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Correspondence Memorandum

Date: August 31, 2017

To: Deferred Compensation Investment Committee

From: Shelly Schueller, Director
Wisconsin Deferred Compensation Program

Subject: Collective Investment Trust Options

ETF requests that the Investment Committee recommend the Deferred Compensation Board (Board) consider converting to Collective Investment Trust options for certain investment options currently offered to Wisconsin Deferred Compensation Program participants.

The Board is interested in offering quality, low-cost investment options to Wisconsin Deferred Compensation Program (WDC) participants. Consequently, the Board has regularly reviewed and discussed the expenses associated with various WDC investment options. Collective Investment Trust (CIT) options for some of the WDC's mutual funds are now available to large institutional plan sponsors such as the Deferred Compensation Board. Plan sponsors have recently shown more interest in offering CITs because CITs generally have lower expense ratios than mutual funds.

CITs are pooled investment vehicles created and maintained by a bank or a trust company that holds ultimate responsibility for the investments. Like mutual funds, CITs have specific investment objectives, may purchase stocks and bonds, and are offered through investment managers. Any underlying mutual funds in a CIT are subject to regulatory oversight, similar to that required of other mutual funds. CITs are subject to federal regulations via the Internal Revenue Service and Department of Labor, but not federal securities laws.

As stated previously, the primary appeal of CITs for the WDC is the lower expense ratios than mutual funds. However, there are potential drawbacks for CITs:

1) CITs do not have to produce a prospectus nor do they have to comply with federal Securities and Exchange Commission regulations. CITs are subject to

Reviewed and approved by Matt Stohr, Administrator,
Division of Retirement Services

Matt Stohr

Electronically Signed 9/11/17

Board	Mtg Date	Item #
DCIC	9.19.17	4

anti-fraud provisions, as well as banking laws, the Internal Revenue Code, ERISA and Department of Labor regulations. Annual audited financial reports are available to plan sponsors.

2) CITs do not trade publicly, therefore transparency is lost. Investors cannot simply look up a trust via a ticker symbol.
3) CITs are only required to provide an annual net asset value (NAV), whereas mutual funds must report daily NAVs.
4) CITs are not required to distribute dividends and realized capital gains. Rather, the value of these distributions is retained and reflected as an increase in share price. This contrasts with mutual funds, where any capital gains and dividends must be distributed and in most cases, are reinvested in the form of additional shares.

<u>Vanguard</u>

Since 1985, Vanguard has offered lower-cost CIT versions of its mutual funds to select institutional investors meeting Vanguard's requirements. Vanguard's CITs are pooled investment vehicles created and maintained by the Vanguard Fiduciary Trust Company. For example, Vanguard says its Target Retirement Trusts are,

> "structured as 'master-feeder' trusts. Each 5-year mandate (2015, 2020, 2025, etc.) has a master trust that invests in and holds Vanguard mutual fund shares. Clients [like the WDC] invest in shares of the feeder trusts (sometimes referred to as 'sleeves' or 'sleeve trusts') that in turn invest in units of the master trust."

The committee previously discussed the pros and cons of the Vanguard Target Retirement Trusts with Vanguard in early 2015. The Target Retirement Trusts offer the identical investment approach as the Vanguard Target Retirement Funds, including glide path and target allocation.

In conversations with ETF and in recognition of the longstanding relationship with the Board, Vanguard has offered to provide CIT versions of the Vanguard Institutional Index (500 Index) and the Target Retirement Fund series (Income, 2015, 2025, 2035, 2045 and 2055) to WDC participants at very low cost.

- The Vanguard Institutional Index (500 Index) currently has a 2 bps expense ratio. If this option was converted a CIT, the expense ratio would be 1.4 bps.
- The Vanguard Target Institutional Retirement Funds offered through the WDC each have a 9 bps expense ratio. If the WDC's Target Retirement Funds were converted to CITs, the expense ratios would drop to 7 bps.

Vanguard has stated that a daily NAV and other information on the performance of its CITs is available on the Vanguard website and can be made available directly to the WDC's record keeper. Vanguard will also provide annual audited financial statements for their CITs for posting on the WDC website.

