

Report Parameters

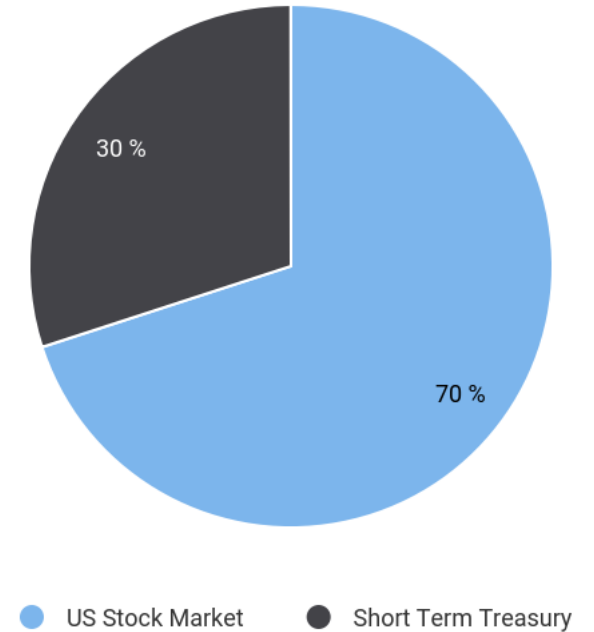
Initial Amount	\$10,000
Career Years	17
Simulation Period	50
Simulation Model	Historical Returns
Bootstrap Model	Single Year
Tax Treatment	Pre-tax Returns
Sequence of Return Risk	No Adjustments
Inflation Model	Historical Inflation
Fee Structure	0.25% on 20% of Assets

Simulation Description

Monte Carlo simulation results for 10000 portfolios with \$10,000 initial portfolio balance using available historical returns data from Jan 1997 to Dec 2020. 17-year linear glide path was used to transition from starting portfolio to retirement portfolio. The simulated inflation model used historical inflation with 2.10% mean and 1.22% standard deviation based on the Consumer Price Index (CPI-U) data from Jan 1997 to Dec 2020. The generated inflation samples were correlated with simulated asset returns based on historical correlations.

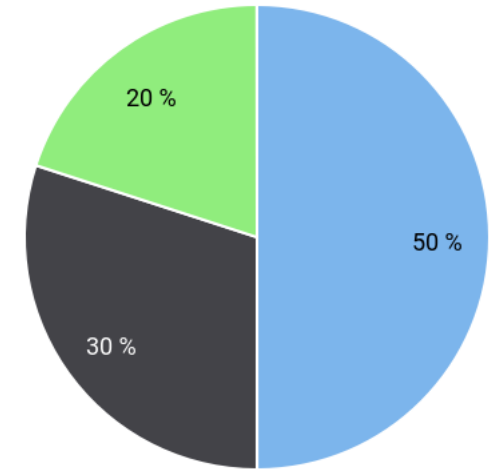
Starting Portfolio

Asset Class	Allocation	CAGR	Expected Annual Return	Annualized Volatility
US Stock Market	70.00%	9.16%	10.56%	15.93%
Short Term Treasury	30.00%	3.39%	3.40%	1.77%



Retirement Portfolio

Asset Class	Allocation	CAGR	Expected Annual Return	Annualized Volatility
US Stock Market	50.00%	9.16%	10.56%	15.93%
Total US Bond Market	30.00%	5.03%	5.09%	3.42%
Short Term Treasury	20.00%	3.39%	3.40%	1.77%



- US Stock Market
- Total US Bond Market
- Short Term Treasury

Financial Goals

Purpose	Type	Starts In	Ends In	Frequency	Times	Total	Success
Accumulation	Contribute \$75.00	1 month	17 years	Monthly	204	\$15,300	100.00%
Distribution years 2039-2046	Withdraw \$175	17 years	24 years and 11 months	Monthly	96	-\$16,800	99.98%

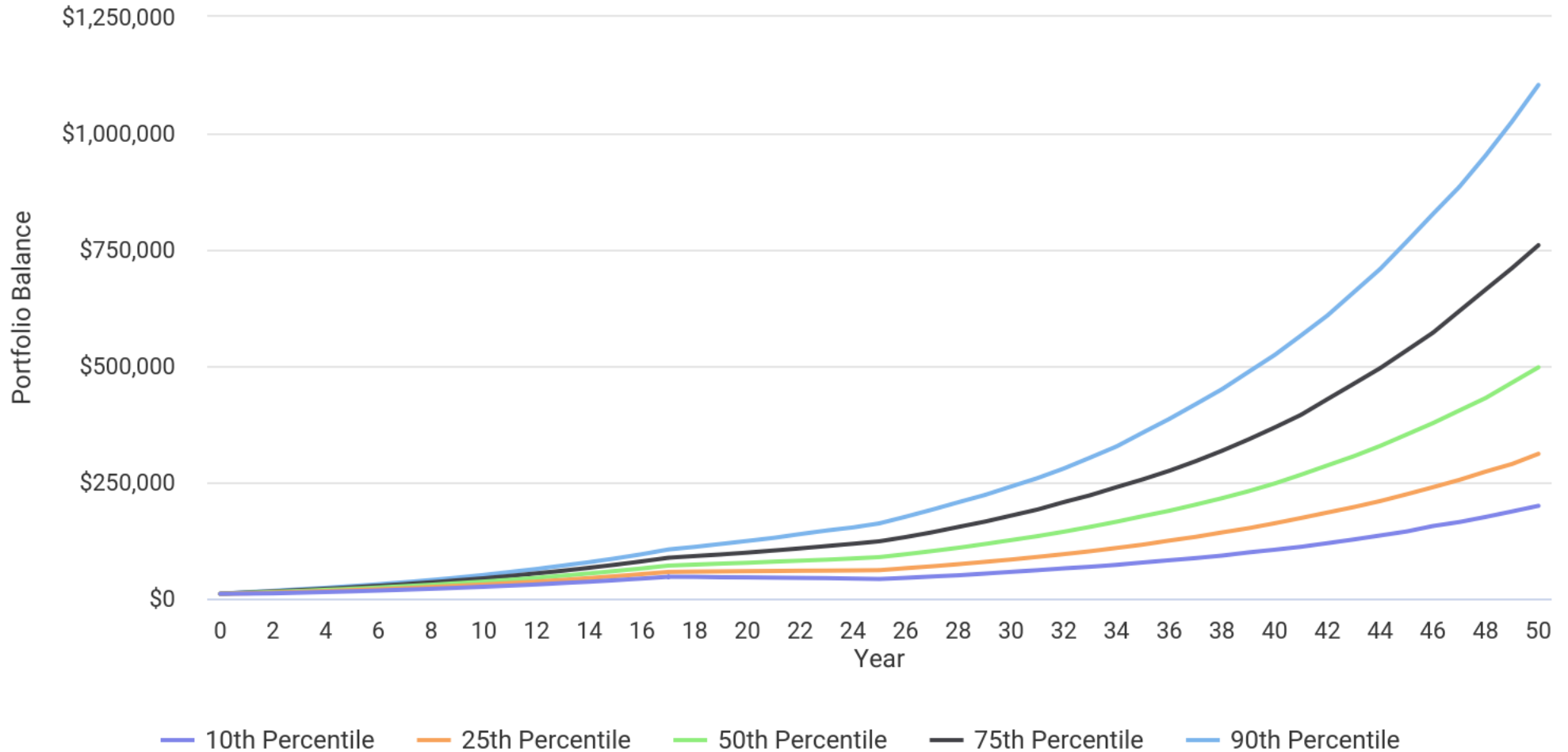
Total is the sum of expected cashflows in present dollars

