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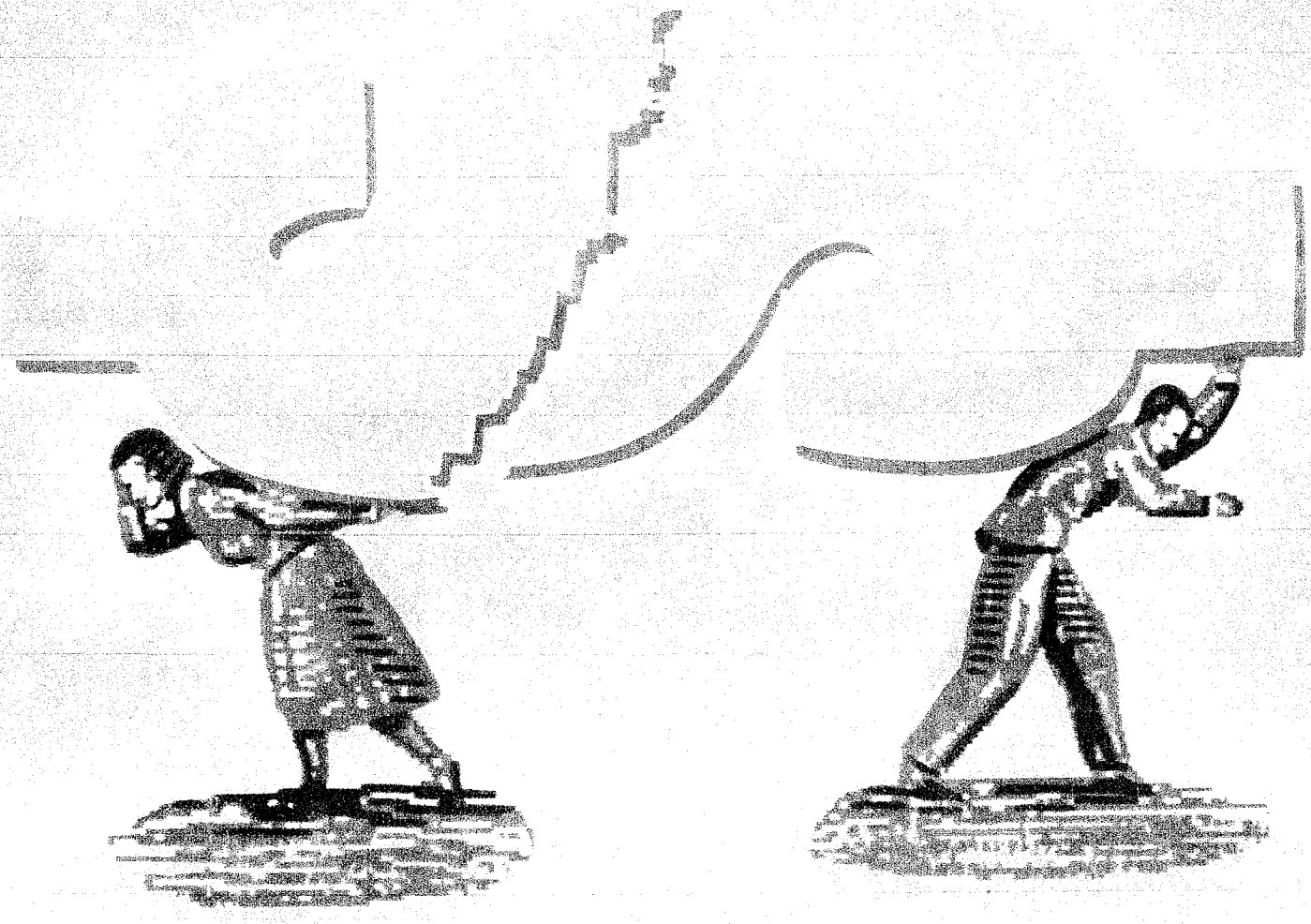
A Report to the Nation
Benjamin Scafidi, Principal Investigator

The Taxpayer Costs of Divorce and Unwed Childbearing

First-Ever Estimates for the Nation and All Fifty States



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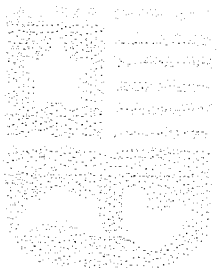

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Most discussion over marriage focuses on the role of marriage as a social, moral, or religious institution. But marriage is also an economic institution, a powerful creator of human and social capital. Increases in divorce and unwed childbearing have broad economic implications, including larger expenditures for the federal and state governments. This is the first-ever report that attempts to measure the taxpayer costs of family fragmentation for U.S. taxpayers in all fifty states. Among its findings: Even programs that result in very small decreases in divorce and unwed childbearing could yield big savings for taxpayers.

The report's principal investigator is Benjamin Scafidi, an economist in the J. Whitney Bunting School of Business at Georgia College & State University. The co-sponsoring organizations are the Institute for American Values, the Institute for Marriage and Public Policy, Georgia Family Council, and Families Northwest.

The co-sponsoring organizations are grateful to Chuck Stetson and Mr. and Mrs. John Fetz for their generous financial support of the project. The principal investigator is grateful to Deanie Waddell for her expert research assistance.

On the cover: Man and Woman Splitting Dollar *by Todd Davidson, Stock Illustration RF, Getty Images.*

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The Taxpayer Costs of Divorce and Unwed Childbearing

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Executive Summary

This report examines some of the costs to U.S. taxpayers of high rates of divorce and unmarried childbearing both at the national and state levels.

Why should legislators and policymakers care about marriage? Public debate on marriage in this country has focused on the "social costs" of family fragmentation (that is, divorce and unwed childbearing), and research suggests that these are indeed extensive. But marriage is more than a moral or social institution; it is also an economic one, a generator of social and human capital, especially when it comes to children.

Research on family structure suggests a variety of mechanisms, or processes, through which marriage may reduce the need for costly social programs. In this study, we adopt the simplifying and extremely cautious assumption that all of the taxpayer costs of divorce and unmarried childbearing stem from the effects that family fragmentation has on poverty, a causal mechanism that is well-accepted and has been reasonably well-quantified in the literature.

Based on the methodology, we estimate that family fragmentation costs U.S. taxpayers *at least $112 billion each and every year*, or more than $1 trillion each decade. In appendix B, we also offer estimates for the costs of family fragmentation for each state.

These costs arise from increased taxpayer expenditures for antipoverty, criminal justice, and education programs, and through lower levels of taxes paid by individuals who, as adults, earn less because of reduced opportunities as a result of having been more likely to grow up in poverty.

The $112 billion figure represents a "lower-bound" or minimum estimate. Given the cautious assumptions used throughout this analysis, we can be confident that current high rates of family fragmentation cost taxpayers *at least* $112 billion per year. The estimate of $112 billion per year is the total figure incurred at the federal, state, and local levels. Of these taxpayer costs, $70.1 billion are at the federal level, $33.3 billion are at the state level, and $8.5 billion are at the local level. Taxpayers in California incur the highest state and local costs at $4.8 billion, while taxpayers in Wyoming have the lowest state and local costs at $61 million.

If, as research suggests is likely, marriage has additional benefits to children, adults, and communities, and if those benefits are in areas other than increased income levels, then the actual taxpayer costs of divorce and unwed childbearing are likely much higher.

How should policymakers, state legislators, and others respond to the large taxpayer costs of family fragmentation? We note that even very small increases in stable marriage rates as a result of government programs or community efforts to strengthen marriage would result in very large savings for taxpayers. If the federal marriage initiative, for example, succeeds in reducing family fragmentation by just 1 percent, U.S. taxpayers will save an estimated $1.1 billion each and every year.

Because of the modest price tags associated with most federal and state marriage-strengthening programs, and the large taxpayer costs associated with divorce and unwed childbearing, even modest success rates would be cost-effective. Texas, for example, recently appropriated $15 million over two years for marriage education and other programs to increase stable marriage rates. If this program succeeds in increasing stably married families by just three-tenths of 1 percent, it will be cost-effective in its returns to Texas taxpayers.

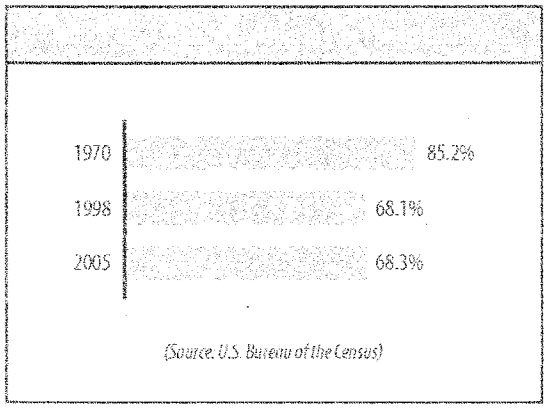
This report is organized as follows: Section I explains why policymakers may have an interest in supporting marriage. Sections II and III explain the methods used to estimate the taxpayer cost of family fragmentation by using evidence about the relationship between family breakdown and poverty. Section IV reveals the national estimate of the taxpayer cost. Estimated costs for individual states are found in appendix B.

Finally, a note to social scientists: Few structural estimates exist of the relationships needed to estimate the taxpayer costs of family fragmentation. Therefore, we have used indirect estimates based on the assumption that marriage has no independent effects on adults or children other than the effect of marriage on poverty.

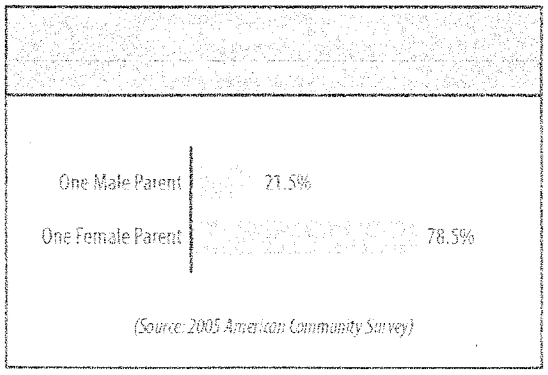
1. Why Should Government Care about Marriage?

Over the past 40 years, marriage has become less common and more fragile, and the proportion of children raised outside intact marriages has increased dramatically. Between 1970 and 2005, the proportion of children living with two married parents dropped from 85 percent to 68 percent, according to Census data. About three-quarters of children living with a single parent live with a single mother.

These important changes in family structure stem from two fundamental changes in U.S. residents' behavior regarding marriage: increases in unmarried childbearing and high rates of divorce.[1] More than a third of all U.S. children are now born outside of wedlock, including 25 percent of non-Hispanic white babies, 46 percent of Hispanic babies, and 69 percent of African American babies.[2] In 2004, almost 1.5 million babies were born to unmarried mothers.[3] Divorce rates, by contrast, after increasing in the 1960s and 1970s, appear to have declined modestly in recent years. The small decline in divorce after 1980, however, seems to have been offset by increases in unwed childbearing, as the percentage of children living with one parent increased steadily between 1970 and 1998 with only a small drop after 1998. Overall, divorce rates remain high relative to the period before 1970. Today's young adults in their prime childbearing years are less likely to get married, and many more U.S. children each year are born to unmarried mothers. Should U.S. taxpayers be concerned about these increases in family fragmentation, and if so, why?



(Source: U.S. Bureau of the Census)



(Source: 2005 American Community Survey)

Public debate on marriage in this country has focused on the "social costs" of increases in divorce and unmarried childbearing. Research suggests that the social costs are indeed extensive. When parents part, or fail to marry, their children seem to suffer from increased risks of poverty, mental illness, infant mortality, physical illness, juvenile delinquency and adult criminality, sexual abuse and other forms of family violence, economic hardship, substance abuse, and educational failure, such as increased risk of dropping out of school.[4]

But marriage is more than a moral or even social institution; it is also an economic one, a generator of social and human capital, especially when it comes to children. Not much attention has been focused to date on the hard, economic costs of family fragmentation, by which we mean not only the economic costs to affected individuals and families but also to the public purse.

There are good reasons for suspecting that taxpayer costs associated with family fragmentation are substantial: To the extent that the decline of marriage increases the number of children and adults eligible for and in need of government services, costs to taxpayers will grow. To the extent that increases in family fragmentation also independently drive social problems faced by communities—such as crime, domestic violence, substance abuse, and teen pregnancy—the costs to taxpayers of addressing these increasing social problems are also likely to be significant. Pointing out these concerns is not to "blame the victim," but rather to launch a serious effort to determine what these costs are. If these costs are deemed substantial, then it is worth thinking carefully about how these costs can be lowered so that resources can be freed for other useful purposes.

In 2000, a group of more than one hundred family scholars and civic leaders noted the range of public costs associated with family breakdown, concluding:

> Divorce and unwed childbearing create substantial public costs, paid by taxpayers. Higher rates of crime, drug abuse, education failure, chronic illness, child abuse, domestic violence, and poverty among both adults and children bring with them higher taxpayer costs in diverse forms: more welfare expenditure; increased remedial and special education expenses; higher day-care subsidies; additional child-support collection costs; a range of increased direct court administration costs incurred in regulating post-divorce or unwed families; higher foster care and child protection services; increased Medicaid and Medicare costs; increasingly expensive and harsh crime-control measures to compensate for formerly private regulation of adolescent and young-adult behaviors; and many other similar costs.
>
> While no study has yet attempted precisely to measure these sweeping and diverse taxpayer costs stemming from the decline of marriage, current research suggests that these costs are likely to be quite extensive.[5]

In response to public concerns about the negative consequences of divorce and unmarried childbearing for child well-being, the federal government and many states have modestly funded programs aimed at strengthening marriage.

Since the mid-1990s, at least nine states have publicly adopted a goal of strengthening marriage, and seven states have dedicated funding (often using a very small

portion of their federal TANF, or welfare, funds) to various programs designed to strengthen marriage.[6]

For example, Oklahoma offers marriage skills classes throughout the state, providing the courses at no charge to low-income participants. In 2007, Texas legislators mandated that a minimum of 1 percent of the federal TANF block grant to the state be spent on marriage promotion activities, providing an estimated $15 million per year for two years.[7]

In addition to the TANF block grants, the Deficit Reduction Act of 2005 provided an additional $150 million annually for a Healthy Marriage and Responsible Fatherhood Program, administered by the Administration for Children and Families of the Department of Health and Human Services. These monies were specifically allocated for programs designed to help couples form and sustain healthy marriage relationships, with up to $50 million available for responsible fatherhood promotion.[8] Overall, less than 1 percent of TANF dollars are spent annually on healthy marriage programming.

Evaluation is under way to determine the effectiveness of these programs. In the meantime, this study provides the first rigorous estimate of the costs to taxpayers of the decline of marriage, both at the national level and the state level.[9]

II. How Might Marriage Affect Taxpayers? Empirical Literature Review

Research shows that many of the social problems and disadvantages addressed by federal and state government programs occur more frequently among children born to and/or raised by single parents than among children whose parents get and stay married.[10] The potential risks to children raised in fragmented families that have been identified in the literature include poverty, mental illness, physical illness, infant mortality, lower educational attainment (including greater risk of dropping out of high school), juvenile delinquency, conduct disorders, adult criminality, and early unwed parenthood. In addition, family fragmentation seems to have negative consequences for adults as well, including lower labor supply, physical and mental illness, and a higher likelihood of committing or falling victim to crime.[11]

To the extent that family fragmentation *causes* negative outcomes for children and adults, it also leads to higher costs to taxpayers through higher spending on antipoverty programs and throughout the justice and educational systems, as well as losses to government coffers in foregone tax revenues.

A crucial issue for this study is to ascertain to what extent the associations between family fragmentation and these negative outcomes are *causal*. There are of course powerful selection effects into marriage, divorce, and unwed childbearing, and some portion of the negative outcomes for children in nonmarital families are caused by habits, traits, circumstances, and disadvantages among adults that may also lead to divorce and nonmarital childbearing.[12]

For example, a dating couple facing an unexpected pregnancy may choose not to marry because the man is unemployed. Depending on how one looks at it, the out-of-wedlock birth may be said to result from the father's low-earnings or the mother and child's poverty may be said to result from the out-of-wedlock birth. Untangling "what causes what" is a challenge faced by many researchers who study the family.

