# Technical Appendix

AN EVALUATION OF COMMUNITY FOUNDATION INVESTMENT RETURNS AND PAYOUT RATES

## Introduction

- This document includes additional statistics and calculations that were removed from the full report for simplicity and/or brevity. The full report is available online at <a href="https://www.michiganfoundations.org/resources/payout-study">https://www.michiganfoundations.org/resources/payout-study</a>.
- Tables include additional data for matching tables in the full report.
- All data is drawn from the IRS Form 990 archive maintained on Amazon Web Services and published by the Internal Revenue Service. Researchers at the Johnson Center maintain a weekly archive of this entire data set. All figures were drawn from specific lines of the IRS Form 990 documents, as noted below. (The table includes the 2017 line numbers for convenience only, as form line item numbers can vary from year to year.)

Variable	Formula	2017 IRS Form 990 Field
Total assets, end of year (EOY)	N/A	Part 1, Line 20
Total assets, beginning of year (BOY)	Prior year's end of year balance	N/A
Total investment gain	Total assets EOY - Total assets BOY + total expenses - investment expenses - total revenue + investment revenue	Total assets EOY - Total assets BOY + Part I line 18 -Part 9, line 11f, column A - Part 1 line 12 + Part I line 10
Calculated return	Total investment gain / (Total assets BOY + 50% of contributions)	Total investment gain / (Total assets BOY + 50% of Part I line 8)
Corpus	Avg. traded investments + avg. other investments + avg. program investments	Avg. Part X Line 11 (BOY, EOY) + Avg. Part X Line 12 (BOY, EOY) + Avg. Part X Line 13 (BOY, EOY)
Payout	Grants and similar paid amount + [% of total private foundation administrative expenses allocated as qualifying distributions *(total expenses - grants and similar paid amount)]	Part   Line 13 + [.36 * (Part   line 18 - Part   Line 13)]

# Table 1: Michigan

#### MEDIAN REAL RETURNS, IRS FORM 990/990-PF DATA VS. MODEL PORTFOLIOS, BY YEAR

Year	Median Return, Michigan Community Foundation	Median Return, Michigan Private Foundation	Global Equity, 35% Fixed Income	Global Equity, 25% Fixed Income
2014	3.1%	1.8%	6.1%	5.9%
2015	-2.4%	-1.3%	-1.2%	-1.6%
2016	5.5%	3.3%	5.5%	6.1%
2017	10.0%	7.1%	13.5%	15.5%
2018	-7.0%	-5.5%	-6.8%	-7.8%
5-year annualized return	1.6%	1.0%	3.2%	3.3%

## Table 2: National

#### MEDIAN REAL RETURNS, IRS FORM 990/990-PF DATA VS. MODEL PORTFOLIOS, BY YEAR

Year	Median Return, National Community Foundation	Median Return, National Private Foundation	Global Equity, 35% Fixed Income	Global Equity, 25% Fixed Income
2014	2.9%	1.7%	6.1%	5.9%
2015	-1.7%	-0.9%	-1.2%	-1.6%
2016	4.5%	3.3%	5.5%	6.1%
2017	8.4%	6.0%	13.5%	15.5%
2018	-5.0%	-4.4%	-6.8%	-7.8%
5-year annualized return	1.7%	1.1%	3.2%	3.3%

# Table 3: List Comparison

#### MEDIAN REAL RETURNS, IRS FORM 990/990-PF DATA VS. MODEL PORTFOLIOS, BY YEAR

Year	Median Return, Michigan Community Foundation (CFRTI)	Median Return, National Community Foundation (CFRTI)	Median Return, National Community Foundation (CF Insights)	Median Return, National Community Foundation (Lilly School)
2014	3.1%	2.9%	2.9%	2.7%
2015	-2.4%	-1.7%	-2.5%	-1.6%
2016	5.5%	4.5%	4.9%	4.2%
2017	10.0%	8.4%	9.2%	7.6%
2018	-7.0%	-5.0%	-5.0%	-4.3%
5-year annualized return	1.6%	1.7%	1.8%	1.6%

