

Commonwealth of Virginia
Defined Contribution Plans
Investment Guide

DCP
Virginia Retirement System



Investing for your retirement is simpler than you might think.

In just three easy steps, you can be on your way to a more secure future.

step 1 Familiarize yourself with investment basics and the options available within your plan(s).

step 2 Make investment selections that align with your retirement goals.

step 3 Review your account periodically to determine if you need to make changes.

Use this Investment Guide to learn about investment options available in the Commonwealth of Virginia Defined Contribution Plans. Eligible members of VRS Plan 1, VRS Plan 2 and the Hybrid Retirement Plan and participants in Optional Retirement Plans can use the 457 Deferred Compensation Plan to supplement their retirement savings.

The Commonwealth of Virginia offers the following defined contribution plans:

Hybrid Retirement Plan

New employees hired on or after January 1, 2014, with no previous VRS service credit are members of the Hybrid Retirement Plan, which provides defined benefit and defined contribution components. Visit dcp.varetire.org/hybrid for more information.

Commonwealth of Virginia 457 Deferred Compensation Plan (457 Plan)

Salaried and wage employees who work for state agencies or for political subdivisions and school divisions that offer the plan can supplement their pension and other savings by participating in this plan. You participate through salary deferral. Visit dcp.varetire.org/457 for more information.

Virginia 401(a) Cash Match Plan

Employees participating in the 457 Plan may be eligible for the Cash Match Plan. All state employees are eligible for this plan; school division or political subdivision employees should check with their human resource office to see if they are eligible for this plan. Visit dcp.varetire.org/cashmatch for more information.

Optional Retirement Plan for Higher Education (ORPHE)

Employees of Virginia's public colleges and universities may be eligible to participate in an Optional Retirement Plan (ORP) to take advantage of the portability of a defined contribution plan. Check with your human resource office for eligibility information or visit orphe.varetire.org for more information.

Optional Retirement Plan for School Superintendents (ORPSS)

School superintendents may be eligible to participate in an ORP to take advantage of the portability of a defined contribution plan. Check with your human resource office for eligibility information or visit dcp.varetire.org/orpss for more information.

Optional Retirement Plan for Political Appointees (ORPPA)

Political appointees may be eligible to participate in an ORP to take advantage of the portability of a defined contribution plan. Check with your human resource office for eligibility information or visit dcp.varetire.org/orppa for more information.

Virginia Supplemental Retirement Plan (VSRP)

Some VRS-participating employers adopt this plan to provide enhanced benefits to designated employees. Your human resource office will notify you if you are eligible. Visit dcp.varetire.org/vsrp for more information.

CREATING YOUR INVESTMENT STRATEGY

When developing your investment strategy, you need to consider:

- How much to save and invest today
- Your investment time horizon
- Your financial goals
- Your risk tolerance

Once you determine the answers to these considerations, you can create an investment mix that will help you work toward your objective.



The importance of asset allocation and diversification

Asset allocation involves assigning specific percentages of your investments to different asset classes according to your financial goals, risk tolerance and investment time horizon.

Diversification is a risk-management technique that mixes a wide variety of investments within a portfolio. It involves distributing your money among different securities, sectors, industries and strategies within a number of asset classes.

Here are some steps you can take to reduce risk:

- **Diversify** — Putting your money into a number of different types of investment options that include different types of asset classes and securities can help reduce risk. When you invest in different asset classes and types of investments, some may increase in value while others may decrease in value.

- **Invest for the long term** — The market will have ups and downs, but if you invest wisely and leave your investments to grow, you may have a better chance of reaching your long-term investment goals.
- **Be aware of being too cautious** — Just as you should be aware of the risks of investing too aggressively, you also should be mindful of being too cautious. When you're ready to retire, you'll most likely be living in a much more expensive world than today. If you invest all of your contributions in a conservative investment option and don't diversify, you run the risk that inflation will erode much of your investment gains.

Educational meetings and live webinars

To help you reach your long-term financial goals, VRS' third-party record keeper (Voya Financial) regularly holds on-site meetings across the Commonwealth covering a variety of topics including investment basics, retirement planning, retirement distribution strategies, managing your account online and more. They also host live webinars that you may log into from any location. Employers may request educational meetings be held at their locations.

