



Center for Business Analytics and Economic Research

GEORGIA SOUTHERN UNIVERSITY

Quality Jobs Tax Credit Economic and Fiscal Impact

Prepared for
Georgia Department of Audits and Accounts

Prepared by
Center for Business Analytics and Economic Research
Georgia Southern University
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Executive Summary

The Quality Jobs Tax Credit (QJTC) is part of a series of job tax credits that have been in effect since 1990 for the purpose of enhancing economic growth. The tax credit is designed to encourage the creation of well-paying jobs that meet or exceed 110 percent of the average wages in the county where the business is located. The intended purpose of the QJTC is to bolster employment by enhancing job quality. The Center for Business Analytics and Economic Research at Georgia Southern University analyzed the economic contribution and fiscal impacts by companies that utilized the QJTC between the years 2017 – 2021.

Over this five-year timeframe, the tax credit was linked to an average 115 projects and an average employment of 20,815. This equated to \$97.30 million in annual credits awarded, or \$4,675 in credits per job. This figure is not the same as cost per job which includes the total economic and fiscal cost of creating each job to the state of Georgia. The industries that received the QJTC credit most frequently over the past five years were Manufacturing, Professional, Scientific, Technical Services, and Wholesale Trade industries. Additionally, the credit was more active in the last 3 years, 2019-2021.

In 2021, the total output linked to the QJTC totaled \$18.54 billion and total value added reached \$9.91 billion. In addition to direct impact, the other drivers of this economic impact are linked to indirect (business-to-business) and induced (consumer-to-business) transactions. These two factors combined to account for 46 percent of total output and 48 percent of total value added, respectively. In employment terms, there were 25,435 direct jobs which reached 70,718 jobs when the indirect and induced transactions were included.

The impact of the QJTC and the job growth in Georgia goes beyond any single year being modeled. Over a ten-year timeframe (2021-31), if 8.6 percent of businesses in 2021 chose Georgia due to the QJTC, then the ten-year tax revenue forecast is positive. CBAER estimated two separate scenarios. First, if only five percent of businesses chose Georgia due to the QJTC over the ten-year time frame (2022-31), then the net tax revenue loss would be -\$172.59 million. In contrast, if just over 11 percent of businesses made the same choice, the ten-year impact would be a net tax revenue increase of \$131.89 million.

The QJTC may not have had a significant impact on aggregate jobs created during this timeframe at the state level, it still had an effect on the economic landscape in areas where it was utilized. Additionally, the credit was inclined towards aiding growth in rural areas. Though tax credits are not the sole reason a business might locate in a specific area, this credit might have influenced their decision.

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Tax Provision Background/Overview

This report analyzes the economic contribution and fiscal impacts of companies that utilized the Quality Jobs Tax Credit (QJTC) between 2017 and 2021. The Quality Jobs Tax Credit is designed to encourage the creation of well-paying jobs that meet or exceed 110 percent of the average wages in the county where the business is located. It is part of a series of job tax credits that have been in effect since 1990.¹ The provisions of the QJTC can be found at OCGA § 48-7-40.17.² The General Assembly passed the act in 2000. The QJTC has been recognized as a tool designed to promote economic growth in rural areas and to attract businesses creating high-paying jobs across the state.³ This report reviews the economic and fiscal impacts of the Georgia QJTC. Though similar to the Job Tax Credit, the Quality Jobs Tax Credit refers to establishing new, quality jobs, defined as being jobs that meet legislated salary requirements based on the average county wage. Under current state law, a company may not accept both the standard Job Tax Credit and the Quality Job Tax Credit.

The purpose of the QJTC is to facilitate the establishment and relocation of quality jobs into the state, thereby encouraging growth, promoting economic development, and supporting business attraction across the state of Georgia.⁴ Two factors are important in determining the eligibility for QJTC at the county level: tier and rurality status. Section 48-7-40 of Georgia state law provides the framework for separating all counties in Georgia into four tiers based on the level of development in these counties. The Department of Community Affairs manages this tier system. Counties in the 1st-71st rank of developed counties “shall be classified as tier 1,” those ranked 72nd -106th are “classified as tier 2,” then those designated as 107th-141st in development are in tier 3, and lastly the counties in tier 4 are ranked 142nd-159th in development.⁵

The state of Georgia ranks the development of each county based on the following equally weighted factors: (1) highest unemployment rate for the most recent 36-month period, (2) lowest per capita income for the most recent 36-month period, and (3) highest percentage of residents whose incomes are below the poverty level according to the most recent data available.⁶ This means that tier 1 counties are experiencing the highest levels of economic stress based on the eligibility criteria, and tier 4 are the least economically stressed

¹ Sjoquist & Wheeler, 2013. The Structure and History of Georgia’s Job Tax Credit Program. Fiscal Research Center, Andrew Young School of Policy Studies. Atlanta, Georgia.

² 2022 Georgia Code :: Title 48 - Revenue and Taxation :: Chapter 7 - Income Taxes :: Article 2 - Imposition, Rate, Computation, Exemptions, and Credits :: § 48-7-40.17. Tax Credits for Establishing or Relocating Quality Jobs. (n.d.). Justia Law. <https://law.justia.com/codes/georgia/2022/title-48/chapter-7/article-2/section-48-7-40-17/>

³ Ibid., 2022 Georgia Code S48-7-40.17.

⁴ Georgia Jobs Tax Credit. (n.d.). OnCenTive. Retrieved September 18, 2023, from <https://www.oncentive.com/georgia-quality-jobs-tax-credit>

⁵ § 48-7-40 - Designation of counties as less developed areas; tax credits for certain business enterprises:: 2010 Georgia Code :: US Codes and Statutes :: US Law :: Justia

⁶ Ibid., 2022 Georgia Code S48-7-40.17.

communities in Georgia. Typically, counties are evaluated on an annual basis, and new tiers are set at the beginning of each calendar year. However, the Commissioner of Community Affairs can move a county down one tier if it is determined that the county is experiencing a severe and sudden period of economic distress. This typically means the loss of one or more major employer(s), and this type of move will not displace any of the counties already in that tier. These tiers are used to determine the minimum level of new jobs that need to be created by companies applying to use the QJTC and the time frame in which jobs will need to be created.⁷

Table 1: QJTC Eligibility Requirements by Tier

	Tier 1	Tier 2	Tier 3	Tier 4
Number of Counties	71	35	35	18
Minimum Job Creation Requirements	10	25	50	50
Time Period Job Creation Jobs (months)	12	12	24	24

Code section - 48-7-40.17(b.1)

In addition, to receive the tier 1 or 2 lower standards, communities must also be considered rural. Rural status is awarded to communities with less than 50,000 in population and 10 percent or more of the population living in poverty using the United States Bureau of the Census data. The awarding of rural status is governed by the Department of Community Affairs and is done on an annual basis.⁸ Next, for the jobs being created to be considered quality, there are four core standards that must be reached. The job must be located in Georgia, regularly work 30 hours or more a week, be a new job to this state, and pay at least 110 percent of the average wage of the county where the job is located. If the wages paid are above 120 percent, then the amount of available credit increases until 200 percent is reached.⁹

Once a company is awarded the credit, a seven-year window begins, during which the company must start creating the awarded jobs. As soon as the companies starts hiring for the new jobs, a 12- to 24-month window begins, during which the company is required to meet the minimum standard displayed in Table 1. As long as these standards are reached in year one, the company has four additional years to use this credit to create new jobs. In these succeeding four years, the company is still required to meet the minimum number of jobs outlined in Table 1 on an annual basis. Credits that are not used after the five-year awarding period may be carried forward for up to ten additional years.¹⁰

This report will review Georgia’s Quality Job Tax Credit Program, outline and compare similar programs in other states, review the efficacy of the QJTC in Georgia, and relate it to the “but for” assumption. CBAER also provides an estimate of the economic and fiscal effects of the QJTC using data provided by the Georgia Department of Revenue for tax year 2021.

⁷ Ibid., 2022 Georgia Code S48-7-40.17.

⁸ Ibid., 2022 Georgia Code S48-7-40.17.

⁹ Ibid., 2022 Georgia Code S48-7-40.17.

¹⁰ Ibid., 2022 Georgia Code S48-7-40.17.

Legislative Background

The Georgia General Assembly passed the act in 2000 and has revised this law several times since it was first enacted. This section discusses four of the most recent revisions to the QJTC between 2012 and 2020. Each of these changes made small adjustments to the tax credit program, which clarified how it should be used. In 2012, the tax credit was amended to permit the inclusion of jobs with pre-determined end dates as eligible for the credit. This change was made to encourage military contractors who could be impacted by base realignment and closure to consider relocating to Georgia.¹¹ Next, the 2016 amendment redefined how the program should define a taxpayer. The revised standard now includes “any person required by law to file a return or to pay taxes, except that any taxpayer may elect to consider the jobs within its disregarded entities, as defined in the Internal Revenue Code, for purposes of calculating the number of new quality jobs created by the taxpayer under this Code section.”¹²

Following the 2016 change, the General Assembly again adjusted the QJTC program in 2017 which added payroll taxes as eligible expenses. To use the credit on payroll taxes, the company must first have used all of its credit for that tax year on all other eligible income taxes. If any credit remains, the taxpayer can then use the credit on payroll taxes.¹³ Building on the 2017 adjustment, the program was further amended in 2019. This change adds the rural status component to tiers 1 and 2 usages. It also lowers the job creation minimums to 10 for tier 1 counties and 25 for tier 2 counties over a one-year timeframe. In contrast, in tiers 3 and 4, the job creation minimums stayed at 50, but the timeline was extended to 24 months.¹⁴ The 2020 amendment provides that “a taxpayer that in the taxable year beginning on or after January 1, 2019, and before December 31, 2019, claiming a tax credit under this Code section shall have the option to utilize the number of new quality jobs that the taxpayer claimed in such taxable year or calculate the number of new quality jobs based upon subsection (d) of this Code section for the taxable years of 2020 and 2021.”¹⁵

The Quality Jobs Tax Credit is part of the Georgia Department of Economic Development (GDEcD) efforts to bring companies to Georgia to promote economic growth.¹⁶ GDEcD promotes the program, and applications are managed by the Georgia Department of Revenue. Specifically, the tax credit allows businesses to reduce their income tax obligation to the state of Georgia. To be awarded this credit, businesses must create a minimum number of jobs based

¹¹ New Georgia Legislation Encourages Job Growth In The State. (2012, May 15). Georgia Department of Economic Development. Retrieved August 21, 2023, from <https://www.georgia.org/newsroom/press-releases/new-georgia-legislation-encourages-job-growth-in-the-state>

¹² Summary of Enacted Legislation. (2016). In Georgia General Assembly (HB 922 (O.C.G.A. 48-7-40.17)). Georgia General Assembly.

¹³ Georgia Department of Revenue Policy Bulletin IT 2017-01 Income Tax Credits and the Withholding Benefit. (2017, January 1). In Georgia Department of Revenue (O.C.G.A. §§ 48-7-29.14, 48-7-40, 48-7-40.1, 48-7-40.12, 48-7-40.17, 48-7-40.26, 48-7-40.26A, 48-7-40.33). Georgia Department of Revenue.

¹⁴ <https://www.legis.ga.gov/legislation/54770>

¹⁵ Ibid., 2022 Georgia Code S48-7-40.17.

¹⁶ Ibid., Georgia Jobs Tax Credit. (n.d.). OnCentive

on their location in the state, which changes based on tier and rural status discussed previously in the report. The tax credit is targeting newly created jobs that are joining the economy. Businesses seeking to use this tax credit must also be making a capital investment in their operation. The minimum investment is \$2.5 million, and it can include real or personal property. Items listed as qualified include but are not limited to “land acquisition, improvements, building, building improvements, and any personal property used in new or expanded facility(s).”¹⁷ Additionally, three-year or longer leases on real or personal property are eligible expenditures.¹⁸ The investment requirement demonstrates that businesses seeking to use the QJTC are building new or expanding their operation in this state in a meaningful way.

After the location in Georgia is selected, the number of new jobs created is established, and the capital investment made, the size of the credit is determined by the amount of wages paid over the average wage for the county selected. A “high-paying” job is defined as paying at least 10 percent above the average wage of the county in which the job will be located and having at least 30-hour work weeks.¹⁹ The tax credit amount is dependent on several factors. Each qualifying job may earn a credit ranging from \$2,500 to \$5,000 per year for five years. Thus, the QJTC is set up to reward businesses that create higher-paying jobs than what is already present in the county where the business is choosing to locate, see Table 2 for details.

