Indexing Giving: Examining State-level Data

about Itemized Charitable Deductions Using Known Determinants of Giving

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Abstract

Average itemized charitable deductions by state are widely used as a measure of giving yet grossly misstate "generosity." Extending a model initially developed by Gittell and Tebaldi (2004), this work finds that when considering state-level measures of economic and social factors determinant of individual giving at the micro-level, six of the 20 states said to be most generous on the popular "generosity index" have average itemized contributions at least 5 percent LOWER than their predicted giving capacity. Nine states in the bottom 20 on the "generosity index" have average itemized giving at or above the predicted levels.

Further analysis using household-level survey data from the Center on Philanthropy Panel Study (a part of the Panel Study of Income Dynamics conducted by the University of Michigan) reveals significant differences in total secular and total religious giving by households in different Census regions (analysis is not possible at the state level using this data set). The secular and religious differences in giving largely account for the differing total amounts reported. The paper concludes with an appeal that generosity be evaluated as a percentage of income donated combined with percentage of households that donate in a given region.

The problem or issue to be addressed

Since 1997, a "Generosity Index" (GI) has been issued by The Catalog of Philanthropy. The GI ranks states based on itemized charitable deductions claimed by tax filers, using a simple calculation that takes the difference between each state's rank when states are ordered highest to lowest for Average Adjusted Gross Income and each state's rank for Average Itemized Charitable Contribution. In this formulation, Mississippi ranks as the "most generous state" year to year and states in New England are typically at the bottom. Havens and Schervish find, in *Geography and Generosity* (GG), which was released in November 2005, that under the methods used by the GI, Mississippi could be NO LOWER than 26th (of 51) even if there were no itemized charitable contributions on tax returns filed by Mississippi residents. Conversely, Massachusetts can be no higher than 26th in the rankings—even if they gave one or two orders of magnitude more than the average. The Boston Foundation study critiques other aspects of the GI and proposes evaluations of giving that move away from a simple index toward a more nuanced understanding of the share of national income and share of total estimated giving that could be attributed to each state. That is, states where giving as a share of the total exceeds their share of national income might be termed "generous," whereas states where the share of giving attributed to the state is below the state's share of national income could be termed "frugal" or some other appellation.

While this approach takes some account of income differences in states, it does not take into account other factors that might influence the amount donated in a state. This is clearest in the analysis of itemized deductions claimed on tax returns as a measure of giving. Whether a tax filer itemizes any deductions at all varies systematically by region and remains fairly stable over time (Izraeli and Kellman, Clotfelter and Feenberg). The GI formulation—and the GG alternative looking at shares—also ignores economic and demographic characteristics known to be linked to giving at the individual level. Many of the economic and demographic characteristics that are linked to giving at the individual level have corresponding macro level measures that that can be incorporated into a model using state averages, medians, or percentages. Among the known determinants of giving are income (Auten; Clotfelter and

Schmalbeck), education (Brown, E.), religious affiliation (Hoge; Steinberg, R and Wilhelm), and age (Steinberg, R. and Wilhelm). Each of these can be represented at a state level, using median income, percentage of individuals older than 25 that have a college degree, percentage of residents reporting affiliation with one of the main religious traditions, and median age.

The GI and the GG alternative do not take into account state "culture," some of which can be represented with macro-level variables and has been found in selected instances to be linked to giving (Bielefeld, Rooney, and Steinberg, K.)

The evaluation of generosity based on economic capacity and other determinants of giving provides a more realistic approach for examining differences across states or regions and for determining "baseline" information against which future changes can be evaluated. With public policy proposals such as the CARE Act and related legislation and private initiatives underway, such as the work of the New Ventures in Philanthropy group that seeks to increase philanthropic giving by leveraging activities in specific regions, understanding ways to measure giving will be vital to evaluating the results of policy and actions seeking to raise the level of private support for charitable organizations.

Initial alternative model developed in New Hampshire to challenge GI
Using state-level economic data and social data, Ross Gittell and Edinaldo Tebaldi (2004) of the University of New Hampshire examined differences in itemized deductions claimed by tax filers in different states. Their model incorporated the percentage of tax returns with any itemizations at all, aggregate personal income at the state level using Bureau of Economic Analysis data, net capital gains income from tax returns, percentage of adults with graduate degrees, percentage of population in the "middle-aged" cohort, unemployment rate, short-term changes in employment, the Social Capital Benchmark Survey for volunteer rates at the state level, and religious affiliation (percentage each Protestant, Catholic, Other), percentage of African American residents in a state, region of the country, percentage of tax filers itemizing, and concentration of giving among the highest income households (skewness of giving). They used Ordinary Least Squares.

The current work at the Center on Philanthropy to evaluate state differences in giving levels has emerged in three stages, broadly linked to efforts to find alternatives for measuring or gauging generosity on a local or state level.

1) Evaluate the IRS data as a measure of generosity. This research extends Gittell's model by using slightly different measures of the economic and social variables and incorporating a few new variables, with Tobit analysis instead of OLS;
2) Develop alternative measures of generosity using IRS data: This research presents a measure of "generosity" based on the "gap" between a state's predicted average itemized deduction per return with a deduction and the actual average itemized deduction from the IRS records; and
3) Examine household survey data for possible explanations for the gaps observed in step 2. Widely differing results about giving for religion and for secular causes across the regions suggest at least one reason why total giving varies by state. Additional research is needed.