For more information:

- Go to dcp.varetire.org/education to learn more about all the available education and support options.
- Or call the VRS Defined Contribution Plans Service Center: 877-327-5261. (Hearing impaired: 800-579-5708). English and Spanish-speaking representatives are available weekdays from 8:30 a.m. to 9 p.m. ET, excluding stock market holidays.

UNDERSTANDING INVESTMENTS AND RISK

It's important to make sound, well-informed investment decisions, so let's review a few investment basics.

Asset classes

An asset class is a group of securities that typically behaves similarly in the marketplace when compared to other groups of securities.

The most well-known asset classes are stocks, bonds and cash equivalents (i.e., money market instruments). Each asset class has specific risk and return features to consider. And within each asset class is a range of investment types, each with its own risk factors. Although past performance is not a guarantee of future performance, here is a brief overview of what you might expect from the three basic asset classes over the long term.

Cash equivalents and stable value investments

Cash equivalents are short-term, highly liquid securities, such as money market funds and U.S. Treasury bills, which pay interest. Their objectives are current income and capital preservation. Generally speaking, investment in a money market fund offered through an employer's sponsored plan is not insured or guaranteed by the Federal Deposit Insurance Corporation or any other government agency. Although money market funds seek to preserve the value of your investment, it is possible to lose money. Although cash-equivalent investments have a place in many portfolios, their returns are generally low and may not outpace inflation. Stable value investments seek to provide safety of principal while earning interest income and liquidity. Stable value funds typically invest in short to intermediate duration, high-quality bonds.

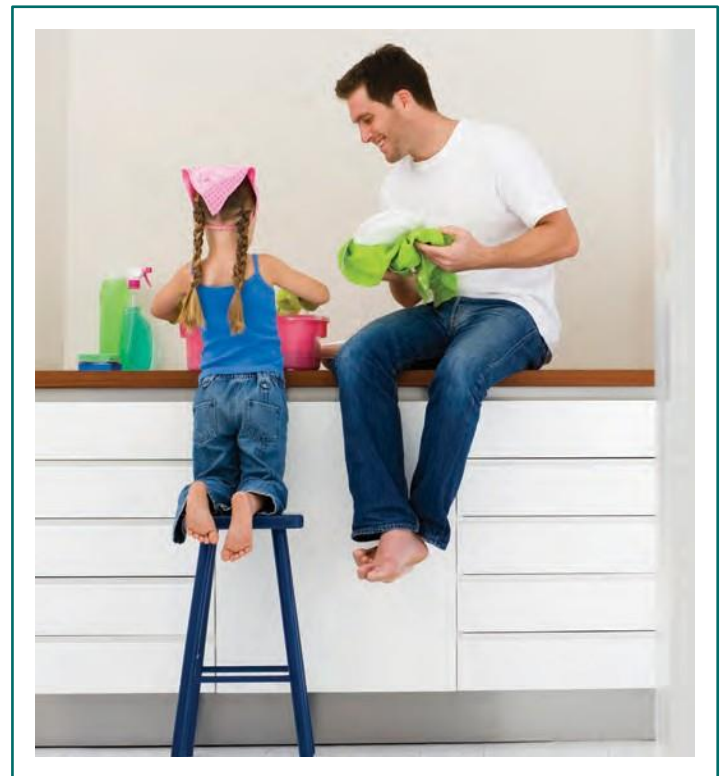
Bonds

By investing in bonds (also called fixed-income investments), you are loaning money to an organization, such as a corporation or the government, in exchange for interest payments. Bond values fluctuate, but ordinarily they will not vary as much as stocks. Bond investment options may help offset the higher risk of stocks in a more aggressive investment portfolio, and they may help keep pace with inflation in a more conservative investment portfolio.