Table 2: Amount of Available Quality Jobs Tax Credit

Percent of Salary above County Wage Average	QJCT Available Credit
≥110% and <120%	\$2,500
≥120% and <150%	\$3,000
≥150% and <175%	\$4,000
≥175% and <200%	\$4,500
200% or greater	\$5,000

Code section - 48-7-40.17(b.1)

In addition to the focus on wages, the QJTC also differs from other economic development tax credits in Georgia because it does not have an industry focus. This makes it possible for the credit to be used by various industrial sectors as defined by the North American Industrial Classification System or NAICS codes. Federal agencies use NAICS codes to classify business and economic activity in the United States.²⁰

Another feature of the QJTC program is that it has a longer time horizon for when it will begin and when it will end. After the QJTC is awarded, the applicant has a seven-year window to

¹⁷ Ibid., 2022 Georgia Code S48-7-40.17.

¹⁸ Ibid., 2022 Georgia Code S48-7-40.17.

¹⁹ Ibid., 2022 Georgia Code S48-7-40.17.

²⁰ Introduction to NAICS, North American Industry Classification System, United States Census Bureau, accessed October 2022, <https://www.census.gov/naics/>.

begin hiring staff. When this process starts, the company will have 12 to 24 months to complete the first round of hiring. During this timeframe, the company is required to meet the minimum standard discussed earlier in this section and in the previous section. As long as these standards are reached in year one, the company has four additional years to earn the tax credit by creating new jobs. Tax credits not used during this five-year time frame may be carried forward for up to ten additional years.²¹

The implied purpose of the QJTC is to encourage new job growth across Georgia. These new jobs may come from either a new business relocating to the state of Georgia or an existing business making a new investment in the area. In either case, the goal remains the same, which is to add new jobs that include a capital investment. These new jobs will pay above the average wage for the community, which could increase the economic value of these jobs. Further, due to the different standards in tier 1 and 2 counties with a rural designation, there is an implied focus on adding more jobs to rural Georgia. Additionally, by not designating a list of target industries, policymakers further encourage development in rural communities by not limiting the type of industry that can be targeted. This provides more flexibility for local leaders working to attract businesses with skills similar to those already present in the community. For nonrural communities, the focus on quality jobs provides a tool for leaders to look at a wider number of industries that could be a good fit for that community and drive future development.

²¹ Ibid., Georgia Code Title 48. Revenue and Taxation § 48-7-40.17

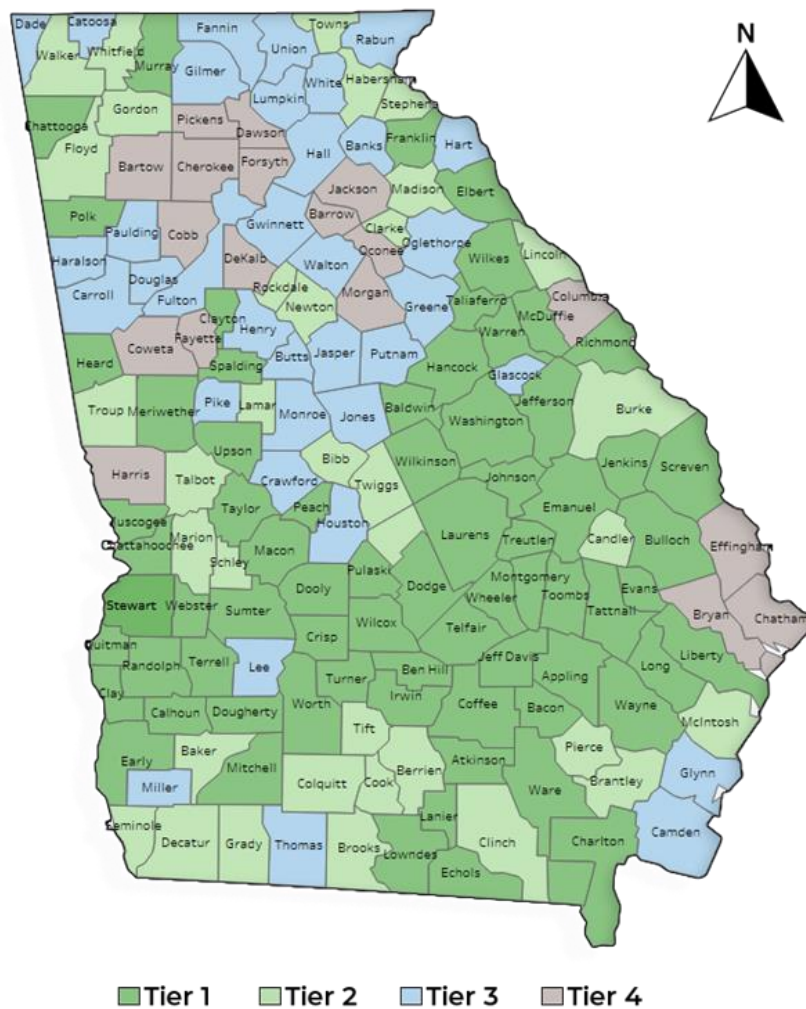
Tax Provision-Related Activity

The QJTC program covers all industry sectors in the Georgia economy. This tax credit is focused on creating new jobs either from new businesses moving to Georgia or existing firms making new investments in this state, which leads to new hiring. This wide-ranging tax credit means that projects covered by this tax credit are taking place across the state of Georgia. CBAER began by applying the QJTC jobs count standard at the county level to the existing economy in Georgia to provide a general estimate of the types of firms already operating in this state. This segment of the report aims to define how many existing operations could meet the employment standard and provides a general description of the current average income level by tier in Georgia. The first stage of the analysis uses establishment by employment size and average county wage. It ends with a comparison between the Georgia counties that have the rural status and those that do not have this designation.

The second stage of this section covers how the QJTC has been used over the past five years (2017 to 2021). It uses data provided by the Georgia Department of Revenue. CBAER began by focusing on the total funds used to earn the tax credit, the number of enterprises, the average amount of credit issued, and the amount of credit used per job. Next, it highlights the new jobs that used the QJTC by tiers. Further, the team has included information on how relevant industrial sectors used the QJTC over the five-year period. The team will also include the four development tiers in this analysis to provide additional context.

Next, CBAER has included two maps of the state of Georgia that highlight which counties are included in each geographic designation used to assign the eligibility requirements for QJTC. The first map focuses on the four tiers of economic development split across all 159 counties in Georgia. The Georgia Department of Community Affairs assigns tiers 1 through 4 annually, and the counties on the map are part of the 2023 presentation. The second map in figure 2 shows which counties are designated as rural with tier 1 and 2 status under current rules.

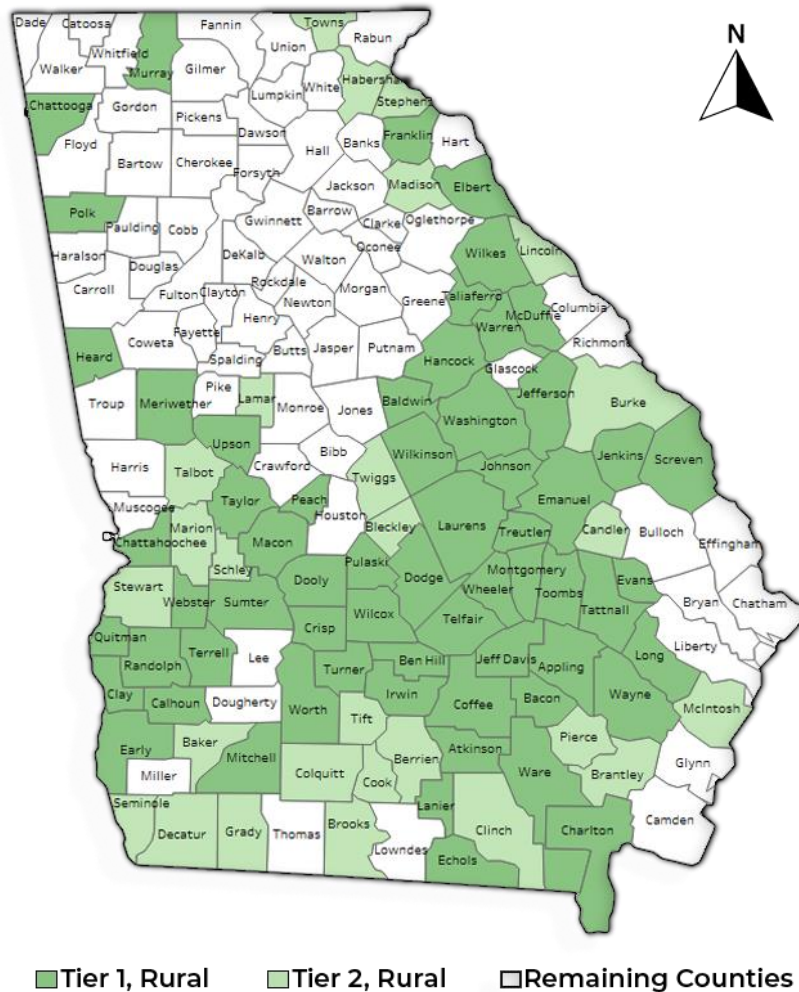
Figure 1: Map of Counties by Tier



In Figure 1, the tier 1 and 2 counties are typically located outside of the metro Atlanta area. Some core metropolitan counties are included in the first two tiers; however, all of these are outside of northern Georgia with the exception of Athens. In contrast, tiers 3 and 4 center around metro Atlanta. Although there are some exceptions to this general finding. For example, the Savannah MSA is entirely made up of Tier 4 counties.

Building on this information, not all Tier 1 and 2 counties meet the current definition for a rural county. This is defined for the purposes of this tax credit as being a county with a population of less than 50,000 and a poverty rate of over 10 percent. Figure 2 shows a map of the counties in Georgia that are Tier 1 or 2 counties with the rural designation.

Figure 2: Tier 1 and 2 Counties in Georgia by Rural Status



As shown in Figure 2, most rural counties are located south of Macon (Bibb County) and west of Augusta (Richmond County). These rural areas comprise a large part of 5 of the 12 regional commissions in Georgia, which are the Central Savannah River Area, Heart of Georgia-Altamaha, Southern Georgia, Southwest Georgia, and River Valley Region.²²

²² Dade, F., & Rabun, U. T. (n.d.). State of Georgia. [dca.ga.gov](https://www.dca.ga.gov/sites/default/files/rcjuly2021.pdf). Retrieved November 30, 2023, from <https://www.dca.ga.gov/sites/default/files/rcjuly2021.pdf>

Georgia Economic Overview

This segment of the report includes average wage, employment, and establishment data covering the past five years, from 2018 to 2022. This range was selected because it will provide a view of how these variables have changed over time and will overlap with the tax credit data discussed in the next section of the report. Furthermore, the data presented here was collected and is presented to match the QJTC, which means that annual employment data in this section is presented by establishment size. For example, Tier 1 employment includes all establishments that have ten or more jobs. By following this method, CBAER seeks to highlight the existing level of development in the Georgia economy in economic segments similar to the QJTC tax credit.

To begin the analysis, the team gathered average annual county wage data from the past five years and broke it down by tiers. CBAER then calculated the interquartile ranges and displayed the mid-point of this analysis in Table 3. This mid-point is the median average wage for each tier in the analysis, which is displayed in Table 3. The information was included because the average county wage is one of the major factors used to determine if a project is eligible for the QJTC. It also provides a general comparison between the average wages in each tier. Also, note that the average wages are reported in nominal terms and are not adjusted for inflation.

Table 3: Median (Interquartile Range 50%) Range of Average Annual Wages in Georgia by Tier

	2018	2019	2020	2021	2022
Tier 1	\$35,356	\$36,166	\$38,394	\$40,796	\$43,264
Tier 2	\$35,950	\$36,446	\$38,898	\$41,308	\$43,633
Tier 3-4	\$38,716	\$37,329	\$40,298	\$42,956	\$45,633

Source: BLS Data

Over the past five years, nominal wages have increased across each of the tiers displayed in Table 3. In tier 1 counties, the average annual wage grew by 4.5 percent between 2018 and 2022. While 2019 had the slowest growth rate at 1.9 percent, the year 2022 grew the fastest, at 6.2 percent. In the Tier 2 counties, this average annual growth rate was 4.9 percent over the five-year time frame. This included 2019, which had the slowest rate of increase at 2.1 percent, while the fastest-growing year was 2020, at 6.6 percent.

