



Iowa Department of **REVENUE**

Iowa's Earned Income Tax Credit Tax Credit Program Evaluation Study

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Preface

During the 2005 Legislative Session the Iowa Department of Revenue received an appropriation to establish the Tax Credits Tracking and Analysis Program to track tax credit awards and claims. In addition, the Department was directed to assist the Legislature by performing periodic economic studies of tax credit programs. This is the third evaluation study completed for this tax credit.

As part of the evaluation, an advisory panel was convened to provide input and advice on the study's scope and analysis. We wish to thank the members of the panel:

Patrick Callan	Iowa Workforce Development
Michael Crawford	Child and Family Policy Center
Robert Krebs	Iowa Department Human Services
Dr. Brent Kreider	Iowa State University
Jeff Smith	Iowa Taxpayers Association
Dr. Bulent Uyar	University of Northern Iowa

The assistance of an advisory panel implies no responsibility for the content and conclusions of the evaluation study.

This report was also reviewed by Angela Gullickson and Amy Rehder Harris. This study and other evaluations of Iowa tax credits can be found on the [Tax Credits Tracking and Analysis Program web page](#) on the Iowa Department of Revenue website.

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Executive Summary

The Iowa Earned Income Tax Credit (EITC), introduced in 1989, allowed taxpayers who claimed the federal EITC to claim a nonrefundable credit equal to 5 percent of the federal EITC. For tax year 1991, the Legislature increased the credit rate to 6.5 percent of the federal EITC. For tax year 2007, the credit rate was raised to 7 percent of the federal EITC and was made refundable. The tax credit rate was increased to 14 percent of the federal credit for the 2013 tax year and to 15 percent for tax years beginning on or after January 1, 2014.

The major findings of the study are these:

Earned Income Tax Credit across the United States

- Twenty-seven states, the District of Columbia, and New York City currently offer an EITC. Four states, Delaware, Maine, Ohio, and Virginia, offer only a nonrefundable state EITC. Four of Iowa's neighbors, Illinois, Minnesota, Nebraska, and Wisconsin, also offer a refundable EITC.
- Iowa's maximum Earned Income Tax Credit, in tax year 2015, was \$936 based on the 15 percent rate, the 13th highest rate among the states offering EITC. Louisiana offers the smallest state EITC at 3.5 percent of the federal credit, resulting in a maximum credit of \$218. California has the highest rate at 85 percent of the federal credit for families with three or more children, resulting in a maximum credit of \$5,306.

Analysis of Iowa Earned Income Tax Credit Claims

- In tax year 2014, 220,518 households claimed \$71.1 million of EITC, where 46.8 percent of claims offset Iowa tax liability and the other 53.2 percent of claims were in excess of Iowa tax liability.
- In tax year 2014, single filers accounted for 27.2 percent of households claiming the Iowa EITC but made only 10.0 percent (\$7.1 million) of total claims. Head of household filers accounted for 45.9 percent of households claiming the EITC and made 60.1 percent of total claims (\$42.7 million). Married filers accounted for 26.7 percent of households claiming the EITC and made 29.7 percent of claims (\$21.1 million). This differs from the total population of Iowa taxpayers where unmarried Iowa tax filers comprised 54.6 percent of households in tax year 2014, while married filers accounted for 45.4 percent.
- In tax year 2014, households with at least one dependent accounted for 74.1 percent of households claiming the EITC and made 95.1 percent of total claims (\$67.6 million).

- The majority of claims were made by households where the taxpayer was between the ages of 21 and 40, both in terms of the number of claims (59.0%) and in terms of the amount of tax credits claimed (65.0%)
- Iowa EITC claimants are concentrated among the lowest income families. In tax year 2014, 67.4 percent of households claiming EITC had Iowa adjusted gross income (AGI) of less than \$25,000, which is income reported on the Iowa tax return excluding any federal or Iowa in-kind benefits. In terms of the amount of credits claimed, 71.4 percent (\$50.8 million) of the total amount of EITC was claimed by taxpayers with Iowa AGI less than \$25,000. Compared to all households filing Iowa tax returns, only 37.3 percent of Iowa households filing income taxes in 2014 had AGI less than \$25,000, and 62.7 percent of tax filers had AGI at or above \$25,000.

Earned Income Tax Credit and Poverty

- In 2014, 14.0 percent of all Iowa households claimed the Iowa EITC although 21.0 percent of all Iowa households had income below the federal poverty guidelines. The poverty guideline for a household with one person in 2014 was \$11,670. That guideline rises by \$4,060 for each additional person in the household regardless of whether that person is a spouse or a child. The disparity of EITC claimants and households with income below the poverty guidelines can be attributed to the distribution of these two populations by household size. Just under half of all Iowa households filing tax returns consist of a single individual, with nearly one-third (30.1 percent) of those households reporting income below the poverty guidelines, while EITC claimants only account for 7.3 percent of single individuals due to the nature of the credit favoring households with dependents.
- In tax year 2014, 49.7 percent of EITC claimants reported Iowa AGI below the applicable federal poverty guideline and 26.3 percent reported AGI between 100 and 150 percent of the applicable guideline. After adding federal and Iowa EITC claims to AGI, the share of EITC claimants below the federal poverty guideline falls to 38.9 percent, and the share of claimants between 100 and 150 percent of the guideline rises to 30.4 percent.
- While the State offers the EITC to provide support for families in Iowa through the tax code, the State also offers cash, food subsidies, and health care benefits to low income families administered by the Iowa Department of Human Services. Over the four tax years since 2011, resident families accounted for approximately 340,000 EITC claims totaling \$96.5 million, while also receiving benefits under one or more of the State assistance programs. Those families received \$59.4 million of those EITC claims as refunds in excess of their tax liability.

- From 2011-2014, State expenditures on EITC eligible for Temporary Assistance for Needy Families (TANF) maintenance of effort (MOE) have totaled approximately \$70.4 million. Note that only the credit in excess of tax liability received by households with at least one dependent counts as MOE.

Earned Income Tax Credit, Persistence, and the Business Cycle

- Of all households making EITC claims in tax year 2014, 34.4 percent of households claimed the EITC in tax year 2014 but not in 2013, and 17.7 percent claimed the EITC in tax years 2013 and 2014, but not 2012.
- Long-term EITC claimants, taxpayers with claims in ten consecutive tax years, predominately filed as head of household with one or more dependents. Nearly half of one-year claimants, taxpayers with only one EITC claim in a four-year tax period, filed single with no dependents.
- Of claimants in tax years 2008-2010, an average of only 4.2 percent had made claims in all of the previous five years. Of claimants in tax years 2012-2014, the average share that had made claims for five consecutive years increases to 6.1 percent. This suggests that there is growing persistence.
- Outside of taxpayers entering or exiting Iowa tax roles, change in earned income, which can be influenced by business cycles, is the most common reason for taxpayers to move in or out of EITC eligibility. Between 2010 and 2014, an average of 36.6 percent of households was newly eligible for the EITC because of a drop in earned income. Conversely, an average of 43.4 percent of households moved out of EITC eligibility because of an increase in earned income.
- Income for the tax year 2010 EITC cohort (EITC claimants who claimed the Iowa EITC for the first time in TY 2010) improved from an average of \$16,768 in tax year 2010 to an average of \$30,970 in tax year 2014 (84.7 percent increase). For the 7,846 tax year 2010 households still claiming the EITC in tax year 2014, their average income only increased 25.4 percent from \$16,740 to \$20,997 in four years. The 5,122 tax year 2010 EITC households, who only claimed the credit in tax year 2010, experienced an average increase of 191.3 percent, increasing from an average of \$15,318 in tax year 2010 to an average of \$44,626 in tax year 2014.
- During a recession, the unemployment rate generally increases. Thus, the number of taxpayers moving into EITC eligibility as a result of unemployment should also increase. The number of households claiming EITC and receiving unemployment compensation increased steadily from 2007 (18,109) to 2010 (34,768). Following the recession it is observed that the net change in eligible households due to changes in income again fell below zero as would be

expected. Claimants with unemployment compensation also experienced declines from the 2010 high to 21,319 in 2014.

I. Introduction

In 2007 and 2011, the Iowa Department of Revenue (IDR) conducted evaluation studies of the Iowa Earned Income Tax Credit (EITC). These prior studies reviewed the background and the history of the Iowa EITC, the federal EITC, and the EITCs of other states. Summary statistics for the Iowa EITC claims were analyzed. The studies also compared impacts of various proposals to change the Iowa EITC and reduce the tax burden on low and moderate income families.

There are two main goals of this third evaluation of the Iowa EITC. The first is to examine the effectiveness of the Iowa EITC in aiding low and moderate income families with the continued evolution of the EITC since the 2011 study. The second is to update the data presented in the first two evaluation studies. In Section II, federal, Iowa, and other states' EITC legislation are discussed. In Section III, recent literature on the EITC is reviewed. Section IV presents descriptive statistics on Iowa EITC claims, provides data on claims through the 2014 tax year, and summarizes other types of assistance administered by other state agencies. Section V discusses various issues related to the EITC, such as the impact of the continuing law changes and the effectiveness of EITC in reducing poverty.

II. Earned Income Tax Credits across the United States

A. The Federal Earned Income Tax Credit

The federal Earned Income Tax Credit was first enacted as part of the Tax Reduction Act of 1975 to offset the Social Security payroll tax for low income workers with children. In 1975, the credit was equal to 10 percent of earned income, up to \$4,000. Therefore the maximum tax credit in 1975 was \$400. The maximum \$400 credit was reduced by \$1 for every \$10 earned over \$4,000, so if a taxpayer earned more than \$8,000, the credit was completely phased out. The Revenue Act of 1978 increased the maximum credit to \$500 and made the credit permanent. The maximum tax credit was increased again by the Deficit Reduction Act of 1984 to \$550. The Tax Reform Act of 1986 increased the tax credit rate from 10 percent to 14 percent which increased the maximum credit to \$851. Starting in 1987, the credit was indexed for inflation. The Omnibus Budget Reconciliation Act of 1990 added a supplemental credit amount for families with two or more children.

The federal EITC equals a fixed percentage of earnings from the first dollar of earnings until the credit reaches a maximum; both the percentage and the maximum credit depend on the number of qualifying dependents in the family (see Figures 1 and 2). The tax credit remains at that maximum as earnings continue to rise, until earnings reach the phase-out range. From that point the credit falls with each additional dollar of earnings until it disappears entirely. In tax year 2014, the maximum credit for eligible households with one child was \$3,305 and was \$6,143 for households with three or more children (see Table 1). The phase-in rates are the same for single and married filers. However, starting in 2002 the income levels at which the credit begins to phase

out are different. The “marriage bonus” makes married filers eligible for credits at higher income.

Between 1991 and 1996, the phase-in tax credit rate was steadily increased from 17.3 percent for a family with two or more dependents to 40 percent. The Omnibus Budget Reconciliation Act of 1993 augmented the EITC by making a small credit available to low income childless workers. The Economic Growth and Tax Relief Reconciliation Act of 2001 raised the income level at which the EITC begins to phase out for married couples by \$1,000 in the 2002 tax year, reaching \$3,000 above that for single filers by 2008. The American Recovery and Reinvestment Act (ARRA) in 2009 provided a two year increase in this “marriage bonus” to \$5,000, indexed for inflation, and expanded the credit for workers with three or more qualifying children. Families with three or more children could receive an EITC benefit of up to 45 percent of their earned income, as compared to 40 percent before ARRA. These changes were extended through tax year 2012 by the 2010 Tax Relief Act, extended another five years in 2013 and made permanent in 2015.

In order to qualify for the federal EITC, a taxpayer must meet certain conditions¹. The taxpayer must have earned income. Earned income includes all wages, salaries, tips, farm income, and other employee compensation, such as union strike benefits, plus the amount of the taxpayer’s net earnings from self-employment.² Taxpayers cannot have investment income above \$3,350 in tax year 2014. The taxpayer, spouse (if filing jointly), and any qualifying children must have Social Security Numbers. The taxpayer must be a U.S. citizen or resident alien for the entire tax year and use a filing status other than married filing separately.

A taxpayer must have a qualifying child or meet three conditions to claim the credit. If a taxpayer does not have a qualifying child, then, along with the requirements above, the taxpayer: 1) must be between the ages of 25 and 65 at the end of the year; 2) cannot be the dependent or a qualifying child of another taxpayer; and 3) must live in the United States for more than half of the tax year.

A qualifying child is defined as follows: 1) A son, daughter, adopted child, grandchild, stepchild, foster child, brother, sister, stepbrother, stepsister, or any descendent the taxpayer cares for as his or her own child; 2) Under the age of 19 at the end of the year, under the age of 24 if the child is a full-time student, or any age if the child is permanently and totally disabled; and 3) Living with the taxpayer in the U.S. for more than half of the tax year.

In tax year 2014, the federal EITC tax credit rates were 7.65 percent for earnings up to \$6,450 for households with no dependents, 34 percent for earnings up to \$9,700 for taxpayers with one dependent, 40 percent for earnings up to \$13,650 for taxpayers with

¹ Including completing the U.S. Schedule EIC in the taxpayer’s federal return

² Adjusted gross income (AGI) equals earned income plus investment income and selected adjustments. The taxpayer receives the smaller of the credit computed using earned income or AGI.

two dependents, and 45 percent for earnings up to \$13,650 for taxpayers with three or more children (see Table 1).³ The phase-out range began at \$8,150 of earned income for singles with no dependents, and \$17,850 of earned income for singles with one or more dependents. With a phase-out rate of 7.65 percent, the credit was completely phased out once earned income rose to \$14,590 for single filers with no children.

The phase-out range for married couples started at an income \$5,430 higher than single filers. Head of household filers with one child face a phase-out rate of 15.98 percent, with the credit phasing-out at earned income of \$43,941. Head of household filers with two or more children face a phase out rate of 21.06 percent, with the tax credit phased out at \$49,186 of earned income for head of household filers with two children, and \$52,427 of earned income for head of household filers with three or more children.

B. The Iowa Earned Income Tax Credit

Legislation creating Iowa's Earned Income Tax Credit was passed during the 1989 Legislative session. When first enacted, the tax credit rate was 5.0 percent of the federal EITC for which the taxpayer was eligible. The Iowa EITC was also nonrefundable, which means the tax credit claimed could not exceed the remaining income tax liability of the taxpayer after the personal exemption credits. During the 1990 Legislative session, the amount of the tax credit was increased to 6.5 percent of the federal EITC in an effort to further help the working poor in Iowa, but the credit remained nonrefundable for the 1991 through 2006 tax years. Effective January 1, 2007, the amount of the tax credit increased to 7.0 percent and became refundable, as a result of the law change which was passed in the 2007 Legislative session. With the change to a refundable tax credit, taxpayers with no Iowa tax liability were now eligible to receive a refund from the State equal to their EITC. In the 2013 session, the tax credit rate was increased to 14 percent of the federal credit for the 2013 tax year and to 15 percent for tax years beginning on or after January 1, 2014.

The Iowa EITC is claimed through the completion of one line on the IA 1040. Nonresidents are eligible to claim the EITC, but the claim must be prorated based on the share of the taxpayers' Iowa-source income. For example, a taxpayer living in Omaha and working two part-time jobs, one in Omaha and one in Council Bluffs, has 50 percent Iowa-source income. If that taxpayer is eligible for the federal EITC, the taxpayer can make a claim to 50 percent of the Iowa EITC.

The Earned Income Tax Credit is designed to support work and recognize, within the income tax code, the basic financial needs low income workers have in providing for themselves and their dependents. In addition to the direct financial benefit to low income working Iowans, the State's refundable EITC plays a role in helping Iowa meet its responsibilities under the Federal Temporary Assistance for Needy Families (TANF) block grant. Under TANF, states are required to expend a minimum amount of state funds for services that meet TANF purposes. This requirement is referred to as

³ Tax year 2014 is the most recent tax year with complete data available for analysis.

maintenance of effort (MOE). The federal agency responsible for the TANF block grant has determined that the refundable portion of state earned income tax credits can be considered as an MOE expenditure as it meets one or both of the following TANF purposes: 1) Provides assistance to needy families so that children may be cared for in their own homes or in the homes of relatives; and 2) Ends the dependence of needy parents on government benefits by promoting job preparation, work, and marriage. Note that only the refunded portion of the tax credit (the amount that exceeds tax liability) claimed by households with at least one dependent counts as MOE.⁴

C. Earned Income Tax Credits in Other States

In 2015, 27 states (including Iowa), the District of Columbia, and New York City offered an EITC (see Table 2). All of the states that allow a state EITC determine the amount of their credit as a percentage of the federal EITC, save Minnesota which has created its own credit calculation independent of the federal credit. Delaware, Maine, Ohio, and Virginia are the only states that have a nonrefundable EITC. Rhode Island has portions of the state credit that are refundable and other portions that are nonrefundable. Louisiana offers the smallest state EITC at 3.5 percent of the federal credit, resulting in a maximum credit of \$218. California has the highest rate at 85 percent of the federal credit for families with three or more children, resulting in a maximum credit of \$5,306. Iowa's maximum Earned Income Tax Credit, in tax year 2015, was \$936 based on a 15 percent rate which is the 13th highest rate among the states offering EITC.