How Much Does Marriage Reduce Poverty?

Researchers respond to this challenge by using a variety of methods to control for unobserved selection effects (that is, to account for other factors that could be explaining the finding) and to tease out causal relationships (that is, to untangle "what causes what"). In this case, the idea that family fragmentation contributes to child poverty has been studied extensively and is widely accepted.[13] Marriage can help to reduce poverty because there are two potential wage earners in the home, because of economies of scale in the household, and possibly also because of changes in habits, values, and mores that may occur when two people marry.[14]

In addition, there is recent, intriguing research that uses naturally occurring evidence to examine whether family fragmentation causes poverty. Elizabeth Ananat and Guy Michaels, for example, use an unusual predictor of whether a married couple will stay married (the predictor is whether their firstborn child is a male, since research has shown that divorce is less likely when this is the case). With this predictor they are able to study married couples who do and do not divorce and conclude that "divorce significantly increases the odds that a woman with children is poor."[15] Their analysis suggests that almost all of the increase in poverty observed among divorced mothers is caused by the divorce. Less than 6 percent of these women and children live in poverty if their first marriage is intact, while more than 24 percent of divorced women with children are living in poverty.[16]

Another area of research uses national data to simulate changes in family structure. For example, Robert Lerman used the Current Population Survey (CPS) and simulated "plausible" marriages by matching single mothers to single males who were the same race and were similar in age and education levels. He found that if these theoretical marriages occurred they would reduce poverty by 80 percent among these single-mother households.[17] Adam Thomas and Isabel Sawhill used a similar

approach and concluded that marriage would reduce poverty among single mothers substantially, by about 65 percent.[18]

Both Lerman's and Thomas and Sawhill's estimates assume that getting married has no effect on men's labor supply (and therefore male earnings). Most research on this topic, by contrast, finds that marriage leads to a modest increase in male labor supply, which would further reduce poverty rates. David Ribar did a useful survey of the literature on the impact of marriage on men's earnings.[19]

Other research that seeks to analyze the impact of marriage on poverty consists of studies that conduct a "shift-share analysis," which show what poverty rates would be if the proportion of households in different family structures remained constant over a given time period. Examples of this research include work done by Hilary Hoynes, Marianne Page, and Ann Stevens and by Rebecca Blank and David Card. These studies find that over 80 percent of poverty is related to changes in family structure, such as increases in households headed by single mothers.[20]

One cautionary note, however, is that these studies could overstate the impact of family structure on income because they do not account for the likelihood that, as Thomas and Sawhill say, "single-parent families possess characteristics that disproportionately predispose them to poverty."[21] For example, persons struggling with mental illness, substance abuse, or criminal records might find it difficult both to hold a job *and* to get or stay married. Nevertheless, even studies that attempt to control for these factors strongly suggest that family fragmentation negatively affects the income available to single parents and their children.

Does Family Fragmentation Increase Crime?

In addition to poverty, family fragmentation also appears to have large effects on rates of crime, according to three separate bodies of literature.

For example, research that considers entire communities has found a strong association between the percent of single-parent households and crime rates. In one case, Robert O'Brien and Jean Stockard found that increases in the proportion of adolescents born outside of marriage were linked to significant increases in homicide arrest rates for fifteen to nineteen year olds.[22]

A second large body of literature—investigations of individual families using variables, such as parent-child relationships or mothers' education levels—finds that a child raised outside of an intact marriage is more likely to commit crimes as a teen and young adult. In one study Cynthia Harper and Sara McLanahan control for a large number of demographic and other characteristics and find that boys reared in single-mother households and cohabitating (or "living together") households are

typically more than twice as likely to commit a crime that leads to incarceration, when compared to children who grow up with both their parents.[23]

Finally, a body of literature that analyzes future crime rates of juvenile offenders shows that stable marriages reduce the likelihood that adult males will commit additional crimes. With a unique data set of former juvenile offenders spanning several decades, Robert Sampson and his colleagues find evidence that marriage leads these former juvenile offenders to commit fewer crimes as adults, even when controlling for unobserved selection effects.[24]

Overall, research on family structure suggests a variety of ways marriage might reduce the demand for costly public services. A stable marriage might reduce the likelihood of domestic violence, alcohol abuse, and parental depression, and might increase the human and social capital available to children in the home in ways that (independent of income) improve children's educational and other outcomes. Two parents in the home might provide more effective supervision of adolescents, reducing the risk of delinquent activities. At the same time, divorce may be sometimes desirable. For example, about one-third of marriages ending in divorce are "high conflict" marriages, and children, on average, appear to be better off when those marriages end.[25]

In this analysis, however, we adopt the simplifying and extremely cautious assumption that *all of the taxpayer costs of divorce and unmarried childbearing stem solely from the negative effects family fragmentation has on poverty in female-headed households.* We make this simplifying assumption because the effect of marriage on poverty has been established, is widely accepted, and can be reasonably well-quantified based on existing data.

II. Is the Methodology Used in This Estimate Reasonable?

This study uses [illegible] to estimate the taxpayer costs of family fragmentation. These estimates include calculations of foregone tax revenue in income taxes, FICA (Social Security and Medicare) taxes, and state and local taxes as a result of family fragmentation. They also include the direct costs to taxpayers as a result of increased expenditures on local, state, and federal taxpayer-financed programs in the following areas:

- Temporary Assistance for Needy Families (TANF) cash assistance
- Food Stamps
- Housing Assistance
- Medicaid
- State Children's Health Insurance Program (SCHIP)
- Child Welfare programs

- Women, Infants, and Children (WIC) assistance
- Low Income Home Energy Assistance Program (LIHEAP)
- Head Start
- School Lunch and Breakfast Programs
- The Justice System[26]

As noted previously, we assume taxpayer costs are driven exclusively by increases in poverty; that is, we used the most widely accepted and best quantified consequence of divorce and unmarried childbearing. It is important to recognize that if family fragmentation has additional negative effects on child and adult well-being that operate independently of income—and if these effects increase the numbers of children or adults who need and are served by taxpayer-funded social programs—then our methodology will significantly *underestimate* taxpayer costs. For example, if family fragmentation increases the number of children who suffer from chronic illnesses,[27] these additional costs to taxpayers would *not* be reflected in the estimates provided by this study.

To put it another way, the methodology we use assumes that marriage would *not* improve the habits, mores, or other behaviors of adults or children in ways that lead to reduced social problems or increased productivity.

What Costs Are Associated with Means-Tested Government Programs?

To obtain an estimate of the taxpayer costs of family fragmentation, this study uses the literature and information already described to make three key assumptions:

- Assumption 1: Marriage lifts zero households headed by a single male out of poverty.
- Assumption 2: Marriage lifts 60 percent of households headed by a single female out of poverty.
- Assumption 3: The share of expenditures on government antipoverty programs that is due to family fragmentation is equal to the percent of poverty that results from family fragmentation.[28]

Taken as a group, these assumptions err on the side of caution. They are more likely to lead to an *underestimate* of the actual taxpayer costs of family fragmentation rather than an overestimate. Assumption 1 leads us to understate taxpayer costs because marriage might bring a second wage earner into single-father households and/or allow men to focus more effort on labor market activities that would increase household earnings. Assumption 2 is based on the discussion on pages 10–11 of this report, specifically the empirical results provided by Ananat and Michaels and Thomas and Sawhill.[29]

Assumption 3 implies that the proportion of poverty that can be attributed to family fragmentation is equal to the proportion of expenditures on a variety of government programs that are caused by family fragmentation. As shown in table 3, if marriage would lift 60 percent of single-mother households out of poverty, then the total number of persons in poverty would decline by 31.7 percent and the total number of children in poverty would decline by 36.1 percent.[30] By virtue of assumption 3, marriage would reduce the costs of some government programs by 31.7 percent and the costs of government programs that are exclusively for children by 36.1 percent. Put another way, this assumption suggests that family fragmentation is responsible for 31.7 percent of the costs of government antipoverty programs and is responsible for 36.1 percent of the costs of government programs that are exclusively for children.[31]

(Source: 2006 CPS)

	Total U.S. Poverty 2006 (thousands)	Number Lifted Out of Poverty via Marriage (thousands) @60% of female-headed households in poverty are lifted out of poverty	Percent Lifted Out of Poverty via Marriage
Total Persons	36,460	11,554	31.7%
Children	12,827	4,629	36.1%

This crucial assumption seems cautious not only because single-parent households have higher rates of poverty and other negative outcomes but also because at the same income level single-parent households are much more likely than married households to make use of government benefits.

In the cautious assumptions used in this analysis, we assume no behavioral effects from marriage on the likelihood of choosing to use government programs, even though (as shown in tables 4, 5, and 6) single-mother households use the Food Stamp, cash assistance, and Medicaid programs at much higher rates than married households with similar incomes.

(Source: 2006 CPS)

Family Type	Percent Receiving Food Stamps *All Income Levels*	Percent Receiving Food Stamps *Families Earning < 200% of Poverty Level*
Married	3.9%	16.2%
Male head no spouse present	8.6%	21.2%
Female head no spouse present	26.1%	42.5%

(Source: 2006 CPS)

Family Type	Percent Receiving Cash Assistance *All Income Levels*	Percent Receiving Cash Assistance *Families Earning < 200% of Poverty Level*
Married	3.6%	8.5%
Male head no spouse present	7.8%	13.2%
Female head no spouse present	17.2%	24.8%

(Source: 2006 CPS)

Family Type	Percent Receiving Medicaid *All Income Levels*	Percent Receiving Medicaid *Families Earning < 200% of Poverty Level*
Married	15.4%	40.3%
Male head no spouse present	27.9%	43.9%
Female head no spouse present	45.6%	62.7%

Assumption 1 means that our analysis focuses on female-headed households only; that is, taxpayer costs associated with single-father households are excluded. Assumptions 2 and 3 allow us to make cautious and straightforward estimates of increased government expenditures on TANF, Food Stamps, housing assistance, Medicaid, SCHIP, child welfare programs, WIC, LIHEAP, Head Start, and school breakfast and lunch programs that result from family fragmentation. (See more details in "Notes to Table A.1" on page 33.) For government programs that serve both adults and children (TANF, Food Stamps, housing assistance, Medicaid, WIC, and LIHEAP), we assume that 31.7 percent of these costs are due to family fragmentation. We make this assumption because existing data (as shown in table 3) suggests that family fragmentation is responsible for 31.7 percent of overall poverty, and assumption 3 suggests that family fragmentation is responsible for 31.7 percent of taxpayer costs on these programs.

For government programs that serve only or predominantly children (such as SCHIP, child welfare programs, Head Start, and school breakfast and lunch programs), we assume that 36.1 percent of these costs are due to family fragmentation.[32]

We offer one cautionary note: The taxpayer costs associated with family fragmentation may be real, but this link does not mean that taxpayers would necessarily choose to realize *all* the tax savings from reductions in family fragmentation.

Many transfer programs, such as Head Start, Section 8 housing vouchers, and LIHEAP are not entitlements. That means not all individuals or households potentially eligible to receive funding or services under these programs receive them. For non-entitlement programs, savings realized from increases in marriage and marital stability could be reaped by taxpayers *or* the savings might be passed on to other poor people.[33] But if such savings were to occur, legislators and voters could either choose to change the rules and use the money for other government purposes or return it to taxpayers.

The next steps in our study were finding ways to estimate any increased costs to the justice system caused by family fragmentation and any foregone tax payments that would result from eliminating family fragmentation. These two sets of calculations require some discussion.

What Costs Are Associated with the Justice System?

Evidence suggests that boys raised in single-parent households are likely to commit crimes at much higher rates than boys raised in married households.[34] Further, marriage reduces the likelihood that adult men will commit crimes.[35]

For the purposes of calculating the impact of family fragmentation on increased costs to the justice system, however, we use the following cautious and simplifying assumption: *All* of the effects of family fragmentation on crime operate through their impact on childhood poverty rates. In this analysis, we are following Harry Holzer and his colleagues. They created a methodology to estimate the impact of eradicating childhood poverty on costs to the U.S. economy. One cost they consider is the cost to the justice system—which includes courts, police, prisons, and jails. Essentially, based on several assumptions taken from the empirical literature on crime, they report that 24 percent of crime is caused by childhood poverty.[36] Using this result, we estimate that if marriage were to reduce childhood poverty rates by 36.1 percent, then costs for the justice system would be reduced by approximately $19 billion. (See details of this calculation in table A.1.)

How Are Foregone Tax Revenues Estimated?

To estimate the impact of family fragmentation on foregone tax revenues, we must estimate the increase in taxable income that would result from marriage. We again make the simplifying assumption that marriage has no behavioral effect; in other words, marriage would not increase the labor supply of men and would therefore have no impact on the taxable earnings of single parents who marry. Again, given the rich literature on how marriage impacts male labor supply,[37] this is a cautious assumption, which increases our confidence that our analysis does not overestimate the actual taxpayer costs of the decline of marriage.

Similarly, we assume that *all* of the effects of family fragmentation on children's future earnings capacity operate only through their impact on rates of childhood poverty. Given the rich but difficult-to-quantify body of evidence that married parents contribute to increasing the human and social capital of their children in other ways (in addition to income),[38] this decision represents another simplifying but cautious assumption, which increases our confidence that our results will not overestimate the taxpayer costs.

There is good evidence on the impact of childhood poverty on future productivity. Holzer and his colleagues estimate that childhood poverty reduces income nationally by $170 billion per year. That is, they find that if children in poverty had instead grown up in households that were *not* in poverty, then these children would as adults earn $170 billion more each year.[39] Using Holzer's estimate of total costs of childhood poverty on adult annual earnings and the estimate that marriage would reduce childhood poverty by 36.1 percent, we estimate that marriage would increase taxable earnings by over $61 billion per year.

To translate this data into an estimate of tax losses from losses in future productivity, we must make simplifying assumptions about tax rates. For this analysis, we assume that all of the increase in earnings is taxed at the 10 percent rate for U.S. income taxes and that all of this increase in earnings is taxed at 15.3 percent for FICA (as tax economists generally find that employees bear the burden of FICA taxation through lower wages). To estimate losses in state and local taxation, we use the national average percentage of income that is paid in state and local taxes—11 percent—as reported by the Tax Foundation on April 4, 2007.[40] (The details of this calculation are shown in table A.1.)

What Is the Total Estimated Cost of Family Fragmentation?

What are the total costs of divorce and unmarried childbearing cost U.S. taxpayers? Here is our estimate:

> Family fragmentation costs U.S. taxpayers at least *$112 billion each year*, or over $1 trillion dollars per decade.[41]

This $112 billion annual estimate includes the costs of federal, state, and local government programs and foregone tax revenues at all levels of government. Table 7 shows an itemized estimate.

To find the cost of family fragmentation in *your state*, turn to page 38.

* *These costs include federal, state, and local costs.*

	in billions
Justice System	$19.3
TANF – Cash Assistance	$5.1
Food Stamps	$9.6
Housing Assistance	$7.3
Medicaid	$27.9
SCHIP	$2.8
Child Welfare	$9.2
WIC	$1.6
LIHEAP	$0.7
Head Start	$2.7
School Lunch and Breakfast Program	$3.5
Additional U.S. Income Taxes Paid	$6.1
Additional FICA Taxes Paid	$9.4
Additional State & Local Taxes Paid	$6.8
Total U.S. Taxpayer Cost of Family Fragmentation	**$112.0**

Table A.5 (page 38) reveals state-by-state estimates for the costs of family fragmentation, and appendix B (page 31) describes the methods used to estimate the costs of family fragmentation for state and local taxpayers. These state-by-state estimates are a subset of the $112 billion total taxpayer cost.