Summary Statistics

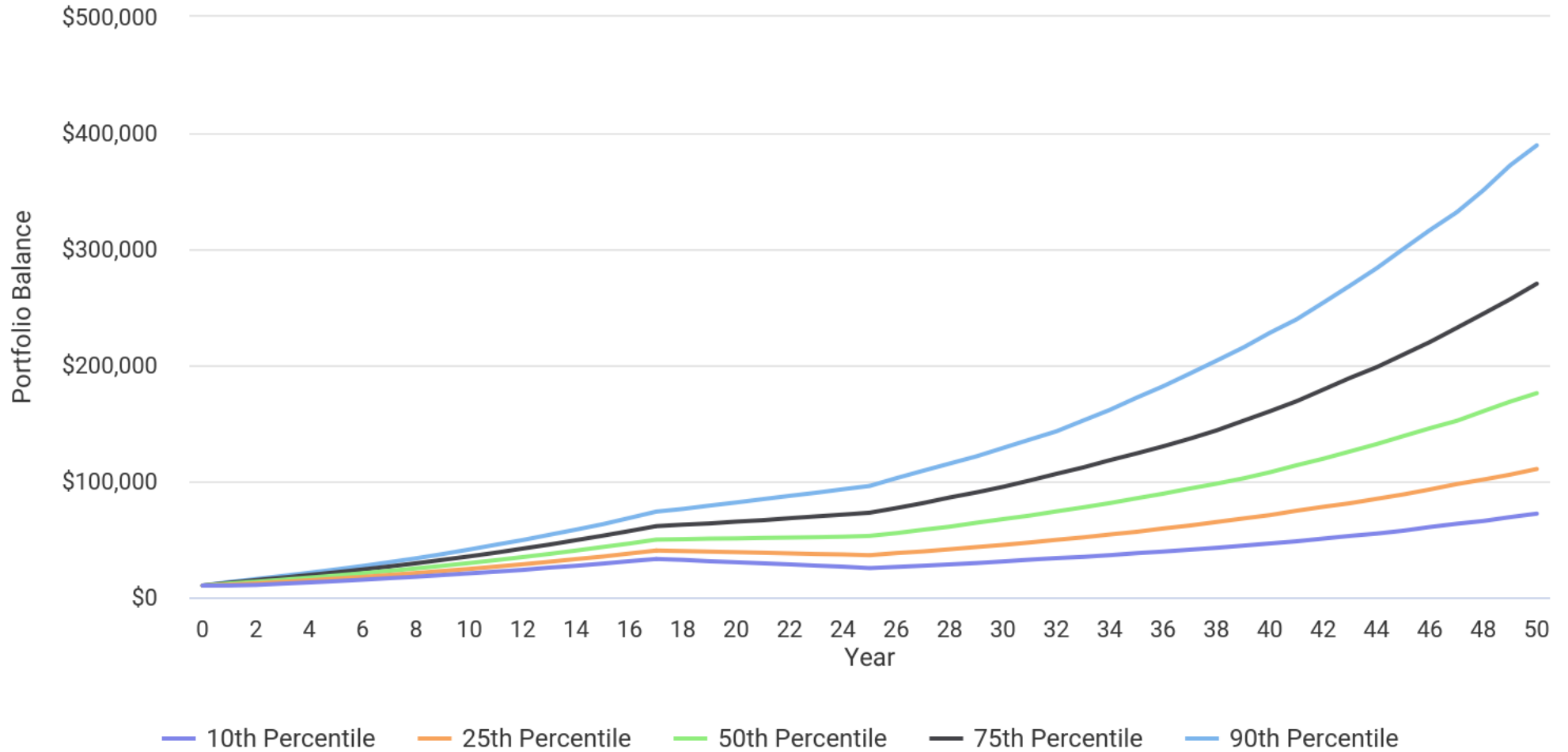
	10th Percentile	25th Percentile	50th Percentile	75th Percentile	90th Percentile
Time Weighted Rate of Return (nominal)	5.64%	6.47%	7.40%	8.27%	9.05%
Time Weighted Rate of Return (real)	3.50%	4.29%	5.18%	6.04%	6.79%
Portfolio End Balance (nominal)	\$199,043	\$310,855	\$496,805	\$759,317	\$1,103,866
Portfolio End Balance (real)	\$71,954	\$110,418	\$175,764	\$270,076	\$389,329
Maximum Drawdown	-37.19%	-29.68%	-23.53%	-19.63%	-17.50%
Maximum Drawdown Excluding Cashflows	-34.65%	-29.02%	-23.95%	-20.18%	-17.50%
Safe Withdrawal Rate	3.70%	4.58%	5.71%	7.00%	8.19%
Perpetual Withdrawal Rate	3.38%	4.12%	4.93%	5.70%	6.36%

9998 portfolios out of 10000 simulated portfolios (99.98%) survived all withdrawals.