#### REAL ANNUAL INVESTMENT RETURNS, COMMUNITY FOUNDATIONS CFRTI LIST

Year	Number of Foundations	25 <sup>th</sup> Percentile Return	Median Return	75 <sup>th</sup> Percentile Return
		Michigan Detail		
2014	58	1.5%	3.1%	4.4%
2015	57	-3.2%	-2.4%	-0.7%
2016	57	3.4%	5.5%	7.3%
2017	57	7.1%	10.0%	12.1%
2018	54	-8.1%	-7.0%	0.0%
		National Detail		
2014	681	1.1%	2.9%	4.9%
2015	705	-3.2%	-1.7%	0.0%
2016	730	2.4%	4.5%	7.1%
2017	752	4.8%	8.4%	10.9%
2018	710	-7.2%	-5.0%	0.4%

### REAL ANNUAL INVESTMENT RETURNS, COMMUNITY FOUNDATIONS (ALTERNATIVE LISTS)

Year	Number of Foundations	25 <sup>th</sup> Percentile Return	Median Return	75 <sup>th</sup> Percentile Return
	(	CF Insights (National)	)	
2014	184	1.0%	2.9%	4.9%
2015	180	-3.9%	-2.5%	-0.4%
2016	197	2.8%	4.9%	6.9%
2017	202	5.4%	9.2%	11.3%
2018	186	-6.8%	-5.0%	0.1%
	Lilly Sch	ool of Philanthropy (1	National)	
2014	893	0.6%	2.7%	4.8%
2015	930	-3.2%	-1.6%	0.1%
2016	963	1.6%	4.2%	6.7%
2017	996	3.5%	7.6%	10.8%
2018	946	-6.9%	-4.3%	0.6%

#### REAL ANNUAL INVESTMENT RETURNS, PRIVATE FOUNDATIONS

Year	Number of Foundations	25 <sup>th</sup> Percentile Return	Median Return	75 <sup>th</sup> Percentile Return
		Michigan Detail		
2014	1,229	-0.8%	1.8%	5.0%
2015	1,304	-4.0%	-1.3%	0.1%
2016	1,407	-2.0%	3.3%	7.1%
2017	1,462	-1.8%	7.1%	12.4%
2018	1,365	-9.2%	-5.5%	-1.9%
		National Detail		
2014	39,094	-0.8%	1.7%	5.5%
2015	45,829	-3.4%	-0.9%	0.5%
2016	50,151	-2.0%	3.3%	7.5%
2017	53,703	-2.0%	6.0%	12.1%
2018	48,709	-8.3%	-4.4%	-1.7%

#### ANNUAL MEDIAN PAYOUT RATE, COMMUNITY FOUNDATIONS (CFRTI)

Year	Number of Foundations	25 <sup>th</sup> Percentile Payout	Median Payout	75 <sup>th</sup> Percentile Payout
		Michigan Detail		
2013	51	4.1%	5.4%	6.8%
2014	58	4.3%	5.8%	7.0%
2015	57	4.7%	5.9%	7.2%
2016	57	5.1%	5.7%	7.3%
2017	57	4.6%	5.4%	7.3%
2018	54	4.6%	5.6%	7.5%
		National Detail		
2013	640	5.1%	7.4%	11.7%
2014	681	5.3%	7.4%	12.2%
2015	705	5.4%	7.8%	13.4%
2016	730	5.5%	7.9%	13.4%
2017	752	5.4%	7.6%	12.8%
2018	710	5.4%	7.7%	12.6%

