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Alternative Approaches to Income Imputation in Setting Child Support Orders

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INTRODUCTION

Parental income is a key component in the determination of a child support obligation. When the court does not have any evidence of the level of the noncustodial parent's income, or when recorded income is believed to be less than the noncustodial parent's earnings capacity, income is typically imputed.¹ In the past, income was often imputed based on full-time (35 or 40 hours per week) employment at the federal minimum wage (Fleming, 2017; Wis. Stat § DCF 150.03.3), and a child support order was assigned accordingly. However, in response to concerns that orders based on imputed income may not accurately reflect the noncustodial parent's ability to pay, the Flexibility, Efficiency, and Modernization in Child Support Programs final rule of December 2016 requires that if a state's guidelines allow for income imputation, the order must take into consideration "the specific circumstances of the noncustodial parent . . . to the extent known, including such factors as the noncustodial parent's assets, residence, employment and earnings history, job skills, educational attainment, literacy, age, health, criminal record and other employment barriers, and record of seeking work, as well as the local job market, the availability of employers willing to hire the noncustodial parent, prevailing earnings level in the local community, and other relevant background factors in the case." (45 C.F.R. § 302.56(c)(iii)).

As Wisconsin prepares to review its guidelines in 2020, this report explores three alternative approaches to imputing noncustodial parent income that could be considered consistent with the 2016 ruling. First, we consider keeping the federal minimum wage (\$7.25) as the hourly wage rate but using estimates of hours worked by locality, occupation, and level of

¹In this article, "imputed income" refers to income attributed by the courts to the noncustodial parent in the process of order determination. This is the term used by the Federal Office of Child Support Enforcement in 2016 final rule (45 C.F.R. § 302.56(c)(iii)).

education. Second, we consider using estimates of workers' annual earnings by locality, occupation, and level of education. Third, we consider using estimates based on the actual earnings of noncustodial parents with imputed income orders in the year after order establishment. We obtain the estimates for the first two approaches from the 2017 American Community Survey (ACS) that is publicly available from the Integrated Public Use Microdata Series (IPUMS) USA database (Ruggles et al., 2019), and we obtain the estimates for the third approach from Wisconsin Court Records Data (CRD) matched to Unemployment Insurance (UI) wage records.

For each approach, we report average monthly imputed income amounts at three different points in the distribution, the 25th percentile, the median (50th percentile), and the mean. We use current Wisconsin guidelines to calculate the percentage of monthly income due for current support (assuming one nonresident child) and the resulting monthly order amount. We report results for several model cases varying the characteristics of the noncustodial parent by locality, occupation, and level of education. We report estimates for all workers and, where possible, separately by sex and by race. We discuss the strengths and weakness of these approaches in light of several factors including the language of the December 2016 rule; the typical information available to the court when establishing orders; recommendations on preferred data sources for imputing income; and the existing research on patterns in employment, earnings, and order compliance among noncustodial parents with imputed-income orders. We also briefly discuss our considerations regarding the development of an on-line calculator where a user could enter case-specific information to obtain an income estimate for a noncustodial parent whose income information is unknown.

BACKGROUND AND POLICY CONTEXT

The child support program aims to ensure that parents contribute to the financial well-being of their children even if they do not live with them. Federal legislation requires that states develop and use a standard set of guidelines to calculate child support obligations based on the income and assets of either or both parents (Child Support Enforcement Amendment, 1984; Family Support Act, 1988; Wis. Stat § DCF 150). Under Wisconsin's child support guidelines, the standard percentage of a noncustodial parent's gross income² allocated to child support for one child begins at 17 percent, and increases for each additional child, up to 34 percent for obligors with five or more children. The percentages are based on estimates of the proportion of income spent on child rearing (Wis. Stat § DCF 150 Preface; Robb, 2019), and may be reduced for lower income payers (Wis. Stat § DCF 150 Appendix C). Basing the obligation on a set percentage of income is intended to facilitate simplicity and transparency in order determinations, and to promote fairness and consistency across cases (Brito, 2012; Pirog, Klotz & Beyers, 1998), but relies heavily on the assumption that courts have accurate information about parents' economic resources and abilities to pay.

The process of determining the child support obligation may be compromised if the court has no evidence of the level of noncustodial parent income, or if the income of the noncustodial parent is less than what a court perceives to be their potential income. In order to avoid delays in establishing orders and to avoid awarding orders for no support or minimum amounts, all states allow for *income imputation*, or the use of assumptions about how much a noncustodial parent is

²Gross income is calculated as income from all sources, less the amount of any public assistance or child support income received.

able to earn, in lieu of using actual income or earnings in order determination (Demyan & Passarella, 2018; Fleming, 2017; McCann, 2019; Venohr, 2015).

Although surveys of state child support program directors suggest that income imputation is used as a “last resort” in order determination (Fleming, 2017), analyses of child support caseload data suggest that orders are set using imputed income in about 15 to 25 percent of all cases (Cancian, Cook, & Meyer, 2019; Venohr, 2018; Demyan & Passarella, 2018), and in 42 to 63 percent of cases where the noncustodial parent is low-income (Cancian et al., 2019; Demyan & Passarella, 2018).³ In Wisconsin specifically, recent analyses using the Wisconsin CRD indicate that noncustodial parents’ income was imputed in 16 percent of all cases, and 42 percent of cases where the noncustodial parent was low-income (Hodges & Cook, 2019; Cancian et al., 2019).

Additionally, though not directly identifying imputed-income cases, several studies have reported on the percentage of noncustodial parents with incomes equivalent to imputed income amounts. For example, Venohr and Slattery-Quintanilla (2014) reported that 13 percent of noncustodial parents on child support cases in Arizona had listed annual incomes equivalent to full-time at the federal minimum wage. Using the same income standard, Takayesu (2011) reported a rate of 20 percent among noncustodial parents in Orange County, California.

Although income imputation can facilitate the process of setting a child support order, with the aim of ensuring that both parents are contributing to the well-being of their child(ren), imputed income may not align with the actual economic circumstances of the noncustodial parent (that is, their actual or potential earnings). Wisconsin guidelines direct the judiciary to

³Cancian et al. (2019) define low income as annual earnings less than 150 percent of the federal poverty line. Demyan and Passarella (2018) define low income as annual earnings less than part-time (20 hours per week) at the minimum wage, which is equivalent to \$7,540 for their study period.

impute income “at an amount that represents the parent’s ability to earn,” taking into account education, training, work experience, previous earnings, physical and mental health, child care responsibilities, and local employment conditions (Wis. Stat § DCF 150.03.3). The guidelines also state that, “If evidence is presented that due diligence has been exercised to ascertain information on the parent's actual income or ability to earn and that information is unavailable,” courts may impute income based on a 35-hour work week at the federal minimum hourly wage (Wis. Stat § DCF 150.03.3).

Compliance with child support obligations appears to be maximized when orders do not exceed more than 25 percent of a noncustodial parents’ earnings (Hodges, Meyer, & Cancian, 2019; Takayesu, 2011; Meyer, Ha, & Hu, 2008), and this percentage is likely lower (closer to 10 to 15 percent) for more economically disadvantaged noncustodial parents (Hodges et al. 2019; Meyer et al. 2008). If imputed income accurately reflects a noncustodial parent’s ability to pay, then orders as a percentage of actual earnings are not likely to exceed these amounts. However, Demyan and Passarella (2018) found that 65 percent of noncustodial parents in Maryland with imputed incomes had orders that constituted more than 25 percent of their actual earnings in the year after order establishment. In comparison, the rate was 33 percent for noncustodial parents whose incomes were not imputed. Of the 65 percent of noncustodial parents with imputed-income orders greater than 25 percent of their actual earnings, more than half had orders that exceeded 75 percent of their actual earnings in the year after order establishment.

It is perhaps not surprising then that average payments and rates of compliance for imputed-income cases are considerably lower than average payments and rates of compliance on cases where the noncustodial parent’s income is not imputed. Demyan and Passarella (2018) reported average annual payments of \$975 for noncustodial parents with imputed incomes, and

\$3,239 for noncustodial parents without imputed incomes. These estimates are quite similar to Cancian, Cook, and Meyer (2019), who reported average payments of \$946 for noncustodial parents with imputed incomes, and \$4,445 for noncustodial parents without imputed incomes. Both sets of authors also find substantially lower rates of compliance (total amount paid as a proportion of the amount due) for noncustodial parents with imputed-income orders compared to those without. For those with imputed-income orders, rates of compliance in the year after order establishment were 31 percent in both studies. For those with orders based on actual income, rates of compliance were 67 percent in the Demyan and Passarella study and 71 percent in the Cancian et al. study.

The findings from these recent studies, as well as research conducted prior to the December 2016 ruling (i.e., Formoso, 2003; Takayesu, 2011; US DHHS OIG, 2000; Visher & Courtney, 2006; Waller & Plotnick, 2001) suggests that imputing income at lower levels than the current standard could result in more consistent payment of child support. In fact, prior to the 2016 rule, some local jurisdictions were already imputing income at lower levels. For example, the local child support agency in St. Joseph County, Indiana, began imputing income at half the federal poverty line for single-person households in cases where “a parent has a known substance-abuse problem, impaired work ability due to a medical problem, a felony record, and when he or she lacks both a high school diploma or GED degree and an employment history” (Brinig & Garrison, 2018).

Although the 2016 rule does not necessarily imply imputing income at lower levels than the current standard, it does imply moving away from imputing income with a fixed amount. In a recent examination of quadrennial reviews of child support guidelines conducted by states in 2018, Hodges & Vogel (2019) examine how states were interpreting this ruling. They found that

review committees mostly recommended statutory changes to the language on income imputation that directed the courts to consider factors related to individual circumstances of the noncustodial parent but did not always provide additional guidance on how these factors should be used. When review committees did provide more specifics, their recommendations tended to use factors related to the individual circumstances of the noncustodial parent as a tool for determining when to impute income at a fixed amount. For example, Arizona’s child support guidelines, revised in 2018, state that “income of at least minimum wage should generally be attributed to a parent *after* considering the specific circumstances of the parents to the extent known” (Arizona Supreme Court, 2019; authors’ own emphasis).

In this report we explicitly consider how factors related to ability to pay can be used to determine an imputed income amount. At the same time, we acknowledge that when income is unknown the courts may have very little additional information about a noncustodial parent. Based on a review of the typical forms⁴ that the courts use to collect information about the parents involved in child support cases, a review of a small number of child support case files⁵, and conversations with Wisconsin court records data collectors, we concluded that a limited set of parental information is available to the courts, at least in the written records.⁶ Therefore, we prioritize factors that are likely to be important determinants of a noncustodial parents’ economic

⁴See, e.g., FA-4139V, “Financial Disclosure Statement” (Wis. Stat. §767.127).

⁵We were able to obtain redacted child support case files from several counties in order to get a sense of the information that might be available to the courts.

⁶When we inquired about the lack of data on parents’ level of education in the CRD, the data collectors informed us that the reason that this information was not collected was because it was infrequently included in the case files.

circumstances and potentially available to courts (such as sex, race, locality, occupation, and level of education).⁷

We report average monthly imputed income amounts at three different points in the distribution, the 25th percentile, the median (50th percentile), and the mean. We include the 25th percentile along with the median and the mean because, based on the findings of recent studies, income imputation may indicate that the noncustodial parent has low income or is facing significant barriers to employment.