The combined Tier 3 and 4 counties also had a strong rate of growth. Between the years 2018 to 2022, the overall average annual rate of growth was 4 percent. In this group, the slowest rate of growth was -3.6 percent in 2019, followed by an 8 percent increase in 2020.

Next, CBAER examined the number of jobs by establishment size that is consistent with the QJTC eligibility requirements. Tier 1 counties include employment in the establishment of 10 or more employees, while tiers 3 and 4 counties are 50 or more. The only tier that does not line up perfectly is tier 2, which is set at 20 or more in place of 25 or more due to data availability issues. The team then examined the trends in total employment over the years 2018 – 2022 for each county. This is illustrated in Table 4.

Table 4: QJTC Eligible Annual Employment by Tiers

	2018	2019	2020	2021	2022
Tier 1	692,663	695,401	655,378	665,861	672,583
Tier 2	406,467	409,699	387,940	395,272	396,416
Tiers 3-4	1,155,627	1,187,171	1,114,345	1,150,204	1,204,092

Source: Georgia Department of Labor

Counties in tiers 1 and 2 experienced an overall loss of total employment over 2018-2022, with Tier 1 declining by 20,080 jobs and tier 2 decreasing by 10,052 jobs, respectively. In comparison, tier 3 and 4 counties increased their employment by 77,715 jobs. All job losses are linked to employment changes in 2020. In tier 1 and 2 counties, employment growth declined by 5.8 percent and 5.3 percent, respectively. This was followed by an average annual employment job growth rate of just over 1 percent between 2021 and 2022. In contrast, for tier 3 and 4 counties, employment decreased by 5.7 percent in 2020. However, the recovery in these areas has been much more robust, with a 3.7 percent average annual increase from 2021 to 2022.

The team also examined the annual growth rates for employment by tier and calculated the average annual growth rate for each tier between the years 2018 and 2022. Consistent with the employment numbers, counties in tiers 3 and 4 generally experienced a slight employment growth rate, while those of tier 1 and tier 2 remained nearly stagnant or receded. Employment in counties in tiers 3 and 4 increased over the five years by 1.5 percent. Employment in tiers 1 and 2 declined by 0.5 percent and 0.1 percent, respectively. Overall, each tier experienced a decline in growth rates in the year 2020. All counties were also able to successfully rebound with positive rates of growth in 2021 and 2022.

The third variable in the analysis, establishments, as defined by the U.S. Bureau of Economic Analysis, are business or industrial units located at a single geographic location. Companies or business enterprises may consist of one or more establishments.²³ By examining the number of establishments in this area over the past five years, CBAER is seeking to establish a general trend of economic activity. The establishments are again segmented by QJTC parameters with tier 1 counties, including establishments with 10 or more employees; tier 2 includes establishments with 20 or more jobs, and tiers 3 and 4 covers establishments with 50 or more employees.

Table 5: QJTC Eligible Annual Establishments by Tier

	2018	2019	2020	2021	2022
Tier 1	12,320	12,419	12,049	12,277	12,393
Tier 2	4,576	4,623	4,411	4,548	4,566
Tiers 3-4	19,816	20,221	18,934	19,740	20,370

Source: Georgia Department of Labor

As seen in Table 5, most tiers experienced an increase in total establishments over the 2018 – 2022 time period, except for tier 2, which decreased by 10 establishments. The team also calculated the annual growth rate in establishments for each tier. Establishments in Tiers 1 and 2 counties have grown, on average, 0.2 percent over the 2018 – 2022 period.

Establishments in tiers 3 and 4 have grown on average by 1 percent over the same timeframe. All tiers experienced a sharp decline in the number of establishments in the year 2020, by -3.0 percent, -4.6 percent, and -6.4 percent for tier 1, tier 2, and tiers 3-4, respectively. All tiers, as expected, experienced a negative growth rate in the year 2020, with tiers 3 and 4 experiencing the sharpest negative growth rate. The data from this table suggests that tiers 3 and 4 were able to successfully rebound from the COVID-19 pandemic and exceed pre-pandemic levels in number of establishments, growing at rates of 4.3 percent and 3.2 percent in years 2021 and 2022, resulting in a five-year average growth rate of 1.0 percent. However, tier 1 and tier 2 were unable to do so, with growth rates after the pandemic being 1.9 percent and 0.9 percent for tier 1 and 3.1 percent and 0.4 percent for tier 2, resulting in a five-year average growth rate of 0.2 percent for both tiers. Overall, except for tier 2, the level of establishments exceeded levels found in 2019 in most tiers. This led to an addition of 607 establishments opening in Georgia over this five-year timeframe, indicating that businesses are either expanding their operations or new companies are regularly choosing to locate within the state.

²³ *Establishment*. (2018, April 13). U.S. Bureau of Economic Analysis. Retrieved September 25, 2023, from <https://www.bea.gov/help/glossary/establishment#:~:text=An%20economic%20unit%E2%80%93business%20or,of%20one%20or%20more%20establishments.>

Rural vs. Nonrural Counties Economic Overview

In addition to the development tier status, the counties with rural status also play a role in awarding tax credits under the QJTC program. Following this qualification, CBAER examined the counties in Georgia that earned a rural designation as defined by the Department of Community Affairs, which is displayed in this report in Figure 2. This information was included in order to highlight the differences between rural and nonrural counties using employment and establishments. As noted, the QJTC program provides a lower qualification standard for rural counties. This subsection provides information that illustrates quantifiable differences between rural and nonrural counties in Georgia. Table 6 compares employment numbers in both rural and nonrural counties from 2018 – 2022.

Table 6: QJTC Eligible Annual Employment by Rurality Status

	2018	2019	2020	2021	2022
Rural	413,271	418,370	422,728	401,738	405,127
Nonrural	2,533,943	2,597,583	2,651,901	2,498,556	2,573,152

Source: Georgia Department of Labor

As seen in Table 6, nonrural counties accounted for most of the new employment positions and demonstrated significantly higher new employment positions for every consecutive year from 2018 – 2022. Even though nonrural counties had a faster growth rate than rural counties, they suffered a greater deficit in 2020 during the COVID-19 pandemic than rural counties. Post-pandemic, nonrural counties have grown at a faster rate and even surpassed pre-pandemic levels of employment. While rural counties were able to increase their employment again following the pandemic, they have not reached pre-pandemic levels.

Table 7: QJTC Eligible Annual Establishments by Rurality Status

	2018	2019	2020	2021	2022
Rural	37,373	39,037	39,451	40,790	42,878
Nonrural	211,320	222,939	230,189	248,860	260,266

Source: Georgia Department of Labor

Nonrural counties demonstrated the highest annual growth in the number of new establishments in Georgia from 2018 - 2022. Both rural and nonrural counties had a continuous linear growth in the number of new establishments from 2018 - 2022, even during the COVID-19 pandemic, with the highest number of establishments coming in at 260,266 for nonrural counties and 42,878 for rural counties in 2022. While both counties had strong growth rates, nonrural counties' average annual growth rate for establishments was much higher, coming in at 4.4 percent in comparison to 2.7 percent for rural counties.

QJTC Overview

The second stage of this section covers how the QJTC has been used over the past five-years (2018 to 2022). It uses data provided by the Georgia Department of Revenue. CBAER begins by focusing on the total funds used to earn the tax credit, the number of enterprises, the average amount of credit issued, and the amount of credit used per job. Next, it highlights the new jobs that used the QJTC by tiers. Further, the team has included information on the QJTC usage by the industrial sectors and tiers in Georgia over the established five-year time frame.

Table 8 outlines the total funds used to earn the Quality Jobs Tax Credit, the number of enterprises, the amount of credit issued, and the amount of credit used per job. The QJTC program awards tax credits annually based on the jobs awarded and wages paid at the project level. Awarded tax credits can be used in the year or carried forward for a 10-year period. The project and tax credit awards in Table 8 are for the year listed in the table. This Table 8 provides an overview of the annual fiscal commitment the state of Georgia is making to beneficiaries of the QJTC program.

Table 8: Total Projects, Credits, and Establishments by Year

Year	Total Projects	Amount of Credit Award	Credit Per Job
2017	85	\$74,866,456	\$4,470
2018	106	\$81,924,150	\$4,668
2019	124	\$106,770,000	\$4,643
2020	125	\$105,518,000	\$4,711
2021	134	\$117,442,000	\$4,617
Total	574	\$486,520,606	\$4,675

Source: Georgia Department of Revenue

As seen in Table 8, the total number of QJTC projects has grown linearly between 2017 and 2021. It has increased at an annual average rate of 12.4 percent. As noted in the legislative background section, the job creation standard by tier and the timeframe available to count new jobs was added to state law on June 1, 2019. Due to the change in the economy since 2020, it is unclear what impact this change had on usage, but it could be a factor going forward.²⁴ The annual amount of credit issued has increased since 2017 at an annual average rate of 12.5 percent. The amount of tax credit issued has also increased over the past five years, even as the amount of tax credit issued per job has remained relatively stable. Overall, this tax credit has

²⁴ Georgia General Assembly. (n.d.). Legis.ga.gov. Retrieved November 30, 2023, from <https://www.legis.ga.gov/legislation/54770>

seen an increase in use over the five-year timeframe, which includes the number of projects and the amount of credit used annually.

Next, CBAER examined hiring made by businesses that used the QJTC. Each of these jobs listed in Table 9 are new in the year they were awarded. Businesses that used the QJTC are only allowed to report a job as new once. Table 9 highlights the number of new jobs that used the Quality Jobs Tax Credit in each tier.

Table 9: New Jobs by Tier and Year

Year	Tier 1	Tier 2	Tiers 3-4	State
2017	2,090	189	13,416	15,695
2018	3,556	531	13,464	17,551
2019	1,768	1,420	19,809	22,997
2020	1,573	496	20,329	22,398
2021	701	248	24,486	25,435
Total	9,688	2,884	91,504	104,076

Source: Georgia Department of Revenue

As seen in Table 9, the number of new jobs in Georgia has increased since 2017, and even though there was a slight decline in 2020, the state was able to recover successfully in 2021. Tiers 3-4 consistently demonstrate the highest number of new jobs, followed by Tier 1 and Tier 2, which have seen declining levels of QJTC jobs awards since usage peaked in 2018. Additionally, even though Tier 1 has the lowest threshold for job creation under the QJTC program, this area has seen a consistent decrease in new job awards since 2018. On the contrary, Tiers 3-4, with the highest thresholds to meet for the QJTC, have consistently increased the number of new jobs since 2017.

Following the totals discussed in Table 9, the team examined the use of the tax credit by industry as defined using 2-digit NAICS code industries and tier. Even though the QJTC does not have an industry-specific requirement, this data is collected on most projects. Table 10 summarizes all industry data from the past five years (2018 – 2022) to look at the industries that have used the tax credit over this timeframe.

