

lowa's Child and Dependent Care Tax Credit and Early Childhood Development Tax Credit

Tax Credits Program Evaluation Study

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Preface

During the 2005 Legislative Session the Iowa Department of Revenue received an appropriation to establish a 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 second evaluation study completed for the Iowa Child and Dependent Care Tax Credit and the Early Childhood Development Tax Credit.

The study was reviewed by Amy Rehder Harris. This study and other evaluations of lowa tax credits can be found on the <u>Tax Credits Tracking and Analysis Program web</u> page on the lowa Department of Revenue website.

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Executive Summary

The lowa Child and Dependent Care (CDC) Tax Credit was enacted in 1977 to provide tax relief to taxpayers with eligible child care costs for qualifying children under age 13 or disabled dependents. Today the refundable lowa CDC Tax Credit ranges from 75 to 30 percent of the federal CDC Tax Credit depending on the adjusted gross income of the taxpayer, with a maximum claim of \$1,576 for a household with two or more qualified children or dependents for taxpayers with net income under \$10,000.

The Iowa Early Childhood Development (ECD) Tax Credit was enacted in 2006 to provide tax relief to taxpayers with eligible early childhood development expenses for qualifying children between ages 3 and 5. This refundable credit is equal to 25 percent of the first \$1,000 in eligible expenses, resulting in a maximum claim of \$250 for each qualifying child.

Both credits can only be claimed by households with Iowa adjusted gross income below \$45,000. Taxpayers can claim only one of these two credits in a tax year.

The major findings of the study are these:

Federal Child and Dependent Care Tax Credit

- The nonrefundable federal Child and Dependent Care Tax Credit, created in 1976, today allows taxpayers to reduce tax liability, depending on the income of the taxpayer, by an amount between 35 and 20 percent of \$3,000 in eligible child care expenses for one qualifying child or \$6,000 for two or more qualifying children.
- Qualifying dependents include children aged 13 and under as well as spouses or dependents who are disabled.
- To be eligible, expenses for the care of a qualifying dependent must be work-related, where they allow the taxpayer (and the spouse if filing jointly) to work or look for work. Eligible expenses must be equal to or less than the earnings of a secondary worker in a household filing jointly.

State Programs to Support Early Childhood Development

- Expenses eligible for the Early Childhood Development Tax Credit include preschool tuition, books that improve child development, instructional materials required to be used in a lesson activity, and child development and educational activities outside the home.
- lowa supports two State-funded pre-K programs, the Statewide Voluntary Preschool Program for Four-Year-Old Children (SWVPP) and Shared Visions. In 2017, State funding for the former program was \$76 million, helping 23,518 children, while the latter program spent \$7.7 million on 1,399 children.

Characteristics of Child and Dependent Care Tax Credit Claimants

- For tax year 2016, 23,519 claimants claimed \$6.1 million in CDC Tax Credits. The average CDC claim was \$258.
- In tax year 2012, an administrative rule change limited claims to only those taxpayers who are able to claim the federal CDC, resulting in the number of claims declining by 25.6 percent and the total amount of claims declining 40.1 percent.
- During the 2014 Legislative session, the Code was modified to clarify that, effective
 for tax years 2015 and later, the refundable lowa credit is based on the federal tax
 credit for which the taxpayer is eligible regardless of whether the taxpayer was able
 to claim the full amount or any of the nonrefundable federal tax credit. As a result,
 the number of claims in tax year 2015 increased by 7.7 percent and the total amount
 of claims increased 40.1 percent.
- For households reporting a child under age 13 and Iowa net income below \$45,000 on their tax year 2016 return, only 16.6 percent claimed the CDC Tax Credit.
- In tax year 2016, households with income between \$20,000 and \$29,999 comprised 32.0 percent of the number of claims and claimed 34.6 percent of the tax credit dollars.
- Single parents claimed 86.0 percent of the credits in tax year 2016. Taxpayers aged between 26 and 30 made 31.5 percent of the claims. Households with just one child made 65.1 percent of claims.

Eligible Child Care Costs

- Eligible child care expenses for qualifying children reported by lowans on their federal returns totaled \$444.7 million in tax year 2016. On average, households reported eligible child care costs of \$4,637 for qualifying children, limited by the caps, or \$3,180 for each child. Overall, 43.5 percent of households reported child care expenses equal to the \$3,000 for one child or \$6,000 for two or more children, indicating these families face the expenses cap under the federal tax credit. The highest average eligible expenses per child, \$4,289, was reported by households with net income \$130,000 or higher, and the second highest average, \$3,515, was reported by taxpayers with AGI of \$110,000 \$129,999.
- lowa CDC claimants reported that an average of 29.9 percent of eligible child care
 costs are covered by their claims to the federal CDC Tax Credit and Iowa CDC Tax
 Credit when expenses are capped. However, when expenses are capped, Iowa
 CDC claimants reported that an average of 19.9 percent of eligible child care costs
 are covered by their claims to the federal CDC Tax Credit and Iowa CDC Tax Credit

Characteristics of Early Childhood Development Tax Credit Claimants

- The ECD Tax Credit claims increased from \$0.5 million in 2006 to \$0.9 million in 2012 before experiencing a steady decline through 2016. In tax year 2016, 4,295 claimants claimed \$0.66 million in credits with an average claim of \$153.
- For households reporting a child between ages 3 and 5 and income below \$45,000 on their tax year 2016 return, only 12.1 percent claimed the ECD Tax Credit.
- In tax year 2016, households with income between \$15,000 and \$24,999 comprised 24.7 percent of claimants and claimed 24.0 percent of the credit.
- Married households claimed 41.5 percent of the credits. Taxpayers aged between 26 and 30 made 31.2 percent of the claims. Households with just one child made 83.2 percent of claims.

Persistence of Child and Dependent Care and Early Childhood Development Tax Credits

- Of all households making either CDC or ECD claims in tax year 2016, 53.9 percent of households claimed either the CDC or ECD in tax year 2016 but not in 2015, and 23.9 percent claimed either the CDC or ECD in tax years 2015 and 2016, but not 2014.
- Long-term CDC or ECD claimants, taxpayers with claims in five consecutive tax years from TY 2012 through 2016, predominatly filed as head of household, 86.0 percent in TY 2016, while only 7.5 percent of claimants were married in TY 2016. In contrast, 37.8 percent of one-year claimants, taxpayers with only one CDC or ECD claim between tax years 2008-2011 (before the rule change) or tax years 2012-2014 (when rule change was effective), filed as married.
- Of claimants in tax years 2008-2011, an average of 10.8 percent had made claims in all of the previous five years or more. Of claimants in tax years 2012-2016, the average share that had made claims for five or more consecutive years decreases to 10.3 percent. This suggests that there is waning persistence.

Total Usage and Future Changes

- Between tax years 2007 and 2016, 114,488 households living in Iowa claimed either the CDC or ECD at least once, 8.2 percent of all Iowa households.
- Changes to the individual income tax for tax year 2023, enacted during the 2018
 Legislative session, include the redefinition of net income. Because the income
 threshold for the CDC and ECD Tax Credits is specified as net income, this change
 is estimated to result in an increase in the number of eligible households, about 50
 percent for the CDC and 5.6 percent for the ECD.

I. Introduction

lowa offers two tax credits for low-income families with young children to help with the costs of child care or preschool. The Child and Dependent Care (CDC) Tax Credit assists working parents with expenses for the care of a qualifying individual. The Early Childhood Development Tax Credit helps parents with preschool expenses for children aged three to five. Taxpayers are allowed to claim only one of these two credits in one tax year.¹

The CDC Tax Credit is calculated as a percent of the federal CDC Tax Credit ranging from 75 to 30 percent with the rate falling as income rises. Under current law, the maximum lowa credit is \$788 for one child or dependent and \$1,575 for two or more. The lowa credit is not available to families with lowa net income of \$45,000 or over. Unlike the federal credit, the lowa credit is refundable, which means if a taxpayer is eligible for the credit but has no lowa tax liability the taxpayer can receive a refund equal to the credit.

The ECD Tax Credit is equal to 25 percent of the first \$1,000 in eligible expenses paid for early childhood development for each dependent aged 3 to 5. Like the CDC Tax Credit, the ECD Tax Credit is only available to taxpayers whose lowa income is less than \$45,000, and it is also refundable.

II. Federal and State Tax Programs to Subsidize Child and Dependent Care

A. Child Care Costs in Iowa and the U.S.

Subsidizing the expenses of child care for working parents is the motivation for the federal and lowa Child and Dependent Care Tax Credits. Child care can present both a barrier to entering the workforce and an additional expense that makes work less rewarding. Many low and moderate-income taxpayers pay a significant portion of their incomes for child care. Middle- and upper-middle class parents also find child care is costly. For example, in 2017 the cost of full-time child care for an infant in a child care center was 11.7 percent of median family income for married couples in lowa and 40.7 percent for single parents (Child Care Aware of America, 2017). In lowa for 2017, the average annual cost for full-time care for a four-year-old child in a child care center was \$8,219 and \$6,722 for full-time care in a family child care home (see Table 1).² These costs nearly equaled the average annual in-state tuition and fees for an lowa public four-year college which were \$8,759 in 2017 (Trends in Higher Education, 2017). Child care is expensive not only in lowa; the average annual child care cost for a four-year-old

¹ Found in Iowa Code 422.12, the processing and review of claims to these two tax credits is handled by the Iowa Department of Revenue (IDR) as part of its normal examination and audit programs.

² "Family child care home" is a child care facility in the home of the provider, often a parent. Small family child care homes have one provider and can accept up to eight children, depending on their ages. Large family child care homes have two adults and can take up to 14 children, depending on their ages. Care is often provided for children of different ages.

child in a child care center in 2017 ranged between \$4,312 and \$14,256 nationally, while the average annual tuition and fees for a public four-year college is \$8,244.

Compared with other states, it is particularly important for lowa to address the child care costs for working parents based on the child care needs of working families. The 2017 American Community Survey data (U.S. Census Bureau, 2017) show the share of lowa children under age 6 with both parents in the labor force was 74.5 percent, which was tied for fifth highest among the states (the nationwide average share is 65.9 percent).

B. Federal Child and Dependent Care Tax Credit

The federal CDC Tax Credit reduces the tax liability of taxpayers incurring eligible expenses for the care of a qualifying person that made it possible for the taxpayer to work or to seek employment.

Prior to this tax provision, the courts had ruled that expenses incurred for the care of a dependent, such as babysitting or daycare, while the taxpayer is at work are not a deductible business expense or work-related expense. Therefore, child care expenses were not deductible under IRC section 162(a) allowing a deduction for all the ordinary and necessary expenses paid or incurred during the taxable year in carrying on any trade or business. There were two main reasons for the Board of Tax Appeals refusing to allow the child care deduction as a job expense over 70 year ago: first, the expenditures were essentially "personal" expenses; second, a deduction could not be made for an expense that was a substitute for imputed non-taxable income, a housewife's services (Smith V. Commissioner, 1940).