Four of Iowa's neighboring states offer an EITC: Illinois, Minnesota, Nebraska, and Wisconsin. Illinois and Nebraska provide a refundable tax credit equal to 10 percent of the federal credit, lower than Iowa. The maximum tax credit was \$624 for Illinois and Nebraska in 2015. Wisconsin has a tiered refundable state tax credit equal to 34 percent of the federal credit for a household with three or more children. For households with two dependents, the tax credit rate is 11 percent. For taxpayers with only one dependent, the tax credit rate is 4 percent of the federal credit. Wisconsin does not offer the credit to households with no qualifying children.

Minnesota's tax credit for families with children used to be structured as a percentage of the federal credit. Since 1998, Minnesota has offered a stand-alone refundable EITC equal to a percentage of the earnings of low income households that follows a pattern similar to the federal credit. In 2015, for households with only one child, the phase-in rate was 9.35 percent of earnings and the phase-out rate was 6.02 percent. The maximum tax credit was \$1,057. For households with two or more children, the phase-in rate was 11 percent of the first \$12,600 of earnings, and 20 percent of earnings between \$19,260 and \$21,770. The phase-out rate is 10.82 percent and the maximum credit is \$2,038.

⁴ Any amount of an EITC refund that is offset by other debts of the taxpayer to the State or federal government must be excluded from what the State can claim as MOE under TANF.

III. Literature Review

There are extensive studies on the federal EITC, looking into areas such as earnings, investments, labor force participation, persistence, and even procreation. In the 2011 EITC Evaluation Study by Jin and Rogers, Eissa and Hoynes' 2006 and 2011 studies, Gunter's 2011 study, Horowitz's 2002 study, Dowd's 2005 study, and Johnson and Williams' 2011 study were discussed. This evaluation study considers a few additional studies on the EITC.

The Center for Administrative Records Research and Applications of the U.S. Census Bureau (2013) released a study on the discontinuities in the EITC benefit function to examine single mothers' hours of work. The study examines single mothers whose earned income entitles them to a credit and finds that mothers who face a high implicit tax induced by the EITC's design reduce their hours of work⁵. This study relates to the previous research by Eissa and Hoynes (2011) which showed that the provision of an EITC should induce labor force participation of single mothers. However, the EITC is designed to induce work among single mothers not currently in the workforce. For those already in the workforce, the effect of the credit on hours worked depends on which region of the credit a worker's earnings put her. Citing the 1998 study by J.B. Liebman, this study states that combined with payroll tax and federal and state income tax, taxpayers falling in the phase-out region of the EITC schedule can face an implicit marginal tax rate that exceeds 50 percent of their income.

The data used in Census Bureau (2013) are taken from supplements to the Current Population Survey (CPS) that are then matched with US 1040s. Participants in the survey were asked detailed questions regarding hours worked and earnings for the 1997 through 2009 time period. For women with one child, the results of the study showed no change in behavior. However, the study indicated that for women with more than one child and earnings that fall in the range where the benefit begins to decrease responded in later tax years by reducing hours of work by approximately 0.5 hours per year. The Census Bureau Report goes on to ponder why women with two children appear to respond when women with one child do not, suggesting the behavior differences might be explained by other tax and transfer policies that combine to compound the negative effect of the declining EITC for the latter group.

Moulton, Graddy-Reed, and Lanahan (2016) extend this analysis by examining the effect of EITC reduction on labor force participation when households lose eligibility based on the qualifying child requirement. This study implies that some of those who most likely qualify for the EITC leave the workforce when the EITC benefit stops. They contend that while the explicit intention of the program is designed to incentivize work, the implicit intention of this anti-poverty social program is that participants remain engaged in the workforce even after their eligibility for the credit ends. However, this study finds that when children age out of EITC eligibility, some recipients leave the labor

⁵ An implicit tax is the cost of an activity that is not collected by the government but may be the result of government policy.

force. Findings show that losing one qualifying child decreases labor force participation by 3.3 percentage points in unmarried, less-educated mothers. However, unmarried college educated mothers actually increased their labor force participation when their child turns 19.

Blank (2012) examined the mechanisms which can generate prolonged effects of wage subsidies on employment, wages, job stability and poverty. Her study suggests that the EITC program primarily stimulates part-time employment and fails to promote self-sufficiency over the long-term because part-time experience accumulation does not translate into substantial wage growth. Blank expands this thought by presenting the idea that if part-time employment is found to be only a temporary solution for single women, and full-time employment creates better ground for self-sufficiency, then the EITC should also aim to encourage full-time work.

The simulations run by Blank (2012) showed that the EITC program stimulates part-time but not full-time employment. Her simulation model suggests that this result comes from the interaction between the EITC and other public assistance programs. She goes on to state that the relative generosity of these programs under part-time employment discourage workers from choosing full-time jobs and has an adverse effect on the long-term profile of the EITC program. Blank concludes with the proposition that since unilateral increases in EITC payments do not improve the long-term employment patterns, future policy changes should include targeted increases in EITC payments for full-time workers. She argues this would generate additional full-time employment and thus translate into substantial long-term reduction in non-employment.

The cited literature questions the view that EITC only provides positive incentives for labor force participation (LFP) which results in positive benefits to society. While the EITC motivates individuals not currently employed to participate in the labor force, an individual already employed, is to a point, not incentivized to improve their LFP. The literature suggests that individuals will weigh the effort of increased participation against decreased benefits and choose the maximum benefit for minimal effort. The literature suggests that incentivizing improvement in LFP beyond just income (i.e. include hours worked per week/year) could do more to improve individuals' LFP.

IV. Analysis of Iowa Earned Income Tax Credit Claims

A. Historical Earned Income Tax Credit Claims

Between 1990 and 2014, the number of EITC claims increased from 60,900 in tax year 1990 to 208,342 in 2009 and 220,518 in 2014 while the amount of claims increased from \$1.6 million in 1990 to \$28.5 million in 2009 and \$71.1 million in 2014 (see Table 3, Figures 3 and 4). The most significant increase in the amount of tax credits claimed occurred between tax years 2012 and 2013 when the Iowa EITC rose from seven percent to 14 percent of the federal credit, thus doubling the Iowa credit available to eligible taxpayers. The number of claims increased from 215,091 to 221,944 (3.2%)

between 2012 and 2013; however, that was below the jump observed between 2006 and 2007 when the credit was first made refundable (71.5%). In 2013, with the average credit increasing by 105.1 percent, the total amount of EITC claims increased from \$31.0 million to \$65.6 million (111.6%).

Iowa EITC claims also change with State law changes including the credit rate increase from 5.0 percent to 6.5 percent in 1991, and the aforementioned 2007 and 2013 changes. Because the Iowa credit is a percentage of the federal credit, federal law expansions also impact claims for the Iowa credit, as long as Iowa couples with those changes.⁶

Since the tax credit became refundable in tax year 2007, the EITC can still offset the Iowa tax liability of claimants, but if the amount of the tax credit exceeds the Iowa tax liability of a claimant the taxpayer will receive a refund check from the State. For example, if a taxpayer has an Iowa tax liability of \$75 and is eligible for a \$200 EITC, \$75 of that credit offsets tax liability while \$125 exceeds tax liability and is refunded. Because one household could experience both, the count of households experiencing an offset to Iowa tax liability and receiving a refund check exceeds the total count of households with an EITC claim. In 2007, 52.8 percent of claimants experienced an offset in liability while 55.2 percent had credits in excess of liability; 44.0 percent of claims offset liability and 56.0 percent of claims were paid as refunds. In 2014, 62.4 percent of claimants experienced an offset in liability while 56.8 percent had credits in excess of liability; 46.8 percent of claims offset liability and 53.2 percent of claims were paid as refunds.

B. Earned Income Tax Credit Claimant Characteristics

In tax year 2014, the most recent complete tax year, head of household filers made up the largest share of Iowa EITC households with claims by filing status (45.9%), followed by single filers (27.2%), married joint filers (17.0%), married filing separately on the same return (9.7%), and qualifying widow(er) filers (0.2%) (see Table 4).⁷ Households with unmarried taxpayers (single, head of household, or qualifying widow(er)) comprised 73.3 percent of all Iowa EITC claimants, while married filers accounted for 26.7 percent of EITC households. This differs from the total population of Iowa taxpayers where unmarried Iowa tax filers comprised 54.6 percent of households in tax year 2014, while married filers accounted for 45.4 percent.

⁶ Coupling refers to the linking of Iowa's tax code to changes that occurred in the federal tax code in the previous years. Thus if Congress changes the rules for the federal EITC base, calculations, and eligibility requirements, it is necessary for Iowa to couple with those changes in order for the Iowa tax credit to also change. Previously, Iowa has always coupled with federal changes to the EITC except for tax year 2009 due to budgetary constraints resulting from the recession. Currently, Iowa is not coupled with the changes effective in tax year 2018 that were passed in 2015.

⁷ Throughout the analysis, married households filing separately on the same return are counted as one household making one claim even if both spouses reported an EITC on the return.

When viewed by the amount of credits claimed by filing status, head of household filers also claimed the largest share (60.1%), but that share far exceeded their share of claims (see Table 4). Single filers, who had the second largest share of claims, had only the third largest share in terms of the amount of credits claimed (10.0%), behind married joint filers (20.2%), yet slightly ahead of married separate filers (9.5%). The reason for the difference between the distribution of households with claims and the distribution of claims is that households without dependents are eligible for smaller credits than households with dependents. This is confirmed by the fact that the average EITC claim for singles (\$119) is significantly lower than the average credit among the other four filing statuses, which range from \$316 for married separate filing to \$422 for head of household.

The majority of Iowa EITC claimants had one or two dependents in the household (34.0% and 23.9%); households with no dependents accounted for an additional 25.9 percent of claims (see Table 5). In terms of amount of credits claimed, households with one or two dependents claimed the largest shares of credit dollars (33.8% and 35.3%). Although households with no dependents accounted for slightly more than one-fourth of the number of claims, they claimed only 4.9 percent of the total amount of credits. This again reflects the structure of the EITC in which the credit increases as the number of dependents increases (up to three) assuming all other things are equal (marital status, earned income). As a result, the average credit among claimants with no dependents (\$61) is significantly less than all other dependent categories with average credits ranging from \$320 to \$526. In tax year 2014, 33 percent of total Iowa dependents were in households that received the EITC. At the same time, 34 percent of households with dependents in the State of Iowa received EITC in 2014.

The majority of claims were made by households where the taxpayer was between the ages of 21 and 40, both in terms of the number of claims (59.0%) and in terms of the amount of tax credits claimed (65.0%) (see Table 6).⁸ This is not surprising because taxpayers between those ages are most likely to have children at home. Nearly one-fifth of all claims (18.3%) and dollars claimed (18.4%) were made by households in which the taxpayer was between the ages of 26 and 30. In addition to having children at home, these taxpayers may also be new to the labor force once those children reach school-age and are thus more likely to have lower earnings.

By definition, Iowa EITC filers are concentrated at lower income levels with 67.4 percent of claimants with income less than \$25,000 and 32.6 percent of claimants reporting \$25,000 or more in Iowa Adjusted Gross Income (AGI) (see Table 7). Compared to all households filing Iowa tax returns, only 37.3 percent of Iowa households filing income taxes in 2014 had AGI less than \$25,000, and 62.7 percent of tax filers had AGI at or above \$25,000. In terms of the amount of tax credits claimed, 71.4 percent of EITC are claimed by taxpayers with income less than \$25,000. The pattern of the average EITC claim by income group shows the structure of the EITC as it relates to income, with the

⁸ In married households, taxpayer age was based on the spouse indicated as the primary taxpayer.

average credit rising at lower income levels with taxpayers in the phase-in range, and then falling with taxpayers in the phase-out ranges. The \$1 to \$4,999 income group digresses from this pattern as the average credit for this group was \$90 compared to an average credit of \$192 in the \$0 or less category. Factors other than income, marital status and number of dependents, influence the average credit as well. The reason that taxpayers with lowa AGI equal to \$0 or less can be eligible for an EITC is because AGI includes passive business losses and capital losses that are not included in earned income. Therefore, someone who had positive wages and thus earned income could have a negative AGI due to losses in other revenue streams.

The share of households with EITC claims by county in tax year 2014 ranged from a low of 9.2 percent in Dallas County to a high of 21.7 percent in Decatur County (see Figure 5). Counties with the highest percentages of claims are concentrated in the bottom third of the state, with only Woodbury and Buena Vista counties in northern Iowa recording more than 18.0 percent. The statewide claim rate was 14.0 percent of resident households. Of households making EITC claims, Story County had the lowest average claim of \$274 while Adams County had the highest average claim of \$364; recall the statewide average claim was \$322 (see Figure 6). In tax year 2014, of Iowa households estimated to be eligible to claim an Iowa EITC of \$1 or more, 96.5 percent actually claimed the Iowa credit (see Figure 7 and Table 8). A majority of counties had a utilization rate of over 97.0 percent, with only Davis and Wayne counties registering a take-up rate of less than 90.0 percent of eligible households.

V. The Earned Income Tax Credit, Minimum Wage, and Poverty

With the EITC policy goal of providing support for low income working families, it is reasonable to consider the extent to which the EITC helps to lift households out of poverty. For this analysis, the federal EITC and the Iowa EITC are each considered because the Iowa EITC supplements the federal EITC. However, all other federal and Iowa means-tested benefits are ignored.

The federal poverty guidelines are used by several means-tested programs, such as Head Start, the Supplemental Nutrition Assistance Program (SNAP), the National School Lunch Program, the Low-Income Home Energy Assistance Program, and the Children's Health Insurance Program, to determine eligibility. The guidelines differ only by the number of persons living in the household (see Table 9). The poverty guideline for a household with one person for 2014 is \$11,670. That guideline rises by \$4,060 for each additional person in the household regardless of whether that person is a spouse or a child. In 2014, 14.0 percent of households filing Iowa tax returns claimed the Iowa EITC although 21.0 percent of all Iowa households had income below the federal poverty guidelines (see Table 10). The disparity of EITC claimants and households with income below the poverty guidelines can be attributed to the distribution of these two populations by household size. Just under half of all Iowa households consist of a single individual, with nearly one-third (30.1 percent) of those households reporting

income below the poverty guidelines, while EITC claimants only account for 7.3 percent of single individuals due to the nature of the credit favoring households with dependents.

A. Interaction of the EITC and Minimum Wage Employment

The first analysis considers how the EITC contributes to household income for workers earning the minimum wage. A simulation of the interaction of EITC claims and earnings at the current national and Iowa minimum wage is provided, with a focus on how that income and EITC together compare to federal poverty guidelines. The simulation ignores all other taxes owed, such as payroll taxes or sales tax, and means-tested benefits for which these households might be eligible, such as housing assistance and SNAP. The federal and Iowa EITC are calculated using the 2014 parameters. The analysis assumes all decisions of households and employers are unchanged by the EITC and makes no attempt to measure behavioral changes.

This simulation considers twelve example households based on marital status (single or married), number of children (0, 1, 2 or 3), and the work status of the spouse (not working or working at the same wage and for the same hours). For each of those households, further variation of wages and hours worked is considered. The wages considered are the current minimum wage of \$7.25 per hour, a \$10.10 per hour (proposed in HF 71 during the 2015 Legislative Session), and the 2014 median hourly wage in Iowa of \$16.00 per hour.⁹ The hours worked considered are 20 hours per week (part-time), 35 hours per week, and a standard full-time work week of 40 hours per week. For this simulation, a full 52-week annual work calendar was assumed for all households. Earnings are calculated based on each combination of wages, hours, and weeks of work assumptions; corresponding federal and Iowa EITC claims are added to those earnings and compared to poverty guidelines.

At the current minimum wage, an individual working 40 hours a week would earn wages of \$15,080 per year, while an individual earning \$10.10 per hour and working the same hours would earn wages of \$21,008 per year (see Figure 8). An individual earning \$16.00 per hour would earn \$33,280 per year. These simulated wages clearly do not differ by the assumed number of children in the household; however, the relevant federal poverty guideline, the horizontal line in each panel, rises with each additional child.

Under this simulation, a single individual would ascend above the federal poverty guideline working fulltime at any of the analyzed wage rates (see Figure 8, Panel A). The example head of household working full-time with one or two children would reach or exceed the poverty guideline working at the minimum wage with the boost from the federal and Iowa EITC (see Figure 8, Panels B and C). If the household includes three children, wages earned through full-time work at the current minimum wage plus the federal and Iowa EITC is still insufficient to reach the poverty guideline (see Figure 8,

⁹ As reported in the Iowa Workforce Development 2014 Laborshed Statewide Report.