We are confident this is a minimum figure because of the uniformly cautious assumptions built into our methodology. For those who would like to dig deeper, appendix A (page 22) provides a detailed response to possible arguments that we have overestimated or underestimated taxpayer costs. For example, here are four potential underestimates:

First, our estimate focuses exclusively on female-headed households; that is, we assume the taxpayer costs of single-father families are zero. This assumption almost certainly leads to an underestimate.

Second, we have excluded from analysis several expensive government programs (because existing data does not allow us to quantify them with confidence), which nonetheless very likely include significant marriage-related taxpayer costs. The taxpayer-funded programs excluded from analysis include the Earned Income Tax Credit (EITC), public education,[42] and Medicare and Medicaid benefits for older adults. The EITC alone is a $40 billion taxpayer-funded program. Estimating the effect of marriage on the EITC involves making complex judgments about who marries whom, and how their income shifts as a result. Since we lack hard data to make

these judgments with the precision necessary to quantify them, we left this program out of the analysis. While some fraction of currently cohabiting taxpayers might pay a marriage penalty if they were to marry, the overall poverty-reducing effects of marriage are likely to move many more families off the EITC rolls. (See appendix A for more detail.)

Similarly, some fraction of public school budgets is likely spent in dealing with social problems created by divorce and unmarried childbearing. Children whose parents stay married are less likely to repeat a grade, exhibit conduct disorders requiring special education outlays, or require expensive special education services generally. Again, none of these costs are reflected in our analysis.

We have also excluded one of the largest taxpayer costs on the book: Medicaid for the elderly and Medicare for unmarried adults. They are excluded partly because most people do not think of older single adults when they think of "fragmented families." But high rates of divorce and failure to marry mean that many more Americans enter late middle-age (and beyond) without a spouse to help them manage chronic illnesses, or to help care for them if they become disabled.[43] Through the Medicare and Medicaid system taxpayers are picking up a large, but difficult to quantify, part of the costs as a result.

Third, we have ignored for the purposes of this analysis any behavioral effects of marriage. We have assumed that all the benefits of marriage come solely from reduced rates of poverty for children, ignoring the evidence that stably married parents provide human and social capital to their children other than income in ways that increase children's well-being and reduce the likelihood they will need or incur expensive government services, from repeating grades at school to ending up in the child protective system or the juvenile justice system.

Similarly, we have assumed no behavioral effects of marriage on fathers' earning capacity. If stable marriage increases men's earnings, as the literature suggests, and/or decreases the likelihood that they will commit crimes as adults, our methodology most likely underestimates the taxpayer costs associated with unmarried parenthood.

Fourth, there is one other major reason we believe $112 billion each year represents a cautious, minimum estimate: For the purposes of this analysis, we assume that households that marry will "take up" or use government benefits for which they are eligible at the same rate as single-mother households. In reality, existing data shows that lower-income married couples are far less likely to choose to use government benefits for which they are eligible than single-mother households. Overall, single mothers are roughly twice as likely to take advantage of government benefits for which they are eligible than are low-income married couples.[44]

Many more details, including a discussion of the empirical literature on which our conclusions are based, are found in appendix A.

V. What Are the Policy Implications?

How should state legislators, and others respond to these new, rigorous estimates of the large taxpayer costs of family fragmentation?

First, public concern about the decline of marriage need not be based only on the important negative consequences for child well-being or on moral concerns, as important as these concerns may be. *High rates of family fragmentation impose extraordinary costs on taxpayers.* Reducing these costs is a legitimate concern of government, policymakers, and legislators, as well as civic leaders and faith communities.

Second, *even very small increases in stable marriage rates would result in very large returns to taxpayers.* For example, a mere 1 percent reduction in rates of family fragmentation would save taxpayers $1.12 billion annually.

Given the modest cost of government and civic marriage-strengthening programs, even more modest success rates in strengthening marriages would be cost-effective. Texas, for example, recently appropriated $15 million over two years for marriage education and other programs to increase stable marriage rates. If such a program succeeded in increasing stably married families by *just three-tenths of 1 percent*, it would still save Texas taxpayers almost $9 million per year. Efforts are currently underway to evaluate the impact of these programs.

Conclusion

The decline of marriage costs American taxpayers at least $112 billion dollars. These costs are recurring—that is, they are incurred each and every year—meaning that the decline of marriage costs American taxpayers more than $1 trillion dollars over a decade.

These costs are due to increased taxpayer expenditures for antipoverty, criminal justice and school nutrition programs, and through lower levels of taxes paid by individuals whose adult productivity has been negatively influenced by growing up in poverty caused by family fragmentation.

This figure represents a minimum or "lower-bound" estimate. If, as research suggests is likely, marriage has additional economic and social benefits to children, adults, and communities—benefits that reduce the need for government services and that operate through mechanisms other than increased income—then the actual taxpayer costs of the retreat from marriage are likely much higher.

Given the cautious assumptions used throughout this analysis, we can be confident that current high rates of family fragmentation cost taxpayers *at least* $112 billion a year, or more than $1 trillion over a decade. Finding new ways to strengthen marriage and reduce unnecessary divorce and unmarried childbearing is a legitimate and pressing public concern.

Because of the very large taxpayer costs associated with high rates of divorce and unmarried childbearing, and the modest price tags associated with most marriage-strengthening initiatives, state and federal marriage-strengthening programs with even very modest success rates will be cost-effective for taxpayers.

In this appendix, we consider in detail four arguments that suggest the estimate that the total taxpayer cost of family fragmentation of $112 billion is too high and four arguments that it is too low.

Is $112 Billion Too High?

In this section, we consider four arguments that suggest the $112 billion estimate is too high:

1. If cohabitating households were to marry, most of them receiving transfer payments would receive a marriage bonus from the federal tax and transfer system.
2. The use of Holzer's research in this study exaggerates the actual impact of low income on childhood poverty.
3. The use of Thomas and Sawhill's research in this study overestimates the impact of marriage on reducing poverty.
4. The main assumption of this study—that the percentage of government program costs due to family fragmentation is proportional to the amount of poverty due to family fragmentation—overestimates the taxpayer costs.

1. If cohabitating couples were to marry, most would receive a marriage bonus from the federal tax and transfer system.

The earned income tax credit (EITC) is an approximately $40 billion antipoverty program that provides cash subsidies to low-income working adults, and Temporary Assistance to Needy Families (TANF) is a $16 billion cash assistance program for low-income families. Gregory Acs and Elaine Maag report that of the 1.1 million people living in cohabitating households earning less than 200 percent of the poverty level and receiving the EITC and/or TANF, about three-fourths of these households would receive an average marriage bonus of approximately $2,423, while about 10.5 percent of these households would receive a marriage penalty of $1,742 in 2008. Thus, if the cohabitating adults in these households were to marry, taxpayers would face increased expenditures for these two social programs. Taken together, these estimates from Acs and Maag suggest that taxpayer expenditures for the EITC, TANF, and the child tax credit would increase by about $0.5 billion if all cohabitating couples were to marry.[45]

Given the results in Acs and Maag, is our estimate of the taxpayer cost of family fragmentation too high by $0.5 billion? In table 7, we ignore any costs of family fragmentation on the EITC. We do so because of complications such as the one pointed out by Acs and Maag that some households would get higher EITC payments if they became married households and nothing else about them (*e.g.*, labor supply) changed. Nevertheless, it appears likely that the net taxpayer costs of family

fragmentation on the EITC would be positive because marriage would render millions of EITC recipients ineligible for any EITC benefits by adding a second wage earner to the household and/or possible positive effects on male labor supply. If marriage, as discussed in the next subsection, would decrease net expenditures on the EITC, then the approach used in this study would underestimate the taxpayer costs of family fragmentation by ignoring the EITC.

[illegible]

We rely on results from Harry Holzer's research to make two calculations—costs to the justice system and increased tax payments. Holzer and his colleagues make a case that the assumptions that underlie their estimates are cautious, and we find their case persuasive. However, they make a broad interpretation of the relationship between childhood poverty and life outcomes as follows:

> [W]e interpret the causal effects of childhood poverty quite broadly. They include *not only the effects of low parental incomes, but also of the entire range of environmental factors associated with poverty in the U.S., and all of the personal characteristics imparted by parents, schools, and neighborhoods to children who grow up with or in them.* We define "poverty" broadly in this way in part because researchers have been unable to clearly separate low income from other factors that affect the life chances of the poor, and also because the set of potential policy levers that might reduce the disadvantages experienced by poor children go beyond just increasing family incomes. Of course, in defining poverty this way, we also assume that the entire range of negative influences associated with low family incomes would ultimately be eliminated if all poor children were instead raised in non-poor households.[46] (Holzer's emphasis)

Childhood poverty may be a proxy for "environmental factors" that may or may not be improved by the income gains from marriage. Thus, reliance on Holzer's estimates of the costs of childhood poverty could potentially overstate any benefits of marriage that come from marriage reducing childhood poverty. One way to think about this issue carefully is to list the broad pathways (i.e., "the environmental factors") through which growing up in poverty is associated with childhood disadvantage:

a. Low income may mean lower quality food, shelter, transportation, and medical care for children.
b. Low income may necessitate living in worse neighborhoods (fewer parks, more crime, less social trust), and poor neighborhood quality may adversely affect child well-being.
c. Low income may mean attending worse schools.
d. Low income may negatively affect parenting processes (warmth, monitoring, discipline) because of the stress economic hardship places on otherwise competent parents.

e. Conversely, parents may have low incomes because they are less motivated and skilled and this lesser competence may be exhibited in parenting as well.
f. Low income may hurt children because low-income families are more likely to have only one parent present, and therefore only half the social and human capital available to the child.

If absence of money itself is the root cause of the negative effects of childhood poverty, then any strategy that increases income will increase child well-being. With more money, parents can provide better nutrition, education, housing, and medical care. They can move to better neighborhoods and enjoy better schools. It may be the case, however, that not all the potential pathways through which childhood poverty negatively affects child well-being can be "treated" with more money. More money may lower the income stress but not the emotional stress of single parenting, for example. In addition, there may be less human and social capital that results when one parent—only half the potential talent pool for parenting—is available.

If marriage increases household income, then marriage would ameliorate the negative effects of childhood poverty that operate through pathways labeled a, b, c, and d above. Marriage may also address at least some of the other pathways through which childhood poverty is associated with relative deprivation (f). But marriage does not address all of the pathways: What if low-income parents are simply less competent generally in parenting as in other domains of life (e)? What if they are less motivated to help their children succeed or have fewer of the skills needed to help their children manage school or work?

To the extent that childhood poverty is caused by living with adults who have persistent personality traits or skill deficits that lessen child well-being, neither income supports nor increased marriage alone will "treat" these problems.

Holzer and his colleagues make an adjustment for genetic factors that may be present in the ability to generate labor market earnings that they believe errs on the side of caution. But not all the selection effects may be understood to be genetic in nature. What if single moms or dads simply are people who have lower average parenting skills and less motivation to begin with? If this is the case, then the use of Holzer's results for two calculations leads to an overestimate of the taxpayer cost of family fragmentation.

Like Holzer, this analysis is constrained by the availability and quality of relevant empirical evidence. We believe, however, that the way we use Holzer's results does not lead to an overestimate for at least three reasons:

- If the assumptions Holzer and his colleagues used are cautious, then that offsets at least some of the "environmental" effects of having a mother or father with less motivation, whether married or not.

- Our analysis assumes no effect of marriage on the labor supply of parents. The best evidence, as reported in Ribar's extensive literature review in 2004, indicates that marriage increases male labor supply and seems not to depress the average female labor supply in the more recent groups of women studied.[47]

- Our analysis assumes no behavioral effect of marriage on parenting skills. If marriage reduces stress on parents, which leads to better parenting, then this approach underestimates the true taxpayer costs of family fragmentation.

Given the limits of the available empirical evidence, we implicitly assume that these three reasons exactly offset any of the effects of childhood poverty that are due to unobserved lower motivation and/or skills present among single parents. To the extent this assumption is wrong and it leads to overstating taxpayer costs because of the use of Holzer's research, the magnitude of the overestimate would have to be viewed in light of the magnitude of our underestimates as described in the next subsection. As suggested below, these underestimates are likely quite substantial.

3. *The use of Thomas and Sawhill's research overestimates the impact of marriage on reducing poverty*

Thomas and Sawhill estimate that marriage would lift 65.4 percent of single-mother households out of poverty.[48] In their microsimulation they place individuals in the March 1999 CPS in "plausible" marriages until they obtain a marriage rate similar to 1970. Attempting to marry *all* single-mother households would likely fall short because of a lack of marriageable men—prisoners are disproportionately men, as are the unemployed, and men have lower life expectancies than women. The dearth of marriageable men is one reason that we use a 60 percent figure instead of the 65.4 percent estimate from Thomas and Sawhill. In addition, Thomas and Sawhill assume no behavioral effects of marriage on male labor supply, which suggests they underestimate the effect of marriage on poverty reduction. For these two reasons, our use of Thomas and Sawhill's research should not lead to an overestimate of the taxpayer cost of family fragmentation.

4. *The main assumption of this study—the percentage of the costs of government programs due to family fragmentation is proportional to the percent of poverty due to family fragmentation—overestimates the taxpayer cost*

To the contrary, the following thought experiment suggests that this assumption likely leads to an *underestimate* of the taxpayer cost of family fragmentation. Suppose there was an antipoverty program that cost taxpayers a total of $100 billion. Also suppose this program provided $5,000 per year to 10 million married households and $5,000 per year to 10 million single-mother households. In addition, suppose that 20 million married households were eligible for the program but only 10 million used it, while all 10 million single-mother households eligible for the program used it.

If each of the 10 million single-mother households in this thought experiment were instead married households, consider two questions:

- How would the methodology used in this study estimate the taxpayer cost of family fragmentation?
- What would be the "true" taxpayer cost of family fragmentation?

Using the methodology of this study, 6 million of the single-mother households (at 60 percent) using this program would no longer use it, which means the cost of family fragmentation would be 6 million multiplied by $5,000, which equals $30 billion. Also, the analysis would assume that the remaining 4 million single-mother households that are now married households would still use the program.

Would $30 billion likely be the "true" costs? We suspect not, because married couples use benefits for which they are income-eligible at a *much lower rate* than single-parent households: Only 50 percent of initially married households eligible for the program use it. As shown in tables 4–6, single-mother households are far more likely at any given income level to choose to use government benefits:

- Single-mother households with incomes less than 200 percent of the poverty line are *2.6 times more likely* to receive *Food Stamps* than married households earning less than 200 percent of the poverty line.
- Single-mother households with incomes less than 200 percent of the poverty line are *2.9 times more likely* to receive *cash assistance* than married households earning less than 200 percent of the poverty line.
- Single-mother households with incomes less than 200 percent of the poverty line are *1.56 times more likely* to receive *Medicaid* than married households earning less than 200 percent of the poverty line.

If we assume that currently single mothers had instead married and that they would use government benefits for which they are eligible at the same rate as other married households (50 percent), then the "true" taxpayer costs of family fragmentation would be $40 billion ($30 billion + 0.5 x 4 million x $5,000). Thus, using the methodology of this study would understate the "true" costs by 33 percent using the assumption that married households and single-mother households receive the same average benefit ($5,000 per household in this example), and that single-mother households take up the antipoverty program at a rate twice as large as married households.

The main assumption of this study seems to be a reasonable simplifying assumption, because of the much higher take-up rate of antipoverty programs of single-parent households relative to similarly situated married households; this assumption perhaps leads to an underestimate of the taxpayer cost of family fragmentation.

To sum up, any differences in unobserved levels of average motivation between single and married mothers complicate using much of the existing empirical literature to estimate the taxpayer cost of family fragmentation. The assumptions that underlie this analysis, however, are extremely cautious in an attempt not to overstate the taxpayer costs. Specifically, by assuming no beneficial behavioral effects of marriage on adults or children, we are likely underestimating taxpayer costs.

