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Wealth Transfer Estimates: 2001 to 2055
State of North Dakota

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Executive Summary

Few of the wealthiest people in the country live in North Dakota. In fact, North Dakota has none of the 400 wealthiest people in the country according to the 2005 Forbes 400 list. Nevertheless thousands of residents of North Dakota, many of them owners of agricultural property, have net worth in excess of $1 million. Their combined wealth is a considerable fraction of the total personal wealth of all the residents in North Dakota.

But North Dakota is a state with a future. Its sense of community, natural resources, economic development prospects, and growing leadership among financial and philanthropic professionals make North Dakota a state that has both capacity and moral compass about how to use its capacity for transformative purposes.

The current research study, conducted by the Center on Wealth and Philanthropy at Boston College for the Impact Foundation of Fargo, North Dakota, has used a version of its Wealth Transfer Microsimulation Model (WTMM) specially calibrated to the state of North Dakota to derive the following findings concerning the level and distribution of household wealth, the amount and distribution of wealth transfer, and the amount and distribution of charitable giving in North Dakota.

I. Wealth and Its Distribution in North Dakota

In 2001 the total wealth (net worth) of the 262 thousand households in North Dakota amounted to just under $92 billion (in 2005 constant dollars). Net worth is the market value of all assets minus the value of all debt. Based on national data, farmland, businesses related to farming, and residential property constituted large components of the assets, although there are not precise estimates of these components for North Dakota households.

In aggregate, household wealth in North Dakota is differently distributed than in the nation. As measured by the average and median wealth per household, the center of the distribution is somewhat lower than that of the nation. In 2001, North Dakota households were $34 thousand per household (9%) less wealthy, on average, than households in the nation. Averaged over all households, the average net worth per North Dakota household was $353 thousand as compared with $387 thousand per household for the nation. Also

in 2001, the wealth of the median household (the household where 50% of households are more wealthy and 50% less wealthy) in North Dakota was $85 thousand, which is about 4% lower than the wealth of the median household in the nation ($89 thousand).

Although the center of the distribution of wealth in North Dakota is somewhat lower than the center of the national distribution, the proportion of people at the extremes of the North Dakota distribution are higher than the extremes of the national distribution. In 2001 there was a smaller percentage of households in net debt (7.4%) in North Dakota as compared with the nation (10.4%) and there was a larger proportion (0.25%) with wealth of $20 million or more in North Dakota than the corresponding proportion (0.12%) for the nation. The averages at the extremes tell a different story: net debtors in North Dakota have an average net worth of -$16 thousand as compared with -$9 thousand for net debtors in the nation. At the upper end, wealth holders with $20,000,000 or more net worth have average wealth of $32 million in North Dakota as compared with $39 million for corresponding households in the nation. All of this indicates that the distribution of wealth in North Dakota does not bear a simple relationship to the national distribution of wealth. Overall, however, the distribution of wealth in North Dakota is slightly lower than that of the nation. In aggregate North Dakota has 0.25% of the nation's households but 0.22% of its wealth and 0.16% of the nation's millionaires.

The distribution of wealth by age of head of household is important because it is correlated with when wealth will be transferred. In North Dakota the wealthiest households are, on average, headed by people who are older than their national counterparts. Their wealth will be transferred sooner rather than later. But most North Dakota households headed by people older than age 80 own less wealth, on average, ($345 thousand) as compared with their national counterparts ($393 thousand). The pattern is similar for households headed by persons under age 60. Their average wealth per household is less than the national average. However, the 18% of North Dakota households headed by persons age 60 to 79 have average wealth of $804 thousand as compared with $638 thousand per household for their national counterparts. In North Dakota, there is therefore a moderately large group of households headed by relatively older people that own a greater than national average amount of wealth per household. Most of their wealth will likely be transferred in the next 20 years.

In terms of the share of wealth, households with heads older than 60 years own more wealth than their counterparts among households in the nation. Households whose heads were under 40 years of age owned 11% of the wealth in North Dakota as compared with 10% owned by comparable households in the nation. However, households whose heads were age 60 or older owned 51% of the wealth in North Dakota as compared with 41% owned by comparable households in the nation.

II. Wealth Transfer and Its Distribution in North Dakota

Wealth transfer refers to the disposition of a household's wealth at the death of the householders. In the case of an unmarried householder, the wealth is transferred when the householder dies. In the case of a married couple, the wealth is transferred when both of the householders have died. We use the umbrella term "final estate" to refer to the

estate of the final householder decedent or equivalently the estate of a household without a surviving spouse.

A final estate has a net worth value (market value of assets owned by decedent minus debts owed by decedents at time of death). From the initial distribution of wealth, we determine the value of a final estate principally by applying assumed secular growth rates of 2%, 3%, and 4% to initial wealth of each household in the distribution. For the period from 2001 (the base year of our data) through 2020 the aggregate value of final estates will be $32 billion in the 2% secular growth scenario, $38 billion in the 3% secular growth scenario, and $44 billion in the 4% secular growth scenario. In the 55 year period from 2001 through 2055, the value of final estates will be $115 billion in the 2% secular growth scenario, $206 billion in the 3% secular growth scenario, and $386 billion in the 4% secular growth scenario. In summary there will be between $115 billion to $386 billion in wealth transfer from households currently in North Dakota from 2001 through 2055 – depending on the secular rate of growth.

The wealth transfer will be highly concentrated among a relatively small number of final estates valued at $1 million or more at the death of the decedent. In terms of percentages, 73% of the wealth transfer will occur from the 7% of final estates valued at $1 million or more in the 2% scenario; 81% will occur from the 12% of final estates with net worth valued at $1 million or more in the 3% scenario; 90% will occur from the 18% of similarly valued final estates in the 4% scenario. The heirs of most North Dakota households will not suddenly become wealthy when their parents pass.

The value of a final estate is distributed among estate settlement fees, taxes, charitable bequests, and bequests to heirs. If the distribution follows national historical patterns, potential charitable bequests will range from $6 billion to $10 billion depending on secular growth in the period from 2001 through 2020. In this period estate fees will be approximately $1 billion, estate taxes will range from $7 billion to $10 billion, and bequests to heirs will range from $18 billion to $22 billion again depending on secular growth.

In the entire period from 2001 through 2055, potential charitable bequests will range from $18 billion to $91 billion depending on secular growth rates. During this same period estate fees will range from $4 billion to $13 billion, estate taxes will range from $26 billion to $119 billion, and bequests to heirs will range from $66 billion to $162 billion depending once more on secular growth.

III. Inter Vivos Charitable Giving, Charitable Bequests, and Their Distribution in North Dakota

Charitable giving is divided into two categories: (1) inter vivos giving, that is giving while the donor is still living, and (2) charitable bequests, that is giving from the estate of a deceased donor. The potential value of charitable bequests has been presented in the previous section. Inter vivos giving is estimated by projecting base year inter vivos

giving at the same secular rates (2%, 3%, and 4%, respectively) as used to estimate wealth transfer.

In the 2% growth scenario, aggregate inter vivos giving amounts to $11 billion from North Dakota residents in the 20 years from 2001 through 2020 and $22 billion in the 55 years from 2001 through 2055. Combined with charitable bequests of $6 billion in 20 years and $18 billion in 55 years, total household giving will amount to $17 billion in the 20 year period and $40 billion in the 55 year period. About two thirds of total giving in the 55 year period will be from households whose net worth is $1 million or more when the gift or bequest is made.

In the 3% growth scenario, aggregate inter vivos giving amounts to $12 billion from North Dakota residents in the 20 years from 2001 through 2020 and $28 billion in the 55 years from 2001 through 2055. Combined with charitable bequests of $8 billion in the 20 years and $40 billion in the 55 years, total household giving will amount to $19 billion in the 20 year period and $67 billion in the 55 year period. About 77% of total giving in the 55 year period will be from households whose net worth is $1 million or more when the gift or bequest is made.

In the 4% growth scenario, aggregate inter vivos giving amounts to $13 billion from North Dakota residents in the 20 years from 2001 through 2020 and $35 billion in the 55 years from 2001 through 2055. Combined with charitable bequests of $10 billion in the 20 years and $91 billion in the 55 years, total household giving will amount to $22 billion in the 20 year period and $126 billion in the 55 year period. Slightly less than 87% of total giving in the 55 year period will be from households whose net worth is $1 million or more when the gift or bequest is made.

Introduction to Technical Report

In 1999 the Center on Wealth and Philanthropy (then the Social Welfare Research Institute) at Boston College released "Millionaires and the Millennium: New Estimates of the Forthcoming Wealth Transfer and the Prospects for a Golden Age of Philanthropy." [Havens and Schervish, 1999] The Millionaires and the Millennium report contained estimates of the potential transfer of wealth from the 1998 population of households to government, heirs, charity, and estate costs in the period from 1998 through 2052. The unique Wealth Transfer Microsimulation Model (WTMM) developed and housed at the Center on Wealth and Philanthropy (CWP) generated the estimates in three growth scenarios. The scenarios were defined in terms of assumed levels of secular growth in household wealth. The low (2%) secular growth scenario implied $41 trillion of wealth transfer ($8 trillion to government, $25 trillion to heirs, $6 trillion to charity, and $2 trillion to estate fees); the middle (3%) secular growth scenario implied $73 trillion of wealth transfer ($18 trillion to government, $40 trillion to heirs, $12 trillion to charity, and $3 trillion to estate fees); and the high (4%) secular growth scenario implied $136 trillion of wealth transfer ($41 trillion to government, $65 trillion to heirs, $25 trillion to

charity, and $6 trillion to estate fees).

The low secular growth estimate of $41 trillion (1998 dollars) has been widely cited since 1999. After reviewing the estimation model, the downturn in financial markets, and challenges to the $41 trillion estimate, we released "Why the $41 Trillion Wealth Transfer is Still Valid: A Review of Challenges and Questions" in January 2003 [Havens and Schervish, 2003]. The report reviewed the estimates and answered nine questions and challenges about the estimates. As the title implied, the report concluded that the $41 trillion wealth transfer estimate was still valid, and re-emphasized that the bulk of the forthcoming transfer would occur in the last 25 years of the 55-year period and would be concentrated among households at the upper end of the wealth distribution.

