2022 INDIANA TAX INCENTIVE REVIEW

OFFICE OF FISCAL AND MANAGEMENT ANALYSIS

LEGISLATIVE SERVICES AGENCY

The Office of Fiscal and Management Analysis (OFMA) is a division of the Legislative Services Agency that performs fiscal, budgetary, and management analysis for the Indiana General Assembly.

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PREFACE

IC 2-5-3.2-1 establishes an annual review, analysis, and evaluation process for state and local tax incentives.

THE ORIGINAL STATUTE REQUIRED THE EVALUATION of each tax incentive at least once during two consecutive five-year cycles. The first five-year review cycle began during the 2014 legislative interim and was completed during the 2018 interim. During the 2019 legislative session, the legislature extended the second tax incentive review schedule from a five-year cycle to a seven-year cycle. The annual tax incentive review is conducted by the Office of Fiscal and Management Analysis, Legislative Services Agency. The prior year reports can be found on the Indiana General Assembly's website at https://iga.in.gov/legislative/2020/publications/tax_incentive_review/.

Pursuant to IC 2-5-3.2-1, the report:

- Specifies the review schedule for 2023-2025.
- Reviews, analyzes, and evaluates the following tax incentives and incentive programs:
  - Coal Gasification Technology Investment Credit
  - Economic Development for a Growing Economy (EDGE) Credit
  - Headquarters Relocation Credit
  - Hoosier Business Investment Credit
- Provides descriptive information and data relating to the tax incentives and incentive programs subject to review in 2022.
- Analyzes and evaluates the effectiveness of the tax incentives and tax incentive programs subject to review in 2022.

We would like to acknowledge the Indiana Economic Development Corporation and the Department of State Revenue for their assistance in providing data that is presented and analyzed in this report.

EXECUTIVE SUMMARY

2022 REVIEW OF TAX INCENTIVES

The tax incentives analyzed this year were created to encourage economic development by reducing the cost of hiring, capital investment, and business relocation and formations.

LSA has previously reviewed these tax credit programs in 2017 and 2018. In the prior reports, LSA found the value of the incentives were small relative to the cost of a particular project, and the research suggests the programs are more likely to influence firms that are already considering making the business decision.

Two incentives reviewed had an insufficient number of uses to conduct a robust analysis. The **coal gasification technology investment tax credit** was awarded for one project in 2010. Since then, no other projects were approved. The **headquarters relocation tax credit** was approved for three projects in a span of 17 years. The headquarters relocation tax credit may have played a role in those firm's decision to relocate to Indiana, but the program is not likely enticing businesses to locate their qualifying operations to Indiana.

LSA used a different approach to evaluate the **economic development for a growing economy (EDGE) tax credit** and the **Hoosier business investment tax credit (HBI)**. In previous analyses, LSA studied the changes in economic activity of businesses that received the EDGE and HBI incentives. Given the recent statutory changes to the program, and data limitations related to those changes, a similar approach using descriptive and causal statistical analysis may not be very effective in measuring the impact of these programs. Instead, LSA conducted a break-even analysis. LSA used historical project data and the IMPLAN economic analysis software to conduct a cost-benefit analysis to estimate the level of economic activity attributable to the tax credit that is necessary to recover the amount of state tax revenue forgone towards the EDGE and HBI projects.

While multiple factors affect the actual amount of state tax revenue generated for an EDGE project, the models suggest that the risk of Indiana not recovering the amount of foregone revenue from EDGE credit certifications is low. The results also suggest that by considering the tax and economic impact variability of HBI projects, the state potentially increases the likelihood of recovering the revenue forgone on a project. Also, by requiring the IEDC to consider projects that will create new jobs when awarding HBI projects, the state could potentially increase the likelihood of recovering the revenue forgone with a HBI project.

INTRODUCTION

DEFINING TAX INCENTIVES, THE REVIEW PROCESS, AND PURPOSE AND APPROACH

IC 2-5-3.2-1 defines a tax incentive as a benefit provided through a state or local tax that is intended to alter, reward, or subsidize a particular action or behavior by the tax incentive recipient, including a tax incentive providing a benefit intended to encourage economic development.

A tax incentive includes an exemption, deduction, credit, preferential rate, or other tax benefit that reduces a taxpayer's state or local tax liability or results in a tax refund. A tax incentive, for the purposes of the evaluation, also includes a program where revenue is dedicated by a political subdivision to pay for improvements in an economic or sports development area, community revitalization area, an enterprise zone, a tax increment financing district, or a similar district.

Tax Incentive Review Process

IC 2-5-3.2-1 establishes an annual review, analysis, and evaluation process for state and local tax incentives. Appendix A contains the text of IC 2-5-3.2-1. The review of Indiana tax incentives is conducted by the Office of Fiscal and Management Analysis, LSA. The original statue required the evaluation of each tax incentive at least one time during two consecutive five-year cycles. The first five-year review cycle began during the 2014 legislative interim and was completed during the 2018 interim. During the 2019 legislative session, the legislature extended the second tax incentive review schedule from a five-year cycle to a seven-year cycle.

The statute requires the LSA to submit a report containing the results of the annual tax incentive review to the Legislative Council and the Interim Study Committee on Fiscal Policy. The report must be submitted before October 1 each year. The statute requires the Committee to hold at least one public hearing between September 30 and November 1 at which the LSA presents the report to the Committee. The Committee is required to submit any recommendations from information reported in the tax incentive review to the Legislative Council. The statute requires the General Assembly to use the LSA's report and the Committee's recommendations to determine whether or not a tax incentive (1) is successful, (2) is provided at a cost that can be accommodated by the state's biennial budget, and (3) should be continued, amended, or repealed.

Tax Incentive Review Purposes and Approaches

IC 2-5-3.2-1 specifies that the purpose of the annual tax incentive review is to (1) ensure tax incentives accomplish the purpose for which they were enacted, (2) provide information to allow the inclusion of the cost of tax incentives in the biennial budgeting process, and (3) provide information needed by the General Assembly to make policy choices

about the efficacy of tax incentives. IC 2-5-3.2-1 lists a variety of descriptive and analytical information that could accomplish tax incentive review goals. The information is as follows:

- The attributes and policy goals of the tax incentive.
- The tax incentive's equity, simplicity, competitiveness, public purpose, adequacy, and conformance with the purposes of the legislation enacting the incentive.
- The activities the tax incentive is intended to promote and the effectiveness of the tax incentive in promoting those activities.
- The number of taxpayers applying for, qualifying for, or claiming the tax incentive, and the tax incentive amounts (in dollars) claimed by taxpayers.
- The tax incentive amounts (in dollars) claimed over time.
- The tax incentive amounts (in dollars) claimed by industry sector.
- The amount of income tax credits that could be carried forward for the ensuing five-year period.
- An estimate of the economic impact of the tax incentive, including a return on investment calculation, cost benefit analysis, and direct employment impact estimate.
- The estimated state cost of administering the tax incentive.
- The methodology and assumptions of the tax incentive review, analysis, and evaluation.
- The estimated leakage of tax incentive benefits out of Indiana.
- Whether the tax incentive could be made more effective through legislation changes.
- Whether measuring the economic impact of the tax incentive is limited due to data constraints and whether legislative changes could facilitate data collection and improve the review, analysis, or evaluation.
- An estimate of the indirect economic activity stimulated by the tax incentive.

Tax Incentive Review Report

IC 2-5-3.2-1 requires the LSA to submit a report containing the results of the annual tax incentive review to the Legislative Council and the Interim Study Committee on Fiscal Policy. The report must be submitted before October 1 each year. The report must include at least the following:

- A detailed description of the review, analysis, and evaluation for each tax incentive reviewed.
- Information to be used by the General Assembly to determine whether a reviewed tax incentive should be continued, modified, or terminated, the basis of the recommendation, and the expected impact of the recommendation on the state's economy.
- Information to be used by the General Assembly to better align a reviewed tax incentive with the original intent of the legislation that enacted the tax incentive.

Tax Incentive Review Schedule

A total of 62 tax incentives were evaluated during the first five-year cycle (2014-2018). A total of 55 incentives are scheduled for a second review over seven years (2019-2025), and three new incentives were added to the schedule. Table 1 specifies the tax review schedule, and Appendix B contains the descriptions of tax incentives and incentive programs on the review schedule.

TABLE 1.
TAX INCENTIVES AND INCENTIVE PROGRAMS SCHEDULED FOR REVIEW, 2022-2026

Tax	Tax Provision
2022	
Adjusted Gross Income Tax	• Coal Gasification Technology Investment Credit • Economic Development for a Growing Economy (EDGE) Credit • Headquarters Relocation Credit • Hoosier Business Investment Credit
2023	
Adjusted Gross Income Tax	• Regional Development Authority Infrastructure Fund Contribution Deduction • Patent-Derived Income Deduction • Research Expense Credit • Venture Capital Investment Credit
Sales Tax	• Aircraft Parts Exemption • Aviation Fuel Exemption • Cargo Trailers/RVs Sold to Certain Nonresidents Exemption • Certain Aircraft Exemption • Research and Development Property
2024	
Adjusted Gross Income Tax	• Redevelopment Tax Credit
Property Tax	• Data Center Property Tax Exemption • Resource Recovery System Deduction
Sales Tax	• Certain Racing Equipment Exemption • Data Center Equipment Exemption
Other	• Professional Sports and Convention Development Areas • Promotional Free-Play Deduction • Motorsports Investment District
2025	
Adjusted Gross Income Tax	• Adoption Tax Credit • Affordable and Workforce Housing Tax Credit • Earned Income Tax Credit • Film and Media Production Tax Credit • Foster Care Support Credit • Indiana 529 College Savings Account Contribution • Indiana Colleges and Universities Contribution Credit • Indiana Partnership Long-Term Care Insurance Premiums Deduction • School Scholarship Contribution Credit
Property Tax	• Geothermal Energy Device Deduction • Hydroelectric Power Device Deduction • Solar-Energy Heating or Cooling System Deduction • Solar Power Device Deduction • Urban Agricultural Zone Exemption • Wind-Powered Device Deduction
Other	• Innovation Development District Program

HEADQUARTERS RELOCATION TAX CREDIT

IC 6-3.1-30

The headquarters relocation tax credit was created to encourage businesses to relocate their corporate headquarters, division or subdivision principal office, or research center to Indiana.

An eligible business could qualify for the credit if it has a qualifying facility located outside Indiana and has not previously maintained a qualifying facility in Indiana. In order to receive the credit, the eligible business must complete the project and enter into an agreement with the Indiana Economic Development Corporation (IEDC). The business must also either:

- Have at least $50 million in worldwide revenues in the year prior to applying for the credit; or
- Received at least $4 million in venture capital either 6 months before or after entering an agreement with the IEDC.