Fidelity Contrafund

As presented to the Board as an informational item at the June 2016 meeting, the Fidelity Contrafund CIT offers the identical investment approach as the mutual fund version of Contrafund. The Contrafund option offered currently through the WDC has an expense ratio of 71 basis points (bps) and provides a reimbursement of 25 bps.

The CIT option discussed at the June 2016 Board meeting has an expense ratio of 43 bps. Since that time, Fidelity has opened a second share class of the Contrafund CIT. The CIT “II” share class has an expense ratio of 38 bps. As of mid-summer 2017, the Contrafund CIT II held over $7 billion in assets. If the Board converted the Contrafund mutual fund option to either of these Contrafund CITs, there would be a savings of between 3 bps and 8 bps to participants, but reimbursements from the fund would end.

Fidelity can provide a daily NAV and other information on the performance of its CITs on the internet and this information directly to the WDC’s record keeper (Empower Retirement) and other interested parties. ETF would work with the record keeper to determine how best to transmit this information to WDC participants via quarterly statements and the WDC website. Annual audited financial statements for the CIT should also be available for posting on the WDC website.

Conclusion

Although moving to CITs may reduce some transparency currently provided by offering the retail mutual fund versions of the same investment options, converting to CITs would be consistent with the Board’s policies regarding offering low-cost options and eliminating options that offer reimbursements[1]. Other s.457 plans have incorporated CITs in plan assets. A 2016 National Association of Government Defined Contribution Administrators survey reported that 22.7% of all s. 457 plan assets are held in CITs.

Recommendation

ETF recommends that the Investment Committee suggest converting to Collective Investment Trust options for certain investment options currently offered to Wisconsin Deferred Compensation Program participants, which at this time are:

1. Fidelity Contrafund - recommend move to Contrafund CIT II
2. Vanguard Institutional Index (500 Index) and the Target Retirement Fund series (Income, 2015, 2025, 2035, 2045 and 2055) – recommend move to CITs.

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[1] The Board’s *Investment Option Selection and Reimbursements Policy*, as adopted June 16, 2015, states that the Board “…seeks to offer participants quality, low-cost investment options through the Wisconsin Deferred Compensation Program (WDC). When available and fiscally feasible, the Board will offer these investment options in share classes (e.g., institutional) that do not provide reimbursements to the plan.”

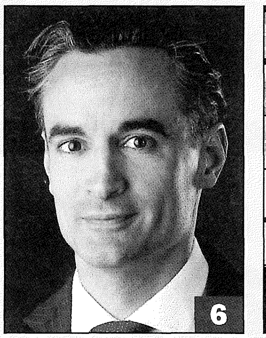
ETF as well as both Fidelity and Vanguard will be available at the meeting to discuss the contents of this memo.

Attachments

A. Robert Steyer. “N.Y. Deferred Comp Plan goes big with CITs” Pensions and Investments. December 12, 2016
B. Elizabeth O’Brien. “Low-Fee 401(k) Choices Are Hiding in Plain Sight” *Money*. July 2017
C. Fidelity: Contrafund collective investment trust option
D. Vanguard: Comparison of target retirement funds vs. target retirement trusts

IN THIS ISSUE

VOLUME 44, NUMBER 25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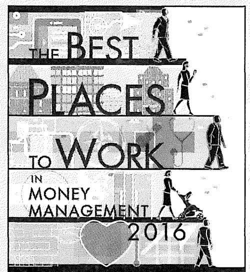

Cover illustration by Carl Wiens/i2i Art

Investing

Managers continue to be bullish on multiasset class strategies, particularly outcome-oriented and customized solutions, despite tepid institutional investor response of late. T. Rowe Price's Sebastien Page said outflows are due mostly to "a few big players underperforming." **Page 6**

Alternatives

The California Public Employees' Retirement System is grappling with ways its $26.4 billion private equity program can continue to produce superior results in an era of expected lower returns across asset classes. **Page 4**

Defined Contribution

N.Y. Deferred Comp Plan goes big with CITs

Changes made to cut costs, reduce overlap, aid returns

By ROBERT STEYER

Employing collective investment trusts for the first time, the New York State Deferred Compensation Plan has engineered a significant change in its investment lineup as it seeks to cut costs, reduce asset allocation overlap and remove poor performing managers.

