# **DECEMBER 19, 2019**

# AGENDA ITEM 4 ACTION ITEM

# SCHOLARSHARE INVESTMENT BOARD

Review of ScholarShare Statement of Investment Policy

#### Recommendation

Meketa Investment Group, Inc. (Meketa) and ScholarShare Investment Board (SIB or Board) staff recommend that the Board adopt Resolution No. 2019-07 approving changes to the ScholarShare Statement of Investment Policy (Investment Policy).

# Background

As part of its annual review, SIB staff and the Board's investment consultant, Meketa reviewed the ScholarShare Statement of Investment Policy (Policy), including, but not limited to, the Plan's purpose and objectives; the responsibilities of the Board, the investment consultant and the program manager; the program policies; and the addendums outlining the Plan's portfolios, underlying funds, and benchmarks. Meketa's review is outlined in their memo (Exhibit A), which recommends changes to reflect the upcoming transition from age-based portfolios to enrollment-based portfolios. The proposed changes are outlined in redline in the revised Investment Policy included as an attachment to Meketa's memo

Pending Board approval, the revised Procedures will take effect on January 27, 2020.

#### **Presenters**

Julio Martinez, Executive Director, ScholarShare Investment Board Eric White, Principal, Meketa Investment Group, Inc.

# **RESOLUTION NO. 2019-07**

# RESOLUTION OF THE SCHOLARSHARE INVESTMENT BOARD RELATING TO THE APPROVAL OF CHANGES TO THE SCHOLARSHARE STATEMENT OF INVESTMENT POLICY

**WHEREAS**, the ScholarShare Investment Board (the "SIB" or "Board") was created under Education Code section 69980 et seq. (the "Golden State ScholarShare Trust Act" or "Act");

**WHEREAS**, Section 69984(a)(2)(B) of the Act provides that the Board shall annually prepare and adopt a written statement of investment policy and shall consider the statement of investment policy and any changes in the investment policy at a public hearing;

**WHEREAS**, the Board adopted the Golden State ScholarShare College Savings Trust Statement of Investment Policy (the "Investment Policy") to define the program's investment objectives and establish policies and procedures to meet investment objectives in a prudent manner; and

**WHEREAS**, the SIB staff and Board's investment consultant (the "Consultant") have reviewed the Investment Policy and are recommending revisions that include updates to reflect the Plan's upcoming transition from age-based portfolios to enrollment-based portfolios;

**NOW, THEREFORE, BE IT RESOLVED,** that the Board hereby approves the changes to the Investment Policy as recommended by SIB staff and the Consultant and as shown in redline in the attachment to the Consultant's memo dated December 12, 2019.

**BE IT FURTHER RESOLVED,** that this Resolution becomes effective on January 27, 2020.

Attest:	
	Chairperson
	·
Date of Adoption:	
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# MEMORANDUM

**To:** ScholarShare Investment Board (SIB)

**From:** Meketa Investment Group (MIG)

Date: December 12, 2019

**Re:** Recommended Changes to the ScholarShare Statement of

**Investment Policy** 

#### Recommendation

Meketa has reviewed the Investment Policy Statement for the ScholarShare College Savings Plan. Based on our review we recommend changing the language to reflect the replacement of Age Based Portfolios with Enrollment Date Portfolios and we are not recommending any other changes at this time. As such, *Meketa recommends the Statement of Investment Policy be updated to reflect the Program's switch to Enrollment Date Portfolios as shown in redline in the Exhibit A to this memo.* 

#### Discussion

Meketa has reviewed the Investment Policy Statement for the ScholarShare College Savings Plan as part of SIB's annual review process.

Meketa has reviewed each section of the Policy in terms of applicability and consistency with the goals and constraints of the Plan.

Meketa's review evaluates if the Policy continues to address certain fundamentals:

- Purpose: The overall purpose of the Plan and the identity of its participants
- Objectives: The Plan's investment goals over short- and long-term periods.
- Governance: Who is responsible for each function regarding the investment program and how they interrelate.
- Risk: The identification of acceptable and unacceptable types and degrees of risk, in terms of operations, asset classes, and individual instruments.
- Investment Classes: The Policy should articulate which investment classes are suitable for investment as well as target, minimum, and maximum allocation ranges.

Based on our review we found the Policy to be consistent and sound.

# **Exhibit A**



# Golden State ScholarShare College Savings Trust Statement of Investment Policy

September 29, 2016 Effective as of January 27, 2020 (Adopted by the ScholarShare Investment Board on December 19, 2019)

#### **PROGRAM PURPOSE**

In accordance with Section 529 of the Internal Revenue Code of 1986, as amended, the Golden State ScholarShare College Savings Trust (the "Trust") offers a qualified tuition program (the "Program") to California families. The purpose of the Program is to help California families save for higher education on a tax advantaged basis.

#### PURPOSE OF THIS STATEMENT

This Investment Policy Statement ("Policy") defines the Program's investment objectives and establishes policies and procedures so that investment objectives can be met in a prudent manner. This Policy is intended to:

- Articulate objectives of the Program and its investment portfolio
- Identify roles of specific entities having a fiduciary responsibility to the Program
- Define policies regarding permitted investments, benchmarks, and asset allocation strategies
- Describe current investment options available to holders of individual savings accounts ("Accounts") established as part of the Program
- Recognize the Governor's Scholarship Programs (GSP) as a separate Program of the Trust

## **PROGRAM OBJECTIVES**

The primary goal of the Program is to provide eligible participants with investment options ("Investment Portfolios") for investment of Accounts in the Trust that

- Meet the various educational saving needs of Account Owners and Program Beneficiaries,
- Encompass a range of risk and return opportunities,
- Allow for a rate of return commensurate with an appropriate level of risk to meet the investment goals of that Portfolio, and
- Are appropriate for college savings.

In order to achieve this objective, Program Investment Portfolios are to be comprised of Underlying Investments (mutual funds ("Funds"), individual securities, insurance agreements, etc.) as outlined in this document ("Underlying Investments" or "Funds").

# **GOVERNOR'S SCHOLARSHIP PROGRAMS**

A separate program, the GSP, also invests in assets of the Trust and, in accordance with California State statutes must be invested in a guaranteed funding agreement.

## **RESPONSIBILITIES**

# ScholarShare Investment Board

The ScholarShare Investment Board (the "SIB" or the "Board") will conduct their responsibilities as a trustee and fiduciary of the Program. The SIB may delegate functions that a prudent entity acting in a like capacity and familiar with those matters could properly delegate under the circumstances. Under this Policy, the SIB will generally be responsible for the following:

- Developing a sound and consistent Policy
- Reviewing and refining the Policy as needed
- Employing qualified investment managers, custodians, and investment advisors
- Reviewing and approving investment proposals by Program manager(s), including an annual review of asset allocation strategies and age bandenrollment date portfolio changes
- Approving procedures for monitoring investment performance criteria and other investment related contractual obligations of the Program Manager and other vendors
- Monitoring adherence to policies, procedures, and criteria as set forth in this document and in Program Fund Monitoring Procedures and Criteria.