Table 10: Credit Jobs by Industry and Tier, Cumulative 5-Year data (2017-2021)

Industry	Tier 1		Tier 2		Tiers 3-4		State	
	Emp	Share	Emp	Share	Emp	Share	Emp	Share
Manufacturing	1,003	10.40%	704	24.40%	14,189	15.50%	15,896	15.30%
Professional, Scientific, and Technical Services	283	2.90%	0	0%	12,602	13.80%	12,885	12.40%
Wholesale Trade	0	0%	97	3.40%	11,169	12.20%	11,266	10.80%
Transportation and Warehousing	4,326	44.70%	417	14.50%	4,061	4.40%	8,804	8.50%
Finance and Insurance	2,025	20.90%	82	2.80%	6,596	7.20%	8,703	8.40%
Information	0	0%	0	0%	8,217	9.00%	8,217	7.90%
Administrative Support and Waste Management and Remediation Services	703	7.30%	0	0%	5,580	6.10%	6,283	6.00%
Management Companies and Enterprises	142	1.50%	326	11.30%	5,053	5.50%	5,521	5.30%
Retail Trade	557	5.70%	0	0%	3,477	3.80%	4,034	3.90%
Health Care and Social Assistance	0	0%	0	0%	3,549	3.90%	3,549	3.40%
Construction	171	1.80%	574	19.90%	2,213	2.40%	2,958	2.80%
Real Estate and Rental and Leasing	0	0%	0	0%	713	0.80%	713	0.70%
Mining, Quarrying, and Oil and Gas Extraction	0	0%	0	0%	337	0.40%	337	0.30%
Accommodation and Food Services	0	0%	0	0%	180	0.20%	180	0.10%
Utilities	117	1.20%	0	0%	0	0%	117	0.10%
Other Services (except Public Admin)	68	0.70%	32	1.10%	0	0%	100	0.10%
No NAICS	293	3.00%	652	22.60%	13,568	14.80%	14,513	13.90%
Total	9,688	100%	2,884	100%	91,504	100%	104,076	100%

Source: Georgia Department of Revenue

Over the past five years, the Manufacturing industry has been the top performer for the state of Georgia, followed by the Professional, Scientific, and Technical Services industry and the Wholesale Trade industry. The Manufacturing Industry makes up about 15.3 percent of the total number of employees under the tax credit, while 12.4 percent of the total employees is within the Professional, Scientific, and Technical Services industry. In contrast, the industries least likely to use the QJTC includes Other Services (except Public Administration) and Utilities, each make up less than 1 percent of the total for the state.

Tiers 3-4 yielded the newest credited jobs, followed by tier 1 and then tier 2. Transportation and warehousing and finance and insurance were especially high in tier 1, making up 65.6 percent of total linked jobs. Manufacturing, construction, transportation, and warehousing were critical industries for tier 2 counties, making up 58.8 percent of total linked jobs.

Manufacturing, Construction, and Professional, Scientific, and Technical Services were the most

popular industries for tiers 3-4, adding up to 41.5 percent of linked jobs. Allow the no NAICS category was prevalent, the majority of projects did report a NAICS code.

Building on this information, CBAER also examined 2021 as a solo year to align with the economic and fiscal analysis section. Table 11 breaks down the use of the QJTC by 2-digit NAICS code industry and tier for this year.

Table 11: Credit Jobs by Industry and Tier, 2021

Industry	Tier 1		Tier 2		Tiers 3-4		State	
	Emp	Share	Emp	Share	Emp	Share	Emp	Share
Wholesale Trade	0	0%	0	0%	3,921	16.00%	3,921	15.40%
Manufacturing	227	32.40%	248	100%	3,228	13.20%	3,703	14.60%
Information	0	0%	0	0%	2,943	10.20%	2,943	11.60%
Professional, Scientific, and Technical Services	0	0%	0	0%	2,431	9.90%	2,431	9.60%
Transportation and Warehousing	206	29.40%	0	0%	1,544	6.30%	1,750	6.90%
Finance and Insurance	0	0%	0	0%	1,531	6.30%	1,531	6.00%
Management Companies and Enterprises	0	0%	0	0%	1,293	5.30%	1,293	5.10%
Administrative/Support and Waste Management and Remediation Services	0	0%	0	0%	1,215	5.00%	1,215	4.80%
Construction	57	8.10%	0	0%	641	2.60%	698	2.70%
Retail Trade	0	0%	0	0%	615	2.50%	615	2.40%
Health Care and Social Assistance	0	0%	0	0%	572	2.30%	572	2.20%
Real Estate and Rental and Leasing	0	0%	0	0%	280	1.10%	280	1.10%
Accommodation and Food Services	0	0%	0	0%	86	0.30%	86	0.30%
Mining, Quarrying, and Oil and Gas Extraction	0	0%	0	0%	69	0.30%	69	0.30%
Utilities	58	8.30%	0	0%	0	0%	58	0.20%
No NAICS	153	21.8%	0	0%	4,117	16.8%	4,270	16.8%
Total	701	100%	248	100%	24,486	100%	25,435	100%

Source: Georgia Department of Revenue

In Georgia, manufacturing and wholesale trade had the most jobs linked to the QJTC in 2021. These two top industries make up 30 percent of the total linked employment under the tax credit in the state. The smaller industries in 2021 are the utilities industry and the mining and quarrying industry, which make up only 0.5 percent of total employment.

Tiers 3-4 were responsible for most of the jobs awarded a credit, followed by tier 1 and then tier 2. Manufacturing and transportation and warehousing were the top industries for Tier 1. Manufacturing was the top and only industry for tier 2 in 2021. Manufacturing, Wholesale

Trade, and Information were the industries creating the most new jobs from the tax credit for Tiers 3-4. The year 2021 has shown the highest number of new jobs created from the Quality Jobs Tax Credit and the largest level of no 2-digit NAICS reported.

Comparison to Other States

Job tax credits are a widely used tool for encouraging business development. These credits are generally a part of the business tax system and are aimed at companies either relocating to or investing in a state. Tax credit programs are designed to support new hiring and are often temporary, although they can be a permanent feature in some states' tax codes. The specifics of these programs vary by state, but generally, these credits focus on job quality and retention, and the credit awarded to the companies can be linked to the annual wage paid to new hires.²⁵

CBAER has selected a group of nine states that offer a job tax credit similar to the QJTC program. The equivalent tax credits were compared to the rules and requirements of the QJTC in this section. To be included in this list each program had to include a wage floor as one of the eligibility requirements. Once this threshold was met, the other aspects of the QJTC were used as points of comparison. Table 12 summarizes the results of the comparison, and the remainder of this section briefly discusses the overall findings. Appendix A includes a more detailed analysis of each of these state programs.

Table 12: Tax Credit Qualifications

State	Wage Requirement	Urban/Rural Classifications	Initial Investment Requirement	Target Industries Only	Job Creation Time Period
Georgia	X	X	X		X
Arizona	X	X	X		X
Colorado	X	X			X
Florida	X	X		X	
Iowa	X				X
Louisiana	X	X		X	
Mississippi	X				X
New Mexico	X	X		X	X
North Carolina	X	X			
Oklahoma	X			X	X

Source: CBAER Analysis

²⁵ Chirinko, Robert S., Daniel J. Wilson. 2023 “Fiscal Policies for Job Creation and Innovation: The Experiences of US States,” Federal Reserve Bank of San Francisco Working Paper 2023-01. <https://doi.org/10.24148/wp2023-01>

Each state in the above table that offers tax credits or other incentives for creating quality jobs includes a minimum wage requirement for the occupation or industry to be eligible for the incentive. These requirements are normally set between 100 and 125 percent of the county wages. In some states, however, these requirements are contingent upon the project as approved (in the case of Colorado), or they can be waived altogether under certain circumstances. The wage requirement in Georgia is consistent with the wage requirements for similar tax credits in the states above.

Like Georgia, six other states offer additional incentives for jobs created in rural areas. These states typically have more lenient or even waived requirements for regions classified as rural, sparsely populated, or underdeveloped. This helps achieve a policy aim of encouraging investment in underdeveloped areas, addressing pockets of unemployment or underemployment, and attracting diverse industries to such areas to improve resilience. For example, the Qualified Targeted Tax Refund Program in Florida waives the wage requirement for jobs created in rural areas. In a similar fashion, jobs created in urban areas have higher requirements. The tax program in Arizona requires urban areas to create 25 new jobs with a minimum capital investment ranging from \$500,000 to \$5,000,000 whereas rural areas must create a minimum of 5 new jobs with a capital investment between \$100,000 and \$1,000,000.

Furthermore, these programs tend to be more impactful in rural areas. An analysis of Iowa's High Quality Jobs program found that HQJ projects in rural areas were estimated to have a larger spillover effect on employment than those in urban areas at the industry-level contributing to the goal of attracting diverse industries to such areas and improving resilience.²⁶

Many quality job-type programs analyzed were intended for specific, targeted industries. For example, Oklahoma's 21st Century Quality Jobs Incentive Program provides that the incentives apply to knowledge-based service industries and includes high wage requirements.²⁷ Furthermore, eligibility for New Mexico's Job Training Incentive Program covers companies that manufacture or produce a product in New Mexico, non-retail service companies that export a substantial percentage of services out of state, and other specified types of businesses.²⁸ In contrast, Louisiana limits its tax credit to the following industries: bioscience, manufacturing, software, clean energy technology, food technology, advanced materials, headquarters or

²⁶ Jin. (2021, December). Iowa's High Quality Jobs Program Tax Credits Program Evaluation Study. Iowa Department of Revenue.

²⁷ *21st Century Quality Jobs*. (2021, January 26). Oklahoma Department of Commerce. Retrieved September 18, 2023, from <https://www.okcommerce.gov/doing-business/business-relocation-expansion/incentives/21st-century-quality-jobs-incentive/>

²⁸ Gannon, & Borrego. (n.d.). *Job Training Incentive Programs*. New Mexico Economic Development Department. Retrieved November 13, 2023, from <https://edd.newmexico.gov/business-development/edd-programs-for-business/job-training-incentive-program/>

multi-state businesses, aircraft MROs, or oil and gas field service industries.²⁹ Florida's Qualified Target Industry Tax Refund Program was designed to encourage the recruitment and creation of high-paying, high-skilled jobs within specific industries as well as the growth of corporate headquarters and other target industries.³⁰ Florida seems to be the most restrictive state, limiting their tax credit to the following industries: Cleantech, Life Sciences, InfoTech, Aviation/Aerospace, Homeland Security/Defense, and Financial/Professional Services.³¹ There seems to be a trend and consensus among the states that they are prioritizing high-growth industries that have the potential to create high-wage jobs and contribute to economic development such as manufacturing, clean energy, technology, and software.

Two states, specifically Mississippi and Iowa, stated that employee benefits and/or medical benefits must be included in the new jobs created. In order to utilize the Advanced Job Program in Mississippi, companies must provide basic health benefits to all full-time employees. Similarly, for the High-Quality Jobs Program in Iowa, benefits packages must meet certain criteria to be eligible for the program. This helps in ensuring the creation of quality jobs and aids in attracting and retaining employees over the long term.

Lastly, many of the states listed require a minimum number of jobs to be created. Programs in Oklahoma and Mississippi both require 10 new full-time jobs to be created. In Arizona, the minimum number of jobs necessary for the program depends on the rural status of the county: urban areas require 25 new jobs and rural areas require 5 new jobs. Every program besides North Carolina, Louisiana, and Florida requires a minimum number of jobs to be created during the credit period.

²⁹ Adegbe. (n.d.). *Quality Jobs*. Opportunity Louisiana. Retrieved November 13, 2023, from <https://www.opportunitylouisiana.gov/business-incentives/quality-jobs>

³⁰ Levanthal, Regalado, Byrd, & Jameson. (2022, November). *Florida Economic Development Program Evaluations – Year 10* (No. 22–06). Office of Program Policy Analysis and Government Accountability.

³¹ Qualified Target Industry Tax Refund. (2012, February). In *eFlorida.com*. Enterprise Florida, Inc.

Economic Activity

The economic activity linked to the QJTC is analyzed in three ways. First, CBAER generated an economic impact analysis based on the number of jobs linked to the QJTC in 2021. This year was selected because it was the most recently completed year within the 2017 – 2021 timeframe of the report. Next, the team prepared an alternate use analysis that focused on what would have happened if the tax credit were not offered and the funds were used by state governments to fund its operations. This section concludes with a but for analysis, which assesses how many of the benefits related to the QJTC are linked to the tax credit.

Economic Impact Analysis

Economic activity is measured by the number of jobs linked to the QJTC and the industry in which these jobs are in the economy. The team analyzes a five-year timeframe from 2017 to 2021 in this report. Over this timeframe, the tax credit supported an average of 115 projects and 20,815 jobs. This equated to \$97.30 million in annual credit awarded or \$4,675 in credit per job. However, as noted in the QJTC in Georgia subsection, the years 2019, 2020, and 2021 had higher levels of activity than the years 2017 and 2018. This increase in activity began before the pandemic and has continued through the recovery period.

CBAER selected tax year 2021 as the focus year for the economic contribution analysis. This year was selected because it was the most recent year with complete data. It also aligned with the average activity discussion linked to this credit. The amount of credit issued per job in the year 2021 was \$4,617, which was only -1.2 percent, away from the five-year average. Additionally, by using a signal year, the team was working to project a clear picture of economic activity linked to this tax credit.

