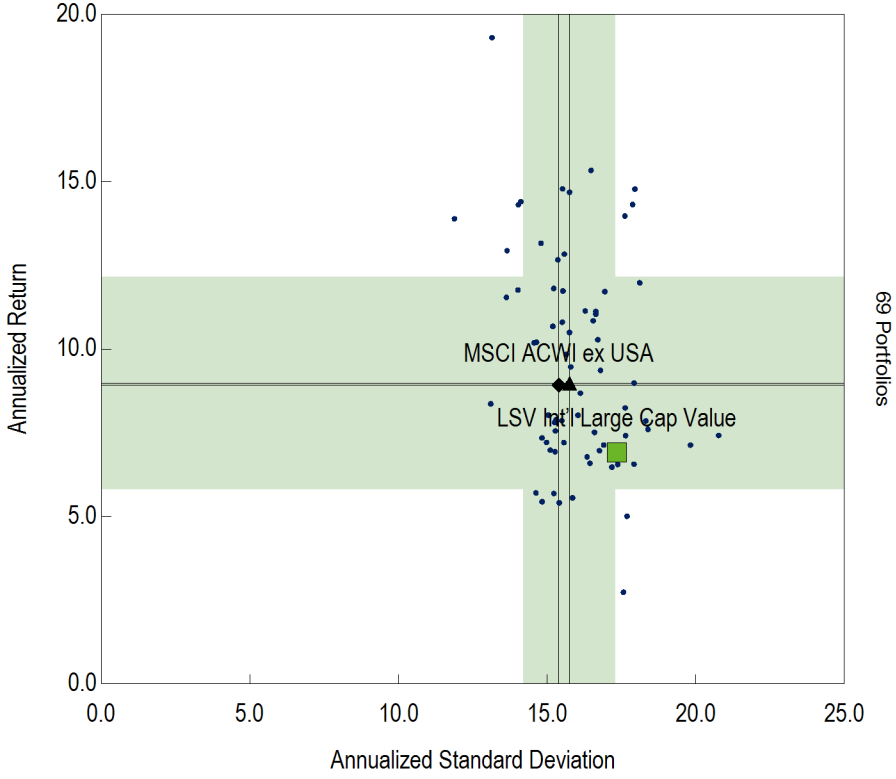
LSV Int'l Large Cap Value

RISK VS. RETURN 3 & 5 YEAR

3 Years Ending December 31, 2020



5 Years Ending December 31, 2020

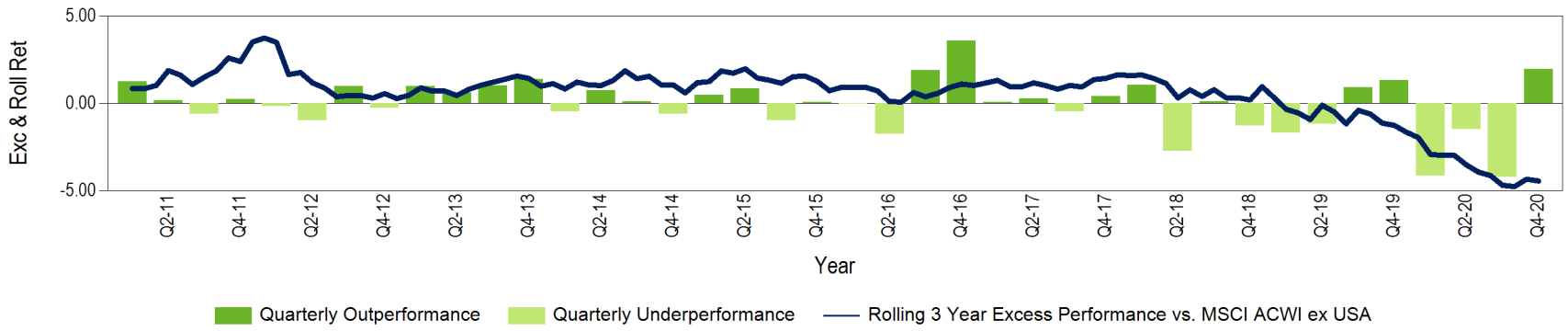


3 Years Ending December 31, 2020	Anlzd Return	Anlzd Standard Deviation	Sharpe Ratio
LSV Int'l Large Cap Value	0.43%	20.61%	-0.05
MSCI ACWI ex USA	4.88%	18.19%	0.19
eV ACWI ex-US Large Cap Equity Net Median	6.38%	18.48%	0.26

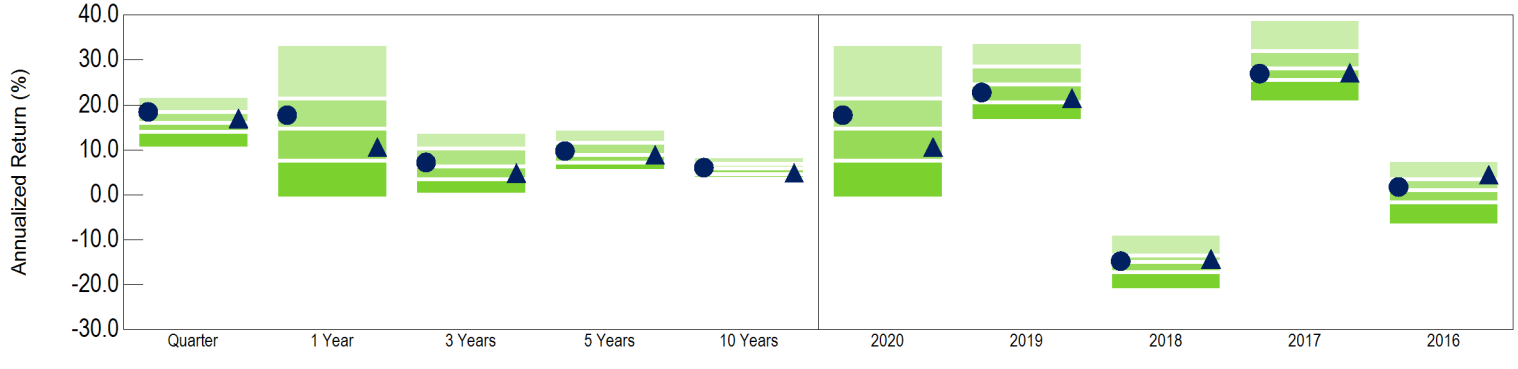
5 Years Ending December 31, 2020	Anlzd Return	Anlzd Standard Deviation	Sharpe Ratio
LSV Int'l Large Cap Value	6.92%	17.34%	0.33
MSCI ACWI ex USA	8.93%	15.39%	0.51
eV ACWI ex-US Large Cap Equity Net Median	8.98%	15.75%	0.49

MANAGER PERFORMANCE COMPARISONS

Rolling Annualized Excess Performance



eV ACWI ex-US Large Cap Equity Net Return Comparison
Ending December 31, 2020

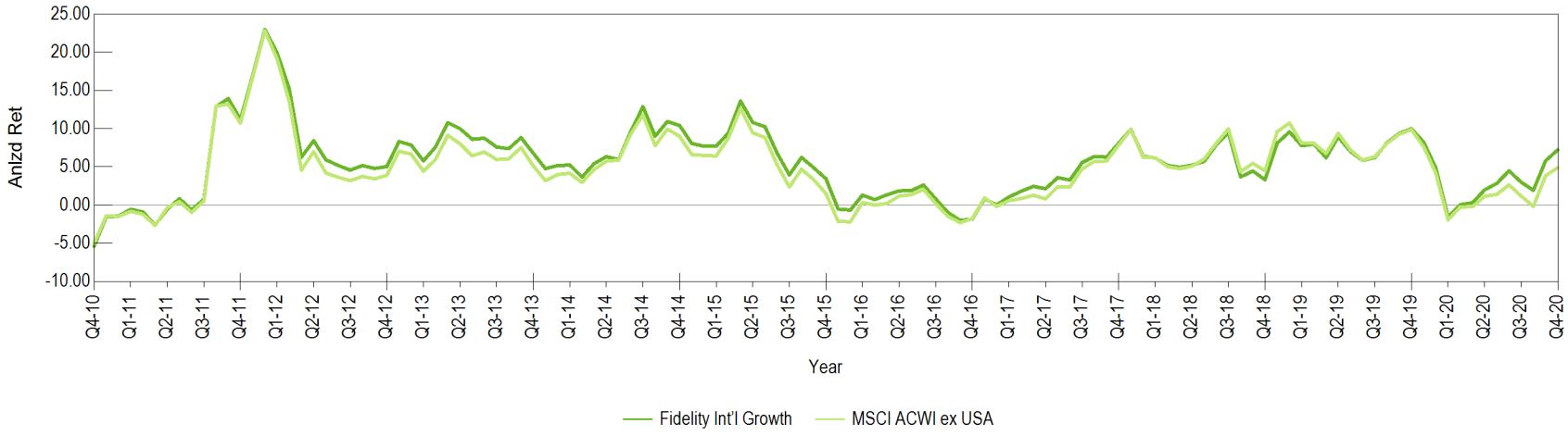


	Return (Rank)																			
5th Percentile	21.9		33.5		14.0		14.7		8.5		33.5		33.9		-8.7		39.0		7.7	
25th Percentile	18.6		21.5		10.5		11.7		7.1		21.5		28.6		-13.4		32.1		3.5	
Median	16.0		14.8		6.4		9.0		6.0		14.8		24.7		-14.8		28.3		1.1	
75th Percentile	14.1		7.7		3.5		7.2		4.7		7.7		20.7		-17.1		25.7		-1.6	
95th Percentile	10.4		-0.7		0.1		5.5		3.8		-0.7		16.5		-21.1		20.7		-6.7	
# of Portfolios	76		75		73		69		48		75		82		79		71		71	
● Fidelity Int'l Growth	18.5	(26)	17.7	(37)	7.2	(43)	9.8	(45)	6.1	(49)	17.7	(37)	22.8	(56)	-14.7	(48)	27.0	(66)	1.8	(44)
▲ MSCI ACWI ex USA	17.0	(41)	10.7	(60)	4.9	(55)	8.9	(51)	4.9	(71)	10.7	(60)	21.5	(67)	-14.2	(41)	27.2	(64)	4.5	(20)