# Program Manager(s)

The Board has determined that it is necessary and reasonable to retain a professional investment manager to invest the assets of the Program (the "Program Manager"). Under this Policy, the Program Manager(s) and its (their) affiliates and subcontractors will generally be responsible for the following:

- Overseeing Investment Portfolios and their Underlying Investments such that performance is consistent with performance criteria as shown in the Investment Performance Criteria Schedules of the Monitoring Procedures and Criteria
- Reviewing, analyzing, and recommending asset allocation guidelines and any changes in age bandsenrollment date portfolios annually submitting a proposal for SIB review and approval
- Implementing SIB investment policies, including asset allocation
- Investing, monitoring, and rebalancing the asset allocation of Investment Portfolios to ensure adherence to target allocations on an as needed basis
- Providing monthly and quarterly reports as contractually obligated or directed by Law, the Board, or the Executive Director

# Investment Consultant(s)

The SIB has determined that it is necessary and reasonable to retain a professional investment consultant to advise the Board with regard to the investments of the Trust (the "Investment Consultant"). Under this Policy, the Investment Consultant(s) will generally be responsible for the following:

- Providing general and/or specific investment advice to the SIB and staff
- Making recommendations on investment policies, objectives, and strategies, including asset allocation
- Monitoring of Program Managers and their investment performance

#### **PROGRAM POLICIES**

The SIB will pursue the following policies to allow the Program to meet Program Objectives.

# Permitted Investments

With the exception of GSP, there are no statutory restrictions on the types of investments that can be made by the Trust. The money in the Trust is not California state money and, therefore, not subject to the statutory and constitutional restrictions that apply to state funds. Thus, the universe of possible investment options for the Trust includes: equities (both domestic and foreign); real estate; corporate and government debt instruments (of any maturity); commodities; FDIC-insured bank products; currency and any other investment vehicle utilized in the marketplace. However, all of the assets in the Program (except for those held in one of the two Funding Agreements) will be allocated to Investment Portfolios which will initially be invested in one or more Funds. Since all mutual fund assets are subject to the provisions of the Investment Company Act of 1940 (the "1940 Act"), the Program's assets (excluding Funding Agreement assets) must be managed in a manner consistent with the 1940 Act. The SIB has further limited investments in the Underlying Investments of the Program to the following broad asset categories (collectively known as "Permitted Investments"):

- Domestic equities and international equities
- Medium and long-term debt obligations of domestic corporations
- U.S. government and government sponsored entity debt obligations
- Real estate commingled funds that invest in publicly traded real estate securities
- Money market instruments, cash, and money market mutual funds that are registered in the U.S. and denominated in U.S. dollars
- Investments in mutual funds, but limited to existing, rated mutual funds, which are registered in the United States and denominated in U.S. dollars
- Insurance agreements
- FDIC-insured bank products

When evaluating current and potential Funds and proxy voting proposals, the SIB cares greatly about geopolitical and social issues as they relate to investment options selected for plan participants. The following is a partial, though not exhaustive list of such issues:

- Respect for Human Rights
- Respect for Civil Liberties
- Respect for Political Rights
- Discrimination Based on Race, Sex, Disability, Language or Social Status
- Worker Rights
- Environmental
- War, Conflicts, and Acts of Terrorism

While funds will not be selected, rejected, or divested from based solely on the basis of the aforementioned factors, the SIB will give serious consideration to such issues when reviewing and approving investments for the plan.

# **Benchmarks**

The SIB shall evaluate investment performance relative to an assigned benchmark. The Program Manager shall at all times seek to provide performance consistent with performance criteria as shown in the Investment Performance Criteria Schedules of the Monitoring Procedures and Criteria. When evaluating investment performance, a benchmark will be used to provide relative results with the following stipulations:

- Evaluations shall be against an industry standard benchmark
- Program Investment Portfolios are to be displayed against an appropriate benchmark or policy benchmark as outlined in the Program Fund Monitoring Procedures and Criteria
- All Underlying Investments and Investment Portfolios shall be considered against their respective benchmarks over an identical time period

# Asset Allocation

The SIB will pursue asset allocation strategies to allow the Program to meet Program objectives. The Program Manager is responsible for establishing asset allocation guidelines, which SIB must approve, and maintaining these allocations within approved levels. When implementing new asset allocation guidelines or when rebalancing Investment Portfolios, the Program Manager will have a commercially reasonable period of time to complete the task.

Normally, the Program Manager will not exceed three percent (3%) above or below the base percentages of the Underlying Investment's assets included in the asset allocation guidelines of each Portfolio (see Addendum). In the event of unusual or cataclysmic market movements that result in a violation of the three percent target range, a temporary target range of five (5%) will be in effect. The Program Manager will make substantial and prudent efforts to reallocate assets within the normal 3% target range in a commercially reasonable amount of time. The Program Manager will inform the SIB within a period of one (1) business day in the event that there is a cataclysmic event and it is moving to a 5% target range or if there is a 3% or 5% range violation. The Chair or the Chair's designee and Program Manager will monitor the event and report any violations of this guideline to the SIB. If necessary, the Chair or the Chair's designee may issue a written suspension of the guidelines. In this case, the Chair or the Chair's designee will inform the Program Manager and call a public meeting of the entire SIB to confirm whether the suspension is appropriate or rejected. If rejected, the SIB will issue different instructions to the Program Manager to be immediately implemented.

#### Review of Asset Allocation

The SIB shall monitor the asset allocation of the Program's Investment Portfolios relative to approved allocations. Within 30 days following the close of each quarter, the Program Manager will provide to the SIB an exception report showing the Program Manager's non-compliance with target allocations, if any, as designated in the Addendum to this document. In addition, the Program Manager will meet with the Board on a periodic basis to review actual asset allocations of Investment Portfolios.

#### **ADDENDUM 1**

While the investment parameters for all of the Investment Portfolios offered in the Program are approved by the SIB, Account Owners bear the risk of investment results derived from the selected Investment Portfolio specifically and the Program generally. The appropriate Investment Portfolio (or Portfolios) for each Account Owner is (are) a function of multiple factors, including age (of Beneficiary), income, length of time before money is used, and tolerance for investment risk. Investment Portfolios for the Plan are presented below by investment management style (active then passive). A list of Funds that may be used in each Portfolio and their respective benchmarks and asset classes may be found in Addendum 2.

# **ACTIVE PORTFOLIOS**

Active portfolios are comprised of underlying investments, which are managed using active decision-making processes. These active decisions are intended to provide long-term performance beyond that of a benchmark or index. Actively-managed mutual funds have more relative risk due to different exposures relative to the benchmark.

# Active Enrollment Year Portfolios

The Active Enrollment Year Portfolios seek to match the investment objective and level of risk to the investment horizon by taking into account the number of years before the Beneficiary turns 18 and is expected to enter college. Allocations to the Active Enrollment Year Portfolios will change over time depending on the number of years left until the enrollment date. The Active Enrollment Year Portfolios have evolving investment objectives and investment strategies. The Active Enrollment Year Portfolio for Beneficiaries expected to enter college later in the future will seek a favorable long-term return by investing in Underlying Funds that invest primarily in equity securities, which have a higher level of risk, but greater potential for returns than more conservative investments. As the expected time until starting college decreases, the Active Enrollment Year Portfolio allocates less to Underlying Funds that invest in equity securities and allocate more heavily to Underlying Funds that invest in fixed-income securities and a Funding Agreement to preserve capital.