Methods

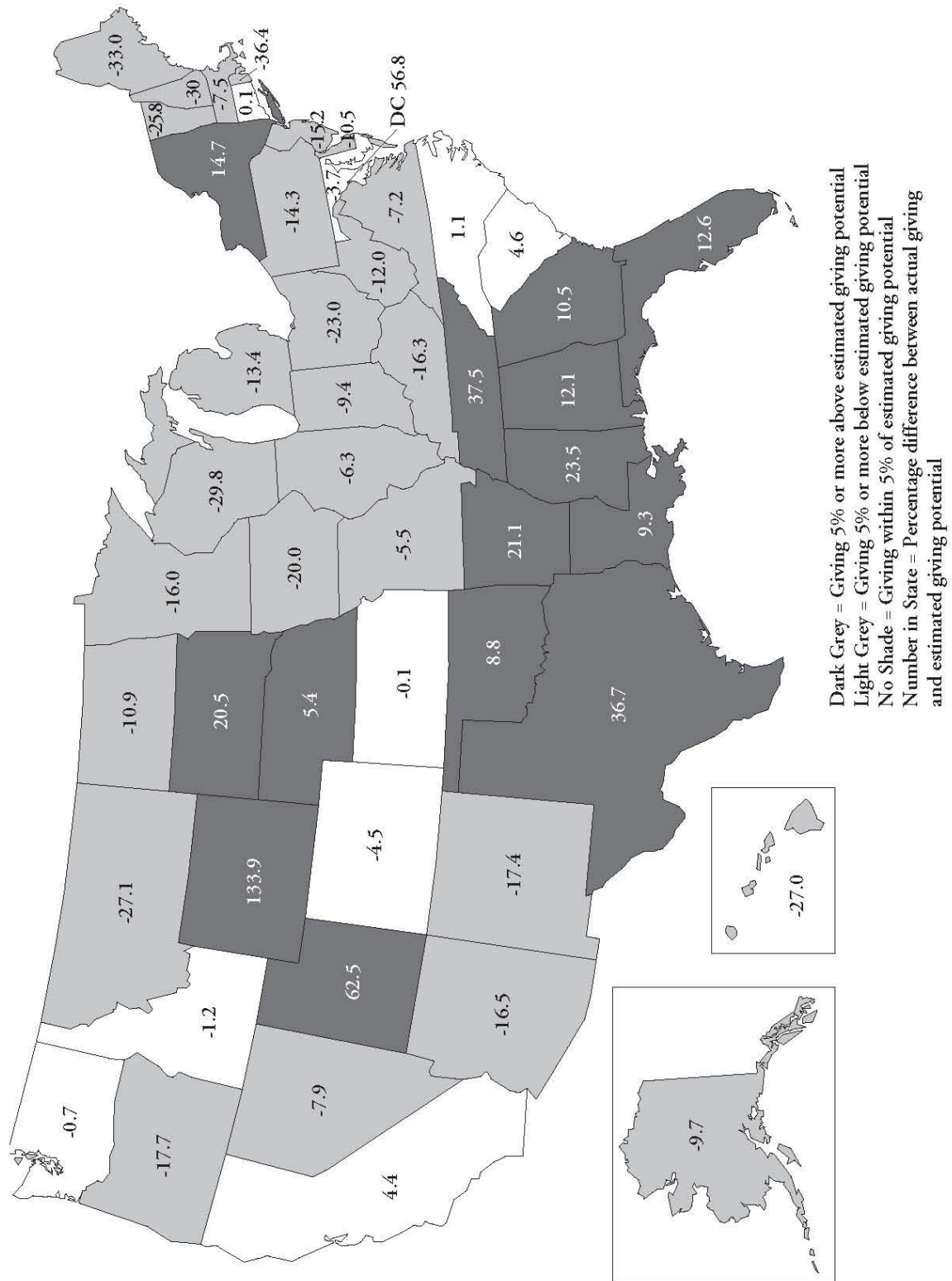This project uses a different method for each stage.

1. Evaluate the IRS data as a measure of generosity. For this state, we used multi-variate Tobit regression analyses to identify determinants of average itemized charitable contribution amount claimed per tax return itemizing charitable gifts, for each of the 50 states and the District of Columbia, using tax return data and macro-level variables (state-level)

2. Develop alternative measures of generosity: Using the model resulting from step 1, we predicted an expected value of itemized charitable contributions per state and calculate the "gap" for each state. Based on the gap, states could be ranged from largest gap showing "generosity" (giving 5 percent or more above predicted level of giving) through "frugality" (giving 5 percent or more BELOW the predicted level), although this ranking permits a state with a very high average gift—but the lowest participation rate in the nation—to be "the most generous."

3. Examine household survey data for possible explanations for the gaps observed in step 2. In this stage, we used descriptive statistics about participation rates, average giving, average religious giving, and average secular giving by households in Census regions, using the COPPS data. The marked differences found in secular and religious giving could be a part of the explanation for differences in total giving.

Starting point: State generosity as reported by the simple averages of itemized charitable contributions

In general, the simple averages of itemized charitable contributions can be characterized regionally as:

- Relatively high in many Southern states, when compared to the national average.

- Relatively low nearly all Northeastern states (excepting New York and Connecticut), again compared to the national average.

- Most often below the national average in the east and west north central regions (from Ohio westward through the Great Plains to the include North and South Dakota, Nebraska and Kansas). However, two Great Plains states—Nebraska and South Dakota— show above average itemized charitable contributions.

- Mixed in the Mountain states with:
  - Several states (Montana, Arizona, New Mexico, and Nevada) considerably below the national average;
  - Two states near the national average (Colorado and Idaho); and
  - Two states (Utah and Wyoming) markedly above the national average.

- Generally lower than average in the Pacific states, although California and Washington show near-average levels of itemized giving per return with an itemized gift.

Map 1
States with average gift amount 5 percent above and 5 percent below national average, 1999-2001 giving data

-33.0

-36.4

-30

-7.5

-0.1

-25.8

-15.2

-10.5

DC 56.8

14.7

-14.3

-3.7

-7.2

1.1

4.6

12.6

-12.0

10.5

-23.0

-16.3

37.5

12.1

-13.4

-9.4

23.5

-29.8

-6.3

21.1

9.3

-16.0

-20.0

-5.5

8.8

-10.9

20.5

5.4

-0.1

36.7

-27.1

133.9

-4.5

-17.4

-1.2

62.5

-16.5

-0.7

-17.7

-7.9

4.4

-27.0

-9.7

Dark Grey = Giving 5% or more above estimated giving potential
Light Grey = Giving 5% or more below estimated giving potential
No Shade = Giving within 5% of estimated giving potential
Number in State = Percentage difference between actual giving
and estimated giving potential

Stage 1: Extend Gittell & Tebaldi's Model

In work funded by the New Hampshire Charitable Foundation, Professor Ross Gittell and his associate Edinaldo Tebaldi evaluated itemized charitable contributions by state. They found that a number of factors explained the variations found across the states. Gittell and Tebaldi took the total amount contributed in a state and divided it by the number of tax returns in a state to estimate average gift per tax filer. Each year, approximately 30 percent of returns include a Schedule A containing itemized deductions, and on average, across the 50 states and the District of Columbia, about 88 percent of the households that itemize any type of deduction include an itemized charitable gift. Thus, data about itemized deductions for charitable gifts reflect the reported contributions of approximately 26 percent of the households in the U.S. On the other hand, approximately 66 to 70 percent of households report making gifts when surveyed.[1] Therefore, studies that rely exclusively on IRS tax return data are excluding MOST donors.