The first kind of federal tax relief for child and dependent care costs appeared in 1954 as an itemized deduction not exceeding \$600 for a household regardless of the number of dependents. The deduction was available only to women and widowers and applied to the costs of caring for children ages 11 and younger and dependents incapable of self-care. An income-based phase-out of the deduction applied to married couples, with the allowable deduction for working wives who filed joint returns reduced by the amount a couple's combined adjusted gross income (AGI) exceeded \$4,500. This reduction condition was only for working wives (excluding single parents), according to the tax form instructions. There was no phase-out for unmarried women (including married women who were legally separated from their husbands), wives whose husbands were incapable of self-support, and widowers.³ In 1964, various changes to the deduction were made including an extension to cover the care of 12-year-olds, allowing the deduction to be claimed by married men whose wives were institutionalized or incapacitated, an increase in the maximum deductible amount to \$900 for taxpayers with two or more dependents, and a rise in the starting point of the phase-out for married couples to \$6,000. Effective in 1972, all gender-based eligibility rules were removed; the deduction was available to "individuals." The maximum deductible amount was dramatically increased to \$2,400/\$3,600/4,800 depending on the number of dependents. The age limitation for qualifying dependents was raised to under age 15.

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³ Section 214 of the Internal Revenue Code of 1954: Starting in 1963, Congress exempted some married women who had been deserted by their husbands from the phase-out.

The starting point of the phase-out was increased to \$18,000; the amount of eligible expenses was reduced by one-half of excess AGI over \$18,000. The phase-out was extended to unmarried taxpayers. The federal benefit remained a deduction through 1975, providing benefit for only those taxpayers who itemized deductions.

Effective in tax year 1976, the federal child care tax benefit was converted to a nonrefundable tax credit equal to 20 percent of eligible child care expenses up to \$2,400 for one child and \$4,800 for two or more children. There was no phase-out. Effective in tax year 1982, the flat 20 percent rate was changed to a schedule starting at 30 percent for taxpayers with income less than \$10,000 and then phasing-down to 20 percent for eligible taxpayers with income over \$28,000. In 1983, the ability to claim the CDC was added to the short form, US 1040A. Effective in 1988, Social Security numbers of care providers were required when filing a claim to the tax credit, and overnight camp expenses were no longer considered eligible expenses. Effective in 1989, a qualifying children's age was lowered to under age 13.

The Economic Growth and Tax Relief Reconciliation Act (EGTRRA) of 2001 made numerous expansions to the federal credit beginning in tax year 2003: it raised the top credit rate from 30 percent to 35 percent, boosted the maximum child care expenses eligible for the credit from \$2,400 to \$3,000 for one child and \$4,800 to \$6,000 for two or more children, and increased the threshold above which the highest credit rate declined from \$10,000 to \$15,000. The credit starts at 35 percent for those with AGI between \$0 and \$15,000 and it is reduced by one percentage point for each \$2,000 AGI exceeds \$15,000 (see Table 3). For taxpayers with AGI exceeding \$43,000, the percentage remains flat at 20 percent. The 2003 version of the federal CDC Tax Credit is the most generous federal benefit to-date. The expansions, originally set to expire in 2010, were extended two years in 2010, and made permanent in 2013.

To claim the federal CDC Tax Credit, the taxpayer is required to file Form 2441 "Child and Dependent Care Expenses" with the individual income tax return. A claim to the federal CDC Tax Credit requires a qualified child or dependent, eligible expenses, and meeting additional requirements for the taxpayer (IRS Publication 503, 2016).

A qualifying child or dependent is defined as:

- A child who is under age 13 when the care is provided;
- A spouse who is physically or mentally incapable of self-care and who has the same principal place of abode as the taxpayer for more than half of the year; or.⁴
- A dependent of any age who is physically or mentally incapable of self-care and who has the same principal place of abode as the taxpayer for more than half of the year. For this purpose, whether an individual is the taxpayer's dependent is determined without regard to the individual's gross income, whether the individual files a joint return, or whether a dependent of another taxpayer.

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⁴ An individual is physically or mentally incapable of self-care if, as a result of a physical or mental defect, the individual is incapable of caring for his or her hygiene or nutritional needs, or requires the full-time attention of another person for the individual's own safety or the safety of others.

 If a qualifying child or dependent lives with a taxpayer for only part of the tax year, only those expenses paid during that part of the year can be included in calculating the credit. A noncustodial parent may not treat a child as a qualifying individual for purposes of the credit even if the noncustodial parent may claim an exemption for the child.⁵

Eligible expenses for the federal CDC Tax Credit must be work-related to qualify for the credit. Expenses are considered work-related only if both of the following are true. First, they allow the taxpayer (and the spouse if filing jointly) to work or look for work. Second, they are for a qualifying child's care. Eligible expenses must be equal to or less than the earnings of a secondary worker in a household filing jointly.

Eligible expenses do not include:

- Child support payments.
- Any child care benefits provided by an employer that a taxpayer excludes from gross income.
- Expenses covered by wages diverted to a pre-tax flexible spending account for child care expenses.
- Expenses reimbursed by a state social service agency unless the taxpayer includes the reimbursement in income.
- Expenses incurred during a period where a taxpayer worked or actively looked for work during only part of the period. Generally, the taxpayer must calculate the expenses for each day. However, there are special rules for temporary absences or part-time work.⁷

In addition, taxpayers are required to meet the following conditions to be eligible for the credit:

- Married couples must file a joint return to take the credit; married separate filing status cannot be used. However, if the taxpayer is legally separated or living apart from the spouse, he or she may be able to file a separate return and still take the credit.
- If the taxpayer is filing a joint return, both the taxpayer and spouse must have earned income unless one spouse is a full-time student. Earned income includes wages, salaries, tips, other taxable employee compensation, and net earnings from self-employment. A net loss from self-employment reduces earned income. Earned income also includes strike benefits and any disability pay a taxpayer reports as wages.

⁶ References to a qualifying child or eligible child care expenses, hereafter in this paper, are intended to include qualified dependents or eligible dependent care expenses as well.

⁵ For more information on divorced or separated parents or parents who live apart at all times during the last six months of the year, refer to the topic "Child of Divorced or Separated Parents or Parents Living Apart" in Publication 503, Child and Dependent Care Expenses.

include qualified dependents or eligible dependent care expenses as well.

⁷ See the topic "Working or Looking for Work" in Publication 503, Child and Dependent Care Expenses for more details.

• The taxpayer must report the name, address, and taxpayer identification number (either the Social Security number or the employer identification number) of the child care provider. If the child care provider is a tax-exempt organization, taxpayers need only report the name and address on the return. If taxpayers cannot provide information regarding the child care provider, they may still be eligible for the credit if they can show that they exercised due diligence in attempting to provide the required information.

The federal CDC Tax Credit does not have an upper income limit. Therefore, it is not specifically targeted to low-income taxpayers, although the sliding scale rate structure has the potential to benefit low-income taxpayers more. The maximum federal credit that can be claimed by a taxpayer with maximum eligible child care expenses for two qualifying children is \$2,100 if AGI is below \$15,000 (see Figure 1). That amount falls as AGI increases until flattening to \$1,200 at \$43,000 or higher of AGI. The maximum eligible expenses and the income brackets are not indexed. Thus, each year the real value of these provisions erodes as a result of inflation. If the \$45,000 income limit had been indexed since 2006, and rounded to the nearest \$10, the income limit for tax year 2018 would be \$56,080.

The federal credit is nonrefundable. That is, it can only be used to offset income tax liability prior to any refundable credits, such as the federal Earned Income Tax Credit, and does not benefit those without federal tax liability. Any credit that cannot be used against current tax year liability cannot be carried forward to future tax years.

C. Iowa Child and Dependent Care Tax Credit

The lowa Child and Dependent Care Tax Credit is targeted to low- and moderate-income families with lowa adjusted gross income below \$45,000. The goal of the tax credit is to make it financially easier for parents to work or seek work by offsetting necessary child care costs.

The lowa CDC Tax Credit went into effect on January 1, 1977 as a nonrefundable tax credit equal to five percent of the federal credit (see Table 2). In 1983, the state credit percentage was increased from five percent to ten percent of the federal credit. The state credit percentage was increased again in 1986 to 45 percent of the federal credit. In 1990, the CDC became a sliding scale percentage of the federal credit spanning 75 to 10 percent and also became refundable. The change to a refundable credit meant that taxpayers with a claim that exceeded their lowa tax liability could receive a payment from the State equal to the amount of the tax credit that exceeded tax liability. In 1993, an income limit was introduced. Only taxpayers with lowa AGI below \$40,000 were allowed to claim the CDC, and the credit rate range was truncated to between 75 and 40 percent. An additional income bracket was added effective January 1, 2006 to allow taxpayers with AGI between \$40,000 and \$44,999 to claim a credit equal to 30 percent of the federal credit.

Before tax year 2012, the rules were unclear as to whether the state credit could be claimed if the taxpayer was not able to claim the nonrefundable federal credit due to a

lack of tax liability. In response to some taxpayer protests generated from audits, effective in tax year 2012, the administrative rule pertaining to the CDC Tax Credit, which stated that the lowa CDC Tax Credit is a percent of the allowed federal CDC, was revised to clarify that the allowed credit equals the actual amount of federal CDC received by the taxpayer.⁸ As a result, taxpayers with no federal tax liability who could not claim any nonrefundable federal CDC could no longer claim the lowa CDC. Once the impact of this rule change was realized, with claims dropping approximately \$3 million (40.1%), the 2014 Legislature changed the Code language for the tax credit that the amount of federal CDC for which the taxpayer is eligible is the point of calculation for the lowa tax credit, not the federal CDC that could actually be claimed.⁹ Due to revenue concerns, the change was made effective beginning with the 2015 tax year, delaying the fiscal impact until FY 2016.

Under current law, the maximum lowa credit is \$788 for one qualifying child (see Table 3). For households with two and more qualifying children, the maximum lowa credit is \$1,575 for claimants with lowa AGI below \$10,000. The credit phases down to \$396 for claimants with lowa AGI between \$40,000 and \$44,999 (see Figure 1). To claim this credit, taxpayers must include a copy of their completed federal Form 2441. As noted above, the CDC cannot be claimed if the ECD is claimed.

For nonresidents and part-year residents, the tax credit must be prorated based on the ratio of lowa-source income to total income. For married separate filers on the same return the combined AGI of both spouses must be used in computing the credit. The credit must be divided between spouses in the ratio of each spouse's net income to their combined net income.

III. State Programs to Support Early Childhood Development

A. Iowa Early Childhood Development Tax Credit

lowa's Early Childhood Development Tax Credit was enacted in tax year 2005 and went into effect starting January 1, 2006. The goal of the tax credit is to help low-income households with early childhood expenses, particularly preschool expenses, thus encouraging parents to invest in the development of young children and prepare them for school.

