

**Counting Custodial Fathers: The Role of Imputation and  
Survey Probes in Identifying Custodial Fathers in the CPS-CSS**

*By*

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## Number of Custodial Fathers

According to the CPS-CSS data, between 1994 and 1998, the number of custodial fathers decreased from 2.2 million to 2.1 million. In contrast, the Census Bureau reports, based on the March CPS, that the number of *father-only families* increased from 1.5 million to 2.0 million, a 33% increase, during the same time period. Our task was to understand why these different trends emerged even though the two underlying populations are fairly similar.

To meet this goal, we examined several aspects of this issue, which we discuss in greater detail below.

- We examined trends in the number of custodial fathers separately by marital status because different survey questions were used in the CPS-CSS to identify married custodial fathers and single custodial fathers.
- The number of single fathers who were *not* counted as custodial fathers increased by 43% between 1996 and 1998. We show that changes in the imputation procedures and rates for screening questions contribute to this trend.
- The number of married custodial fathers fell 47% between 1994 and 1996. We show that the number of married couple families who were imputed as custodial father families dropped substantially between 1994 and 1996, contributing to the decline in the number of married custodial fathers.
- We compare the estimated number of custodial fathers in the 1998 CPS-CSS with estimates from the 1996 Wave 5 SIPP.

**A. Differences Between Father-Only Families (CPS) and Custodial Fathers (CPS-CSS)**

Table 1 shows the number of father-only families from Census Bureau reports based on the March CPS. The number of father-only families increased by 20% between 1994 and 1996 and another 14% between 1996 and 1998. Table 1 also shows the number of custodial fathers reported in the CPS-CSS. The number of custodial fathers declined by 6% between 1994 and 1996 and another 1% between 1996 and 1998.

**Table 1. Number and Trends in Father-Only and Custodial Father Families**  
(Numbers in 1,000s except percentages, responses are weighted)

	1994	1996	1998
Father Only Families, CPS <sup>1</sup>	1,481	1,783	2,030
Change from Previous CPS	--	20%	14%
Custodial Father Families, CPS-CSS <sup>2</sup>	2,180	2,058	2,035
Change from Previous CPS-CSS	--	-6%	-1%

1 Source: Household and Family Characteristics: March 1994, 1996, 1998, Census Bureau, widowers excluded. Includes married fathers with an absent spouse.

2 Excludes widowers and married fathers with an absent spouse (if the spouse is the mother of the children in the household). Source: Urban Institute Tabulations of CPS-CSS, 1994, 1996, and 1998, widowers excluded

There are some differences in the definition of a father-only family and a custodial father family. The CPS defines a father-only family as a family headed by a man who is divorced, separated, never married, or married with an absent spouse and has a child of his own under age 18 living with him (we have excluded widowers and widows since very few of them are custodial parents). A custodial father, as defined in the CPS-CSS, is a man who has a child of his own under age 21 living with him who has a parent living elsewhere. Father-only families exclude married fathers whose spouse lives in the household, while a custodial father can be married with a spouse present. The children in father-only families can have no other parent living elsewhere (e.g., the children could have been adopted by a single father), while children in custodial families must have a parent living outside the household. Furthermore, father-only families include children under age 18, while

custodial families include children under age 21. Even with these differences, we expected similar trends in the number of custodial and father-only families.

### **B. Trends in The Number of Custodial Fathers by Marital Status**

Table 2 shows the trend in the number of custodial fathers by marital status.

Between 1994 and 1996, the number of single custodial fathers increased from 1,193,000 to 1,564,000, an increase of 371,000 single custodial fathers. The number of married custodial fathers, however, declined from 987,000 to 494,000, a decrease of 493,000 married custodial fathers. This led to an overall decline in the number of custodial fathers. Between 1996 and 1998, the number of single custodial fathers declined by 54,000. At the same time, the number of single fathers who were *not* counted as custodial fathers increased from 473,000 to 677,000. In other words, 204,000 more single fathers were not counted as custodial fathers in 1998 compared to 1996. The number of married custodial fathers increased by 31,000, but this was not a large enough increase to offset the decline in the number of single custodial fathers.

**Table 2. Single<sup>1</sup> and Custodial<sup>2</sup> Fathers in the CPS-CSS**  
(Numbers in 1,000s, except percentages, responses are weighted)

	<b>1994</b>	<b>1996</b>	<b>1998</b>
Total Custodial Fathers	2,180	2,058	2,035
Single Custodial Fathers	1,193	1,564	1,510
Married Custodial Fathers	987	494	525
Single Fathers Not Counted as Custodial	499	473	677
Total Single Fathers	1,692	2,037	2,187
Percentage of Single Fathers Not Counted as Custodial	29%	23%	31%

<sup>1</sup> Divorced, Never Married, or Separated, with own children, under age 21, in household

<sup>2</sup> Widowers are excluded.

Source: Urban Institute tabulations of the 1994-1998 CPS-CSS.