The glidepath for each Active Enrollment Year Portfolio is predetermined and based on the current glidepath, which minimizes disruption in the participant's investment experience. Participants stay in the same Active Enrollment Year Portfolio as asset allocations shift quarterly. At the end of the glidepath, Active Enrollment Year Portfolios will enter the Enrollment state, which is the final destination portfolio with a static investment allocation for use during expected portfolio distributions.

The Active Enrollment Year Portfolios invest primarily in Underlying Funds that are actively-managed. An actively-managed fund is different from an index fund in that an actively-managed fund is not managed to track its benchmark index, but rather, managed pursuant to the investment style and strategy of its investment adviser. This means that the performance of an actively-managed fund can vary greatly from that of its benchmark index – in either a positive or negative direction. Because of the active management style, actively-managed funds tend to have higher expenses than index funds. See table below for mutual fund allocations by asset class.

# ACTIVELY MANAGED MUTUAL FUND ASSET ALLOCATION PERCENTAGES – BY ASSET CLASS

(Target Asset Allocation to be Implemented on January 27, 2020\*)

Active Enrollment Year Portfolio	<u>Domestic</u> <u>Equity Funds</u>	International Equity Funds	<u>Fixed</u> <u>Income</u>	Real Estate Fund	Short Term/ Cash Equivalent
2036/2037	<u>50.40%</u>	<u>24.00%</u>	<u>20.00%</u>	<u>5.60%</u>	<u>0.00%</u>
2034/2035	<u>50.40%</u>	<u>24.00%</u>	<u>20.00%</u>	<u>5.60%</u>	0.00%
2032/2033	<u>48.00%</u>	<u>22.70%</u>	<u>24.00%</u>	<u>5.30%</u>	0.00%
2030/2031	<u>45.30%</u>	<u>21.60%</u>	<u>28.00%</u>	<u>5.10%</u>	<u>0.00%</u>
2028/2029	<u>42.90%</u>	<u>20.30%</u>	<u>32.00%</u>	<u>4.80%</u>	0.00%
2026/2027	<u>37.80%</u>	<u>18.00%</u>	<u>40.00%</u>	<u>4.20%</u>	0.00%
2024/2025	<u>30.20%</u>	<u>14.40%</u>	<u>52.00%</u>	<u>3.40%</u>	0.00%
2022/2023	<u>22.70%</u>	<u>10.80%</u>	<u>54.00%</u>	<u>2.50%</u>	<u>10.00%</u>
2020/2021	<u>15.70%</u>	<u>7.50%</u>	<u>40.00%</u>	<u>1.80%</u>	<u>35.00%</u>
Enrollment Year	<u>9.40%</u>	4.50%	<u>35.00%</u>	<u>1.10%</u>	<u>50.00%</u>

<sup>\*</sup> Target asset allocation will change over time.

# Active Age-Based Portfolio

The Active Age-Based Portfolio seeks to match the investment objective and level of risk to the investment horizon by taking into account the Beneficiary's current age and the number of years before the Beneficiary turns 18 and is expected to enter college. Depending on the Beneficiary's age, allocations to the Active Age-Based Portfolio will be placed in one of nine Age Bands, each of which has a different investment objective and investment strategy. The Age Bands for younger Beneficiaries seek a favorable long-term return by investing in Underlying Funds that invest primarily in equity securities, which have a higher level of risk, but greater potential for returns than more conservative investments. As a Beneficiary nears college age, the Age Bands allocate less to Underlying Funds that invest in equity securities and allocate more heavily to Underlying Funds that invest in fixed-income securities and a Funding Agreement to preserve capital.

As the Beneficiary ages, assets in the Account that are attributable to the Active Age-Based Portfolio are moved from one Age Band to the next on the first "Rolling Date" following the Beneficiary's fifth, ninth, eleventh, thirteenth, fifteenth, sixteenth, seventeenth, and eighteenth birthdays. The Rolling Dates are March 20, June 20, September 20 and December 20 (or the first business day thereafter).

The Active Age-Based Portfolio invests primarily in Underlying Funds that are actively-managed. An actively-managed fund is different from an index fund in that an actively-managed fund is not managed to track its benchmark index, but rather, managed pursuant to the investment style and strategy of its investment adviser. This means that the performance of an actively-managed fund can vary greatly from that of its benchmark index — in either a positive or negative direction. Because of the active management style, actively-managed funds tend to have higher expenses than index funds. See table below for mutual fund allocations by asset class.

# ACTIVELY MANAGED MUTUAL FUND ASSET ALLOCATION PERCENTAGES — BY ASSET CLASS

(Target Asset Allocation as Adopted on November 7, 2011\*)

<del>Portfolio</del>	<del>Domestic</del> <del>Equity Funds</del>	International Equity Funds	<del>Fixed</del> Income	Real Estate Fund	Short Term/ Cash Equivalent
Ages 0-4	<del>50.40%</del>	<del>24.00%</del>	<del>20.00%</del>	<del>5.60%</del>	0.00%
Ages 5-8	<del>44.10%</del>	<del>21.00%</del>	<del>30.00%</del>	4.90%	0.00%
Ages 9-10	<del>37.80%</del>	<del>18.00%</del>	<del>40.00%</del>	4.20%	0.00%
Ages 11-12	<del>31.50%</del>	<del>15.00%</del>	<del>50.00%</del>	<del>3.50%</del>	0.00%
Ages 13-14	<del>25.20%</del>	<del>12.00%</del>	<del>60.00%</del>	<del>2.80%</del>	0.00%
Age 15	<del>18.90%</del>	9.00%	<del>60.00%</del>	<del>2.10%</del>	<del>10.00%</del>
Age 16	<del>15.75%</del>	<del>7.50%</del>	<del>55.00%</del>	<del>1.75%</del>	<del>20.00%</del>
Age 17	<del>12.60%</del>	<del>6.00%</del>	<del>45.00%</del>	<del>1.40%</del>	<del>35.00%</del>
Ages 18+	<del>9.45%</del>	<del>4.50%</del>	<del>35.00%</del>	<del>1.05%</del>	<del>50.00%</del>

<sup>\*</sup> Target asset allocation will change over time.

# Active Diversified Equity Portfolio

This Investment Portfolio seeks to provide a favorable long-term total return by investing primarily in actively-managed equity Underlying Funds. Because of the high exposure to domestic and foreign equities, and the corresponding high degree of risk, this Investment Portfolio may be appropriate for investors if they already have substantial college savings from less volatile investments (e.g., fixed-income investments), if they have a long investment horizon and they can tolerate a higher level of risk, or for use in conjunction with other Investment Portfolios in the Plan. See table below for mutual fund allocations by asset class.

# MUTUAL FUND ASSET ALLOCATION PERCENTAGES - BY ASSET CLASS

Domestic	International	Real Estate
Equity Funds	Equity Funds	Fund
63.00%	30.00%	

# Active Growth Portfolio

This Investment Portfolio seeks to provide a favorable long-term total return, mainly from capital appreciation, by investing primarily in a combination of actively-managed equity and fixed-income Underlying Funds. Because of the high exposure to equities, and the corresponding high degree of risk, this Investment Portfolio may be appropriate for investors if they already have substantial college savings from less volatile investments (e.g., fixed-income investments), if they have a long investment horizon and they can tolerate a higher level of risk, or for use in conjunction with other Investment Portfolios in the Plan. See table below for mutual fund allocations by asset class.