### ANNUAL MEDIAN PAYOUT RATE, COMMUNITY FOUNDATIONS (ALTERNATIVE LISTS)

Year	Number of Foundations	25 <sup>th</sup> Percentile Payout	Median Payout	75 <sup>th</sup> Percentile Payout
		CF Insights (National)	)	
2013	170	4.9%	7.1%	10.6%
2014	184	5.5%	7.3%	11.3%
2015	180	5.9%	7.8%	11.8%
2016	197	5.5%	7.7%	10.9%
2017	202	5.4%	7.6%	11.4%
2018	186	5.4%	7.4%	12.2%
	Lilly Sch	ool of Philanthropy (N	National)	
2013	829	5.1%	7.7%	13.0%
2014	893	5.2%	7.6%	13.5%
2015	930	5.4%	8.1%	14.7%
2016	963	5.5%	8.0%	14.4%
2017	996	5.5%	7.9%	14.5%
2018	946	5.4%	7.9%	14.4%

#### ANNUAL MEDIAN PAYOUT RATE, PRIVATE FOUNDATIONS

Year	Number of Foundations	25 <sup>th</sup> Percentile Payout	Median Payout	75 <sup>th</sup> Percentile Payout
		Michigan Detail		
2013	1,174	4.7%	5.8%	15.6%
2014	1,235	4.8%	5.9%	17.8%
2015	1,303	5.0%	6.0%	16.7%
2016	1,406	4.9%	6.2%	18.9%
2017	1,462	4.7%	5.9%	16.5%
2018	1,331	4.8%	5.9%	16.5%
		National Detail		
2013	37,629	4.5%	5.8%	17.5%
2014	43,776	4.6%	5.7%	16.5%
2015	47,710	4.9%	5.9%	17.0%
2016	50,787	4.8%	5.9%	17.1%
2017	54,638	4.6%	5.6%	16.1%
2018	50,528	4.7%	5.5%	14.3%

### Notes

Past performance does not guarantee future results. All investments have risk and the potential for loss as well as gains.

The "Range of Projected Rates of Return" provides an indication of the potential variability of returns throughout the asset allocation spectrum, illustrating the trade off between market risk (volatility) and return. Reviewing these ranges may help measure risk tolerance to withstand losses in a portfolio. All returns assume the portfolio is rebalanced to the stock and/or bond percentages annually.

We show optimized returns calculated by Callan Associates for the next 10-year period. The returns are computed by our optimization software and are based on a diversified portfolio using Callan Associates' capital market projections. Callan's analysts incorporate a variety of current economic data (such as current interest rates, stock price/earnings ratios, and stock price/cash flow ratios, etc.) with historical data to derive expected ranges of returns from diversified portfolios. This allows for the incorporation of more current information in setting expectations.

These modeled performance returns are hypothetical projections and represent the likelihood of possible investment outcomes. They do not reflect actual investment results and are not guarantees of future results. Hypothetical performance has many inherent limitations some of which are described in this disclosure. No representation is made, nor should it be inferred, that any portfolio will or is likely to achieve profits or losses similar to those shown. Returns for investments in the asset allocations shown may not fall within these projected returns. These results are projections of possible outcomes and cannot reflect the impact that material economic and market factors might have on decision making regarding management of the funds. These results assume maintaining positions during periods of severe market decline and do not take into account the ability to sustain losses. One of the limitations of hypothetical performance results is that they are generally prepared with the benefit of hindsight. Returns shown assume the reinvestment of all distributions. These projections were derived from the projection of indexes and do not represent the actual investment recommendations. All investments have risk; inherent in any investment is the potential for loss as well as gain.

The "Range of Real Total Assets" and "Range of Real Spending" charts are based on the market value and/or estimated cash flow assumptions shown. Returns shown for "Range of Real Total Assets" and "Range of Real Spending" charts are hypothetical for illustration purposes only. They are based on the asset allocation mixes shown to illustrate the range of possible outcomes. No expectation should be made or implied that such returns can be achieved.

Data sources for peer group comparisons, returns, and standard statistical data are provided by the sources referenced and are based on data obtained from recognized statistical services or other sources believed to be reliable. However, some or all information has not been verified prior to the analysis, and we do not make any representations as to its accuracy or completeness. Any analysis non-factual in nature constitutes only current opinions, which are subject to change. Benchmarks or indices are included for information purposes only to reflect the current market environment; no index is a directly tradable investment. There may be instances when consultant opinions regarding any fundamental or quantitative analysis may not agree.

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