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⁸ Iowa Administrative Bulletin (September 9, 2012) amended subrule 42.15(1) to provide additional clarification on how the Iowa CDC Tax Credit for Iowa individual income tax is computed by adding the bolded sentence: "42.15(1) Computation of the Iowa child and dependent care credit. The Iowa child and dependent care credit which is allowed for federal income tax purposes under Section 21 of the Internal Revenue Code. For taxpayers whose federal child and dependent care credit is limited to their federal tax liability, the Iowa credit shall be computed based on the lesser amount." This change is supported by case law which claims that tax credits and exemptions from taxation are to be construed strictly against the taxpayer and liberally in favor of the taxing body.

⁹ SF 2337 added the following language to 422.12C "without regard to whether or not the federal credit was limited by the taxpayer's federal tax liability" thereby requiring a rewrite of the Department's administrative rules to remove the change made in 2012.

The ECD Tax Credit equals 25 percent of the first \$1,000 of eligible expenses paid in a tax year for each dependent aged 3 through 5. There is no limit on the number of dependents for which a household can claim the ECD, but the tax credit is only available to taxpayers whose lowa adjusted gross income is less than \$45,000. The ECD is refundable.

Early childhood development expenses eligible for the credit include the following:

- Services provided to the dependent by a preschool;¹⁰
- Books that improve child development, such as textbooks, music and art books, teacher's editions and reading books;
- Instructional materials required to be used in a lesson activity, such as paper, notebooks, pencils and art supplies;
- Lesson plans and curricula;
- Child development and educational activities outside the home, such as drama, art, music and museum activities and the entrance fees for such activities.

Early childhood development expenses that are not eligible for the credit include:

- Food, lodging, or membership fees relating to child development and educational activities outside the home;
- Services, materials, or activities for the teaching of religious tenets, doctrines, or worship, if the purpose of these expenses is to instill those tenets, doctrines, or worship.

For nonresidents and part-year residents, this credit may be claimed in full. For credits claimed by married taxpayers who elect to file separately on a combined return, the ECD Tax Credit shall be prorated to each spouse in the ratio of each spouse's net income to their combined net income. This credit cannot be claimed in the same tax year that the CDC Tax Credit is claimed.

B. Other Subsidies for Preschool Expenses in Iowa

Besides the ECD Tax Credit, Iowa supports two State-funded pre-K programs, the Statewide Voluntary Preschool Program for Four-Year-Old Children (SWVPP) and Shared Visions. These two programs are offered in conjunction with other State and federally funded preschool programs such as Head Start, Early Childhood Special Education, and Title I.

In 2007, the Iowa legislature created SWVPP.¹¹ The Iowa Department of Education provides administration and oversight for the program. The purpose of SWVPP is to provide an opportunity for all four-year-old children in the state of Iowa to enter school ready to learn by expanding access to research-based preschool curricula and licensed

¹⁰ "Preschool" is defined in Section 237A.1, Code of Iowa as "a child care facility which provides to children ages three through five, for periods of time not exceeding three hours per day, programs designed to help the children to develop intellectual skills, social skills, and motor skills, and to extend their interest and understanding of the world about them."

¹¹ Iowa Code section 256C by Iowa Acts 2007 (HF 877).

teaching staff. In academic year 2016-2017, 23,518 children were enrolled in SWVPP. Currently, the program is offered in 97.9 percent of Iowa's school districts. The funding totaled \$76 million in academic year 2016-2017.

The Shared Visions Preschool Program was established in 1989 and is also administrated by the Iowa Department of Education. Shared Visions offers child development programs for at-risk children ages three to five years whose families have an income below 130 percent of the poverty level. In academic year 2016-2017, State of Iowa funds totaling \$7.7 million served 1,399 children.

IV. Analysis of Child and Dependent Care Tax Credit and Early Childhood Development Tax Credit Claims and Claimants

The main data source used in this study is lowa individual income tax returns which include taxpayers' income, tax credits claimed, and tax liability. The taxpayers' age, county of residence, number of dependents, and the ages of up to four dependents are also available. Unfortunately, other demographic measures such as educational attainment, gender, and race of taxpayers are not available. The analysis focuses on tax year 2016 as that is the most recent year of complete return data.

A. Claims to the Tax Credits

Between 1977 and 2016, the total amount of the Iowa Child and Dependent Care Tax Credit claims increased from \$1.6 million to a high of \$15.5 million in 1988 before falling to \$4.5 million in 2012 (see Table 2 and Figure 2). The number of taxpayers claiming the CDC Tax Credit increased to a high of 176,800 in 1988 when the credit had no income limit, before declining to 21,432 in 2014 when only those Iowa taxpayers with Iowa net income below \$45,000 and some federal tax liability were eligible for the Iowa tax credit (prior to 1984, data for the number of claims are not available). The number of claimants presented here is on a taxpayer basis, thus households filing married separately on the same return are counted as two taxpayers if both made a CDC Tax Credit claim. The average amount claimed per return increased from \$66 in 1984 to \$243 in 2005, falling to \$192 in 2012 and reaching a high of \$258 in 2016.

As indicated above, changes in the tax provisions for the federal and Iowa CDC have caused variation in claim numbers and amounts over the history of the tax credit. The largest increase in the total amount of claims, from \$3.5 million to \$8.1 million (134.4%), occurred between 1982 and 1983, when the Iowa credit percentage linked to the federal credit rose from 5 percent to 10 percent. Between 1992 and 1993, the number of claims decreased dramatically from 145,300 to 67,800 (-53.3%). Beginning in 1993, claims to the Iowa Child and Dependent Care were limited to households with income below \$40,000. The introduction of an income limit also decreased the total claimant amount

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¹² In this section, all amounts provided are nominal (not adjusted for inflation).

Historical claimant counts prior to 1995 are only available from the IDR Individual Income Tax Annual Statistical Reports which present tax credit claim counts on an individual taxpayer basis.

from \$10.4 million to \$7.9 million (-24.0%). However, the average claim experienced the biggest increase in 1993 from \$72 to \$117 (62.8%) because higher income claimants previously eligible for 30 percent or less of the federal credit were no longer qualified to claim the Iowa CDC. In 2003, the federal CDC expansion explains the increase in the total amount claimed from \$6.2 million to \$8.4 million (35.5%). In 2006, raising the Iowa income limit to \$45,000 led to an increase of claimants from 33,900 to 39,400 (16.3%) and an increase in total credits from \$8.2 million to \$8.9 million (8.2%). The administrative rule change effective in 2012 clarifying that the Iowa credit can only be claimed if the taxpayer was eligible to receive a federal credit, the number of claims dropped approximately one quarter and total claims dropped 40 percent. With the expansion of eligibility to again include those who have no federal tax liability effective for tax year 2015, the number of claims increased by 7.7 percent and the total amount of claims increased 40.1 percent.

Both the number of taxpayers making claims and the total amount of claims increased since the enactment of the Early Childhood Development Tax Credit in 2006 through 2012, likely reflecting growing taxpayer awareness. In 2007, the second year after enactment of the ECD, the number of claims measured on an individual taxpayer basis rose from 3,507 to 3,790 (8.1%) and total claims increased by \$45,000 (10.5%) from \$0.46 million to \$0.51 million (see Table 4 and Figure 3). The largest increase in claims occurred between 2010 and 2011; the number of claims increased from 4,303 to 5,112 (18.8%) and total claims rose from \$0.59 million to \$0.75 million (26.7%).

The number of ECD claimants steadily decreased from its high of 5,768 in 2012 down to 4,295 claimants in 2016 while total claims decreased from \$0.85 million to \$0.66 million. The largest decrease in claims occurred between 2013 and 2014; the number of claims decreased from 5,443 to 4,849 (10.9%) and the amounts of claims fell from \$0.8 million to \$0.7 million (7.0%). There have been no policy changes to explain the changing patterns in usage.

Another way to assess the tax credit claims is to look at the take-up rate (or utilization rate) over time. The take-up rate for the CDC is measured as the ratio of households making CDC claims to the number of households filing tax returns with income below \$45,000 and with at least one dependent under age 13 who did not make a claim to the ECD, which would make them ineligible for a CDC claim. Because the lowa Earned Income Tax Credit was available for working parents with earned income up to \$44,846 with one child, \$50,198 for two children, and \$53,505 for three or more children in tax year 2016, it is believed that most low-income working parents filed an lowa tax return over the last decade even if they had income below the filing threshold. However, many of these households may not pay for child care because a parent is available to provide the care, or care is provided by another relative at no cost. Therefore, it is expected that take-up rates for the credit will be well below 100 percent. Indeed, the CDC take-up rates have been below 26.0 percent (see Figure 4). In general, the take-up rate of the CDC decreased from a high of 26.0 percent in 2006 to a low of 14.9 percent in 2013 before climbing to 16.6 percent in 2016.

The ECD take-up rate is measured as the ratio of households making an ECD claims to households filing a tax return with at least one child between ages 3 and 5 and income less than \$45,000 who did not make a claim to the CDC, which would make them ineligible for an ECD claim. Again, it is expected that the take-up rate will be well below 100 percent because many alternatives to paying for preschool are available, including State preschool programs that support early childhood development. Also, parents may choose not to invest in early childhood development, so taxpayers may not have eligible expenses. Overall, the take-up rate of the ECD is estimated to have been lower than that for the CDC. In contrast to the CDC take-up rate, the ECD's take-up rate increased at the start of the decade. The rate jumped from 9.3 percent in 2010 to 12.0 percent in 2011, and further to 13.2 percent in 2012 (see Figure 4). Between 2013 and 2016 the annual ECD take-up rate remained above 12 percent.

Take-up rates were also analyzed on a county level, based on the county reported by households on the tax returns. In tax year 2016, CDC take-up rates ranged from 29.6 percent in Worth County to 6.9 percent in Wayne County (see Figure 5). For the ECD, Mills County had the highest take-up rate at 20.8 percent, followed by Louisa County at 18.9 percent. Buena Vista County had the lowest take-up rate at 2.7 percent (see Figure 6).

B. Child and Dependent Care Tax Credit Claimant Characteristics

In tax year 2016, 6.2 percent of claimants reported lowa adjusted gross income less than \$10,000, 32.9 percent reported AGI between \$10,000 and \$24,999, and the remaining 60.9 percent of claimants reported between \$25,000 and \$44,999 in AGI (see Table 5). Unlike prior analysis, claims here are reported on a household basis; taxpayers filing married separate on the same return with two claims are counted as one household. In terms of the amount of credits claimed, 8.2 percent was claimed by households with AGI less than \$10,000. The pattern of the average CDC claim by income group shows the structure of the CDC as it relates to income, with the average credit being higher at lower income levels and then falling as the credit rate phases down. Between AGI levels of \$20,000 and \$44,999, the average claim decreased from \$353 to \$146.

Head of household filers made up the largest share of CDC claims by filing status (74.2%), followed by married filing separately on combined returns (11.4%), single filers (8.7%), married joint filers (5.6%), and qualifying widow(er) (0.1%) (see Table 6). In total, unmarried taxpayers - single, head of household or qualifying widow(er) - comprised 83.0 percent of all CDC claimants, while married filers accounted for 17.0 percent. When viewed by amount of credits claimed by filing status, taxpayers filing as head of household claimed the largest share (75.7%). Taxpayers using married filing separately on combined returns, who account for the second largest share of households claiming the credit, had the third largest share of the amount of credits claimed (8.8%).