# MUTUAL FUND ASSET ALLOCATION PERCENTAGES – BY ASSET CLASS

Domestic	International	Fixed	Real Estate
Equity Funds	Equity Funds	Income	Fund
44.10%	21.00%	30.00%	4.90%

# Active Moderate Growth Portfolio

This Investment Portfolio seeks moderate growth by investing primarily in a combination of actively-managed equity and fixed-income Underlying Funds The Portfolio seeks a balanced asset allocation and invests a larger portion of its assets in Underlying Funds that invest primarily in fixed-income securities than does the Active Growth Portfolio. Underlying Funds that invest primarily in fixed-income securities have a lower level of risk, but a lower potential for returns than Underlying Funds that invest primarily in equity securities. This Investment Portfolio may be appropriate for investors if they have a medium to short investment horizon and can tolerate a moderate level of risk. See table below for mutual fund allocations by asset class.

#### MUTUAL FUND ASSET ALLOCATION PERCENTAGES - BY ASSET CLASS

Domestic	International	Fixed	Real Estate
Equity Funds	Equity Funds	Income	Fund
25.20%	12.00%	60.00%	2.80%

# Active Conservative Portfolio

This Investment Portfolio seeks to provide preservation of capital along with a moderate rate of return. Approximately half of the Portfolio invests in actively-managed Underlying Funds that invest primarily in fixed-income securities, which have a lower level of risk and corresponding lower potential for returns than more aggressive investments. The rest of the Portfolio is invested in a Funding Agreement. This Investment Portfolio may be appropriate for investors if they have a medium to short investment horizon and can tolerate a conservative to moderate level of risk. See table below for fund allocations by asset class.

#### MUTUAL FUND ASSET ALLOCATION PERCENTAGES - BY ASSET CLASS

Fixed Income	Short Term/ Cash Equivalent
50.00%	50.00%

#### Active International Equity Portfolio

This Investment Portfolio seeks to provide a favorable long-term total return by investing in actively-managed international equity Underlying Funds. Because of the high exposure to foreign equity investments, and the corresponding high degree of risk, this Investment Portfolio may be appropriate for investors if they already have substantial college savings from less volatile investments (e.g., fixed-income investments) or they have a long investment horizon and they can tolerate a higher level of risk, or for use in conjunction with other Investment Portfolios offered by the Plan.

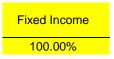
## MUTUAL FUND ASSET ALLOCATION PERCENTAGES - BY ASSET CLASS



# Active Diversified Fixed Income Portfolio

This Investment Portfolio seeks to provide preservation of capital along with a moderate rate of return by investing primarily in actively-managed Underlying Funds that invest in a diversified mix of fixed-income investments. This Investment Portfolio may be appropriate for investors if they have a medium-term investment horizon and can tolerate a moderate level of risk.

MUTUAL FUND ASSET ALLOCATION PERCENTAGES - BY ASSET CLASS



# Social Choice Portfolio

This Investment Portfolio seeks to provide a favorable long-term total return. The Social Choice Portfolio invests 100% of its assets in the TIAA-CREF Social Choice Equity Fund, which invests primarily in equity securities of companies that meet certain social criteria, such as product safety, corporate citizenship, human rights and environmental performance. Because of the high exposure to domestic and foreign equity investments, and the corresponding high degree of risk, this Investment Portfolio may be appropriate for investors if they already have substantial college savings from less volatile investments (e.g., fixed-income investments) or you have a long investment horizon and they can tolerate a higher level of risk, or for use in conjunction with other Investment Portfolios offered by the Plan.

# **PASSIVE PORTFOLIOS**

Passive portfolios are comprised of underlying mutual funds, which are managed using passive decision-making processes that are generally less expensive than active management. Decisions are intended to provide long-term performance similar to that of a benchmark or index. Passively-managed mutual funds often have low relative risk due to highly similar exposures relative to the benchmark. On an absolute basis, however, passive (or index) mutual funds can have more or less risk than actively managed mutual funds.

# Passive Enrollment Year Portfolios

The Passive Enrollment Year Portfolios seek to match the investment objective and level of risk to the investment horizon by taking into account the number of years before the Beneficiary turns 18 and is expected to enter college. Allocations to the Passive Enrollment Year Portfolios will change over time depending on the number of years left until the enrollment date. The Passive Enrollment Year Portfolios have evolving investment objectives and investment strategies. The Passive Enrollment Year Portfolio for Beneficiaries expected to enter college later in the future will seek a favorable long-term return by investing in Underlying Funds that invest primarily in equity securities, which have a higher level of risk, but greater potential for returns than more conservative investments. As the expected time until starting college decreases, the Passive Enrollment Year Portfolio allocates less to Underlying Funds that invest in equity securities and allocates more heavily to Underlying Funds that invest in fixed-income securities and a Funding Agreement to preserve capital.

The glidepath for each Passive Enrollment Year Portfolio is predetermined and based on the current glidepath, which minimizes disruption in the participant's investment experience. Participants stay in the same Passive Enrollment Year Portfolio as asset allocations shift quarterly. At the end of the glidepath, Passive Enrollment Year Portfolios will enter the Enrollment state, which is the final destination portfolio with a static investment allocation for use during expected portfolio distributions.

The Passive Enrollment Year Portfolios invest primarily in Underlying Funds that are index funds. An index fund is managed to track a specific securities index that the fund uses as a benchmark. The Passive Enrollment Year Portfolios also invests in certain other Underlying Funds (the TIAA-CREF Inflation-Linked Bond Fund and the TIAA-CREF High Yield Fund) and a Funding Agreement. Thus, although a majority of the Underlying Funds in which these Portfolios invest are passively-managed, they do not invest exclusively in passively-managed Underlying Funds (see table below).

# PASSIVELY MANAGED MUTUAL FUND ASSET ALLOCATION PERCENTAGES – BY ASSET CLASS

(Target Asset Allocation to be Implemented on January 27, 2020\*)

Passive Enrollment Year Portfolio	Domestic Equity Fund	International Equity Funds	<u>Fixed</u> Income	Real Estate Fund	Short Term/ Cash Equivalent
2036/2037	<u>50.40%</u>	<u>24.00%</u>	<u>20.00%</u>	<u>5.60%</u>	0.00%
<u>2034/2035</u>	<u>50.40%</u>	<u>24.00%</u>	<u>20.00%</u>	<u>5.60%</u>	<u>0.00%</u>
<u>2032/2033</u>	<u>47.90%</u>	<u>22.80%</u>	<u>24.00%</u>	<u>5.30%</u>	0.00%
<u>2030/2031</u>	<u>45.40%</u>	<u>21.60%</u>	<u>28.00%</u>	<u>5.00%</u>	<u>0.00%</u>
<u>2028/2029</u>	<u>42.80%</u>	<u>20.40%</u>	<u>32.00%</u>	<u>4.80%</u>	<u>0.00%</u>
2026/2027	<u>37.80%</u>	<u>18.00%</u>	<u>40.00%</u>	<u>4.20%</u>	<u>0.00%</u>
2024/2025	30.20%	<u>14.40%</u>	<u>52.00%</u>	<u>3.40%</u>	0.00%
<u>2022/2023</u>	<u>22.70%</u>	<u>10.80%</u>	<u>54.00%</u>	<u>2.50%</u>	<u>10.00%</u>
<u>2020/2021</u>	<u>15.70%</u>	<u>7.50%</u>	<u>40.00%</u>	<u>1.80%</u>	<u>35.00%</u>
Enrollment Year	<u>9.40%</u>	<u>4.50%</u>	<u>35.00%</u>	<u>1.10%</u>	<u>50.00%</u>

<sup>\*</sup> Target asset allocation will change over time.

