

Tax Increment Financing: Contributions to Economic Growth in Rural Nebraska

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Glossary

Term	Definition
Base value, TIF base value	The assessed value of the taxable real property in a redevelopment project last certified to the political subdivisions in the year prior to the effective date of the provision authorizing the dividing of ad valorem tax.
Direct jobs or Wages & Salaries	Jobs residing in the industry receiving the TIF designation. Does not include spillover jobs (indirect + induced) jobs.
IMPLAN Multipliers	Using classic input-output analysis in combination with regional specific social accounting matrices and multiplier models, IMPLAN provides a highly accurate and adaptable model for its users. The IMPLAN database contains county, state, zip code, and federal economic statistics which are specialized by region. See Appendix B.
Labor income	Wages & salaries plus self-employment income.
Legal classification of incorporated places in Nebraska	First Class City: Population 5,001 to 100,000; Second Class City: Population 801 to 5,000; Village: Population 100 to 800
Personal income	Refers to all of the income collectively received by all individuals or households in the area. Personal income includes compensation from a number of sources including salaries; wages and bonuses received from employment or self-employment; dividends; farm income and distribution received from investments; rental receipts from real estate investments; and profit-sharing from businesses.
Rural Nebraska	All areas of the state outside the corporate limits of the cities of Lincoln and Omaha. This includes all first-class and second-class cities, and villages in the state.
Self-employment income	Current-production income of sole proprietorships, partnerships, and tax-exempt cooperatives. Excludes dividends, monetary interest received by nonfinancial business, and rental income received by persons not primarily engaged in the real estate business.
Spillover activity	Impacts in businesses and industries tied indirectly to spending. For example, wholesale firms that sell to the firm receiving the TIF designation.
TIF	Tax increment financing. A public financing method used as a subsidy for redevelopment, infrastructure, and other community improvement projects.
TIF excess value or TIF increment value	The total assessed value of the real property in a TIF redevelopment project for the current year, less the redevelopment project base valuation.
Total impact	Impact includes wages & salaries, self-employment income, profits, interest payments, and tax collections. Sometimes referred to as output, or sales impact.
Types of TIF	The Nebraska Department of Revenue classifies multi-family, rental housing developments as commercial projects. Residential TIF projects are most commonly for infrastructure associated with a new single-family housing subdivision.

Tax Increment Financing: Contributions to Economic Growth in Rural Nebraska

The objective of this study is to estimate the economic impact of tax increment financing (TIF) projects on the state of Nebraska. The study estimates overall economic impacts of the projects, and also calculates the impacts across ten industries.¹

In addition, the study provides an analysis of impacts of TIF projects located in rural communities across Nebraska. The projects sampled consist of those initiated or completed between 2006-2016, and supplies a diverse representation of types and sizes of projects and communities. The study includes recommendations to maximize the economic benefits of future TIF projects. The study excludes data for the cities of Lincoln and Omaha.²

Using input-output multipliers, the study furnishes sales, earnings and job impacts in addition to estimating the impact of TIF projects on yearly state and local tax collections, paying special attention to property taxes.

Basic questions answered by this study include:

- The types of projects for which TIF has been used to attract new investment;
- The associated number of jobs enticed and/or housing units created;
- The resulting wage levels, or comparative contribution to overall community housing stock;
- The impact of TIF projects on real property taxes;
- The impact of TIF on area infrastructure; K-12 schools; highways and roads; and police and fire protection.

This report was produced independently by the principal investigators. Any errors or misstatements contained in this study are solely the responsibility of the authors.

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¹This study was completed independent of Creighton University. Any opinions or analyses are those of Ernie Goss, Scott Strain, and Goss & Associates, and are not necessarily those of Creighton University, or the Department of Economic & Finance.

²Data for communities in Douglas and Lancaster counties outside of Lincoln and Omaha are included.

Cover Photo: Downtown Ashland, Nebraska. Source: Wikimedia Commons

Executive Summary

Tax Increment Financing: Contributions to Economic Growth in Rural Nebraska

Major Findings. It was concluded that both commercial/industrial and residential TIF projects generated gains in population for Nebraska's counties between 2011 and 2016. It was found that each \$1,000,000 of incremental commercial/industrial TIF value generated a population gain of roughly 67, while residential TIF of the same magnitude boosted population by approximately 106. Additionally, it was concluded that annually each \$1,000,000 in residential TIF investment supported 14.8 jobs and each \$1,000,000 in commercial/industrial TIF investment supported approximately 19.5 jobs.

Regarding the annual rate-of-return for taxpayer provided infrastructure, including increased costs for schools, fire and police protection, both commercial/industrial TIF and residential TIF produced yearly rates-of-return, adjusted for inflation, above 3.5 percent for local taxpayers for 15-year TIF period plus five years.

I. U.S. TIF Usage (Urban and Rural).

- A. South Dakota has the most stringent TIF requirements in the U.S., according to the present study.
- B. This study found that in 2016, Nebraska's TIF policies ranked as the sixth most restrictive among the 50 states.
 - 1) Among the 50 states, 17 limit the source of funding to property taxes. Nebraska is one of the 17.
 - 2). Sixteen states allowed the use of sales tax collections as a source of TIF funding. Nebraska is not one of the 16.
 - 3) Only four states restricted TIF payoff period to less than 20 years. Nebraska was one of the four.
 - 4). For the 35 states with specific lengths of TIF duration, a weighted average of 28.8 years was allowed.
- C. Types of TIF projects.
 - 1) In 1997, 37 percent of TIF base value was associated with residential projects. By 2016, only 17 percent of TIF base value was associated with residential projects.
 - 2) Between 1997 and 2016, commercial and industrial TIF base value projects increased from 55 percent to 69 percent of TIF base value. The remaining 14 percent were mixed use TIF base value projects.

Regarding the annual rate-of-return for taxpayer provided infrastructure, including schools, fire and police protection, both commercial/industrial TIF and residential TIF produced yearly rates of return, adjusted for inflation, above 3.5 percent for local taxpayers.

