

Build Wealth... Reduce Risk

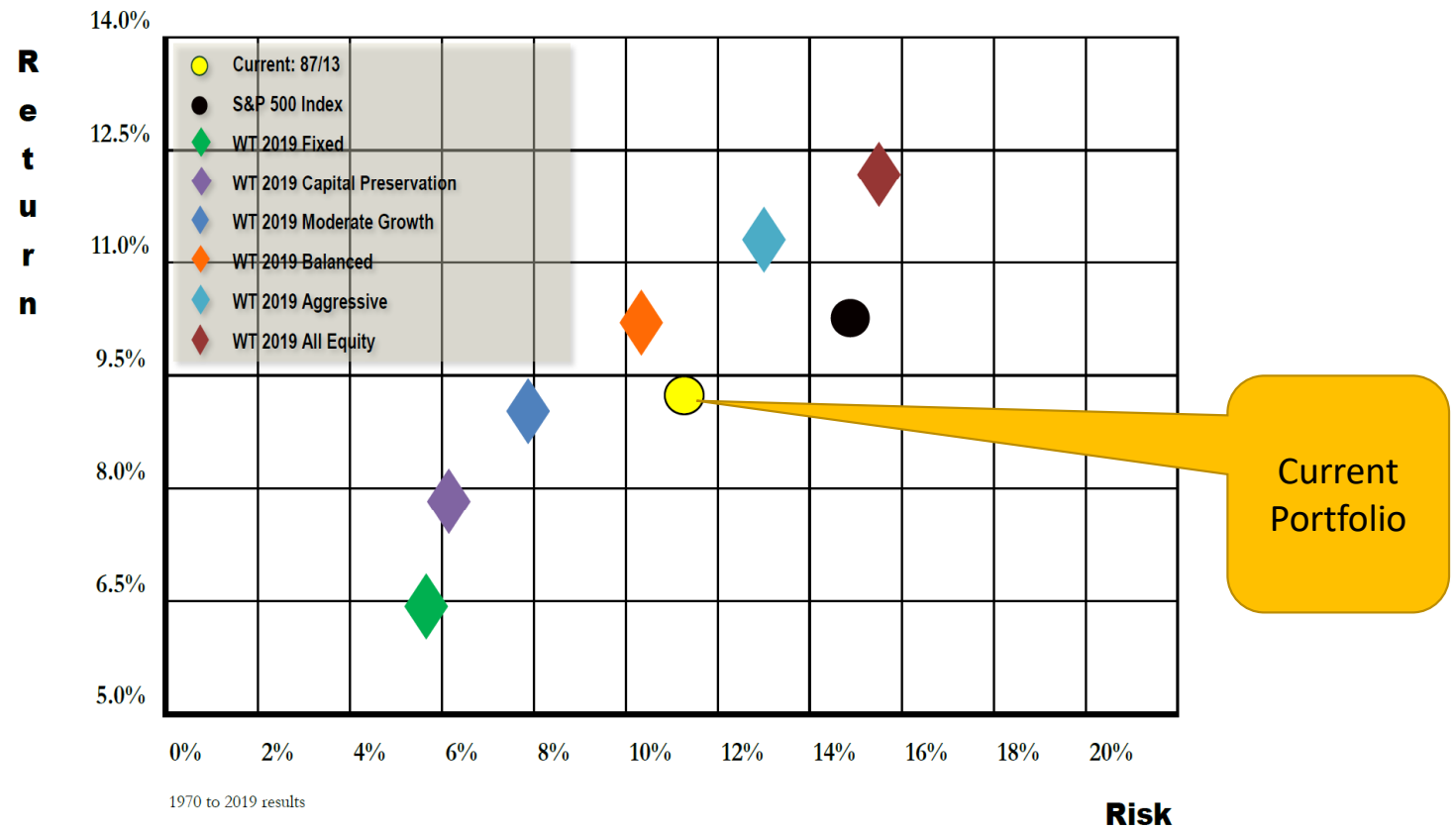


Expected Return Analysis

Prepared for: **Aggressive Allocation**

Presented by: Guy Baker CFP, MSFS, ChFC, MBA, PhD

Efficient Frontier



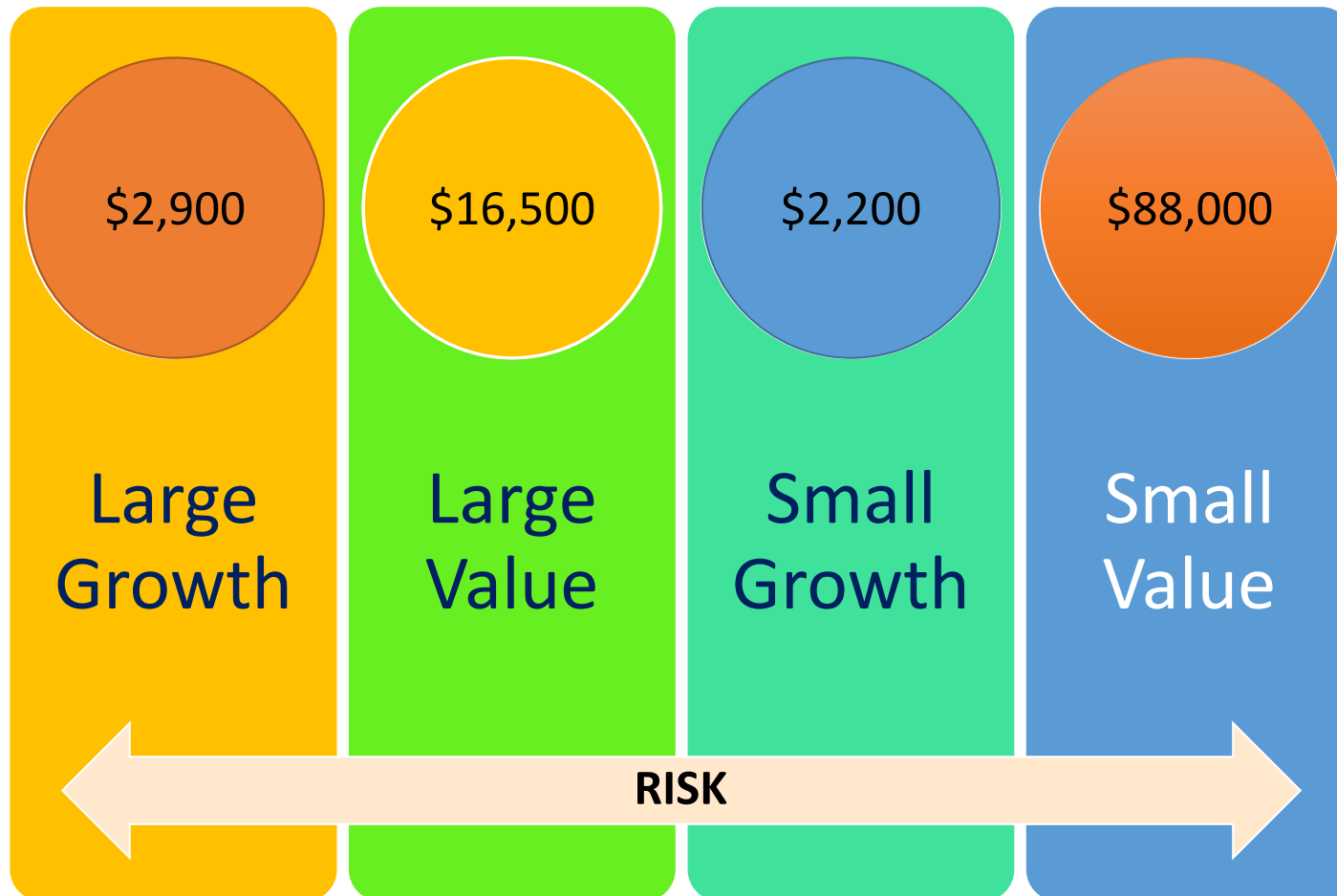
Current Portfolio

Empower Aggressive Account

Fund Name	Symbol	Assets	Category	Stock	Turnover	Fund	Risk			
		Shown		Holdings		Exp	5 Year	1 Year	3 Year	10 Year
Proposed Wt 2019 Aggressive Portfolio Summary				29,645	20%	0.32%	13.0%	6.8%	7.0%	9.7%
Weighted Current Proxy		\$1,000,000		8,701	25%	0.41%	36.84%	32.42%	27.83%	47.20%
American Funds New Perspective A	ANWPX	\$100,000	World Large Stock	304	20%	0.76%	45.5%	Information Gathered from YCharts		
Columbia Mid Cap Index Inst	NMPAX	\$70,000	Mid-Cap Blcnd	404	17%	0.20%	45.5%			
DFA US Large Cap Value I	DFLVX	\$150,000	Large Value	330	N/A	0.26%	44.2%			