# Passive Age-Based Portfolio

The Passive Age-Based Portfolio seeks to match the investment objective and level of risk to the investment horizon by taking into account the Beneficiary's current age and the number of years before the Beneficiary turns 18 and is expected to enter college. Depending on the Beneficiary's age, allocations to the Passive Age-Based Portfolio will be placed in one of nine Age Bands, each of which has a different investment objective and investment strategy. The Age Bands for younger Beneficiaries seek a favorable long-term return by investing in Underlying Funds that invest primarily in equity securities, which have a higher level of risk, but greater potential for returns than more conservative investments. As a Beneficiary nears college age, the Age Bands allocate less to Underlying Funds that invest in equity securities and allocate more heavily to Underlying Funds that invest in fixed-income securities and a Funding Agreement to preserve capital.

As the Beneficiary ages, assets in the Account that are attributable to the Passive Age-Based Portfolio are moved from one Age Band to the next on the first "Rolling Date" following the Beneficiary's fifth, ninth, eleventh, thirteenth, fifteenth, sixteenth, seventeenth, and eighteenth birthdays. The Rolling Dates are March 20, June 20, September 20 and December 20 (or the first business day thereafter).

The Passive Age-Based Portfolio invests primarily in Underlying Funds that are index funds. An index fund is managed to track a specific securities index that the fund uses as a benchmark. The Passive Age-Based Portfolio also invests in certain other Underlying Funds (the TIAA-CREF Inflation-Linked Bond Fund and the TIAA-CREF High Yield Fund) and a Funding Agreement. Thus, although a majority of the Underlying Funds in which this Portfolio invests are passively-managed, it does not invest exclusively in passively-managed Underlying Funds (see table below).

# PASSIVELY MANAGED MUTUAL FUND ASSET ALLOCATION PERCENTAGES – BY ASSET CLASS

(Target Asset Allocation as Adopted on November 7, 2011\*)

Portfolio	Domestic Equity Fund	International Equity Funds	Fixed Income	Real Estate Fund	Short Term/ Cash Equivalent
Ages 0-4	<del>50.40%</del>	<del>24.00%</del>	<del>20.00%</del>	<del>5.60%</del>	0.00%
Ages 5-8	44.10%	<del>21.00%</del>	<del>30.00%</del>	4.90%	<del>0.00%</del>
Ages 9-10	<del>37.80%</del>	<del>18.00%</del>	<del>40.00%</del>	<del>4.20%</del>	<del>0.00%</del>
Ages 11-12	<del>31.50%</del>	<del>15.00%</del>	<del>50.00%</del>	<del>3.50%</del>	<del>0.00%</del>
Ages 13-14	<del>25.20%</del>	<del>12.00%</del>	<del>60.00%</del>	<del>2.80%</del>	<del>0.00%</del>
Age 15	<del>18.90%</del>	9.00%	<del>60.00%</del>	<del>2.10%</del>	<del>10.00%</del>
Age 16	<del>15.75%</del>	<del>7.50%</del>	<del>55.00%</del>	<del>1.75%</del>	<del>20.00%</del>
Age 17	<del>12.60%</del>	<del>6.00%</del>	<del>45.00%</del>	<del>1.40%</del>	<del>35.00%</del>
Ages 18+	<del>9.45%</del>	4 <del>.50%</del>	<del>35.00%</del>	<del>1.05%</del>	<del>50.00%</del>

<sup>\*</sup> Target asset allocation will change over time.

# Passive Diversified Equity Portfolio

This Investment Portfolio seeks to provide a favorable long-term total return, mainly from capital appreciation, by investing in Underlying Funds that are primarily equity index funds. Because of the high exposure to domestic and foreign equities, and the corresponding high degree of risk, this Investment Portfolio may be appropriate for investors if they already have substantial college savings from less volatile investments (e.g., fixed-income investments), if they have a long investment horizon and you can tolerate a higher level of risk, or for use in conjunction with other Investment Portfolios in the Plan (see table below).

# MUTUAL FUND ASSET ALLOCATION PERCENTAGES - BY ASSET CLASS

Domestic	International	Real Estate
Equity Fund	Equity Funds	Fund
63.00%	30.00%	7.00%

## Passive Growth Portfolio

This Investment Portfolio seeks to provide a favorable long-term total return, mainly from capital appreciation, by investing in Underlying Funds that are primarily equity index funds. The Portfolio seeks to invest a relatively small percentage of assets to Underlying Funds that invest primarily in fixed income securities. Because of the high exposure to domestic and foreign equities, and the corresponding high degree of risk, this Investment Portfolio may be appropriate for investors if they already have substantial college savings from less volatile investments (e.g., fixed-income investments), if they have a long investment horizon and they can tolerate a higher level of risk, or for use in conjunction with other Investment Portfolios in the Plan (see table below).

#### MUTUAL FUND ASSET ALLOCATION PERCENTAGES - BY ASSET CLASS

Domestic	International	Fixed	Real Estate
Equity Fund	Equity Funds	Income	Fund
44.10%	21.00%	30.00%	4.90%

### Passive Moderate Growth Portfolio

This Investment Portfolio seeks moderate growth by investing primarily in a combination of equity and fixed-income Underlying Funds. The equity Underlying Funds in which the Portfolio invests are index funds and the Portfolio invests in a combination of actively-managed and index funds with respect to its investments in fixed-income Underlying Funds. The Portfolio seeks a balanced asset allocation and invests a larger portion of its assets in Underlying Funds that invest primarily in fixed-income securities than does the Active Growth Portfolio. Underlying Funds that invest primarily in fixed-income securities have a lower level of risk, but a lower potential for returns than Underlying Funds that invest primarily in equity securities. This Investment Portfolio may be appropriate for investors if they have a medium to short investment horizon and can tolerate a moderate level of risk (see table below).

# MUTUAL FUND ASSET ALLOCATION PERCENTAGES - BY ASSET CLASS

Domestic	International	Fixed	Real Estate
Equity Fund	Equity Funds	Income	Fund
25.20%	12.00%	60.00%	2.80%

#### Passive Conservative Portfolio

This Investment Portfolio seeks to provide preservation of capital along with a moderate rate of return. Approximately half of the Portfolio invests in active and index Underlying Funds that invest primarily in fixed-income securities, which have a lower level of risk and corresponding lower potential for returns than more aggressive investments. The rest of the Portfolio is invested in a Funding Agreement (see table below). This Investment Portfolio may be appropriate for investors if they have a medium to short investment horizon and can tolerate a conservative to moderate level of risk.

#### MUTUAL FUND ASSET ALLOCATION PERCENTAGES – BY ASSET CLASS

Fixed	Short Term/
Income	Cash Equivalent
50.00%	50.00%

## Index International Equity Portfolio

This Investment Portfolio seeks to provide a favorable long-term total return, mainly from capital appreciation, by investing in international equity index Underlying Funds. Because of the high exposure to foreign equities, and the corresponding high degree of risk, this Investment Portfolio may be appropriate for investors if they already have substantial college savings from less volatile investments (e.g., fixed-income investments), if they have a long investment horizon and they can tolerate a higher level of risk, or for use in conjunction with other Investment Portfolios in the Plan.