Executive Summary

II. Nebraska TIF Usage 2006-16 (Urban and Rural).

- A. Assessed value of TIF property, as a percent of total assessed value, expanded from 1.2 percent in 2006 to 1.4 percent in 2016.
 - 1) Assessed value of TIF commercial/industrial property, as a percent of total commercial/industrial assessed value, climbed from 5.9 percent in 2006 to 8.8 percent in 2016.
 - 2) Assessed value of TIF residential property, as a percent of total residential assessed value, rose from 0.2 percent in 2006 to 0.6 percent in 2016.
- B. The number of total TIF projects ranged from 442 in 2006 to 828 in 2016.
- C. The Nebraska average TIF expanded from \$3.31 million per project in 2006 to \$4.02 million per project in 2016.
 - 1) This represents a compound annual growth of 2.0 percent, approximately equal to the rate of inflation.
 - 2) TIF data indicate that the annual growth in total TIF investment came from approving a larger number of TIF projects rather than accepting bigger TIF projects.

III. Nebraska Residential TIF Projects 2006-16 (Rural).

- A. Over the period, the average base value decreased at an annual rate of 2.9 percent.³
 - 1) The property tax collected on the base value sank by 3.3 percent per annum.
 - 2) Property taxes collected fell from an average of \$21,383 to \$12,941 over the time period.
- B. Over the time period, the incremental TIF value expanded at an annual rate of 4.5 percent.
 - 1) The property taxes collected on the incremental value climbed by 4.1 percent per annum.
 - 2) Over the period, property taxes collected climbed from an average of \$13,021 to \$23,675.



Webster County, Nebraska Courthouse. Source: Wikimedia Commons

³The decline in the average base value is expected since TIF projects are located in blighted areas with falling property values.

Executive Summary

IV. The Economic Impact of Nebraska's Residential TIF Projects.⁴

- A. Annually, the average residential TIF project (all dollar amounts in 2017 values):
 - 1) Added \$1.6 million to sales.
 - 2) Boosted wages & salaries by \$204,300.
 - 3). Generated self-employment income of \$50,700.
- B. Total impact over 15-year TIF period (all dollar amounts in 2017 values):
 - 1) Added \$23.8 million to sales.
 - 2) Boosted wages & salaries by \$3.1 million.
 - 3) Generated self-employment income of \$760,900.
 - 4) Supported an average of 17.6 jobs each year of the TIF project.
- C. Over a 20-year period, the average residential TIF project:
 - 1) Produced an average of approximately \$923,586 in local tax collections. For a full 20 years of the TIF (TIF period plus five years) taxpayers experienced a 3.6 percent rate-of return.
 - 2) Provided the taxpayer, for publicly-provided infrastructure, a 3.6 percent inflation-adjusted rate-of-return for the first 20 years of the TIF project.
 - 3) In 2016, Cheyenne County had the highest residential TIF per capita at \$796, growing its per capita residential TIF by 9.8 percent between 2011 and 2016. In 2011, Polk led the state with per capita residential TIF of \$796.
 - 5) For 27 Nebraska counties with residential TIF in 2011, population growth between 2011 and 2016 would have been 2.03 percent lower without the use of residential TIF.
 - 6) Each \$1,000,000 of residential TIF investment produced a population gain of 106 between 2011 and 2016 and added 14.8 jobs.

Each \$1,000,000 of residential TIF investment produced a population gain of 106 between 2011 and 2016.

⁴The estimated impacts are above growth that would have taken place without the TIF projects.

Executive Summary

V. Nebraska's Commercial/Industrial TIF Projects, 2006-16.

- A. The base value of commercial/industrial property in TIF project decreased at an annual rate of 1.5 percent.⁵
 - 1) The property tax collected on the base value sank by 2.2 percent per annum.
 - 2) The average property taxes collected on the base value of commercial/industrial TIF fell from \$13,568 to \$9,910 over the 15-year TIF period.
- B. The incremental improvement to TIF property results in an average addition to valuations of \$1,832,878.
 - 1) This incremental improvement on the TIF property increases in value at an annual rate of 3.3 percent.
 - 2) Property taxes collected on the commercial/industrial TIF, but used to pay the TIF bond or loan, increased 2.6 percent per annum.
 - 3) At the end of the TIF period, the average incremental valuation was \$2,879,939.

VI. The 2016 Economic Impact of Nebraska's Commercial/Industrial TIF Projects.⁶

- A. Annually, the average commercial and industrial TIF project in 2017 dollars:
 - 1) Added \$6.1 million to sales.
 - 2) Boosted wages & salaries by \$1.8 million.
 - 3) Generated self-employment income of \$192,456.
- B. Total impact over 15-year TIF period was:
 - 1) An addition of \$90.8 million to sales in 2017 dollars.
 - 2) Boosted wages & salaries by \$26.6 million in 2017 dollars.
 - 3) Generated self-employment income of \$2.9 million 2017 dollars.
 - 4). Supported an average of 56.1 jobs each year of the TIF period.
- C. The number of rural communities using commercial/industrial TIF expanded from 91 in 2006 to 121 in 2016.
- D. In 2016, Fillmore County had the highest commercial/industrial TIF per capita at \$10,604, growing its per capita TIF by 32.7 percent between 2011 and 2016.
- E. In 2011, Boone County led the state with per capita commercial/industrial TIF of \$8,826.
- G. Over a 20-year period, Nebraska commercial/industrial TIF investments produced an average of approximately \$2.2 million in local tax collections. For a full 20 years of the TIF (TIF period plus five years) taxpayers experienced a 5.6 percent rate-of-return.
- H. It is concluded that on average between 2011 and 2016, each \$1,000,000 in commercial/industrial TIF added 19.5 jobs and experienced a population increase of 67.

⁵The decline in the average base value is expected since TIF projects are located in blighted areas with falling property values.