The economic impact analysis represents the impact of jobs linked to businesses that used the QJTC. The tax credit is designed to support the creation of new jobs that are either moving into Georgia or have been created by existing businesses making new investments, which creates an economic impact. These impacts can be calculated using an input/output model. In this case, the team used the IMPLAN model for the state of Georgia for the economic impact analysis. It was created as a partnership between the United States Forest Service (USFS) and the Federal Emergency Management Agency (FEMA) in the mid-70s. This model was privatized in 1991 and is now a fully private company. It is one of the most commonly used input/output models in the United States.

There are four variables used to describe the economic impact in this analysis: output, gross regional product, labor income, and employment. The output variable refers to the value of industry production, which includes net sales and inventory changes. Value added refers to singular local transactions, where intermediate impacts have been removed from the output. Next, labor income covers both employee compensation and proprietor income. Included within employee compensation are both wages paid and benefits provided to employees. The final variable is employment, which includes all full-time, part-time, and temporary positions.

These four variables work across the economy to define the types of economic impacts linked to the QJTC.

Using these variables included in the IMPLAN model, the team calculated the economic impact of the QJTC in Georgia in 2021. The economic impacts are calculated at the state level using six-digit NAICS codes at the project level. Table 13 displays the estimated economic impact.

Table 13: 2021 Economic Impact of QJTC

Impact	Output*+	Value		Employment
		Added*+	Labor Income*+	
Direct	\$10,058.80	\$5,133.13	\$2,598.49	25,435
Indirect	\$4,733.46	\$2,574.38	\$1,627.84	24,044
Induced	\$3,746.42	\$2,201.56	\$1,185.04	21,239
Total	\$18,538.69	\$9,909.07	\$5,411.36	70,718

*\$ in Millions

+current year dollars

In 2021, direct output linked to the QJTC was \$10.05 billion and increased to \$18.54 billion once the indirect and induced transactions were included. The indirect transactions cover business-to-business spending linked to the direct impacts; examples of this spending could include replacing input goods used in a production process, uniforms, safety equipment, and more. In contrast, the induced transactions cover consumer-to-business transactions. For example, an induced transaction occurs when employees use their earnings to purchase homes, cars, groceries, medical care, and more.

For the QJTC, the indirect and induced transactions account for 45.7 percent of the total impact, with indirect effects outpacing induced effects by \$987 million in output. Using induced output transaction, the top five contribution sectors include employment services, real estate, management of companies, video production, and radio and television broadcasting. This broad range of secondary impacts is partly driven by the wide range of input industries in the analysis. The QJTC was used by 17 different 2-digit NAICS industrial sectors. The three largest sectors included manufacturing, wholesale trade, and professional scientific and technical services, accounting for 38.5 percent of the direct inputs.

In the value-added segment of the analysis, we found that the induced category is still trailing the indirect transactions. This does not mean that the induced transactions are not impactful to the economy. This consumer-to-business transaction accounted for 2.2 billion in economic activity which is 22.2 percent of the total value-added impact. This spending influences several other major industries in Georgia. The top five industries supported by this spending include owner-occupied dwellings, hospitals, banking/depository of credit, offices of physicians, and rental housing. These five are followed closely by both limited and full-service restaurants. All of this spending has gone to support employment in this state.

Using employment, the QJCT supports over 25,400 jobs in 2021. This employment and associated spending support 45,300 indirect and induced jobs, which is 64 percent of the total in the analysis. This direct and secondary employment is linked to \$76,536 in labor income per job. With the top employment industries in durable goods wholesale, employment services, management of companies, real estate and truck transportation.

Within this economic impact analysis, the jobs used are new in 2021 and are not repeated in any other year. However, this does not mean one single project will not provide new jobs in multiple years. In 2021, there were 134 total projects, with 108 of these appearing in another year in our data set. This resulted in 23,007 jobs coming from projects that provided jobs in another year, which is consistent with the tax credit being available for use over a five-year period but only allowing jobs to be counted in a single year. In contrast, there were 26 projects that had not appeared in any previous year, yielding 2,428 jobs. From an economic impact standpoint, the driver of the impact is the number of new jobs in a single year. It is less impactful whether the jobs are coming from a new or repeat project. These findings do illustrate that the projects using the QJTC tend to be larger multiyear ventures rather than single one-off projects.

Alternate Use Analysis

In order to develop a clear picture of the economic and fiscal impact of the tax credit, CBAER performed an alternative use analysis. The analysis assumed that if the tax credit was eliminated the award funds would be returned to the state of Georgia and used as part of normal operations. To complete this segment of the report, CBAER first calculated the current economic impact of this policy choice in 2021. The team used that the \$117.44 million awarded tax credit would be the direct input for this analysis. Table 14 displays the total alternate use impact in 2021.

**Table 14: State Government–
2021 Alternative Use Economic Impact**

	Output^{*+}	Value Added^{*+}	Labor Income^{*+}	Employment
Direct	\$117.44	\$55.93	\$30.34	297
Indirect	\$55.27	\$30.06	\$19.01	281
Induced	\$43.74	\$25.70	\$13.84	248
Total	\$216.45	\$115.69	\$63.18	825

*Dollars in millions
+ Current year dollars

The economic impact of using the awarded tax credit to fund state government would support 297 in direct state employment and \$55.93 million in direct value added. Once this spending moves through the economy the total impact would reach \$63.18 million in value added and support 825 jobs. These jobs would have pay and benefit packages that would approach \$76,537 in annual compensation.

Next, CBAER estimated the amount of tax revenue that would have been collected following the economic impact. Table 15 shows the average annual new tax collections for both state and local governments in Georgia from the alternate use activities for 2021.

Table 15: Combined State and Local Governments – Average Alternative Use Tax Collections Without the Tax Credit ^{*,+}

	State	Local Taxes
Georgia Income Tax Estimate	\$2.08	
Sales Tax Estimates	\$0.71	\$0.60
Georgia All Other Taxes (estimated at 22% of total GA tax)	\$0.79	
Property	0	\$1.14
Total State and Local Tax Estimate	\$3.58	\$1.74

* Dollars in millions; + Current year dollars

Based on the alternate use economic impact analysis, the total state tax collection would have been \$3.58 million, accompanied by \$1.74 million in local tax collections. The tax collections connected to this analysis are based on the secondary impact of individuals paying state and local taxes on their income from the alternative use activities. The most prominent category for state government in terms of revenue is the income tax estimate, which equaled \$2.08 million, or 58 percent of the total tax. Sales taxes and other Georgia taxes were \$0.71 million and \$0.79 million, respectively. The local tax collections were most represented by property taxes, which make up 66 percent of the total collections for this category, with local sales taxes equal to \$1.74 million.

But For Analysis

Many factors influence the location decisions of firms in the economy. This includes but is not limited to access to the necessary workforce, supply chain, customer base, educational institutions, and other company specific factors. Also included in this mix are project specific local tax abatements and more general state level tax incentives, which include income tax credits. The QJTC is a state level tax credit that seeks to aid with economic development across the state of Georgia. It incentivizes development in less-developed areas by providing different levels of eligibility requirements based on the level of development at the county level. Thus, a place-based component is added to a statewide tax credit.

Following this description, not all of the 135 projects located in Georgia and used the QJTC in 2021 do so only based on this tax credit. This is not to say that tax incentives do not play a role in firm location decisions. Rather, subsidies add to business attraction efforts, particularly with firms that offer the highest value to the government unit offering the incentive. This is because the overall incentive package value varies from project to project.³²

³² Slattery, Cailin, Bidding for Firms: Subsidy Competition in the U.S. (December 31, 2022). Available at SSRN: <https://ssrn.com/abstract=3250356>

This type of place-based incentive has been popular for years as policymakers look for ways to aid regional development in places currently being missed or under-invested in by the private sector. These types of tax credits can be beneficial by encouraging developers to move resources into distressed regions, which can increase economic activity. These tax credits are often given to businesses with larger multiplier effects, which may justify them receiving more subsidy per job than they might otherwise. It is also common for jobs going to less well-off communities to receive more subsidies.³³

From a firm perspective, this tax credit offsets some of the development costs associated with the project, which can increase the return on investment, creating a sizable benefit. The following is an example from the *Area Development Site and Facility Planning* publication in 2014. Assume a business creates 100 new jobs with qualifying wages and invests \$10 million in a Georgia community. The business would receive \$1.5 million from the QJTC over the qualifying time period based on the location in the state. In this example, 15 percent of the total capital cost would be offset by this credit.³⁴

From an economic and community development standpoint, there are benefits to providing a broad-based place-based tax credit. What is less clear however, is how to measure the effectiveness of one single tax credit in influencing firm location decisions once it has become part of the general equilibrium of the host community. In other words, many firms closely guard their decision-making processes, and communities will work with incoming companies to bring new business into the area. Even though it is clear the provision of a jobs tax credit is not the determining factor in a business decision to locate in a certain state or area within a state, the credit does play a role in the decision. Upon reviewing the literature, it was found that the location, expansions, and retention of jobs are influenced by tax incentive policies 2 percent, 11.4 percent, and 25 percent of the time. These percentages represent the proportion of firms that decided to locate in their region based on the tax credit.³⁵ Additionally, the research team also included 8.6 percent which represents the breakeven point after 10 years which will be discussed in the next section of the report.

³³ Slattery, C., & Zidar, O. (2020). Evaluating State and Local Business Incentives. *The Journal of Economic Perspectives*, 34(2), 90–118.

³⁴ Foley, B. (2014). Securing incentives with a well-paid workforce. *Area Development Site and Facility Planning*, 49(4), 25-27. Retrieved from <https://www.proquest.com/trade-journals/securing-incentives-with-well-paid-workforce/docview/1635270875/se-2>

³⁵ Bartik, Timothy J. 2018. "'But For' Percentages for Economic Development Incentives: What Percentage Estimates are Plausible Based on the Research Literature?" Upjohn Institute Working Paper 18-289. Kalamazoo, MI: W.E. Upjohn Institute for Employment Research. <https://doi.org/10.17848/wp18-289>

Table 16: Economic Contribution linked QJTC

% of Impact Solely Linked to QJTC	Output		Value Added		Labor Income		Employment	
	Direct	Total	Direct	Total	Direct	Total	Direct	Total
2% of Impact Solely Linked to QJTC	\$301.76	\$556.16	\$153.99	\$297.27	\$77.95	\$162.34	763	2,121
8.6% of Impact Solely Linked to QJTC	\$865.06	\$1,594.33	\$441.45	\$852.18	\$233.47	\$465.38	2,187	6,081
11.4% of Impact Solely Linked to QJTC	\$1,146.70	\$2,113.41	\$585.18	\$1,129.63	\$296.23	\$616.90	2,786	8,062
25% of Impact Solely Linked to QJTC	\$2,514.70	\$4,634.67	\$1,283.28	\$2,477.27	\$649.62	\$1352.84	6,357	17,676

* Dollars in millions; + Current year dollars

The table above reflects a lower bound of 2 percent with an upper bound at 25 percent based on the total economic impact in 2021. Using these assumptions, the value of the QJTC ranges from \$301.76 million to \$2.5 billion in direct output. It increases to \$566.16 million or \$4.6 billion in total when the secondary impacts are included. These economic output findings support employment in both the low and high scenarios. In this low scenario, direct employment was 763 and total supported jobs reached 2,121. In the high scenario, direct employment was 6,357, and total employment reached 17,676 jobs.

Fiscal Impact

The fiscal impact of the QJTC is determined by comparing the cost to the state of providing the credit to the increased revenue to state and local governments resulting from the incentive that the credit provides. Displayed in Table 17 is the economic impact of the QJTC in 2021.

Table 17: 2021 Economic Impact of the Quality Jobs Tax Credit

Impact	Output ⁺	Value	Labor	Employment
		Added ⁺	Income ⁺	
Direct	\$10,058.80	\$5,133.13	\$2,598.49	25,435
Indirect	\$4,733.46	\$2,574.38	\$1,627.84	24,044
Induced	\$3,746.42	\$2,201.56	\$1,185.04	21,239
Total	\$18,538.69	\$9,909.07	\$5,411.36	70,718

* Dollars in millions; ⁺ Current year dollars

Based on this impact, CBAER also prepared an economic impact covering the total economic effect of the QJTC from 2017 through 2021; Table 18 presents these figures.