The amount of the credit equals up to 50% of the relocation costs incurred in the taxable year. However, the amount claimed may not result in an Indiana tax liability that is lower than the Indiana tax liability in the taxable year immediately preceding the taxable year in which the taxpayer first incurred the relocation costs. The tax credit may be applied to individual or corporate adjusted gross income tax, financial institutions tax, or insurance premiums tax liabilities.

The credit is nonrefundable, but unused credits may be carried forward for up to nine succeeding taxable years. Unused credits may not be carried back. However, the IEDC has the discretion to provide refundable credits to firms who qualify under the venture capital requirements.

The credit reduces the cost of the relocation, but it does not address the regional attributes that may influence a headquarters to relocate in an area. Research shows that headquarters tend to move to cities that contain other headquarters and offer a variety of business service suppliers such as experts in law, advertising, and finance (Davis & Henderson, 2008). Other regional attributes that tend to attract headquarters are good airport facilities, low corporate taxes, low average wages, and the same industry specialization (Strauss-Kahn & Vives, 2009). Dearmon, Evans, Greve, and Baksi conducted a literature review of both domestic and international studies on headquarters mobility and found 22 location-related factors and 15 firm special attributes that affect a firm's decision to relocate. Their research found smaller younger firms are more likely to relocate. In 2019, the credit was expanded to include relocating firms receiving qualifying venture capital, and in 2022 the employment conditions were removed. The modifications to the credit expand eligibility to more firms.

TABLE 1.
HEADQUARTERS RELOCATION TAX CREDIT CLAIMS

Tax Year	Claims			Credits		
	Individual	Corporation	Total	Individual	Corporation	Total
2014	N/R	N/R	N/R	*	-	*
2015	N/R	N/R	6	*	*	$10,497
2016	N/R	N/R	N/R	*	*	*
2017	N/R	0	N/R	*	-	*
2018	N/R	0	N/R	*	-	*
2019	N/R	0	N/R	*	-	*
2020	N/R	0	N/R	*	-	*

N/R = Five or fewer filers, count not reportable
* Less than $20,000, and not reportable

SOURCE: Raw data provided by Department of State Revenue, data analysis by the Office of Fiscal and Management Analysis.

The credit was enacted in 2005 and no credits were awarded until 2013. Since then, the IEDC approved three projects. The total contracted amount is $3.75 million, and $2.4 million has been certified as of August 6, 2022. An incentive's effectiveness cannot be determined by the number of claims. However, this credit has only been approved for three projects in 17 years. It is possible the credit influenced decisions to locate here, but it is not likely enticing businesses to locate their headquarters or research operations to Indiana.

COAL GASIFICATION TECHNOLOGY INVESTMENT TAX CREDIT

IC 6-3.1-29

The coal gasification technology investment credit was established to encourage the use of Indiana coal to produce synthesis gas to generate electricity, and for the production of synthesis gas to be used as a substitute for natural gas.

The tax credit was intended to create jobs with higher wages, reduce air pollution caused by the generation of electricity through fossil fuels, and promote investment in integrated coal gasification power plants and fluidized bed combustion technology. Qualified investment is defined as a taxpayer's expenditures for all real and tangible personal property incorporated in and used as part of an integrated coal gasification power plant, or a fluidized bed combustion technology and transmission equipment located at the site to serve the plant. To be eligible for this credit, the facility must meet several statutory requirements, including being placed in service.

The credit equals 10% of the first $500 million in qualified investments in an integrated coal gasification power plant and 5% of the qualified investment that exceeds $500 million. The credit for fluidized bed combustion technology equals 7% of the first $500 million invested and 3% of the investment that exceeds $500 million. The tax credit may be claimed against a taxpayer's individual adjusted gross income (AGI), corporate AGI, financial institutions, insurance premiums, and utility receipts tax liability. The utility receipts tax was repealed beginning in FY 2023. As a result, the credit would likely be claimed through other tax liabilities for FY 2023. The credit is refundable if the taxpayer sells substitute natural gas to the Indiana Finance Authority; otherwise the credit is nonrefundable.

The legislation establishing the credit for integrated coal gasification facilities was passed by the 2005 Indiana General Assembly. The credit applies to taxable years beginning after December 31, 2005. In 2006, the credit was expanded to include fluidized combustion technology. A taxpayer planning to make a qualified investment must apply to the Indiana Economic Development Corporation (IEDC) and receive approval through a written agreement before they make the investment. If approved, the credit may be claimed once the facility is operational. The IEDC is required to annually determine whether the taxpayer is in compliance with the agreement. The taxpayer must enclose the certificate of compliance from the IEDC along with their return.

The credit must be taken in 10 annual installments. The annual amount of the credit equals the lesser of the total amount of credit awarded divided by 10 or the greater of: (1) the utility's total state tax liability for the taxable year multiplied by 25%; or (2) the utility's total utility receipts tax liability for the taxable year.

Taxpayers may assign part or all of the credit to one or more utilities that enter into a contract to purchase electricity or substitute natural gas from the taxpayer. The contract must be approved by the Indiana Utility Regulatory Commission. A tax credit assigned to a taxpayer must be taken in 20 annual installments. The total amount of the taxpayer's credit that may be assigned in any taxable year may not exceed: (1) the total approved credit amount divided by 20 and multiplied by (2) the percentage of Indiana coal used in the taxpayer's qualified investment in the taxable year for which the annual installment of the credit is allowed. The part of the amount that may be assigned to any one utility with respect to the taxable year may not exceed the greater of: (1) the utility's total state tax liability for the taxable year multiplied by 25% or (2) the utility's total utility receipts tax liability for the taxable year.

A taxpayer who makes a qualified investment in an integrated coal gasification power plant and enters into a contract to sell substitute natural gas to the Indiana Finance Authority may choose to claim the credit as a refundable tax credit for a period of 20 years. The amount of refundable credit for one taxable year is equal to: (1) the total approved credit amount divided by 20 and multiplied by (2) the ratio of Indiana coal to total coal used in the taxpayer's integrated coal gasification power plant in the taxable year.

Approval of Tax Credit

A tax credit of up to $150 million was approved for the power project in Edwardsport, Indiana. No other projects have been approved for the tax credit. A tax credit agreement was entered into by Duke Energy Indiana, Inc., the IEDC, and the State Budget Agency with an effective date of March 31, 2010 (IEDC Transparency Portal).

The agreement estimated that the construction phase of the project would create 900 to 2,000 construction jobs and $26.9 million in state tax revenue. It further estimated that, after beginning operations, the project would create 300 mining jobs that would pay $18 million annually in wages. The agreement projected the use of 1.5 million tons of Indiana coal per year. It also estimated that about 79 to 99 full-time jobs would be created at the plant and pay above 125% of the average wage in Knox County, Indiana.

In June 2013, Duke Energy Indiana, Inc., put into service the coal gasification plant in Edwardsport. The Edwardsport IGCC project includes: (1) an activated carbon bed for the absorption of mercury; (2) two heat recovery steam generators, each of which is equipped with selective catalytic reduction for nitrogen oxide control; and (3) a multiple-cell cooling tower. The plant has a capacity of 618 MW. According to Duke Energy, the plant uses 1.7 to 1.9 million tons of Indiana and Midwestern coal per year.

The $150 million credit will be claimed over 10 years from tax years 2013 to tax year 2022. The credit is estimated to reduce state General Fund revenues by up to $15 million annually between FY 2014 and FY 2023. Duke Energy Indiana also reports that it has executed contracts in excess of $950 million with utility companies to sell electricity. This would allow Duke Energy to assign the tax credit to those utility companies.

Coal Gasification Technology

The 2010 Worldwide Gasification Database revealed that the worldwide gasification capacity has continued to grow in the past several decades This technology is more prevalent in the Asia-Pacific region. North America accounts for less than 5% of the production estimates (Higman Consulting, GSTC). The coal to electricity generation model similar to the Edwardsport plant is a very small share of the overall gasification market. This is primarily because, despite advances in gasification technologies over the past several decades, the costs of gasification systems remain high. The larger capital investment required for bigger plants and the accompanying financial risk have become significant barriers to market penetration.

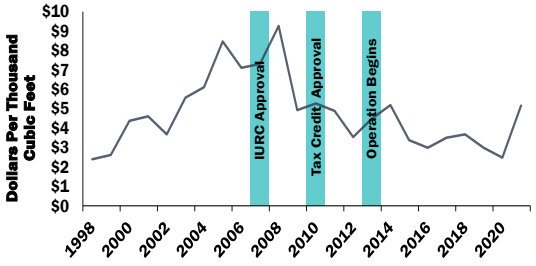
Even with a higher cost, the coal gasification technology is considered an option because of the potential to reduce air pollution emissions caused by coal. The U.S. Department of Energy lists the status of 59 proposed gasification plants. This database includes all gasification plants classified as active or canceled in the last decade. About 15 of these projects planned to produce electricity. However, 10 of those projects that were considering using coal as fuel have been delayed, canceled, or changed the fuel source to natural gas. The database does not include facilities that are currently operating. Since 2000, there were only two major coal gasification plants in the United States using coal as a feedstock to generate electricity: the Duke Energy plant at Edwardsport, Indiana and the Kemper Power plant, in Kemper County, Mississippi. Due to operational costs and efficiency issues, the Kemper Power plant stopped using the coal gasification process to generate electricity.

Cost of Project

The construction cost for Duke Energy's Edwardsport plant increased from an estimated $1.9 billion to more than $3.5 billion. Assuming that the taxpayer will receive $150 million in tax credits, this is about 4% of the total cost of construction. The project is largely funded by utility consumers through charges built into their electricity rates.

The Edwardsport facility uses coal as fuel and turns it into syngas which was estimated to be a better alternative due to high natural gas prices during the project's development phase in 2006. Natural gas prices were at their highest in decades. However, by the time the operations began, natural gas prices decreased and continue to remain relatively low. Figure 1 shows the natural gas prices since 1998 along with certain project milestones.

FIGURE 1.
COST OF U.S. NATURAL GAS FOR ELECTRICITY GENERATION AND EDWARDSPORT GASIFICATION POWER PLANT TIMELINE



SOURCE: U.S. Department of Energy, analysis by the Office of Fiscal and Management Analysis.

In 2017, coal provided the largest generation share of electricity in 18 states, down from 28 states in 2007. Coal accounts for approximately 95% of electric

generation in Indiana.