T. Rowe Price US Large-Cap Core	TRULX	\$160,000	Large Blend	68	58%	0.74%	35.0%			
Vanguard Total Stock Mkt Idx Inv	VTSMX	\$150,000	Large Blend	3,542	4%	0.14%	38.3%			
DFA Emerging Markets I	DFEMX	\$70,000	Diversified Emerging Mkts	1,211	N/A	0.43%	43.7%			
Fidelity® International Index	FSPSX	\$160,000	Foreign Large Blend	929	2%	0.04%	36.7%			
Cohen & Steers REIT & Preferred Incom	RNP	\$40,000	Allocation--50% to 70% Ec	250	53%	1.96%	50.2%	46.0%	41.1%	64.2%
DFA Inflation-Protected Securities I	DIPSX	\$20,000	Inflation-Protected Bond	17	28%	0.11%	9.1%	7.3%	5.6%	16.3%
Federated Instl High Yield Bond Instl	FIHBX	\$10,000	High Yield Bond	522	26%	0.50%	20.0%	17.6%	16.5%	23.4%
Federated Total Return Bond Instl	FTRBX	\$30,000	Intermediate Core-Plus Bor	881	43%	0.39%	8.2%	7.1%	6.2%	10.3%
PIMCO Gurtin Ca Muni Interm Val Instl	GCMVX	\$10,000	Muni California Intermedia	83	9%	0.39%		7.6%	6.9%	