**C. Reasons Single Fathers are Screened Out as Custodial Fathers**

A fairly large proportion of single fathers are not counted as custodial fathers in the CPS-CSS (see Table 2). A much larger percentage of single fathers are not counted as custodial fathers as compared to single mothers (see Table 3). We had expected that few single fathers would not be custodial fathers because we had excluded widowers from our analysis.

**Table 3. Single<sup>1</sup> and Custodial<sup>2</sup> Mothers in the CPS-CSS**  
(Numbers in 1,000s, except percentages, responses are weighted)

	<b>1994</b>	<b>1996</b>	<b>1998</b>
Total Custodial Mothers	11,375	11,318	11,642
Single Custodial Mothers	8,951	9,102	9,039
Married Custodial Mothers	2,424	2,216	2,603
Percentage of Custodial Mothers who are Single	79%	80%	78%
Single Mothers Not Counted as Custodial	825	870	1,017
Total Single Mothers	9,776	9,972	10,056
Percentage of Single Mothers Not Counted as Custodial	8%	9%	10%

<sup>1,2</sup> See Table 2. Source: See Table 2.

The percentage of single fathers excluded has not been consistent over time, while it has been stable among single mothers. In 1998, 31% of single fathers and 10% of single mothers were not counted as custodial parents. A similar proportion of single fathers (29%) and mothers (8%) are not counted as custodial parents in 1994. In 1996, however, the proportion of single fathers not counted as custodial fathers was quite a bit lower (23%) than in the other two years of the CPS-CSS data. The percent of single mothers not counted as custodial parents remained fairly stable over the three years of data.

It should be noted that the CPS-CSS survey determined custodial status for each individual child in a household. To present information at the parent level we developed decision rules for categorizing the reasons parents with more than one child were not

counted as custodial parents. The decisions rules are described in detail in the two footnotes to Table 4. Later in the report we present the screening reasons at the child level to further demonstrate the effects of imputation on responses to each screening question.

One reason that single parents were not counted as custodial parents in the CPS-CSS is because their child was born during the survey year. The CPS-CSS restricts the sample to child(ren) who was born prior to the survey year because most of the survey questions focus on child support received in the previous year. This is the least common reason single parents are not considered custodial parents (Table 4 and Table 5). In all three years, 6% or fewer single fathers and 12% or fewer single mother were not counted as custodial parents for this reason.

**Table 4. Reasons Single Fathers are Screened Out as Custodial Parents**  
(Numbers in 1,000s, except percentages, responses are weighted)

Fathers Screening Reasons	1994		1996		1998	
	N	%	N	%	N	%
Child Born in Survey Year	17	3	29	6	18	3
No Parent Living Elsewhere <sup>1</sup>	372	75	0	0	189	28
Never Attempted Support <sup>2</sup>	110	22	444	94	470	69
<b>Total</b>	<b>499</b>	<b>100</b>	<b>473</b>	<b>100</b>	<b>677</b>	<b>100</b>

<sup>1</sup> Parents with multiple children with different screening reasons are included in this category if at least one child has no parent living elsewhere and their other child(ren) were born in the survey year.

<sup>2</sup> Parents with multiple children with different screening reasons are included in this category if they have never attempted support for at least one child and their other children were born in the survey year and/or have no parent living elsewhere.

Source: Urban Institute tabulations of CPS-CSS

**Table 5. Reasons Single Mothers are Screened Out as Custodial Parents**  
(Numbers in 1,000s except percentages, responses are weighted)

Mothers Screening Reasons	1994		1996		1998	
	N	%	N	%	N	%
Child Born in Survey Year	95	12	66	8	92	9
No Parent Living Elsewhere <sup>1</sup>	486	59	0	0	408	40
Never Attempted Support <sup>2</sup>	244	29	804	92	517	51
<b>Total</b>	<b>825</b>	<b>100</b>	<b>870</b>	<b>100</b>	<b>1017</b>	<b>100</b>

<sup>1 2</sup> See explanation for Table 4

Source: Urban Institute tabulations of CPS-CSS

Another reason why single parents are not counted as custodial parents is because no parent lives elsewhere. The CPS-CSS asks whether each child in the household has a parent living outside of the household (103A) (see Table 6). If a single parent responds "no" to this question for any of their children, the survey asks a follow-up question about why a parent does not live elsewhere (103B). Single parents are not considered custodial parents if they respond for all of their children that (1) the other parent has died; (2) both parents live in the household; (3) other parent legally terminated their parental rights; or (4) child was adopted by a single parent.

**Table 6. Screening Questions for Children of Single Parents, 1998 CPS-CSS**

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103A. Does child have (father/mother) who lives outside this house?

