Child Support Demonstration Evaluation
Cost-Benefit Analysis, September 1997-December 2004

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Report to the
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Bureau of Child Support

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Executive Summary

This analysis estimates the cost of a full pass-through policy (where both federal and state shares of child support are paid to families) compared to a partial pass-through policy (where only the state share of child support is paid to families) for the population of W-2 cases subject to child support pass-through policy in Wisconsin. By comparing full and partial pass-through group averages for costs and benefits that vary between the two groups, we can estimate net costs or savings attributable to the full pass-through policy in Wisconsin from the perspectives of the state and federal governments.

This analysis demonstrates that for Wisconsin, the majority of the net cost to the federal government is attributable simply to the loss of the federal share of child support that is passed through. To the state, the full pass-through policy results in a net savings, largely because of lower child care subsidies for those in the full pass-through group. We estimate the total cost savings to the state government over 23 quarters to be approximately $7.7 million. Total net costs to the federal government over the same period are approximately $9.8 million. From the perspective of government in general, the net cost of the full pass-through policy over the entire follow-up period amounts to just over $2 million, or around $90,000 per quarter. Previously reported results for the Child Support Demonstration Evaluation have shown that the full pass-through policy increases child support payments and has other beneficial effects. This cost-benefit analysis demonstrates that these positive outcomes are associated with relatively low governmental costs.

There are several reasons why a cost-benefit analysis for Wisconsin may not reflect the experience that other states would have under a full pass-through policy. In other states, custodial parents may exit TANF at a different rate, and the relative socioeconomic disadvantage of TANF participants may be different. The Wisconsin data only allow a comparison of the full pass-through policy to the state’s partial pass-through policy, and thus may not reflect the experience of other states moving from a no pass-through policy or from a different partial pass-through policy.
The purpose of this report is to estimate the cost of a full pass-through policy (where both the federal and state shares of child support are paid to families) compared to a partial pass-through policy (where only the state share of child support is paid to families) for the population of W-2 cases subject to child support pass-through policy in Wisconsin. The Child Support Demonstration Evaluation allows us to compare cases subject to a full pass-through policy (experimental group) to cases subject to a partial pass-through policy (control group). The amount of child support paid to cases subject to the full pass-through policy is clearly a cost to the federal government, since that amount represents the federal share of child support. By comparing experimental- and control-group averages for other child support and other government payments and receipts, we can estimate net costs or savings attributable to the full pass-through policy in Wisconsin from the perspectives of the state and federal governments.

This report shows total costs and benefits for two cohorts of cases through the most recent quarter for which data are available for all cases, the 22nd quarter after entry. Quarterly net costs are also shown through the 26th quarter after entry (costs for the four quarters for which we have no data are estimated). Since both cohorts include a control group, we can compare outcomes under a full and partial pass-through policy. Cohort 1 consists of cases that entered W-2 between September 1997 and July 8, 1998. Because of an inadvertent random assignment error affecting Milwaukee County, cases entering in the rest of 1998 (Cohort 2) were not included in the experiment and are not included here. Cohort 3 consists of cases that entered W-2 from January through June 1999.

This is the second of two cost-benefit reports. This report adds one analysis not included in the first report, an assessment of per-case costs for cases entering after the end of random assignment.

Average public assistance and child support payments were estimated with a regression model (see Appendix A for an explanation of the regression procedure). All dollar amounts are shown in constant December 2004 dollars.
Net state costs are calculated by adding state costs and subtracting state benefits. State costs are the state share of W-2 payments, Medicaid and BadgerCare payments, child care subsidies, and the estimated state share of administrative costs per case.\(^1\) State benefits are the state share of medical support (payments made by noncustodial parents to reimburse the state for Medicaid expenses associated with a birth), and the federal incentive payment for those reimbursements. For each cost and benefit, the experimental-control difference shows the state cost or savings associated with the full pass-through policy. Since both control and experimental group members receive the state share of current child support payments, that figure is not included in cost calculations.