Information
Gathered from
YCharts

Growth of \$1 from 1926 to 2019



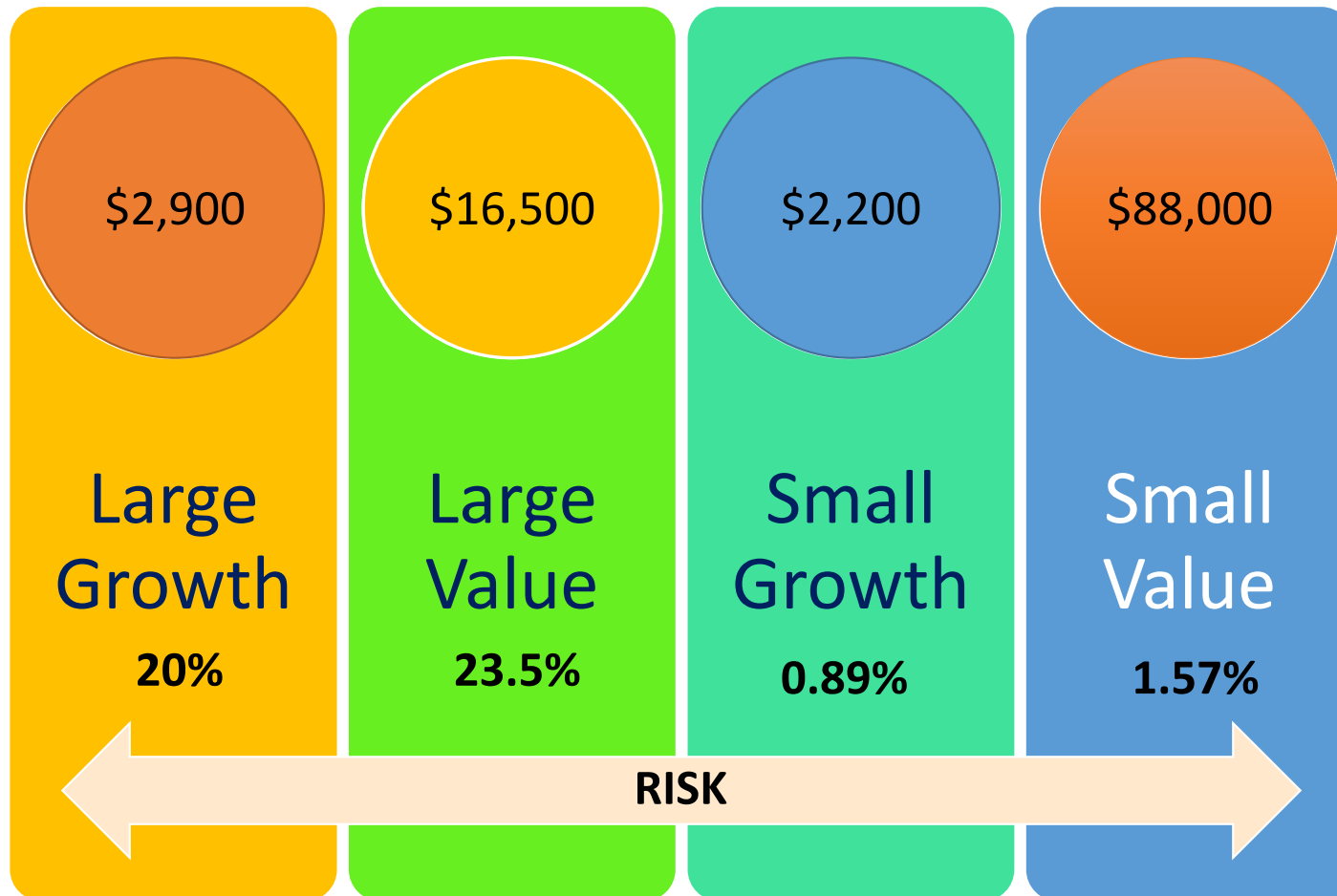
Proxy Construction

Proxy Portfolio Name			Wealth Teams Efficient Frontier						
Standard Deviation			WT 2019 Fixed	WT 2019 Capital Preservation	WT 2019 Moderate Growth	WT 2019 Balanced	WT 2019 Aggressive	WT 2019 All Equity	AGGRESSIVE ACCOUNT
			5.64%	6.16%	7.88%	10.34%	13.02%	15.54%	11.33%
EQUITY			0%	21%	40%	61%	81%	97%	79.76%
Standard Deviation									
US STOCKS			0.00%	16.00%	31.40%	47.30%	62.70%	76.50%	58.23%
15.2%	Large Cap Growth	Russell 1000 Growth Index	0.00%	1.48%	2.90%	4.37%	5.80%	7.07%	12.47%
13.6%	Large Cap Core	Russell 1000 Index	0.00%	2.56%	5.02%	7.56%	10.02%	12.23%	15.61%
13.1%	Large Cap Value	Russell 1000 Value Index	0.00%	3.65%	7.17%	10.80%	14.32%	17.47%	15.97%
16.4%	Mid Cap Growth	Russell Midcap Growth Index	0.00%	0.69%	1.35%	2.04%	2.71%	3.30%	3.23%
14.9%	Mid Cap Core	Russell Midcap Index	0.00%	1.04%	2.04%	3.08%	4.08%	4.97%	3.63%
12.9%	Mid Cap Value	Russell Midcap Value Index	0.00%	1.82%	3.56%	5.37%	7.11%	8.68%	4.87%
20.1%	Small Cap Growth	Russell 2000 Growth Index	0.00%	0.99%	1.95%	2.93%	3.88%	4.74%	0.47%
17.5%	Small Cap Core	Russell 2000 Index	0.00%	1.84%	3.62%	5.45%	7.22%	8.81%	0.84%
15.7%	Small Cap Value	Russell 2000 Value Index	0.00%	1.93%	3.79%	5.71%	7.57%	9.23%	1.15%
INTERNATIONAL STOCKS			0.00%	3.90%	7.30%	11.10%	14.80%	18.10%	21.53%