Stocks

By investing in stocks, you are buying shares of ownership in a company. Stocks may have the highest potential for growth over the long term, but they also carry a higher degree of risk. Their unpredictable movement up and down in value is called volatility. One way of classifying stocks is through market capitalization. Market capitalization, or market cap, measures a company's size by multiplying the number of shares outstanding by the stock's price. For example, if a company has 10 million shares outstanding at a price of \$50 per share, the company's market cap is equal to \$500 million. Market cap size is often grouped in these categories:

- Large (referred to as large cap)
- Medium (referred to as mid or mid cap)
- Small (referred to as small cap)



Major types of stocks

Large-cap stocks are often called blue-chip stocks, a term that comes from the highest valued chips on a poker table. They are stocks of well-established companies that generally pay steady dividends. The vast size and maturity of these companies can make them well positioned to weather inevitable economic downturns.

Mid-cap stocks are stocks in companies that generally are established, yet innovative and responsive, with the potential for continued earnings growth. Their larger capitalization base tends to make them less risky than smaller-cap stocks, though they typically have slightly lower historical returns.

Small-cap stocks have the potential for rapid changes in earnings and growth. Small-cap stocks include companies that might lack the resources of larger companies and may be more volatile during times of market stress. Many small-cap companies respond faster to market changes, but may have difficulty weathering economic downturns.

International stocks are issued by companies outside the U.S. Whether you invest in the stock of a Japanese auto manufacturer, a German design firm or more volatile emerging markets, international stocks tend to have a high risk and a high return potential. Political climates may change and currency valuations may rise or fall, but international stocks may offer you the opportunity to diversify into young, dynamic markets that are early in their growth cycle.

Investment option types

Your plans provide you with a wide array of investment options that may include mutual funds, collective trust funds and separately managed funds.

When you invest in **mutual funds**, your money is pooled with the money of other investors who have the same, or “mutual,” investment goals.

A **collective trust fund** is a fund created by a bank or trust company that pools the assets of institutional investors for investment purposes.

Where a mutual fund and collective trust fund differ is that a mutual fund primarily serves *individual shareholders* (retail market), while a collective trust fund is available only to *institutional investors*, such as employers who sponsor retirement plans (e.g., VRS), foundations and endowments. A number of regulatory bodies oversee both mutual funds and collective trust funds.

A **separately managed fund** is a fund managed by an investment advisor for a specific employer’s plan.

All investment option types referenced above typically have a team of investment professionals who handle the buying and selling of investments on behalf of a fund, based on the fund’s investment philosophy and objective.

Types of risk

Like many things, when it comes to investing, there’s no way to avoid risk. Here are some risks to be aware of as you develop your investment strategy:

- **Market risk:** The risk that the price of securities in a fund will rise or fall, sometimes rapidly or unpredictably due to factors such as real or perceived adverse economic conditions, political developments and investor sentiment in general. During a general downturn in the securities markets, multiple asset classes may decline in value simultaneously. Stocks generally have greater price volatility than bonds.
- **Inflation risk:** The risk that your account will lose value because your returns are not outpacing the cost of living.
- **Interest rate risk:** The risk that if interest rates rise, bonds will decline in value.
- **Income risk:** The risk that a fund’s income will decline because of falling interest rates.
- **Default (credit) risk:** The risk that an issuer fails to pay interest or principal when it is due or in a timely manner, or that negative perceptions of an issuer’s ability to make such payments will cause the price of the security to decline.
- **Business risk:** The risk that an investment will lose value because of a decline in a specific company or industry.
- **Country risk:** The risk that domestic events, laws and regulations will negatively impact a country’s securities markets.
- **Currency risk:** The risk that the value of a foreign investment, measured in U.S. dollars, will negatively impact fund returns because of unfavorable changes in currency exchange rates.

On the other hand, not investing has its own level of risk: the risk that you won’t have enough retirement income to pay for the things you need or want. You can help reduce this risk by investing on a consistent basis over the long term.



YOUR PLANS' INVESTMENT OPTIONS

Your investment options are organized into three paths. The path approach is designed to make it easier for you to implement your investment decisions. It's also flexible — you do not need to choose just one path or investment option. You can mix and match investment options within each path to help you meet your objectives, risk tolerance and overall investing style. Below is a more detailed description of the three investment paths.