Natural gas had long been the second-most prevalent fuel for electricity generation behind coal, but in April 2015, it became the primary fuel source for generating electricity in the U.S. For the U.S. as a whole, natural gas provided 32% of the total electricity generated in 2017, slightly higher than coal's 30% share. The price of natural gas has provided impetus to the decision to shift away from using coal as a fuel source. While the electricity generation cost of natural gas has been above and below coal in the last five years, the direct use of natural gas has proved to be cheaper than gasified syngas.

However, as long as the total cost of generating electricity using gasified syngas remains substantially higher than the cost of generating electricity using natural gas, the tax credit is unlikely to incentivize the construction of another coal gasification plant.

Conclusion

The coal gasification technology investment tax credit was established to promote investment in integrated coal gasification power plants and fluidized bed combustion technology. In the last 18 years, only one project was approved to receive this tax credit. The tax credit represents a small portion of the capital, operational, and maintenance expenditures of that project. This along with the rate based funding mechanism discussed in the prior section, indicate that the tax credit, by itself, did not solely influence whether the firm built a coal gasification plant. Due to the relatively low cost of generating power using natural gas and other fuel sources, an integrated coal gasification technology has to produce power at low prices in order to compete with wholesale market power prices. The low utilization of the tax credit indicates that coal gasification technology may not be competitive in the current energy market conditions. Currently, there are no active plans for any integrated coal gasification plant to be built in the state of Indiana. It can be concluded that the tax credit, by itself, will unlikely incentivize any project in the near future.

ECONOMIC DEVELOPMENT FOR A GROWING ECONOMY TAX CREDIT

IC 6-3.1-13

The economic development for a growing community (EDGE) tax credit is a discretionary tax incentive established to encourage businesses to either create new jobs or retain existing jobs in the state.

Businesses can qualify to receive credits in two ways. The primary method to qualify for EDGE credits, and its original purpose when it was enacted in 1994, is job creation. About 99% of all EDGE projects are selected to create new jobs either through business attraction or expansion. In 2003, the EDGE credit was expanded to include job retention projects. The Indiana Economic Development Corporation (IEDC) has only awarded 16 projects to date. Since the previous evaluation in 2017, several attributes of EDGE were modified. Table 1 shows the program changes. The EDGE credit is administered by the IEDC, and a business must enter into an incentive agreement with the IEDC before they can receive EDGE.

TABLE 1.
SUMMARY OF LEGISLATIVE CHANGES TO THE EDGE SINCE 2018

Characteristics	EDGE Before 2018	EDGE 2018 and After
Duration of Credit	Maximum 10 taxable years.	Maximum 20 taxable years.
Project Location	The credit may be awarded to an applicant who meets certain conditions at the time of the applicant's location or expansion decision.	The credit may be awarded if an applicant proposes a project to create new jobs in Indiana without a determined physical location.
Credit Amount Calculation	Credits for job creation projects cannot exceed the incremental income withholdings of the new employees.	Credits for job creation projects cannot exceed the incremental income withholdings of the new employees which can include non-resident employees.
Claiming the Credit	The credit may be claimed against a taxpayer's tax liability and, at the discretion of the IEDC, the credit is also refundable.	Eligible recipients may elect to forgo claiming the credit against any state tax liability and submit a request to receive a payment equal to the credit.
Annual Credit Limit	The IEDC could not award more than $10 million in credits per fiscal year for retention projects. Job creation projects had no aggregate credit limits.	There is a combined aggregate credit limit of $300 million per fiscal year for EDGE, HBI, CRED, headquarters relocation, redevelopment, and film and media tax credits.

SOURCE: Office of Fiscal and Management Analysis.

A business must apply to request an allocation of EDGE credits from the IEDC. The credits may be awarded to applicants who meet project, employment, and other criteria as specified in the agreement. The incentive agreement specifies the project details, the duration of the credit, the amount of credits to be awarded, and employment requirements. The credit equals an agreed percentage of incremental income tax withholdings attributable to created and retained jobs by the project, or a fixed dollar amount. Table 2 contains the number of EDGE projects and credits. EDGE credit awards are based on performance. Therefore, the business must provide proof to the IEDC that it is fulfilling its agreement before the IEDC will certify any credit. The IEDC only approves the full credit amount if the business fulfills its obligations stated in the incentive agreement. For example, a business enters into a $800,000 EDGE agreement to hire 25 new positions for a period of 8 years. The IEDC can certify $100,000 in EDGE credits if the business hires all 25 people in the first year. In order to receive $100,000 in the second year, the business must continue to fill those 25 new positions. If the business hires less people, then the certified credits are adjusted accordingly. Table 2 shows the amount of EDGE credits that could have been certified and the actual credits certified.

TABLE 2.
EDGE CONTRACTS AND CERTIFICATIONS BY CALENDAR YEAR

Calendar Year	Number of Projects	Value of Contracts Executed	Actual Credits Certified	Maximum Possible Certifications	Certification Percentage
2013	186	$236,660,154	$62,132,771	$157,035,988	40%
2014	242	$238,822,843	$70,815,179	$173,943,863	41%
2015	244	$199,408,489	$70,670,259	$192,726,023	37%
2016	191	$154,945,000	$72,271,660	$210,805,912	34%
2017	204	$200,957,848	$75,279,521	$231,474,532	33%
2018	247	$216,239,750	$82,290,786	$255,089,832	32%
2019	262	$328,388,250	$88,400,674	$279,523,405	32%
2020	248	$240,702,000	$83,568,075	$301,371,473	28%
2021	248	$377,761,000	$90,842,726	$335,118,192	27%

SOURCE: Raw data provided by the Indiana Economic Development Corporation, analysis by the Office of Fiscal and Management Analysis.

The structure of the EDGE program affects the relationship between the contracts and certified credits. An EDGE agreement lasts for a period of years as determined by the IEDC. Before 2022, the IEDC could enter into up 10 year contracts, but the average contract was for eight years. [After 2022, the IEDC is authorized to offer 20 year contracts]. The pattern of certifications and contracts means that a single year's worth of certifications could be comprised of agreements entered into from the prior 10 years.

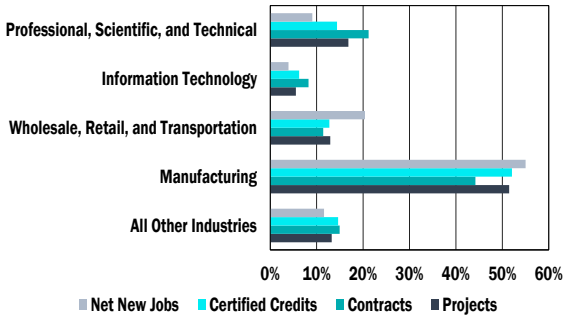
The amount of EDGE credits the IEDC may provide is based on the wages associated with the new jobs a business creates. The IEDC can offer up to 100% of the withholding associated with the new jobs. The average credit percentage is about 70%. The size of the contracts awarded also vary. An analysis of the contracts from 2008 to 2021 found:

- Contracts for $1 million or less represent 76% of the projects
- Contracts between $1 million and $10 million represent 23% of the projects
- Contracts over $10 million are 1% of the projects

The number of new jobs associated with these projects range from 6 to 3,000. The average number of expected jobs is 110. Because the credit is based on income tax withholding, the number of new positions and associated wages directly affect the credit the business will receive.

Figure 1 illustrates the industries with the largest share of EDGE projects, contracts, certified credits, and net new jobs. Manufacturing received the most projects.

FIGURE 1.
EDGE PROJECTS BY INDUSTRIAL SECTOR FOR YEARS 2008-2022

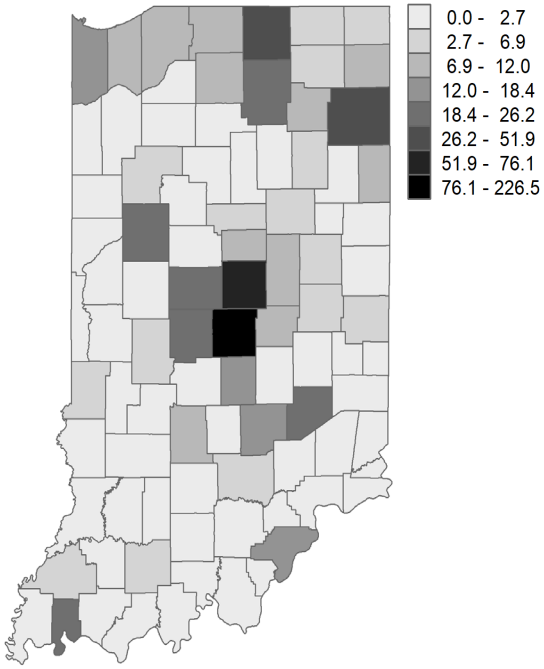


SOURCE: Raw data provided by the Indiana Economic Development Corporation, analysis by the Office of Fiscal and Management Analysis.

The high concentration of EDGE projects involved with the retail trade industry represent the type of business but not necessarily the activity occurring at the project location. These businesses are connected to wholesale, warehousing, and manufacturing operations. For example, there are projects where a distribution center associated with a retailer may be expanding and receives an EDGE credit.

EDGE credit recipients are concentrated in Indiana's larger counties where population centers and larger employers are located. Of the projects since 2005, about half of the projects are located in Marion, Hamilton, Elkhart, Allen, Hendricks, and Clark County. Figure 2 shows the amount of certified credits awarded to businesses by county.

FIGURE 2.
CERTIFIED EDGE AWARDS TO DATE BY COUNTY (IN MILLIONS)



SOURCE: Raw data provided by the Indiana Economic Development Corporation, analysis by the Office of Fiscal and Management Analysis.

TABLE 3.
EDGE TAX CREDIT CLAIMS

Tax Year	Claims			Credits		
	Individual	Corporation	Total	Individual	Corporation	Total
2014	882	445	1,327	$6,257,820	$42,496,104	$48,753,924
2015	892	531	1,423	$5,884,917	$43,940,485	$49,825,402
2016	970	540	1,510	$6,119,713	$46,408,625	$52,528,338
2017	757	543	1,300	$7,710,114	$53,262,239	$60,972,353
2018	726	343	1,069	$9,035,576	$46,699,284	$55,734,860
2019	889	346	1,235	$9,249,697	$55,520,310	$64,770,007
2020	718	323	1,041	$8,918,963	$39,283,258	$48,202,221

SOURCE: Raw data provided by the Department of State Revenue, analysis by the Office of Fiscal and Management Analysis.