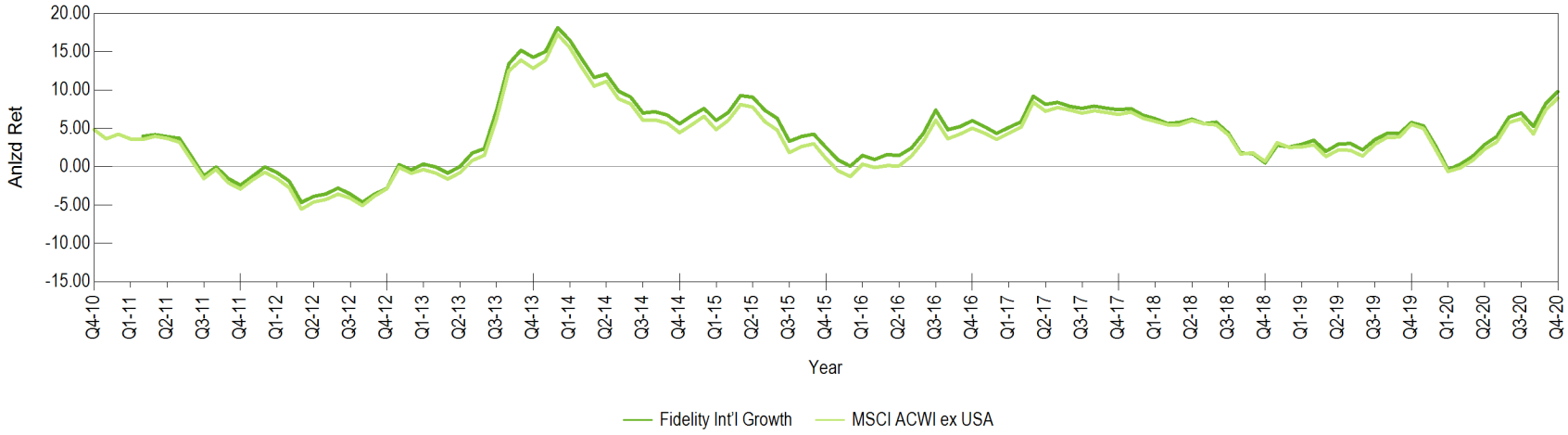
Fidelity Int'l Growth

MANAGER PERFORMANCE - ROLLING 3 & 5 YEAR

Rolling 3 Year Annualized Return (%)



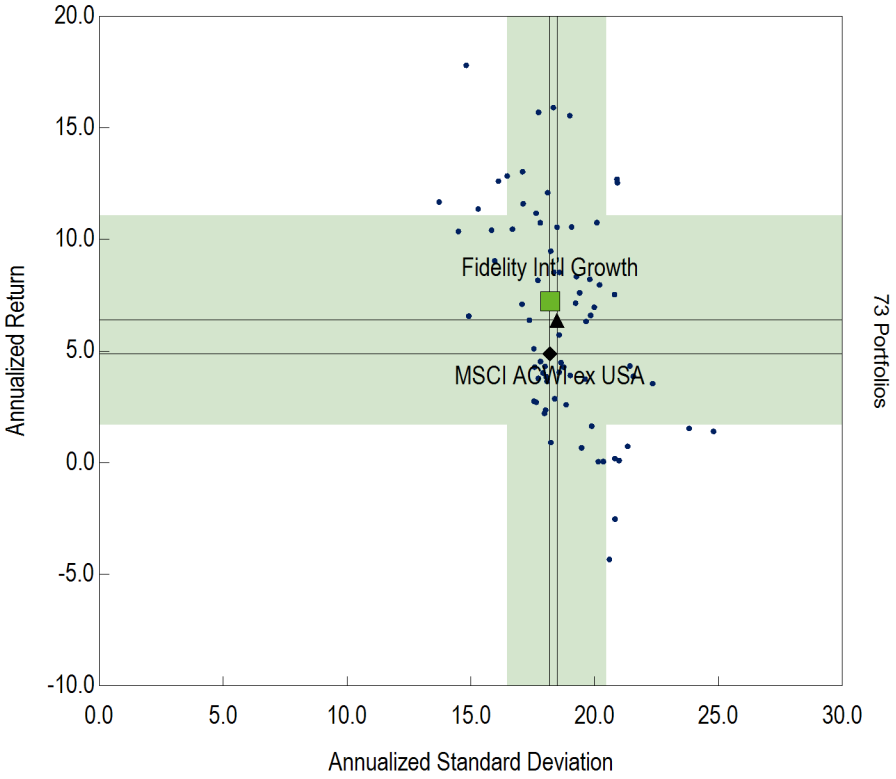
Rolling 5 Year Annualized Return (%)



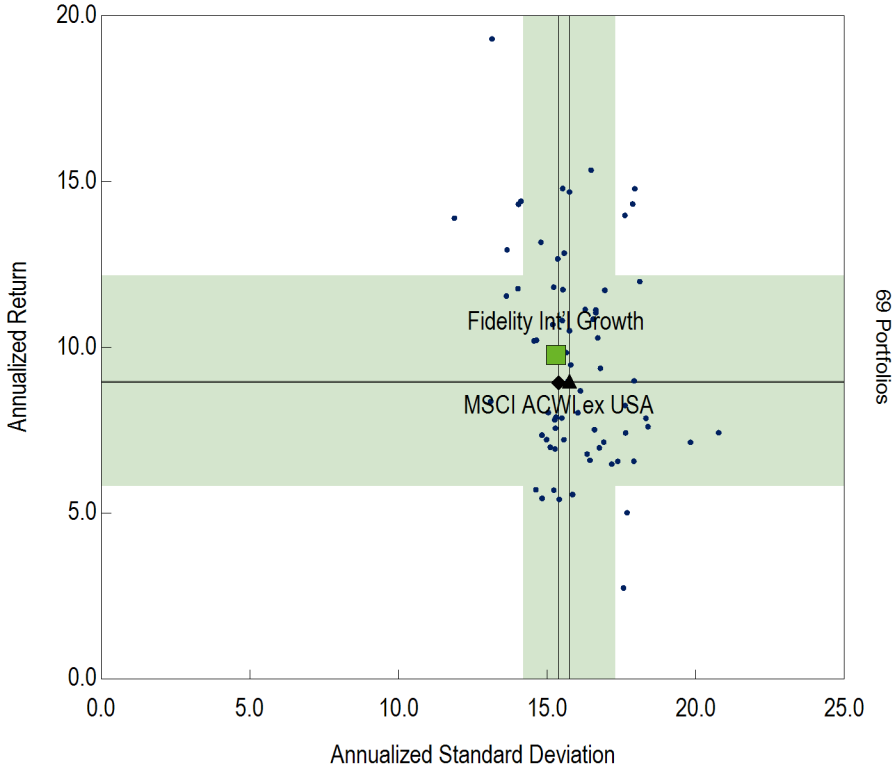
Fidelity Int'l Growth

RISK VS. RETURN 3 & 5 YEAR

3 Years Ending December 31, 2020



5 Years Ending December 31, 2020



3 Years Ending December 31, 2020

	Anlzd Return	Anlzd Standard Deviation	Sharpe Ratio
Fidelity Int'l Growth	7.23%	18.22%	0.32
MSCI ACWI ex USA	4.88%	18.19%	0.19
eV ACWI ex-US Large Cap Equity Net Median	6.38%	18.48%	0.26

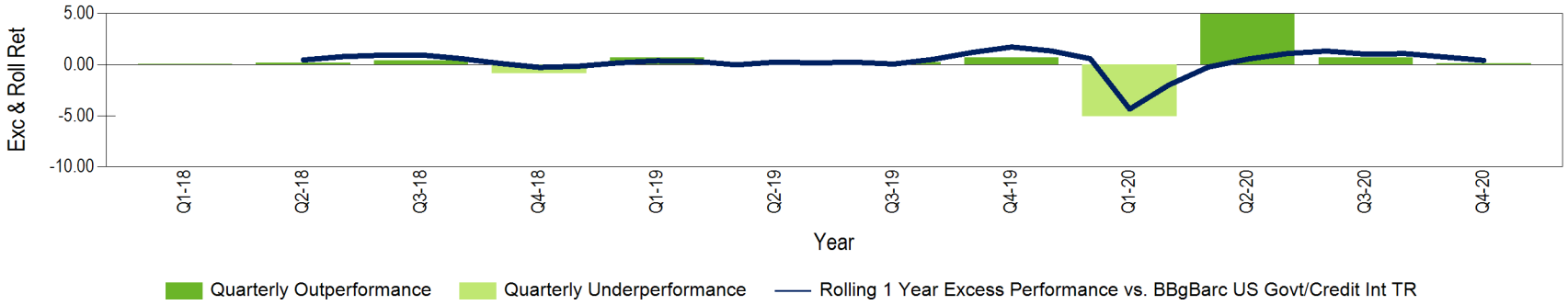
5 Years Ending December 31, 2020

	Anlzd Return	Anlzd Standard Deviation	Sharpe Ratio
Fidelity Int'l Growth	9.77%	15.30%	0.56
MSCI ACWI ex USA	8.93%	15.39%	0.51
eV ACWI ex-US Large Cap Equity Net Median	8.98%	15.75%	0.49