The calculations for the federal government are similar to those for the state. Federal costs are Food Stamp benefits, the federal share of Medicaid and BadgerCare benefits and administrative costs, and medical support incentive payments. Federal benefits are the federal share of medical support and the federal share of current child support payments.

Although this analysis focuses on benefits and costs to the state and federal governments, there are also benefits that accrue to individuals (such as child support payments to the custodial parent), as well as costs borne by individuals (such as child support paid by the noncustodial parent). This report does not explicitly consider individual-level benefits and costs.

The first panel of Table 1 shows the calculation of per-case and total costs to the state government for each cohort over the first 23 quarters of the evaluation. As the table shows, costs to the state are higher for those in the control group than for those in the experimental group. Thus, there is a net savings to the state when the cost of the full pass-through is compared to that of the partial pass-through. This savings is $371 per case through the 22\(^{nd}\) quarter after entry for Cohort 1, and $691 per case for

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\(^1\)Because we were not able to obtain 2004 and 2005 Medicaid administrative cost data from DHFS, we used 2003 cost data (in combination with administrative data) to estimate Medicaid administrative costs. Because net Medicaid administrative costs are so small, we expect that using the correct cost data would have resulted in very small or no change to the results shown in Table 1 and the Figures.
<table>
<thead>
<tr>
<th>Costs to the State</th>
<th>Experimental</th>
<th>Control</th>
<th>Net Costs</th>
<th>Experimental</th>
<th>Control</th>
<th>Net Costs</th>
</tr>
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<tbody>
<tr>
<td>W-2 payments (and AFDC)</td>
<td>$8,504</td>
<td>$8,536</td>
<td>-$32</td>
<td>$6,278</td>
<td>$6,356</td>
<td>-$77</td>
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<td>Medicaid benefits (state share)</td>
<td>10,501</td>
<td>10,454</td>
<td>47</td>
<td>8,685</td>
<td>8,660</td>
<td>26</td>
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<td>Child care subsidies</td>
<td>16,232</td>
<td>16,623</td>
<td>-391</td>
<td>16,313</td>
<td>16,994</td>
<td>-681</td>
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<td>Food Stamp administrative cost (state share)</td>
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<td>531</td>
<td>2</td>
<td>417</td>
<td>423</td>
<td>-7</td>
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<tr>
<td>Medicaid administrative cost (state share)</td>
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<td>1,083</td>
<td>-3</td>
<td>999</td>
<td>997</td>
<td>2</td>
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<td><strong>Benefits to the State</strong></td>
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<td></td>
<td></td>
</tr>
<tr>
<td>Medical support (state share)</td>
<td>229</td>
<td>233</td>
<td>5</td>
<td>266</td>
<td>304</td>
<td>38</td>
</tr>
<tr>
<td>Medical support incentive payment</td>
<td>49</td>
<td>50</td>
<td>1</td>
<td>57</td>
<td>65</td>
<td>8</td>
</tr>
<tr>
<td><strong>Total Cost per W-2 Case</strong></td>
<td>36,573</td>
<td>36,944</td>
<td>-$371</td>
<td>32,369</td>
<td>33,061</td>
<td>-$691</td>
</tr>
<tr>
<td><strong>Number of Experimental, Nonexperimental, and Control Cases</strong></td>
<td>12,918</td>
<td>3,542</td>
<td></td>
<td>1,140</td>
<td>1,122</td>
<td></td>
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<tr>
<td><strong>Total State Costs</strong></td>
<td></td>
<td></td>
<td>-$6,103,170</td>
<td></td>
<td>1,122</td>
<td></td>
</tr>
</tbody>
</table>