16.6%	Non-US Stocks	MSCI EAFE Index	0.00%	1.758%	3.291%	5.004%	6.67%	8.16%	12.45%
15.0%	Large Value	Dimensional Global Large Value Index	0.00%	1.34%	2.50%	3.80%	5.07%	6.20%	8.12%
17.5%	Small Cap Growth	Dimensional International Small Cap Index	0.00%	0.81%	1.51%	2.29%	3.06%	3.74%	0.96%
EMERGING STOCKS			0.00%	0.80%	1.50%	2.20%	3.00%	2.30%	1.18%
19.0%	Small Cap Core	MSCI Emerging Markets Index (net div.)	0.00%	0.50%	0.93%	1.41%	1.88%	2.300%	1.18%
REAL ESTATE			3%	3%	3%	3%	3%	3%	5.06%
16.6%	Real Estate	Dow Jones REIT Index	3.00%	3.00%	3.00%	3.00%	3.00%	3.00%	5.06%
FIXED INCOME			87%	77%	57%	37%	18%	0%	12.73%
0.0%	Cash	Cash	1.000%	0.60%	0.70%	0.90%	0.30%	0.10%	2.24%
5.0%	Bonds	Barclays US Aggregate Bond Index	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%
1.0%	Short Term	One-Month US Treasury Bills	31.20%	27.34%	20.49%	13.28%	6.28%	0.00%	0.89%
5.4%	Interm Term	Bloomberg Barclays U.S. Corporate Bond Index Intermediate	45.60%	39.97%	29.95%	19.41%	9.18%	0.00%	2.37%
9.5%	Long Term	Long-Term Corporate Bonds	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	7.23%
14.0%	Inflation Protected	Bloomberg Barclays US TIPS Index	9.60%	8.41%	6.30%	4.09%	1.93%	0.00%	0.00%
4.7%	Intl. Fixed Income	FTSE World Government Bond Index 1-5 Years	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%
OTHER									1.27%
TOTAL								100%	99%