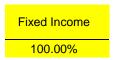
#### MUTUAL FUND ASSET ALLOCATION PERCENTAGES - BY ASSET CLASS

International Equity Fund 100.00%

### Passive Diversified Fixed Income Portfolio

This Investment Portfolio seeks to provide preservation of capital along with a moderate rate of return by investing primarily in Underlying Funds that invest in a diversified mix of fixed-income investments. The majority of the Portfolio is invested in an Underlying Fund that is an index fund. This Investment Portfolio may be appropriate for investors if they have a medium to short investment horizon and can tolerate a moderate level of risk.

#### MUTUAL FUND ASSET ALLOCATION PERCENTAGES - BY ASSET CLASS



# The Individual Fund Portfolios

These Investment Portfolios allow investors to choose a passively-managed mutual fund from the following list of offerings:

# • Index U.S. Large Cap Equity Portfolio

This Investment Portfolio seeks to provide a favorable long-term total return. The Index U.S. Large Cap Equity Portfolio invests 100% of its assets in the TIAA-CREF S&P 500 Index Fund, which invests primarily in a portfolio of equity securities of large domestic companies selected to track U.S. equity markets based on a market index. This Investment Portfolio may be appropriate for investors if they already have substantial college savings from less volatile investments (e.g., fixed-income investments) or they have a long investment horizon and they can tolerate a higher level of risk, or for use in conjunction with other Investment Portfolios offered by the Plan.

#### Index Bond Portfolio

This Investment Portfolio seeks to provide preservation of capital along with a moderate rate of return from interest income and capital appreciation. The Index Bond Portfolio invests 100% of its assets in the TIAA-CREF Bond Index Fund, which employs a "passive management" – or indexing – strategy and seeks to match the total return of the Barclays Capital U.S. Aggregate Bond Index. This Investment Portfolio may be appropriate for investors if they have a medium to short investment horizon and can tolerate a moderate level of risk.

# • Index U.S. Equity Portfolio

This Investment Portfolio seeks to provide favorable long-term growth, mainly from capital appreciation. The Index U.S. Equity Portfolio invests 100% of its assets in the TIAA-CREF Equity Index Fund, which employs a "passive management" – or indexing –strategy and seeks a diversified portfolio selected to track the overall market for common stocks publicly traded in the U.S., as represented by the Russell 3000 index. Because of the high exposure to equity investments, and the corresponding high degree of risk, this Investment Portfolio may be appropriate for investors if they already have substantial college savings from less volatile investments (e.g., fixed-income investments) or they have a long investment horizon and they can tolerate a higher level of risk, or for use in conjunction with other Investment Portfolios offered by the Plan.

These portfolios are designed for people who seek to customize their college investing through participation in a single mutual fund or several mutual funds.

# PRINCIPAL PLUS INTEREST PORTFOLIO

#### Principal Plus Interest Portfolio

This Investment Portfolio seeks to preserve capital and provide a stable return. It may be appropriate for investors if they have a short investment horizon and are looking for a conservative investment with a low level of risk. The assets in this Investment Portfolio are allocated to a Funding Agreement issued by TIAA-CREF Life to the Board on behalf of the Plan, which is the policyholder under the agreement. The Funding Agreement provides for a return of principal plus a guaranteed rate of interest and allows for the possibility that additional interest may be credited as declared periodically by TIAA-CREF Life. The interest rate guarantee is made to the Board only, and not to Participants or Beneficiaries. The rate of any additional interest is declared in advance for a period of up to 12 months and is not guaranteed for any future periods.

# **ADDENDUM 2**

The Portfolios shall contain the Funds listed with their benchmarks by asset class below.

Active Free Heavy Very Age Paged Powlfelias	Danahmauk
Active Enrollment Year Age-Based Portfolios  Domestic Equity	<u>Benchmark</u>
T. Rowe Price Institutional Large Cap Growth Fund	Russell 1000 Growth
T. Rowe Price Institutional Large Cap Glowiff and     T. Rowe Price Institutional Large Cap Value Fund	Russell 1000 Value
<ul> <li>TIAA-CREF Small Cap Equity Fund</li> </ul>	Russell 2000
International Equity	Russell 2000
DFA Large Cap International Portfolio	MSCI World ex US
<ul> <li>DFA Emerging Markets Core Equity Portfolio</li> </ul>	MSCI Emerging Markets
Fixed Income	MSCI Emerging Markets
MetWest Total Return Bond Fund	BC US Aggregate Bond
PIMCO Real Return Fund	BC US TIPS
PIMCO Income Fund	BC US Aggregate Bond
T. Rowe Price Institutional Floating Rate Fund	S&P/LSTA Performing Loan
Real Estate	Odi /EOTAT choming Loan
TIAA-CREF Real Estate Securities Fund	FTSE NAREIT Equity
Short Term/Cash Equivalent	1 TOE WATER Equity
T-C Life Funding Agreement	N/A
1 o Life I driding Agreement	14// (
Active Diversified Equity Portfolio	<u>Benchmark</u>
Domestic Equity	
<ul> <li>T. Rowe Price Institutional Large Cap Growth Fund</li> </ul>	Russell 1000 Growth
<ul> <li>T. Rowe Price Institutional Large Cap Value Fund</li> </ul>	Russell 1000 Value
<ul> <li>TIAA-CREF Small Cap Equity Fund</li> </ul>	Russell 2000
International Equity	
<ul> <li>DFA Large Cap International Portfolio</li> </ul>	MSCI World ex US
<ul> <li>DFA Emerging Markets Core Equity Portfolio</li> </ul>	MSCI Emerging Markets
Real Estate	
<ul> <li>TIAA-CREF Real Estate Securities Fund</li> </ul>	FTSE NAREIT Equity
Active Growth Portfolio	<u>Benchmark</u>
Domestic Equity	D 11 / 200 0 11
T. Rowe Price Institutional Large Cap Growth Fund	Russell 1000 Growth
T. Rowe Price Institutional Large Cap Value Fund	Russell 1000 Value
<ul> <li>TIAA-CREF Small Cap Equity Fund</li> </ul>	Russell 2000
International Equity	
DFA Large Cap International Portfolio	MSCI World ex US
<ul> <li>DFA Emerging Markets Core Equity Portfolio</li> </ul>	MSCI Emerging Markets
Fixed Income	
MetWest Total Return Bond Fund	BC US Aggregate Bond
PIMCO Real Return Fund	BC US TIPS
PIMCO Income Fund	BC US Aggregate Bond
<ul> <li>T. Rowe Price Institutional Floating Rate Fund</li> </ul>	S&P/LSTA Performing Loan

#### Real Estate

TIAA-CREF Real Estate Securities Fund

FTSE NAREIT Equity

S&P/LSTA Performing Loan

S&P/LSTA Performing Loan

Benchmark

**Benchmark** 

N/A

**Benchmark** 

Benchmark

# Active Moderate Growth Portfolio

Domestic Equity

 T. Rowe Price Institutional Large Cap Growth Fund Russell 1000 Growth T. Rowe Price Institutional Large Cap Value Fund Russell 1000 Value Russell 2000

