

# Monthly Report

# FF Series

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TD Ameritrade, Fidelity, Schwab

January 2020

Data through December 31

See important disclosures starting on page 4, including important risk considerations, methodology, benchmark descriptions, and hypothetical/back — tested calculation information.

For use in one-on-one client meetings only.  
Not to be used in a group setting or presentation.

# Hypothetical Performance Summary

	2007	2008	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019
<b>FF 100</b> Aggressive Benchmark	-2.32%	3.02%	34.37%	21.58%	6.26%	9.87%	29.59%	14.08%	-4.05%	9.31%	16.38%	-11.12%	18.14%
	-3.40%	-26.43%	22.82%	13.24%	-1.65%	11.58%	22.25%	8.17%	1.05%	7.97%	15.33%	-5.17%	20.64%
<b>FF 80</b> Moderate Aggressive Benchmark	-1.53%	4.55%	29.90%	18.81%	5.90%	9.27%	23.39%	11.89%	-3.68%	8.87%	13.70%	-9.77%	16.33%
	-2.42%	-21.44%	19.97%	12.02%	-0.04%	10.25%	17.14%	7.54%	0.94%	7.03%	12.92%	-4.11%	18.16%
<b>FF 60</b> Moderate Benchmark	-0.75%	6.07%	25.55%	16.04%	5.49%	8.66%	17.45%	9.72%	-3.32%	8.40%	11.07%	-8.46%	14.50%
	-1.44%	-16.20%	17.10%	10.72%	1.54%	8.90%	12.21%	6.90%	0.79%	6.07%	10.55%	-3.08%	15.69%
<b>FF 40</b> Moderate Conservative Benchmark	0.03%	7.58%	21.31%	13.26%	5.03%	8.04%	11.75%	7.58%	-2.99%	7.89%	8.50%	-7.20%	12.65%
	-0.46%	-10.71%	14.22%	9.34%	3.08%	7.54%	7.46%	6.25%	0.62%	5.09%	8.23%	-2.09%	13.23%
<b>FF 20</b> Conservative Benchmark	0.81%	9.09%	17.17%	10.48%	4.51%	7.41%	6.29%	5.47%	-2.67%	7.36%	5.97%	-5.97%	10.79%
	0.52%	-4.94%	11.34%	7.90%	4.59%	6.17%	2.88%	5.59%	0.41%	4.09%	5.95%	-1.13%	10.78%
<b>FF Income</b> Income Benchmark	1.35%	10.18%	13.32%	8.00%	3.93%	6.88%	1.70%	3.74%	-2.37%	6.62%	4.04%	-5.26%	9.53%
	1.42%	0.81%	8.53%	6.39%	5.47%	4.71%	-1.19%	4.83%	0.26%	3.02%	3.73%	-0.48%	8.25%

Allocation Performance Summaries are hypothetical illustrations created by using the monthly return of each underlying money management program multiplied by the allocation percentage of each money management program.

The data in this report pertains only to accounts with an initial investment value of \$100,000 or greater. Accounts valued under \$100,000 utilize proprietary FormulaFolios ETFs in place of certain separately managed models, which may result in slightly different performance results.

Returns are net of the highest allowable advisory fee (2.20%); although not all clients pay 2.20%.

*See important disclosures starting on page 4, including important risk considerations, methodology, benchmark descriptions, and hypothetical/back-tested calculation information.*








# Risk/Return Metrics

Allocation Performance Summaries are hypothetical illustrations created by using the monthly model return of each underlying money management program multiplied by the allocation percentage of each money management program.

Returns are net of the highest allowable advisory fee (2.20%); although not all clients pay 2.20%.

**Standard deviation** is a statistical measure of the volatility of a portfolio's returns around its mean.

**Sharpe Ratio** is a measure that indicates the average return minus the risk-free return divided by the standard deviation of return on an investment.

	Average Annual Return	Maximum Drawdown	 WealthGuard	Standard Deviation	Sharpe Ratio	Highest Month	Lowest Month	Trailing 1 Year	Trailing 3 Years	Trailing 5 Years	Trailing 10 Years
<b>FF 100</b> Aggressive Benchmark	11.19% 6.14%	-14.68% -37.14%	20% 	10.39 10.68	0.88 0.39	8.48% 7.56%	-8.34% -11.73%	18.14% 20.64%	6.91% 9.68%	5.09% 7.56%	10.40% 8.99%
<b>FF 80</b> Moderate Aggressive Benchmark	9.97% 5.76%	-12.50% -30.61%	20% 	8.81 8.67	0.90 0.43	7.57% 6.21%	-6.93% -9.98%	16.33% 18.16%	6.07% 8.56%	4.59% 6.69%	9.04% 7.95%
<b>FF 60</b> Moderate Benchmark	8.72% 5.34%	-10.41% -23.49%	15% 	7.35 6.72	0.91 0.50	6.78% 4.92%	-5.51% -8.23%	14.50% 15.69%	5.20% 7.42%	4.06% 5.79%	7.66% 6.89%
<b>FF 40</b> Moderate Conservative Benchmark	7.44% 4.87%	-8.31% -15.77%	10% 	6.09 4.90	0.89 0.59	5.99% 3.63%	-4.16% -6.49%	12.65% 13.23%	4.29% 6.26%	3.49% 4.87%	6.26% 5.79%
<b>FF 20</b> Conservative Benchmark	6.15% 4.35%	-6.22% -8.61%	7.5% 	5.18 3.40	0.80 0.69	5.85% 3.02%	-3.56% -4.74%	10.79% 10.78%	3.35% 5.08%	2.90% 3.93%	4.84% 4.67%
<b>FF Income</b> Income Benchmark	4.95% 3.72%	-5.44% -5.14%	7.5% 	4.89 2.74	0.60 0.63	6.26% 3.20%	-3.24% -2.88%	9.53% 8.25%	2.59% 3.77%	2.36% 2.91%	3.59% 3.46%