Beyond the amount certified by the IEDC, the business must still claim the credit with the Department of State Revenue, and this represents the true cost. The EDGE credit is refundable; therefore, the discount provided by EDGE credits is not limited by tax liability. It overcomes the disadvantage of other nonrefundable tax incentive programs where the full value of the incentive may not be realized in the year of the activity. On average, 77% of the EDGE credits annually certified by the IEDC are claimed by taxpayers in the same taxable year. It is doubtful that businesses could be unaware of available EDGE credits given the high level of participation and reporting required, yet a few businesses do not claim a portion of their certified dollars.

Framework of the Analysis

In previous reports, LSA compared the employment patterns of businesses who received EDGE and those who did not receive EDGE in an attempt to measure the effectiveness of the program. LSA was unable to determine whether market conditions, the EDGE tax credit, multiple incentives, or all the above contributed to the economic activity LSA observed.

The purpose of EDGE tax credit is to increase the private sector economic activity in Indiana. It particularly focuses on increasing or maintaining the level of employment. An EDGE contract is provided to support new hiring or retain existing employees. It is difficult to determine the portion of the jobs that are basis of any EDGE contract that would not have occurred in absence of the EDGE tax credit.

The EDGE tax credit allows the recipient to receive up to the income tax withholding generated on the jobs that are certified under the EDGE contract. The income tax withholding on the EDGE related job awarded as a credit is the cost to the state. In essence, the cost of the credit can be divided into two parts: (1) the credit provided on jobs that would not exist in absence of the credit; and (2) the credit provided on jobs that would exist regardless of the credit.

While the total amount of economic activity (jobs) creditable under the contract is available, the portion of the

economic activity created "but-for" the tax credit is elusive. Bartik (2019), while reviewing literature on the effectiveness of tax incentives, found that the typical incentive likely induces less than 25% of the economic activity associated with a tax incentive.

These challenges encouraged LSA to pursue a different method of analysis—a break-even analysis. A break-even analysis is similar to a cost-benefit analysis, but the focus is to measure how much new economic activity is necessary to cover the cost of an action. This technique has been used by other states to evaluate tax incentives. Oklahoma conducts a break-even analysis to determine whether the associated activity, at specific thresholds, are sufficient to recover the cost of tax incentives. Rhode Island computes a break-even point for each tax incentive they review. In addition, Rhode Island considers multiple measures such as gross state product, employment, and state revenue. Both states conduct a break-even analysis to understand if the economic activity from an incentive project could generate enough state revenue to cover the costs and how much new activity must be created for that to happen.

Building from the research of other states, LSA investigated the potential break-even points for EDGE projects, and whether different industries have different break-even points. Each EDGE certified job created or retained in Indiana has a cascading economic impact that leads to additional jobs and output in Indiana. Whereas the cost of the credit is limited to the withholding tax generated from the certified job, each job creates additional tax revenue, potentially beyond the cost of the credit. However, the additional economic and fiscal impact of the tax credit should only be attributed for a new position created or existing position retained in the state, and not for a position that would exist regardless of the tax credit. In absence of a clear understanding of the portion of jobs created under the EDGE program that are new or retained because of the credit, this analysis attempts to set aside that inquiry and determine the share of EDGE certified jobs for each industry that must be attributed to the credit for the EDGE tax credit to be cost-effective.

The cost-benefit as measured by state tax revenues may not reflect the complete workings of the tax credit, in that it may not account for the project creating employment, or generating investments. Yet, a break-even on state tax revenue confirms that the state is not funding a project where state does not recoup its revenues dedicated toward the project.

Methodology

EDGE certification and performance data from IEDC was used to conduct the analysis. The tax credits certified between 2011 and 2020 were used. An EDGE contract usually provides tax credits equal to a portion of income tax withholding for the job created during the contract period, generally between five to 10 years. The total certified amount for each year of the EDGE project is the annual cost to the state.

IMPLAN input-output model was used to compute the state tax benefit from a project. The NAICS subsector for each project was used to calculate the economic and state tax revenue impact of creating a job in that subsector. The state tax revenue

generated for each job in that subsector multiplied by the number of jobs in the project was the total tax revenue estimated to have been generated by the project. This is considered the annual state tax benefit from the project.

Since the IMPLAN input-output results for tax benefit were produced in 2022 dollars, the cost of the project in certified tax credits for each year was converted into 2022 dollars. Certified tax credits as a share of tax revenue generated from the project was calculated. This share, expressed as a percentage of revenue generated, represents the share of economic activity from the project that would be sufficient to offset the forgone state revenue dedicated toward the project. This could also be expressed as the number of credit attributable jobs per 100 jobs certified for the project.

The analysis shows the break-even percentages for an average project within a specified industry. Based on economic factors like wages, accompanying investments and market situations, an actual project may have a different break-even point than the industry average calculated using the available data. All the models operate under the following assumptions and limitations:

- IMPLAN assumes businesses with an industry are producing the same product. For example, if one business produces laptops and other business produces network servers, the model will categorize them both broadly as producing computer products.
- IMPLAN computes the economic impact based on the industry as a whole and will not account for business specific prices, labor supply and cost, or exactly how much intermediate inputs are purchased locally. In addition, IMPLAN does not have budgetary or supply side constraints.
- The models all measure the impact of a single state incentive awarded to a project. If other state incentives are used, the break-even point would likely increase because the state cost would be higher.
- This simulation does not account for the impact of federal and local incentives, nor does it include the estimated changes in federal and local taxes.
- The break-even point is calculated while the business is receiving the incentive. Once an incentive is no longer issued, all revenue associated with the project would be received by the state.
- The break-even analysis does not account for the alternative economic impact of Indiana spending an equal amount through the budget process.

Since LSA's last study, the EDGE program has undergone several changes that may affect the incentive's effectiveness. These changes include doubling the potential duration of an agreement from 10 to 20 years and allowing businesses to receive direct payments instead of claiming a credit on an annual tax return. As another limitation of this analysis, evaluating the past projects awarded under the old structure disregards how the recent changes will impact future projects.

Results

The analysis included all businesses receiving the EDGE tax credit between

2011 and 2020. As the EDGE contract allows a project to receive the tax credit for multiple years, a total of 2,164 projects receiving 8,953 certified payments were studied. These projects fall under 50 different industry subsectors.

The analysis calculated the tax revenue break-even point for each project. The break-even point was calculated as the share of total jobs required to be attributable to the credit for the project to be cost effective. Table 4 shows the number of jobs per 100 certified jobs required to be attributable to the tax credit to recover the foregone tax revenue toward the project.

TABLE 4.
NUMBER OF EDGE PROJECTS BETWEEN 2011 TO 2020 BY BREAK-EVEN THRESHOLD

Number of Credit Attributable Jobs per 100 EDGE Certified Jobs Required for State Revenue Break-Even	Number of EDGE Projects in the Category	Share
0 to 10	1,290	59.6%
10 to 20	637	29.4%
20 to 30	151	7.0%
30 to 40	55	2.5%
40 to 50	10	0.5%
More than 50	21	1.0%

SOURCE: Indiana Economic Development Corporation Certification Data, IMPLAN Input-Output Model.

More than half (59.6%) of the projects required less than 10 out of every 100 certified jobs to be attributable to the credit for the project to break-even on the state tax revenue. Some of the large sectors having a low break-even point are automotive manufacturing, wholesale, chemical manufacturing, and telecommunication. These sectors typically have low to medium level wages, but they result in high state economic impact. Which means that they have low credit costs per job, but the indirect and induced impact attributable to these sectors mostly occur within the state leading to relatively high state tax revenues.

About 30% of the projects required between 10 to 30 jobs to be attributable to the credit for the incentive to be cost effective. Industry subsectors like finance and insurance, warehousing, and professional and technological services fall under this bracket. These sectors have either high wages or low dynamic economic impact. The finance and insurance industry has mid to high levels of wages leading to a high cost of credit per certified job, so even though they have a relatively strong economic impact, the break-even point is about 13 per 100 certified jobs. The warehousing industry has a much higher break-even point at 18 per 100 jobs, despite having a low wage level and low credit cost. The reason is low in-state economic impact leading to low tax revenue impact from these projects.

Less than 5% of the projects needed 30 or more jobs out of 100 certified jobs to be attributable to the credit for the project be cost effective. These are industries with high wages and low in-state economic impact. Projects providing business support services or involved in management of companies get certified for jobs with high wages, whereas their in-state economic impact is relatively lower. This leads to a high break-even point.

Table 5 shows the results of model simulations for 10 industry subsectors chosen based on various factors like the size of the subsector in Indiana, amount of credit certification, and number of EDGE projects to demonstrate the variability of the break-even point. The simulations suggest EDGE projects have break-even points below 25% regardless of the industry subsectors. This means it is more likely for the state to recover the forgone revenue. For example, in an automotive manufacturing project, about four out of 100 of the new jobs specified in the agreement must be directly attributable to the credit for the state to cover its cost in providing the EDGE credits. The lower break-even points illustrated by the models are industries that have a greater share of the intermediate inputs purchased locally.

The table also shows some sectors have significantly higher break-even points. The break-even point of software publishing is five times higher than the automobile manufacturing industry. This is because of higher wages leading to larger certifications per job, and a portion of the potential economic activity generated by this industry being out of Indiana. Even then, if a quarter of the jobs associated with an EDGE project are attributable to the credit and would not exist in absence of the credit, then this analysis concludes that the project could generate enough state revenue to cover the cost of the EDGE credits.

TABLE 5.
EDGE TAX CREDIT: STATE TAX REVENUE BREAK-EVEN COST-BENEFIT ANALYSIS (YEAR 2011-2020)

Industry	Break-Even Cost-Benefit (per 100 Jobs)		Break-Even	
Name of the Industry	Foregone Tax Revenues (Cost)	State Tax Revenue Impact (Benefit)	Foregone Tax Revenue as a Share of State Tax Revenue Impact	Number of Credit Attributable Jobs for Tax Revenue Break-Even
Food Processing	$86,409	$1,106,560	7.8%	7.8
Plastic and Rubber Mfg.	$77,437	$841,843	9.2%	9.2
Auto Mfg.	$90,500	$2,223,093	4.1%	4.1
Wholesale Trade	$96,820	$2,548,890	3.8%	3.8
Warehousing and Storage	$79,016	$433,451	18.2%	18.2
Software Publishing	$166,222	$782,610	21.2%	21.2
Telecommunication	$123,844	$4,946,451	2.5%	2.5
Data Processing and Hosting	$199,985	$1,534,469	13.0%	13.0
Credit Companies/Finance	$144,103	$1,115,743	12.9%	12.9
Professional and Tech. Services	$149,369	$976,434	15.3%	15.3

SOURCE: Indiana Economic Development Corporation Certification Data, IMPLAN Input-Output Model.