Is $112 Billion Too Low?

In this section, we consider four arguments that suggest that the $112 billion estimate is too low:

1. Ignoring the EITC, public education, and other government programs underestimates the true taxpayer costs of family fragmentation.
2. Ignoring the direct impact of family fragmentation on crime (independent of poverty) underestimates the taxpayer costs.
3. Ignoring any impact of marriage on single fathers understates the taxpayer cost of family fragmentation.
4. Ignoring the fact that, given income-eligibility, single-mother households are much more likely than married households to take up subsidies from transfer programs underestimates the likely taxpayer costs of family fragmentation.

1. Ignoring the EITC and the education and other government programs underestimates the true taxpayer costs of family fragmentation

We ignore EITC expenditures largely because of the lack of empirical information needed to make reasonable assumptions about how marriage will affect usage of the EITC and related programs in our complex tax code. But ignoring potential taxpayer savings produced by marriage on EITC expenditures means ignoring a very expensive government program that is almost certainly affected by marriage rates. Taxpayers spend approximately $40 billion on cash assistance to the working poor under the EITC. As shown in table A.2, using the assumptions in this study, family fragmentation would lead to about $12.68 billion in higher taxpayer costs on the EITC. Adjusting this estimate based on the results of Acs and Maag, as discussed under the first argument in the previous subsection, would reduce that amount by about $0.5 billion, leaving a net taxpayer cost of about $12.18 billion.

We have chosen to ignore the EITC expenditures (including potential savings of an additional $12.18 billion each year) because the consequences of marriage for the EITC are complex and would involve multiple assumptions of how marriage would affect men's and women's earnings.

In addition to the EITC, this analysis does not assume any costs of family fragmentation to the public school system, which is almost certainly not true. Considerable research suggests that children raised outside of intact marriages are more likely to

be held back a grade, to be in special education, and to qualify for remedial services, although we do not have hard data on how much of these effects are due to unobserved selection bias and how much are "caused" by lack of marriage.

If marriage were to reduce the percentage of children receiving special or remedial services, then family fragmentation would create significant taxpayer costs for public education, as federal and state funding formulas tend to provide large amounts of extra funding for children receiving these services. (These costs may be offset, however, by more teens dropping out of school as a result of family fragmentation, which reduces the direct taxpayer costs of public education.[49])

The lack of evidence of exogenous changes in family structure on the likelihood of receiving special education or remedial services or staying in school, and the lack of comparable cost data on remedial and special education services across states, makes it impossible to estimate these costs with confidence. But the lack of data does not mean that family fragmentation has no impact on educational expenditures. Finally, we exclude the approximately 71 percent of Medicaid expenditures devoted to the disabled and the elderly from the analysis, thereby making the cautious assumption that family fragmentation has no impact on these expenditures. Most people do not think of elderly unmarried adults or middle-aged disabled singles as belonging to "fragmented families." Nonetheless, there is considerable evidence that older adults who are unmarried are more likely to become disabled, to manage chronic diseases less successfully, and to need nursing home care as they age.[50] Excluding these large public costs thus likely significantly underestimates the actual costs to taxpayers from the decline in marriage.

2. Ignoring the direct impact of family fragmentation on crime (fragmentation of poverty) underestimates the taxpayer costs

Estimates of the potential impact of family structure on crime, even those that do not control for selection bias, are large and arguably should not be ignored. As discussed in the section on methodology on page 12, it appears that family fragmentation has large effects on crime, both in terms of increasing the likelihood that a child raised outside of marriage will commit crimes[51] and the likelihood that adult men will leave criminal activity after they are married.[52] While Harper and McLanahan use a large number of control variables to help isolate the effect of family structure on youth crime, they do not control for unobserved selection effects. Nonetheless, their estimated effects of family structure on crime are extremely large—typically children reared in single-mother households are more than twice as likely to engage in criminal activities as children reared in a married household. For example, they report that children living with a single mother are 2.168 times more likely to be incarcerated than children living with both parents, all else being equal.[53] Suppose we had assumed that over half their result was due to selection bias—that the single mothers in their sample possessed such poor parenting skills that even if they got married most of the estimated effect Harper and McLanahan reported was due to selection bias. Specifically, suppose that children reared with

a single mother are only 50 percent more likely to engage in criminal activity than children raised with both parents, all else being equal. As shown in table A.2, using this more aggressive approach yields an estimate that family fragmentation is responsible for about $29 billion in costs to the justice system as opposed to the $19.3 billion estimate used to generate the main result of this study.

The $29 billion estimated cost of family fragmentation to the justice system is either too high or too low depending on the true magnitude of any exogenous effects of marriage on criminal activity. The $19.3 billion figure represents about 8.7 percent of all costs to the justice system ($19.3 billion / $222.8 billion = 0.087), while the $29 billion figure represents 13 percent of all costs to the justice system ($29 billion / $222.8 billion = 0.13).

To put these two estimates in context, note that, according to the Bureau of Justice Statistics, in 2002 only 43.6 percent of inmates report that they lived with both parents "most of the time" while growing up.[54] While the majority of inmates did not live with both parents most of the time while growing up, the figure used to generate the main estimate of this study suggests that only 8.7 percent of the costs of the justice system can be attributed to family fragmentation. As stated previously, Sampson and his colleagues endeavor to control for selection effects and find that former juvenile offenders commit fewer crimes as adults when married. Because our estimates here ignore these potential taxpayer savings from marriage, our method is more likely to underestimate than overestimate the taxpayer costs of family fragmentation to the justice system.

3. *Ignoring any impact of marriage on single fathers underestimates the taxpayer cost of family fragmentation.*

Research suggests that married men become more committed workers at least in part as a result of marriage. Therefore, if single fathers were to marry, it is likely that their labor supply would increase leading to increased tax payments. Further, tables 4–6 show that single-father households have higher take-up rates of antipoverty programs than married households with similar incomes.

Adding a second wage earner would render single-father households less likely to receive government assistance via increased income and economies of scale. Economies of scale via marriage—essentially "savings from size"—imply that by living together, two adults are better able to share expenses and escape poverty. Ribar provides an example of how marriage leads to economies of scale:

> Consider the outcomes for a couple with a 9th–11th grade education and one child in 2001. The median annual income for a woman with this level of education was $10,330, while the median annual income for a similarly educated man was $19,434. If the mother and child lived apart from the father, their income would have been below the two-person poverty threshold of $12,207; however, if the family lived together, their combined income would have

> exceeded the three-person threshold of $14,255. The mother and child would have also met the gross income requirement for food stamps if they lived apart from the father but would [*sic*] been ineligible if they lived with him. Even if the mother had no income and the family just depended on the father's resources, they would have been above the poverty line and ineligible for food stamps if they all lived together.[55]

As shown in tables 4–6, single-mother households have higher take-up rates of government antipoverty programs than married households with similar incomes. Thus, even if single-mother households that were instead married households were to remain eligible for transfer programs, it appears they would be less likely to use them. The methods used to estimate the taxpayer cost of family fragmentation at $112 billion ignore this likelihood, and suggest this estimate is too low.

To sum up, this study is likely underestimating the taxpayer cost of family fragmentation because (1) there likely would be net savings of EITC expenditures due to any increase in marriage rates of non-cohabitating single parents and savings from other programs not considered here; (2) the estimated costs to the justice system are too low if there is a direct effect of marriage on reducing crime—which seems likely given the research done to date; (3) there are taxpayer costs of single-father households that are ignored here; and (4) the take-up rate of antipoverty programs would likely decline if single-parent households were instead married households that remained eligible for these programs.

Appendix B:
Explaining the Methodology for State-Specific Costs

This appendix describes the methodology used to estimate state-specific taxpayer costs of family fragmentation. These estimates include costs to state and local taxpayers.

The methods used to create the state-specific estimates are similar to the methods employed to create the national estimate described in the body of this report. For the state-specific estimates, we used the 2006 Current Population Survey to estimate the state-specific reductions in total poverty and child poverty that would result from marriage. These estimates are shown in the last columns of tables A.3 and A.4 and are based on assumptions 1–3 described on page 13. These tables include the underlying data used as well as other information that reveal how total and child poverty fall disproportionately on unmarried households, and on households headed by single females in particular.

Table A.5 shows the components and the total state and local taxpayer costs of family fragmentation for each state. These taxpayer costs include foregone state and local tax revenue and costs to the justice system, TANF, Medicaid, SCHIP, and child welfare programs. State-specific data for the overall costs of these programs come from the sources listed in the "Notes to Table A.1" on page 33.

State-specific cost estimates, however, were not available for costs to the justice system, and foregone earnings are not estimated at the state level. To make state-specific estimates for these two line items, we assume that the proportion of taxpayer costs that accrues to a given state is equal to the proportion of poverty caused by family fragmentation in the state. For example, using the information in table A.3, we calculate that 10.2 percent of all childhood poverty in the U.S. that is due to family fragmentation occurs in the state of California. Thus, 10.2 percent of the increase in national income that comes from reducing childhood poverty via marriage is assigned to California. Correspondingly, 10.2 percent of the reduction in state and local justice costs that results from marriage are also assigned to California.[56]

Calculation			
1	**Justice System (federal, state, & local)**		
	Expenditures on Corrections, Police, and Courts	$222,802,421,001	
	Amount of Crime Attributed to Childhood Poverty	0.24	
	Reduction in Childhood Poverty via Marriage	0.361	
	Cost of Family Fragmentation	**$19,303,601,755**	= $22,802,422,001*.24*.361
2	**TANF (federal & state)**		
	Expenditures on TANF	$16,100,000,000	
	Cost of Family Fragmentation	**$5,103,700,000**	= $16,100,000,000*.317
3	**Food Stamps**		
	Persons Receiving Food Stamps	26,672,000	
	Reduction in Food Stamp Receipt via Marriage @31.7%	8,455,024	= 26,672,000*.317
	Mean Food Stamp Benefit per person per year	$1,131.24	
	Cost of Family Fragmentation	**$9,564,661,350**	= $1,131.24*8,445,024
4	**Housing Assistance**		
	HUD Expenditures on Housing Assistance	$23,019,000,000	
	Cost of Family Fragmentation	**$7,297,023,000**	= $24,019,000,000*.317
5	**Medicaid (federal & state)**		
	Expenditures on Medicaid	$303,222,842,723	
	Cost of Family Fragmentation	**$27,875,275,932**	= $303,222,842,723*.317*.29
6	**SCHIP (federal & state)**		
	Expenditures on SCHIP	$7,884,328,870	
	Cost of Family Fragmentation	**$2,846,242,722**	= $2,846,242,722*.361
7	**Child Welfare Services (federal, state, & local)**		
	Expenditures on Child Welfare Services	$25,465,943,844	
	Cost of Family Fragmentation	**$9,193,205,728**	= $25,465,943,844*.361
8	**WIC**		
	Expenditures on WIC	$4,997,309,299	
	Cost of Family Fragmentation	**$1,584,147,048**	= $4,997,309,299*.317
9	**LIHEAP**		
	Expenditures on LIHEAP	$2,181,384,985	
	Cost of Family Fragmentation	**$691,499,040**	= $691,499,040*.317
10	**Head Start**		
	Expenditures on Head Start	$7,470,990,545	
	Cost of Family Fragmentation	**$2,697,027,587**	= $7,470,990,545*.361
11	**School Breakfast and Lunch**		
	Expenditures on Subsidized School Breakfast and Lunch Programs	$9,638,590,455	
	Cost of Family Fragmentation	**$3,479,531,154**	= $9,638,590,455*.361
12	**Forgone Tax Receipts**		
	Loss in National Income from Childhood Poverty (Holzer, et al., 2007)	$170,000,000,000	
	Reduction in Childhood Poverty via Marriage	36.1%	
	Loss in National Income from Family Fragmentation	$61,370,000,000	= $170,000,000,000*.361
	Forgone Federal Taxes @ 10% Tax Rate	**$6,137,000,000**	= $61,370,000,000*.10
	Forgone FICA @ 15.3% Tax Rate	**$9,389,610,000**	= $61,370,000,000*.153
	Forgone State & Local Taxes @ 11% Average Tax Rate	**$6,750,700,000**	= $61,370,000,000*.11

Notes to Table A.1

The numbers at the beginning of each paragraph correspond to the sub-calculations listed in table A.1.

1. This calculation is adapted from a similar calculation by Harry Holzer and his colleagues (see endnote 37). Jens Ludwig estimates that federal, state, and local taxpayers spent $200 billion on the justice system—prisons, police, courts, etc.—in 2003 (see "The Costs of Crime" testimony to the U.S. Senate Committee on the Judiciary on September 19, 2006, http://judiciary.senate.gov/testimony.cfm?id-2068&wit_id-5749). If taxpayer expenditures on the justice system increased at the rate of inflation indicated by the CPI-U, then taxpayers spent $222.8 billion on the justice system in 2007. Holzer and his colleagues use what they believe to be a conservative estimate that 24 percent of crime is due to childhood poverty. Combined with the estimate that 36.1 percent of childhood poverty is caused by family fragmentation, then the taxpayer cost of family fragmentation to the justice system is $222.8 billion times 0.24 times 0.361, which equals approximately $19 billion. (In the tables, an asterisk denotes the multiplication function.)

2. We use FY 2005 data on TANF cash assistance expenditures that comes from the National Association of State Budget Officers FY 2005 State Expenditure Report (Washington, DC: NASBO, 2006). We did not inflate the expenditure data for inflation because TANF expenditures seem to be leveling off in recent years.

3. The expenditure on Food Stamps was retrieved from http://www.fns.usda.gov/pd/fssummar.htm and excludes $2.7 billion in administrative costs. Thus, we assume that administrative costs would not decrease due to a caseload decline.

4. The FY 2006 expenditure on federal housing assistance was retrieved from http://www.gpoaccess.gov/usbudget/fy06/pdf/budget/hud.pdf. In FY 2006, HUD spent about $23 billion on homeless programs, rental assistance, and public housing. Thus, the calculation excludes expenditures on other housing programs such as the Low Income Housing Tax Credit. We did not inflate FY 2006 expenditure data for inflation because expenditures on housing programs have oscillated in the past few years.

5. FY 2005 Medicaid expenditure data comes from NASBO FY 2005 State Expenditure Report and includes federal and state expenditures. The FY 2005 expenditure for Medicaid was inflated using the CPI-U to make an estimate of FY 2007 expenditures. Since Medicaid expenditures tend to grow faster than the rate of inflation, this FY 2007 estimate is cautious. According to the Kaiser Family Foundation in 2008 (see http://www.statehealthfacts.org/medicaid.jsp), 40 percent of Medicaid expenditures are for the disabled, while another 26 percent are for the elderly. Non-elderly adults and children receive 29 percent of Medicaid expenditures. (The uses of the remaining Medicaid expenditures are reportedly unknown.) For this analysis, we use the cautious assumption that family fragmentation leads to no Medicaid costs for the elderly or the disabled. Thus, only 29 percent of total Medicaid expenditures are potentially impacted by family fragmentation under this assumption.

6. FY 2006 federal and state expenditures on SCHIP were retrieved from the Kaiser Family Foundation website (see http://www.statehealthfacts.org/comparetable.jsp?ind-235&cat-4). Given the uncertainty surrounding SCHIP reauthorization, we did not inflate expenditures to 2007 dollars.

7. An estimate of FY 2004 federal and state expenditures on the child welfare system came from C. A. Scarcella et al., *The Cost of Protecting Vulnerable Children* (Washington, DC: Urban Institute, 2006). We inflated their FY 2004 estimate for 2007 dollars using the CPI-U. Scarcella and colleagues label the following government programs as "child welfare" programs: services for children and families to prevent abuse and neglect, family preservation services, child protective services, in-home services, out-of-home placements such as foster care, and adoption services.

8. Information on FY 2003 federal WIC expenditures came from the U.S. House Committee on Ways & Means Green Book (see http://www.gpoaccess.gov/wmprints/green/index.html) and was estimated for FY 2007 using the CPI-U.