Yes - Custodial Child

No - Go to Question 103B

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103B. Why doesn't child have a biological or adoptive (mother/father) living outside the house

Other parent died - Not a Custodial Child

Both parents live in household - Not a Custodial Child

Other parent legally terminated rights - Not a Custodial Child

Child adopted by single parent - Not a Custodial Child

Parents are separated/divorced - Go to Question 103C

Don't want contact with child's (mother/father) - Go to Question 103C

Don't know where child's (mother/father) is - Go to Question 103C

She/he lives elsewhere - Go to Question 103C

Other parent is no longer recognized as a parent by this household - Go to Question 103C

Other - Go to Question 103C

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103C. Did you ever have any type of child support agreement or ever attempt to have any type of child support agreement with child's (mother/father)

Yes - Custodial Child

No - Not a Custodial Child

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The Census Bureau did not release the data for question 103B in 1996 or 1998. We were able to determine the responses to 103B based on responses to the preceding screener questions (103A) and succeeding screener question (103C). If a parent stated that there was no other parent outside the household (103A) and they had no response to the screener question of whether they had ever attempted a child support order (103C), we concluded that they had reiterated in 103B that there really was no other parent outside the household. If the parent stated there was no other parent outside the household (103A), and there was a response coded for whether they had ever attempted a child support order (103C), we concluded that they had indicated in 103B that there really was a parent outside the household.

Table 4 shows that the number of single fathers who reiterated in the follow-up question that none of their children had a parent living outside the household declined substantially between 1994 and 1998. In 1994, 372,000 single fathers (75%) reiterated that none of their children had a parent living elsewhere. In 1998, only 189,000 single fathers (28%) responded similarly. In 1996, none of the fathers reiterated there was no parent living elsewhere. We will show later in the report that this is entirely a function of the imputation procedures used in 1996 for the follow-up question, 103B.

There is a decline between 1994 and 1998 in the number of single mothers reporting that none of their children had a parent living elsewhere; however, the drop is not as large as it is among single fathers. In 1994, 486,000 single mothers (59%) reported in the follow-up question that none of their children had a father living elsewhere, while in 1998, 408,000 single mothers (40%) responded similarly. Again, because of the imputation procedures for 103B, none of the single mothers reiterated that their child(ren) had a father living outside the home in the follow-up question in 1996.



A third reason why single parents are not counted as custodial parents is that they indicate in the follow-up question (103B) that, in fact, there really is a parent living elsewhere, but they also report that they have not tried to obtain a child support agreement from this parent (103C) (See Table 6). As mentioned above, when a single parent initially responds that there is no parent living elsewhere for a child, the survey asks why a parent does not live elsewhere. In 1996 and 1998, many possible options were offered to single parents that indicate there really is a parent living elsewhere, including: (1) parents are separated/divorced; (2) don't want contact with other parent; (3) don't know where other parent is; (4) other parent lives elsewhere; (5) other parent is no longer recognized as a parent by this household; or (6) other. In 1994 parents were given two options: (1) other parents is no longer recognized as a parent by this household; or (2) other.

If a single parent responded with any of these options, they were asked a second follow-up question (103C): Did you try to obtain a child support agreement from this parent? If they responded affirmatively to this question for any child, then they were counted as custodial parents. If they responded that they had not tried to obtain child support for all their children, they were not counted as custodial parents.

Table 4 shows that the number of single fathers not counted as custodial fathers because they did not attempt to obtain a child support agreement more than quadrupled between 1994 and 1998. In 1994, 110,000 single fathers were not counted as custodial fathers because they reported, in the follow-up probe, that they had not tried to obtain a child support agreement. Two years later, 444,000 single fathers were not counted as custodial fathers for this reason. This number held fairly steady between 1996 and 1998.

There is also an increase in the number and percentage of single mothers who were excluded as custodial mothers for this reason. The changes were as substantial for single mothers as for single fathers between 1994 and 1996, but the number declined significantly

by 1998. The number of single mothers not counted as custodial mothers because they had not attempted to obtain a child support order increased from 244,000 to 517,000 between 1994 and 1998; however, this had less impact on the percentage of single mothers who are custodial because overall relatively fewer single mothers were not counted as custodial mothers.

#### **D. Imputation of Reasons Why Single Fathers Are Not Considered Custodial Fathers**

Our next step in the analysis was to determine whether the imputation procedures contributed to the change over time in the number of single fathers who were not counted as custodial fathers. This analysis is affected by information we obtained from the Census Bureau staff. The Census Bureau staff explained that in 1996 and 1998 there were problems with the CATI instrument. The answers to the follow-up screener question that asked why there was no other parent outside the household (103B) were not saved, and all responses to this question were imputed. Thus, the imputation rate for 103B was 100% in both 1996 and 1998. Parents who responded during the survey that there was a parent outside the household were asked the next screener question, whether they had tried to obtain a child support order (103C). Some parents were imputed a response to question 103B and not 103C, although the imputation rates for 103C were also quite high (around 90%) in all three years. In our analysis, almost all parents who were imputed a response to 103C were imputed responses to the entire CPS-CSS survey. In other words, these parents did not respond to the entire survey, and all of their data were created through the imputation process.