The majority of CDC claimants had one dependent (73.0%) and nearly one-fourth had two dependents (22.4%), while households with three or more dependents made up 4.6

percent of claimants (see Table 7). In terms of amount of credits claimed, households with one or two dependents claimed the largest shares of credit dollars (65.1% and 29.4% respectively). The highest average household tax credit claim of \$374 was made by households with two dependents.

Taxpayers making CDC claims were concentrated in the age groups of 26-30 and 31-35 (defined using the primary taxpayer's age). The plurality of claims were made by households where the primary taxpayer was between ages 26 and 30, both in terms of the number of claims (29.7%) and in terms of the amount of credits claimed (31.5%) (see Table 8). In addition, one-fourth of all claims (25.0%) and dollars claimed (24.5%) were made by households in which the taxpayer was between the ages of 31 and 35. This is not surprising because these taxpayers are most likely to have young children at home. These taxpayers are also relatively new to the labor force and are more likely to have lower earnings to meet the income limit of the tax credit.

Nearly all CDC claims were made by Iowa residents; 19,664 (92.3%) Iowa resident households claimed \$5.7 million (94.1%) in tax credits in tax year 2016 (see Table 9). Nonresidents may claim the Iowa CDC if they have Iowa-source income. In 2016, 1,637 (7.7%) claimed \$0.36 million in CDC Tax Credits where the vast majority of those taxpayers lived in neighboring states.

C. Eligible Child Care Costs

Federal Form 2441 provides some information about eligible child care expenses. Data from the form is available for claimants who filed their lowa return electronically with their federal electronic return included. For tax year 2016, 95,900 households (including those who were not eligible to claim the lowa CDC) reported positive child care expenses on Form 2441 (see Table 10). The eligible child care expenses for qualifying children totaled \$444.7 million. On average, a household paid \$4,637 for child care for their qualifying children or \$3,180 for each child. Overall, 43.5 percent of households reported child care expenses higher than \$3,000 if one child or higher than \$6,000 for two or more children, which indicates the child care expenses cap under the federal tax credit, and thus implicitly for the lowa credit, was binding for these families. The highest average eligible expenses per child, \$4,289, was reported by those income was \$130,000 or higher, and the second highest average, \$3,515, was reported by taxpayers with AGI of \$110,000 - \$129,999.

In tax year 2016, Iowa CDC claim amounts by household ranged from \$1 to \$1,575. The majority of claims were \$250 or under with 23.0 percent of claims under \$100 (see Figure 7). Despite Form 2441 data suggesting nearly half of taxpayers have expenses higher than the maximum expenses limit, with the Iowa credit equal to 75 to 30 percent of the federal credit which is between 35 and 20 percent of qualified expenses, the Iowa credit is often just a small share of expenses (6 percent for households with net income between \$43,000 and \$44,999). For those taxpayers filing electronic returns making Iowa CDC claims, tax credits claimed were compared to the child care expenses reported on Form 2441. Combining federal CDC Tax Credit claims with Iowa CDC Tax Credit claims, it is found that households with uncapped expenses, on average, have

29.9 percent of their qualified expenses covered by the two credits in TY 2016 (see Table 11). Those households with capped expenses, on average, have 19.9 percent of their qualified expenses covered by the two credits.

D. Early Childhood Development Tax Credit Claimant Characteristics

ECD claimants were fairly evenly distributed across the income groups with 13.5 percent of claimants reporting AGI below \$10,000, and roughly 12 percent of claimants in each of the other income groups (see Table 5). Claims are slightly skewed toward the middle of eligible taxpayers. Claimants with AGI between \$20,000 to \$34,999, made 37.2 percent of claims, but 50.4 percent of claims.

Like the CDC claimants, head of household filers made up the largest share of ECD claimants by filing status (54.6%) and also the largest share of credits claimed (54.3%) (see Table 6). Unlike CDC claimants, married joint filers made up the second largest share of ECD claimants (24.6%) and amount claimed (23.8%). Taxpayers filing married separately on combined returns were the third largest share of claimants (16.3%) and amount claimed (16.0%). The higher share of married joint filers as ECD claimants likely reflects that one-earner, married households having kids in preschool can claim the ECD but they are not qualified to claim the CDC. In total, unmarried taxpayers made 59.1 percent of the claims and 58.5 percent of total credits claimed.

The majority of ECD claimants had one dependent in the household (89.3%) while households with two dependents made up 10.4 percent of the claimants (see Table 7). The majority of claims were made by households where the taxpayers were between the ages of 26 and 30, both in terms of the number of claims (31.4%) and in terms of the amount of credits claimed (31.2%) (see Table 8). Primary taxpayers aged 31-35 had the second largest share of the claims (26.5%) and the amount claimed (27.3%). These households are most likely to have preschool-age children.

In 2016, 1,356 (32.9%) claimants claimed the maximum ECD Tax Credit of \$250, which reflects eligible expenses of \$1,000 or more, assuming one qualifying child (see Figure 8). A maximum claim of \$500 for households with two qualifying children were claimed by 113 (2.7%) households and only 6 (0.1%) claimed \$750, a maximum claim for a household with three qualifying children. In total households with likely maximum claims made up 35.8 percent of all claimants. The large share of those claiming the \$250 credit likely reflects that not many claimants have more than one qualifying child. This suggests that one-third of claimants incurred at least \$1,000 in eligible expenses during the tax year and two-thirds of claimants reported early childhood expenses below \$1,000.

Nearly all ECD claims were made by Iowa residents; 3,784 (91.9%) Iowa resident households claimed \$595,000 (90.5%) in tax credits in tax year 2016 (see Table 9). Nonresidents may claim the Iowa ECD if they have Iowa-source income. In 2016, 334 (8.1%) claimed \$65,000 in CDC Tax Credits where a majority of those taxpayers lived in neighboring states.

E. Overlap of Iowa CDC, ECD, and Other Tax Credits for Families with Children

lowa also provides other tax credits for families with children, including the refundable Earned Income Tax Credit (EITC) (equal to 15 percent of the federal EITC in tax year 2016), the nonrefundable Dependent Credit (equal to \$40 per dependent claimed on the lowa return, as specified by the Internal Revenue Code), and the nonrefundable Tuition and Textbook Tax Credit (equal to 25 percent of the first \$1,000 of tuition and textbook expenses paid for each child attending Kindergarten through 12th grade in an accredited lowa school). In tax year 2016, 86.9 percent of lowa's CDC claimants also claimed the Iowa EITC, totaling \$7.0 million, and 97.3 percent claimed the Dependent Credit totaling \$1.3 million. Over 97 percent of the small share of households not claiming the Dependent Credit filed as either single or head of household suggesting the taxpayer shares custody of their child such that he/she was not eligible to claim the dependent but still eligible to claim child care expenses (see Table 12). Only 14.7 percent of CDC claimants also claimed the TTC, totaling \$0.24 million, which reflects that one-fifth did not have tax liability against which to apply the nonrefundable TTC and the remaining CDC claimants must not have had eligible expenses to be eligible for the TTC Summing the claims for those three credits with the CDC claims, the CDC claimants received \$14.7 million in credits either offsetting lowa tax liability or refunded to the claimants.

For ECD claimants, all but two households claimed the Dependent Credit, totaling \$0.36 million, and 86.4 percent claimed a total of \$1.7 million of EITC (see Table 13). Similar to CDC claimants, only 18.7 percent of ECD claimants claimed the TTC, totaling \$0.08 million. Overall, the ECD claimants received \$2.8 million from State family credits.

V. Persistence of Child Dependent Care and Early Childhood Development Tax Credits

Although it is interesting to consider trends in total credit claims and characteristics of those claiming the credits in the most current tax year to analyze how the CDC and ECD reduce the tax liability of low-income families with childcare or preschool expenses, it is also interesting to analyze whether these families repeatedly claim the credit, or if they make only one or two claims and then stop, likely because the households move above the income thresholds, demonstrating income mobility. Therefore, CDC and ECD 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 either the CDC or ECD, where the period considered is tax years 2008 through 2016 (see Tables 14 and 15). In tax year 2016, 13,700 taxpayers (53.9% of all 2016 claimants) claimed either the CDC or ECD in tax year 2016 but not in 2015 or "One year", and 6,073 taxpayers (23.9%) claimed either the CDC or ECD in tax years 2015 and 2016, but not 2014 or "Two years". Fairly consistent patterns emerge for tax years 2008 through 2016; between 44.8 percent and 58.8 percent who claimed either the CDC or ECD had not claimed the credit in the prior

tax year. Around one-fifth had claimed the credit for two consecutive years while another 9.0 percent to 12.8 percent had three consecutive years of claims.

To learn whether taxpayers with persistent CDC or ECD claims differ from taxpayers with a single claim, households with either CDC or ECD claims for all five years between tax years 2012 and 2016 are compared with households who during the spans of tax years 2008 through 2011 (before the rule change) and tax years 2012 through 2014 (when the rule change was effective) only claimed either the CDC or ECD in one tax year (see Table 16). First, it is interesting to note that the filing status and number of dependents in the household were similar for one-time claimants between the two tax periods, before and after the rules were clarified in 2012, with the biggest difference appearing in the number of households in the group. The number of one-time claimants during the three-year period during the tightened rules is less than half of the number during the four-year period before, suggesting may one-time claimants were likely not receiving any nonrefundable federal CDC. While 81.8 to 86.0 percent of the long-term CDC or ECD claimants filed head of household, only 53.7 to 54.2 percent of one-year claimants filed head of household. For the long-term claimants, only 7.9 and 7.5 percent of claimants were married. In contrast, 37.8 percent of one-year claimants filed as married, 10.1 to 6.5 percent of long-term claimants filed single, similarly 7.9 to 8.3 percent of one-year claimants filed as single taxpayers. Only 3.2 to 2.3 percent of longterm CDC or ECD claimants had no dependent listed, and 2.3 to 2.8 percent of oneyear claimants had no dependent listed. This suggests that single parents with one or two children are much more likely to make repeated CDC or ECD claims whereas onetime claimants are more likely to be married taxpayers with three or more children. The adjusted gross income of one-time claimants were concentrated near the upper range of the income cap for credit eligibility, with only 21.1 to 13.1 percent in the less than \$15,000 range, and 42.2 to 50.4 percent in the \$30,000 - \$44,999 range. Long-term claimants income in TY 2012 was concentrated in the \$15,000 - \$29,999 range (62.0 percent), while in TY 2016 the concentration of long-term claimants was in the \$30,000 -\$44,999 range (60.7 percent, demonstrating the income mobility of the long-term claimants

A second way to measure persistence is to look at the behavior of cohorts (see Table 17). In this analysis, a cohort is defined as the group of CDC or ECD claimants who first claimed one of the credits in the same tax year. Therefore, the 2007 cohort claimed either the CDC or ECD for the first time in tax year 2007, considering tax years beginning in tax year 2006. Thus all claimants of either the CDC or ECD in tax year 2006 were removed from the population before analyzing the tax year 2007 cohort. The tax year 2007 cohort began with around 16,600 claimants. For tax years 2008 through 2011, the year 1 cohort dropped to 12,000 to 14,000 claimants. When the lowa CDC was limited to the actual federal credit received effective in tax year 2012, the 2012 cohort was only 9,182 initial claimants. In 2013 and 2014, the cohorts also began with around 9,000 initial claimants, showing an ongoing impact of the credit rule change. Whereas once the amount of the lowa credit again became based on the eligible federal credit, the number increased to roughly 10,000 in 2015 and 2016, but remained short of the year 1 claimants prior to the rule change.