9. Information on FY 2003 federal LIHEAP expenditures came from the U.S. House Committee on Ways & Means Green Book (http://www.gpoaccess.gov/wmprints/green/index.html) and was estimated for FY 2007 using the CPI-U.

10. Information on FY 2003 federal Head Start expenditures came from the U.S. House Committee on Ways & Means Green Book (http://www.gpoaccess.gov/wmprints/green/index.html) and was estimated for FY 2007 using the CPI-U.

11. Information on FY 2003 federal School Breakfast and Lunch expenditures came from the U.S. House Committee on Ways & Means Green Book (http://www.gpoaccess.gov/wmprints/green/index.html) and was estimated for FY 2007 using the CPI-U.

12. Holzer and his colleagues estimate that U.S. national income is $170 billion lower because of childhood poverty. Using the estimate that 56.1 percent of childhood poverty is due to family fragmentation, then the decrease in national income from family fragmentation is approximately $61 billion. To make these calculations we assume that this extra national income would be taxed at a 10 percent federal marginal income tax rate, a 15.3 percent FICA tax rate, and an 11 percent state plus local tax rate. The latter figure is the average percent of income spent on state plus local taxation (see the Tax Foundation website at http://www.taxfoundation.org/taxdata/show/335.html). We use a 15.3 percent FICA tax rate because tax economists generally believe that employees bear the full burden of the employer share of these payroll taxes via lower wages (see Daniel Hamermesh and Albert Rees, *The Economics of Work and Pay*, 5th ed. (New York: HarperCollins College Pub., 1993).

EITC		
Expenditures on EITC	$40,000,000,000	
Cost of Family Fragmentation @ 31.7% cost reduction via marriage	$12,680,000,000	= $40,000,000,000*.317
Savings from Family Fragmentation Using Estimates from Acs and Maag (2005)	$500,000,000	
Net Cost of Family Fragmentation	**$12,180,000,000**	= $12,680,000,000 - $500,000,000
Justice System (federal, state, & local)		
Expenditures on Corrections, Police Protection, and Courts in U.S.	$222,802,421,001	
Amount of Crime Attributed to Childhood Poverty	0.24	
Amount of Crime Attributed to Childhood Poverty and Family Fragmentation @ assumed 50% higher likelihood of children reared by single mothers to engage in crime	0.36	= .24*1.5
Reduction in Childhood Poverty via Marriage	0.361	
Cost of Family Fragmentation	**$28,955,402,633**	= $222,802,421,001*.361*.36

(Source: 2006 CPS)

	Total Number in Poverty (thousands)	Number in Poverty in Husband-Wife Family (thousands)	Number in Poverty in Unmarried Households with Male Householder (thousands)	Number in Poverty in Unmarried Households with Female Householder (thousands)	Percent of Total Poverty Living in Unmarried Household	in Percent of Total Poverty Living in Unmarried Households with Female Householder	Percent Reduction Total Poverty If Marriage Reduced Poverty of Female-headed Households by 60%
AL	650	196	88	366	69.8%	56.3%	33.8%
AK	58	10	13	35	82.8%	60.3%	36.2%
AZ	902	361	188	353	60.0%	39.1%	23.5%
AR	487	140	67	280	71.3%	57.5%	34.5%
CA	4,427	1,732	760	1,935	60.9%	43.7%	26.2%
CO	466	159	88	220	65.9%	47.2%	28.3%
CT	275	54	49	172	80.4%	62.5%	37.5%
DE	80	27	14	38	66.3%	47.5%	28.5%
DC	104	11	29	64	89.4%	61.5%	36.9%
FL	2,068	580	383	1,106	72.0%	53.5%	32.1%
GA	1,172	300	156	716	74.4%	61.1%	36.7%
HI	116	27	35	53	76.7%	45.7%	27.4%
ID	141	41	30	70	70.9%	49.6%	29.8%
IL	1,338	274	241	823	79.5%	61.5%	36.9%
IN	674	134	129	411	80.1%	61.0%	36.6%
IA	301	79	67	156	73.8%	51.8%	31.1%
KS	349	91	77	182	73.9%	52.1%	31.3%
KY	690	234	117	339	66.1%	49.1%	29.5%
LA	713	200	96	417	71.9%	58.5%	35.1%
ME	134	29	28	77	78.4%	57.5%	34.5%
MD	469	79	110	279	83.2%	59.5%	35.7%
MA	758	183	166	409	75.9%	54.0%	32.4%
MI	1,323	315	259	749	76.2%	56.6%	34.0%
MN	422	125	111	186	70.4%	44.1%	26.4%
MS	596	150	67	379	74.8%	63.6%	38.2%
MO	659	228	113	318	65.4%	48.3%	29.0%
MT	125	28	23	75	77.6%	60.0%	36.0%
NE	180	71	40	69	60.6%	38.3%	23.0%
NV	241	66	56	120	72.6%	49.8%	29.9%
NH	71	16	20	35	77.5%	49.3%	29.6%
NJ	762	241	121	400	68.4%	52.5%	31.5%
NM	328	116	64	148	64.6%	45.1%	27.1%
NY	2,668	696	468	1,534	75.0%	57.5%	34.5%
NC	1,225	348	188	689	71.6%	56.2%	33.7%
ND	70	14	17	39	80.0%	55.7%	33.4%
OH	1,371	316	204	851	77.0%	62.1%	37.2%
OK	531	165	103	263	68.9%	49.5%	29.7%
OR	439	158	54	227	64.0%	51.7%	31.0%
PA	1,397	294	295	808	79.0%	57.8%	34.7%
RI	110	27	17	66	75.5%	60.0%	36.0%
SC	474	127	51	296	73.2%	62.4%	37.5%
SD	82	18	16	48	78.0%	58.5%	35.1%
TN	879	310	129	441	64.7%	50.2%	30.1%
TX	3,816	1,446	625	1,745	62.1%	45.7%	27.4%
UT	233	65	35	135	72.3%	57.4%	34.5%
VT	48	12	10	26	75.0%	54.2%	32.5%
VA	651	184	112	355	71.7%	54.5%	32.7%
WA	502	132	118	253	73.7%	50.4%	30.2%
WV	277	96	46	136	65.3%	49.1%	29.5%
WI	555	117	97	341	78.9%	61.4%	36.9%
WY	51	14	10	27	72.5%	52.9%	31.8%

(Source: 2006 CPS)

	Total Number of Children in Poverty (thousands)	Number of Children in Poverty in Husband-Wife Family (thousands)	Number of Children in Poverty in Unmarried Households with Male Householder (thousands)	Number of Children in Poverty in Unmarried Households with Female Householder (thousands)	Percent of Total Child Poverty Living in Unmarried Household	Percent of Total Child Poverty Living in Unmarried Households with Female Householder	Percent Reduction in Total Child Poverty if Marriage Reduced Poverty of Female-headed Households by 60%
AL	209	64	12	133	63.6%	69.4%	38.2%
AK	21	3	3	15	71.4%	85.7%	42.9%
AZ	329	142	29	159	48.3%	56.8%	29.0%
AR	183	56	6	121	66.1%	69.4%	39.7%
CA	1,724	788	149	787	45.6%	54.3%	27.4%
CO	161	69	11	81	50.3%	57.1%	30.2%
CT	84	18	7	59	70.2%	78.6%	42.1%
DE	25	10	2	13	52.0%	60.0%	31.2%
DC	37	4	4	29	78.4%	89.2%	47.0%
FL	590	177	18	395	66.9%	70.0%	40.2%
GA	499	142	13	344	68.9%	71.5%	41.4%
HI	31	10	5	16	51.6%	67.7%	31.0%
ID	53	19	4	29	54.7%	64.2%	32.8%
IL	472	130	23	319	67.6%	72.5%	40.6%
IN	226	33	18	175	77.4%	85.4%	46.5%
IA	101	34	9	58	57.4%	66.3%	34.5%
KS	137	38	14	85	62.0%	72.3%	37.2%
KY	236	64	31	141	59.7%	72.9%	35.8%
LA	252	60	20	173	68.7%	76.2%	41.2%
ME	37	9	4	25	67.6%	75.7%	40.5%
MD	151	29	21	100	66.2%	80.8%	39.7%
MA	199	51	15	133	66.8%	74.4%	40.1%
MI	469	104	48	316	67.4%	77.8%	40.4%
MN	139	56	9	74	53.2%	59.7%	31.9%
MS	221	40	8	173	78.3%	81.9%	47.0%
MO	247	100	20	127	51.4%	59.5%	30.9%
MT	36	9	1	26	72.2%	75.0%	43.3%
NE	58	30	4	23	39.7%	48.3%	23.8%
NV	81	29	6	46	56.8%	64.2%	34.1%
NH	17	5	2	9	52.9%	70.6%	31.8%
NJ	260	111	13	136	52.3%	57.3%	31.4%
NM	120	52	12	55	45.8%	56.7%	27.5%
NY	858	205	57	597	69.6%	76.1%	41.7%
NC	449	131	33	285	63.5%	70.8%	38.1%
ND	23	6	2	15	65.2%	73.9%	39.1%
OH	515	109	32	373	72.4%	78.8%	43.5%
OK	188	63	25	101	53.7%	66.5%	32.2%
OR	143	67	8	68	47.6%	53.1%	28.5%
PA	469	111	46	312	66.5%	76.3%	39.9%
RI	37	12	3	23	62.2%	67.6%	37.3%
SC	163	44	8	110	67.5%	73.0%	40.5%
SD	26	7	2	16	61.5%	73.1%	36.9%
TN	306	125	21	159	52.0%	59.2%	31.2%
TX	1,436	593	86	756	52.6%	58.7%	31.6%
UT	101	29	7	65	64.4%	71.3%	38.6%
VT	12	3	1	7	58.3%	75.0%	35.0%
VA	241	72	12	157	65.1%	70.1%	39.1%
WA	159	48	10	101	63.5%	69.8%	38.1%
WV	83	26	9	48	57.8%	68.7%	34.7%
WI	199	56	5	138	69.3%	71.9%	41.6%
WY	17	5	2	10	55.8%	70.6%	35.3%

State	State & Local Tax Burden	Foregone Tax Revenue	Justice System	TANF	Medicaid	SCHIP	Child Welfare	Total
California	11.5%	$717	$1,621	$515	$1,093	$153	$739	$4,829
New York	13.8%	$657	$1,220	$202	$1,184	$73	$322	$3,668
Texas	9.3%	$559	$1,557	$64	$635	$46	$96	$2,957
Ohio	12.4%	$368	$768	$48	$1,271	$32	$251	$2,739
Pennsylvania	10.8%	$267	$643	$109	$839	$36	$421	$2,315
Florida	10.0%	$313	$814	$57	$546	$43	$181	$1,953
Illinois	10.8%	$275	$657	$19	$650	$98	$250	$1,949
Michigan	11.2%	$281	$651	$90	$374	$30	$135	$1,562
Georgia*	10.3%	$281	$709	$59	$290	$49	$72	$1,460
North Carolina	11.0%	$250	$587	$59	$339	$21	$73	$1,329
New Jersey	11.6%	$126	$280	$16	$419	$47	$115	$1,003
Massachusetts	10.6%	$112	$274	$3	$335	$46	$175	$945
Indiana	10.7%	$150	$361	$5	$158	$15	$150	$839
Virginia	10.2%	$127	$323	$17	$234	$23	$51	$776
Tennessee	8.5%	$107	$328	$12	$220	$0	$89	$757
Wisconsin	12.3%	$135	$284	$11	$198	$15	$95	$737
Maryland	10.8%	$86	$206	$9	$266	$30	$127	$724
Connecticut	12.2%	$57	$122	$45	$438	$3	$48	$712
Washington	11.1%	$89	$268	$52	$266	$1	$95	$711
Louisiana	11.0%	$152	$356	$2	$109	$13	$37	$670
Missouri	10.1%	$102	$262	$5	$211	$9	$75	$664
Arizona	10.3%	$131	$328	$13	$134	$10	$38	$654
Kentucky	10.9%	$122	$290	$21	$119	$8	$92	$654
Mississippi	10.5%	$144	$356	$0	$84	$10	$10	$605
Minnesota	11.5%	$68	$152	$9	$213	$11	$121	$574
Alabama	8.8%	$93	$274	$3	$124	$10	$44	$548
Arkansas	11.3%	$109	$249	$4	$86	$6	$16	$471
South Carolina	10.7%	$94	$227	$4	$132	$3	$8	$469
Colorado	10.4%	$67	$167	$0	$111	$11	$99	$454
Oklahoma	9.0%	$72	$208	$23	$92	$9	$26	$430
Kansas	11.2%	$76	$175	$9	$78	$6	$45	$389
Oregon	10.0%	$54	$140	$16	$111	$7	$33	$361
Iowa	11.0%	$51	$119	$17	$104	$6	$61	$359
Utah	10.7%	$55	$134	$8	$50	$4	$25	$276
West Virginia	10.9%	$42	$99	$8	$50	$3	$29	$231
New Mexico	9.8%	$43	$113	$3	$57	$1	$12	$230
Maine	14.0%	$28	$52	$37	$87	$4	$7	$214
Rhode Island	12.7%	$23	$47	$6	$78	$9	$43	$206
Nevada	10.1%	$37	$95	$6	$44	$5	$13	$199
District of Columbia	12.5%	$29	$60	NA	NA	$1	$72	$162
Nebraska	11.9%	$22	$47	$6	$41	$3	$23	$142
Idaho	10.1%	$23	$60	$0	$34	$2	$8	$127
Alaska	6.6%	$8	$31	$7	$42	$3	$22	$114
Montana	9.7%	$20	$54	$5	$22	$2	$10	$113
Hawaii	12.4%	$16	$33	$10	$32	$2	$18	$112
New Hampshire	8.0%	$6	$19	$8	$48	$1	$18	$99
Delaware	8.8%	$9	$27	$1	$39	$1	$11	$88
South Dakota	9.0%	$11	$33	$3	$22	$1	$7	$77
Vermont	14.1%	$8	$14	$5	$35	$0	$12	$74
North Dakota	9.9%	$12	$21	$3	$17	$1	$5	$69
Wyoming	9.5%	$8	$21	$12	$13	$1	$7	$61

1. Of course, the death of one's spouse is another reason why an adult may not be married.

2. U.S. Census Bureau, 2005 American Community Survey.

3. Joyce A. Martin et al., "Births: Final Data for 2004," *National Vital Statistics Reports* 55, no. 1 (September 29, 2006): 3.

4. W. Bradford Wilcox et al., *Why Marriage Matters: 26 Conclusions from the Social Sciences* (New York: Institute for American Values, 2005), 10–11, and Institute for American Values, *The Marriage Movement: A Statement of Principles* (New York: Institute for American Values, 2000), http://center.americanvalues.org/?p=19.

5. Institute for American Values, *The Marriage Movement*, 11.

6. T. Ooms, S. Bouchet, and M. Parke, *Beyond Marriage Licenses: Efforts in States to Strengthen Marriage and Two-Parent Families* (Washington, DC: Center for Law and Social Policy, 2004). The welfare reform act of 1996 converted federal welfare funding (now known as TANF or Temporary Assistance for Needy Families) into block grants to the states, becoming the first federal law explicitly to promote marriage. Personal Responsibility and Work Opportunity Reconciliation Act of 1996 (PRWORA), 42 U.S.C. 1305 (P.L. 104–193, Aug. 22, 1996). Three of the four purposes of the welfare reform law relate to marriage, giving the states broad latitude in the use of the welfare funds: (1) to provide assistance to needy families so that children may be cared for in their own homes or in the homes of relatives; (2) to end the dependence of needy parents on government benefits by promoting job preparation, work and marriage; (3) to prevent and reduce the incidence of out-of-wedlock pregnancies; and (4) to encourage the formation and maintenance of two-parent families.

