

**SAN MATEO COUNTY COMMUNITY COLLEGE DISTRICT  
RETIREMENT BOARD OF AUTHORITY MEETING**

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PRESENTED TO: DATE: 04/25/2018  
Retirement Board of Authority

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SUBJECT: ITEM #: 2017/2018-016  
Public Comments Enclosure: No  
Action Item No

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Prepared by: Keenan Financial Services  
Requested by: Retirement Board of Authority

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**BACKGROUND:**

The public may address the Retirement Board of Authority on any matter pertaining to the Board that is not on the agenda.

**RECOMMENDATION:**

The Chair reserves the right to limit the time of presentations by individual or topic.

**SAN MATEO COUNTY COMMUNITY COLLEGE DISTRICT  
RETIREMENT BOARD OF AUTHORITY MEETING**

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PRESENTED TO: DATE: 04/25/2018  
Retirement Board of Authority

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SUBJECT: ITEM #: 2017/2018-017  
Approval of Agenda Enclosure: Yes  
Action Item Yes

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Prepared by: Keenan Financial Services  
Requested by: Retirement Board of Authority

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**BACKGROUND:**

Under California Government Code Section §54950 (The Ralph M. Brown Act) the “Legislative Body” is required to post an agenda detailing each item of business to be discussed. The Authority posts the agenda in compliance with California Government Code Section §54954.2.

**STATUS:**

Unless items are added to the agenda according to G.C. §54954.2 (b) (1) (2) (3) the agenda is to be approved as posted.

**RECOMMENDATION:**

Subject to changes or corrections, the agenda is to be approved.

# AGENDA

## SAN MATEO COUNTY COMMUNITY COLLEGE DISTRICT RETIREMENT BOARD OF AUTHORITY MEETING

April 25, 2018  
1:00 PM – 3:00 PM

## SAN MATEO COUNTY COMMUNITY COLLEGE DISTRICT CITY VIEW CONFERENCE ROOM

BLDG #10-401  
3401 CSM Drive  
San Mateo, CA. 94402  
(650) 358-6828

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### I. CALL TO ORDER

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### II. ROLL CALL

#### MEMBERS

Chief Financial Officer	Bernata Slater
Vice Chancellor of Human Resources & Employee Relations	Eugene Whitlock
Controller	Nicole Wang
Classified Representative	Kathy McEachron
Academic Representative	Bruce Maule

#### PROGRAM COORDINATOR

Senior Vice President, Keenan Financial Services	Gail Beal
Senior Account Manager, Keenan Financial Services	Roslyn Washington

#### CONSULTANTS

Morgan Stanley (MS)	Cary Allison
Benefit Trust Company (BTC)	Scott Rankin

#### GUESTS

Executive Vice Chancellor	Kathy Blackwood
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#### OTHER

None

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### III. PUBLIC COMMENTS

**Information**  
**2017/2018-016**

The public may address the Retirement Board of Authority (RBOA) on any matter pertaining to the Retirement Board that is not on the agenda. The Chair reserves the right to limit the time of presentations by individual or topic.

### IV. APPROVAL OF AGENDA

**Action**  
**2017/2018-017**

The Retirement Board of Authority (RBOA) retains the right to change the order in which agenda items are discussed. Subject to review by the Retirement Board, the agenda is to be approved as presented. Items may be deleted or added for discussion only according to G.C. Section 54954.2.

PUBLIC COMMENTS:

- V. APPROVAL OF MINUTES** **Action**  
**2017/2018-018**
- The Retirement Board of Authority (RBOA) will review the Minutes from the previous meeting on **February 25, 2018**, for any adjustments and adoption.  
PUBLIC COMMENTS:  
BOARD CONSIDERATION:
- 

- VI. INVESTMENTS**
- PORTFOLIO PERFORMANCE REVIEW** **Action**  
**2017/2018-019**

Morgan Stanley (MS) will review the overall performance of the District's Public Entity Investment Trust Portfolio.  
PUBLIC COMMENTS:

- MARKET OVERVIEW** **Information**  
**2017/2018-020**

Morgan Stanley (MS) will provide an overview of the actions of the capital markets since the last Retirement Board of Authority (RBOA) meeting.  
PUBLIC COMMENTS:  
BOARD CONSIDERATION:

- INVESTMENT POLICY STATEMENT REVIEW** **Action**  
**2017/2018-021**

The Retirement Board of Authority shall, with the assistance of Benefit Trust Company and Morgan Stanley Smith Barney, review the Investment Policy Statement setting forth the investment objectives for the Trust. Key to this process is a review of the Board's time horizon for investment, short-term liquidity needs, attitudes as well as the capacity to accept investment risk as measured through the completion of a **Risk Tolerance Questionnaire**, the expected rate of return of the Board taking into account the discount rate and assumptions contained in the most recent Actuarial Valuation Study, as well as any other information the RBOA membership feel pertinent to the discussion.  
PUBLIC COMMENTS:  
BOARD CONSIDERATION:

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- VII. EDUCATION** **Information**  
**2017/2018-022**

The purpose of this and all Retirement Board of Authority meetings is the continuing education of Retirement Board members on the status of the funds held in the Trust and the fiduciary duties of the Retirement Board members. All of the agenda items are included in furtherance of that purpose. Investment in monies for the long term carries with it a fiduciary liability. A discussion, led by Morgan Stanley will present the annual update of their capital market assumptions.  
PUBLIC COMMENTS:  
BOARD CONSIDERATION:

## VIII. ADMINISTRATION

### DISBURSEMENT REPORT

Action  
2017/2018-023

The Retirement Board of Authority (RBOA) members will ratify “reasonable fees” associated with GASB compliance and the Management/Operational duties of the District’s OPEB Investment Trust.

PUBLIC COMMENTS:

BOARD CONSIDERATION:

### FUTURE TRANSFER OF ASSETS INTO THE TRUST

Information  
2017/2018-024

Based on the current Actuarial Valuation Study, the Retirement Board of Authority (RBOA) will discuss the OPEB deposits scheduled by the District to be transferred into the Investment Trust.

PUBLIC COMMENTS:

BOARD CONSIDERATION:

### UPDATE OF RETIREMENT BOARD OF AUTHORITY (RBOA) BYLAWS

Action  
2017/2018-025

The current District OPEB Trust document provides provisions to operate the Trust. RBOA Bylaws provide additional direction for issues not discussed in the provisions of the District’s Trust Document. The Retirement Board of Authority will review the RBOA Bylaws and edit as necessary.

PUBLIC COMMENTS:

BOARD CONSIDERATION:

### REPORT TO THE GOVERNING BOARD OF TRUSTEES

Information  
2017/2018-026

The Retirement Board of Authority membership anticipates a presentation as to the status of the District’s OPEB Trust to the San Mateo County CCD Governing Board of Trustees on **April 25, 2018**. Schedules for the preparation of presentation materials should be identified and accepted by the RBOA.

PUBLIC COMMENTS:

BOARD CONSIDERATION:

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## IX. INFORMATION REPORTS

### RETIREMENT BOARD OF AUTHORITY COMMENTS

Information  
2017/2018-027

Each member may report about various matters involving the Retirement Board of Authority. There will be no Retirement Board discussion except to ask questions or refer matters to staff, and no action will be taken unless listed on a subsequent agenda.

**PROGRAM COORDINATOR/CONSULTANT COMMENTS**

**Information  
2017/2018-028**

The Program Coordinator and Consultants will report to the Retirement Board of Authority about various matters involving the Authority. There will be no Authority discussion except to ask questions, and no action will be taken unless listed on a subsequent agenda.

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**X. DATE, TIME AND AGENDA ITEMS FOR NEXT MEETING**

**Information  
2017/2018-029**

In addition to standing Agenda items, members and visitors may suggest additional items for consideration at the next Retirement Board of Authority meeting.

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**XI. ADJOURNMENT**

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**Americans with Disabilities Act** The San Mateo County Community College District Retirement Board of Authority conforms to the protections and prohibitions contained in Section 202 of the Americans with Disabilities Act of 1990 and the federal rules and regulations adopted in implementation thereof. A request for disability-related modification or accommodation, in order to participate in a public meeting of the San Mateo County Community College District Retirement Board of Authority meeting, shall be made to: Bernata Slater, Chief Financial Services, San Mateo County Community College District, 3401 CMS Drive, San Mateo, CA 94402.

**SAN MATEO COUNTY COMMUNITY COLLEGE DISTRICT  
RETIREMENT BOARD OF AUTHORITY MEETING**

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PRESENTED TO:  
Retirement Board of Authority

DATE: 04/25/2018

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SUBJECT:  
Approval of Minutes

ITEM #: 2017/2018-018

Enclosure: Yes

Action Item: Yes

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Prepared by: Keenan Financial Services

Requested by: Retirement Board of Authority

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**BACKGROUND:**

As a matter of record and in accordance with the Brown Act, minutes of each meeting are kept and recorded.

**STATUS:**

The Retirement Board of Authority will review the Minutes from the previous meeting on **February 25, 2018.**

**RECOMMENDATION:**

Subject to changes or corrections, the minutes are to be approved.

# MINUTES

## SAN MATEO COUNTY COMMUNITY COLLEGE DISTRICT RETIREMENT BOARD OF AUTHORITY MEETING

February 15, 2018

9:00 AM–12:00 PM

### **I. CALL TO ORDER**

1. The meeting was called to order at 9:04 AM by Gail Beal.

### **II. ROLL CALL**

1. All Retirement Board of Authority (RBOA) members were present, except Bernata Slater:  
Eugene Whitlock, Vice Chancellor of Human Resources & Employee Relations,  
Nicole Wang, Controller,  
Kathy McEachron, Classified Representative,  
Bruce Maule, Academic Representative.
2. All Coordinators/Consultants were present:  
Gail Beal, Senior Vice President, Keenan Financial Services,  
Roslyn Washington, Senior Account Manager, Keenan Financial Services,  
Cary Allison, Senior Vice President, Morgan Stanley,  
Scott Rankin, Senior Vice President, Benefit Trust Company.
3. The following Guests were present:  
Kathy Blackwood, Executive Vice Chancellor, SMCCCD,  
Tina Treis, Crowe Horwath LLP.

### **III. PUBLIC COMMENTS**

1. There were no public comments.
2. This item is information only.

### **IV. APPROVAL OF AGENDA**

1. Eugene Whitlock Motioned to approve the Agenda as presented; Motion was seconded by Bruce Maule and was unanimously approved by all of the RBOA members present.

### **V. APPROVAL OF MINUTES**

1. Bruce Maule Motioned to approve the Minutes as presented; Motion was seconded by Eugene Whitlock and was unanimously approved by all of the RBOA members present.

### **VI. INVESTMENTS**

1. **Portfolio Performance Review**
  - a. Cary Allison of Morgan Stanley (MS) reviewed the performance of the Trust's accounts as of December 31, 2017.
  - b. The Portfolio Value as of 12/31/17 was **\$102,507,563**.



Time weighted return net of fees

Month to Date	Quarter to Date	Year to Date	Latest 1 Year	Annualized latest 3 Year	Annualized latest 5 Year	Annualized Inception to Date
0.92	2.59	12.92	12.92	5.84	6.53	6.93

- c. The Portfolio Value as of 1/31/18 was **\$104,979,033**.
- d. The Portfolio Value as of 2/14/18 was **\$102,085,904**.
- e. We are down .41% YTD.
- f. Cary advised they made a couple of changes to assets. Slightly decreased REITS and moved money into John Hancock Int'l Growth.
- g. Prudential Jennison Global Opportunities Fund replaced Brandes Emerging Markets Fund..
- h. Bruce Maule asked to get a better understanding of the new ALT classification on performance reports. Are these private equity? Scott Rankin said no, we just felt that we need to be more transparent and definitive on our funds, and more precise in our categorizations. So now alternative credit fixed income funds (we have two) are classified under alternatives rather than simply fixed income.
- i. Bruce Maule Motioned to accept the Portfolio Performance Review as presented; Motion was seconded by Kathy McEachron and was unanimously carried by all RBOA members present.

**2. Market Overview**

- a. Cary Allison gave an overview of the Markets since the last RBOA meeting.
- b. Fundamentals of the economy are getting better.
- c. This is an earnings driven recovery period with Morgan Stanley predicting up to 3% over the next year..
- d. In 2015 the Feds were predicted to raise rates 4 times in 2016. They only raised them 1 time in December of 2016.
- e. S&P 500 Earnings in 2014/15/16 were at \$117-118. In 2017 they jumped to ~\$132, and in 2018 are expected to be ~\$150. This is an earnings-driven rally.
- f. These are all-weather portfolios.
- g. Bonds did exceptionally well in 2017.
- h. In 2018 we are expecting more inflation but not much more.
- i. The market was up in January 5% then the 1<sup>st</sup> week of Feb the market corrected down 10%.
- j. The unemployment report came out and within it was wage growth info which Wall Street was expecting 2.7% but it was 2.9%.
- k. As far as our portfolios are concerned, Morgan Stanley feels that just because we have a correction there is no need to change anything.
- l. Globally, the world is doing better.
- m. This was the 1<sup>st</sup> time in 6-7 years that Global stocks outperformed Domestic stocks.
- n. This item is information only.

**3. Investment Policy Statement Review**

- a. Scott Rankin discussed the Investment Policy Statement.
- b. The Risk Tolerance Questionnaire will be brought to the next meeting. RBOA

- wants to wait to have all five members present to make change.
- c. Bruce Maule motioned to accept the Investment Policy Statement as presented; Motion was seconded by Nicole Wang and was unanimously carried by all RBOA members present.
  - d. There were discussions about achieving, or not achieving, the 7% target rate of return. As of 12/31/17, the returns were 6.93%/year annualized since inception; as of 1/31/18, returns were 7.16%/year annualized since inception, and as of fiscal year-end, 6/30/17, they were 6.63%/year annualized since inception. We discussed how our portfolios are designed to achieve these target rates of returns over a full secular (long-term) time horizon, while minimizing risk, consistent with CA gov't code guidelines, which is consistent with GASB 74/75 guidelines. Further discussion centered upon trust asset allocation which is 50/50 (equity/fixed income) while the actuarial report stated that 75/25 allocation is needed to achieve a 7% rate of return. Morgan Stanley and Benefit Trust Company have a difference of opinion from the actuary. This difference in asset mixes is stated in the auditor's report. Cary/Scott felt that SMCCCD would be uncomfortable with the increased level of volatility with 25% additionally invested in equities, and that level of equities is not needed to achieve the desired rate of return. It was decided that the Futuris team should attend a district board meeting, to help educate the board on our process. The Futuris team will attend the April 2018 board meeting.

## **VII. ADMINISTRATION**

### **1. Annual Reporting on the Status of the Trust**

- a. Roslyn Washington presented the Annual Report on the Status of the Trust for the fiscal year ending June 30, 2017.
- b. Bruce Maule Motioned to ratify the Annual Report on the Status of the Trust; Motion was seconded by Kathy McEachron and was unanimously approved by all of the RBOA members present.

### **2. Disbursement Report**

- a. Roslyn Washington presented a Trust Disbursement Report reflecting fiduciary withdrawals and fees paid to Keenan, BTC & Morgan Stanley for their services for the period March 1, 2017 – January 22, 2018.
- b. Bruce Maule Motioned to ratify the Disbursement Report as presented; Motion was seconded by Kathy McEachron and was unanimously carried by all RBOA members present.

### **3. Updates to the Comprehensive Compliance Plan, including the “Substantive Plan”**

- a. Roslyn Washington addressed the RBOA and advised that the Service Rep. worked with the District to gather information to update the Substantive Plan for the fiscal year ended June 30, 2017.
- b. This is information only.

### **4. Actuarial Valuation Study Update**

- a. The new actuarial valuation study is effective June 30, 2017.
- b. The full liability is \$120M.

- c. This item is information only.

**5. Status of District's current OPEB Plan Independent Auditor's Report**

- a. Crowe Horwath LLP provided an independent analysis of the District's Public Entity Investment Trust for the year ended June 30, 2017. RBOA members were guided through the Audit Report by Tina Treis of Crowe Horwath, LLP. Tina Tries presented a management letter that detailed the conflict described earlier between the points of view of Morgan Stanley and Greg Kischuk, actuary. The RBOA members were comfortable with the explanation, but agreed to do a risk tolerance exercise again to reaffirm the desired rate of return in the Investment Policy.
- b. Kathy McEachron Motioned to accept the OPEB Plan Independent Auditor's Report as presented; Motion was seconded by Bruce Maule and was unanimously carried by all RBOA members present.

**6. Future Transfer of Assets into the Trust**

- a. \$12M will be transferred into the Trust between March and June.
- b. This item is information only.

**VIII. INFORMATION REPORTS**

**1. Retirement Board of Authority Comments**

- a. There were no RBOA comments.
- b. This is information only.

**2. Program Coordinator/Consultant Comments**

- a. There were no Coordinator/Consultant comments.
- b. This is information only.

**IX. DATE, TIME AND AGENDA ITEMS FOR NEXT MEETING**

- a. April 25, 2018 1:00 PM – 3:00 PM.
- b. This is information only.

**X. ADJOURNMENT**

- a. The meeting was adjourned by Gail Beal at 11:52 AM.

**SAN MATEO COUNTY COMMUNITY COLLEGE DISTRICT  
RETIREMENT BOARD OF AUTHORITY MEETING**

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PRESENTED TO:	DATE:	04/25/2018
Retirement Board of Authority		

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SUBJECT:	ITEM #:	<u>2017/2018-019</u>
Portfolio Performance Review	Enclosure:	<u>Yes</u>
	Action Item	<u>Yes</u>

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Prepared by:	<u>Morgan Stanley Wealth Management (MS)</u>
Requested by:	<u>Retirement Board of Authority</u>

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**BACKGROUND:**

As Board members of the Retirement Board of Authority you have a fiduciary responsibility as described in Government Code section 53215, et seq. As part of fulfilling your fiduciary responsibility, it is important to periodically review the District's OPEB Trust Portfolio.

**STATUS:**

Morgan Stanley (MS) will provide a review of the District's OPEB Trust Portfolio Performance Report.

**RECOMMENDATION:**

The Retirement Board of Authority should review and accept the District's Public Entity Investment Trust Portfolio Report and file as appropriate.

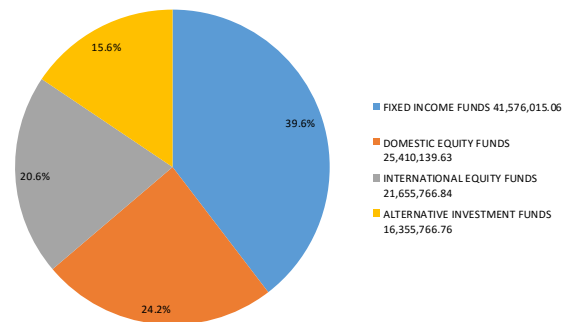
**SAN MATEO COUNTY COMMUNITY COLLEGE FUTURIS PUBLIC ENTITY INVESTMENT TR**  
 March 31, 2018

**Change In Portfolio**

Portfolio Value on 12-31-17	102,507,563.16
Contributions	3,050,000.00
Withdrawals	0.00
Change in Market Value	-887,849.89
Income Received	421,373.75
Portfolio Fees	-93,398.73
Portfolio Value on 03-31-18	<u>104,997,688.29</u> 104,997,688.29

**Asset Allocation**

**PORTFOLIO SUMMARY**  
 March 31, 2018



**Time Weighted Return - Gross of Fees**

	Month To Date	Quarter To Date	Year To Date	Latest 1 Year	Annualized Latest 3 Year	Annualized Latest 5 Year	Annualized Inception To Date
Account	-0.21	-0.43	-0.43	8.52	5.23	6.01	7.02
S&P 500 TR	-2.54	-0.76	-0.76	14.00	10.80	13.32	13.49
MSCI EAFE	-1.97	-1.70	-1.70	14.60	5.49	6.46	5.96
MSCI ACWI Ex US Net	-1.76	-1.18	-1.18	17.36	6.47	6.05	5.67
Barclays Aggregate	0.64	-1.46	-1.46	1.20	1.21	1.83	3.10
Barclays Global Agg Bd Unhedged	1.06	1.35	1.35	6.98	3.14	1.49	2.00
50% MSCI ACWI/ 50% Barclays Agg	-0.75	-1.13	-1.13	8.09	4.83	5.64	6.28

**Time Weighted Return - Net of Fees**

	Month To Date	Quarter To Date	Year To Date	Latest 1 Year	Annualized Latest 3 Year	Annualized Latest 5 Year	Annualized Inception To Date
Account	-0.24	-0.52	-0.52	8.13	4.86	5.64	6.65
S&P 500 TR	-2.54	-0.76	-0.76	14.00	10.80	13.32	13.49
MSCI EAFE	-1.97	-1.70	-1.70	14.60	5.49	6.46	5.96
MSCI ACWI Ex US Net	-1.76	-1.18	-1.18	17.36	6.47	6.05	5.67
Barclays Aggregate	0.64	-1.46	-1.46	1.20	1.21	1.83	3.10
Barclays Global Agg Bd Unhedged	1.06	1.35	1.35	6.98	3.14	1.49	2.00
50% MSCI ACWI/ 50% Barclays Agg	-0.75	-1.13	-1.13	8.09	4.83	5.64	6.28

"#sanmateo."

# PORTFOLIO APPRAISAL

*March 31, 2018*

Quantity	Security	Security Symbol	Unit Cost	Total Cost	Price	Market Value	Pct. Assets	Cur. Yield
<b>FIXED INC MUTUAL FUNDS</b>								
Taxable Funds								
739,264.599	BLACKROCK TOTAL RETURN FD BD FD BLKRR CL	MPHQ.X	11.87	8,775,394.05	11.44	8,457,187.01	8.1	2.9
463,533.143	GUGGENHEIM FDS TR INV T GD BD INSTL	GIUS.X	18.34	8,503,191.10	18.46	8,556,821.82	8.1	3.7
403,725.891	HARTFORD WORLD BOND Y	HWDY.X	10.40	4,196,808.97	10.62	4,287,568.96	4.1	0.2
295,376.291	LEGG MASON BW GLOBAL OPPS BD IS	GOBS.X	10.84	3,202,342.91	11.17	3,299,353.17	3.1	0.0
593,617.858	PRUDENTIAL TOTAL RETURN BD FD	PTRQ.X	14.53	8,625,501.46	14.29	8,482,799.19	8.1	3.0
731,462.955	WESTERN ASSET FDS INC	WAPS.X	11.82	8,644,025.07	11.61	8,492,284.91	8.1	4.7
				41,947,263.55		41,576,015.06	39.6	2.9
				41,947,263.55		41,576,015.06	39.6	2.9
<b>DOMESTIC EQUITY FUNDS</b>								
Large Cap Funds								
242,740.109	ALGER FDS II SPECTRA FD Z	ASPZ.X	18.57	4,508,800.42	21.66	5,257,750.76	5.0	0.0
157,996.855	COLUMBIA FDS SER TR I	COFY.X	23.00	3,634,315.58	25.64	4,051,039.36	3.9	0.9
106,741.310	OAKMARK SELECT INSTITUTIONAL	OANL.X	44.20	4,717,731.47	45.93	4,902,628.37	4.7	?
70,783.438	PRUDENTIAL WORLD FD INC JENNISON GBL Q	PRJQ.X	22.62	1,601,420.81	22.62	1,601,121.37	1.5	?
				14,462,268.29		15,812,539.86	15.1	0.2
Mid Cap Funds								
87,104.818	HARTFORD MIDCAP Y	HMDY.X	26.93	2,345,986.69	36.99	3,222,007.22	3.1	0.0
Small Cap Funds								
197,792.612	ALGER FDS SMALL CP FOCUS Z	AGOZ.X	11.34	2,243,291.36	16.72	3,307,092.47	3.1	0.0
45,251.439	UNDISCOVERED MANAGERS FDS BEHAVR VAL R6	UBVF.X	58.57	2,650,593.82	67.81	3,068,500.08	2.9	1.0
				4,893,885.18		6,375,592.55	6.1	0.5
				21,702,140.17		25,410,139.63	24.2	0.3
<b>INTERNATIONAL FUNDS</b>								
Small Cap Funds								
154,027.959	BRANDES INTERNATIONAL SMALL CAP R6	BISR.X	13.42	2,067,743.11	13.22	2,036,249.62	1.9	2.7
108,921.201	LEGG MASON PARTNERS EQUITY TR CLEARBDG IN IS	CBIS.X	14.95	1,628,053.82	18.75	2,042,272.52	1.9	1.9
				3,695,796.93		4,078,522.14	3.9	2.3
International								
47,880.142	AMERICAN FUNDS NEW PERSPECTIVE F2	ANWF.X	38.23	1,830,597.30	43.96	2,104,811.04	2.0	0.9

## PORTFOLIO APPRAISAL

*March 31, 2018*

Quantity	Security	Security Symbol	Unit Cost	Total Cost	Price	Market Value	Pct. Assets	Cur. Yield
234,068.287	HARTFORD INTERNATIONAL VALUE Y	HILY.X	14.14	3,310,384.83	17.50	4,096,195.02	3.9	2.0
93,493.235	JOHN HANCOCK FDS III INTL GROWTH R6	JIGT.X	28.51	2,665,758.29	28.61	2,674,841.45	2.5	?
108,737.266	OAK MARK INTERNATIONAL INVESTOR	OANI.X	29.44	3,201,275.26	27.80	3,022,895.99	2.9	?
192,558.435	THORNBURG INVESTMENT INCOME BUILDER	TIBO.X	20.90	4,024,769.62	21.29	4,099,569.08	3.9	1.0
				15,032,785.31		15,998,312.59	15.2	0.9
Emerging Markets								
23,346.623	AMERICAN FUNDS NEW WORLD F-2	NFFF.X	57.44	1,341,076.98	67.63	1,578,932.11	1.5	1.0
				20,069,659.21		21,655,766.84	20.6	1.2
<b>ALTERNATIVE INVESTMENT FUNDS</b>								
176,076.980	COHEN & STEERS RLTY INCM NEW SHS CL Z	CSZI.X	15.55	2,737,691.55	14.48	2,549,594.67	2.4	3.0
319,965.440	GUGGENHEIM MACRO OPPORTUNITIES INSTL	GIOI.X	26.39	8,443,310.49	26.72	8,549,476.56	8.1	5.0
309,368.767	LEGG MASON BW ALT	LMAM.X	10.31	3,189,148.43	10.38	3,211,247.80	3.1	3.6
88,318.123	PRUDENTIAL GLOBAL REAL ESTATE	PGRQ.X	24.98	2,205,798.30	23.16	2,045,447.73	1.9	2.5
				16,575,948.76		16,355,766.76	15.6	4.1
<b>TOTAL PORTFOLIO</b>				<b>100,295,011.69</b>		<b>104,997,688.29</b>	<b>100.0</b>	<b>2.1</b>

**SAN MATEO COUNTY COMMUNITY COLLEGE DISTRICT  
RETIREMENT BOARD OF AUTHORITY MEETING**

---

PRESENTED TO: DATE: 04/25/2018  
Retirement Board of Authority

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SUBJECT: ITEM #: 2017/2018-020  
Market Overview Enclosure: Yes  
Action Item No

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Prepared by: Keenan Financial Services  
Requested by: Retirement Board of Authority

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**BACKGROUND:**

As Board members of the Retirement Board of Authority you have a fiduciary responsibility as described in Government Code section 53215, et seq. In fulfilling your fiduciary responsibility, it is important to understand the impact of market conditions on the assets in the Investment Trust.