Gittell used tax data for 2000 and 2001, and found 13 variables used in a regression model with an adjusted-r squared value of 0.92. The Gittell/Tebaldi model used:

- Six measures of economic conditions (personal income, capital gains, unemployment rate, short-term change in unemployment rate, percentage of tax filers itemizing deductions, and a measure of the concentration of giving among the highest income households);
- Seven indicators of social or demographic variation by state (percentage of adults with graduate degrees; percentage of the state population aged 35 to 54, and percentage of the population that is African American; percentage of the population that is Protestant, percentage of the population that is Catholic; percentage of the population that reported volunteering in the Social Capital Benchmark Survey; and region of the country).

The only REGIONAL difference that was statistically significant in their study was the lower levels of giving in the West. Other variables explained most of the state-to-state differences in giving.

We took the Gittell/Tebaldi work as a starting point and tested its robustness, using tax data for one more year (covering 1999, 2000, and 2001, as 2000 was the beginning of the stock market decline and 2001 was a recession year) and different macro-level measures for income, investment earnings, education level, age, and religious affiliation. We did not include measures of unemployment (neither unemployment rate nor short-term changes in unemployment) nor measures of volunteering or region. We focused on variables found in other studies to be associated with household giving. The independent variables and the justification for them are:
- Adjusted gross income at the state level based on IRS data, following Deb, et al.;
- Percentage of AGI derived from investment income, including dividends, interest, and capital gains, using IRS state-level data and theoretically based on findings by Deb et al. about the role of the stock market in estimating individual itemized deductions ahead of IRS data availability and on Eaton & Milkman, who found that capital gains tax rates influence level of non-cash contributions;

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[1] Center on Philanthropy Panel Study of giving and volunteering. See M. Wilhelm and R. Steinberg, Patterns of Giving in COPPS, 2001. http://mypage.iu.edu/~rsteinbe/patternsofgvc.pdf, Table 2.

- Median age, based on Rooney et al (2004) among others, who found that giving increases with age—at least until retirement age;
- Percentage of population that is Catholic, following findings from Steinberg and Wilhelm and Hoge et al. that Catholic households, in general, donate less than Protestant households in total and less to religion in particular;
- Percentage of population, based on Census Bureau data, that is African-American, building on work done by Steinberg and Wilhelm, who found that, controlled for all other factors, African-American households contributed more than households of other races, but the difference was not statistically significant.

Our final model relates itemized donations and several explanatory variables:

Itemized Donations = B1(Adjusted Gross Income) + B2(Investment Income as Share of AGI) +

B3(Median Age) + B4(Catholics as Share of Pop) + B5(Protestants as Share of Pop) +

B6(African Americans as Share of Pop) + B7(% of Pop Itemizing Charitable Donations)

+ B8(% of Pop Itemizing Any Tax Deductions) + Error term

As discussed below, a number of other theoretically or empirically grounded variables were also tested, but were found to be consistently insignificant. These variables are discussed briefly below but space constraints enjoin an in depth analysis of these "non-results."

Gittell's basic findings are confirmed
Our results correspond with the overall findings of Gittell and Tebaldi fairly closely. We focused on average gift per return with a gift (limiting the analysis to the returns where a gift was claimed as a deduction). Since whether a household itemizes or not can influence whether, or how much, a household contributes, this analysis focuses only on itemizing households.[2] This limits the analysis to the approximately 26 percent of returns in the U.S. that included a charitable deduction. Gittell and Tebaldi included an appendix showing results using the same dependent variable (average amount itemized as a charitable gift per return that itemized a charitable gift). The Center analysis excludes some variables that they included and uses different measures for income and investment earnings, but the adjusted r-squared of the two is nearly the same (they report 0.72).

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[2] Giving data at the state level exist only for the itemizing households.

Table 1
Center on Philanthropy Regression Model
State-Level Measures Used as Determinants of Average Itemized Charitable Deduction, by state
$ in 000s
Dependent variable = average itemized charitable contribution per return with a charitable contribution

Variable	Coefficient	P value	
Percentage that itemize anything	-9.1535	[.000]	***
Percentage Roman Catholic	-2.9776	[.000]	***
Median Age (years)	-1.9999	[.000]	***
Median Age squared	0.0264	[.001]	***
Average AGI ($ in 000s)	0.0459	[.017]	**
Percentage African American	2.1727	[.007]	***
Percentage of itemizers that itemize a gift	5.3035	[.045]	**
Percentage of AGI that is from Investment Income	13.4855	[.000]	***
Tax burden per Tax Foundation	3.0186	[.143]	
Percentage Evangelical	0.6417	[.419]	
Percentage with B.A. or B.S.	1.4610	[.560]	
Percentage living below poverty line	-1.7297	[.646]	
Percentage Mainline Protestant	0.3612	[.802]	
Intercept	35.7358		
N	51		
Adj-R2	0.7961		

Average gift amount linked to percentage with itemized deductions
Within a state, the percentage of itemized returns and the percentage of donor returns (itemized returns that include a charitable deductions) both play a role in predicting the amount of the average gift amount per return with a gift. We find:

- Percentage of the tax returns that include itemized deductions. A one percent increase in the share of tax returns that itemize any type of deductions is associated with a decrease in the average gift amount itemized of $91.50. It is also true the other way. States with low percentage of itemizing households show a high average gift. This suggests diminishing returns to additional or marginal donors. This makes sense intuitively: additional or marginal itemizers are also likely to be marginal or smaller donors.

- Percentage of the population that is Catholic, based on data from the Association of Statisticians of American Religious Bodies. For every one percent more of the population that is Catholic, the average gift amount itemized is estimated to decrease by nearly $30.

- Median age of the population. Using Census 2000 data, the higher the median age (average for the U.S. is 35.5 years), the LOWER the giving, all other factors held constant. For every three-month increase in median age of state residents compared to the national average, giving potential is estimated to decrease by $500 per itemized charitable deduction. Among most states, there is only a little variation in the median age. Every three-month increase in median age decreases itemized giving by about 14 percent, all other factors held constant. This result is "odd" both for its magnitude and sign. We

expected giving to increase with age (at least until retirement) but age typically has a small effect—at least if one controls for income, as we have.