7. 2007 Texas H.B. 2683, fiscal note, http://www.capitol.state.tx.us/. Data on Texas program also from personal communication with Bill Coffin, Special Assistant for Marriage Education at Administration for Children and Families, Department of Health and Human Services.

8. Deficit Reduction Act of 2005, § 7103, P.L. 109–171 (codified at 42 U.S.C. 603(a)(2)). Allowable marriage activities under the marriage initiative include the following: (1) public advertising campaigns on the value of marriage and the skills needed to increase marital stability and health; (2) education in high schools on the value of marriage, relationship skills, and budgeting; (3) marriage education, marriage skills, and relationship skills programs, that may include parenting skills, financial management, conflict resolution, and job and career advancement, for non-married pregnant women and non-married expectant fathers; (4) premarital education and marriage skills training for engaged couples and for couples or individuals interested in marriage; (5) marriage enhancement and marriage skills training programs for married couples; (6) divorce reduction programs that teach relationship skills; (7) marriage mentoring programs which use married couples as role models and mentors in at-risk communities; and (8) programs to reduce the disincentives to marriage in means-tested aid programs, if offered in conjunction with any activity above.

9. To address this issue, we propose the following thought experiment: If all currently unmarried adult women were instead married (which would also mean all children now living with a single mother were instead living with two married parents), how much would taxpayers save? The amount that taxpayers would save if all single women (including mothers) married is the taxpayer cost of family fragmentation. (Again, we are not saying that all women *should* be married, rather that posing such a scenario helps us to capture the costs of family fragmentation.) Throughout the analysis, individuals who are not married or who have experienced a divorce or a nonmarital birth are considered to be living in a "fragmented" family. As discussed below, we exclude all adults and children living with a male householder with no spouse present from the analysis only in the interest of creating a very cautious estimate of the taxpayer cost of family fragmentation. Further, as shown in table 2, single motherhood occurs much more frequently than single fatherhood. As discussed below, it is likely not theoretically possible (nor necessarily desirable) for all women to be married, and the analysis in this study takes this concern into account.

10. Lack of fulltime work seems to be the biggest cause of poverty in America with family fragmentation being the second largest cause; see Ron Haskins and Isabel Sawhill, "Work and Marriage: The Way to End Poverty and Welfare," Policy Brief, Welfare Reform & Beyond #28 (Washington, DC: Brookings Institution, 2003). See also Paul Amato, "The Impact of Family Formation Change on the Cognitive, Social and Emotional Well-Being of the Next Generation," *The Future of Children* 15, no. 2 (Fall 2005): 75–96; Wilcox et al., *Why Marriage Matters*; K. A. Moore et al, "Marriage from a Child's Perspective: How Does Family Structure Affect Children and What Can We Do about It?" *Child Trends Research Brief*, June 2002; Sara McLanahan and Gary Sandefur, *Growing Up with a Single Parent: What Helps, What Hurts* (Cambridge, MA: Harvard University Press, 1994).

11. Wilcox et al., *Why Marriage Matters*; David Ribar, "What Do Social Scientists Know about the Benefits of Marriage? A Review of Quantitative Methodologies," IZA Discussion Paper # 998 (Bonn, Germany: Institute for the Study of Labor, January 2004), http://ftp.iza.org/dp998.pdf.

12. Examples of habits, traits, and disadvantages that may lead to negative life outcomes (which are costly to taxpayers) and to a lack of marriage, to divorce, and to nonmarital childbearing include not considering the impact of present actions and choices on the future, proclivity to violence, and a lack of employment skills.

13. See, for example, P. R. Amato and R. A. Maynard, "Decreasing Nonmarital Births and Strengthening Marriage to Reduce Poverty," *The Future of Children* 17, no. 2 (Fall 2007): 75–96.

14. G. S. Becker, *A Treatise on the Family* (Cambridge, MA: Harvard University Press, 1981) provides the seminal economic explanation: specialization and exchange and economies of scale. Ribar, "What Do Social Scientists Know?" provides an extensive review of the empirical literature on these effects. For example, Ginther and Zavodny suggest that marriage leads to a causal increase in male labor supply; see D. Ginther and M. Zavodny, "Is the Male Marriage Premium Due to Selection? The Effect of Shotgun Weddings on the Return to Marriage," *Journal of Population Economics* 14 (2001): 313–328.

15. In a forthcoming article in the *Journal of Human Resources* titled "The Effect of Marital Breakup on the Income Distribution of Women with Children," Elizabeth O. Ananat and Guy Michaels use exogenous variation in the sex of the firstborn child to estimate the impact of divorce on income. Prior studies have shown that marriages in which the firstborn child is male are less likely to end in divorce (see, e.g., K. Bedard and O. Deschenes, "Sex Preferences, Marital Dissolution, and the Economic Status of Women," *Journal of Human Resources* 40, no. 2 [Spring 2005]: 411–434).

16. Ananat and Michaels, "The Effects of Marital Breakup," table 3.

17. Robert Lerman, "The Impact of the Changing U.S. Family Structure on Child Poverty and Income Inequality" *Economica* 63 (1996): S119–S139.

18. In "For Richer or for Poorer: Marriage as an Antipoverty Strategy," *Journal of Policy Analysis and Management* 21, no. 4 (2002): 587–599, Adam Thomas and Isabel Sawhill (like Lerman) did not match all single mothers with husbands. They report that there were more than enough single white males to marry all single white mothers in the CPS, but there was a shortage of single black males to marry all single black mothers. In many low-income communities, women probably outnumber marriageable men, because of higher death and incarceration rates of males, meaning it would not be theoretically possible to marry all single mothers. They suggest that the lack of marriageable black males or the reported undercount of minorities in the CPS could be responsible for the dearth of black males available in the CPS. In addition to black males, there is likely also a shortage of elderly males of all races eligible to marry elderly females because of higher death rates at younger ages among males.

19. Ribar, "What Do Social Scientists Know?" 38–46.

20. See Hilary Hoynes, Marianne Page, and Ann Stevens, "Poverty in America: Trends and Explanation," *Journal of Economic Perspectives* 20, no. 1 (Winter 2006): 47–68, published by the American Economic Association; and R. Blank and D. Card, "Poverty, Income Distribution and Growth: Are They Still Related?" *Brookings Papers on Economic Activity* 48, no.2 (1993): 285–340, published by The Brookings Institution.

21. Thomas and Sawhill, "For Richer or for Poorer."

22. Robert M. O'Brien and Jean Stockard, "The Cohort-size Same-size Conundrum: An Empirical Analysis and Assessment Using Homicide Arrest Data from 1960 to 1999," *Journal of Quantitative Criminology* 19 (2003): 1–32.

23. Cynthia Harper and Sara McLanahan, "Father Absence and Youth Incarceration," *Journal of Research on Adolescence* 14, no. 3 (2004): 369–397. Harper and McLanahan do not attempt to control for unobserved selection effects, which limits our confidence that all of the large differences in risk of incarceration they found due to family structure are causally related to parents' marital status. However, the large number of control variables in their empirical model and the large magnitudes of their results make it hard to believe that the impact of family fragmentation of boys' and young men's criminal conduct is zero.

24. Robert Sampson, J. Laub, and C. Wimer, "Does Marriage Reduce Crime? A Counterfactual Approach to Within-Individual Causal Effects," *Criminology* 44, no. 3 (2006): 465–504.

25. Paul R. Amato and Alan Booth, *A Generation at Risk: Growing Up in an Era of Family Upheaval* (Cambridge: Harvard University Press, 1997), 220. While the theoretical and empirical case for marriage having a beneficial impact on men, women, and children may be strong, surely in some cases spouses and children are better off without one parent in the home. For example, a woman and children may be better off without the father when the father is violent or when the marriage is high-conflict. In "Until Death Do You Part: The Effects of Unilateral Divorce on Spousal Homicides,"

Economic Inquiry 41 (2003): 163–183. T. S. Dee finds that unilateral divorce laws, which were found to lead to increases in divorce (see L. Friedberg, "Did Unilateral Divorce Raise Divorce Rates? Evidence from Panel Data," *American Economic Review* 88 [1998]: 608–627), have a negligible effect on the incidence of husbands murdering wives, but unilateral divorce coupled with laws that favored husbands in the division of marital property led to a 21 percent increase of lethal spousal violence against husbands. Contrary to Dee's results, B. Stevenson and J. Wolfers (see "Bargaining in the Shadow of the Law: Divorce Laws and Family Distress" *Quarterly Journal of Economics* 121, no. 1 [2006]: 267–288) find that no-fault divorce led to a large decline in spousal homicide against wives and no change in spousal homicide against husbands. Dee replicates the results of a 2000 version of Stevenson and Wolfers' work and finds that their results are sensitive to a variety of assumptions and specification (see Dee, pp. 177–178). It is unclear whether any changes in their analysis that were present in Stevenson and Wolfers' published version in 2006 render Dee's concerns in 2003 moot, as Stevenson and Wolfers do not directly address these concerns in 2006. Therefore, there does not seem to be definitive evidence that unilateral divorce laws decrease spousal homicide against wives. Nevertheless, Wilcox et al., *Why Marriage Matters*, 31, summarize evidence that married women are subject to less violence inside and outside the home relative to single and cohabitating women. In addition, Ananat and Michaels find that divorce benefits some women with children financially, as they moved in with relatives with significant incomes and/or the former husband was not contributing anything or very much to family income (see their forthcoming article "The Effects of Marital Breakup"). Nevertheless, as discussed in the text, Ananat and Michaels also find that divorce greatly increases the odds that women with children are in the lowest income quartile. In some individual cases women and children may be better off without the children's father because they avoid violence or poverty, but empirical evidence suggests that marriage tends to have the opposite effect by keeping women and children away from violence and increasing material resources.

26. There are other taxpayer-funded programs that likely experience larger expenditures due to family fragmentation such the Earned Income Tax Credit, remedial school programs, and special education programs. These programs were excluded because we did not feel comfortable making reasonable cost estimates given the available empirical literature. The likelihood that these programs would experience reduced costs if more single-adult households became married families suggests that this estimate of the taxpayer cost of family fragmentation is an underestimate of the true costs. Some state funds for TANF programs that benefit children are included in the "child welfare" calculation below, but other non-cash assistance TANF funds are excluded from this analysis.

27. Some evidence suggests that more children in single-parent families are hospitalized for asthma or childhood diabetes because single parents can be less able to manage the complex stresses of chronic illness for themselves and their children, and because they have less access to adequate health care. See Linda Waite and Maggie Gallagher, *The Case for Marriage: Why Married People Are Happier, Healthier, and Better-Off Financially* (New York: Doubleday, 2000).

28. Assumption 3 does not imply that only households in poverty are eligible for means-tested programs. Most federal means-tested programs serve significant numbers of households with incomes above poverty thresholds. As marriage would reduce poverty by increasing household incomes, marriage would also increase the income of households that already had incomes above poverty thresholds but were receiving means-tested transfers. At least some of these households would be rendered ineligible for these means-tested transfers due to marriage.

29. Ananat and Michaels, "The Effects of Marital Breakup" and Thomas and Sawhill, "For Richer or for Poorer."

30. In table 3, female-headed households refers to all households with a female householder and no spouse present, including households with and without children. In 2006 there were 12,827,000 children in poverty. Among those, 7,715,000 lived with a single mother. If marriage were to lift 60 percent of these 7,715,000 children out of poverty, then 4,629,000 children would escape poverty. Thus, marriage would lift 4,629,000/12,827,000 or 36.1 percent of these children out of poverty. In 2006 there were 36,460,000 total persons in poverty. Among those, 19,257,000 lived with a female householder with no spouse present or were themselves the female householder with no spouse. If marriage were to lift 60 percent of these 19,257,000 individuals out of poverty, then 11,554,000 people would escape poverty. Thus, marriage would lift 11,554,000/36,460,000 or 31.7 percent of these individuals out of poverty.

31. Based on their estimate of the impact of marriage on the poverty status of female-headed households, Thomas and Sawhill find that the overall 1998 poverty rate would have been 24 percent lower if the proportion of children living in female-headed households in 1998 was the same as had existed in 1970 (see Thomas and Sawhill, "For Richer or for Poorer").

32. Based on table 3, assumption 2 suggests that family fragmentation is responsible for 36.1 percent of childhood poverty, and assumption 3 suggests that family fragmentation is responsible for 36.1 percent of taxpayer costs on these programs.

33. For example, under current rules, if increases in marriage moved some children off the Head Start rolls (because they are no longer poor), then other children who are eligible but do not currently receive Head Start services would be admitted into newly freed-up Head Start spaces.

34. Harper and McLanahan, "Father Absence and Youth Incarceration."

35. Sampson, Laub, and Wimer, "Does Marriage Reduce Crime?"

36. Harry Holzer et al., *The Economic Costs of Poverty in the United States: Subsequent Effects of Children on Growing Up Poor* (Washington, DC: Center for American Progress, January 24, 2007), http://www.americanprogress.org/issues/2007/01/pdf/poverty_report.pdf.

37. See, for example, Ribar, "What Do Social Scientists Know?"

38. See, for example, McLanahan and Sandefur, *Growing Up with a Single Parent*.

39. Holzer et al., *The Economic Costs of Poverty*.

40. In the estimates for individual states, we use state-specific average tax rates from *TaxFoundation.org*, "Tax Data: State and Local Tax Burdens Compared to Other U.S. States, 1970–2007," April 4, 2007, http://www.taxfoundation.org/taxdata/show/335.html.

41. The specific calculations for each line item and the data sources used are contained in table A.1 and its notes. These taxpayer costs can be considered as annual recurring costs under the assumption that current rates of single motherhood remain constant into the future.

42. For example, the U.S. spends almost $500 billion per year on public education. See Thomas D. Snyder, *Mini-Digest of Education Statistics, 2007*, NCES 2008-023, (Washington, DC: National Center for Education Statistics, Institute of Educational Sciences, U.S. Department of Education, 2008).

43. See, for example, Waite and Gallagher, *The Case for Marriage;* and Elizabeth Marquardt, "The New Alone," *Washington Post*, January 27, 2008, B01.

44. As shown in tables 4–6 based on the 2006 Current Population Survey, single-mother households with income less than 200 percent of the poverty line are 2.6 times as likely to receive Food Stamps, 2.9 times as likely to receive cash assistance, and 1.56 times as likely to receive Medicaid than married couples also earning less than 200 percent of the poverty threshold.

45. Using estimates and calculations from Gregory Acs and Elaine Maag, *Irreconcilable Differences? The Conflict between Marriage Promotion Initiatives for Cohabiting Couples with Children and Marriage Penalties in Tax and Transfer Programs* (Washington, DC: Urban Institute, 2005), we estimate the $0.5 billion amount.

46. Holzer et al., *The Economic Costs of Poverty*, 6.

47. Ribar, "What Do Social Scientists Know?"

48. Thomas and Sawhill, "For Richer or for Poorer."

49. Of course, higher dropout rates would lower future earnings, and government spends considerable resources on attempting to prevent high school students from dropping out and providing services to help dropouts earn a high school diploma or GED.

50. See Waite and Gallagher, *The Case for Marriage*.

51. Harper and McLanahan, "Father Absence and Youth Incarceration."

52. Sampson, Laub, and Wimer, "Does Marriage Reduce Crime?"

53. Harper and McLanahan, "Father Absence and Youth Incarceration," table 2.

54. Doris J. James, *The Profile of Jail Inmates, 2002*, Special Report NCJ 201932 (Washington, DC: U.S. Department of Justice, Bureau of Justice Statistics, July 2004), http://www.ojp.usdoj.gov/bjs/abstract/pji02.htm.

55. Ribar, "What Do Social Scientists Know?" 38.

56. Based on data used by Jens Ludwig in "The Costs of Crime" testimony to the U.S. Senate Committee on the Judiciary" on September 19, 2006, in the entire U.S., state and local taxpayers spent about $183 billion on the justice system in FY 2007, while the remaining $49 billion was spent by the federal government (see http://judiciary.senate.gov/testimony.cfm?id=2068&wit_id=5749).