Of recent studies of child support cases with imputed-income orders, Brinig & Garrison (2018) provided the greatest detail regarding parental characteristics. Among their sample of low-income child support cases in St. Joseph County, IN, where the father was the payer on the case, they found that fathers who were African-American, who did not appear in court, who were incarcerated or receiving Social Security Disability payments, who had housing instability (higher rates of moves), and who had children with other partners, were all more likely to have imputed-income orders (Brinig & Garrison, 2018). Unfortunately, they did not have information about the actual earnings of the noncustodial parents in their sample either before or after order establishment.

Demyan and Passarella (2018), on the other hand, had more limited information about the parents on the child support cases that they examined, but did have access to UI wage records for the parents on the cases. They found considerable differences in employment rates between those with and without imputed-income orders: 50.6 percent compared to 68.3 percent had any employment in the year after establishment and 40.9 percent compared to 68.3 percent were

⁷The data also contain limited information on incarceration; more information on this dimension would allow its incorporation into the income imputation process.

employed in all four quarters. Even more striking were the contrasts in median annual earnings from formal employment: \$6,152 compared to \$27,542.

We also consider both sex and race as factors related to ability to pay in our analyses. The factors listed in the ruling—“assets, residence, employment and earnings history, job skills, educational attainment, literacy, age, health, [and] criminal record” (45 C.F.R. § 302.56(c)(1)(iii))—suggest a gender and race-neutral approach to imputing income. This is consistent with current child support policies that do not distinguish between whether the mother or the father is the noncustodial parent (Moseley 1999). However, female and non-white workers face unique challenges in the labor market such that sex and race are likely to be significant determinates of earnings. Female workers are more likely to leave their jobs for compelling family reasons and they are more likely to experience economic insecurity due to employment interruptions (Bauer & Sousa-Poza, 2015). Lower levels of educational attainment and history with the criminal justice system differentially affect employment opportunities and wages for African American workers (Holzer, Offner, & Sorensen, 2005), who are overrepresented in the IV-D caseload (Cancian, Meyer, & Han 2011; Holzer, Offner, & Sorensen, 2005), and cases with imputed-income orders (Brinig & Garrison, 2018; Demyan & Passarella, 2018).

APPROACHES

Approach 1: Hours Worked

We consider three approaches that could be used to impute noncustodial parent income consistent with the 2016 ruling. In the first approach, we calculate income by keeping the hourly wage rate constant at the federal minimum wage in 2019 (\$7.25), and using estimates of hours worked per week by occupation, level of education, and county. This approach is similar to what has been considered by some states in their child support guideline reviews (Venohr, 2018).

In large part, this type of approach has been motivated by evidence that hours of available work vary across labor markets and across occupations and industrial sectors. For example, in the recent review of New Mexico State Child Support Guidelines, Venohr (2018 p. 29) considers variation in average hours worked per week by industry, and shows that averages vary from 27 hours in the leisure and hospitality industry to 39.6 in the construction industry. The approach has also been motivated by national estimates of the percentage of workers working less than full-time due to economic reasons (see, for instance, Demyan and Passerella (2018) who cite Canon, Kudlyak, & Reed (2014)) and evidence that, particularly in some service industries and occupations, work hours can vary from week to week or even day to day (Alexander & Haley-Lock, 2015; Lambert et al., 2014).

This type of approach to imputing income has also been motivated by concerns that in some states noncustodial parents with imputed incomes based on full-time work at the minimum wage may not qualify for a low-income adjustment to their order (Venohr, 2018). In Wisconsin, a noncustodial parent working 35 hours per week at the federal minimum wage would have a monthly gross income of approximately \$1,100, and would thus qualify for a low-income adjustment. For a case with one child, under the Wisconsin guidelines schedule for low-income payers, the noncustodial parents' obligation would be 14 percent of their gross income, or 3 percentage points less than the standard 17 percent rate for one child (Wis. Stat § DCF 150 Appendix A; Wis. Stat § DCF 150 Appendix C). We consider hours worked per week for workers at the 25th percentile of the hours distribution, as well as median and mean hours worked per week. We also report the income, percentage of income, and order amount under the current practice of imputing income at 35 hours per week at the federal minimum wage.

Approach 2: Earnings of Workers in Wisconsin

For a second approach, we calculate income using annual earnings estimates by locality, occupation, and level of education for workers in Wisconsin. North Dakota has recently incorporated a similar approach in their statute, allowing for income imputation at “six-tenths of the state’s statewide average earnings for persons with similar work history and occupational qualifications” (N.D. Admin. Code § 75-02-04.1; Venohr, 2018). Other states have raised concerns that state-level earnings amounts may result in “too-high” orders. The recent report on Florida child support guidelines, for example, states that “imputing standard amounts in default cases based upon state median wage or statewide occupational wage rates does not comply with this rule because it is unlikely to result in an order that a particular noncustodial parent has the ability to pay” (Norrbin et al., 2017, p. 123). The report goes on to note that the Florida state median wage was more than 2.5 times the minimum wage (Norrbin et al., 2017).

We share a similar concern that imputing income using state-level measures, such as the median annual earnings of workers in Wisconsin, could result in too-high orders for many parents. We estimate median annual earnings of \$31,566 (in 2019 dollars) for workers in Wisconsin.⁸ This amount is well above the threshold for a low-income adjustment in Wisconsin, which is \$18,732 or 150 of the federal poverty line for a single person household and would result in a monthly order of \$447. Therefore, for this approach, we consider annual earnings of workers at the 25th percentile of the earnings distribution, as well as median earnings and mean earnings. Moreover, state-level estimates likely mask substantively meaningful within-state variation in earnings by locality, occupation, and education. By accounting for these factors, we

⁸Authors’ own calculations using annual income from wages (adjusted to 2019 dollars) for individuals in Wisconsin ages 16 to 65 who worked in the last year (N = 152,215), from the IPUMS USA 2017 ACS 5-year sample (Ruggles et al., 2019).

are more confident that this approach will produce income amounts that are both reasonable and comparable to those from our other two approaches.

Approach 3: Earnings of Noncustodial Parents with Imputed-Income Orders

For a third approach, we construct a sample of noncustodial parents with imputed-income orders from previous cohorts of Wisconsin child support cases. We then match the noncustodial parents on these cases to Wisconsin UI wage records in order to calculate income using their average earnings in the year following their court order. This approach is very different in that we obtain direct evidence on the later earnings (in the formal labor market) of noncustodial parents with imputed-income orders. It also gives us additional information to evaluate the other two approaches by allowing us to examine the extent to which they result in imputed incomes that align with what we know about the actual earnings of noncustodial parents on imputed-income cases with similar characteristics. This approach is especially important because our reading of the prior literature suggests that noncustodial parents with imputed-income orders have distinct employment and earnings patterns that differ from those of the larger child support caseload, and that may or may not be captured by the first two approaches. However, we also note that later earnings may be influenced by the order itself, particularly if the size of the order relative to actual earnings leads to the accumulation of child support debt (Cancian, Heinrich, & Chung, 2013). It is possible that the earnings of former fathers with imputed-income orders might have been higher under a system where they received more modest support orders.

For each approach, we report the imputed-income amount (average monthly), percentage of income under Wisconsin child support guidelines, and order amount (monthly) for several “model cases” where we vary the characteristics of the noncustodial parent by occupation (production occupations, food preparation and serving related occupations), education (less than

high school diploma, high school diploma/GED, four-year degree), and county (Dane County, Marathon County, Milwaukee County, and Price County). We report results overall and separately by sex (male, female) and race (white, black). We recognize that current child support guidelines do not differentiate between whether the noncustodial parent is the mother or the father in the determination of the support amount and that there may be legal constraints that prohibit the courts from considering race and gender in order determination.⁹ Reporting the results from the different model cases for all individuals and separately by sex and race, however, provides a sense of how much a gender-neutral or race-neutral approach masks important differences between workers that would result in variation in imputed income amounts.

DATA, SAMPLES, & MEASURES

American Community Survey (ACS) 2017 5-Year Sample

For Approaches 1 and 2, we use the publicly available ACS 2017 5-year sample from the IPUMS USA database (Ruggles et al., 2019). The U.S. Census Bureau product describes its ACS as the “premier source for detailed population and housing information about our nation” (US Census Bureau, 2019a). We selected the ACS primarily because of its sample size and its coverage of smaller geographical areas (US Census Bureau, 2019b). Using the ACS 5-year sample allows us to generate estimates of earnings and hours worked that are representative at the county level, though some counties with a population under 100,000 are aggregated into Public Use Microdata Areas (PUMAs) in the microdata (US Census Bureau, 2019c).

⁹For a discussion of the legal basis for a gender-neutral approach to order determination see Clark (1999).

Our main ACS sample consists of 148,347 individuals between the ages of 18 and 65 living in Wisconsin who worked in the last year. In the ACS 2017 5-year sample there were 293,311 total individuals living in Wisconsin. Of these individuals, 180,040 (61 percent) were between the ages of 18 and 65 (60,342 were under the age of 18 and 52,929 were over the age of 65). Of those between the ages of 18 and 65, 31,693 (18 percent) had not worked in the last year.

Since finding full-time work is a challenge for many people, rather than assume that they work 35 hours per week, we attempt to predict the number of hours that workers with various characteristics work per month. Our Approach 1 then takes the mean (or median or 25th percentile) of the predicted hours values, and multiplies it by the minimum wage for an alternative estimate of monthly earnings.

The ACS does not provide hours worked per month (or per year), so we need to estimate it indirectly. For each of the individuals in our main ACS sample, we have information on the usual number of hours that they worked per week in the last year, and the total number of weeks they worked in the last year. To obtain our estimate of the number of hours per year for each worker, we first multiply the number of hours per week that the individual reported they usually worked in the last year by the number of weeks they reported working in the last year. We then divide that total by 12 to get the average number of hours worked per month. We multiply the mean (or median or 25th percentile) of this number by the minimum wage to get our Approach 1 estimate of monthly earnings. We calculate alternative estimates by demographic groups by estimating the average (or median or 25th percentile) hours separately for the different groups.

We also have individuals' reports of their total gross earned income in the last year, which we use to obtain our measure of median annual earnings for Approach 2. We convert

earnings to 2019 dollars using the Personal Consumption Expenditures Price Index (PCEPI).¹⁰ Additionally, we have information on their sex (male, female), race (white, black, and other race or multiple races), level of education (less than high school, high school diploma or GED, four-year degree or more), occupation¹¹, and county of residence.¹² that allows us to calculate conditional medians that likely better reflect individual labor market opportunities.

For Approach 3, we draw from the Wisconsin CRD¹³, a sample of child support-related cases filed in 21 Wisconsin counties. We use the same sample of 18,158 cases coming to court between 1996 and 2010 used by Hodges and Cook (2019) in their report on the use of child support guidelines in Wisconsin.¹⁴ This is a larger number of cases than Cancian and colleagues (2019), who restrict their sample to cohorts 30 and 33 (cases coming to court in 2010 and 2013).

¹⁰We prefer the PCEPI to the Consumer Price Index for methodological reasons; see e.g. the discussion at <https://www.clevelandfed.org/newsroom-and-events/publications/economic-trends/2014-economic-trends/et-20140417-pce-and-cpi-inflation-whats-the-difference.aspx>

¹¹We group occupations into 24 separate categories for business, science, and arts; business operations specialists; financial specialists; computer and mathematical; architecture and engineering; life, physical, and social science; community and social services occupations; legal occupations; education, training, and library occupations; arts, design, entertainment, sports, and media occupations; healthcare practitioners and technical occupations; healthcare support occupations; protective service occupations; food preparation and serving occupations; building and grounds cleaning and maintenance occupations; personal care and service occupations; sales and related occupations; office and administrative support occupations; farming, fishing, and forestry occupations; construction and extraction occupations; installation, maintenance, and repair workers; production occupations; transportation and material moving occupations; and military specific occupations.