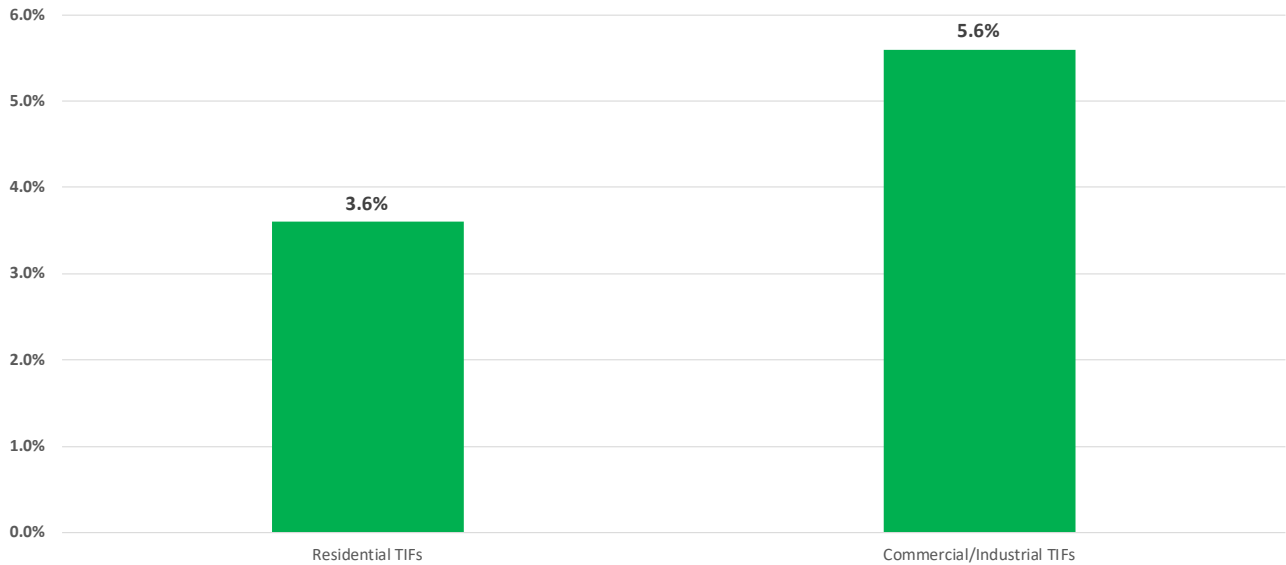
⁶The estimated impacts are above growth that would have taken place without the TIF projects.

Executive Summary

VII. Summary of Economic Impacts

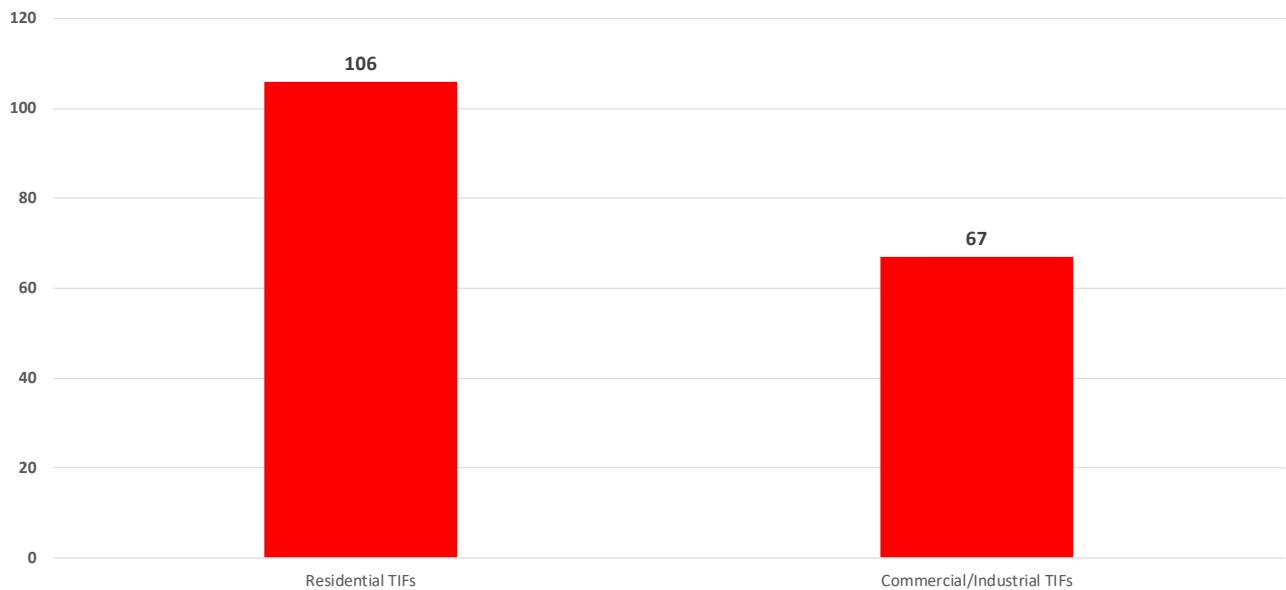
Figures EX.1 - EX.5 summarize the economic impacts of Nebraska TIF investments.

Figure EX.1: Rate-of-return for publicly provided infrastructure for 15-Year TIF project plus 5 years



Source: Goss & Associates

Figure EX.2: Average population impact of each \$1,000,000 in TIF investment, 2011-16⁷

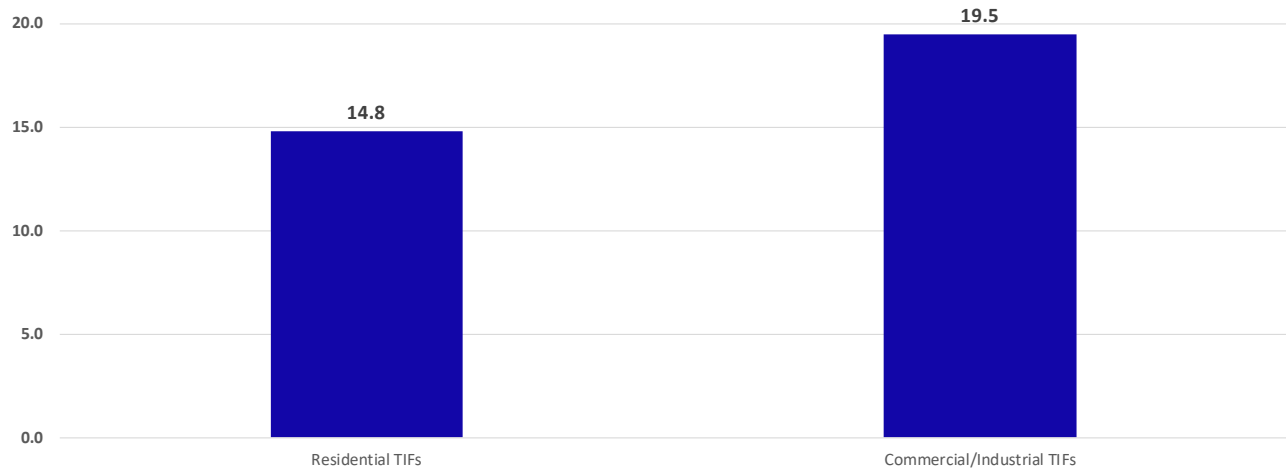


Source: Goss & Associates

⁷The estimated impacts are above growth that would have taken place without the TIF projects.