The models illustrate an estimate of the state revenue associated with these types of projects. The actual state revenue attributable to a project could be higher or lower. Bartik (2019) found that recent research indicates the economic impact models likely overstate the economic benefits associated with the activity modeled. The following factors could reduce the impact which would result in higher break-even points.

1. If more intermediate purchases are made to out-of-state suppliers, it will reduce the in-region economic activity and reduce the estimated state tax impact.

2. If the new positions are filled by people living outside of the state, the state tax revenue associated with their household spending would be lost.

3. If a person leaves an Indiana job, and the newly vacant position is eliminated, the net economic activity would be less because the new position is displacing existing economic activity.

Conclusion

While the simulations do not provide insight on the effectiveness of EDGE, they do suggest the risk of Indiana not recovering the amount of foregone revenue as a result of EDGE credit certifications is low. This is important because the recent statutory changes to the credit allow for longer contracts and possibly direct payments to businesses.

The EDGE tax credit provided to businesses is statutorily linked to the state income tax. Thus, the structure of EDGE increases the likelihood of the state recovering revenue than alternative incentives. The state forgoes credits equal to a portion of the withholding associated with the new positions. The state will still receive revenue from all the business and personal taxes related to the new activity. Yet, a portion of the job commitment in an EDGE contract must be driven by the EDGE tax credit. This analysis shows the share of jobs that must be directly attributable to EDGE for the project to be cost-effective is relatively low. It also provides the variability among industry subsectors, thus showing the relative risk for the industry subsectors.

HOOSIER BUSINESS INVESTMENT TAX CREDIT

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The Hoosier business investment (HBI) tax credit was established to encourage capital investments in Indiana. The credit applies to qualified investments made for taxable years beginning after December 31, 2003.

In order to receive a credit, a taxpayer must enter into an incentive agreement with the IEDC. A recipient may use the credit to offset individual or corporate adjusted gross income (AGI) tax, financial institutions tax, insurance premiums tax, and nonprofit agricultural organization health coverage tax liabilities. The credit is nonrefundable, but unused credits may be carried forward for a number of years determined by the IEDC, up to a maximum of 9 years.

HBI was subject to annual credit limits associated to different types of investments. However, like EDGE, PL 135-2022 rolled the HBI credit threshold into the general $300 million total annual credit limit for the applicable tax credits administered by the IEDC.

The HBI credit program has evolved into three distinct programs. Each variation was established for a specific type of investment or project.

The HBI credit was created to encourage capital investments directly related to expanding the workforce in Indiana. The HBI credit equals up to 10% of qualifying investments. The definition of a qualifying investment includes a wide range of activities ranging from constructing a new building to purchasing new computer equipment. However, property that could be easily moved outside of Indiana is ineligible for the credit. The IEDC can offer a credit of up to 15% of the qualified investment if the business invests in digital manufacturing equipment. The IEDC is instructed to evaluate HBI credit applications by how the proposed project will create new jobs or increase wage levels in Indiana, and that receiving the credit is a major factor in the applicant's decision to make the investment. In addition, the average wage paid to employees at the location after the credit is given will be at least 150% of the hourly minimum wage. This is the most commonly awarded variation of the HBI credit.

Logistics Investments

Businesses making capital investments that will enhance Indiana's logistics industry can apply for the HBI credit for logistics variant. For logistics investments, the HBI credit equals up to 25% of the difference of the logistics investment made in the taxable year and 105% of the average logistics investment made in the prior two years. The statute defining a logistics investment lists a number of improvements that could potentially qualify. For example, constructing a new distribution facility, upgrading permanent waterside docks, replacing bridges, improving a fueling facility, and new distribution equipment could all qualify as a logistics investment.

Expenditures for maintenance expenses are ineligible for the credit. When evaluating an application involving a logistics investment, the IEDC must determine whether the project will create more jobs, preserve existing jobs, increase wages, or improve Indiana's economy. As of September 1, 2022, this incentive has never been used.

HBI Accelerated

The IEDC was authorized, under specific conditions, to pay a taxpayer for unused credits at a discount through the HBI Accelerated program. To qualify, the taxpayer must propose at least $500 million in total investment over a five-year period. They must enter into an agreement with the IEDC before January 1, 2017, and agree to claim tax credits for only $170 million of the total investment. An additional accelerated credit use was authorized in statute for a project where a taxpayer proposes to invest more than $250 million, but only claim $170 million in qualifying investments. The agreement with the IEDC for this project must be entered into before July 1, 2022. The total amount of credits the IEDC can discount and remit is limited to $17 million per fiscal year. If an accelerated HBI credit is awarded, the non-discounted amount counts towards the annual credit limit.

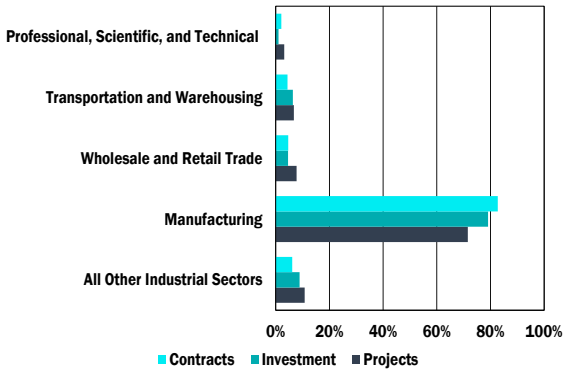
This program was utilized for the Rolls-Royce Corporation and Nucor Corporation. According to the incentive agreement, Rolls-Royce Corporation invested over $584 million at their Indianapolis facility. The amount of HBI credits offered was $17 million, but the accelerated credit amount, after the discount, is $15.5 million. Nucor Corporation in Waterloo is expected to invest $593 million. The agreement provides $3 million to Nucor provided the investment is made. [The IEDC also entered into a separate agreement with Nucor Corp. for $2.15 million in EDGE.]

HBI Contracts and Certifications

The IEDC and the business must enter into a credit agreement before the investment begins. The applicant must first agree to maintain operations at the project location for at least 10 years. The agreement will contain the total qualifying investment and the maximum amount of HBI credits the taxpayer could potentially receive for the project. The amount of HBI credits offered in the agreement is referred to as the contract amount. The cumulative contract amount of HBI is $737.2 million since 2005.

HBI projects are concentrated into a few industrial sectors. Figure 1 shows the distribution of projects, contract amounts, and level of eligible investment by industrial sector. About 72% of all HBI credit recipients are primarily involved in manufacturing, and those businesses received the largest contracts.

FIGURE 1.
HBI PROJECTS BY INDUSTRIAL SECTOR FOR YEARS 2004-2022

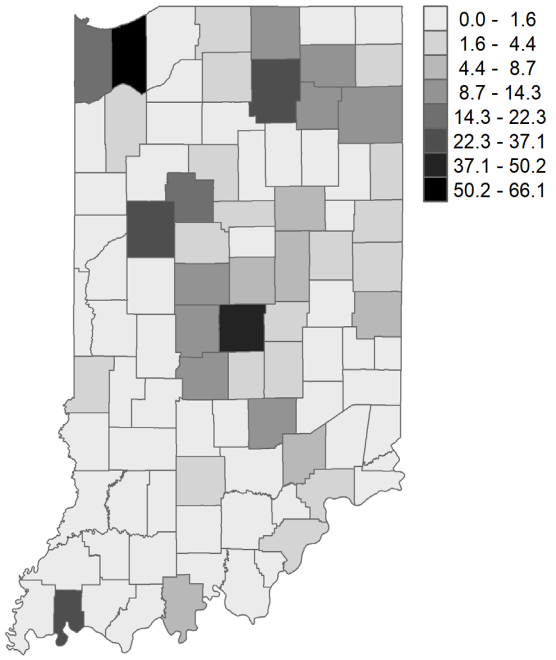


SOURCE: Raw data provided by the Indiana Economic Development Corporation, analysis by the Office of Fiscal and Management Analysis.

There have been HBI projects in 80 counties since 2005. While Marion County has 73% more projects than the next highest county, it does not have a proportional amount of additional investment. The 21 projects in Tippecanoe County had the potential for 96% of the total expected investment associated with the 99 projects in Marion County. Table 1 shows the 10 counties with the greatest level of expected investment, and Figure 2 shows the certified credits by county.

Table 1 also indicates the relative size of HBI projects. The IEDC has entered into HBI agreements with contracts over the $10 million. The large projects are the exception. Looking at the contracts entered into after 2012, 87% offered less than $1 million. The average credit per contract is $579,000. Generally, the greater the amount of qualifying investment will result in more HBI credits, but the IEDC has the discretion to provide HBI credits of up to 10% of amount of the qualifying investment. While there are instances of 10% credits, the average credit percentage is 3%. The qualifying investments associations with projects with $1 million or less HBI credits range from $800,000 to $435 million.

FIGURE 2.
CERTIFIED HBI AWARDS BY COUNTY (IN MILLIONS)



SOURCE: Raw data provided by the Indiana Economic Development Corporation, analysis by the Office of Fiscal and Management Analysis.

TABLE 1.
HOOSIER BUSINESS INVESTMENT TAX CREDIT BY COUNTY, TOP 10 IN EXPECTED QUALIFIED INVESTMENT

County	Number of Projects	Total Contracts	Expected Qualified Investment	Investment Per Project
Marion	99	$75,441,169	$2,300,565,678	$23,238,037
Tippecanoe	21	$67,910,000	$2,227,642,673	$106,078,223
Lake	12	$41,763,026	$1,046,813,554	$87,234,463
Allen	34	$19,341,695	$851,202,709	$25,035,374
Montgomery	6	$5,035,000	$838,606,425	$139,767,738
Hendricks	23	$13,453,955	$780,924,491	$33,953,239
Lawrence	9	$4,821,093	$663,865,239	$73,762,804
Vanderburgh	14	$53,169,430	$616,211,910	$44,015,136
Delaware	10	$6,298,806	$548,016,761	$54,801,676
Elkhart	56	$18,376,260	$543,709,949	$9,709,106

SOURCE: Raw data provided by the Indiana Economic Development Corporation, analysis by the Office of Fiscal and Management Analysis.

A contract does not guarantee a credit. The contract represents the maximum credit the business can receive provided they make the specified level of investment. Once the investment is made, the business informs the IEDC, and the IEDC certifies an amount of credit based on the actual investment. The agreement will also contain provisions requiring the taxpayer to report employment information to the IEDC. The reporting requirements will usually extend beyond the investment timeframe because the taxpayer could have their HBI credits recaptured if the business violates the terms of the agreement. Table 2 contains information on the HBI credit agreements by year. Since 2005, the IEDC has awarded HBI for 691 projects. The cumulative HBI credits certified is $484.7 million, about 65% of the contracted credits. Table 2 shows the HBI contracts awarded and amount of credits certified by calendar year.