¹²County/public use microdata areas (PUMA) includes separate categories for Brown, Dane, Kenosha, La Crosse (city), Marathon, Milwaukee, Outagamie, Racine, Rock, Sheboygan, Walworth, Waukesha, and Winnebago Counties. Other counties are combined, into a total of 15 groupings: (1) Northwest Wisconsin (includes 10 counties); (2) Oneida, Lincoln, Vilas, Langlade, and Forest; (3) West Central Wisconsin (includes eight counties); (4) Grant, Green, Iowa, Richland, and Lafayette; (5) Sauk and Columbia; (6) Dodge and Jefferson; (7) Marinette, Oconto, Door and Florence; (8) Manitowoc and Kewaunee; (9) East Central Wisconsin (includes five counties); (10) Fond du Lac and Calumet; (11) Wood, Portage, Juneau, and Adams; (12) Washington and Ozaukee; (13) Barron, Polk, Clark, and Chippewa (North); (14) St. Croix and Dunn; and (15) Eau Claire and Chippewa (South).

¹³The 21 CRD counties are: Calumet, Clark, Dane, Dodge, Dunn, Green, Jefferson, Juneau, Kewaunee, Marathon, Milwaukee, Monroe, Oneida, Ozaukee, Price, Racine, Richland, St. Croix, Sheboygan, Waukesha, and Winnebago.

¹⁴The CRD sample used by Hodges and Cook (2019) includes 20,468 total cases. Of these cases, they exclude 415 that did not have information about parental custody, 324 that did not have a weight, 971 where the parents reconciled, 352 that did not have a physical placement order, nine where the children were placed with a third party, 174 that had a split placement arrangement, and 65 that had additional missing information.

From the 18,158 cases coming to court between 1996 and 2010, we identify 13,249 cases (76 percent) that had a child support order at the time of the final judgement or paternity establishment. In 13,017 of those cases, either the mother or the father on the case was identified as the noncustodial parent and ordered to pay child support.¹⁵

From the sample of cases with a child support order, we identify 1,973 imputed-income cases (15 percent). We follow the same methods as Hodges and Cook (2019) and Cancian and colleagues (2019) to identify imputed income. Specifically, we identify cases as having imputed-income orders if the court record indicates that the type of support order is a “fixed-dollar order, based on a percentage of potential income” or if there is a record of a deviation from the guidelines that indicates that the potential earnings of the payer were used in order determination.¹⁶

For imputed-income cases, we are able to match the noncustodial parent to UI wage records for the state of Wisconsin. We then record the annual earnings from formal employment for each case in the year after the order was set.¹⁷ We convert the earnings to 2019 dollars using the PCEPI. The UI wage records only record positive earnings for individuals with covered jobs in the state of Wisconsin. This means that we have no data on earnings for individuals who work outside of Wisconsin, who work for certain employers (such as the federal government), who work informally (for example, do odd jobs for cash), or who are self-employed. The CRD gives us very limited demographic information about the workers relative to the ACS. However, we

¹⁵There were 230 cases that did not identify a payer, one that listed someone other than the noncustodial parent as the payer, and one that indicated that payer changed over the case history.

¹⁶In the CRD, data collectors identify three types of deviations from the standard percentage-of-income guidelines that indicate that imputed income was used in setting an order. These are deviations due to: (1) the potential earnings of the payer (general); (2) the potential earnings of the payer based on full-time federal minimum wage; and (3) the potential earnings of the payer based on part-time federal minimum wage.

¹⁷This refers to the four calendar quarters following the calendar quarter in which the order was set.

were able to match the noncustodial parent on the imputed-income cases to the KIDS caseload data in order to obtain information about parental race for most cases.

The Wisconsin CRD matched to UI wage and KIDS data give us the advantage of having detailed information about noncustodial parents in Wisconsin whose child support orders were set using imputed income. In addition to information on the noncustodial parents' later earnings and race, we also have information on the location of the case (county) and, for some cases, the noncustodial parent's occupation. Unfortunately, data on noncustodial parent education was not available from the CRD or from KIDS. Additionally, not all Wisconsin counties are represented in the CRD sample. To represent different types of Wisconsin counties, we select four counties: Milwaukee, Dane, Marathon, and Price.

RESULTS

Table 1 presents our results for Approach 1. For comparison, the first three columns present the imputed income and order under the status quo assuming a constant 35 hours per week. The next three sets of columns show the calculations using the 25th percentile of monthly hours, the median of monthly hours, and the mean of monthly hours for each of the relevant categories. One can see substantial variation in the orders depending on which calculation we use.

Table 1. Approach 1: Monthly Income, Percentage of Income, and Burden Levels by County, Occupation, and Level of Education

Scenario	Approach 1: Hours Worked at Federal Minimum Wage											
	35 Hours at Federal Minimum Wage			25th Percentile			Median			Mean		
	Income	Percentage of Income	Order Amount	Income	Percentage of Income	Order Amount	Income	Percentage of Income	Order Amount	Income	Percentage of Income	Order Amount
Wisconsin	\$1,100	14%	\$151	\$920	12%	\$113	\$1,257	15%	\$185	\$1,131	14%	\$155
Production Occupation	\$1,100	14%	\$151	\$1,257	15%	\$185	\$1,257	15%	\$185	\$1,199	14%	\$172
Less than High School Diploma	\$1,100	14%	\$151	\$1,051	13%	\$138	\$1,257	15%	\$185	\$1,126	14%	\$154
High School Diploma	\$1,100	14%	\$151	\$1,257	15%	\$185	\$1,257	15%	\$185	\$1,207	14%	\$173
Four-year degree	\$1,100	14%	\$151	\$1,162	14%	\$162	\$1,257	15%	\$185	\$1,214	14%	\$174
Food preparation and service occupation	\$1,100	14%	\$151	\$399	11%	\$45	\$788	11%	\$88	\$795	11%	\$89
Less than High School Diploma	\$1,100	14%	\$151	\$237	11%	\$27	\$657	11%	\$74	\$704	11%	\$79
High School Diploma	\$1,100	14%	\$151	\$399	11%	\$45	\$788	11%	\$88	\$799	11%	\$90
Four-year degree	\$1,100	14%	\$151	\$526	11%	\$59	\$943	12%	\$115	\$895	12%	\$108
Dane County	\$1,100	14%	\$151	\$788	11%	\$88	\$1,257	15%	\$185	\$1,098	13%	\$148
Marathon County	\$1,100	14%	\$151	\$1,005	13%	\$129	\$1,257	15%	\$185	\$1,176	14%	\$166
Milwaukee County	\$1,100	14%	\$151	\$788	11%	\$88	\$1,257	15%	\$185	\$1,097	13%	\$148
Price County	\$1,100	14%	\$151	\$798	11%	\$89	\$1,257	15%	\$185	\$1,103	13%	\$149

Source: 2017 American Community Survey, 5 year sample. $N=148,347$ individuals in Wisconsin ages 18 to 65.

Notes: Percentage of income figures are based on the Wisconsin child support guidelines schedule for 2019 (Wis. Stat § DCF 150 Appendix A, 2019; Wis. Stat § DCF 150 Appendix C, 2019). Italics indicate income less than \$781; this corresponds to the lowest monthly income amount on the Wisconsin low-income guidelines schedule, “monthly income up to \$781.”

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Median hours result in the highest expected contributions. For a worker in Wisconsin, this results in a monthly income level of \$1,257 with a monthly order of \$185 for a case with one child. This income amount shows up in many scenarios, and is higher than the \$1100 income and \$151 order we see under the current standard. This difference is due to the fact that a large fraction of workers report working 40 hours per week and working the full year. As a result, the median worker calculations often assume 40 hours per week rather than 35. One can also see that for some groups (most notably food preparation and service with less than a high school diploma) the median is substantially lower.

Mechanically, the 25th percentile must be lower than the median, but it is striking how much lower it is. For most cases, the implied order amount is less than half of what the median would yield. This is particularly the case for food preparation and service occupations. Income is \$237 per month at the 25th percentile of the hours distribution for a food preparation and service occupation worker in Wisconsin with less than a high school diploma. This is almost three times smaller than income at the median of the hours distribution for the same subgroup.

For the state as a whole and the four counties, the mean values fall between the median and the 25th percentile. For the results by occupation, the mean values vary relative to the median and the 25th percentile, sometimes yielding a payment between the two, and sometimes a higher or lower payment. Between the three distributional measures for Approach 1, we prefer the mean. In our view, this is a case where the median is a bit of a strange measure, since a large fraction of workers report full-time (40 hours per week) full-year (52 weeks per year) employment.

Table 2 presents the results for Approach 2. This table takes a similar format to Table 1 but uses earned income from the ACS rather than assuming the minimum wage. With some

exceptions, this approach leads to substantially higher orders compared to Approach 1; we also see very large differences between the different distributional measures, with the mean substantially larger than the median, and the median substantially larger than the 25th percentile. We do not think the mean is a good metric here, given that it can be heavily influenced by a few very high earners. The median does a much better job of quantifying the typical earner so we lean towards that, though to be cautious one might prefer the 25th percentile.

Table 3 presents the results from Approach 3. This approach uses the actual income as measured by UI records of parents with orders and imputed income. These results are stunning. With some exceptions, this approach leads to substantially lower orders compared to the first two approaches. In fact, at the 25th percentile and the median, income is very low—\$0 to 4 a month overall, and for all subgroups, less than \$300 a month. The highest order amount from this method using median income would be \$31 in Price County. Using the 25th percentile equals \$0 except for Price County. The means are larger, as one would expect, but still very small. Only in production occupations and Marathon County does the monthly income amount exceed the federal poverty line. Between the three distributional measures for Approach 3, we prefer the mean. Using the 25th percentile and median measures from this approach would often yield \$0 order amounts. However, it is important to keep the main result in mind; parents with imputed-income orders seem to typically have remarkably low income from formal employment.

Tables 4 and 5 break these results down for various demographic groups. Rather than show all 3 possibilities for each approach, we show only one per approach. We use our preferred measures from each approach: the mean for Approach 1, the median for Approach 2, and the mean for Approach 3.

Table 2. Approach 2: Monthly Income, Percentage of Income, and Burden Levels by County, Occupation, and Level of Education

Scenario	Approach 2: Annual Earnings								
	25th Percentile			Median			Mean		
	Income	Percentage of Income	Order Amount	Income	Percentage of Income	Order Amount	Income	Percentage of Income	Order Amount
Wisconsin	\$1,123	14%	\$154	\$2,675	17%	\$455	\$3,489	17%	\$593
Production Occupation	\$1,724	17%	\$293	\$2,806	17%	\$477	\$3,019	17%	\$513
Less than High School Diploma	\$1,315	15%	\$199	\$2,213	17%	\$376	\$2,351	17%	\$400
High School Diploma	\$1,727	17%	\$294	\$2,894	17%	\$492	\$3,059	17%	\$520
Four-year degree	\$1,917	17%	\$326	\$3,146	17%	\$535	\$3,685	17%	\$626
Food preparation and service occupation	<i>\$400</i>	11%	\$45	\$896	12%	\$108	\$1,176	14%	\$166
Less than High School Diploma	<i>\$219</i>	11%	\$25	<i>\$741</i>	11%	\$83	\$990	13%	\$125
High School Diploma	<i>\$417</i>	11%	\$47	\$896	12%	\$108	\$1,166	14%	\$162
Four-year degree	<i>\$681</i>	11%	\$76	\$1,250	15%	\$182	\$1,582	17%	\$269
Dane County	\$1,120	14%	\$153	\$3,016	17%	\$513	\$4,018	17%	\$683
Marathon County	\$1,277	15%	\$188	\$2,648	17%	\$450	\$3,365	17%	\$572
Milwaukee County	\$1,072	13%	\$142	\$2,586	17%	\$440	\$3,304	17%	\$562
Price County	\$863	12%	\$102	\$2,333	17%	\$397	\$2,837	17%	\$482

Source: 2017 American Community Survey, 5 year sample. *N*= 148,347 individuals in Wisconsin ages 18 to 65.

