



## The fi360 Fiduciary Score® methodology

Updated March 1, 2012

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## What is the fi360 Fiduciary Score?

The fi360 Fiduciary Score (“Score”) is an investment rating system born out of Practice 3.1 in the *Prudent Practices for Investment Fiduciaries* handbook series. It helps quickly identify a short list of investments that merit continued research in the selection process. It also facilitates the ongoing monitoring process by highlighting investments that contain potential deficiencies.

The Score evaluates investments on nine different criterion across a spectrum of quantitative data points to determine if the investment meets a minimum fiduciary standard of care. The nine criteria include: regulatory oversight, track record, assets in the investment, stability of the organization, composition consistent with asset class, style consistency, expense ratio/ fees relative to peers, risk-adjusted performance relative to peers, and performance relative to peers.

The Score is a flash-report on a selected investment. It is a useful tool for investment decision-makers to identify and monitor investments in the course of their due diligence process. **The fi360 Fiduciary Score represents a suggested course of action and is not intended, nor should it be used as the sole source of information for reaching an investment decision.**

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## Calculating the fi360 Fiduciary Score

The fi360 Fiduciary Score is a peer percentile ranking of an investment against a set of quantitative due diligence criteria selected to reflect prudent fiduciary management. The fi360 Fiduciary Score is calculated on a monthly basis for investments with at least a three year history. The Score is calculated for open end mutual funds, exchange-traded funds (“ETFs”), and Group Retirement Plan Annuities (“GRPAs”).

The fi360 Fiduciary Score is calculated by first combining open end mutual fund and ETF databases (data source: Morningstar). Each investment is then evaluated against the individual criterion (factors and thresholds) and point system identified in the Criteria section of this document. If an investment fails a criterion, points are allotted. Next, the points are totaled and the total for each investment is ordered from lowest to highest within each peer group. Each investment is then given a percentile ranking based on its placement in the distribution of their peer group. GRPAs are ranked relative to their corresponding mutual fund/ETF peer group. Investments with 0 points are automatically given an fi360 Fiduciary Score of 0. Every other investment is given a Score of 1-100 representing their percentile ranking.

For example, an investment with an fi360 Fiduciary Score of 37 would place it in the 37<sup>th</sup> percentile of its peers. An fi360 Fiduciary Score of 0 is most favorable. It represents that an investment meets or exceeds all of fi360’s recommended due diligence thresholds. A Score of 100 is least favorable.

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## Calculating the fi360 Fiduciary Score Average

The fi360 Fiduciary Score Average is a one-, three-, five- or ten-year rolling average of an investment’s fi360 Fiduciary Score. The Average Score is also calculated on a monthly basis.

Since the Average Score is a rolling average of the historical fi360 Fiduciary Score, an investment needs to have the requisite amount of history for each Average Score. If an investment doesn’t have the required history, then the investment will not receive an Average Score. This is first determined by examining the inception date of the investment’s parent share class. If the investment has been in existence for 3 years PLUS the number of historical years used for the average, then the investment will also have an Average Score. For example if an investment has been in existence for 4 years, then the investment will have a fi360 Fiduciary Score Average (1 year).

## Missing historical fi360 Fiduciary Score data

Since the averaging process requires an investment to have 12(one year) to 120(ten year) consecutive data points, a missing period policy has been instituted to ensure that a missed data period will not eliminate the calculation of an individual Average Score for an extended length of time.

fi360 Fiduciary Score Average	Missing periods allowed
1 year	1
3 year	2
5 year	3
10 year	4

## Calculation Transition

On March 1, 2012, fi360 switched the calculation frequency of the fi360 Fiduciary Score and fi360 Fiduciary Score Average from quarterly to monthly. With this transition, the calculation methodology of the Average Score will accommodate both historical quarterly and monthly Score calculations for a period of time. This transition is required so that the Average Score calculation can be continued without interruption.

- To manage this transition, a Factor will be introduced to correctly weight all historical quarterly calculations as monthly calculations. This will ensure that the averaging process always includes the same amount of weighted score data points.
  - 1 year – 12 weighted score data points required
  - 3 year – 36 weighted score data points required
  - 5 year – 60 weighted score data points required
  - 10 year – 120 weighted score data points required
- For monthly periods after the January 2011 data period, the Factor will always be 1.
- Prior to the January 2011 data period, each Score will have a Factor of 3, except for the following condition.
  - If the current month end is the first month in a quarter (ex. Jan 31, 2012)
    - Factor for the oldest score included will be a 2
  - If the current month end is the second month in a quarter (ex. Feb 29, 2012)
    - Factor for the oldest score included will be a 1