Panel D). Based on the parameters of this simulation, a head of household tax filer with three children earning either \$10.10 or the median Iowa wage of \$16.00 per hour would ascend the applicable federal poverty guideline without the assistance of the EITC.

A married, single income earner with no children working at the current minimum wage would not ascend above the federal poverty guideline even on a full time work schedule (see Figure 9, Panel A). Because the EITC is small for households without children, the federal and Iowa EITC together also do not move the minimum wage earnings above the threshold. Based on the parameters of this simulation a single income earner earning \$10.10 per hour and working for at least 35 hours per week would exceed the federal poverty guideline, but at that wage, the household is ineligible for the EITC.

A married, single earner household with one or more children cannot ascend the applicable poverty guideline at the current minimum wage, even with the federal and Iowa EITC. The simplified analysis does show that a family of four, with a single earner working 35 or 40 hours per week at \$10.10 per hour is pushed above the poverty guideline once the federal and Iowa EITC are included.

The final set of simulation households are dual income families, where it is assumed that both spouses work at the same designated wage for the same designated hours (essentially doubling all income seen in the married, single-earner household). A married couple with no children and both earners working part time at \$7.25 per hour falls just short of the federal poverty guideline but also is ineligible for the EITC (see Figure 10, Panel A). As the applicable federal poverty guideline increases with added children, dual income families must work more hours or earn higher wages to remain above the poverty guideline. However, despite the rising level of the federal poverty guideline, dual income families with both spouses working a 40-hour workweek would be above the guideline without the aid of the federal or the Iowa EITC at the current \$7.25 per hour minimum wage.

B. Distribution of EITC Claims and Federal Poverty Guidelines

Another helpful analysis for understanding how the EITC can help low income families is to consider the actual picture of Iowa EITC claimants in tax year 2014 relative to the federal poverty guidelines. Of households that claimed the Iowa EITC in 2014, 49.7 percent reported Iowa AGI below the applicable federal poverty guideline, 26.3 percent reported AGI between 100 and 150 percent of the applicable guideline, 16.2 percent reported AGI between 150 and 200 percent, and the remaining 7.9 percent reported AGI above 200 percent or negative AGI (see Figure 11, Panel A). After adding the actual federal and Iowa EITC claims reported on the tax return to AGI, the distribution changes (see Figure 11, Panel B). The share below the federal poverty guideline falls to 38.9 percent, 30.4 percent of claimants fell between 100 and 150 percent of the guideline, and 21.4 percent fall between 150 and 200 percent of the guideline with the remaining 9.3 percent in the other category.

This suggests that 10.8 percent of claimants were pushed above the poverty guideline as a result of the resources provided by the federal and Iowa EITC. Nearly one and a half percent were pushed above 200 percent of the guideline. The distribution of the EITC claim amounts is concentrated among claimants with AGI between 100 and 150 percent of the poverty guideline, accounting for 44.2 percent of the credit amount in 2014 (see Figure 12). The share of EITC credits earned by claimants with AGI less than the poverty guidelines is 32.3 percent, while claimants earning between 150 and 200 percent of the guideline account for 19.6 percent of the credits earned. Only 3.9 percent of EITC credits are earned by claimants earning above 200 percent the poverty limit or with negative AGI.

Single, head of household, or qualifying widow claimants received the lion's share of EITC claims. In tax year 2014, 31.3 percent of all EITC households were either single, head of household, or qualifying widow and reported AGI below the federal poverty guideline, but they accounted for only 22.8 percent of the total claim amount (see Table 11). Tax filers who were married and earned less than the poverty guideline accounted for only 7.6 percent of total claimants, while claiming 9.5 percent of the total claim amount, likely pushed up relative to single filers because of the greater likelihood of children in the household. Single, head of household, or qualifying widow households with income between 100 and 150 percent of the poverty guideline account for 21.5 percent of all EITC claimants and claimed 30.6 percent of the total claim amount in tax year 2014.

C. Earned Income Tax Credit Claimants and State Assistance Programs

While the State offers the EITC to provide support for working families in Iowa through the tax code, the State also offers other benefits to low income families administered by the Iowa Department of Human Services (DHS).¹⁰

Iowa's Family Investment Program (FIP) uses the federal Temporary Assistance to Needy Families (TANF) funds to provide cash assistance to needy families as they become self-supporting so that children may be cared for in their own homes or in the homes of relatives. FIP is available to one-parent and two-parent families and to relatives caring for children whose parents are not in the home. FIP payments are based on the family size and family income.

The Food Assistance Program, Iowa's version of the federal SNAP, helps people with gross income at or below 130 percent of the poverty guideline to buy food for a healthy diet. Households of the same size do not all get the same amount of Food Assistance. The benefit amount depends on both the household's size and income. Only households with very little or no income get the maximum benefit amount.

The State of Iowa also provides Medicaid, a health insurance program for certain eligible groups of people based on income levels who are a resident of Iowa and a U.S.

¹⁰ The information can be accessed at <http://www.dhs.iowa.gov>

citizen or permanent U.S. resident. The following are some of the eligibility requirements: a child under the age of 19, a parent living with a child under the age of 18, a woman who is pregnant, a woman in need of treatment for breast or cervical cancer, a person who is elderly (age 65 or older), a person who is disabled according to Social Security standards, or an adult between the ages of 19 and 64 and whose income is at or below 133 percent of the Federal Poverty Level (FPL).¹¹

Using case data provided by DHS, IDR matched Iowa families receiving State assistance through the Family Investment Program, Food Assistance Program, and/or Medicaid to households with children making EITC claims in tax years 2011 through 2014. Counts, total EITC claims, and average EITC claims are presented for each tax year (see Table 12). Over the four tax years since 2011, resident families accounted for approximately 340,000 EITC claims (38.8 percent of total), accounting for \$96.5 million, while also receiving one or more of the State assistance programs. Those families, approximately 83,000 per tax year, received \$59.4 million of those EITC claims as refunds in excess of their tax liability over the four tax years.

For tax years 2011 through 2014, State expenditures on EITC eligible for TANF maintenance of effort have totaled approximately \$70.4 million. Note that only the tax credit in excess of tax liability received by households with at least one dependent counts as MOE; it is not necessary that those households also receive another State benefit. In addition, refundable EITC is subject to offset, a method to collect money owed to State agencies authorized by Chapter 8A.504 of Iowa Code. Refundable EITC may be fully or partially offset for any taxpayer who owes money through the State offset program. Only EITC refunds after any offsets are eligible for MOE.

D. Persistence of Earned Income Tax Credit Claims

Although it is interesting to consider trends in total credit claims and characteristics of those claiming the individual credits in any year, the goal of the EITC is not only to reduce the tax liability of low income families in one tax year, but also to encourage work. To get a better sense of whether this goal is being met, it is necessary to focus on the behavior of taxpayers claiming the credit. Therefore, EITC claimants were tracked over time to assess the persistence of taxpayer claims. Persistence is defined in two ways in this analysis.

Persistence is first defined as the number of consecutive years a household claimed the EITC where the period considered for this measure stretches to claims made between tax years 2000 and 2014 (see Tables 13 and 14). In tax year 2014, 75,829 taxpayers (34.4%) claimed the EITC in tax year 2014 but not in 2013 or “One Year”, and 39,003 taxpayers (17.7%) claimed the EITC in tax years 2013 and 2014, but not 2012 or “Two

¹¹ Poverty thresholds are used for calculating all official poverty population statistics by the Census Bureau, while the poverty guidelines are a simplified version of the federal poverty thresholds used for administrative purposes by the Department of Health and Human Services. The poverty thresholds is composed of a detailed 48 cell matrix of thresholds that varies by family size, number of children, and age; while the poverty guidelines is based on family size and is detailed in table 9 of this report.

Years”. Very consistent patterns emerge for tax years 2004 through 2006; between 46.3 percent and 47.2 percent who claimed the EITC had not claimed the credit in the prior tax year. Just under one-fifth had claimed the credit for two consecutive years while another 11 percent to 12 percent had three consecutive years of claims.

This pattern changed in tax year 2007; the diagonal of bolded shares indicates the group of taxpayers claiming in 2007. When the EITC changed from nonrefundable to refundable in 2007, the distribution of new claimants increased noticeably with nearly 64 percent of 2007 claims as “One Year”, well above any other tax year. This reflects the group of taxpayers with no Iowa tax liability who were previously unable to benefit from the EITC. In tax year 2008, the new claimants share dropped sharply to 37.2 percent, but the share with two years remained high at 36.9 percent. The patterns that emerged for tax years 2010 through 2014 were similar to that seen before the tax credit was refundable except for the “One Year”; between 34.4 percent and 36.7 percent who claimed the EITC had not claimed the credit in the prior tax year. This suggests that there was more jumping in and out of usage before tax year 2007 when taxpayers were required to have Iowa tax liability to benefit. Of claimants in tax years 2008-2010, an average of only 4.2 percent had made claims in all of the previous five years. Of claimants in tax years 2012-2014, the average share that had made claims for five consecutive years increases to 6.1 percent. This suggests that there is growing persistence.

To learn whether taxpayers with persistent EITC claims differ from taxpayers making only a single claim, households with EITC claims for all ten years between tax year 2005 and 2014 are compared with households that during the span of 2010 – 2013 only claimed the EITC in one tax year (see Table 15). While 64.2 percent of the long-term EITC claimants filed head of household, only 24.2 percent of one-year claimants filed head of household. In contrast, 6.2 percent of long-term claimants filed single, while 49.9 percent of one-year claimants filed as single taxpayers. Only 10.7 percent of long-term EITC claimants had no dependent, while 51.5 percent of one-year claimants had no dependent. This suggests that single parents with two or three children are much more likely to make repeated EITC claims whereas one-time claimants are more likely to be single taxpayers with no children.

A second way to measure persistence is to look at cohorts (see Table 16). A cohort is a group of individuals having a statistical factor in common in a demographic study such as a class membership. In this analysis, a cohort is defined as the group of EITC claimants who first claimed the credit in the same year. Therefore, the 2004 cohort claimed the EITC for the first time in tax year 2004, considering tax years beginning in tax year 2000. Thus all claimants of the EITC in tax years 2000, 2001, 2002 and 2003 were removed from the population before analyzing the tax year 2004 cohort whereas the definition of a “One Year” claimant above only did not have a claim in the immediately prior year. In tax years 2004 through 2006, EITC cohorts began with around 32,000 claimants in their initial year. When the EITC became refundable in 2007, the 2007 cohort erupted to 87,583 initial claimants because a large group of

taxpayers with no Iowa tax liability were now eligible to claim the Iowa tax credit. In 2008 and 2009, the cohorts began with around 54,000 initial claimants, showing a lingering impact of the credit becoming refundable.

As expected with cohort persistence, as the years progress, claimants exit from claiming the credit for one reason or another. For cohorts making an initial EITC claim in tax year 2004 or 2005, 41 percent also made claims in the following year (see Table 17). For the 2006 cohort, the persistence into the second year, which was the change to a refundable credit tax year 2007, increased to 54 percent, and for the 2007 cohort, the persistence in 2008 was 57 percent. The second year persistence decreased for each of the following cohorts, but remained above the rate seen when the credit was nonrefundable. With the observed behavior change as a result of the key policy change, it is reasonable to analyze behavior before and after the policy change. The 2004 and 2005 cohorts each had a remaining class of about 5 percent of the original cohort after ten years and an average of 9.4 percent after seven years, including four or five years with refundable credits. In contrast, the 2007 and 2008 cohorts, who faced a refundable credit throughout, had an average of 13.3 percent still claiming after seven years. This suggests that making the credit refundable has resulted in more persistence in claims.

The 2004, 2005 and 2006 cohorts each received an average claim amount of about \$88 in their initial year (see Table 18). When the EITC became refundable in 2007 and the number of claimants jumped, the average tax credit earned also jumped to \$107 per household. The average initial year claims for 2008 through 2012 cohorts were around \$93 per household, jumping to \$193 in 2013 when the tax credit rate doubled. The more interesting analysis is to consider average claim amounts within a cohort over time. Considering tax years prior to the doubling of the credit rate in tax year 2013, the average claim increased each year for each cohort from an average of \$93 per claimant in year one to an average of \$176 for claimants who continued to make claims in their 5th year of claiming the EITC. For each cohort, the doubling of the credit in tax year 2013 resulted in an upsurge in average EITC credit of about 109.6 percent before returning to an average annual increase of about 6.6 percent. Taking into consideration that claims to this credit can increase each year simply because of inflation, pulling out the impacts of that inflation, each cohort experienced an upsurge in average EITC credit of about 106.6 percent before returning to an average annual increase of about 4.9 percent. This suggests that claimants within a cohort who continue to make claims are those eligible for higher credits, likely families with children.

Since the EITC became refundable, the EITC has been widely utilized by low income Iowans. Between tax years 2007 and 2014, 428,197 households living in Iowa claimed the EITC at least once. With the average household population of Iowa over those eight years of 1.4 million households, this suggests that 30.6 percent of all Iowa households claimed the credit during this period.

Because the EITC requires earned income, the literature has shown that it encourages labor force participation in most cases. The goal is for participants to supplement their

income with the EITC as they gain skills and experience in the workforce which could result in income gains that will move those households out of EITC eligibility. Real wage income for the 22,029 households making an EITC claim in tax year 2010 and remaining on Iowa's tax rolls, improved from an average of \$16,768 in tax year 2010 to an average of \$30,970 in tax year 2014, for an 84.7 percent real wage increase (see Table 19).¹² For the 7,846 tax year 2010 households still claiming the EITC in tax year 2014, their average real wages only increased 25.4 percent from \$16,740 to \$20,997 in four years (see Table 20). Conversely, for the 5,122 tax year 2010 EITC households who remained in the tax rolls for each subsequent year but only claimed the credit in tax year 2010, their wages grew at a much more substantial rate (see Table 21). These taxpayers experienced an average real increase of 191.3 percent, increasing from an average of \$15,318 in tax year 2010 to an average of \$44,626 in tax year 2014.

E. Earned Income Tax Credit Claim Exit and Entry and the Business Cycle

The persistence analysis indicates that many taxpayers make only sporadic EITC claims. That raises the question as to the reasons why taxpayers exit and enter the roles of EITC claimants. This analysis builds on the exit and entry information presented in Jin and Rogers (2011).

The major reasons households move in or out of claiming the EITC include changes in marital status, changes in the number of dependents, changes in earned income, and not filing taxes. This analysis varies from the Jin and Rogers (2011) evaluation in that the populations they considered did not account for tax filers who either did not file a tax return the year prior to the EITC claim or did not file in the year following the claim. Excluding this portion of the EITC population does not account for new residents to the state, people who did not file taxes the year before because they fell below the filing threshold because they likely were not working, as well as those who leave the state or leave the workforce and again fall below the filing threshold. Taxpayers who were eligible for the EITC in one year but were not eligible in the previous year are considered to move into eligibility for the EITC. Taxpayers who were eligible for the EITC in one year but were not eligible in the next year are considered to move out of eligibility for the EITC. A change in earned income, which can be influenced by business cycles, is the most common reason for taxpayers to move in or out of EITC eligibility after accounting for those moving in or off the tax rolls (see Table 22). Between 2010 and 2014, an average of 36.6 percent of households was newly eligible for the EITC because of a drop in earned income. Conversely, an average of 43.4 percent of households moved out of EITC eligibility because of an increase in earned income.

Because the range of eligible income increases as a household moves from zero to three dependents, adding a dependent explains new eligibility for an average of 15.7 percent of households. It is possible that some divorced taxpayers jump in and out of

¹² All earnings and EITC claims presented in the wage growth analysis have been adjusted for inflation and are presented in 2014 dollars.

EITC claims as they are only able to claim a dependent every other year for tax purposes. With the “marriage bonus” expanding eligibility for households, a change in marital status explained an average of 16.9 percent of households entering EITC (e.g., marriage) and 15.2 percent leaving (e.g., divorce).

As pointed out by Jin and Rogers (2011), the EITC has a countercyclical impact with respect to economic growth. During an economic expansion, when employment and personal income rise, more taxpayers should move out of EITC eligibility and fewer taxpayers should be newly eligible for the credit. During an economic downturn, when employment and personal income fall, more taxpayers should become eligible for the credit and fewer taxpayers should move out of EITC eligibility.

Using individual income tax records between 2001 and 2014, the numbers of taxpayers who entered and exited federal EITC eligibility each year are calculated. The net change in eligible households due to changes in earned income equals the difference between the number of taxpayers moving into eligibility for the EITC due to drops in income and the number of taxpayers moving out of eligibility for the tax credit due to increases in income. When the economy is growing, the net change in eligible households due to changes in earned income (left scale) should be negative (see Figure 13). When the economy is weak, that net change should be positive. After controlling for federal law changes that expanded the eligibility for married filers, the largest net change in eligible households (23,580) occurred in 2002, a recession year. When the economy gradually recovered after 2002, the net change in eligible households also dropped. Between 2004 and 2005, that net change fell to -26,551, the lowest level in the fifteen year period. During the great recession, the net change in eligible households due to changes in income again rose above zero (15,641) in 2009. Although the recession in 2009 resulted in much more unemployment than 2002, the more muted net change likely reflects the change to a refundable EITC between those dates.