Notes: Percentage of income figures are based on the Wisconsin child support guidelines schedule for 2019 (Wis. Stat § DCF 150 Appendix A, 2019; Wis. Stat § DCF 150 Appendix C, 2019).

Italics indicate income less than \$781; this corresponds to the lowest monthly income amount on the Wisconsin low-income guidelines schedule, “monthly income up to \$781.”

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Table 3. Approach 3: Monthly Income, Percentage of Income, and Burden Levels by County

Approach 3: Annual Earnings of Noncustodial Parents with Imputed-Income Orders										
Scenario	N	25th Percentile			Median			Mean		
		Income	Percentage of Income	Order Amount	Income	Percentage of Income	Order Amount	Income	Percentage of Income	Order Amount
Wisconsin	1,941	<i>\$0</i>	11%	\$0	<i>\$4</i>	11%	<i>\$0</i>	<i>\$465</i>	11%	\$52
Production Occupation	51	<i>\$0</i>	11%	\$0	<i>\$242</i>	11%	\$27	<i>\$1,330</i>	15%	\$201
Food preparation and service occupation	27	<i>\$0</i>	11%	\$0	<i>\$159</i>	11%	\$18	<i>\$777</i>	11%	\$87
Dane County	280	<i>\$0</i>	11%	\$0	<i>\$17</i>	11%	\$2	<i>\$669</i>	11%	\$75
Marathon County	72	<i>\$0</i>	11%	\$0	<i>\$250</i>	11%	\$28	<i>\$1,129</i>	14%	\$155
Milwaukee County	560	<i>\$0</i>	11%	\$0	<i>\$0</i>	11%	<i>\$0</i>	<i>\$314</i>	11%	\$35
Price County	24	<i>\$53</i>	11%	\$6	<i>\$273</i>	11%	\$31	<i>\$862</i>	12%	\$100

Source: Estimates from Wisconsin Court Record Data cohorts 17–33, cases coming to court in Wisconsin between 1996 and 2013. *N*= 1,941 cases in which the payer (noncustodial parent) is the father or mother and in which the child support order was set using imputed income. Excludes 38 cases where the noncustodial parent did not have a valid social security number for a match to the Unemployment Insurance wage records.

Notes: Percentage of income figures are based on the Wisconsin child support guidelines schedule for 2019 (Wis. Stat § DCF 150 Appendix A, 2019; Wis. Stat § DCF 150 Appendix C, 2019).

Italics indicate income less than \$781; this corresponds to the lowest monthly income amount on the Wisconsin low-income guidelines schedule, “monthly income up to \$781.”

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Table 4. Monthly Income, Percentage of Income, and Burden Levels by Imputation Approach and Scenario: Male and Female Workers

	Approach 1: Mean Hours at Federal Minimum Wage			Approach 2: Median Annual Earnings			Approach 3: Mean Earnings of Noncustodial Parents with Imputed-Income Orders		
	Income	Percentage of		Income	Percentage of		Income	Percentage of	
		Income	Order Amount		Income	Order Amount		Income	Order Amount
Male Workers									
Wisconsin	\$1,214	14%	\$174	\$3,250	17%	\$553	<i>\$457</i>	11%	\$51
Production Occupation	\$1,233	15%	\$179	\$3,106	17%	\$528	\$1,330	15%	\$201
Less than High School Diploma	\$1,162	14%	\$161	\$2,553	17%	\$434	N/A	N/A	N/A
High School Diploma	\$1,241	15%	\$180	\$3,234	17%	\$550	N/A	N/A	N/A
Four-year degree	\$1,252	15%	\$182	\$3,451	17%	\$587	N/A	N/A	N/A
Food preparation and service occupation	\$850	12%	\$99	\$957	12%	\$119	\$783	11%	\$88
Less than High School Diploma	\$755	11%	\$85	\$763	11%	\$86	N/A	N/A	N/A
High School Diploma	\$863	12%	\$102	\$984	13%	\$125	N/A	N/A	N/A
Four-year degree	\$923	12%	\$113	\$1,319	15%	\$200	N/A	N/A	N/A
Dane County	\$1,164	14%	\$162	\$3,404	17%	\$579	<i>\$650</i>	11%	\$73
Marathon County	\$1,269	15%	\$187	\$3,020	17%	\$513	\$1,145	14%	\$159
Milwaukee County	\$1,149	14%	\$160	\$2,917	17%	\$496	<i>\$312</i>	11%	\$35
Price County	\$1,202	14%	\$172	\$2,750	17%	\$467	\$877	12%	\$104
Female Workers									
Wisconsin	\$1,040	13%	\$136	\$2,243	17%	\$381	\$999	13%	\$126
Production Occupation	\$1,109	13%	\$150	\$2,128	17%	\$362	N/A	N/A	N/A
Less than High School Diploma	\$1,052	13%	\$138	\$1,702	17%	\$289	N/A	N/A	N/A
High School Diploma	\$1,117	14%	\$153	\$2,155	17%	\$366	N/A	N/A	N/A
Four-year degree	\$1,124	14%	\$154	\$2,500	17%	\$425	N/A	N/A	N/A
Food preparation and service occupation	\$755	11%	\$85	\$875	12%	\$104	N/A	N/A	N/A
Less than High School Diploma	<i>\$647</i>	11%	\$73	<i>\$702</i>	11%	\$79	N/A	N/A	N/A
High School Diploma	\$755	11%	\$85	\$872	12%	\$103	N/A	N/A	N/A
Four-year degree	\$879	12%	\$104	\$1,052	13%	\$138	N/A	N/A	N/A
Dane County	\$1,028	13%	\$132	\$2,589	17%	\$440	N/A	N/A	N/A
Marathon County	\$1,070	13%	\$142	\$2,383	17%	\$405	N/A	N/A	N/A
Milwaukee County	\$1,045	13%	\$137	\$2,298	17%	\$391	N/A	N/A	N/A
Price County	\$997	13%	\$126	\$1,939	17%	\$330	N/A	N/A	N/A

Sources: Approaches 1 and 2: 2017 American Community Survey, 5 year sample. N= 77,190 males in Wisconsin ages 18 to 65 who worked in the last year. Approach 3: Estimates from Wisconsin Court Record Data cohorts 17–33, cases coming to court in Wisconsin between 1996 and 2013. N= 1,895 noncustodial fathers whose orders were set using imputed income at the time of final judgment on the case.

Notes: Percentage of income figures are based on the Wisconsin child support guidelines schedule for 2019 (Wis. Stat § DCF 150 Appendix A, 2019; Wis. Stat § DCF 150 Appendix C, 2019). Values marked “N/A” reflect fewer than 10 observations. Italics indicate income less than \$781; this corresponds to the lowest monthly income amount on the Wisconsin low-income guidelines schedule, “monthly income up to \$781.”

https://docs.legis.wisconsin.gov/code/admin_code/DCF/101_199/150_c.pdf

Table 5. Monthly Income, Percentage of Income, and Burden Levels by Imputation Approach and Scenario: African American and White Workers

	Approach 1: Mean Hours at Federal Minimum Wage			Approach 2: Median Annual Earnings			Approach 3: Mean Earnings of Noncustodial Parents with Imputed-Income Orders		
	Income	Percentage of Income	Order Amount	Income	Percentage of Income	Order Amount	Income	Percentage of Income	Order Amount
African American Workers									
Wisconsin	\$1,013	13%	\$130	\$1,838	17%	\$313	\$253	11%	\$28
Production Occupation	\$1,060	13%	\$141	\$2,002	17%	\$340	N/A	N/A	N/A
Less than High School Diploma	\$827	11%	\$95	\$1,140	14%	\$156	N/A	N/A	N/A
High School Diploma	\$1,105	13%	\$149	\$2,104	17%	\$358	N/A	N/A	N/A
Four-year degree	\$1,144	14%	\$159	\$2,917	17%	\$496	N/A	N/A	N/A
Food preparation and service occupation	\$772	11%	\$87	\$526	11%	\$59	N/A	N/A	N/A
Less than High School Diploma	\$565	11%	\$63	\$896	12%	\$108	N/A	N/A	N/A
High School Diploma	\$819	11%	\$94	\$942	12%	\$115	N/A	N/A	N/A
Four-year degree	\$718	11%	\$81	\$863	12%	\$102	N/A	N/A	N/A
Dane County	\$1,007	13%	\$130	\$1,894	17%	\$322	\$284	11%	\$32
Marathon County	\$1,072	13%	\$142	\$1,833	17%	\$312	\$434	11%	\$49
Milwaukee County	\$1,018	13%	\$131	\$1,903	17%	\$323	\$257	11%	\$29
Price County	\$1,108	13%	\$149	\$1,754	17%	\$298	N/A	N/A	N/A
White Workers									
Wisconsin	\$1,142	14%	\$159	\$2,833	17%	\$482	\$773	11%	\$87
Production Occupation	\$1,214	14%	\$174	\$2,979	17%	\$506	\$1,056	13%	\$138
Less than High School Diploma	\$1,143	14%	\$159	\$2,333	17%	\$397	N/A	NA	NA
High School Diploma	\$1,220	14%	\$175	\$3,016	17%	\$513	N/A	N/A	N/A
Four-year degree	\$1,226	15%	\$178	\$3,333	17%	\$567	N/A	N/A	N/A
Food preparation and service occupation	\$791	11%	\$89	\$900	12%	\$108	\$1,284	15%	\$192
Less than High School Diploma	\$662	11%	\$74	\$528	11%	\$59	N/A	N/A	N/A
High School Diploma	\$795	11%	\$89	\$906	12%	\$109	N/A	N/A	N/A
Four-year degree	\$911	12%	\$110	\$1,254	15%	\$185	N/A	N/A	N/A
Dane County	\$1,113	13%	\$150	\$3,193	17%	\$543	\$1,016	13%	\$131
Marathon County	\$1,185	14%	\$167	\$2,761	17%	\$469	\$1,058	13%	\$141
Milwaukee County	\$1,130	14%	\$155	\$3,016	17%	\$513	\$639	11%	\$72
Price County	\$1,110	13%	\$150	\$2,413	17%	\$410	\$1,076	13%	\$143

Sources: Approaches 1 and 2: 2017 American Community Survey, 5 year sample. N= 4,284 African American individuals in Wisconsin ages 18 to 65 who worked in the last year. Approach 3: Estimates from Wisconsin Court Record Data cohorts 17–33, cases coming to court in Wisconsin between 1996 and 2013. N=864 African American noncustodial parents whose orders were set using imputed income at the time of final judgment on the case.

