

The Beta Engine = [Adding Value and Risk Management from Managing Beta](#)

Over the past two years, SDCERA has developed and now implemented a “Beta Engine”, which is a form of active rebalancing intended to add value to the fund. The Beta Engine is composed of two pieces.

First, SDCERA uses a futures overlay to rebalance basic asset class exposures. The overlay is run to SDCERA specifications by The Russell Group.

Second, using multiple market signals the Beta Engine projects expected relative strengths of basic asset or sub-asset classes for the next period. Based on this information, the Staff modestly adjusts exposures, using the overlay, to add value [and manage risks](#) while staying within SDCERA’s acceptable range for cash rebalancing of the asset portfolio. The futures overlay provides a cost effective means of implementing these modest over- and under-weights.

The Beta Engine seeks added value returns in a range that is otherwise “dead” space, as asset class weights drift from market noise. [This is also important from a governance perspective as now performance of beta assets is driven by market intelligence and systematic oversight as opposed to happenstance.](#) Since implementation in August 2007, the Beta Engine has added about 30 bps to [total portfolio](#) return.

The Beta Engine concept is a cost effective way to make small rebalancing decisions that can add value to the fund. Until recently, SDCERA staff has been responsible for both the market research and implementation of the Beta Engine utilizing software licensed from M^{cube} [Investment Technologies, LLC](#). On the recommendation of staff, however, future development and implementation [of the Beta Engine](#) will be [managed](#) by [AlphaEngine Global Investment Solution, LLC \(AEGIS\)](#), an investment advisory subsidiary of M^{cube}, [with appropriate staff oversight and control.](#)