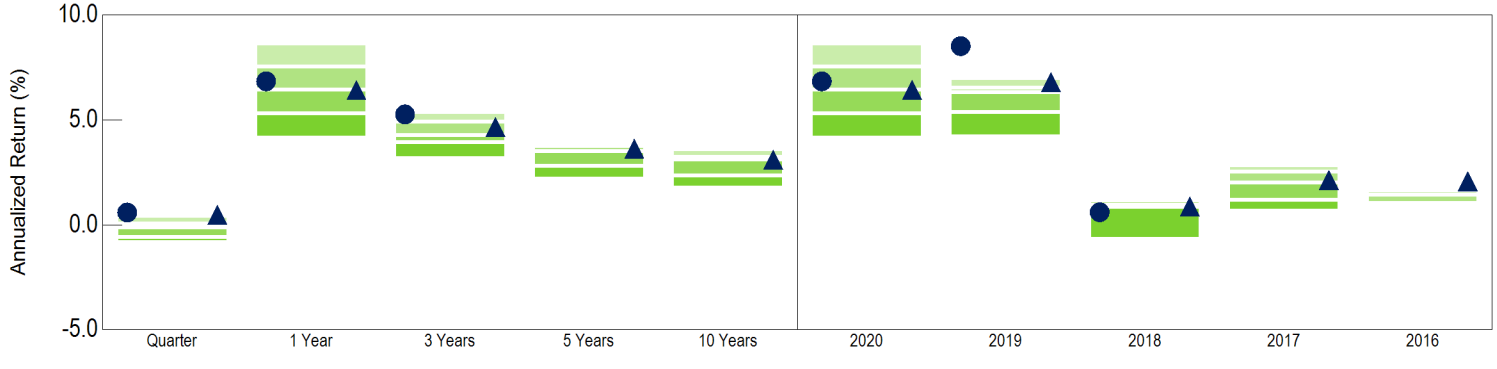
Domestic Fixed Income Managers

MANAGER PERFORMANCE COMPARISONS

Rolling Annualized Excess Performance



eV US Government Fixed Inc Net Return Comparison
Ending December 31, 2020

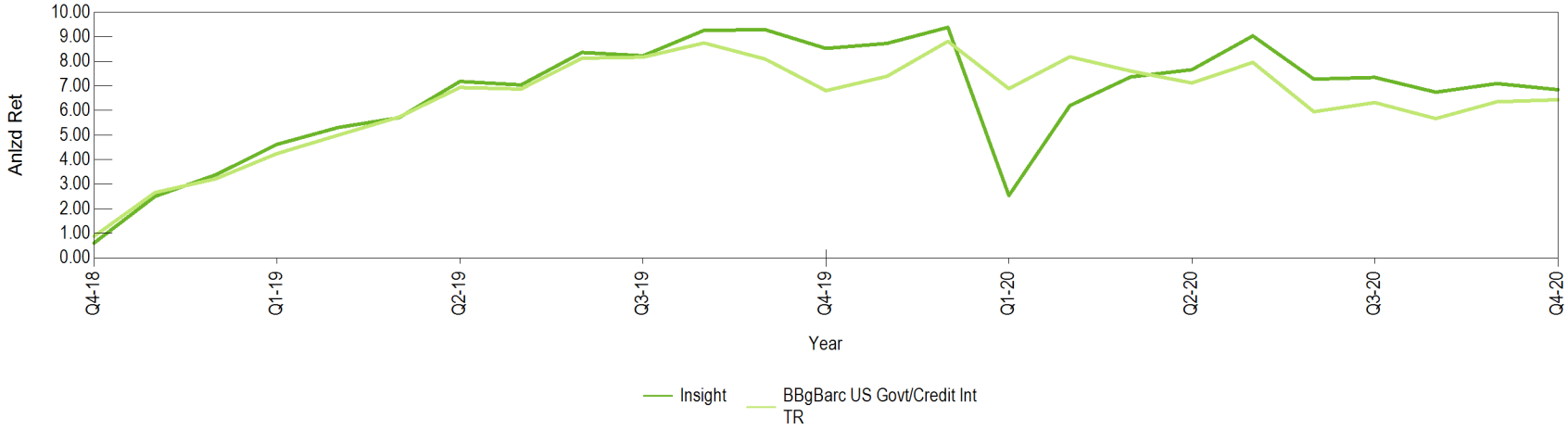


	Return (Rank)																			
5th Percentile	0.4		8.6		5.4		3.9		3.6		8.6		7.0		1.3		2.8		1.6	
25th Percentile	0.1		7.6		4.9		3.8		3.3		7.6		6.6		1.2		2.6		1.5	
Median	-0.1		6.5		4.3		3.6		3.1		6.5		6.3		1.0		2.0		1.1	
75th Percentile	-0.5		5.3		4.0		2.8		2.4		5.3		5.4		0.9		1.2		1.0	
95th Percentile	-0.8		4.2		3.2		2.2		1.8		4.2		4.2		-0.6		0.7		0.8	
# of Portfolios	14		14		14		13		13		14		13		12		11		9	
● Insight	0.6	(1)	6.8	(46)	5.3	(7)	--	(--)	--	(--)	6.8	(46)	8.5	(1)	0.6	(87)	--	(--)	--	(--)
▲ BBgBarc US Govt/Credit Int TR	0.5	(4)	6.4	(51)	4.7	(41)	3.6	(34)	3.1	(51)	6.4	(51)	6.8	(15)	0.9	(76)	2.1	(48)	2.1	(1)

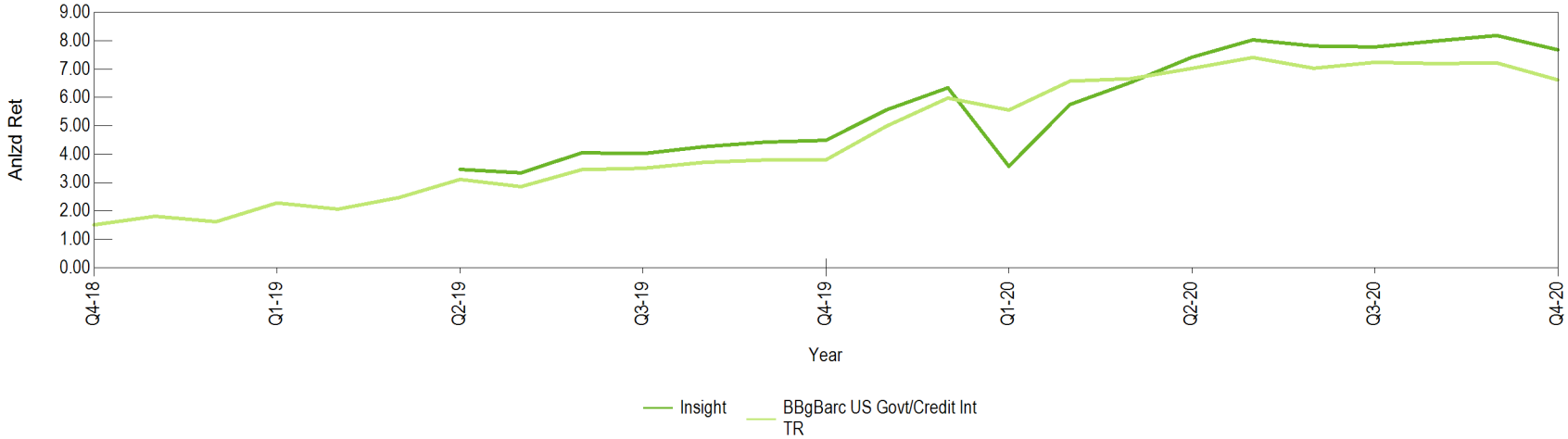
Insight

MANAGER PERFORMANCE - ROLLING 1 & 2 YEAR

Rolling 1 Year Annualized Return (%)



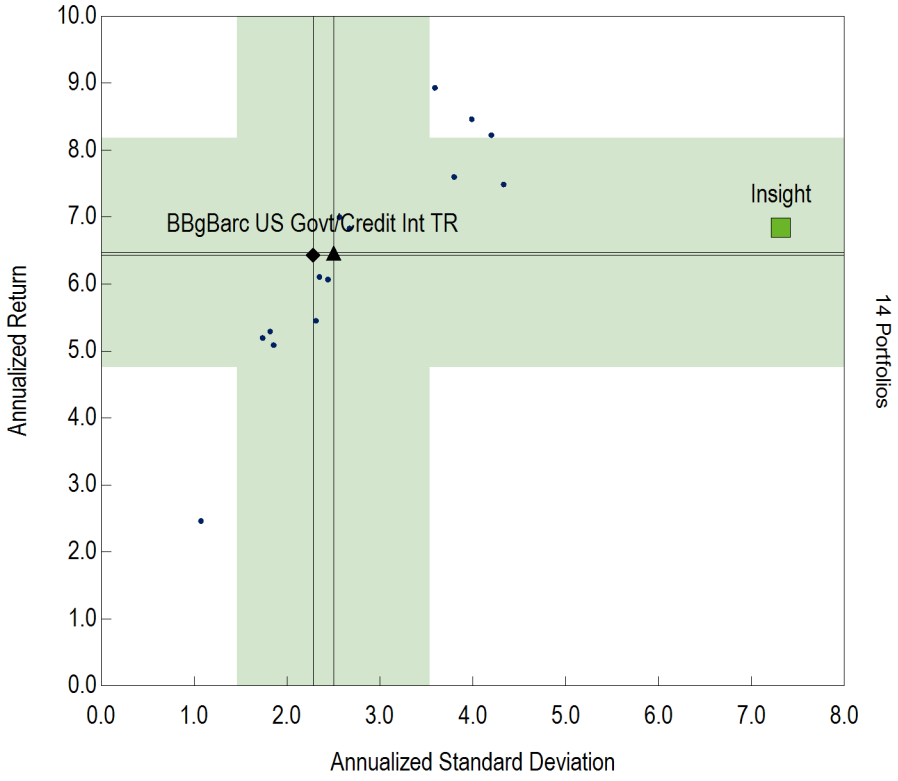
Rolling 2 Year Annualized Return (%)



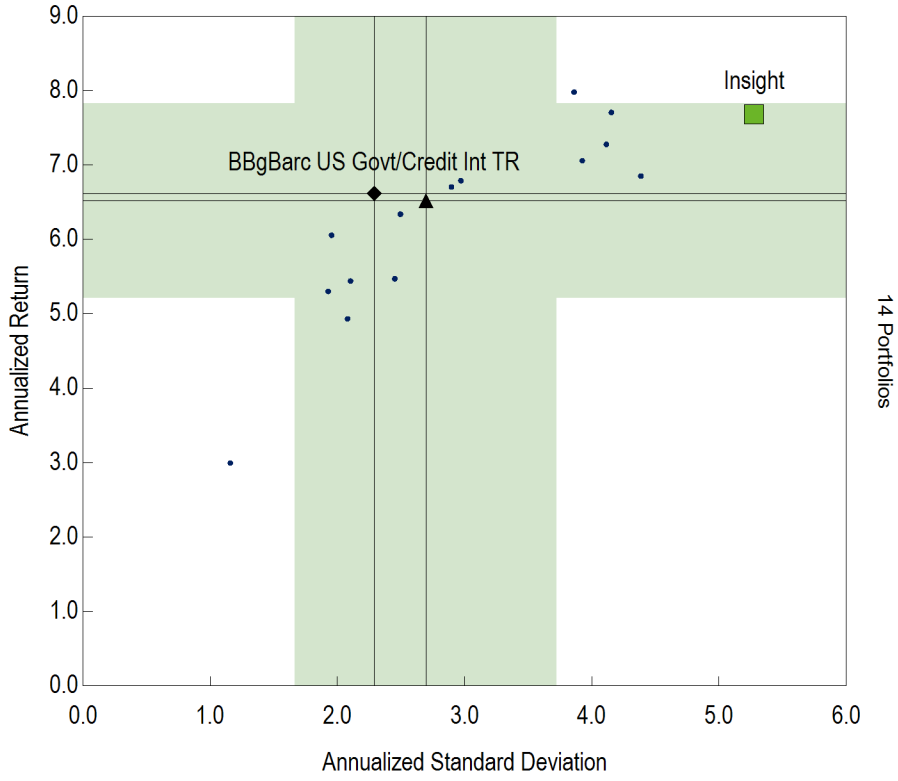
Insight

RISK VS. RETURN 1 & 2 YEAR

1 Year Ending December 31, 2020



2 Years Ending December 31, 2020



1 Year Ending December 31, 2020

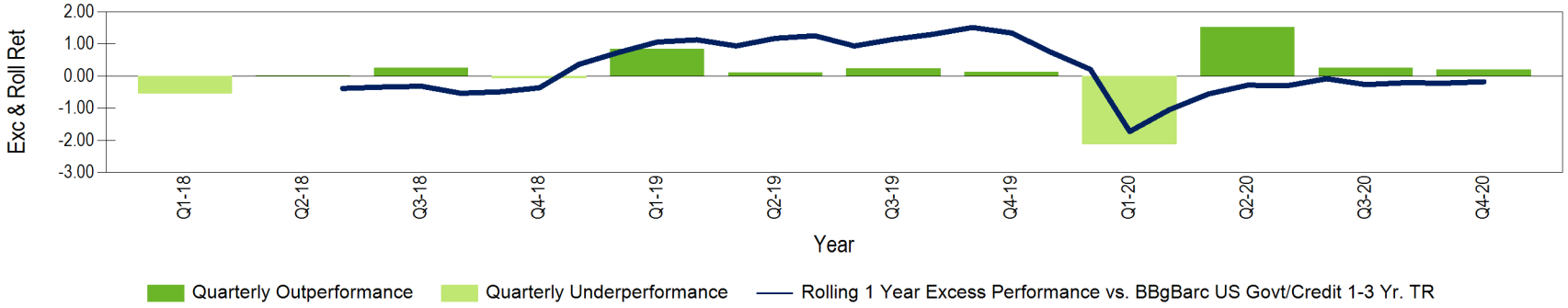
	Anlzd Return	Anlzd Standard Deviation	Sharpe Ratio
Insight	6.84%	7.32%	0.87
BBgBarc US Govt/Credit Int TR	6.43%	2.28%	2.62
eV US Government Fixed Inc Net Median	6.47%	2.50%	2.33