Notes: Percentage of income figures are based on the Wisconsin child support guidelines schedule for 2019 (Wis. Stat § DCF 150 Appendix A, 2019; Wis. Stat § DCF 150 Appendix C, 2019). Values marked “N/A” reflect fewer than 10 observations. Italics indicate income less than \$781; this corresponds to the lowest monthly income amount on the Wisconsin low-income guidelines schedule, “monthly income up to \$781.”

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The results go largely as one would expect for male and female workers (see Table 4). Males in the ACS sample used for Approaches 1 and 2 work slightly more hours (on average) and have slightly higher median earnings, so they would have higher orders compared to the overall group under both approaches. Females in the ACS sample work slightly fewer hours (on average) and have slightly lower median earnings, so they would have lower orders compared to the overall group under both approaches. Under Approach 3, since most of the sample is noncustodial fathers, this group looks very much like the overall group. Notably, although the sample size is quite small (N=46), noncustodial mothers with imputed-income orders have higher average earnings than noncustodial fathers with imputed-income orders, and would have orders nearly twice the size as noncustodial fathers under the third approach.

Considering the results by race (see Table 5), blacks generally would have lower orders than whites under all three approaches. The difference between average hours worked for blacks and whites is smaller than the difference in median earnings for blacks and whites, so that Approach 1 results in more similar order amounts for the two groups than Approach 2. This highlights an important distinction between hours worked and earnings that may be useful to the courts when considering whether actual income reflects the noncustodial parent's earnings capacity. Blacks and whites in the ACS sample both work less than 40 hours per week on average (32 hours per work and 36 hours per week respectively), but the difference in median earnings suggests that the two groups receive much different returns for those efforts.

DEVELOPING AN IMPUTED-INCOME CALCULATOR

One limitation of each of the approaches considered in this report is that they do not account for all factors related to economic circumstances discussed in the 2016 ruling. We considered the possibility of using quantile regression analysis to predict noncustodial parents'

later earnings as a function of characteristics such as sex, age, locality, occupation, education, history with the criminal justice system, literacy, and health. Quantile regression is preferable to standard OLS regression because it provides imputed income estimates for the typical earner, as well as for high earners and low earners. A quantile regression model would produce predicted values of earnings as a function of factors such as age and level of education at different points in the earnings distribution (i.e., fathers in the 25th, 50th, and 75th percentile of the earnings distribution).

We also considered building a calculator that would use a prediction model based on later earnings records of noncustodial parents with imputed-income orders in the Wisconsin CRD data, as well as potentially drawing on outside data sources such as the ACS and the Survey of Income and Program Participation (SIPP). Based on the numbers, this approach would produce income estimates that would often result in \$0 obligations. The distribution of earnings (from UI wage records, shown in Appendix Table 1) in the year after order establishment shows that half of noncustodial parents with imputed-income orders had less than \$50 in formal earnings and less than 10 percent had earnings greater than \$17,500 (140 percent of the federal poverty line in 2019). Hence, even if we supplemented with information from the ACS and the SIPP, with the CRD as our base, the calculator would likely produce imputed-income amount at or near \$0.

An alternative would be to use only publicly-available data for the calculator, so that income estimates similar to what are shown for Approach 1 and 2 were easily obtained. But there are also some logistical factors to consider, such as the availability of resources for development, implementation, and maintenance of this type of calculator.

SUMMARY

This report is part of a series that considers the use of the guidelines (Hodges & Cook, 2019), the way the guidelines treat cases in which the payer has low income (Hodges & Vogel, 2019), and the relationship between the use of income imputation in setting child support orders and child support payments (Cancian et al., 2019). This report considered three alternative ways that noncustodial parent income could be imputed when it is not known to the court: (1) keeping the federal minimum wage (\$7.25) as the hourly wage rate but using variations in hours worked by locality, occupation, and level of education; (2) using annual earnings of workers in Wisconsin by locality, occupation, and level of education, (3) using actual (formal) earnings of noncustodial parents with imputed income orders from prior cohorts in the year after order establishment. For each approach, we considered the income amount at different positions in the distributions (e.g., the 25th percentile, the median, and the mean) and identified a preferred measure: mean hours worked per week, median annual earnings, and mean earnings of noncustodial parents with imputed-income orders.

Each of these approaches have strengths and weakness in terms of “right-sizing” orders as well as accounting for the specific circumstances of the noncustodial parent in accordance with the language of the December 2016 rule. The first approach, using mean hours worked per week at the federal minimum wage, results in less variation and also lower order amounts than the second approach, using median earnings. Both approaches typically result in higher orders than the third approach, which uses the actual earnings of noncustodial parents with imputed-income orders from prior CRD cohorts.

If the goal of the agency is to be as compliant as possible with the 2016 final rule, these approaches can also be evaluated on the number of factors in the final ruling used in determining the imputed-income amount. The first two approaches take multiple factors into account

including locality, occupation, education, as well as sex and race. The scale of the data (large number of observations) makes it possible to generate estimates at fairly granular level (for example, for a black male with a high school diploma working in a food service occupation in Milwaukee). In contrast, with the third approach, using the Wisconsin CRD, it is not possible to obtain earnings estimates at the same level of detail, due to the small number of imputed-income cases and limited information available in the case records where the income of the noncustodial parents is unknown.

Transparency about the way in which the estimates are generated is also important. For the first two approaches, the data are publicly available. Additionally, the process for obtaining the estimates is fairly easy to implement and understand, so that the estimates could be updated on a regular basis. This is a clear advantage of the first two approaches compared to the third.

In comparing each of the different approaches in greater detail, we prioritized county-level estimates (see Appendix Tables 2–7). This decision was made following a memorandum from the Institute for Research on Poverty to the Wisconsin Department of Children and Families that listed geographic relevance as among the most important principals in the selection of indicators for imputing income. The memorandum stated specifically that “data points reliable at the county-level are preferable” (Dresser & Cancian, 2018). It is possible that giving priority to other factors (such as level of education) could lead to different conclusions about the approaches.

Still, our findings have important implications for using imputed income in order determination. Not only do the first two approaches considered in this report often result in incomes above the current standard, for the most part they result in incomes that are well above what we observe for noncustodial parents with imputed-income orders and similar characteristics

in the CRD. Together with recent research by Cancian and colleagues (2019) and Demyan & Passarella (2018), this suggests imputing income at lower levels than the current standard, or, in cases where the noncustodial parents has very low earnings, treating these earnings as evidence of ability to pay.

This creates a challenge for child support policymakers who must consider the implications of lower orders, especially for the well-being of the children on the case. If the earnings of past noncustodial parents with imputed income orders are indicative of the earnings of future noncustodial parents with income imputed orders, then more than half have earnings consistent with a no-support order (that is, below the minimum amount on the Wisconsin guidelines tables for low-income payers). Clearly, some of these noncustodial parents will have earnings from informal employment arrangements. However, absent any way to track these informal earnings, it seems unlikely that having more information about their economic circumstances (such as a prior history of incarceration or literacy) would lead to different conclusions.

Appendix Table 1. Distribution of Hours Worked, Annual Earnings (ACS), and Annual Earnings (WCRD)

	Min	P10	P25	Median	P75	P90	Max
Approach 1							
Hours Worked per Week ^a	1	9.62	25.38	40	44	50	99
Approach 2							
Annual Earnings of Workers in Wisconsin ^a	\$0	\$2,553	\$12,311	\$31,566	\$53,108	\$81,704	\$443,246
Approach 3							
Annual Earnings of Noncustodial Parents with Imputed-income Orders ^b	\$0	\$0	\$0	\$50	\$5,580	\$17,301	\$276,789

Sources: Approaches 1 and 2: 2017 American Community Survey, 5 year sample. N= 152,215 individuals in Wisconsin ages 16 to 65. Approach 3: Estimates from Wisconsin Court Record Data cohorts 17–33, cases coming to court in Wisconsin between 1996 and 2013. N = 1,941 cases in which the payer (noncustodial parent) is the father or mother and in which the child support order was set using imputed income. Excludes 38 cases where the noncustodial parent did not have a valid social security number for a match to the Unemployment Insurance wage records.

Appendix Table 2. Approach 1: Monthly Income, Percentage of Income, and Burden Levels by County, Occupation, and Level of Education

Scenario	Approach 1: Hours Worked at Federal Minimum Wage											
	35 Hours at Federal Minimum Wage			25th Percentile			Median			Mean		
	Income	Percentage of Income	Order Amount	Income	Percentage of Income	Order Amount	Income	Percentage of Income	Order Amount	Income	Percentage of Income	Order Amount
Wisconsin	\$1,100	14%	\$151	\$920	12%	\$113	\$1,257	15%	\$185	\$1,131	14%	\$155
Production Occupation	\$1,100	14%	\$151	\$1,257	15%	\$185	\$1,257	15%	\$185	\$1,199	14%	\$172
Less than High School Diploma	\$1,100	14%	\$151	\$1,051	13%	\$138	\$1,257	15%	\$185	\$1,126	14%	\$154
High School Diploma	\$1,100	14%	\$151	\$1,257	15%	\$185	\$1,257	15%	\$185	\$1,207	14%	\$173
Four-year degree	\$1,100	14%	\$151	\$1,162	14%	\$162	\$1,257	15%	\$185	\$1,214	14%	\$174
Food preparation and service occupation	\$1,100	14%	\$151	\$399	11%	\$45	\$788	11%	\$88	\$795	11%	\$89
Less than High School Diploma	\$1,100	14%	\$151	\$237	11%	\$27	\$657	11%	\$74	\$704	11%	\$79
High School Diploma	\$1,100	14%	\$151	\$399	11%	\$45	\$788	11%	\$88	\$799	11%	\$90
Four-year degree	\$1,100	14%	\$151	\$526	11%	\$59	\$943	12%	\$115	\$895	12%	\$108
Dane County	\$1,100	14%	\$151	\$788	11%	\$88	\$1,257	15%	\$185	\$1,098	13%	\$148
Production Occupation	\$1,100	14%	\$151	\$1,051	13%	\$138	\$1,257	15%	\$185	\$1,132	14%	\$155
Less than High School Diploma	\$1,100	14%	\$151	\$798	11%	\$89	\$1,257	15%	\$185	\$1,119	14%	\$153
High School Diploma	\$1,100	14%	\$151	\$1,100	13%	\$148	\$1,257	15%	\$185	\$1,137	14%	\$156
Four-year degree	\$1,100	14%	\$151	\$1,051	13%	\$138	\$1,257	15%	\$185	\$1,111	13%	\$150
Food preparation and service occupation	\$1,100	14%	\$151	\$290	11%	\$33	\$785	11%	\$88	\$766	11%	\$86
Less than High School Diploma	\$1,100	14%	\$151	\$293	11%	\$33	\$798	11%	\$89	\$725	11%	\$81
High School Diploma	\$1,100	14%	\$151	\$242	11%	\$27	\$657	11%	\$74	\$756	11%	\$85
Four-year degree	\$1,100	14%	\$151	\$628	11%	\$70	\$798	11%	\$89	\$891	12%	\$107
Marathon County	\$1,100	14%	\$151	\$1,005	13%	\$129	\$1,257	15%	\$185	\$1,176	14%	\$166
Production Occupation	\$1,100	14%	\$151	\$1,257	15%	\$185	\$1,257	15%	\$185	\$1,222	14%	\$175
Less than High School Diploma	\$1,100	14%	\$151	\$1,162	14%	\$162	\$1,257	15%	\$185	\$1,134	14%	\$155
High School Diploma	\$1,100	14%	\$151	\$1,257	15%	\$185	\$1,257	15%	\$185	\$1,224	14%	\$175
Four-year degree	\$1,100	14%	\$151	\$1,257	15%	\$185	\$1,288	15%	\$192	\$1,362	15%	\$209
Food preparation and service occupation	\$1,100	14%	\$151	\$363	11%	\$41	\$785	11%	\$88	\$751	11%	\$84
Less than High School Diploma	\$1,100	14%	\$151	\$126	11%	\$14	\$299	11%	\$34	\$369	11%	\$41
High School Diploma	\$1,100	14%	\$151	\$382	11%	\$43	\$798	11%	\$89	\$765	11%	\$86
Four-year degree	\$1,100	14%	\$151	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A