Table 18: 2017-2021 Economic Impact of the Quality Jobs Tax Credit

Impact	Output ⁺	Value	Labor	Employment
		Added ⁺	Income ⁺	
Direct	\$37,557.97	\$18,991.47	\$10,376.10	104,076
Indirect	\$17,132.78	\$9,341.42	\$5,944.79	87,215
Induced	\$14,458.56	\$8,496.52	\$4,573.36	81,953
Total	\$69,149.31	\$36,829.41	\$20,894.25	273,244

* Dollars in millions; ⁺ Current year dollars

The economic impact of the quality jobs tax credit has an effect on state and local government tax collections, which partially offset the revenue loss from the provision of the credit. Companies will pay sales tax on non-exempt items purchased in-state, employees will pay income tax on their wages, and companies in the indirect and induced segment of the analysis will pay corporate taxes on their profits. The impact of this economic activity on state and local tax receipts is summarized in Table 19.

Table 19: New Tax Revenue from Economic Activity^{*+}

Type of Tax	2017-2021			Total (FY 2021)		
	State Impact	Local Impact	Total	State Impact	Local Impact	Total
Sales tax	\$567	\$319	\$886	\$160	\$90	\$250
Corporate profits tax	\$101	0	\$101	\$28	0	\$28
Personal income tax	\$442	0	\$442	\$115	0	\$115
Property taxes	0	\$775	\$775	0	\$218	\$218
Other taxes	\$29	\$57	\$86	\$13	\$16	\$29
Total tax receipts	\$1,139	\$1,151	\$2,290	\$316	\$324	\$640

* Dollars in millions; ⁺ Current year dollars

To calculate the net revenue or loss due to the quality jobs tax credit, the cost of the credit in terms of lower corporate income taxes is offset by the net of the new tax revenue generated by the economic activity spurred by the provision of the credit less the tax revenue lost from the fiscal impact of alternative government spending. For this analysis, we will focus solely on the year 2021. The net revenue gain or loss due to the quality jobs tax credit is presented in Table 20 under various interpretations of the impact of the credit on job creation (2 percent, 5 percent, 11.4 percent, 25 percent, and 100 percent for information purposes).

Table 20: Estimated Net State and Local Revenue Loss from the Quality Jobs Tax Credit*

Type of Tax	Combined State and Local Impact – Total (FY 2021)				
	2%	5%	11.4%	25%	100%
Corporate tax foregone due to tax credit utilized	\$(117.44)	\$(117.44)	\$(117.44)	\$(117.44)	\$(117.44)
New sales tax receipts	\$4.98	\$12.45	\$28.39	\$62.25	\$250
New corporate profits tax	\$.56	\$1.40	\$3.19	\$7.00	\$28
New personal income tax	\$2.30	\$5.75	\$13.11	\$28.75	\$115
New property taxes	\$4.36	\$10.90	\$24.85	\$54.50	\$218
New other taxes	\$.56	\$1.40	\$3.19	\$7.00	\$29
Foregone sales tax receipts from alternate spending	\$(.14)	\$(0.35)	\$(0.80)	\$(1.75)	\$(7)
Foregone income tax receipts from alternate spending	\$(.22)	\$(0.55)	\$(1.25)	\$(2.75)	\$(11)
Foregone property tax receipts from alternate spending	\$(.12)	\$(0.30)	\$(0.68)	\$(1.50)	\$(6)
Foregone other tax receipts from alternate spending	\$(.08)	\$(0.20)	\$(0.46)	\$(1.00)	\$(4)
Net revenue loss from quality jobs credit utilization	\$(105.24)	\$(86.94)	\$(47.90)	\$35.06	\$492.56
ROI	(89.62%)	(74.03%)	(40.79%)	29.85%	419.41%

* Dollars in millions;

+ Current year dollars

For the fiscal year 2021, there is a net revenue gain from the provision of the quality jobs tax credit only if as many as 25 percent of the new jobs produced are assumed to be a result of the tax credit provision and would not have been located in Georgia otherwise. While studies reflect a range of job creation percentages of 2 percent to 25 percent, as discussed previously,

an assumption of 11.4 percent job creation solely as a result of the credit is assumed to be a reasonable upper boundary based on the information provided in the but for analysis.³⁶

Therefore, it is reasonable to infer that the return on investment in the initial year of the Quality Jobs Tax Credit is a negative 40.8 percent. However, the total return from the investment in the tax credit should consider the impact in future years as well. Each of the next four years will bear additional costs as the incentive continues to support jobs retained or jobs added to the initial pool. Beyond the fourth year, the remaining jobs should continue to provide direct economic benefits and continue to enhance tax revenues on direct, indirect, and induced effects from the jobs retained. Considering the impact of jobs retained in future years, an assumption of 8.6 percent of jobs because of the provision of the tax credit would yield a breakeven point considering the cost of the credit over the first five years compared to the benefits of job retention over the 10-year period following the granting of the initial credit (Tables 21 through 23).

To model the impact of the 2021 credit pool on future years, we determined job retention based on separation data obtained for the State of Georgia from the U.S. Bureau of Labor Statistics Job Openings and Labor Turnover Survey. CBAER gathered annual separation data by industry going back to 2013 and also gathered overall separation data back to 1993 in order to identify patterns that would skew average separation data, such as the Great Recession and the COVID-19 pandemic. The team identified 2013 - 2019 as the years most unaffected by recession and representative of a somewhat "normal" pattern of separations. CBAER then used the average separation rate for these years by industry to determine job retention for the years 2022- 2031. The results of this analysis are conservative since we are modeling only reductions. As noted in the economic impact subsections, most projects that qualify for the credit see an increase in qualified jobs for one to two years after the initial year of the credit. As a result, the team is modeling lower job retention than what occurs. The IMPLAN analysis was run for the years 2022 - 2031 to extend the analysis of the full impact of the credit over a ten-year period. The results without any reduction in the number of jobs directly tied to the provision of the tax credit are displayed in Table 21.

³⁶ Bartik, Timothy J. 2018. "'But For' Percentages for Economic Development Incentives: What Percentage Estimates are Plausible Based on the Research Literature?" Upjohn Institute Working Paper 18-289. Kalamazoo, MI: W.E. Upjohn Institute for Employment Research. <https://doi.org/10.17848/wp18-289>

**Table 21: Estimated Net State and Local Revenue Gain (Loss) - Future Tax Years
Scenario: Full Impact with no Reduction in Direct Impact of Credit on Job Creation**

Year	Jobs Remaining	Cost of Tax Credit*	New sales tax receipts*	New corporate profits tax*	New personal income tax*	New property taxes*	New other taxes*	Net revenue gain (loss) from quality jobs credit utilization*
2022	24,076	\$(111.16)	\$228.00	\$27.86	\$114.36	\$210.15	\$18.43	\$487.64
2023	22,794	\$(105.24)	\$216.96	\$26.40	\$108.38	\$189.79	\$17.53	\$453.83
2024	21,586	\$(99.66)	\$206.46	\$25.02	\$102.76	\$180.61	\$16.68	\$431.88
2025	20,449	\$(94.41)	\$196.47	\$23.72	\$97.43	\$171.87	\$15.87	\$410.95
2026	19,377	0	\$187.04	\$22.49	\$92.42	\$163.62	\$15.10	\$480.69
2027	18,365	0	\$178.08	\$21.33	\$87.69	\$155.78	\$14.38	\$457.25
2028	17,411	0	\$171.20	\$20.24	\$83.33	\$153.33	\$13.93	\$442.03
2029	16,514	0	\$161.42	\$19.19	\$78.98	\$141.21	\$13.03	\$413.83
2030	15,663	0	\$153.77	\$18.22	\$74.98	\$134.51	\$12.41	\$393.88
2031	14,861	0	\$146.54	\$17.29	\$71.22	\$128.19	\$11.82	\$375.07
Net gain (loss) from new jobs created over 10 years								\$4,347.05

* Dollars in millions;

The new jobs created during 2021 produced a gain in new tax revenues of more than \$4.3 billion. As noted above, the full impact of jobs created cannot be attributed directly to the incentive provided by the Quality Jobs Tax Credit. Therefore, CBAER has provided two additional analyses that represent more likely outcomes that occur directly because of the provision of the credit. The results at the upper boundary of 11.4 percent of jobs directly linked to the provision of the tax credit are presented in Table 22.

**Table 22: Estimated Net State and Local Revenue Gain (Loss) - Future Tax Years
Scenario: Quality Jobs Tax Credit Directly Linked to 11.4% of New Job Growth**

Year	Total Jobs Remaining	Cost of Tax Credit *	New sales tax receipts*	New corporate profits tax*	New personal income tax*	New property taxes*	New other taxes*	Net revenue gain (loss) from quality jobs credit utilization*
2022	24,076	\$(111.16)	\$25.99	\$3.18	\$13.04	\$23.96	\$2.10	-\$42.90
2023	22,794	\$(105.24)	\$24.73	\$3.01	\$12.36	\$21.64	\$2.00	-\$41.51
2024	21,586	\$(99.66)	\$23.54	\$2.85	\$11.71	\$20.59	\$1.90	-\$39.06
2025	20,449	\$(94.41)	\$22.40	\$2.70	\$11.11	\$19.59	\$1.81	-\$36.80
2026	19,377	0	\$21.32	\$2.56	\$10.54	\$18.65	\$1.72	\$54.80
2027	18,365	0	\$20.30	\$2.43	\$10.00	\$17.76	\$1.64	\$52.13
2028	17,411	0	\$19.52	\$2.31	\$9.50	\$17.48	\$1.59	\$50.39
2029	16,514	0	\$18.40	\$2.19	\$9.00	\$16.10	\$1.49	\$47.18
2030	15,663	0	\$17.53	\$2.08	\$8.55	\$15.33	\$1.41	\$44.90
2031	14,861	0	\$16.71	\$1.97	\$8.12	\$14.61	\$1.35	\$42.76
Net gain (loss) from quality jobs tax credit utilization over 10 years								\$131.89

* Dollars in millions;

If 11.4 percent of new jobs are directly linked to the QJTC, then the cost of the credit will be recouped over a seven-year period with a positive return of \$131.89 million over ten years.

Other state studies, including the 2022 Georgia Jobs Tax Credit study, have assumed an additional lower level of five percent for the number of jobs directly linked to jobs credits. Table 23 shows the results using this five percent level.

**Table 23: Estimated Net State and Local Revenue Gain (Loss) - Future Tax Years
Scenario: Quality Jobs Tax Credit Directly Linked to 5% of New Job Growth**

Year	Total Jobs Remaining	Cost of Tax Credit *	New sales tax receipts*	New corporate profits tax*	New personal income tax*	New property taxes*	New other taxes*	Net revenue gain (loss) from quality jobs credit utilization*
2022	24,076	\$(111.16)	\$11.40	\$1.39	\$5.72	\$10.51	\$0.92	-\$81.22
2023	22,794	\$(105.24)	\$10.85	\$1.32	\$5.42	\$9.49	\$0.88	-\$77.29
2024	21,586	\$(99.66)	\$10.32	\$1.25	\$5.14	\$9.03	\$0.83	-\$73.08
2025	20,449	\$(94.41)	\$9.82	\$1.19	\$4.87	\$8.59	\$0.79	-\$69.14
2026	19,377	0	\$9.35	\$1.12	\$4.62	\$8.18	\$0.76	\$24.03
2027	18,365	0	\$8.90	\$1.07	\$4.38	\$7.79	\$0.72	\$22.86
2028	17,411	0	\$8.56	\$1.01	\$4.17	\$7.67	\$0.70	\$22.10
2029	16,514	0	\$8.07	\$0.96	\$3.95	\$7.06	\$0.65	\$20.69
2030	15,663	0	\$7.69	\$0.91	\$3.75	\$6.73	\$0.62	\$19.69
2031	14,861	0	\$7.33	\$0.86	\$3.56	\$6.41	\$0.59	\$18.75
Net gain (loss) from quality jobs tax credit utilization over 10 years								\$-172.59

* Dollars in millions; + Current year dollars

At the level of five percent of new jobs attributed to QJCT, the cost of the credit is not recovered over the ten-year period and results in a net cost of \$172.59 million.

The breakeven point for the percentage of new jobs directly attributable to the credit is 8.6 percent. At that level, the cost of the credit would equal the new tax revenue generated by the increased economic development from the new job creation over a ten-year period.