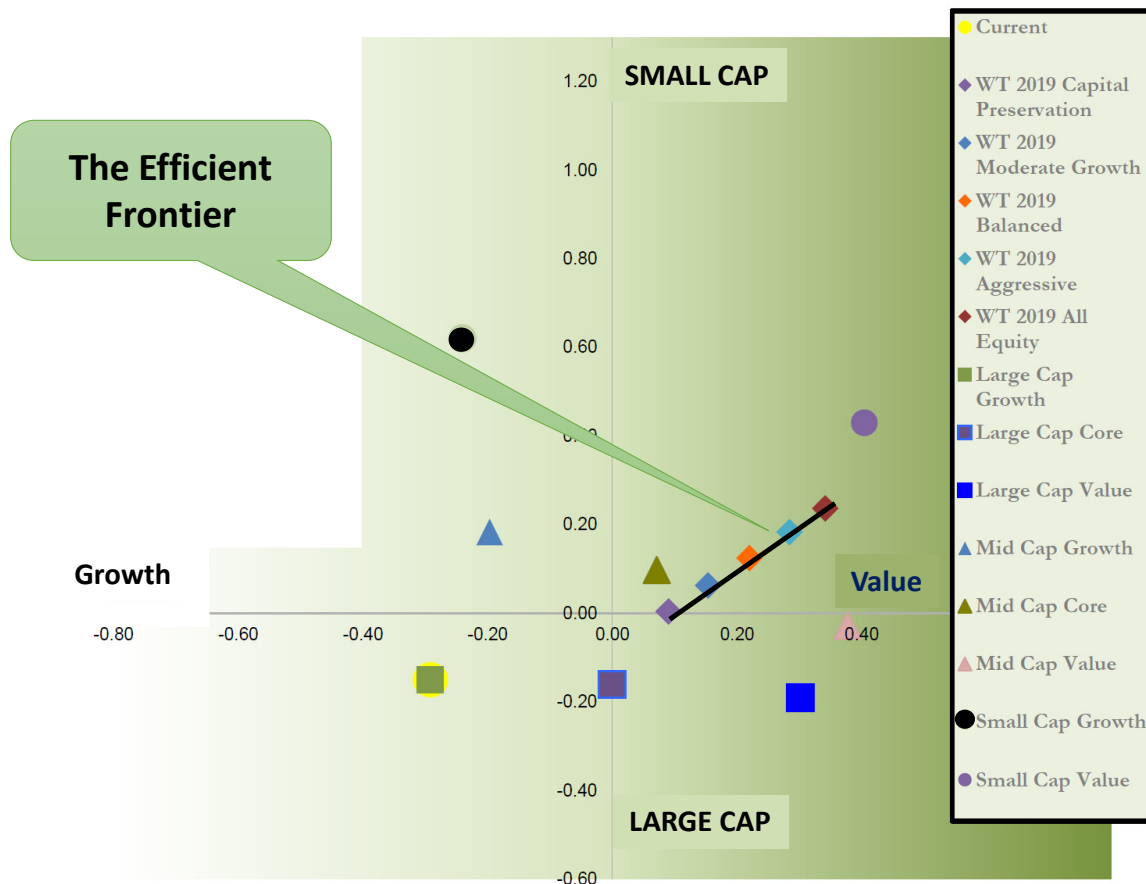
Large Cap
44%/58.23%

Small Cap
Value
1.15%/58.23%

Growth of \$1 from 1926 to 2019



Regressions and Returns



The **Efficient Frontier** is the optimized combination of all component parts Based on return and risk

EF Allocation

Lg Growth –	10.81%
Lg Value –	19.33%
SM Growth –	7.49%
Sm Value –	11.18%

Benchmark Proxy Returns Sorted for Risk Using Efficient Frontier

	WT 2019 Fixed	WT 2019 Capital Preservation	WT 2019 Moderate Growth	WT 2019 Balanced	Current	Risk Adjusted 1970	Current Equity Only	WT 2019 Aggressive	Allocation Adjusted	WT 2019 All Equity
Average Return	6.79%	8.23%	9.58%	11.01%	9.97%	11.58%	10.65%	12.48%	12.84%	13.78%
IRR	6.39%	7.80%	9.01%	10.18%	9.30%	10.62%	9.73%	11.28%	11.53%	12.14%
Standard Deviation (σ 2015)	5.64%	6.16%	7.88%	10.34%	11.33%	11.33%	12.95%	13.02%	13.72%	15.54%
Value of \$100,000 (target)	2,240,526	4,281,629	7,422,466	12,548,663	8,467,776	15,249,463	10,264,895	20,358,541	22,739,422	29,759,566
Probability of Reaching Target	50%	53%	53%	56%	58%	59%	58%	56%	59%	54%
Value at 90% probability	1,315,590	2,378,997	3,479,854	5,256,842	3,347,491	6,209,428	3,523,494	6,610,030	8,106,403	7,193,993