**STATUS:**

Morgan Stanley (MS) will provide an overview of current capital market conditions.

**RECOMMENDATION:**

The Retirement Board of Authority should receive the information and file accordingly.





## Portfolio Update – 1<sup>st</sup> Quarter 2018

Cary M. Allison, CIMA<sup>®</sup>  
Senior Institutional Consultant  
U.S. Government Entity Specialist

Morgan Stanley

MODEL PORTFOLIOS									
EQUITIES	Style	Ticker	Expenses	Fixed Income	Conservative	Moderate	Moderate Growth	Growth	Aggressive Growth
<i>Domestic Equities</i>									
<i>Large Cap Domestic Equities</i>									
Alger Spectra	Large Growth	ASPZX	0.89%	0%	1%	3%	5%	5%	7%
Columbia Contrarian Core	Large Blend	COFYX	0.66%	0%	2%	3%	4%	5%	7%
Oakmark Select	Large Value	OANLX	0.82%	0%	2%	4%	4%	6%	7%
				0%	5%	10%	13%	16%	21%
<i>Small/Mid Cap Domestic Equities</i>									
Hartford Midcap	Mid Growth	HMDYX	0.76%	0%	0%	1%	2%	4%	6%
Alger Small Cap Focus	Small Growth	AGOZX	1.01%	0%	1%	2%	3%	4%	5%
Undiscovered Managers Behavioral Value	Small Blend	UBVFX	0.79%	0%	1%	1%	2%	4%	5%
				0%	2%	4%	7%	12%	16%
<i>Real Estate Investment Trusts</i>									
Cohen & Steers Real Estate Securities	Real Estate	CSZIX	0.88%	0%	1%	2%	2%	3%	4%
Prudential Global Real Estate	Real Estate	PGRQX	0.80%	0%	0%	1%	2%	2.5%	3%
				0%	1%	3%	4%	5.5%	7%
<i>Total Domestic Equities &amp; REITS</i>				0%	8%	17%	24%	33.5%	44%
<i>International/Global Equities</i>									
John Hancock International Growth	Int'l Growth	JIGTX	0.93%	0%	2%	2.0%	3%	3.5%	4%
Brandes International Small Cap	Int'l SMID	BISRX	1.00%	0%	1%	1.5%	2%	2.5%	3%
ClearBridge International Small Cap	Int'l SMID	CBISX	1.01%	0%	0%	1.5%	2%	2.5%	3%
American Funds New Perspectives Fund	Global Growth	ANWFX	0.55%	0%	1%	2%	2%	3%	4%
American Funds New World Fund	Emerging Markets	NFFFX	0.76%	0%	1%	1%	1.5%	2%	3%
Prudential Jennison Global Opportunities	Global Growth	PRJQX	0.84%	0%	0%	1%	1.5%	2%	3%
Oakmark International	Int'l Value	OANIX	0.81%	0%	1%	2%	3%	3%	3%
Hartford International Value	Int'l Value	HILYX	0.91%	0%	1%	2%	3%	4%	4%
Thornburg Investment Income Builder	Global Blend	TIBOX	0.85%	0%	1%	3%	3%	5%	5%
				0%	8%	16%	21%	27.5%	32%
<i>Total Equities</i>				0%	16%	33%	45%	61%	76%
<b>FIXED INCOME</b>									
BlackRock Total Return	Domestic Bond	MPHQX	0.39%	16%	14%	11%	9%	6%	4%
Guggenheim Investment Grade Bond	Domestic Bond	GIUSX	0.50%	16%	14%	11%	9%	6%	4%
Prudential Total Return Bond	Domestic Bond	PTRQX	0.46%	16%	14%	11%	9%	6%	4%
Western Asset Core Plus Bond	Domestic Bond	WAPSX	0.42%	16%	14%	11%	9%	6%	4%
Guggenheim Macro Opportunities	Domestic Bond	GIOIX	0.97%	16%	12%	11%	9%	6%	4%
Hartford World Bond	Global Bond	HWDYX	0.67%	8%	7%	4%	4%	3%	1%
Brandywine Global Opportunities Bond	Global Bond	GOBSX	0.56%	6%	5%	4%	3%	3%	1.5%
Brandywine Global Alternative Credit	Global Bond	LMAMX	1.25%	6%	4%	4%	3%	3%	1.5%
<i>Total Bonds</i>			<i>Subtotals</i>	100.0%	84.0%	67.0%	55.0%	39.0%	24.0%
<b>SUMMARY</b>									
Total Equities				0.0%	16.0%	33.0%	45.0%	61.0%	76.0%
Total Fixed Income				100.0%	84.0%	67.0%	55.0%	39.0%	24.0%
Grand Total				100.0%	100.0%	100.0%	100.0%	100.0%	100.0%
<i>Expense Ratio</i>				0.60%	0.60%	0.66%	0.68%	0.72%	0.74%
<b>TARGET EQUITY &amp; NOMINAL BENCHMARKS</b>									
Target Equity Allocations				0%	15%	30%	45%	60%	75%
MSCI ACWI (All County World Index)				0%	15%	30%	45%	60%	75%
Barclay's Aggregate Bond				100%	85%	70%	55%	40%	25%
<b>STATISTICS</b>									
Target Avg Annual Return				4.50%	5.00%	6.00%	6.99%	7.69%	8.46%
Standard Deviation (Risk)				3.12%	4.26%	6.09%	7.41%	9.48%	11.89%

NOTE: The portfolios listed above are sample representations only and may be altered from time to time at the discretion of the Trustee.

# Portfolio Returns

As of March 31<sup>st</sup>, 2018

<i>Portfolio</i>	<i>3 Mo</i>	<i>1-Yr</i>	<i>3-Yr</i>	<i>5-Yr</i>	<i>10-Yr</i>
<b>Fixed Income</b>	-0.24%	4.03%	2.58%	2.72%	5.79%
<i>Benchmark (Barclay's Aggregate)</i>	-1.46%	1.20%	1.20%	1.82%	3.63%
<b>Conservative</b>	-0.33%	5.24%	3.24%	3.46%	5.90%
<i>Benchmark (15% ACWI / 85% BC Agg)</i>	-1.34%	3.23%	2.32%	2.99%	4.16%
<b>Moderate</b>	-0.33%	6.93%	4.33%	4.73%	6.24%
<i>Benchmark (30% ACWI / 70% BC Agg)</i>	-1.23%	5.27%	3.42%	4.15%	4.63%
<b>Moderate Growth</b>	-0.22%	8.21%	5.10%	5.66%	6.43%
<i>Benchmark (45% ACWI / 55% BC Agg)</i>	-1.13%	7.34%	4.50%	5.29%	5.03%
<b>Growth</b>	-0.24%	9.73%	6.06%	6.79%	6.63%
<i>Benchmark (60% ACWI / 40% BC Agg)</i>	-1.05%	9.42%	5.57%	6.42%	5.37%
<b>Aggressive Growth</b>	-0.18%	11.39%	7.06%	7.94%	6.63%
<i>Benchmark (75% ACWI / 25% BC Agg)</i>	-0.97%	11.53%	6.62%	7.53%	5.63%

NOTE: The portfolios listed above are sample representations only and may be altered from time to time at the discretion of the trustee.

Quarter	Fixed Income	Conservative	Moderate	Moderate Growth	Growth	Aggressive Growth
<b>Quarterly Returns</b>						
3/31/2008	0.72%	-0.37%	-1.49%	-3.40%	-5.13%	-6.50%
6/30/2008	-1.51%	-1.76%	-1.75%	-1.47%	-1.25%	-0.97%
9/30/2008	-3.19%	-4.12%	-5.53%	-7.08%	-8.88%	-11.99%
12/31/2008	0.28%	-2.90%	-6.76%	-9.65%	-13.11%	-17.53%
3/31/2009	-0.34%	-2.21%	-4.38%	-5.50%	-7.11%	-9.17%
6/30/2009	7.63%	9.64%	12.08%	13.79%	15.91%	19.16%
9/30/2009	8.04%	9.48%	11.18%	12.23%	13.84%	15.75%
12/31/2009	2.06%	2.26%	2.60%	2.90%	3.18%	3.67%
3/31/2010	3.31%	3.59%	3.83%	3.97%	4.23%	4.46%
6/30/2010	1.74%	-0.35%	-2.38%	-3.89%	-5.73%	-7.85%
9/30/2010	4.69%	6.20%	7.61%	8.68%	9.87%	11.45%
12/31/2010	-0.30%	0.98%	2.45%	3.57%	5.03%	6.92%
3/31/2011	1.50%	1.88%	2.26%	2.58%	3.09%	3.58%
6/30/2011	2.15%	1.93%	1.61%	1.28%	0.91%	0.49%
9/30/2011	0.17%	-2.89%	-5.81%	-7.78%	-10.68%	-13.70%
12/31/2011	1.52%	2.35%	3.30%	3.98%	4.96%	6.08%
3/31/2012	2.75%	4.06%	5.37%	6.27%	7.62%	9.09%
6/30/2012	1.89%	0.57%	-0.66%	-1.62%	-2.93%	-4.29%
9/30/2012	3.75%	4.14%	4.37%	4.57%	4.92%	5.18%
12/31/2012	1.52%	1.89%	2.22%	2.39%	2.63%	2.83%
3/31/2013	0.60%	1.47%	2.55%	3.32%	4.37%	5.57%
6/30/2013	-2.99%	-2.48%	-1.80%	-1.36%	-0.74%	-0.09%
9/30/2013	0.94%	1.64%	2.58%	3.30%	4.29%	5.24%
12/31/2013	0.94%	1.90%	2.85%	3.43%	4.36%	5.33%
3/31/2014	2.14%	2.04%	1.97%	2.05%	1.89%	1.85%
6/30/2014	2.52%	2.87%	3.30%	3.65%	4.02%	4.37%
9/30/2014	-0.04%	-0.60%	-1.11%	-1.56%	-2.17%	-2.61%
12/31/2014	0.83%	0.59%	0.91%	1.18%	1.50%	1.61%
3/31/2015	1.54%	1.63%	1.89%	2.15%	2.37%	2.48%
6/30/2015	-1.70%	-1.40%	-1.03%	-0.87%	-0.60%	-0.30%
9/30/2015	-0.38%	-1.97%	-3.16%	-3.99%	-5.19%	-6.33%
12/31/2015	-0.42%	0.57%	1.53%	2.06%	2.89%	3.74%
3/31/2016	2.62%	2.10%	1.76%	1.64%	1.36%	1.05%
6/30/2016	2.26%	1.92%	1.75%	1.68%	1.54%	1.42%
9/30/2016	1.27%	2.05%	2.89%	3.48%	4.27%	5.05%
12/31/2016	-1.78%	-1.20%	-0.85%	-0.55%	0.08%	0.47%
3/31/2017	1.95%	2.52%	3.32%	3.85%	4.41%	5.12%
6/30/2017	2.05%	2.35%	2.73%	3.00%	3.32%	3.67%
9/30/2017	1.37%	1.82%	2.44%	2.79%	3.33%	3.81%
12/31/2017	0.80%	1.32%	1.95%	2.43%	3.03%	3.69%
3/31/2018	-0.24%	-0.33%	-0.33%	-0.22%	-0.24%	-0.18%

Quarter	Fixed Income	Conservative	Moderate	Moderate Growth	Growth	Aggressive Growth
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#### Annualized Rolling Returns (per year)

1 Year	4.03%	5.24%	6.93%	8.21%	9.73%	11.39%
2 Years	3.86%	5.30%	7.09%	8.44%	10.18%	11.96%
3 Years	2.58%	3.24%	4.33%	5.10%	6.06%	7.06%
4 Years	3.16%	3.56%	4.51%	5.19%	5.98%	6.75%
5 Years	2.72%	3.46%	4.73%	5.66%	6.79%	7.94%
6 Years	3.57%	4.25%	5.38%	6.18%	7.17%	8.16%
7 Years	4.02%	4.42%	5.21%	5.75%	6.39%	7.01%
8 Years	4.48%	4.96%	5.80%	6.39%	7.09%	7.83%
9 Years	6.36%	7.22%	8.50%	9.39%	10.49%	11.80%
10 Years	5.79%	5.90%	6.24%	6.43%	6.63%	6.63%

#### Annual Returns

2008	-3.70%	-8.88%	-14.75%	-20.09%	-25.83%	-32.79%
2009	18.28%	20.03%	22.25%	24.18%	26.47%	29.88%
2010	9.71%	10.70%	11.74%	12.48%	13.39%	14.71%
2011	5.44%	3.21%	1.10%	-0.38%	-2.47%	-4.71%
2012	10.27%	11.05%	11.67%	11.94%	12.49%	12.93%
2013	-0.56%	2.49%	6.25%	8.89%	12.75%	16.92%
2014	5.54%	4.95%	5.11%	5.35%	5.24%	5.19%
2015	-0.98%	-1.21%	-0.85%	-0.78%	-0.74%	-0.72%
2016	4.38%	4.92%	5.63%	6.36%	7.40%	8.17%
2017	6.31%	8.25%	10.85%	12.62%	14.85%	17.30%
2018	-0.24%	-0.33%	-0.33%	-0.22%	-0.24%	-0.18%

#### Statistics

Worst Quarter	-3.19%	-4.12%	-6.76%	-9.65%	-13.11%	-17.53%
Average Quarter	1.28%	1.33%	1.37%	1.38%	1.40%	1.43%
Best Quarter	8.04%	9.64%	12.08%	13.79%	15.91%	19.16%
Worst 1-Year Period	-4.71%	-10.56%	-17.25%	-21.83%	-27.37%	-34.71%
Average 1-Year Period	5.76%	5.91%	6.33%	6.59%	6.96%	7.36%
Best 1-Year Period	22.61%	27.15%	32.75%	36.63%	41.91%	49.37%
Worst 3-Year Rolling Period	1.30%	2.09%	3.29%	3.73%	2.12%	0.04%
Average 3-Year Rolling Period	6.00%	6.31%	6.96%	7.37%	7.90%	8.46%
Best 3-Year Rolling Period	13.68%	15.32%	17.40%	18.83%	20.68%	23.50%
Worst 5-Year Rolling Period	2.87%	3.71%	4.88%	4.89%	3.34%	1.55%
Average 5-Year Rolling Period	6.12%	6.63%	7.54%	8.15%	8.96%	9.84%
Best 5-Year Rolling Period	10.75%	12.57%	14.95%	16.63%	18.91%	22.03%



## INSTITUTIONAL QUESTIONNAIRE

DATE

NAME

ADDRESS

The purpose of this questionnaire is to help us understand your plan's investment needs and preferences so that we can better assist you in developing and implementing an appropriate investment strategy.

### SECTION A—Investment Overview

This section will help us determine your plan's primary purpose for investing, its investment timeline, its cash needs during that period, and its tolerance for risk.

A1. What is your purpose for establishing this account?

- Defined Benefit Pension Plan
- Profit Sharing Plan
- 401(k) Plan
- Endowment
- Operating Fund
- Foundation
- Money Purchase Pension Plan
- Long-Term Reserve Account (10 years or greater)
- Short-Term Reserve Account (fewer than 10 years)
- Other (Please describe.) \_\_\_\_\_

A2. The following questions are intended to help us understand the nature of your plan's outgoing cash flows (i.e., liabilities). Do you know the average duration of the outgoing cash flows (average age of liabilities) for this plan?

- Yes       No

If "Yes," what is the average duration of the outgoing cash flows (average age of liabilities) for this plan?

- Fewer than 10 years       Greater than 10 years

*For Defined Benefit Pension Plans only: Answer either A3 or A4, and A5. Otherwise, proceed to A6.*

A3. What is the average age of the plan participants?

- Less than 50 years old       50 years old or older

**OR**

A4. What percentage of the participants is expected to retire in the next 5 years?

- Less than 75%       More than 75%

**AND**

A5. This plan/fund is

- Underfunded       Sufficiently funded       Overfunded

- A6. Which one of the following statements best describes your attitude toward the trade-off between risk and return?
- I am primarily concerned with limiting risk. I am willing to accept lower expected returns to limit the Plan's chance of loss.
  - Limiting risk and maximizing return are of equal importance to me. I am willing to accept moderate risk and a moderate chance of loss to achieve moderate returns.
  - I am primarily concerned with maximizing the returns of the Plan's investments. I am willing to accept high risk and a high chance of loss to maximize the Plan's investment return potential.

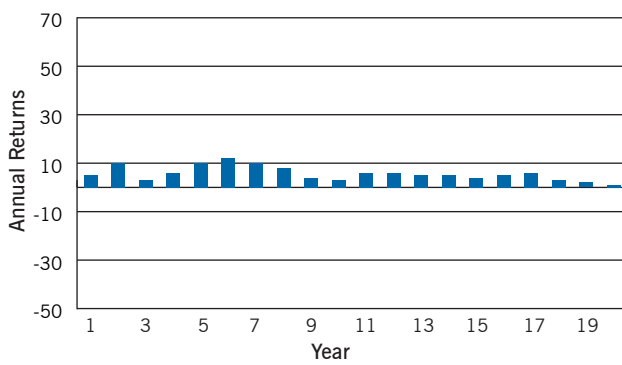
A7. The following graphs show the historical year-by-year returns for three hypothetical portfolios over a 20-year period. The average annual return over the 20-year period is also indicated. Please note that these are hypothetical examples only, for the purpose of gauging your tolerance for risk. Actual results of any particular investment will vary and may be negative.

Also note that the risk of Investment Y is substantially greater than that of Investment X, and the risk of Investment Z is substantially greater than that of Investment Y.

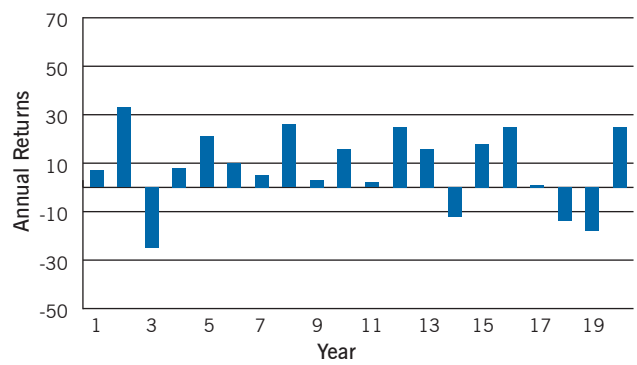
Given your investment goals for this account, which portfolio would you choose?

- Portfolio X       Portfolio Y       Portfolio Z

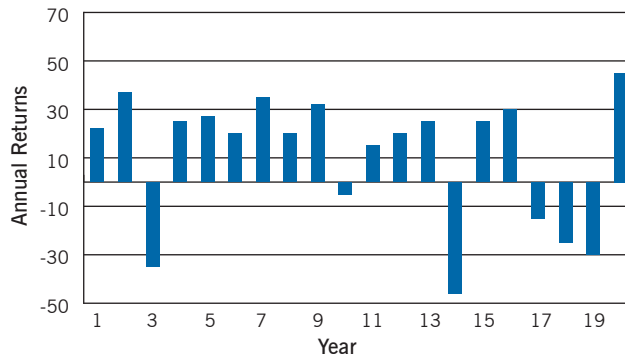
**Portfolio X Average Annual Return=6%**



**Portfolio Y Average Annual Return=9%**



**Portfolio Z Average Annual Return=11%**

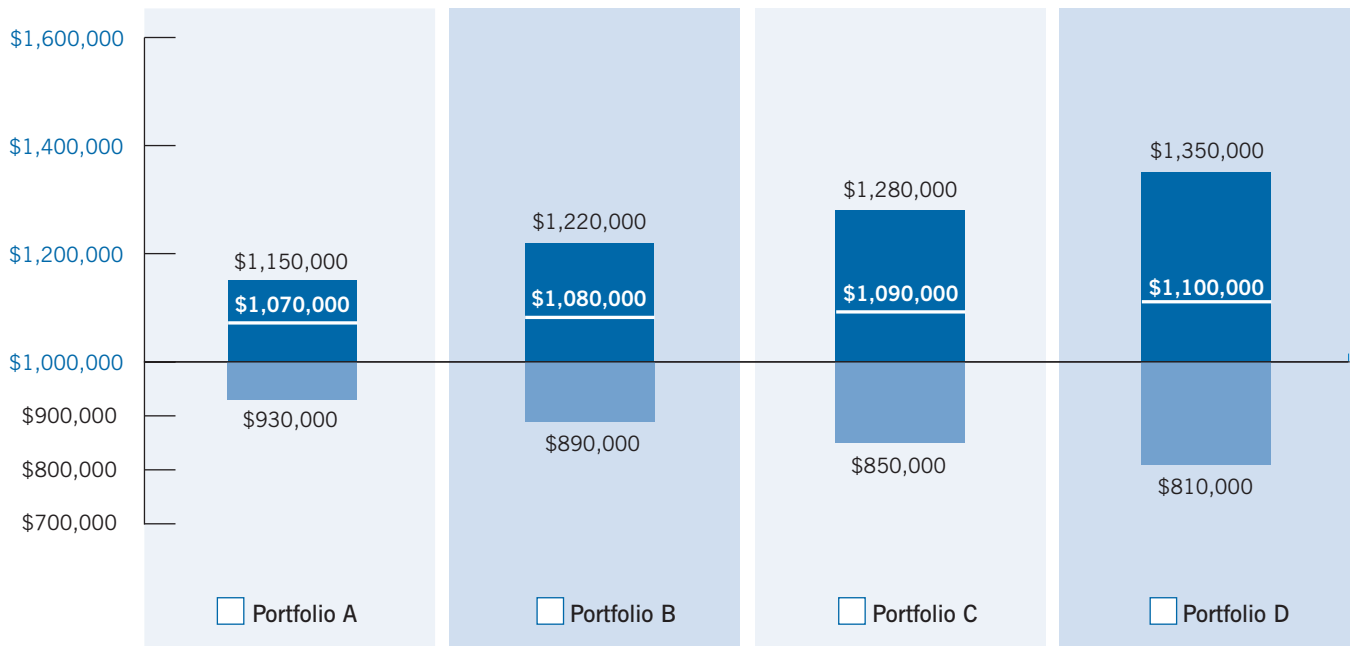


A8. The risk of a portfolio suffering a decrease in value (having a negative return) is often a primary concern for investors. In seeking to achieve potentially higher returns, however, an investor must be willing to accept greater risk. The following table portrays four different hypothetical \$1,000,000 portfolios. For each portfolio, the assumed value at the end of one year is shown, along with the probability of suffering a decline (rather than a gain) that year. Given your Plan's investment objectives, in which of the four hypothetical portfolios would you be most comfortable investing?