During a recession, the unemployment rate generally increases. Thus, the number of taxpayers moving into EITC eligibility as a result of unemployment should also increase. The number of households claiming EITC and receiving unemployment compensation (right scale in Figure 10) increased steadily from 2007 (18,109) to 2010 (34,768). Following the recession it is observed that the net change in households due to changes in income again fell below zero as would be expected. Claimants with unemployment compensation also experienced declines from the 2010 high to 21,319 in 2014. Note that unemployment compensation does not count as earned income for the household.

VI. Conclusion

This evaluation of the EITC provided a picture of who claims the EITC credit and how much has been claimed. In tax year 2014, the most recent complete tax year, \$71.1

million in credits were claimed, where 46.8 percent of claims offset Iowa tax liability and the other 53.2 percent of claims were in excess of tax liability.

A majority of claims were made by households with at least one dependent (74.1 percent of total claims in 2014). Head of household filers accounted for 45.9 percent of total households claiming the EITC and claimed 60.1 percent of total credits. Households earning less than \$25,000 accounted for 67.4 percent of households claiming the EITC. In terms of the amount of credits claimed, 71.4 percent of the total amount of EITC (\$50.8 million) was claimed by taxpayers with earnings less than \$25,000.

Of households that claimed the Iowa EITC in 2014, 49.7 percent reported Iowa AGI below the applicable federal poverty guideline, 26.3 percent reported AGI between 100 and 150 percent of the applicable guideline, 16.2 percent reported AGI between 150 and 200 percent, and the remaining 7.9 percent reported AGI above 200 percent or negative AGI. After adding the actual federal and Iowa EITC claims reported on the tax return to AGI, the distribution changes. The share below the federal poverty guideline falls to 38.9 percent, 30.4 percent of claimants fell between 100 and 150 percent of the guideline, and 21.4 percent fall between 150 and 200 percent of the guideline with the remaining 9.3 percent in the other category. Over the four tax years since 2011, resident families receiving one or more of the State assistance programs accounted for approximately 340,000 EITC claims, totaling \$96.5 million.

Since the EITC became refundable, the EITC has been widely utilized by low income Iowans. Between tax years 2007 and 2014, 428,197 households living in Iowa claimed the EITC at least once. With the average household population of Iowa over those eight years of 1.4 million households, this suggests that 30.6 percent of all Iowa households claimed the credit during this period. In tax year 2014, 33 percent of total Iowa dependents were in households that received the EITC. At the same time, 34 percent of households with dependents in the State of Iowa received EITC in 2014.

The major reasons households move in or out of claiming the EITC include not filing taxes, changes in marital status, changes in the number of dependents, and changes in earned income. A change in earned income, which can be influenced by business cycles, is the most common reason for taxpayers to move in or out of EITC eligibility after accounting for those moving in or off the tax role. Between 2010 and 2014, an average of 36.6 percent of households was newly eligible for the EITC because of a drop in earned income. Conversely, an average of 43.4 percent of households moved out of EITC eligibility because of an increase in earned income.

Between tax years 1990 and 2014, over \$400 million in EITC has been claimed with nearly \$154 million being paid as refunds to low-income taxpayers since the credit became refundable in tax year 2007.

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Tables and Figures

Figure 1. Federal EITC by Earned Income for Single Filers, Tax Year 2014

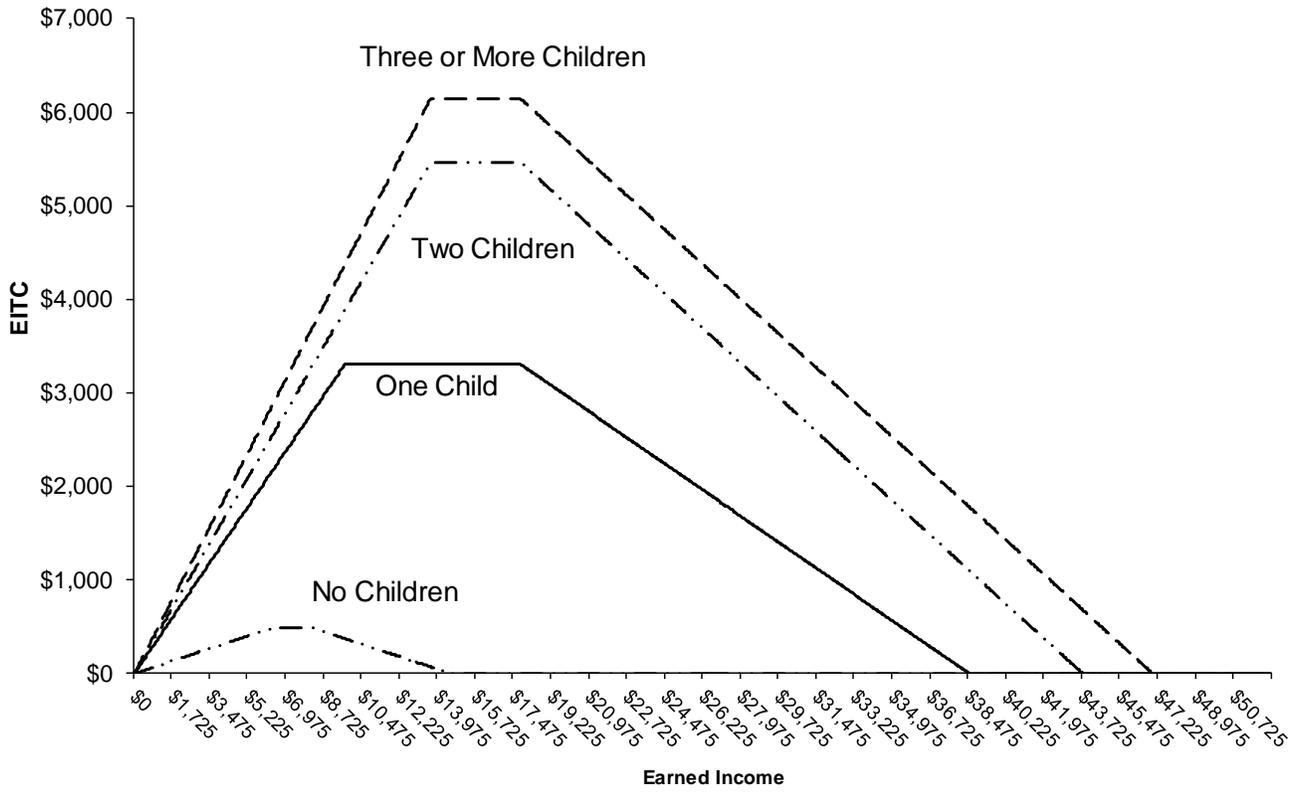


Figure 2. Federal EITC by Earned Income for Married Filers, Tax Year 2014

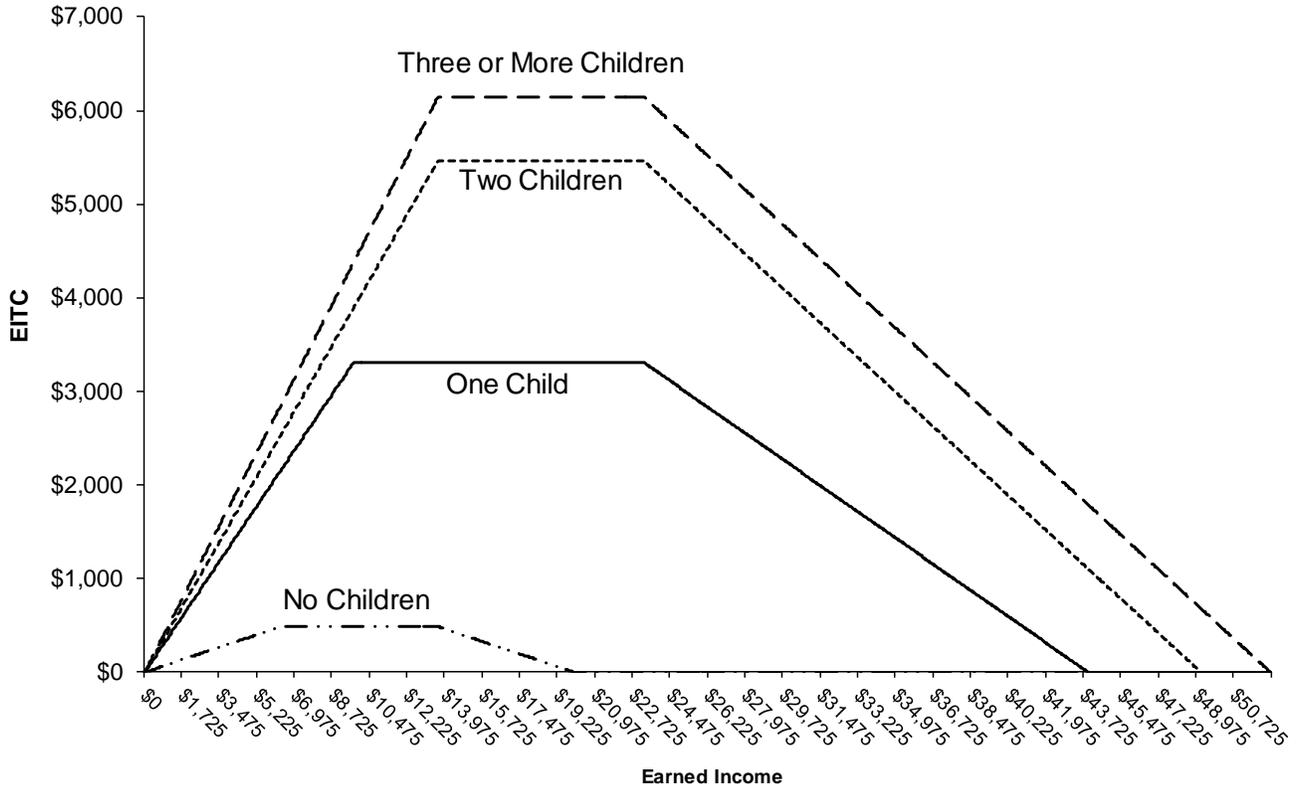


Table 1. Federal and State Parameters for EITC for Tax Year 2014

Single Taxpayers	Phase-in Rate	Phase-in Income Threshold	Maximum Federal Credit	Maximum Iowa Credit	Phase-out Income Start Level	Phase-out Rate	Phase-out Income Threshold
No Children	7.65%	\$6,450	\$496	\$74	\$8,150	7.65%	\$14,590
One Child	34.00%	\$9,700	\$3,305	\$496	\$17,850	15.98%	\$38,511
Two Children	40.00%	\$13,650	\$5,460	\$819	\$17,850	21.06%	\$43,756
Three or More Children	45.00%	\$13,650	\$6,143	\$921	\$17,850	21.06%	\$46,997

Married Taxpayers	Phase-in Rate	Phase-in Income Threshold	Maximum Federal Credit	Maximum Iowa Credit	Phase-out Income Start Level	Phase-out Rate	Phase-out Income Threshold
No Children	7.65%	\$6,450	\$496	\$74	\$13,500	7.65%	\$20,020
One Child	34.00%	\$9,700	\$3,305	\$496	\$23,250	15.98%	\$43,941
Two Children	40.00%	\$13,650	\$5,460	\$819	\$23,250	21.06%	\$49,186
Three or More Children	45.00%	\$13,650	\$6,143	\$921	\$23,250	21.06%	\$52,427

Source: Internal Revenue Service

**Table 2. Comparison of Enacted State Earned Income Tax Credit Programs
Tax Year 2015**

State	Percentage of Federal Tax Credit	Refundable Credit	Maximum Credit	Notes
California	85%	Yes	\$5,306	85% of the federal credit up to half of the federal phase-in range
Colorado	10%	Yes	\$624	
Connecticut	28%	Yes	\$1,717	
Delaware	20%	No	\$1,248	
Illinois	10%	Yes	\$624	
Indiana	9%	Yes	\$562	
Iowa	15%	Yes	\$936	
Kansas	17%	Yes	\$1,061	
Louisiana	3.5%	Yes	\$218	
Maine	5%	No	\$312	
Maryland	26%	Yes	\$1,592	Maryland also offers a nonrefundable EITC set at 50 percent of the federal credit. Taxpayers may claim either the refundable credit or the nonrefundable credit, but not both.
Massachusetts	23%	Yes	\$1,436	
Michigan	6%	Yes	\$375	
Minnesota	Stand Alone	Yes	\$1,057	Minnesota's credit for families with children is a percentage of family earnings. Depending on income level and family size, the credit may range from 6.02% to 20% of earnings.
Nebraska	10%	Yes	\$624	
New Jersey	30%	Yes	\$1,873	
New Mexico	10%	Yes	\$624	
New York	30%	Yes	\$1,873	
Ohio	10%	No	\$624	
Oklahoma	5%	Yes	\$312	
Oregon	6%	Yes	\$375	
Rhode Island	25%	Yes	\$1,561	
Vermont	32%	Yes	\$1,997	
Virginia	20%	No	\$1,248	
Wisconsin	4%-1child, 11%-2 children, 34%-3 children	Yes	\$2,122	
District of Columbia	40%	Yes	\$2,497	
New York City	5%	Yes	\$312	

Sources: Internal Revenue Service and state revenue departments

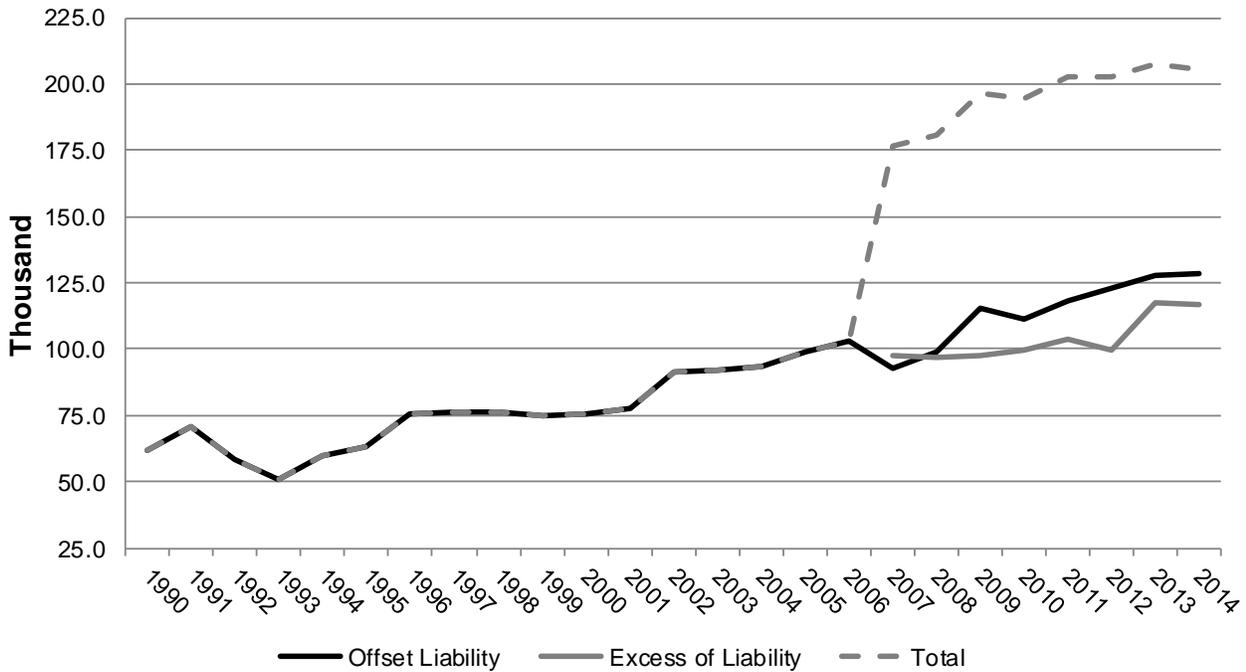
Table 3. Amount of Iowa EITC Claims and Number of Households Claiming, Tax Years 1990 - 2014

Tax Year	Claims Used to Offset Liability (in Million \$)	Claims in Excess of Liability (in Million \$)	Total EITC Claims (in Million \$)	EITC Households	Average Claim
1990	\$1.6	-	\$1.6	61,900	\$26
1991	\$3.4	-	\$3.4	70,755	\$48
1992	\$2.6	-	\$2.6	58,155	\$45
1993	\$2.1	-	\$2.1	51,075	\$41
1994	\$3.1	-	\$3.1	60,131	\$52
1995	\$3.9	-	\$3.9	63,292	\$62
1996	\$5.9	-	\$5.9	75,725	\$78
1997	\$6.0	-	\$6.0	76,415	\$79
1998	\$6.0	-	\$6.0	75,976	\$79
1999	\$6.0	-	\$6.0	74,656	\$80
2000	\$6.2	-	\$6.2	75,725	\$82
2001	\$6.5	-	\$6.5	77,874	\$83
2002	\$8.4	-	\$8.4	91,099	\$92
2003	\$8.6	-	\$8.6	92,292	\$93
2004	\$9.0	-	\$9.0	93,532	\$96
2005	\$9.9	-	\$9.9	98,667	\$100
2006	\$10.7	-	\$10.7	102,811	\$104
2007	\$9.9	\$12.6	\$22.5	176,363	\$128
2008	\$11.1	\$12.9	\$24.0	180,970	\$133
2009	\$14.9	\$13.6	\$28.5	208,342	\$137
2010	\$13.8	\$13.7	\$27.5	206,156	\$133
2011	\$15.6	\$14.7	\$30.3	215,200	\$141
2012	\$16.9	\$14.1	\$31.0	215,091	\$144
2013	\$31.0	\$34.6	\$65.6	221,944	\$296
2014	\$33.3	\$37.8	\$71.1	220,518	\$322
Total	\$246.4	\$153.9	\$400.4	2,944,664	

Source: Iowa individual income tax returns

Note: EITC claims used to offset Iowa tax liability is when the amount of taxes owed by an individual is reduced by the EITC. EITC claims in excess of Iowa tax liability is when a taxpayer has an EITC claim amount that exceeds their Iowa tax liability and the taxpayer receives a tax refund.