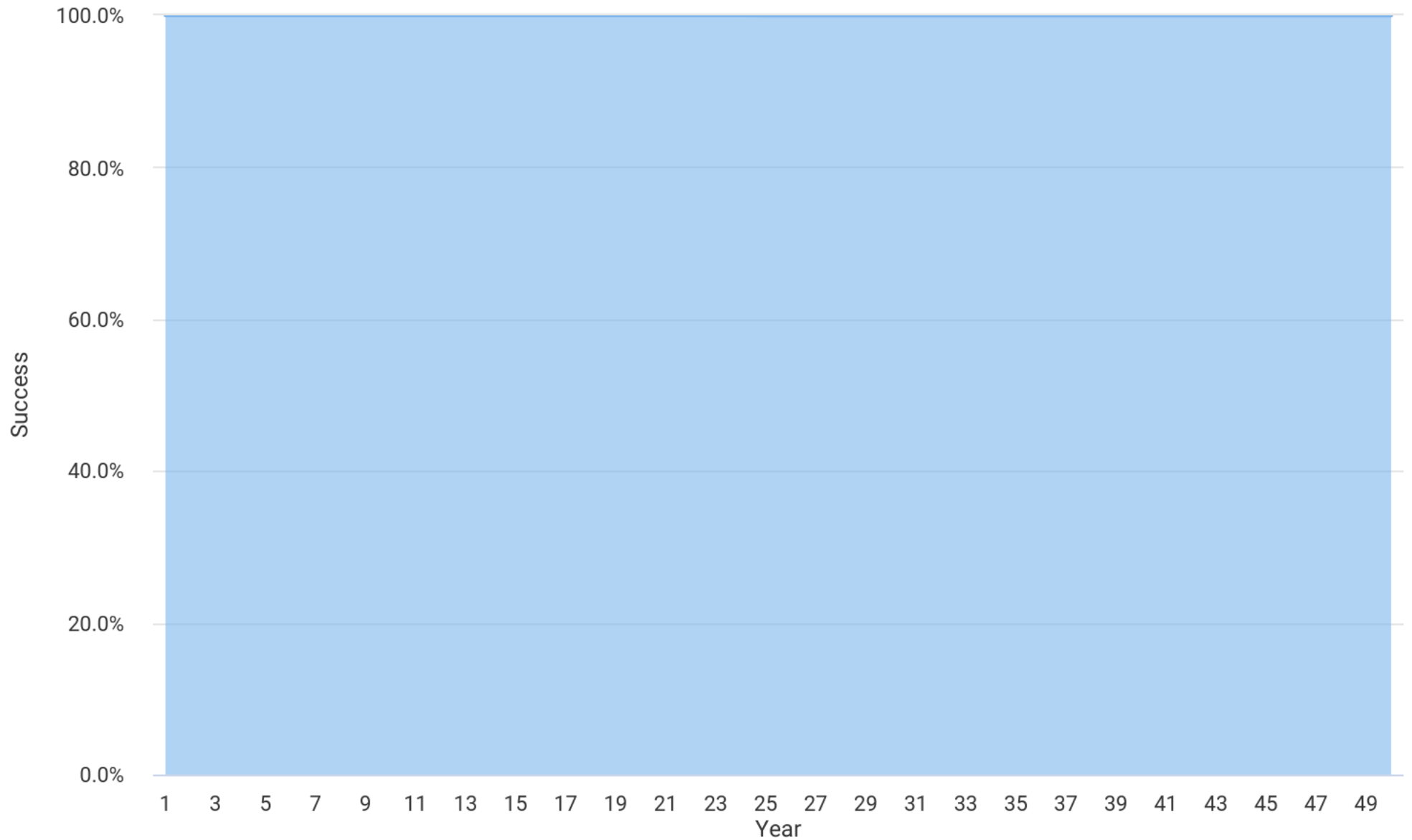
Portfolio Balance (nominal)



Portfolio Balance (inflation adjusted)



Portfolio Success





Portfolio Balances (nominal)

Year	10th Percentile Balance	25th Percentile Balance	50th Percentile Balance	75th Percentile Balance	90th Percentile Balance	Portfolio Success
1	\$10,376	\$10,934	\$11,882	\$12,726	\$13,293	100.00%
2	\$10,959	\$12,451	\$13,884	\$15,289	\$16,234	100.00%
3	\$12,364	\$14,080	\$16,021	\$17,880	\$19,470	100.00%
4	\$13,687	\$15,803	\$18,317	\$20,736	\$22,839	100.00%
5	\$15,226	\$17,726	\$20,750	\$23,779	\$26,490	100.00%
6	\$16,936	\$19,753	\$23,424	\$27,086	\$30,468	100.00%
7	\$18,827	\$22,101	\$26,275	\$30,644	\$34,864	100.00%
8	\$20,606	\$24,551	\$29,347	\$34,617	\$39,536	100.00%
9	\$22,799	\$27,101	\$32,690	\$38,895	\$44,760	100.00%
10	\$25,081	\$29,937	\$36,280	\$43,297	\$50,532	100.00%
11	\$27,430	\$33,030	\$40,105	\$48,353	\$56,894	100.00%
12	\$30,048	\$36,300	\$44,323	\$53,925	\$63,308	100.00%
13	\$33,074	\$39,786	\$48,916	\$59,568	\$70,661	100.00%
14	\$35,886	\$43,793	\$53,756	\$65,916	\$77,984	100.00%
15	\$39,180	\$47,863	\$59,060	\$72,552	\$86,135	100.00%
16	\$42,720	\$52,320	\$64,515	\$79,747	\$95,082	100.00%
17	\$46,504	\$57,024	\$70,506	\$87,418	\$105,246	100.00%
18	\$46,354	\$57,623	\$72,690	\$91,115	\$110,791	100.00%
19	\$45,455	\$58,029	\$74,792	\$94,518	\$117,179	100.00%
20	\$45,183	\$58,576	\$76,635	\$98,561	\$123,652	100.00%
21	\$44,617	\$58,953	\$79,069	\$103,004	\$130,198	100.00%
22	\$44,109	\$59,475	\$81,128	\$107,569	\$138,349	100.00%
23	\$43,641	\$59,741	\$83,281	\$112,569	\$146,007	100.00%
24	\$42,680	\$60,122	\$85,910	\$117,465	\$152,620	100.00%
25	\$41,713	\$60,678	\$88,762	\$122,799	\$161,350	99.98%
26	\$44,242	\$64,959	\$95,004	\$131,915	\$175,682	99.98%
27	\$47,093	\$69,012	\$101,756	\$142,165	\$190,837	99.98%
28	\$49,751	\$73,580	\$108,898	\$153,711	\$206,823	99.98%
29	\$53,316	\$78,586	\$116,959	\$165,032	\$222,359	99.98%
30	\$57,110	\$83,615	\$125,419	\$178,086	\$240,632	99.98%
31	\$60,630	\$89,276	\$133,875	\$191,113	\$258,678	99.98%
32	\$64,654	\$95,154	\$143,439	\$207,139	\$279,376	99.98%