Since 1999, various groups have periodically expressed interest in estimates of wealth transfer at the state level. The principal impediment to developing these estimates is lack of data on the general distribution of household wealth and its specific distribution by age of head of household for geographic areas smaller than the nation. In 2004 we developed and tested a proprietary procedure to estimate these distributions for states and large metropolitan areas. Application of the procedure now allows us to apply the WTMM to produce wealth transfer estimates for states and large metropolitan areas as well as for the nation.

At the invitation of the Impact Foundation of Fargo, North Dakota we applied a recently updated and expanded version of the WTMM to the households residing in North Dakota in 2001 in order to estimate the transfer of wealth from these households during the period from 2001 through 2055. For the purposes of this report the area delineated as North Dakota by the U.S. Census in 2001 defines the state of North Dakota.

Prior to applying the WTMM, it is necessary to first estimate the distributions of wealth and wealth by age of head of household. The procedure to estimate these distributions is based on data from the Survey of Consumer Finances (SCF) sponsored by the Board of Governors of the Federal Reserve and the demographic supplement of the Current Population Survey (CPS), jointly conducted by the Bureau of Census and the Bureau of Labor Statistics. The procedure requires that both databases share a common year. The demographic supplement of the CPS is collected in March, annually; but the most recent survey data from the SCF was collected in 2001. Consequently the most recent year for which base data is available is 2001 and that is the base year of this analysis.

This report presents and documents the wealth distributions and the estimates of wealth transfer for North Dakota for three scenarios of secular rates of growth in household wealth: 2%, 3%, and 4% real (inflation adjusted) secular rates of growth. The estimates and all dollar figures in this report have been adjusted for inflation, which means that they are reported in terms of their purchasing power in 2005. For example, $100,000 of household wealth in 2001 could purchase $100,000 worth of goods and services in 2001 were the wealth liquidated and used for consumption expenditure. Due to inflation it would take $109,091, on average, to purchase those same goods and services in 2005. The $100,000 in 2001 dollars becomes $109,091in 2005 inflation adjusted dollars, which

is the amount of money needed in 2005 to purchase what $100,000 would have purchased in 2001.

The wealth distributions and wealth transfer estimates for North Dakota are presented in the findings section of this report. How these estimates were derived is documented in the methodological appendix to this report.

Findings

This report provides three sets of estimates for households residing in North Dakota in 2001: a baseline distribution of their current wealth, the projected wealth transfer, and a projection of their inter vivos giving during the same period from 2001 through 2055. The first set consists of the estimated distribution of household wealth and its distribution by age of head of household in 2001. This is the starting point for the simulation. The second set consists of the estimates of wealth transfer and the potential distribution of this transfer among government, heirs, charity, and estate settlement costs. The third set consists of a simple projection along trend of household inter vivos giving.

Throughout this document, household wealth is defined as household net worth, that is, the market value of all assets owned by members of the household less the value of all debt owed by members of the household. Inter vivos giving includes gifts of cash, assets, and other in-kind gifts to charitable organizations. All dollars are measured in 2005 constant (inflation adjusted) dollars. This means that all dollar values in the report represent 2005 buying power. For instance, a transfer of $200,000 to an heir in 2055 will have the same 2005 buying power as a transfer of $200,000 in 2005, although by 2055 the $200,000 will have a nominal value closer to $1,000,000 if we assume a 3% average annual inflation rate from 2005 through 2055.

Wealth Distributions

The first set of findings involves the amount and distribution of household wealth. The distribution of wealth among North Dakota households is lower than that for the nation. In 2001, the 262 thousand households in North Dakota (0.25% of all households in the nation) owned an aggregate amount of $92 billion in wealth (0.22% of all household wealth in the nation). The average and median household wealth for North Dakota was $353 thousand and $85 thousand, which respectively represented 91% and 96% of the average ($387 thousand) and median ($89 thousand) household wealth in the nation.

Table 1 presents the distribution of household wealth for North Dakota in 2001. As is the case across the nation, it shows a highly skewed distribution of wealth. At the lower end of the distribution in 2001 there were 188 thousand households (72% of all North Dakota households) with wealth of less than $200,000. In aggregate they owned $11 million of wealth (12% of all household wealth in the state). In contrast, at the upper end of the distribution there were 12 thousand households (4.4% of all North Dakota households)

that owned wealth of $1 million or more. In aggregate these households owned $56 million in wealth (60% of all household wealth in North Dakota). Even more dramatically, the 0.4% of households with wealth of $10 million or more owned 29% of all household wealth in the state.

Although the largest share of wealth in North Dakota is concentrated among a small proportion of households at the upper end of the distribution, the average wealth for this small group is higher than corresponding wealthy households in the nation. At the low end of the distribution, households in North Dakota also have a higher average amount of wealth as compared with their counterparts in the nation. Table 1 indicates that for the nation there are 71,112 thousand households (67% of all U.S. households) with wealth of less than $200,000. Their wealth averaged $51,260 per household as compared with $58,042 per household in North Dakota. At the other end of the spectrum, there were 7,131 thousand households nationally (6.7% of all U.S. households) with wealth of $1 million or more. On average, their wealth was $3.52 million as contrasted with $4.79 million for similar households in the state. Although households with $1 million or more in net worth represent a smaller proportion of all North Dakota households than the proportion of such households in the nation, their average wealth is more than $1 million dollars higher than their counterparts nationwide.

The distribution of wealth in North Dakota is unique in the sense that it is neither uniformly higher nor uniformly lower nor the same as the distribution of wealth nationally. The comparisons differ when considering frequencies and amounts. There is a larger fraction of households in the lower end of the distribution of wealth and a smaller fraction of households in the upper end of the wealth distribution in North Dakota than in the nation. In addition, the overall average and median household wealth is lower in North Dakota than in the nation. These statistics imply that the distribution of wealth is lower in North Dakota than in the nation. However, average wealth is higher than the nation in both the lower and the higher end of the distribution. This deviates from a pattern of a lower distribution of wealth in North Dakota relative to the nation. We conclude that the distribution of wealth in North Dakota is too disparate from the national distribution to be described by a simple comparison. We may conclude, nonetheless, that in North Dakota in 2001 there were about 1 thousand households with substantial wealth, averaging $26 million per household.

The last two columns of Table 1 contain the average ages of the heads of household within each net worth category for North Dakota and for the nation. Below $5 million in wealth, the average ages in each net worth category are roughly comparable between North Dakota and the nation. Above $5 million, the average ages are notably older for heads of North Dakota households than for the heads of households nationally. This implies that the transfer of wealth from these high end households will occur sooner in North Dakota than for the nation.

Table 2 presents information about the distribution of wealth among households in North Dakota but only for households with positive net worth. It indicates that 242 thousand households had positive net worth, which in aggregate amounted to slightly less than $93

billion. Within each wealth category the average and aggregate household wealth are the same as presented in Table 1. The last four columns of this table contain the cumulative percentage distributions for the number of households and their aggregate net worth for North Dakota and the nation. The percentages in these columns are cumulated from high to low wealth categories. The table indicates that about 30% of the households in North Dakota with positive net worth have net worth of $200,000 or more as compared with slightly more than a third (37%) for the nation. In every wealth category above $200,000 and under $20,000,000 there is a smaller percentage of households in North Dakota with wealth in that category or higher as compared with the nation. Although the percentages are both small, there is, however, a greater percentage of households with wealth of $20,000,000 or more in North Dakota than in the nation. This again confirms that the distribution of household wealth in North Dakota is complex and differentiated from the distribution for the nation.

With respect to wealth transfer, the distribution of wealth is important for two reasons. First, combined with rates of growth in household wealth, it determines the amount of wealth to be transferred at the death of the householders. Second, wealthy individuals tend to distribute a disproportionately large portion of their estates to charitable bequests. The distribution of wealth in North Dakota implies that very wealthy households will generate a potentially larger value of charitable bequests in North Dakota relative to the rest of the nation during the period from 2001 through 2055 because North Dakota has a greater proportion of very wealthy households and they own a greater proportion of North Dakota's household wealth.

Table 3 presents the aggregate and average amount of household wealth in North Dakota by the age of head of household in 2001. The table shows that in 2001 there were smaller fractions of households in the 40 to 59 age group and in the 60 to 79 age group but a larger fraction of households age 80 and older in North Dakota as compared with the nation. The average wealth per household is greater among households with heads age 60 to 79 in North Dakota ($804 thousand per household) as compared with the nation ($638 thousand per household). In every other age group, the average household wealth is smaller in North Dakota than in the nation.

Households whose head is under age 40 own about 11% of North Dakota's household wealth. The wealth of these households will not be transferred until late in or after the 55 year horizon of the wealth transfer analysis. Households age 60 or older own 51% of the wealth in North Dakota as compared with 41% nationally. Moreover, we found in Table 1 that the average age of heads of households with $5 million or more net worth are on average older in North Dakota than in the nation. Both these facts imply that in North Dakota this wealth is likely to be transferred earlier in the 55 year period than it is nationally. One implication of the age distribution of wealth for wealth transfer is that a greater percentage of North Dakota's transfer of wealth in contrast to the national pattern will occur in the first 15 years and a smaller percentage in the last 15 years of the 55 year period.

Wealth Transfer Estimates

The Wealth Transfer Microsimulation Model (WTMM) estimates the number, value, and destiny (taxes, heirs, charity, and fees) of final estates in three secular growth scenarios: low (2%) secular growth, middle (3%) secular growth, and high (4%) secular growth. Before presenting these findings, we briefly summarize how the model works. (We detail the workings of the model in the Methodological Appendix.) The estimates of wealth transfer generated by the WTMM are derived from compiling the value of final estates. A final estate is an estate without a surviving spouse. The WTMM first calculates the number and value of final estates. When an unmarried person dies, the WTMM generates a final estate and transfers the wealth of the decedent to the final estate. When a married person dies, the WTMM transfers the wealth of the decedent to the decedent's spouse but does not generate a final estate; when that surviving spouse subsequently dies the WTMM generates a final estate and transfers the remaining household wealth to the final estate. After the number and value of final estates are estimated, the WTMM uses historical patterns to distribute the estate's value to government (in the form of federal and state estate taxes), heirs, charitable bequests, and estate fees (outstanding debt, burial costs, and legal/probate fees).