YEAR	Returns (1970 through 2019)									
1970	10.96%	8.86%	6.73%	4.39%	0.04%	3.57%	-1.75%	2.11%	1.51%	-0.03%
1975	9.28%	16.80%	24.28%	32.29%	9.89%	35.33%	9.85%	40.42%	2.48%	47.86%
1980	0.75%	12.34%	18.33%	20.53%	22.03%	20.53%	25.68%	24.20%	5.67%	29.45%
1985	21.51%	17.86%	27.30%	30.24%	29.69%	31.47%	31.59%	33.32%	1.06%	35.97%
1986	16.53%	17.81%	18.76%	19.81%	25.21%	20.30%	27.30%	20.93%	1.16%	21.77%
1987	6.53%	6.53%	6.97%	7.08%	6.28%	7.04%	6.54%	6.76%	1.09%	6.02%
1988	10.09%	10.09%	13.83%	17.87%	19.20%	19.41%	21.27%	21.95%	1.09%	25.66%
1989	10.09%	12.64%	15.20%	17.89%	21.58%	18.93%	23.35%	20.59%	1.09%	22.95%
1990	8.14%	2.99%	-1.79%	-6.71%	-9.33%	-8.43%	-11.63%	-11.31%	1.09%	-15.34%
1991	13.14%	17.16%	20.98%	24.93%	25.81%	26.44%	27.90%	28.89%	1.09%	32.42%
1992	6.24%	7.21%	8.19%	9.09%	6.02%	9.44%	5.97%	9.98%	1.09%	15.88%
1993	8.91%	10.79%	12.47%	14.29%	15.85%	15.04%	17.06%	17.11%	1.09%	15.88%
1994	-1.67%	-0.80%	-0.04%	0.79%	1.24%	1.09%	1.98%	1.98%	1.09%	15.88%
1995	14.68%	17.63%	20.45%	23.36%	27.08%	24.51%	28.78%	28.78%	1.09%	15.88%
1996	4.94%	8.01%	10.96%	14.07%	16.41%	15.22%	18.96%	18.96%	1.09%	15.88%
1997	6.67%	9.66%	12.57%	15.52%	21.72%	16.60%	23.99%	23.99%	1.09%	15.88%
1998	6.18%	7.36%	8.21%	8.86%	16.33%	9.07%	17.56%	17.56%	1.09%	15.88%
1999	1.61%	4.52%	7.20%	10.07%	15.54%	11.15%	18.92%	18.92%	1.09%	15.88%
2000	9.56%	8.77%	8.00%	7.07%	-1.08%	6.77%	-2.63%	-2.63%	1.09%	15.88%
2001	7.40%	6.41%	5.37%	4.11%	-7.89%	3.66%	-10.35%	-10.35%	1.09%	15.88%
2002	9.47%	4.84%	0.40%	-4.23%	-13.81%	-5.84%	-17.44%	-17.44%	1.09%	15.88%
2003	4.56%	11.70%	18.69%	26.42%	30.57%	29.37%	35.30%	35.30%	1.09%	15.88%
2004	3.90%	7.24%	10.39%	13.78%	15.18%	15.06%	16.85%	16.85%	1.09%	15.88%
2005	2.06%	3.82%	5.43%	7.13%	8.78%	7.76%	9.64%	9.64%	1.09%	15.88%
2006	4.11%	7.44%	10.57%	13.96%	17.18%	15.24%	19.69%	19.69%	1.09%	15.88%
2007	6.27%	5.27%	4.19%	3.04%	3.65%	2.67%	3.80%	3.80%	1.09%	15.88%
2008	2.58%	7.28%	12.18%	21.68%	21.68%	22.78%	24.32%	24.32%	1.09%	15.88%