With the data that was available to us, we calculated the percent of excluded single fathers who were imputed each reason in 1994, 1996, and 1998 (see Table 7). Based on the information available, the imputation rates followed a curious pattern between 1994 and

1998. In 1996, none of the single fathers were imputed a response to 103B that indicated there really was no parent outside the household. In 1996, the total number of single fathers not counted as custodial fathers was roughly equivalent to the total number not counted in 1994; however, the reason they were not counted shifted from "no parent outside the household" to "never attempting child support." This shift was because no fathers were imputed as not having a parent outside the household for screener question 103B, which was missing 100% of the time. In 1998, about the same number of single fathers as in 1996 were excluded because they had never attempted support, but an additional 189,000 were excluded because they were imputed a response that there was no other parent living outside the household for question 103B.

**Table 7. Number and Percent of Screened Out Single Fathers Imputed to Each Screening Reason**  
(Numbers in 1,000s, except percentages, responses are weighted)

Screening Reasons	1994			1996			1998		
	N	# Alloc	% Alloc	N	# Alloc	% Alloc	N	# Alloc	% Alloc
Child Born in Survey Year	17	0	0	29	0	0	18	0	0
No Parent Living Elsewhere <sup>1</sup> (103B)	372	40	11	0	0	0	189	189	100
Never Attempted Support <sup>2</sup> (103C)	110	100	91	444	410	92	470	439	93

<sup>1,2</sup> See explanation for Table 4

Source: Urban Institute tabulations of CPS-CSS

To clarify these results, we first tested the CATI to see how parents were directed through the survey. In 1994, any parent whose response to the follow-up question of why there was no parent outside the household (103B) was "other" was skipped over question 103C. These parents were later imputed responses to 103C. This problem with the CATI accounted for much of the high imputation rate for 103C. We did not find this problem with

the CATI in 1996 and 1998, and we do not know why the imputation rates for question 103C were as high in those years.

### **E. Screening Reasons for Each Child**

We broke down the screening reasons for each child in single father families. By examining the flow of the responses to the questions for individual children, we were able to shed light on differences across survey years in the imputation procedures for these individual level screener questions.

Table 8 shows the number of children in single father families with each response to the three screener questions 103A, 103B, 103C. The imputation rates for each response is in parentheses. The three columns for each year categorize the responses for each child by custodial status. The first column for each year indicates that the child was identified as a custodial child based on the response to the screener question. The third column for each year indicates that the child was not counted as a custodial child based on the response to the screener question. Once a child was clearly identified as a custodial child or excluded as a custodial child, no more screener questions were asked.

The middle column in each year shows the number of responses to the screener question that were followed up by another screener question in order to ascertain custodial status. The arrows show the flow of the responses into the follow-up screener questions. Based on this table, we could identify the number of children who were considered custodial, the number of children who were not custodial, and the imputation rate for each response to the screener questions.

Table 8 shows that between 1994 and 1996, the number of children living with a single father who were identified as custodial children by the first screener question, 103A, increased from 1.592 million to 1.988 million. This is reflective of the 20% increase in the

**Table 8. Number of Responses to Screener Questions 103A, B, and C for Children of Single Fathers. Percent of Each Response Imputed in Parentheses**  
 (Numbers in 1,000s, except percentages, responses are weighted)

	1994			1996			1998		
	Custodial	Continue Survey	Not Custodial	Custodial	Continue Survey	Not Custodial	Custodial	Continue Survey	Not Custodial
<b>103A: Is there another parent who lives outside the house?</b>									
Yes	1,592 (25%)			1,988 (24%)			1,994 (24%)		
No		735 (7%)			814 (13%)			1,056 (14%)	
<b>103B: Why is there no other parent outside the house</b>									
Is no other parent			553 (11%)		0				390 (100%)
Is another parent		182 (1%)			814 (100%)			666 (100%)	
<b>103C: Did you try to get child support?</b>									
Yes	5 (100%)			196 (91%)			103 (87%)		
No			177 (90%)		618 (91%)			563 (91%)	

Source: Urban Institute tabulations of CPS-CSS

number of father-only families based on the March CPS. But, between 1996 and 1998, the number of children identified as custodial children by question 103A remained about the same, even though the number of father-only families in the March CPS increased by 14%.

Table 8 also shows an 11% increase between 1994 and 1996 in the number of children for whom parents initially said 'no' to 103A (i.e. there was no other parent outside of the household), increasing from 735,000 to 814,000. In contrast, between 1996 and 1998, this figure increased from 814,000 to 1,056 million, a 30% increase.

To understand these fluctuations in responses to question 103A, we first examined the imputation rates for this question. Table 8 shows that about 25% of the 'yes' responses to 103A are imputed in all three years. On the other hand, the imputation rate for the 'no' responses increased from 7% to 14% between 1994 and 1998. Thus, part of the reason 'no' responses to 103A increased is because their imputation rate increased.