2 Years Ending December 31, 2020

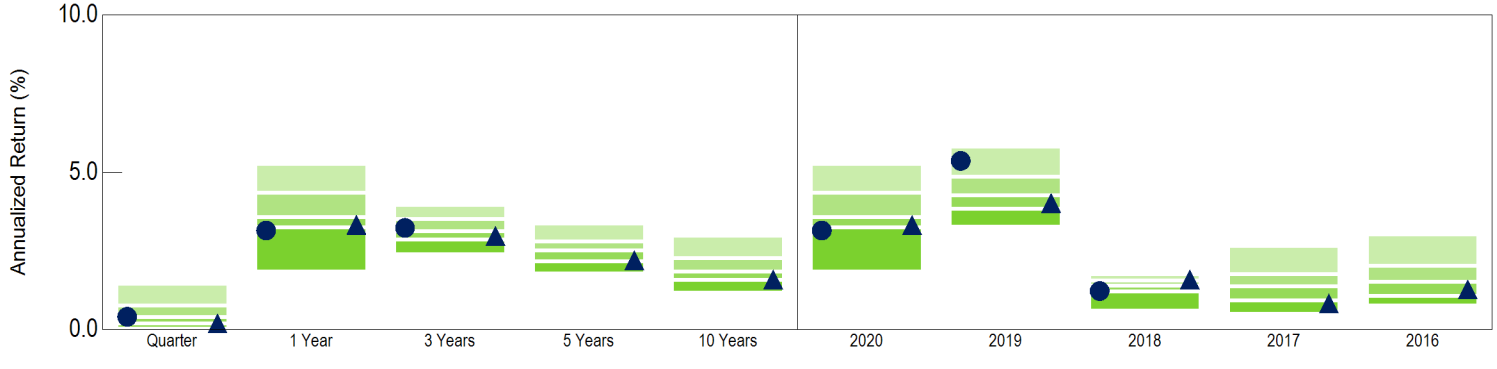
	Anlzd Return	Anlzd Standard Deviation	Sharpe Ratio
Insight	7.68%	5.28%	1.22
BBgBarc US Govt/Credit Int TR	6.62%	2.29%	2.34
eV US Government Fixed Inc Net Median	6.52%	2.70%	1.75

MANAGER PERFORMANCE COMPARISONS

Rolling Annualized Excess Performance



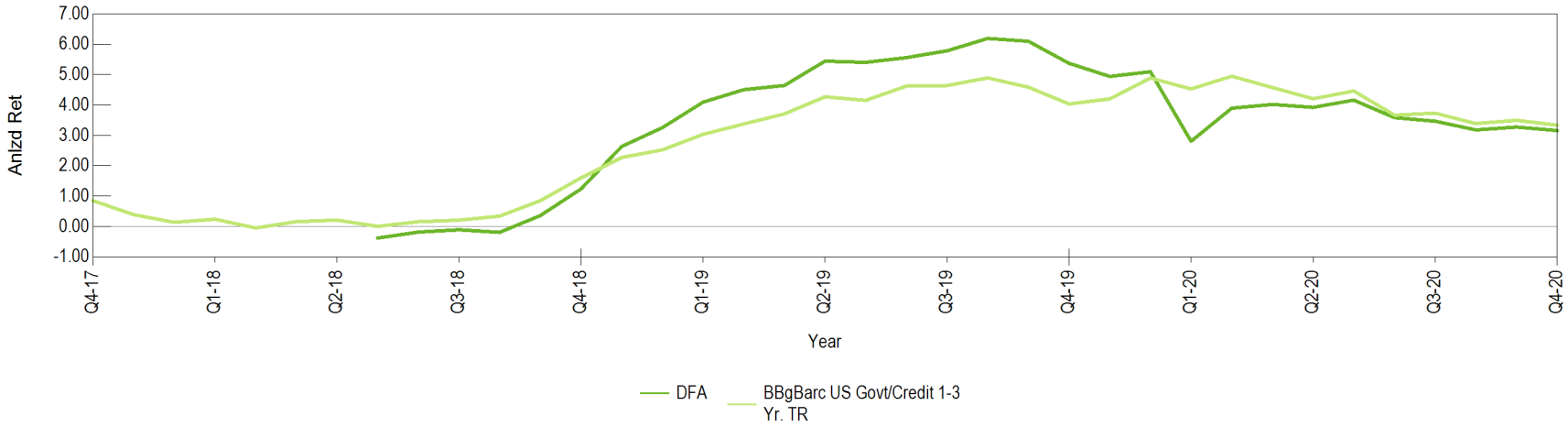
eV US Short Duration Fixed Inc Net Return Comparison
Ending December 31, 2020



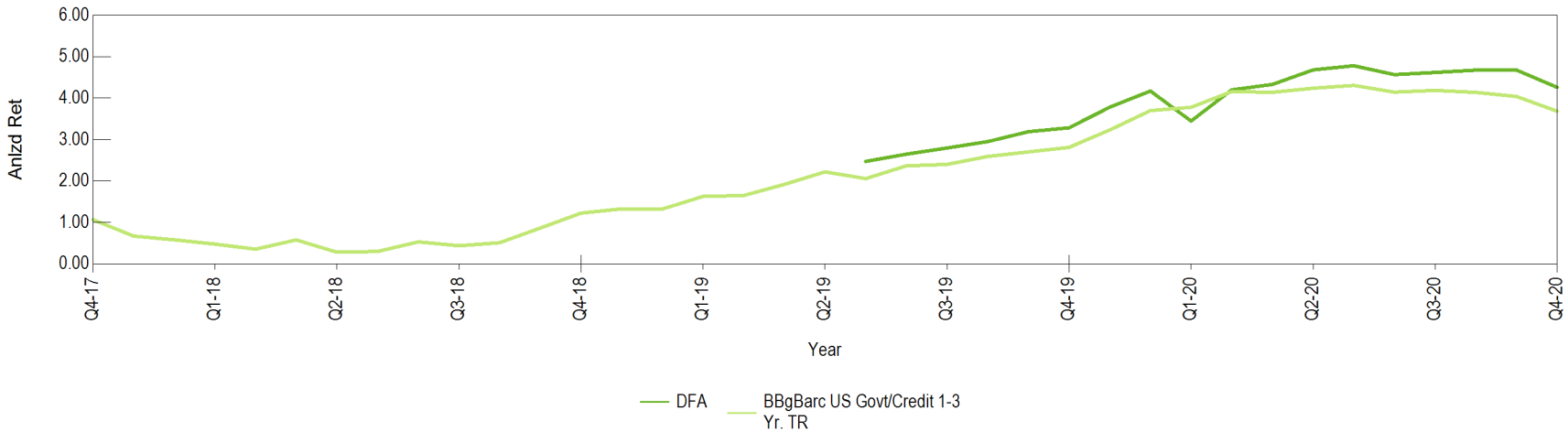
	Return (Rank)																			
5th Percentile	1.5		5.3		4.0		3.4		3.0		5.3		5.8		1.8		2.7		3.0	
25th Percentile	0.8		4.4		3.5		2.8		2.3		4.4		4.9		1.6		1.8		2.0	
Median	0.4		3.6		3.1		2.5		1.9		3.6		4.3		1.4		1.4		1.5	
75th Percentile	0.2		3.3		2.9		2.2		1.6		3.3		3.9		1.2		0.9		1.1	
95th Percentile	0.0		1.9		2.4		1.8		1.2		1.9		3.3		0.6		0.5		0.8	
# of Portfolios	142		142		138		132		109		142		144		137		126		114	
● DFA	0.4	(51)	3.2	(82)	3.2	(44)	--	(--)	--	(--)	3.2	(82)	5.4	(11)	1.2	(75)	--	(--)	--	(--)
▲ BBgBarc US Govt/Credit 1-3 Yr. TR	0.2	(77)	3.3	(71)	3.0	(66)	2.2	(73)	1.6	(76)	3.3	(71)	4.0	(68)	1.6	(22)	0.8	(83)	1.3	(66)

MANAGER PERFORMANCE - ROLLING 1 & 2 YEAR

Rolling 1 Year Annualized Return (%)



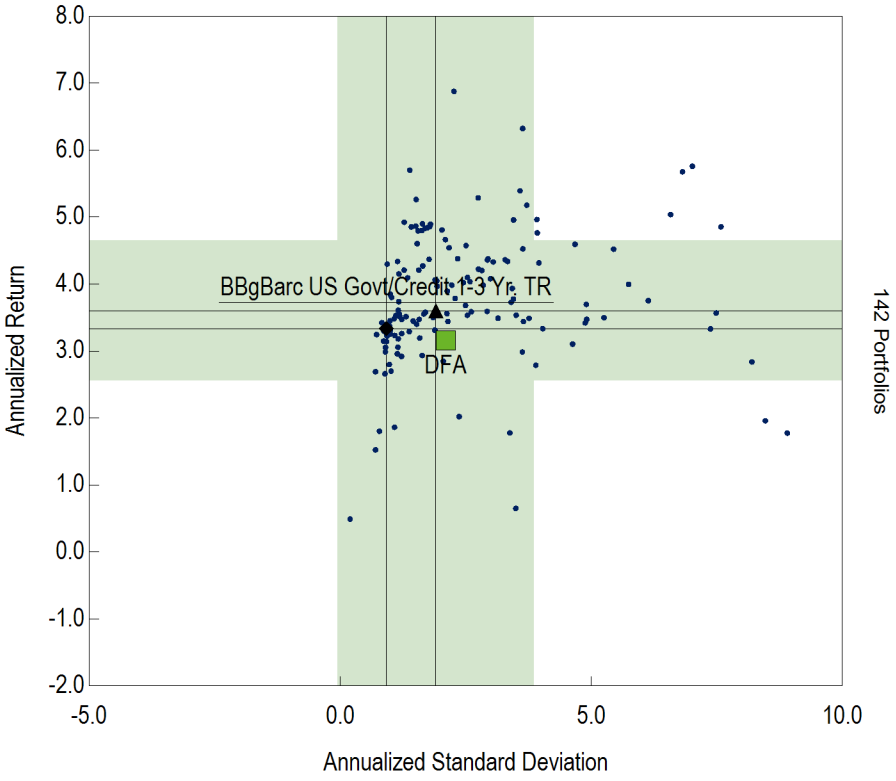
Rolling 2 Year Annualized Return (%)