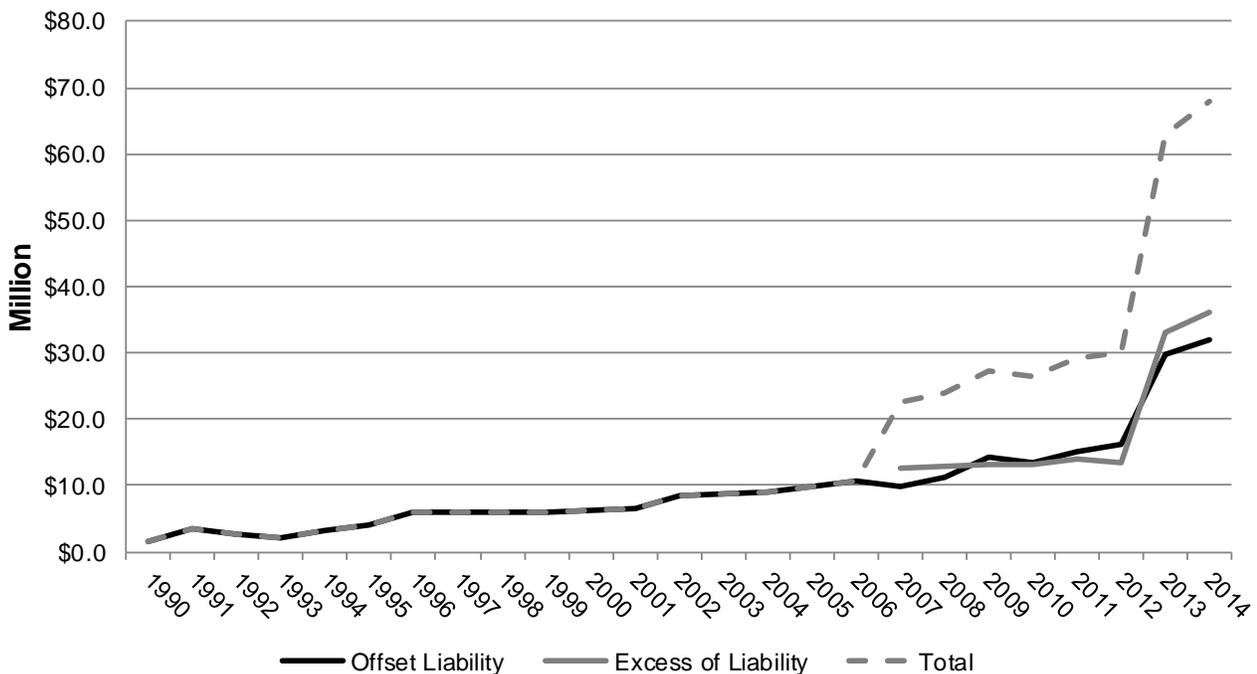
Figure 3. Number of Households Claiming EITC, Tax Years 1990 - 2014



Source: Iowa individual income tax returns

Note: Within a tax year, the combined count of households where their EITC claim offset Iowa tax liability and the count of households where their EITC claim was in excess of Iowa tax liability will not equal the total count of households with EITC claims because some households have an EITC claim that both offsets tax liability and is in excess of tax liability.

Figure 4. Amount of Iowa EITC Claims, Tax Years 1990 - 2014



Source: Iowa individual income tax returns

Table 4. Iowa EITC Claims by State Filing Status, Tax Year 2014

Filing Status	Number of Households	Distribution of Households	Amount of Offset Liability Claims	Share of Offset Liability Claims	Amount of Excess of Liability Claims	Share of Excess of Liability Claims	Total Amount of Claims	Distribution of Total Claims	Average Claim
Single	60,026	27.2%	\$2,907,782	40.9%	\$4,206,252	59.1%	\$7,114,034	10.0%	\$119
Married Joint	37,448	17.0%	\$7,491,086	52.2%	\$6,866,264	47.8%	\$14,357,350	20.2%	\$383
Married Separate	21,375	9.7%	\$4,884,967	72.2%	\$1,877,096	27.8%	\$6,762,063	9.5%	\$316
Head of Household	101,308	45.9%	\$17,948,170	42.0%	\$24,778,220	58.0%	\$42,726,390	60.1%	\$422
Qualifying Widow(er)	361	0.2%	\$54,659	40.5%	\$80,150	59.5%	\$134,809	0.2%	\$373
Total	220,518	100.0%	\$33,286,664	46.8%	\$37,807,982	53.2%	\$71,094,646	100.0%	\$322

Source: Iowa individual income tax returns

Table 5. Iowa EITC Claims by Number of Dependents, Tax Year 2014

Number of Dependents	Number of Households	Distribution of Households	Amount of Offset Liability Claims	Share of Offset Liability Claims	Amount of Excess Liability Claims	Share of Excess Liability Claims	Total Amount of Claims	Distribution of Total Claims	Average Claim
0	57,131	25.9%	\$1,134,987	32.7%	\$2,339,466	67.3%	\$3,474,453	4.9%	\$61
1	75,070	34.0%	\$11,136,411	46.3%	\$12,916,231	53.7%	\$24,052,642	33.8%	\$320
2	52,814	23.9%	\$11,802,433	47.0%	\$13,325,873	53.0%	\$25,128,306	35.3%	\$476
3	25,349	11.5%	\$6,525,707	48.9%	\$6,815,841	51.1%	\$13,341,548	18.8%	\$526
4	7,423	3.4%	\$1,987,292	52.9%	\$1,771,147	47.1%	\$3,758,439	5.3%	\$506
5	1,901	0.9%	\$498,674	52.9%	\$443,260	47.1%	\$941,934	1.3%	\$495
6	556	0.3%	\$134,001	50.3%	\$132,600	49.7%	\$266,601	0.4%	\$479
7	173	0.1%	\$43,515	52.8%	\$38,940	47.2%	\$82,455	0.1%	\$477
8 and over	101	0.0%	\$23,644	49.0%	\$24,624	51.0%	\$48,268	0.1%	\$478
Total	220,518	100.0%	\$33,286,664	46.8%	\$37,807,982	53.2%	\$71,094,646	100.0%	\$322

Source: Iowa individual income tax returns

Table 6. Iowa EITC Claims by Age, Tax Year 2014

Age	Number of Households	Distribution of Households	Amount of Offset Liability Claims	Share of Offset Liability Claims	Amount of Excess Liability Claims	Share of Excess Liability Claims	Total Amount of Claims	Distribution of Total Claims	Average Claim
20 and under	3,487	1.6%	\$321,406	23.5%	\$1,046,538	76.5%	\$1,367,944	1.9%	\$392
21-25	26,088	11.8%	\$3,573,704	38.4%	\$5,738,772	61.6%	\$9,312,476	13.1%	\$357
26-30	40,352	18.3%	\$5,935,428	45.4%	\$7,147,428	54.6%	\$13,082,856	18.4%	\$324
31-35	35,730	16.2%	\$6,532,009	48.8%	\$6,841,227	51.2%	\$13,373,236	18.8%	\$374
36-40	27,972	12.7%	\$5,457,588	51.0%	\$5,234,313	49.0%	\$10,691,901	15.0%	\$382
41-45	22,567	10.2%	\$4,051,787	51.5%	\$3,813,413	48.5%	\$7,865,200	11.1%	\$349
46-50	17,063	7.7%	\$2,661,969	52.6%	\$2,401,605	47.4%	\$5,063,574	7.1%	\$297
51-55	28,455	12.9%	\$3,607,994	50.2%	\$3,579,608	49.8%	\$7,187,602	10.1%	\$253
56-60	9,703	4.4%	\$814,510	46.0%	\$957,664	54.0%	\$1,772,174	2.5%	\$183
61-65	6,501	2.9%	\$275,654	33.4%	\$549,939	66.6%	\$825,593	1.2%	\$127
66 and older	2,237	1.0%	\$12,536	2.7%	\$445,313	97.3%	\$457,849	0.6%	\$205
Missing	363	0.2%	\$42,079	44.7%	\$52,162	55.3%	\$94,241	0.1%	\$260
Total	220,518	100.0%	\$33,286,664	46.8%	\$37,807,982	53.2%	\$71,094,646	100.0%	\$322

Source: Iowa individual income tax returns

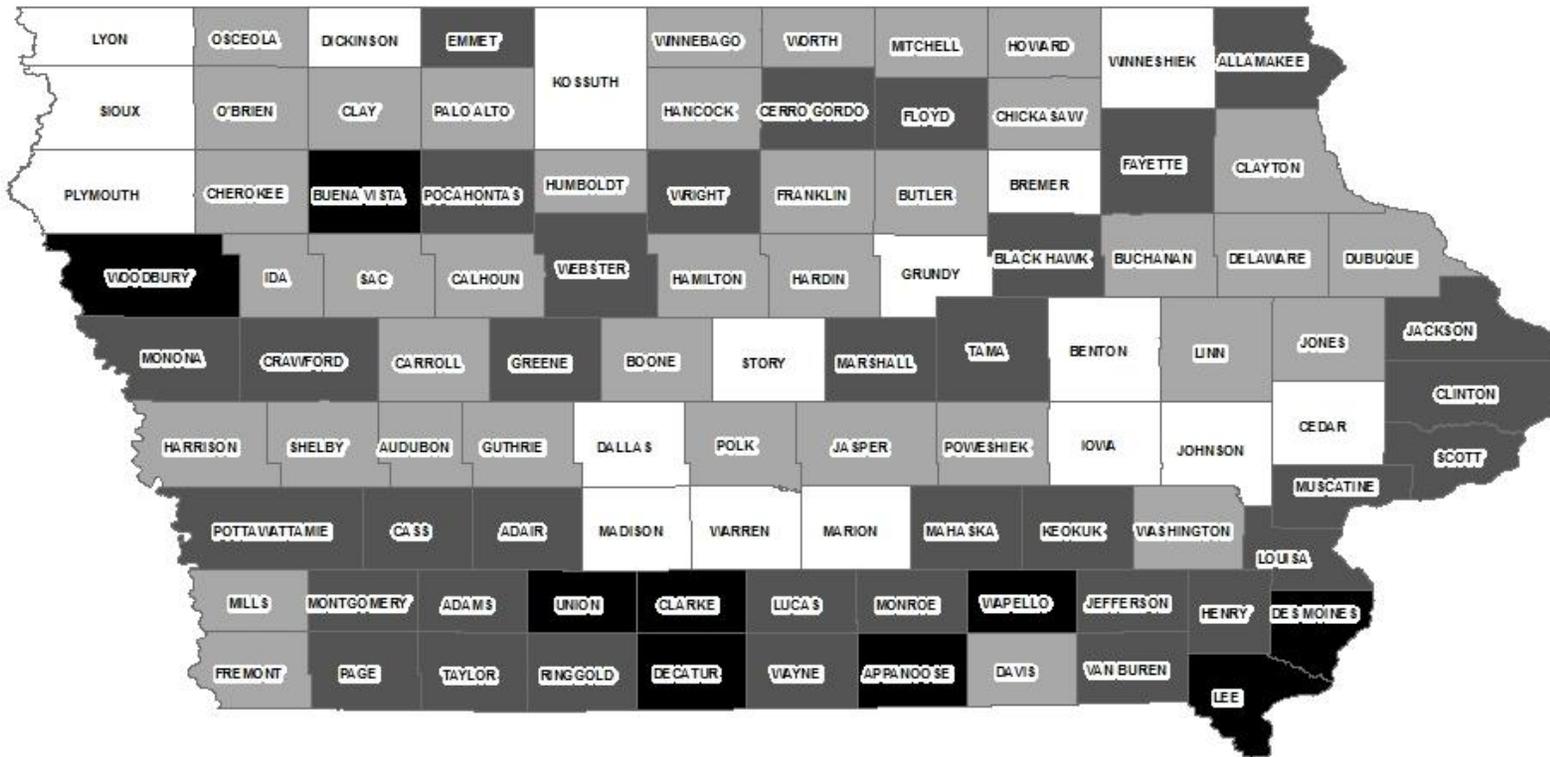
Note: In married households, taxpayer age was based on the spouse indicated as the primary taxpayer.

Table 7. Iowa EITC Claims by Household Adjusted Gross Income, Tax Year 2014

Iowa Adjusted Gross Income	Number of Households	Distribution of Households	Amount of Offset Liability Claims	Share of Offset Liability Claims	Amount of Excess Liability Claims	Share of Excess Liability Claims	Total Amount of Claims	Distribution of Total Claims	Average Claim
\$0 or less	3,919	1.8%	\$1,097	0.1%	\$752,003	99.9%	\$753,100	1.1%	\$192
\$1 - \$4,999	21,449	9.7%	\$195	0.0%	\$1,931,687	100.0%	\$1,931,882	2.7%	\$90
\$5,000 - \$9,999	35,155	15.9%	\$217,897	2.9%	\$7,306,675	97.1%	\$7,524,572	10.6%	\$214
\$10,000 - \$14,999	39,505	17.9%	\$829,852	6.1%	\$12,670,221	93.9%	\$13,500,073	19.0%	\$342
\$15,000 - \$19,999	25,259	11.5%	\$4,234,078	29.0%	\$10,363,381	71.0%	\$14,597,459	20.5%	\$578
\$20,000 - \$24,999	23,439	10.6%	\$8,705,660	69.9%	\$3,755,974	30.1%	\$12,461,634	17.5%	\$532
\$25,000 - \$29,999	22,253	10.1%	\$8,475,297	91.5%	\$785,640	8.5%	\$9,260,937	13.0%	\$416
\$30,000 - \$34,999	20,045	9.1%	\$5,765,840	96.9%	\$187,393	3.1%	\$5,953,233	8.4%	\$297
\$35,000 - \$39,999	15,082	6.8%	\$3,137,368	98.7%	\$40,215	1.3%	\$3,177,583	4.5%	\$211
\$40,000 - \$44,999	8,970	4.1%	\$1,429,158	99.1%	\$12,804	0.9%	\$1,441,962	2.0%	\$161
\$45,000 - \$49,999	4,538	2.1%	\$452,788	99.6%	\$1,628	0.4%	\$454,416	0.6%	\$100
\$50,000 and over	904	0.4%	\$37,434	99.0%	\$361	1.0%	\$37,795	0.1%	\$42
Total	220,518	100.0%	\$33,286,664	46.8%	\$37,807,982	53.2%	\$71,094,646	100.0%	\$322