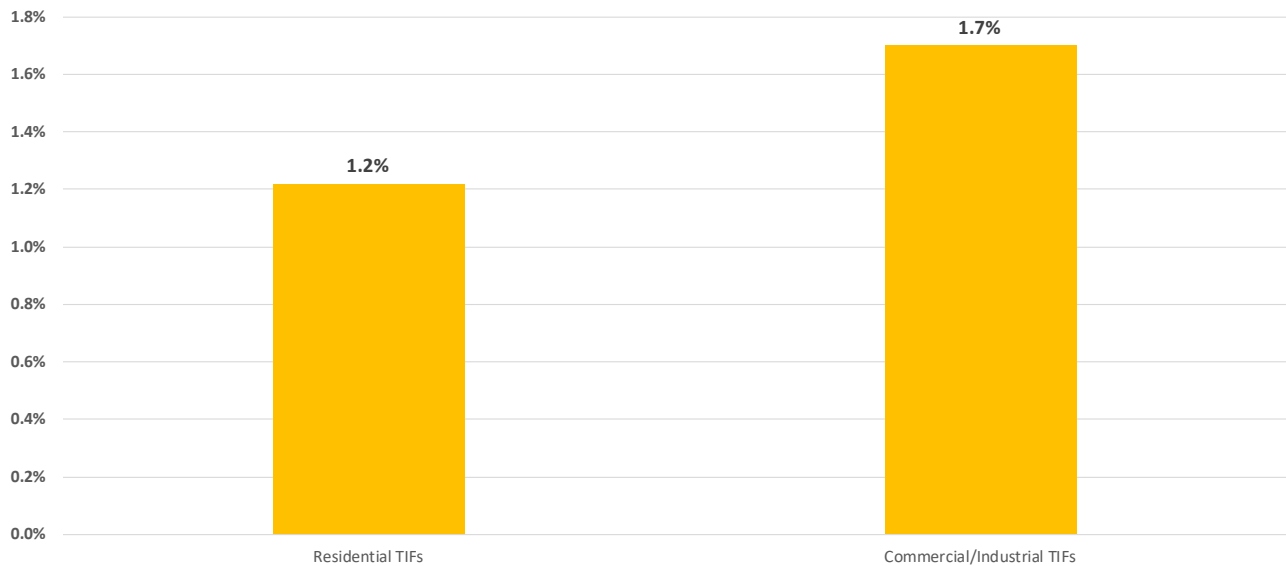
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Figure EX.3: Average employment impact of each \$1,000,000 in TIF investment, 2011-16⁸



Source: Goss & Associates

Figure EX.4: Median estimated percent population gain for counties with TIF investments, 2011-16⁹



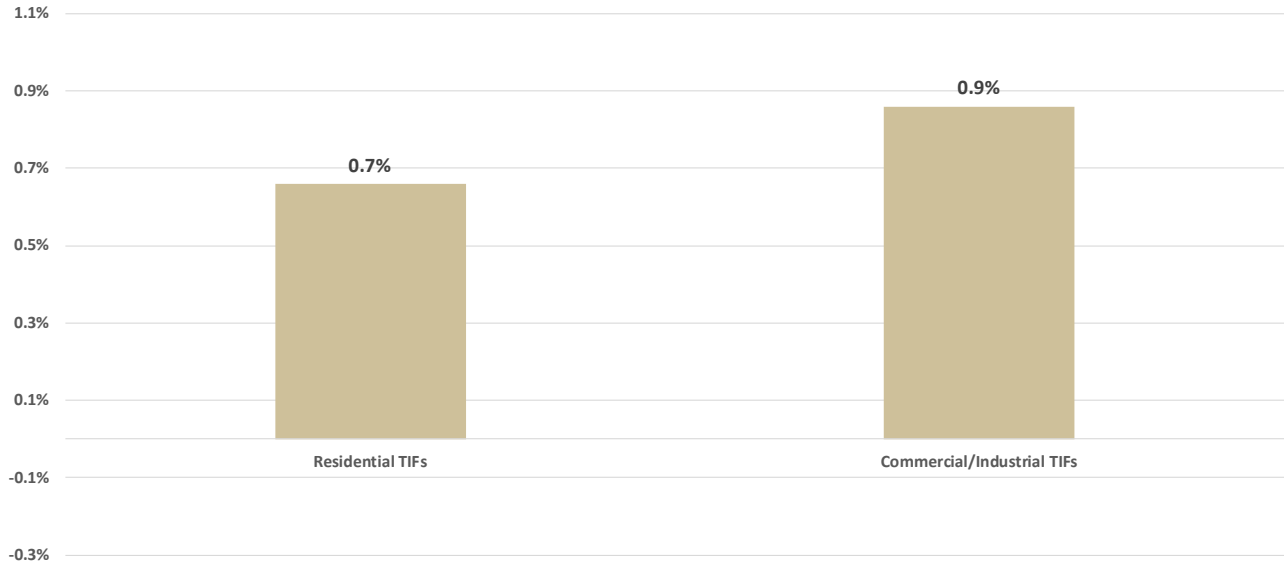
Source: Goss & Associates and U.S. Census

⁸Ibid..

⁹The estimated impacts are above growth that would have taken place without the TIF projects.

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Figure EX.5: Median estimated percent employment gain for counties with TIF investments, 2011-16¹⁰



Source: Goss & Associates and U.S. Bureau of Labor Statistics

¹⁰Ibid..