| Costs to the Federal Government                        |              |         |           |              |         |           |
| Food Stamp benefits                                    | $12,659      | $12,705 | -$46      | $8,683       | $8,676  | $7        |
| Medicaid benefits (federal share)                      | 14,904       | 14,833  | 71        | 12,347       | 12,310  | 37        |
| Food Stamp administrative cost (federal share)         | 760          | 757     | 3         | 593          | 602     | -9        |
| Medicaid administrative cost (federal share)           | 1,542        | 1,546   | -4        | 1,423        | 1,420   | 2         |
| Medical support incentive payment                       | 49           | 50      | -1        | 57           | 65      | -8        |
| **Benefits to the Federal Government**                  |              |         |           |              |         |           |
| Medical support (federal share)                        | 326          | 333     | 7         | 380          | 433     | 53        |
| Federal share of current child support (paid to federal government) | 0           | 501     | 501       | 0            | 370     | 370       |
| **Total Cost per W-2 Case**                            | 29,587       | 29,057  | $551      | 22,723       | 22,270  | $453      |
| **Number of Experimental, Nonexperimental, and Control Cases** | 12,918       | 3,542   |           | 1,140        | 1,122   |           |
| **Total Federal Costs**                                | $8,734,685   | $1,024,619 |           | $1,024,619   |           |           |

a Medical support is lying-in costs and other medical expenses, reimbursed by the noncustodial parent to the state. The federal government pays the state a 15 percent incentive payment for these collections.

b An additional benefit to the state and cost to the federal government that is not shown is the child support incentive payment, made by the federal government to states and based on the amount of child support collected. This is now distributed on the basis of a state’s collections relative to other states, and cannot be easily attributed to individuals. Because collections are higher for those in the experimental group, the experimental-control difference in the incentive payment, if shown in this table, would slightly decrease the per-case cost to the state, and slightly increase the per-case cost to the federal government.

C The federal share of current child support varied annually between 58.41 percent and 59.59 percent. This share applies to payments made when a mother in the control group is in a lower tier. Note that only current support is included in this calculation, and in the calculation of the child support incentive.
Cohort 3. The per-case difference is largely driven by the experimental-control difference in child care subsidies, which is $391 lower for the Cohort 1 experimental group, and $681 lower for Cohort 3. Net state savings for the two cohorts combined over the period are about $7.7 million.

The largest contributor to the state’s savings under the full pass-through treatment is savings in the child care subsidies program. Since child support does not have any direct impact on eligibility for the child care program or on the amount of any child care subsidy, any effect of the full pass-through on child care outlays by the state must be indirect. It may be that the additional income that mothers receive through the full pass-through is enough to allow at least some of them to not participate in the child care program (even though this additional income does not directly affect their eligibility). There are no waiting lists for child care subsidies, and should be no difference in access to the program between the partial and full pass-through groups.

We should note however, that while the absolute value of the difference in the amount of child care subsidy is quite large compared to that for other programs, this is largely due to the large amounts of subsidy that mothers receive over the period. Full pass-through mothers in Cohort 1 receive only 2.4 percent less in child care subsidies than do partial pass-through mothers. This is consistent with our findings in the CSDE Phase I Final Report, which showed full pass-through mothers receiving 2.1 percent less than partial pass-through mothers in 1999, an effect which was too small to be significant. Since the child care subsidies are so much larger than other programs, and the total differences are summed up over nearly 6 years, this small percentage difference adds up to a fairly large absolute difference.

The second panel of Table 1 shows costs and benefits to the federal government. Federal costs are similar in magnitude to those for the state, but in the opposite direction. From the federal government’s perspective, net costs are higher for those in the experimental group. This difference is largely driven by

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2 The child care subsidy is paid by the state to the child care provider. The amount of the subsidy varies by provider and reflects reimbursement rates set in each county and tribal area minus an income-dependent parent co-payment.
the mechanical factor that the federal share of current child support is paid to the federal government only for those in the control group; for those in the experimental group, that amount is instead passed through to the family. Thus, the experimental-control difference in the federal share of child support will always be a net cost to the federal government. For Cohort 1, the child support difference is similar to the net cost per case. For Cohort 3, the child support difference is augmented by higher Food Stamp and Medicaid benefit payments to the experimental group, and also by lower medical support payments by the experimental group. Net federal costs for the two cohorts combined over the period are about $8.7 million.