(table continues)

Appendix Table 2, continued

	Approach 1: Hours Worked at Federal Minimum Wage											
	35 Hours at Federal Minimum Wage			25th Percentile			Median			Mean		
	Income	Percentage of Income	Order Amount	Income	Percentage of Income	Order Amount	Income	Percentage of Income	Order Amount	Income	Percentage of Income	Order Amount
Milwaukee County	\$1,100	14%	\$151	\$788	11%	\$88	\$1,257	15%	\$185	\$1,097	13%	\$148
Production	\$1,100	14%	\$151	\$1,100	13%	\$148	\$1,257	15%	\$185	\$1,141	14%	\$156
Less than High School Diploma	\$1,100	14%	\$151	\$1,051	13%	\$138	\$1,257	15%	\$185	\$1,127	14%	\$154
High School Diploma	\$1,100	14%	\$151	\$1,100	13%	\$148	\$1,257	15%	\$185	\$1,139	14%	\$156
Four-year degree	\$1,100	14%	\$151	\$1,100	13%	\$148	\$1,257	15%	\$185	\$1,213	14%	\$174
Food preparation and service	\$1,100	14%	\$151	\$377	11%	\$42	\$943	12%	\$115	\$847	12%	\$99
Less than High School Diploma	\$1,100	14%	\$151	\$317	11%	\$36	\$1,100	13%	\$148	\$865	12%	\$102
High School Diploma	\$1,100	14%	\$151	\$363	11%	\$41	\$880	12%	\$104	\$830	11%	\$95
Four-year degree	\$1,100	14%	\$151	\$598	11%	\$67	\$943	12%	\$115	\$948	12%	\$118
Price County	\$1,100	14%	\$151	\$798	11%	\$89	\$1,257	15%	\$185	\$1,103	13%	\$149
Production	\$1,100	14%	\$151	\$1,172	14%	\$165	\$1,257	15%	\$185	\$1,193	14%	\$168
Less than High School Diploma	\$1,100	14%	\$151	\$943	12%	\$115	\$1,257	15%	\$185	\$1,060	13%	\$141
High School Diploma	\$1,100	14%	\$151	\$1,257	15%	\$185	\$1,257	15%	\$185	\$1,213	14%	\$174
Four-year degree	\$1,100	14%	\$151	\$943	12%	\$115	\$1,257	15%	\$185	\$1,082	13%	\$144
Food preparation and service	\$1,100	14%	\$151	\$399	11%	\$45	\$788	11%	\$88	\$786	11%	\$88
Less than High School Diploma	\$1,100	14%	\$151	\$157	11%	\$18	\$788	11%	\$88	\$763	11%	\$86
High School Diploma	\$1,100	14%	\$151	\$471	11%	\$53	\$788	11%	\$88	\$782	11%	\$88
Four-year degree	\$1,100	14%	\$151	\$473	11%	\$53	\$943	12%	\$115	\$851	12%	\$99

Source: 2017 American Community Survey, 5 year sample. N= 148,347 individuals in Wisconsin ages 18 to 65.

Notes: Percentage of income figures are based on the Wisconsin child support guidelines schedule for 2019 (Wis. Stat § DCF 150 Appendix A, 2019; Wis. Stat § DCF 150 Appendix C, 2019). Values marked "N/A" reflect fewer than 10 observations. Italics indicate income less than \$781; this corresponds to the lowest monthly income amount on the Wisconsin low-income guidelines schedule, "monthly income up to \$781."

https://docs.legis.wisconsin.gov/code/admin_code/dcf/101_199/150_c.pdf

Appendix Table 3. Approach 2: Monthly Income, Percentage of Income, and Burden Levels by County, Occupation, and Level of Education

Scenario	Approach 2: Annual Earnings								
	25th Percentile			Median			Mean		
	Income	Percentage of Income	Order Amount	Income	Percentage of Income	Order Amount	Income	Percentage of Income	Order Amount
Wisconsin	\$1,123	14%	\$154	\$2,675	17%	\$455	\$3,489	17%	\$593
Production Occupation	\$1,724	17%	\$293	\$2,806	17%	\$477	\$3,019	17%	\$513
Less than High School Diploma	\$1,315	15%	\$199	\$2,213	17%	\$376	\$2,351	17%	\$400
High School Diploma	\$1,727	17%	\$294	\$2,894	17%	\$492	\$3,059	17%	\$520
Four-year degree	\$1,917	17%	\$326	\$3,146	17%	\$535	\$3,685	17%	\$626
Food preparation and service occupation	\$400	11%	\$45	\$896	12%	\$108	\$1,176	14%	\$166
Less than High School Diploma	\$219	11%	\$25	\$741	11%	\$83	\$990	13%	\$125
High School Diploma	\$417	11%	\$47	\$896	12%	\$108	\$1,166	14%	\$162
Four-year degree	\$681	11%	\$76	\$1,250	15%	\$182	\$1,582	17%	\$269
Dane County	\$1,120	14%	\$153	\$3,016	17%	\$513	\$4,018	17%	\$683
Production Occupation	\$1,315	15%	\$199	\$2,502	17%	\$425	\$2,638	17%	\$448
Less than High School Diploma	\$1,315	15%	\$199	\$1,736	17%	\$295	\$2,122	17%	\$361
High School Diploma	\$1,336	15%	\$202	\$2,667	17%	\$453	\$2,677	17%	\$455
Four-year degree	\$1,228	15%	\$178	\$2,157	17%	\$367	\$2,806	17%	\$477
Food preparation and service occupation	\$345	11%	\$39	\$820	11%	\$94	\$1,169	14%	\$162
Less than High School Diploma	\$190	11%	\$21	\$949	12%	\$118	\$997	13%	\$126
High School Diploma	\$333	11%	\$37	\$766	11%	\$86	\$1,121	14%	\$154
Four-year degree	\$426	11%	\$48	\$958	12%	\$119	\$1,717	17%	\$292
Marathon County	\$1,277	15%	\$188	\$2,648	17%	\$450	\$3,365	17%	\$572
Production Occupation	\$2,071	17%	\$352	\$2,917	17%	\$496	\$3,070	17%	\$522
Less than High School Diploma	\$1,553	17%	\$261	\$2,068	17%	\$352	\$2,386	17%	\$406
High School Diploma	\$2,241	17%	\$381	\$2,917	17%	\$496	\$3,067	17%	\$521
Four-year degree	\$2,500	17%	\$425	\$3,507	17%	\$596	\$4,700	17%	\$799
Food preparation and service occupation	\$255	11%	\$29	\$880	12%	\$104	\$1,319	15%	\$200
Less than High School Diploma	\$121	11%	\$14	\$230	11%	\$26	\$4,179	17%	\$710
High School Diploma	\$298	11%	\$33	\$888	12%	\$105	\$1,028	13%	\$132
Four-year degree	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Milwaukee County	\$1,072	13%	\$142	\$2,586	17%	\$440	\$3,304	17%	\$562
Production	\$1,498	16%	\$245	\$2,589	17%	\$440	\$2,777	17%	\$472
Less than High School Diploma	\$1,285	15%	\$192	\$2,167	17%	\$368	\$2,253	17%	\$383
High School Diploma	\$1,532	17%	\$254	\$2,631	17%	\$447	\$2,841	17%	\$483
Four-year degree	\$2,083	17%	\$354	\$3,106	17%	\$528	\$3,581	17%	\$609
Food preparation and service	\$491	11%	\$55	\$1,035	13%	\$135	\$1,290	15%	\$193
Less than High School Diploma	\$340	11%	\$38	\$1,140	14%	\$156	\$1,224	14%	\$175
High School Diploma	\$448	11%	\$50	\$949	12%	\$118	\$1,209	14%	\$173
Four-year degree	\$862	12%	\$100	\$1,754	17%	\$298	\$1,979	17%	\$336

(table continues)

Appendix Table 3, continued

Scenario	Approach 2: Annual Earnings								
	25th Percentile			Median			Mean		
	Income	Percentage of Income	Order Amount	Income	Percentage of Income	Order Amount	Income	Percentage of Income	Order Amount
Price County	\$863	12%	\$102	\$2,333	17%	\$397	\$2,837	17%	\$482
Production	\$1,702	17%	\$289	\$2,553	17%	\$434	\$2,795	17%	\$475
Less than High School Diploma	<i>\$777</i>	11%	\$87	\$1,929	17%	\$328	\$2,217	17%	\$377
High School Diploma	\$1,771	17%	\$301	\$2,587	17%	\$440	\$2,872	17%	\$488
Four-year degree	\$1,578	17%	\$268	\$1,872	17%	\$318	\$2,465	17%	\$419
Food preparation and service	<i>\$431</i>	11%	\$48	\$1,000	13%	\$127	\$1,150	14%	\$160
Less than High School Diploma	<i>\$207</i>	11%	\$23	\$1,060	13%	\$141	\$946	12%	\$118
High School Diploma	<i>\$431</i>	11%	\$48	\$922	12%	\$113	\$1,133	14%	\$155
Four-year degree	<i>\$706</i>	11%	\$79	\$1,422	16%	\$227	\$1,566	17%	\$266

Source: 2017 American Community Survey, 5 year sample. *N*= 148,347 individuals in Wisconsin ages 18 to 65.