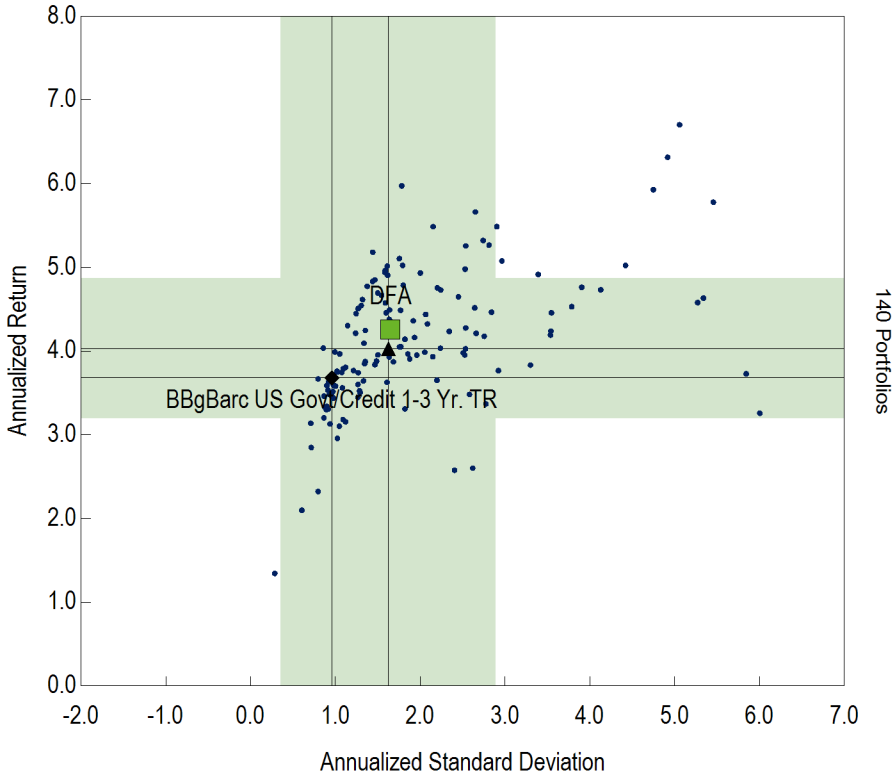
DFA

RISK VS. RETURN 1 & 2 YEAR

1 Year Ending December 31, 2020



2 Years Ending December 31, 2020



1 Year Ending December 31, 2020

	Anlzd Return	Anlzd Standard Deviation	Sharpe Ratio
DFA	3.16%	2.11%	1.29
BBgBarc US Govt/Credit 1-3 Yr. TR	3.33%	0.92%	3.14
eV US Short Duration Fixed Inc Net Median	3.60%	1.91%	1.73

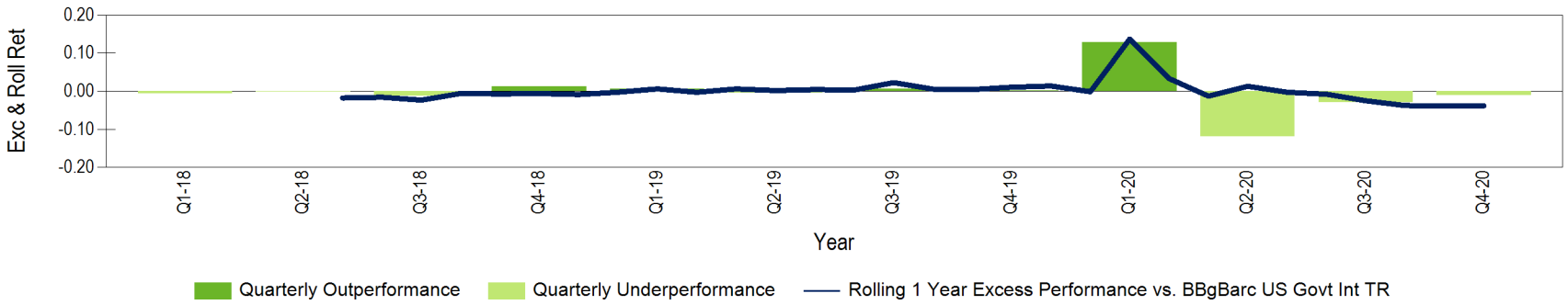
2 Years Ending December 31, 2020

	Anlzd Return	Anlzd Standard Deviation	Sharpe Ratio
DFA	4.26%	1.65%	1.82
BBgBarc US Govt/Credit 1-3 Yr. TR	3.68%	0.96%	2.52
eV US Short Duration Fixed Inc Net Median	4.03%	1.62%	1.76

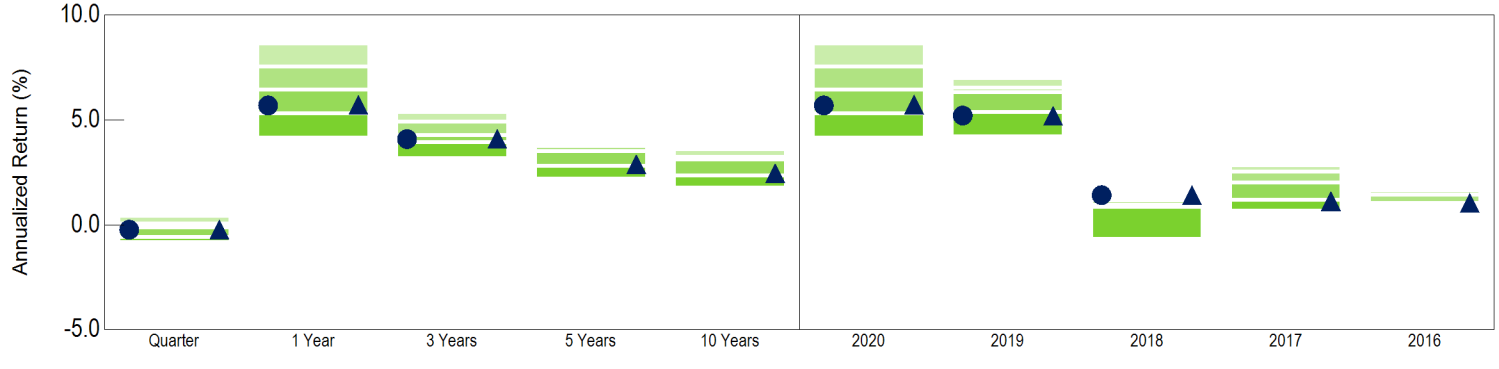
Northern Trust Intermediate Gov't Bond

MANAGER PERFORMANCE COMPARISONS

Rolling Annualized Excess Performance



eV US Government Fixed Inc Net Return Comparison
Ending December 31, 2020

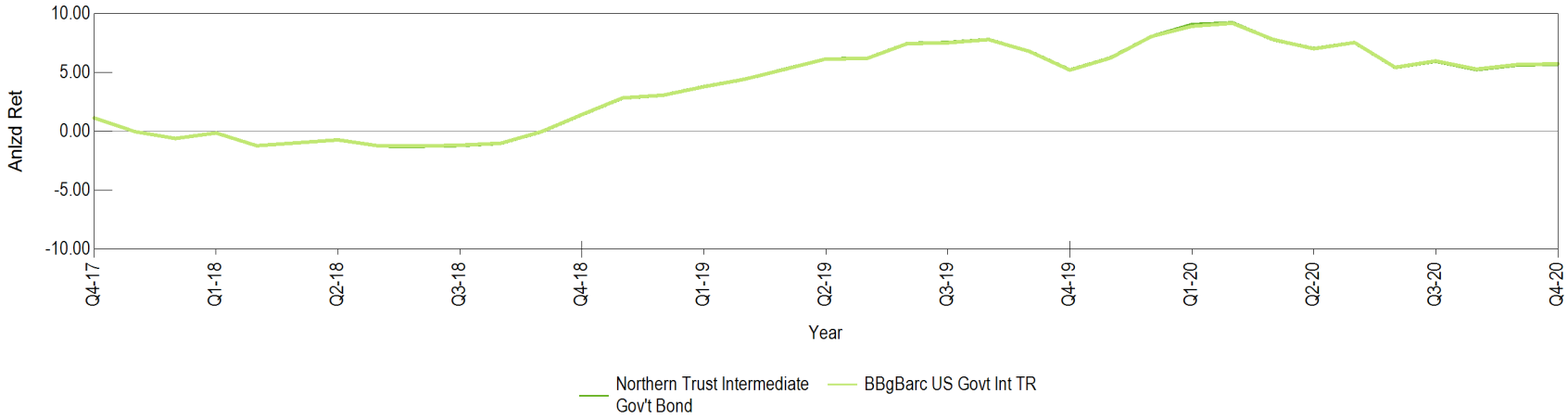


	Return (Rank)																			
5th Percentile	0.4		8.6		5.4		3.9		3.6		8.6		7.0		1.3		2.8		1.6	
25th Percentile	0.1		7.6		4.9		3.8		3.3		7.6		6.6		1.2		2.6		1.5	
Median	-0.1		6.5		4.3		3.6		3.1		6.5		6.3		1.0		2.0		1.1	
75th Percentile	-0.5		5.3		4.0		2.8		2.4		5.3		5.4		0.9		1.2		1.0	
95th Percentile	-0.8		4.2		3.2		2.2		1.8		4.2		4.2		-0.6		0.7		0.8	
# of Portfolios	14		14		14		13		13		14		13		12		11		9	
● Northern Trust Intermediate Gov't Bond	-0.2	(64)	5.7	(67)	4.1	(57)	--	(--)	--	(--)	5.7	(67)	5.2	(79)	1.4	(1)	--	(--)	--	(--)
▲ BBgBarc US Govt Int TR	-0.2	(64)	5.7	(66)	4.1	(56)	2.9	(59)	2.5	(72)	5.7	(66)	5.2	(79)	1.4	(1)	1.1	(78)	1.1	(54)