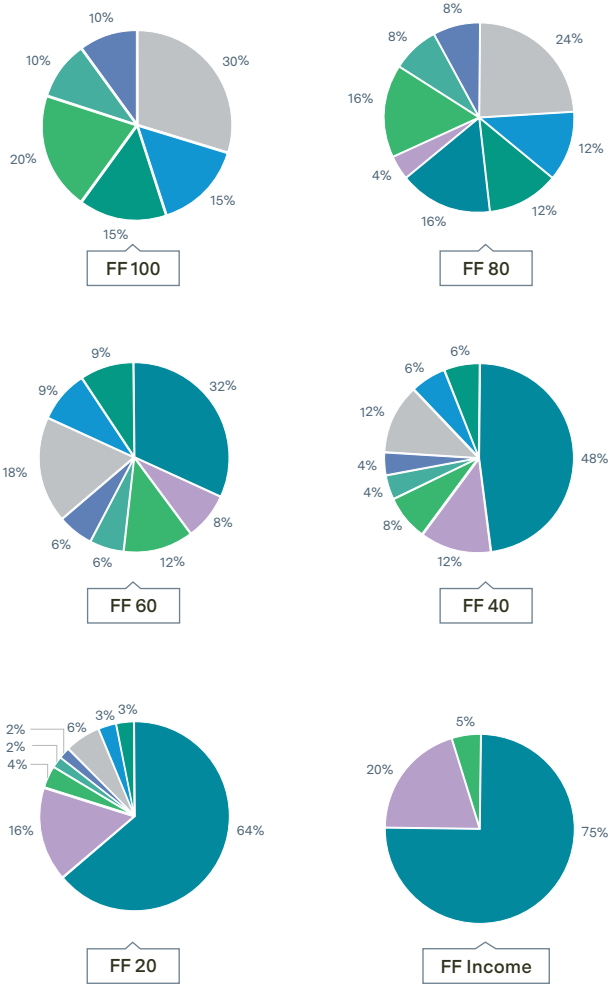
The data in this report pertains only to accounts with an initial investment value of \$100,000 or greater. Accounts valued under \$100,000 utilize proprietary FormulaFolios ETFs in place of certain separately managed models, which may result in slightly different performance results.

See important disclosures starting on page 4, including important risk considerations, methodology, benchmark descriptions, and hypothetical/back-tested calculation information.

**WealthGuard™** is a complete portfolio monitoring system. Designed by determining the amount of downside risk a client is willing to tolerate, WealthGuard™ is added to client accounts to help protect from downside risk. WealthGuard™ is not a stop loss strategy. When the account value in the portfolio hits the targeted downside value, an alert is sent to the client, advisor, and money manager. The money manager trades the account as indicated on the WealthGuard™ agreement.

There is no guarantee the exact WealthGuard™ value will be captured, or assets will be traded or liquidated the same day the WealthGuard™ value is reached due to time of day and/or market restrictions. WealthGuard™ is not responsible for any tax implications that may result due to the liquidation or trading of the holdings. FormulaFolio Investments is not responsible for any errors or omissions in the information used to prepare your WealthGuard™ percentages.

# Allocation Composition



## Models

- Tactical Growth
- Total Return Growth Lite
- Flexible Growth
- FFI US Equity
- Smart Passive Growth
- Sector Rotation
- Tactical Income
- Flexible Income

# Risk/Return Breakdown



See important disclosures starting on page 4, including important risk considerations, methodology, benchmark descriptions, and hypothetical/back-tested calculation information.

# Disclaimer

FormulaFolio Investments, LLC (“FormulaFolios”) is a Registered Investment Advisor with the SEC (Securities and Exchange Commission). Registration with the SEC does not imply a certain level of skill or training nor is it an endorsement of FormulaFolios by the SEC. This illustration is not complete unless accompanied by the Form ADV Part 2A Disclosure Brochure for FormulaFolios.

## This Report Contains Hypothetical/Backtested Performance

Backtested performance is hypothetical (it does not reflect trading in actual accounts) and is provided for informational purposes only to indicate historical performance had the portfolios been available over the relevant time period. Custom Allocation Hypothetical Performance Illustrations are hypothetical illustrations created by taking the target percentages of each model to create the overall allocation. The hypothetical returns in this document are intended to show how the allocations are designed to function and do not represent actual client returns or live allocation returns. Results do not reflect the impact that material economic and market factors may have had if client funds were invested in the illustrated allocations. In actual client accounts, the percentage of each money management program in an allocation will deviate from month to month as allocation rebalancing does not occur that frequently, causing variations in actual returns.

Individual results will differ from hypothetical results depending on the size of account, investment objectives, restrictions on the amount of transactions and related costs, the inception date of the account, and other account-specific factors. Client specific cash flows, such as contributions and/or distributions are not factored into the backtested calculations. Backtested performance is NOT an indicator of future actual results.

The models included within this report were developed with the benefit of hindsight via backtesting. Though backtesting is no guarantee of future results FormulaFolios believes it is beneficial to review hypothetical model statistics in order to gauge the viability of an idea in various market environments. However, the nature of backtested models and allocations create the potential for an investment adviser to select superior performance results in order to get the desired model and related allocation results. **No matter how positive the model returns have been over any time period, the potential for loss is always present due to factors that may not be accounted for in the models.** Additionally, the simulated results in this report reflect performance of proprietary strategies that were not offered by FormulaFolios to investors for the entire periods illustrated and do NOT represent returns that any investor actually attained. Some models used in the Allocations were not in existence until after December 31, 2011 (the inception of FormulaFolios).

## Data Includes a blend of backtested and live tracking account data

Certain results in the underlying models include a blend of backtested and “live” returns for the specified periods as described in each of the programs discussed in the next section. The “live” returns are derived from a FormulaFolios—originated tracking account consisting of funds invested in the individual models held at Folio Institutional, one of the custodian firms used by FormulaFolios. This tracking account is traded in real time in accordance with FormulaFolios’ proprietary portfolio model compositions. Note that the firm’s tracking account holdings may differ from the models because of the custodian used as each custodian has available certain securities that can be bought and sold without incurring transaction costs for clients. Accordingly, FormulaFolios uses different individual holdings for each custodian in an effort to minimize trading costs, which means that actual client holdings may differ

depending on the custodian used. The models managed by FormulaFolios suggest broad asset allocations, not specific holdings.

FormulaFolios regularly monitors its investment models, and makes portfolio adjustments when it is deemed appropriate. Results are updated retroactively when portfolio adjustments are made to the allocations as illustrated by the following disclosures.