Low (2%) Secular Growth Scenario

Table 4 presents the detailed results of the low (2%) secular growth scenario for North Dakota. Panel 1 presents the estimates for the 20 year period from 2001 through 2020. Panel 2 presents the corresponding estimates for the entire 55 year period from 2001 through 2055. Within each panel the columns define the value of the final estate, which is categorized by the net worth of the household when the final householder dies. The rows of the table define the number of final estates, the value in terms of net worth of final estates, estate fees, federal and state estate taxes, bequests to charity, and bequests to heirs. The total transfer and its distribution are located in the total column, which is the rightmost column in each panel.

For North Dakota we estimate that 213 thousand final estates will occur during the 55 year period from 2001 through 2055. These final estates will be valued at $115 billion (2005 dollars) at the time of death if wealth grows in North Dakota at an average annual secular rate of 2%. If historical patterns hold, $4 billion will be distributed to estate fees, $26 billion to government, $18 billion to charity, and $66 billion to heirs. The $18 billion of potential charitable bequests constitutes 16% of the $115 billion value of final estates.

Most of the potential charitable bequests (68%) are generated by the 0.4% of final estates with value of $20 million or more. This proportion (68%) is large for two reasons: (1) final estates valued at $20 million or more account for 29% of the $115 billion in total wealth transfer in North Dakota; and (2) on average, estates of $20 million or more give the largest fraction (38%) of their value to charity as compared with estates of lesser value.

In North Dakota, as in the nation, the transfer of wealth is concentrated among wealthy final estates. Most (73%) of the $115 billion of wealth transfer in the low growth scenario occurs among the 7% of final estates with value of $1 million or more. These estates pay 73% of the aggregate estate fees, nearly 100% of the aggregate estate taxes, 96% of the aggregate charitable bequests, but only 56% of the aggregate bequests to heirs.

Panel 1 of Table 4 indicates that slightly more than 27% ($31 billion out of the 55 year total $115 billion) of wealth transfer in North Dakota will occur before 2021. During the first 20 years from 2001 to 2020, 60 thousand final estates will occur. These 60 thousand final estates amount to 28% of the number of final estates generated during the entire 55 year period of the simulation. The aggregate value of these estates is $31 billion (27% of the aggregate value during the entire 55 year period) with potential aggregate charitable bequests of $6 billion (32% of the aggregate amount during the entire period). Although the bulk of the wealth transfer in North Dakota will occur later than 2020, a disproportionately large fraction of the charitable bequest potential (as compared with national estimates) will occur before 2021.

We have seen in Table 1 that in 2001 there were 12 thousand households in North Dakota with at least $1 million in net worth. During the 55 years of the low growth scenario, another 12 thousand households will become millionaires, for a total of 24 thousand households with net worth of at least a million dollars. However, the wealth of 4 thousand of these households will decline before their deaths as they draw down their assets through a combination of consumption, gifts, and health care costs after age 60. Of the 20 thousand households (24 minus 4) whose wealth remains above $1 million before their final estates or before the year 2055, 16 thousand have final estates of $1 million or more and 4 thousand households survive for 55 years and maintain their millionaire status in the year 2055.

Of the 213 thousand final estates, 130 thousand of the final decedents will be women, 80 thousand will be men, and 3 thousand will involve two spouses who die in the same year.

Middle (3%) Secular Growth Scenario

Table 5 presents the detailed results of the middle (3%) secular growth scenario for North Dakota. It is formatted the same as Table 4. As in Table 4, the total transfer and its distribution are located in the total column, which is the rightmost column in each panel.

In the middle growth scenario for North Dakota we again estimate that 213 thousand final estates will occur among the 2001 population of households during the 55 year period from 2001 through 2055. These final estates will be valued at $206 billion at the time of death if wealth grows in North Dakota at an average annual secular rate of 3%. Based on historical patterns, $7 billion will be distributed to estate fees, $55 billion to government, $40 billion to charity, and $104 billion to heirs. The $40 billion of potential charitable bequests constitutes 19% of the $206 billion value of final estates – an additional 3% as

compared with the low growth scenario.

Once again, most of the potential charitable bequests (73%) are generated by the 1% of final estates valued at $20 million or more. This proportion (73%) is large for two reasons: (1) final estates with values of $20 million or more account for 39% of the $206 billion in total wealth transfer in North Dakota; and (2) on average, estates of $20 million or more give the largest fraction (38%) of their value to charity as compared with estates of lesser value.

As in the nation, the transfer of wealth in North Dakota is concentrated among wealthy final estates. Most (81%) of the $206 billion of wealth transfer in the middle (3%) growth scenario occurs among the 12% of final estates with value of $1 million or more. These estates pay 81% of the aggregate estate fees, 99% of the aggregate estate taxes, 97% of the aggregate charitable bequests, and contribute 65% of the aggregate bequests to heirs.

From Panel 1 of Table 5 we find that approximately 18% ($38 billion out of the 55 year total $206 billion) of wealth transfer in North Dakota will occur by the end of 2020. During the first 20 years from 2001 to 2020, we again estimate that 60 thousand final estates will occur. These 60 thousand final estates amount to 28% of final estates generated during the entire 55 year period of the simulation. The aggregate value of these estates is $38 billion (18% of the aggregate value during the entire period) with potential aggregate charitable bequests of $8 billion (19% of the aggregate amount during the entire period). Most of the wealth transfer will occur later than 2020 – a greater percentage in the middle (3%) secular growth scenario than in the low (2%) secular growth scenario.

In 2001 there were 12 thousand households in North Dakota with at least $1 million in net worth. During the 55 years of the middle growth scenario, another 26 thousand households will become millionaires, for a total of 38 thousand millionaire households. However, the wealth of 3 thousand of these households will decline before their deaths as they draw down their assets through a combination of consumption, gifts, and health care costs after age 60. Of the 35 thousand households (38 minus 3) whose wealth remains above $1 million before their final estates or before the year 2055, 25 thousand have final estates with net worth of $1 million or more at their deaths and 10 thousand households survive for 55 years and maintain their millionaire status in the year 2055.

Of the 213 thousand final estates in all scenarios, 113 thousand of the final decedents will be women, 80 thousand will be men, and 3 thousand will involve two spouses who die in the same year.

High (4%) Secular Growth Scenario

Table 6 presents the detailed results of the high (4%) secular growth scenario for North Dakota. Table 6 is formatted the same as Table 4 and Table 5. Once again, the total

transfer and its distribution are located in the total column, which is the rightmost column in each panel.

As is the case in all three scenarios, there are still 213 thousand final estates in North Dakota generated by the 2001 population of households during the 55 year period from 2001 through 2055. These final estates will be valued at $386 billion at the time of death if wealth grows in North Dakota at an average annual secular rate of 4%. If historical patterns hold, $13 billion will be distributed to estate fees, $119 billion to government, $91 billion to charity, and $162 billion to heirs. The $91 billion of potential charitable bequests constitutes 24% of the $386 billion value of final estates.

Most of the potential charitable bequests (80%) are generated by the 1% of final estates with values of $20 million or more. This proportion is large for two reasons: (1) final estates valued at $20 million or more account for 52% of the $386 billion in total wealth transfer in North Dakota; and (2) on average, estates of $20 million or more give the largest fraction (38%) of their value to charity as compared with estates of lesser value.

As household wealth grows at higher rates, the transfer of wealth in North Dakota, as in the nation, is concentrated among wealthy final estates. Most (90%) of the $386 billion of wealth transfer in the high growth scenario occurs among the 18% of final estates whose value is $1 million or more. These estates pay 89% of aggregate estate fees, nearly 100% of aggregate estate taxes, 99% of the aggregate charitable bequests, and 77% of aggregate bequests to heirs.

Panel 1 of Table 5 shows that less than 11% ($44 billion out of the 55 year total $386 billion) of wealth transfer in North Dakota will occur on or before 2020. During the first 20 years from 2001 to 2020, we again estimate that 60 thousand final estates will occur. These 60 thousand final estates amount to 28% of final estates generated during the entire 55 year period of the simulation. The aggregate value of these estates is $44 billion (11% of the aggregate value during the entire period) with potential aggregate charitable bequests of $10 billion (10% of the aggregate amount during the entire period). Just as the 4% growth rate produces more wealth transfer than the other scenarios in the first 20 years, it also results in dramatically greater growth in the next 35 years. As a result, the great majority (89%) of the wealth transfer will occur later than 2020.

In 2001 there were 12 thousand households in North Dakota with at least $1 million in net worth. During the 55 years of the high growth scenario, another 45 thousand households will become millionaires, for a total of 57 thousand millionaire households. However, the wealth of 2 thousand of these households will decline before their deaths as they draw down their assets through a combination of consumption, gifts, and health care costs after age 60. Of the 55 thousand households (57 minus 2) whose wealth remains above $1 million before their final estates or before the year 2055, 38 thousand have final estates of $1 million or more and 17 thousand households survive for 55 years and maintain their millionaire status in the year 2055.

In all three scenarios, there are 213 thousand final estates, 130 thousand of the final

decedents will be women, 80 thousand will be men, and 3 thousand will involve two spouses who die in the same year.

Inter Vivos Giving and Wealth Transfer by Initial Household Wealth

Tables 7, 8, and 9 present data for each of the three growth scenarios on wealth transfer and inter vivos charitable donations categorized by the initial wealth of the households in 2001. In each table the first column contains the category of wealth for North Dakota households at the beginning of the simulation period in 2001. This first column defines the rows of the table. The second column lists the number of households in each wealth category in 2001; the third column lists the aggregate wealth of these households in 2001; the fourth column presents the number of final estates generated by these households during the 55 years of the simulation; the fifth column presents the aggregate value of the final estates presented in column four; the sixth column lists the number of the initial households in 2001 that survive the 55 years and still exist in 2055; the seventh column lists the aggregate wealth of these surviving households in 2055; the eighth column lists a simple projection of inter vivos contributions along trend (at the same percentage as secular growth in wealth) during the 55 year period of the simulation; the ninth column lists the estimates of potential aggregate charitable bequests projected by the WTMM during the 55 year period of the simulation; the tenth column sums the inter vivos and charitable bequests from columns eight and nine; the last two columns present the cumulative distributions of charitable giving and of households, respectively.