PORTFOLIO	EXPECTED VALUE OF \$1,000,000 AFTER 1 YEAR	CHANCE OF LOSING MONEY AFTER 1 YEAR	INVESTMENT CHOICE (CHOOSE ONE)
PORTFOLIO A	\$1,070,000	19%	<input type="checkbox"/>
PORTFOLIO B	\$1,080,000	23%	<input type="checkbox"/>
PORTFOLIO C	\$1,090,000	26%	<input type="checkbox"/>
PORTFOLIO D	\$1,100,000	28%	<input type="checkbox"/>



A9. Each bar below shows a range of possible one-year ending values for a \$1,000,000 initial investment in one of four hypothetical portfolios. The assumed value of the average return for that portfolio is shown in the center of the bar. For example, it is assumed that, at the end of a given year, Portfolio A could have an ending value anywhere between \$1,150,000 (15% return) and \$930,000 (-7% return). The assumed average ending value is approximately \$1,070,000 (7% return). It is important to remember that the hypothetical portfolios are more likely to achieve the average return over long-term holding periods. The four bars represent the four hypothetical portfolios. (Please note that these are only examples — actual results will vary.) Given the assumed possible average and best and worst outcomes for each portfolio, please indicate which of the four options you would consider most suitable for your plan.



A10. Inflation can greatly erode the return on your investments, especially over time. For example, in a year with a 3.5% inflation rate, an investment with a 6% return before inflation would have a real return of only 2.5% ( $6\% - 3.5\% = 2.5\%$ ). Please specify which of the following examples best summarizes your attitude regarding investing and inflation.

- I prefer a portfolio that has the potential to return substantially more than inflation over the long run and am willing to accept large short-term fluctuations in value (and a greater potential for loss) to achieve this goal.
- I prefer a portfolio that has the potential to exceed inflation moderately over the long run and am willing to accept moderate short-term fluctuations in value (and a moderate potential for loss) to achieve this goal.
- I prefer to minimize short-term fluctuations in portfolio value (and the potential for loss) as much as possible, even if it means that my Plan's portfolio has the potential to only keep pace with or slightly exceed inflation.

A11. Sometimes investment losses are permanent, sometimes they are prolonged, and sometimes they are short-lived. How might you respond when you experience investment losses?

- I would sell the Plan's investments immediately if they suffered substantial declines.
- Although declines in investment value make me uncomfortable, I would wait one to two quarters before adjusting the Plan's portfolio.
- I can endure significant declines in the value of the Plan's investments and would wait at least one year before adjusting the Plan's portfolio.
- Even if the Plan's investments suffered a significant decline over several years, I would continue to follow my long-term investment strategy and not adjust the Plan's portfolio.

## SECTION B—Investment Overview and Preferences (optional)

This set of questions helps us understand your preferences for certain asset classes. Please note that your final investment selection may or may not include the asset classes selected below.

- B1. Would you consider allocating a portion of your Plan's portfolio to international investments?  Yes  No
- B2. Would you consider allocating a portion of your Plan's portfolio to emerging markets investments?  Yes  No
- B3. Would you consider allocating a portion of your Plan's portfolio to real estate investments?  Yes  No
- B4. Would you prefer your Plan's fixed income investments to be in tax-exempt municipal bond investments rather than taxable government or corporate bond investments?  Yes  No
- B5. Would you consider allocating a portion of your Plan's portfolio to high-yield fixed income investments?  Yes  No

### NOTES ON RISK:

**International/Emerging Markets:** Foreign investing involves certain risks, such as currency fluctuations and controls, restrictions on foreign investments, less governmental supervision and regulation, and the potential for political instability. In addition, the securities markets of many of the emerging markets are substantially smaller, less developed, less liquid and more volatile than the securities of the U.S. and other more developed countries.

**High Yield:** High-yield fixed income securities, also known as "junk bonds," are considered speculative, involve greater risk of default and tend to be more volatile than investment-grade fixed income securities.

**Real Estate:** Real estate investments are subject to special risks, including interest rate and property value fluctuations, as well as risks related to general and local economic conditions.

## SECTION C—Current Investments

To help you structure a portfolio to meet your plan's investment objectives, please tell us how your plan's investments are currently allocated among equity investments (stocks or equity mutual funds), fixed income investments (bonds or fixed income mutual funds), and cash and equivalents (checking accounts, certificates of deposit, Treasury bills and money market funds). To help you calculate this amount, a worksheet has been provided on the next page.

C1. Please specify your plan's current investment allocation.

Equity Investments: \$ \_\_\_\_\_

Fixed Income Investments: \$ \_\_\_\_\_

Cash and Equivalents: \$ \_\_\_\_\_

## SECTION D—Investment Considerations

This final section helps us determine the services and programs that may best suit your plan's investment needs.

D1. How much do you plan to invest?

\$ \_\_\_\_\_

D2. Will there be any restrictions placed on the management of your portfolio (that is, are there any individual securities or industry groups that should not be purchased for this account)?

Yes  No

If "Yes," please specify:

# INSTITUTIONAL FINANCIAL DATA WORKSHEET (OPTIONAL)

Please describe your total investment portfolio in the spaces below.

<b>EQUITY</b>	<b>ASSETS (IN DOLLARS)</b>
Domestic Stocks/Stock Mutual Funds	\$ _____
International Stocks/International Mutual Funds	\$ _____
Real Estate Investments/REITs/Funds	\$ _____
Commodities/Managed Futures Funds	\$ _____
Other Equity	\$ _____
<b>Total Equity</b>	\$ _____

<b>FIXED INCOME</b>	
Government Bonds/Mutual Funds	\$ _____
Corporate Bonds/Mutual Funds	\$ _____
Municipal Bonds/Mutual Funds	\$ _____
International Bonds/Mutual Funds	\$ _____
Convertible Bonds/Mutual Funds	\$ _____
Preferred Stock	\$ _____
Other Fixed Income	\$ _____
<b>Total Fixed Income</b>	\$ _____

<b>CASH AND EQUIVALENTS</b>	
Checking Accounts	\$ _____
Certificates of Deposit	\$ _____
Money Market Funds	\$ _____
Treasury Bills	\$ _____
Other Cash Equivalents	\$ _____
<b>Total Cash and Equivalents</b>	\$ _____

<b>COMBINED TOTAL</b>	\$ _____
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# FORM W-9

## Important Tax Notice

Morgan Stanley & Co. Incorporated is required by law to withhold 28% of dividends, interest, gross proceeds of sales of securities and certain other payments made by Morgan Stanley Smith Barney LLC to a client's account if the client has not filed a signed Form W-9 with Morgan Stanley Smith Barney LLC.

## Complete and sign to avoid backup withholding.

NAME

BUSINESS NAME, IF DIFFERENT FROM ABOVE

Check appropriate box:  Individual/Sole Proprietor  Corporation  Partnership  Other

ADDRESS (NUMBER, STREET, AND APT. OR SUITE NO.)

CITY, STATE AND ZIP CODE

Please fill in your Taxpayer Identification Number (TIN), which is your Social Security Number (for individuals) or your Federal Employer Identification Number (for entities). If you have applied for but have not yet received your TIN, please fill in the words "Applied For."

TAXPAYER IDENTIFICATION NUMBER (TIN)

I certify, under penalties of perjury, that:

1. The TIN shown on this form is my correct TIN (or I am waiting for a TIN to be issued to me).
2. I am not subject to backup withholding because (a) I am exempt from backup withholding or (b) I have not been notified by the Internal Revenue Service (IRS) that I am subject to backup withholding as a result of a failure to report all interest or dividends or (c) the IRS has notified me that I am no longer subject to backup withholding. *(Cross out this item 2 if the IRS has notified you that you are subject to backup withholding.)*
3. I am a U.S. person (or I am a U.S. resident alien).

CLIENT NAME (PLEASE PRINT)

CLIENT SIGNATURE (AND TITLE IF AN ENTITY)

DATE

## INVESTMENT POLICY STATEMENT

### San Mateo County Community College District

The purpose of this Investment Policy Statement is to establish a comprehensive strategy for the acceptance and accumulation of invested assets under the **Futuris Public Entity Investment Trust** (the "**Trust**"), which has been adopted for use by **San Mateo County Community College District** (the "**Employer**") for, among other things, to assist the Employer in meeting applicable funding requirements for the payment of future retiree health and welfare obligations and other post-employment benefit obligations (generally referred to as "**OPEB Liability**"), but may also be used to fund other purposes related to excess funds of the Employer as allowable under applicable law.

This Investment Policy Statement shall be consistent with the governing law, including the Internal Revenue Code of 1986 as amended from time to time (the "**Code**"), applicable provisions of Governmental Accounting Standards Board Statement Nos. 43 and 45, California laws, including applicable provisions of the California Government Code.

### TRUST FUNDING STATEMENT

The purpose of the Trust is to provide a uniform method of investing contributions and earnings of all contributed amounts between funds deposited within the Trust Fund, as such term is defined within the Trust. The Trust shall be funded primarily by irrevocable contributions made by the Employer, but may also include other contributions made by any Participant as determined necessary and appropriate under applicable circumstances and in compliance with underlying legal requirements. These contributions shall be remitted to the Trust on a discretionary basis, as determined by and through the direction of the Employer, or such delegated Trust.

### RETIREMENT BOARD OF AUTHORITY

The Retirement Board of Authority (the "**RBOA**") is directly responsible for the implementation and oversight of this Investment Policy Statement. This responsibility includes the selection and ongoing evaluation of investments and/or investment managers in accordance with applicable laws and regulations. However, these investment responsibilities may be delegated to an authorized third-party trustee. In this case, the RBOA has appointed Benefit Trust Company ("**BTC**") as Discretionary Trustee and Trust Fund custodian, who may further designate and delegate any corresponding Investment Manager responsibilities as set forth below. On behalf of the Trust, and as approved by the RBOA, BTC shall administer the assets of the Trust in such a manner that the investments are:

- Prudent; in consideration of the stated purpose of the Trust, any underlying Plan and in accordance with Article 16, Section 17 of the California Constitution creating a Retirement System, and California Government Code Sections 53620 through 53622, as applicable;
- Diversified; among a broad range of investment alternatives;



- Permitted; in accordance with the terms of the Trust, any applicable Plan document and in accordance with California Government Code Sections 53620 through 53622 and other applicable requirements;
- Selected; for the exclusive benefit of the Plan participants as it relates to the funding of retiree health and welfare benefits, or as otherwise deemed appropriate for the purposes set forth by the Trust.

The above notwithstanding, the RBOA retains the responsibility to oversee the management of the Trust, including BTC's, or any successor trustee's, requirement that investments and assets held within the Trust continually adhere to the requirements of California Government Code.

### **INVESTMENT OBJECTIVES**

The Trust authorizes the use of a broad range of investment choices that have distinctly different risk and return characteristics. In general, assets held in the Trust Fund will be for the primary purpose of meeting present and future OPEB Liability obligations and may be invested in accordance with California Government Code Sections 53600 through 53622 that subject to applicable legal requirements may provide greater latitude to increase purchasing power and capital growth potential if deemed prudent to do so.

Though investment responsibilities are delegated to the Trustee, the RBOA determines the target return that is applicable for this Trust as it relates to those assets held in the Trust Fund. Attachment A of this Investment Policy details the target return selected by the RBOA. The target return may be modified from time to time by amending the Appendix. Related to the investments and the holding of investments themselves, the Trustee may cause any or all of the assets of the Trust to be commingled, to the extent such investment and the issuance thereof would be exempt under the provisions of Sections 2(a)(36), 3(b)(1) or 3(c)(11) of the Investment Company Act of 1940 or Section 3(a)(2) of the Securities Act of 1933, with the assets of trusts created by others, causing such money to be invested as part of a common and/or collective trust fund.

### **PERIODIC ANALYSIS AND EVALUATION**

The RBOA and/or its designees shall periodically meet with the Trustee to review investment performance reports that analyze the performance of the managers selected in each market sector that take into consideration:

- adherence to applicable legal constraints on investment prudence;
- consistency and adherence to stated investment management style and discipline;
- risk adjusted performance relative to managers with similar style;
- long-term investment performance relative to appropriate benchmarks; and
- changes in investment personnel managing the portfolio

**ETHICS AND CONFLICT OF INTEREST**

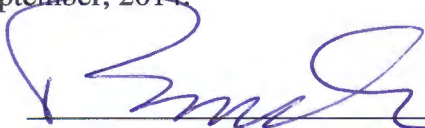
Officers, employees, and agents involved in the investment process shall refrain from personal business activities that could conflict with proper execution of the investment program, or which could impair their ability to make impartial decisions. Officers, employees, and agents involved in the investment process shall abide by the California Government Code Section 1090 et seq. and the California Political Reform Act (California Government Code Section 81000 et seq.)

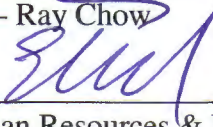
**AMENDMENT**

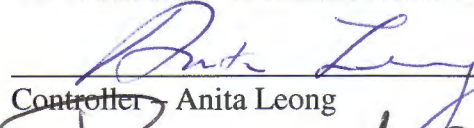
The RBOA shall have the right to amend this Policy, in whole or in part, at any time and from time to time.

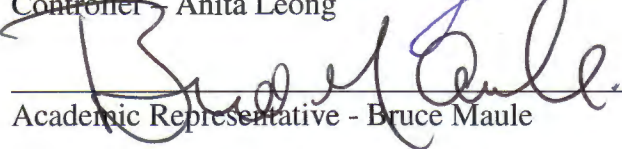
**ADOPTION**

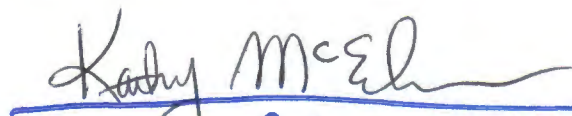
The RBOA hereby adopts the provisions of this Investment Policy Statement as of this 16th day of September, 2014.

By:   
\_\_\_\_\_  
Chief Financial Officer – Ray Chow

By:   
\_\_\_\_\_  
Vice Chancellor of Human Resources & Employee Relations – Eugene Whitlock

By:   
\_\_\_\_\_  
Controller – Anita Leong

By:   
\_\_\_\_\_  
Academic Representative - Bruce Maule

By:   
\_\_\_\_\_  
Kathy McEachron, classified Representative



## **APPENDIX A: Target Return**

Subject to the ability of the Retirement Board of Authority and Trustee to deviate from these guidelines as set forth under the heading "Investment Objectives" in the Statement, the Retirement Board of Authority has determined after due consideration to the time horizon of the trust, trust liquidity needs, and the District's risk tolerance and capacity for risk, that the Trust Fund shall be invested with the objective of achieving an annualized target net rate of return of 7% in order to meet the Plan's actuarial assumption (as determined by Retirement Board of Authority's Actuarial Consultant), as well as an additional 0.4% to cover the costs of trust administration, GASB 43 and GASB 45 compliance.

In accordance with Article 16 Section 17 of the California Constitution creating a retirement system and California Government Code sections 53620 through 53622, the Retirement Board of Authority has the authority to invest or reinvest funds intended for the payment of employee retiree health benefits under a prudent investor standard and shall diversify investments so as to minimize the risk of loss and to maximize the rate of return. The Trustee shall establish investment portfolios on a discretionary basis to meet the diverse needs of the Trust and its applicable purposes. Applicable provisions and requirements of, in particular, the California Government Code (specifically provisions under Sections 53216.1, 53216.5 and 53216.6, as applicable) shall be examined before selecting the investment portfolios to achieve the targets stated above.

The Trustee shall manage the Trust investments on a discretionary basis such that the total allocation among various investment styles, capitalizations, fund managers and securities is established and re-balanced from time-to-time so as to meet the Trust's overall target return objectives with the least amount of risk. The Trust assets shall not be invested in any proprietary investment vehicles of the Trustee or any of its affiliates or advisors.

### **Equity Investments**

The purpose of the aggregate equity allocation within the Trust is to provide a total return consisting primarily of appreciation, with dividend income a secondary consideration. In order to maximize return opportunity while minimizing risk, the Trustee shall, in its discretion, allocate the Trust's equity allocation among a diverse group of equity fund managers, taking into consideration such factors as investment style (value, growth, international, etc.) as well as the capitalization (large, mid, small, etc.) of the investment.

Permitted equity investments shall include:

- Publicly traded common stocks, preferred stocks, securities convertible into common stocks, and securities which carry the right to buy common stocks, listed on a major United States stock exchange, including stocks traded through the NASDAQ Stock Market;
- American Depository Receipts ("ADRs");



- SEC-registered open-end mutual funds and Bank, Insurance Company or Trust Company commingled funds which invest primarily in stocks and other instruments which are allowable securities under these policies and objectives;
- Closed-end SEC-registered mutual funds which invest primarily in stocks and other instruments which are allowable securities under these policies and objectives; and
- Exchange Traded Funds (“ETFs”) which invest primarily in stocks and other instruments which are allowable securities under these policies and objectives.

In managing the equity portfolio, the Trustee shall not do any of the following:

- buy equity securities on margin;
- short-sell equity securities;
- buy or sell futures contracts in any form, except that the Trustee is authorized to buy or sell such contracts specifically for purposes of, and only for purposes of, a hedge against portfolio loss;
- buy or sell put or call options on stocks, indexes or futures contracts;
- buy or sell foreign securities not registered through an SEC filing or not denominated in U.S. dollars; or
- buy or sell any securities which are not publicly traded.

However, all of the above restrictions shall be permitted in open-end or closed-end mutual funds, comingled funds, or ETFs, if in the opinion of the Trustee these activities are consistent with fund objectives and prudent management, and the investments provide for daily liquidity.

Additionally, certain securities may not be held directly, but only in open-end or closed-end mutual funds, comingled funds, or ETFs. These include common stocks, preferred stocks, and securities convertible into common stocks and securities that carry the right to purchase common stocks of non-U.S. companies traded on global exchanges, traded in any currency, as well as restricted securities of U.S. and non-U.S. companies, including securities issued through private offerings, and forward currency contracts or currency futures contracts to hedge foreign currency exposure.

Not more than 5% of the Trust assets shall be invested in any single equity security issue or issuer. The foregoing limitation is not intended to apply to the percentage of Trust assets invested in a single diversified mutual fund.

Both an investment fund manager’s performance and the performance of individual securities, if purchased, will be compared to the following benchmarks based upon the particular investment style and capitalization range:

Domestic Equities:	S&P 500
International:	MSCI EAFE and ACWI ex.U.S

The Trustee shall pay particular attention to rolling 3 and 5 year time frames as well as shorter periods should the situation warrant. In addition, the Trustee shall measure and compare the exposure to risk of the Trust's equity portfolio with benchmarks appropriate for the investment style and capitalization range of each such investment.

### **Fixed Income Investments**

The purpose of the aggregate fixed income allocation within the Trust is to provide a total return consisting of income and appreciation, while preserving capital by investing in a diversified portfolio of high quality fixed income securities. The investment objective of the fixed income portfolio is to achieve a total return commensurate with the overall bond market as measured by the Barclay's Aggregate Bond Index for domestic securities, and the Barclay's Global Bond Index for international securities, with attention given to rolling 3 and 5 year time frames as well as shorter periods should the situation warrant. In addition, the Trustee shall measure and compare the exposure to risk of the Trust's fixed income portfolio with benchmarks appropriate for the investment style and capitalization range of each such investment.

Permitted securities shall include:

- Obligations of the U.S. Government and its agencies;
- Bonds issued by U.S. Corporations or U.S. subsidiaries of foreign companies that are incorporated within the U.S. and carry a minimum BBB rating;
- Certificates of Deposit issued by banks or savings and loans of sound financial condition under FDIC management, with never more than \$100,000 (including interest) in any single institution;
- Money market funds and money market instruments of an investment grade commonly held in money market funds such as repurchase agreements, banker's acceptances, commercial paper, etc.
- SEC-registered open-end mutual funds and Bank, Insurance Company and Trust Company commingled funds which invest primarily in bonds and other instruments which are allowable securities under these policies and objectives;
- Closed-end SEC registered mutual funds which invest primarily in bonds and other instruments which are allowable securities under these policies and objectives;
- Exchange Traded Funds ("ETFs") which invest primarily in bonds and other instruments which are allowable securities under these policies and objectives;
- Investment grade foreign government or corporate bonds carrying a minimum BBB rating, whether or not denominated in U.S currency, and whether or not



hedged for foreign currency risk.

- Securities backed by pools of consumer or corporate receivables other than mortgages (“Asset-backed Securities”), provided that these securities have been registered with the SEC for public offering and that they meet the requirements of these policies and objectives and carry a minimum BBB rating; and
- U.S. Agency mortgage-backed pass-through securities.

In managing the fixed income portion of the Trust assets, the Trustee shall not do any of the following:

- buy fixed income securities on margin;
- short-sell fixed income securities;
- buy or sell futures contracts in any form, except that the Trustee is authorized to buy or sell such contracts specifically for purposes of, and only for purposes of, a hedge against portfolio loss;
- buy or sell put or call options on bonds, indexes or futures contracts;
- buy or sell foreign securities not registered through an SEC filing or not denominated in U.S. dollars; or
- buy or sell any securities which are not publicly traded except U.S. Government or agency-backed mortgages.

However, all of the above restrictions shall be permitted only in open-end or closed-end mutual funds, comingled funds, or ETFs, if in the opinion of the Trustee these activities are consistent with fund objectives, prudent management, risk mitigation, and the investments provide for daily liquidity. In addition, investment in non-investment grade bonds or loans by such funds shall be permitted so long as the average aggregate rating of the funds are investment grade, and in the opinion of the Trustee the proportion of non-investment grade bonds to investment grade bonds in the portfolio is prudent.

Not more than 5% of the Trust assets shall be invested in any single debt security issue or issuer. The foregoing limitation is not intended to apply to the percentage of Trust assets invested in a single diversified mutual fund, nor does the limitation apply to obligations of the U.S. Government and its agencies, U.S. agency mortgage-backed pass-through securities or to a mutual fund that invests in such obligations or securities.

### **Use of Mutual Funds**

The Retirement Board of Authority envisions that the Trustee will invest predominantly in open and closed-end mutual funds. The Board recognizes that the limitations and restrictions set forth in this Statement cannot be imposed on the managers of such mutual funds and that mutual funds held by the Trust may be managed outside of the requirements of this Statement. Nonetheless, the Trustee shall seek to identify mutual funds that comply as closely as possible to these guidelines and shall diligently monitor for prompt removal and replacement of those that do not.

### **Performance Review**

In the execution of its fiduciary responsibilities, the Trustee shall review, on a regular basis, the performance of the various investments and fund managers employed by the Trust to determine if assets are being properly managed according to the stated objectives and policies set forth in the Trust Agreement and in this Statement. The Trustee shall view performance and investment risk on the basis of a full 3 to 5-year market cycle, though the stated objectives and policies of the Trustee may result in the prompt sale of a security or dismissal of a fund manager based upon shorter term results. In addition, any deviation or change in the structure, management or investment style of any fund manager employed shall precipitate a review by the Trustee to determine whether or not that manager should be retained.

### **Change of Target Return**

The Retirement Board of Authority may, from time to time, discuss with Trustee the need to change target investment returns for the trust as conditions or characteristics of the Trust, or applicable Fund requirements change. In the event a change is made, a new Appendix A will be adopted by the Retirement Board of Authority to reflect the change.