The revisions were based on the Albany-based plan's issuing RFPs throughout the year covering all asset classes of its mutual fund lineup, or about $12.1 billion of the plan's $19.4 billion total assets.

The board will replace some mutual funds for performance, replace some others with less expensive CITs and add a few CITs. The board also will convert some mutual funds to CITs offered by the same manager, as well as renew several mutual fund manager contracts.

"The finalists were chosen for performance — then we looked at fees," said David Fischer, executive director of the nation's largest deferred compensation plan. "In all cases, the fees will be the same or less. In most cases, they will be less." Some of the fees involving CITs are still subject to negotiation, he added.

Mr. Fischer said he couldn't estimate the overall savings for participants. "There should be no meaningful increases to plan administrative costs," he added.

The deferred compensation plan's three-member governing board voted unanimously Dec. 2 to make the changes. Each new or renewed contract is for eight years with the possibility of two one-year extensions.

Plan executives have not yet decided on starting dates for the new investments or termination dates for other investments, "This will be determined by administrative constraints as well as timing of the communications to participants," Mr. Fischer said.

Although contracts for existing investments covered by the board's vote are scheduled to expire March 31, those contracts "are expected to be *extended* for one year," Mr. Fischer said.

The New York State plan last revised its mutual fund lineup in 2008; but the adjustments were modest compared with the latest changes, said Mr. Fischer, whose plan has 218,516 participants.

When the plan issued RFPs this year, board members wanted to look at both CITs and mutual funds in all asset categories, Mr. Fischer said. The plan didn't consider offering CITs in its 2008 revision because "back then, they were few and far between," he said.

Since then, the use of CITs has surged, bolstered by their lower fees, greater flexibility in investment management and less complexity in plan management, according to the *Pensions & Investments'* database that tracks defined contribution money managers. CIT use reached $1.58 trillion in assets at year-end 2015, compared with $895.6 billion in 2008.

Annual surveys by Callan Associates Inc. show that 70.8% of DC plans offered at least one CIT in 2015, up from 60% in 2014. The rate was 51.9% in 2013, 48.3% in 2012

SEE CIT ON PAGE 52

- What effect would a slowdown in China have on global markets?
- Is this the time to be defensive when it comes to equity investing?
- Is this the time to embrace active management?
- What are stock and bond managers' key concerns?

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CIT

CONTINUED FROM PAGE 2

and 43.8% in 2011.

Meanwhile, Vanguard Group Inc. has reported CITs represented 20% of DC plan assets in 2015 among clients vs. 6.7% in 2010.

The New York State plan will employ CITs in multiple settings. One example was the negotiation with T. Rowe Price Group Inc., which provides a mutual fund-based target-date series.

The target-date portfolio contains 10 separate funds, and the net expense ranges from 43 basis points for the most conservative vintage to 60 basis points for the most aggressive fund.

The target-date series will become a collective investment trust from T. Rowe Price, and each component will have an approximate net expense of 38 basis points subject to contract negotiations, Mr. Fischer said. The target-date series represents about $1.37 billion in plan assets.

Replace equity funds

The plan's governing board also decided to replace three large-cap domestic equity core mutual funds. Instead, it will offer a collective investment trust from BlackRock Inc. — the Equity Index Fund — which tracks the Standard & Poor's 500 index. The net expense for the CIT will be approximately 0.9 basis points subject to contract negotiations.

The New York State plan has been offering the actively managed Davis New York Venture Fund Class A with a net expense of 51 basis points, the actively managed Hartford Capital Appreciation HLS 1A Fund with a net expense of 57 basis points; and the passively managed Vanguard Institutional Index Plus Fund with a net expense of 2 basis points.

The Vanguard fund represents $1.48 billion in plan assets; the two actively managed funds have a total of $492 million in plan assets.

Mr. Fischer said representatives of Callan Associates, the plan's investment consultant, told board members that actively managed large-cap domestic core equity funds "don't add value" compared to a passively managed CIT with the same strategy.