Do-It-For-Me Path

The ***Do-It-For-Me Path*** includes a series of target date portfolios for participants who prefer a pre-mixed portfolio that is already diversified. Participants select portfolios based on a projected retirement distribution date and individual needs.

Help-Me-Do-It Path

The ***Help-Me-Do-It Path*** includes a carefully selected menu of funds for participants who prefer to take a more active role in investing and want to construct a portfolio that addresses their individual needs.

Do-It-Myself Path

The ***Do-It-Myself Path*** includes a self-directed brokerage account (SDBA) for those who believe they are skilled and knowledgeable about investments. Investments include mutual funds, exchange-traded funds (ETFs) and individual securities.

	Investment Options	Asset Class	Benchmark	Objective
Do-It-For-Me Path	Retirement Portfolio	Asset Allocation	Custom benchmarks are calculated using blended returns of third-party indices that proportionately reflect the respective weightings of the portfolios' asset classes. Index weightings are adjusted quarterly to reflect the portfolios' asset allocation shifts over time.	Seeks to provide for retirement outcomes consistent with investor preferences throughout the savings and drawdown phase based on quantitatively measured risk that investors, on average, may be willing to accept. In pursuit of that objective, the portfolios will be broadly diversified across global asset classes, with asset allocations becoming more conservative over time. The target date portfolios invest in BlackRock's LifePath Index Funds N.
	Target Date 2030 Portfolio			
	Target Date 2035 Portfolio			
	Target Date 2040 Portfolio			
	Target Date 2045 Portfolio			
	Target Date 2050 Portfolio			
	Target Date 2055 Portfolio			
	Target Date 2060 Portfolio			
	Target Date 2065 Portfolio			
	Target Date 2070 Portfolio			

Help-Me-Do-It Path	Money Market Fund	Cash Equivalents	FTSE Three-Month Treasury Bill Index is intended to track the performance of three-month Treasury Bills.	Seeks a high level of current income as is consistent with liquidity and stability of principal. The fund invests in BlackRock's Short-Term Investment Fund W.
	Stable Value Fund Trading Restriction: Money cannot be transferred directly from the Stable Value Fund to the Money Market Fund (considered a competing fund). Money must be exchanged into a non-competing fund and remain there for 90 days before transferring it into the Money Market Fund. If you are an ORPHE participant and want to make a direct exchange to another ORPHE provider, you must first exchange to a non-competing fund and remain there for 90 days.	Stable Value	Custom Benchmark	Seeks to provide safety of principal while earning a level of interest income consistent with an underlying portfolio of short- to intermediate-duration high-quality fixed income (bond) securities, and cash or cash equivalents and liquidity to accommodate participant transactions.



Investment Options	Asset Class	Benchmark	Objective
Bond Fund	U.S. Bonds	Bloomberg U.S. Aggregate Bond Index is considered indicative of the domestic bond market.	Seeks to track the performance of the Bloomberg U.S. Aggregate Bond Index by investing in a diversified sample of the bonds that make up the index. The fund invests in BlackRock's U.S. Debt Index Fund M.
Inflation-Protected Bond Fund	Inflation-Protected Bonds	Bloomberg U.S. Treasury Inflation-Protected Securities Index is considered indicative of inflation-protected securities issued by the U.S. Treasury.	Seeks to track the performance of the Bloomberg U.S. Treasury Inflation-Protected Securities Index by investing in some or all of the bonds that make up the index. The fund invests in BlackRock's U.S. Treasury Inflation-Protected Securities Fund M.
High-Yield Bond Fund	High-Yield Bonds	ICE BofA U.S. High-Yield BB-B Constrained Index is considered indicative of the higher-quality, high-yield bond market.	Seeks to achieve returns that exceed, over time, its benchmark, ICE BofA U.S. High-Yield BB-B Constrained Index by investing in a diversified portfolio of primarily below investment grade securities; may also invest in other securities. The fund invests in JPMorgan's Corporate High-Yield Fund-Investment Class.
Virginia Retirement System Investment Portfolio (VRSIP)	Asset Allocation	Custom Benchmark	Seeks to maximize return while managing risk within an acceptable range, as it relates to the VRS defined benefit plan. A target date portfolio will serve as the Pending Account VRSIP.
Stock Fund	U.S. Large-Cap Stocks	S&P 500 Index is considered indicative of the domestic large-cap stock market.	Seeks to track the performance of the S&P 500 Index by investing in stocks that make up the index. The fund invests in BlackRock's Equity Index Fund F.

