# PORTFOLIO ANALYTICS CENTER



## **Portfolio Historical Analysis**

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#### Disclaimer

The return assumptions in this report are not reflective of any specific product, and do not include any fees or expenses that may be incurred by investing in specific products. The actual returns of a specific product may be more or less than the returns used in this report. They should not be considered a guarantee of future performance or a guarantee of achieving overall financial objectives.

Past performance is not a guarantee or a predictor of future results of either the indices or any particular investment. All investments involve risk, including the loss of principal and cannot be guaranteed against loss by a bank, custodian, or any other financial institution.

Investors cannot directly invest in indexes. Asset allocation models may not be suitable for all investors.

International markets involve additional risks, including, but not limited to, currency fluctuation, political instability, foreign taxes, and different methods of accounting and financial reporting. Fixed income securities are subject to interest rate risk because the prices of fixed income securities tend to move in the opposite direction of interest rates. Emerging markets involve additional risks, including, but not limited to, currency fluctuation, political instability, foreign taxes, and different methods of accounting and financial reporting. Real estate securities funds are subject to changes in economic conditions, credit risk and interest rate fluctuations

**Sources:** Center for Research in Security Prices (CRSP), Dimensional Returns, Morningstar Inc., Sep 2018. Assumes dividend and capital gain reinvestment.

Portfolio Composition: The pie charts on the following pages reflect inputs entered on the Input page. These are for illustrative purposes only.

Skittles Chart: The white box included in the skittles chart represents the position of the client/advisor selected portfolio relative to the colored skittles representing the performance of the asset classes displayed.

Performance History: Dollar returns show how the chosen hypothetical investment amount entered on the input page would have grown during the given time period.

**Downturns and Recoveries:** Dollar returns show how a hypothetical investment of \$1 would have grown during the given time periods of financial stress and recovery: 2000 - 2006 and 2008 to 2014.

Dollar returns for 1 Year High and 1 Year Low show how the chosen hypothetical investment amount entered on input page would have grown during the best or worst 1 year period.

Best and Worst Case: Dollar returns show how a hypothetical investment of \$1,000 would have grown during the given time period.

**Data Disclosure:** The chosen asset mixes hold percentages constant by rebalancing the portfolios at the beginning of each calendar year. The buying and selling of securities for the purpose of rebalancing may have adverse tax consequences.

All results in this Report do not reflect actual investment results. Our simulation uses performance of indexes. While an index is a composite of securities with similar characteristics, investors cannot invest directly in it. Asset class portfolio returns are based on data that is representative of how the asset classes could have performed in earlier years. The return assumptions in this report are not reflective of any specific product, and do not include any fees or expenses that may be incurred by investing in specific products. The actual returns of a specific product may be more or less than the returns used in this report. It is not possible to directly invest in an index.

The information provided in this calculator is not advice and does not take into account you/your client's personal circumstances. Before making any decision or recommendation you should consider all relevant personal circumstances and options.

The average annual historical returns are calculated using the indices contained in this Report, which serve as proxies for their respective asset classes. The index data are for the period 1972 - Sep 2018. No portfolio rebalancing costs, including taxes, if applicable, are deducted from the portfolio value.

Investment advisory services provided by LWI Financial Inc. ("Loring Ward"). IRN B 17-029.

#### Definitions:

Standard Deviation - The standard deviation is often used by investors to measure the risk of a stock or a stock portfolio. The basic idea is that the standard deviation measures volatility: the more a stock's/portfolio returns vary from the stock's average return, the more volatile the stock/portfolio.

The S&P 500 Index is an index run by Standard & Poor's that is designed to represent the 500 largest U.S. stocks.

The MSCI EAFE® Index (Morgan Stanley Capital International Europe, Australasia and Far East Index) is composed of more than 1,000 companies representing the stock markets of Europe, Australia, New Zealand, and the Far East and is an unmanaged index. EAFE represents non-U.S. large stocks.

Consumer Price Index (CPI) is a measure of the average change over time in the prices paid by urban consumers for a market basket of consumer goods and services.

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### **Scenario Inputs**

Scenario Name	KKS_JUN_20_02 Outputs
Investment Amount	\$ 1,000,000
Annual Distribution	4% / \$ 40,000
Fee Adjustment	1.75%
Custom Period	1972 - 2018
Portfolio Name	MSP_Nov30_04
Asset Class Mix (%)	Global Developed Stocks (includes Int'l Developed, U.S.) : 30 Other Assets : 40 International Large Growth Stocks : 20 Commodities : 10

## **Comparison Details**

Comparison Type	Benchmark
Comparison Name	S&P 500
Asset Class Mix (%)	Wells Fargo Asset Allocation A : 30 Federated MDT Balanced A : 20 Yamaha Corp : 20 American Funds Retire Inc Port-Cnsrv A : 20 First Trust Alt Abs Ret Strat ETF : 10

### **Skittles Chart**

Displays the annual return for every asset class, stacked in order of increasing returns for the selected date range. The selected portfolio is displayed for reference as a white 'skittle', highlighting relative annual performance.