- Average income per tax return filed. Every $1,000 more in average income per tax return, all factors held constant, yields an estimated $46 more in the average gift amount itemized. This is consistent with Deb et al. (2003) that income is second most important predictor of changes in itemized charitable donations.

- Percentage of population that is African American. For every one percent more of the state population that is African American, the average gift amount itemized increases by nearly $22, other factors held constant. This is somewhat contrary to Steinberg and Wilhelm, who found that at the household level, the race or ethnicity of an individual household was not associated at statistically significant levels with the amount donated, after controlling for income, education, and religious affiliation.

- Percentage of the tax returns that include an itemized contribution. A one percent increase in the itemized returns that include a charitable deduction increases the average gift by $53.03, all other factors held constant. This result is contrary to the expected theme of diminishing returns and bears further research.

- Percentage of total income in the state that derives from investments (taxable interest, tax-exempt interest, dividends, and capital gains as a percentage of adjusted gross income for the state). Every one percent rise in investment income as a percentage of all income results in an estimated $135 more in the average gift amount itemized, all other factors held constant. This is consistent with Deb et al. (2003) which found that changes in the S&P 500 was the single most important predictor of changes in itemized charitable donations

Other variables in the model also have theoretical underpinnings but the results do not show statistical significance. None of the following were associated at statistically significant levels with amounts of itemized contributions claimed per return with an itemized contribution amount.

- State and local tax burden as calculated by the Tax Foundation. State and local tax burdens are determinants of two possible components of itemized giving per return with itemized deductions: 1) whether or not households itemize at all and 2) disposable income.
- The percentage of the state population living below the poverty level following some of Brooks' analyses about the negative relationships between giving and receipt of welfare payments.
- Percentage of state residents with a bachelor's degree or higher level of education, based on E. Brown as well as Rooney et al. (2004), among many others, who found a positive relationship between educational attainment and giving—even after controlling for differences in income;
- Percentage of the population that is Protestant, following Steinberg and Wilhelm's findings from COPPS, 2001.

In earlier iterations of the work, we tested other variables that also did not result in associations that reached statistical significance. With a series of 51 (all states plus the District of Columbia), we elected to drop these variables in later versions.

- The distribution of income in the state. Gittell and Tebaldi used the skewness of giving but did not include skewness of income in their model. Because income is strongly associated with giving, we tested income distribution as one possible determinant of the amount that would be itemized in charitable gifts per return with charitable gifts.
- The ratio of men to women in the state, following Andreoni and Vesterlund;
- Percentage of returns that claimed dependents, per work done by Russell James, who found that for NON-religious giving, there was a negative relationship between the number of dependents and the amount contributed;
- Percentage of state residents who own their own homes, following findings by Yamuchi Yokoyama for Japan.
- Percentage of the state population that reported volunteering in the prior year. This was weakly significant for the 48 states (to 0.05) for which data were available, but we dropped it later because data were not recorded for Alaska, Hawaii, and the District of Columbia. With data now available through the Census Bureau, additional analysis should be done to include this variable contemporaneously with the income used.
- Robert Putnam's "comprehensive social capital index" from *Bowling Alone*, which we also elected not to use because it was not available for every state and the District of Columbia.

Stage 2: "Giving potential" linked to investment income, income, religious affiliation, and more

Using the results of stage 1, we estimated "giving potential" based on a given state's economic, demographic, and social variables. The predictions range from a high of $5,366 for Utah to a low of $2,263 for Rhode Island.

Then for each state, the three-year average of actual itemized contributions claimed by residents of that state was compared with the estimate of giving potential. The state with the largest positive difference (giving above predicted capacity) was Wyoming; the state with the lowest was Alaska, with actual itemized contributions that were $752 below the estimated capacity. Then, for each state, the calculated gap was taken as a percentage of actual average itemized contributions in that state. Appendix 1 shows the results of the gap and percentage calculation state-by-state.

Map 2 (following page) uses grey shades to highlight states where the actual amount itemized in charitable contributions is 5 percent or more above or 5 percent or more below the predicted value.

Map 2
States with an average gift amount that is 5 percent above estimated giving potential or 5 percent below estimated giving potential