In many FormulaFolios Custom Allocations there will be proprietary, FormulaFolios money management programs; as well as third party money management programs. To illustrate the hypothetical return history of these allocations, FormulaFolios uses monthly return data provided by the third-party money management program sponsors from the earliest common inception to the latest month end. Descriptions of the performance calculation for each money management program, both third party programs and FormulaFolios proprietary programs, are listed in the next section.

## Underlying Money Management Programs and Models

FormulaFolios was able to purchase the securities recommended by the models and the markets were sufficiently liquid to permit all trading. Changes in these assumptions may have a material impact on the backtested returns presented. Certain assumptions have been made for modeling purposes and are unlikely to be realized. No representations and warranties are made as to the reasonableness of the assumptions. This information is provided for illustrative purposes only.

## Tactical Growth

FormulaFolios manages the Tactical Growth model. The performance results are presented in US dollars and reflect the reinvestment of dividends and other earnings, and are net of investment management fees, net of fees after transactions, and also net of any separate

fees assessed directly by each unaffiliated mutual fund holding that comprised the model. Performance is not net of custodial fees, if applicable. The model used by FormulaFolios was developed by the firm's founder, Jason Wenk, beginning in January 2007 under the name "RWA Market Rotation" and used for the management of client assets of a separate Registered Investment Adviser firm also founded by Mr. Wenk. The name of the model was changed to "Tactical Growth" in November 2011. Because FormulaFolios was not in existence prior to January 1, 2012, and because the last revision to the model algorithm was in July 2016, all returns illustrated prior to that date should be viewed as backtested returns. The Tactical Growth model from 8/2016 to current is reported from the live returns as utilized by FormulaFolios in a tracking account. Though some returns for the individual model may be live, the data illustrated for the purpose of this report represents hypothetical performance numbers.

#### **Smart Passive Growth**

FormulaFolios manages the Smart Passive Growth model. Although this model is generally passive, it has the ability to sell a portion of holdings and hedge with treasury bonds during unfavorable investment environments. The portfolio for the Smart Passive Growth model is designed utilizing index Exchange Traded Funds (ETFs). The performance results are presented in US dollars and reflect the reinvestment of dividends and other account earnings, and are net of investment management fees, net of fees after transactions, and also net of any separate fees assessed directly by each unaffiliated mutual fund holding that comprised the account. Performance is not net of custodial fees if applicable. Because FormulaFolios was not in existence prior to January 1, 2012, and because the last revision to the model algorithm was in October 2016, all returns illustrated prior to that date should be viewed as hypothetical backtested returns. The Smart Passive Growth model from 11/2016 to current is reported from the live returns as utilized by FormulaFolios in a tracking account. Though some returns for the individual model may be live, the data illustrated for the purpose of this report represents hypothetical performance numbers.

#### **Defensive Growth**

FormulaFolios manages the Defensive Growth model. The performance results are presented in US dollars and reflect the reinvestment of dividends and other account earnings, and are net of investment management fees, net of fees after transactions, and also net of any separate fees assessed directly by each unaffiliated mutual fund holding that comprised the account. Performance is not net of custodial fees if applicable. Because FormulaFolios was not in existence prior to January 1, 2012, and because the last revision to the model algorithm was in May 2015, all returns illustrated prior to that date should be viewed as backtested returns. The Defensive Growth model from 6/2015 to current is reported from the live returns as utilized by FormulaFolios in a tracking account. Though some returns for the individual model may be live, the data illustrated for the purpose of this report represents hypothetical performance numbers.

#### **FormulaFolios US Equity**

FormulaFolios manages the FormulaFolios US Equity Fund, an open-end registered mutual fund. The performance results are presented in US dollars and reflect the reinvestment of dividends and other earnings, and are net of investment management fees, net of fees after transactions, and net of any separate fees assessed directly by each unaffiliated mutual fund holding that may have comprised the model. Performance is not net of custodial fees if applicable. The model used by FormulaFolios was developed by the firm's founder, Jason Wenk. All returns illustrated prior to December 2015 in relation to the mutual fund should be viewed as backtested model returns. FormulaFolios US Equity is utilized in the model Diversified Equity, which is made up of a blend of Defensive Growth, Dividend Growth, and Multi-Cap Equity. The FormulaFolios US Equity Fund from 12/2015 to current is reported from the live returns as utilized by FormulaFolios in a tracking account. Though some returns for the individual model may be live, the data illustrated for the purpose of this report represents hypothetical performance numbers.

#### **Total Return Growth**

FormulaFolios manages the Total Return Growth model. The performance results are presented in US dollars and reflect the reinvestment of dividends and other account earnings, and are net of investment management fees, net of fees after transactions, and also net of any separate fees assessed directly by each unaffiliated mutual fund holding that comprised the account. Performance is not net of custodial fees if applicable. The model used by FormulaFolios was developed by the firm's founder, Jason Wenk, beginning in July 2006 and used for the management of client assets of a separate Registered Investment Advisor firm also founded by Mr. Wenk. The last revision to the investment model algorithm was in May 2009. Because FormulaFolios was not in existence prior to January 1, 2012 all returns illustrated prior to that date should be viewed as backtested returns. The Total Return Growth model from 1/2012 to current is reported from the live returns as utilized by FormulaFolios in a tracking account. Though some returns for the individual model may be live, the data illustrated for the purpose of this report represents hypothetical performance numbers.

#### **Total Return Growth Lite**

FormulaFolios manages the Total Return Growth Lite model. The performance results are presented in US dollars and reflect the reinvestment of dividends and other earnings, and are net of investment management fees, net of fees after transactions, and also net of any separate fees assessed directly by each unaffiliated mutual fund holding that comprised the model. Performance is not net of custodial fees, if applicable. Because FormulaFolios was not in existence prior to January 1, 2012, and because the first use of the model algorithm was not until June 2014, all returns illustrated prior to that date are backtested returns. Results from 6/2014 to current are the live returns of the program as utilized by FormulaFolios in a tracking account. Though some returns for the individual model may be live, the data illustrated for the purpose of this report represents hypothetical performance numbers.

## Dividend Growth

FormulaFolios manages the Dividend Growth model. The performance results are presented in US dollars and reflect the reinvestment of dividends and other account earnings, and are net of investment management fees, net of fees after transactions, and also net of any separate fees assessed directly by each unaffiliated mutual fund holding that comprised the account. Performance is not net of custodial fees if applicable. Because FormulaFolios was not in existence prior to January 1, 2012, and because the last revision to the model algorithm was in May 2015, all returns illustrated prior to that date should be viewed as backtested returns. The Dividend Growth model from 6/2015 to current is reported from the live returns as utilized by FormulaFolios in a tracking account. Though some returns for the individual model may be live, the data illustrated for the purpose of this report represents hypothetical performance numbers.