Figure 1 shows per-case net costs for Cohort 1 cases separately for each quarter from the quarter of entry through the 26th quarter after entry. State costs (the dark bars) generally follow the pattern of the total costs shown in Table 1; except for the quarter of entry and the 19th through 21st quarters after entry, there is a net savings to the state in each quarter, ranging from $7 in the ninth quarter after entry to $53 in the 15th quarter after entry. The change in the later quarters is notable; in the 20th quarter after entry, there is a net state cost per case of $33. However, by the 22nd quarter after entry, state costs again show a net savings. Net state costs for Cohort 1 are largely driven by the experimental-control difference in child care payments. After the first few quarters, child care payments to control-group cases are consistently higher than payments to those in the experimental group, and this difference is primarily responsible for the net cost savings to the state government. This pattern continues except for the three quarters where higher W-2 and Medicaid and Badger Care payments to the experimental group outweighed only slightly higher child care payments to the control group, or where average child care payments were higher for the experimental group. Examination of the child care data shows some cyclical annual trends, but no obvious data patterns signaling a data error or nonrandom change in how child care payments are made.

The lighter bars in Figure 1 show per-case net costs to the federal government for Cohort 1. In this case, the net costs are consistently positive, between $3 and $61 per case, depending on the quarter.
Figure 1
Cohort 1 Federal and State Cost per Case, by Relative Quarter

Dotted bars include estimated data.
The bars for the 9th through 13th quarters after entry in Figure 1 are dotted to indicate that these quarters include some estimated data. During the last two quarters of 2000 and the first quarter of 2001, some control-group cases incorrectly received a full pass-through. Since this error makes the control-group outcomes during that period unreliable, we estimated the control-group means during those three calendar quarters by assuming that the experimental-control difference in those quarters would be proportional to the difference in the quarter prior to the error. Comparing child support payment trends before and after the period affected by the error, we find no indication that the effects of this error continued, and thus use unadjusted data for all quarters following the error.

Figure 2 shows the same information for Cohort 3. The per-case cost patterns are more varied than those for Cohort 1. There is a net cost to the state for five of the first six quarters, and then again in the 12th and 18th quarters after entry. The highest net cost to the state is $33 per case in the second quarter after entry. The highest net savings to the state is $119 per case in the 14th quarter after entry. Net costs to the federal government range from $2 to $91 per case, but in four quarters there was a net savings to the federal government, ranging from $4 to $32 per case.

There are two sets of dotted bars in Figure 2. The first set, in the 5th through 8th quarters after entry, reflects the same error-correction estimation described above for Cohort 1. The second set, in the 23rd through 26th quarters after entry, reflects projection of results for a period for which we do not yet have follow-up data (since cases in Cohort 3 entered W-2 at a later date). This projection was done using a linear trend based on the three years immediately preceding the projection period. Because this trend generally shows that federal costs for Cohort 3 were decreasing and then becoming net savings, we project small net federal savings for this cohort in the last four quarters.

We also used three alternate projection methods in addition to the one shown in Figure 2: a linear trend based on all of the Cohort 3 data prior to the projection period, an exponential function based on all of the Cohort 3 data, and an exponential function based on data for both cohorts for the first 17 quarters. See Appendix A for more detail on projection methods.
Figure 2
Cohort 3 Federal and State Cost per Case, by Relative Quarter
From the state government perspective, these alternate methods all incorporate a stronger trend of movement from net costs to net savings, and thus result in larger net savings estimates for each of the four quarters. The largest additions of net savings, ranging from $17 to $25 additional per-case savings per quarter, result from the first alternate method, a linear trend using all 23 quarters of Cohort 3 data.

From the federal government perspective, the first alternate method again results in net cost savings that are higher, in this case by about $5 in each quarter. The second results in similar results to that used for Figure 2, and the third results in approximately zero net costs per case in each quarter.

Table 2 shows per-case costs for full pass-through cases in each of the four cohorts. The purpose of this table is to compare per-case costs for the two later cohorts to those for the two earlier cohorts. The table shows that per-case costs in Cohorts 4 and 5 are very similar to those in Cohort 3. Because there is no control group for Cohorts 4 and 5, we could not calculate net costs as shown in Table 1.