TIAA-CREF Small Cap Equity Fund

International Equity

 DFA Large Cap International Portfolio MSCI World ex US DFA Emerging Markets Core Equity Portfolio **MSCI** Emerging Markets

Fixed Income

 MetWest Total Return Bond Fund BC US Aggregate Bond **BC US TIPS**  PIMCO Real Return Fund BC US Aggregate Bond PIMCO Income Fund

T. Rowe Price Institutional Floating Rate Fund

Real Estate

 TIAA-CREF Real Estate Securities Fund FTSE NAREIT Equity

# Active Conservative Portfolio

Fixed Income

 MetWest Total Return Bond Fund BC US Aggregate Bond PIMCO Real Return Fund **BC US TIPS**  PIMCO Income Fund BC US Aggregate Bond

T. Rowe Price Institutional Floating Rate Fund

Short Term/Cash Equivalent

T-C Life Funding Agreement

Active International Equity Portfolio

International Equity

DFA Large Cap International Portfolio MSCI World ex US DFA Emerging Markets Core Equity Portfolio **MSCI** Emerging Markets

Active Diversified Fixed Income Portfolio

Fixed Income

 MetWest Total Return Bond Fund BC US Aggregate Bond PIMCO Real Return Fund **BC US TIPS**  PIMCO Income Fund BC US Aggregate Bond S&P/LSTA Performing Loan

T. Rowe Price Institutional Floating Rate Fund

Social Choice Portfolio

**Benchmark**  TIAA-CREF Social Choice Equity Fund Russell 3000

Passive Enrollment Year Age-Based Portfolios	<u>Benchmark</u>
Domestic Equity ■ TIAA-CREF Equity Index Fund	Russell 3000 TR
International Equity	raddon dddd i'r
TIAA-CREF International Equity Index Fund	MSCI EAFE
<ul> <li>TIAA-CREF Emerging Markets Equity Index Fund</li> </ul>	MSCI Emerging Markets
Fixed Income ■ TIAA-CREF Bond Index Fund	BC US Aggregate Bond
<ul> <li>TIAA-CREF Boild index Fund</li> <li>TIAA-CREF Inflation-Linked Bond Fund</li> </ul>	BC US TIPS 1-10 Year
<ul> <li>TIAA-CREF High Yield Fund</li> </ul>	BofA ML BB-B US Cash Pay
Real Estate	High Yield Constrained
<ul> <li>TIAA-CREF Real Estate Securities Fund</li> </ul>	FTSE NAREIT Equity
Short Term/Cash Equivalent	- 1- 3
<ul> <li>T-C Life Funding Agreement</li> </ul>	N/A
Passive Diversified Equity Portfolio	<u>Benchmark</u>
Domestic Equity	
■ TIAA-CREF Equity Index Fund	Russell 3000 TR
International Equity  TIAA-CREF International Equity Index Fund	MSCI EAFE
TIAA-CREF Emerging Markets Equity Index Fund	MSCI Emerging Markets
Real Estate	
<ul> <li>TIAA-CREF Real Estate Securities Fund</li> </ul>	FTSE NAREIT Equity
Passive Growth Portfolio	<u>Benchmark</u>
Domestic Equity	
Domestic Equity ■ TIAA-CREF Equity Index Fund	Benchmark Russell 3000 TR
Domestic Equity  TIAA-CREF Equity Index Fund International Equity TIAA-CREF International Equity Index Fund	Russell 3000 TR  MSCI EAFE
Domestic Equity  TIAA-CREF Equity Index Fund International Equity  TIAA-CREF International Equity Index Fund  TIAA-CREF Emerging Markets Equity Index Fund	Russell 3000 TR
Domestic Equity  TIAA-CREF Equity Index Fund International Equity  TIAA-CREF International Equity Index Fund TIAA-CREF Emerging Markets Equity Index Fund Fixed Income	Russell 3000 TR  MSCI EAFE MSCI Emerging Markets
<ul> <li>Domestic Equity</li> <li>TIAA-CREF Equity Index Fund</li> <li>International Equity</li> <li>TIAA-CREF International Equity Index Fund</li> <li>TIAA-CREF Emerging Markets Equity Index Fund</li> <li>Fixed Income</li> </ul>	Russell 3000 TR  MSCI EAFE
Domestic Equity  ■ TIAA-CREF Equity Index Fund International Equity  ■ TIAA-CREF International Equity Index Fund  ■ TIAA-CREF Emerging Markets Equity Index Fund  Fixed Income  ■ TIAA-CREF Bond Index Fund	Russell 3000 TR  MSCI EAFE MSCI Emerging Markets  BC US Aggregate Bond BC US TIPS 1-10 Year BofA ML BB-B US Cash Pay
Domestic Equity  TIAA-CREF Equity Index Fund International Equity  TIAA-CREF International Equity Index Fund  TIAA-CREF Emerging Markets Equity Index Fund  Fixed Income  TIAA-CREF Bond Index Fund  TIAA-CREF Inflation-Linked Bond Fund  TIAA-CREF High Yield Fund	Russell 3000 TR  MSCI EAFE MSCI Emerging Markets  BC US Aggregate Bond BC US TIPS 1-10 Year
<ul> <li>Domestic Equity</li> <li>TIAA-CREF Equity Index Fund</li> <li>International Equity</li> <li>TIAA-CREF International Equity Index Fund</li> <li>TIAA-CREF Emerging Markets Equity Index Fund</li> <li>Fixed Income</li> <li>TIAA-CREF Bond Index Fund</li> <li>TIAA-CREF Inflation-Linked Bond Fund</li> </ul>	Russell 3000 TR  MSCI EAFE MSCI Emerging Markets  BC US Aggregate Bond BC US TIPS 1-10 Year BofA ML BB-B US Cash Pay
Domestic Equity  TIAA-CREF Equity Index Fund International Equity  TIAA-CREF International Equity Index Fund  TIAA-CREF Emerging Markets Equity Index Fund  Fixed Income  TIAA-CREF Bond Index Fund  TIAA-CREF Inflation-Linked Bond Fund  TIAA-CREF High Yield Fund  Real Estate  TIAA-CREF Real Estate Securities Fund  Passive Moderate Growth Portfolio	Russell 3000 TR  MSCI EAFE MSCI Emerging Markets  BC US Aggregate Bond BC US TIPS 1-10 Year BofA ML BB-B US Cash Pay High Yield Constrained
Domestic Equity  TIAA-CREF Equity Index Fund International Equity  TIAA-CREF International Equity Index Fund  TIAA-CREF Emerging Markets Equity Index Fund  Fixed Income  TIAA-CREF Bond Index Fund  TIAA-CREF Inflation-Linked Bond Fund  TIAA-CREF High Yield Fund  Real Estate  TIAA-CREF Real Estate Securities Fund  Passive Moderate Growth Portfolio Domestic Equity	Russell 3000 TR  MSCI EAFE MSCI Emerging Markets  BC US Aggregate Bond BC US TIPS 1-10 Year BofA ML BB-B US Cash Pay High Yield Constrained  FTSE NAREIT Equity  Benchmark
Domestic Equity  ■ TIAA-CREF Equity Index Fund International Equity  ■ TIAA-CREF International Equity Index Fund  ■ TIAA-CREF Emerging Markets Equity Index Fund  Fixed Income  ■ TIAA-CREF Bond Index Fund  ■ TIAA-CREF Inflation-Linked Bond Fund  ■ TIAA-CREF High Yield Fund  Real Estate  ■ TIAA-CREF Real Estate Securities Fund  Passive Moderate Growth Portfolio Domestic Equity  ■ TIAA-CREF Equity Index Fund International Equity	Russell 3000 TR  MSCI EAFE MSCI Emerging Markets  BC US Aggregate Bond BC US TIPS 1-10 Year BofA ML BB-B US Cash Pay High Yield Constrained  FTSE NAREIT Equity  Benchmark  Russell 3000 TR
Domestic Equity  ■ TIAA-CREF Equity Index Fund International Equity ■ TIAA-CREF International Equity Index Fund ■ TIAA-CREF Emerging Markets Equity Index Fund Fixed Income ■ TIAA-CREF Bond Index Fund ■ TIAA-CREF Inflation-Linked Bond Fund ■ TIAA-CREF High Yield Fund  Real Estate ■ TIAA-CREF Real Estate Securities Fund  Passive Moderate Growth Portfolio Domestic Equity ■ TIAA-CREF Equity Index Fund International Equity ■ TIAA-CREF International Equity Index Fund	Russell 3000 TR  MSCI EAFE MSCI Emerging Markets  BC US Aggregate Bond BC US TIPS 1-10 Year BofA ML BB-B US Cash Pay High Yield Constrained  FTSE NAREIT Equity  Benchmark  Russell 3000 TR  MSCI EAFE
Domestic Equity  ■ TIAA-CREF Equity Index Fund International Equity  ■ TIAA-CREF International Equity Index Fund  ■ TIAA-CREF Emerging Markets Equity Index Fund  Fixed Income  ■ TIAA-CREF Bond Index Fund  ■ TIAA-CREF Inflation-Linked Bond Fund  ■ TIAA-CREF High Yield Fund  Real Estate  ■ TIAA-CREF Real Estate Securities Fund  Passive Moderate Growth Portfolio Domestic Equity  ■ TIAA-CREF Equity Index Fund International Equity	Russell 3000 TR  MSCI EAFE MSCI Emerging Markets  BC US Aggregate Bond BC US TIPS 1-10 Year BofA ML BB-B US Cash Pay High Yield Constrained  FTSE NAREIT Equity  Benchmark  Russell 3000 TR
Domestic Equity  TIAA-CREF Equity Index Fund International Equity  TIAA-CREF International Equity Index Fund  TIAA-CREF Emerging Markets Equity Index Fund  TIAA-CREF Bond Index Fund  TIAA-CREF Inflation-Linked Bond Fund  TIAA-CREF High Yield Fund  Real Estate  TIAA-CREF Real Estate Securities Fund  Passive Moderate Growth Portfolio Domestic Equity  TIAA-CREF Equity Index Fund International Equity  TIAA-CREF International Equity Index Fund  TIAA-CREF Emerging Markets Equity Index Fund  TIAA-CREF Bond Index Fund  Fixed Income  TIAA-CREF Bond Index Fund	Russell 3000 TR  MSCI EAFE MSCI Emerging Markets  BC US Aggregate Bond BC US TIPS 1-10 Year BofA ML BB-B US Cash Pay High Yield Constrained  FTSE NAREIT Equity  Benchmark  Russell 3000 TR  MSCI EAFE MSCI Emerging Markets  BC US Aggregate Bond
Domestic Equity  TIAA-CREF Equity Index Fund International Equity  TIAA-CREF International Equity Index Fund  TIAA-CREF Emerging Markets Equity Index Fund  TIAA-CREF Bond Index Fund  TIAA-CREF Inflation-Linked Bond Fund  TIAA-CREF High Yield Fund  Real Estate  TIAA-CREF Real Estate Securities Fund  Passive Moderate Growth Portfolio Domestic Equity  TIAA-CREF Equity Index Fund International Equity  TIAA-CREF International Equity Index Fund  TIAA-CREF Emerging Markets Equity Index Fund  TIAA-CREF Bond Index Fund  TIAA-CREF Bond Index Fund  TIAA-CREF Inflation-Linked Bond Fund	Russell 3000 TR  MSCI EAFE MSCI Emerging Markets  BC US Aggregate Bond BC US TIPS 1-10 Year BofA ML BB-B US Cash Pay High Yield Constrained  FTSE NAREIT Equity  Benchmark  Russell 3000 TR  MSCI EAFE MSCI Emerging Markets  BC US Aggregate Bond BC US TIPS 1-10 Year
Domestic Equity  TIAA-CREF Equity Index Fund International Equity  TIAA-CREF International Equity Index Fund  TIAA-CREF Emerging Markets Equity Index Fund  TIAA-CREF Bond Index Fund  TIAA-CREF Inflation-Linked Bond Fund  TIAA-CREF High Yield Fund  Real Estate  TIAA-CREF Real Estate Securities Fund  Passive Moderate Growth Portfolio Domestic Equity  TIAA-CREF Equity Index Fund International Equity  TIAA-CREF International Equity Index Fund  TIAA-CREF Emerging Markets Equity Index Fund  TIAA-CREF Bond Index Fund  Fixed Income  TIAA-CREF Bond Index Fund	Russell 3000 TR  MSCI EAFE MSCI Emerging Markets  BC US Aggregate Bond BC US TIPS 1-10 Year BofA ML BB-B US Cash Pay High Yield Constrained  FTSE NAREIT Equity  Benchmark  Russell 3000 TR  MSCI EAFE MSCI Emerging Markets  BC US Aggregate Bond