Source: Iowa individual income tax returns

Figure 5. Percentage of Households Claiming the EITC by County, Tax Year 2014

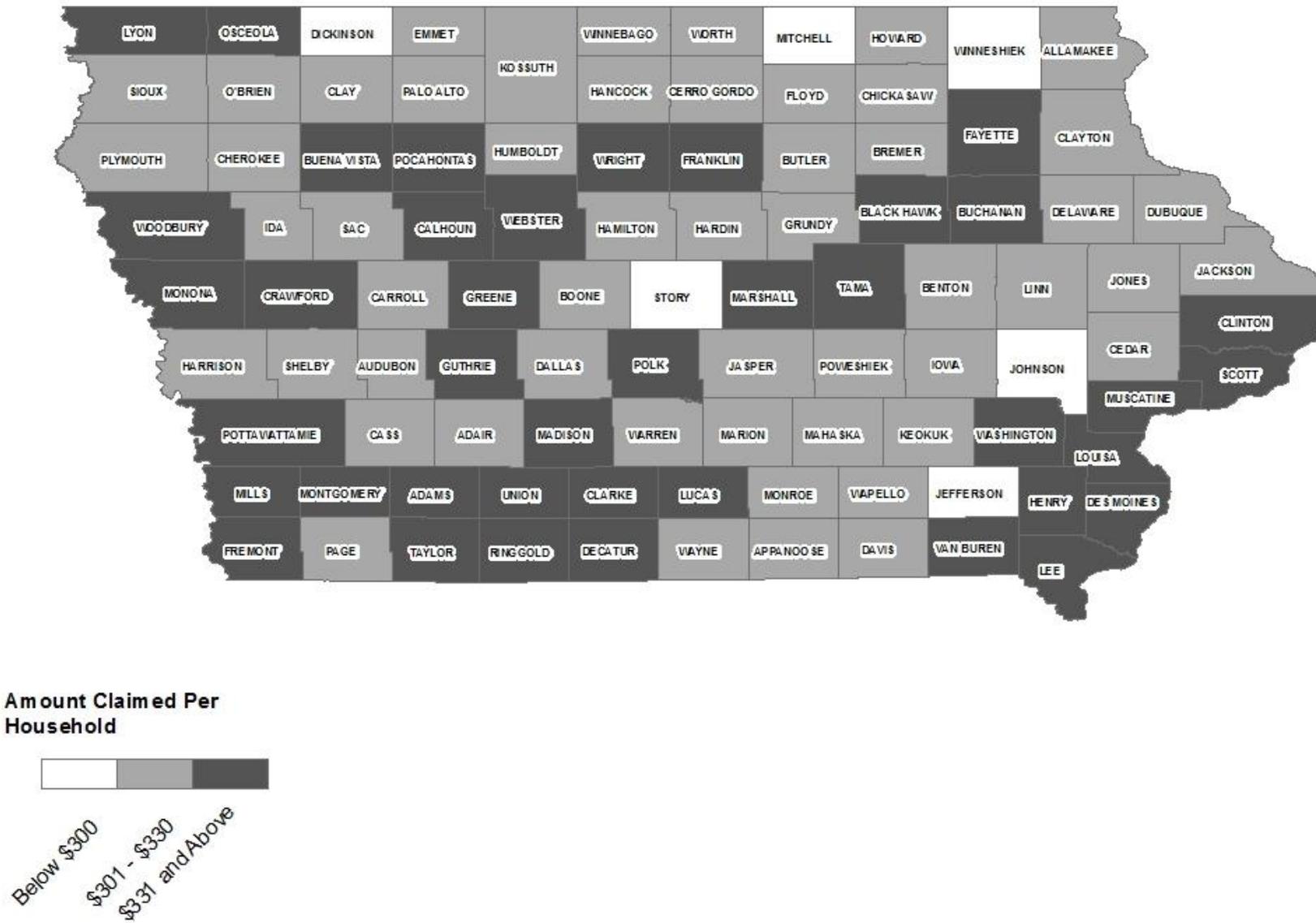


Percentage of All Households Claiming EITC



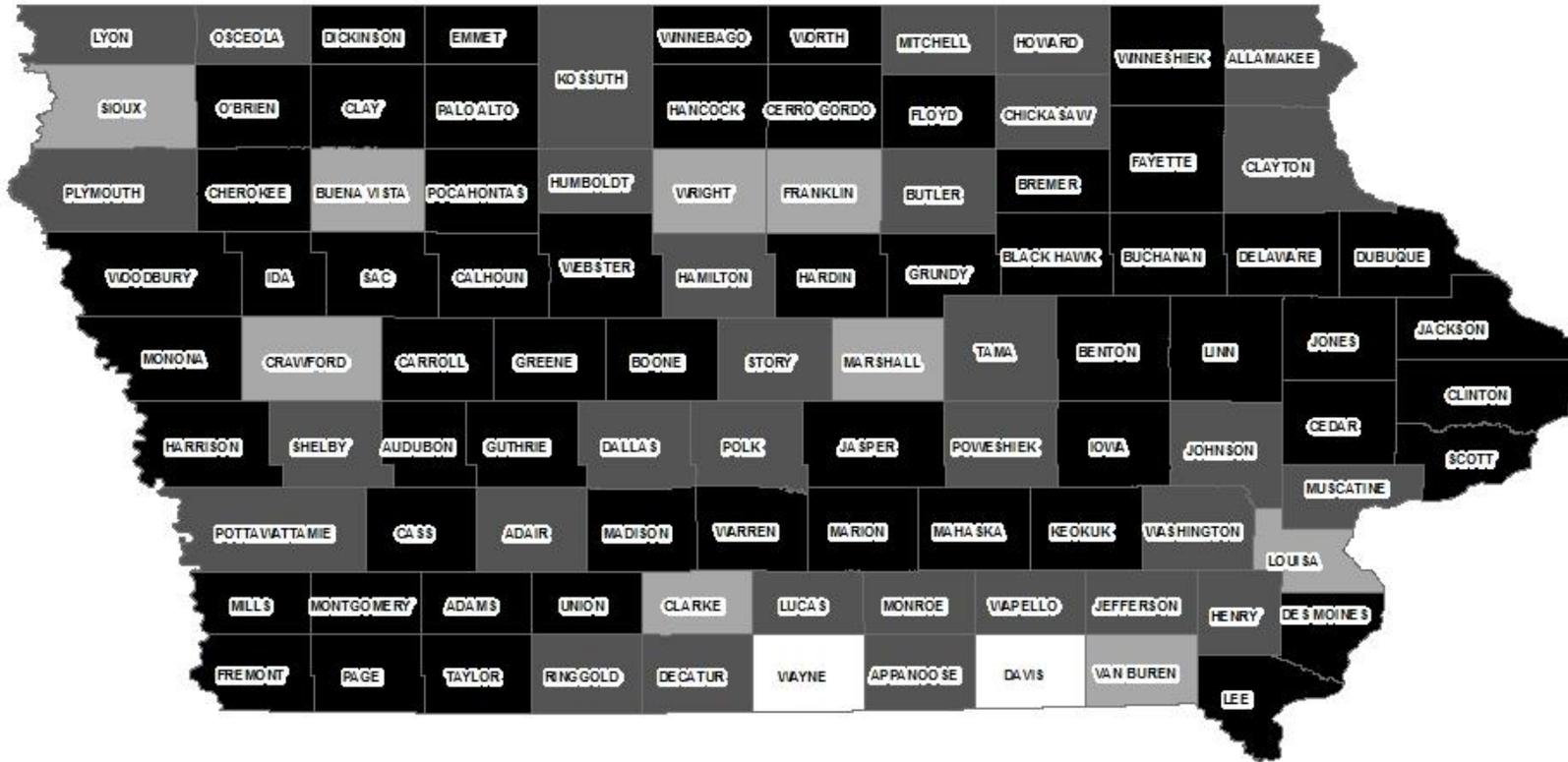
Source: Iowa individual income tax returns

Figure 6. Average Iowa EITC Claim Per Household by County, Tax Year 2014

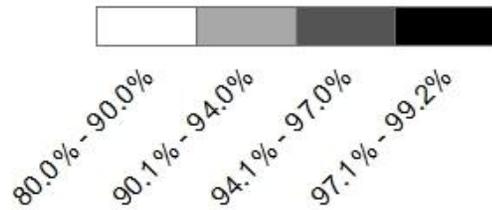


Source: Iowa individual income tax returns

Figure 7. Percentage of Eligible Households Claiming EITC by County, Tax Year 2014



Percentage of Eligible Households Claiming EITC



Source: Iowa individual income tax returns

Table 8. Earned Income Tax Credit Claims by County, Tax Year 2014

County	Households Filing Returns	Households Claiming EITC	EITC Eligible Households	Percent of Returns Claiming EITC	Percent of Returns Eligible for EITC	Percent of Eligible for EITC Claiming EITC
ADAIR	3,999	634	664	15.9%	16.6%	95.5%
ADAMS	1,961	339	347	17.3%	17.7%	97.7%
ALLAMAKEE	6,583	1,068	1,130	16.2%	17.2%	94.5%
APPANOOSE	5,435	1,134	1,178	20.9%	21.7%	96.3%
AUDUBON	2,763	411	419	14.9%	15.2%	98.1%
BENTON	11,540	1,350	1,379	11.7%	11.9%	97.9%
BLACK HAWK	59,192	9,652	9,836	16.3%	16.6%	98.1%
BOONE	12,097	1,520	1,566	12.6%	12.9%	97.1%
BREMER	10,724	1,000	1,021	9.3%	9.5%	97.9%
BUCHANAN	9,185	1,176	1,203	12.8%	13.1%	97.8%
BUENA VISTA	9,609	1,908	2,041	19.9%	21.2%	93.5%
BUTLER	6,641	861	897	13.0%	13.5%	96.0%
CALHOUN	4,255	616	625	14.5%	14.7%	98.6%
CARROLL	10,117	1,325	1,354	13.1%	13.4%	97.9%
CASS	6,298	1,128	1,152	17.9%	18.3%	97.9%
CEDAR	8,494	994	1,018	11.7%	12.0%	97.6%
CERRO GORDO	20,319	3,266	3,323	16.1%	16.4%	98.3%
CHEROKEE	5,539	771	793	13.9%	14.3%	97.2%
CHICKASAW	5,717	718	754	12.6%	13.2%	95.2%
CLARKE	4,184	796	851	19.0%	20.3%	93.5%
CLAY	8,138	1,222	1,247	15.0%	15.3%	98.0%
CLAYTON	8,052	1,110	1,147	13.8%	14.2%	96.8%
CLINTON	22,027	3,870	3,932	17.6%	17.9%	98.4%
CRAWFORD	7,611	1,308	1,434	17.2%	18.8%	91.2%
DALLAS	32,232	2,968	3,090	9.2%	9.6%	96.1%
DAVIS	3,518	520	632	14.8%	18.0%	82.3%
DECATUR	3,087	670	702	21.7%	22.7%	95.4%
DELAWARE	8,166	1,029	1,050	12.6%	12.9%	98.0%
DES MOINES	19,591	3,694	3,763	18.9%	19.2%	98.2%
DICKINSON	8,737	1,025	1,043	11.7%	11.9%	98.3%
DUBUQUE	46,737	6,324	6,469	13.5%	13.8%	97.8%
EMMET	4,409	724	743	16.4%	16.9%	97.4%
FAYETTE	8,901	1,386	1,416	15.6%	15.9%	97.9%
FLOYD	7,063	1,132	1,161	16.0%	16.4%	97.5%
FRANKLIN	4,461	645	716	14.5%	16.1%	90.1%
FREMONT	3,047	463	475	15.2%	15.6%	97.5%
GREENE	4,121	737	745	17.9%	18.1%	98.9%
GRUNDY	5,418	530	546	9.8%	10.1%	97.1%
GUTHRIE	4,789	708	716	14.8%	15.0%	98.9%
HAMILTON	6,860	1,052	1,085	15.3%	15.8%	97.0%
HANCOCK	5,025	687	707	13.7%	14.1%	97.2%
HARDIN	7,853	1,166	1,191	14.8%	15.2%	97.9%
HARRISON	6,427	923	943	14.4%	14.7%	97.9%
HENRY	8,724	1,492	1,538	17.1%	17.6%	97.0%
HOWARD	4,555	649	680	14.2%	14.9%	95.4%
HUMBOLDT	4,509	633	655	14.0%	14.5%	96.6%
IDA	3,308	490	494	14.8%	14.9%	99.2%
IOWA	7,978	966	994	12.1%	12.5%	97.2%
JACKSON	9,130	1,407	1,433	15.4%	15.7%	98.2%
JASPER	15,957	2,285	2,334	14.3%	14.6%	97.9%

Source: Iowa individual income tax returns

Table 8 continued. Earned Income Tax Credit Claims by County, Tax Year 2014.

County	Households Filing Returns	Households Claiming EITC	EITC Eligible Households	Percent of Returns Claiming EITC	Percent of Returns Eligible for EITC	Percent of Eligible for EITC Claiming EITC
JEFFERSON	7,005	1,260	1,303	18.0%	18.6%	96.7%
JOHNSON	62,142	7,099	7,338	11.4%	11.8%	96.7%
JONES	8,641	1,168	1,197	13.5%	13.9%	97.6%
KEOKUK	4,466	717	734	16.1%	16.4%	97.7%
KOSSUTH	7,230	864	891	12.0%	12.3%	97.0%
LEE	15,409	2,917	2,960	18.9%	19.2%	98.5%
LINN	101,692	13,713	13,961	13.5%	13.7%	98.2%
LOUISA	4,974	807	860	16.2%	17.3%	93.8%
LUCAS	3,831	663	697	17.3%	18.2%	95.1%
LYON	5,093	578	602	11.3%	11.8%	96.0%
MADISON	6,682	779	801	11.7%	12.0%	97.3%
MAHASKA	9,420	1,550	1,579	16.5%	16.8%	98.2%
MARION	14,400	1,708	1,753	11.9%	12.2%	97.4%
MARSHALL	17,760	3,255	3,489	18.3%	19.6%	93.3%
MILLS	6,162	784	805	12.7%	13.1%	97.4%
MITCHELL	4,879	613	645	12.6%	13.2%	95.0%
MONONA	3,985	614	631	15.4%	15.8%	97.3%
MONROE	3,307	515	532	15.6%	16.1%	96.8%
MONTGOMERY	4,709	844	855	17.9%	18.2%	98.7%
MUSCATINE	20,207	3,637	3,765	18.0%	18.6%	96.6%
OBRIEN	6,644	908	934	13.7%	14.1%	97.2%
OSCEOLA	2,877	408	430	14.2%	14.9%	94.9%
PAGE	6,457	1,076	1,094	16.7%	16.9%	98.4%
PALO ALTO	4,182	635	647	15.2%	15.5%	98.1%
PLYMOUTH	11,624	1,369	1,416	11.8%	12.2%	96.7%
POCAHONTAS	3,273	506	517	15.5%	15.8%	97.9%
POLK	215,456	30,713	32,027	14.3%	14.9%	95.9%
POTTAWATTAMIE	41,867	7,200	7,478	17.2%	17.9%	96.3%
POWESHIEK	8,281	1,131	1,169	13.7%	14.1%	96.7%
RINGGOLD	2,018	356	377	17.6%	18.7%	94.4%
SAC	4,783	661	678	13.8%	14.2%	97.5%
SCOTT	79,113	12,915	13,124	16.3%	16.6%	98.4%
SHELBY	5,599	693	715	12.4%	12.8%	96.9%
SIoux	14,288	1,437	1,596	10.1%	11.2%	90.0%
STORY	37,178	3,583	3,723	9.6%	10.0%	96.2%
TAMA	7,564	1,172	1,226	15.5%	16.2%	95.6%
TAYLOR	2,623	467	478	17.8%	18.2%	97.7%
UNION	5,434	1,027	1,055	18.9%	19.4%	97.3%
VAN BUREN	3,095	529	574	17.1%	18.5%	92.2%
WAPELLO	15,217	3,262	3,390	21.4%	22.3%	96.2%
WARREN	20,875	2,200	2,246	10.5%	10.8%	98.0%
WASHINGTON	10,049	1,395	1,482	13.9%	14.7%	94.1%
WAYNE	2,627	476	536	18.1%	20.4%	88.8%
WEBSTER	16,291	2,806	2,867	17.2%	17.6%	97.9%
WINNEBAGO	5,157	748	762	14.5%	14.8%	98.2%
WINNESHIEK	9,126	1,068	1,097	11.7%	12.0%	97.4%
WOODBURY	46,235	9,696	9,979	21.0%	21.6%	97.2%
WORTH	3,504	531	542	15.2%	15.5%	98.0%
WRIGHT	5,785	889	951	15.4%	16.4%	93.5%
TOTAL	1,404,299	206,424	213,140	14.7%	15.2%	96.8%

Source: Iowa individual income tax returns

Table 9. Federal Poverty Guidelines for 2014

Number of People in Family/Household	100% Poverty Guideline	150% Poverty Guideline	200% Poverty Guideline
1	\$11,670	\$17,505	\$23,340
2	\$15,730	\$23,595	\$31,460
3	\$19,790	\$29,685	\$39,580
4	\$23,850	\$35,775	\$47,700
5	\$27,910	\$41,865	\$55,820
6	\$31,970	\$47,955	\$63,940
7	\$36,030	\$54,045	\$72,060
8	\$40,090	\$60,135	\$80,180

*For families/households with more than 8 persons, add \$4,060 for each additional person.