**SAN MATEO COUNTY COMMUNITY COLLEGE DISTRICT  
RETIREMENT BOARD OF AUTHORITY MEETING**

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PRESENTED TO: DATE: 04/25/2018  
Retirement Board of Authority

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SUBJECT:	ITEM #:	<u>2017/2018-022</u>
Education	Enclosure:	<u>Yes</u>
	Action Item	<u>No</u>

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Prepared by: Keenan Financial Services (KFS)  
Requested by: Retirement Board of Authority

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**BACKGROUND:**

The purpose of this and all Retirement Board of Authority meetings is the continuing education of Retirement Board members on the status of the funds held in the Trust and the fiduciary duties of the Retirement Board members. All of the agenda items are included in furtherance of that purpose. Investment in monies for the long term carries with it a fiduciary liability. A discussion, led by Morgan Stanley will present the annual update of their capital market assumptions.

**STATUS:**

The Retirement Board of Authority will be presented with an annual update of their capital market assumptions led by Morgan Stanley.

**RECOMMENDATION:**

Discuss the information provided my Morgan Stanley.

# Inputs for GIC Asset Allocation

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## MICHAEL WILSON

Chief Investment Officer  
Morgan Stanley Wealth Management  
Morgan Stanley & Co.

Chief US Equity Strategist  
Morgan Stanley & Co.

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## LISA SHALETT

Head of Wealth Management Investment  
Resources  
Head of Investment & Portfolio Strategies  
Morgan Stanley Wealth Management

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## DANIEL C. HUNT, CFA

Senior Asset Allocation Strategist  
Morgan Stanley Wealth Management

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## JOE PICKHARDT

Cross-Asset Strategist  
Morgan Stanley Wealth Management

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## AILI CHEN

Cross-Asset Strategist  
Morgan Stanley Wealth Management

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## LUCY YAN

Cross-Asset Strategist  
Morgan Stanley Wealth Management

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## Annual Update of Capital Market Assumptions

Here we present the annual update of our capital market assumptions. These forecasts estimate returns and volatility of global asset classes over the strategic, or seven-year horizon, and the secular, or 20+ year horizon. The strategic estimates are the key inputs into the Global Investment Committee's (GIC) strategic asset allocations. This year's forecasts reflect the significant market movements of the past year that have resulted in higher equity valuations and higher rates, as well as incorporate our outlook for continued strong global growth.

Alongside the annual update of our strategic assumptions is a rebalancing of our GIC strategic asset allocation models. These models are optimized annually using our goals-based framework and targeted risk parameters. It's important to keep in mind that these strategic models, which are developed with a seven-year investment horizon in mind, do not immediately impact our tactical models.

The tactical models, updates to which are published separately, target an investment horizon of 12 to 18 months and are adjusted based on the collective deliberations of the Global Investment Committee.



## Executive Summary

Since March 2017, when we last updated our capital market assumptions, equity markets across the globe have rallied—about 20% in developed markets, and more than 30% in emerging markets—while interest rates have approached five-year highs. These moves have largely been in reaction to strong economic fundamentals. Indeed, the “synchronous global growth” we had anticipated in last year’s report has appeared, driving earnings to consistently beat expectations and inflation expectations to move upward. While this economic strength and investor optimism is a breath of fresh air compared with the “secular stagnation” environment of low growth and deflationary fear that plagued markets for much of this cycle, it also means that the business cycle is in its late stages, and richer equity valuations—especially in the US—likely mean lower returns going forward. Accordingly, our seven-year strategic forecasts for equities have been revised downward while our fixed income forecasts have moved modestly higher, reflecting the higher yields available to investors today owing to better economic growth prospects.

Notable changes to our seven-year strategic forecasts include a reduction in our US equity forecast to 4.3% annualized returns from the previous 4.9%, mainly due to their now-higher valuations. Similarly, the forecast for international equities has been reduced to 5.7% from the previous 6.3%; and emerging markets now stand at 6.4% versus last year’s 7.5% forecast. Given the recent rise in interest rates and the improving long-term outlook for continued rate normalization, our broad US fixed income forecast has risen to 3.3% from last year’s 3.0%, and our ultrashort fixed income forecast to 2.3% from last year’s 2.0%.

To align our models with these forecasts, we also update our strategic allocations, which can be found on pages 12 and 13. The overall impact of these changes is to modestly reduce the risk profile of our models. We are increasing

## Exhibit 1: Lower Estimates for Equities, Higher for Fixed Income and Cash

	Annualized Return (2018)	Annualized Volatility (2018)	Annualized Return (2017)	Annualized Volatility (2017)
<b>Global Equities</b>	5.2%	14.7%	5.7%	16.0%
<b>US Equities</b>	4.3	14.2	4.9	14.7
<b>International Equities</b>	5.7	16.8	6.3	17.3
<b>Emerging &amp; Frontier Mkt. Equities</b>	6.4	21.6	7.5	22.1
<b>Ultrashort Fixed Income</b>	2.3	0.9	2.0	0.9
<b>US Fixed Income Taxable</b>	3.3	5.3	3.0	5.4
<b>High Yield Fixed Income</b>	3.5	8.3	3.5	8.4
<b>Real Assets</b>	5.1	12.7	5.9	14.0
<b>Absolute Return Assets</b>	3.4	4.0	3.5	4.0
<b>Equity Hedge Assets</b>	4.3	8.2	4.1	8.3
<b>Equity Return Assets</b>	4.4	8.1	4.5	8.3

Note: Ultrashort Fixed Income represented by 90-day T-bills, US Fixed Income Taxable represented by Bloomberg Barclays US Agg. Index and High Yield Fixed Income represented by Bloomberg Barclays US Corporate HY Index.

Source: Robert J. Shiller of Yale University, Standard and Poors, Bloomberg, FactSet, Moody’s, Haver Analytics, Datastream/IBES, Morgan Stanley Wealth Management GIC, Morgan Stanley & Co., Morgan Stanley Alternative Investment Partners as of Feb. 28, 2018

our exposure to US fixed income and cash to take advantage of higher yields. We are largely sourcing this exposure out of US growth stocks, where valuations have risen significantly. We also rebalance our exposure in alternatives by reducing our allocation to master limited partnerships (MLPs), where our return estimates have fallen, and increase exposure to equity hedge and absolute return assets, which have lower correlations to equities. We expect these allocations to improve our risk-adjusted return for the seven-year strategic horizon.

## How Has Our Outlook Changed?

Global markets have rallied sharply since the first quarter of 2017, when we published the previous capital market assumptions. Our call for “synchronous global growth” has become a reality, while policy changes, including the tax cuts recently passed in Congress, have helped to further accelerate growth and earnings expectations. The recent highs in the equity markets price in these higher expectations, leading to richer valuations

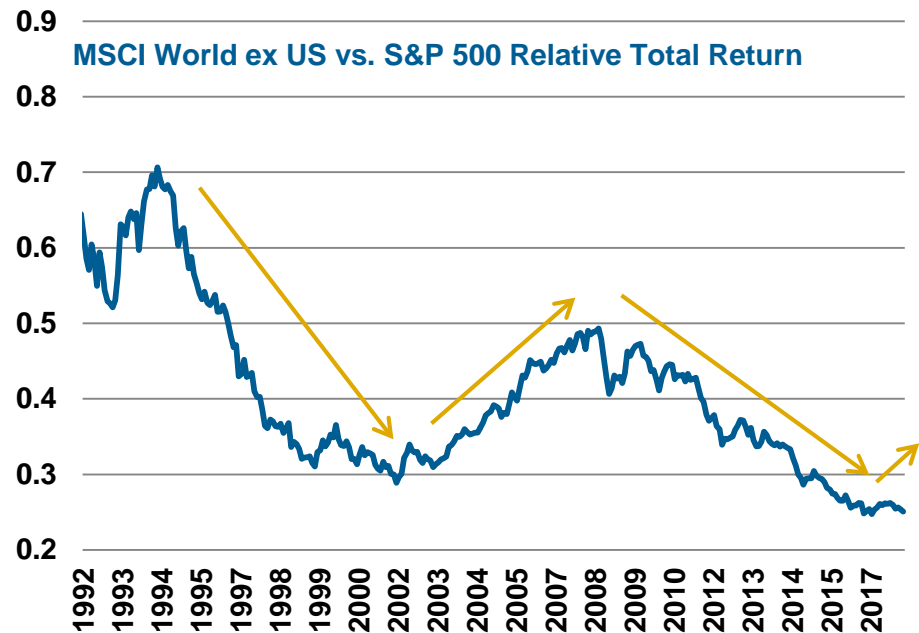
that largely led to the changes in this year’s equity forecasts. The result is a modest decline in our strategic return expectations for equities, especially in the US and the emerging markets (see Exhibit 1). However, valuations in international developed markets largely remain modest as these regions are earlier than the US in the business cycle. Accordingly, our strategic forecasts for international developed equities are higher than for the US, reflecting a greater potential for multiple expansion. Indeed, we believe that the strong performance of international equities in 2017 may signal the beginning of a new cycle of outperformance (see Exhibit 2, page 3).

This improving global economic outlook has been reflected across fixed income markets as well, where interest rates have risen to multiyear highs. While this has largely increased our strategic return forecasts across fixed income, credit spreads are at exceptional tights and are likely to widen, moderating the upward impact on broad investment grade expected returns.

For alternatives that are more sensitive to interest rate movements, our forecasts



**Exhibit 2: Strong 2017 Returns May Signal Start of a New Cycle of Outperformance for Non-US Equities**



Source: Morgan Stanley Wealth Management GIC, Bloomberg as of Feb. 28, 2018

have largely increased versus the past year. For alternatives more exposed to equity beta, our forecasts have declined. Our expected returns for master limited partnerships (MLPs) have fallen notably, based on our belief that that the strong returns of previous years in this market are unlikely to continue due to structural changes in the industry. The full set of our current forecasts can be found in the table on page 14.

Overall, we remain optimistic regarding global growth, as we believe recent improvements in growth and inflation from the historically depressed levels earlier in this cycle are likely to persist. Reflecting this strength, we believe global interest rates will continue to rise modestly, with the 10-year US Treasury bond reaching an end-of-cycle level of 3.15% versus the current 2.86%. Indeed, as we outlined in our November 2017 *Special Report*, "[The Capex Conundrum and Productivity Paradox](#)," we believe that many of the headwinds to growth are easing. That means we may be at the beginning of a secular bull market for equities that is driven by a shift toward higher capital spending and associated

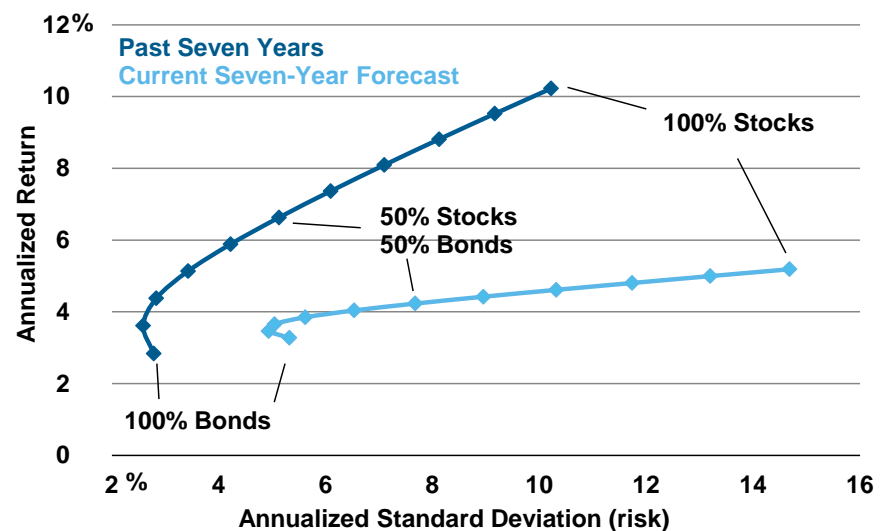
productivity improvements. Of course, cyclical bear markets do happen in secular bull markets, but they tend to be shallower and shorter than what we saw during the financial crisis.

That said, we believe that developed markets are unlikely to see a near-term

reacceleration of growth to the high levels seen in past decades, as we lack the significant tailwinds from favorable demographics, accelerating globalization and room for increased leverage. We are also near the final stages of the current business cycle. Now a full nine years since the last global recession, we expect the current expansion to end at some point in the next seven years. The next downturn may be less severe than the previous recession due to significant structural changes in the global financial system that make the cascading defaults we saw in the financial crisis less likely.

Our expectation for slower economic growth than that seen in recent decades has important investment implications. While we remain confident that the time-tested principles of asset allocation and diversification will help investors achieve their goals, it is important to keep both return and risk in mind when setting those goals. Our forecasts suggest that risk-adjusted returns in the next seven years are likely to be materially lower than the past seven years, as shown by the lower and flatter shape of the efficient frontier between stocks and bonds (see Exhibit 3). While investors may be able to increase diversification by adding alternative asset

**Exhibit 3: Next Seven-Year Outlook Calls for Lower Returns and Higher Volatility**



Note: Stocks represented by the MSCI All Country World Index, bonds represented by the Bloomberg Barclays US Aggregate Index.

Source: FactSet, Morgan Stanley Wealth Management GIC as of Feb. 28, 2018



### Exhibit 4: Strategic Return, Volatility And Correlation Forecasts

	Return	Volatility	Correlation to Equities
Equities	5.19%	14.68%	1.00%
REITs	5.85	16.70	0.70
Master Limited Partnerships	5.87	16.05	0.45
Commodities	3.44	14.54	0.44
Private Real Estate	6.54	15.21	0.18
Equity Hedge Assets	4.31	8.19	0.07
US Fixed Income Taxable	3.27	5.32	-0.05

Note: Seven-years annualized forecast

Source: Robert J. Shiller of Yale University, Standard and Poor's, Bloomberg, FactSet, Moody's, Haver Analytics, Datastream/IBES, Morgan Stanley & Co, Morgan Stanley Alternative Investment Partners, Morgan Stanley Wealth Management GIC as of Feb. 28, 2018

classes, such as equity hedge strategies (see Exhibit 4), achieving higher returns will likely require investors to assume greater levels of risk than was necessary in the past.

### Rebalancing Our Strategic Models

We are updating and rebalancing our strategic models, as can be seen in Exhibits 12 and 13 on pages 12 and 13. We are modestly decreasing our overall exposure to equities, primarily by reducing the US growth allocation, while also decreasing exposure to MLPs and eliminating exposure to emerging market fixed income. We reallocate the proceeds into ultrashort and high-quality US fixed income along with risk-reducing alternatives.

The overall impact of these changes is, at the margin, to reduce the risk associated with these portfolios, as the prospective risk/reward available according to our strategic forecasts has become less favorable. Investors should keep in mind that our strategic models target an investment horizon of at least seven years, and are designed to maximize risk-adjusted return and minimize turnover. Investors seeking to take advantage of short-term market opportunities and who are comfortable with six-to-18 month holding periods should consider the tactical GIC model portfolios, which can make opportunistic or defensive short-term adjustments to the strategic models.

The majority of the reduction in our equity exposure is sourced from US growth stocks, as significant increases in their valuations have caused the largest reductions in our strategic forecast. Our international equity exposure remains above its benchmark, as our return forecasts for Europe, Japan and emerging markets suggest higher return potential.

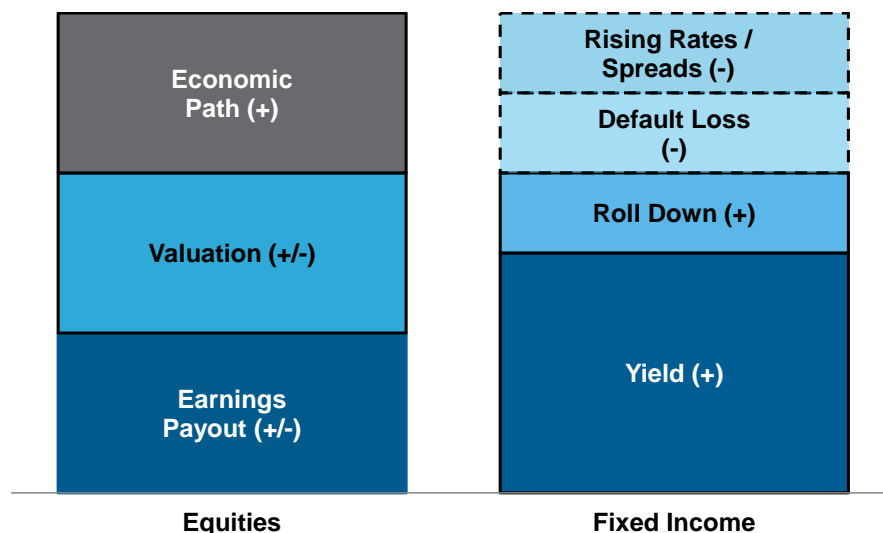
Within fixed income, we take advantage of higher yields by reallocating a portion of the proceeds from US growth to US investment grade and ultrashort fixed income, while we reduce portfolio risk by removing emerging market fixed income.

Within alternatives, we reduce our exposure to MLPs, due to our lower return forecasts for this asset class and their volatile nature. We increase our exposure to equity hedge assets and absolute return assets as the investment strategies of these alternatives attempt to reduce exposure to broad equity movements and help support the portfolio during major market drawdowns while seeking to generate higher returns than high-quality fixed income, a traditional portfolio diversifier. In the most aggressive model, we increase our allocation to equity return assets in place of absolute return assets, which lowers our equity beta but is more appropriate for this model's investment objective.

### Building Our Forecasts

Our methodology for forecasting equity and fixed income returns largely uses the framework we implemented in 2017 (see Exhibit 5). For equities, we build return estimates by combining three major factors: the return of earnings to shareholders, the impact of changes in valuation and the likely economic path in the next seven years. For fixed income, we construct estimates from current yields and appreciation due to expected "roll down"—the price appreciation that comes

### Exhibit 5: The Building Blocks of Our Return Estimates



Source: Morgan Stanley Wealth Management GIC, Morgan Stanley & Co.

as bonds near maturity—and adjust for potential losses from credit exposure, rising interest rates and widening credit spreads. For other asset classes including alternatives, we estimate returns based on our estimates for equities and fixed income, the likely economic path over the strategic horizon and specific analysis of each individual asset class.

## Equities: Our Strategic Methodology

Our methodology for forecasting strategic equity returns has three main components. First, we examine what earnings companies are likely to pay out to investors either through dividends or share repurchases. Second, we anticipate the effects of potential repricing by examining current valuations and assuming asset prices will normalize during the seven-year period. Finally, we examine the likely economic path that will influence earnings growth. By breaking our forecasts into these components, we can contextualize our estimates in the current market environment.

## What Earnings Will Companies Return to Investors?

Financial asset prices are fundamentally determined by the present value of cash flows paid to the investor. Accordingly, our analysis begins by assessing the extent to which cash is delivered to equity owners through dividends and share repurchases. We measure these returns by examining which companies in each region have paid out in both forms over the past 12 months. This year, we net out the anticipated effects of inflation entirely from dividend yield, rather than splitting the effect of inflation between both dividend yield and repurchase yield. This change has no net effect on the overall return forecasts. These estimates of real dividend yield and nominal repurchase yield (see Exhibit 6) form the base of our return forecasts, to which we add effects from changes in valuation, real earnings growth and inflation.

## Are Valuations Likely to Boost or Drag Down Returns?

Return forecasts are not simply a matter of projecting what companies are likely to earn and return to investors, but also whether the pricing, or valuation, of that cash flow is attractive or unattractive in historical context. We focus on two measures of valuation appropriate over a multiyear horizon: cyclically adjusted price/earnings (CAPE) multiples, which compare the market price to the average real earnings generated over the course of a business cycle; and the equity risk premium, which compares the yield generated by an equity position to the yield of a comparable fixed income substitute. We believe that by combining these two measures of valuation into our forecast rather than relying on either individually, we are able to improve the accuracy of our forecasts.

First, we estimate valuation-driven returns based on the CAPE ratio. This metric attempts to smooth volatile swings in company earnings that can occur in the course of a business cycle and adjusts for

## Exhibit 6: We Expect International Equities to Outperform US in Next Seven Years

	Earnings		Valuation		Economic Path			Total
	Real Dividend Yield	Real Repurchase Yield	Price/Earnings Ratio	Equity Risk Premium	Growth Trend	Recession Impact	Inflation	
US Large-Cap Equities	-0.4%	1.5%	-1.0%	0.0%	2.5%	-0.5%	2.1%	<b>4.3%</b>
US Small/Mid-Cap Equities	-0.5	-0.3	-0.7	0.5	3.7	-0.7	2.1	<b>4.2</b>
UK Equities	0.3	0.3	0.5	0.1	2.8	-0.6	3.0	<b>6.4</b>
European Equities	1.4	0.0	0.3	1.2	1.9	-0.4	1.3	<b>5.7</b>
Japan Equities	1.3	0.5	0.3	1.2	1.1	-0.3	1.0	<b>5.2</b>
Asia Pacific ex Japan Equities	1.3	-0.1	-0.1	0.3	3.3	-0.6	1.8	<b>5.9</b>
<b>Developed International Equities</b>	1.2	0.1	0.3	0.9	2.1	-0.4	1.6	<b>5.7</b>
<b>Emerging Markets Equities</b>	0.1	-0.4	0.3	0.4	4.6	-0.8	2.1	<b>6.4</b>
<b>Global Equities</b>	0.3	0.7	-0.3	0.4	2.7	-0.5	1.9	<b>5.2</b>
Global Small/Mid-Cap Equities	0.0	-0.3	-0.3	1.0	3.8	-0.7	1.9	<b>5.4</b>

Source: Robert J. Shiller of Yale University, Standard and Poor's, Bloomberg, FactSet, Haver Analytics, Datastream/IBES, Morgan Stanley Wealth Management GIC, Morgan Stanley & Co. as of Feb. 28, 2018

inflation in order to gain a better picture of the true earning potential of the equity market and how much investors are paying for it. Popularized by Yale University professor Robert Shiller,<sup>1</sup> a version of the CAPE ratio which employs a 10-year average to smooth earnings has shown a historical correlation to average equity returns over the long term. The theory behind this relationship suggests that more expensive CAPE ratios imply lower average future returns.

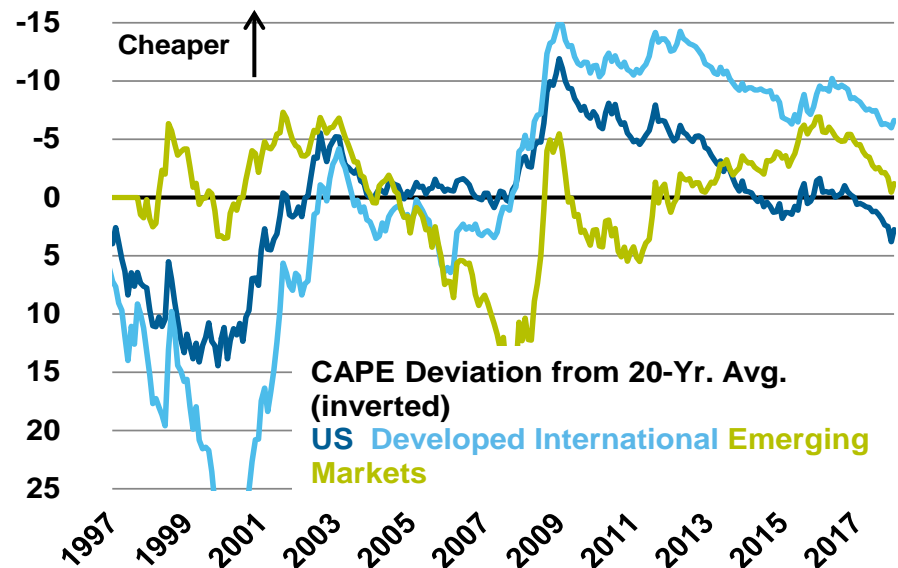
We use this observation as a baseline for our methodology. However, because the historical rate of earnings growth has outpaced the growth we expect in the next seven years, we believe it is more appropriate to utilize the CAPE ratio to estimate how much of the return may come from changes in valuation alone.

Our work suggests that equity multiples demonstrate mean reversion over our seven-year strategic horizon. Future expansion and contraction in multiples have been associated with initial valuations: When equities are purchased at unusually cheap or expensive levels, as measured by a CAPE ratio with a trailing seven-year cyclical adjustment, they tend to rise or fall over the next seven years.

This year, we use a trailing 10-year cyclical adjustment for emerging markets and European equities, which we believe appropriately normalizes for earnings potential by effectively down-weighting the idiosyncratic data points that have been a feature of this exceptional cycle. We also adjust our methodology for Japanese equities, where speculative activity drove valuations to extremes in the late 1980s, only to be followed by decades of deflationary fear and economic stagnation. Our analysis suggests that trailing price/earnings (P/E) ratios provide a better estimate of mean-reversion in forward multiples, and better correspond to our view that Japan's regime change in monetary dynamics and corporate governance is a new reality, distinct from

<sup>1</sup>Campbell, John and Robert Shiller, "Valuation Ratios and the Long-Run Stock Market Outlook," *The Journal of Portfolio Management*, July 1997. <http://www.econ.yale.edu/~shiller/online/jpmalt.pdf>.