As the years progress, claimants exit from claiming the credit, likely because their income rises above the limit or children age out of eligibility. For cohorts making an initial claim of either the CDC or ECD in tax years 2007 through 2015, an average of 40 percent also made claims in the following year (see Table 18). For the 2011 cohort, the persistence into the second year, which was the change to the CDC's dependence on the federal credit effective in tax year 2012, decreased to a low of 34.2 percent, and for the 2012 through 2014 cohorts, the persistence in year 2 remained below average at around 37 percent.

The 2007 through 2011 cohorts each received an average CDC claim amount of about \$231 in their initial year (see Table 19). The average initial year CDC claims for 2012 through 2014 cohorts dropped to around \$188 per household. Initial year ECD claims did not experience the same volatility in the average claim over the period of this analysis, with an average of \$147 claim in the first year (see Table 20). For CDC claimants the average claim increased each year for each cohort from an average of \$231 per claimant in year one to an average of \$295 for claimants who continued to make claims in their third year of claiming either the CDC or ECD. For each cohort, the average CDC claim has decreased from year four (\$290) through year ten (\$246).

VI. Total Usage and Future Changes

Between tax years 2007 and 2016, 114,488 households living in lowa claimed either the CDC or ECD at least once. With the average household population of lowa over those ten years of 1.4 million households, this suggests that 8.2 percent of all lowa households claimed either the CDC or ECD during this period.

During the 2018 Legislative session, tax rates were reduced for the individual income tax effective in 2019 and significant changes were enacted for tax year 2023, contingent upon hitting revenue targets in fiscal year 2022. Among those changes is the redefinition of net income for lowa to equal federal taxable income. Because the income threshold for the CDC and ECD Tax Credits is specified as net income, this change is estimated to result in an increase in the number of eligible households and total claims.

Forecasted claims for the CDC and ECD suggest slow growth in claimants and claims over TY 2019 through TY 2022 (see Table 21). Under the assumption the TY 2023 tax cuts are trigged, the forecast for TY 2023 claimants is an increase about 50 percent for the CDC and 5.6 percent for the ECD. The redefinition of net income would also raise the average tax credit for existing claimants, thus expected to result in a 70.8 percent increase of claims for the CDC and a 2.3 percent increase in ECD claims.

VI. Conclusion

Child care is a significant cost for many working parents. The Iowa CDC Tax Credit is aimed to help parents with their child care costs. Iowa also provides the ECD Tax Credit with the aim to encourage preschool attendance by helping parents with early childhood expenses. However both tax credits are limited to low-income households.

This evaluation of the CDC and ECD provided a picture of who claims the credits and how much had been claimed over the history of each credit. While the CDC Tax Credit has undergone multiple transformations since its inception in tax year 1977, the ECD Tax Credit has not changed since it was enacted just over a decade ago. The latest changes to the CDC involved an administrative rule change limiting eligibility effective in tax year 2012 that was overruled by a Code change effective three tax years later.

In tax year 2016, \$6.1 million in CDC Tax Credits were claimed by over 21,000 households while \$668,000 in ECD Tax Credits were claimed by over 4,100 households. In tax years 2015 and 2016, an average of 55 percent of claimants had not made a claim to either tax credit in the prior tax year.

Three-quarters of CDC claimants file head of household and reported just one dependent. The majority of CDC claims were received by households with net income between \$20,000 and \$34,999. Once net income is redefined in tax year 2023, the number of claimants is expected to increase 50 percent.

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Tables and Figures

Table 1. Iowa and U.S. Child Care Costs, Calendar Year 2017

	lowa	U.S.				
Average Annual Cost for Full-Time Care in a Center:						
Infant	\$9,967	\$5,178 - \$20,125				
Four-year-old child	\$8,219	\$4,312 - \$14,256				
Average Annual Cost for Full-Time Care in a Family Child Care H	ome:					
Infant	\$7,091	\$3,930 - \$12,636				
Four-year-old child	\$6,722	\$3,704 - \$11,834				
Compare with:						
Average annual tuition and fees for public four-year college (in-state)	\$8,759	\$8,244				
Affordability (cost of full-time child care as percent of median family income):						
Infant in center, percent of income for single parents	40.7%	27.2% - 89.1%				

Source: Child Care in America, 2017. Child Care Aware® of America.

Table 2. Iowa Child and Dependent Care Tax Credit Claims, Tax Years 1977-2016

Tax Year	Number of Claimants	Change in Number of Claimants	Total Claimed (Millions)	Change in Total Claimed	Average Claim Amount	Tax Provision Major Change
1977	NA	NA	\$1.6	NA	NA	lowa 5% of the federal CDC
1978	NA	NA	\$2.0	25.5%	NA	
1979	NA	NA	\$2.4	19.7%	NA	
1980	NA	NA	\$2.7	10.9%	NA	
1981	NA	NA	\$3.2	18.5%	NA	
1982	NA	NA	\$3.5	8.2%	NA	
1983	NA	NA	\$8.1	134.4%	NA	lowa raised to 10% of the federal CDC
1984	147,700	NA	\$9.7	19.2%	\$66	
1985	155,000	4.9%	\$10.7	9.8%	\$69	
1986	167,000	7.7%	\$13.3	25.0%	\$80	lowa raised s to 45% of the federal CDC
1987	171,700	2.8%	\$14.2	6.6%	\$83	
1988	176,800	3.0%	\$15.5	9.2%	\$88	Federal administrative rule change
1989	152,800	-13.6%	\$13.0	-16.1%	\$85	Federal qualifying children age lowered to 13 lowa became 75 to 10 percent percentage of federal
1990	142,900	-6.5%	\$10.5	-19.2%	\$73	CDC
1991	146,300	2.4%	\$10.7	1.9%	\$73	
1992	145,300	-0.7%	\$10.4	-2.8%	\$72	I in limit -t 640,000
1993	67,800	-53.3%	\$7.9	-24.0%	\$117	lowa income limit at \$40,000
1994 1995	65,100 61,800	-4.0% -5.1%	\$8.0 \$8.0	1.3% 0.0%	\$123 \$129	
1995	59,752	-3.1% -3.3%	\$8.1	1.3%	\$129 \$136	
1990	54,127	-3.3% -9.4%	\$7.6	-6.2%	\$130 \$140	
1997	47,561	-9.4% -12.1%	\$7.0 \$7.0	-6.2% -7.9%	\$140 \$147	
1999	45,003	-12.1% -5.4%	\$6.7	-7.9% -4.3%	\$147 \$149	
2000	45,003	-5.4% -7.7%	\$6.7 \$6.4	-4.5% -4.5%	\$149 \$154	
2000	39,618	-4.7%	\$6.2	-3.1%	\$15 4 \$156	
2001	38,111	-3.8%	\$6.2	0.0%	\$163	
2002	37,219	-3.6% -2.3%	\$8.4	35.5%	\$226	Federal EGTRRA expansions
2004	34,422	-7.5%	\$8.1	-3.6%	\$235	r ederal COTTITA expansions
2005	33,917	-1.5%	\$8.2	1.7%	\$243	
2006	39,440	16.3%	\$8.9	8.2%	\$226	lowa income limit raised to \$45,000
2007	37,510	-4.9%	\$8.8	-1.3%	\$235	
2008	34,907	-6.9%	\$8.2	-6.7%	\$235	
2009	33,776	-3.2%	\$7.9	-3.3%	\$235	
2010	32,964	-2.4%	\$7.8	-1.7%	\$237	Federal 2003 expansions extended through 2012
2011	31,429	-4.7%	\$7.5	-3.9%	\$238	,
2012	23,376	-25.6%	\$4.5	-40.1%	\$192	lowa credit was limited by actual received amount of federal credit
2013	21,617	-7.5%	\$3.8	-15.2%	\$176	
2014	21,432	-0.9%	\$4.1	6.5%	\$189	
2015	23,088	7.7%	\$5.7	40.1%	\$246	lowa Code changed to reflect amount based on eligible amount of federal credit not actual received
2016	23,519	1.9%	\$6.1	6.8%	\$258	amount

Source: Iowa Department of Revenue Individual Income Tax Annual Statistical Reports, tax years 1977-1995. Iowa individual income tax return data, tax years 1996-2016. Shaded areas indicate there were tax provision changes in that year. Amounts claimed are not adjusted for inflation.

Number of claimants is on an individual taxpayer basis. Married couples filing separately on the same return are counted as two claimants.

Table 3. Tax Parameters for the Federal and Iowa Child and Dependent Care Tax Credit, Under Current Law

Federal Child and Dependent Care Tax Credit						
Federal Adjusted Gross Income		Capped Flidible		Maximum Claim Amount (1/2+Children)		
Over	But Not Over		1 Child	2+ Children		
\$0	\$15,000	35%	\$1,050	\$2,100		
\$15,000	\$17,000	34%	\$1,020	\$2,040		
\$17,000	\$19,000	33%	\$990	\$1,980		
\$19,000	\$21,000	32%	\$960	\$1,920		
\$21,000	\$23,000	31%	\$930	\$1,860		
\$23,000	\$25,000	30%	\$900	\$1,800		
\$25,000	\$27,000	29%	\$870	\$1,740		
\$27,000	\$29,000	28%	\$840	\$1,680		
\$29,000	\$31,000	27%	\$810	\$1,620		
\$31,000	\$33,000	26%	\$780	\$1,560		
\$33,000	\$35,000	25%	\$750	\$1,500		
\$35,000	\$37,000	24%	\$720	\$1,440		
\$37,000	\$39,000	23%	\$690	\$1,380		
\$39,000	\$41,000	22%	\$660	\$1,320		
\$41,000	\$43,000	21%	\$630	\$1,260		
\$43,000	or Over	20%	\$600	\$1,200		