The difference between the annual contracts awarded and the certified credits can be attributable to both the program's structure and the related business activity. The agreements can provide the business with up to four years to make the qualifying investment, so the annual amount of certified credits can be from prior year projects. Also, the businesses have to make the investment. There are instances where the level of actual investment is less than the intended amount in the contract. This will result in fewer credits certified. An analysis of the projects from 2013 to 2019 found 47% of projects were not awarded the full contracted amount.

TABLE 2.
HOOSIER BUSINESS INVESTMENT TAX CREDIT CONTRACT AND CERTIFICATIONS BY CALENDAR YEAR

Calendar Year	Number of Projects	Value of Contracts Executed	Actual Credits Certified
2013	34	$30,960,015	$10,140,121
2014	32	$10,040,000	$16,503,848
2015	36	$28,064,000	$6,855,544
2016	26	$8,278,000	$6,225,491
2017	16	$5,092,500	$7,369,947
2018	23	$15,025,000	$16,536,527
2019	32	$17,365,000	$14,259,032
2020	32	$17,880,000	$9,461,493
2021	54	$21,910,000	$10,648,560
2022	24	$24,315,000	$12,180,926

SOURCE: Raw data provided by the Indiana Economic Development Corporation, analysis by the Office of Fiscal and Management Analysis.

TABLE 3.
HOOSIER BUSINESS INVESTMENT TAX CREDIT CLAIMS

Tax Year	Claims			Credits		
	Individual	Corporation	Total	Individual	Corporation	Total
2014	64	12	76	$1,137,393	$812,546	$1,949,939
2015	46	23	69	$1,022,952	$3,409,959	$4,432,911
2016	54	23	77	$1,098,480	$4,192,939	$5,291,419
2017	52	21	73	$814,460	$2,012,713	$2,827,173
2018	82	24	106	$1,107,886	$3,976,151	$5,087,037
2019	91	15	106	$1,157,570	$7,378,774	$8,950,344
2020	48	17	65	$1,167,871	$3,050,118	$4,217,989

SOURCE: Raw data provided by the Department of State Revenue, analysis by the Office of Fiscal and Management Analysis.

Once the IEDC certifies the business's HBI credit, they may claim it on their annual return. The amount of HBI credits claimed annually are less than the amount of certified credit. The IEDC awarded a total of $169.3 million in HBI from 2010 to 2019. Of those projects, $93.3 million was certified, but approximately $65.9 million in credits was claimed on tax returns. This is expected because the HBI is nonrefundable and the credit is limited to the business's tax liability. The inability for businesses to fully utilize the incentive may hinder its effectiveness.

Effectiveness

HBI was created to encourage capital investments, but statue requires the IEDC to award credits based on job creation and wage growth. This can be problematic because capital investment can either be a substitute of labor or a complement to labor. It is possible that an HBI related investment could have a positive, negative, or no impact on jobs and wage growth. An analysis of HBI projects found evidence that the IEDC is awarding contracts to projects that are increasing both investment and employment. This relationship is demonstrated by the number of HBI projects that are also offered EDGE credits. EDGE credits can be provided to businesses that create or retain employment. About 57.5% of HBI projects also received EDGE since 2004. Of the projects with both incentives, the total EDGE contracts were $675 million and HBI contracts were $515 million. The average net new jobs for projects that receive both incentives were about twice the average net new jobs for projects that just received HBI.

It is difficult to determine the portion of certified investment and accompanying economic activity that would have occurred in absence of the credit. In essence, HBI projects have varied layers of inputs, incentives, market forces, and economic and fiscal impacts. Statistical techniques may not be able to control for all other factors and discern the impact of the incentive on the growth of business or the industry sector. To work around this limitation, a break-even analysis similar to the EDGE analysis was conducted using HBI data. However, this analysis only

considered the certified credit and related investments of an HBI project. To work within the limitations of the available data and for purpose of consistency between projects, any accompanying commitments like direct employment were not considered in the model.

Results

IEDC data was used to calculate an estimated amount of HBI tax credit for every $1 million in investment made by an industry subsector. Based on actual certification data, the typical HBI credit amount was different for each industry subsector. Table 4 shows that the automobile manufacturing subsector received about $2,550 in tax credits for every $1 million in investment, whereas the professional, scientific, and technical sector services subsector received about $26,000 for every $1 million in investment. This suggests on average the cost of incentivizing capital investment in automobile manufacturing has been lower than professional services for projects within the HBI credit program.

Using IMPLAN input-output model, the tax impact from $1 million in investment by an industry subsector was calculated. Based on various economic factors and the amount of economic activity that occurs outside Indiana, each sector has a different state tax revenue impact for the $1 million investment scenario. According to the model, every $1 million in investment by an automobile manufacturer returns about $10,400 in state tax revenue while a $1 million investment in the professional, scientific, and technical services subsector may generate about $29,500 in state tax revenue. The simulation suggests, for HBI credit projects, the economic and fiscal impact in Indiana for investment in automobile manufacturing has been lower than investments in the professional, scientific, and technical services sector.

TABLE 4.
HOOSIER BUSINESS INVESTMENT TAX CREDIT: STATE TAX REVENUE BREAK-EVEN COST-BENEFIT ANALYSIS PER $1 MILLION IN INVESTMENT BASED ON PROJECTS BETWEEN YEARS 2011-2020

Industry	Break-Even Cost-Benefit (per $1 million)		Break-Even	
Name of the Industry	Foregone Tax Revenues (Cost)	State Tax Revenue Impact (Benefit)	Foregone Tax Revenue as a Share of State Tax Revenue Impact	Credit Attributable Investment Required for Tax Revenue Break-Even
Plastic and Rubber Mfg.	$9,490	$13,908	68.2%	682,318
Auto Mfg.	$2,550	$10,406	24.5%	245,019
Miscellaneous Mfg.	$10,867	$18,552	58.6%	585,753
Warehousing and Storage	$8,847	$40,372	21.9%	219,143
Professional and Tech. Services	$26,056	$29,477	88.4%	883,955

SOURCE: Indiana Economic Development Corporation Certification Data, IMPLAN Input-Output Model.

As a result of sector dynamics, economic multipliers, and the level of certification, the state tax revenue break-even point for various industries are as low as 25% for automobile manufacturing and as high as 88% for professional services. This suggests HBI projects are more cost effective in the automobile manufacturing industry as compared to professional, scientific, and technical services. The simulation found the break-even for other sectors fall between 22% and 88%. This variation among break-even points for industries might provide an opportunity for the IEDC to maintain a desired level of risk for the HBI program as it enters into agreements with different businesses.

Limitations

Cost benefit or break-even analysis works under certain limitations. It only accounts for the direct financial costs from foregone state tax revenues and compares them to the benefits received through increased economic activity and resulting state tax revenues. In the context of HBI, it may not consider the crowding out of investments by other businesses because of incentivizing HBI projects. Also, the analysis does not consider whether the HBI recipient has relocated already planned capital investments within Indiana or if it is creating new investments. The IMPLAN input output model may not capture all the distortion to the economy from the preferential treatment to HBI projects. The break-even model does not consider the opportunity cost or the administrative costs of the credit program.

There are other factors that could potentially decrease the estimated break-even points. The simulations model the impact of a business spending $1 million on all commodities it purchases on average. The economic impact will vary if LSA assumes the $1 million was all spent on construction services, new machinery, or other equipment. The project data lacked the precision necessary for LSA to make a broad assumption across all industries. In addition, the simulations do not show the impact of a business hiring additional employees or increased sales that may result directly from their investment. For example, if a business spent $1 million to add a new production line, the models are measuring the potential impact of the expenditure, not the impact of any employees the business may hire because of the investment.

Conclusion

The objective of HBI is to increase capital investment, employment, and economic growth in Indiana. This can be achieved by changing the distribution of tax expenditures toward investment activities with higher spillovers and ripple effect, that result in higher economic and fiscal impact in Indiana. Although a cost-benefit analysis leading up to establishing a break-even point is useful in the business selection process, it also comes with limitations. Yet, the analysis suggests that certain sectors generate higher tax revenue on average relative to the cost of credit. By requiring the IEDC to consider those factors when awarding HBI projects, the state would potentially increase the likelihood in recovering the revenue forgone with a project.

TAX INCENTIVE REVIEW STATUTE (IC 2-5-3.2-1)

Chapter 3.2. Review, Analysis and Tax Incentives

Sec. 1. (a) As used in this section, "tax incentive" means a benefit provided through a state or local tax that is intended to alter, reward, or subsidize a particular action or behavior by the tax incentive recipient, including a benefit intended to encourage economic development. The term includes the following:

(1) An exemption, deduction, credit, preferential rate, or other tax benefit that:

(A) reduces the amount of a tax that would otherwise be due to the state;

(B) results in a tax refund in excess of any tax due; or

(C) reduces the amount of property taxes that would otherwise be due to a political subdivision of the state.

(2) The dedication of revenue by a political subdivision to provide improvements or to retire bonds issued to pay for improvements in an economic or sports development area, a community revitalization area, an enterprise zone, a tax increment financing district, or any other similar area or district.

(b) The general assembly intends that each tax incentive effectuate the purposes for which it was enacted and that the cost of tax incentives should be included more readily in the biennial budgeting process. To provide the general assembly with the information it needs to make informed policy choices about the efficacy of each tax incentive, the legislative services agency shall conduct a regular review, analysis, and evaluation of all tax incentives according to a schedule developed by the legislative services agency.

(c) The legislative services agency shall conduct a systematic and comprehensive review, analysis, and evaluation of each tax incentive scheduled for review. The review, analysis, and evaluation must include information about each tax incentive that is necessary to achieve the goals described in subsection (b), which may include any of the following:

(1) The basic attributes and policy goals of the tax incentive, including the statutory and programmatic goals of the tax incentive, the economic parameters of the tax incentive, the original scope and purpose of the tax incentive, and how the scope or purpose has changed over time.

(2) The tax incentive's equity, simplicity, competitiveness, public purpose, adequacy, and extent of conformance with the original purposes of the legislation enacting the tax incentive.

(3) The types of activities on which the tax incentive is based and how effective the tax incentive has been in promoting these targeted activities and in assisting recipients of the tax incentive.

(4) The count of the following:

(A) Applicants for the tax incentive.

(B) Applicants that qualify for the tax incentive.

(C) Qualified applicants that, if applicable, are approved to receive the tax incentive.

(D) Taxpayers that actually claim the tax incentive.

(E) Taxpayers that actually receive the tax incentive.

