RETIREMENT REPORT

Littleton Public Schools
403(b) and 457 Retirement Plans

Fall 2017

Littleton Public Schools
big enough to serve you; small enough to know you

What Can Squirrels Teach Us About Saving?

They're smart and adaptable, and they plan

Darwin said that organisms don't need to be the smartest to survive, they need to be the most adaptable. Gray squirrels are a double threat: they are both smart and adaptable, equally at home in the woods, a backyard, or the city.

It turns out they also have a phenomenal ability to change their behavior to survive, including finding, storing, and retrieving nuts.[1] This puts them close to humans' ability to meet a long-dated future goal, such as saving money.

Sizing up nuts... and investments

Much as we assess which investments have the potential to provide long-term growth or preserve capital, squirrels use their sharp peripheral vision to size up nuts to see which ones are good to eat. Nuts that sprout use up valuable nutrients. A savvy squirrel will use its sharp teeth to cut off a nut's sprouting mechanism, thereby preserving its food value for winter.

When evaluating an investment for the future, such as a mutual fund, you want to be sure that the strategy it follows has the potential to deliver the results you expect over many years, often decades. In a way, you're sizing up your own nuts!

Looking at the fund's past performance is an often-useful way to evaluate returns, but it shouldn't be the sole factor. (Remember, past performance does not predict future returns.) In addition, look at the consistency of the fund's returns over time. How did it do against its benchmark in a down market? A fund that consistently underperforms in a down market is like a sprouting nut. Consider avoiding it, or replacing it with another option.

Don't hide them all in one spot

According to researchers, fox squirrels move thousands

of nuts among five or more locations to discourage pilfering by rival squirrels.[2]

By avoiding losses, squirrels reduce risk. You do the same thing when diversifying a portfolio. Rather than putting all your "fund nuts" in one basket, you may be able to lessen the risk of experiencing a large loss by spreading your investments across multiple funds. There's less likelihood of all investments going down in value at the same time.[3]

Investors diversify by including stocks, bonds, and cash in their portfolios. Stocks, which represent shares of ownership in a company, usually perform differently from bonds or cash. Over long periods, stocks generally have provided the greatest returns, but with the most risk. Corporate bonds, which are essentially loans to a company, offer somewhat less return potential, but with less risk than stocks. Cash or "cash equivalents" typically are the least risky asset class, but also offer the least return.

Having the right balance of asset classes may help you save more for the future in a smart way — just like our crafty friends, the squirrels.

1 Natalie Angier, "Nut? What Nut? The Squirrel Outwits to Survive," New York Times, July 5, 2010. http://www.nytimes.com/2010/07/06/science/06angi.html

2 "Fox squirrels show long-term investment savvy when hoarding nuts," Berkeley News, October 3, 2012. http://news.berkeley.edu/2012/10/03/squirrelnuts/

3 Diversification does not guarantee a profit or protect from losses.

Would You Rather Have $1 Million or $5,000 a Month to Retire?

Choosing between these values is all about your perspective

Some people view having $1 million in the bank as more valuable than having an income of $5,000 per month. However, both values are roughly equivalent. This example illustrates what behavioral researchers call the illusion of wealth and the illusion of poverty.[1]

It seems that most of us have been conditioned to be attracted to large numbers, and in fact, having a $1 million war chest at our fingertips may be very appealing. But consider how the illusion of wealth may skew your judgment. Many financial planners use a rule of thumb not to withdraw more than 4% a year from your retirement account. Historic research has shown the risk of that withdrawal rate depleting the account as very remote. But a 4% annual withdrawal rate taken from a $1 million nest egg is just $40,000 — not chump change, but not likely to fund a lavish lifestyle, either.

On the other hand, the option to take $5,000 a month from an investment account may appear to suffer from the illusion of poverty, at least when comparing it to the $1 million lump sum. But here, again, perspective matters. It turns out that a $5,000 per month income is roughly equivalent to a $1 million nest egg that's annuitized (that is, converting it to a contract that provides a stream of fixed monthly payments for a defined period).[2]

When we examine our assumptions about money, it helps to consider the filters we use to make comparisons. Sometimes, illusions of wealth and poverty play a subliminal role.