Period contribution = (Factor \* fi360 Fiduciary Score)/ Sum of Factors

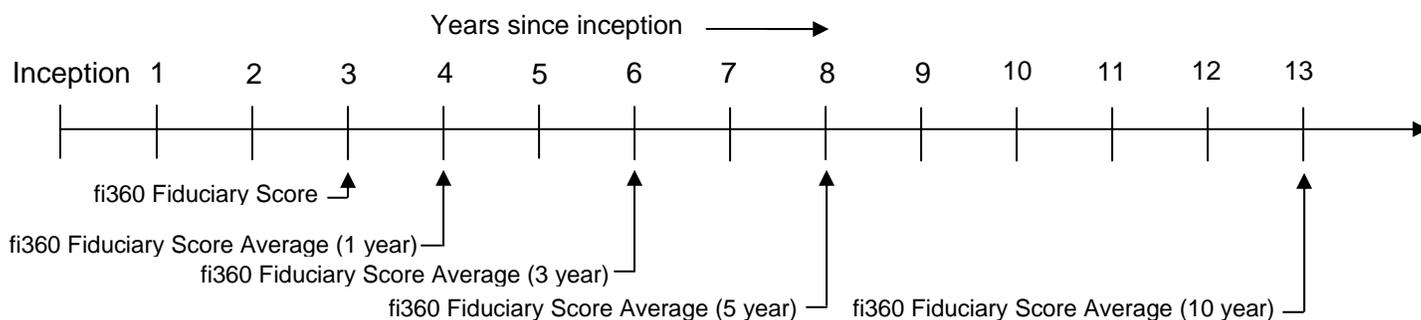
Summing all the individual period contributions will calculate the average as of the most recent month end. A calculation of the fi360 Fiduciary Score Average (1 year) for a fictitious investment will help to illustrate the process.

Period	March, 2011	June, 2011	September, 2011	December, 2011	January, 2012
fi360 Fiduciary Score	15	10	10	20	0
Factor	2	3	3	3	1
Period contribution	1.66	5	2.5	2.5	0

Summing all periods and rounding to the next highest value results in a fi360 Fiduciary Score Average (1 year) of 12. (1.66 + 5 + 2.5 + 2.5 + 0)

## Calculation timeline

The minimum track record criterion states that an investment must have three years of history before the fi360 Fiduciary Score can be calculated. Once that threshold has been passed, the fi360 Fiduciary Score will be available, and the history required for the Average will also begin to accrue. After an investment accrues one year of Fiduciary Score history, the fi360 Fiduciary Score Average (1 year) will be available. This pattern extends to the other Average calculations, as shown below.



## Calculation notes

- The fi360 Fiduciary Score process relies upon peer group comparison. Determining an investment's appropriate peer group or asset class is subjective. There are no industry standards for determining a money manager's investment style or peer group, which makes it difficult to track some investments across different databases. Fi360 utilizes Morningstar data in the calculation of the fi360 Fiduciary Score and therefore uses the Morningstar Category™ as the investment's peer group.
- To make the peer group analysis meaningful, the data set should be substantial enough to draw comparisons. With that in mind, fi360 requires at least five distinct investments with a three year history in order to calculate a Score for the investments in a peer group. Investments within peer groups that do not meet the requirement will not receive a Score.
- Fi360 also utilizes Morningstar Extended Performance data in its calculations. Mutual fund share classes that don't have the history to receive a fi360 Fiduciary Score will receive a Quarter Score using their parent share class data adjusted for expenses. Regardless of the length of existence, an investment will only receive an Average Score after the appropriate amount of Score calculations have been tracked. Extended performance data will not "back-date" an Average Score for a brand new fund share class. *Note: Extended Performance data was introduced with the 12.31.2010 calculations.*
- When evaluating Group Retirement Plan Annuities (GRPAs), the combined mutual fund/ETF peer group data is used as the backdrop to rank the GRPAs. The GRPA database is limited in size and since these investments are used interchangeably in the marketplace with mutual funds, the combined mutual fund/ETF peer groups provide a better analysis of the GRPAs data.

## The fi360 Fiduciary Score Criteria

- **Regulatory oversight:** The investment should be managed by: (a) a bank, (b) an insurance company, (c) a registered investment company (mutual fund), or (d) a registered investment adviser.
  - Unregistered investments are excluded from fi360's calculations.
- **Minimum track record:** The investment should have at least three years of history so that performance statistics can be properly calculated.
- **Stability of the organization:** The same portfolio management team should be in place for at least two years. In a management team setting, the most senior manager's tenure should be at least two years.
  - 5 points if there has been manager turnover in the past two years
  - 10 points if there has been manager turnover in the past year
- **Assets in the investment:** The investment should have at least \$75 million under management (across all share classes.)
  - 5 points if the investment has less than \$75 million in assets
  - 10 points if the investment has less than \$50 million in assets
- **Composition consistent with asset class:** At least 80% of the investment's underlying securities should be consistent with the broad asset class. For example, a Large-Cap Growth investments should not hold more than 20% in cash, fixed income and/or international securities (Only applicable to certain peer groups – see the [Appendix](#) for more information.)
  - 10 points if more than 20% of the portfolio is inconsistent with the broad asset class

**Note:** The broad asset classes used in the composition criterion include: U.S. Stocks, U.S. Bonds and Non-U.S. Stocks. The Long-Short peer group is evaluated on the U.S. Stock and Cash composition.