The net expense differences between the BlackRock CIT and the two actively managed funds were substantial, so replacing Davis and Hartford was a strategic decision, Mr. Fischer said. The expense difference between the BlackRock CIT and the Vanguard fund was sufficient enough to replace Vanguard, too, he added.

The deferred compensation plan also will remove three small-cap mutual funds for performance reasons when the new lineup takes effect.

The Wells Fargo Small Cap Value Fund and Federated Clover Small Value Fund will be replaced by the Delaware Small Cap Value Fund. The Columbia Acorn USA Fund will be replaced by the T. Rowe Price QM Small Cap Growth Equity Fund.

The plan also will replace the Principal Large Cap Growth Fund for performance reasons. It will be succeeded by the T. Rowe Price Blue Chip Growth Trust, a collective investment trust.

Representatives of the firms whose funds are being replaced for performance reasons declined to comment or didn't respond to a request for comment.

Among other lineup changes, the board voted to:

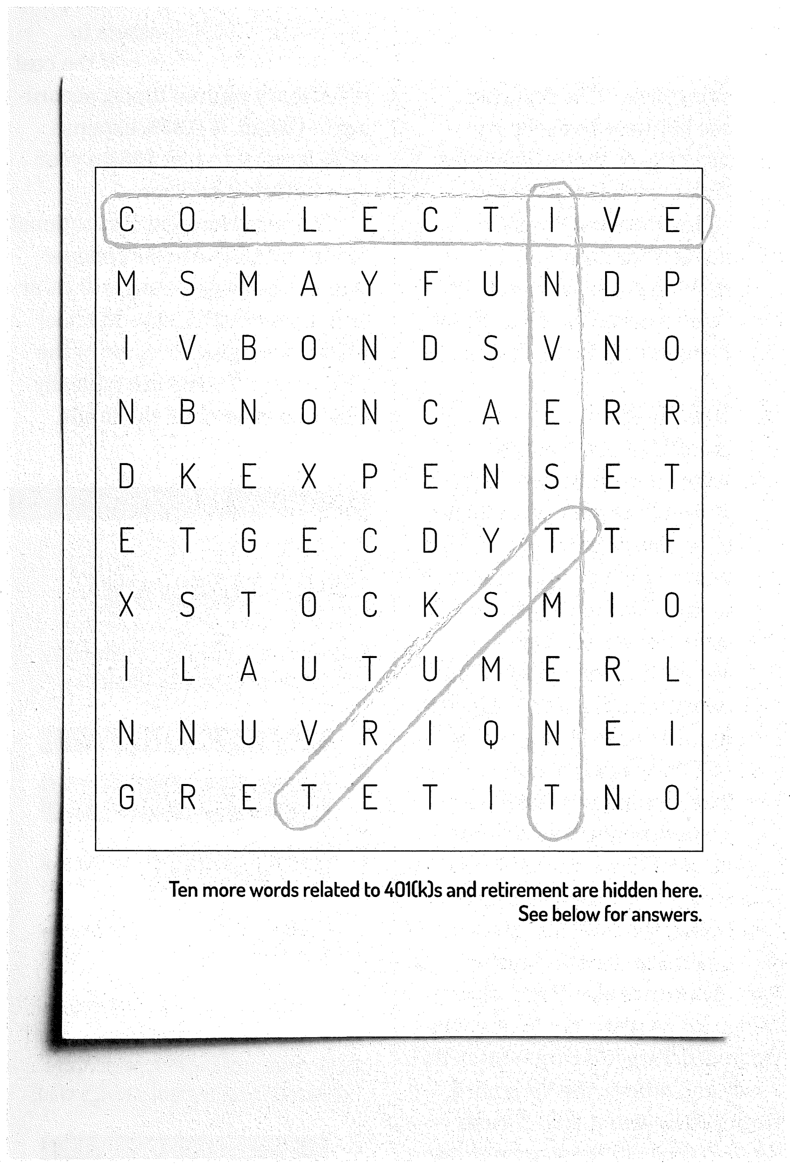
- replace the Federated Total Return Government Bond Fund and the Vanguard Total Bond Market Index Fund Institutional Plus shares with the BlackRock U.S. Debt Index with Securities Lending collective investment trust. Also, in the bond category, the board voted to add another CIT — the Voya Core Plus Fixed Income Strategy.
- map the Vanguard Mid Cap Index Fund Institutional shares and the Vanguard Small Cap Institutional Plus shares into a new offering — the BlackRock Russell 2500 Equity Index Fund CIT. Also, the plan will add the Fidelity Institutional Asset Management Small/Mid Cap Core Fund collective investment trust to the small/midcap menu.
- transfer assets from the T. Rowe Price Equity Income Fund mutual fund to the same large-cap value asset style managed by T. Rowe Price as a CIT. The plan also will add another CIT — Boston Partners Large Cap Value — to the large-cap value menu; and
- merge the Vanguard Capital Opportunity Fund Admiral shares into the existing Vanguard PRIMECAP Fund Admiral shares in the large-cap growth menu.