[1] "Would You Rather Have $1 Million or $5,000 Monthly in Retirement?" Wall Street Journal, March 27, 2017. https://www.wsj.com/articles/would-you-rather-have-1-million-or-5-000-monthly-in-retirement-1490582208

[2] Annuities are long-term, tax-deferred vehicles designed for retirement. There are costs and limitations associated with this product and guarantees are based on the claims paying ability of

Whom do I call for help?

Contact TIAA-CREF for the following:

> Balances
> Investment changes
> Change personal info

800.842.2009
www.tiaa-cref.org

The Plan's Investment Consultant

Innovest Portfolio Solutions

4643 S. Ulster St., Suite 1040
Denver, CO 80237

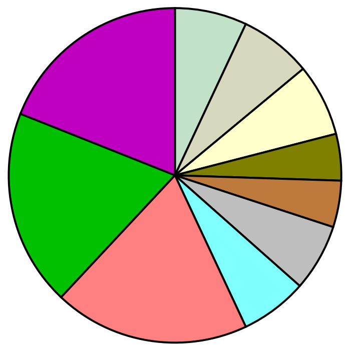
303.694.1900 | www.innovestinc.com

Littleton Public School Conservative 09/30/17

Who typically uses this portfolio?

Current Age:	over 60
Risk Level:	Low
Expected Return:	Low
<u>Time Horizon:</u>	
Years to Age 65:	under 5
Years to Age 85:	under 25
Expense Ratio (%)	0.26

Portfolio Allocation (%)



Dodge & Cox Stock (DODGX)	7.0
Vanguard 500 Index;Adm (VFIAX)	7.0
Harbor:Cap Apprec;Inst (HACAX)	7.0
Vanguard Md-Cp Idx;Adm (VIMAX)	4.5
Vanguard Sm-Cp Idx;Adm (VSMAX)	4.5
Am Beacon:Intl Eq;Inst (AAIEX)	6.5
American Funds EuPc;R6 (RERGX)	6.5
Met West:Total Return;I (MWTIX)	19.0
Vanguard Tot Bd;Adm (VBTLX)	19.0
TIAA Traditional	19.0

Past Performance (%)*

	Last Quarter	YTD	1 Year	3 Years	5 Years	10 Years
Littleton Public School Conservative	2.85	9.24	9.14	5.75	7.06	N/A

Understanding Your Professionally-Managed Portfolios

Who typically uses this portfolio?

Current Age: The age (today) of an average investor with time horizon, risk level, and return expectations of the Conservative Portfolio.

Time Horizon: Indicates the number of years (time horizon) to the average retirement age of 65, when the investor will begin spending the money in their account, and the number of years to assumed life expectancy of age 85.

Risk Level: The amount of expected risk in the Conservative Portfolio. Risk is measured by the potential loss over a 12-month period that an investor might expect in the Conservative Portfolio, and is calculated via a statistical process consistent with 95% probability.

Low: -8% to **-14%**

Expected Return: The level of expected investment return from the Conservative Portfolio. The range of returns shown below indicates the potential gain that an investor might expect each year, on average, over a 5-year period. This is also referred to as the "mean" return, and is calculated using a statistical process to determine a range of probabilities.

Low: 4% to **6%**

Past Performance

Investment performance results shown above represent past performance and are not indicative of future results. Please read the information contained in the applicable fund prospectuses carefully before investing money.

How is the portfolio diversified?

The pie chart and accompanying data shown for each portfolio illustrates the percentage allocated to each fund.

*Innovest relies on 3rd party data for these returns.

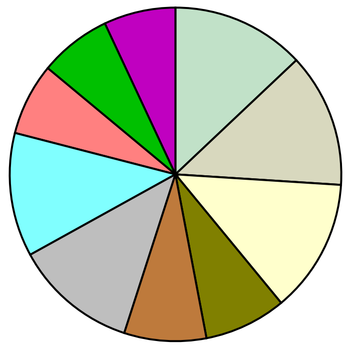
**Returns using TIAA Traditional Annuity - GRA contract

Littleton Public School Moderate 09/30/17

Who typically uses this portfolio?