Year	10th Percentile Balance	25th Percentile Balance	50th Percentile Balance	75th Percentile Balance	90th Percentile Balance	Portfolio Success
33	\$68,000	\$101,430	\$153,865	\$221,851	\$302,809	99.98%
34	\$72,184	\$108,507	\$164,912	\$239,271	\$326,794	99.98%
35	\$77,333	\$115,668	\$176,929	\$256,053	\$356,685	99.98%
36	\$82,041	\$124,388	\$188,459	\$274,460	\$385,914	99.98%
37	\$86,699	\$132,348	\$201,675	\$295,050	\$417,656	99.98%
38	\$92,058	\$141,926	\$215,503	\$317,447	\$449,835	99.98%
39	\$98,898	\$150,911	\$230,460	\$341,754	\$486,871	99.98%
40	\$104,727	\$161,601	\$247,145	\$367,600	\$523,547	99.98%
41	\$110,990	\$172,932	\$266,066	\$394,837	\$565,504	99.98%
42	\$118,805	\$184,704	\$286,023	\$428,470	\$608,455	99.98%
43	\$126,773	\$196,394	\$305,785	\$461,645	\$658,444	99.98%
44	\$135,314	\$209,318	\$327,898	\$495,153	\$708,422	99.98%
45	\$143,903	\$223,889	\$352,332	\$533,080	\$766,809	99.98%
46	\$155,635	\$239,090	\$376,889	\$571,244	\$826,491	99.98%
47	\$164,172	\$254,789	\$404,000	\$617,797	\$884,705	99.98%
48	\$175,182	\$272,670	\$430,866	\$664,070	\$952,356	99.98%
49	\$186,993	\$288,978	\$463,935	\$710,149	\$1,025,347	99.98%
50	\$199,043	\$310,855	\$496,805	\$759,317	\$1,103,866	99.98%



Portfolio Balances (inflation adjusted)

Year	10th Percentile Balance	25th Percentile Balance	50th Percentile Balance	75th Percentile Balance	90th Percentile Balance	Portfolio Success
1	\$10,064	\$10,729	\$11,753	\$12,445	\$13,048	100.00%
2	\$10,542	\$11,897	\$13,318	\$14,715	\$15,640	100.00%
3	\$11,645	\$13,203	\$15,006	\$16,785	\$18,304	100.00%
4	\$12,687	\$14,542	\$16,788	\$19,062	\$21,019	100.00%
5	\$13,787	\$15,963	\$18,628	\$21,406	\$23,886	100.00%
6	\$15,033	\$17,447	\$20,610	\$23,875	\$26,882	100.00%
7	\$16,343	\$19,100	\$22,649	\$26,445	\$30,148	100.00%
8	\$17,596	\$20,808	\$24,796	\$29,195	\$33,470	100.00%
9	\$19,051	\$22,573	\$27,047	\$32,162	\$37,170	100.00%
10	\$20,547	\$24,356	\$29,406	\$35,150	\$41,101	100.00%
11	\$21,973	\$26,348	\$31,896	\$38,370	\$45,227	100.00%
12	\$23,507	\$28,334	\$34,547	\$41,889	\$49,220	100.00%
13	\$25,463	\$30,508	\$37,269	\$45,315	\$53,777	100.00%
14	\$27,034	\$32,804	\$40,189	\$49,145	\$58,238	100.00%
15	\$28,934	\$34,987	\$43,251	\$52,975	\$62,885	100.00%
16	\$30,998	\$37,614	\$46,228	\$57,002	\$68,263	100.00%
17	\$32,887	\$40,174	\$49,593	\$61,179	\$73,712	100.00%
18	\$32,131	\$39,706	\$49,950	\$62,482	\$76,029	100.00%
19	\$30,937	\$39,229	\$50,434	\$63,511	\$78,906	100.00%
20	\$30,087	\$38,786	\$50,605	\$65,076	\$81,586	100.00%
21	\$29,163	\$38,264	\$51,064	\$66,308	\$84,478	100.00%
22	\$28,243	\$37,724	\$51,348	\$68,036	\$87,305	100.00%
23	\$27,179	\$37,152	\$51,642	\$69,606	\$89,997	100.00%
24	\$26,282	\$36,810	\$52,069	\$71,131	\$93,011	100.00%
25	\$25,024	\$36,166	\$52,810	\$72,783	\$95,821	99.98%
26	\$26,056	\$37,982	\$55,174	\$76,775	\$102,558	99.98%
27	\$27,085	\$39,408	\$58,089	\$81,054	\$108,936	99.98%
28	\$28,217	\$41,276	\$60,733	\$85,919	\$115,135	99.98%
29	\$29,370	\$43,174	\$64,112	\$90,272	\$121,345	99.98%
30	\$30,783	\$45,014	\$67,257	\$95,084	\$128,585	99.98%
31	\$32,304	\$47,096	\$70,305	\$100,541	\$135,793	99.98%
32	\$33,644	\$49,393	\$73,935	\$106,299	\$142,922	99.98%



Year	10th Percentile Balance	25th Percentile Balance	50th Percentile Balance	75th Percentile Balance	90th Percentile Balance	Portfolio Success
33	\$34,693	\$51,506	\$77,383	\$111,769	\$152,199	99.98%
34	\$36,190	\$54,012	\$81,053	\$118,030	\$161,374	99.98%
35	\$37,909	\$56,311	\$85,186	\$123,859	\$171,870	99.98%
36	\$39,293	\$59,198	\$89,154	\$129,958	\$181,744	99.98%
37	\$40,910	\$61,734	\$93,615	\$136,577	\$192,680	99.98%
38	\$42,541	\$64,755	\$97,789	\$143,703	\$203,791	99.98%
39	\$44,382	\$67,798	\$102,350	\$151,972	\$215,077	99.98%
40	\$46,274	\$70,712	\$107,627	\$160,186	\$227,818	99.98%
41	\$48,134	\$74,486	\$113,662	\$168,850	\$239,391	99.98%
42	\$50,462	\$77,849	\$119,296	\$178,850	\$253,775	99.98%
43	\$52,781	\$80,927	\$125,570	\$188,922	\$268,407	99.98%
44	\$54,768	\$84,733	\$131,890	\$198,149	\$283,426	99.98%
45	\$57,271	\$88,517	\$138,795	\$209,031	\$300,018	99.98%
46	\$60,459	\$92,834	\$145,585	\$219,904	\$316,394	99.98%
47	\$63,244	\$97,415	\$151,925	\$231,999	\$331,634	99.98%
48	\$65,624	\$101,326	\$160,257	\$244,240	\$350,635	99.98%
49	\$68,961	\$105,561	\$168,460	\$256,664	\$372,034	99.98%
50	\$71,954	\$110,418	\$175,764	\$270,076	\$389,329	99.98%