The board's vote on these changes came about eight months after it decided to stand pat on the deferred compensation plan's biggest allocation — the $6.83 billion Stable Income Fund. The board issued an RFP in January for a stable value structure manager. In May, it rehired Goldman Sachs Asset Management. The new contract took effect Oct. 1 and will run for five years with the possibility of two one-year extensions.

Low-Fee 401(k) Choices Are Hiding in Plain Sight

Many plans are replacing old-style mutual funds with trusts. Here's the lowdown for savers.

BY ELIZABETH O'BRIEN



Ten more words related to 401(k)s and retirement are hidden here. See below for answers.

THERE'S A STEALTH investment vehicle that's making its way into more 401(k) plans: the collective investment trust (CIT). You might own one or more, especially if you work for a large company, and not even know it.

Also known as collective investment funds, these holdings are similar to mutual funds in owning baskets of securities. But they are open only to retirement plans and some other institutional investors, and they aren't subject to the same disclosure rules and other requirements as mutual funds. That leads to the primary attraction of CITs: lower fees.

While the trusts are not new—in fact, like mutual funds they've been around for many decades—they've been growing in popularity. Recent lawsuits filed by retirement-plan participants accusing companies of having excessive 401(k) fees have put a spotlight on what savers pay. Also, the onus on plans to lower fees has grown over the past decade owing to a requirement that plans disclose all fees to participants.

In 2016, 65% of larger 401(k)

PAPER: KYOSHINO/GETTY IMAGES

ANSWERS: BONDS, EXPENSE, FUND, INDEXING, MONEY, MUTUAL, PORTFOLIO, RETIRE, SAVE, AND STOCKS.

plans included at least one trust on its menu, vs. 48% in 2012, according to Lori Lucas, defined contribution practice leader at Callan Associates, an investment consulting firm. "The financial services industry has seen an increased use of trusts due to fee sensitivity," says Kevin Jestice, head of institutional investor services at Vanguard.

Here's what you need to know if you own a collective investment trust now, or may in the future:

HOW TO SPOT THEM

The tip-off that some of the options in your 401(k) are CITs? On the list of investments, look for "Trust" or the abbreviated "Tr" in the name—and also the absence of a ticker symbol. Don't assume your investments are funds because you see the names of big fund companies like Vanguard and Fidelity; they are also big providers of CITs, typically through their own trust-company subsidiaries.

As investments, trusts "look and feel a lot like a mutual fund," Lucas says. For example, a trust could track the S&P 500 stock index, just like an index mutual fund. There are also target-date trusts: Some plans might offer the Vanguard Target Retirement 2030 Fund, and others, the Vanguard Target Retirement 2030 Trust. You can typically move money into or out of a trust daily, just as you can with the funds in a 401(k).

THE COST SAVINGS VS. FUNDS

Some 401(k)s have trimmed their expenses by switching from ordinary mutual funds for individual investors to lower-cost institutional funds—and cut them again by switching to CITs. As seen in the graphic below, a typical mix of CITs in a large 401(k) plan might cost 0.35% of assets in annual fees, less than half the cost of ordinary mutual funds, according to Callan. A 0.35% expense ratio is equal to just $350 a year on a $100,000 balance.