(5) The dollar amount of the tax incentive benefits that has been actually claimed by all taxpayers over time, including the following:

(A) The dollar amount of the tax incentive, listed by the North American Industrial Classification System (NAICS) Code associated with the tax incentive recipients, if an NAICS Code is available.

(B) The dollar amount of income tax credits that can be carried forward for

the next five (5) state fiscal years.

(6) An estimate of the economic impact of the tax incentive, including the following:

(A) A return on investment calculation for the tax incentive. For purposes of this clause, "return on investment calculation" means analyzing the cost to the state or political subdivision of providing the tax incentive, analyzing the benefits realized by the state or political subdivision from providing the tax incentive.

(B) A cost-benefit comparison of the state and local revenue foregone and property taxes shifted to other taxpayers as a result of allowing the tax incentive, compared to tax revenue generated by the taxpayer receiving the incentive, including direct taxes applied to the taxpayer and taxes applied to the taxpayer's employees.

(C) An estimate of the number of jobs that were the direct result of the tax incentive.

(D) For any tax incentive that is reviewed or approved by the Indiana economic development corporation, a statement by the chief executive officer of the Indiana economic development corporation as to whether the statutory and programmatic goals of the tax incentive are being met, with obstacles to these goals identified, if possible.

(7) The methodology and assumptions used in carrying out the reviews, analyses, and evaluations required under this subsection.

(8) The estimated cost to the state to administer the tax incentive.

(9) An estimate of the extent to which benefits of the tax incentive remained in Indiana or flowed outside Indiana.

(10) Whether the effectiveness of the tax incentive could be determined more definitively if the general assembly were to clarify or modify the tax incentive's goals and intended purpose.

(11) Whether measuring the economic impact is significantly limited due to data constraints and whether any changes in statute would facilitate data collection in a way that would allow for better review, analysis, or evaluation.

(12) An estimate of the indirect economic benefit or activity stimulated by the tax incentive.

(13) Any additional review, analysis, or evaluation that the legislative services agency considers advisable, including comparisons with tax incentives offered by other states if those comparisons would add value to the review, analysis, and evaluation.

The legislative services agency may request a state or local official or a state agency, a political subdivision, a body corporate and politic, or a county or municipal redevelopment commission to furnish information necessary to complete the tax incentive review, analysis, and evaluation required by this section. An official or entity presented with a request from the legislative services agency under this subsection shall cooperate with the legislative services agency in providing the requested information. An official or entity may require that the legislative services agency adhere to the provider's rules, if any, that concern the confidential nature of the information.

(d) The legislative services agency shall, before October 1 of each year, submit a report to the legislative council, in an electronic format under IC 5-14-6, and to the interim study committee on fiscal policy established by IC 2-5-1.3-4 containing the results of the legislative services agency's review, analysis, and evaluation. The report must include at least the following:

(1) A detailed description of the review, analysis, and evaluation for each tax incentive reviewed.

(2) Information to be used by the general assembly to determine whether a reviewed tax incentive should be continued, modified, or terminated, the basis for the recommendation, and the expected impact of the recommendation on the state's economy.

(3) Information to be used by the general assembly to better align a reviewed tax incentive with the original intent of the legislation that enacted the tax incentive.

The report required by this subsection must not disclose any proprietary or otherwise confidential taxpayer information.

(e) The interim study committee on fiscal policy shall do the following:

(1) Hold at least one (1) public hearing after September 30 and before November 1 of each year at which:

(A) the legislative services agency presents the review, analysis, and evaluation of tax incentives; and

(B) the interim study committee receives information concerning tax incentives.

(2) Submit to the legislative council, in an electronic format under IC 5-14-6, any recommendations made by the interim study committee that are related to the legislative services agency's review, analysis, and evaluation of tax incentives prepared under this section.

(f) The general assembly shall use the legislative services agency's report under this section and the interim study committee on fiscal policy's recommendations under this section to determine whether a particular tax incentive:

(1) is successful;

(2) is provided at a cost that can be accommodated by the state's biennial budget; and

(3) should be continued, amended, or repealed.

(g) The legislative services agency shall establish and maintain a system for making available to the public information about the amount and effectiveness of tax incentives.

(h) The legislative services agency shall develop and publish on the general assembly's Internet web site a multi-year schedule that lists all tax incentives and indicates the year when the report will be published for each tax incentive reviewed. The legislative services agency may revise the schedule as long as the legislative services agency provides for a systematic review, analysis, and evaluation of all tax incentives and that each tax incentive is reviewed at least once every seven (7) years.

(i) This section expires December 31, 2025.

TAX INCENTIVE AND INCENTIVE PROGRAM DESCRIPTIONS

Adjusted Gross Income Tax	
Tax Provision	**Description**
Adoption Tax Credit (Reviewed in 2018)	20% of the federal adoption tax credit claimed for the year. The maximum credit equals $2,500 per eligible child.
Affordable and Workforce Housing Credit	The credit may be provided to projects that receive the 4% federal low-income housing tax credit. The Indiana Housing and Community Development Authority may award between 40% and 100% of the taxpayer's federal LIHTC. However, the total credits provided may not exceed $30 million a fiscal year. The credit expires at the end of FY 2028.
Coal Gasification Technology Investment Credit (Reviewed in 2018 and 2022)	10% of the first $500 million in qualified investment in an integrated coal gasification power plant (7% if the investment is in a fluidized-bed combustion unit) and 5% of the qualified investment exceeding $500 million (3% if the investment is in a fluidized-bed combustion unit). Credits are approved by the IEDC.
Community Revitalization Enhancement District Credit (Reviewed in 2016 and 2021)	Percent of qualified investments made in these areas as approved by the IEDC.
Earned Income Tax Credit (Reviewed in 2015)	A refundable tax credit for certain families that have a modified adjusted gross income less than $47,900. The credit amount depends on the number of qualifying children and family income. The maximum credit for 2021 was $538.
Economic Development for a Growing Economy (EDGE) Credit (Reviewed in 2017 and 2022)	Incremental income tax withholdings of new or retained employees as approved by the IEDC.
Enterprise Zone Employee Income Deduction (Reviewed in 2016 and 2020)	The lesser of 50% of earnings or $7,500 if the individual lives and works within an enterprise zone.
Enterprise Zone Employment Expense Credit (Reviewed in 2016 and 2020)	Allowed for increased employment expenditures, equal to the lesser of 10% multiplied by the increased wages or $1,500 multiplied by the number of qualified employees.
Film and Media Production Tax Credit	Up to 30% of a taxpayer's qualified production expenses as determined by the IEDC. The credit begins in FY 2023 and expires at the end of FY 2027.
Foster Care Support Tax Credit	50% of the amount contributed to a qualifying foster care organization. The maximum credit per taxpayer is $10,000 for a taxable year, with the total credits limited to $2 million per fiscal year.
Headquarters Relocation Credit (Reviewed in 2017 and 2022)	Up to 50% of the costs incurred by an eligible business to relocate its headquarters, division or subdivision principal office, or research center to Indiana. Businesses relocating that receive at least $4 million in venture capital in the six months preceding the move may qualify.
Hoosier Business Investment Credit (Reviewed in 2017 and 2022)	Up to 10% of qualified nonlogistics business investments directly related to expanding the workforce in Indiana, not to exceed the taxpayer's state tax liability. For logistics investments, the credit equals 25% of the additional qualified investment made during the taxable year. Credits are approved by the IEDC.
Indiana 529 College Savings Account Contribution Credit (Reviewed in 2015)	20% of annual contributions to an Indiana College Choice 529 investment plan savings account. The maximum credit per taxpayer is $1,000 before tax year 2023. Beginning in tax year 2023, the maximum credit per taxpayer increases to $1,500.

Tax Provision	Description
Indiana Colleges and Universities Contribution Credit (Reviewed in 2015)	50% of contributions to institutions of higher education, up to $100 ($200 if filing a joint return).
Indiana Partnership Long-Term Care Insurance Premiums Deduction (Reviewed in 2014)	Amount of premiums paid during the year on a qualified long-term care policy.
Individual Development Account Credit (Reviewed in 2015 and 2019)	50% of the amount contributed to a fund if the contribution is not less than $100 and not more than $50,000.
Neighborhood Assistance Credit (Reviewed in 2015 and 2019)	50% of contributions to approve projects that assist economically disadvantaged areas or to employ, train, or provide technical assistance to people who reside in these areas. The maximum credit is $25,000. Total tax credits statewide may not exceed $2.5 million in a fiscal year.
Patent-Derived Income Deduction (Reviewed in 2017)	Up to $5 million in income from plant or utility patents issued beginning in 2008 to businesses or organizations domiciled in Indiana.
Redevelopment Tax Credit	Awarded to taxpayers who redevelop or rehabilitate real property located within qualified redevelopment areas that are approved by the IEDC. The IEDC and a taxpayer must enter into an agreement before qualified investments are made, which determines the terms of the credit.
Regional Development Authority Infrastructure Fund Contribution Deduction	An amount equal to the federal income tax deduction allowable for contributions or gifts to a regional development authority infrastructure fund. The deduction is effective January 1, 2018.
Research Expense Credit (Reviewed in 2017)	For certain qualified research expenses incurred.
Residential Historic Rehabilitation Credit (Reviewed in 2015 and 2019)	20% of qualified expenditures as approved by DNR for the preservation or rehabilitation of the taxpayer's principal residence. The maximum statewide credit may not exceed $250,000 annually.
School Scholarship Contribution Credit (Reviewed in 2015)	50% of contributions to nonprofit K-12 school scholarship-granting organizations. The total new credits may not exceed a limit established in statute. The limit varies by fiscal year.
Venture Capital Investment Credit (Reviewed in 2017)	20% of annual qualified venture capital investment up to $1 million. Total new credits awarded may not exceed $12.5 million annually. Beginning in tax year 2022, the credit increases to either 25% or 30% depending on the type of business, and the annual cap increases to $20 million.
Property Tax	
Tax Provision	**Description**
Brownfield Revitalization Zone Abatement (Reviewed in 2018 and 2021)	The designating body may grant a 3-, 6-, or 10-year abatement for real and personal property located in a brownfield revitalization zone. The deduction equals the increase in the property's AV multiplied by a percentage based on year and duration.
Certified Technology Park Deduction (Reviewed in 2017 and 2021)	Personal property located in a certified technology park and used to conduct high-technology activity. The deduction equals 100% of the property's AV. The term of 2 to 10 years is determined by the county fiscal body.
Data Center Property Tax Exemption	Local governments may provide a personal property tax exemption on qualified enterprise information technology equipment to owners of a data center who invest at least $25 million in real and personal property in the facility. The exemption is effective July 1, 2019.