Executive Summary

VIII. Policy Recommendations Based on Study Outcomes

- A. Keep TIF decisions local. Local policymakers are in a better position to evaluate the negatives and positives of potential TIF projects.
- B. The sources of funds for TIF projects should continue to be local. Allowing the use of state funds for TIF funding would likely result in an “arms race” in terms of TIF funding since the cost would be borne by non-area residents.
- C. Allow other local non-real property taxes as a source of TIF funding. Currently, 16 states permit sales taxes as a source of TIF funding. The authors of this study recommend that the source of any funding remain local. Thus, an expansion in the source of funds for TIF projects to sales taxes include only local option sales taxes. At a minimum, an examination of alternative funding sources for TIF project funding should be forthcoming. Determine the pros and cons of using additional revenue streams (e.g., sales tax) in your development efforts. Determine interest among stakeholders whether using revenue sources beyond real-property taxes is a live option.
- D. Create clear, transparent TIF guidelines and policies. Once the guidelines are developed it is important to follow the guidelines in the application of TIF. An example of a straight-forward, readily available guideline and application may be found here:
http://www.scottsbluff.org/document_center/TIF%20Guidelines%2012-01-16%20FINAL.pdf.
- E. Develop a strategy plan that identifies industries and projects best suited for the specific needs of your community. In addition, the development professional should have an understanding of the relative economic and fiscal impacts industries have on a community, i.e., what industries have the most bang for the buck. The development professional should help guide local officials to pursuing best-use projects.
- F. Marshal public and private partners, (e.g., city and county officials, business community leaders, private agencies, school district officials and neighborhood associations). Identify key stakeholder interests and their commitment to local development endeavors. In addition, the economic developer should evaluate stakeholders from the perspective of whether their specific interests are compatible with your development efforts, or do potential conflicts exist? Determine whether the inclusion of representatives of additional local taxing authorities in the TIF process will help with respect to potential negative perceptions of the TIF project (e.g., school district officials).
- G. Proactively communicate the benefits of specific TIF projects. Have a marketing plan that, at a minimum, provides economic and fiscal impact analysis to partners and the public regarding the positive impacts to the community. Use every public address as an opportunity to discuss the importance of TIF in development efforts. Use specific examples and walk the audience through the project with particular attention to the role TIF played in completing the project. Be ready to answer the following types of questions: Did TIF provide gap financing? What other funding sources were available? How many jobs will be created – directly at the project and what spillover job impacts might occur? What additional taxes will be generated by the project?
- H. The assessed value of the base should grow at the same pace as the TIF increment or hold its initial TIF year value throughout the duration of the TIF.

Section 1 - A Short History of TIF in the U.S. and Nebraska

Section Highlights

The study concludes that:

- South Dakota has the most stringent TIF requirements in the U.S.
- Nebraska's TIF policies are the sixth most restrictive in the U.S..
 - o Nebraska limits the source of TIF funding to taxes on real property. Sixteen states allow the use of sales tax collections as a source of TIF funding.
 - o Only four states restrict the TIF payoff period to less than 20 years. Nebraska is one of the four.
- For the 37 states and D.C. with specific lengths of TIF duration, a weighted average of 28.8 years is allowed.

What is TIF?

TIF is a redevelopment incentive in which the taxes, usually property taxes, associated with the increase in assessed value of the developed property are normally remitted to the developer for the payment of interest and principal on TIF bonds or loans. This is generally authorized specifically to areas that are classified as "blighted," and is usually intended to enable the redevelopment of an area which would not have occurred had there been no TIF financing.

In most cases the developer of a project issues bonds or otherwise borrows funds to support the development. The property tax on the expanded assessed value is then used to pay the interest and principal of the bonds or the loans. The first TIF was created in California in 1952, and by 2004, all states except for Arizona, had authorized its use (Farris & Horbas, 2008)¹¹.

Greifer (2005) argues that historically, tax increment financing has been viewed, or advanced, as a way to combat blight or deterioration within city districts or neighborhoods. However, state and local governments contend tax increment financing is now used as a flexible, all-purpose financing tool for economic development.¹²

TIF projects vary by financing type, land use, and sponsoring government. Financing type is usually property taxes, but could also be sales or utility taxes. Land use could be residential, commercial, industrial, or some combination thereof.

Nebraska's TIF policies are the sixth most restrictive in the U.S.

TIF in Nebraska

Nebraska voters approved the use of TIF in 1978 and the State Legislature passed enabling legislation in 1979. According to the 2016 TIF report from the Nebraska Department of Revenue Property Assessment Division, 129 communities in 70 counties have active TIF projects within their jurisdictions. The number of TIF projects has grown more than 350 percent from 1997 to 2016.

The base value of TIF projects has grown from \$1,871 million in 1997 to \$6,229 million in 2016, a 233 percent increase. On a per capita basis, Nebraska TIF excess, or incremental, value has grown from \$314 in 1997 to \$1,746 in 2016 (or \$1,108 excluding Douglas and Lancaster counties).

¹¹ Sherri Farris; John Horbas (2008) "Creation vs Capture: Evaluating the True Costs of Tax Increment Financing" Journal of Property Tax Assessment & Administration Vol. 6(4).

¹² "An Elected Official's Guide to Tax Increment Financing," 2005 Government Finance Officer's Association

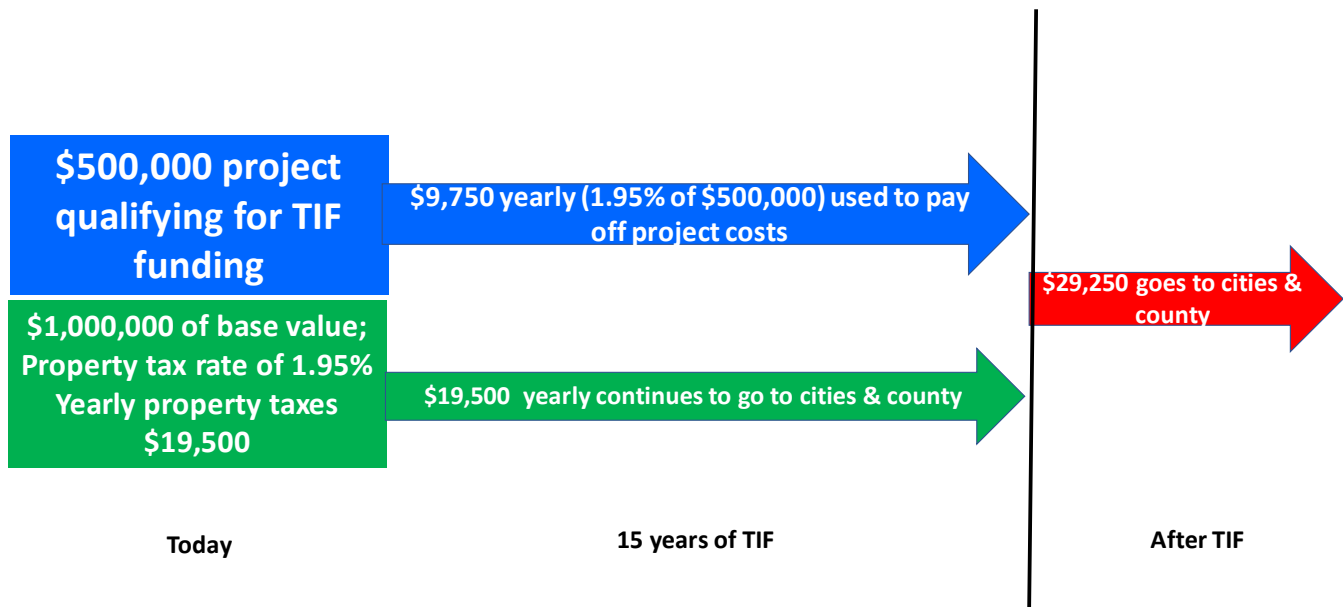
The distribution of TIF projects in Nebraska by type of project has changed somewhat over the years. In 1997, 37 percent of TIF base value was associated with residential projects. The residential share of project base value declined to 17 percent by 2016. On the other hand, the share of base value for both commercial and industrial projects increased over the same time period, with commercial/industrial project share increasing from 55 percent to 69 percent, and the remaining mixed use project share increasing from 9 percent to 14 percent.