Table 7 presents the data for the low (2%) growth scenario. The last row indicates that there were 262 thousand households in North Dakota in 2001 and their aggregate wealth amounted to just over $92 billion. These households produced 213 thousand final estates whose aggregate value was $115 billion. Of the 262 thousand households in 2001, 48 thousand survive in 2055 and their aggregate wealth amounts to $25 billion. Based on the pattern of inter vivos giving in the 2001 Survey of Consumer Finances (defined in terms of household wealth and race), the WTMM projects that the 262 thousand households in North Dakota in 2001 will contribute $22 billion to charitable causes before their deaths and $18 billion in charitable bequests during the 55 years of the simulation. The total amount of inter vivos charitable donations and charitable bequests is estimated to be $40 billion during the 55 year period. The cumulative percentages indicate that the 4.4% of households in North Dakota that have wealth of $1 million or more in 2001 account for 59% of the charitable giving during the 55 years of the simulation. Even more dramatically, the 0.4% of North Dakota households with wealth of $10 million or more in 2001 account for 38% of the charitable giving during the 55 year period.

Table 8 presents the data for the middle (3%) growth scenario. The last row again indicates that there were 262 thousand households in North Dakota in 2001 and their aggregate wealth amounted to slightly more than $92 billion. These households produced 213 thousand final estates whose aggregate value was $206 billion. Of the 262 thousand households in 2001, 48 thousand survive in 2055 and their aggregate wealth

amounts to $71 billion. Based on the pattern of inter vivos giving in the 2001 Survey of Consumer Finances (defined in terms of household wealth and race), the WTMM projects that the 262 thousand households in North Dakota in 2001 will contribute $28 billion to charitable causes before their deaths and $40 billion in charitable bequests during the 55 years of the simulation. The total amount of inter vivos charitable donations and charitable bequests is estimated to be $67 billion during the 55 year period. The cumulative percentages indicate that the 4.4% of households in North Dakota that have wealth of $1 million or more in 2001 account for 62% of the charitable giving during the 55 years of the simulation. Even more dramatically, the 0.4% of North Dakota households with wealth of $10 million or more in 2001 account for 37% of the charitable giving during the 55 year period.

Table 9 presents the data for the high (4%) growth scenario. From the last row we find that the 262 thousand households in North Dakota in 2001 owned approximately $92 billion in aggregate wealth. These households produced 213 thousand final estates whose aggregate value was $386 billion. Of the 262 thousand households in 2001, 48 thousand survive in 2055 and their aggregate wealth amounts to $201 billion. Based on the pattern of inter vivos giving in the 2001 Survey of Consumer Finances (defined in terms of household wealth and race), the WTMM projects that the 262 thousand households in North Dakota in 2001 will contribute $35 billion to charitable causes before their deaths and $91 billion in charitable bequests during the 55 years of the simulation. The total amount of inter vivos charitable donations and charitable bequests is estimated to be $126 billion during the 55 year period. The cumulative percentages indicate that the 4.4% of households in North Dakota that have wealth of $1 million or more in 2001 account for 61% of the charitable giving during the 55 years of the simulation. The 0.4% of North Dakota households with wealth of $10 million or more in 2001 account for 33% of the charitable giving during the 55 year period.

Summary of Inter Vivos Giving and Wealth Transfer Results

The major findings for each of the three secular growth scenarios are summarized in Table 10. The upper panel of this table summarizes the findings for the 20 year period from 2001 through 2055. The lower panel summarizes the corresponding findings for the 55 year period from 2001 through 2055.

The first row of the upper panel indicates that the 20 year estimate of total wealth transfer in North Dakota ranges from $32 billion in the 2% secular growth scenario to $44 billion in the 4% secular growth scenario – an increase of 39%. The second row indicates a 20 year total of charitable bequests ranging from $6 billion in the low growth scenario to $10 billion in the high growth scenario. The third row predicts that the 20 year total of additional inter vivos giving will range from $11 billion to $13 billion. The fourth row of this panel indicates that the 20 year estimate of total charitable contributions rises from $17 billion in the 2% secular growth scenario to $22 billion in the 4% secular growth scenario – an increase of 35%. The fifth row of this table indicates the percentage of aggregate contributions made by households with $1 million or more in wealth at the

time of the contribution. As can been seen, the percentage of contributions made by millionaires rises from 66% in the 2% secular growth scenario to 72% in the 4% secular growth scenario.

The lower panel indicates that during the 55 year period, the estimates of total wealth transfer range from $115 billion in the 2% secular growth scenario to $386 billion in the 4% growth scenario – an increase of 237%. The 55 year estimate of charitable bequests ranges from $18 billion in the low growth scenario to $91 billion in the high growth scenario – an increase of 403%. The 55 year estimate of inter vivos giving ranges from $22 billion to $35 billion – an increase of 60%. Combining inter vivos and bequest giving, the 55 year estimate of total charitable donations ranges from $40 billion to $126 billion – an increase of 214%. During the 55 year period of the simulation, the percentage of total contributions made by millionaires ranges from 67% to 87%. It is clear that millionaire households as a group possess the greatest capacity for charitable giving and based on historical patterns and projections will contribute the greatest amount of charitable giving during the next 55 years. Higher secular rates of growth in wealth increase the potential for charitable giving for these millionaires faster than for less wealthy households, and in North Dakota the proportion of charitable giving by millionaires increases substantially as the rate of secular growth increases over the 55 year period.

There is another theme in this table: In the 20 year period inter vivos contributions predominate over charitable bequests in each of the three scenarios, but in the 55 year period charitable bequests predominate over inter vivos giving in the 3% and 4% growth scenarios. The shift in predominance reflects three trends in the data. First, although household inter vivos giving grows along trend at the same secular rate as household wealth, over time householders die and no longer make inter vivos gifts at all. Second, it is precisely when householders die that final estates are formed and charitable bequests are made. Most of these estates in North Dakota will occur after 2020, especially among wealth holders. Third, over the decades household wealth grows and there are more wealthy households. The estates of wealthy households account for the largest charitable bequests -- on average, the wealthier the estate the larger the fraction of the estate that is allocated to charity.

Discussion

In 2001 North Dakota contained slightly fewer than 262 thousand households. These households constituted 0.25% of all households in the nation, and their aggregate net worth of $92 billion constituted 0.22% of the aggregate net worth of the nation. About 95.6% of the households in North Dakota had net worth less than $1 million in 2001, but the approximately 4.4% of households with net worth of $1 million or more owned 60% of the aggregate wealth in North Dakota. Moreover, the householders with $1 million or more in net worth were relatively older than their counterparts nationally.

During the 55 years from 2001 through 2055, we estimate that North Dakota households will transfer $115 billion and will contribute a potential $40 billion in combined inter vivos donations and charitable bequests, if secular growth is 2%. These households will transfer $206 billion and will contribute a potential $67 billion in combined inter vivos donations and charitable bequests, if secular growth is 3%. They will transfer $386 billion and will contribute a potential $126 billion in combined inter vivos donations and charitable bequests, if secular growth is 4%.

The data in Table 3 indicate that there are a greater proportion of older households that are wealthy as compared with the national distribution of wealth by age of head of household. The greater proportions of older households yields a higher proportion of wealth transfer in the near term 20 year period. Over time, however, the wealth of the younger group will grow as their assets grow and as some of them come into an inheritance. This younger group, however, will not transfer their wealth until late in the 55 year period. The younger group is actually larger and has greater sway on the aggregate wealth transfer estimates than the older group. Overall, the wealth transfer is somewhat lower in the near term 20 year period as compared with the national estimates.

In North Dakota the wealth transfer in the first 20 years ranges from 11% to 27% of the 55 year total, depending on the scenario. In our 1999 national analysis the corresponding percentages were 13% to 29%, depending on the scenario. In terms of dollars, the estimate of wealth transfer in North Dakota during the first 20 years amounts to $32 billion, and the estimate of combined inter vivos donations and charitable bequests amounts to $17 billion, if secular growth is 2%. During these 20 years the wealth transfer estimate amounts to $38 billion, and the estimate of combined inter vivos donations and charitable bequests amounts to $19 billion, if secular growth is 3%. If secular growth is 4%, we estimate that during the first 20 years there will be $44 billion in wealth transfer, and combined inter vivos donations and charitable bequests will amount to $22 billion. In the 20 year period the combination of inter vivos donations and charitable bequests amounts to roughly half the value of wealth transfer in each of the scenarios. The inter vivos charitable contributions, of course, are made independently of the estate while charitable bequests are made from the corpus of the estate.

It is important to note that the foregoing wealth transfer findings were derived from a wealth transfer simulation analysis specifically designed for North Dakota using the WTMM specifically calibrated for North Dakota. We find that tailored estimates for states and large metropolitan areas are more accurate than interpolation based on national estimates because such tailored estimates take account of the local demographic and income characteristics of the area. Because these estimates have been produced by working directly with the WTMM, the projection that aggregate wealth transfer for North Dakota will be at least $115 billion and as much as $386 billion can be reported and used with greater confidence.

The findings for North Dakota that we have documented should offer this region and its citizens a deeper hope and confidence about its philanthropic prospects. But an even more favorable outcome may be in store for North Dakota than what our estimates

already suggest. First, the estimates reported here are conservative. Second, our projections do not take into account the new and renewed efforts of charities and others, such as the Impact Foundation, to encourage greater charitable giving.

The growth rates of 2%, 3%, and 4% modeled in the wealth transfer simulation as well as the estimated growth of 2%, 3%, and 4% in inter vivos giving are both reasonable, if not conservative, by historical standards. For instance, the real annual growth in household wealth from 1950 through the first quarter of 2004 has averaged 3.37%. Moreover, this average rate of growth has endured despite the occurrence of 9 recessions over this period. From this we can conclude that the results from the 2% wealth transfer scenario—the one we tend to emphasize in our writings and presentations—is clearly conservative, that the results from the 3% scenario are historically low, and that the results from the 4% scenario are reasonable. In regard to the growth of inter vivos giving, the 2%, 3%, and 4% projections of annual average real growth also turn out to be historically low. From 1985 to 2004, data from Giving USA (Center on Philanthropy at Indiana University, 2004) indicates that average real growth in individual lifetime giving has grown at an average annual rate of 3.34%. From 1995 through 2004, the average real rate of growth in such giving has been 5.29%. Our estimates of projected inter vivos giving, we believe, are even more conservative than our projections of wealth transfer and charitable bequests.

Because our projected rates of growth in wealth, charitable bequests, and inter vivos giving are so conservative, it is reasonable to expect that total charitable giving over the next five decades will be equal to if not higher than our current estimates. But in addition to our conservative estimation strategy, there is a more important reason why charitable giving in North Dakota may turn out to be even more abundant.