The bottom line for the cost-benefit calculations is shown in Table 1. We estimate total cost savings to the state government to be $6,103,170 for Cohort 1 and $1,564,157 for Cohort 3, for a total across the two cohorts of $7,667,327. We estimate total net costs to the federal government of $8,734,685 for Cohort 1 and $1,024,619 for Cohort 3, for a total across the two cohorts of $9,759,304.

There are several reasons that a benefit-cost analysis for Wisconsin may not represent the experience of other states with a full pass-through policy. There could be differences in the speed with which custodial parents move off TANF and in the relative socioeconomic disadvantage of TANF participants in other states. The Wisconsin data only allow a comparison of the full pass-through policy to a particular partial pass-through policy, and thus may not reflect the experience of other states moving from a no pass-through policy or from a different partial pass-through policy.

This analysis does show that the majority of net federal costs are attributable simply to the loss of the federal share of child support that is instead passed through in full. This is particularly true for the first, largest, cohort of cases, where all the other federal costs and savings largely cancel each other out. For the later cohort, some additional federal costs result from higher public assistance payments and
### Table 2
Government Costs For Full Pass-Through Cases Through the Sixth Quarter after Entry, Including Later Cohorts

<table>
<thead>
<tr>
<th></th>
<th>Cohort 1 Full Pass-Through</th>
<th>Cohort 3 Full Pass-Through</th>
<th>Cohort 4</th>
<th>Cohort 5</th>
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<tr>
<td><strong>Number of cases</strong></td>
<td>12,918</td>
<td>1,140</td>
<td>18,940</td>
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<td><strong>Costs to the State</strong></td>
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<td>W-2 payments (and AFDC)</td>
<td>$5,001</td>
<td>$3,351</td>
<td>$3,469</td>
<td>$3,826</td>
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<td>Medicaid benefits (state share)</td>
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<td>Food Stamp administrative cost (state share)</td>
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<td>159</td>
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<td>129</td>
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<td>Medicaid administrative cost (state share)</td>
<td>394</td>
<td>397</td>
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<td>309</td>
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<tr>
<td><strong>Benefits to the State</strong>a</td>
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<tr>
<td>Medical support (state share)b</td>
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<td>79</td>
<td>76</td>
<td>99</td>
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<tr>
<td>Medical support incentive payment</td>
<td>12,740</td>
<td>10,300</td>
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<td><strong>Total State Cost per W-2 Case</strong></td>
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<td>10,761</td>
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<td><strong>Costs to the Federal Government</strong></td>
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<td>Medicaid administrative cost (federal share)</td>
<td>563</td>
<td>568</td>
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<td><strong>Benefits to the Federal Government:</strong></td>
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<td>Medical support (federal share)b</td>
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<td>112</td>
<td>106</td>
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<td><strong>Total Federal Cost per W-2 Case</strong></td>
<td>9,669</td>
<td>7,316</td>
<td>7,323</td>
<td>7,582</td>
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</table>

*a Medical support is lying-in costs and other medical expenses, reimbursed by the noncustodial parent to the state. The federal government pays the state a 15 percent incentive payment for these collections.

b An additional benefit to the state and cost to the federal government that is not shown is the child support incentive payment, made by the federal government to states and based on the amount of child support collected. This is now distributed on the basis of a state’s collections relative to other states, and cannot be easily attributed to individuals. Because collections are higher for those in the experimental group, the experimental-control difference in the incentive payment, if shown in this table, would slightly decrease the per-case cost to the state, and slightly increase the per-case cost to the federal government.
lower medical support payments for those in the experimental group, but child support still accounts for two-thirds of net federal costs in that cohort. To the state, the full pass-through policy results in a net savings, largely because of lower child care subsidies for those in the experimental group. From the perspective of government in general, the net cost of the full pass-through policy for both cohorts of cases over the entire follow-up period amounts to just over $2 million, or around $91,000 per quarter. Previously reported results for the Child Support Demonstration Evaluation have shown that the full pass-through policy increases child support payments and has other positive effects. The current analysis shows that these beneficial outcomes are associated with relatively small governmental costs.
Appendix A - Methodology