Notes: Percentage of income figures are based on the Wisconsin child support guidelines schedule for 2019 (Wis. Stat § DCF 150 Appendix A, 2019; Wis. Stat § DCF 150 Appendix C, 2019). Values marked “N/A” reflect fewer than 10 observations. Italics indicate income less than \$781; this corresponds to the lowest monthly income amount on the Wisconsin low-income guidelines schedule, “monthly income up to \$781.”

https://docs.legis.wisconsin.gov/code/admin_code/dcf/101_199/150_c.pdf

Appendix Table 4. Monthly Income, Percentage of Income, and Burden Levels by Imputation Approach and Scenario: Male Workers

Scenario	Approach 1: Mean Hours at Federal Minimum Wage			Approach 2: Median Annual Earnings			Approach 3: Mean Earnings of Noncustodial Parents with Imputed-Income Orders		
	Income	Percentage of Income	Order Amount	Income	Percentage of Income	Order Amount	Income	Percentage of Income	Order Amount
Wisconsin	\$1,214	14%	\$174	\$3,250	17%	\$553	\$457	11%	\$51
Production Occupation	\$1,233	15%	\$179	\$3,106	17%	\$528	\$1,330	15%	\$201
Less than High School Diploma	\$1,162	14%	\$161	\$2,553	17%	\$434	N/A	N/A	N/A
High School Diploma	\$1,241	15%	\$180	\$3,234	17%	\$550	N/A	N/A	N/A
Four-year degree	\$1,252	15%	\$182	\$3,451	17%	\$587	N/A	N/A	N/A
Food preparation and service occupation	\$850	12%	\$99	\$957	12%	\$119	\$783	11%	\$88
Less than High School Diploma	\$755	11%	\$85	\$763	11%	\$86	N/A	N/A	N/A
High School Diploma	\$863	12%	\$102	\$984	13%	\$125	N/A	N/A	N/A
Four-year degree	\$923	12%	\$113	\$1,319	15%	\$200	N/A	N/A	N/A
Dane County	\$1,164	14%	\$162	\$3,404	17%	\$579	\$650	11%	\$73
Production Occupation	\$1,157	14%	\$161	\$2,979	17%	\$506	\$762	11%	\$86
Less than High School Diploma	\$1,183	14%	\$167	\$1,985	17%	\$337	N/A	N/A	N/A
High School Diploma	\$1,162	14%	\$162	\$3,016	17%	\$513	N/A	N/A	N/A
Four-year degree	\$1,095	13%	\$148	\$2,333	17%	\$397	N/A	N/A	N/A
Food preparation and service occupation	\$833	11%	\$95	\$766	11%	\$86	\$812	11%	\$93
Less than High School Diploma	\$786	11%	\$88	\$949	12%	\$118	N/A	N/A	N/A
High School Diploma	\$830	11%	\$95	\$750	11%	\$84	N/A	N/A	N/A
Four-year degree	\$912	12%	\$110	\$1,277	15%	\$188	N/A	N/A	N/A
Marathon County	\$1,269	15%	\$187	\$3,020	17%	\$513	\$1,145	14%	\$159
Production Occupation	\$1,258	15%	\$185	\$3,149	17%	\$535	N/A	N/A	N/A
Less than High School Diploma	\$1,178	14%	\$166	\$3,069	17%	\$522	N/A	N/A	N/A
High School Diploma	\$1,262	15%	\$186	\$3,157	17%	\$537	N/A	N/A	N/A
Four-year degree	\$1,356	15%	\$208	\$3,447	17%	\$586	N/A	N/A	N/A
Food preparation and service occupation	\$745	11%	\$84	\$1,106	13%	\$149	N/A	N/A	N/A
Less than High School Diploma	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
High School Diploma	\$735	11%	\$82	\$965	12%	\$120	N/A	N/A	N/A
Four-year degree	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Milwaukee County	\$1,149	14%	\$160	\$2,917	17%	\$496	\$312	11%	\$35
Production	\$1,168	14%	\$162	\$2,809	17%	\$477	N/A	N/A	N/A
Less than High School Diploma	\$1,194	14%	\$169	\$2,500	17%	\$425	N/A	N/A	N/A
High School Diploma	\$1,160	14%	\$161	\$2,917	17%	\$496	N/A	N/A	N/A
Four-year degree	\$1,191	14%	\$168	\$2,979	17%	\$506	N/A	N/A	N/A
Food preparation and service	\$906	12%	\$109	\$1,120	14%	\$153	N/A	N/A	N/A
Less than High School Diploma	\$978	13%	\$124	\$1,315	15%	\$199	N/A	N/A	N/A
High School Diploma	\$872	12%	\$103	\$1,000	13%	\$127	N/A	N/A	N/A
Four-year degree	\$1,045	13%	\$137	\$2,000	17%	\$340	N/A	N/A	N/A

(table continues)

Appendix Table 4, continued

Scenario	Approach 1: Mean Hours at Federal Minimum Wage			Approach 2: Median Annual Earnings			Approach 3: Mean Earnings of Noncustodial Parents with Imputed-Income Orders		
	Income	Percentage of Income	Order Amount	Income	Percentage of Income	Order Amount	Income	Percentage of Income	Order Amount
Price County	\$1,202	14%	\$172	\$2,750	17%	\$467	\$877	12%	\$104
Production	\$1,215	14%	\$174	\$2,761	17%	\$469	N/A	N/A	N/A
Less than High School Diploma	\$1,053	13%	\$138	\$1,896	17%	\$322	N/A	N/A	N/A
High School Diploma	\$1,240	15%	\$180	\$2,917	17%	\$496	N/A	N/A	N/A
Four-year degree	\$1,083	13%	\$144	\$2,155	17%	\$366	N/A	N/A	N/A
Food preparation and service	\$816	11%	\$93	\$863	12%	\$102	N/A	N/A	N/A
Less than High School Diploma	\$870	12%	\$103	\$1,083	13%	\$144	N/A	N/A	N/A
High School Diploma	\$802	11%	\$90	\$776	11%	\$87	N/A	N/A	N/A
Four-year degree	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A

Sources: Approaches 1 and 2: 2017 American Community Survey, 5 year sample. N= 77,190 males in Wisconsin ages 18 to 65 who worked in the last year. Approach 3: Estimates from Wisconsin Court Record Data cohorts 17–33, cases coming to court in Wisconsin between 1996 and 2013. N= 1,895 noncustodial fathers whose orders were set using imputed income at the time of final judgment on the case.

Notes: Percentage of income figures are based on the Wisconsin child support guidelines schedule for 2019 (Wis. Stat § DCF 150 Appendix A, 2019; Wis. Stat § DCF 150 Appendix C, 2019). Values marked “N/A” reflect fewer than 10 observations. Italics indicate income less than \$781; this corresponds to the lowest monthly income amount on the Wisconsin low-income guidelines schedule, “monthly income up to \$781.”

https://docs.legis.wisconsin.gov/code/admin_code/DCF/101_199/150_c.pdf

Appendix Table 5. Monthly Income, Percentage of Income, and Burden Levels by Imputation Approach and Scenario: Female Workers

Scenario	Approach 1: Mean Hours at Federal Minimum Wage			Approach 2: Median Annual Earnings			Approach 3: Mean Earnings of Noncustodial Parents with Imputed-Income Orders		
	Income	Percentage of Income	Order Amount	Income	Percentage of Income	Order Amount	Income	Percentage of Income	Order Amount
Wisconsin	\$1,040	13%	\$136	\$2,243	17%	\$381	\$999	13%	\$126
Production Occupation	\$1,109	13%	\$150	\$2,128	17%	\$362	N/A	N/A	N/A
Less than High School Diploma	\$1,052	13%	\$138	\$1,702	17%	\$289	N/A	N/A	N/A
High School Diploma	\$1,117	14%	\$153	\$2,155	17%	\$366	N/A	N/A	N/A
Four-year degree	\$1,124	14%	\$154	\$2,500	17%	\$425	N/A	N/A	N/A
Food preparation and service occupation	\$755	11%	\$85	\$875	12%	\$104	N/A	N/A	N/A
Less than High School Diploma	\$647	11%	\$73	\$702	11%	\$79	N/A	N/A	N/A
High School Diploma	\$755	11%	\$85	\$872	12%	\$103	N/A	N/A	N/A
Four-year degree	\$879	12%	\$104	\$1,052	13%	\$138	N/A	N/A	N/A
Dane County	\$1,028	13%	\$132	\$2,589	17%	\$440	N/A	N/A	N/A
Production Occupation	\$1,082	13%	\$144	\$1,950	17%	\$332	N/A	N/A	N/A
Less than High School Diploma	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
High School Diploma	\$1,082	13%	\$144	\$1,985	17%	\$337	N/A	N/A	N/A
Four-year degree	\$1,134	14%	\$155	\$2,155	17%	\$366	N/A	N/A	N/A
Food preparation and service occupation	\$698	11%	\$78	\$833	11%	\$95	N/A	N/A	N/A
Less than High School Diploma	\$657	11%	\$74	\$817	11%	\$93	N/A	N/A	N/A
High School Diploma	\$680	11%	\$76	\$833	11%	\$95	N/A	N/A	N/A
Four-year degree	\$872	12%	\$103	\$900	12%	\$108	N/A	N/A	N/A
Marathon County	\$1,070	13%	\$142	\$2,383	17%	\$405	N/A	N/A	N/A
Production Occupation	\$1,121	14%	\$154	\$2,586	17%	\$440	N/A	N/A	N/A
Less than High School Diploma	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
High School Diploma	\$1,124	14%	\$154	\$2,589	17%	\$440	N/A	N/A	N/A
Four-year degree	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Food preparation and service occupation	\$756	11%	\$85	\$862	12%	\$100	N/A	N/A	N/A
Less than High School Diploma	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
High School Diploma	\$794	11%	\$89	\$880	12%	\$104	N/A	N/A	N/A
Four-year degree	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Milwaukee County	\$1,045	13%	\$137	\$2,298	17%	\$391	N/A	N/A	N/A
Production	\$1,073	13%	\$142	\$1,898	17%	\$323	N/A	N/A	N/A
Less than High School Diploma	\$1,001	13%	\$129	\$1,467	16%	\$237	N/A	N/A	N/A
High School Diploma	\$1,080	13%	\$143	\$1,958	17%	\$333	N/A	N/A	N/A
Four-year degree	\$1,276	15%	\$188	\$3,333	17%	\$567	N/A	N/A	N/A
Food preparation and service	\$794	11%	\$89	\$1,021	13%	\$131	N/A	N/A	N/A
Less than High School Diploma	\$683	11%	\$77	\$970	12%	\$121	N/A	N/A	N/A
High School Diploma	\$793	11%	\$89	\$932	12%	\$114	N/A	N/A	N/A
Four-year degree	\$900	12%	\$108	\$1,657	17%	\$282	N/A	N/A	N/A

(table continues)

Appendix Table 5, continued

Scenario	Approach 1: Mean Hours at Federal Minimum Wage			Approach 2: Median Annual Earnings			Approach 3: Mean Earnings of Noncustodial Parents with Imputed-Income Orders		
	Income	Percentage of Income	Order Amount	Income	Percentage of Income	Order Amount	Income	Percentage of Income	Order Amount
Price County	\$997	13%	\$126	\$1,939	17%	\$330	N/A	N/A	N/A
Production	\$1,136	14%	\$156	\$2,128	17%	\$362	N/A	N/A	N/A
Less than High School Diploma	\$1,092	13%	\$147	\$2,553	17%	\$434	N/A	N/A	N/A
High School Diploma	\$1,143	14%	\$159	\$2,128	17%	\$362	N/A	N/A	N/A
Four-year degree	\$1,080	13%	\$143	\$1,638	17%	\$278	N/A	N/A	N/A
Food preparation and service	\$772	11%	\$87	\$1,034	13%	\$135	N/A	N/A	N/A
Less than High School Diploma	\$647	11%	\$73	\$863	12%	\$102	N/A	N/A	N/A
High School Diploma	\$774	11%	\$87	\$1,000	13%	\$127	N/A	N/A	N/A
Four-year degree	\$854	12%	\$99	\$1,034	13%	\$135	N/A	N/A	N/A

Sources: Approaches 1 and 2: 2017 American Community Survey, 5 year sample. N= 71,157 females in Wisconsin ages 18 to 65 who worked in the last year. Approach 3: Estimates from Wisconsin Court Record Data cohorts 17–33, cases coming to court in Wisconsin between 1996 and 2013. N= 46 noncustodial mothers whose orders were set using imputed income at the time of final judgment on the case.