Portfolio Cashflows (nominal)

Year	10th Percentile Cashflow	25th Percentile Cashflow	50th Percentile Cashflow	75th Percentile Cashflow	90th Percentile Cashflow
1	\$924	\$921	\$916	\$913	\$909
2	\$948	\$942	\$935	\$929	\$923
3	\$972	\$964	\$954	\$946	\$937
4	\$996	\$986	\$975	\$964	\$955
5	\$1,020	\$1,008	\$995	\$983	\$972
6	\$1,044	\$1,030	\$1,016	\$1,002	\$989
7	\$1,069	\$1,053	\$1,037	\$1,021	\$1,008
8	\$1,093	\$1,077	\$1,059	\$1,041	\$1,026
9	\$1,118	\$1,100	\$1,081	\$1,062	\$1,045
10	\$1,144	\$1,124	\$1,103	\$1,083	\$1,065
11	\$1,170	\$1,149	\$1,126	\$1,104	\$1,085
12	\$1,197	\$1,174	\$1,150	\$1,126	\$1,105
13	\$1,224	\$1,199	\$1,173	\$1,149	\$1,127
14	\$1,251	\$1,225	\$1,198	\$1,172	\$1,148
15	\$1,279	\$1,252	\$1,223	\$1,195	\$1,170
16	\$1,308	\$1,279	\$1,249	\$1,219	\$1,194
17	\$1,336	\$1,307	\$1,275	\$1,243	\$1,217
18	-\$2,889	-\$2,954	-\$3,032	-\$3,110	-\$3,183
19	-\$2,946	-\$3,014	-\$3,096	-\$3,178	-\$3,254
20	-\$3,004	-\$3,074	-\$3,161	-\$3,245	-\$3,327
21	-\$3,062	-\$3,138	-\$3,226	-\$3,316	-\$3,400
22	-\$3,123	-\$3,201	-\$3,293	-\$3,387	-\$3,478
23	-\$3,186	-\$3,268	-\$3,361	-\$3,462	-\$3,552
24	-\$3,245	-\$3,332	-\$3,433	-\$3,536	-\$3,631
25	-\$3,311	-\$3,399	-\$3,503	-\$3,611	-\$3,711
26	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00
27	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00
28	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00
29	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00
30	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00
31	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00
32	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00



Year	10th Percentile Cashflow	25th Percentile Cashflow	50th Percentile Cashflow	75th Percentile Cashflow	90th Percentile Cashflow
33	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00
34	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00
35	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00
36	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00
37	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00
38	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00
39	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00
40	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00
41	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00
42	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00
43	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00
44	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00
45	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00
46	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00
47	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00
48	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00
49	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00
50	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00



Portfolio Cashflows (inflation adjusted)

Year	10th Percentile Cashflow	25th Percentile Cashflow	50th Percentile Cashflow	75th Percentile Cashflow	90th Percentile Cashflow
1	\$900	\$900	\$900	\$900	\$900
2	\$900	\$900	\$900	\$900	\$900
3	\$900	\$900	\$900	\$900	\$900
4	\$900	\$900	\$900	\$900	\$900
5	\$900	\$900	\$900	\$900	\$900
6	\$900	\$900	\$900	\$900	\$900
7	\$900	\$900	\$900	\$900	\$900
8	\$900	\$900	\$900	\$900	\$900
9	\$900	\$900	\$900	\$900	\$900
10	\$900	\$900	\$900	\$900	\$900
11	\$900	\$900	\$900	\$900	\$900
12	\$900	\$900	\$900	\$900	\$900
13	\$900	\$900	\$900	\$900	\$900
14	\$900	\$900	\$900	\$900	\$900
15	\$900	\$900	\$900	\$900	\$900
16	\$900	\$900	\$900	\$900	\$900
17	\$900	\$900	\$900	\$900	\$900
18	-\$2,100	-\$2,100	-\$2,100	-\$2,100	-\$2,100
19	-\$2,100	-\$2,100	-\$2,100	-\$2,100	-\$2,100
20	-\$2,100	-\$2,100	-\$2,100	-\$2,100	-\$2,100
21	-\$2,100	-\$2,100	-\$2,100	-\$2,100	-\$2,100
22	-\$2,100	-\$2,100	-\$2,100	-\$2,100	-\$2,100
23	-\$2,100	-\$2,100	-\$2,100	-\$2,100	-\$2,100
24	-\$2,100	-\$2,100	-\$2,100	-\$2,100	-\$2,100
25	-\$2,100	-\$2,100	-\$2,100	-\$2,100	-\$2,100
26	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00
27	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00
28	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00
29	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00
30	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00
31	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00
32	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00



Year	10th Percentile Cashflow	25th Percentile Cashflow	50th Percentile Cashflow	75th Percentile Cashflow	90th Percentile Cashflow
33	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00
34	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00
35	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00
36	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00
37	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00
38	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00
39	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00
40	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00
41	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00
42	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00
43	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00
44	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00
45	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00
46	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00
47	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00
48	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00
49	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00
50	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00

Asset Correlations

Name	US Stock Market	Short Term Treasury	Total US Bond Market	Inflation
US Stock Market	1.00	-0.29	-0.04	0.02
Short Term Treasury	-0.29	1.00	0.77	-0.07
Total US Bond Market	-0.04	0.77	1.00	-0.14
Inflation	0.02	-0.07	-0.14	1.00

Asset correlations are based on monthly returns from Jan 1997 to Dec 2020

Expected Annual Return

Percentile	1 Year	3 Years	5 Years	10 Years	15 Years	20 Years	25 Years	30 Years	40 Years	50 Years
10th Percentile	-5.34%	-1.41%	0.72%	3.04%	3.91%	4.48%	4.84%	5.11%	5.39%	5.64%
25th Percentile	0.34%	3.55%	4.39%	5.31%	5.77%	6.02%	6.15%	6.23%	6.37%	6.47%
50th Percentile	9.07%	8.69%	8.29%	7.91%	7.74%	7.63%	7.56%	7.52%	7.43%	7.40%
75th Percentile	17.22%	13.20%	11.75%	10.30%	9.64%	9.16%	8.88%	8.70%	8.44%	8.27%
90th Percentile	22.66%	16.75%	14.56%	12.36%	11.19%	10.53%	10.06%	9.76%	9.35%	9.05%