Figure 1.1¹³ shows how a \$500,000 project which is granted TIF status is handled in Nebraska in an area with a 1.95 percent property tax rate. In this case, the base value before improvements is \$1,000,000 with yearly property taxes of \$19,500.

As demonstrated, each year for 15 years, the property taxes of \$9,750 on the added value, \$500,000 in this case, is used to support the development. Public development costs that can be supported by Nebraska TIF projects include infrastructure, transit, beautification, parking and municipal building.

At the end of the 15 years of TIF, the property taxes on the improvements, and basis of \$29,250 now goes to the governmental agencies. However, in many TIF projects, bond or note payoff occurs in less than 15 years, in which case the full, increased amount of property taxes begins to accrue to the taxing entity sooner than 15 years. For this example, it is assumed that the assessments do not increase with time. In many cases, a conservative 2.0 percent increase in assessment values is appropriate.

Figure 1.1: Example of 15-Year Nebraska TIF



Source: Goss & Associates

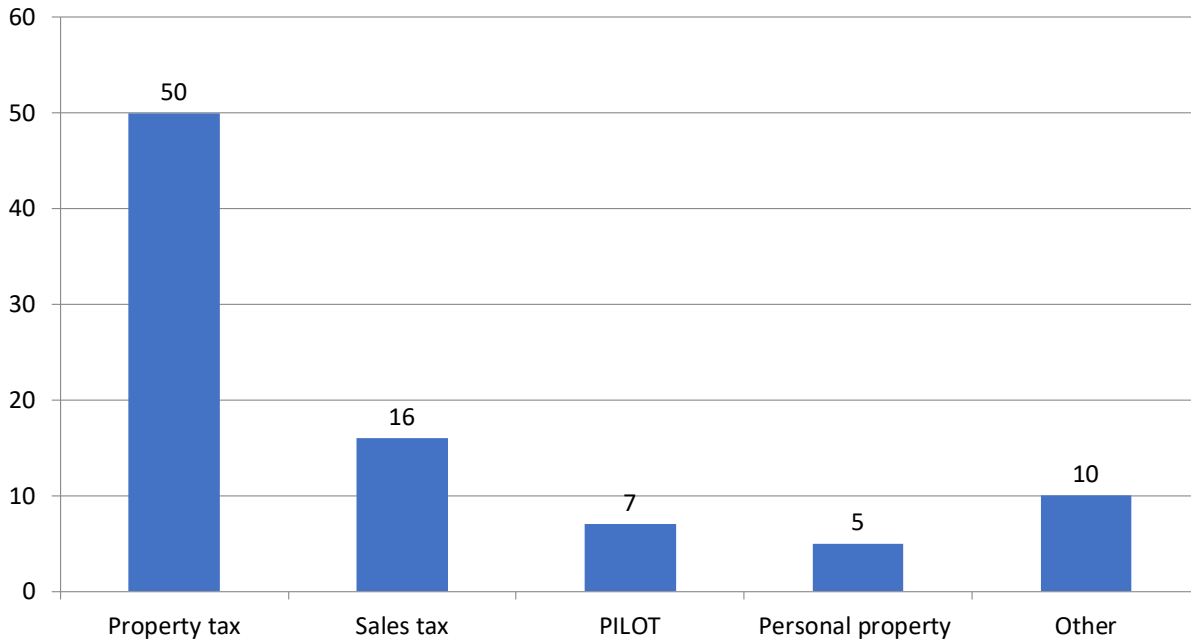
Note: Assumes no increase in tax rate, or assessed value.

¹³Nebraska TIF revenue comes from real property taxes only and is limited to 15 years

TIF Comparisons Among States

While Nebraska restricts TIF revenue sources to property taxes, many states use other taxes to support TIF projects. Figure 1.2 shows the variation among the states in terms of which revenues can serve as a source of revenues. All 51 states and D.C. permit real property taxes to be used, and 16 states allow sales tax collections to support a TIF project. In terms of TIF sources, another six states permit payments in lieu of taxes (PILOT), and 10 states allow other sources of TIF revenues.

Figure 1.2: Eligible TIF revenue sources (2016) (number of states and D.C.)



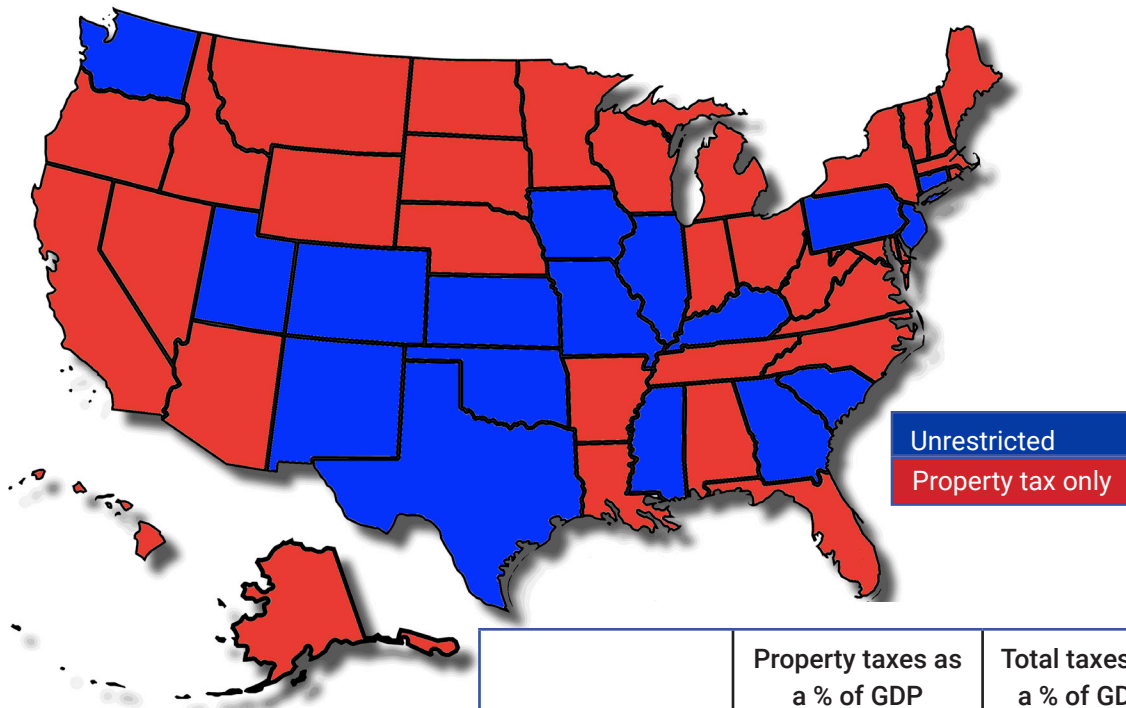
Source: Council of Development Finance Agencies (CDFA)



