# CAPTRUST Financial Advisors

Investment Policy Monitoring (Scoring) System Methodology

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# Appendix A -Asset Class Overview

<b>Broad Asset Class</b>	Description
Fixed Income	These investments generally invest the bulk of their assets in the fixed income, or "bond"
	markets. Investments in this category vary in terms of the duration of their primary
	holdings (short term, intermediate term or long term), in the quality of the issuers of their
	holdings (government to corporate issuers of varying quality), and in the origin of their
	issuance (issued within or outside of the U.S. bond market).
Asset Allocation	These investments, like balanced funds, attempt to provide participants with a broadly
	diversified collection of stocks, bonds and money market securities, among other
	investment asset classes. Each manager commonly specifies either a risk-based strategy
	(e.g. "aggressive", "moderate" or "conservative") or a target date (e.g. 2030, 2040, 2050,
	etc.) that drives the proportionate, or strategic, allocation it follows. Each manager will
	have its own restrictions, disclosed in its prospectus or other appropriate governing
	document, which will define the ranges it may allocate to any given investment or asset
	class.
Domestic Equity	These investments generally invest the bulk of their assets in ownership ("equity")
	securities, or stocks of companies whose headquarters and/or primary business is in the
	United States. Investments in this category vary both in their objectives (e.g. current
	income versus long term capital appreciation) and in the types of equity securities they
	specialize in. Some investments in this category focus on small capitalization or medium
	capitalization companies versus large capitalization companies. Some funds tend to look
	for companies whose earnings, or perceived value, are growing at faster rates than other
	companies (e.g. "growth") while others focus their investments on companies who for
	various reasons may be selling for less than the manager believes is its real worth (e.g.
	"value").
	Historically investments focused an smaller and medium capitalization securities have
	Historically, investments focused on smaller and medium capitalization securities have thrived at different times and in different proportions to investments focused on large
	capitalization securities. Growth investments have also tended to excel at different times
	and in different proportion to value investments.
International	These investments generally invest the bulk of their assets in ownership ("equity")
Equity	securities, or stocks of companies whose headquarters and/or primary business is outside
Equity	of the United States. Investments in this category also include regionally focused managers
	that specialize in a particular part of the world, global managers that can invest in both U.S.
	and international markets, and emerging market managers that concentrate their
	investments in markets that are less mature than the world's developed markets and so
	may provide opportunities for rapid growth. It is also generally true that higher growth
	opportunities are tempered significantly by higher risk for loss of capital, at least over
	shorter terms.



	Historically international markets have moved in very different cycles than their domestic counterparts.
Specialty	These investments generally invest the bulk of their assets in ownership ("equity") securities, or stocks of companies in a particular market segment. Historically investments focused on specialty securities have offered a significantly high risk for loss of capital, at least over shorter terms.

## Benchmarks & Peer Groups:

<b>Broad Asset Class</b>	Asset Class or Strategy	Benchmark Index	Peer Group*
Fixed Income	Intermediate Core Bond Intermediate Core-Plus Bond Global Bond Global Bond (USD-Hedged)	Bloomberg BarCap Aggregate Bond Index Bloomberg BarCap Global Aggregate Bond Index Bloomberg Barclays Global Aggregate Hedged Index	Intermediate Core Bond Intermediate Core-Plus Bond Global Bond Global Bond (USD-Hedged)
Asset Allocation	Allocation	Appropriate S&P 500 / Bloomberg BarCap Agg Blend	Appropriate Allocation Peer Group
Asset Allocation	Target Date Funds	Vintage Year Appropriate Index	Vintage Year Appropriate Peer Group
Domestic Equity	Large Cap U.S. Equity	Russell 1000 Value Russell 1000 S&P 500 Russell 1000 Growth	Large Company Value Large Company Blend Large Company Growth
Domestic Equity	Mid Cap U.S. Equity	Russell Mid Cap Value Russell Mid Cap Russell Mid Cap Growth	Medium Company Value Medium Company Blend Medium Company Growth
Domestic Equity	Small Cap U.S. Equity	Russell 2000 Value Russell 2000 Russell 2000 Growth	Small Company Value Small Company Blend Small Company Growth
International Equity	International Equity	MSCI EAFE MSCI ACWI ex US MSCI ACWI ex US IMI MSCI Emerging Markets	Foreign Large Value Foreign Large Blend Foreign Large Growth Emerging Markets
Specialty	Specialty	Applicable Index	Applicable Peer Group



\* Peer groups are based off of Morningstar open-end mutual fund data. At the discretion of CAPTRUST, peer groups may be supplemented by non-mutual fund investments (e.g. collective investment trusts). Peer groups are maintained by CAPTRUST and reviewed on a quarterly basis.