-23.0

-.07

-19.1

-2.7

-21.4

-1.7

DC 8.6

8.3

-2.8

-2.7

-14.9

-3.9

-7.8

-1.0

-5.7

-1.8

-9.9

4.6

-4.8

-7.1

3.9

6.4

14.9

0.7

3.9

-8.2

-6.0

-5.1

-3.3

4.7

-2.2

9.7

-11.2

2.3

-2.3

-2.5

4.6

1.9

-13.9

66.9

1.8

8.0

-11.0

10.6

7.1

-1.2

-0.9

-11.4

-19.1

11.8

-3.8

Dark Grey = Giving 5% or more above estimated giving potential
Light Grey = Giving 5% or more below estimated giving potential
No Shade = Giving within 5% of estimated giving potential
Number in State = Percentage difference between actual giving and estimated giving potential
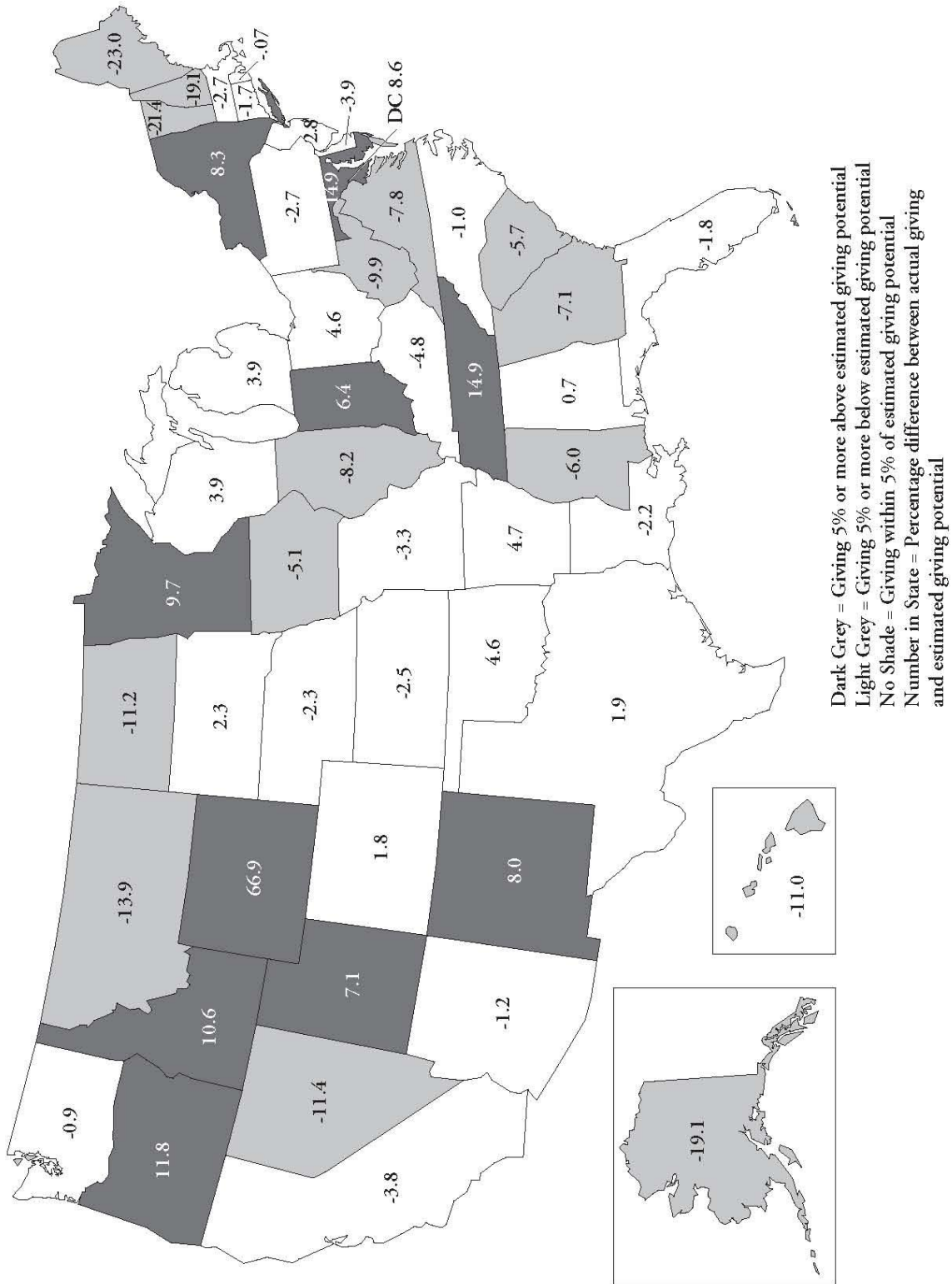
Table 2 shows the top 10 states by percentage difference, where actual giving is higher than the estimated giving potential, followed by the lowest ten states, where actual giving is lower than estimated giving potential.

Table 2
Top Ten and Bottom Ten states by percentage difference between actual giving and estimated giving potential, 1999-2001

Top 10

State	Percentage difference
Wyoming	67
Tennessee	15
Maryland	14
Oregon	12
Idaho	11
Minnesota	10
District of Columbia	9
New York	8
New Mexico	8
Utah	7

Bottom 10

State	Percentage difference
Illinois	- 8
West Virginia	-10
Hawaii	-11
North Dakota	- 11
Nevada	- 11
Montana	- 14
New Hampshire	- 19
Alaska	- 19
Vermont	- 21
Maine	- 23

In this reformulation, presented first for a practitioner audience through a *Giving USA Update* in 2004, Wyoming is the most generous state, with an average itemized charitable deduction 67 percent more than predicted. In general, states in the South—often said to be generous because of religious beliefs—showed itemized giving near or somewhat below the predicted values. For example, Mississippi tax returns with itemized gifts claim 6 percent LESS than is predicted. Some Northeastern states give near potential, including Rhode Island, Connecticut, and Massachusetts, yet the three other states in New England itemize gifts that are between 19 and 23 percent below predicted potential (NH, VT, ME).

A few states, including Vermont, Maine, and Alaska, either have low levels of contributions or low levels of ITEMIZED contributions. It is possible that residents of states that have itemized gift averages below potential are in fact giving more than they are reporting on tax returns. State-level survey data gathered using consistent methods would be one way to examine whether it is contributions that are lower in some states or reports that are lower.

One of the most interesting things from a practitioner's perspective is the notion that there is "untapped capacity" in some states. That is, income, wealth (as indicated by dividend and investment income), religious beliefs, education levels, and other factors would seem to be consistent with additional amounts in donations from households THAT ARE ALREADY GIVING.

Participation rate is not revealed in the "gap" analysis
Note a dimension that is not revealed in the gap analysis, which relates to giving alone, is the participation rates in states. Specifically, among Wyoming 2003 tax returns, only 79.5 percent of returns that itemize any kind of deduction include a deduction for a gift, which is 2 standard deviations away from the national average of 87.5 percent. Wyoming has the lowest state-wide rate of claiming gifts in the country. In New Jersey or New York, however, 92 percent of itemized tax returns include a charitable deduction, suggesting that giving is widespread in those states and in others where a high percentage of tax returns itemizing deductions include itemized contributions. The variable is included in the model (percentage of itemized returns that include an itemized gift) but if a definition of "generosity" includes participation rate in giving, the rankings that result from the "gap analysis" are misleading because states with relatively low participation rates (e.g, Wyoming, Oregon, Idaho and New Mexico) appear among the most generous, whereas states with at least average rates of participation (Illinois, Hawaii, Maine, and New Hampshire) appear in the ten "least generous."

In estimating or assessing generosity on a statewide level, participation rate in giving matters. A low-income state with a high percentage of households giving a relatively high percentage of their income could, by many assessments, be considered more generous than a tax-haven state with a small share of high net worth households claiming large deductions for charitable gifts.

Participation rate can be evaluated using IRS data, by taking the number of returns that include a charitable gift deduction and dividing it by the number of returns that include any deduction.. For 2003, the range is from 79.5 % of returns with itemized deduction for Wyoming to 92.4 % for New York. To the extent that "gaps" and participation can be combined, it might be possible to come up with an index that would permit the comparison over time of giving compared with capacity among households that itemize and giving by percentage of households that itemize. Neither approach, however, captures information about the majority of households, the 65 to 70 percent or so that do not itemize. Of those, the majority do make contributions, and some make significant (more than $1,000) total gifts.