Annual Return Probabilities

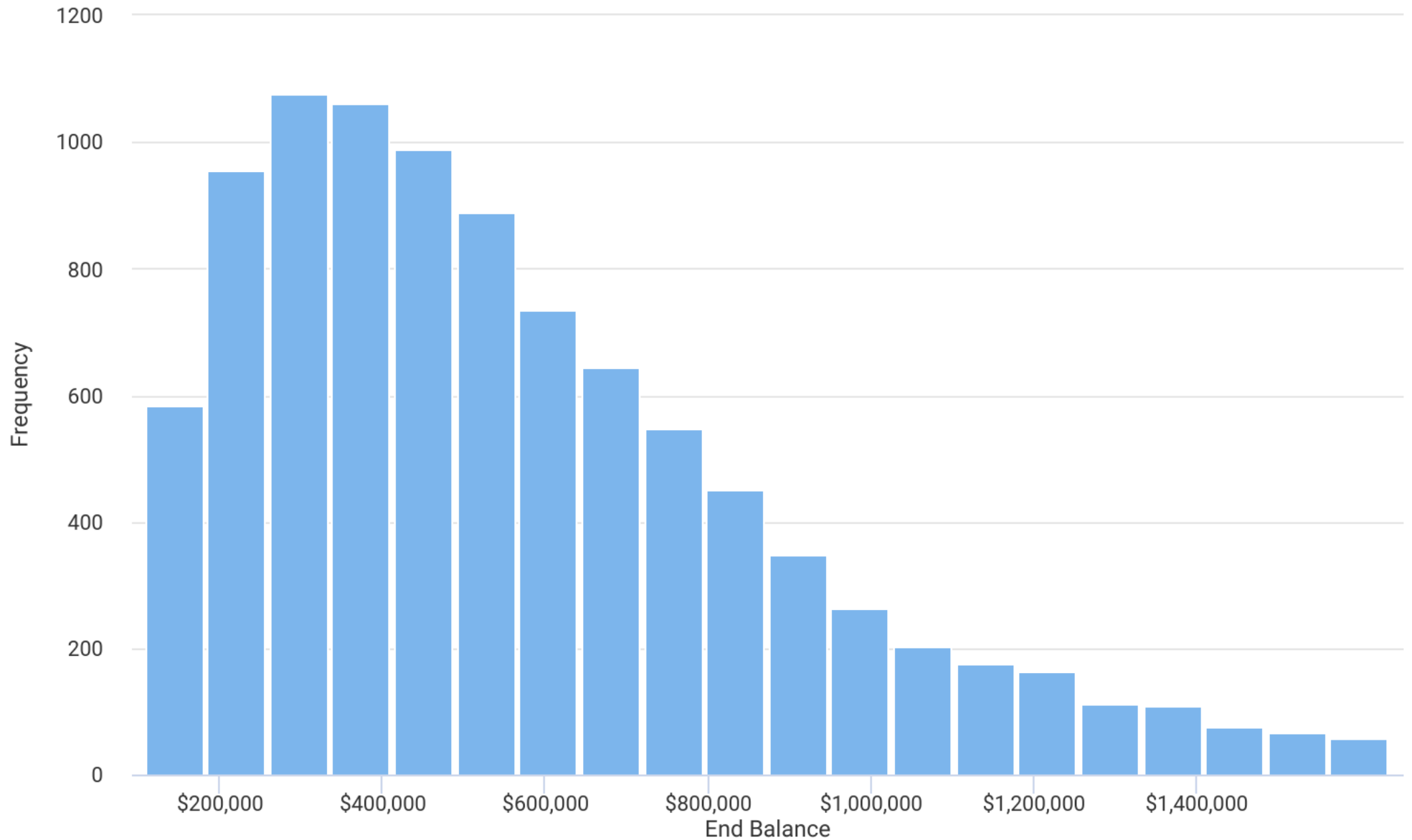
Return	1 Year	3 Years	5 Years	10 Years	15 Years	20 Years	25 Years	30 Years	40 Years	50 Years
>= 0.00%	78.84%	86.95%	91.95%	97.62%	99.43%	99.85%	99.99%	99.99%	100.00%	100.00%
>= 2.50%	70.47%	79.02%	83.98%	91.91%	95.96%	97.87%	98.88%	99.45%	99.87%	99.96%
>= 5.00%	66.26%	69.06%	71.76%	77.58%	82.32%	85.92%	88.55%	90.98%	93.46%	95.53%
>= 7.50%	62.36%	56.56%	55.56%	54.30%	53.42%	52.33%	50.87%	50.47%	47.99%	46.92%
>= 10.00%	49.55%	42.58%	37.53%	27.97%	20.93%	14.70%	10.57%	7.69%	4.04%	2.05%
>= 12.50%	41.08%	28.46%	20.47%	9.17%	3.80%	1.18%	0.39%	0.05%	0.01%	0.00%