### Appendix B -Investment Evaluation/Scoring System

The actively managed investment options will be evaluated relative to their peers using a comprehensive scoring system designed to serve as a *guide and an aid* to the Committee, or CAPTRUST when they have discretion (commonly 3(38) for ERISA plans) when evaluating investment options, providing a baseline for measurement and discussion. **The scoring system is not intended to trigger an automatic and mandated outcome or investment decision for a given score.** It is intended to serve as a tool to support sound fiduciary decisions that are in the sole interest of participants and beneficiaries.

Thus, the comments that follow should be considered in the context that the scoring system is one tool, not a system that supplants the fiduciary's role in prudently evaluating investment options. In order to remain in good standing under the scoring system, each plan investment option should accumulate point totals within the acceptable ranges described below. The scoring system measures eight (8) quantitative areas and two (2) qualitative ones, as outlined in the tables below. Quantitative scores for investment options that are mutual funds are calculated at the strategy level using the lowest-cost share class available. Non-mutual fund investment options may be scored based on individual share class or based on a gross of fee product. CAPTRUST maintains discretion over which share class and/or product is considered to be the lowest-cost for purposes of scoring.

#### **Metrics & Points:**

Quantitative Scoring Areas	Weight	Min	Max	Description
		Score	Score	
Risk Adjusted Perf (3 Yr)	10%	4 Pt	10 Pt	Risk-Adjusted Performance measures the
Risk Adjusted Perf (5 Yr)	10%	1 Pt	10 Pt	level of return that an investment option
				would generate given a level of risk
				equivalent to the benchmark index.
Perf vs. Peer Group (3 Yr)	10%	4 Pt	10 Pt	Performance vs. Relevant Peer Group
Perf vs. Peer Group (5 Yr)	10%	1 Pt	10 Pt	measures the percentile rank of an
				investment option's returns relative to
				other available options in that category.
Style Attribution (3 Year)	7%	3 Pt	7 Pt	



Style Attribution (5 Year)	8%	1 Pt	8 Pt	Style Attribution indicates the level of style
				purity of an investment option relative to
				the benchmark index.
Confidence (3 Year)	7%	3 Pt	7 Pt	Confidence indicates the consistent
Confidence (5 Year)	8%	1 Pt	8 Pt	relative value add of the manager as
				compared to other available options in
				that category.

Qualitative Scoring Areas	Weight	Min	Max	Description
		Score	Score	
Management Team	25%	1 Pt	25 Pt	Management Team measures the consistency and quality of an investment option's management group.
Investment Family Items	5%	1 Pt	5 Pt	Investment Family Items measures the stewardship of the investment option's parent company.

Total	100%	20 Pts	100 Pts	Overall Investment Score

Points are awarded in each of the categories of the scoring system according to the following methodologies. In the categories of Risk Adjusted Performance, Performance vs. Relevant Peer Group, and Confidence, points are awarded according to where an investment option ranks on a percentile basis relative to the rest of the peer universe. The table below illustrates this methodology:

% Rank	Top 25%	26-50%	51-75%	76-100%
3 Year Risk-	10	9	7	4
Adjusted				
5 Year Risk-	10	8	5	1
Adjusted				
3 Year Peer-	10	9	7	4
Relative				
5 Year Peer-	10	8	5	1
Relative				
3 Year	7	6	5	3
Confidence				
5 Year	8	6	4	1
Confidence				



In the category of Style Attribution, points are awarded based on an investment option's level of style consistency relative to the applicable benchmark. Points are assigned using absolute breakpoints and are not peer-relative. These breakpoints are determined by CAPTRUST and are subject to change based on market conditions.