Table 9 shows more specifically the impact of the rising imputation rate for 'no' responses to 103A. It shows that the number of children who were imputed a 'no' response to 103A increased from 51,000 to 148,000 between 1994 and 1998, representing a 190 percent increase. Between 1994 and 1998, there was a steady increase in the proportion of imputed responses that were 'no' for question 103A. The imputed 'no' responses rose from 11% in 1994, to 18% in 1996, to 24% in 1998.

Table 9 also shows that there are fluctuations in the non-imputed responses to question 103A. In particular, the number of non-imputed children who were identified as having another parent living outside of the household (i.e. 'yes' to 103A) increased 27% between 1994 and 1996, but not at all between 1996 and 1998. The number of non-imputed children who were identified as *not* having another parent living outside of the household increased just 4% between 1994 and 1996 and increased 28% between 1994 and 1998. The

reason for this response pattern is the drop in 1996 in the proportion of non-imputed responses that were 'No' for question 103A.

We asked the Census Bureau staff whether there had been changes to the imputation procedures for 103A between 1994 and 1998 and they indicated that there had not been. In addition, our investigation of the CATI instrument revealed no changes in the way 103A question was asked. Nonetheless, it appears that the increase in the imputation rate for the 'no' response to 103A was a contributing factor to the increase in the number of children of single fathers who were not counted as custodial children.

**Table 9. Number of Children with a Single Father by their Responses to 103A and Imputation Status**  
(Numbers in 1,000s, except percentages, responses are weighted)

	1994	1996	1998	%Change btwn 1994-98
Number of Children with a Single Father	2,327	2,802	3,050	
Not Imputed Responses to PES103A	1,878	2,219	2,423	
Response is 'Yes'	1,194	1,511	1,515	27%
Response is 'No'	684	708	908	33%
% with 'No' Response	36%	32%	37%	
Imputed Responses to PES103A	449	583	626	
Response is 'Yes'	398	477	479	20%
Response is 'No'	51	106	148	190%
% with 'No' Response	11%	18%	24%	

Source: Urban Institute tabulations of CPS-CSS.

There was a major change between 1996 and 1998 in the imputation of responses to 103B, the follow-up question that asked why there was no parent outside the household. In 1996, every child was imputed a response that there really was a parent outside the household, while 390,000 children were excluded as custodial children in 1998 based solely on their *imputed* response to this question. This change excluded many children from custodial status in 1998.

Almost all of the responses to 103C are imputed in all three years. The proportion of children who were imputed negative responses to 103C increased between 1996 and 1998. In 1996, 76% of the children who were imputed a response to 103C were imputed a negative response and were not counted as custodial children. In 1998, about 85% of the children who were imputed a response to 103C were imputed a negative response and not counted as a custodial child. Again, much like question 103A, there changes in the imputation rates excluded more single fathers in 1998 compared to 1996.

We conclude from this analysis that the change in the imputation procedures for question 103B between 1996 and 1998 contributed substantially to the increase in the number of excluded single fathers. All children in 1996 were imputed a response to 103B that indicated there was a parent outside the house, while in 1998 37% (390,000) children were not counted as custodial children based solely on their imputed response to this question. The increase in the proportion of children who were imputed a 'no' response for 103A and the increase in the proportion of children who were imputed a 'no' response to 103C also contributed to the increase in the number of single fathers who were excluded as custodial fathers. These changes in imputation rates and procedures, however, do not explain why the number of non-imputed single fathers who are *not* counted as custodial fathers increased more rapidly between 1996 and 1998 than the number of non-imputed single fathers who were identified as custodial.

#### **F. Change in the Number of Married Custodial Fathers: The Role of Whole Case Imputation**

We were surprised to find that the number of married custodial fathers declined from 987,000 in 1994 to 494,000 in 1996, a 50% decrease (see Table 2). The number of married custodial fathers remained relatively steady in 1998 at 525,000. Through further



investigation we show that the dramatic change in the number of married custodial fathers between 1994 and 1996 appears to reflect changes in whole case imputations.

Some parents refused to answer the entire child support supplement. In these cases, the parent is imputed their custodial status. If they are imputed as custodial parents, they are also imputed values for every variable in the child support supplement. Unfortunately, no variable in the CPS-CSS data indicates whether a parent is a whole case imputation. The Census Bureau staff informed us that the best indicators of whole case imputation are the variables at the beginning of the child support supplement because most parents who answered the first questions answered all of the questions in the supplement, and most parents who did not answer the first questions refused to answer the entire supplement.

We used two of the initial variables in the supplement to determine whether a married parent was imputed as a custodial parent. Both variables had limitations, which we describe below. In this section, we present results based on both variables. The first variable used was the imputation flag for question 102A. Question 102A asked whether the first child in a married couple household was a custodial child. A similar question was asked for every child in a married couple household, but only the imputation flag for the first child was available in the data sets. The main advantage of using this variable is that it was asked of both custodial and non-custodial parents. Thus, we could examine changes over time in the rates at which imputed parents were assigned to custodial and non-custodial status. The disadvantage of using this variable is that we only have this flag for the first child.