## Exhibit 7: Based on CAPE, Developed International and Emerging Market Stocks Appear Cheaper Than US



Note: CAPE uses a trailing seven-year time period except in the case of EM and Europe. Trailing seven year CAPE shown for Japan for comparability reasons, although trailing P/E is used for the calculation of our return estimates.

Source: Robert J. Shiller of Yale University, Standard and Poor's, Bloomberg, FactSet, Haver Analytics, Morgan Stanley Wealth Management GIC as of Feb. 28, 2018

historical context.

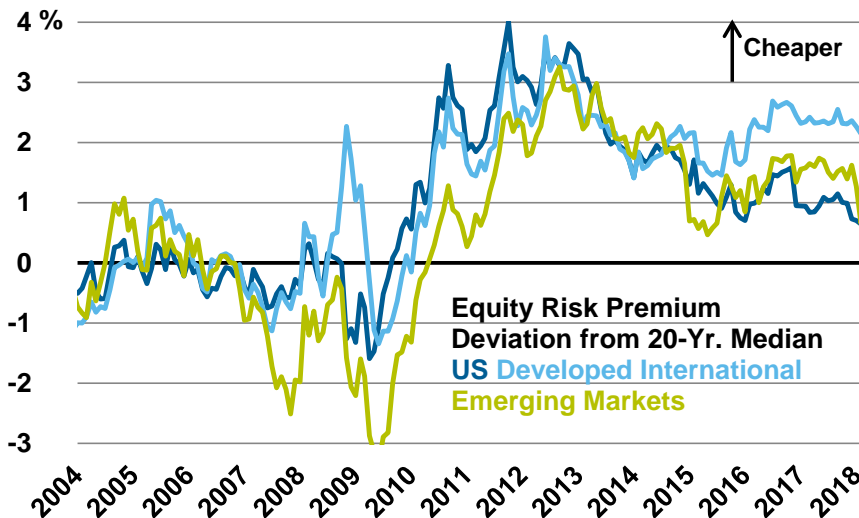
We find that current US and EM CAPE ratios suggest modest multiple contraction in the next seven years, while developed international CAPE ratios suggest equity returns are likely to be boosted by modest multiple expansion (see Exhibit 7).

The equity risk premium component of our valuation analysis measures the degree of additional compensation investors require to hold equities. This is measured by comparing the yield generated by an equity position to the yield of corporate bonds, which are driven by similar fundamentals but which offer additional levels of security in the form of fixed payments and a superior standing in the capital structure. A higher equity risk premium suggests that equities are cheap relative to bonds as they offer a high degree of compensation for bearing equity risk. While the recent rise in rates, especially in the US, has caused equity risk premiums to fall, they remain at elevated levels across the globe, especially in large-cap international developed markets (see Exhibit 8, see page 7).

We expect interest rates to rise globally as loose global monetary policy normalizes and inflation and growth return to more typical levels. During the next seven years, we expect modestly higher rates, at levels consistent with our estimates of growth and inflation. Accordingly, we embed assumptions of finishing the cycle with the 10-year US Treasury bond at 3.15%, the German Bund at 1.52%, the British Gilt at 3.29%, the Canadian 10-year sovereign bond at 2.46% and the 10-year Japanese government bond at 0.95%. For a detailed explanation of our seven-year rate target methodology, please see page 8.

Assuming we realize these yield targets, investment grade corporate spreads return to historical medians and equity risk premiums revert to their historical median from current elevated levels, we then calculate the implied future earnings yield associated with these equity regions. This allows us to estimate the impact of changing valuations on the return for each region. This year, we include an adjustment for our anticipated EM spreads,

## Exhibit 8: Equity Risk Premiums Remain Above Average



Source: Bloomberg, FactSet, Haver Analytics, Morgan Stanley Wealth Management GIC as of Feb. 28, 2018

using a weighted average between median EM spreads and median international spreads rather than solely the historical median for EM. This change reflects the significant and continuing structural improvements made in these markets as well as the strength of the underlying issuers.

This year, higher interest rates and equity appreciation have caused equity risk premiums to fall, suggesting that equities are now less attractive relative to bonds. Furthermore, our outlook for gradually rising interest rates and wider credit spreads contributes to lower equity return estimates than last year. We believe equity risk premiums in the US are now approaching fair value, while low interest rates and moderate equity valuations outside the US suggest international equities are likely to benefit from a repricing of equities relative to bonds.

### What Is the Likely Economic Path for the Next Seven Years?

The final component to equity returns concerns the likely path of the economy, as it has a strong impact on the ability of companies to grow their earnings. We begin with OECD estimates of real GDP

growth for the next seven years. We believe real GDP growth is a good proxy for the rate of index-level real earnings growth, as consumption and production, which constitute the lion's share of GDP growth, are closely related to index revenue values. Additionally, we believe the outlook for corporate margins is relatively stable, with significant contraction or expansion unlikely in the next seven years.

Finally, we make several refinements for smaller companies and for growth- and value-style equities. In a slight change from last year, we adjust our growth estimates for mid- and small-cap equities relative to their large-cap counterparts according to realized seven-year earnings growth premiums. We also incorporate a similar adjustment to account for the differences in US growth and value equities.

Next, we add a downward adjustment to these growth rates to account for our expectation of a mild recession. Given that we are well into the current economic cycle and that the time horizon of our forecast approximates the average length of a business cycle, we believe that a recession will occur at sometime in the next seven years. To incorporate this into

our growth forecast, we assume a -1% decline in real earnings growth spanning one year. Across the different regions, the reduction to the trend real growth forecast varies between -0.3% and -1.1%. Finally, we incorporate expected inflation—market-based inflation breakeven rates—to the preceding analysis to convert our real forecasts to nominal values. Inflation breakevens compare yields on nominal government bonds to liquid inflation-indexed government securities, which pay investors a fixed rate of interest on a par value that increases in line with headline inflation. By subtracting the real yield of the inflation-indexed bond from the nominal bond, we find the implied inflation rate for the time period associated with the maturity of the underlying bonds. To match our seven-year forecast horizon, our analysis focuses on inflation breakevens based on bonds set to mature in seven-years, when data is available.<sup>2</sup>

These implied inflation rates generally confirm our optimistic economic outlook that deflation will continue. We continue to be slightly more optimistic than the market concerning inflation in Japan, where we assume it will reach 1.0% versus the market-implied 0.6%. This increase is driven by our more optimistic view of their economic path and is also intended to offset potential bias from a constrained supply of Japanese inflation-protection securities.

<sup>2</sup>In order to account for lack of available data, we employed the following proxies: UK: 60% weight in 5-year UK breakeven and 40% weight in 10-year UK breakeven; Europe ex UK: 30% weight in Germany 5-year breakeven, 20% weight in Germany 10-year breakeven, plus 50% weight in France seven-year breakeven; EM: seven-year US breakeven; Canada: 10-year Canada breakeven.



## Fixed Income: Our Strategic Methodology

Our forecasts for fixed income returns over the strategic horizon begin by approximating the likely returns based on current yields and price appreciation due to the roll-down. They are then adjusted downward for the effect of likely rising rates and credit spreads, along with potential credit losses (see Exhibit 9). Our methodology leverages the work of Andrew Sheets, Morgan Stanley & Co.'s chief cross-asset strategist and a member of the Global Investment Committee.<sup>3</sup>

### Initial Yield and Roll Down

Our approach sets a baseline for fixed income returns using the current yield on each index. Historically, the yield at which fixed income instruments have been purchased has been a good predictor of forward returns, especially over long horizons and for bonds of higher credit quality. This concept is relatively straightforward: When a bond is purchased, the yield is locked in and, barring credit losses and assuming the bond is held to term, will be paid to investors during the life of the bond.

In addition to the yield of a fixed income security, changes in market value account for the rest of the return to investors. The roll of a bond down the yield curve is one relatively predictable component of expected change in market value. Generally, yield curves are upward sloping, a phenomenon associated with additional compensation for the higher uncertainty associated with longer time horizons. As time passes, longer-maturity bonds roll down the curve, growing closer to their maturity date and effectively becoming shorter-maturity bonds. As dictated by the typically upward-sloping yield curve, this entails price appreciation as yields decline. The magnitude of appreciation differs according to the

<sup>3</sup>Tang, Serena W, Andrew Sheets, Phanikiran L Naraparaju, Wanting Low, and Elizabeth Volynsky, "What Will Markets Return?," *Cross-Asset Dispatch*, Oct. 23, 2016, Morgan Stanley & Co.

## Exhibit 9: Higher Starting Yields Do Not Always Result in Stronger Returns

	Starting Yield	Return from Roll Down	Default Loss	Impact of Rising Yields /Spreads	Total
<b>US 10-Yr. Treasury</b>	2.9%	0.1%	0.0%	-0.4%	<b>2.6%</b>
<b>US Aggregate</b>	3.15	0.65	-0.05	-0.48	<b>3.27</b>
<b>US High Yield Corp.</b>	6.14	0.64	-2.49	-0.81	<b>3.48</b>
<b>International Agg.</b>	0.85	1.45	-0.05	-1.13	<b>1.11</b>
<b>Emg. Mkt. Credit*</b>	6.23	0.19	-0.70	-0.64	<b>5.08</b>
<b>Global Aggregate</b>	1.87	1.36	-0.05	-0.83	<b>2.35</b>

\*US dollar

The above asset classes are represented by the following indexes in order of appearance: Bloomberg Barclays US Treasury: 10-20 Year Index; Bloomberg Barclays US Aggregate Bond Index; Bloomberg Barclays US Corporate High Yield Index; Bloomberg Barclays Global Aggregate Non USD (hedged) Index, JPMorgan EMBI Global; and Bloomberg Barclays Global Aggregate Index.

Source: Morgan Stanley Wealth Management GIC, Bloomberg, Datastream, Moody's as of Feb. 28, 2018

different yield curves. This year, we interpolate the roll for each index using its average maturity and the current shape of the yield curve.

### Allowances for Rising Rates and Widening Credit Spreads

Fixed income instruments have benefitted from a 30-year secular bull market as rates fell to historical lows. We believe, however, that during the next seven years, rates are likely to sustain their recent gains off these low levels and potentially reach higher levels as growth and inflation normalize. To maintain consistency, we must account for the drop in price that higher rates would imply, offsetting a portion of the returns from initial yield and the roll-down.

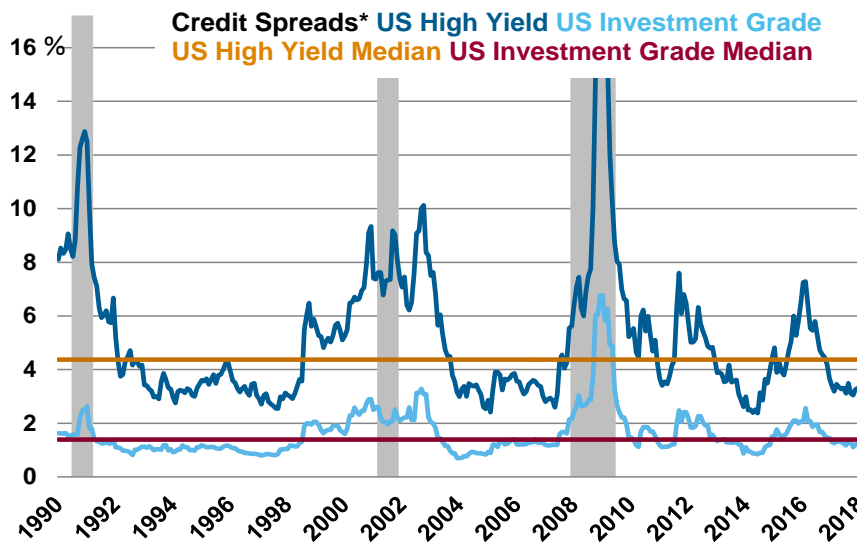
This year, we utilize a broader range of interest rate forecasts to incorporate region-specific factors to our estimates. Given our belief that we are now entering a new secular upturn in interest rates from recent lows, we generate seven-year forecasts based on our long-run estimates for fair value rates across various regions. Historically, secular trends in interest rates have occurred over a multicycle horizon. Accordingly, we expect only partial progress toward our long-run target over a seven-year strategic horizon. We forecast that the 10-year US Treasury yield will

rise to 3.15%, the German Bund to 1.52%, the British Gilt to 3.29%, the Canadian 10-year sovereign bond to 2.46%, and Japanese government bonds to 0.95%. These forecasts also feed our equity risk premium methodology.

Given our seven-year horizon, which encompasses the average length of a business cycle, we make no assumptions about changes in the shape of the yield curve because they have tended to average out over the course of a cycle. Instead, we assume a parallel shift in the curve upward for all fixed income instruments and adjust for duration, or interest rate sensitivity, to estimate the impact on returns for each fixed income asset class. Long-duration bonds are most affected.

This year, we also incorporate the impact on credit-sensitive fixed income asset classes from rising credit spreads, given that today's historically tight spreads are unlikely to persist. In line with our equity risk premium methodology, we assume spreads will rise to the 20-year median spread for corporate bonds in each region relative to their government benchmark (see Exhibit 10, page 9). We incorporate an adjustment for anticipated spreads in emerging markets using a weighted average between median EM spreads and median international spreads in order to account for structural improvements in these markets and the strength of the underlying issuers. Bonds

## Exhibit 10: Credit Spreads Are Likely To Rise to Their Medians



\*Versus riskless rate

Source: Morgan Stanley Wealth Management GIC, Bloomberg as of Feb. 28, 2018

of lower credit quality, especially those with longer duration, are the most affected.

### Allowances for Default Loss

Fixed income securities are also subject to losses associated with default risk. This risk is especially important for bonds with lower credit ratings such as high yield bonds or debt issued by emerging market countries.

Sheets has found the relationship between default losses and the time to maturity varies depending on the credit rating of the bond. Investment grade bonds generally face higher risk of default loss as the maturity of the bond grows closer, as the issuers are likely to grow larger and take on greater risks as time passes since their bond issuance. High yield bonds, on the other hand, generally face lower risk of default losses as time goes on. These riskier, generally younger companies face the highest default risk in the first few years, suggesting companies that succeed in making it past the first few years are likely able to sustain or even improve their credit quality.

Accordingly, we adjust our forecasts based on the historical default losses associated with bonds of similar credit ratings and time to maturity.

### Ultrashort Fixed income

Our strategic ultrashort fixed income return forecast is based on the market-implied expected return of the three-month US Treasury bill for the next seven years. We derive this figure from the prices of a set of instruments including the on-the-run three-month T-bills and a selection of longer-term swaps (T-bills vs. three-month LIBOR) up to a maturity of seven years. Our forecast this year is a slightly higher, 2.3% vs. 2.0% in 2017, consistent with our expectation of continued US interest rate normalization.

### Inflation-Protection Securities

This year, we forecast strategic returns for inflation-protection securities by adding together the real yield associated with global inflation-protection securities and the same inflation breakeven measures used in our equity forecasts,<sup>4</sup> weighting each country's breakeven according to the country's respective weight in the Bloomberg Barclays Global Inflation-

<sup>4</sup>Including the adjustment for Japanese inflation to 1.0% from 0.5%.

Linked Index. We expect a return of 1.5% this year, lower than the inflation forecasts due to the negative real yield associated with these securities in many developed international regions.

## Alternatives: Our Strategic Methodology

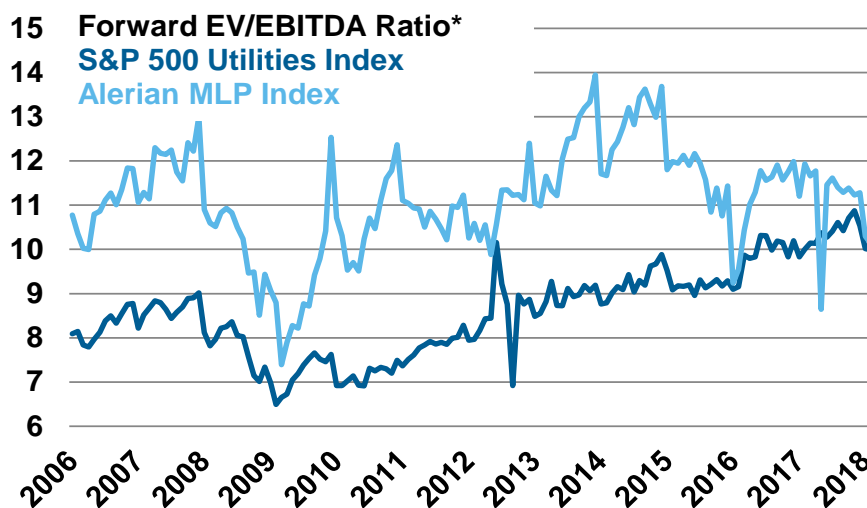
### Global REITs

We estimate the return on global real estate investment trusts (REITs) using a similar methodology to our equity methodology. For the earnings payout contribution to return, we examine what these companies have paid out via dividends and share repurchases in the past 12 months. We take into account their current valuations by using the CAPE ratio to project forward multiple expansion, and acknowledge the impact of our forecast for higher interest rates and credit spreads via the equity risk premium. Our earnings growth forecast is the same as our forecast for global equities. By our estimates, we expect global REITs to deliver an annualized 5.8% return.

### Master Limited Partnerships

Our strategic forecast for MLPs uses a methodology similar to that used for equities. For the earnings payout contribution to return, we balance the high yield associated with these securities against their historical reliance on equity issuance as a form of funding. We take into account their current depressed valuations by using the CAPE ratio to project forward multiple expansion, and acknowledge the impact of our forecast for higher interest rates and credit spreads via the equity risk premium. Our earnings growth forecast, however, differs from our equity methodology. For MLPs, the fundamental driver of earnings is volume growth—therefore, our estimate is based on the seven-year production growth for crude and natural gas estimate of the US Energy Information Administration (EIA). Finally, we add the impact of a mild recession and expected inflation as with our equity forecast. Overall, this takes our

## Exhibit 11: Structural Changes Point to Lower Future Returns for MLPs



\*Enterprise value/earnings before interest, taxes, depreciation and amortization  
Source: Morgan Stanley Wealth Management GIC, Bloomberg as of Feb. 28, 2018

MLP estimate to 5.9%. While this is a large change from our previous forecast, we believe structural changes in the market will make it difficult for the equity issuance-funded growth of the previous MLP boom to continue, suggesting lower future returns are likely. These changes are evident in recent market dynamics as shown in Exhibit 11, which demonstrates that the ratio of MLPs' enterprise value (EV) to earnings before interest, taxes, depreciation and amortization (EBITDA) valuations following the 2015-2016 drop in crude oil prices have persisted at a much smaller premium to that of utilities, which are also yield-generating assets with comparable business models.

### Commodities

We estimate the return to commodities using the sources of returns of commodity futures: changes in the spot price of the commodity, the yield from collateral set aside by investors and the appreciation or depreciation from rolling along the futures curve. We assume that the spot price will appreciate with expected inflation and expect that collateral set aside for commodities trading to deliver a return in line with our ultrashort fixed income estimate. Finally, the roll yield is based on the historical return from the Bloomberg

Roll Select Commodities Index. We believe our framework is appropriate for a seven-year horizon and estimate that commodities will return an annualized 3.4% during this period.

### Hedged Strategies and Managed Futures

Hedged strategies are not themselves asset classes. Instead, they are investment strategies that have historically shown an ability to deliver returns in a manner that diversifies stock and bond holdings within portfolios by leveraging exposures to traditional asset classes. We thank our colleagues at Morgan Stanley Investment Management's Alternative Investment Partners for their assistance in creating this methodology.

To develop return assumptions, we deconstruct historical returns into their fundamental sources. In the case of directional strategies, including equity long-short and event driven, we use betas and correlations to stock and bond markets to set return forecasts consistent with our estimates of these traditional asset classes.

In contrast, absolute return strategies like managed futures and global macro are less directional—in other words, they do not rely on being systematically invested and frequently take short positions. For

these strategies, we attribute expected return based on modestly positive effects from “skill” factors such as market timing and security selection in proportions consistent with recent history.

Measures of broad performance of these strategies face difficulties that are not encountered among traditional asset classes. Private indexes designed to track the performance of funds following these strategies rely on independent investment managers to report their own performance, which can impart selection bias and survivorship bias from selective disclosures of existing and now-extinct funds. Furthermore, managers of hedged strategies often hold less-liquid securities, and so reported returns appear excessively “smooth” due to lagging price discovery. We use statistical methods to mitigate these effects and establish estimated returns as closely aligned with the underlying economics as possible.

### Private Equity and Private Real Estate

Private equity and private real estate have also earned a reputation for delivering strong returns in a manner uncorrelated to traditional asset classes. However, their performance can also be difficult to measure at an index level due to their illiquidity and the lack of published high-frequency return data. We adjust index-level returns using a statistical method to “de-smooth” their historical return series. We then estimate the relationship between these returns and a set of common factors that have shown a historical relationship with private equity and private real estate performance, including GDP growth, inflation volatility and the concurrent returns of other traditional and illiquid asset classes. By quantifying these relationships, we are able to use our assumptions about the behavior of these other factors to estimate returns to private equity and private real estate over the strategic horizon. Note that we assume a private equity composition of 80% leveraged buyout funds and 20% venture capital funds. Overall, we expect

## WEALTH MANAGEMENT

an annualized return of 6.4% for private equity and 6.5% for private real estate.

## Secular Returns

In addition to our strategic return estimates, we also project returns over the secular horizon, which we consider to be a 20+ year horizon. As a primary guide for long-term return potential, we use the geometric average returns over a long history of market data for both global equities and bonds. For developed market asset classes, much of our data extends to 1900. For emerging markets, the data begins in 1987. For asset classes for which long histories are not available, we base our estimates on the typical relative return differential versus a comparable asset class over the longest available period of monthly returns.

Given the evolving nature of the global economy, we believe it is necessary to make several adjustments to these long-run averages when the future is likely to exhibit material differences from the past. One such adjustment concerns US equities: Given their exceptionally strong returns since 1900 and the significant transformation of the US during that time, we reduce our large-cap estimate from the historical average by 1.0% per year. Over our large-cap return estimates, we add an annualized premium of 0.5% for US mid caps, 1.0% for US small caps and 0.5% for international small caps versus international large caps. While these understate historical outperformance by small- and mid-cap stocks, we believe the significant structural improvements in the liquidity of small-cap equities is consistent with lower return differentials compared with history. Finally, because multiyear outperformance of growth and value equities is difficult to time, we assume both growth and value cohorts of US equities of a given market cap deliver equal returns going forward.

Among alternative asset classes, data availability once again poses a challenge to using the same methodology that we use for equities and fixed income. To account for this, we employ similar methodologies to those used in our strategic estimates

over the longest available horizon to provide secular return estimates for alternatives. We make exceptions for asset classes with shorter histories. For example, our long-run MLP and REIT forecasts employ a three-factor Fama-French methodology,<sup>5</sup> which utilizes the historical relationship between these asset classes and three broad market factors (excess market returns, excess small cap returns, and excess value-factor returns) to estimate long-term returns.

## Volatility

Volatility is a measure of the variability of returns around their average value, and is one measure of the risk associated with an investment. In order to estimate volatility for liquid asset classes, we calculate the average volatility over the available history of each asset class and give a slightly higher weight to the past seven years. Using long-term data mitigates the impact of specific regimes and business cycle stages that could skew our results. We largely expect a normalization of volatility in coming years relative to the extreme lows of 2017.

For strategies with values that are not continuously marked on public markets, including hedge funds, private equity and private real estate, historical returns may understate the true volatility of underlying assets. For these classes, we use the aforementioned statistical methodologies to eliminate serial correlation and estimate a more representative volatility of underlying assets.

## Correlation

A critical factor in asset allocation is correlation, or the degree to which asset class returns move together. Correlations can vary considerably over different historical periods due to changes in economic regime, market structure, stage of the business cycle or myriad other factors. Therefore, we calculate long-run

correlations based on asset-class returns for the past 20 years. For illiquid asset classes, we include the statistical adjustments to return series discussed above. We use these 20-year correlations as a proxy for expected future correlations. Please refer to the table beginning on page 15.