Loss Probabilities

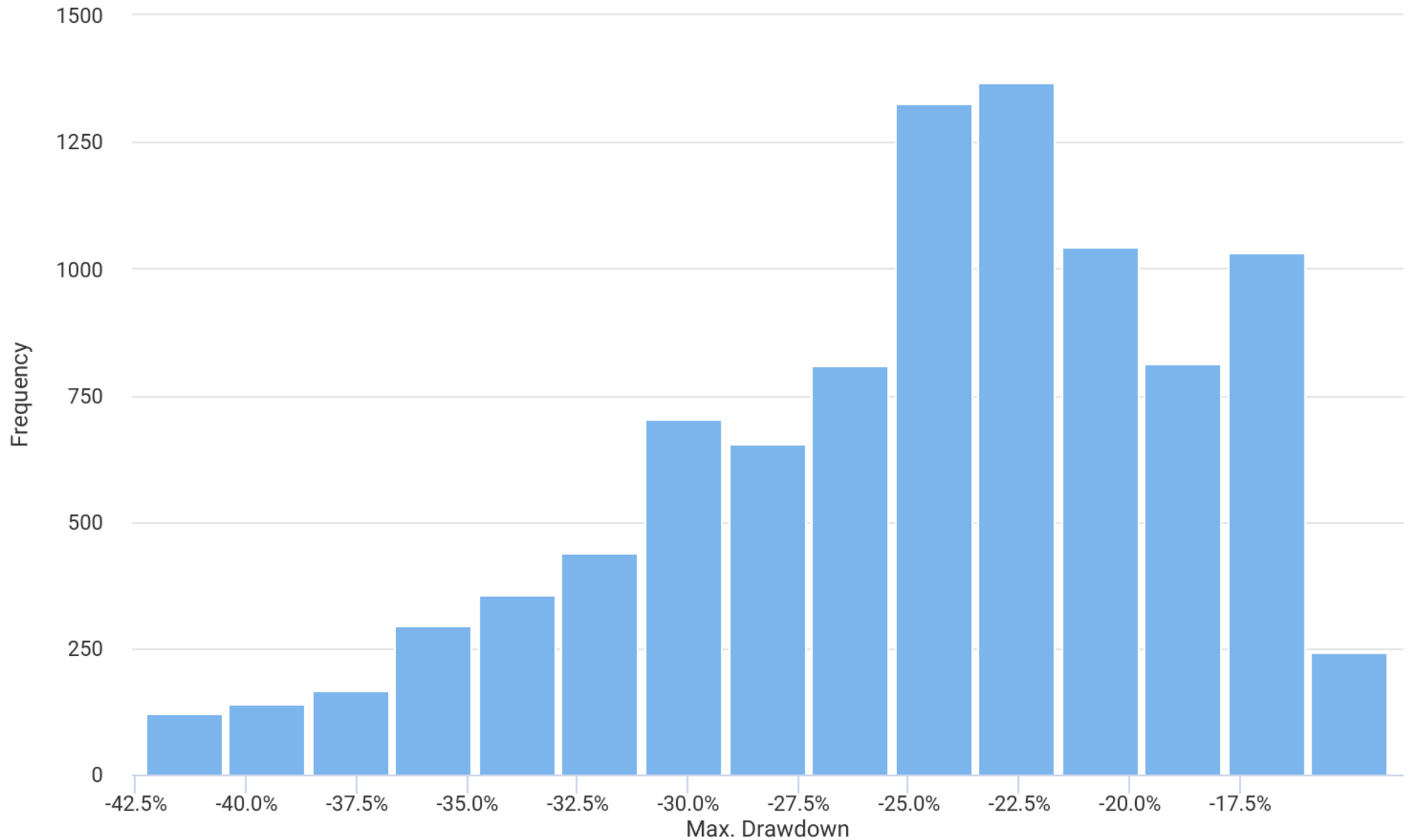
Loss	Loss Probability Excluding Cashflows		Loss Probability Including Cashflows	
	Within Time Period	End of Time Period	Within Time Period	End of Time Period
>= 2.50%	62.78%	0.00%	28.67%	0.03%
>= 5.00%	44.22%	0.00%	23.65%	0.02%
>= 7.50%	36.25%	0.00%	18.88%	0.02%
>= 10.00%	32.70%	0.00%	17.99%	0.02%
>= 12.50%	27.05%	0.00%	5.98%	0.02%
>= 15.00%	17.76%	0.00%	5.02%	0.02%
>= 17.50%	12.54%	0.00%	4.83%	0.02%
>= 20.00%	10.42%	0.00%	1.40%	0.02%
>= 22.50%	9.14%	0.00%	1.02%	0.02%
>= 25.00%	7.75%	0.00%	0.68%	0.02%
>= 27.50%	4.47%	0.00%	0.42%	0.02%
>= 30.00%	3.23%	0.00%	0.22%	0.02%
>= 32.50%	2.63%	0.00%	0.19%	0.02%
>= 35.00%	1.77%	0.00%	0.15%	0.02%
>= 37.50%	1.21%	0.00%	0.11%	0.02%
>= 40.00%	0.87%	0.00%	0.10%	0.02%

Loss is measured against the original portfolio balance.

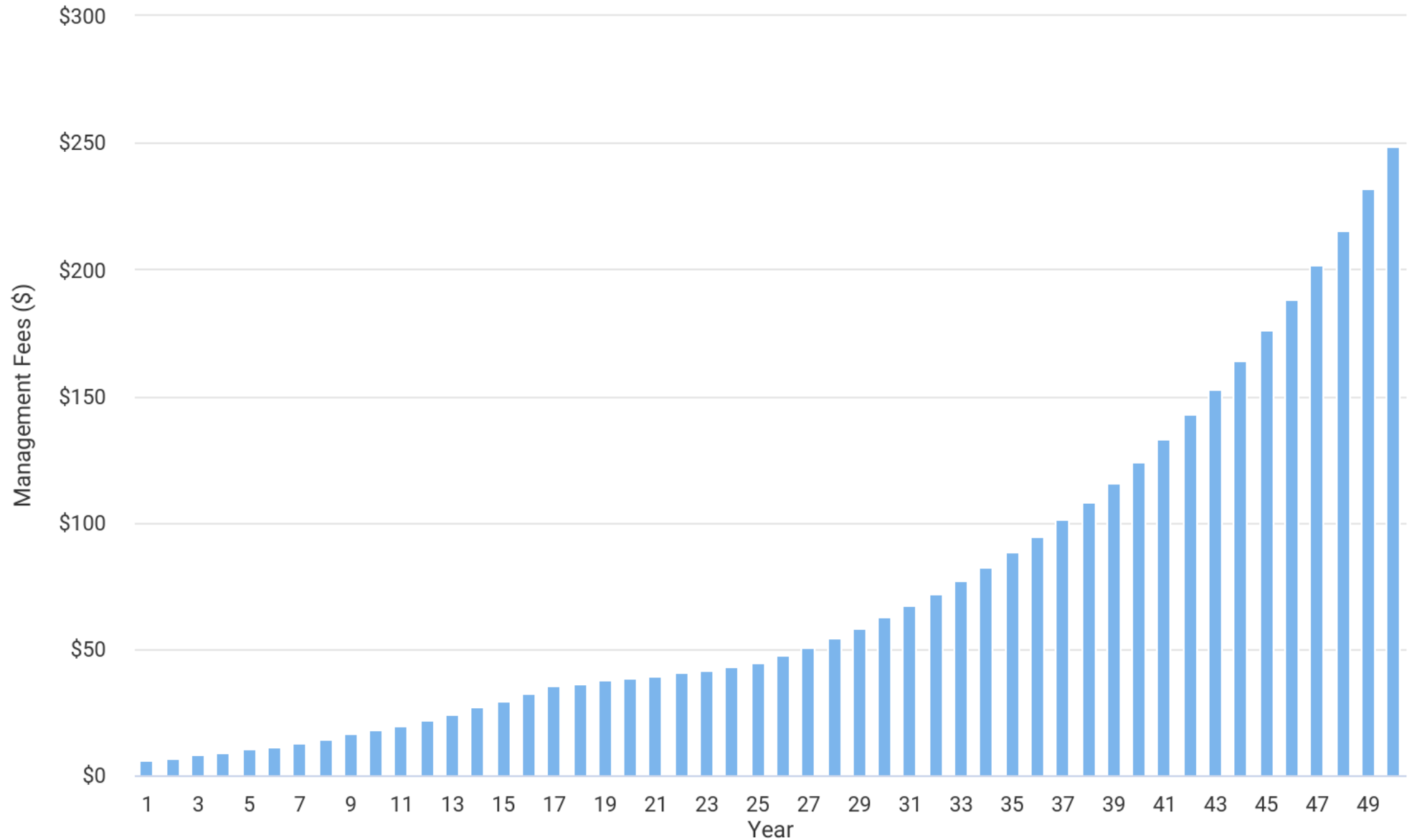
Portfolio End Balance Histogram (95% of results)