## Flexible Growth

FormulaFolios manages the Flexible Growth model. The performance results are presented in US dollars and reflect the reinvestment of dividends and other earnings, and are net of investment management fees, net of fees after transactions, and also net of any separate fees assessed directly by each unaffiliated mutual fund holding that comprised the model. Performance is not net of custodial fees, if applicable. Because FormulaFolios was not in existence prior to January 1, 2012, and because the last revision to the model algorithm was in May 2015, all returns illustrated prior to that date are hypothetical backtested returns. The Flexible Growth model from 6/2015 to current is reported from the live returns as utilized by FormulaFolios in a tracking account. Though some returns for the individual model may be live, the data illustrated for the purpose of this report represents hypothetical performance numbers.

## Sector Rotation

FormulaFolios manages the Sector Rotation model. The performance results are presented in US dollars and reflect the reinvestment of dividends and other earnings, and are net of investment management fees, net of fees after transactions, and also net of any separate fees assessed directly by each unaffiliated mutual fund holding that comprised the model. Performance is not net of custodial fees, if applicable. Because FormulaFolios was not in existence prior to January 1, 2012, and because the first use of the model algorithm was not until October 2017, all returns illustrated prior to that date are hypothetical backtested returns. The Flexible Growth model from 10/2017 to current is reported from the live returns as utilized by FormulaFolios in a tracking account. Though some returns for the individual model may be live, the data illustrated for the purpose of this report represents hypothetical performance numbers.

## Multi Cap Equity

FormulaFolios manages the Multi Cap Equity model. The performance results are presented in US dollars and reflect the reinvestment of dividends and other account earnings, and are net of investment management fees, net of fees after transactions, and also net of any separate fees assessed directly by each unaffiliated mutual fund holding that comprised the account. Performance is not net of custodial fees if applicable. The model used by FormulaFolios was developed by the firm's founder, Jason Wenk, beginning in December 2007 and used for the management of client assets of a separate Registered Investment Advisor firm also founded by Mr. Wenk. The model was originally introduced as the "RWA Large Cap FormulaFolio" and changed its name to "Multi Cap Equity" in January 2012. The last revision to the investment model algorithm was in November 2013. Because FormulaFolios was not in existence prior to January 1, 2012, and because the last revision to the model algorithm was in November 2013 all returns illustrated prior to that date should be viewed as backtested returns. The Multi Cap Equity model

from 11/2013 to current is reported from the live returns as utilized by FormulaFolios in a tracking account. Though some returns for the individual model may be live, the data illustrated for the purpose of this report represents hypothetical performance numbers.

## Tactical Income

FormulaFolios manages the Tactical Income model. The performance results are presented in US dollars and reflect the reinvestment of dividends and other earnings, and are net of investment management fees, net of fees after transactions, and also net of any separate fees assessed directly by each unaffiliated mutual fund holding that comprised the model. Performance is not net of custodial fees, if applicable. The model used by FormulaFolios was developed by the firm's founder, Jason Wenk, beginning in December 2007 and was used for the management of client assets of a separate Registered Investment Adviser firm also founded by Mr. Wenk. The last revision to the investment model algorithm was in December 2016. Because FormulaFolios was not in existence prior to January 1, 2012, and because the last revision to the model algorithm was in December 2016, all returns illustrated prior to that date should be viewed as backtested returns. The Tactical Income model from 1/2017 to current is reported from the live returns as utilized by FormulaFolios in a tracking account. Though some returns for the individual model may be live, the data illustrated for the purpose of this report represents hypothetical performance numbers.

## Smart Passive Income

FormulaFolios manages the Smart Passive Income model. The portfolio for the Smart Passive Income model is designed utilizing index Exchange Traded Funds (ETFs). The performance results are presented in US dollars and reflect the reinvestment of dividends and other account earnings, and are net of investment management fees, net of fees after transactions, and also net of any separate fees assessed directly by each unaffiliated mutual fund

holding that comprised the account. Performance is not net of custodial fees, if applicable. Because FormulaFolios was not in existence prior to January 1, 2012, and because the last revision to the model algorithm was in October 2016, all returns illustrated prior to that date should be viewed as backtested returns. The Smart Passive Income model from 11/2016 to current is reported from the live returns as utilized by FormulaFolios in a tracking account. Though some returns for the individual model may be live, the data illustrated for the purpose of this report represents hypothetical performance numbers.

#### **Flexible Income**

FormulaFolios manages the Flexible Income model. The performance results are presented in US dollars and reflect the reinvestment of dividends and other account earnings, and are net of investment management fees, net of fees after transactions, and also net of any separate fees assessed directly by each unaffiliated mutual fund holding that comprised the account. Performance is not net of custodial fees, if applicable. Because FormulaFolios was not in existence prior to January 1, 2012, and because the first use of the model algorithm was not until July 2018, all returns illustrated prior to that date are hypothetical backtested returns. The Flexible Income model from 7/2018 to current is reported from the live returns as utilized by FormulaFolios in a tracking account. Though some returns for the individual model may be live, the data illustrated for the purpose of this report represents hypothetical performance numbers.

#### **Redwood Managed Volatility**

Redwood Investment Management (“Redwood”) manages the Redwood Managed Volatility model. The performance results are presented in US dollars and reflect the reinvestment of dividends and other account earnings, and are net of investment management fees, net of fees after transactions, and also net of any separate fees

assessed directly by each unaffiliated mutual fund holding that comprised the model. Performance is not net of custodial fees, if applicable. Monthly results from 1/1994 to 12/2013 are provided by Redwood to FormulaFolios and are used to create backtested results for FormulaFolios portfolio purposes. Redwood’s monthly performance from January 1994 to December 2012 was examined by Rothstein Kass, Beverly Hills, CA. In December, 2013, Redwood created the Redwood Managed Volatility mutual fund. The Redwood model from 1/2014 to current is reported from the live returns as utilized by FormulaFolios in a tracking account. Though some returns for the individual model may be live, the data illustrated for the purpose of this report represents hypothetical performance numbers.