	Investment Options	Asset Class	Benchmark	Objective
Help-Me-Do-It Path (continued)	International Stock Fund	International Stocks	MSCI ACW ex-U.S. IMI Index is considered indicative of the international large, mid and small cap stock market segments of developed and emerging markets countries excluding the U.S.	Seeks to track the performance of the MSCI ACW ex-U.S. IMI Index by investing in a representative sample of stocks that make up the index. The fund invests in BlackRock's MSCI ACW ex-U.S. IMI Index Fund F.
	Small/Mid-Cap Stock Fund	U.S. Small/Mid-Cap Stocks	Russell 2500 Index is considered indicative of the small- to mid-cap segment of the domestic stock market.	Seeks to track the performance of the Russell 2500 Index by investing in a representative sample of the stocks that make up the index. The fund invests in BlackRock's Russell 2500 Index Fund F.
	Global Real Estate Fund	Real Estate	FTSE EPRA/NAREIT Developed Index is considered indicative of listed real estate companies and REITs worldwide, including the U.S.	Seeks to track the performance of the FTSE EPRA/NAREIT Developed Index by holding component funds that invest in global real estate securities. The fund invests in BlackRock's Developed Real Estate Index Fund F.

Do-It-Myself Path	<p>Self-Directed Brokerage Account (SDBA)</p> <ul style="list-style-type: none"> Minimum core funds balance required to open an SDBA \$3,500. Minimum balance to be maintained in the core funds (after SDBA opened) is \$2,500. Initial and subsequent minimum transfer amount into SDBA \$1,000. These rules apply to each plan the participant is participating in independently. If the core account balance drops below \$3,500, the participant is not eligible to transfer any additional funds to the brokerage account. Voya Financial does not transfer funds from the brokerage account to enforce the core minimum requirement. If the PPT earns any Revenue Shares in the Brokerage account, they will be passed back to the PPT as earnings. Investments in the VRSIP fund are ineligible for transfer into the self-directed brokerage account with Charles Schwab due to equity wash provisions. 	<p>Information about the Self-Directed Brokerage Account is available online at dcp.varetire.org.</p> <p>To open an SDBA:</p> <ul style="list-style-type: none"> Enter your User ID and password to log in to your secure account. Select the appropriate plan and go to Account. Select Investments & Research. Select Self-Directed Brokerage Account and then Open an account.
-------------------	--	--

Charles Schwab & Co., Inc. and Voya Financial are not affiliated and are not responsible for the products and services provided by the other.

Schwab Personal Choice Retirement Account® (PCRA) is offered through Charles Schwab & Co., Inc. (Member SIPC), the registered broker/dealer, which also provides other brokerage and custody services to its customers.

There is no assurance that the funds will achieve their objectives.

Benchmarks are current as of this printing. You cannot invest directly in the benchmark.

The VRS Board and the Plans' investment managers may impose restrictions and/or fees that discourage investment trading that could have an adverse impact on the management of a fund, other participants or clients of the fund's management.