Between 1994 and 1996 there was a large increase in the imputation rate for question 102A. In 1994, 3% of married couple families were imputed custodial status, 10% were imputed in 1996, and 14% were imputed in 1998. Discussions with the Census

Bureau staff and our examination of the CATI instrument uncovered no explanation for this large increase in whole case imputation rates between 1994 and 1998.

The second variable used to identify whole case imputation was the imputation flag for question 150, which is a question about whether legal arrangements have been made for child support for every custodial child. This is the first variable to appear in the child support supplement after custodial status is determined. A response and imputation flag is available for every custodial child, so imputation rates are based on whether every child was imputed a response, rather than just the first child as with 102A. The imputation rates for this question are more stable over time. In 1994, 23% of married custodial families were imputed responses to this variable for all of their children. This figure was 24% in 1996 and 27% in 1998. The disadvantage of using this variable is that it is only available for couples with custodial children. Hence, we cannot compare the rate at which married couple families were imputed to custodial or non-custodial status.

Table 10 shows the imputation status for custodial and non-custodial families based on the imputation flag for question 102A (the question which asks whether the first child in a married couple household is a custodial child). The proportion of non-imputed married couple families that reported having custodial children remained fairly steady across the three survey years at 10% in 1994, 7% in 1996 and 8% in 1998. In contrast, the proportion of married couple families who were imputed as custodial families dropped rapidly between 1994 and 1996 from 58% to 28%. Furthermore, if a married couple family was imputed as a custodial family, they were much more likely to be imputed as a custodial father family in 1994, rather than a custodial mother family, compared to 1996 and 1998. Eighty-four percent of married couple families who were imputed as a custodial family were imputed as custodial father families in 1994 compared to 18% in 1996 and 17% in 1998.

**Table 10. Percent of Married Couple Families in Each Imputation and Custodial Status: Using Question 102A**

	1994	1996	1998
Percent Missing Custodial Status	3	10	14
Percent of Non-Imputed Families that are Custodial	10	7	8
Percent of Imputed Families that are Custodial	58	28	24
Percent of Imputed Custodial Families who were Imputed as Custodial Father Families	84	18	17

Source: Urban Institute tabulations of CPS-CSS

When we broke this information down further in each year, the proportion of non-imputed married couple families who reported that they were custodial father families was fairly steady between 1994 and 1998. Two percent of non-imputed married couple families reported a custodial father in 1994, and 1% in 1996 and 1998 (see Table 11).

**Table 11. Imputed and Non-Imputed Married Couple Families<sup>1</sup> in Each Custodial Status: Using Question 102A**  
(Numbers in 1,000s, except percentages, responses are weighted)

	1994		1996		1998	
<b>Non-Imputed</b>	N	%	N	%	N	%
Custodial Father	621	2	344	1	367	1
Custodial Mother	2,356	8	1,577	6	1,770	7
Non-Custodial	25,967	90	24,712	93	24,007	92
<b>Total</b>	<b>28,944</b>	<b>100</b>	<b>26,633</b>	<b>100</b>	<b>26,144</b>	<b>100</b>
	1994		1996		1998	
<b>Imputed</b>	N	%	N	%	N	%
Custodial Father	366	49	150	5	158	4
Custodial Mother	68	9	637	23	834	20
Non-Custodial	309	42	2,020	72	3,157	76
<b>Total</b>	<b>743</b>	<b>100</b>	<b>2,807</b>	<b>100</b>	<b>4,149</b>	<b>100</b>

<sup>1</sup> The imputation status for a few married couple families were missing. They are not included in the table  
Source: Urban Institute tabulations.

The proportion of married couple families who were imputed as custodial father families, however, declined substantially between 1994 and 1996. Forty-nine percent of imputed married couple families were imputed as custodial father families in 1994

compared to 5% in 1996 and 4% in 1998. The change in imputation rates contributed to the decline in the number of married custodial fathers between 1994 and 1996.

We created a similar table for custodial married couple families based on the imputation flags for question 150, which asked whether legal arrangements for child support had been made for each custodial child. We counted a married custodial family as imputed if every child in the family was imputed a response to this question.

There was a small drop in the number of non-imputed custodial fathers, and a larger drop in the number of mothers in this category (see Table 12). The percentage decline in non-imputed custodial families, however, was the same for custodial mother families and custodial father families. The number of non-imputed custodial fathers dropped 18% and the number of non-imputed custodial mothers dropped 22%.

