Transaction Cost Analysis
Understanding Trade Execution Impact

Transaction Cost Analysis (TCA) lets investment managers determine the effectiveness of their portfolio transactions. By providing greater transparency into investment strategies and trading performance, TCA helps investment managers lower their trading costs. The Charles River Investment Management Solution (CR IMS) provides TCA seamlessly integrated with order, execution and portfolio management capabilities. Charles River’s TCA scales with your analytics needs, from pre-trade to post-trade capabilities. Pre-trade TCA is included as standard functionality in Charles River IMS.

Real-Time Decision Support
Charles River’s integrated TCA capability produces immediately actionable intelligence, accessible directly from the blotter. Extensive reporting and visualization options provide portfolio managers and traders with highly individualized feedback, helping them improve performance and reduce slippage. For example, Charles River TCA provides insight into questions such as:

- Which algorithm is working for me?
- What’s my optimal execution rate?
- Should I use crossing networks for my orders?
- Do my orders differ by time of day, order size, sector, PM?

Key Benefits
- Evaluate trading costs and trends on one platform
- Measure the performance of each Portfolio Manager, Trader & Broker
- Make more informed investment and trading decisions
- Improve quality of trade execution
- Reduce execution costs and slippage
- Maximize alpha

Advanced Capabilities
- Pre- and post-trade analytics application
- Multi-agent perspective on order life-cycle
- Best-in-class customized reporting
- Optimize trading strategies to fit PM and trader profiles
- Align behavioral profiles with implementation strategies
- Covering: Global Equity Markets, US/Canada inter-listed, EU composite
- Supports entire order life-cycle
- Real-time implementation shortfall
- Real-time unrealized gain/loss (UGL)
- %ADV and liquidity indicators
- UI-based research tool

Generate performance profiles in Charles River TCA to understand factors impacting trade costs
Charles River’s TCA helps portfolio managers, traders and buy-side firms understand trade execution impact throughout the trade lifecycle.

**Improved Execution & Increased Alpha**

- **Portfolio Manager Window**: Portfolio manager initiates the investment action and estimates impact.
- **Trader Window**: Trader executes the order with best broker and strategy.
- **Firm**: Firm evaluates overall trading performance by looking at individual performance.

**Pre-Trade TCA**

Pre-Trade TCA provides portfolio managers with estimates of trade costs and market impact based on extensive historical trade information for a particular name. It evaluates all relevant trade execution strategies and recommends the strategy that is most consistent with a manager’s risk preferences.

**Post-Trade TCA**

Post-Trade TCA helps firms and portfolio managers profile and analyze trader performance across numerous metrics. Users can assess trade execution quality by comparing actual executed prices to user-selected benchmark prices. A full suite of benchmarks are provided, including volume-weighted average price, opportunity cost, performance, open/close/previous close price. Custom benchmarks are also supported.

**About Charles River**

Charles River serves more than 350 investment firms in 43 countries in the institutional asset and fund management, private wealth, alternative investments, insurance, banking and pension markets. [www.crd.com](http://www.crd.com)

Charles River Development reserves the right to change plans, priorities and future enhancements at any time without notice. (December 2014)