# Real Estate

TIAA-CREF Real Estate Securities Fund

FTSE NAREIT Equity

# Passive Conservative Portfolio

#### Fixed Income

TIAA-CREF Bond Index Fund

TIAA-CREF Inflation-Linked Bond Fund

TIAA-CREF High Yield Fund

<u>Benchmark</u>

BC US Aggregate Bond BC US TIPS 1-10 Year BofA ML BB-B US Cash Pay

High Yield Constrained

# Short Term/Cash Equivalent

T-C Life Funding Agreement

N/A

# Passive International Equity Portfolio

# International Equity

TIAA-CREF International Equity Index Fund

TIAA-CREF Emerging Markets Equity Index Fund

# **Benchmark**

MSCI EAFE (Net MA)
MSCI Emerging Markets

# Passive Diversified Fixed Income Portfolio

#### Fixed Income

TIAA-CREF Bond Index Fund

TIAA-CREF Inflation-Linked Bond Fund

■ TIAA-CREF High Yield Fund

# <u>Benchmark</u>

BC US Aggregate Bond BC US TIPS 1-10 Year BofA ML BB-B US Cash Pay High Yield Constrained

# Index U.S. Large Cap Equity Portfolio

TIAA-CREF S&P 500 Index Fund

# Benchmark

S&P 500

# Index U.S Equity Portfolio

TIAA-CREF Equity Index Fund

# **Benchmark**

Russell 3000 TR

#### Index Bond Portfolio

TIAA-CREF Bond Index Fund

# Benchmark

BC US Aggregate Bond

# Principal Plus Interest Portfolio

T-C Life Funding Agreement

# Benchmark

N/A