The costs and benefits presented in this report were estimated using data collected from the state of Wisconsin administrative data management systems used for public assistance programs (W-2, Food Stamps, Medicaid, and child care benefits are managed through the CARES system) and for child support enforcement (managed through the KIDS system). We extracted data on the program participation and child support history of mothers who entered the W-2 program during two time periods: Cohort 1 cases entered between September 1997 and July 9, 1998 (the first three quarters of the W-2 program) and Cohort 3 cases entered January-June 1999. During these time periods cases entering W-2 were assigned to one of two treatments: either a control treatment, under which the state retained any child support payments above the greater of $50 or 41 percent, or an experimental treatment under which all child support payments were passed through to the families.\(^3\)

Some cases which entered W-2 during these time periods were not included in the estimation procedure for these reports. Full details of the data selection procedures can be found in the CSDE Phase II Final Report (Appendix 1); in short, we only included cases in which the resident parent was the mother, we excluded cases that were not subject to experimental or control assignment (because of some errors in the assignment process or regulations which limited assignment for cases with good cause exemptions or children receiving SSI), and we excluded some cases which appeared to be subject to various bureaucratic irregularities (e.g., cases that entered the AFDC program after that program was supposed to be closed to new entrants, cases that experienced long delays between experimental assignment and entry into W-2, multiple W-2 cases for a single entrant, or cases that experienced incorrect treatments for their assignment).

\(^3\)A full analysis of the effects of this experiment can be found in the CSDE Phase II Final Report.
The resulting samples included 16,460 mothers and their families in Cohort 1 and 2,262 in Cohort 3. We then tracked their usage of various state-run assistance programs and their child support history through December 2004, using data extracted from the CARES and KIDS systems in January and February of 2005.

USING REGRESSION MODELS TO ESTIMATE DIFFERENCES

While the experimental method used in the CSDE project should control for most differences in initial characteristics between the two treatment groups, it is possible that random differences may exist between the two groups or that there may be some small differences in the chances that cases did not enter W-2 after learning of their assignment. For this reason, we present regression-adjusted means, rather than simple means, in the analysis of experimental effects. This approach has a number of advantages. First, even if random assignment worked perfectly, there will be some chance difference in the initial characteristics of the experimental and control groups. Regression-adjusted means adjust for this chance variation. The regression-adjusted difference reflects the estimated effect of experimental status (i.e., the coefficient on the indicator for experimental or control status) after accounting for differences in characteristics at entry into W-2. This approach also adjusts for any nonrandom differential assignment based on observable characteristics among the control variables. Finally, to the extent control variables account for the variance in the outcome of interest, we are more likely to be able to discern the effect of the experiment.

The analyses in this report use a standard set of control variables, including time period of assignment, mother’s age and race, amount of child support payments, mother’s AFDC and employment history, initial W-2 tier, location, education, and family structure. A full list of the variables and details of their specifications are included in Table A1.1.

4Our previous analysis do not show any of these “diversion effects” to be significant in the overall samples.
The regression-adjusted means were generated as follows. First, the outcome was estimated as a function of the set of control variables, with an indicator variable for experimental status separately for each cohort. All observations from experimental and control groups were included in the regression analysis. Second, weighted mean values for each control variable were calculated for each cohort, and a predicted value for the outcome variable was generated by evaluating the estimated regression coefficients at these means.

Administrative costs for each case were generated using estimates for the monthly cost of administering food stamps and Medicaid benefits provided by the state of Wisconsin. These costs varied on an annual basis.

The costs and benefits shared by the federal and state governments included Medicaid benefits, Food Stamp and Medicaid administrative costs, and payments by noncustodial parents to reimburse the state for Medicaid costs associated with a birth. These were divided between the two governments using a specific federal share percentage which varied annually between 58.41 percent and 59.59 percent.