TABLE S-5

SELECTED VITAL STATISTICS
FREQUENCIES AND RATES OR RATIOS BY COUNTY
MONTANA, 2007

		MONTANA		BEAVERHEAD		BIG HORN		BLAINE		BROADWATER		CARBON		CARTER		CASCADE		CHOUTEAU		CUSTER	
		NUMBER	RATE	NUMBER	RATE	NUMBER	RATE	NUMBER	RATE	NUMBER	RATE	NUMBER	RATE	NUMBER	RATE	NUMBER	RATE	NUMBER	RATE	NUMBER	RATE
Population	Population	957,861	-	8,804	-	12,798	-	6,550	-	4,590	-	9,721	-	1,268	-	81,775	-	5,254	-	11,188	-
Natural Increase	Natural Increase	3,867	4.0	17	1.9	159	12.4	60	9.2	-6	1.3	-7	0.7	-8	6.3	470	5.7	-19	3.6	-21	1.9
Births - Residence	Live Births, Total	12,437	13.0	94	10.7	281	22.0	123	18.8	47	10.2	85	8.7	7	5.5	1,203	14.7	44	8.4	124	11.1
	Live Births, Male	6,366	13.3	55	12.2	150	23.7	68	21.0	23	9.8	46	9.4	5	8.0	644	15.9	23	8.7	66	12.0
	Live Births, Female	6,071	12.7	39	9.1	131	20.3	55	16.6	24	10.7	39	8.1	2	3.1	559	13.6	21	8.0	58	10.2
	Live Births, Out Of	4,456	358.3	23	244.7	163	580.1	78	634.1	14	297.9	23	270.6	-	-	408	339.2	8	181.8	45	362.9
Deaths - Residence	Deaths (Excluding	8,570	8.9	77	8.7	122	9.5	63	9.6	53	11.5	92	9.5	15	11.8	733	9.0	63	12.0	145	13.0
	Deaths (Excluding	4,342	9.1	37	8.2	65	10.3	32	9.9	35	14.9	45	9.2	8	12.7	402	9.9	29	11.0	77	14.0
	Deaths (Excluding	4,228	8.8	40	9.3	57	8.8	31	9.4	18	8.0	47	9.7	7	10.9	331	8.0	34	13.0	68	11.9
Infant Mortality & Fetal Death - Residence	Infant Deaths (Under 1 Year)	76	6.1	-	-	4	14.2	-	-	-	-	-	-	-	-	8	6.7	3	68.2	-	-
	Neonatal (Under 28	43	3.5	-	-	2	7.1	-	-	-	-	-	-	-	-	3	2.5	2	45.5	-	-
	Postneonatal (28	33	2.7	-	-	2	7.1	-	-	-	-	-	-	-	-	5	4.2	1	22.7	-	-
	Fetal	38	3.1	-	-	2	7.1	1	8.1	-	-	-	-	-	-	3	2.5	-	-	-	-
	Perinatal	81	6.5	-	-	4	14.2	1	8.1	-	-	-	-	-	-	6	5.0	2	45.5	-	-
Leading Causes of Death - Residence	(#) Malignant neoplasms	1,906	199.0	23	261.2	17	132.8	12	183.2	14	305.0	20	205.7	3	236.6	150	183.4	22	418.7	39	348.6
	# Diseases of heart	1,860	194.2	16	181.7	17	132.8	8	122.1	14	305.0	14	144.0	7	552.1	153	187.1	12	228.4	26	232.4
	(#) Chronic lower	604	63.1	4	45.4	12	93.8	4	61.1	2	43.6	5	51.4	2	157.7	65	79.5	2	38.1	14	125.1
	(#) Accidents	603	63.0	5	56.8	17	132.8	5	76.3	6	130.7	6	61.7	-	-	40	48.9	2	38.1	10	89.4
	(61#)	437	45.6	3	34.1	5	39.1	3	45.8	-	-	5	51.4	-	-	42	51.4	3	57.1	14	125.1
	(48#) Alzheimer's	260	27.1	-	-	1	7.8	2	30.5	-	-	7	72.0	-	-	49	59.9	5	95.2	3	26.8
	(43#) Diabetes	258	26.9	4	45.4	6	46.9	2	30.5	2	43.6	3	30.9	-	-	25	30.6	1	19.0	3	26.8
	(#) Intentional self-harm	192	20.0	2	22.7	2	15.6	-	-	1	21.8	2	20.6	1	78.9	10	12.2	2	38.1	5	44.7
	(#) Influenza and	180	18.8	3	34.1	5	39.1	2	30.5	4	87.1	-	-	-	-	17	20.8	-	-	6	53.6
	(#) Chronic liver	139	14.5	1	11.4	2	15.6	5	76.3	1	21.8	1	10.3	-	-	17	20.8	-	-	3	26.8
Abortion - Residence	Abortions	1,977	159.0	14	148.9	22	78.3	2	16.3	3	63.8	14	164.7	-	-	163	135.5	1	22.7	15	121.0
Births - Occurrence	Live Births, Total	12,401	12.9	85	9.7	217	17.0	-	-	1	0.2	2	0.2	-	-	1,523	18.6	1	0.2	254	22.7
Deaths - Occurrence	Deaths (Excluding	8,608	9.0	87	9.9	86	6.7	37	5.6	46	10.0	68	7.0	15	11.8	852	10.4	44	8.4	155	13.9
	Accidental	633	66.1	8	90.9	18	140.6	6	91.6	9	196.1	5	51.4	2	157.7	38	46.5	3	57.1	10	89.4
	Motor Vehicle	293	30.6	2	22.7	11	86.0	4	61.1	4	87.1	4	41.1	-	-	19	23.2	2	38.1	7	62.6
	Other Accidental	340	35.5	6	68.2	7	54.7	2	30.5	5	108.9	1	10.3	2	157.7	19	23.2	1	19.0	3	26.8
Infant Death - Occurrence	Infant Deaths (Under 1	68	5.5	-	-	2	9.2	-	-	-	-	-	-	-	-	14	9.2	1	0.0	1	3.9
Marriages - Occurrence	Marriages Solumnized	7,263	7.6	62	7.0	80	6.3	40	6.1	54	11.8	180	18.5	6	4.7	603	7.4	41	7.8	67	6.0
	Licenses Issued	7,263	7.6	58	6.6	84	6.6	39	6.0	38	8.3	129	13.3	4	3.2	627	7.7	32	6.1	66	5.9
Marital Terminations - Occurrence	Marital Terminations	4,720	4.9	27	3.1	20	1.6	6	0.9	13	2.8	15	1.5	0	0.0	906	11.1	7	1.3	52	4.6
Abortion - Occurrence	Abortions	2,238	180.5	-	-	-	-	-	-	-	-	-	-	-	-	96	63.0	-	-	-	-

261 of 34 of Mon = 13.7 % abortions

* OUT OF WEDLOCK BIRTHS, INFANT DEATHS, FETAL DEATHS, AND ABORTIONS ARE PER 1,000 LIVE BIRTHS.** CAUSE-SPECIFIC RESIDENT DEATH RATES ARE PER 100,000 ESTIMATED POPULATION.*** NATURAL INCREASE, LIVE BIRTHS, DEATHS, MARRIAGES, AND MARTIAL TERMINATIONS ARE PER 1,000 POPULATION.
- QUANTITY IS ZERO.
SEE "CAUSE OF DEATH" IN THE "TECHNICAL OVERVIEW" FOR THE INTERNATIONAL CLASSIFICATION OF DISEASE (ICD-10) CODES INCLUDED IN EACH CATEGORY.
LINE NUMBERS SHOWN IN PARENTHESES ON THIS TABLE CORRESPOND TO CATEGORIES AND CODE RANGES IN THE TABLE AT
http v.dphhs.mt.gov/statisticalinformation/vitalstats/appendix/1 ies.pdf. THOSE MARKED WITH A "#" SIGN ARE RANKABLE AS LEAD AUSES.
ABOR DATA IS LIMITED TO ABORTIONS OCCURRING IN MONTANA.

TABLE S-6

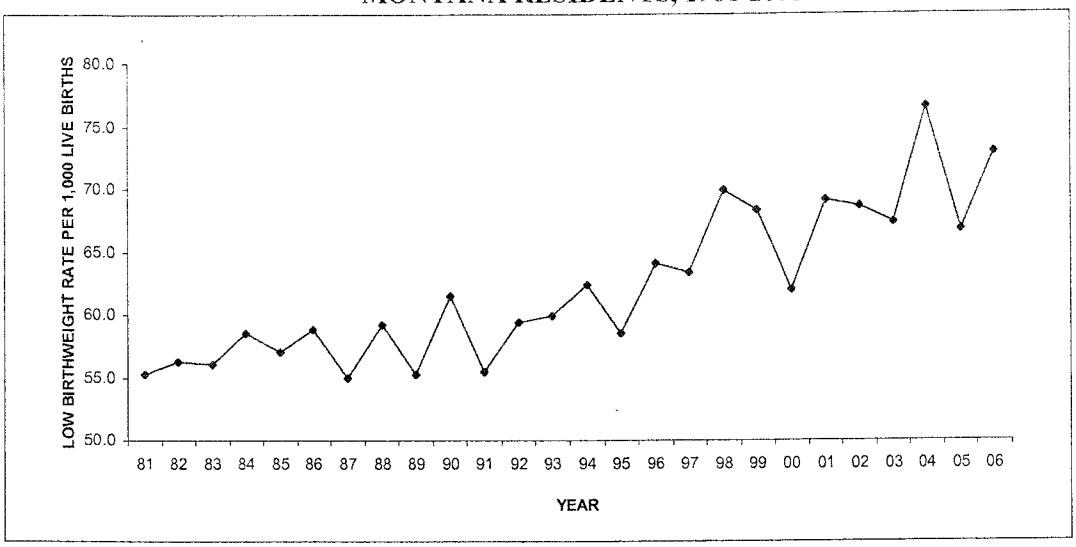
FREQUENCY OF LICENSES ISSUED, MARRIAGES SOLEMNIZED,
MARITAL DISSOLUTIONS* AND MARRIAGES INVALIDATED*
BY COUNTY OF OCCURRENCE - MONTANA, 2003

COUNTY	LICENSES ISSUED	MARRIAGES SOLEMNIZED	MARITAL TERMINATIONS	MARITAL DISSOLUTIONS*	INVALID MARRIAGES*
MONTANA, TOTAL	6,640	6,640	3,255	3,232	23
BEAVERHEAD	65	63	31	30	1
BIG HORN	94	81	8	8	-
BLAINE	31	30	5	5	-
BROADWATER	21	35	-	-	-
CARBON	136	187	14	13	1
CARTER	6	6	-	-	-
CASCADE	627	587	390	388	2
CHOUTEAU	22	33	-	-	-
CUSTER	83	85	64	64	-
DANIELS	9	9	3	3	-
DAWSON	54	54	15	15	-
DEER LODGE	53	66	34	33	1
FALLON	17	17	11	11	-
FERGUS	72	86	48	48	-
FLATHEAD	730	729	343	338	5
GALLATIN	657	607	139	138	-
GARFIELD	8	8	-	-	-
GLACIER	86	94	8	8	-
GOLDEN VALLEY	2	2	-	-	-
GRANITE	17	22	1	1	-
HILL	113	112	45	45	-
JEFFERSON	27	51	12	12	-
JUDITH BASIN	3	6	7	7	-
LAKE	173	211	109	107	2
LEWIS & CLARK	444	416	284	282	2
LIBERTY	2	3	8	8	-
LINCOLN	106	118	97	97	-
MCCONE	10	5	-	-	-
MADISON	65	78	14	12	2
MEAGHER	10	14	-	-	-
MINERAL	33	35	-	-	-
MISSOULA	723	624	492	488	4
MUSSELSHELL	23	20	18	18	-
PARK	137	163	-	-	-
PETROLEUM	3	1	-	-	-
PHILLIPS	33	34	2	2	-
PONDERA	30	33	21	21	-
POWDER RIVER	7	7	1	1	-
POWELL	33	38	11	11	-
PRAIRIE	7	5	-	-	-
RAVALLI	214	253	163	163	-
RICHLAND	62	60	18	18	-
ROOSEVELT	58	59	8	8	-
ROSEBUD	28	24	1	1	-
SANDERS	69	78	20	20	-
SHERIDAN	25	24	8	8	-
SILVER BOW	233	223	140	140	-
STILLWATER	71	65	16	16	-
SWEET GRASS	33	35	2	2	-
TETON	35	43	12	12	-
TOOLE	27	28	7	7	-
TREASURE	4	4	3	3	-
VALLEY	35	41	15	15	-
WHEATLAND	13	12	-	-	-
WIBAUX	5	6	-	-	-
YELLOWSTONE	956	907	608	605	3
YELLOWSTONE PARK	-	-	-	-	-
NOT STATED	-	3	-	-	-

*** DATA WERE COLLECTED BY THE MONTANA OFFICE OF VITAL STATISTICS (OVS) THROUGH OCTOBER 1998 AND BY THE THE JUDICIAL CASE MANAGEMENT SYSTEM (JCMS) THEREAFTER. DATA COLLECTED BY JCMS ARE NOT COMPARABLE TO THOSE COLLECTED BY OVS AND SHOULD BE USED WITH CAUTION.**

Figure 10

RATE OF LOW BIRTHWEIGHT BIRTHS
MONTANA RESIDENTS, 1981-2006



MOTHER'S AGE, RACE, AND MARITAL STATUS

Those giving birth in 2006 were mostly married white women between the ages of 20 and 35 years. **Table S-8** shows the frequency and percent distribution of births to Montana residents by the mother's age and county of residence. **Table S-3** shows the frequency of births by the mother's race and county of residence of the mother. Any of the races shown may include women of Hispanic origin.

Figure 11

PERCENT OF BIRTHS TO UNMARRIED MOTHERS
MONTANA AND U.S. RESIDENTS, 1981-2006

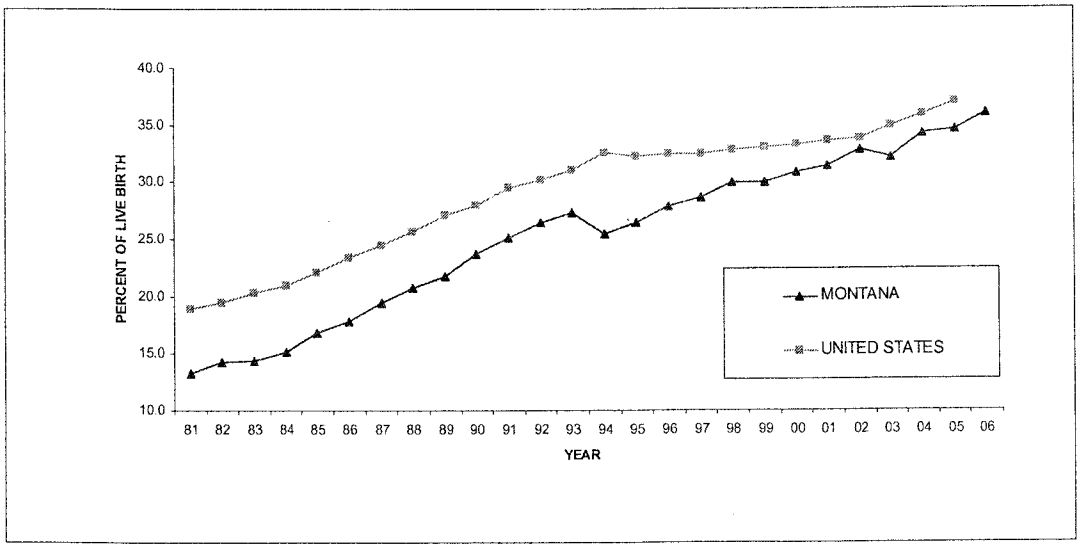


Table B-1 shows the frequency and percent of resident births to unmarried mothers for the years 2000 through 2006. **Table S-7** shows the frequency of birth by marital status of the mother for each of Montana's counties in 2006. **Figure 11**, on the previous page, shows the trend in those births to unmarried women for residents of Montana and the United States since 1981. Births to unmarried women represented 13.3% of Montana's resident births in 1981, 23.7% in 1990, 30.8% in 2000, and 35.9% in 2006.