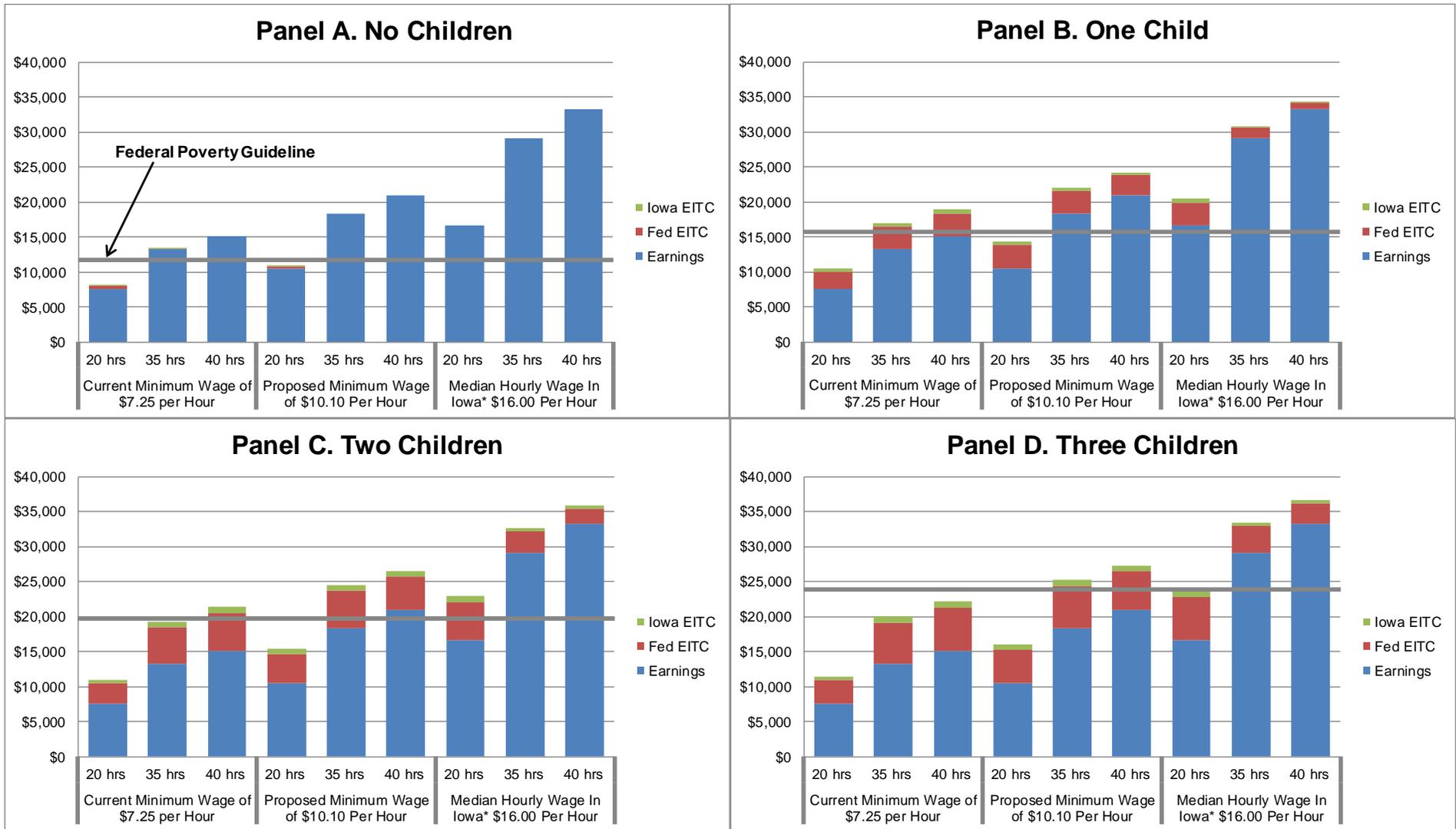
Source: US Department of Health & Human Services Office of the Assistant Secretary for Planning and Evaluation

Table 10. Iowa Households with Income Below Federal Poverty Guidelines and Households Claiming EITC for Tax Year 2014

Households Filing Tax Returns	All		1 Person		2 People		3 People		4 People		5+ People	
	Count	Share	Count	Share	Count	Share	Count	Share	Count	Share	Count	Share
All Households	1,575,708	100%	682,944	43.3%	491,529	31.2%	158,042	10.0%	146,522	9.3%	96,671	6.1%
All EITC Claimants	220,518	14.0%	49,609	7.3%	68,389	13.9%	48,680	30.8%	31,485	21.5%	22,355	23.1%
All Households with Income Below Poverty Guidelines	331,348	21.0%	205,637	30.1%	72,376	14.7%	24,710	15.6%	15,673	10.7%	12,952	13.4%

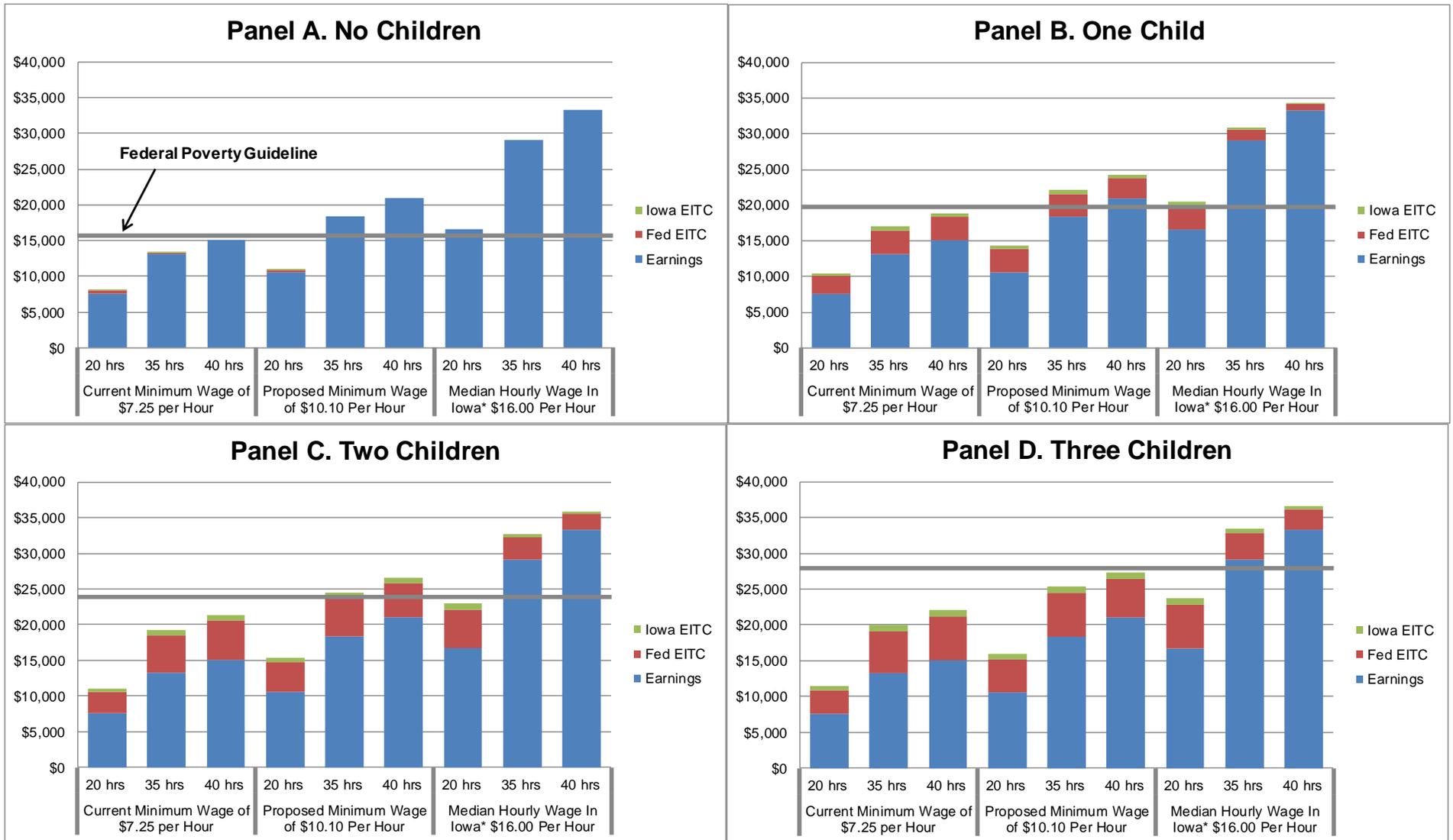
Source: Iowa individual income tax returns

Figure 8. Interaction of Wages, Hours, and EITC Claims for Example Single or Head of Household Filers Compared to Federal Poverty Guidelines



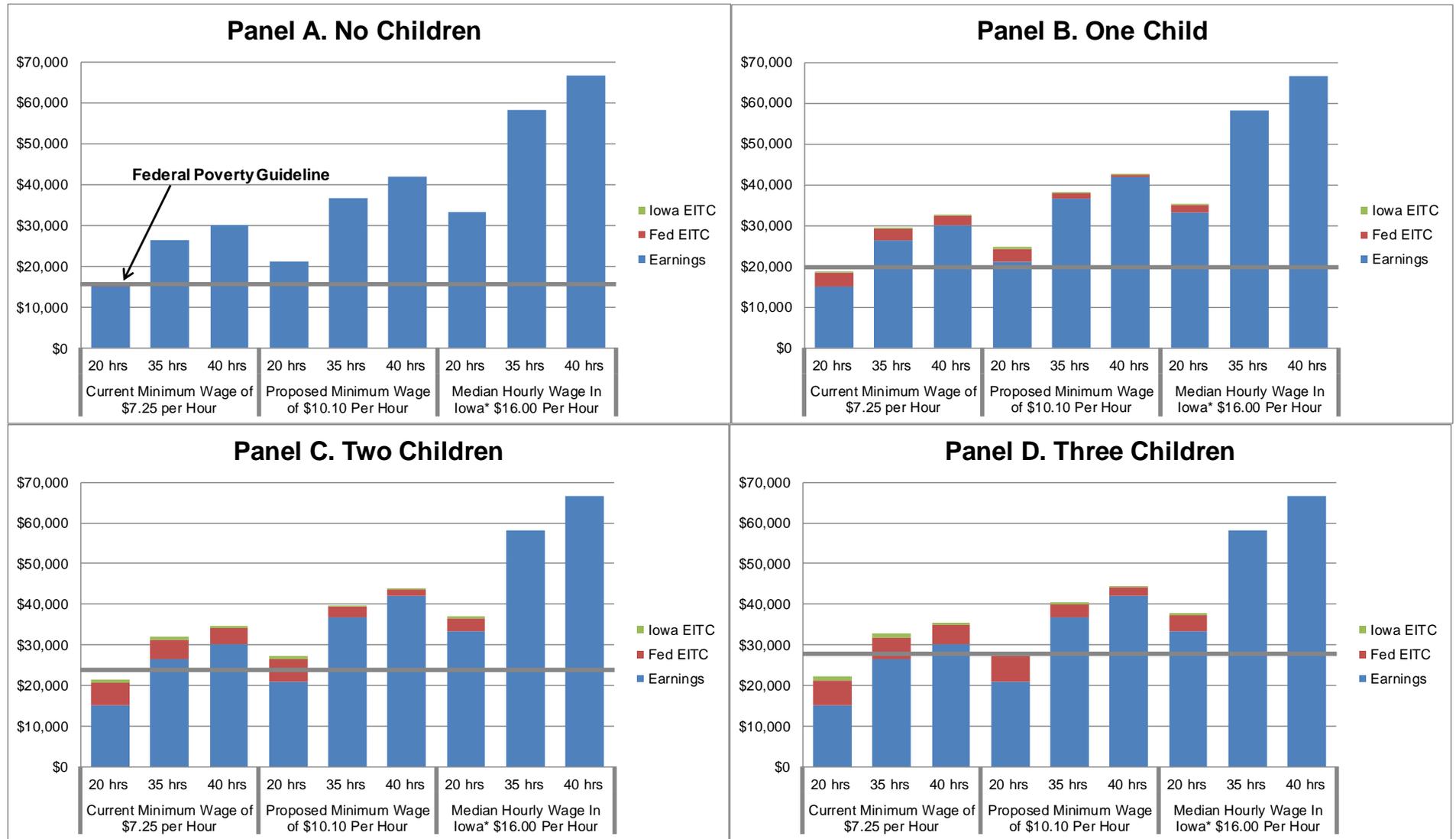
* As reported in the Iowa Workforce Development 2014 Laborshed Statewide Report.

Figure 9. Interaction of Wages, Hours, and EITC Claims for Example Married, One Earner Household Filers Compared to Federal Poverty Guidelines



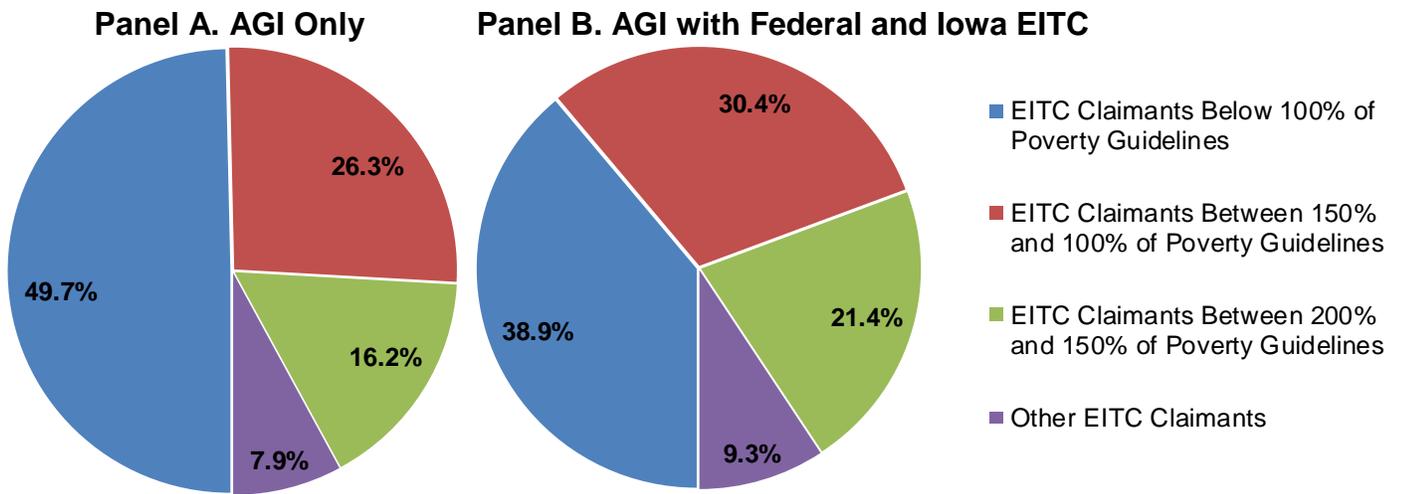
* As reported in the Iowa Workforce Development 2014 Laborshed Statewide Report

Figure 10. Interaction of Wages, Hours, and EITC Claims for Example Married, Dual Earner Household Filers Compared to Federal Poverty Guidelines



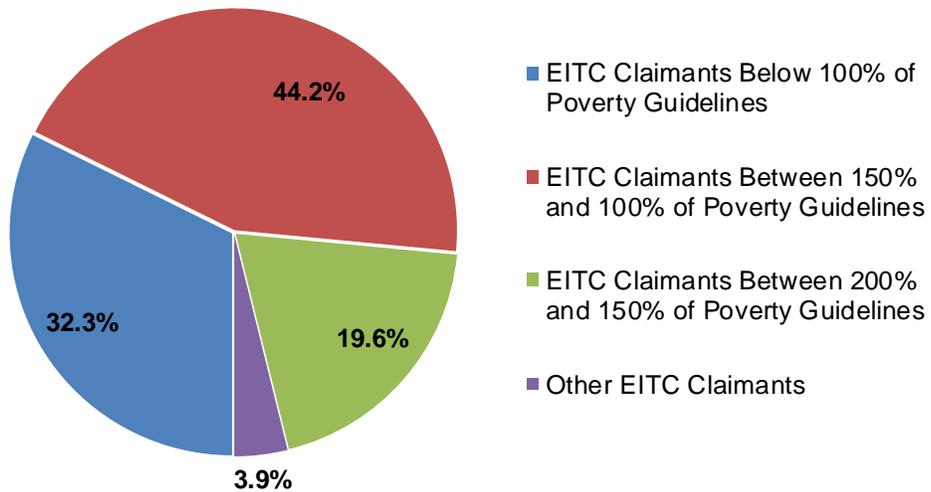
* As reported in the Iowa Workforce Development 2014 Laborshed Statewide Report

Figure 11. Distribution of Tax Year 2014 Iowa EITC Claimants by AGI Compared to Poverty Guidelines



Source: Iowa individual income tax returns

Figure 12. Distribution of 2014 EITC Claim Amount by AGI Only Compared to Poverty Guidelines



Source: Iowa individual income tax returns

Table 11. Distribution of EITC Claimants and Claims by Poverty Guidelines and Filing Status

AGI Compared to Poverty Guidelines	Single/Head of Household/ Qualified Widow(er) with Dependent				Married Joint/Married Separate Combined/ Married Separate			
	Claimants	Share of Claimants	EITC Amount	Share of EITC Amount	Claimants	Share of Claimants	EITC Amount	Share of EITC Amount
EITC Claimants Below 100% of Poverty Guidelines	68,923	31.3%	\$16,199,381	22.8%	16,859	7.6%	\$6,778,100	9.5%
EITC Claimants Between 150% and 100% of Poverty Guidelines	47,443	21.5%	\$21,782,993	30.6%	19,656	8.9%	\$9,643,855	13.6%
EITC Claimants Between 200% and 150% of Poverty Guidelines	29,372	13.3%	\$9,829,738	13.8%	17,833	8.1%	\$4,137,307	5.8%
Other EITC Claimants	15,957	7.2%	\$2,163,121	3.0%	4,475	2.0%	\$560,151	0.8%

Source: Iowa individual income tax returns

Table 12. Tax Years 2011 - 2014 Iowa Earned Income Tax Credit Claims by Refundable Status for Resident Families Receiving State Assistance

Tax Year	Resident Families with Iowa Earned Income Tax Credit Claims Matched to Various Combinations of State Assistance*								
	Total EITC			Offset Tax Liability EITC			Exceed Tax Liability EITC		
	Count	Total EITC	Average EITC	Count	Total EITC	Average EITC	Count	Total EITC	Average EITC
2011	88,392	\$15,517,058	\$176	40,826	\$6,543,593	\$160	58,472	\$8,973,465	\$153
2012	82,936	\$15,184,751	\$183	40,734	\$6,855,745	\$168	53,731	\$8,329,006	\$155
2013	89,259	\$33,149,838	\$371	44,418	\$12,124,648	\$273	65,563	\$21,025,190	\$321
2014	78,162	\$32,609,078	\$417	38,689	\$11,539,915	\$298	58,860	\$21,069,163	\$358
Total	338,749	\$96,460,725	\$285	164,667	\$37,063,901	\$225	236,626	\$59,396,824	\$251

Source: Iowa Department of Revenue and Department of Human Services

* Exceed Tax Liability EITC claims matched to various combinations of assistance are total Exceed Liability EITC amounts; i.e., offsets are not subtracted.