- **Style consistency:** The investment must be highly correlated to the asset class of the investment option. This means the Morningstar Style Box™ for the current period must match the peer group of the investment. (Only applicable to certain peer groups – see the [Appendix](#) for more information.)
  - 10 points if the investment is not correlated to its peer group
- **Expense ratios/fees relative to peers:** The investments fees should not be in the bottom quartile (most expensive) of their peer group. The Prospectus Net Expense Ratio is used for the evaluation of mutual funds and ETFs. It includes all fund management costs, 12b-1 fees, administrative fees, and all other asset-based costs incurred by the fund, except brokerage costs. If the investment is purchased within a group annuity product, any recordkeeping fees added to the underlying fund expense ratios by the group annuity provider are not included in this ratio. The management fee is used in the evaluation of GRPAs. It is the maximum percentage deducted from an investment's average net assets to pay an advisor or sub-advisor.
  - 10 points if the investment's expense ratio is in the bottom quartile

- **Risk-adjusted performance relative to peers:** The investments risk-adjusted performance (Alpha and Sharpe Ratio – see [Appendix](#) for more information) should be above the peer group median manager’s risk-adjusted performance. (Alpha is not evaluated for Money Market and Money Market Taxable peer groups.)
  - 2.5 points if the risk-adjusted performance is in the third quartile
  - 5.0 points if the risk-adjusted performance is in the fourth quartile
  - 7.5 points if the risk-adjusted performance is in the bottom decile
  - 7.5 points if not calculated
  
- **Performance relative to peers:** The investments performance should be above the peer group’s median manager return for 1-, 3- and 5-year cumulative periods.
  - One-year performance relative to the median value for the peer group:
    - 2.5 points if in the third quartile
    - 5.0 points if in the fourth quartile
    - 7.5 points if in the bottom decile
    - 7.5 points if not calculated
  - Three-year performance relative to the median value for the peer group:
    - 5.0 points if in the third quartile
    - 7.5 points if in the fourth quartile
    - 10.0 points if in the bottom decile
    - 10.0 points if not calculated
  - Five-year performance relative to the median value for the peer group:
    - 7.5 points if in the third quartile
    - 10.0 points if in the fourth quartile
    - 12.5 points if in the bottom decile
    - If the investment does not have a five-year performance history:
      - 7.5 points if the three-year performance is in the third quartile
      - 10.0 points if the three-year performance is in the fourth quartile
      - 12.5 points if the three-year performance is in the bottom decile
      - 12.5 points if the three-year performance not calculated

## Interpreting the fi360 Fiduciary Score

The fi360 Fiduciary Score bar charts provide a visual representation of the investment's Score. The following thresholds provide the user with an easy to view assessment of the investment and a suggested course of action.

### fi360 Fiduciary Score: 0

No fiduciary due diligence shortfalls.

### fi360 Fiduciary Score: 1–25

The investment may be an appropriate choice for use in a fiduciary account.

### fi360 Fiduciary Score: 26–50

The investment has noteworthy shortfalls. It may not be an appropriate choice if being considered in a search. However, if already in use, the investment may not need to be replaced.

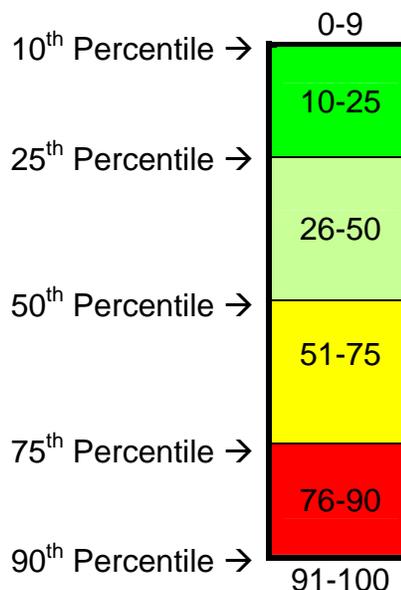
### fi360 Fiduciary Score: 51–75

The investment has considerable shortfalls. It may not be an appropriate choice if being considered in a search. However, if already in use, the investment may not need to be replaced.