1972	1973	1974	1975	1976	1977	1978	1979	1980	1981	1982	1983	1984	1985	1986	1987	1988	1989
Commodities 42.43%	Commodities 74.96%	Commodities 39.51%	Asset Class Mix 2 37.23%	Asset Class Mix 2 23.93%	Int'l Large Growth 11.70%	Commodities 31.61%	Commodities 33.81%	Asset Class Mix 2 32.50%	Asset Class Mix 1 -1.75%	Asset Class Mix 2 21.55%	Asset Class Mix 2 22.56%	Int'l Large Growth 10.36%	Int'l Large Growth 47.59%	Int'l Large Growth 66.35%	Commodities 23.77%	Commodities 27.93%	Commodities 38.28%
Int'l Large Growth 39.09%	Asset Class Mix 1 -1.75%	Asset Class Mix 1 -1.75%	Global Developed 32.80%	Other 19.15%	Commodities 10.37%	Int'l Large Growth 28.30%	Asset Class Mix 2 18.61%	Other 25.77%	Global Developed -4.79%	Other 14.76%	Int'l Large Growth 21.94%	Asset Class Mix 2 6.27%	Global Developed 40.56%	Global Developed 41.89%	Int'l Large Growth 20.61%	Int'l Large Growth 25.91%	Asset Class Mix 2 31.69%
Global Developed 22.48%	Int'l Large Growth -11.39%	Int'l Large Growth -19.56%	Other 31.55%	Global Developed 13.40%	Global Developed 0.68%	Global Developed 16.52%	Other 12.31%	Global Developed 25.67%	Asset Class Mix 2 -4.92%	Commodities 11.56%	Global Developed 21.93%	Global Developed 4.72%	Asset Class Mix 2 31.73%	Asset Class Mix 2 18.67%	Global Developed 16.16%	Global Developed 23.29%	Other 27.25%
Asset Class Mix 2 18.99%	Asset Class Mix 2 -14.69%	Global Developed -25.47%	Int'l Large Growth 30.65%	Int'l Large Growth 0.77%	Asset Class Mix 1 -1.75%	Asset Class Mix 2 6.57%	Global Developed 10.95%	Int'l Large Growth 24.01%	Other -9.73%	Global Developed 9.71%	Other 17.27%	Other 1.40%	Other 26.33%	Other 14.62%	Asset Class Mix 2 5.25%	Asset Class Mix 2 16.61%	Global Developed 16.61%
Other 15.63%	Global Developed -15.24%	Asset Class Mix 2 -26.47%	Asset Class Mix 1 -1.75%	Asset Class Mix 1 -1.75%	Asset Class Mix 2 -7.16%	Other 1.06%	Int'l Large Growth 9.38%	Commodities 11.08%	Int'l Large Growth -10.59%	Asset Class Mix 1 -1.75%	Commodities 16.26%	Commodities 1.05%	Commodities 10.01%	Commodities 2.04%	Other 2.03%	Other 12.40%	Int'l Large Growth 6.86%
Asset Class Mix 1 -1.75%	Other -17.37%	Other -29.72%	Commodities -17.22%	Commodities -11.92%	Other -11.50%	Asset Class Mix 1 -1.75%	Asset Class Mix 1 -1.75%	Asset Class Mix 1 -1.75%	Commodities -23.01%	Int'l Large Growth -3.74%	Asset Class Mix 1 -1.75%	Asset Class Mix 1 -1.75%					