Table 13. Count of Households by Consecutive Years of EITC Claims

Consecutive Years	Number of Consecutive Claims by Tax Year										
	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014
One Year	43,310	46,551	47,985	119,794	71,622	79,669	71,976	79,049	75,117	78,414	75,829
Two Years	17,972	18,841	20,358	27,303	71,079	37,913	39,267	36,883	39,579	38,441	39,003
Three Years	11,802	10,587	11,041	13,992	18,767	51,142	24,561	25,401	23,679	25,852	24,647
Four Years	6,768	7,680	6,845	8,150	10,345	14,363	38,755	17,723	17,935	17,180	18,160
Five Years	13,680*	4,735	5,329	5,209	6,272	8,276	11,247	30,582	13,294	13,679	12,867
Six Years		10,273*	3,408	4,070	4,003	5,103	6,533	8,951	24,629	10,421	10,538
Seven Years			7,845*	2,673	3,180	3,315	4,102	5,247	7,281	20,279	8,213
Eight Years				6,259*	2,139	2,625	2,684	3,396	4,298	6,030	16,744
Nine Years					4,991*	1,796	2,146	2,217	2,812	3,556	4,977
Ten Years						4,140*	4,885*	5,751*	6,467*	7,713*	9,216*
Total	93,532	98,667	102,811	187,450	192,398	208,342	206,156	215,200	215,091	221,565	220,194

Source: Iowa individual income tax returns

* With data only analyzed going back to TY 2000 for Tax Years 2004 - 2008 and only 10 years back for Tax Years 2009 - 2014, the lowest number in the column reflects that consecutive year plus possible additional years.

Note: Bolded data reflects the Tax Year 2007 law change making the EITC refundable.

Table 14. Share of Households with Persistent EITC Claims by Consecutive Years

Consecutive Years	Distribution of Consecutive Claims by Tax Year										
	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014
One Year	46.3%	47.2%	46.7%	63.9%	37.2%	38.2%	34.9%	36.7%	34.9%	35.4%	34.4%
Two Years	19.2%	19.1%	19.8%	14.6%	36.9%	18.2%	19.0%	17.1%	18.4%	17.3%	17.7%
Three Years	12.6%	10.7%	10.7%	7.5%	9.8%	24.5%	11.9%	11.8%	11.0%	11.7%	11.2%
Four Years	7.2%	7.8%	6.7%	4.3%	5.4%	6.9%	18.8%	8.2%	8.3%	7.8%	8.2%
Five Years	14.6%*	4.8%	5.2%	2.8%	3.3%	4.0%	5.5%	14.2%	6.2%	6.2%	5.8%
Six Years		10.4%*	3.3%	2.2%	2.1%	2.4%	3.2%	4.2%	11.5%	4.7%	4.8%
Seven Years			7.6%*	1.4%	1.7%	1.6%	2.0%	2.4%	3.4%	9.2%	3.7%
Eight Years				3.3%*	1.1%	1.3%	1.3%	1.6%	2.0%	2.7%	7.6%
Nine Years					2.6%*	0.9%	1.0%	1.0%	1.3%	1.6%	2.3%
Ten Years						2.0%*	2.4%*	2.7%*	3.0%*	3.5%*	4.2%*
Total	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%

Source: Iowa individual income tax returns

* With data only analyzed going back to TY 2000 for Tax Years 2004 - 2008 and only 10 years back for Tax Years 2009 - 2014, the lowest number in the column reflects that consecutive year plus possible additional years.

Note: Bolded data reflects the Tax Year 2007 law change making the EITC refundable.

Table 15. Comparison between One-Year and Long-Term EITC Claimants by Filing Status and Number of Dependents, Tax Years 2005-2014

Iowa Filing Status	One-Year Claimants		Long-Term Claimants	
	Only One EITC Claim Between 2010-2013		Claim EITC for 10 Years Between 2005-2014	
	Number of Households	Percent of Households	Number of Households	Percent of Households
Married	25,072	25.7%	2,715	29.5%
Single	48,595	49.9%	573	6.2%
Head of Household	23,598	24.2%	5,914	64.2%
Qualifying Widow(er)	127	0.1%	14	0.2%
Total	97,392	100.0%	9,216	100.0%

Number of Dependents	Only One EITC Claim Between 2010-2013		Claim EITC for 10 Years Between 2005-2014	
	Number of Households	Percent of Households	Number of Households	Percent of Households
	0	50,115	51.5%	987
1	27,100	27.8%	3,157	34.3%
2	12,983	13.3%	2,879	31.2%
3+	7,194	7.4%	2,193	23.8%
Total	97,392	100.0%	9,216	100.0%

Source: Iowa individual income tax returns

Table 16. Persistence of Iowa Earned Income Tax Credit Claimants by Cohorts

Cohort	Year 1	Year 2	Year 3	Year 4	Year 5	Year 6	Year 7	Year 8	Year 9	Year 10
2004	31,828	12,963	7,427	5,436	4,184	3,385	2,728	2,269	1,884	1,608
2005	32,306	13,228	8,909	6,563	5,239	4,114	3,302	2,730	2,262	1,877
2006	32,534	17,618	11,905	8,956	6,997	5,529	4,513	3,726	3,072	
2007	87,583	50,008	35,183	26,475	20,823	16,694	13,739	11,420		
2008	54,565	27,808	17,797	12,773	9,598	7,507	5,968			
2009	53,666	25,304	16,004	11,279	8,603	6,676				
2010	47,197	23,008	14,447	10,449	7,846					
2011	48,430	22,921	14,654	10,238						
2012	45,741	22,250	14,100							
2013	46,203	21,966								
2014	44,812									

Source: Iowa individual income tax returns

Note: A cohort is defined as the group of EITC claimants who first claimed the credit in the same year.

Table 17. Share of Iowa Earned Income Tax Credit Claimants with Persistent Claims by Cohorts

Cohort	Year 1	Year 2	Year 3	Year 4	Year 5	Year 6	Year 7	Year 8	Year 9	Year 10
2004	100%	40.7%	23.3%	17.1%	13.1%	10.6%	8.6%	7.1%	5.9%	5.1%
2005	100%	40.9%	27.6%	20.3%	16.2%	12.7%	10.2%	8.5%	7.0%	5.8%
2006	100%	54.2%	36.6%	27.5%	21.5%	17.0%	13.9%	11.5%	9.4%	
2007	100%	57.1%	40.2%	30.2%	23.8%	19.1%	15.7%	13.0%		
2008	100%	51.0%	32.6%	23.4%	17.6%	13.8%	10.9%			
2009	100%	47.2%	29.8%	21.0%	16.0%	12.4%				
2010	100%	48.7%	30.6%	22.1%	16.6%					
2011	100%	47.3%	30.3%	21.1%						
2012	100%	48.6%	30.8%							
2013	100%	47.5%								
2014	100%									

Source: Iowa individual income tax returns

Table 18. Average Iowa Earned Income Tax Credit Claim by Cohorts and Year of Claim

Cohort	Year 1	Year 2	Year 3	Year 4	Year 5	Year 6	Year 7	Year 8	Year 9	Year 10
2004	\$85	\$105	\$116	\$150	\$159	\$182	\$176	\$197	\$197	\$406
2005	\$87	\$108	\$148	\$159	\$180	\$176	\$191	\$196	\$404	\$430
2006	\$91	\$140	\$157	\$181	\$179	\$198	\$202	\$420	\$445	
2007	\$107	\$141	\$161	\$165	\$182	\$190	\$399	\$422		
2008	\$92	\$134	\$148	\$171	\$181	\$384	\$411			
2009	\$93	\$126	\$154	\$172	\$370	\$399				
2010	\$91	\$134	\$159	\$353	\$387					
2011	\$92	\$135	\$318	\$359						
2012	\$95	\$282	\$336							
2013	\$193	\$260								
2014	\$211									
Average	\$93	\$126	\$147	\$166	\$208	\$255	\$276	\$309	\$349	\$418

Source: Iowa individual income tax returns

Note: Bolded numbers reflect tax year 2007 when the credit became refundable while bolded and italicized reflect tax year 2013 when the credit rate was doubled

Table 19. Average Real Wage Growth for EITC Claimants from Tax Year 2010 through Tax Year 2014

All (22,029 Taxpayers per Tax Year)

Tax Year	Average Real Wages	Real Wage Growth Since 2010	Real Average EITC Claim
2010	\$16,768	-	\$109
2011	\$22,645	35.0%	\$148
2012	\$26,428	57.6%	\$160
2013	\$28,383	69.3%	\$335
2014	\$30,970	84.7%	\$362

Source: Iowa individual income tax returns

Note: All wages and EITC values were adjusted to 2014 dollars

Table 20. Average Real Wage Growth for EITC Claimants Still Claiming EITC from Tax Year 2010 through Tax Year 2014

Still Claim (7,846 Taxpayers per Tax Year)

Tax Year	Average Real Wages	Real Wage Growth Since 2010	Real Average EITC Claim
2010	\$16,740	-	\$160
2011	\$18,368	9.7%	\$186
2012	\$19,248	15.0%	\$193
2013	\$20,013	19.6%	\$393
2014	\$20,997	25.4%	\$404

Source: Iowa individual income tax returns

Note: All wages and EITC values were adjusted to 2014 dollars

Table 21. Average Real Wage Growth for EITC Claimants Only Claiming EITC in 2010 from Tax Year 2010 through Tax Year 2014

Only Claimed 2010 (5,122 Claims per Tax Year)			
Tax Year	Average Real Wages	Real Wage Growth Since 2010	Real Average EITC Claim
2010	\$15,318	-	\$54
2011	\$31,602	106.3%	-
2012	\$38,732	152.8%	-
2013	\$41,312	169.7%	-
2014	\$44,626	191.3%	-

Source: Iowa individual income tax returns

Note: All wages and EITC values were adjusted to 2014 dollars

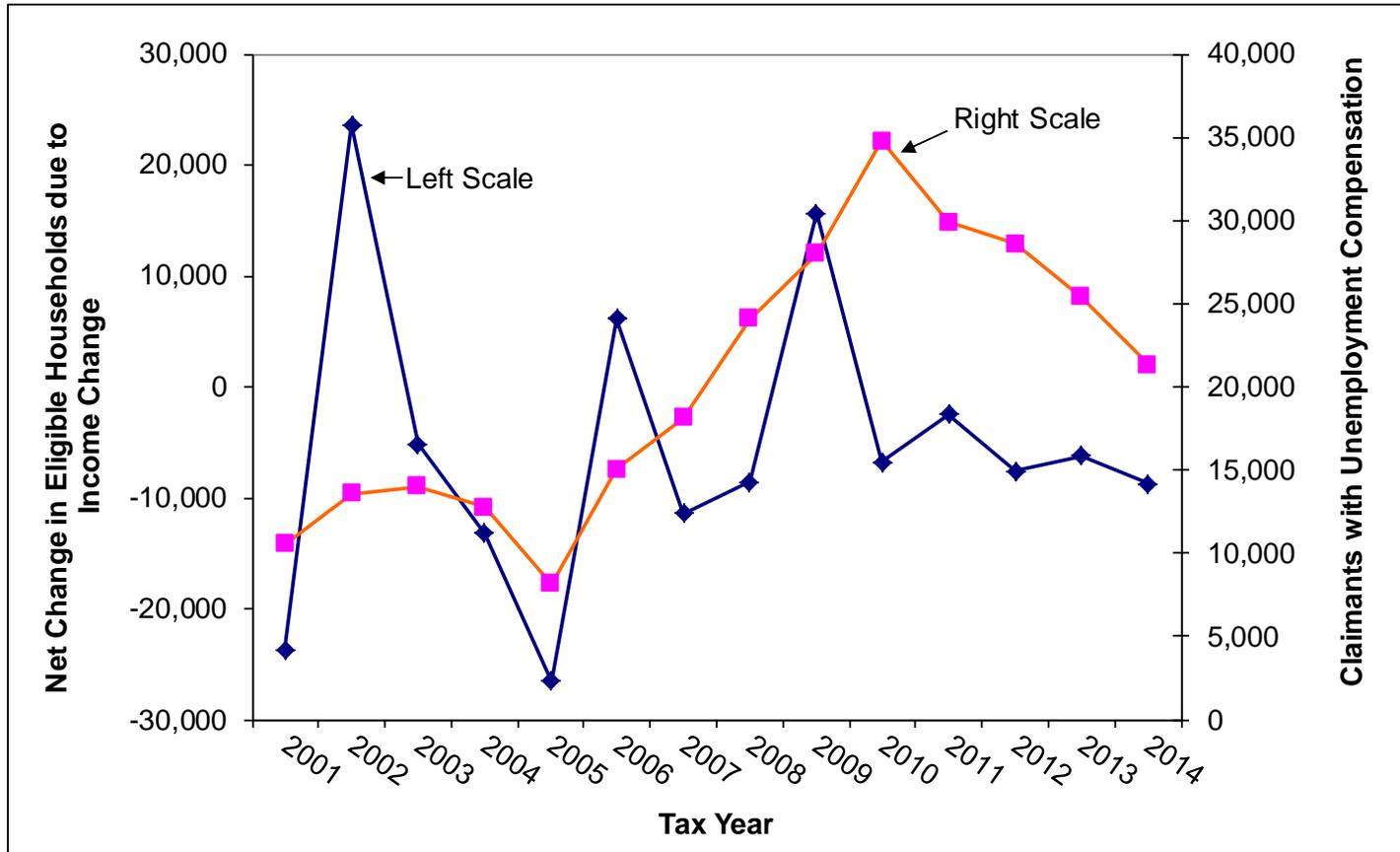
Table 22. Major Reasons for Taxpayers Moving In and Out of EITC Eligibility

Major Reasons for Entering EITC	2010	2011	2012	2013	2014	Average
No Tax Return Filed Previous Year	47.9%	45.0%	48.1%	48.3%	50.0%	47.9%
Earned Income Drops	36.8%	39.4%	36.1%	35.5%	35.1%	36.6%
Change in Marital Status	17.5%	16.9%	17.2%	16.8%	16.4%	16.9%
Add Dependents	16.3%	15.8%	16.3%	15.8%	14.5%	15.7%
Major Reasons for Leaving EITC	2010	2011	2012	2013	2014	Average
No Tax Return Filed Following Year	44.8%	48.0%	46.2%	47.4%	45.8%	46.4%
Earned Income Increases	43.4%	40.8%	43.6%	44.1%	45.3%	43.4%
Change in Marital Status	15.3%	15.0%	15.5%	15.0%	15.2%	15.2%
Fewer Dependents	11.5%	12.1%	12.1%	11.9%	13.3%	12.2%

Source: Iowa individual income tax returns

Note: Shares of different reasons are not mutually exclusive.

Figure 13. Interaction of the Business Cycle and EITC Eligible Households



Source: Iowa individual income tax returns