PROJECTION METHODS FOR SEPTEMBER 2000-FEBRUARY 2001 TREATMENT ERROR

From September 2000 to February 2001 because of a programming error in the CARES data system, most control cases that received W-2 cash grants were treated as if they had not received a grant and therefore received a full pass-through of their child support. Since this error affects our ability to properly estimate experimental-control differences during this time period we instead chose to interpolate values for levels of child support and public assistance programs during this time period. For Cohort 1 the time period corresponds with the 9\textsuperscript{th} through 13\textsuperscript{th} quarters after entry; for Cohort 3 we interpolated values for the 5\textsuperscript{th} through 8\textsuperscript{th} quarters after entry.

To interpolate these values we used the values for child support payments and public assistance program amounts for the four calendar quarters before the quarters with errors (July 1999-June 2000) and for the four calendar quarters after the quarters with errors (April 2001-March 2002) and calculated the linear trend across these values to interpolate the values for three calendar quarters with the error (3Q-4Q
2000 and 1Q 2001). For example, for Cohort 1 experimental cases we took the values of W-2 grants from July 1999-June 2000 and from April 2001-March 2000 and used least squares to predict a line across these data points; the values on the line which corresponded with intervening quarters are used as the projection. Using a linear trend across one year before and one year after the error has the advantage of only using data from the time period closest to the data we are trying to predict, but it does provide enough data to account for any annual cyclicality which may appear in child support payments or public assistance receipt.

PROJECTION METHODS FOR 23rd-26th QUARTERS AFTER ENTRY FOR COHORT 3

We also wished to project values to reflect the expected differences for Cohort 3 in the 23rd through the 26th quarters after entry, since not enough time had elapsed for these cases to have experienced this time period. We could not use the same method as the interpolation above (as there are no data available from after the time period we are trying to predict); we therefore used four methods to extrapolate these values. The first (used for Figure 2) used a method similar to that used for the treatment error time period, but bases its linear trend projection on the 3 years of data before the 23rd quarter after entry. The second method replicated the linear method of the first method, but based the least squares projection on all 23 quarters. The third used an exponential projection based on the 23 preceding quarters. An exponential function allows the change in the values over time to slow down or speed up. Finally, the fourth used an exponential projection based on all quarter of both Cohort 1 and Cohort 3 data. There were some small differences in the results depending on the projection method used (discussed in the text of the report), but none were big enough to affect our overall conclusions.
TABLE A1.1  
List of Control Variables Used in Regression Models

All control variables are dummy variables.

- **Time Period of Assignment**
  - Aug. 1997–March 16, 1998 when 80% of cases were assigned to full pass-through (omitted)
  - March 17–May 8, 1998 when 70% of cases were assigned to full pass-through
  - May 9–July 8, 1998 when half of cases were assigned to full pass-through and half to partial

- **Child Support history; amount paid on behalf of the mother in the one-year period before mother entered W-2**
  - $0 (omitted)
  - $1–$999
  - $1,000 or more

- **Mother’s age**
  - 25 or younger (omitted)
  - 26–30 years
  - 31 or older

- **Mother’s race/ethnicity**
  - White (omitted)
  - African American
  - Other

- **Months of AFDC receipt during the 24-month period before mother entered W-2**
  - 0 months (omitted)
  - 1–18 months
  - 19–24 months

- **Region**
  - Milwaukee County
  - Other urban counties
  - Rural counties (omitted)

- **Initial W-2 tier**
  - Upper tier (omitted)
  - Lower tier
  - Caretaker of Newborn

- **Age of youngest child**
  - 0–2 years (omitted)
  - 3–5 years
  - 6 or older

- **Mother’s education**
  - Grade 11 or less
  - High school diploma or equivalent
  - Post high school (omitted)

- **Average annual earnings of the highest-earning father during the two-year period before mother entered W-2;**
  - $0–$14,999 (omitted)
  - $15,000 or more
• Mother’s employment history; number of quarters employed during the two-year period before mother entered W-2
  – 0 quarters (omitted)
  – 1–6 quarters
  – 7–8 quarters