Dawson County, Nebraska Courthouse. Source: Wikimedia Commons

Figure 1.3 shows the states that limit the TIF revenue source to property taxes versus states that permit other sources of TIF funding. As presented, the seventeen states that limit TIF funding to real property taxes, as a percent of GDP, have higher property taxes, and higher total taxes. In terms of GDP growth, there is almost no difference between the two groups of states (Source: Goss & Associates).

Figure 1.3: States and D.C. that limit TIF sources to property taxes, 2016



Source: Council of Development Finance Agencies (CDFA)

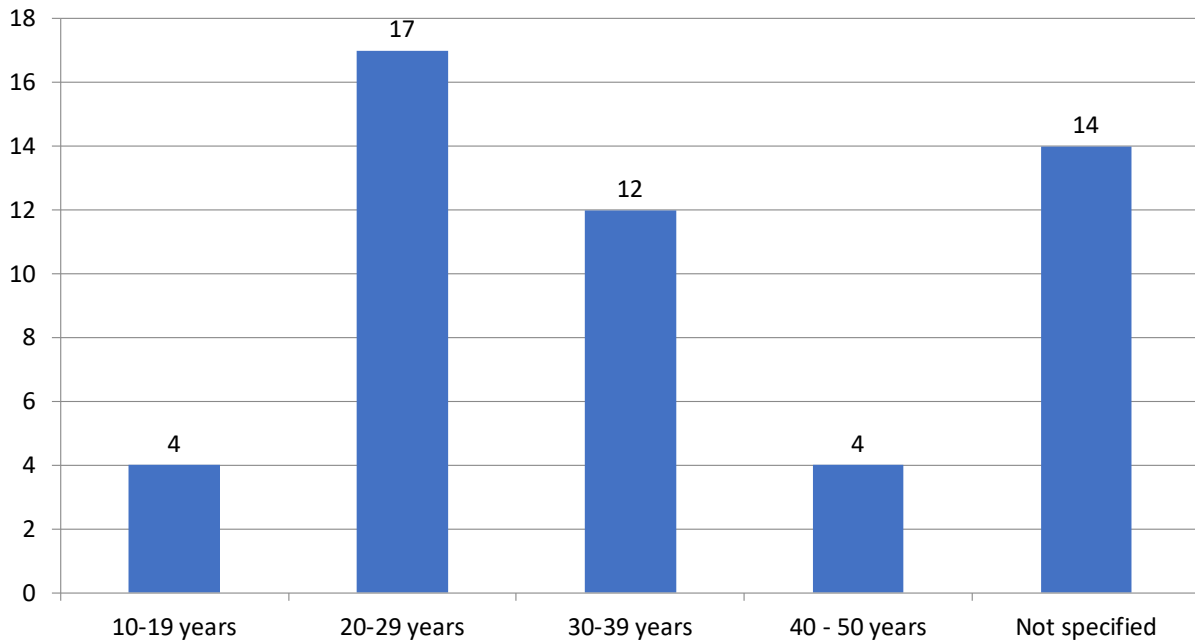
	Property taxes as a % of GDP	Total taxes as a % of GDP	GDP growth 2010-2015
Property tax only	2.40%	8.11%	18.55%
Allow other taxes	2.38%	7.84%	18.17%



Gage County, Nebraska Courthouse. Source: Wikimedia Commons

While Nebraska limits the TIF period to 15 years, many states deviate from this shorter period. Figure 1.4 profiles the 50 states and the District of Columbia. As indicated, 14 states do not specify a period. In this case, the period is normally the duration of the bond repayment. The weighted average duration of a TIF project, when specified, is 28.8 years.

Figure 1.4: Maximum TIF length among U.S. states and D.C., 2016



Source: Council of Development Finance Agencies (CDFA)

The weighted average duration of a TIF project, when specified, is 28.8 years.

In terms of limiting TIF, Table 1.1 shows how states restrict TIF length. column (1) lists states that restrict the sources of TIF revenue to property tax revenues. As presented, 33 states limit TIF sources to property tax collections. Of these 33 states, 24 states limit TIF projects to blighted areas. These states are listed in column (2). Of the 24 states requiring TIF for blighted areas, four states limit the duration of the TIF to less than 20 years. Those four states are listed in column (3) of Table 1.1. Of the four states with TIF limited to less than 20 years, only one state, South Dakota, column (4) limits TIF development to industrial and commercial projects (i.e., excludes residential TIF).

Table 1.2 shows the variation among the states in terms of: a) sources of revenues to pay interest and principal on TIF bonds in 2016; b) whether residential TIF projects are allowed; c) the maximum length of the TIF period; and d) whether a blighted designation is required for the use of TIF funding.