The very cheapest institutional funds and CITs are far cheaper than the averages—under 0.1% or even under 0.05%, says Michael Miller, managing director of the PFE Group. Trusts are typically a hair cheaper than the funds.

POTENTIAL DRAWBACKS

Trusts can have a disadvantage when it comes to transparency and the ease of reviewing all of your investments in one place. "These aren't investments you'd generally see in the newspaper," says Bob Salerno, a senior vice president at Fidelity. You can't look them up on websites like Yahoo Finance either.

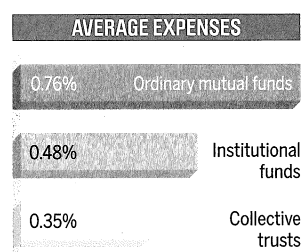
Instead, you'll have to log in to your account on the website of the financial company that administers your 401(k) plan. Much of the information you'll see on the trusts is likely to be similar to what is provided for the mutual funds in the plan. For instance, you will often be able to see how a trust has performed compared with an index benchmark or category average, says David Blanchett, head of retirement research for Morningstar.

Another downside to collective investment trusts is that it's harder to integrate them into online portfolio management tools. For example, Personal Capital offers free financial software that allows users to track investments held in multiple accounts and at various firms. The software automatically grabs data about the securities inside mutual funds, but for CITs the user would have to manually add a ticker symbol for an equivalent fund to use as a proxy, a spokeswoman says. Ditto for investors using Morningstar's portfolio tracking tool.

Similarly, portfolio management firm Betterment says it can't advise clients about the CITs inside their 401(k)s as it does about mutual fund holdings in those company plans. ■

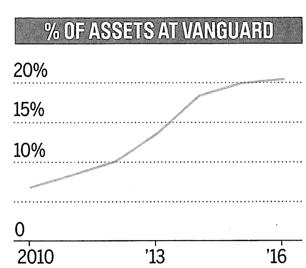
401(k) Makeover

Collective investment trusts carry lower fees than mutual funds...



NOTE: Weighted based on typical asset mix of large plans.

...And are growing as a percentage of assets in retirement savings plans.



SOURCES: Callan Associates (fees), Vanguard

Fidelity Contrafund

	Mutual Fund - Retail	Mutual Fund - K Shares	Collective Investment Trust
Product Name	Fidelity Contrafund	Fidelity Contrafund - Class K	Fidelity Contrafund Commingled Pool
Fund Ticker / CIT CUSIP	FCNTX	FCNKX	31617E851
Benchmark	S&P 500	S&P 500	S&P 500
Portfolio Manager	Will Danoff	Will Danoff	Will Danoff
Inception Date	05/17/1967	Fund: 05/17/1967 | Share class: 05/09/2008	01/17/2014
Investment Advisor	Fidelity Management & Research (FMR)	Fidelity Management & Research (FMR)	Fidelity Management Trust Company (FMTC)
Sub-Advisor	FMR Co., Inc. (FMRC)	FMR Co., Inc. (FMRC)	FMR Co., Inc. (FMRC)
Eligibility Minimum	None	None	$50 Million in AUM (Position-Level)
Expense Ratio	Gross*: 68 bps Net*: 68 bps	Gross*: 58 bps Net*: 58 bps	43 bps**
Assets* **	$78.1 billion	$30.3 billion	$15.5 billion
Regulatory Regime	U.S. securities laws, including the Investment Company Act of 1940 and FINRA regulation	U.S. securities laws, including the Investment Company Act of 1940 and FINRA regulation	Exempt from the Investment Company Act of 1940 but subject to the Securities Act of 1933 as a security; subject to ERISA and other federal statutes and regulations, and banking laws of Massachusetts
Performance Fees	Yes – based on most recent 36 month period	Yes – based on most recent 36 month period	No
In-Kind Transfers	Yes	Yes	Yes
Holdings Disclosure	Yes	Yes	Yes, policy will follow '40 Act funds
Redemption Fees	None	None	None
Significant Cash Flow Policy	No	No	Yes
Excessive Trading Policy	Yes	Yes	Yes
Participant Portability	Yes	No	No
Historical Performance	Available through Fund Inception Date	Available through Fund Inception Date	Began tracking on Pool Inception Date
Morningstar Rating	Yes	Yes	Not available