1990	1991	1992	1993	1994	1995	1996	1997	1998	1999	2000	2001	2002	2003	2004	2005	2006	2007
Commodities 29.08%	Asset Class Mix 2 30.47%	Asset Class Mix 2 7.62%	Int'l Large Growth 24.64%	Commodities 16.61%	Asset Class Mix 2 37.58%	Commodities 23.17%	Asset Class Mix 2 33.36%	Asset Class Mix 2 28.58%	Int'l Large Growth 31.94%	Commodities 31.84%	Asset Class Mix 1 -1.75%	Commodities 25.91%	Global Developed 34.81%	Int'l Large Growth 16.27%	Commodities 21.36%	Int'l Large Growth 22.12%	Int'l Large Growth 18.03%
Asset Class Mix 1 -1.75%	Other 26.31%	Other 4.46%	Global Developed 22.50%	Global Developed 4.43%	Other 34.11%	Asset Class Mix 2 22.96%	Other 31.01%	Other 26.67%	Global Developed 29.29%	Asset Class Mix 1 -1.75%	Asset Class Mix 2 -11.89%	Asset Class Mix 1 -1.75%	Int'l Large Growth 32.99%	Global Developed 15.93%	Int'l Large Growth 14.41%	Global Developed 20.10%	Commodities 16.23%
Asset Class Mix 2 -3.10%	Global Developed 18.28%	Commodities 3.70%	Asset Class Mix 2 10.08%	Int'l Large Growth 4.18%	Global Developed 18.87%	Other 20.26%	Global Developed 14.04%	Global Developed 21.30%	Commodities 24.35%	Asset Class Mix 2 -9.10%	Other -13.04%	Int'l Large Growth -15.72%	Asset Class Mix 2 28.68%	Asset Class Mix 2 10.88%	Global Developed 10.27%	Asset Class Mix 2 15.79%	Global Developed 8.49%
Other -6.56%	Int'l Large Growth 13.85%	Asset Class Mix 1 -1.75%	Other 7.06%	Asset Class Mix 2 1.32%	Commodities 15.21%	Global Developed 12.21%	Int'l Large Growth 2.80%	Int'l Large Growth 21.15%	Asset Class Mix 2 21.04%	Other -10.14%	Global Developed -16.41%	Global Developed -18.25%	Other 26.38%	Commodities 9.15%	Asset Class Mix 2 4.91%	Other 13.62%	Asset Class Mix 2 5.49%
Global Developed -17.02%	Asset Class Mix 1 -1.75%	Global Developed -5.23%	Commodities -1.07%	Other -1.54%	Int'l Large Growth 11.62%	Int'l Large Growth 4.17%	Asset Class Mix 1 -1.75%	Asset Class Mix 1 -1.75%	Other 19.53%	Global Developed -14.05%	Commodities -19.51%	Asset Class Mix 2 -22.10%	Commodities 23.93%	Other 8.99%	Other 3.00%	Commodities 2.07%	Other 3.53%
Int'l Large Growth -24.55%	Commodities -5.76%	Int'l Large Growth -12.79%	Asset Class Mix 1 -1.75%	Asset Class Mix 1 -1.75%	Asset Class Mix 1 -1.75%	Asset Class Mix 1 -1.75%	Commodities -3.39%	Commodities -27.03%	Asset Class Mix 1 -1.75%	Int'l Large Growth -24.20%	Int'l Large Growth -25.33%	Other -23.37%	Asset Class Mix 1 -1.75%				

2008	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018
Asset Class Mix 1 -1.75%	Global Developed 31.57%	Commodities 16.83%	Asset Class Mix 2 2.11%	Global Developed 16.06%	Asset Class Mix 2 32.39%	Asset Class Mix 2 13.69%	Int'l Large Growth 1.65%	Asset Class Mix 2 11.96%	Int'l Large Growth 27.61%	Asset Class Mix 2 10.56%
Commodities -35.65%	Int'l Large Growth 30.66%	Asset Class Mix 2 15.06%	Other 0.00%	Asset Class Mix 2 16.00%	Other 29.60%	Other 11.39%	Asset Class Mix 2 1.38%	Commodities 11.77%	Global Developed 22.44%	Other 8.99%
Asset Class Mix 2 -37.00%	Asset Class Mix 2 26.46%	Global Developed 13.54%	Asset Class Mix 1 -1.75%	Int'l Large Growth 15.48%	Global Developed 27.42%	Global Developed 4.52%	Other -0.73%	Other 9.54%	Asset Class Mix 2 21.83%	Global Developed 5.33%
Other -38.49%	Other 23.45%	Int'l Large Growth 13.06%	Global Developed -6.03%	Other 13.41%	Int'l Large Growth 20.53%	Asset Class Mix 1 -1.75%	Global Developed -0.80%	Global Developed 8.19%	Other 19.42%	Int'l Large Growth 0.39%
Global Developed -40.82%	Commodities 18.91%	Other 12.78%	Int'l Large Growth -12.71%	Commodities -1.06%	Asset Class Mix 1 -1.75%	Int'l Large Growth -3.26%	Asset Class Mix 1 -1.75%	Asset Class Mix 1 -1.75%	Commodities 1.70%	Asset Class Mix 1 -1.75%
Int'l Large Growth -42.88%	Asset Class Mix 1 -1.75%	Asset Class Mix 1 -1.75%	Commodities -13.32%	Asset Class Mix 1 -1.75%	Commodities -9.52%	Commodities -17.01%	Commodities -24.66%	Int'l Large Growth -1.87%	Asset Class Mix 1 -1.75%	Commodities -2.02%

Annualized Rtn	Std. Deviation
Asset Class Mix 2	Commodities
10.60%	21.46%
Global Developed	Int'l Large Growth
8.96%	20.94%
Int'l Large Growth	Global Developed
7.76%	17.55%
Commodities	Asset Class Mix 2
7.57%	17.14%
Other	Other
7.39%	16.62%
Asset Class Mix 1	Asset Class Mix 1
-1.75%	0.00%