Appendix 2 shows the states by the "participation rate" in giving calculated from tax returns with itemized deductions for 2003. This is not a state-wide participation rate but an indicator, perhaps, of the extent to which at least some residents of the state contribute.

Stage 3: Household analysis of giving, secular giving, religious giving
The Center on Philanthropy Panel Study for 2003 has more than 6,000 records in a nationally representative sample (of 7,827 records total—some are a low-income oversample). COPPS is a module of the Panel Study of Income Dynamics conducted by the University of Michigan.

Using the COPPS data, we can find averages for all households and for donor households only for total giving, secular giving, and religious giving by Census Region. There are not enough

observations in most states to analyze at the state level. The regions are the nine used by the Census Bureau, although we have added more descriptive names to help keep track of where each region is located. Table 3 presents the regions, their numbers and Census Bureau names, and the more descriptive names we've used.

Table 3
Census Regions by Number and Name, *Giving USA* name and states

Number	Census Name	Alternative Name	States included (using postal abbreviations)
1	Northeast	New England	CT, MA, ME, NH, RI, VT
2	Mid-Atlantic	Mid-Atlantic	NJ, NY, PA
3	East North Central	Great Lakes	IL, IN, MI, OH, WI
4	West North Central	Plains	IA, KS, MN, MO, ND, NE, SD
5	Southeast	Southeast/Atlantic Coast	DC, DE, FL, GA, MD, NC, SC, VA, WV
6	East South Central	Central South/Gulf	AL, KY, MS, TN
7	West South Central	Central Oil States	AR, LA, OK, TX
8	Mountain	Mountain/Southwest	AZ, CO, ID, MT, NM, NV, UT, WY
9	Pacific	Pacific	AK, CA, HI, OR, WA

Applying the weights assigned by the PSID staff and restricting analysis to the nationally representative sub-sample, we determined the participation rate for giving by Census Region. A household was determined to be a donor household if the respondent said the household gave $25 or more to a charitable cause in 2002. Table 4 summarizes the regional participation rates for any gift, for donors to religion, and for donors to any secular cause. Secular causes considered in COPPS are: religious organizations; combined fundraising efforts such as United Way, Catholic Charities or community foundations, to help people meet basic needs, for health, education, youth development, arts, environmental organizations, or international aid or relief.

Table 4
Participation rates (donor households as a percentage of all households for donors to any cause; donors to religion, and donors to secular causes)

Region: Census Name (Alternative Name)	Donor	Religion	Secular
1: New England	81.8	48.9	75.5
2: Mid-Atlantic	68.7	46.9	61.8
3: East North Central (Great Lakes)	61.5	40.9	51.6
4. West North Central (Plains)	67.9	53.1	53.9
5: Southeast (Atlantic coast)	68.6	47.8	55.5
6: East South Central (Central South: Gulf)	65.0	47.9	51.9
7: West South Central (Central Oil States)	61.4	48.3	47.9
8: Mountain (Mountain/Southwest)	71.3	39.8	63.1
9: Pacific	64.4	36.7	53.9
U.S.	67.0	45.0	56.1

Because COPPS contains giving information and income information for the same households, it is possible to calculate for each donor household the amount given as a percentage of total income. Using this data, by region, an average percentage of income giving PER DONOR HOUSEHOLD can be one gauge of generosity. This is not adjusted to reflect higher (or lower) percentages of donors in a region. We present that finding later. Table 5 summarizes the percentage of income among donor households only by region, by type of contribution.

Table 5
Average percentage, Giving as a percentage of income, 2002
Donor households only

Region		Total Giving	Religion	Secular
1	New England	1.6	0.6	1.0
2	Mid-Atlantic	2.4	1.5	0.8
3	Great Lakes	2.9	2.1	0.8
4	Plains	3.4	2.5	0.8
5	Southeast	3.3	2.3	0.9
6	Central South	4.0	3.1	0.8
7	Central Oil	3.9	2.8	1.0
8	Mountain/SW	2.7	1.9	0.8
9	Pacific	3.0	1.8	1.2
National		3.1	2.1	1.0

When giving is widespread, as it is in some regions, that region's share of national giving may exceed its share of national income, even if its per household average gift amount is lower than the national average gift amount (making up for a lower average with volume). To analyze this, we took household data from the Census Bureau and income data from the Bureau of Economic analysis to estimate each region's share of the national total of households and the national total for personal income. That is compared with an estimate of each region's share of giving. Table 6 summarizes the results.

Table 6
By region, percentage of total estimated COPPS giving compared with percentage of households and percentage of total national personal income in that region

Region		Households	Personal income	Religious Giving	Secular Giving	Total Giving
1	New England	5.0	6.0	2.9	9.5	5.4
2	Mid-Atlantic	13.7	15.7	8.7	13.5	10.5
3	Great Lakes	17.9	15.6	15.4	12.3	14.2
4	Plains	7.1	6.5	9.3	6.5	8.2
5	Southeast(Atlantic)	17.9	18.1	19.6	19.1	19.4
6	Central South/Gulf	6.3	5.0	7.7	4.1	6.3
7	Central Oil States	11.0	10.1	14.0	8.6	11.9
8	Mountain/Southwest	6.7	6.1	7.3	7.2	7.3
9	Pacific	14.4	17.0	15.1	19.3	16.7

Data: Households: Census, 2000
Personal Income: Bureau of Economic Analysis, 2002
Religious, secular and total Giving: COPPS average giving per household x number of households, summed for all regions and regional total divided by national total. Calculations using COPPS 2003 by the Center on Philanthropy.

Some regions show estimated giving above their national share of income for secular or religious giving, but no region is above its national share in giving for each type of recipient. The regions that are above their national share for all giving are those that give above their national share in religious giving.

Table 7
Giving share is above income share (difference is by number of percentage points)

	Region	Difference
Secular Giving	New England	+ 3.5
	Pacific	+2.3
	Mountain	+ 1.1
	Southeast (Atlantic)	+1.0
Religious giving	Central Oil States	+3.9
	Great Plains	+2.8
	Central South : Gulf	+ 2.7
	Southeast (Atlantic)	+1.5
Total giving	Central Oil States	+1.8
	Great Plains	+1.7
	Southeast (Atlantic)	+1.3
	Central South (Gulf)	+ 1.2

One region, the Mid-Atlantic, has a share of giving that is below its national share of income for secular giving, religious giving and total giving. Other regions are low in one area but not all areas.