Points in the qualitative areas of Management Team and Investment Family Items are awarded on the basis of merit, and focus primarily on management team stability, consistency of investment philosophy, firm stewardship, and corporate governance.

If at any time the fiduciary concludes that an investment option is not meeting the desired objectives or guidelines, the investment option may be considered for termination. In order to remain in good standing an option should total greater than 80 points under the Scoring System. Options that total between 70 and 79 points will be marked for closer ongoing review by the fiduciary. Options that score below 70 points may be considered for termination.

Scoring System	Min Score	Max Score
In Good Standing Marked	80 Pts	100 Pts
for Review Consider for	70 Pts	79 Pts
Termination	20 Pts	69 Pts

### **Distinct Investment Options:**

For asset classes where CAPTRUST believes a peer-relative score is not meaningful, either due to the size or makeup of the asset class, CAPTRUST may score funds using an alternative quantitative and qualitative framework. The rating methodology evaluates both quantitative and qualitative factors, and culminates each quarter in one of the following ratings:

Score	Definition
Green	In Good Standing Marked
Yellow	for Review Consider for
Red	Termination

An example where this alternative methodology would apply is Multisector Bond investment options.



### Passively Managed Investment Options:

The passively managed investment options will be evaluated relative to an applicable benchmark, using a comprehensive scoring system proprietary to CAPTRUST. The rating methodology evaluates both quantitative and qualitative factors for passively managed investment options, and culminates each quarter in one of the following ratings:

Score	Definition
Green	In Good Standing Marked
Yellow	for Review Consider for
Red	Termination

Depending on the type of passively managed option being evaluated, multiple criteria, both quantitative and qualitative, may be used in establishing a rating. Such criteria may include, but are not limited to:

#### Quantitative

- Tracking error
- Fees
- Peer relative performance

### Qualitative

- Fair value pricing methodology
- Securities lending practices
- Replication and management strategy
- Management firm experience and stability

When a passively managed option is scored below green, CAPTRUST will clearly articulate to the fiduciary, at an appropriate time, the reasons for the scoring.



# **Appendix C - Capital Preservation**

<b>Broad Asset Class</b>	Description
Capital Preservation	These options may represent a) Money Market options, b) Stable Value options, or c)
	Insurance Company Guaranteed options.
	Money Market
	Money Market options (Treasury / Government / Prime) are investment options
	whose primary objective is safety of principal. Money Markets invest in high quality,
	short-term securities (full principal and interest within 397 days) in an attempt to
	mitigate interest rate and credit risk. Money Market options are often structured to
	maintain a \$1.00/share Net Asset Value (NAV) but it is not guaranteed that they will
	meet this objective.
	Stable Value
	A Stable Value fund is a type of separately managed account, insurance separate
	account, or commingled trust investing in high quality, short to intermediate-term
	fixed income securities presenting minimal interest rate and credit risk. Unique
	accounting features allow for gain and loss amortization over a period of time,
	allowing management to invest in longer-term fixed income assets while mitigating
	NAV flucuations. Stable Value funds are generally structured to maintain a
	\$1.00/share NAV but it is not guaranteed that they will meet this objective.
	January Common Common Common
	Insurance Company Guaranteed Options  An Insurance Company Currenteed Option's primary abjective is to provide atable
	An Insurance Company Guaranteed Option's primary objective is to provide stable
	returns while featuring a full principal and interest guarantee. This category
	represents a type of insurance separate trust, insurance separate account or
	insurance general account product investing in high quality, intermediate-term
	securities while offering investors a "guaranteed" rate of return based on the
	insurance provider's claims paying ability. Returns are based on a crediting rate
	formula which resets periodically with varying transparency.