Public Benefits

The effectiveness of job tax credits in stimulating employment is an ongoing debate. While studies show that a significant percentage of jobs created under these programs would have occurred without the credits, there is still a potential for the public to benefit from these incentives.³⁷

First, even though a large percentage of the jobs would have been created without the tax credit, the remaining percentage directly attributable to the provision of the credit represents jobs that might not have been created otherwise. In large job markets, even a small percentage can translate into a significant number of jobs that benefit the local economy and the citizens who now have high-paying jobs they otherwise might not have had.³⁸ While the cost of providing the credit will usually exceed the new tax revenue that it produces, the increased direct, indirect, and induced economic benefits are valuable to sustain growth and provide opportunities for citizens to work in higher quality jobs.

Second, job tax credits might not be the primary factor in a business decision to relocate or expand, but they can be part of a broader package of incentives.³⁹ When combined with a skilled workforce, educational resources, infrastructure, and other business-friendly policies, the tax credits might be the tipping point in locating in one place versus another with similar characteristics.⁴⁰ In a competitive environment where states and regions vie for new businesses, not offering tax incentives could put a location at a disadvantage and potentially lead to a loss of business opportunities to other areas that do offer such incentives.

Third, the Quality Jobs Tax Credit has a component designed to encourage development in rural areas of Georgia. To the extent the credit incents a business to locate in one of these underserved areas, it can lead to more balanced economic growth and help to reduce regional disparities within the state.⁴¹ By focusing more resources on rural areas, the credit might also have social benefits by increasing employment in certain demographics such as the long-term unemployed or residents of low-income areas.

³⁷ Gurmu, Shiferaw, David L. Sjoquist, and Laura Wheeler. 2021. "The Effectiveness of Job tax credits." *Regional Science and Urban Economics* 90

³⁸ Ibid.

³⁹ Gonzales, C., Kerlin, M., Schaff, R., & Tucker-Ray, S. (2019, September 13). How state and local governments win at attracting companies. McKinsey & Company. <https://www.mckinsey.com/industries/public-sector/our-insights/how-state-and-local-governments-win-at-attracting-companies#/>

⁴⁰ The experts: How much impact do state and local incentives have in luring new manufacturing facilities? (2013, Jun 17). *Wall Street Journal* (Online) Retrieved from <https://www.proquest.com/newspapers/experts-how-much-impact-do-state-local-incentives/docview/1368130586/se-2>

⁴¹ How States Can Direct Economic Development to Places and People in Need. (2021, February 2). The Pew Charitable Trusts. Retrieved November 29, 2023, from <https://www.pewtrusts.org/en/research-and-analysis/reports/2021/02/how-states-can-direct-economic-development-to-places-and-people-in-need>

Finally, for some businesses, particularly startups and smaller businesses, tax credits can make a significant difference in initial survival rates and enhance their ability to grow, leading to more long-term job creation.⁴²

To conclude, the public benefit section of the report CBAER compared the Quality Jobs Tax Credit to the Jobs Tax Credit. This comparison was included here because while both tax credits support similar segments of the economy, some major differences make each program unique. Addressing these similarities and differences makes it possible to find distinctions that impact the potential for public benefit.

The QJTC was established to offer businesses the opportunity to receive a larger jobs-related tax credit that recognizes the increased value from the creation of higher quality jobs. The higher salaries offered in new full-time positions result in a higher tax credit against the corporate income tax. This differs from the Georgia Job Tax Credit program (JTC), which was established in 1990 and offers a tax credit for newly created full-time positions not previously located in the state that offer health insurance and pay at least at or above the average county wage of the lowest county wage in the state.⁴³ The necessity and the effectiveness of the QJTC have been questioned, especially due to its similarity to the JCT.

The JTC is industry-specific, meaning it only applies to the following industries: manufacturing, warehousing, distribution, and logistics, software development, FinTech, Data Centers, Contact Centers, Telecommunication, and Research and Development facilities.⁴⁴ The QJTC is more widely available because it does not have a targeted industry. While the qualification requirements are more stringent, this makes it particularly useful for generating higher paying employment activity in less developed areas. Further, the QJTC requires payment of higher salaries which can help address regional disparities in job quality. Table 24 provides a comparison of the JTC with the QJTC. It should be noted that neither credit generates a full return on investment when considering the number of jobs directly attributable to the provision of the credit in any one year.

⁴² Marks, G. (2023, August 15). 8 tax credits that you didn't know can save your small business a lot of money. <https://www.inquirer.com>. <https://www.inquirer.com/business/small-business/tax-credits-refunds-small-businesses-self-employed-save-money-20230815.html>

⁴³ *Job Tax Credit Program*. (n.d.). Georgia Department of Community Affairs.

⁴⁴ *Business Incentives*. (2023). Georgia Department of Economic Development.

Table 24: Comparison of the Job Tax Credit and Quality Job Tax Credit Programs

Designation	Jobs Tax Credit			Quality Jobs Tax Credit		
	Min Jobs	Tax Credit	Industry	Min Jobs	Tax Credit	Months to create Jobs
Tier 1 (lower 40)	2	3,500	ALL	10		12
Tier 1	2	3,500	SPECIFIC	10	\$2,500 – 5,000	12
Tier 2	10	2,500	SPECIFIC	25		12
Tier 3	15	1,250	SPECIFIC	50		24
Tier 4	25	750	SPECIFIC	50		24
Less Developed Census Tracts	5	3,500	SPECIFIC	NA	NA	NA
Opportunity Zones	2	3,500	ALL	NA	NA	NA
Military Zones	2	3,500	ALL	NA	NA	NA

The QJTC, as opposed to the JTC, assigns tax credit value based on a percentage bracket above average county salary level. The JTC has a predetermined tax credit value based on the tier and the county development ranking. The JTC makes qualification easier for more economically disadvantaged areas and counties. The QJTC also has a time limit in which the new jobs must be created, which was not found in the JTC. The JTC specifically supports economic growth in traditionally underserved areas, industries, and counties. The JTC generally has a much lower new employment position threshold criterion. Overall, while the QJTC appears to have much more stringent eligibility criteria, the benefit of the tax credit value has the opportunity to be more beneficial from a long-term development standpoint because of its incentive for creating higher paying jobs.

Conclusion

The QJTC tax credit makes an economic contribution to Georgia. Businesses that used this tax credit when relocating to the state generated \$10.05 billion in direct economic output which supported 25,435 jobs in 2021. After secondary effects of these jobs were calculated, the total impact reached \$18.54 billion in output, supporting 70,718 jobs in total. These impacts also influenced tax revenue collection. The companies, associated employees, and secondary effects for this transaction supported \$316 million in taxes paid to the State of Georgia and \$324 million paid to local governments.

In addition, the research team also performed an alternative use analysis. This analysis examined what would have happened if the QJTC tax credit was not part of the Georgia Tax code. The impact was calculated using the amount of tax credit awarded in 2021. In total, state economic activity would have totaled \$216.45 million in output and \$115.39 million in total value added without the QJTC. The state tax collection was estimated to be \$3.58 million and \$1.74 million in local government tax collection. These tax collections are based on the secondary impact in the economic model and individuals paying state and local taxes on their income and spending.

Finally, the impact of the QJTC and the jobs added to Georgia goes beyond a single year being modeled. Over a ten-year timeframe (2021-31) as long as 8.6 percent of businesses in 2021 chose Georgia due to the QJTC, the ten-year tax revenue forecast is positive. Consequently, CBAER estimates two different scenarios are likely to occur. First, if only 5 percent of businesses chose Georgia due to the QJTC over the ten-year time frame (2022-31), the net tax revenue loss would be -\$172.59 million. In contrast, if just over 11 percent of businesses made the same choice the ten-year impact would be a net tax revenue increase of \$131.89 million.

In conclusion, the QJTC has effectively achieved its primary objectives of job creation and ensuring the long-term quality of those jobs. While the efficacy of tax credits in job creation may be debated, the QJTC demonstrates its worth through its additional positive effects. Firstly, it serves as a catalyst for economic growth in underdeveloped or rural areas, where business incubation can be particularly challenging. By reducing startup and operational costs for businesses in such regions, the tax credit fosters economic resilience. Secondly, the QJTC sets a precedent for job quality in these underdeveloped areas and beyond, improving retention rates and establishing a baseline for other businesses entering these markets. Overall, the QJTC plays a crucial role in balancing the socioeconomic landscape between urban and rural areas, contributing to Georgia's overall prosperity.

Appendix A: Other States Comparison

Arizona

Quality Jobs Tax Credit

This program offers up to \$9,000 of Arizona income or premium tax credits over a period of 3 years for each net new qualifying job. This equals a credit of \$3,000 per net new qualifying job per year for three years. There is a cap at 10,000 pre-approved jobs that will receive this tax credit each year. Any unused tax credit may be applied for up to five consecutive taxable years. A business will meet eligibility criteria by making the requisite minimum investment and creating the requisite minimum number of new jobs.⁴⁵

Capital investment values and minimum number of new jobs created have different thresholds for rural versus urban areas. An urban area is defined as, “a location that is within the exterior boundaries of a city or town that has a population of 50,000 or more, and that is located in a county that has a population of 800,000 or more,” and a rural area is defined as “a location that is within the boundaries of tribal lands or a city or town with a population of less than 50,000, or a county with a population of less than 800,000,”.⁴⁶ Urban locations must create at least 25 new jobs and the minimum capital investment can range from \$500,000, \$1,000,000, \$2,500,00, to \$5,000,000, with percentages of the average county wages as 200 percent, 150 percent, 125 percent, and 100 percent, respectively. Rural locations must create a minimum of at least 5 new jobs and the minimum capital investment can range from \$100,000, \$500,000, or \$1,000,000, with percentages of the average county wages as 150 percent, 125 percent, and 100 percent, respectively.⁴⁷

Minimum Capital Investment	Minimum Number of Net New Jobs (QEP's) Added	Percent of County Median Wage
For Urban Locations:		
\$5,000,000	25	100%
\$2,500,000	25	125%
\$1,000,000	25	150%
\$500,000	25	200%
For Rural Locations:		
\$1,000,000	5	100%
\$500,000	5	125%
\$100,000	5	150%

⁴⁵ *Quality Jobs*. (n.d.). Arizona Commerce Authority. Retrieved November 13, 2023, from <https://www.azcommerce.com/incentives/quality-jobs/>

⁴⁶ *Ibid.*, Arizona Commerce Authority.

⁴⁷ *Ibid.*, Arizona Commerce Authority.

Colorado

Job Growth Incentive Tax Credit 295

299-324

The credit is equal to 50 percent of the Federal Insurance Contributions Act tax paid by the business per net new job for each calendar year in the credit period. The tax credit is performance based and companies must continuously show performances in job creation and wages. Unused tax credit may not become a tax refund; however, it may be applied to each of the 10 succeeding income tax years. Businesses must do the following to meet eligibility: create at least 20 net new jobs in Colorado during the credit period (or at least 5 net new jobs if the project is in an Enhanced Rural Enterprise Zone), pay the net new employees an average annual wage of at least 100 percent of the average annual wage in the country where the project will be located, maintain the net new jobs for at least one year, consider at least one other state or international market for the project, and demonstrate that Colorado's Job Growth Incentive Tax Credit is a major factor in the decision to locate in Colorado. Projects can meet eligibility by completing all of the following: be reasonably and efficiently able to locate outside of Colorado, have a reduced chance of locating in Colorado without this incentive, and be actively considered in multiple states and/or countries. The minimum average annual wage is set when the project is approved.⁴⁸

Florida

Qualified Targeted Industry Tax Refund

If eligible, companies may receive a tax refund that can be put towards corporate income, sales, ad valorem, intangible personal property, insurance premium, communication services, or certain other taxes. There is a maximum of 25 percent of the total refund approved that could be taken in a single fiscal year and a cap on \$1.5 million in tax refunds for a single year. A company must first apply to Enterprise Florida (EFI) and then meet the eligibility requirements: be in a target industry, create at least 10 new full-time jobs in Florida, and if an expansion project, increase employment by at least 10 percent (whichever is greater), pay an average annual wage that is at least 115 percent of the state, metropolitan statistical area (MSA), or the local average wages, demonstrate the jobs make a significant economic contribution to the area, and provide a resolution from the city or county commission recommending the applicant for the incentive and committing the community to provide a local match equaling 20 percent of the tax refund.⁴⁹

⁴⁸ Landes. (n.d.). *Job Growth Incentive Tax Credit*. Colorado Office of Economic Development and International Trade. Retrieved November 13, 2023, from <https://oedit.colorado.gov/job-growth-incentive-tax-credit>

⁴⁹ Qualified Target Industry Tax Refund. (2012, February). In *eFlorida.com*. Enterprise Florida, Inc.