In all scenarios, the WTMM assumes that household wealth grows in accordance with historical patterns that reflect patterns of charitable bequests and inter vivos giving. Specifically, the wealth transfer estimates assume that the relationship between household wealth, charitable bequests, and inter vivos gifts to persons and to charity do not change, on average, during the 55 year period of the simulation. In other words, all we have said so far does *not* assume that people become more charitably inclined than they have been in the past.

This could all change as charities step up the quantity and, especially, the quality of their fundraising efforts, and as national and regional efforts to advance philanthropy encourage philanthropy through programs that better communicate the technical tools, effective consequences, spiritual meaning, and personal satisfaction of charitable giving. What we have in the past referred to as the prospects for a golden age of philanthropy will arise not just because of the growth in wealth. It will emerge even more profoundly and abundantly to the extent there is a growth in a dedicated and fulfilling philanthropic identity among those for whom allocating financial resources for the care of others is a high priority. It will also grow, especially in North Dakota, as the community leadership advances the wealth of the state, its standard of living, and its quality of life.

Methodological Appendix

This appendix documents the details of how the estimates were determined. It describes how the microdata file was derived, even without a reliable source of household wealth for North Dakota. It then continues with a description of the model and how it works.

The research objective of this project is to estimate the wealth transfer from households residing in North Dakota in 2001 during the period from 2001 through 2055. Our basic research strategy was to apply the currently updated and expanded WTMM to a microdata file for North Dakota. This strategy required the development of an appropriate microdata file for North Dakota and calibration of the data file for use by the WTMM. Once these tasks were completed, the WTMM could be run for each of the three scenarios and results tabulated.

Survey of Consumer Finances

The WTMM was designed to use a subset of data from the Survey of Consumer Finances (SCF) as its national microdata file. The SCF is conducted every three years for the Board of Governors of the Federal Reserve [National Opinion Research Center, 1992, 1995, 1998, and 2001]. The most recent available survey was conducted in 2001. The 2004 survey is currently collecting data and will not be released until early 2006.

There are approximately 4,500 households in the 2001 survey sample: 3,000 households selected in a representative sample and 1,500 in an oversample of wealthy households, selected from IRS income tax returns. The staff of the Federal Reserve calculates weights that permit the two samples to be combined to represent the population of all households. With respect to content, the SCF contains very detailed information concerning assets owned, income earned, debt owed, inheritance expected or received, employment history, and demographic characteristics. The SCF also contains a question concerning inter vivos giving of cash and in-kind charitable donations[1]. The two most important characteristics of the SCF with respect to wealth transfer are: (1) it contains sufficient detail about the full portfolio of each household to support a reliable estimate of net worth at the household level, and (2) unlike most other surveys it includes a large group of wealthy households that supports reliable estimates for this group, which gives disproportionately large amounts to charity.

[1] The SCF ignores annual donations of less than $500 per household. At CWP we developed a method to approximate the value of contributions of less than $500 based on data from the General Social Survey conducted by the National Opinion Research Center.

Imputation of Wealth

The key limitation to applying the WTMM to states and metropolitan areas is the lack of data concerning the distribution of net worth of households in these areas. There is partial data on state and metropolitan area assets from a variety of sources but there is no sufficiently large representative sample of households for states and metropolitan areas with a reliable comprehensive distribution of household net worth.

Early in 2004, we began to explore the possibility of using relationships among variables on the SCF to impute net worth to households in the Current Population Survey (CPS) based primarily on components of income, home ownership, and demographic characteristics. The 2001 March Supplement of the CPS is based on a sample of approximately 70,000 households, representative by state and large metropolitan areas. It contains detailed information on income, household structure, employment, and demographic characteristics, but very sparse information on wealth.

In our exploration of the feasibility of imputing wealth to households in the CPS sample, we had the ambitious objective of estimating the distribution of household wealth within states and large metropolitan areas. At the national level the goal was to estimate the national distribution of household wealth based on the imputed measure in the CPS sample. The SCF provides an independent estimate of this distribution. Using the SCF distribution as a criterion, therefore, we wanted to develop, for each household on the CPS, an imputed measure of wealth whose distribution matched the distribution of wealth from the SCF.

We began our development efforts by adapting an approach used by the Federal Reserve to predict household wealth based on components of income [Frankel and Kennickell, 1995; Kennickell, 1993, 1999, and 2001] which the Fed uses to select its high wealth oversample based on income information from IRS income tax filings. The results were promising but not sufficiently reliable, especially at very high, lower middle, and low levels of wealth. We modified some of the variables we had been using (e.g. replaced median value of housing with average value of housing), added a number of demographic characteristics (e.g., marital status, age, education, race) and developed our own proprietary procedure to impute household wealth to households in the Current Population Survey. In the process we gave more emphasis to macro level accuracy of the distribution than to micro level household accuracy of imputed wealth.

Assessment of Imputation Measure

The goal of the imputation procedure was to estimate the distribution of wealth within states and large metropolitan areas. We succeeded in the sense that the national distribution of household wealth based on the imputed measure on the CPS sample has the same mean and nearly the same standard deviation as the national distribution based on the SCF; the median and quartiles of the imputed distribution are also within a percent of their counterparts in the wealth distribution from the SCF. Moreover, the age distribution of imputed wealth is within 3 percent of the age distribution of household

wealth on the SCF. The means of the imputed wealth measure from the CPS are usually within 5 percent of the means of wealth on the SCF within categories of demographic characteristics not included in the imputation procedure. On a national basis for 2001, the imputed measure appears to have good national distributional properties in the base year.

Without going into the analytic details here, we found that the properties of the imputation degraded when applied to the 1998 CPS using the relationships among variables in the 2001 SCF. However, when using relationships among variables in the 1998 SCF the imputation regained its levels of distributional accuracy. We conclude that it is necessary that the SCF and the CPS be for the same year, since some of the relationships used in the imputation are more associational than behavioral or causal. This is the reason that the base year of the imputation and the base year of the wealth transfer analysis is 2001, the most recent vintage of SCF data.

Although the imputation reproduces the distribution of wealth nationally, there was no guarantee that it would do so for states and metropolitan areas. Clearly, since the imputed measure is derived from the income, home ownership, and demographic characteristics specific to each state and metropolitan area, a case can be made that it should be a good estimate of the wealth of these states and metropolitan areas. We looked at work on the distribution of wealth by states conducted by Barry Johnson and his colleagues at the Statistics of Income (SOI) Division of the IRS [Johnson and Schreiber, 1998]. This work used the value of estates from federal estate filings together with mortality rates and state demographic profiles from the Bureau of Census to estimate wealth in the state of filing. The rank order correlation for state wealth generated by the SOI technique and our imputed measure was near zero – the two measures were uncorrelated. However, in 1996 Robert and Jon Haveman estimated wealth at the state level based on asset and debt information collected as part of the Survey of Income and Program Participation (SIPP) [Haveman and Haveman, 1996]. The rank order correlation between the Haveman measure from 1996 and our imputed measure for 2001 was 0.67 – a fairly close relationship given the intervening years and the fact that SIPP has oversamples of low income households but no oversample of high wealth households. The Haveman measure also had near zero rank order correlation with states ranked by the SOI measure of wealth. We concluded that the SOI measure may not be an effective measure for generating the entire distribution of wealth for the entire population of a state and that our imputed measure was superior at least with respect to generating state distributions.

As a final assessment of the imputed measure we applied it to states and metropolitan areas in New England. It agreed with our perceptions of wealth in these states and metropolitan areas. This constituted a minimal criterion rather than strong evidence of regional accuracy of the measure. However, the measure passed this minimal test.

In summary our imputed measure replicates the national distribution of household wealth very closely, is based on population and household characteristics measured in the CPS for states and metropolitan areas, and closely agrees with the only other study we found

based on household survey data. We conclude the imputed measure appears to be a good measure for generating the distribution of household wealth for states and large metropolitan areas.

Calibrating the Microdata File to North Dakota

The process of developing the microdata file for North Dakota involves marrying the information from three sources: (1) the national relationships among wealth and inheritance variables from the 2001 SCF, (2) the wealth and demographic distributions for North Dakota from the CPS, and (3) the aggregate national wealth totals from the Flow of Funds Accounts published by the Federal Reserve.

In our estimates of wealth transfer we have reconciled the aggregate amount of household wealth derived from the SCF with an independent, more comprehensive estimate from the Flow of Funds Accounts. We assume that the Flow of Funds estimate is more accurate at the aggregate level than the survey estimate due to variations of sampling. Since very high wealth holders (households with more than $50 million in wealth) are relatively rare, the proportion included in the sample varies from year to year, and their wealth is so large that even modest variations in the proportions of high wealth holders in the sample has an effect on the estimate of aggregate wealth derived from the survey. In 2001 we adjusted the shape of the extreme tails of the SCF wealth distribution to a weighted average shape of the distributions in 1992, 1995, 1998, and 2001 (counted twice). After this adjustment, the estimate of aggregate household wealth based on the survey estimate was within 2 percent of the estimate based on the Flow of Funds Accounts.

The imputed measure of wealth allowed us to estimate the overall distribution of household wealth for North Dakota and breakdowns of this distribution by demographic characteristics important to the estimation of wealth transfer (i.e., age, marital status, race, and gender of not married). The imputed measure, however, is less accurate at the household level (since we had emphasized distributional accuracy over household accuracy when developing the imputation measure). In contrast, the SCF measures household wealth and household demographic characteristics at a national level, but its distributions of both household wealth and demographic characteristics do not match those for North Dakota. We wanted to calibrate the microdata file for North Dakota in such a manner that it would combine the North Dakota distributional properties with the household accuracy of the SCF. Since the SCF and CPS were both describing the population in 2001, we married the data from both files by mapping the SCF into the North Dakota distributions as derived from the CPS (with the imputed measure of wealth). The resulting file, adjusted for different sample sizes, constitutes the North Dakota microdata file, which was used by the WTMM to produce the estimates of wealth transfer for North Dakota. This method of marrying the two sets of data has three beneficial properties: (1) it reestablished the accuracy of wealth in relation to demographic characteristics at the household level; (2) it maintained the distributions based on the CPS; (3) it contained all the variables (in addition to wealth) that are required by the WTMM to estimate wealth transfer.