By comparison, unmarried women in the U.S. accounted for 18.9% of the resident births in 1981, 28.0% in 1990, 33.2% in 2000, and 36.9% in 2005 (the latest year for which a national statistic is available). The Montana proportion of births to unmarried mothers has been, for more than two decades, somewhat below the U.S. proportion. However, the long-term trend for Montana is increasing and appears to be converging with the national trend over this period.

METHOD OF DELIVERY

About three quarters of the infants delivered in Montana in the years 1997 through 2006 were delivered vaginally (including those delivered vaginally after the mother had a previous C-section). As **Figure 12** shows, the likelihood of a vaginal delivery decreases steadily with increasing age of the mother. This pattern holds for both whites and Native Americans.

Figure 12

FREQUENCY AND PERCENT DISTRIBUTION OF LIVE BIRTHS BY AGE OF MOTHER AND METHOD OF DELIVERY MONTANA OCCURRENCES, 1997-2006

METHOD OF DELIVERY		ALL AGES	UNDER 15	15-17	18-19	20-24	25-29	30-34	35-39	40-44	45 AND OVER	NOT STATED
ALL METHODS	Number	112,087	105	3,786	8,755	31,340	31,479	23,125	10,921	2,419	152	5
	Percent	100	100	100	100	100	100	100	100	100	100	100
VAGINAL	Number	83,967	91	3,195	7,159	24,684	23,692	16,377	7,225	1,460	79	5
	Percent	74.9	86.7	84.4	81.8	78.8	75.3	70.8	66.2	60.4	52	100
VAGINAL AFTER C-SECTION	Number	2,510	-	4	54	414	764	745	433	92	4	-
	Percent	2.2	0	0.1	0.6	1.3	2.4	3.2	4	3.8	2.6	0
PRIMARY C-SECTION	Number	15,433	13	568	1,320	4,169	4,082	3,086	1,673	476	46	-
	Percent	13.8	12.4	15	15.1	13.3	13	13.3	15.3	19.7	30.3	0
REPEAT C-SECTION	Number	10,166	1	18	220	2,070	2,938	2,917	1,589	390	23	-
	Percent	9.1	1	0.5	2.5	6.6	9.3	12.6	14.5	16.1	15.1	0
NOT STATED	Number	11	-	1	2	3	3	-	1	1	-	-
	Percent	0	0	0	0	0	0	0	0	0	0	0

TABLE S-6

FREQUENCY OF LICENSES ISSUED, MARRIAGES SOLEMNIZED,
MARITAL DISSOLUTIONS* AND MARRIAGES INVALIDATED*
BY COUNTY OF OCCURRENCE - MONTANA, 2003

COUNTY	LICENSES ISSUED	MARRIAGES SOLEMNIZED	MARITAL TERMINATIONS	MARITAL DISSOLUTIONS*	INVALID MARRIAGES*
MONTANA, TOTAL	6,640	6,640	3,255	3,232	23
BEAVERHEAD	65	63	31	30	1
BIG HORN	94	81	8	8	-
BLAINE	31	30	5	5	-
BROADWATER	21	35	-	-	-
CARBON	136	187	14	13	1
CARTER	6	6	-	-	-
CASCADE	627	587	390	388	2
CHOUTEAU	22	33	-	-	-
CUSTER	83	85	64	64	-
DANIELS	9	9	3	3	-
DAWSON	54	54	15	15	-
DEER LODGE	53	66	34	33	1
FALLON	17	17	11	11	-
FERGUS	72	86	48	48	-
FLATHEAD	730	729	343	338	5
GALLATIN	657	607	139	138	-
GARFIELD	8	8	-	-	-
GLACIER	86	94	8	8	-
GOLDEN VALLEY	2	2	-	-	-
GRANITE	17	22	1	1	-
HILL	113	112	45	45	-
JEFFERSON	27	51	12	12	-
JUDITH BASIN	3	6	7	7	-
LAKE	173	211	109	107	2
LEWIS & CLARK	444	416	284	282	2
LIBERTY	2	3	8	8	-
LINCOLN	106	118	97	97	-
MCCONE	10	5	-	-	-
MADISON	65	78	14	12	2
MEAGHER	10	14	-	-	-
MINERAL	33	35	-	-	-
MISSOULA	723	624	492	488	4
MUSSELSHELL	23	20	18	18	-
PARK	137	163	-	-	-
PETROLEUM	3	1	-	-	-
PHILLIPS	33	34	2	2	-
PONDERA	30	33	21	21	-
POWDER RIVER	7	7	1	1	-
POWELL	33	38	11	11	-
PRAIRIE	7	5	-	-	-
RAVALLI	214	253	163	163	-
RICHLAND	62	60	18	18	-
ROOSEVELT	58	59	8	8	-
ROSEBUD	28	24	1	1	-
SANDERS	69	78	20	20	-
SHERIDAN	25	24	8	8	-
SILVER BOW	233	223	140	140	-
STILLWATER	71	65	16	16	-
SWEET GRASS	33	35	2	2	-
TETON	35	43	12	12	-
TOOLE	27	28	7	7	-
TREASURE	4	4	3	3	-
VALLEY	35	41	15	15	-
WHEATLAND	13	12	-	-	-
WIBAUX	5	6	-	-	-
YELLOWSTONE	956	907	608	605	3
YELLOWSTONE PARK	-	-	-	-	-
NOT STATED	-	3	-	-	-

*** DATA WERE COLLECTED BY THE MONTANA OFFICE OF VITAL STATISTICS (OVS) THROUGH OCTOBER 1998 AND BY THE THE JUDICIAL CASE MANAGEMENT SYSTEM (JCMS) THEREAFTER. DATA COLLECTED BY JCMS ARE NOT COMPARABLE TO THOSE COLLECTED BY OVS AND SHOULD BE USED WITH CAUTION.**

TABLE S-6

FREQUENCY OF LICENSES ISSUED, MARRIAGES SOLEMNIZED,
MARITAL DISSOLUTIONS* AND MARRIAGES INVALIDATED*
BY COUNTY OF OCCURRENCE - MONTANA, 2004

COUNTY	LICENSES ISSUED	MARRIAGES SOLEMNIZED	MARITAL TERMINATIONS	MARITAL DISSOLUTIONS*	INVALID MARRIAGES*
MONTANA, TOTAL	6,946	6,946	3,516	3,481	35
BEAVERHEAD	54	54	25	25	-
BIG HORN	93	77	8	8	-
BLAINE	33	32	2	1	1
BROADWATER	32	47	-	-	-
CARBON	137	201	24	24	-
CARTER	1	1	1	1	-
CASCADE	687	664	478	469	9
CHOUTEAU	21	32	3	3	-
CUSTER	81	77	58	58	-
DANIELS	9	9	5	5	-
DAWSON	62	63	14	14	-
DEER LODGE	44	51	26	25	1
FALLON	24	24	5	5	-
FERGUS	80	92	39	39	-
FLATHEAD	719	702	228	226	2
GALLATIN	753	683	264	263	1
GARFIELD	6	10	-	-	-
GLACIER	71	84	18	18	-
GOLDEN VALLEY	4	1	1	1	-
GRANITE	16	23	13	13	-
HILL	109	100	69	69	-
JEFFERSON	27	58	16	16	-
JUDITH BASIN	5	7	3	3	-
LAKE	157	196	103	103	-
LEWIS & CLARK	455	402	308	306	2
LIBERTY	10	11	3	3	-
LINCOLN	115	144	84	81	3
MCCONE	6	6	4	4	-
MADISON	46	62	22	22	-
MEAGHER	9	12	6	5	1
MINERAL	36	45	-	-	-
MISSOULA	815	710	499	491	8
MUSSELSHELL	35	30	19	19	-
PARK	126	176	59	59	-
PETROLEUM	2	1	-	-	-
PHILLIPS	29	33	6	6	-
PONDERA	36	40	19	19	-
POWDER RIVER	7	8	1	1	-
POWELL	37	36	16	16	-
PRAIRIE	4	6	-	-	-
RAVALLI	203	254	140	139	1
RICHLAND	84	77	27	27	-
ROOSEVELT	77	79	9	9	-
ROSEBUD	30	31	8	8	-
SANDERS	80	87	23	23	-
SHERIDAN	21	21	8	8	-
SILVER BOW	247	237	161	160	1
STILLWATER	69	55	17	17	-
SWEET GRASS	22	24	17	17	-
TETON	30	34	12	12	-
TOOLE	33	36	14	14	-
TREASURE	6	4	1	1	-
VALLEY	47	45	20	20	-
WHEATLAND	11	11	5	5	-
WIBAUX	5	5	3	3	-
YELLOWSTONE	988	933	602	597	5
YELLOWSTONE PARK	-	-	-	-	-
NOT STATED	-	3	-	-	-

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TABLE S-6

FREQUENCY OF LICENSES ISSUED AND MARRIAGES SOLUMNIZED BY COUNTY OF OCCURRENCE - MONTANA, 2005

COUNTY	LICENSES ISSUED	MARRIAGES SOLEMNIZED	MARITAL TERMINATIONS
MONTANA, TOTAL	6,964	6,964	3,983
BEAVERHEAD	56	56	18
BIG HORN	94	87	18
BLAINE	32	37	-
BROADWATER	34	41	4
CARBON	123	198	9
CARTER	5	7	2
CASCADE	633	613	445
CHOUTEAU	23	32	11
CUSTER	68	83	41
DANIELS	7	7	7
DAWSON	73	70	16
DEER LODGE	39	52	23
FALLON	27	22	3
FERGUS	73	84	52
FLATHEAD	900	859	480
GALLATIN	782	690	260
GARFIELD	6	4	3
GLACIER	79	90	29
GOLDEN VALLEY	2	5	2
GRANITE	12	25	4
HILL	103	92	72
JEFFERSON	36	70	20
JUDITH BASIN	14	12	4
LAKE	159	218	92
LEWIS & CLARK	433	389	367
LIBERTY	4	6	9
LINCOLN	87	132	76
MCCONE	4	3	3
MADISON	58	84	28
MEAGHER	8	14	4
MINERAL	27	42	12
MISSOULA	805	665	546
MUSSELSHELL	27	29	17
PARK	141	166	74
PETROLEUM	1	1	-
PHILLIPS	24	30	12
PONDERA	21	26	18
POWDER RIVER	13	8	3
POWELL	25	32	21
PRAIRIE	2	2	0
RAVALLI	188	240	142
RICHLAND	44	45	35
ROOSEVELT	67	65	8
ROSEBUD	38	37	12
SANDERS	69	80	24
SHERIDAN	17	22	11
SILVER BOW	266	240	175
STILLWATER	63	55	24
SWEET GRASS	19	32	14
TETON	29	24	12
TOOLE	36	38	12
TREASURE	3	3	2
VALLEY	41	47	21
WHEATLAND	11	9	2
WIBAUX	5	5	-
YELLOWSTONE	1,008	938	679
YELLOWSTONE PARK	-	-	0
NOT STATED	-	1	5

TABLE S-6

FREQUENCY OF LICENSES ISSUED AND
MARRIAGES SOLUMNIZED
BY COUNTY OF OCCURRENCE - MONTANA, 2006

COUNTY	LICENSES ISSUED	MARRIAGES SOLEMNIZED	MARITAL TERMINATIONS*
MONTANA, TOTAL	7,055	7,055	4,176
BEAVERHEAD	54	58	34
BIG HORN	82	85	41
BLAINE	19	28	10
BROADWATER	32	43	16
CARBON	108	175	20
CARTER	4	7	3
CASCADE	609	596	469
CHOUTEAU	34	42	11
CUSTER	79	78	41
DANIELS	8	7	6
DAWSON	55	57	16
DEER LODGE	50	63	41
FALLON	19	22	6
FERGUS	98	105	48
FLATHEAD	951	919	271
GALLATIN	856	772	272
GARFIELD	8	11	4
GLACIER	67	80	44
GOLDEN VALLEY	-	4	2
GRANITE	15	19	13
HILL	115	113	58
JEFFERSON	31	54	18
JUDITH BASIN	8	11	4
LAKE	141	197	155
LEWIS & CLARK	444	400	396
LIBERTY	5	5	3
LINCOLN	108	143	71
MCCONE	4	4	-
MADISON	52	73	29
MEAGHER	11	10	6
MINERAL	30	34	14
MISSOULA	838	716	537
MUSSELSHELL	24	23	16
PARK	154	193	90
PETROLEUM	2	2	-
PHILLIPS	21	24	11
PONDERA	37	38	20
POWDER RIVER	9	7	5
POWELL	30	35	15
PRAIRIE	5	6	3
RAVALLI	202	243	183
RICHLAND	71	63	42
ROOSEVELT	56	61	14
ROSEBUD	30	28	28
SANDERS	58	66	38
SHERIDAN	18	18	9
SILVER BOW	220	212	253
STILLWATER	65	59	26
SWEET GRASS	27	29	16
TETON	37	34	8
TOOLE	42	38	23
TREASURE	1	2	5
VALLEY	42	48	17
WHEATLAND	9	9	2
WIBAUX	5	9	-
YELLOWSTONE	955	876	693
YELLOWSTONE PARK	-	-	-
NOT STATED	-	1	-

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TABLE S-7

TABLE 18

MARRIAGES, DIVORCES, AND ANNULMENTS

MONTANA COUNTIES, 1970

COUNTY	MARRIAGES		MARRIAGE DISSOLUTIONS	
	LICENSE ISSUED	SOLEMNIZED	DIVORCES	ANNULMENTS
MONTANA, TOTAL	6,919	6,919	2,742	309
BEAVERHEAD	75	69	36	2
BIG HORN	70	66	52	3
BLAINE	57	65	13	1
BROADWATER	30	21	26	2
CARBON	52	70	24	4
CARTER	15	11	4	1
CASCADE	861	860	324	56
CHOUTEAU	46	46	35	4
CUSTER	112	133	73	-
DANIELS	33	33	2	-
DAWSON	109	120	29	-
DEER LODGE	115	137	58	12
FALLON	25	30	4	-
FERGUS	122	136	33	7
FLATHEAD	438	466	189	9
GALLATIN	373	325	79	10
GARFIELD	15	9	1	-
GLACIER	78	79	51	5
GOLDEN VALLEY	7	6	1	1
GRANITE	19	20	3	2
HILL	187	177	55	1
JEFFERSON	38	37	16	4
JUDITH BASIN	13	15	7	-
LAKE	90	118	60	9
LEWIS & CLARK	405	415	133	14
LIBERTY	30	21	3	-
LINCOLN	169	164	79	6
MCCONE	16	13	1	-
MADISON	31	38	8	2
MEAGHER	27	26	5	-
MINERAL	24	31	11	1
MISSOULA	728	653	304	55
MUSSELSHELL	30	31	20	7
PARK	102	107	52	2
PETROLEUM	5	5	1	2
PHILLIPS	48	50	14	-
PONDERA	64	71	21	3
POWDER RIVER	18	15	4	-
POWELL	67	69	22	1
PRAIRIE	25	24	1	-
RAVALLI	123	134	48	4
RICHLAND	121	123	21	2
ROOSEVELT	127	130	43	4
ROSEBUD	53	55	17	1
SANDERS	43	46	25	2
SHERIDAN	72	72	5	-
SILVER BOW	406	384	185	21
STILLWATER	30	35	23	3
SWEET GRASS	32	34	5	2
TETON	51	61	9	3
TOOLE	92	90	18	2
TREASURE	5	5	6	-
VALLEY	114	113	36	-
WHEATLAND	24	22	10	-
WIBAUX	7	7	2	-
YELLOWSTONE	850	826	435	39