Current Age:	40 - 60
Risk Level:	Moderate
Expected Return:	Moderate
<u>Time Horizon:</u>	
Years to Age 65:	5 - 25
Years to Age 85:	25 - 45
Expense Ratio (%)	0.35

Portfolio Allocation (%)



Dodge & Cox Stock (DODGX)	13.0
Vanguard 500 Index;Adm (VFIAX)	13.0
Harbor:Cap Apprec;Inst (HACAX)	13.0
Vanguard Md-Cp Idx;Adm (VIMAX)	8.0
Vanguard Sm-Cp Idx;Adm (VSMAX)	8.0
Am Beacon:Intl Eq;Inst (AAIEX)	12.0
American Funds EuPc;R6 (RERGX)	12.0
Met West:Total Return;I (MWTIX)	7.0
Vanguard Tot Bd;Adm (VBTLX)	7.0
TIAA Traditional	7.0

Past Performance (%)*

	Last Quarter	YTD	1 Year	3 Years	5 Years	10 Years
Littleton Public School Moderate	4.60	14.69	16.04	8.03	10.64	N/A

Understanding Your Professionally-Managed Portfolios

Who typically uses this portfolio?

Current Age: : The age (today) of an average investor with time horizon, risk level, and return expectation of the Moderate Portfolio.

Time Horizon: Indicates the number of years (time horizon) to the average retirement age of 65, when the investor will begin spending the money in their account, and the number of years to assumed life expectancy of age 85.

Risk Level: The amount of expected risk in the Moderate Portfolio. Risk is measured by the potential loss over a 12-month period that an investor might expect in the Moderate Portfolio, and is calculated via a statistical process consistent with 95% probability.

Moderate: -13% to -19%

Expected Return: The level of expected investment return from the Moderate Portfolio. The range of returns shown below indicates the potential gain that an investor might expect each year, on average, over a 5-year period. This is also referred to as the "mean" return, and is calculated using a statistical process to determine a range of probabilities.

Moderate: 5% to 7%

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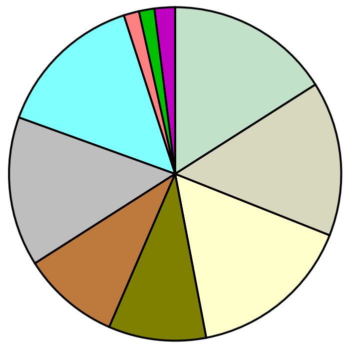
**Returns using TIAA Traditional Annuity - GRA contract

Littleton Public School Aggressive 09/30/17

Who typically uses this portfolio?

Current Age:	30 - 50
Risk Level:	High
Expected Return:	High
Time Horizon:	
Years to Age 65:	15 - 35
Years to Age 85:	35 - 55
Expense Ratio (%)	0.39

Portfolio Allocation (%)



Dodge & Cox Stock (DODGX)	16.0
Vanguard 500 Index;Adm (VFIAX)	15.0
Harbor:Cap Apprec;Inst (HACAX)	16.0
Vanguard Md-Cp Idx;Adm (VIMAX)	9.5
Vanguard Sm-Cp Idx;Adm (VSMAX)	9.5
Am Beacon:Intl Eq;Inst (AAIEX)	14.5
American Funds EuPc;R6 (RERGX)	14.5
Met West:Total Return;I (MWTIX)	1.5
Vanguard Tot Bd;Adm (VBTLX)	1.5
TIAA Traditional	2.0

Past Performance (%)*

	Last Quarter	YTD	1 Year	3 Years	5 Years	10 Years
Littleton Public School Aggressive	5.40	17.22	19.36	9.03	12.30	N/A

Understanding Your Professionally-Managed Portfolios

Who typically uses this portfolio?

Current Age: : The age (today) of an average investor with time horizon, risk level, and return expectation of the Aggressive Portfolio.

Time Horizon: Indicates the number of years (time horizon) to the average retirement age of 65, when the investor will begin spending the money in their account, and the number of years to assumed life expectancy of age 85.

Risk Level: The amount of expected risk in the Aggressive Portfolio. Risk is measured by the potential loss over a 12-month period that an investor might expect in the Aggressive Portfolio, and is calculated via a statistical process consistent with 95% probability.

High: -17% to -23%

Expected Return: The level of expected investment return from the Aggressive Portfolio. The range of returns shown below indicates the potential gain that an investor might expect each year, on average, over a 5-year period. This is also referred to as the "mean" return, and is calculated using a statistical process to determine a range of probabilities.

High: 6% to 8%

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