Tax Provision	Description
Enterprise Zone and Entrepreneur and Enterprise District Investment Deduction (Reviewed in 2016 and 2020)	Qualified investments including buildings, manufacturing or production equipment, retooling, and infrastructure within an enterprise zone. The deduction equals the increase in AV of the enterprise zone property as compared to the AV in the base year. The deduction was expanded to include Entrepreneur and Enterprise Districts on July 1, 2017.
Enterprise Zone Obsolescence Deduction (Marion County) (Reviewed in 2016 and 2020)	Newly purchased real property in an enterprise zone in Marion County if an obsolescence depreciation adjustment was allowed for the property in the year preceding the year in which the owner purchased the property. The deduction equals the amount of the former owner's obsolescence adjustment multiplied by 100% in year 1, 75% in year 2, 50% in year 3, and 25% in year 4.
Entrepreneur and Enterprise District Personal Property Minimum Value Exemption (Reviewed in 2020)	An exclusion from the 30% valuation floor for depreciable personal property. The incentive went into effect July 1, 2017.
Entrepreneur and Enterprise District Vacant Building Abatement (Reviewed in 2020)	Commercial or industrial building that is vacant for a year or longer. The deduction equals 100% of real property taxes for the first year it is occupied and 50% in the second year. The incentive went into effect July 1, 2017.
Geothermal Energy Heating or Cooling Device Deduction (Reviewed in 2018)	Real property or mobile home equipped with geothermal heating, cooling, hot water, or electricity production. The deduction equals the device's AV.
Hydroelectric Power Device Deduction (Reviewed in 2018)	Real property or mobile home equipped with a hydroelectric power device. The deduction equals the device's AV.
Infrastructure Development Zone Exemption (Reviewed in 2017 and 2021)	100% exemption in a geographic area designated as an Infrastructure Development Zone by the county executive, municipal legislative body, or the Marion County fiscal body.
Low-Income Housing Exemption (Reviewed in 2015 and 2021)	All or part of real property is exempt from property taxation if (1) the improvements on the real property were constructed, rehabilitated, or acquired for the purpose of providing housing to income-eligible persons, (2) the property is subject to an extended use agreement, and (3) the property owner has entered into an agreement to make payments in lieu of taxes.
Low-Income Residence Exemption (Reviewed in 2015 and 2021)	All the property is exempt if the property is acquired for the purpose of building, renovating, or improving a single family residence that is to be given away or sold in a charitable manner by a nonprofit organization to low-income individuals who will use the property as a family residence and will not have an exemption for the land.
Personal Property Abatements in an Economic Revitalization Area (Reviewed in 2017 and 2020)	New manufacturing, R&D, logistical distribution, and information technology equipment located in an economic revitalization area. The local designating body determines the length of the deduction from 1 to 10 years. It may be enhanced to up to 20 years. The designating body must specify an abatement schedule.
Real Property Abatements in an Economic Revitalization Area (Reviewed in 2017 and 2020)	Improvements made to real property located in an economic revitalization area. The local designating body determines the length of the deduction from 1 to 10 years. The designating body must specify an abatement schedule.
Resource Recovery Systems Deduction (Reviewed in 2018)	Tangible property directly used to dispose of solid waste or hazardous waste by converting it into energy or other useful products. The deduction equals 95% of the system's AV. This deduction currently applies to only one property located in Marion County.
Solar-Energy Systems Deduction (Reviewed in 2018)	Real property or mobile home equipped with solar energy heating or cooling system. The deduction equals system's cost.

Solar Power Device Deduction (Reviewed in 2018)	Solar power device that is part of real property, personal property, or, in some cases, utility distributable property.
Tax Increment Financing (Reviewed in 2015 and 2019)	Special district established by local units that capture incremental property tax revenue for development purposes in the districts.
Urban Agricultural Zone Exemption	A local unit may exempt land used for farming practices in an urban agricultural zone.
Wind-Powered Devices Deduction (Reviewed in 2018)	Real property or mobile home equipped with wind-powered equipment designed to provide mechanical energy or produce electricity. The deduction equals the device's AV.
Sales Tax	
Tax Provision	**Description**
Aircraft Parts (Reviewed in 2018)	Materials, parts, equipment, and engines used in the repair, maintenance, refurbishment, remodeling, or remanufacturing of an aircraft or avionics system of an aircraft.
Aviation Fuel (Reviewed in 2018)	Aviation gasoline, jet fuel, and fuel used as a substitute for aviation gasoline or jet fuel.
Cargo Trailers/RVs Sold to Certain Nonresidents (Reviewed in 2018)	Sales of RVs and trailers to a resident of another state that has a reciprocal exemption.
Certain Aircraft (Reviewed in 2018)	Aircraft purchased for rental or leasing if the annual amount of gross lease revenue is greater than or equal to 7.5% of the book value or net acquisition price. Any aircraft rented or leased for predominant use in public transportation. Aircraft sold to a person who is not an Indiana resident.
Certain Racing Equipment (Reviewed in 2018)	Tangible personal property that comprises any part of a professional motor racing vehicle or a two-seater Indianapolis 500-style race car, excluding tires and accessories.
Data Center Equipment Tax Exemption	A sales and use tax exemption is provided on purchases of qualifying data center equipment and energy to operators of a qualified data center for a period no to exceed 25 years for data center investments of less than $750 million. If the investment exceeds $750 million, then the IEDC may award an exemption for up to 50 years. The exemption is effective January 1, 2019.
Research and Development Property (Reviewed in 2017)	Tangible personal property that has not previously been used in Indiana for any purpose and is acquired for the purpose of experimental laboratory R&D for new products, new uses of existing products, or improving or testing existing products.
Other	
Tax Provision	**Description**
Certified Technology Parks (Reviewed in 2017 and 2021)	Special zones established by local units that capture state and local tax revenue for high-technology business development in the zones.
Community Revitalization Enhancement Districts (Reviewed in 2016 and 2021)	Special districts established by local units that may capture state and local tax revenue for development purposes in the districts.
Enterprise Zones (Reviewed in 2016 and 2020)	Special zone established by municipal units where tax incentives are provided for development in the zones.
Entrepreneur and Enterprise District Pilot Program (Reviewed in 2020)	Special district established by municipal units that may receive a grant for programs that support entrepreneurship, small business development, technology development, and innovation. The program went into effect on July 1, 2017.

Tax Provision	Description
Innovation Development Districts	Special districts established by the IEDC that may capture incremental state income tax, sales tax, and local property tax. The districts may not overlap with other economic development areas.
Motorsports Investment District (Reviewed in 2018)	Geographic area including the Indianapolis Motor Speedway. Revenue is captured from certain incremental sales tax, individual income tax, and admissions fee revenue.
Professional Sports Development Areas (Reviewed in 2017)	Special areas established by local units that may capture state and local tax revenue for sports and convention development purposes in the areas.
Promotional Free-Play Deduction (Reviewed in 2018)	Wagering tax deduction for wagers made by casino patrons using noncashable vouchers, coupons, electronic credits, or electronic promotions provided by the casino.

REFERENCES

Bartik, T. J. (2019). *Making sense of incentives: Taming business incentives to promote prosperity.* WE Upjohn Institute.

Citizen Action Coalition of Indiana, Testimony to the Indiana Utility Regulatory Commission (July 2018).

Davis, J. C., & Henderson, J. V. (2008). The agglomeration of headquarters. Regional Science and Urban Economics, 38(5), 445-460.

Dearmon, J., Evans, R., Greve, R., & Baksi, S. (n.d.). *The Economic and Social Impact of Headquarters and Headquarters Relocations.* Economic Research & Policy Institute. Oklahoma City: Meinders School of Business. Retrieved from https://www.okcu.edu/uploads/business/docs/Economics-of-Headquarter-Cities--Final-Draft.pdf

Duke Energy, Testimony to the Indiana Utility Regulatory Commission (March 2018).

Florida Office of Economic and Demographic Research. (n.d.). *Return on Investment*. Retrieved from http://edr.state.fl.us/Content/returnoninvestment/

Friends of the Earth International (2016, July). Fueling the fire, the chequered history of underground coal gasification and coal chemicals around the world. Retrieved from https://www.foei.org/wp-content/uploads/2016/07/FoEI_Fuelling_the_Fire_July2016.pdf

Goodman, J., & Benz, S. (2021, July 7). How States Can Use Cost-Benefit Analysis to Evaluate Tax Incentives. Retrieved from https://www.pewtrusts.org/en/research-and-analysis/articles/2021/07/07/how-states-can-use-cost-benefit-analysis-to-evaluate-tax-incentives

IMPLAN® model, 2022 Data, using inputs provided by the user and IMPLAN Group LLC, IMPLAN System (data and software), 16905 Northcross Dr., Suite 120, Huntersville, NC 28078 www.IMPLAN.com

Indiana Economic Development Corporation. (n.d.). Indiana Economic Development Corporation Transparency Portal. Retrieved from https://transparency.iedc.in.gov/Pages/ContractSearch.aspx

Mergent, Inc. (n.d.). North American Database. Retrieved August 18, 2022, from Mergent Intellect Database: http://www.mergentintellect.com/

National Conference of State Legislatures. (2021, November 11). State Tax Incentive Evaluations Database. Retrieved from https://www.ncsl.org/research/fiscal-policy/state-tax-incentive-evaluations-database.aspx

State of Oklahoma Incentive Evaluation Commission. (2021). Tax Incentive Evaluation Report. State of Oklahoma. Retrieved from https://iec.ok.gov/

Shafirovich E, Varma A. (2009). Underground coal gasification: a brief review of current status. Industrial & Engineering Chemistry Research, 48(17), 7865-7875.

State of Rhode Island Department of Revenue. (n.d.). Tax Incentives Evaluations 2016-2018. Retrieved from Revenue Analysis - Reports: https://dor.ri.gov/revenue-analysis/reports

Strauss-Kahn, V., & Vives, X. (2009). Why and where do headquarters move? Regional Science and Urban Economics, 39(2), 168-186.

U.S. Energy Information Administration. (n.d.). Average price or cost of natural gas for U.S. electric power producers. Retrieved from https://www.eia.gov/tools/faqs/faq.php?id=51&t=8

U.S. Energy Information Administration. (n.d.). Today in energy. Retrieved from https://www.eia.gov/todayinenergy/detail.php?id=28832

Zaffou, M., & Fazio, E. (2021). Training: Cost-Benefit Analysis and Tax Incentive Evaluations. Retrieved from https://www.pewtrusts.org/en/research-and-analysis/articles/2021/07/07/how-states-can-use-cost-benefit-analysis-to-evaluate-tax-incentives