Assessment of Calibration

The two most important distributions for the estimate of wealth transfer in North Dakota are (1) the distribution of household wealth in North Dakota, and (2) the distribution of average household wealth by age of head. These distributions were presented in the findings section. A comparison of these distributions for North Dakota reveals that the distributions based on the remapped file (used to produce the wealth transfer estimates) differ by less than 0.2% from the corresponding distributions based on the CPS data for North Dakota. The remapped data faithfully reproduced the distributions of household wealth based on the imputed wealth measures for North Dakota households in the CPS sample.

The WTMM

The Wealth Transfer Microsimulation Model (WTMM) was designed and developed at CWP (then known as the Social Welfare Research Institute) at Boston College. Updated and expanded in the past six months, the model simulates the number and value of final estates for households that existed in 2001 during a 55 year period, which in this analysis is 2001 through 2055. The model was further adapted to estimate wealth transfer in North Dakota through the development and calibration of its microdata file and some relatively minor modifications for the smaller number of households in North Dakota as compared with the nation.

The WTMM incorporates the concept of final estate. A final estate is an estate without a surviving spouse – that is, the estate of a widowed, divorced, or never married decedent. When one of two spouses die the WTMM assumes that the wealth of the decedent is transferred to the surviving spouse. In this case a final estate occurs only when the surviving spouse dies. A final estate also occurs at the death of all other heads of household (i.e., never married, divorced, or widowed heads of household)

The WTMM assumes that household wealth grows along secular trends consistent with growth in the gross domestic product of the economy. The rates of growth define each of three scenarios (2%, 3%, and 4% rates of secular growth, respectively). A major assumption of the analysis is that there will be no sustained period of major economic downturn or upturn in North Dakota during the 55 year period of the analysis (2001 through 2055). There will, of course, be economic cycles in North Dakota during this period. The WTMM assumes only that none of these cycles will result in a long period (5 years or more) of sustained economic depression or booming economic growth.

The WTMM does not generate births, marriages, or divorces nor does it develop new household businesses nor divest the household of old businesses in the course of the simulation. It does, of course, assume that people in North Dakota die at the 2001 national rates (by age, gender, and race) published by the National Center for Health Statistics based on data from the Center of Disease Control and Prevention.

The WTMM does assume that there are variations in the rate of growth in household wealth, depending on the age of head. These life cycle variations are due to periods of accelerated rates of accumulation, periods of distribution, variations in savings rates, variations in consumption rates, drawdown of assets at the end of their lifecycle for households of modest means, and gifting of assets predominantly among affluent and wealthy households. The WTMM assumes that for the next 55 years the pattern of life cycle variations in the rate of growth in household wealth is represented by the current pattern estimated from data from the 1992, 1995, 1998, and 2001 SCF. In particular, it assumes there will be no major increase or decrease in the amounts or prevalence of inter vivos gifts (such as charitable remainder trusts) during the period.

The WTMM applies the mortality rates, secular growth rates, and life cycle variations to each household to estimate the number and value of final estates. For each final estate, its value is distributed to government, charity, heirs, and estate costs based on historical patterns. These patterns depend on the asset value of the estate. They are based primarily on data from federal estate tax filings for 1992 through 2001. The pattern indicates that as asset levels of estates increase, the proportion of the value of the estate bequeathed to charity increases substantially to an average of 38% for estates with assets of $20 million or more. The WTMM assumes that the national historical pattern, adjusted for changes in the estate tax law, holds for North Dakota during the period of the simulation.

The expanded version of the WTMM modifies the historical proportions of the value of estates distributed to government by an adjustment based on changed estate tax liability based on current estate tax law as reflected in The Economic Growth and Tax Relief Reconciliation Act of 2001. Specifically the WTMM estimates the government share of the estate based on its asset value and the historical proportion paid in estate taxes. The WTMM then calculates the estate tax liability under estate tax provisions in effect prior to 2001 and estate tax provisions in effect for the year being simulated. The proportion of new to old tax liability is applied to the historical estimate of estate taxes paid (which reduces this amount for estates that paid estate taxes). The resulting reduction in estate taxes paid is allocated as increases to charity and heirs, proportional to the historical percentages distributed to charity and heirs for the given household. This allocation is consistent with the proposition that reductions in the estate tax will increase charitable giving [Schervish, 2001].

The expanded WTMM estimates wealth transfer by race. Because of small sample sizes, however, breakdowns of wealth transfer estimates by race are unreliable for North Dakota and are not contained in this report.

The expanded WTMM projects inter vivos charitable giving along secular trend. The secular trend is the same as that used for growth in household wealth in the scenario. In each year of the analysis, households that have survived in that year are assumed to make inter vivos contributions equal to their prior year contributions times the secular growth rate for the scenario.

The WTMM runs in constant (inflation adjusted) dollars for 2001. All internal calculations and all estimates are calculated in 2001 dollars. These values have been transformed to constant (inflation adjusted) 2003 dollars prior to presentation in this report. All dollar amounts in this report are constant 2003 dollars.

The WTMM for North Dakota estimates the amount of wealth transferred during the 55 year period by households residing in North Dakota in 2001. It needs to be interpreted with respect to this group of households. We note that not all of this wealth will necessarily be transferred to charities and heirs located in North Dakota, some will be transferred to charities and heirs located outside North Dakota. Moreover, some households residing in North Dakota in 2001 may move out of North Dakota prior to the deaths of the heads of household and consequently prior to the transfer of wealth. The wealth transfer model assesses the capacity of the 2001 population of North Dakota to transfer wealth and its potential capacity for charitable giving.

Data and Parameters

Via its microdata file, WTMM uses the relevant demographic characteristics for North Dakota households derived from the CPS. It uses distribution of wealth derived from the imputed measure of wealth, which in turn depends on the detailed income components and demographic characteristics of North Dakota households as contained in the CPS. The construction of the microdata file has been described previously in this report.

In addition to the North Dakota microdata file, the WTMM uses parameters based on national statistics. It uses the final mortality rates for 2001 published by the National Center for Health Statistics based on data from the Center of Disease Control and Prevention. It uses historical data from the Statistics of Income Division of the Internal Revenue Service. This data consists of average patterns (1992-2001) of distribution of estates, net of surviving spouse deductions, where the distributions are defined in terms of the percentage of the net value distributed to estate fees, charitable deductions, estate taxes, and heirs. The WTMM also uses life cycle variations in the growth of wealth calculated from the 1992, 1995, 1998, and 2001 SCF.

Scenarios

The estimates of wealth transfer and its potential for charitable giving have been calculated for three scenarios, differentiated by the rate of secular growth in household wealth. The low growth scenario assumes a 2% real (inflation adjusted) rate of secular growth and lower than average rates of life cycle savings. The middle growth scenario assumes a 3% real rate of secular growth and average rates of life cycle savings. The high growth scenario assumes a 4% real rate of secular growth and above average rates of life cycle savings

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TABLES

NORTH DAKOTA

Table 1
Distribution of Household Wealth
North Dakota and Nation

Household Net Worth	Number of Households (thousands)		Percent of Households		Average HH Net Worth (thousands)		Aggregate HH Net Worth (millions)		Percent HH Net Worth		Average Age of Head (years)	
	North Dakota	Nation	North Dakota	Nation	North Dakota	Nation	North Dakota	Nation	North Dakota	Nation	North Dakota	Nation
Negative or Zero	19.45	11,058.46	7.44%	10.38%	($16.2)	($8.6)	($315)	($95,492)	-0.3%	-0.2%	34.8	37.9
$1 to $199,999	168.71	60,053.11	64.50%	56.40%	$66.6	$62.3	$11,236	$3,740,667	12.2%	9.1%	48.1	46.8
$200,000 to $499,999	42.02	19,181.12	16.07%	18.01%	$286.3	$322.1	$12,030	$6,178,229	13.0%	15.0%	55.0	54.2
$500,000 to $999,999	19.78	9,061.98	7.56%	8.51%	$697.3	$695.9	$13,792	$6,306,067	14.9%	15.3%	57.7	56.7
$1,000,000 to $4,999,999	9.00	6,068.77	3.44%	5.70%	$1,900.1	$1,911.9	$17,097	$11,602,790	18.5%	28.2%	55.9	57.6
$5,000,000 to $9,999,999	1.57	648.11	0.60%	0.61%	$7,483.4	$7,132.8	$11,739	$4,622,811	12.7%	11.2%	64.5	56.3
$10,000,000 to $19,999,999	0.38	288.45	0.14%	0.27%	$14,835.8	$13,442.7	$5,605	$3,877,537	6.1%	9.4%	60.8	58.3
$20,000,000 or More	0.66	126.50	0.25%	0.12%	$31,986.7	$39,450.8	$21,179	$4,990,330	22.9%	12.1%	65.6	60.4
ALL	261.57	106,486.49	100%	100%	$353.1	$387.1	$92,363	$41,222,940	100.0%	100.0%	49.4	48.8

All dollar values are in 2005 dollars.
Calculated at the Center on Wealth and Philanthropy at Boston College.

Table 2
Distribution of Household Wealth Among Households with Positive Wealth
North Dakota

Household Net Worth	Number of Households (thousands)	Percent of Households	Average HH Net Worth (thousands)	Aggregate HH Net Worth (millions)	Percent HH Net Worth	Cumulative Percent of HHs		Cumulative Percent of Net Worth	
	North Dakota	North Dakota	North Dakota	North Dakota	North Dakota	North Dakota	Nation	North Dakota	Nation
$1 to $199,999	168.71	69.68%	$66.6	$11,236	12.12%	100.00%	100.00%	100.00%	100.00%
$200,000 to $499,999	42.02	17.36%	$286.3	$12,030	12.98%	30.32%	37.07%	87.88%	90.95%
$500,000 to $999,999	19.78	8.17%	$697.3	$13,792	14.88%	12.96%	16.97%	74.90%	75.99%
$1,000,000 to $4,999,999	9.00	3.72%	$1,900.1	$17,097	18.45%	4.79%	7.47%	60.02%	60.73%
$5,000,000 to $9,999,999	1.57	0.65%	$7,483.4	$11,739	12.67%	1.08%	1.11%	41.57%	32.65%
$10,000,000 to $19,999,999	0.38	0.16%	$14,835.8	$5,605	6.05%	0.43%	0.43%	28.90%	21.46%
$20,000,000 or More	0.66	0.27%	$31,986.7	$21,179	22.85%	0.27%	0.13%	22.85%	12.08%
ALL	242.12	100%	$382.8	$92,677	100.00%	-	-	-	-

All dollar values in 2005 dollars.
Calculated at the Center on Wealth and Philanthropy at Boston College.