Notes: Percentage of income figures are based on the Wisconsin child support guidelines schedule for 2019 (Wis. Stat § DCF 150 Appendix A, 2019; Wis. Stat § DCF 150 Appendix C, 2019). Values marked “N/A” reflect fewer than 10 observations. Italics indicate income less than \$781; this corresponds to the lowest monthly income amount on the Wisconsin low-income guidelines schedule, “monthly income up to \$781.”

https://docs.legis.wisconsin.gov/code/admin_code/DCF/101_199/150_c.pdf

Appendix Table 6. Monthly Income, Percentage of Income, and Burden Levels by Imputation Approach and Scenario: African American Workers

Scenario	Approach 1: Mean Hours at Federal Minimum Wage			Approach 2: Median Annual Earnings			Approach 3: Mean Earnings of Noncustodial Parents with Imputed-Income Orders		
	Income	Percentage of Income	Order Amount	Income	Percentage of Income	Order Amount	Income	Percentage of Income	Order Amount
Wisconsin	\$1,013	13%	\$130	\$1,838	17%	\$313	\$253	11%	\$28
Production Occupation	\$1,060	13%	\$141	\$2,002	17%	\$340	N/A	N/A	N/A
Less than High School Diploma	\$827	11%	\$95	\$1,140	14%	\$156	N/A	N/A	N/A
High School Diploma	\$1,105	13%	\$149	\$2,104	17%	\$358	N/A	N/A	N/A
Four-year degree	\$1,144	14%	\$159	\$2,917	17%	\$496	N/A	N/A	N/A
Food preparation and service occupation	\$772	11%	\$87	\$526	11%	\$59	N/A	N/A	N/A
Less than High School Diploma	\$565	11%	\$63	\$896	12%	\$108	N/A	N/A	N/A
High School Diploma	\$819	11%	\$94	\$942	12%	\$115	N/A	N/A	N/A
Four-year degree	\$718	11%	\$81	\$863	12%	\$102	N/A	N/A	N/A
Dane County	\$1,007	13%	\$130	\$1,894	17%	\$322	\$284	11%	\$32
Production Occupation	\$1,048	13%	\$137	\$1,724	17%	\$293	N/A	N/A	N/A
Less than High School Diploma	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
High School Diploma	\$1,087	13%	\$147	\$1,724	17%	\$293	N/A	N/A	N/A
Four-year degree	N/A	N/A	N/A	\$2,383	17%	\$405	N/A	N/A	N/A
Food preparation and service occupation	\$780	11%	\$87	\$708	11%	\$79	N/A	N/A	N/A
Less than High School Diploma	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
High School Diploma	\$877	12%	\$104	\$1,726	17%	\$293	N/A	N/A	N/A
Four-year degree	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Marathon County	\$1,072	13%	\$142	\$1,833	17%	\$312	\$434	11%	\$49
Production Occupation	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Less than High School Diploma	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
High School Diploma	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Four-year degree	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Food preparation and service occupation	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Less than High School Diploma	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
High School Diploma	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Four-year degree	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Milwaukee County	\$1,018	13%	\$131	\$1,903	17%	\$323	\$257	11%	\$29
Production	\$1,048	13%	\$137	\$2,280	17%	\$388	N/A	N/A	N/A
Less than High School Diploma	\$864	12%	\$102	\$1,315	15%	\$199	N/A	N/A	N/A
High School Diploma	\$1,077	13%	\$143	\$2,455	17%	\$417	N/A	N/A	N/A
Four-year degree	\$1,204	14%	\$172	\$2,917	17%	\$496	N/A	N/A	N/A
Food preparation and service	\$817	11%	\$93	\$1,021	13%	\$131	N/A	N/A	N/A
Less than High School Diploma	\$645	11%	\$72	\$896	12%	\$108	N/A	N/A	N/A
High School Diploma	\$856	12%	\$100	\$1,083	13%	\$144	N/A	N/A	N/A
Four-year degree	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A

(table continues)

Appendix Table 6, continued

Scenario	Approach 1: Mean Hours at Federal Minimum Wage			Approach 2: Median Annual Earnings			Approach 3: Mean Earnings of Noncustodial Parents with Imputed-Income Orders		
	Income	Percentage of Income	Order Amount	Income	Percentage of Income	Order Amount	Income	Percentage of Income	Order Amount
Price County	\$1,108	13%	\$149	\$1,754	17%	\$298	N/A	N/A	N/A
Production	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Less than High School Diploma	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
High School Diploma	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Four-year degree	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Food preparation and service	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Less than High School Diploma	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
High School Diploma	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Four-year degree	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A

Sources: Approaches 1 and 2: 2017 American Community Survey, 5 year sample. N= 4,284 African American individuals in Wisconsin ages 18 to 65 who worked in the last year. Approach 3: Estimates from Wisconsin Court Record Data cohorts 17–33, cases coming to court in Wisconsin between 1996 and 2013. N=864 African American noncustodial parents whose orders were set using imputed income at the time of final judgment on the case.

Notes: Percentage of income figures are based on the Wisconsin child support guidelines schedule for 2019 (Wis. Stat § DCF 150 Appendix A, 2019; Wis. Stat § DCF 150 Appendix C, 2019). Values marked “N/A” reflect fewer than 10 observations. Italics indicate income less than \$781; this corresponds to the lowest monthly income amount on the Wisconsin low-income guidelines schedule, “monthly income up to \$781.”

https://docs.legis.wisconsin.gov/code/admin_code/DCF/101_199/150_c.pdf

Appendix Table 7. Monthly Income , Percentage of Income, and Burden Levels by Imputation Approach and Scenario: White Workers

Scenario	Approach 1: Mean Hours at Federal Minimum Wage			Approach 2: Median Annual Earnings			Approach 3: Mean Earnings of Noncustodial Parents with Imputed-Income Orders		
	Income	Percentage of Income	Order Amount	Income	Percentage of Income	Order Amount	Income	Percentage of Income	Order Amount
Wisconsin	\$1,142	14%	\$159	\$2,833	17%	\$482	\$773	11%	\$87
Production Occupation	\$1,214	14%	\$174	\$2,979	17%	\$506	\$1,056	13%	\$138
Less than High School Diploma	\$1,143	14%	\$159	\$2,333	17%	\$397	N/A	NA	NA
High School Diploma	\$1,220	14%	\$175	\$3,016	17%	\$513	N/A	N/A	N/A
Four-year degree	\$1,226	15%	\$178	\$3,333	17%	\$567	N/A	N/A	N/A
Food preparation and service occupation	\$791	11%	\$89	\$900	12%	\$108	\$1,284	15%	\$192
Less than High School Diploma	\$662	11%	\$74	\$528	11%	\$59	N/A	N/A	N/A
High School Diploma	\$795	11%	\$89	\$906	12%	\$109	N/A	N/A	N/A
Four-year degree	\$911	12%	\$110	\$1,254	15%	\$185	N/A	N/A	N/A
Dane County	\$1,113	13%	\$150	\$3,193	17%	\$543	\$1,016	13%	\$131
Production Occupation	\$1,137	14%	\$156	\$2,809	17%	\$477	N/A	N/A	N/A
Less than High School Diploma	\$1,012	13%	\$130	\$1,726	17%	\$293	N/A	N/A	N/A
High School Diploma	\$1,145	14%	\$159	\$2,981	17%	\$507	N/A	N/A	N/A
Four-year degree	\$1,149	14%	\$160	\$2,155	17%	\$366	N/A	N/A	N/A
Food preparation and service occupation	\$759	11%	\$85	\$833	11%	\$95	N/A	N/A	N/A
Less than High School Diploma	\$618	11%	\$69	\$733	11%	\$82	N/A	N/A	N/A
High School Diploma	\$748	11%	\$84	\$789	11%	\$89	N/A	N/A	N/A
Four-year degree	\$949	12%	\$118	\$1,447	16%	\$231	N/A	N/A	N/A
Marathon County	\$1,185	14%	\$167	\$2,761	17%	\$469	\$1,058	13%	\$141
Production Occupation	\$1,253	15%	\$182	\$3,149	17%	\$535	N/A	N/A	N/A
Less than High School Diploma	\$1,215	14%	\$174	\$3,420	17%	\$581	N/A	N/A	N/A
High School Diploma	\$1,249	15%	\$181	\$3,083	17%	\$524	N/A	N/A	N/A
Four-year degree	\$1,388	16%	\$216	\$3,830	17%	\$651	N/A	N/A	N/A
Food preparation and service occupation	\$746	11%	\$84	\$851	12%	\$99	N/A	N/A	N/A
Less than High School Diploma	\$345	11%	\$39	\$175	11%	\$20	N/A	N/A	N/A
High School Diploma	\$752	11%	\$84	\$862	12%	\$100	N/A	N/A	N/A
Four-year degree	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Milwaukee County	\$1,130	14%	\$155	\$3,016	17%	\$513	\$639	11%	\$72
Production	\$1,186	14%	\$167	\$2,917	17%	\$496	N/A	N/A	N/A
Less than High School Diploma	\$1,180	14%	\$167	\$2,413	17%	\$410	N/A	N/A	N/A
High School Diploma	\$1,180	14%	\$166	\$2,979	17%	\$506	N/A	N/A	N/A
Four-year degree	\$1,254	15%	\$185	\$3,333	17%	\$567	N/A	N/A	N/A
Food preparation and service	\$831	11%	\$95	\$1,021	13%	\$131	N/A	N/A	N/A
Less than High School Diploma	\$894	12%	\$108	\$1,167	14%	\$162	N/A	N/A	N/A
High School Diploma	\$791	11%	\$89	\$863	12%	\$102	N/A	N/A	N/A
Four-year degree	\$990	13%	\$125	\$1,838	17%	\$313	N/A	N/A	N/A

(table continues)

Appendix Table7, continued

Scenario	Approach 1: Mean Hours at Federal Minimum Wage			Approach 2: Median Annual Earnings			Approach 3: Mean Earnings of Noncustodial Parents with Imputed-Income Orders		
	Income	Percentage of Income	Order Amount	Income	Percentage of Income	Order Amount	Income	Percentage of Income	Order Amount
Price County	\$1,110	13%	\$150	\$2,413	17%	\$410	\$1,076	13%	\$143
Production	\$1,207	14%	\$173	\$2,586	17%	\$440	N/A	N/A	N/A
Less than High School Diploma	\$1,087	13%	\$147	\$1,787	17%	\$304	N/A	N/A	N/A
High School Diploma	\$1,224	14%	\$175	\$2,631	17%	\$447	N/A	N/A	N/A
Four-year degree	\$1,062	13%	\$141	\$1,750	17%	\$298	N/A	N/A	N/A
Food preparation and service	\$798	11%	\$90	\$1,028	13%	\$132	N/A	N/A	N/A
Less than High School Diploma	\$718	11%	\$81	\$1,035	13%	\$135	N/A	N/A	N/A
High School Diploma	\$800	11%	\$90	\$953	12%	\$119	N/A	N/A	N/A
Four-year degree	\$866	12%	\$103	\$1,422	16%	\$227	N/A	N/A	N/A

Sources: Approaches 1 and 2: 2017 American Community Survey, 5 year sample. N = 137,338 white individuals in Wisconsin ages 18 to 65 who worked in the last year. Approach 3: Estimates from Wisconsin Court Record Data cohorts 17–33, cases coming to court in Wisconsin between 1996 and 2013. N = 735 white noncustodial parents whose orders were set using imputed income at the time of final judgment on the case.

Notes: Percentage of income figures are based on the Wisconsin child support guidelines schedule for 2019 (Wis. Stat § DCF 150 Appendix A, 2019; Wis. Stat § DCF 150 Appendix C, 2019). Values marked “N/A” reflect fewer than 10 observations. Italics indicate income less than \$781; this corresponds to the lowest monthly income amount on the Wisconsin low-income guidelines schedule, “monthly income up to \$781.”

https://docs.legis.wisconsin.gov/code/admin_code/DCF/101_199/150_c.pdf

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