#### **Redwood Managed Municipal Income**

Redwood Investment Management (“Redwood”) manages the Redwood Managed Municipal Income model. The performance results are presented in US dollars and reflect the reinvestment of dividends and other account earnings, and are net of investment management fees, net of fees after transactions, and also net of any separate fees assessed directly by each unaffiliated mutual fund holding that comprised the model. Performance is not net of custodial fees, if applicable. Monthly results from 1/1990 to 3/2017 are provided by Redwood to FormulaFolios and are used to create backtested results for FormulaFolios portfolio purposes. In March, 2017, Redwood created the Redwood Managed Municipal Income mutual fund, so results from 4/2017 to 6/2018 are derived from Morningstar’s return data and are used to create backtested results for FormulaFolios portfolio purposes. The Redwood model from 7/2018 to current is reported from the live returns as utilized by FormulaFolios in a tracking account. Though some returns for the individual model may be live, the data illustrated for the purpose of this report represents hypothetical performance numbers.

#### **BCA Managed Income**

Brian Carruthers and Associates (“BCA”) manage the BCA Managed Risk model. The performance results are presented in US dollars and reflect the reinvestment of dividends and other account earnings, and are net of investment management fees, net of fees after transactions, and also net of any separate fees assessed directly by each unaffiliated mutual fund holding that comprised the account.

Performance is not net of custodial fees if applicable. Results for BCA Managed Risk from 8/2002 to 12/2011 are provided as audited by Theta Investment Research to FormulaFolios and are used to create hypothetical backtested results for FormulaFolios portfolio purposes. The program is known within the Theta Investment Research database as “Managed Income”. The BCA model from 1/2012 to current is reported from the live returns as utilized by FormulaFolios in a tracking account. Though some returns for the individual model may be live, the data illustrated for the purpose of this report represents hypothetical performance numbers.

#### **FormulaFolios Tactical Growth ETF**

FormulaFolios manages the FormulaFolios Tactical Growth ETF. The performance results are presented in US dollars and reflect the reinvestment of dividends and other earnings, and are net of investment management fees, net of fees after transactions, and also net of any separate fees assessed directly by each unaffiliated mutual fund holding that comprised the model. Performance is not net of custodial fees, if applicable. The model used within the ETF was developed by the firm’s founder, Jason Wenk, beginning in January 2007 under the name “RWA Market Rotation” and used for the management of client assets of a separate Registered Investment Adviser firm also founded by Mr. Wenk. The name of the model was changed to “FormulaFolios Tactical Growth” in November 2011. Because FormulaFolios was not in existence prior to



January 1, 2012, and because the FormulaFolios Tactical Growth ETF was not launched until November 2017, all returns illustrated prior to November 2017 in relation to the ETF should be viewed as backtested model returns. This backtested data is derived from the model returns prior to existence of the ETF, accounting for an estimated 1.00% annual Fund expense ratio (the last revision to the model algorithm was in July 2016). The FormulaFolios Tactical Growth ETF from 11/2017 to current is reported from the live returns as utilized by FormulaFolios in a tracking account. Though some returns for the individual model may be live, the data illustrated for the purpose of this report represents hypothetical performance numbers.

#### **FormulaFolios Smart Growth ETF**

FormulaFolios manages the FormulaFolios Smart Growth ETF. Although this model is generally passive, it has the ability to sell a portion of holdings and hedge with treasury bonds during unfavorable investment environments. The portfolio for the FormulaFolios Smart Passive Growth model is designed utilizing index Exchange Traded Funds (ETFs). The performance results are presented in US dollars and reflect the reinvestment of dividends and other account earnings, and are net of investment management fees, net of fees after transactions, and also net of any separate fees assessed directly by each unaffiliated mutual fund holding that comprised the account. Performance is not net of custodial fees if applicable. Because FormulaFolios was not in existence prior to January 1, 2012, and because the FormulaFolios Smart Growth ETF was not launched until November 2017, all returns illustrated prior to November 2017 in relation to the ETF should be viewed as backtested model returns. This backtested data is derived from the model returns prior to existence of the ETF, accounting for an estimated 0.71% annual Fund expense ratio (the last revision to the model algorithm was in October 2016). The FormulaFolios Smart Growth ETF from 11/2017 to current is reported from the live returns as utilized by FormulaFolios in a tracking account. Though some returns

for the individual model may be live, the data illustrated for the purpose of this report represents hypothetical performance numbers.

#### **FormulaFolios Hedged Growth ETF**

FormulaFolios manages the FormulaFolios Hedged Growth ETF. The performance results are presented in US dollars and reflect the reinvestment of dividends and other earnings, and are net of investment management fees, net of fees after transactions, and also net of any separate fees assessed directly by each unaffiliated mutual fund holding that comprised the model. Performance is not net of custodial fees, if applicable. Because FormulaFolios was not in existence prior to January 1, 2012, and because the FormulaFolios Hedged Growth ETF was not launched until mid-June 2017, all returns illustrated prior to July 2017 in relation to the ETF should be viewed as backtested model returns. This backtested data is derived from the model returns prior to existence of the ETF, accounting for an estimated 1.15% annual Fund expense ratio (the last revision to the model algorithm was in October 2016). The FormulaFolios Hedged Growth ETF from 7/2017 to current is reported from the live returns as utilized by FormulaFolios in a tracking account. Though some returns for the individual model may be live, the data illustrated for the purpose of this report represents hypothetical performance numbers.

#### **FormulaFolios Tactical Income ETF**

FormulaFolios manages the FormulaFolios Tactical Income ETF. The performance results are presented in US dollars and reflect the reinvestment of dividends and other earnings, and are net of investment management fees, net of fees after transactions, and also net of any separate fees assessed directly by each unaffiliated mutual fund holding that comprised the model. Performance is not net of custodial fees, if applicable. The model used by FormulaFolios was developed by the firm's founder, Jason Wenk, beginning in December 2007 and was used for the management of client assets of a separate Registered

Investment Adviser firm also founded by Mr. Wenk. The last revision to the investment model algorithm was in December 2016. Because FormulaFolios was not in existence prior to January 1, 2012, and because the FormulaFolios Tactical Income ETF was not launched until mid-June 2017, all returns illustrated prior to July 2017 in relation to the ETF should be viewed as backtested model returns. This backtested data is derived from the model returns prior to existence of the ETF, accounting for an estimated 1.00% annual Fund expense ratio (the last revision to the model algorithm was in October 2016). The FormulaFolios Tactical Income ETF from 7/2017 to current is reported from the live returns as utilized by FormulaFolios in a tracking account. Though some returns for the individual model may be live, the data illustrated for the purpose of this report represents hypothetical performance numbers.