### fi360 Fiduciary Score: 76–100

The investment has significant shortfalls and may not be appropriate for use in a fiduciary account. Strongly consider replacing the investment if already in use.

### Bar Chart Example:



## Appendix

### Composition consistent with asset class

This criterion is only applied to investments in the following peer groups: Large Value, Large Blend, Large Growth, Mid-Cap Value, Mid-Cap Blend, Mid-Cap Growth, Small Value, Small Blend, Small Growth, Long Government, Long-term Bond, Intermediate Government, Intermediate-term Bond, Muni National Long, Muni Single State Long, Muni National Interm, Diversified Emerging Mkts, Europe Stock, Diversified Pacific/Asia, Pacific/Asia ex-Japan Stk, Japan Stock, Latin America Stock, Foreign Large Value, Foreign Large Blend, Foreign Large Growth, Foreign Small/Mid Value, Foreign Small/Mid Growth, China Region, Muni California Long, Muni California Intermediate, Muni New York Intermediate, Muni New York Long, Muni New York Intermediate, Muni Single State Interm, Inflation-Protected Bond and Long-Short.

### Style consistency

This criterion is only applied to investments in the following peer groups: Large Value, Large Blend, Large Growth, Foreign Large Value, Foreign Large Blend, Foreign Large Growth, Foreign Small/Mid Value, Foreign Small/Mid Growth, Mid-Cap Value, Mid-Cap Blend, Mid-Cap Growth, Small Value, Small Blend, Small Growth, Long Government, Intermediate Government, Short Government, Long-term Bond, Intermediate-term Bond, Short-term Bond, High Yield Bond, Muni California Long, Muni California Intermediate, Muni National Long, Muni National Interm, Muni Short, Muni New York Long, Muni New York Intermediate, Muni Single State Long, Muni Single State Interm, and Inflation-Protected Bond.

### Risk-adjusted performance relative to peers

Morningstar calculates the Alpha and Sharpe Ratios used in the evaluation. Alpha is calculated using one of the six broad asset class indexes shown below.

Broad Asset Class	Broad Asset Class Index
U.S. Stock	S&P 500 TR
International Stock	MSCI EAFE NR USD
Municipal Bond	BarCap Municipal TR USD
Balanced	Morningstar Moderate Target Risk
Taxable Bond	BarCap US Agg Bond TR USD
Commodities	Morningstar Long-Only Commodity TR
Alternative	ML USD LIBOR 3 Mon CM

The broad asset classes shown above correspond to the peer groups in the following manner:

U.S. Stock	International Stock	Municipal Bond	Balanced
Communications	China Region	High Yield Muni	Aggressive Allocation
Consumer Discretionary	Diversified Emerging Mkts	Muni California Intermediate	Conservative Allocation
Consumer Staples	Diversified Pacific/Asia	Muni California Long	Convertibles
Equity Energy	Europe Stock	Muni Massachusetts	Moderate Allocation
Financial	Foreign Large Blend	Muni Minnesota	Retirement Income
Health	Foreign Large Growth	Muni National Interm	Target-Date 2000-2010
Industrials	Foreign Large Value	Muni National Long	Target-Date 2011-2015
Large Blend	Foreign Small/Mid Growth	Muni New Jersey	Target-Date 2016-2020
Large Growth	Foreign Small/Mid Value	Muni New York Intermediate	Target-Date 2021-2025
Large Value	Global Real Estate	Muni New York Long	Target-Date 2026-2030
Leveraged Net Long	Japan Stock	Muni Ohio	Target-Date 2031-2035
Mid-Cap Blend	Latin America Stock	Muni Pennsylvania	Target-Date 2036-2040
Mid-Cap Growth	Pacific/Asia ex-Japan Stk	Muni Short	Target-Date 2041-2045
Mid-Cap Value	World Stock	Muni Single State Interm	Target-Date 2050+
Miscellaneous Sector		Muni Single State Long	World Allocation
Natural Resources			
Real Estate	<b>Taxable Bond</b>	<b>Alternative</b>	<b>Commodities</b>
Small Blend	Inflation-Protected Bond	Bear Market	Commodities Agriculture
Small Growth	Intermediate Government	Currency	Commodities Broad Basket
Small Value	Intermediate-Term Bond	Equity Precious Metals	Commodities Energy
Technology	Long Government	Long-Short	Commodities Industrial Metals
Utilities	Long-Term Bond	Market Neutral	Commodities Miscellaneous
	Short Government		Commodities Precious Metals
	Short-Term Bond		
	Bank Loan		
	Emerging Markets Bond		
	High Yield Bond		
	Multisector Bond		
	Stable Value		
	Ultrashort Bond		
	World Bond		