<sup>5</sup>We use the data provided by Kenneth French for the three factors in the model.  
[http://mba.tuck.dartmouth.edu/pages/faculty/ken.french/data\\_library.html](http://mba.tuck.dartmouth.edu/pages/faculty/ken.french/data_library.html)



**Exhibit 12: New Strategic Weights for GIC Asset Allocation Models Level 1**

	Wealth Conservation	Income	Balanced Growth	Market Growth	Opportunistic Growth
Ultrashort Fixed Income	15%	10%	6%	4%	2%
<b>Equities</b>					
US Equities	6	12	17	23	29
US Large-Cap Growth	2	5	5	8	11
US Large-Cap Value	2	5	6	9	12
US Mid-Cap Growth	0	0	1	1	1
US Mid-Cap Value	1	1	2	2	2
US Small-Cap Growth	0	0	1	1	1
US Small-Cap Value	1	1	2	2	2
International Equities	11	14	21	26	34
European Equities	7	10	15	18	21
Japan Equities	4	4	6	6	9
Asia Pacific ex Japan Equities	0	0	0	2	4
Emerging & Frontier Mkt. Equities	3	5	6	8	9
<b>Total Equities</b>	20	31	44	57	72
Total US Equities	6	12	17	23	29
Total International Equities	11	14	21	26	34
Total Emerging & Frontier Mkt. Equities	3	5	6	8	9
<b>Fixed Income &amp; Preferreds</b>					
Short-Term Fixed Income	22	18	11	5	0
US Fixed Income Taxable	27	23	16	11	0
International Fixed Income	2	1	1	0	0
Inflation-Protection Securities	0	0	0	0	0
High Yield Fixed Income	6	5	4	2	0
Emerging Mkt Fixed Income	0	0	0	0	0
<b>Total Fixed Income</b>	57	47	32	18	0
<b>Alternatives</b>					
Real Assets	4	7	7	5	5
REITs	2	3	3	2	2
Commodities	0	0	0	0	0
Master Limited Partnerships	2	4	4	3	3
Absolute Return Assets	4	5	5	2	0
Equity Hedge Assets	0	0	6	6	9
Equity Return Assets	0	0	0	8	12
Opportunistic Assets	0	0	0	0	0
Private Real Estate	0	0	0	0	0
Private Equity	0	0	0	0	0
Private Credit	0	0	0	0	0
<b>Total Alternative Investments</b>	8	12	18	21	26

Note: Strategic allocations effective March 29, 2018 for investors with less than \$25 million in investable assets.

Source: Morgan Stanley Wealth Management GIC

**Exhibit 13: New Strategic Weights for GIC Asset Allocation Models Level 2**

	Wealth Conservation	Income	Balanced Growth	Market Growth	Opportunistic Growth
Ultrashort Fixed Income	15%	11%	7%	3%	1%
<b>Equities</b>					
US Equities	8	11	15	23	29
US Large-Cap Growth	3	4	6	8	11
US Large-Cap Value	3	5	7	9	12
US Mid-Cap Growth	0	0	0	1	1
US Mid-Cap Value	1	1	1	2	2
US Small-Cap Growth	0	0	0	1	1
US Small-Cap Value	1	1	1	2	2
International Equities	9	13	18	23	31
European Equities	6	8	12	15	21
Japan Equities	3	4	4	6	7
Asia Pacific ex Japan Equities	0	1	2	2	3
Emerging & Frontier Mkt. Equities	3	4	5	6	8
<b>Total Equities</b>	20	28	38	52	68
Total US Equities	8	11	15	23	29
Total International Equities	9	13	18	23	31
Total Emerging & Frontier Mkt. Equities	3	4	5	6	8
<b>Fixed Income &amp; Preferreds</b>					
Short-Term Fixed Income	20	16	10	5	0
US Fixed Income Taxable	25	20	14	8	0
International Fixed Income	2	2	2	1	0
Inflation-Protection Securities	0	0	0	0	0
High Yield Fixed Income	6	4	4	2	0
Emerging Market Fixed Income	0	0	0	0	0
<b>Total Fixed Income</b>	53	42	30	16	0
<b>Alternatives</b>					
Real Assets	3	5	5	5	5
REITs	1	2	2	2	2
Commodities	0	0	0	0	0
Master Limited Partnerships	2	3	3	3	3
Absolute Return Assets	2	4	2	1	0
Equity Hedge Assets	0	0	5	5	5
Equity Return Assets	0	0	0	3	6
Opportunistic Assets	7	10	13	15	15
Private Real Estate	5	4	4	5	5
Private Equity	1	4	7	7	7
Private Credit	1	2	2	3	3
<b>Total Alternative Investments</b>	12	19	25	29	31

Note: Strategic allocations effective March 29, 2018 for investors with more than \$25 million in investable assets.

Source: Morgan Stanley Wealth Management GIC

## Exhibit 14: Strategic and Secular Return and Volatility Estimates

	Strategic Return and Volatility Estimates		Secular Return and Volatility Estimates	
	Annualized Return 2018	Annualized Volatility 2018	Annualized Return 2018	Annualized Volatility 2018
<b>Ultrashort Fixed Income</b>	<b>2.3%</b>	<b>0.9%</b>	<b>3.4%</b>	<b>0.9%</b>
<b>Equities</b>	<b>5.2</b>	<b>14.7</b>	<b>9.2</b>	<b>15.3</b>
US Equities	4.3	14.2	9.3	15.1
US Large-Cap Growth	3.2	15.7	9.2	16.8
US Large-Cap Value	5.0	13.7	9.2	14.4
US Mid-Cap Growth	3.0	18.5	9.8	19.9
US Mid-Cap Value	5.2	14.8	9.8	15.5
US Small-Cap Growth	4.3	21.1	10.3	22.3
US Small-Cap Value	5.3	16.8	10.3	17.2
International Equities	5.7	16.8	8.8	18.1
European Equities	5.7	16.4	7.4	17.3
Japan Equities	5.2	20.0	7.4	20.7
Asia Pacific ex Japan Equities	5.9	21.9	9.7	23.0
Emerging & Frontier Mkt. Equities	6.4	21.6	11.4	22.7
<b>Fixed Income &amp; Preferreds</b>	<b>3.3</b>	<b>5.3</b>	<b>4.8</b>	<b>5.3</b>
Short-Term Fixed Income	2.6	1.4	3.6	1.4
US Fixed Income Taxable	3.3	5.3	4.8	5.3
International Fixed Income	1.1	4.2	4.5	4.2
Inflation-Protection Securities	1.5	7.5	5.7	7.5
High Yield Fixed Income	3.5	8.3	6.9	8.3
Emerging Market Fixed Income	5.1	12.3	7.1	12.3
<b>Alternatives</b>	<b>4.0</b>	<b>5.8</b>	<b>6.4</b>	<b>5.8</b>
Real Assets	5.1	12.7	6.8	12.7
REITs	5.8	16.7	8.0	16.7
Commodities	3.4	14.5	4.4	14.5
Master Limited Partnerships	5.9	16.0	8.1	16.0
Absolute Return Assets	3.4	4.0	5.4	4.0
Equity Hedge Assets	4.3	8.2	5.8	8.2
Equity Return Assets	4.4	8.1	7.3	8.1
Opportunistic Assets	6.5	14.3	9.1	14.3
Private Real Estate	6.5	15.2	6.5	15.2
Private Equity	6.4	19.1	11.7	19.1
Private Credit	3.1	8.0	3.4	8.0

Note: Ultrashort Fixed Income represented by 90-day T-bills, Fixed Income & Preferreds by Bloomberg Barclays Aggregate Bond Index, Short-Term Fixed Income by Bloomberg Barclays Aggregate 1-3 Year Index, US Fixed Income Taxable by Bloomberg Barclays US Aggregate Index, International Fixed Income by Barclays Global Aggregate Non USD (hedged) Index, Inflation-Protection Securities by Bloomberg Barclays Global Inflation Linked Index, High Yield Fixed Income by Barclays US Corporate High Yield Index and Emerging Market Fixed Income JP Morgan EMBI Global Index. All other others are based on proprietary models.

Source: Morgan Stanley Wealth Management GIC as of Feb. 28, 2018

Strategic annualized return and volatility estimates are based on a seven-year time horizon. Secular annualized return and volatility estimates are based on a 20-year-plus time horizon. Annualized volatility estimates are based on data with longest available history through March 2017.

Estimates are for illustrative purposes only, are based on proprietary models and are not indicative of the future performance of any specific investment, index or asset class. Actual performance may be more or less than the estimates shown in this table. Estimates of future performance are based on assumptions that may not be realized.

Investor Suitability: Morgan Stanley Wealth Management recommends that investors independently evaluate each asset class, investment style, issuer, security, instrument or strategy discussed. Legal, accounting and tax restrictions, transaction costs and changes to any assumptions may significantly affect the economics and results of any investment. Investors should consult their own tax, legal or other advisors to determine suitability for their specific circumstances. Investments in private funds (including hedge funds, managed futures funds and private equity funds) are speculative and include a high degree of risk.

**Exhibit 15: Correlation Matrix**

	1	2	3	4	5	6	7	8	9	10	11
1 Ultrashort Fixed Income	1.00	-0.11	-0.10	-0.11	-0.07	-0.09	-0.09	-0.10	-0.08	-0.09	-0.07
2 Equities	-0.11	1.00	0.95	0.91	0.88	0.89	0.86	0.84	0.79	0.99	0.84
3 US Equities	-0.10	0.95	1.00	0.95	0.93	0.86	0.88	0.81	0.79	0.96	0.81
4 US Large-Cap Growth	-0.11	0.91	0.95	1.00	0.79	0.93	0.75	0.85	0.69	0.92	0.79
5 US Large-Cap Value	-0.07	0.88	0.93	0.79	1.00	0.72	0.95	0.70	0.84	0.91	0.75
6 US Mid-Cap Growth	-0.09	0.89	0.86	0.93	0.72	1.00	0.74	0.95	0.75	0.86	0.77
7 US Mid-Cap Value	-0.09	0.86	0.88	0.75	0.95	0.74	1.00	0.74	0.91	0.87	0.72
8 US Small-Cap Growth	-0.10	0.84	0.81	0.85	0.70	0.95	0.74	1.00	0.84	0.81	0.73
9 US Small-Cap Value	-0.08	0.79	0.79	0.69	0.84	0.75	0.91	0.84	1.00	0.78	0.67
10 International Equities	-0.09	0.99	0.96	0.92	0.91	0.86	0.87	0.81	0.78	1.00	0.85
11 European Equities	-0.07	0.84	0.81	0.79	0.75	0.77	0.72	0.73	0.67	0.85	1.00
12 Japan Equities	-0.13	0.66	0.58	0.56	0.54	0.56	0.54	0.56	0.52	0.65	0.61
13 Asia Pacific ex Japan Equities	-0.08	0.87	0.77	0.73	0.73	0.72	0.74	0.70	0.67	0.84	0.64
14 Emerging & Frontier Mkt. Equities	-0.08	0.88	0.76	0.74	0.71	0.76	0.71	0.73	0.66	0.83	0.69
15 Fixed Income & Preferreds	0.11	-0.05	-0.11	-0.10	-0.09	-0.10	-0.04	-0.14	-0.10	-0.07	-0.18
16 Short-Term Fixed Income	0.45	-0.14	-0.20	-0.20	-0.18	-0.19	-0.15	-0.21	-0.17	-0.16	-0.28
17 US Fixed Income Taxable	0.11	-0.05	-0.11	-0.10	-0.09	-0.10	-0.04	-0.14	-0.10	-0.07	-0.18
18 International Fixed Income	0.14	-0.15	-0.15	-0.17	-0.12	-0.19	-0.09	-0.20	-0.15	-0.15	-0.16
19 Inflation-Protection Securities	0.03	0.13	0.06	0.07	0.06	0.07	0.13	0.03	0.04	0.11	0.02
20 High Yield Fixed Income	-0.18	0.69	0.62	0.59	0.60	0.61	0.66	0.60	0.62	0.67	0.58
21 Emerging Market Fixed Income	-0.04	0.58	0.51	0.49	0.50	0.51	0.51	0.49	0.45	0.55	0.45
22 Alternatives	-0.12	0.81	0.69	0.69	0.63	0.74	0.67	0.74	0.65	0.77	0.67
23 Real Assets	-0.02	0.69	0.59	0.51	0.65	0.54	0.70	0.54	0.64	0.66	0.45
24 REITs	-0.06	0.70	0.63	0.52	0.70	0.53	0.78	0.55	0.73	0.69	0.53
25 Commodities	0.05	0.44	0.33	0.30	0.35	0.35	0.38	0.31	0.32	0.41	0.19
26 Master Limited Partnerships	-0.03	0.45	0.40	0.35	0.44	0.38	0.46	0.38	0.42	0.43	0.32
27 Absolute Return Assets	-0.21	0.75	0.66	0.62	0.64	0.64	0.68	0.63	0.63	0.72	0.63
28 Equity Hedge Assets	0.01	0.07	0.00	0.00	0.00	0.03	0.04	0.03	0.03	0.06	0.01
29 Equity Return Assets	-0.06	0.90	0.81	0.82	0.73	0.89	0.75	0.89	0.76	0.86	0.76
30 Opportunistic Assets	0.11	0.38	0.35	0.34	0.32	0.38	0.30	0.36	0.29	0.38	0.42
31 Private Real Estate	0.21	0.19	0.20	0.14	0.24	0.14	0.23	0.15	0.22	0.20	0.21
32 Private Equity	0.01	0.44	0.41	0.42	0.34	0.46	0.32	0.42	0.29	0.43	0.48
33 Private Credit	-0.13	0.52	0.45	0.41	0.46	0.44	0.54	0.43	0.47	0.50	0.45

Source: Bloomberg, Datastream, Morgan Stanley Alternative Investment Partners, Morgan Stanley Wealth Management GIC  
 Above is based on data with longest available history through February 2018. Correlation is a statistical method of measuring the strength of a linear relationship between two variables. The correlation between two variables can assume any value from -1.00 to +1.00, inclusive. Past performance is not indicative of future results. We apply significant statistical adjustments to correct for distortions typically associated with index returns for hedge funds, private equity and private real estate. Correlation assumptions are the same for the secular and strategic horizons.

**Exhibit 15: Correlation Matrix (continued)**

	12	13	14	15	16	17	18	19	20	21	22
1 Ultrashort Fixed Income	-0.13	-0.08	-0.08	0.11	0.45	0.11	0.14	0.03	-0.18	-0.04	-0.12
2 Equities	0.66	0.87	0.88	-0.05	-0.14	-0.05	-0.15	0.13	0.69	0.58	0.81
3 US Equities	0.58	0.77	0.76	-0.11	-0.20	-0.11	-0.15	0.06	0.62	0.51	0.69
4 US Large-Cap Growth	0.56	0.73	0.74	-0.10	-0.20	-0.10	-0.17	0.07	0.59	0.49	0.69
5 US Large-Cap Value	0.54	0.73	0.71	-0.09	-0.18	-0.09	-0.12	0.06	0.60	0.50	0.63
6 US Mid-Cap Growth	0.56	0.72	0.76	-0.10	-0.19	-0.10	-0.19	0.07	0.61	0.51	0.74
7 US Mid-Cap Value	0.54	0.74	0.71	-0.04	-0.15	-0.04	-0.09	0.13	0.66	0.51	0.67
8 US Small-Cap Growth	0.56	0.70	0.73	-0.14	-0.21	-0.14	-0.20	0.03	0.60	0.49	0.74
9 US Small-Cap Value	0.52	0.67	0.66	-0.10	-0.17	-0.10	-0.15	0.04	0.62	0.45	0.65
10 International Equities	0.65	0.84	0.83	-0.07	-0.16	-0.07	-0.15	0.11	0.67	0.55	0.77
11 European Equities	0.61	0.64	0.69	-0.18	-0.28	-0.18	-0.16	0.02	0.58	0.45	0.67
12 Japan Equities	1.00	0.54	0.58	-0.18	-0.25	-0.18	-0.23	0.01	0.47	0.32	0.59
13 Asia Pacific ex Japan Equities	0.54	1.00	0.89	0.07	-0.01	0.07	-0.05	0.19	0.64	0.61	0.76
14 Emerging & Frontier Mkt. Equities	0.58	0.89	1.00	-0.02	-0.07	-0.02	-0.12	0.15	0.67	0.67	0.82
15 Fixed Income & Preferreds	-0.18	0.07	-0.02	1.00	0.79	1.00	0.76	0.75	0.16	0.34	0.06
16 Short-Term Fixed Income	-0.25	-0.01	-0.07	0.79	1.00	0.79	0.58	0.52	0.04	0.17	-0.01
17 US Fixed Income Taxable	-0.18	0.07	-0.02	1.00	0.79	1.00	0.76	0.75	0.16	0.34	0.06
18 International Fixed Income	-0.23	-0.05	-0.12	0.76	0.58	0.76	1.00	0.66	-0.01	0.17	-0.05
19 Inflation-Protection Securities	0.01	0.19	0.15	0.75	0.52	0.75	0.66	1.00	0.30	0.37	0.23
20 High Yield Fixed Income	0.47	0.64	0.67	0.16	0.04	0.16	-0.01	0.30	1.00	0.56	0.69
21 Emerging Market Fixed Income	0.32	0.61	0.67	0.34	0.17	0.34	0.17	0.37	0.56	1.00	0.61
22 Alternatives	0.59	0.76	0.82	0.06	-0.01	0.06	-0.05	0.23	0.69	0.61	1.00
23 Real Assets	0.42	0.71	0.69	0.12	0.11	0.12	-0.03	0.22	0.69	0.50	0.70
24 REITs	0.45	0.70	0.66	0.20	0.08	0.20	0.11	0.30	0.67	0.51	0.62
25 Commodities	0.26	0.51	0.50	0.06	0.10	0.06	-0.11	0.16	0.36	0.32	0.53
26 Master Limited Partnerships	0.26	0.45	0.44	0.01	0.07	0.01	-0.06	0.03	0.56	0.31	0.50
27 Absolute Return Assets	0.59	0.69	0.72	0.04	-0.06	0.04	-0.11	0.20	0.78	0.56	0.89
28 Equity Hedge Assets	0.01	0.10	0.10	0.30	0.27	0.30	0.31	0.35	0.03	0.07	0.43
29 Equity Return Assets	0.64	0.80	0.85	-0.06	-0.10	-0.06	-0.15	0.11	0.70	0.59	0.93
30 Opportunistic Assets	0.31	0.26	0.31	-0.16	-0.23	-0.16	-0.13	0.02	0.19	0.12	0.35
31 Private Real Estate	0.14	0.13	0.13	-0.04	-0.07	-0.04	-0.01	0.03	0.08	0.03	0.16
32 Private Equity	0.39	0.30	0.37	-0.22	-0.29	-0.22	-0.19	0.02	0.25	0.14	0.41
33 Private Credit	0.44	0.46	0.47	-0.04	-0.09	-0.04	-0.17	0.16	0.77	0.26	0.56

Source: Bloomberg, Datastream, Morgan Stanley Alternative Investment Partners, Morgan Stanley Wealth Management GIC  
 Above is based on data with longest available history through February 2018. Correlation is a statistical method of measuring the strength of a linear relationship between two variables. The correlation between two variables can assume any value from -1.00 to +1.00, inclusive. Past performance is not indicative of future results. We apply significant statistical adjustments to correct for distortions typically associated with index returns for hedge funds, private equity and private real estate. Correlation assumptions are the same for the secular and strategic horizons.

**Exhibit 15: Correlation Matrix (continued)**

	23	24	25	26	27	28	29	30	31	32	33
1 Ultrashort Fixed Income	-0.02	-0.06	0.05	-0.03	-0.21	0.01	-0.06	0.11	0.21	0.01	-0.13
2 Equities	0.69	0.70	0.44	0.45	0.75	0.07	0.90	0.38	0.19	0.44	0.52
3 US Equities	0.59	0.63	0.33	0.40	0.66	0.00	0.81	0.35	0.20	0.41	0.45
4 US Large-Cap Growth	0.51	0.52	0.30	0.35	0.62	0.00	0.82	0.34	0.14	0.42	0.41
5 US Large-Cap Value	0.65	0.70	0.35	0.44	0.64	0.00	0.73	0.32	0.24	0.34	0.46
6 US Mid-Cap Growth	0.54	0.53	0.35	0.38	0.64	0.03	0.89	0.38	0.14	0.46	0.44
7 US Mid-Cap Value	0.70	0.78	0.38	0.46	0.68	0.04	0.75	0.30	0.23	0.32	0.54
8 US Small-Cap Growth	0.54	0.55	0.31	0.38	0.63	0.03	0.89	0.36	0.15	0.42	0.43
9 US Small-Cap Value	0.64	0.73	0.32	0.42	0.63	0.03	0.76	0.29	0.22	0.29	0.47
10 International Equities	0.66	0.69	0.41	0.43	0.72	0.06	0.86	0.38	0.20	0.43	0.50
11 European Equities	0.45	0.53	0.19	0.32	0.63	0.01	0.76	0.42	0.21	0.48	0.45
12 Japan Equities	0.42	0.45	0.26	0.26	0.59	0.01	0.64	0.31	0.14	0.39	0.44
13 Asia Pacific ex Japan Equities	0.71	0.70	0.51	0.45	0.69	0.10	0.80	0.26	0.13	0.30	0.46
14 Emerging & Frontier Mkt. Equities	0.69	0.66	0.50	0.44	0.72	0.10	0.85	0.31	0.13	0.37	0.47
15 Fixed Income & Preferreds	0.12	0.20	0.06	0.01	0.04	0.30	-0.06	-0.16	-0.04	-0.22	-0.04
16 Short-Term Fixed Income	0.11	0.08	0.10	0.07	-0.06	0.27	-0.10	-0.23	-0.07	-0.29	-0.09
17 US Fixed Income Taxable	0.12	0.20	0.06	0.01	0.04	0.30	-0.06	-0.16	-0.04	-0.22	-0.04
18 International Fixed Income	-0.03	0.11	-0.11	-0.06	-0.11	0.31	-0.15	-0.13	-0.01	-0.19	-0.17
19 Inflation-Protection Securities	0.22	0.30	0.16	0.03	0.20	0.35	0.11	0.02	0.03	0.02	0.16
20 High Yield Fixed Income	0.69	0.67	0.36	0.56	0.78	0.03	0.70	0.19	0.08	0.25	0.77
21 Emerging Market Fixed Income	0.50	0.51	0.32	0.31	0.56	0.07	0.59	0.12	0.03	0.14	0.26
22 Alternatives	0.70	0.62	0.53	0.50	0.89	0.43	0.93	0.35	0.16	0.41	0.56
23 Real Assets	1.00	0.80	0.75	0.78	0.73	0.19	0.68	0.26	0.24	0.24	0.60
24 REITs	0.80	1.00	0.39	0.44	0.65	0.14	0.61	0.27	0.25	0.26	0.56
25 Commodities	0.75	0.39	1.00	0.40	0.49	0.25	0.48	0.23	0.19	0.20	0.37
26 Master Limited Partnerships	0.78	0.44	0.40	1.00	0.56	0.06	0.50	0.11	0.12	0.10	0.46
27 Absolute Return Assets	0.73	0.65	0.49	0.56	1.00	0.17	0.83	0.34	0.18	0.39	0.74
28 Equity Hedge Assets	0.19	0.14	0.25	0.06	0.17	1.00	0.17	0.01	0.01	0.01	0.01
29 Equity Return Assets	0.68	0.61	0.48	0.50	0.83	0.17	1.00	0.39	0.16	0.46	0.55
30 Opportunistic Assets	0.26	0.27	0.23	0.11	0.34	0.01	0.39	1.00	0.76	0.92	0.34
31 Private Real Estate	0.24	0.25	0.19	0.12	0.18	0.01	0.16	0.76	1.00	0.50	0.23
32 Private Equity	0.24	0.26	0.20	0.10	0.39	0.01	0.46	0.92	0.50	1.00	0.36
33 Private Credit	0.60	0.56	0.37	0.46	0.74	0.01	0.55	0.34	0.23	0.36	1.00

Source: Bloomberg, Datastream, Morgan Stanley Alternative Investment Partners, Morgan Stanley Wealth Management GIC

Above is based on data with longest available history through February 2018. Correlation is a statistical method of measuring the strength of a linear relationship between two variables. The correlation between two variables can assume any value from -1.00 to +1.00, inclusive. Past performance is not indicative of future results. We apply significant statistical adjustments to correct for distortions typically associated with index returns for hedge funds, private equity and private real estate. Correlation assumptions are the same for the secular and strategic horizons.