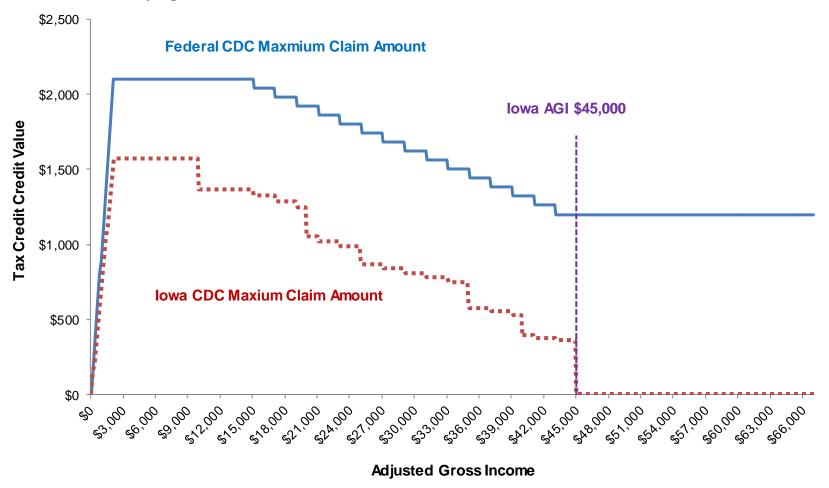
Iowa Child and Dependent Care Tax Credit

Iowa Adjusted Gross Income		Percentage of the Federal CDC Credit	Maximum Claim Amount (1/2+Children)		
Over	But Not Over		1 Child	2+ Children	
NA	\$10,000	75%	\$788	\$1,576	
\$10,000	\$19,999	65%	\$683	\$1,365	
\$20,000	\$24,999	55%	\$528	\$1,056	
\$25,000	\$34,999	50%	\$435	\$870	
\$35,000	\$39,999	40%	\$288	\$576	
\$40,000	\$44,999	30%	\$198	\$396	
\$45,000	or Over	No Credit	\$0	\$0	

Source: IRS Form 2441 and relevant lowa Code 42.12C

Federal and lowa adjusted gross income are assumed to be equal for simplification.

Figure 1. Maximum Claim Amounts of Federal and Iowa's Child and Dependent Tax Credits for a Household with Two or More Qualifying Children



45,000 \$10.0 \$9.0 40,000 ■ Number of Claimants ■ Total Claimed (Millions) \$8.0 35,000 \$7.0 30,000 **Number of Claimants** Claim Amount (Millions) \$6.0 25,000 \$5.0 20,000 \$4.0 15,000 \$3.0 10,000 \$2.0 5,000 \$1.0 \$0.0 2077 20/2 ₹000 2007 2003 ₹00¥ 2005 7006 200> ₹000 2070 2002 Tax Year

Figure 2. Child and Dependent Care Tax Credit Claims, Tax Years 2000 - 2016

Table 4. Iowa Early Childhood Development Tax Credit Claims, Tax Years 2006-2016

Tax Year	Number of Claimants	Change Rate of Number of Claimants	Total Claimed (Millions)	Change Rate of Total Claimed	Average Claim Amount
2006	3,507	-	\$0.46	-	\$131
2007	3,790	8.1%	\$0.51	10.5%	\$134
2008	3,765	-0.7%	\$0.52	3.0%	\$139
2009	3,978	5.7%	\$0.55	6.1%	\$139
2010	4,303	8.2%	\$0.59	6.9%	\$138
2011	5,112	18.8%	\$0.75	26.7%	\$147
2012	5,768	12.8%	\$0.85	14.0%	\$148
2013	5,443	-5.6%	\$0.78	-8.4%	\$144
2014	4,849	-10.9%	\$0.73	-7.0%	\$150
2015	4,482	-7.6%	\$0.68	-6.3%	\$152
2016	4,295	-4.2%	\$0.66	-3.6%	\$153

Source: Individual income tax return data, tax years 2006-2016

Number of claimants is on an individual taxpayer basis. Amounts claimed are not adjusted for inflation. Married couples filing separately on the same return are counted as two claimants.

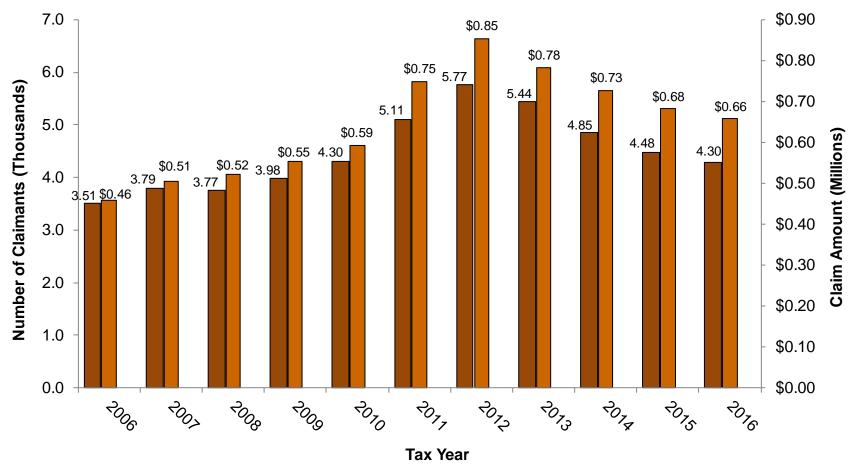
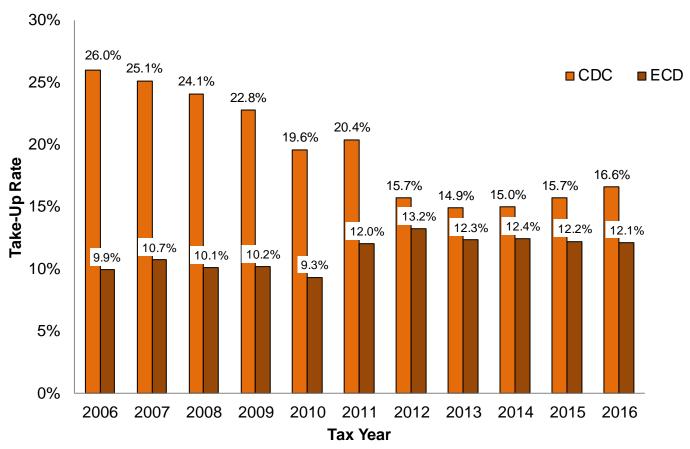


Figure 3. Early Childhood Development Tax Credit Claims, Tax Years 2006-2016

Figure 4. Estimated Take-Up Rates of Child and Dependent Care and Early Childhood Development Tax Credits, Tax Years 2006-2016



Note: The take-up rate for the CDC is measured as the ratio of households making CDC claims to the number of households filing tax returns with income below \$45,000 and with at least one dependent under age 13 who did not make a claim to the ECD. The ECD take-up rate is measured as the ratio of households making an ECD claims to households filing a tax return with at least one child between ages 3 and 5 and income less than \$45,000 who did not make a claim to the CDC.

Lyon Dickinson Emmet Winnebago Worth Howard Osceola Mitchell Allamakee Kossuth Winneshiek Obrien Clay Hancock Cerro Gordo Floyd Sioux Palo Alto Chickasaw Fayette Clayton Buena Vista Humboldt Bremer Plymouth Cherokee Wright Franklin Butler Pocahontas Black Hawk Buchanan Delaware Dubuque Webster Grundy lda Sac Woodbury Calhoun Hamilton Hardin Jackson Jones Benton Linn Tama Monona Boone Story Crawford Carroll Greene Marshall Clinton Cedar Shelby Audubon Harrison Guthrie Dallas Polk Poweshiek lowa Jasper Johnson Scott Muscatine Keokuk Washington Marion Mahaska Pottawattamie Madison Warren Cass Adair Louisa Mills Montgomery Adams Union Clarke Lucas Monroe Wapello Jefferson Henry Des Moines Davis Van Buren Fremont Page Taylor Ringgold Decatur Wayne Appanoose Lee 06.9% - 11.4% 11.4% - 14.7% 14.7% - 17.4% 17.4% - 21.6% 21.6% - 29.6%

Figure 5. Estimated Take-Up Rates for Child and Dependent Care Tax Credit by County, Tax Year 2016

Note: The take-up rate for the CDC is measured as the ratio of households making CDC claims to the number of households filing tax returns with income below \$45,000 and with at least one dependent under age 13 who did not make a claim to the ECD.

Worth Lyon Dickinson **Emmet** Winnebago Osceola Howard Mitchell Allamakee Kossuth Winneshiek Hancock Cerro Gordo Floyd Clay Sioux Obrien Palo Alto Chickasaw Fayette Clayton Buena Vista Humboldt Bremer Plymouth Wright Butler Cherokee Franklin Pocahontas Black Hawk Buchanan Delaware Dubuque Webster Grundy lda Sac Calhoun Hamilton Woodbury Hardin Jackson Jones Linn Tama Benton Monona Greene Crawford Carroll Boone Story Marshall Clinton Cedar Harrison Shelby Audubon Guthrie Dallas Polk Poweshiek Iowa Jasper Johnson Scott Muscatine Washington Mahaska Keokuk Pottawattamie Cass Adair Madison Warren Marion Louisa Mills Montgomery Adams Union Clarke Lucas Monroe Wapello Jefferson Henry Des Moines Van Buren Fremont Page Wayne Appanoose Davis Ringgold Decatur Taylor Lee 02.7% - 06.5% 06.5% - 09.4% 09.4% - 11.4% 11.4% - 14.2% 14.2% - 20.8%

Figure 6. Estimated Take-Up Rates of Early Childhood Development Tax Credit by County, Tax Year 2016

Note: The ECD take-up rate is measured as the ratio of households making an ECD claims to households filing a tax return with at least one child between ages 3 and 5 and income less than \$45,000 who did not make a claim to the CDC.