**Note that for the following Funds, the firm's tracking account holdings may differ from the models because of the custodian used as each custodian has available certain securities that can be bought and sold without incurring transaction costs for clients. Accordingly, FormulaFolios uses different individual holdings for each custodian in an effort to minimize trading costs, which means that actual client holdings may differ depending on the custodian used. The models managed by FormulaFolios suggest broad asset allocations, not specific holdings.**

#### **Dividend Appreciation Fund**

FormulaFolios utilizes the Vanguard Dividend Appreciation ETF to report performance for the Dividend Appreciation Fund portion of the portfolio. The performance results are presented in US dollars and reflect the reinvestment of dividends and other earnings, and are net of investment management fees, net of fees after transactions, and also net of any separate fees assessed directly by each unaffiliated mutual fund holding that comprised the model. Performance for the Vanguard Dividend Appreciation ETF is derived from Morningstar and used to create hypothetical

backtested results for FormulaFolios portfolio purposes. The Vanguard Dividend Appreciation ETF was launched April 21, 2006. Though some returns for the individual model may be live, the data illustrated for the purpose of this report represents hypothetical performance numbers.

#### **Total World Stock Fund**

FormulaFolios utilizes the Vanguard Total World Stock ETF to report performance for the Total World Stock Fund portion of the portfolio. The performance results are presented in US dollars and reflect the reinvestment of dividends and other earnings, and are net of investment management fees, net of fees after transactions, and also net of any separate fees assessed directly by each unaffiliated mutual fund holding that comprised the model. Performance for the Vanguard Dividend Appreciation ETF is derived from Morningstar and used to create hypothetical backtested results for FormulaFolios portfolio purposes. The Vanguard Dividend Appreciation ETF was launched June 24, 2008. For data prior to June 2008, FormulaFolios used the Vanguard Total World Stock Index Investor Shares. Though some returns for the individual model may be live, the data illustrated for the purpose of this report represents hypothetical performance numbers.

#### **Treasury Inflation Protected Securities Fund**

FormulaFolios utilizes the iShares TIPS Bond ETF to report performance for the Treasury Inflation Protected Securities Fund portion of the portfolio. The performance results are presented in US dollars and reflect the reinvestment of dividends and other earnings, and are net of investment management fees, net of fees after transactions, and also net of any separate fees assessed directly by each unaffiliated mutual fund holding that comprised the model. Performance for the iShares TIPS Bond ETF is derived from Morningstar and used to create hypothetical backtested results for FormulaFolios portfolio purposes. The iShares TIPS Bond ETF was launched December 4, 2003. Though some returns for the individual model may be live, the data illustrated for the purpose of this report represents hypothetical performance numbers.

#### **Investment Grade Corporate Bond Fund**

FormulaFolios utilizes the iShares iBoxx Investment Grade Corporate Bond ETF to report performance for the Investment Grade Corporate Bond Fund portion of the portfolio. The performance results are presented in US dollars and reflect the reinvestment of dividends and other earnings, and are net of investment management fees, net of fees after transactions, and also net of any separate fees assessed directly by each unaffiliated mutual fund holding that comprised the model. Performance for the iShares iBoxx Investment Grade Corporate Bond ETF is derived from Morningstar and used to create hypothetical backtested results for FormulaFolios portfolio purposes. The iShares iBoxx Investment Grade Corporate Bond ETF was launched December 22, 2002. Though some returns for the individual model may be live, the data illustrated for the purpose of this report represents hypothetical performance numbers.

#### **Benchmarks**

Because each individual model utilized by FFI has its own unique algorithm and investment strategy, FFI uses a specific benchmark for each individual model used within the allocation series. The individual benchmarks are then combined to form a custom index based on the individual model weights within the specified allocation.

The following contains a description of each individual benchmark as well as the models the benchmark used for comparative purposes:

#### **Barclay Global Macro Index**

Global Macro managers carry long and short positions in any of the world's major capital or derivative markets. These positions reflect their views on overall market direction as influenced by major economic trends and/or events. The portfolios of these funds can include stocks, bonds, currencies, and commodities in the form of cash

or derivatives instruments. Most funds invest globally in both developed and emerging markets. The Barclay Global Macro Index is used as a benchmark for Tactical Growth because Tactical Growth takes a macro approach at investing in various asset classes.

#### **Barclay Equity Long/Short Index**

This directional strategy involves equity-oriented investing on both the long and short sides of the market. The objective is not to be market neutral. Managers have the ability to shift from value to growth, from small to medium to large capitalization stocks, and from a net long position to a net short position. Managers may use futures and options to hedge. The focus may be regional or sector specific. The Barclay Equity Long/Short Index is used as a benchmark for Total Return Growth, Total Return Growth Lite, and Flexible Growth because Total Return Growth and Total Return Growth Lite can shift between long and short positions and Flexible Growth can shift between various US equity sectors and capitalizations.

#### **S&P 500 Index**

The S&P 500 is a market capitalization weighted equity index and seeks to act as a benchmark for large-cap US stocks. This index measures the performance of 500 large publicly traded US stocks. Stocks within the S&P 500 index are reconstituted on an as-needed basis. The S&P 500 index is used as a benchmark for Multi Cap Equity and Sector Rotation, though the fund may maintain different weights and biases than the index. Multi Cap Equity seeks to select a diversified blend of stocks from the strongest market sectors based on top-down fundamental analysis while Sector Rotation seeks to accentuate the most favorable sectors within the S&P 500.

#### **Russell 3000 Index**

The Russell 3000 is a market capitalization weighted equity index maintained by FTSE Russell and seeks to act as a benchmark for the entire US stock market. This

index measures the performance of the 3,000 largest publicly traded US stocks. Stocks within the Russell 3000 index are reconstituted once a year, at which time the underlying companies are re-ranked based on their market capitalizations for that year. The Russell 3000 index is used as a benchmark for the FormulaFolios US Equity Fund and Defensive Growth, though the models may maintain different weights and biases than the index. FormulaFolios US Equity and Defensive Growth seek to select a diversified blend of stocks with desirable risk and return characteristics from the entire US stock market in order to achieve long term capital appreciation.

