



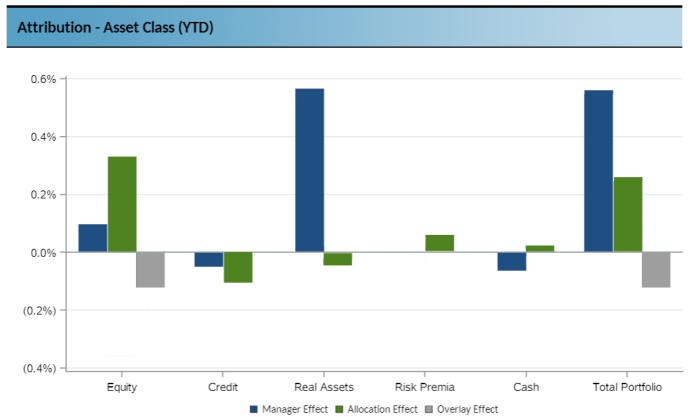
# Using VOR in Performance Evaluation

*“Working closely with the foundation, we were able to quickly add value by producing more timely and transparent performance and risk metrics than the previous provider; all while providing the foundation a 35% ROI.”*

— Dominic Pazzula, FRG’s Director of Product Development

Before they started using VOR (Visualization of Risk), the investment professionals at a leading U.S. charitable foundation relied upon the organization’s well-regarded custodian for monthly portfolio performance reporting.

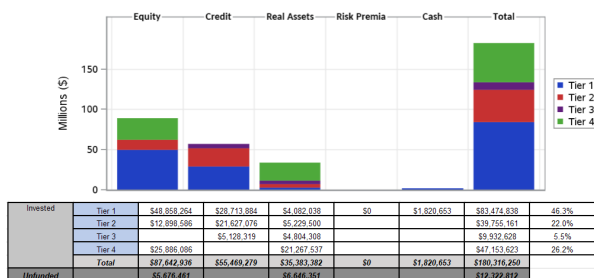
As with most custodians, the bank’s performance team was responsible for calculating month-end performance utilizing custodial data and the bank’s performance calculation methodologies. The investment team of the foundation would then produce Investment Committee performance reports relying on the bank’s output. On several occasions the foundation’s investment team discovered inconsistencies in the performance calculation methodologies which led to their having to recalculate rates of return for portions of the portfolio to ensure accuracy. This proved to be quite resource-intensive. Moreover, it caused delays in performance reporting and performance attribution analysis.



The foundation estimated that working with the bank’s performance measurement service consumed the majority of time for one and a half full-time investment team members. Unfortunately, the time that was required for performance reporting took them away from focusing on other value-added strategies and projects.

The foundation was confronted with a few options when trying to resolve their performance calculation issues. One, the foundation could stay the course and accept the time and resource challenges. Two, it could select a different custodial bank to calculate performance. And three, it could identify and select an independent third-party to calculate performance and performance attribution. The foundation chose to retain FRG as its performance and risk measurement provider.

Liquidity Profile



The Liquidity Profile describes the level of liquidity for each investment  
 Tier 1: Highly liquid (T+0 or less)  
 Tier 2: Monthly, Quarterly or Semi-Annual redemption period  
 Tier 3: Annual to 24 month redemption period  
 Tier 4: Illiquid > 24 month redemption period  
 Unfunded: Committed, but not yet called capital

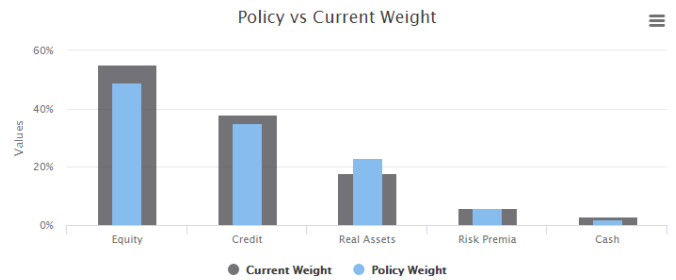
### How VOR Streamlines Operations

FRG's technology, performance, and risk professionals reviewed the structure of the foundation's investment program. We further analyzed the needs of the board, senior management, and investment team for reporting and analysis. Mobilizing our technological resources and subject-matter experts, we designed informative reports, automated data collection from all sources, and assumed ongoing responsibility for data scrubbing and error correction. Our objectives were to relieve our client of the operational burden associated with performance and risk reporting while providing timely, accurate, useful intelligence—the information that would most help the foundation evaluate results, monitor liquidity, control exposures, and make midcourse corrections in view of their long-term financial goals.

At its core, the VOR system is a rules-based performance calculation engine whose algorithms are clearly defined, transparent and consistently applied. The output includes tabular and graphic presentations of rates of return, volatility, and performance and attribution analyses including fund-level contributions to risk and return.

VOR's features include:

- A technologically sound database proactively managed by FRG personnel.
- Flexibility to accommodate client-initiated changes in data inputs and computational methodologies with a full and transparent audit trail. For example,



clients have the ability to adjust cash flows to handle trade versus settlement date issues.

- Reproducible results – clients receive spreadsheets that replicate the VOR system's calculation at each step and include the ability to adjust inputs and methodologies for "what-if" analysis.
- A web portal for accessing customizable reporting in both static and dynamic formats.

### How VOR Helps the Foundation

VOR enables the foundation to more efficiently conduct its investment program without the explicit cost of the custodial bank's performance service and the opportunity cost of the analysts' time. More importantly, the client's investment professionals reliably provide official results, including full PDF reports and web dashboards, within two weeks of the monthly close. Receiving better information, sooner, affords senior management and the board greater insight into the foundation's investment operations and the sources of risk-adjusted returns.

### About Financial Risk Group

Financial Risk Group is an international risk management firm dedicated to helping clients around the world maximize the effectiveness and value of their investments in risk management technology, methodology, and processes. FRG provides clients with unique technology offerings, implementation services, business advisory services, and thought leadership across the risk management spectrum.

### About the VOR Platform

The VOR (Visualization of Risk) platform brings together the data, teams, and technology you need to manage money. Combining innovative risk analytics with comprehensive portfolio management, performance, and reporting—all on one platform—VOR provides insight to guide your decision making regarding risk management, efficient trading, and operational scale.

#### CONTACT:

320 S. ACADEMY STREET CARY, NC 27511  
P (919) 439-3819 F (704) 800-7472  
www.frgrisk.com | info@frgrisk.com



FINANCIAL RISK  
GROUP