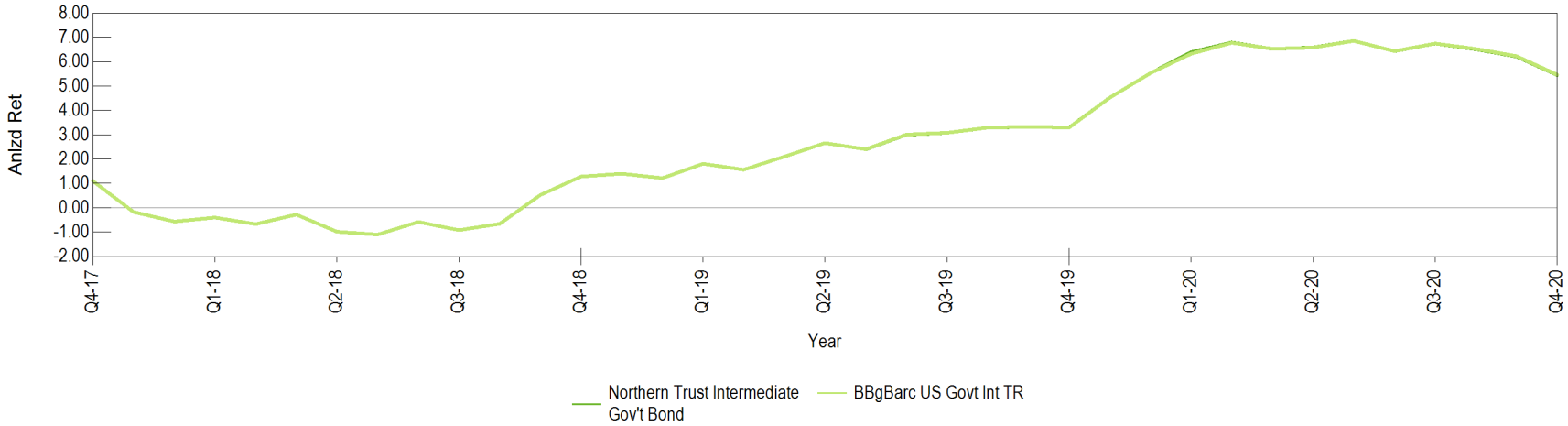
Northern Trust Intermediate Gov't Bond

MANAGER PERFORMANCE - ROLLING 1 & 2 YEAR

Rolling 1 Year Annualized Return (%)



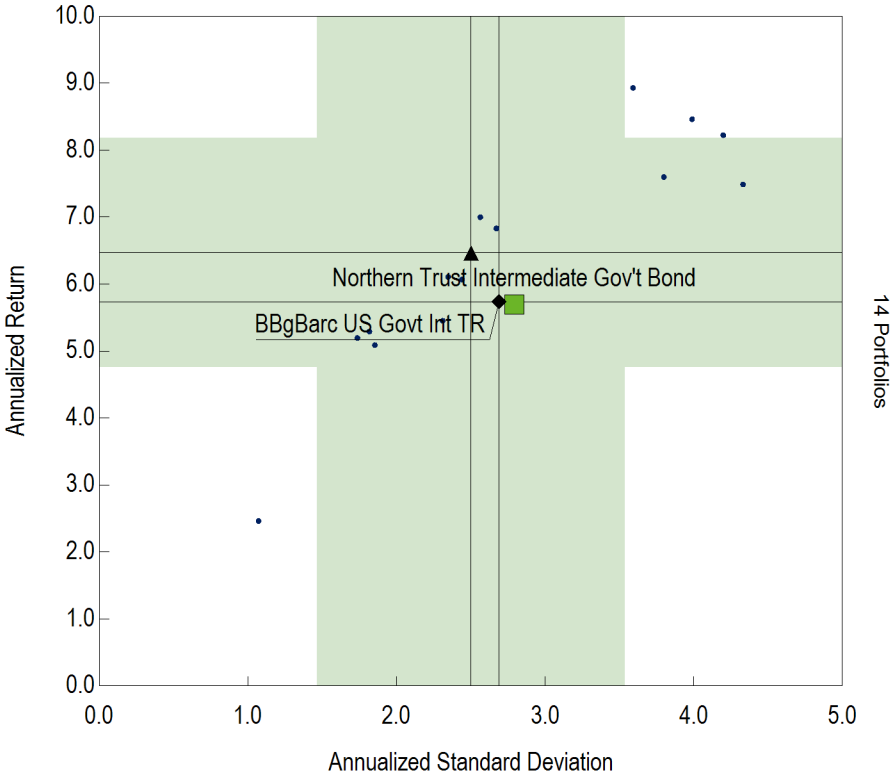
Rolling 2 Year Annualized Return (%)



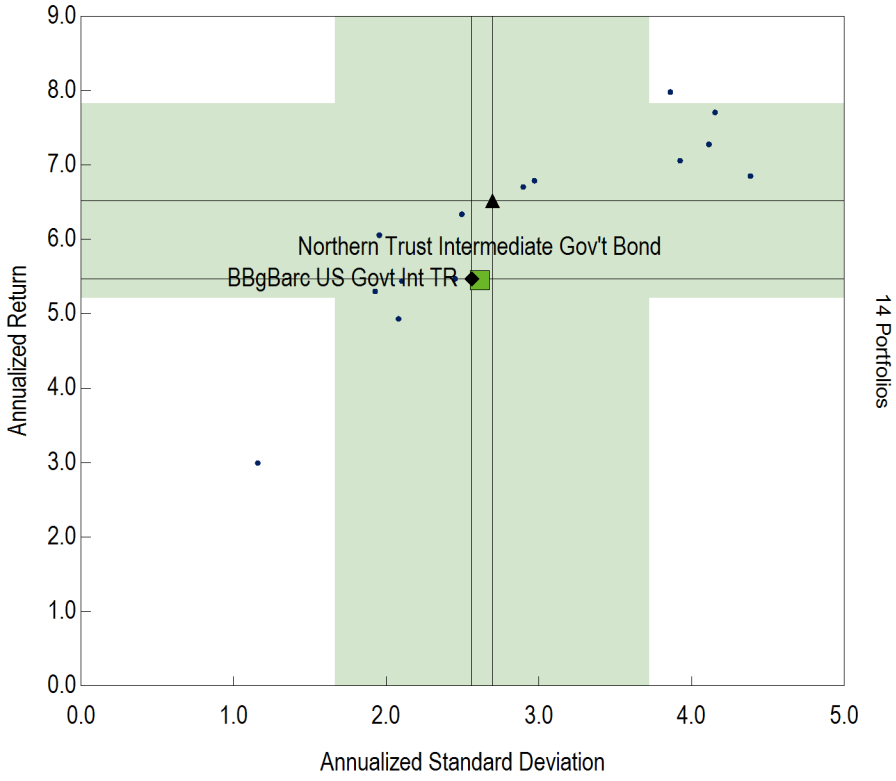
Northern Trust Intermediate Gov't Bond

RISK VS. RETURN 1 & 2 YEAR

1 Year Ending December 31, 2020



2 Years Ending December 31, 2020



1 Year Ending December 31, 2020

	Anlzd Return	Anlzd Standard Deviation	Sharpe Ratio
Northern Trust Intermediate Gov't Bond	5.69%	2.79%	1.88
BBgBarc US Govt Int TR	5.73%	2.69%	1.96
eV US Government Fixed Inc Net Median	6.47%	2.50%	2.33

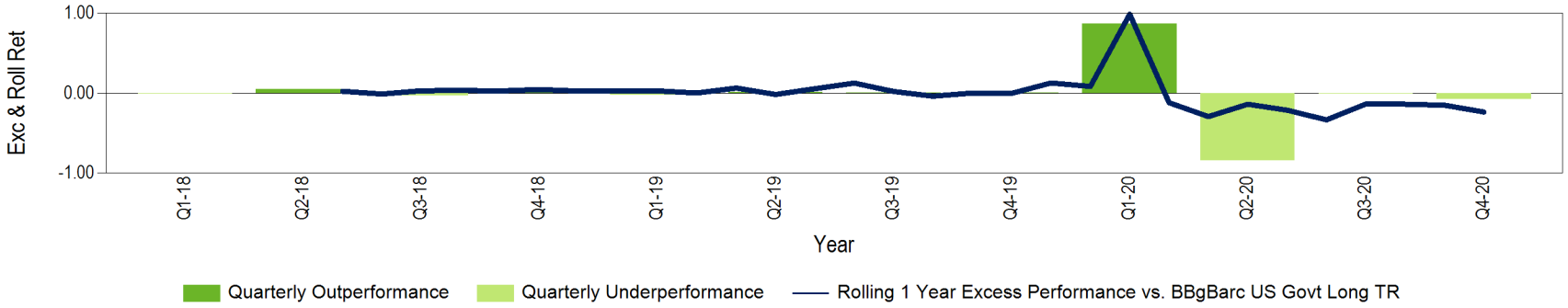
2 Years Ending December 31, 2020

	Anlzd Return	Anlzd Standard Deviation	Sharpe Ratio
Northern Trust Intermediate Gov't Bond	5.45%	2.61%	1.61
BBgBarc US Govt Int TR	5.47%	2.56%	1.64
eV US Government Fixed Inc Net Median	6.52%	2.70%	1.75