Table 5. Income Distribution of CDC and ECD Tax Credit Claimants, Tax Year 2016

		Child and D	ependent Care	Tax Credit			Early Childhoo	od Developmer	nt Tax Credit	
AGI Range	Number of Households	Distribution of Households	Amount of Tax Credit	Distribution of Credits	Average Credits	Number of Households	Distribution of Households	Amount of Tax Credit	Distribution of Credits	Average Credits
Less than \$10,000	1,324	6.2%	\$495,604	8.2%	\$374	555	13.5%	\$92,276	14.0%	\$166
\$10,000 - \$14,999	1,523	7.1%	\$529,415	8.7%	\$348	468	11.4%	\$72,901	11.1%	\$156
\$15,000 - \$19,999	2,322	10.9%	\$820,495	13.5%	\$353	499	12.1%	\$76,696	11.7%	\$154
\$20,000 - \$24,999	3,162	14.8%	\$1,001,238	16.5%	\$317	520	12.6%	\$80,888	12.3%	\$156
\$25,000 - \$29,999	3,655	17.2%	\$1,098,754	18.1%	\$301	514	12.5%	\$81,692	12.4%	\$159
\$30,000 - \$34,999	3,485	16.4%	\$1,038,071	17.1%	\$298	506	12.3%	\$81,312	12.4%	\$161
\$35,000 - \$39,999	2,994	14.1%	\$663,966	11.0%	\$222	516	12.5%	\$84,963	12.9%	\$165
\$40,000 - \$44,999	2,837	13.3%	\$414,091	6.8%	\$146	541	13.1%	\$87,108	13.2%	\$161
Total	21,302	100%	\$6,061,634	100%	\$285	4,119	100%	\$657,836	100%	\$160

Table 6. Filing Status Distribution of CDC and ECD Tax Credit Claimants, Tax Year 2016

		Child and De	ependent Care	Tax Credit		Early Childhood Development Tax Credit				
Filing Status	Number of Households	Distribution of Households	Amount of Tax Credit	Distribution of Credits	Average Credits	Number of Households	Distribution of Households	Amount of Tax Credit	Distribution of Credits	Average Credits
Single	1,850	8.7%	\$612,551	10.1%	\$331	180	4.4%	\$26,484	4.0%	\$147
Married Joint	1,183	5.6%	\$318,475	5.3%	\$269	1,015	24.6%	\$156,564	23.8%	\$154
Married Separate	2,436	11.4%	\$531,052	8.8%	\$218	670	16.3%	\$116,261	17.7%	\$174
Head of Household	15,804	74.2%	\$4,588,362	75.7%	\$290	2,250	54.6%	\$357,259	54.3%	\$159
Qualifying Widow(er)	29	0.1%	\$11,194	0.2%	\$386	4	0.1%	\$1,268	0.2%	\$317
Total	21,302	100%	\$6,061,634	100%	\$285	4,119	100%	\$657,836	100%	\$160

Table 7. Eligible Dependent Distribution of CDC and ECD Tax Credit Claimants, Tax Year 2016

		Child and De	pendent Care	Tax Credit			Early Childhood Development Tax Credit					
Number of Eligible Children	Number of Households	Distribution of Households	Amount of Tax Credit	Distribution of Credits	Average Credits	Number of Households	Distribution of Households	Amount of Tax Credit	Distribution of Credits	Average Credits		
1	15,545	73.0%	\$3,943,529	65.1%	\$254	3,677	89.3%	\$547,078	83.2%	\$149		
2	4,765	22.4%	\$1,781,382	29.4%	\$374	427	10.4%	\$103,761	15.8%	\$243		
3	876	4.1%	\$297,773	4.9%	\$340	15	0.4%	\$6,997	1.1%	\$466		
4	112	0.5%	\$37,795	0.6%	\$337							
5	3	0.0%	\$966	0.0%	\$322							
Total	21,301	100%	\$6,061,445	100%	\$285	4,119	100%	\$657,836	100%	\$160		

Table 8. Primary Age Distribution of CDC and ECD Tax Credit Claimants, Tax Year 2016

		Child and D	ependent Care	Tax Credit			Early Childho	od Developme	nt Tax Credit	
Primary Age	Number of Households	Distribution of Households	Amount of Tax Credit	Distribution of Credits	Average Credits	Number of Households	Distribution of Households	Amount of Tax Credit	Distribution of Credits	Average Credits
Less than 20	93	0.4%	\$29,349	0.5%	\$316	5	0.1%	\$493	0.1%	\$99
20 - 25	3,990	18.7%	\$1,239,384	20.4%	\$311	717	17.4%	\$111,739	17.0%	\$156
26 - 30	6,318	29.7%	\$1,907,122	31.5%	\$302	1,293	31.4%	\$205,426	31.2%	\$159
31 - 35	5,329	25.0%	\$1,486,644	24.5%	\$279	1,093	26.5%	\$179,757	27.3%	\$164
36 - 40	3,111	14.6%	\$828,132	13.7%	\$266	567	13.8%	\$86,510	13.2%	\$153
41 - 45	1,415	6.6%	\$334,854	5.5%	\$237	257	6.2%	\$42,654	6.5%	\$166
46 - 50	613	2.9%	\$144,400	2.4%	\$236	100	2.4%	\$16,684	2.5%	\$167
51 - 55	271	1.3%	\$58,815	1.0%	\$217	51	1.2%	\$9,517	1.4%	\$187
56 - 60	101	0.5%	\$20,573	0.3%	\$204	19	0.5%	\$3,011	0.5%	\$158
61 - 65	38	0.2%	\$7,904	0.1%	\$208	11	0.3%	\$1,383	0.2%	\$126
Over 65	23	0.1%	\$4,457	0.1%	\$194	6	0.1%	\$662	0.1%	\$110
Total	21,302	100%	\$6,061,634	100%	\$285	4,119	100%	\$657,836	100%	\$160

Table 9. Residency Distribution of CDC Tax Credit Claimants, Tax Year 2016

Tax Credit	State of Residence	Number of Households	Distribution of Households	Amount of Tax Credit	Distribution of Credits	Average Credits
Child and Dependent Care Tax Credit	lowa Neighboring States Other States	19,664 1,120 517	92.3% 5.3% 2.4%	\$5,701,506 \$211,003 \$148,987	94.1% 3.5% 2.5%	\$290 \$188 \$288
	Total	21,301	100%	\$6,061,496	100%	\$285
	lowa	3,784	91.9%	\$595,467	90.5%	\$157
Early Childhood Development	Neighboring States	150	3.6%	\$26,569	4.0%	\$177
Tax Credit	Other States	184	4.5%	\$35,703	5.4%	\$194
	Total	4,118	100%	\$657,739	100%	\$160

Table 10. Eligible Child Care Expenses on Federal Form 2441, Tax Year 2016

Adjusted Gross Income	Number of Households	Number of Dependents on Form 2441	Total Federal CDC Credit	Total Eligible Expenses	Average Eligible Expenses Per Household	Average Eligible Expenses Per Dependent	Percentage of Households with Eligible Expenses \$3,000/\$6,000 or Over
Less Than \$30,000	9,719	11,922	\$3,374,927	\$26,432,795	\$2,720	\$2,217	29.1%
\$30,000 - \$49,999	13,065	17,230	\$6,498,737	\$43,197,590	\$3,306	\$2,507	35.9%
\$50,000 - \$69,999	13,063	18,637	\$6,478,784	\$48,234,471	\$3,692	\$2,588	37.5%
\$70,000 - \$89,999	15,687	23,356	\$8,238,258	\$67,565,561	\$4,307	\$2,893	42.4%
\$90,000 - \$109,999	14,506	22,303	\$7,539,480	\$72,324,732	\$4,986	\$3,243	47.5%
\$110,000 - \$129,999	10,043	15,501	\$4,889,999	\$54,491,557	\$5,426	\$3,515	49.6%
\$130,000 or More	19,817	30,881	\$8,719,021	\$132,455,453	\$6,684	\$4,289	54.6%
Total	95,900	139,830	\$45,739,206	\$444,702,159	\$4,637	\$3,180	43.5%

Source: IRS Form 2441 data and Iowa individual income tax return data, tax year 2016

Note: The table includes taxpayers who reported positive child care expenses on federal Form 2441 and were matched with their lowa individual income tax return data, regardless of whether claiming lowa's CDC or not.

Table 11. Share of Eligible Child Care Expenses Covered by Federal and Iowa CDC Tax Credits, Tax Year 2016

		Ex	penses Uncapp	ed		Expenses Capped					
Adjusted Gross Income	Number of Households	Total Eligible Expenses	Total Federal CDC Credit	Total Iowa CDC Credit	Share of Expenses Covered by Credits	Number of Households	Total Eligible Expenses	Total Federal CDC Credit	Total Iowa CDC Credit	Share of Expenses Covered by Credits	
Less than \$10,000	272	\$503,171	\$49,219	\$104,491	30.5%	121	\$827,702	\$67,794	\$82,076	18.1%	
\$10,000 - \$14,999	316	\$497,620	\$18,212	\$95,882	22.9%	82	\$457,456	\$19,151	\$55,016	16.2%	
\$15,000 - \$19,999	982	\$1,349,016	\$120,347	\$258,072	28.1%	297	\$1,450,405	\$76,745	\$194,254	18.7%	
\$20,000 - \$24,999	1,896	\$2,913,873	\$541,697	\$451,093	34.1%	721	\$3,681,303	\$395,912	\$378,616	21.0%	
\$25,000 - \$29,999	2,260	\$4,064,848	\$843,171	\$522,098	33.6%	1,082	\$6,022,178	\$805,649	\$495,518	21.6%	
\$30,000 - \$34,999	2,083	\$3,962,629	\$847,272	\$461,612	33.0%	1,200	\$6,701,009	\$932,179	\$523,109	21.7%	
\$35,000 - \$39,999	1,830	\$3,822,582	\$751,487	\$306,391	27.7%	993	\$5,703,736	\$784,377	\$320,843	19.4%	
\$40,000 - \$44,999	1,815	\$3,780,207	\$681,170	\$199,134	23.3%	880	\$5,179,252	\$662,177	\$196,083	16.6%	
Total	11,454	\$20,893,946	\$3,852,575	\$2,398,773	29.9%	5,376	\$30,023,041	\$3,743,984	\$2,245,515	19.9%	

Source: IRS Form 2441 data and Iowa individual income tax return data, tax year 2016

Note: The table includes taxpayers who reported positive child care expenses on federal Form 2441 and were matched with their lowa individual income tax return data, regardless of whether claiming lowa's CDC or not.

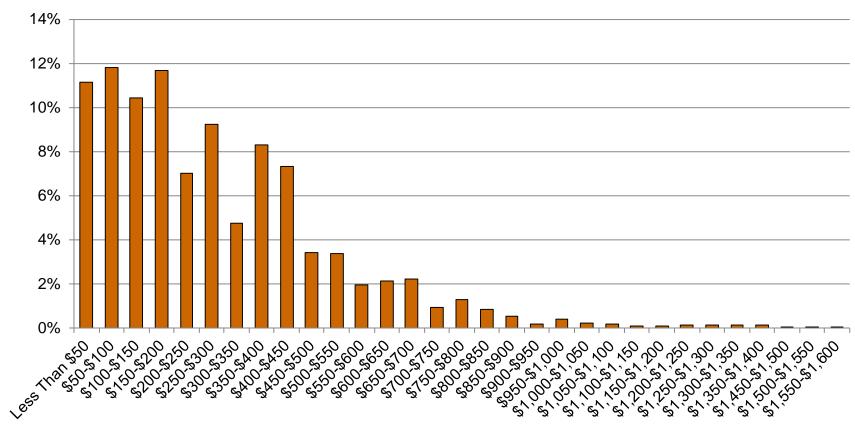


Figure 7. Frequency Distribution of Child and Dependent Care Tax Credit Claims, Tax Year 2016

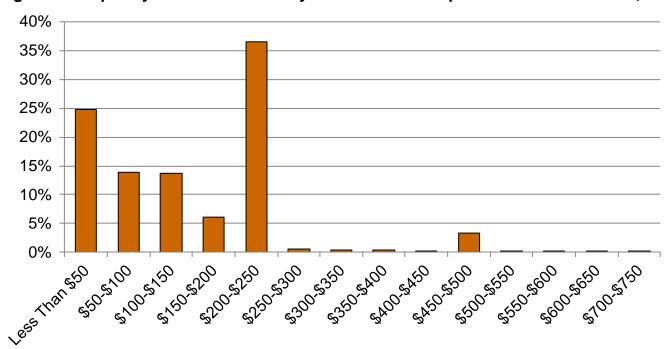


Figure 8. Frequency Distribution of Early Childhood Development Tax Credit Claims, Tax Year 2016