**Table 12. Imputed and Non-Imputed Married Couple Families in Each Custodial Status: Using Question 150**  
(Numbers in 1,000s, except percentages, responses are weighted)

<b>Non-Imputed</b>	<b>1994</b>	<b>1996</b>	<b>1998</b>
Custodial Father	449	366	399
Custodial Mother	2,180	1,699	1,885
<b>Imputed</b>	<b>1994</b>	<b>1996</b>	<b>1998</b>
Custodial Father	538	127	126
Custodial Mother	244	517	718
% Fathers Imputed	55%	26%	24%
% Mothers Imputed	10%	23%	28%
% Total Imputed	23%	24%	27%

Source: Urban Institute tabulations of 1998 CPS-CSS

The number of imputed custodial fathers dropped substantially between 1994 and 1996 from 538,000 to 127,000. The proportion of custodial fathers who were imputed dropped from 55% to 26% during the same time period. The proportion of custodial married mothers who were imputed increased from 10% to 23% during the same time period.

These two analyses suggest that the number of married custodial fathers was affected by changes in the imputation rates between 1994 and 1996. The rate at which married couple custodial families were imputed as custodial father families dropped substantially between 1994 and 1996. It appears that the imputation flag for question 102A may not fully capture all married couples who were imputed in 1994; however, based on the two variables the patterns in imputation rates for married custodial father families are the same.

### **G. Comparison of the 1998 CPS-CSS and the 1996 SIPP**

The 1996 Wave 5 SIPP and the 1998 CPS-CSS were fielded about the same time. The SIPP interviewed custodial fathers between August 1997 and November 1997. The CPS-CSS interviewed custodial fathers in April 1998. In the CPS-CSS sample there were 4,486 custodial parents, which included 684 custodial fathers. In the SIPP sample, there were 5,076 custodial parents, which included 758 custodial fathers.

The 1996 Wave 5 SIPP used questions similar to the CPS-CSS to determine whether a parent was a custodial parent. In the SIPP, parents were first asked whether there was a parent living elsewhere for each of their children. If the parent said that there was no parent living elsewhere, a survey probe ascertained why there was no other parent. If the parent's answer indicated that there was, in fact, a noncustodial parent (e.g., They responded "Parents are separated or divorced" or "Other parent lives elsewhere") for any of their children, the parent was counted as a custodial parent. If the parent indicated that there was no other parent living elsewhere (e.g., They responded "Other parent has died" or "Both parents live in the household") for all of their children, the parent was not considered a custodial parent.

The processes of identifying custodial parents in the 1996 SIPP and the 1998 CPS-CSS were very similar. Both surveys determined the custodial status for each child on a roster of children in the household. The follow-up probe about why there was no parent living elsewhere was worded the same in both surveys.

There are, however, two differences between the 1996 SIPP and the 1998 CPS-CSS. First, in the SIPP, once the parent indicated in the follow-up probe that there really was a parent living elsewhere, they were counted as a custodial parent. The CPS-CSS included the additional question about whether the parent had ever pursued a child support agreement. In the CPS-CSS, if parents stated in the additional probe that they had never pursued a child support agreement, they were not counted as a custodial parent. Second, in the SIPP, if one parent in a married couple household had previously been identified as a step parent, then the parents were asked the follow-up probe about why there was no parent living elsewhere; in the CPS-CSS only single parents were asked the follow-up probe.

**Table 13. Number of Custodial Parents by Whether Identified Through Follow-Up Question, SIPP Data<sup>1,2</sup>**  
(Numbers in 1,000s except percentages, responses are weighted)

	Custodial Fathers		Custodial Mothers	
	N	% Alloc	N	% Alloc
All Custodial Children Identified through Follow-up Probe	56	14%	337	16%
At Least one Custodial Child Identified without Follow-up Probe	2,421	22%	12,425	13%

1 Widows and widowers excluded

2 The SIPP variable, ECSUNIV, is supposed to identify custodial parents; however, this variable identifies all parents who were *asked* whether they have a custodial child. We only include parents who replied *they did* have a custodial child in the count of custodial parents.

Source: Urban Institute tabulations of 1996 Wave 5 SIPP.

Table 13 shows the number of custodial fathers and mothers in Wave 5 of the 1996 SIPP by whether they were identified as custodial parents by their response to the follow-

up probe. About 2% (56,000) of the custodial fathers and 3% (350,000) of custodial mothers denied that any of their children were custodial children until they were asked the follow-up probe about why there was no other parent in the household. Only a small proportion of these cases are imputed. This demonstrates that there is a small group of parents who will only identify their custodial children when pressed in survey probes. Furthermore, few parents refused to respond to the survey probes.

#### **H. Trend in the Number of Custodial Fathers, SIPP Data**

It is difficult to produce a reliable estimate of the trend in the number of custodial fathers using the available SIPP data. The SIPP survey interviewed custodial parents in 1993, 1994, 1995 and 1997; however, the questions used to identify custodial parents changed substantially between 1995 and 1997. In the older SIPP surveys, parents of children under 21 were asked one question about whether any of their children had a parent who lived outside the household. They were not asked this question about each child, using a roster of their children, as they were in the 1996 Wave 5 SIPP and the CPS-CSS surveys. They were not asked a follow-up question about why there was no other parent living elsewhere. Between 1995 and 1997, the number of custodial fathers identified in the SIPP survey increased from 1.4 million to 2.5 million, a 79 percent increase (see Table 14). The number of custodial mothers increased from 10.9 million to 12.8, a 17 percent increase. It appears that the inclusion of a roster of children and survey probes increased the number of identified custodial parents.