Table 8
Giving share is below income share (difference is by number of percentage points)

	Region	Difference
Secular Giving	Great Lakes	-3.3
	Mid-Atlantic	-2.2
	Central Oil States	-1.5
Religious giving	Mid-Atlantic	-7.0
	New England	-3.1
	Pacific	-1.9
Total giving	Mid-Atlantic	-5.2
	Great Lakes	-1.4
	New England	-0.6

Conclusion
Prior work by others using the Internal Revenue Service data about itemized deductions claimed for charitable contributions has stimulated a high level of discussion and analysis about differences in charitable giving across regions and among states. The Catalog of Philanthropy, beginning in the late 1990s, began to regularly report low giving in New England (based on average amount itemized in charitable gifts per return with charitable gift) and high giving in

many Southern States. This initial effort to "index" giving spurred work to explore further the determinants of itemized contributions.

Supporting work by others (Gittell and Tebaldi; Havens and Schervish for the Boston Foundation), this research concludes that unadjusted amounts for the average itemized deduction from Internal Revenue Service data are biased as a measure of generosity, no matter how generosity is defined. Because of systematic differences among states in the percentage of households that claimed any type of itemized deduction, if for no other reason, the IRS data cannot present any useful measure of "giving" at the state level.

While national averages may be useful overall, there are strong theoretical and practical grounds to expect giving to vary by state based on the predominant characteristics within that state, including income and its composition (specifically, investment income), religious affiliation, age, and education levels. When controlling for these variables, it is possible to forecast an expected level of itemized giving by state and then compare the actual average amount itemized per state with the expected value. This approach incorporates known determinants of giving at the household level and uses those, when measured at the state level, to estimate itemized contributions statewide. The analysis is still limited to itemized tax returns, so covers only 24 percent of returns in some states (Alaska, Arkansas, and others) and nearly 50 percent of potential donors in others (Maryland, where 48.5 percent of tax returns for 2003 included itemized deductions of some type).

The IRS data could be helpful as an indicator of the extent to which giving is widespread (or not) in a state. That is, some number of returns are reported as having included an itemized deduction for charitable giving, and this is done by income range for each state as well as total for each state. The number of returns with a gift can be divided by the number of itemized returns to calculation an approximation of the "participation rates" in giving for each state and by income range within states. This dimension of the IRS data has been little explored and merits further analysis as one indicator of generosity.

While the Center on Philanthropy Panel Study does not include enough observations for most states to conduct state-by-state analysis, it can be used for regional analysis, as has been done recently for New England and in this work for all nine Census regions.

To advance our understanding of state-level differences in giving, if all state level surveys, such as those recently conducted for New Hampshire and Indiana, use questions such as those on the COPPS module of the PSID, comparisons to national averages—and across states—for itemizing and for NON-itemizing households can be developed. Where the Center on Philanthropy is given an opportunity to conduct state-level or other geographically specific studies, we will use the COPPS questions and prepare analysis that compares the region to the national data. We intend to continue to explore the differences in secular, religious, and total giving and examine further household and where possible or larger societal factors that could be determinants of giving (e.g., the number of nonprofits in the area, political or other cultural measure such as Elzar's measure of culture or voter turnout).

References

Andreoni, J. and Vesterlund, L. (2001) Which is the fair sex? Gender differences in altruism, *The Quarterly Journal of Economics*, MIT Press, vol. 116(1), pages 293-312.

Auten, G., C. Clotfelter, and R. Schmalbeck, (2000). Taxes and philanthropy among the wealthy. in Joel Slemrod (ed.), *Does Atlas Shrug? The Economic Consequences of Taxing the Rich.* New York: Harvard University Press.

Bielefeld, W., P. Rooney, and K. Steinberg (2005). How Do Need, Capacity, Geography and Politics Influence Giving, in Arthur Brooks (ed.), *Gifts of Time and Money in America's Communities.* Lanham, MD: Rowman & Littlefield.

Brady, P., Cronin, J-A. , and Houser, S. (2001). Regional differences in the utilization of the mortgage interest deduction, August 2001, OTA paper.

Brooks, A. (2004) The effects of public policy on private charity. *Administration and Society*. 36: 166-185.

Brown, E. (2005). College, Social Capital, and Charitable Giving, in Arthur Brooks, (ed.), *Gifts of Time and Money in America's Communities.* Lanham, MD: Rowman & Littlefield.

Catalog for Philanthropy (2004). Generosity Index. Available at www.catalogueforphilanthropy.org/cfp/db/generosity.php?year=2004.

Center on Philanthropy at Indiana University (2005). *Indiana Gives 2004*. Available at www.philanthropy.iupui.edu.

Center on Philanthropy at Indiana University (2005b). *A Closer Look at New England Giving*. Available at www.nhcf.org.

Clotfelter, C. and D. Feenberg (1990). Is there a regional bias in federal tax subsidy rates for giving?. *Public Finance* Vol. 45, No. 2.

Deb, P., M Wilhelm, P Rooney, and M. Brown (2003), Estimating charitable contributions in *Giving USA*, *Nonprofit and Voluntary Sector Quarterly*, December 2003.

Eaton, D., and M. Milkman (2004). An empirical examination of the factors that influence the mix of cash and noncash giving to charity. *Public Finance Review* Vol. 32. No. 6.

Gittell, R. and E. Tebaldi. (2004). Charitable Giving in the U.S. States: What factors influence giving in the U.S. States. Working paper presented February 2, 2004 to the Forum of the Regional Associations of Grantmakers.

Giving USA Foundation (2004). *Giving USA Update #3*. Glenview, IL: author.

Giving USA Foundation (2003). *Giving Memphis 2003*. Indianapolis, IN: author.

Havens, J. and Schervish, P. (2005). *Geography and Generosity*: *Boston and Beyond.* Boston: Boston Foundation..

Hoge, D., C. Zech, P. McNamara, and M. Donahue (1996). *Money Matters: Personal Giving in American Churches*. Louisville, KY: Westminster John Knox Press.

James, Russell N. (2002). The impact of sects, rationality and human capital in religious charitable giving. Dissertation. University of Missouri-Columbia.

Internal Revenue Service (2004). Individual tax statistics, state income. Available at http://www.irs.gov/taxstats/indtaxstats/article/0,,id=98123,00.html.