Table 12. Claiming Patterns of the CDC and Other Iowa Tax Credits for Family with Children, Tax Year 2016

Tax Credit	Number of Households	Distribution of Households	Amount of Tax Credit
Child and Dependent Care Credit	21,301	100%	\$6,061,496
Earned Income Credit	18,516	86.9%	\$7,031,158
Tuition and Textbook Credit	3,132	14.7%	\$239,208
Dependent Credit	20,735	97.3%	\$1,322,760
Total Credits	-	-	\$14,654,622

Table 13. Claiming Patterns of the ECD and Other Iowa Tax Credits for Family with Children, Tax Year 2016

Tax Credit	Number of Households	Distribution of Households	Amount of Tax Credit
Early Childhood Development Credit	4,119	100%	\$657,836
Earned Income Credit	3,560	86.4%	\$1,709,855
Tuition and Textbook Credit	769	18.7%	\$80,625
Dependent Credit	4,117	100%	\$364,800
Total Credits	-	-	\$2,813,116

Table 14. Count of Households by Consecutive Years of Either CDC or ECD Claims

	Number of Consecutive Claims by Tax Year									
Consecutive Years	2008	2009	2010	2011	2012	2013	2014	2015	2016	
One Year	16,024	15,586	15,711	15,810	12,353	23,713	12,840	14,662	13,700	
Two Years	6,856	6,808	6,608	6,571	5,404	11,287	4,698	4,798	6,073	
Three Years	4,091	3,681	3,635	3,422	2,895	6,754	2,182	2,236	2,46	
Four Years	2,144	2,343	2,153	2,105	1,620	4,236	1,334	1,127	1,24	
Five Years	3,257	1,352	1,440	1,292	1,073	2,638	888	756	65	
Six Years		2,033	860	888	703	1,751	503	495	45	
Seven Years			1,284	530	474	1,127	344	295	28	
Eight Years				808	283	723	255	207	17	
Nine Years					449	429	174	141	14	
Ten Years						262	244	232	21	
Total	32,372	31,803	31,691	31,426	25,254	52,920	23,462	24,949	25,42	

^{*} With data only analyzed going back to TY 2004 for Tax Years 2008-2012 and only 10 years back for Tax Years 2013-2016, the lowest number in the column reflects that consecutive year plus additional years.

Table 15. Share of Households with Persistent CDC or ECD Claims by Consecutive Years

		1	Distribution	of Claims b	y Consecu	itive Tax Ye	ars of Clair	n	
Consecutive Years	2008	2009	2010	2011	2012	2013	2014	2015	2016
One Year	49.5%	49.0%	49.6%	50.3%	48.9%	44.8%	54.7%	58.8%	53.9%
Two Years	21.2%	21.4%	20.9%	20.9%	21.4%	21.3%	20.0%	19.2%	23.9%
Three Years	12.6%	11.6%	11.5%	10.9%	11.5%	12.8%	9.3%	9.0%	9.7%
Four Years	6.6%	7.4%	6.8%	6.7%	6.4%	8.0%	5.7%	4.5%	4.9%
Five Years	10.1%	4.3%	4.5%	4.1%	4.2%	5.0%	3.8%	3.0%	2.6%
Six Years		6.4%	2.7%	2.8%	2.8%	3.3%	2.1%	2.0%	1.8%
Seven Years			4.1%	1.7%	1.9%	2.1%	1.5%	1.2%	1.1%
Eight Years				2.6%	1.1%	1.4%	1.1%	0.8%	0.7%
Nine Years					1.8%	0.8%	0.7%	0.6%	0.6%
Ten Years						0.5%	1.0%	0.9%	0.8%
Total	100%	100%	100%	100%	100%	100%	100%	100%	100%

^{*} With data only analyzed going back to TY 2004 for Tax Years 2008-2012 and only 10 years back for Tax Years 2013-2016, the lowest number in the column reflects that consecutive year plus additional years.

Table 16. Comparison between One-Year and Long-Term CDC or ECD Claimants by Filing Status and Number of Dependents

	Betwe	•	C or ECD Claim or Between 201		Claim CDC	•	Claimants Years Between	2012-2016
	Between	2008-2011	Between	2012-2014	Tax Ye	ear 2012	Tax Ye	ar 2016
lowa Filing Status	Number of Households	Percent of Households	Number of Households	Percent of Households	Number of Households	Percent of Households	Number of Households	Percent of Households
Married	15,895	37.8%	7,049	37.8%	153	7.9%	145	7.5%
Single	3,495	8.3%	1.475	7.9%	195	10.1%	126	6.5%
Head of Household	22,579	53.7%	10,107	54.2%	1,583	81.8%	1,664	86.0%
Qualifying Widow(er)	77	0.2%	29	0.2%	4	0.2%	0	0.0%
Total	42,046	100.0%	18,660	100.0%	1,935	100.0%	1,935	100.0%
	Between 2	2008-2011	Between 2	2012-2014	Tax Ye	ar 2012	Tax Ye	ar 2016
Number of	Number of	Percent of	Number of	Percent of	Number of	Percent of	Number of	Percent of
Dependents	Households	Households	Households	Households	Households	Households	Households	Households
0	1,160	2.8%	425	2.3%	61	3.2%	45	2.3%
1	20,119	47.8%	9,161	49.1%	1,197	61.9%	1,003	51.8%
2	13,245	31.5%	5,701	30.6%	507	26.2%	660	34.1%
3+	7,522	17.9%	3,373	18.1%	170	8.8%	227	11.7%
Total	42,046	100.0%	18,660	100.0%	1,935	100.0%	1,935	100.0%
	Between 2	2008-2011	Between 2	2012-2014	Tax Ye	ar 2012	Tax Ye	ar 2016
AGI Range	Number of Households	Percent of Households	Number of Households	Percent of Households	Number of Households	Percent of Households	Number of Households	Percent of Households
	0.000	21.1%	0.445	13.1%	88	4.5%	 85	4.4%
Less than \$15,000 \$15,000-\$29,999	8,888 15,407	36.6%	2,445 6,813	36.5%		4.5% 62.0%	676	4.4% 34.9%
\$30,000-\$44,999	15,407 17,751	36.6% 42.2%	9,402	36.5% 50.4%	1,200 647	62.0% 33.4%	1,174	34.9% 60.7%
Total	42,046	100.0%	18,660	100.0%	1,935	100.0%	1,935	100.0%

Table 17. Persistence of CDC or ECD Claimants by Cohorts

Cohort	Year 1	Year 2	Year 3	Year 4	Year 5	Year 6	Year 7	Year 8	Year 9	Year 10
2007	16,630	6,856	3,681	2,153	1,292	703	404	255	141	79
2008	13,989	5,914	3,140	1,834	941	557	318	195	137	
2009	12,589	5,329	2,770	1,330	731	423	254	156		
2010	12,188	5,073	2,263	1,263	710	399	230			
2011	12,034	4,113	1,936	1,041	604	364				
2012	9,182	3,368	1,644	872	520					
2013	8,677	3,268	1,573	888						
2014	9,056	3,384	1,734							
2015	10,409	4,250								
2016	9,734	•								

Table 18. Share of Iowa CDC or ECD 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
2007	100%	41.2%	22.1%	12.9%	7.8%	4.2%	2.4%	1.5%	0.8%	0.5%
2008	100%	42.3%	22.4%	13.1%	6.7%	4.0%	2.3%	1.4%	1.0%	
2009	100%	42.3%	22.0%	10.6%	5.8%	3.4%	2.0%	1.2%		
2010	100%	41.6%	18.6%	10.4%	5.8%	3.3%	1.9%			
2011	100%	34.2%	16.1%	8.7%	5.0%	3.0%				
2012	100%	36.7%	17.9%	9.5%	5.7%					
2013	100%	37.7%	18.1%	10.2%						
2014	100%	37.4%	19.1%							
2015	100%	40.8%								
2016	100%									

Source: Iowa individual income tax returns Note: Bolded numbers equals tax year 2012

Table 19. Average lowa CDC Claims 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
2007	\$251	\$311	\$326	\$324	\$322	\$247	\$222	\$232	\$236	\$246
2008	\$245	\$307	\$317	\$327	\$260	\$238	\$229	\$265	\$260	
2009	\$242	\$314	\$327	\$266	\$243	\$239	\$261	\$253		
2010	\$245	\$317	\$263	\$245	\$243	\$290	\$307			
2011	\$244	\$255	\$243	\$260	\$286	\$293				
2012	\$192	\$230	\$254	\$289	\$307					
2013	\$176	\$243	\$307	\$319						
2014	\$196	\$299	\$324							
2015	\$264	\$327								
2016	\$258									
Average	\$231	\$289	\$295	\$290	\$277	\$261	\$255	\$250	\$248	\$246

Source: Iowa individual income tax returns Note: Bolded numbers equals tax year 2012

Table 20. Average lowa ECD Claims 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
2007	\$144	\$170	\$178	\$179	\$178	\$173	\$183	\$157	\$144	\$139
2008	\$146	\$177	\$189	\$188	\$198	\$166	\$213	\$167	\$154	
2009	\$146	\$181	\$184	\$188	\$177	\$213	\$136	\$143		
2010	\$137	\$166	\$178	\$167	\$169	\$152	\$149			
2011	\$152	\$177	\$188	\$162	\$190	\$193				
2012	\$144	\$170	\$178	\$181	\$186					
2013	\$147	\$166	\$201	\$184						
2014	\$151	\$172	\$176							
2015	\$150	\$166								
2016	\$153									
Average	\$147	\$172	\$184	\$178	\$183	\$179	\$170	\$155	\$149	\$139

Table 21. Forecast of CDC and ECD Claims from TY 2017 through TY 2023, Assuming Revenue Triggers are Met

Tax Credit		TY 2017	TY2018	TY 2019	TY 2020	TY 2021	TY 2022	TY 2023
Child and Dependent Care	Credit Amount Year over Year Change	\$6,300,000	\$7,000,000 11.1%	\$7,000,000 0.0%	\$7,100,000 1.4%	\$7,200,000 1.4%	\$7,200,000 0.0%	\$12,300,000 70.8%
(CDC)	Claimants Year over Year Change	22,000	23,000 4.5%	23,000	23,000	22,000 -4.3%	22,000 0.0%	33,000 50.0%
Early Child Development	Credit Amount Year over Year Change	\$650,000	\$720,000 10.8%	\$740,000 2.8%	\$770,000 4.1%	\$790,000 2.6%	\$805,000 1.9%	\$850,000 5.6%
(ECD)	Claimants Year over Year Change	4,000	4,200 5.0%	4,300 2.4%	4,400 2.3%	4,400 0.0%	4,400 0.0%	4,500 2.3%

Source: Iowa Individual Income MicroModel Forecast