Notes: Data shown is based on information available at the time of publication:

* Expense Ratio, as of 03/01/2017 from the Fidelity Contrafund and Fidelity Contrafund – Class K prospectus

** As reflected in the Pool's Participation Agreement

*** Assets as of 03/31/2017; for mutual funds it reflects assets in the share class

Vanguard®

A comparison: Vanguard Target Retirement Funds and Vanguard Target Retirement Trusts

	Vanguard Target Retirement Funds	Vanguard Target Retirement Trusts
Investment approach	A fund-of-funds approach, investing in several underlying Vanguard mutual funds, gradually changing to a more conservative asset allocation as the Target Retirement Fund approaches its target year. (Vanguard Target Retirement Income Fund is an exception, with a static allocation.)	Identical investment approach, with the same glide path and target allocation.
Underlying funds	Investor Shares of five Vanguard index mutual funds.	The lower-cost Institutional or Institutional Plus Shares of the same Vanguard mutual funds.
Costs	16 to 18 basis points, including all fees and costs.	Contact your Vanguard representative to discuss pricing, which is often less than mutual funds for plans that qualify.
Legal structure	Mutual fund.	Collective trust, also known as commingled trust or group trust.
Eligible investors	Individual investors and retirement plan participants.	Restricted to qualified plans under Section 401(a) of the Internal Revenue Code and certain government retirement plans described in Section 818(a)(6) of the Code.
Regulatory oversight	Subject to all the applicable regulations for mutual funds, including federal securities laws such as the Investment Company Act of 1940.	Collective trusts are generally not subject to federal securities laws, but are subject to their antifraud provisions, as well as banking laws, the Internal Revenue Code, ERISA, and other Department of Labor regulations. **Note:** The trusts' underlying investments are mutual funds and are subject to the same regulatory oversight as other mutual funds.

(continued on reverse)

Note: There may be other material differences between products that should be considered.

	Vanguard Target Retirement Funds	Vanguard Target Retirement Trusts
Reporting requirements	Prospectus, statement of additional information, and annual and semiannual reports, among other reporting requirements. Daily net asset value (NAV) is available through Vanguard and through third parties such as the media.	Annual audited financial reports are available to plan sponsors. The trusts' NAVs only need to be reported annually, but Vanguard chooses to provide daily NAVs, as well as fact sheets and quarterly investment commentaries, which are all available anytime through Vanguard's website. (Trusts do not have ticker symbols and their NAVs are not available through the usual media.) **Note:** The underlying funds have the same reporting requirements as other mutual funds.
Dividend payments	Because of their mutual fund tax structure, any dividends and net realized capital gains are required to be distributed. However, in order to maintain tax deferral advantages, distributions are generally kept within the plan, often automatically reinvested in the funds. A reinvestment within the funds causes the value of these distributions to appear in the form of additional fund shares.	Tax-exempt collective trusts aren't required to distribute any dividends and realized capital gains. The value of these distributions are retained and reflected in an increase to the share price.

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For more information about Vanguard funds, visit institutional.vanguard.com or call 800-523-1036 to obtain a prospectus. Investment objectives, risks, charges, expenses, and other important information about a fund are contained in the prospectus; read and consider it carefully before investing.

All investing is subject to risks, including the possible loss of the money you invest.

Investments in Target Retirement Funds are subject to the risks of their underlying funds. The year in the fund name refers to the approximate year (the target date) when an investor in the fund would retire and leave the workforce. The fund will gradually shift its emphasis from more aggressive investments to more conservative ones based on its target date. An investment in Target Retirement Funds is not guaranteed at any time, including on or after the target date.

The Target Retirement Trusts are not mutual funds. They are collective investment trusts managed by Vanguard Fiduciary Trust Company, a Pennsylvania trust company and a wholly owned subsidiary of The Vanguard Group, Inc.

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