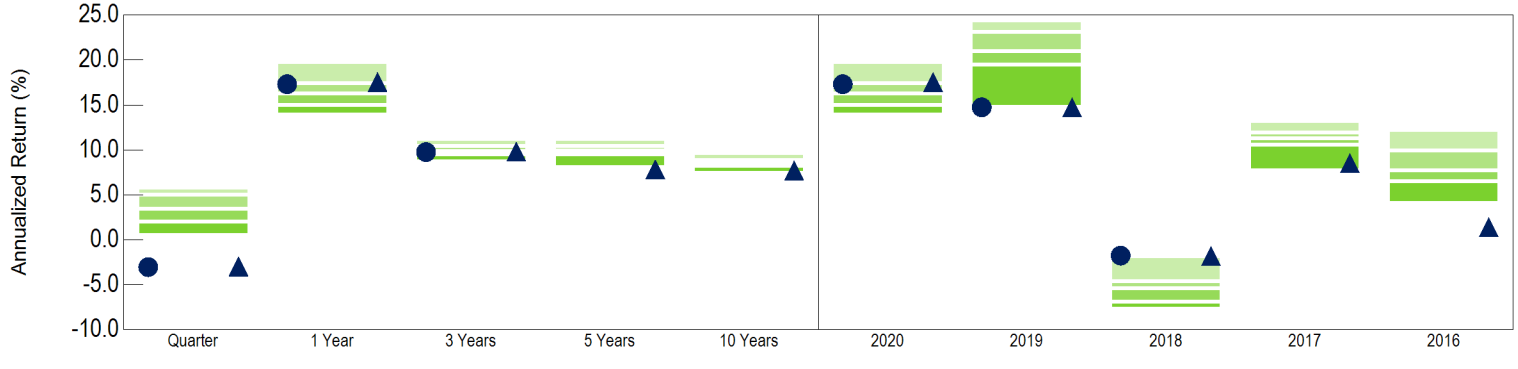
Northern Trust Long Term Gov't Bond

MANAGER PERFORMANCE COMPARISONS

Rolling Annualized Excess Performance



eV US Long Duration Fixed Inc Net Return Comparison
Ending December 31, 2020

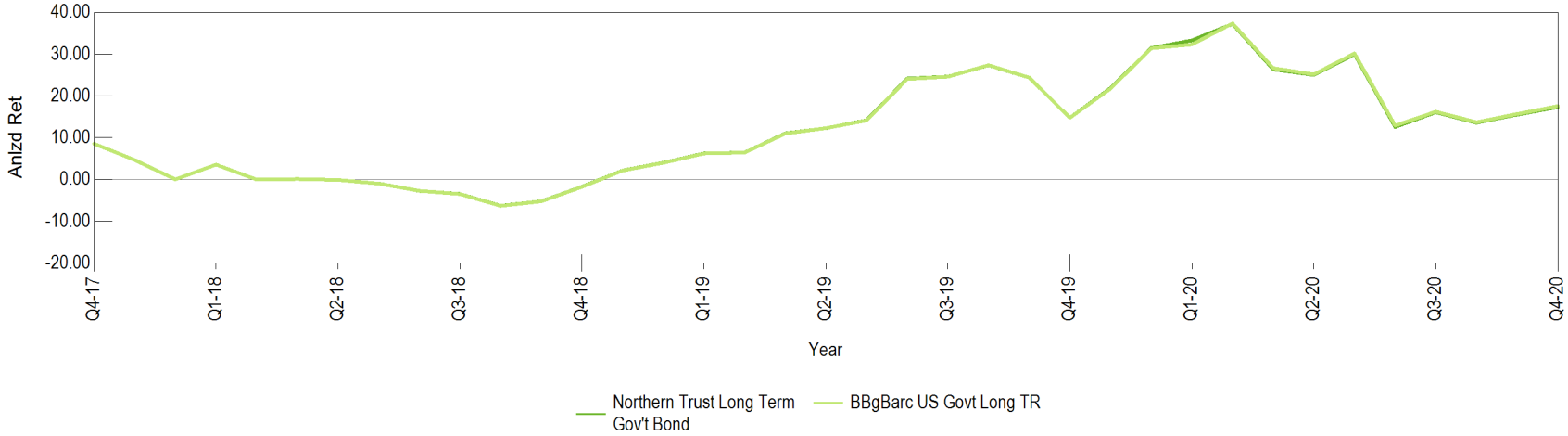


	Return (Rank)																			
5th Percentile	5.8		19.7		11.2		11.2		9.6		19.7		24.4		-1.9		13.2		12.2	
25th Percentile	5.1		17.5		10.5		10.5		8.9		17.5		23.2		-4.6		12.0		10.0	
Median	3.5		16.4		9.9		10.0		8.6		16.4		21.0		-5.3		11.4		7.8	
75th Percentile	2.1		15.1		9.6		9.6		8.3		15.1		19.5		-6.8		10.7		6.6	
95th Percentile	0.6		14.0		8.8		8.1		7.5		14.0		14.8		-7.6		7.7		4.1	
# of Portfolios	89		89		83		75		54		89		88		89		95		91	
● Northern Trust Long Term Gov't Bond	-3.0	(99)	17.3	(28)	9.8	(62)	--	(--)	--	(--)	17.3	(28)	14.7	(96)	-1.7	(5)	--	(--)	--	(--)
▲ BBgBarc US Govt Long TR	-3.0	(98)	17.6	(24)	9.8	(60)	7.8	(96)	7.7	(90)	17.6	(24)	14.7	(96)	-1.8	(5)	8.5	(92)	1.4	(99)

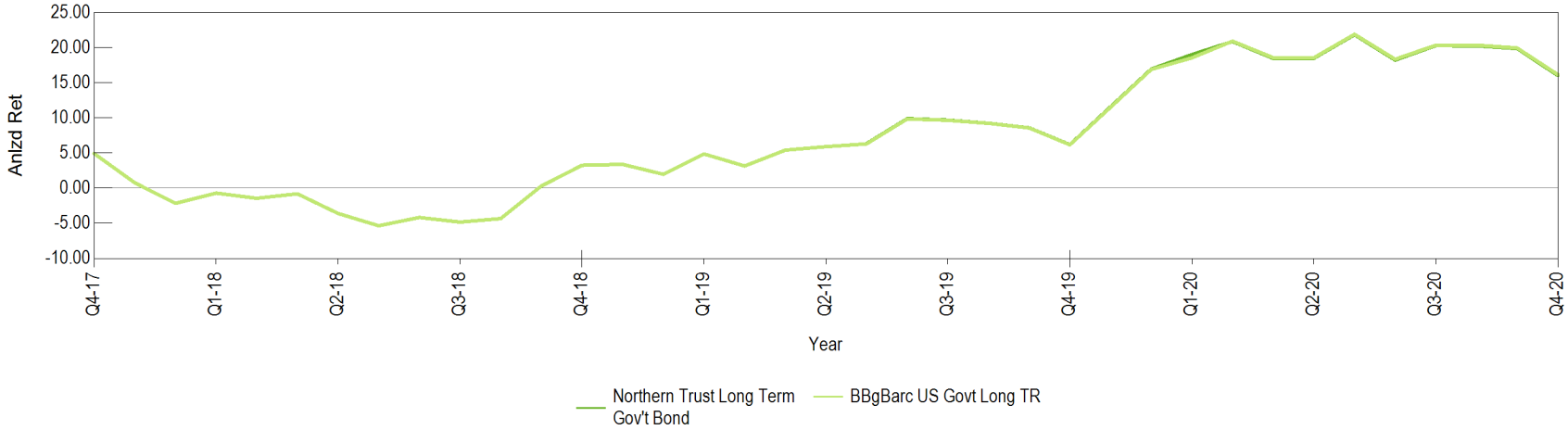
Northern Trust Long Term Gov't Bond

MANAGER PERFORMANCE - ROLLING 1 & 2 YEAR

Rolling 1 Year Annualized Return (%)



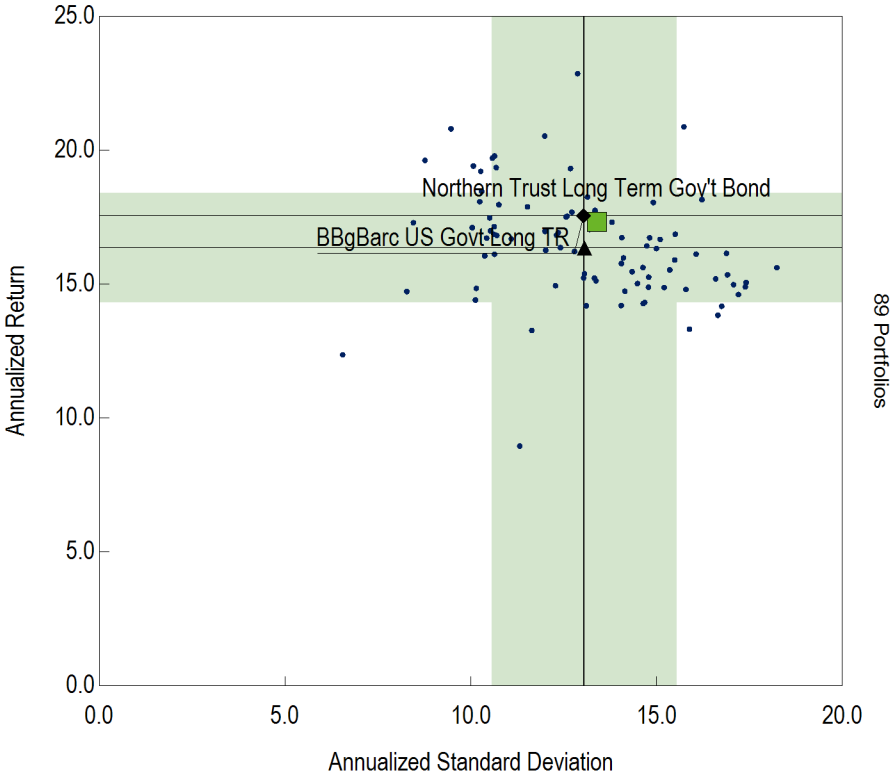
Rolling 2 Year Annualized Return (%)



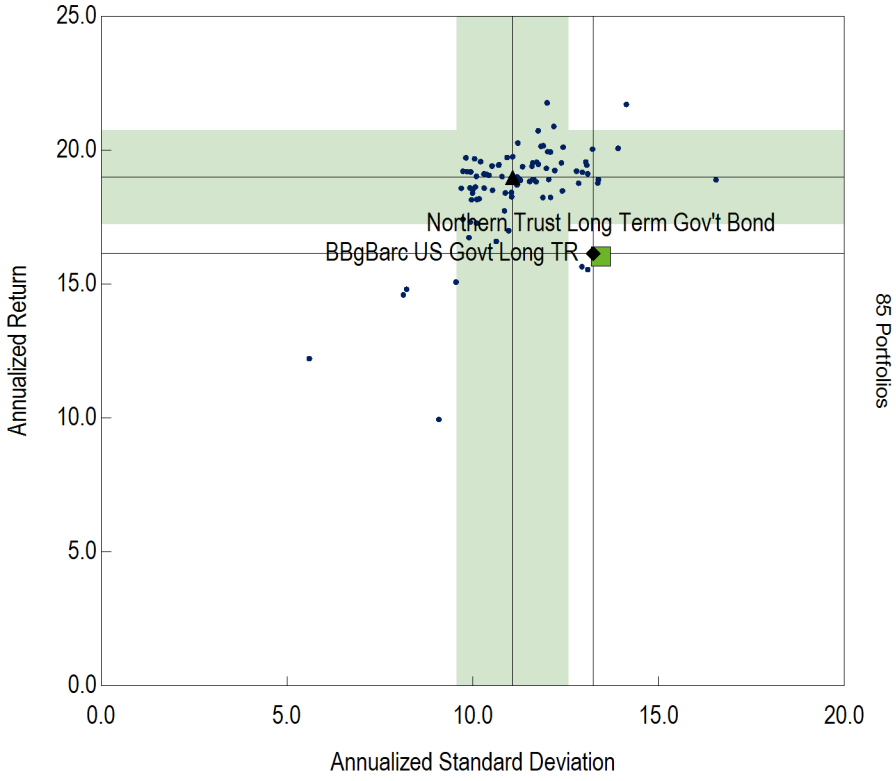
Northern Trust Long Term Gov't Bond

RISK VS. RETURN 1 & 2 YEAR

1 Year Ending December 31, 2020



2 Years Ending December 31, 2020



1 Year Ending December 31, 2020	Anlzd Return	Anlzd Standard Deviation	Sharpe Ratio
Northern Trust Long Term Gov't Bond	17.32%	13.39%	1.26
BBgBarc US Govt Long TR	17.55%	13.04%	1.31
eV US Long Duration Fixed Inc Net Median	16.36%	13.06%	1.23

2 Years Ending December 31, 2020	Anlzd Return	Anlzd Standard Deviation	Sharpe Ratio
Northern Trust Long Term Gov't Bond	16.02%	13.45%	1.10
BBgBarc US Govt Long TR	16.14%	13.24%	1.12
eV US Long Duration Fixed Inc Net Median	18.99%	11.07%	1.58

NOTES

- All performance is shown net of investment management fees.

- Fiscal year end June 30.

- All data prior to July 1, 2020 was received from StanCERA's previous investment consultant.

- Policy Index makeup history:

  - **Inception - 6/30/2017:** 14.4% Russell 1000 Value, 11.3% Russell 1000 Growth, 4.8% S&P 500, 4% Russell 2000 Value, 3.7% Russell 2000 Growth, 18% MSCI ACWI ex USA Gross, 29.8% BBgBarc US Aggregate TR, 3.5% DJ US Select RESI TR USD, 7.5% 9% Annual, 3% CPI + 4%.