Current Portfolio

Average Return

9.97%

IRR

9.30%

\$8,467,776

Allocation Adjusted

Average Return

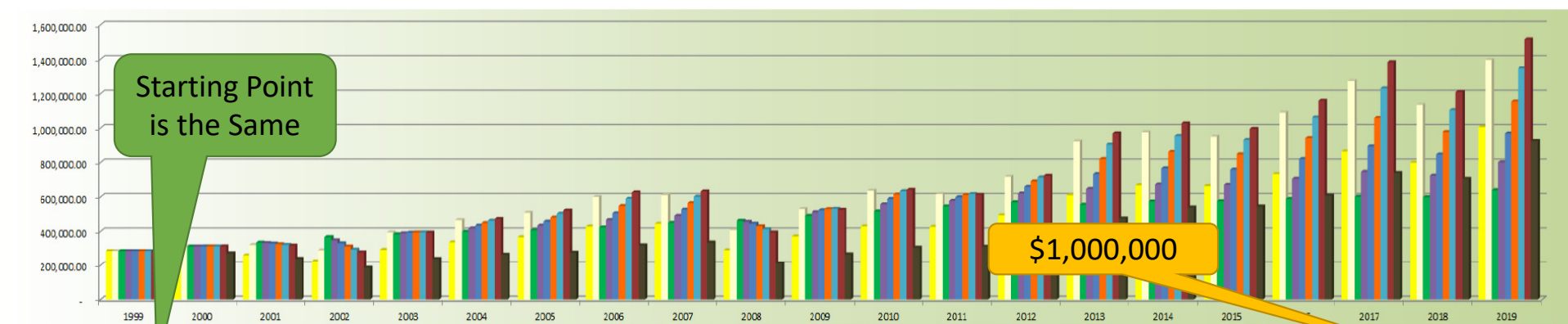
12.84%

IRR

11.53%

\$22,739,422

Comparing Proxies for Current Portfolio to Wealth Teams Since 2000



Current 87/13, irr = 6.49%	\$284,702	\$281,635	\$259,422	\$223,586	\$291,927	\$336,232	\$365,770	\$428,614	\$444,251	\$289,641	\$370,418	\$429,312	\$426,527	\$493,142	\$610,167	\$668,300	\$663,590	\$732,589	\$864,481	\$798,636	\$1,005,714	YTD
	$\sigma = 15.5\%$	-1.08%	-7.89%	-13.81%	30.57%	15.13%	8.78%	17.18%	3.65%	-34.80%	27.39%	15.90%	-0.65%	15.62%	23.73%	9.53%	-0.70%	10.40%	18.00%	-7.62%	25.93%	
Risk Adjusted 2000 69/31, irr = 8.01%	\$284,702	\$312,670	\$321,685	\$294,745	\$394,663	\$461,672	\$501,828	\$587,947	\$599,814	\$413,971	\$531,158	\$632,973	\$617,465	\$713,317	\$900,122	\$950,223	\$927,761	\$1,055,703	\$1,222,674	\$1,098,632	\$1,337,876	
	$\sigma = 16.4\%$	9.82%	2.88%	-8.37%	33.90%	16.98%	8.70%	17.16%	2.02%	-30.98%	28.31%	19.17%	-2.45%	15.52%	26.19%	5.57%	-2.36%	13.79%	15.82%	-10.15%	21.78%	
Allocation Adjusted 87/13, irr = 8.24%	\$284,702	\$312,643	\$320,332	\$289,229	\$394,327	\$465,302	\$508,060	\$600,446	\$610,468	\$407,979	\$530,034	\$636,730	\$616,836	\$717,700	\$923,197	\$975,933	\$950,500	\$1,089,802	\$1,273,994	\$1,135,160	\$1,395,131	
	$\sigma = 20.2\%$	9.81%	2.46%	-9.71%	36.34%	18.00%	9.19%	18.18%	1.67%	-33.17%	29.92%	20.13%	-3.12%	16.35%	28.63%	5.71%	-2.61%	14.66%	16.00%	-10.90%	22.90%	
WT 2019 Fixed 3/97, irr = 4.11%	\$284,702	\$311,664	\$334,737	\$366,447	\$383,153	\$398,110	\$406,303	\$423,002	\$449,521	\$461,106	\$490,188	\$516,108	\$544,875					\$588,195	\$601,270	\$598,562	\$639,608	
	$\sigma = 13.0\%$	9.47%	7.40%	9.47%	4.56%	3.90%	2.06%	4.11%	6.27%	2.58%	6.31%	5.29%	5.57%					0.28%	2.28%	2.22%	6.86%	
WT 2019 Capital Preservation 20/80, irr = 5.29%	\$284,702	\$312,139	\$332,146	\$348,210	\$388,941	\$417,107	\$433,058	\$465,256	\$489,778	\$455,394	\$510,660	\$557,044	\$577,442	\$620,086	\$646,672	\$672,382	\$670,369	\$705,711	\$745,598	\$723,779	\$801,588	
	$\sigma = 15.0\%$	9.64%	6.41%	4.84%	11.70%	7.24%	3.82%	7.44%	5.27%	-7.02%	12.14%	9.08%	3.66%	7.39%	4.29%	3.98%	-0.30%	5.27%	5.65%	-2.93%	10.75%	
WT 2019 Moderate Growth 40/60, irr = 6.29%	\$284,702	\$312,520	\$329,308	\$330,629	\$392,431	\$433,216	\$456,728	\$505,003	\$526,181	\$444,731	\$522,655	\$588,235	\$598,644	\$658,962	\$732,662	\$766,059	\$759,004	\$820,600	\$893,733	\$846,626	\$968,630	