#### **Dow Jones US Select Dividend Index**

The Dow Jones US Select Dividend Index seeks to act as a benchmark for dividend-paying US stocks. This index measures the performance of 100 publicly traded dividend-paying stocks. Stocks within the Dow Jones US Select Dividend Index are reconstituted once a year. The annual rebalancing constituent selection process is as follows:

Stocks passing all screens are ranked in descending order by indicated annual dividend yield, defined as a stock's indicated annual dividend (not including any special dividends) divided by its price.

All remaining current constituent stocks ranked 200 and above are retained in the index assuming they continue to meet all other eligibility requirements.

Stocks that are not current constituents are added to the index until the constituent count reaches 100.

The Dow Jones US Select Dividend Index is used as a benchmark for Dividend Growth, though the fund may maintain different weights and biases than the index. Dividend Growth seeks to select a diversified blend of stocks with desirable risk and return characteristics while simultaneously providing a steady stream of dividend income.

#### **Dow Jones Aggressive Portfolio Index**

The Dow Jones Aggressive Portfolio Index acts as a broadly diversified buy-and-hold benchmark. This index aims to achieve 100% of the risk of an all-stock index based on the trailing 36-month semi-variance. The all-stock portfolio includes a blend of US and non-US stocks, with varying market capitalizations. Though this index does not include a specific carve-out for real estate, it does act as a strong proxy for a diversified growth portfolio and is used as a benchmark for the Smart Passive Growth model.

#### **Bloomberg Barclays Aggregate Bond Index**

The Bloomberg Barclays Aggregate Bond Index is a broad-based flagship benchmark that measures the investment grade, US dollar-denominated, fixed-rate taxable bond market. The index includes Treasuries, government-related and corporate securities, mortgage-backed securities, asset-backed securities, and commercial mortgage-backed securities; it represents the performance of the total US investment-grade bond market. This index is used as a benchmark for Tactical Income and Smart Passive Income. Though the index does not reflect the active nature of Tactical Income, and Tactical Income includes asset classes such as high yield bonds and non-US bonds which are not included in the benchmark, the overall goal of Tactical Income is to achieve stable long-term returns with minimal risk similar to the index. Smart Passive Income only utilizes the asset classes within the index, though the weights differ slightly.

#### **Morningstar Nontraditional Bond Index**

The Nontraditional Bond category contains funds that pursue strategies divergent in one or more ways from conventional practice in the broader bond-fund universe. Many funds in this group describe themselves as "absolute return" portfolios, which seek to avoid losses and produce returns uncorrelated with the overall bond

market; they employ a variety of methods to achieve those aims. Another large subset of funds are self-described "unconstrained" portfolios that have more flexibility to invest tactically across a wide swath of individual sectors, including high-yield and foreign debt, and typically with very large allocations. Funds in the latter group typically have broad freedom to manage interest-rate sensitivity, but attempt to tactically manage those exposures in order to minimize volatility. The category is also home to a subset of portfolios that attempt to minimize volatility by maintaining short or ultra-short duration portfolios, but explicitly court significant credit and foreign bond market risk in order to generate high returns. This index is used as a benchmark for Redwood Managed Volatility, BCA Managed Income, and Flexible Income due to the unique nature of their investment management philosophies.

#### **Morningstar High-Yield Muni Category**

The High-Yield Muni category contains funds that typically invest a substantial portion of assets in high-income municipal securities that are not rated or that are rated at the level of or below BBB (considered high-yield within the municipal-bond industry) by a major ratings agency such as Standard & Poor's or Moody's. This index is used as a benchmark for Redwood Managed Municipal Income as the model primarily utilizes high-yield municipal bonds to generate long-term returns.

#### **NASDAQ US Dividend Achievers Select**

The NASDAQ US Dividend Achievers Select Index is comprised of a select group of securities with at least ten consecutive years of increasing annual regular dividend payments. The Index employs a modified market capitalization weighting methodology which is applied to the capitalization of each Index Security as of the last trading day in February. The NASDAQ US Dividend Achievers Select Index is used as a benchmark for the Dividend Appreciation Fund as the Vanguard Dividend Appreciation ETF seeks to track the performance of the Index.

### FTSE Global All Cap Index

The FTSE Global All Cap Index is a market-capitalization weighted index representing the performance of the large, mid and small cap stocks globally. The index aggregate of around 7,400 stocks cover Developed and Emerging Markets and is suitable as the basis for investment products, such as funds, derivatives, and exchange-traded funds. The FTSE Global All Cap Index is used as a benchmark for the Total World Stock Fund as the Vanguard Total World Stock ETF seeks to track the performance of the Index.

### US Treasury Inflation-Linked Bond Index

The Bloomberg Barclays US Treasury Inflation-Linked Bond Index measures the performance of the US Treasury Inflation Protected Securities (TIPS) market. Federal Reserve holdings of US TIPS are not index eligible and are excluded from the face amount outstanding of each bond in the index. The US TIPS Index is a subset and the largest component of the Global Inflation-Linked Bond Index. The Bloomberg Barclays US Treasury Inflation-Linked Bond Index is used as a benchmark for the Treasury Inflation Protected Securities Fund as the iShares TIPS Bond ETF seeks to track the performance of the Index.

### Markit iBoxx Liquid Investment Grade Index

The Markit iBoxx USD Liquid Investment Grade Index is designed to provide a balanced representation of the USD investment grade corporate market and to meet the investors demand for a USD denominated, highly liquid and representative investment grade corporate index. The Index has been designed to be a subset of the broader USD corporate bond market. The Markit iBoxx USD Liquid Investment Grade Index is used as a benchmark for the Investment Grade Corporate Bond Fund as the iShares iBoxx Investment Grade Corporate Bond ETF seeks to track the performance of the Index.