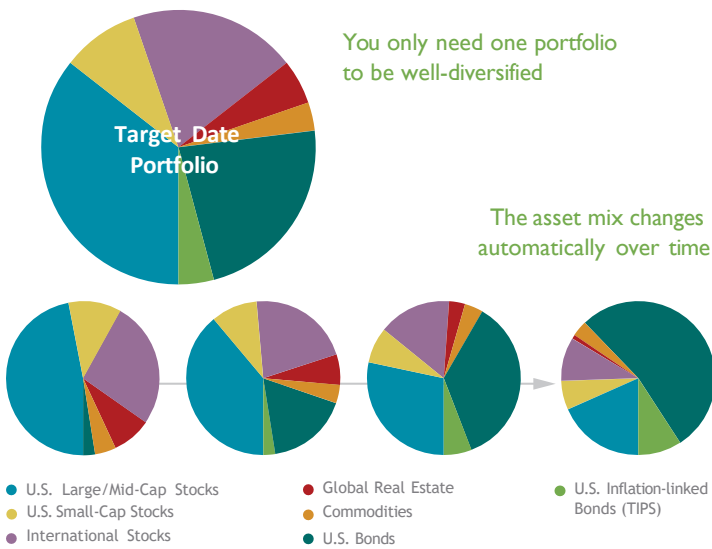


CHOOSING A TARGET DATE PORTFOLIO

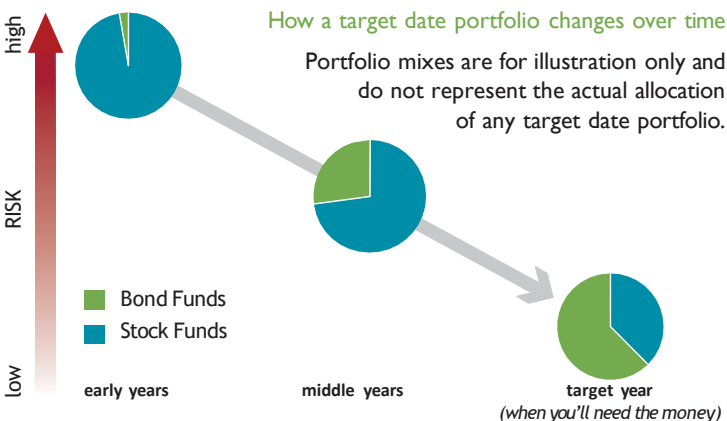
A SIMPLE WAY TO SAVE FOR RETIREMENT: Target date portfolios offer the ease and convenience of a professionally managed, diversified portfolio in one easy step. Although target date portfolios offer a simple investing solution, you should continue to monitor your plan account and increase contributions to stay on track with your retirement objectives.

A portfolio that evolves over time

Professionals make the diversification, asset allocation and rebalancing decisions for the target date portfolios. They are constructed to provide broad diversification, so you typically only need one portfolio.



Over time, the investment mix gradually shifts from a greater concentration of higher-risk investments (such as stock funds) to a greater concentration of lower-risk investments (such as bond funds). The investment mix automatically becomes more conservative as the portfolio approaches its target date, so you don't have to constantly worry about the mix of individual funds.



Picking your portfolio

Choose the target date portfolio whose target date is closest to the year you expect to begin withdrawing money from your plan account.

If Your Birthday is...	Your Target Date Portfolio is...
On or before 1962	Retirement Portfolio
On or between 1963 and 1967	Target Date 2030 Portfolio
On or between 1968 and 1972	Target Date 2035 Portfolio
On or between 1973 and 1977	Target Date 2040 Portfolio
On or between 1978 and 1982	Target Date 2045 Portfolio
On or between 1983 and 1987	Target Date 2050 Portfolio
On or between 1988 and 1992	Target Date 2055 Portfolio
On or between 1993 and 1997	Target Date 2060 Portfolio
On or between 1998 and 2002	Target Date 2065 Portfolio
On or after 2003	Target Date 2070 Portfolio

Based on assumption that retirement age is 65.

Diversification and shifting to a conservative investment mix over time helps manage risk, but does not guarantee earnings growth. As with any investment, there is risk and the potential to lose value. Although target date portfolios seek to meet different investment objectives, meeting these objectives is not guaranteed. Asset allocation, diversification and rebalancing do not ensure a profit or protect against loss in declining markets.

GLOSSARY OF TERMS

Assets

Anything owned that has monetary value or can be exchanged for monetary value (e.g., a house or car).

Benchmark

A standard by which something can be measured or judged.

Capital

Money available for investment purposes.

Capital Gain (or Loss)

An increase (or decrease) in value of a capital asset, for example, of a stock that gives it higher (or lower) value than its purchase price. The gain or loss is not realized until the asset is sold.

Diversification

Spreading your money among different securities, sectors, industries and strategies within a number of asset classes (e.g., stocks, bonds, cash equivalents).

Dividend

A payment to shareholders that represents their share of a fund's or company's distributed earnings.