	$\sigma = 11.2\%$	9.77%	5.37%	0.40%	18.69%	10.39%	5.43%	10.57%	4.19%	-15.48%	17.52%	12.55%	1.77%	10.08%	11.18%	4.58%	-0.92%	8.12%	8.91%	-5.27%	14.41%	
WT 2019 Balanced 60/40, irr = 7.22%	\$284,702	\$312,580	\$325,428	\$311,662	\$394,004	\$448,291	\$480,252	\$547,294	\$563,936	\$429,575	\$529,026	\$613,901	\$611,395	\$690,239	\$820,142	\$861,888	\$847,739	\$941,551	\$1,058,823	\$976,299	\$1,154,196	
	$\sigma = 14.0\%$	9.79%	4.11%	-4.23%	26.42%	13.78%	7.13%	13.96%	3.04%	-23.83%	23.15%	16.04%	-0.41%	12.90%	18.82%	5.09%	-1.64%	11.07%	12.46%	-7.79%	18.22%	
WT 2019 Aggressive 80/20, irr = 8.05%	\$284,702	\$312,608	\$321,346	\$293,667	\$394,391	\$462,012	\$502,589	\$589,707	\$601,295	\$412,733	\$530,689	\$633,274	\$617,052	\$713,879	\$903,568	\$954,165	\$931,216	\$1,060,959	\$1,230,785	\$1,104,435	\$1,347,099	
	$\sigma = 13.0\%$	9.80%	2.80%	-8.61%	34.30%	17.15%	8.78%	17.33%	1.97%	-31.36%	28.58%	19.33%	-2.56%	15.66%	26.61%	5.60%	-2.41%	13.93%	16.01%	-10.27%	21.97%	
WT 2019 All Equity 100/0, irr = 8.68%	\$284,702	\$312,537	\$317,295	\$277,527	\$393,038	\$472,354	\$520,657	\$626,738	\$632,471	\$394,300	\$525,573	\$641,845	\$612,420	\$723,308	\$968,947	\$1,027,205	\$994,965	\$1,159,025	\$1,381,953	\$1,209,167	\$1,514,914	
	$\sigma = 0.0\%$	9.78%	1.52%	-12.53%	41.62%	20.13%	10.23%	20.37%	0.91%	-37.66%	33.29%	22.12%	-4.58%	18.11%	33.96%	6.01%	-3.14%	16.49%	19.23%	-12.50%	25.29%	
S&P 500 Index 100/0, irr = 6.04%	\$284,702	\$271,841	\$238,928	\$185,645	\$238,322	\$263,593	\$275,853	\$318,640	\$335,315	\$210,709	\$265,817	\$305,102	\$310,771	\$359,613	\$474,922	\$538,603	\$544,693	\$608,333	\$739,329	\$705,137	\$924,898	

Critical Factors You Can Control:

Aggressive Account		Current Portfolio	Proposed WT 2019 Aggressive Portfolio
Expected Return		9.30%	11.28%
Risk Index		11.33%	13.02%
EXPLICIT (disclosed) Costs:			
Fund Management		0.41%	0.32%
Advisor Fee		0.25%	0.25%
IMPLICIT (undisclosed) Costs:			
Turnover		25%	20%
Transaction		0.24%	0.16%
Cash Drag		0.21%	0.03%
Implicit + Explicit Total:		1.11%	0.77%
BEHAVIORIAL:			
Investor		1.91%	0%
TOTAL ANNUAL COST		3.02%	0.77%
Explicit & Implicit Cost for \$1,000,000 Portfolio		\$11,105	\$7,709
Total Cost (including Behavioral) for \$1,000,000 Portfolio		\$30,205	\$7,709

Fund Mgt Fee
0.41% - 0.32%

Transaction Fees
0.24% - 0.16%
Cash Drag
0.21% - .03%