The table below represents the percent of each individual index utilized for each allocation:

<b>FF100</b>	
Barclay Global Macro Index	20%
Barclay Equity Long/Short Index	20%
Russell 3000 Index	30%
Dow Jones Aggressive Portfolio Index	15%
S&P 500 Index	15%
<b>FF80</b>	
Barclay Global Macro Index	16%
Barclay Equity Long/Short Index	16%
Russell 3000 Index	24%
Dow Jones Aggressive Portfolio Index	12%
S&P 500 Index	12%
Bloomberg Barclays Aggregate Bond Index	16%
Morningstar Nontraditional Bond Index	4%
<b>FF60</b>	
Barclay Global Macro Index	12%
Barclay Equity Long/Short Index	12%
Russell 3000 Index	18%
Dow Jones Aggressive Portfolio Index	9%
S&P 500 Index	9%
Bloomberg Barclays Aggregate Bond Index	32%
Morningstar Nontraditional Bond Index	8%
<b>FF40</b>	
Barclay Global Macro Index	8%
Barclay Equity Long/Short Index	8%
Russell 3000 Index	12%
Dow Jones Aggressive Portfolio Index	6%
S&P 500 Index	6%
Bloomberg Barclays Aggregate Bond Index	48%
Morningstar Nontraditional Bond Index	12%

<b>FF20</b>	
Barclay Global Macro Index	4%
Barclay Equity Long/Short Index	4%
Russell 3000 Index	6%
Dow Jones Aggressive Portfolio Index	3%
S&P 500 Index	3%
Bloomberg Barclays Aggregate Bond Index	64%
Morningstar Nontraditional Bond Index	16%
<b>FF Income</b>	
Barclay Global Macro Index	5%
Bloomberg Barclays Aggregate Bond Index	75%
Morningstar Nontraditional Bond Index	20%

FFI has selected the above allocations of the indices to act as broad blended benchmarks. Each individual index was selected to represent the stated portfolios. Specific asset class weights within the benchmarks may differ from the weights within FFI's portfolios. The goal of these benchmarks is to demonstrate how a broadly diversified portfolio based on a specified risk tolerance and management style may have performed during a specified time period. These benchmarks are for illustration purposes only and do not reflect the exact nature of FFI's portfolios.

### Custodians

FormulaFolios utilizes a variety of custodians for safe-keeping clients' assets including Fidelity, TD Ameritrade, Charles Schwab, Folio Institutional, Nationwide (Jefferson National) & Security Benefit.

Fidelity, TD Ameritrade, and Charles Schwab are typically used for transaction-based pricing (charging a fee for every trade placed), though Fidelity and TD Ameritrade also offer asset-based pricing. However, all three of these custodians offer a varying array of commission-free

ETF options with specific holding period restrictions of 30 days. Folio Institutional offers asset-based pricing (charging a fixed percentage of assets rather than charging a fee for every trade placed). Because many of FormulaFolios' strategies utilize ETF's, and because each custodian offers its own unique selection of commission-free ETF options, the actual holdings may differ from custodian to custodian, which will result in somewhat differing performance. No-load variable annuity contracts are utilized through Nationwide, formerly Jefferson National. These contracts have a monthly flat insurance fee. Additional low-cost fund platform fees will be assessed for investors who purchase shares of low-cost funds, which may be utilized. Additional fees may apply. See prospectus for details. No-load variable annuities are utilized through Security Benefit. Contracts will experience charges for a mortality and expense fee as well as an administration fee which varies depending on sub-accounts chosen. Additional fees may apply. See Prospectus for details.

#### Investment Risk

All index and benchmark return data shown is historical while the holdings return data shown for the current and proposed portfolios are hypothetical and/or backtested. Different types of investments involve varying degrees of risk, and there can be no assurance that the future performance of any specific investment, investment strategy, or product made reference to directly or indirectly in this report, will be profitable, result in the achievement of any investment objective, equal any corresponding indicated historical performance level(s), or be suitable for your portfolio. Significant losses of principal or income may occur. You could lose all of your investment. Additional investment risks are explained in FormulaFolios' ADV Part 2A.

- Interest Rate Risk: Portfolios may change in response to the movement of interest rates. The price of a fixed income security will generally fall when interest rates rise.
- Credit Risk: The value of a client's investment in the portfolio may change in response to changes in the credit ratings of the portfolio's securities. Generally, investment risk and price volatility increase as a security's credit rating declines.
- Default Risk: High Yield bonds are considered speculative and are susceptible to default or decline in value due to adverse economic and business developments.
- Foreign Risk: Foreign investments are subject to the same risks as domestic investments and additional risks, including international trade, currency, political, regulatory and diplomatic risks, which may affect their value. Also, foreign securities are subject to the risk that their market price may not reflect the issuer's condition because there is not sufficient publicly available information about the issuer.
- Asset Allocation Risk: The success of asset allocation depends upon the manager's ability to make decisions that will achieve an account's objectives. Asset categories may not perform as expected due to economic and market influences both foreign and domestic and anticipated returns may not be realized.
- Inflation Risk: The value of assets or income from investments may be worth less in the future as inflation decreases the value of money.
- Sector Risk: When a substantial portion of assets are devoted to a particular market sector or industry, there is potentially greater volatility compared to broadly diversified strategies. A market sector or industry may underperform the market as a whole for a variety of reasons.
- Equity Market Risk: Stocks have risk such that their returns and the principal invested in them is not guaranteed and they are subject to changing market conditions. Small stocks are more volatile than large stocks and are subject to significant price fluctuations.
- Risks Associated with Exchange Traded Products: These securities may not accurately track their underlying index and may not have liquidity under severe market conditions. Exchange Traded Notes are unsecured debt instruments. As such, are subject to risk by default by the issuing bank (counterparty risk) as well as market risk. Exchange Traded Notes may fail to track the index they are designed to track as well as being negatively impacted by a decline in the credit rating of the issuer.
- Risks Associated with Closed-End Funds: These securities frequently trade at a discount from net asset value, which can create a risk of loss for investors purchasing shares in, or shortly after, an initial public offering. Further, the portfolio managers may use leverage which can magnify losses.

Moreover, you should not assume that any discussion or information provided here serves as the receipt of, or as a substitute for, personalized investment advice from FormulaFolios or any other investment professional. Further, the charts and graphs contained herein should not serve as the sole determining factor for making investment decisions. To the extent that you have any questions regarding the applicability of any specific issue discussed to your individual situation, you are encouraged to consult with your financial professional. All information, including that used to compile charts, is obtained from sources believed to be reliable, but FormulaFolios does not guarantee its reliability. Information pertaining to FormulaFolios' advisory operations, services, and fees is set forth in its current Form ADV Part 2A Disclosure Brochure, a copy of which is available from FormulaFolios upon request.