<b>Broad Asset Class</b>	Asset Class or Strategy	Benchmark Index	Peer Group
Capital Preservation	Money Market	90 Day U.S. Treasury Bill	N/A
Capital Preservation	Stable Value	Hueler Analytics Stable Value Index	N/A
Capital Preservation	Guaranteed Funds	90 Day U.S. Treasury Bill	N/A



The Capital Preservation options will be evaluated using a comprehensive scoring methodology proprietary to CAPTRUST. The scoring methodology evaluates both quantitative and qualitative factors for the Capital Preservation options, and culminates each quarter in one of the following ratings:

Score	Definition	
Green	In Good Standing Marked	
Yellow	for Review Consider for	
Red	Termination	

Depending on the type of Capital Preservation option being evaluated, multiple criteria, both quantitative and qualitative, may be used in establishing a rating. Such criteria may include, but are not limited to:

### Quantitative

- Crediting Rate/Yield
- Market to Book Ratio
- Average Credit Quality of Portfolio
- Wrap provider/insurer diversification
- Average duration of securities in the portfolio
- Sector allocations

#### Qualitative

- Management team composition and tenure
- Management firm experience and stability

When a Capital Preservation option is scored below green, CAPTRUST will clearly articulate to the fiduciary, at an appropriate time, the reasons for the scoring.



### Appendix D - Target Date Scoring

The scoring for target date investments differs from CAPTRUST's scoring of core asset classes.

CAPTRUST believes that both qualitative and quantitative variables are essential to evaluate target date investments, consistent with the traditional asset class scoring system. CAPTRUST's qualitative assessment will determine an investment to be 'In Good Standing,' 'Marked for Review' or 'Consider for Termination.'

Scores for investment options that are mutual funds are calculated at the strategy level using the lowest-cost share class available. This process yields a total quantitative and qualitative score by target date family. Non-mutual fund investment options may be scored based on individual share class or based on a gross of fee product. CAPTRUST maintains discretion over which share class and/or product is considered to be the lowest-cost for purposes of scoring. Scores may be adjusted to account for a smaller sample size.

The below section discusses the major target date assessment categories and describes the methodology for each.

### Performance (20 Points Total)

Each target date investment option's vintage year is compared against an appropriate peer group on both a risk-adjusted and peer-relative basis over three- and five-year periods. Each vintage year's score is then aggregated to arrive at a total score, and each target date family's relative score is ranked based on percentiles. Points are allocated based on the following system:

3 and 5-Year Risk-Adjusted and 3 and 5-Year Peer-Relative Scores

% Rank	Top 10%	11-20	21-30	31-40	41-50	51-60	61-70	71-80	81-90	91-100
Points	5	5	4	4	3	3	2	2	1	1

Once points are allocated to each vintage year, scores are aggregated to arrive at a total performance score.

### Glidepath Risk: Weightings of Equities and "Other" Asset Classes (10 points)

Target date investment options have varied assumptions across considerations such as savings rates, retirement date, longevity and other factors surrounding retirement, which can impact their overall



allocation to equities and equity-like investments throughout the glidepath. Because of these differences, evaluating dispersion from the mean is a way to evaluate how much market (having too much exposure to risky asset classes subject to greater loss potential) or shortfall risk (not having enough money to retire) a target date investment option takes relative to all other options. This dispersion is measured based on the following methodology:

Glidepath Risk: Percentage of Equity and "Other" Asset Class scores

% Rank	Top 20%	21-39%	40-60%	61-79%	80-100%
Points	6	8	10	8	6

### Glidepath Risk: Regression to Global Equity Index (10 Points)

For Glidepath Risk, an assessment is made to determine how a target date investment option's returns move relative to a broad index of global equities. Both three- and five-year betas are determined and averaged, and points are allocated based upon the following system:

Glidepath: Regression to Global Equity Index Scores

3 and 5 Year Beta	Beta > .89	.70 < Beta < .<.89	Beta < .70
Points	6	8	10

### Portfolio Construction (15 Points)

Portfolio Construction is evaluated qualitatively andbased on variables such as:

- Investment philosophy
- Tactical asset allocation, if applicable
- Strategic asset allocation
- Risk management

### Underlying Investment Vehicles (15 Points)

Underlying Investment Vehicles are evaluated through qualitative means, such as:

- Quality of underlying investments/managers
- Execution of underlying investments/managers
- Use of active and passive management, if applicable
- Transparency into underlying investments/managers



### Target Date Investment Management (25 Points) and Firm (5 Points)

Points in the qualitative areas of Target Date Investment Management and Firm are awarded on the basis of merit, and focus primarily on management team stability, consistency of investment philosophy, firm stewardship, and corporate governance, as well as a commitment to the target date asset class.