**Table 14: Number of Custodial Parents by Gender, SIPP Data Trend<sup>1</sup>**  
 (Numbers in 1,000s except percentages, responses are weighted)

SIPP Data Source	1992 Wave 6 1993 Wave 3	1992 Wave 9 1993 Wave 6	1993 Wave 9	1996 Wave 5
Data Collection Date	10/93 - 1/94	10/94 - 1/94	10/95 - 1/96	8/97 - 11/97
Custodial Fathers	1,438	1,607	1,437	2,477
Custodial Mothers	10,455	10,870	10,860	12,762

<sup>1</sup> Widows and widowers excluded

Source: Urban Institute tabulations of SIPP data.

We draw three main conclusions from our analysis of the imputation procedures in the CPS-CSS and our comparison with the SIPP. First, the imputation procedures for the screener questions in the CPS-CSS that identify custodial children increased the number of single fathers who were *not* counted as custodial fathers. Second, changes to the rate at which married couple families were imputed as custodial father families contributed to a decline in the estimated number of married custodial fathers between 1994 and 1996. Third, our analysis of the trends in the SIPP estimates of the number of custodial parents revealed that ascertaining custodial status for each child separately and including probes at the beginning of the survey will likely identify a much larger number of custodial parents. The CPS-CSS has included these probes since 1994. Problems arose with the CPS-CSS survey probes because of the large rate of missing responses to the probes. The missing responses were due, in large part, to technical difficulties with the CATI instrument. The SIPP had low nonresponse rates on the same probes.

## **V. Conclusions**

This report demonstrates the importance of imputation procedures in estimates of key child support trends that are based on the CPS-CSS data. The imputation procedures for custodial status had an impact on the number of single and married parents who were



identified as custodial parents. The changes in imputation procedures over the years appear to have contributed to the declining number of custodial fathers.

The survey design may have had an impact on the number of custodial parents identified. Assessing the custodial status separately for each child using a roster of children in the household and including a survey probe as to why there is no parent living outside the household appears to substantially increase the number of parents who are identified as custodial parents. When the SIPP survey used the roster method and included a survey probe in their 1996 survey, the number of custodial fathers increased 79% (about 1 million additional custodial fathers). The number of custodial mothers increased by 18%, (about 2 million additional custodial mothers).

The roster method used in the CPS-CSS most likely makes the estimates of the number of custodial parents more accurate. However, the two CPS-CSS survey probes have, thus far, not improved the accuracy of the survey because of the high level of missing data. It is also important to note that the second survey probe in the CPS-CSS, which ascertains whether a child support agreement was pursued, excluded approximately 1 million potential custodial parents in 1998 because their (mainly imputed) responses to this survey probe were negative (i.e. they did not pursue a child support agreement).

The CPS-CSS data have high imputation rates compared to the SIPP. In the 1998 CPS-CSS, about 28% of custodial parents were imputed that status; whereas in the 1996 Wave 5 SIPP, the whole case imputation rate among custodial parents was only 14%. Thus, imputation procedures have a more profound effect on results obtained from the CPS-CSS. It is important for data users to be aware of the rate of imputation for variables analyzed in the CPS-CSS data. Methods similar to the ones presented in this report, such as producing cross-tabulations of variable responses by imputation status, should be

employed by data users to better understand the contribution of imputed data to unusual findings.

Based on our findings we recommend that the imputation of children to custodial status be made consistent over time. This would allow better estimation of the trends in the number of custodial parents, particularly custodial fathers. Changes to the imputation procedures reduced the number of married custodial fathers between 1994 and 1996. Changes to imputation procedures increased the number of single fathers *not* counted as custodial fathers between 1996 and 1998.

The survey probe to ascertain why there is no parent outside the household (question 103B) should remain in the CPS-CSS survey only if technical problems with the CATI are corrected. Currently, based on results from the SIPP, we estimate that this type of survey probe identifies an additional 2% to 3% of custodial parents. The technical problems that resulted in 100% imputation for this survey probe in the 1996 and 1998 CPS-CSS, however, make the probe much less useful than in the SIPP.

Once technical problems in the CATI for question 103B are resolved, then responses to the follow-up question 103C (which asks whether the parent has pursued a child support agreement) should be re-examined. If high nonresponse rates to 103C persist, then it would be worthwhile to consider dropping question 103C. The current 90% nonresponse rate to this survey probe severely limits its usefulness in the identification of custodial parents. Other surveys, such as the SIPP, do not include a similar probe.