Izraeli, O. and M. Kellman (1996). The propensity to itemize in the context of a human capital model. *American Economic Review* Vol. 40, Issue 2.

Metropolitan Association for Philanthropy. (2004). *Private Dollars for Public Good: A Report on Giving in the St. Louis Region.* St. Louis: author.

Roper Center (2000). Social Capital Community Benchmark Survey. Available at http://roperweb.ropercenter.uconn.edu/SocCapReg/sccreg.html.

Rooney, P., Mesch, D., Chin, W., and Steinberg, K. (2005). The effects of Race, gender, and survey methodologies on giving in the U.S, *Economics Letters*, Vol. 86, Issue 2.

Rooney, P., Steinberg, K., and Schervish, P. (2004). Methodology is destiny: The effect of survey prompts on reported levels of giving and volunteering, *Nonprofit and Voluntary Sector Quarterly*, Vol. 33, No. 4.

Steinberg, R. and M. Wilhelm (2004). Patterns of Giving in COPPS. Working paper. Available at http://php.indiana.edu/~rsteinbe/patternsofgvc.pdf.

Wolpert, J (1989). Key indicators of generosity in communities. In V.A. Hodgkinson, R.W. Lyman, & Associates (eds.), *The Future of the Nonprofit Sector.* San Francisco: Jossey-Bass.

Yamuchi, N. and Yokoyama, S. (2005). What determines individual giving and volunteering in Japan? An econometric analysis using the 2002 National Survey Data. (In Japanese. With English summary.) Osaka Economic Papers, vol. 54, no. 4, 2005, pp. 407-20

Appendix 1

Three-year average annual actual giving compared to estimated giving capacity, 1999-2001,
Organized by percentage difference between the actual average annual giving and the estimated giving potential
Light grey indicates states where actual is 5% above predicted; dark grey is for states 5% or more below.

	Actual	Estimated capacity	Difference	Gap (percent)
Wyoming	$8,267	$4,952	$3,315	66.9
Tennessee	$4,858	$4,229	$630	14.9
Maryland	$3,403	$2,972	$430	14.5
Oregon	$2,909	$2,603	$307	11.8
Idaho	$3,490	$3,157	$334	10.6
Minnesota	$2,967	$2,706	$262	9.7
District of Columbia	$5,544	$5,105	$438	8.6
New York	$4,054	$3,743	$312	8.3
New Mexico	$2,921	$2,703	$218	8
Utah	$5,744	$5,366	$378	7.1
Indiana	$3,201	$3,008	$193	6.4
Arkansas	$4,280	$4,086	$194	4.7
Oklahoma	$3,845	$3,675	$169	4.6
Ohio	$2,720	$2,601	$119	4.6
Michigan	$3,060	$2,946	$114	3.9
Wisconsin	$2,482	$2,390	$93	3.9
New Jersey	$2,996	$2,915	$82	2.8
South Dakota	$4,261	$4,167	$94	2.3
Texas	$4,831	$4,742	$90	1.9
Colorado	$3,375	$3,316	$59	1.8
Alabama	$3,962	$3,934	$28	0.7
Rhode Island	$2,248	$2,263	($15)	-0.7
Washington	$3,511	$3,543	($32)	-0.9
North Carolina	$3,572	$3,608	($36)	-1
Arizona	$2,950	$2,986	($36)	-1.2
Connecticut	$3,538	$3,597	($59)	-1.7
Florida	$3,979	$4,052	($73)	-1.8
Louisiana	$3,863	$3,950	($86)	-2.2
Nebraska	$3,724	$3,811	($86)	-2.3
Kansas	$3,531	$3,621	($90)	-2.5
Pennsylvania	$3,030	$3,114	($84)	-2.7
Massachusetts	$3,269	$3,360	($91)	-2.7
Missouri	$3,341	$3,454	($114)	-3.3
California	$3,690	$3,835	($146)	-3.8
Delaware	$3,162	$3,291	($129)	-3.9
Kentucky	$2,957	$3,107	($150)	-4.8
Iowa	$2,826	$2,977	($151)	-5.1
South Carolina	$3,698	$3,922	($224)	-5.7
Mississippi	$4,366	$4,647	($281)	-6
Georgia	$3,906	$4,202	($297)	-7.1
Virginia	$3,282	$3,559	($278)	-7.8
Illinois	$3,313	$3,608	($295)	-8.2
West Virginia	$3,112	$3,455	($342)	-9.9
Hawaii	$2,581	$2,901	($320)	-11
North Dakota	$3,150	$3,548	($398)	-11.2
Nevada	$3,256	$3,676	($420)	-11.4
Montana	$2,577	$2,992	($415)	-13.9
New Hampshire	$2,475	$3,060	($585)	-19.1
Alaska	$3,193	$3,945	($752)	-19.1
Vermont	$2,621	$3,333	($712)	-21.4
Maine	$2,369	$3,079	($709)	-23
National average	$3,535	$3,526		

Appendix 2
Percentage of itemized returns that included itemized charitable gift
2003 tax return data, IRS SOI, Organized highest to lowest
Top quintile : Light grey; Bottom quintile: dark grey

	Itemized Gift Participation
New York	92.4
New Jersey	91.8
Rhode Island	91.4
Connecticut	91.2
Utah	91.1
Massachusetts	91.0
Maryland	90.9
Alabama	90.7
Delaware	90.0
Minnesota	89.9
Georgia	89.6
Pennsylvania	89.5
Oklahoma	89.4
South Carolina	89.3
Nebraska	89.2
Kentucky	89.2
District of Columbia	89.2
Hawaii	89.2
Michigan	88.9
Illinois	88.7
Virginia	88.4
Arizona	88.2
North Carolina	88.2
Mississippi	88.0
California	87.9
Kansas	87.3
Louisiana	87.1
Tennessee	87.0
Iowa	86.7
Wisconsin	86.7
New Hampshire	86.5
Nevada	86.5
Maine	86.2
Missouri	86.1
Arkansas	85.8
Florida	85.6
Colorado	85.4
North Dakota	85.3
Washington	84.7
Idaho	84.7
Indiana	84.2
Texas	84.1
South Dakota	84.0
Oregon	83.9
Ohio	83.7
Montana	83.6
New Mexico	83.2
Alaska	82.6
Vermont	81.6
West Virginia	80.8
Wyoming	79.5
National average	87.2
Standard deviation:	3.0