## Appendix

### Hedge Fund Index Performance and Survivorship Bias

It should be noted that the majority of hedge fund indexes are comprised of hedge fund manager returns. This is in contrast to traditional indexes, which are comprised of individual securities in the various market segments they represent and offer complete transparency as to membership and construction methodology. As such, some believe that hedge fund index returns have certain biases that are not present in traditional indexes. Some of these biases inflate index performance, while others may skew performance negatively. However, many studies indicate that overall hedge fund index performance has been biased to the upside. Some studies suggest performance has been inflated by up to 260 basis points or more annually depending on the types of biases included and the time period studied. Although there are numerous potential biases that could affect hedge fund returns, we identify some of the more common ones throughout this paper.

Self-selection bias results when certain manager returns are not included in the index returns and may result in performance being skewed up or down. Because hedge funds are private placements, hedge fund managers are able to decide which fund returns they want to report and are able to opt out of reporting to the various databases. Certain hedge fund managers may choose only to report returns for funds with strong returns and opt out of reporting returns for weak performers. Other hedge funds that close may decide to stop reporting in order to retain secrecy, which may cause a downward bias in returns.

Survivorship bias results when certain constituents are removed from an index. This often results from the closure of funds due to poor performance, “blow ups,” or other such events. As such, this bias typically results in performance being skewed higher. As noted, hedge fund index performance biases can result in positive or negative skew. However, it would appear that the skew is more often positive. While it is difficult to quantify the effects precisely, investors should be aware that idiosyncratic factors may be giving hedge fund index returns an artificial “lift” or upwards bias.

### Hedged Strategy Definitions

**Equity Long/Short** This strategy consists of a core holding of long equities hedged at all times with varying degrees of short sales of stock and/or index options. Some managers maintain a substantial portion of assets within a hedge structure and commonly employ leverage.

**Event Driven** Investment managers in this strategy maintain positions in companies currently or prospectively involved in corporate transactions of a wide variety including but not limited to mergers, restructurings, financial distress, tender offers, shareholder buybacks, debt exchanges, security issuance or other capital structure adjustments. Security types can range from most senior in the capital structure to most junior or subordinated, and frequently involve additional derivative securities. Event-driven exposure includes a combination of sensitivities to equity markets, credit markets and idiosyncratic, company-specific developments. Investment theses are typically predicated on fundamental characteristics (as opposed to quantitative), with the realization of the thesis predicated on a specific development exogenous to the existing capital structure.

**Global Macro** This is a hedge fund strategy that bases its holdings—such as long and short positions in various equity, fixed income, currency, and futures markets—primarily on overall economic and political views of various countries (macroeconomic principles).

**Managed Futures Funds** These funds primarily trade liquid global futures, options, swaps, and foreign exchange contracts, both listed and over-the-counter. A majority of these funds follow trend-following, price-momentum strategies. Other strategies included in this category are systematic mean reversion, discretionary global macro strategies, commodity index tracking, and other futures strategies. More than 60% of the fund's exposure is invested through derivative securities. These funds obtain exposure primarily through derivatives; the holdings are largely cash instruments.

For index definitions referenced in this report please visit the following: <http://www.morganstanleyfa.com/public/projectfiles/id.pdf>

## Glossary

**BETA** A measure of the volatility, or systematic risk, of a security or a portfolio in comparison to the market as a whole.

**CORRELATION** This is statistical measure of how two securities move in relation to each other. This measure is often converted into what is known as correlation coefficient, which ranges between -1 and +1. Perfect positive correlation (a correlation coefficient of +1) implies that as one security moves, either up or down, the other security will move in lockstep, in the same direction. Alternatively, perfect negative correlation means that if one security moves in either direction the security that is perfectly negatively correlated will move in the opposite direction. If the correlation is 0, the movements of the securities are said to have no correlation; they are completely random. A correlation greater than 0.8 is generally described as strong, whereas a correlation less than 0.5 is generally described as weak.

**DRAWDOWN** This term refers to the largest cumulative percentage decline in net asset value or the percentage decline from the highest value or net asset value (peak) to the lowest value net asset value (trough) after the peak.

**EFFICIENT FRONTIER** The efficient frontier is the set of optimal portfolios that offers the highest expected return for a defined level of risk or the lowest risk for a given level of expected return.

**EQUITY RISK PREMIUM** The excess return that an individual stock or the overall stock market provides over a risk-free rate.

**EXCESS RETURN** This term represents the average quarterly total return of the portfolio relative to its benchmark. A portfolio with a positive excess return has on average outperformed its benchmark on a quarterly basis. This statistic is obtained by subtracting the benchmark return from the portfolio's return.

**MEAN REVERSION** This theory suggests that prices and returns eventually move back toward the mean or average. This mean or average can be the historical average of the price or return or another relevant average such as the growth in the economy or the average return of an industry.

**STANDARD DEVIATION** This statistic quantifies the volatility associated with a portfolio's returns by measuring the variation in returns around the mean return. Unlike beta, which measures volatility relative to the aggregate market, standard deviation measures the absolute volatility of a portfolio's return.

**VOLATILITY** This is a statistical measure of the dispersion of returns for a given security or market index. Volatility can either be measured by using the standard deviation or variance between returns from that same security or market index. Commonly, the higher the volatility, the riskier the security.



The **Global Investment Committee (GIC)** is a committee of seven senior Morgan Stanley & Co. and Morgan Stanley Wealth Management thought leaders who meet regularly to discuss the global economy and markets, set asset allocation recommendations and portfolio weightings, and produce a suite of strategic and tactical market publications

Daniel Hunt, Joe Pickhardt, Aili Chen and Lucy Yan are not members of the Global Investment Committee and any implementation strategies suggested have not been reviewed or approved by the Global Investment Committee.

## Risk Considerations

### Master Limited Partnerships (MLPs)

Individual MLPs are publicly traded partnerships that have unique risks related to their structure. These include, but are not limited to, their reliance on the capital markets to fund growth, adverse ruling on the current tax treatment of distributions (typically mostly tax deferred), and commodity volume risk.

For tax purposes, MLP ETFs are taxed as C corporations and will be obligated to pay federal and state corporate income taxes on their taxable income, unlike traditional ETFs, which are structured as registered investment companies. These ETFs are likely to exhibit tracking error relative to their index as a result of accounting for deferred tax assets or liabilities (see funds' prospectuses).

The potential tax benefits from investing in MLPs depend on their being treated as partnerships for federal income tax purposes and, if the MLP is deemed to be a corporation, then its income would be subject to federal taxation at the entity level, reducing the amount of cash available for distribution to the fund which could result in a reduction of the fund's value.

MLPs carry interest rate risk and may underperform in a rising interest rate environment. MLP funds accrue deferred income taxes for future tax liabilities associated with the portion of MLP distributions considered to be a tax-deferred return of capital and for any net operating gains as well as capital appreciation of its investments; this deferred tax liability is reflected in the daily NAV; and, as a result, the MLP fund's after-tax performance could differ significantly from the underlying assets even if the pre-tax performance is closely tracked.

### Duration

Duration, the most commonly used measure of bond risk, quantifies the effect of changes in interest rates on the price of a bond or bond portfolio. The longer the duration, the more sensitive the bond or portfolio would be to changes in interest rates. Generally, if interest rates rise, bond prices fall and vice versa. Longer-term bonds carry a longer or higher duration than shorter-term bonds; as such, they would be affected by changing interest rates for a greater period of time if interest rates were to increase. Consequently, the price of a long-term bond would drop significantly as compared to the price of a short-term bond.

**International investing** entails greater risk, as well as greater potential rewards compared to U.S. investing. These risks include political and economic uncertainties of foreign countries as well as the risk of currency fluctuations. These risks are magnified in countries with emerging markets, since these countries may have relatively unstable governments and less established markets and economies.

**Alternative investments** often are speculative and include a high degree of risk. Investors could lose all or a substantial amount of their investment. Alternative investments are suitable only for eligible, long-term investors who are willing to forgo liquidity and put capital at risk for an indefinite period of time. They may be highly illiquid and can engage in leverage and other speculative practices that may increase the volatility and risk of loss. Alternative Investments typically have higher fees than traditional investments. Investors should carefully review and consider potential risks before investing. Certain of these risks may include but are not limited to: Loss of all or a substantial portion of the investment due to leveraging, short-selling, or other speculative practices; Lack of liquidity in that there may be no secondary market for a fund; Volatility of returns; Restrictions on transferring interests in a fund; Potential lack of diversification and resulting higher risk due to concentration of trading authority when a single advisor is utilized; Absence of information regarding valuations and pricing; Complex tax structures and delays in tax reporting; Less regulation and higher fees than mutual funds; and Risks associated with the operations, personnel, and processes of the manager. As a diversified global financial services firm, Morgan Stanley Wealth Management engages in a broad spectrum of activities including financial advisory services, investment management activities, sponsoring and managing private investment funds, engaging in broker-dealer transactions and principal securities, commodities and foreign exchange transactions, research publication, and other activities. In the ordinary course of its business, Morgan Stanley Wealth Management therefore engages in activities where Morgan Stanley Wealth Management's interests may conflict with the interests of its clients, including the private investment funds it manages. Morgan Stanley Wealth Management can give no assurance that conflicts of interest will be resolved in favor of its clients or any such fund. All expressions of opinion are subject to change without notice and are not intended to be a forecast of future events or results. Further, opinions regarding Alternative Investments expressed herein may differ from the opinions expressed by Morgan Stanley Wealth Management and/or other businesses/affiliates of Morgan Stanley Wealth Management. This is not a "research report" as defined by FINRA Rule 2241 and was not prepared by the Research Departments of Morgan Stanley Smith Barney LLC or Morgan Stanley & Co. LLC or its affiliates. Certain information contained herein may constitute forward-looking statements. Due to various risks and uncertainties, actual events, results or the performance of a fund may differ materially from those reflected or contemplated in such forward-looking statements. Clients should carefully consider the investment objectives, risks, charges, and expenses of a fund before investing. Interests in alternative investment products are offered pursuant to the terms of the applicable offering memorandum, are distributed by Morgan Stanley Smith Barney LLC and certain of its affiliates, and (1) are not FDIC-insured, (2) are not deposits or other obligations of Morgan Stanley or any of its affiliates, (3) are not guaranteed by Morgan Stanley and its affiliates, and (4) involve investment risks, including possible loss of principal. Morgan Stanley Smith Barney LLC is a registered broker-dealer, not a bank. In Consulting Group's advisory programs, alternative investments are limited to US-registered mutual funds, separate account strategies

and exchange-traded funds (ETFs) that seek to pursue alternative investment strategies or returns utilizing publicly traded securities. Investment products in this category may employ various investment strategies and techniques for both hedging and more speculative purposes such as short-selling, leverage, derivatives and options, which can increase volatility and the risk of investment loss. Alternative investments are not suitable for all investors. As a diversified global financial services firm, Morgan Stanley Wealth Management engages in a broad spectrum of activities including financial advisory services, investment management activities, sponsoring and managing private investment funds, engaging in broker-dealer transactions and principal securities, commodities and foreign exchange transactions, research publication, and other activities. In the ordinary course of its business, Morgan Stanley Wealth Management therefore engages in activities where Morgan Stanley Wealth Management's interests may conflict with the interests of its clients, including the private investment funds it manages. Morgan Stanley Wealth Management can give no assurance that conflicts of interest will be resolved in favor of its clients or any such fund. Alternative investments involve complex tax structures, tax inefficient investing, and delays in distributing important tax information. Individual funds have specific risks related to their investment programs that will vary from fund to fund. Clients should consult their own tax and legal advisors as Morgan Stanley Wealth Management does not provide tax or legal advice.

**Managed futures investments** are speculative, involve a high degree of risk, use significant leverage, have limited liquidity and/or may be generally illiquid, may incur substantial charges, may subject investors to conflicts of interest, and are usually suitable only for the risk capital portion of an investor's portfolio. Before investing in any partnership and in order to make an informed decision, investors should read the applicable prospectus and/or offering documents carefully for additional information, including charges, expenses, and risks. Managed futures investments are not intended to replace equities or fixed income securities but rather may act as a complement to these asset categories in a diversified portfolio.

Risks of **private real estate** include: illiquidity; a long-term investment horizon with a limited or nonexistent secondary market; lack of transparency; volatility (risk of loss); and leverage.

**Investing in commodities** entails significant risks. Commodity prices may be affected by a variety of factors at any time, including but not limited to, (i) changes in supply and demand relationships, (ii) governmental programs and policies, (iii) national and international political and economic events, war and terrorist events, (iv) changes in interest and exchange rates, (v) trading activities in commodities and related contracts, (vi) pestilence, technological change and weather, and (vii) the price volatility of a commodity. In addition, the commodities markets are subject to temporary distortions or other disruptions due to various factors, including lack of liquidity, participation of speculators and government intervention.

**Physical precious metals** are non-regulated products. Precious metals are speculative investments, which may experience short-term and long term price volatility. The value of precious metals investments may fluctuate and may appreciate or decline, depending on market conditions. If sold in a declining market, the price you receive may be less than your original investment. Unlike bonds and stocks, precious metals do not make interest or dividend payments. Therefore, precious metals may not be suitable for investors who require current income. Precious metals are commodities that should be safely stored, which may impose additional costs on the investor. The Securities Investor Protection Corporation ("SIPC") provides certain protection for customers' cash and securities in the event of a brokerage firm's bankruptcy, other financial difficulties, or if customers' assets are missing. SIPC insurance does not apply to precious metals or other commodities.

**Bonds** are subject to interest rate risk. When interest rates rise, bond prices fall; generally the longer a bond's maturity, the more sensitive it is to this risk. Bonds may also be subject to call risk, which is the risk that the issuer will redeem the debt at its option, fully or partially, before the scheduled maturity date. The market value of debt instruments may fluctuate, and proceeds from sales prior to maturity may be more or less than the amount originally invested or the maturity value due to changes in market conditions or changes in the credit quality of the issuer. Bonds are subject to the credit risk of the issuer. This is the risk that the issuer might be unable to make interest and/or principal payments on a timely basis. Bonds are also subject to reinvestment risk, which is the risk that principal and/or interest payments from a given investment may be reinvested at a lower interest rate.

**Bonds rated below investment grade** may have speculative characteristics and present significant risks beyond those of other securities, including greater credit risk and price volatility in the secondary market. Investors should be careful to consider these risks alongside their individual circumstances, objectives and risk tolerance before investing in high-yield bonds. High yield bonds should comprise only a limited portion of a balanced portfolio.

The majority of \$25 and \$1000 par **preferred securities** are "callable" meaning that the issuer may retire the securities at specific prices and dates prior to maturity. Interest/dividend payments on certain preferred issues may be deferred by the issuer for periods of up to 5 to 10 years, depending on the particular issue. The investor would still have income tax liability even though payments would not have been received. Price quoted is per \$25 or \$1,000 share, unless otherwise specified. Current yield is calculated by multiplying the coupon by par value divided by the market price.

The initial interest rate on a **floating-rate security** may be lower than that of a fixed-rate security of the same maturity because investors expect to receive additional income due to future increases in the floating security's underlying reference rate. The reference rate could be an index or an interest rate. However, there can be no assurance that the reference rate will increase. Some floating-rate securities may be subject to call risk.

The market value of **convertible bonds** and the underlying common stock(s) will fluctuate and after purchase may be worth more or less than original cost. If sold prior to maturity, investors may receive more or less than their original purchase price or maturity value, depending on market conditions. Callable bonds may be redeemed by the issuer prior to maturity. Additional call features may exist that could affect yield.

Some \$25 or \$1000 par **preferred securities** are QDI (Qualified Dividend Income) eligible. Information on QDI eligibility is obtained from third party sources. The dividend income on QDI eligible preferreds qualifies for a reduced tax rate. Many traditional 'dividend paying' perpetual preferred securities (traditional preferreds with no maturity date) are QDI eligible. In order to qualify for the preferential tax treatment all qualifying preferred securities must be held by investors for a minimum period – 91 days during a 180 day window period, beginning 90 days before the ex-dividend date.

**Treasury Inflation Protection Securities' (TIPS)** coupon payments and underlying principal are automatically increased to compensate for inflation by tracking the consumer price index (CPI). While the real rate of return is guaranteed, TIPS tend to offer a low return. Because the return of TIPS is linked to inflation, TIPS may significantly underperform versus conventional U.S. Treasuries in times of low inflation.

**Ultrashort-term fixed income** asset class is comprised of fixed income securities with high quality, very short maturities. They are therefore subject to the risks associated with debt securities such as credit and interest rate risk.

**Equity securities** may fluctuate in response to news on companies, industries, market conditions and general economic environment.

Companies paying **dividends** can reduce or cut payouts at any time.

**Investing in smaller companies** involves greater risks not associated with investing in more established companies, such as business risk, significant stock price fluctuations and illiquidity.

**Stocks of medium-sized companies** entail special risks, such as limited product lines, markets, and financial resources, and greater market volatility than securities of larger, more-established companies.

**Asset allocation and diversification** do not assure a profit or protect against loss in declining financial markets.

The **indices** are unmanaged. An investor cannot invest directly in an index. They are shown for illustrative purposes only and do not represent the performance of any specific investment.

The **indices selected by Morgan Stanley Wealth Management** to measure performance are representative of broad asset classes. Morgan Stanley Smith Barney LLC retains the right to change representative indices at any time.

**REITs investing** risks are similar to those associated with direct investments in real estate: property value fluctuations, lack of liquidity, limited diversification and sensitivity to economic factors such as interest rate changes and market recessions.

Because of their narrow focus, **sector investments** tend to be more volatile than investments that diversify across many sectors and companies.

**Investing in foreign emerging markets** entails greater risks than those normally associated with domestic markets, such as political, currency, economic and market risks. These risks are magnified in **frontier markets**.

**Investing in currency** involves additional special risks such as credit, interest rate fluctuations, derivative investment risk, and domestic and foreign inflation rates, which can be volatile and may be less liquid than other securities and more sensitive to the effect of varied economic conditions. In addition, international investing entails greater risk, as well as greater potential rewards compared to U.S. investing. These risks include political and economic uncertainties of foreign countries as well as the risk of currency fluctuations. These risks are magnified in countries with emerging markets, since these countries may have relatively unstable governments and less established markets and economies.

**Rebalancing** does not protect against a loss in declining financial markets. There may be a potential tax implication with a rebalancing strategy. Investors should consult with their tax advisor before implementing such a strategy.

**Value investing** does not guarantee a profit or eliminate risk. Not all companies whose stocks are considered to be value stocks are able to turn their business around or successfully employ corrective strategies which would result in stock prices that do not rise as initially expected.

**Growth investing** does not guarantee a profit or eliminate risk. The stocks of these companies can have relatively high valuations. Because of these high valuations, an investment in a growth stock can be more risky than an investment in a company with more modest growth expectations.

**Yields** are subject to change with economic conditions. Yield is only one factor that should be considered when making an investment decision.

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**SAN MATEO COUNTY COMMUNITY COLLEGE DISTRICT  
RETIREMENT BOARD OF AUTHORITY MEETING**

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PRESENTED TO: DATE: 04/25/2018  
Retirement Board of Authority

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SUBJECT: ITEM #: 2017/2018-023  
Disbursement Report Enclosure: Yes  
Action Item Yes

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Prepared by: Keenan Financial Services  
Requested by: Retirement Board of Authority

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**BACKGROUND:**

The District's OPEB Trust is positioned to make withdrawals for the reimbursement of retiree benefits for eligible participants and for the "reasonable fees" associated with the management and operation of the Trust.

**STATUS:**

The Retirement Board of Authority (RBOA) shall ratify the "reasonable fees" associated with GASB 74/75 compliance and the Management/Operational duties of the District's Investment Trust.

**RECOMMENDATION:**

The Retirement Board of Authority will hear the information and take appropriate action as deemed necessary.

## San Mateo CCD Disbursements

02.01.2018 – 03.15.2018

### DISBURSEMENT TRANSACTIONS

02/14/2018	MONTHLY FEE TO BENEFIT TRUST COMPANY JANUARY 2018	(\$10,560.40)
02/14/2018	MONTHLY FEE TO KEENAN AND ASSOCIATES JANUARY 2018	(\$10,597.90)
02/14/2018	MONTHLY FEE TO MORGAN STANLEY JANUARY 2018	(\$10,497.90)
03/14/2018	MONTHLY FEE TO BENEFIT TRUST COMPANY FEBRUARY 2018	(\$10,284.25)
03/14/2018	MONTHLY FEE TO KEENAN AND ASSOCIATES FEBRUARY 2018	(\$10,321.75)
03/14/2018	MONTHLY FEE TO MORGAN STANLEY FEBRUARY 2018	(\$10,221.75)
	<b>TOTAL FOR DISBURSEMENT</b>	<b>(\$62,483.95)</b>

**SAN MATEO COUNTY COMMUNITY COLLEGE DISTRICT  
RETIREMENT BOARD OF AUTHORITY MEETING**

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PRESENTED TO: DATE: 04/25/2018  
Retirement Board of Authority

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SUBJECT: ITEM #: 2017/2018-024  
Future Transfer of Assets into the Trust Enclosure: Yes  
Action Item No

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Prepared by: Keenan Financial Services  
Requested by: Retirement Board of Authority

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**BACKGROUND:**

The Trust was created for the exclusive purpose of prefunding unfunded retiree OPEB liabilities.

**STATUS:**

A dollar-cost-averaging strategy is currently used for prefunding the District's OPEB Investment Trust requirements. The RBOA membership shall acknowledge recent prefunding transfers to the Trust and review anticipated future schedules for District transfers.

**RECOMMENDATION:**

The Retirement Board of Authority shall hear the information file accordingly.





**San Mateo County Community College District**

3401 CSM Dr. San Mateo, CA 94402  
650-358-6821

*Accounting Office*

TO: Rachel Ridon/Tiffany Htwe/Joe Demee/Janice Romanini/Tim San Juan (County Treasury)  
wire@smcgov.org (County Controller)

FROM: Nicole Wang, Controller

SUBJECT: Request for fund transfer to State Street Bank and Trust Co.  
For San Mateo County Community College District  
Futuris Public Entity Investment Trust

DATE: March 27<sup>th</sup> 2018

This memo is to request the wire transfer from 0ZA01 to State Street Bank and Trust Co. Wire transfer instruction is as follow:

**Amount:** \$3,050,000.00 (Three Million Fifty Thousand Dollars Only)  
**Transfer Date:** April 2<sup>nd</sup> 2018  
**Fund Transfer from:** 0ZA01  
**Fund Transfer to:**  
**Wire to:** State Street Bank and Trust Co.  
**ABA Routing No.:** 011000028  
**BTC FBO GASB**  
**For Credit to A/C#:** 10408185  
**Further Credit to A/C#:** 115150003820 i/n/o San Mateo County Community College District  
Futuris Public Entity Investment Trust

Authorized By:

  
\_\_\_\_\_  
Nicole Wang, Controller

 **Futuris** Confirmation Form  
A Keenan Solution

Check Box 1 **Mail check to:**  
Benefit Trust Company  
Attn: Futuris Accounts Admin  
FBO: San Mateo County Community College District Futuris Public Entity Investment Trust  
5901 College Blvd., Suite 100  
Overland Park, KS 66211-0381

**Make check payable to:** Benefit Trust Company as Trustee for:  
San Mateo County Community College District Futuris Public Entity Investment Trust

**Attach a copy of this form to your check!**

Check Box 2 **Send Electronic Fund Transfers (Fed Wires) to:**  
State Street Bank and Trust Co.  
ABA: 011000028  
BTC FBO GASB  
A/C#: 10408185  
Credit Account Number: 115150003820 i/n/o San Mateo County Community College District Futuris Public Entity Investment Trust

**E-mail this form to:** [srankin@benefittrust.com](mailto:srankin@benefittrust.com); [admin@benefittrust.com](mailto:admin@benefittrust.com); [rashington@keenan.com](mailto:rashington@keenan.com)

---

**Plan Information:**

Plan Name: **San Mateo County Community College District  
Futuris Public Entity Investment Trust**

Today's Date: March 27th 2018

Wire Date: April 2nd 2018

Total Amount of Check/Wire

\$ 3,050,000.00

Submitted By: 

Telephone: (650) 358-6871



**San Mateo County Community College District**

3401 CSM Dr. San Mateo, CA 94402  
650-358-6821

*Accounting Office*

TO: Rachel Ridon/Tiffany Htwe/Joe Demec/Janice Romanini/Tim San Juan (County Treasury)  
wire@smcgov.org (County Controller)

FROM: Nicole Wang, Controller


SUBJECT: Request for fund transfer to State Street Bank and Trust Co.  
For San Mateo County Community College District  
Futuris Public Entity Investment Trust

DATE: February 27, 2018

This memo is to request the wire transfer from 0ZA01 to State Street Bank and Trust Co. Wire transfer instruction is as follow:

**Amount:** \$3,050,000.00 (Three Million Fifty Thousand Dollars Only)  
**Transfer Date:** March 5<sup>th</sup> 2018  
**Fund Transfer from:** 0ZA01  
**Fund Transfer to:**  
**Wire to:** State Street Bank and Trust Co.  
**ABA Routing No.:** 011000028  
**BTC FBO GASB**  
**For Credit to A/C#:** 10408185  
**Further Credit to A/C#:** 115150003820 i/n/o San Mateo County Community College District  
Futuris Public Entity Investment Trust

Authorized By:

  
\_\_\_\_\_  
Nicole Wang, Controller

 **Futuris** Confirmation Form  
A Keenan Solution

Check Box 1 **Mail check to:**  
Benefit Trust Company  
Attn: Futuris Accounts Admin  
**FBO: San Mateo County Community College District Futuris Public Entity Investment Trust**  
5901 College Blvd., Suite 100  
Overland Park, KS 66211-0381

**Make check payable to:** Benefit Trust Company as Trustee for:  
**San Mateo County Community College District Futuris Public Entity Investment Trust**

**Attach a copy of this form to your check!**

Check Box 2 **Send Electronic Fund Transfers (Fed Wires) to:**  
State Street Bank and Trust Co.  
ABA: 011000028  
BTC FBO GASB  
A/C#: 10408185  
Credit Account Number: 115150003820 i/n/o San Mateo County Community College District Futuris Public Entity Investment Trust

**E-mail this form to:** [srankin@benefittrust.com](mailto:srankin@benefittrust.com); [admin@benefittrust.com](mailto:admin@benefittrust.com); [rwashington@keenana.com](mailto:rwashington@keenana.com)

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**Plan Information:**

Plan Name: **San Mateo County Community College District  
Futuris Public Entity Investment Trust**  
Today's Date: February 27, 2018  
Wire Date: March 5, 2018

Total Amount of Check/Wire

\$ 3,050,000.00

Submitted By: 

Telephone: (650) 358-6821



**SAN MATEO COMMUNITY COLLEGE DISTRICT  
RETIREMENT BOARD OF AUTHORITY MEETING**

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PRESENTED TO: DATE: 04/25/2018  
Retirement Board of Authority

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SUBJECT: ITEM #: 2017/2018-025  
Retirement Board of Authority (RBOA) Bylaws Enclosure: Yes  
Action Item: Yes

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Prepared by: Keenan Financial Services  
Requested by: Retirement Board of Authority

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**BACKGROUND:**

The current Trust document provides provisions to operate the Investment Trust. Retirement Board of Authority (RBOA) Bylaws can provide additional direction for issues not discussed in the provisions of the Trust Document.