Table 3
Distribution of Household Wealth
North Dakota and Nation

Age of Head	Number of Households (thousands)		Percent of Households		Average HH Net Worth (thousands)		Aggregate HH Net Worth (millions)		Percent HH Net Worth		Average Age of Head (years)	
	North Dakota	Nation	North Dakota	Nation	North Dakota	Nation	North Dakota	Nation	North Dakota	Nation	North Dakota	Nation
Under Age 40	91.5	35,521.3	35.0%	33.4%	$109.7	$117.7	$10,045	$4,179,244	10.9%	10.1%	30.3	30.7
40 to 59 Years	97.9	42,666.6	37.4%	40.1%	$363.6	$475.7	$35,592	$20,296,305	38.5%	49.2%	48.4	48.4
60 to 79 Years	47.6	22,986.6	18.2%	21.6%	$804.0	$637.9	$38,255	$14,662,072	41.4%	35.6%	69.4	69.3
80 Years or Older	24.6	5,312.0	9.4%	5.0%	$344.6	$392.6	$8,470	$2,085,318	9.2%	5.1%	85.4	84.4
ALL	261.6	106,486.5	100.0%	100.0%	$353.1	$387.1	$92,363	$41,222,940	100.0%	100.0%	49.4	48.8

All dollar values are in 2005 dollars.
Calculated at the Center on Wealth and Philanthropy at Boston College.

Table 4
LOW (2%) Secular Growth Scenario
North Dakota

Panel 1
2001-2020

	Neg or Zero	$1 to $999,999	$1 M to $4.9 M	$5 M to $9.9 M	$10 M to $19.9 M	$20 M or More	Total
Number of Estates	1,322.57 2.22%	55,151.02 92.46%	2,062 3.46%	535 0.90%	217 0.36%	359 0.60%	59,647 100.00%
Value of Estates	($15.40) - -	$8,720.73 27.71% 100.00%	$4,099 13.02% 100.00%	$4,226 13.43% 100.00%	$2,875 9.14% 100.00%	$11,564 36.75% 100.00%	$31,469 100.00% 100.00%
Estate Fees	$0.80 0.07% -	$307.31 27.88% 3.52%	$167 15.17% 4.08%	$174 15.76% 4.11%	$113 10.28% 3.94%	$340 30.84% 2.94%	$1,102 100.00% 3.50%
Estate Taxes	$0.00 0.00% -	$12 0.18% 0.14%	$677 10.19% 16.52%	$1,346 20.25% 31.84%	$1,012 15.22% 35.19%	$3,599 54.16% 31.12%	$6,645 100.00% 21.12%
Bequests to Charity	$0.00 0.00% -	$166 2.84% 1.91%	$300 5.12% 7.31%	$1,969 33.64% 564.48%	$486 8.30% 16.89%	$4,337 74.09% 37.51%	$5,854 100.00% 18.60%
Bequests to Heirs	$0.00 0.00% -	$8,235 46.05% 94.43%	$2,954 16.52% 72.08%	$15,748 88.06% 2142.19%	$1,265 7.07% 43.98%	$3,288 18.38% 28.43%	$17,883 100.00% 56.83%

Panel 2
2001-2055

	Neg or Zero	$1 to $999,999	$1 M to $4.9 M	$5 M to $9.9 M	$10 M to $19.9 M	$20 M or More	Total
Number of Estates	5,736.71 2.69%	191,962.48 89.94%	12,193 5.71%	1,938 0.91%	703 0.33%	897 0.42%	213,430 100.00%
Value of Estates	($110.53) - -	$31,327 27.34% 100.00%	$26,078 22.76% 100.00%	$14,071 12.28% 100.00%	$9,546 8.33% 100.00%	$33,688 29.40% 100.00%	$114,598 100.00% 100.00%
Estate Fees	$1.92 0.05% -	$1,107 26.96% 3.53%	$1,066 25.97% 4.09%	$578 14.08% 4.11%	$374 9.10% 3.92%	$979 23.84% 2.91%	$4,106 100.00% 3.58%
Estate Taxes	$0 0.00% -	$122 0.47% 0.39%	$5,550 21.34% 21.28%	$5,110 19.64% 36.32%	$3,821 14.69% 40.03%	$11,409 43.86% 33.87%	$26,012 100.00% 22.70%
Bequests to Charity	$0 0.00% -	$667 3.68% 2.13%	$1,872 10.32% 7.18%	$1,742 9.60% 12.38%	$1,538 8.48% 16.11%	$12,323 67.92% 36.58%	$18,142 100.00% 15.83%
Bequests to Heirs	$0 0.00% -	$29,431 44.29% 93.95%	$17,589 26.47% 67.45%	$6,641 9.99% 47.20%	$3,812 5.74% 39.94%	$8,977 13.51% 26.65%	$66,450 100.00% 57.99%

All dollar values are in millions of 2005 dollars.
Estimated at the Center on Wealth and Philanthropy at Boston College.

Table 5
MIDDLE (3%) Secular Growth Scenario
North Dakota

Panel 1
2001-2020

	Neg or Zero	$1 to $999,999	$1 M to $4.9 M	$5 M to $9.9 M	$10 M to $19.9 M	$20 M or More	Total
Number of Estates	1,290.67 2.16%	54,879.67 92.01%	2,276 3.82%	504 0.84%	295 0.49%	402 0.67%	59,647 100.00%
Value of Estates	($12.31) - -	$9,586.55 25.51% 100.00%	$4,944 13.15% 100.00%	$3,952 10.52% 100.00%	$3,831 10.19% 100.00%	$15,280 40.66% 100.00%	$37,580 100.00% 100.00%
Estate Fees	$0.92 0.07% -	$338.05 26.09% 3.53%	$202 15.59% 4.09%	$162 12.53% 4.11%	$150 11.61% 3.93%	$442 34.11% 2.89%	$1,296 100.00% 3.45%
Estate Taxes	$0.00 0.00% -	$22 0.27% 0.23%	$867 10.43% 17.53%	$1,322 15.91% 33.46%	$1,326 15.96% 34.61%	$4,771 57.42% 31.22%	$8,308 100.00% 22.11%
Bequests to Charity	$0.00 0.00% -	$196 2.58% 2.05%	$368 4.84% 7.45%	$514 6.76% 13.01%	$667 8.76% 17.40%	$5,861 77.06% 38.36%	$7,606 100.00% 20.24%
Bequests to Heirs	$0.00 0.00% -	$9,030 44.30% 94.20%	$3,506 17.20% 70.93%	$1,953 9.58% 49.43%	$1,688 8.28% 44.06%	$4,206 20.63% 27.53%	$20,384 100.00% 54.24%

Panel 2
2001-2055

	Neg or Zero	$1 to $999,999	$1 M to $4.9 M	$5 M to $9.9 M	$10 M to $19.9 M	$20 M or More	Total
Number of Estates	4,547 2.13%	184,176 86.29%	18,443 8.64%	3,199 1.50%	1,452 0.68%	1,612 0.76%	213,430 100.00%
Value of Estates	($66) - -	$39,466 19.19% 100.00%	$44,745 21.76% 100.00%	$22,315 10.85% 100.00%	$19,912 9.68% 100.00%	$79,304 38.56% 100.00%	$205,676 100.00% 100.00%
Estate Fees	$2 0.02% -	$1,407 19.46% 3.57%	$1,842 25.46% 4.12%	$916 12.67% 4.11%	$776 10.73% 3.90%	$2,290 31.66% 2.89%	$7,233 100.00% 3.52%
Estate Taxes	$0 0.00% -	$452 0.82% 1.15%	$11,044 19.96% 24.68%	$8,364 15.11% 37.48%	$8,116 14.67% 40.76%	$27,365 49.45% 34.51%	$55,342 100.00% 26.91%
Bequests to Charity	$0 0.00% -	$1,027 2.60% 2.60%	$3,516 8.90% 7.86%	$2,727 6.90% 12.22%	$3,248 8.22% 16.31%	$28,989 73.38% 36.55%	$39,506 100.00% 19.21%
Bequests to Heirs	$0 0.00% -	$36,579 35.29% 92.69%	$28,344 27.34% 63.34%	$10,308 9.94% 46.19%	$7,772 7.50% 39.03%	$20,660 19.93% 26.05%	$103,662 100.00% 50.40%

All dollar values are in millions of 2005 dollars.
Estimated at the Center on Wealth and Philanthropy at Boston College.

Table 6
HIGH (4%) Secular Growth Scenario
North Dakota

Panel 1
2001-2020

	Neg or Zero	$1 to $999,999	$1 M to $4.9 M	$5 M to $9.9 M	$10 M to $19.9 M	$20 M or More	Total
Number of Estates	1,074.66 1.80% -	54,787.67 91.85%	2,462 4.13%	511 0.86%	370 0.62%	441 0.74%	59,647 100.00%
Value of Estates	($11.20) - -	$9,723.49 22.16% 100.00%	$5,592 12.74% 100.00%	$3,894 8.87% 100.00%	$4,936 11.25% 100.00%	$19,750 45.00% 100.00%	$43,885 100.00% 100.00%
Estate Fees	$0.79 0.05% -	$343.07 22.92% 3.53%	$229 15.30% 4.09%	$160 10.69% 4.11%	$194 12.93% 3.92%	$570 38.10% 2.89%	$1,497 100.00% 3.41%
Estate Taxes	$0.00 0.00% -	$31 0.30% 0.32%	$1,044 10.06% 18.68%	$1,335 12.86% 34.29%	$1,709 16.46% 34.63%	$6,263 60.32% 31.71%	$10,383 100.00% 23.66%
Bequests to Charity	$0.00 0.00% -	$201 2.11% 2.07%	$429 4.49% 7.66%	$498 5.21% 12.78%	$869 9.11% 17.61%	$7,546 79.08% 38.21%	$9,543 100.00% 21.75%
Bequests to Heirs	$0.00 0.00% -	$9,148 40.70% 94.08%	$3,890 17.31% 69.57%	$1,901 8.46% 48.82%	$2,164 9.63% 43.84%	$5,371 23.90% 27.20%	$22,474 100.00% 51.21%