Earnings

A company's or fund's profit after paying all costs, expenses and taxes.

Expense Ratio

A ratio for comparing an investment option's efficiency by dividing its expenses by its net assets.

Fund Profiles

Provides information about each core investment option. It includes information about the fund's investment objective, risks, performance and other pertinent data. Posted quarterly on your plan's website at: dcp.varetire.org.

Interest or dividends earned from an investment. Income is automatically reinvested in a participant's plan account.

Index

An unmanaged group of securities whose overall performance is used as a benchmark against which financial or economic performance may be measured, such as the S&P 500 or the Consumer Price Index.

Interest

Money a borrower pays to a lender as the cost of using its money, expressed as a percent per period of time. The period of time is usually one year, in which case it is called an annual rate of interest.

Investment Objective/Goal

A statement of the goals an investment option seeks to achieve through its investments. Generally, investors match their financial objectives with investment options that have similar goals, balanced with the investor's risk tolerance.

Investment Option Performance Report (IOP)

Listing of core investments available in the plans comparing performance to benchmarks, performance over time and expense ratios. Posted monthly on your plan's website at dcp.varetire.org and included with your quarterly participant statement.

Liquidity

A market is liquid when it has a high level of trading activity, allowing buying and selling with minimum price disturbance. A liquid asset is easily turned into cash.

Market Capitalization (Market Cap)

The current value or price of a stock multiplied by the number of shares outstanding. For example, if a company has 1 million shares available and the price is \$10 per share, market cap is \$10 million.

Principal

The original amount invested, not including interest or dividends on that amount.

Standard Deviation

A measure of the variability of returns or prices around their mean value.

Total Return

Return on an investment over a specific period of time. Total return includes income and share price appreciation and depreciation. It assumes that all dividends and capital gains paid during the period are reinvested to buy additional shares.

Volatility

A measure of the dispersion of outcomes for the return on an investment; typically, this is stated as annualized standard deviation.



Easy account access — Manage your account 24/7 at

dcp.varetire.org/login, through the Voya Retire® mobile app and by calling the VRS Defined Contribution Plans Service Center.

Log in to your DCP account to learn more about:

- Plan Features, fees and expenses.
- Contributing to the plan.
- Retirement planning.
- Financial Wellness.
- Estimate your savings progress with myorangemoney®.
- View, download and print account statements.
- Investment options for different types of investors.
- Rebalancing your account.
- Naming beneficiaries.
- Rolling over balances from other retirement plans.
- Making a withdrawal.

Accessing your account You can access your plan via:

- **Web:** dcp.varetire.org/hybrid
- **DCP Account:** dcp.varetire.org/login
- **Mobile:** Voya Retire

VRS Defined Contribution Plans Service Center: 877-327-5261

(Hearing impaired: 800-579-5708). English- and Spanish-speaking representatives are available weekdays from 8 a.m. to 9 p.m. ET, excluding stock market holidays.

The first time you log in to the plan website or use the mobile app you will be required to set up a username and password and establish authentication. Select “Register Now” in the login section to begin. As part of the registration process, you will receive a code through the designated method you have on file with Voya (text, email or U.S. Mail). You will then create a login username and password for ongoing online or mobile account access.

The first time you access your account by phone you will need to verify your identity. Once your identity has been verified, follow the prompts to have a code sent to you by the designated method you have on file with Voya (text, email or U.S. Mail). Use the code to create a unique PIN, which you will use for subsequent phone access.

VRS Defined Contribution Plans Education Specialists

To help you make informed decisions and achieve your retirement goals, VRS provides local DC Plans Education Specialists who can assist you with plan enrollment, account management, investment education and retirement planning. Whether you are just starting your career, nearing retirement or somewhere in between, you can benefit from the guidance and support of a local DC Plans Education Specialist.

Contact: Log in to your [DCP Account](#) to send a secure message.

DC Plans Virginia Service Center

Reynolds Office Building
6641 West Broad Street
Suite G-106
Richmond, VA 23230

877-327-5261

Hours: Monday - Friday | 8:30 a.m. - 5 p.m. ET