**STATUS:**

Because of the new GASB 74/75 standards that recently went into effect, the Retirement Board of Authority (RBOA) will review the current RBOA Bylaws and edit the language as they see necessary.

**RECOMMENDATION:**

The Retirement Board of Authority should review the information and take appropriate action as deemed necessary.

**SAN MATEO COUNTY COMMUNITY COLLEGE DISTRICT  
FUTURIS TRUST RETIREMENT BOARD OF AUTHORITY  
BYLAWS**

**PREAMBLE**

The objectives of the San Mateo County Community College (SMCCCD) in establishing a Trust for the pre-funding of its OPEB liabilities is to comply with the requirements of GASB Statements No. 74 & No. 4575 and to create a retirement system that complies with the California Constitution and Government Code provisions related to such systems with a Governing Board (referred to as the “Retirement Board of Authority”) consisting of officials of the SMCCCD.

The Trust is to be managed in accordance with the following principles:

- ❑ Trust assets are managed in accordance with all applicable laws, trust documents, and a written Investment Policy Statement (IPS).
- ❑ Trust assets are diversified to a specific risk/return profile.
- ❑ A written Investment Policy Statement (IPS) contains the detail to define, implement, and monitor the trust’s investment strategy.
- ❑ Appropriate fiduciary standards are applied in the management of trust assets and the supervision of persons hired to assist in the management of the trust.
- ❑ Due diligence is documented.
- ❑ Control procedures are in place to monitor and account for trust investment and administrative expenses.
- ❑ There are safeguards to avoid conflicts of interest, such as the use of funding instruments that are non-proprietary funds of any service provider to the Trust.

**1: A Retirement Board of Authority**

1.1: The SMCCCD governing body has established by resolution a Retirement Board of Authority (the “Board”) to supervise the trust.

1.2: The Board has been established to manage, direct and control the Fiduciary, Trust Settlor and Administrative functions, such as Consultants, Actuaries, Auditors and Accountants, Legal Counsel, Financial Advisors of the Trust.

1.3: The Board will sign such documents as are necessary to adopt and maintain an irrevocable trust which complies with the California Constitution, California Government Code, GASB Statements No. 74 & No. 4575, and Section 115 of the Internal Revenue Code.

1.4: As mandated by the California Government Code, the Board shall perform all its duties with the care, skill, and diligence that a Prudent Person would utilize.

1.5: The Board shall also act solely in the interest of plan participants and beneficiaries with the sole purpose of providing benefits to them and paying only necessary and reasonable expenses for administrating the Trust.

1.6: The Board shall oversee the operation of the Trust as outlined in the Trust agreement. The Board shall delegate investment decision-making to a Trustee with a discretionary

mandate and thereafter monitor the performance of the Discretionary Trustee. For the management of the Trust's assets, an appropriate Registered Investment Advisor (RIA) shall be appointed and monitored by the Discretionary Trustee.

1.7: The Board shall adhere to the terms of the written documents governing the Trust and ensure that they comply with all applicable laws, rules and regulations that may impact the Trust.

1.8: The Board shall facilitate and oversee the preparation and centralized maintenance of the SMCCCD's Comprehensive Compliance Plan. To aid the SMCCCD in meeting its fiduciary requirements, the Substantive Plan, as described in GASB 74 and ~~4575~~, will be set forth as an essential element in the development of a Comprehensive Compliance Plan.

1.9: The Board will have the exclusive authority to establish, execute and interpret the Trust's written Investment Policy Statement (IPS) which profiles the long-term investment objectives of the Trust.

1.10: The Board shall facilitate any efforts and processes necessary to ensure the SMCCCD executes applicable written agreements providing any required consent to compliance with the terms of the Trust.

1.11: The Board will require that compensation paid to the Trust's service providers is identifiable, transparent, and reasonable and adheres to the terms of the written documents governing the Trust.

## 2: Retirement Board of Authority – Member Appointments

2.1: The members of the Board are appointed by resolution of the governing body of the SMCCCD. Board members may be replaced or terminated by the governing body of the SMCCCD at any time as Board members serve at the pleasure of the SMCCCD.

2.2: Board members shall be appointed to the Board by the SMCCCD Board of Trustees. The Board will consist of three appointees of the district based solely on their titles, one recommended by AFT and one recommended by CSEA, both approved by the SMCCCD Board of Trustees. If the Title of an existing Board member changes and that new title is not one of the designated titles included in the resolution of the governing body of the SMCCCD, the Board member will no longer be a Board member unless there is a new resolution from the governing body of the SMCCCD. If the governing body determines alternates are required, positions will be appointed by resolution.

2.3: The number of Board members will consist of such number of individuals that are deemed necessary by the governing body of the SMCCCD.

2.4: The Board will designate one of its members by majority vote to serve as Chairperson and a second member as Vice Chairperson.

2.5 The Chairperson and Vice Chairperson will serve in this capacity for two years at which time the Board will act again to select a Chairperson and Vice Chairperson for a second term. The Chairperson and Vice Chairperson can serve multiple terms.

2.6: The Chairperson will act as the presiding officer for Board meetings.



2.7: Based on the minimum number of signatures required therein and/or specific people required by the Board, authorizations for withdrawals, distributions, benefit payments and reasonable fees are restricted to individuals with specimen signatures listed on the Trust's Signature Authorization Form.

2.8: Board meetings shall be conducted by the Chairperson. When the Chairperson is not present, the Vice Chairperson will conduct the meeting.

2.9: A majority of the Board members must be present or attend by teleconference, per the provisions of the Ralph M. Brown Act, in order to conduct a Board meeting and is considered a quorum. A vote, under the protocols of the Ralph M. Brown Act, of the majority of the Board members, shall be sufficient to transact business.

2.10: Each Board member shall have one vote in accordance with the protocols of the Ralph M. Brown Act. No proxy votes shall be permitted. If a member is attending by teleconference, all votes must be by roll-call.

2.11: In recognition of the importance of the work of the Board, regular attendance at Board meetings is expected from all members.

2.12: No Board member shall have the authority to bind the Board to any contract or endeavor without the approval of the Board.

2.13: No member serving on the Board will receive a salary or compensation from the Board.

2.14: The Board may approve reimbursement for reasonable expenses incurred by Board members. All expenditures of funds shall be subject to Board approval.

2.15: The Board shall designate the SMCCCD, 3401 CSM Drive, San Mateo, CA as the location at which it will receive notices, correspondence, and other communications and shall designate the Chairperson of the Board as the officer for the purpose of receiving service on behalf of the Board.

### 3: Retirement Board of Authority – Meeting Agendas

3.1: All Board meeting agendas shall be prepared and posted in a public location, to comply with the Ralph M. Brown Act

3.2: The Board shall hold their meetings at a minimum of once a year, giving advanced notice to comply with the Ralph M. Brown Act.

3.3: The Board shall engage, at least annually, in analysis of any applicable modifications to the Investment Policy Statement (IPS) through meetings and consulting with the trustee and Registered Investment Advisor (RIA), as applicable.

3.4: Full and complete minutes detailing records of deliberations and decisions from each meeting of the Board shall be maintained In compliance with the Ralph M. Brown Act.

**4: Retirement Board of Authority – Actuarial, Contribution  
& Withdrawal Parameters**

4.1: The Board will ratify the amount of any contributions from the SMCCCD and deliver contributions and allocation instructions to the Trustee. Such contributions and allocation instructions shall be delivered in accordance with the Trust’s written provisions and agreements.

4.2 The Board will establish procedures to review all expenditures and disbursements from the Trust.

4.3: In accordance with GASB Statement No. 4575 schedules, the Board will work with the SMCCCD’s governing body in obtaining the necessary calculations to identify the “Actuarial Present Value of Total Projected Benefits” (APVTPB), the ~~“Unfunded Actuarial Accrued Liability” (UAAL) and the “Annual Required Contribution”(ARC).~~ “Actuarially Determined Contribution” (ADC) as well as all other calculations and information necessary to comply with GASB’s actuarial valuation requirements.

4.4: The Board will provide any necessary plan participant information to the Trustee on a timely basis. The Board shall provide response to all information requested by the Discretionary Trustee in a timely fashion.

**5: Retirement Board of Authority -- Disclosure & Conflict of Interest**

5.1: No Board member shall vote or participate in a determination of any matter in which the Board member shall receive a special compensation or gain.

5.2: Board members have a duty of loyalty precluding them from being influenced by motives other than the accomplishment of the Trust’s objectives.

5.3: Board members, in the performance of their duties, must act pursuant to the documents & instruments establishing and governing the Trust.

**6: Retirement Board of Authority -- Rules of Order/Bylaws**

6.1: Amendment of these Bylaws may be proposed by any member of the Board.

6.2: All amendments to the Bylaws must be approved by a majority vote of the Board members present, before the amendment shall become effective.

6.3: Such amendments shall be binding upon all members of the Board.

6.4: The effective date of any amendment shall be on the first day of the month following adoption, unless otherwise stated.

## **7: Retirement Board of Authority -- Appearance before the Board**

7.1: All persons who wish to make appearances before the Board shall be scheduled in compliance with the provisions of the Ralph M. Brown Act.

7.2: Appearances before the Board may be in person or through a representative.

7.3: Communications with the Board may be in any form that complies with the provisions of the Ralph M. Brown Act.

## **8: Retirement Board of Authority – Fiduciary & Governance Parameters**

8.1: The Trust will be structured so that the Board shall reduce its legal liability for investment risk by appropriately delegating investment decision-making.

8.2: The Board shall delegate investment decision-making to a Trustee with a discretionary mandate and thereafter monitor the performance of the Discretionary Trustee. For the management of the Trust's assets, an appropriate Registered Investment Advisor (RIA) shall be appointed and monitored by the Discretionary Trustee.

8.3: The Board will monitor the performance and acts of the Discretionary Trustee in accordance with the limits and constraints of applicable laws, trust documents and the written Investment Policy Statement (IPS) as well as the Trust's investment goals, objectives, fees and expenses.

8.4: The Board shall monitor the Discretionary Trustee to determine that Trust assets are diversified as directed by the Investment Policy Statement (IPS) and applicable laws.

8.5: The Board through periodic reports will compare investment performance against appropriate indices, peer groups and Investment Policy Statement (IPS) objectives.

8.6: The Board will require that all service agreements and contracts are in writing, and do not contain provisions that conflict with fiduciary standards. Fees paid to each service provider shall be consistent with agreements, contracts and with all applicable laws.

## **9: Discretionary Trustee & Investment Management**

9.1: The agreement appointing the Discretionary Trustee shall require the discretionary trustee to invest Trust assets in compliance with applicable laws, trust documents, and the written Investment Policy Statement (IPS).

9.2: The agreement appointing the Discretionary Trustee shall require the Discretionary Trustee document the specific duties and requirements of the parties involved in the investment process.

9.3: The Board shall require the Discretionary Trustee to acknowledge, in writing, that it is a fiduciary to the Trust and to the SMCCCD.

9.4: The Board shall prohibit the Discretionary Trustee from investing trust assets in its own proprietary investment products or those of its Registered Investment Adviser so as to avoid any potential conflicts of interest.

9.5: The Board shall require the Discretionary Trustee to manage Trust assets with the care, skill and diligence of a Prudent Person under California law.

#### **10: Registered Investment Advisor (RIA):**

10.1: The RIA engaged by the Discretionary Trustee must have the following qualifications and responsibilities:

(a) It shall work with the Discretionary Trustee to establish a long-term, target net rate of return objective for the trust, constructing an investment portfolio which gives due consideration to the SMCCCD's time horizon of investment, as well as its attitudes and capacity for risk.

(b) It shall recommend the appropriate combination of asset classes that optimizes the Trust's return objectives, while minimizing risk consistent with the Trust's constraints.

(c) It shall provide investment recommendations derived from a disciplined approach to investment selection; considering risk-adjusted performance comparable to managers with similar style; a long-term superior performance profile; an analysis of investment expenses with a preference for investments with no-load, no redemption charges, and no transaction fees or revenue-sharing schedules.

(d) It shall have access to appropriate databases and external research, and shall be supported with adequate technology and report production tools.

#### **11: Program Coordinator**

11.1: The Board has appointed a Program Coordinator with responsibility to assist the Board with the processes, procedures and protocols of the Trust's fiduciary decision making.

11.2: The Board shall require the Program Coordinator to facilitate all aspects of the Board's Fiduciary and Administrative mandates and work to assist the Board in ensuring that trust assets are managed in accordance with all applicable laws, trust documents and the written Investment Policy Statement (IPS).

11.3: The Board shall require the Program Coordinator to provide comprehensive assistance in conducting Board meetings and agendas in compliance with the provisions of the Ralph M. Brown Act.

11.4: The Program Coordinator will provide support to the Board in the preparation and centralized maintenance of the SMCCCD's Comprehensive Compliance Plan, including the Substantive Plan.

## 12: Program Definitions:

12.1: ~~“Actuarial Present Value of Total Projected Benefits” (APVTPB) ) is the projected benefit payments discounted to reflect the expected effects of the time value (present) of money and the probabilities of payment, shall mean the total projected costs to finance benefits payable in the future based on members’ service through the valuation date and their future service, discounted to reflect the expected effects of the time value of money. It is the amount that would have to be invested on the valuation date so that the amount invested plus investment earnings will provide sufficient assets to pay the total projected benefits when due.~~

12.2: ~~“Actuarially Determined Contribution” (ADC) is the target or recommended contribution to a defined benefit OPEB plan for the reporting period determined in conformity with the Actuarial Standards of Practice based on the most recent measurement available when the contribution for the reporting period was adopted. “Annual Required Contribution” (ARC) is the actuarially determined level of employer contribution that would be required on a sustained, ongoing basis to systematically fund the normal cost and to amortize the Unfunded Actuarial Accrued Liability (UAAL) attributed to past service over a period not to exceed thirty years. It is the amount needed to pay benefits as they come due plus amortize the UAAL. The ARC has two components: Normal cost and amortization of the UAAL for both active employees and retirees.~~

12.3: “Comprehensive Compliance Plan” shall mean a broad compliance and fiduciary process incorporating the SMCCCD’s substantive plan obligations; the actuarial cost of those obligations; the plan for meeting those costs; the fiduciary strategies and steps in meeting plan requirements.

12.4: “Discretionary Trustee” shall mean a trust structure whereby the Trustee will accept the delegation of investment duties and work as the sole authority in the selection, monitoring and disposition of Trust’s assets.

12.5: “Investment Policy Statement”(IPS) shall mean a written statement that establishes the Futuris SMCCCD Investment Trust’s investment related policies, goals, objectives and criteria for evaluating investment performance that are critical for the successful management of the Trust’s investments.

12.6: “Net OPEB Liability” is the liability of employers and nonemployer contributing entities to plan members for benefits provided through a defined benefit OPEB plan that is administered through a GASB-compliant trust.

12.76: “Quorum” shall mean the majority of the Board members as are required to conduct a Board meeting or to transact business on behalf of the Board.

12.87: “Registered Investment Advisor” (RIA) shall mean the investment entity charged with the responsibility for recommending comprehensive and continuous investment advice for the Futuris SMCCCD Investment Trust.

12.98: “Retirement Board of Authority” is established by the governing body of the SMCCCD and shall mean the entity charged with the discretion, responsibility and authority to oversee the management of the SMCCCD Investment Trust. Specifically, the Board shall determine

the investment policy and strategy for the Trust and is empowered to inquire and resolve any matter it considers appropriate to carry out its responsibilities.

~~12.109: “Substantive Plan” shall mean the terms of the OPEB plans as they are understood by the employer and employees. It is generally comprised of the OPEB plan documents as well as other communications between the employer and the employees as well as the historical pattern of practice with regard to the sharing of benefit-related costs with inactive employees. shall mean the plan through which assets are accumulated and benefits are paid as they come due in accordance with the commitments or understandings between the employer, eligible employees and their beneficiaries.~~

~~12.11: “The Trust” shall mean the SMCCCD’s Investment Trust established for the pre-funding of its OPEB liabilities and maintained in compliance with GASB Statement No. 74 & No 75, the California Constitution and the California Government Code with a governing Board consisting of officials of the SMCCCD.~~

~~12.10: “The Trust” shall mean the SMCCCD’s Investment Trust established for the pre-funding of its OPEB liabilities and maintained in compliance with GASB Statement No. 74 & No 45, the California Constitution and the California Government Code with a governing Board consisting of officials of the SMCCCD.~~

~~12.11: “Unfunded Actuarial Accrued Liability” (UAAL) shall mean the excess of the Actuarial Accrued Liability (AAL) over the Actuarial Value of Assets (AVA). The UAAL can derive from three sources: unfunded past Normal costs, actuarial gains and losses (differences between actuarial assumptions and actual experience), and changes to the level of benefits promised.~~

Updated 04-13-2018

**SAN MATEO COMMUNITY COLLEGE DISTRICT  
RETIREMENT BOARD OF AUTHORITY MEETING**

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PRESENTED TO: DATE: 04/25/2018  
Retirement Board of Authority

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SUBJECT: ITEM #: 2017/2018-026  
Report to the Governing Board of Trustees Update  
Enclosure: Mg  
Action Item No

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Prepared by: Keenan Financial Services  
Requested by: Retirement Board of Authority

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**BACKGROUND:**

The current status of the District's OPEB Investment Trust is periodically presented to the San Mateo Community College District Board of Trustees.

**STATUS:**

An Annual Report presentation regarding the current status of the District's OPEB Investment Trust will be made to the San Mateo Community College District Board of Trustees on **April 25, 2018**.

**RECOMMENDATION:**

The Retirement Board of Authority shall receive the information presented and file accordingly.



April 11, 2018

San Mateo County Community College District  
3401 CSM Drive  
San Mateo, CA. 94402

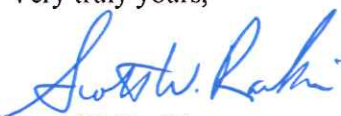
Re: San Mateo County CCD Futuris Public Entity (OPEB) Investment Trust

With a fair market value on March 31st of \$104,997,688.29 your OPEB Trust portfolio's investment performance was down -0.52% for the quarter and up 6.65% on an annualized basis since the November 10, 2009 inception date net of program fees. The portfolio ended the quarter as a diversified mix of domestic and international equity funds, fixed income funds and risk reducing alternative investments. It was designed to be invested over a long time frame. A total of \$75,074,318 has been deposited to the trust, made in installments of various amounts since inception. The performance of your OPEB Trust portfolio for various time frames since inception is listed below.

<u>Performance</u>	<u>Last Quarter</u>	<u>Last 12 months</u>	<u>Annualized Since Inception</u>
San Mateo CCCD OPEB	-0.52%	8.13%	6.65% annualized return
S&P 500	-0.76%	14.00%	13.49% (Domestic Stocks)
MSCI EAFE	-1.70%	14.60%	5.96% (International stocks)
Barclays Aggregate	-1.46%	1.20%	3.10% (Domestic Bonds)
Barclays Global	1.35%	6.98%	2.00% (Global Bonds)

After a strong 2017, global markets hit a speed bump in the first quarter as volatility returned from its year-long hiatus. Though economic data has remained strong, worries about inflation, monetary policy, trade, and global politics brought fear back into the markets, causing the first +10% correction in the S&P 500 since 2015. Despite this setback, Morgan Stanley Chief US Equity Strategist Mike Wilson believes the S&P 500 will hit 3,000 sometime in the summer before falling back to his year-end target of 2,750. With the prior catalyst of tax reform fully priced in, increasing earnings will be the main driver of markets in the absence of further pro-growth support from the president and Congress. Though we remain constructive on equities, we believe investors will have to be more discerning in their stock selection than in prior years as markets become more volatile and the Fed continues raising rates. Morgan Stanley & Co. economists expect US real GDP will be 2.6% in 2018. They forecast global GDP growth to be 3.9% in 2018.

Very truly yours,



Scott W. Rankin  
Senior Vice President

**SAN MATEO COUNTY COMMUNITY COLLEGE DISTRICT  
RETIREMENT BOARD OF AUTHORITY MEETING**

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PRESENTED TO: DATE: 04/25/2018  
Retirement Board of Authority

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SUBJECT: ITEM #: 2017/2018-027  
Retirement Board of Authority Comments Enclosure: No  
Action Item No

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Prepared by: Keenan Financial Services  
Requested by: Retirement Board of Authority

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**BACKGROUND:**

Each member may report about various matters involving the Retirement Board of Authority.

**RECOMMENDATION:**

There will be no Retirement Board of Authority discussion except to ask questions or refer matters to staff, and no action will be taken unless listed on a subsequent agenda.

**SAN MATEO COUNTY COMMUNITY COLLEGE DISTRICT  
RETIREMENT BOARD OF AUTHORITY MEETING**

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PRESENTED TO: DATE: 04/25/2018  
Retirement Board of Authority

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SUBJECT: ITEM #: 2017/2018-028  
Program Coordinator/Consultant Comments Enclosure: No  
Action Item No

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Prepared by: Keenan Financial Services  
Requested by: Retirement Board of Authority

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**BACKGROUND:**

The Program Coordinator may address the Board of Authority on any matter pertaining to the Retirement Board of Authority that is not on the agenda

**RECOMMENDATION:**

There will be no Retirement Board of Authority discussion except to ask questions or refer matters to staff, and no action will be taken unless listed on a subsequent agenda.

**SAN MATEO COUNTY COMMUNITY COLLEGE DISTRICT  
RETIREMENT BOARD OF AUTHORITY MEETING**

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PRESENTED TO: DATE: 04/25/2018  
Retirement Board of Authority

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SUBJECT: ITEM #: 2017/2018-029  
Date, Time and Agenda Items for Next Meeting Enclosure: No  
Action Item No

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Prepared by: Keenan Financial Services  
Requested by: Retirement Board of Authority

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**BACKGROUND:**

Members and visitors may suggest items for consideration at the next Retirement Board of Authority meeting.

**RECOMMENDATION:**

The Board will determine Agenda Items for the next meeting.