Companies located in rural areas or opening plants in rural areas may have exceptions to the above qualifications. Employment increases have the opportunity to be waived in special circumstances for companies located in a rural area. For projects in rural cities, rural communities or county, a designated brownfield area, or a manufacturing project paying at least 100 percent of the prevailing average wage, the wage requirements may be completely waived. A company may accept a refund up to 80 percent of the refund for which they would otherwise qualify if a match exemption is granted to the local community if located in a rural area, county, community, or designated brownfield area.⁵⁰ Note a brownfield area is considered land that is abandoned or underused due to previous industrialization and subsequent pollution of the area.⁵¹

Applicants who create new jobs in Florida can receive a maximum of \$3,000 per net new position created or maximum \$6,000 if in a rural community. Additional benefits and credits may be assigned if companies or positions meet the following criteria: \$1,000 per job for businesses paying at least 150 percent of the prevailing average annual wage or \$2,000 per job for businesses paying at least 200 percent of the prevailing average annual wage; \$2,000 per job if the business falls within a designated high impact sector OR if the business increases exports of its goods through a seaport or airport in the state by at least 10 percent in value or tonnage in each year of receiving a QTI refund; \$2,500 per job (Brownfield Bonus) if project is located in a designated Brownfield area with BSRA (Brownfield site rehabilitation agreement); and \$1,000 per job if the local financial support is equal to the base QTI award.

Iowa

High Quality Jobs Program

This program offers loans, forgivable loans, tax credits, exemptions and/or refunds in an effort to offset the costs of locating, expanding, or modernizing an Iowa facility. The financial award is assigned based on a number of factors, including level of need, quality of jobs, percentage of created or retained jobs defined as high-quality, and the project's economic impact. The program offers a local property tax exemption of up to 100 percent of the value added to the property to a period not to exceed 20 years. The program also offers an investment tax credit equal to a percentage of the qualifying investment that will be amortized over 5 years, which will in turn offset the costs of Iowa income taxes. The tax credit could be carried forward for seven additional years. The program also offers a refund of state sales, service, or use taxes paid to contractors or subcontractors used during construction of the new plant. Also offered is

⁵⁰ <https://www.enterpriseflorida.com/wp-content/uploads/incentive-qualified-target-industry-tax-refund.pdf> ion is granted to the local community

⁵¹ *Overview of EPA's Brownfields Program*. (2023, January 26). United States Environmental Protection Agency. Retrieved November 13, 2023, from <https://www.epa.gov/brownfields/overview-epas-brownfields-program>

a refund of sales and use taxes paid on racks, shelving, and conveyor equipment for distribution projects.⁵²

Companies must apply before the start of their respective projects and priority is given to those with significant local economic impact. Qualifications include wage threshold requirements and benefits requirements for employees. “Created jobs must pay at least 100% of the qualifying wage threshold at the start and 120% of the qualifying wage threshold by project completion and through the maintenance period unless in a distressed area and retained jobs must pay at least 120% of the qualifying wage threshold by project completion and through the maintenance period,”. Benefits packages for fulltime employees must meet one of the following criteria: (1) business pays 70 percent of medical premiums for single coverage plans with qualifying deductible, (2) business pays 60 percent of medical premiums for family coverage plans with qualifying deductible, or (3) business pays for some level of medical and dental coverage and provides the monetary equivalent value through other employee benefits.⁵³

Louisiana

Louisiana Quality Jobs Rebate

The Quality Jobs (QJ) program provides a cash rebate to companies that create higher-paying jobs. The rebate can be up to 6 percent cash rebate of annual gross payroll for new direct jobs on capital expense for up to 10 years. It also provides a state sales/use tax rebate on capital expenditures or a 1.5 percent project facility expense rebate on the total capital investment, excluding tax exempted items. A company must meet one of the following eligibility requirements: (1) part of the bioscience, manufacturing, software, clean energy technology, food technology, advanced materials, headquarters or multi-state businesses, aircraft MROs, or oil and gas field service industries; (2) Must have at least 50 percent of annual sales out-of-state and/or to in-state customers or buyers if the product or service is resold by the purchaser to an out-of-state customer or buyer or to the federal government; (3) The employer is a business that spends fifty percent or more of its time performing services for its out-of-state parent company. These services include but are not limited to legal, marketing, finance, information technology, order management, distribution center operation, or overall operations support; or (4) Employer is located in a parish that is within the lowest 25 percent of parishes based on per capita income. This program separates the cash rebate amount by wage, with a 4 percent rebate corresponding to an \$18/hour wage and a 6 percent rebate corresponding to a \$21.66/hour wage, respectively. If there are less than 50 employees statewide already working for this company, the company must create 5 new jobs with a new direct job annual payroll of at least \$225,000. If there are more than 50 employees already working at this company in the

⁵² *High Quality Jobs*. (n.d.). Iowa Economic Development Authority. Retrieved November 13, 2023, from <https://www.iowaeda.com/grow/high-quality-jobs/>

⁵³ *Ibid.*, Iowa Economic Development Authority.

state, the company must create 15 or greater new direct jobs with a new direct job annual payroll of at least \$675,000.⁵⁴

Mississippi

Advantage Jobs Rebate Program

This program provides a cash rebate for up to 10 years for companies that create new jobs that meet and/or exceed the average annual wage of the state or county in which the company is located. This program is unique in that the average of all new jobs being created by the new or expanding business must meet the program's minimum average wage requirements: provide an average annual wage of 110 percent of the average annual county or state wage, whichever is less, and create 25 new, full-time jobs or data and information processing enterprises that provide an average annual wage of 100 percent of the average state or county wage, whichever is less, and create 200 new, full-time jobs. Basic health benefits must also be provided to all full-time employees.⁵⁵

The rebate amount is 90 percent of the amount of income tax withheld for employees with new, direct jobs. The rebate cannot exceed 4 percent of the new employees' total annual salaries, which exclude benefits not subject to Mississippi income taxes. Eligible businesses have 24 months from the date that their application is approved to create the jobs.⁵⁶

New Mexico

High-Wage Jobs Tax Credit

This tax credit is equal to 8.5 percent of the wages paid to an eligible New Mexico employee in a new high wage job. It is capped at \$12,750 per job per qualifying period. The credit can be applied to any of the following: compensating, gross receipts, and withholding taxes. Any excess credit can be refunded from the state. Eligibility requires that companies are growing, with employment greater than the previous year, and that they are eligible for New Mexico's Job Training Incentive Program. Eligibility for New Mexico's Job Training Incentive Program covers companies that manufacture or produce a product in New Mexico, non-retail service companies that export a substantial percentage of services out of state (50 percent or more of revenues and/or customer base), software development companies, customer support centers and product testing laboratories are three examples of businesses that have qualified in this category, and certain green industries.⁵⁷

⁵⁴ Adegbe. (n.d.). *Quality Jobs*. Opportunity Louisiana. Retrieved November 13, 2023, from <https://www.opportunitylouisiana.gov/business-incentives/quality-jobs>

⁵⁵ Advantage Jobs Program. (2015, February). In *Employment Incentives*. Mississippi Development Authority.

⁵⁶ Ibid., Mississippi Development Authority.

⁵⁷ Gannon, & Borrego. (n.d.). *Job Training Incentive Programs*. New Mexico Economic Development Department. Retrieved November 13, 2023, from <https://edd.newmexico.gov/business-development/edd-programs-for-business/job-training-incentive-program/>

The High-Wage Jobs Tax Credit defines a high-wage job as those that (1) pay at least \$40,000 per year in a community with a population less than 60,000, or (2) pay at least \$60,000 per year in a community with a population greater than 60,000; and are filled for at least 44 weeks by the employee.⁵⁸

Oklahoma

Quality Jobs Incentive Program

This program provides cash payments up to 5 percent of new payrolls every quarter for up to 10 years. Companies must meet an average wage criterion and \$2.5 million in new annual payrolls within three years to qualify. Companies must offer basic health insurance to employees. In some circumstances, qualifying companies must also attain 75 percent out-of-state sales.⁵⁹

21st Century Quality Jobs Program

This program applies to certain basic and service industries and reduces out-of-state sales requirements from 75 percent to 50 percent for industries that are required to have out-of-state sales as well as allowing a net benefit rate of up to 10 percent of payroll. The requirements for the business are creating 10 new full-time jobs at a wage 300 percent of that of the average county wage.⁶⁰

Small Employer Quality Jobs Program

This program applies to qualifying small employers, defined as 500 employees or less, and offers quarterly payments up to 5 percent of new taxable payroll for up to 7 years. Annual salaries must be at least 110 percent of the average county wages in which they are located to qualify. Additionally, employers must attain 35 percent out-of-state sales during the first two years of participation and 60 percent afterwards.⁶¹

⁵⁸ de Prima. (2020, June 30). *New Mexico Employer Tax Credits for Technology and High-Wage Jobs*. CLA Connect. Retrieved November 13, 2023, from <https://www.claconnect.com/en/resources/articles/2020/new-mexico-employer-tax-credits-for-technology-and-high-wage-jobs#:~:text=High%2DWage%20Jobs%20Tax%20Credit,-The%20High%2DWage&text=Qualified%20jobs%20are%20those%20that,44%20weeks%20by%20the%20employee>

⁵⁹ *Quality Jobs Incentive Program*. (2021, January 26). Oklahoma Department of Commerce. Retrieved November 13, 2023, from <https://www.okcommerce.gov/doing-business/business-relocation-expansion/incentives/quality-jobs-incentive-program/>

⁶⁰ *21st Century Quality Jobs*. (2021, January 26). Oklahoma Department of Commerce. Retrieved September 18, 2023, from <https://www.okcommerce.gov/doing-business/business-relocation-expansion/incentives/21st-century-quality-jobs-incentive/>

⁶¹ *Small Employer Quality Jobs Program*. (2021, January 26). Oklahoma Department of Commerce. Retrieved September 18, 2023, from <https://www.okcommerce.gov/doing-business/business-relocation-expansion/incentives/small-employer-quality-jobs-program/>

North Carolina

Job Development Investment Grant

The Job Development Investment Grant (JDIG) is a performance-based incentive program in North Carolina that provides cash grants to new and expanding businesses to defray facility costs. The amount of the award is determined by factors such as project location, county tier classification, number of new jobs created, wage levels in comparison to county averages, investment amount, and industry sector. The program promotes economic development by disbursing grant funding annually for up to 12 years based on performance criteria. Counties are classified according to their economic well-being, with tier 1 receiving 100 percent of the annual payment, tier 2 receiving 90 percent (with 10 percent for infrastructure projects), and tier 3 receiving 75 percent (with 25 percent for infrastructure). JDIG offers extended awards for high-yield projects, transitional projects, and transformative projects, with varying job and investment requirements and grant terms.⁶²

South Carolina

Jobs Tax Credit

The South Carolina new job tax credit is intended to encourage new and expanding businesses to create jobs in the state. South Carolina counties are classified into tiers based on income and unemployment data. Notably, the credit's value per job has increased substantially for companies in tier 3 and tier 4 counties since 2019, with tier 4 offering the maximum credit per new job at \$25,000. Eligible industries encompass manufacturing, processing, tourism, warehousing, banking, distribution, and research and development. In general, businesses must create at least 10 new full-time jobs each year, with the credit generated after the jobs are kept for two years. The credit can be used to offset individual income tax, company income tax, bank tax, or insurance premium tax, and it can potentially cover up to 50 percent of a company's liability. Unused credits can be carried forward for up to 15 years, and companies in multi-county industrial parks can receive a \$1,000 bonus per job credit. Small firms with fewer than 99 employees may be eligible for the Small Business Jobs Credit.⁶³

⁶² *Job Development Investment Grant (JDIG)*. (2023, May 10). NC Commerce. Retrieved November 13, 2023, from <https://www.commerce.nc.gov/grants-incentives/competitive-incentives/job-development-investment-grant-jdig>

⁶³ *An Overview of Business Incentives*. (n.d.). Southern Carolina. Retrieved November 13, 2023, from <https://southerncarolina.org/business-incentives>