Maximum Drawdown Histogram Excluding Cashflows (95% of results)



Annual Management Fees (median)





Management Fees

Year	10th Percentile Fees	25th Percentile Fees	50th Percentile Fees	75th Percentile Fees	90th Percentile Fees
1	\$5.15	\$5.43	\$5.91	\$6.33	\$6.61
2	\$5.44	\$6.19	\$6.91	\$7.61	\$8.08
3	\$6.15	\$7.00	\$7.97	\$8.90	\$9.70
4	\$6.81	\$7.87	\$9.12	\$10.33	\$11.38
5	\$7.58	\$8.83	\$10.34	\$11.85	\$13.21
6	\$8.43	\$9.84	\$11.67	\$13.51	\$15.20
7	\$9.37	\$11.01	\$13.10	\$15.29	\$17.40
8	\$10.27	\$12.24	\$14.64	\$17.27	\$19.73
9	\$11.36	\$13.51	\$16.31	\$19.41	\$22.35
10	\$12.50	\$14.93	\$18.10	\$21.61	\$25.23
11	\$13.67	\$16.48	\$20.01	\$24.14	\$28.41
12	\$14.98	\$18.11	\$22.12	\$26.93	\$31.62
13	\$16.50	\$19.86	\$24.42	\$29.75	\$35.30
14	\$17.90	\$21.86	\$26.84	\$32.93	\$38.96
15	\$19.55	\$23.89	\$29.49	\$36.24	\$43.04
16	\$21.32	\$26.12	\$32.22	\$39.84	\$47.51
17	\$23.21	\$28.47	\$35.22	\$43.68	\$52.59
18	\$23.19	\$28.83	\$36.36	\$45.58	\$55.42
19	\$22.74	\$29.03	\$37.41	\$47.28	\$58.62
20	\$22.60	\$29.30	\$38.34	\$49.31	\$61.86
21	\$22.32	\$29.49	\$39.55	\$51.53	\$65.13
22	\$22.07	\$29.75	\$40.58	\$53.81	\$69.21
23	\$21.83	\$29.89	\$41.66	\$56.31	\$73.04
24	\$21.35	\$30.08	\$42.98	\$58.76	\$76.35
25	\$20.87	\$30.35	\$44.40	\$61.43	\$80.72
26	\$22.13	\$32.50	\$47.53	\$65.99	\$87.89
27	\$23.56	\$34.52	\$50.90	\$71.12	\$95.47
28	\$24.89	\$36.81	\$54.48	\$76.89	\$103
29	\$26.67	\$39.31	\$58.51	\$82.56	\$111
30	\$28.57	\$41.83	\$62.74	\$89.09	\$120
31	\$30.33	\$44.66	\$66.97	\$95.60	\$129
32	\$32.34	\$47.60	\$71.76	\$104	\$140

Year	10th Percentile Fees	25th Percentile Fees	50th Percentile Fees	75th Percentile Fees	90th Percentile Fees
33	\$34.02	\$50.74	\$76.97	\$111	\$151
34	\$36.11	\$54.28	\$82.50	\$120	\$163
35	\$38.69	\$57.86	\$88.51	\$128	\$178
36	\$41.04	\$62.23	\$94.28	\$137	\$193
37	\$43.37	\$66.21	\$101	\$148	\$209
38	\$46.05	\$71.00	\$108	\$159	\$225
39	\$49.47	\$75.49	\$115	\$171	\$244
40	\$52.39	\$80.84	\$124	\$184	\$262
41	\$55.52	\$86.51	\$133	\$198	\$283
42	\$59.43	\$92.40	\$143	\$214	\$304
43	\$63.42	\$98.25	\$153	\$231	\$329
44	\$67.69	\$105	\$164	\$248	\$354
45	\$71.99	\$112	\$176	\$267	\$384
46	\$77.86	\$120	\$189	\$286	\$413
47	\$82.13	\$127	\$202	\$309	\$443
48	\$87.63	\$136	\$216	\$332	\$476
49	\$93.54	\$145	\$232	\$355	\$513
50	\$99.57	\$156	\$249	\$380	\$552

Notes:

- Past performance is no guarantee of future results, which may vary. All use is subject to terms of service.
- Investing involves risk, including possible loss of principal. The value of the investments and the income derived from them may fluctuate over time.
- The projections and other information generated by the Monte Carlo simulation tool regarding the likelihood of various investment outcomes are hypothetical in nature, do not reflect actual investment results and are not guarantees of future results. Results may vary with each use and over time, and hypothetical returns do not reflect trading costs, transaction fees, or taxes.
- A Monte Carlo simulation is a mathematical technique designed to provide a range of possible outcomes to determine the probability of a particular result or set of results. The simulation provides a distribution of possible results, which are used to derive the probability of different outcomes.
- The results are based on information from a variety of sources we consider reliable, but we do not represent that the information is accurate or complete.
- The results do not constitute investment advice or recommendation, are provided solely for informational purposes, and are not an offer to buy or sell any securities.
- The results are based on the total return of assets and assume that all received dividends and distributions are reinvested.
- The probability of success is based on the number of simulations the portfolio survives with a positive end balance.
- Maximum drawdown statistics are calculated from simulated monthly balances.
- Safe withdrawal rate is the percentage of the original portfolio balance that can be withdrawn at the end of each year with inflation adjustment without the portfolio running out of money.
- Perpetual withdrawal rate is the percentage of portfolio balance that can be withdrawn at the end of each year while retaining the inflation adjusted portfolio balance.
- The results assume annual rebalancing of portfolio assets at the end of each year.
- Glide path based portfolio allocation changes are done as part of annual rebalancing
- Withdrawals are done at the start of each specified time period (fixed amounts before percentage based)
- Contributions are done at the end of each specified time period