Panel 2
2001-2055

	Neg or Zero	$1 to $999,999	$1 M to $4.9 M	$5 M to $9.9 M	$10 M to $19.9 M	$20 M or More	Total
Number of Estates	3,376.91 1.58% -	172,021 80.60%	25,972 12.17%	6,563 3.07%	2,634 1.23%	2,863 1.34%	213,430 100.00%
Value of Estates	($49) - -	$39,611 10.26% 100.00%	$65,916 17.08% 100.00%	$45,630 11.82% 100.00%	$35,619 9.23% 100.00%	$199,275 51.63% 100.00%	$386,002 100.00% 100.00%
Estate Fees	$1.54 0.01% -	$1,418 10.81% 3.58%	$2,718 20.73% 4.12%	$1,869 14.25% 4.10%	$1,381 10.53% 3.88%	$5,726 43.67% 2.87%	$13,113 100.00% 3.40%
Estate Taxes	$0 0.00% -	$431 0.36% 1.09%	$17,508 14.66% 26.56%	$17,462 14.62% 38.27%	$14,634 12.25% 41.08%	$69,425 58.12% 34.84%	$119,460 100.00% 30.95%
Bequests to Charity	$0 0.00% -	$1,111 1.22% 2.81%	$5,495 6.03% 8.34%	$5,617 6.17% 12.31%	$5,930 6.51% 16.65%	$72,924 80.07% 36.59%	$91,077 100.00% 23.59%
Bequests to Heirs	$0 0.00% -	$36,650 22.57% 92.53%	$40,196 24.75% 60.98%	$20,682 12.74% 45.33%	$13,674 8.42% 38.39%	$51,200 31.53% 25.69%	$162,404 100.00% 42.07%

All dollar values are in millions of 2005 dollars.
Estimated at the Center on Wealth and Philanthropy at Boston College.

Table 7
Wealth Transfer and Inter Vivos Giving by Household Wealth Category
LOW (2%) Secular Growth Scenario
North Dakota

Household Wealth Category	Number of Households	Household Wealth (Millions)	Number of Final Estates	Value of Final Estates (Millions)	Number of Surviving Households	Wealth of Surviving Households (Millions)	Inter Vivos Contributions (Millions)	Charitable Bequests (Millions)	Total of Charitable Bequests and Inter Vivos Giving (Millions)	Percentage of Total Charitable Giving	Cumulative Percentage of Total Charitable Giving	Cumulative Percentage of Households
2001	**2001**	**2001**	**55 Years**	**55 Years**	**2055**	**2055**	**55 Years**	**55 Years**	**55 Years**	**55 Years**	**55 Years**	**2001**
Negative or Zero	19,454	($315)	11,959	$286	7,495	$437	$528	$18	$546	1.4%	100.0%	100.0%
$1 to $199,999	168,707	$11,236	133,147	$19,766	35,560	$14,676	$6,989	$2,040	$9,029	22.4%	98.6%	92.6%
$200,000 to $499,999	42,024	$12,030	38,746	$12,859	3,278	$2,889	$3,939	$446	$4,385	10.9%	76.2%	28.1%
$500,000 to $999,999	19,780	$13,792	18,560	$13,134	1,220	$2,476	$2,037	$539	$2,576	6.4%	65.3%	12.0%
$1,000,000 to $4,999,999	8,998	$17,097	8,498	$22,377	499	$2,300	$2,947	$2,067	$5,014	12.5%	58.9%	4.4%
$5,000,000 to $9,999,999	1,569	$11,739	1,515	$13,742	54	$849	$1,390	$1,954	$3,344	8.3%	46.5%	1.0%
$10,000,000 or More	1,040	$26,784	1,005	$32,435	35	$1,745	$4,296	$11,078	$15,374	38.2%	38.2%	0.4%
Total	261,570	$92,363	213,430	$114,598	48,141	$25,372	$22,125	$18,142	$40,267	100%		

All dollar values are in millions of 2005 dollars.
Calculated at the Center on Wealth and Philanthropy at Boston College.

Table 8
Wealth Transfer and Inter Vivos Giving by Household Wealth Category
MIDDLE (3%) Secular Growth Scenario
North Dakota

Household Wealth Category	Number of Households	Household Wealth (Millions)	Number of Final Estates	Value of Final Estates (Millions)	Number of Surviving Households	Wealth of Surviving Households (Millions)	Inter Vivos Contributions (Millions)	Charitable Bequests (Millions)	Total of Charitable Bequests and Inter Vivos Giving (Millions)	Percentage of Total Charitable Giving	Cumulative Percentage of Total Charitable Giving	Cumulative Percentage of Households
2001	**2001**	**2001**	**55 Years**	**55 Years**	**2055**	**2055**	**55 Years**	**55 Years**	**55 Years**	**55 Years**	**55 Years**	**2001**
Negative or Zero	19,454	($315)	11,959	$750	7,495	$1,143	$697	$58	$755	1.1%	100.0%	100.0%
$1 to $199,999	168,707	$11,236	133,147	$38,264	35,560	$40,245	$9,081	$5,116	$14,197	21.1%	98.9%	92.6%
$200,000 to $499,999	42,024	$12,030	38,746	$23,917	3,278	$8,856	$4,960	$1,611	$6,571	9.8%	77.8%	28.1%
$500,000 to $999,999	19,780	$13,792	18,560	$24,164	1,220	$6,980	$2,542	$1,736	$4,279	6.4%	68.0%	12.0%
$1,000,000 to $4,999,999	8,998	$17,097	8,498	$41,192	499	$6,273	$3,648	$5,590	$9,238	13.7%	61.6%	4.4%
$5,000,000 to $9,999,999	1,569	$11,739	1,515	$23,128	54	$2,540	$1,626	$5,422	$7,048	10.5%	47.9%	1.0%
$10,000,000 or More	1,040	$26,784	1,005	$54,261	35	$5,174	$5,141	$19,974	$25,115	37.4%	37.4%	0.4%
Total	261,570	$92,363	213,430	$205,676	48,141	$71,211	$27,696	$39,506	$67,202	100.0%		

All dollar values are in millions of 2005 dollars.
Calculated at the Center on Wealth and Philanthropy at Boston College.

Table 9
Wealth Transfer and Inter Vivos Giving by Household Wealth Category
HIGH (4%) Secular Growth Scenario
North Dakota

Household Wealth Category	Number of Households	Household Wealth (Millions)	Number of Final Estates	Value of Final Estates (Millions)	Number of Surviving Households	Wealth of Surviving Households (Millions)	Inter Vivos Contributions (Millions)	Charitable Bequests (Millions)	Total of Charitable Bequests and Inter Vivos Giving (Millions)	Percentage of Total Charitable Giving	Cumulative Percentage of Total Charitable Giving	Cumulative Percentage of Households
2001	**2001**	**2001**	**55 Years**	**55 Years**	**2055**	**2055**	**55 Years**	**55 Years**	**55 Years**	**55 Years**	**55 Years**	**2001**
Negative or Zero	19,454	($315)	11,959	$1,602	7,495	$2,799	$936	$209	$1,144	0.9%	100.0%	100.0%
$1 to $199,999	168,707	$11,236	133,147	$81,206	35,560	$118,783	$12,022	$15,437	$27,460	21.7%	99.1%	92.6%
$200,000 to $499,999	42,024	$12,030	38,746	$43,724	3,278	$21,587	$6,353	$5,174	$11,527	9.1%	77.4%	28.1%
$500,000 to $999,999	19,780	$13,792	18,560	$45,791	1,220	$17,920	$3,225	$5,589	$8,814	7.0%	68.2%	12.0%
$1,000,000 to $4,999,999	8,998	$17,097	8,498	$74,697	499	$16,560	$4,587	$15,685	$20,272	16.0%	61.3%	4.4%
$5,000,000 to $9,999,999	1,569	$11,739	1,515	$41,971	54	$7,285	$1,936	$13,155	$15,091	11.9%	45.2%	1.0%
$10,000,000 or More	1,040	$26,784	1,005	$97,012	35	$15,578	$6,258	$35,829	$42,087	33.3%	33.3%	0.4%
Total	261,570	$92,363	213,430	$386,002	48,141	$200,512	$35,318	$91,077	$126,395	100.0%		

All dollar values are in millions of 2005 dollars.
Calculated at the Center on Wealth and Philanthropy at Boston College.

Table 10
Projections for Wealth Transfer and Charitable Contributions

North Dakota

20-Year Period from 2001-2020 (2005 Purchasing Power)

	Low Estimate (2% Secular Growth)* ($2005 in Billions)	Middle Estimate (3% Secular Growth)* ($2005 in Billions)	High Estimate (4% Secular Growth)* ($2005 in Billions)
Total Wealth Transfer	$31.5	$37.6	$43.9
Bequests to Charity**	$5.9	$7.6	$9.5
Inter-Vivos Giving by Individuals***	$10.6	$11.6	$12.7
Total Charitable Contributions	$16.5	$19.2	$22.2
% of Total Contributed by Millionaires	66.1%	69.4%	72.4%

55-Year Period from 2001-2055 (2005 Purchasing Power)

	Low Estimate (2% Secular Growth)* ($2005 in Billions)	Middle Estimate (3% Secular Growth)* ($2005 in Billions)	High Estimate (4% Secular Growth)* ($2005 in Billions)
Total Wealth Transfer	$114.6	$205.7	$386.0
Bequests to Charity**	$18.1	$39.5	$91.1
Inter-Vivos Giving by Individuals***	$22.1	$27.7	$35.3
Total Charitable Contributions	$40.2	$67.2	$126.4
% of Total Contributed by Millionaires	66.9%	76.7%	86.7%

*Note: This table is calculated for secular trends of 2%, 3%, and 4% in growth rates of both real personal wealth and real inter-vivos giving. The actual real growth rate in inter-vivos giving was 1.61% in the 10 years from 1985 through 1995; 10.12% in the 5 years from 1995 through 2000; and 3.34% in the 19 years from 1985 through 2004.

**Note: Bequests to charity were estimated specifically for Boston by the Center on Wealth and Philanthropy, Boston College.

***Calculated by the Center on Wealth and Philanthropy based on data from the 2001 Survey of Consumer Finances.