  - **7/1/2017 - 8/31/2018:** 18.5% Russell 1000, 5.5% Russell 2000, 24% MSCI ACWI ex USA Gross, 19% BBgBarc US Govt/Credit 1-3 Yr. TR, 1% FTSE T-Bill 1 Month TR, 3% BBgBarc US Treasury 7-10 Yr TR, 7.7% NCREIF Property Index, 1.7% NCREIF Property Index +2%, 0.6% CPI + 5%, 5% BBgBarc US High Yield + 2%, 14% 60% MSCI ACWI Net/40% BBgBarc Global Aggregate.

  - **9/1/2018 - 5/30/2019:** 10% Russell 1000, 3% Russell 2000, 6% Russell 3000 +3%, 27% MSCI ACWI ex USA Gross, 20% BBgBarc US Govt/Credit 1-3 Yr. TR, 1% FTSE T-Bill 1 Month TR, 3% BBgBarc US Treasury 7-10 Yr TR, 5% NCREIF Property Index, 5% NCREIF Property Index +2%, 1% CPI + 5%, 6% S&P/LSTA Leveraged Loan Index+2%, 13% 60% MSCI ACWI Net/40% BBgBarc Global Aggregate.

  - **6/1/2019 - 6/30/2020:** 14% Russell 1000, 3% Russell 2000, 6% Russell 3000 + 3%, 23% MSCI ACWI ex-USA, 19% BBgBarc US Gov't/Credit 1-3 Yr, 1% Citi 1 Month T-Bills, 3% BBgBarc US Treasury 7-10 Yr, 5% NCREIF Property, 5% NCREIF Property +2%, 2% CPI +5%, 6% S&P/LSTA Leveraged Loan Index + 2%, 13% 60% MSCI ACWI / 40% BBgBarc Global Aggregate.

  - **7/1/2020 - Present:**14% Russell 1000, 3% Russell 2000, 6% Russell 3000 + 3%, 23% MSCI ACWI ex-USA, 8% BBgBarc US Gov't/Credit 1-3 Yr, 1% Citi 1 Month T-Bills, 3% BBgBarc US Treasury 7-10 Yr, 5% NCREIF Property, 5% NCREIF Property +2%, 2% CPI +5%, 6% S&P/LSTA Leveraged Loan Index + 2%, 13% 60% MSCI ACWI / 40%BBgBarc Global Aggregate, 11% BBgBarc US Intermediate.

- Starting July 1, 2020, Policy index will be made up as follows: 14% Russell 1000, 3% Russell 2000, 6% Russell 3000 + 3%, 23% MSCI ACWI ex-USA, 8% BBgBarc US Gov't/Credit 1-3 Yr, 1% Citi 1 Month T-Bills, 3% BBgBarc US Treasury 7-10 Yr, 5% NCREIF Property, 5% NCREIF Property +2%, 2% CPI +5%, 6% S&P/LSTA Leveraged Loan Index + 2%, 13% 60% MSCI ACWI / 40% BBgBarc Global Aggregate, 11% BBgBarc US Intermediate.

- The Cash composite market value includes a small transition cash balance.

- Starting July 1, 2020, the small Capital Prospects transition cash balance will be moved from the Cash composite to the US Small composite and the Int'l Equities composite will be moved into the Public Equities composite.

DISCLAIMERS & DISCLOSURES

- Past performance is no guarantee of future results.
- Returns for pooled funds, e.g. mutual funds and collective investment trusts, are collected from third parties; they are not generally calculated by NEPC. Returns for separate accounts, with some exceptions, are calculated by NEPC. Returns are reported net of manager fees unless otherwise noted.
- A "since inception" return, if reported, begins with the first full month after funding, although actual inception dates (e.g. the middle of a month) and the timing of cash flows are taken into account in Composite return calculations.
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February 23, 2021
Retirement Board Agenda Item

TO: Retirement Board

FROM: Stan Conwell, Retirement Investment Officer
Rick Santos, Executive Director

I. SUBJECT: Transition Manager Overview

II. ITEM NUMBER: 8.a

III. ITEM TYPE: Information Only

IV. STAFF RECOMMENDATION: None

V. ANALYSIS:

Attachment 1: NEPC memo on Transition Managers

At the January meeting there was discussion on the use of a transition manager to facilitate some of the rebalance of StanCERA's portfolio to the new strategic asset allocation. Since the January meeting staff was able to gather more details about the estimated costs of the transition and some expected benefits a transition manager can provide. Below are the estimated costs gathered from a pre-trade report for phase 2 of the rebalance plan. The expected benefits of using a transition manager are also summarized below.

Estimated Costs

- **Trading Costs:** The total implicit and explicit trading costs of the transition are expected to be 11-12 basis points of the estimated $330 million transition size or approximately $390,000. The trading costs include explicit costs like commissions and implicit costs like the bid/ask spread on securities.
- **Opportunity Costs:** The opportunity cost or the performance difference between the legacy portfolio and target portfolio during the transition is expected to be as much as +/- 25.6 basis points or $845,000 depending on the movement of the markets. This potential cost could be higher without a transition manager.

Benefits of Using a Transition Manager

- **Reduce time out-of-market:** A transition manager will create a transition account and sync trades to occur simultaneously reducing the time out-of-market as well as the overall time to transition the portfolio.
- **Opportunity Cost:** The increased speed reduces the potential opportunity cost. The transition manager takes responsibility for performance during the transition.

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- **Greater Transparency:** The transition manager provides greater documentation and transparency about the cost of transition through detailed pre and post trade reports.
- **Control of Trades:** A transition manager can control the intraday timing of trades to maintain market exposure. They can also coordinate the trading of specific securities to avoid potential volatility from events like earnings releases.
- **Relationship Pricing:** Discounts and fee waivers are expected and will reduce the estimated explicit costs.
- **Existing Agreement:** StanCERA utilized a transition manger previously in 2016. The legal costs of negotiating with a transition manager this time should be reduced as a result.

After reviewing the pre-trade reports, the use of a transition manager would be a benefit to StanCERA. The main benefit comes from controlling the potential opportunity cost of the transition that given the large size of capital involved could be substantial without the professional management of the transactions. The transition manager has the necessary expertise and resources to control this risk by speeding up the process thus decreasing the chance market volatility will adversely impact the portfolio during the transition. Reducing explicit costs through relationship pricing discounts and added transparency from detailed pre and post trade reports is also a good benefit of using a transition manager.

VI. RISK: None

VII. STRATEGIC PLAN: N/A

VIII. ADMINISTRATIVE BUDGET IMPACT: NONE

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NEPC, LLC

To: Stanislaus County Employees' Retirement Association

From: Daniel Hennessy, CFA, CAIA

Date: February 23, 2021

Subject: Transition Management

When pension plans make significant manager and asset allocation changes they often rely upon the services of a transition manager to oversee the investment trades. Transition managers help pension plans maintain market exposures, minimize transaction costs, and provide useful reports documenting the entire process. StanCERA has used transition managers in the past, and StanCERA's plan staff is evaluating transition managers for the upcoming trades that are needed to implement the recently approved asset allocation changes.

NEPC recommends the use of transition managers as a best practice for several reasons:

- Their expertise helps avoid volatility or tracking error versus the legacy and new investment portfolios
- They can alleviate perceived or actual manager conflicts of interest
- They provide transparency with pre-trade and post-trade reports
- They may offer interim portfolio management when required

We also recommend that transition managers be hired in a fiduciary capacity to the pension plan, and that they trade only on an agency basis to avoid a conflict of interest.

Manager changes often involve complex multi-day trades across several exchanges. If the order and timing of the trades are chosen poorly, the pension plan could easily be under- or over-exposed to volatile asset classes for a period of time. Transition managers act as a quarterback over the entire process, helping to ensure that everything goes smoothly. They can also sometimes use their own balance sheets or other liquidity sources to cross trades at lower costs than that available in public markets.

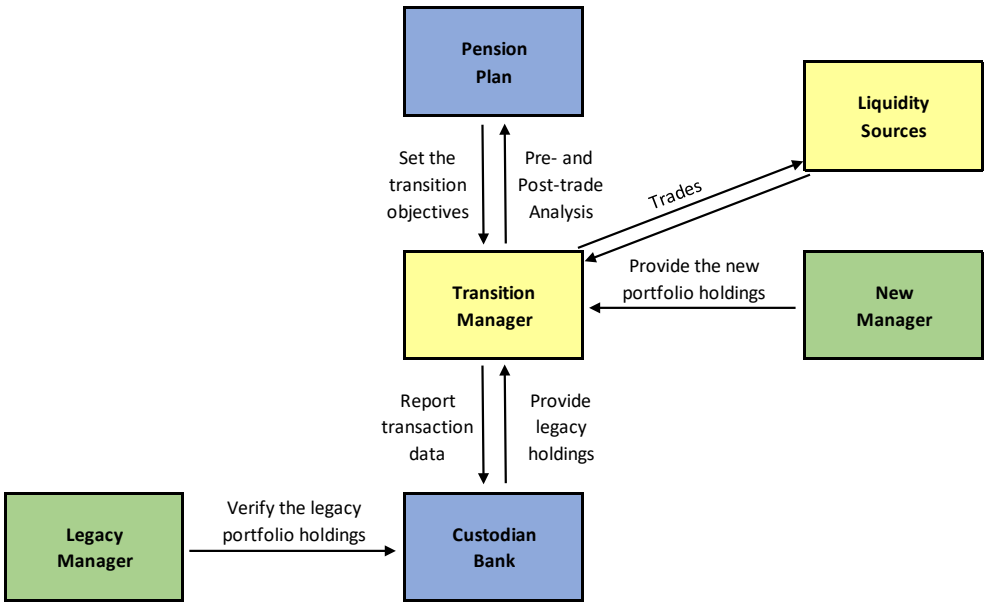
The transition process can be thought of in three stages: pre-trade, intra-trade, and post-trade. During the pre-trade period the transition manager works with the pension plan to determine the goals and key risk factors. The legacy and new investment managers are also consulted to determine their current investment holdings and redemption/purchase policies. A transition plan is developed including a cost estimate for the entire process.

Once the transition plan is approved and the portfolios are ready to be traded, the transition manager carefully executes the sales and purchases while seeking to optimize the market impact, transaction costs, and residual risks. For example, if both the legacy and new managers are heavily invested in similar industries or geographies then the timing of the sales and purchases should be managed to ensure that those concentrations are not temporarily magnified. Securities that are owned by both legacy and new managers can simply be transferred in-kind to avoid transaction costs. Transition managers can also sometimes lower transaction costs by matching buy and sell orders with other institutional investors. For fairness these types of crossing trades are typically settled at an agreed timing and price tied to open trading, such as at the market close at the average price for the day. Transition managers also often use derivatives to manage the pension plan's investment exposures during the trading process.

Finally, transition managers must provide full post-trade reporting, with a summary of all transactions and a complete cost and revenue attribution. The post-trade report should compare actual results to those that were forecasted and explain any differences.

This schematic shows the various parties and responsibilities involved in the transition management process:

THE TRANSITION MANAGEMENT PROCESS



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