SECTION 1 - A SHORT HISTORY OF TIF IN THE U.S. AND NEBRASKA

Table 1.1: Most stringent TIF requirements

Screen (1) use of property taxes only	Screen (2) and (1) required blighted designation)	Screen (3), (2) and (1) length of TIF period less than 20 years	Screen(4), (3), (2) and (1) excludes residential TIF
Alabama	Alabama	Montana	South Dakota
Alaska	Alaska	Nebraska	
Arizona	Arizona	North Dakota	
Arkansas	Arkansas	South Dakota	
California	California		
Delaware	Delaware		
Florida	Florida		
Hawaii	Idaho		
Idaho	Indiana		
Indiana	Maine		
Louisiana	Minnesota		
Maine	Montana		
Maryland	Nebraska		
Massachusetts	Nevada		
Michigan	New York		
Minnesota	North Carolina		
Montana	North Dakota		
Nebraska	Ohio		
Nevada	Oregon		
New Hampshire	Rhode Island		
New York	South Dakota		
North Carolina	Tennessee		
North Dakota	Virginia		
Ohio	Wyoming		
Oregon			
Rhode Island			
South Dakota			
Tennessee			
Vermont			
Virginia			
West Virginia			
Wisconsin			
Wyoming			

Source: Goss & Associates based on CDFA data

SECTION 1 - A SHORT HISTORY OF TIF IN THE U.S. AND NEBRASKA

Table 1.2: TIF characteristics by state, 2016

	Property tax only (Y=yes; N=no)	Residential TIF allowed (Y=yes; N=no)	TIF period	Blighted designation required (Y=yes; N=no)
Alabama	Y	Y	30	Y
Alaska	Y	Y	No limit	Y
Arizona	Y	Y	25	Y
Arkansas	Y	Y	25	Y
California	Y	Y	50	Y
Colorado	N	Y	25	Y
Connecticut	N	N	40	N
Delaware	Y	Y	30	Y
District of Columbia	N	Y	Per agreement	Y
Florida	Y	Y	40	Y
Georgia	N	Y	Until redevelopment costs paid	Y
Hawaii	Y	Y	Bonds paid off	N
Idaho	Y	Y	24	Y
Illinois	N	Y	23	Y
Indiana	Y	Y	25	Y
Iowa	N	Y	20	Y
Kansas	N	N	20	N
Kentucky	N	Y	30	Y
Louisiana	Y	Y	30	N
Maine	Y	N	30	Y
Maryland	Y	Y	Not specified	N
Massachusetts	Y	Y	30	N
Michigan	Y	Y	30	N
Minnesota	Y	Y	26	Y
Mississippi	N	Y	30	N
Missouri	N	Y	23	Y
Montana	Y	Y	15	Y
Nebraska	Y	Y	15	Y
Nevada	Y	Y	30	Y
New Hampshire	Y	N	Life of bonds	N
New Jersey	N	N	Not specified	Y
New Mexico	N	Y	25	N
New York	Y	Y	Not specified	Y
North Carolina	Y	Y	30	Y
North Dakota	Y	Y	15	Y
Ohio	Y	Y	30	Y
Oklahoma	N	Y	25	Y
Oregon	Y	Y	Not specified	Y
Pennsylvania	N	Y	20	Y
Rhode Island	Y	Y	25	Y
South Carolina	N	Y	Not specified	Y
South Dakota	Y	N	15	Y
Tennessee	Y	Y	Not specified	Y
Texas	N	Y	40	N
Utah	N	Y	Per agreement	N
Vermont	Y	Y	20	N
Virginia	Y	Y	No limit	Y
Washington	N	Y	No limit	N
West Virginia	Y	Y	30	N
Wisconsin	Y	Y	25	N
Wyoming	Y	Y	25	Y

Source: CFDA data

To support greater use of TIF, proponents argue that the development would likely not have happened without the use of this type of incentive. Thus, according to this argument, the baseline property tax revenues would have continued absent TIF. As pointed out by Kriz (2001) and others, the “but for” test is determinative in estimating the return, or benefits of TIF.

Nebraska TIF Compared to Neighbors

TIF in Nebraska is primarily designed to finance the public costs associated with a private development project. Essentially, the direct property tax increases resulting from a development are targeted to repay the public investment required by a project.

Nebraska voters approved community tax increment finance (then known as community improvement financing) in November 1978, and the Unicameral passed enabling legislation in 1979. The legislature revised the TIF statutes in 1988, 1991, 1995, 1996, 1997, and 1999.

The Nebraska TIF process may only be used for substandard and blighted areas. An area is considered substandard, or blighted, if the buildings and improvements are detrimental to public health and safety.

An area is blighted if at least one of the following conditions exists: “(i) Unemployment in the designated area is at least one hundred twenty percent of the state or national average; (ii) the average age of the residential or commercial units in the area is at least forty years; (iii) more than half of the plotted and subdivided property in an area is unimproved land that has been within the city for forty years and has remained unimproved during that time; (iv) the per capita income of the area is lower than the average per capita income of the city or village in which the area is designated; or (v) the area has had either stable or decreasing population based on the last two decennial censuses.”¹⁴

The planning commission has 30 days to respond to a TIF request. If the planning commission does not make a recommendation within that time, the local government may proceed without a recommendation.

Some recent studies have concluded that there is minimal, or no net gain from TIF. A collaborative study conducted by The *Heartland Institute*, the *Center for Economic Policy Analysis*, the *Jewish Council on Urban Affairs*, and the *Statewide Housing Action Coalition* found that TIF projects were costly, ineffective, and unfair to local residents and small business owners who were stuck with the brunt of the property tax increase and benefited little from the projects.



Merrick County, Nebraska Courthouse. Source: Wikimedia Commons

Table 1.3 on the following page compares Nebraska’s TIF policies with that of its neighbors.

The State of Iowa has expanded the use of TIF at what Swenson and Eathington (2006) characterized as an “explosive rate.”¹⁵ According to Swenson and Eathington, Iowa boosted the number of TIF zones from 746 in 1991 to 1,014 in 1997, to 2,058 in 2006. Swenson and Eathington (2007) concluded that TIF ordinance cities now represent approximately “92 percent of all urban taxable valuation across the state.”

Data presented by Swenson and Eathington suggests that the average cost of a TIF created job in Iowa is over \$3,000. The authors conclude, “the costs of TIF activities in the state appear to be very high.”

¹⁴Revised Statutes of Nebraska, Sec. 18-2103.

¹⁵David Swenson and Liesl Eathington, “Tax Increment Financing Growth in Iowa,” Iowa State University, 2006, p. 1..

Table 1.3: TIF characteristics by state, 2016

	CO	IA	KS	MN	MO	NE	SD	WY
Year authorized	1975	1969	1976	1979	1982	1978	1973	1978
Eligible tax revenue								
Real property	yes	yes	yes	yes	yes	yes	yes	yes
Personal property	yes	no	yes	yes	yes	no	no	no
Sales	yes	yes	yes	no	yes	no	no	no
PILOT	yes	no	yes	no	yes	no	no	no
Income	no	no	no	no	yes	no	no	no
Eligible public costs								
Public infrastructure	yes	yes	yes	yes	yes	yes	yes	yes
Public transit	yes	yes	yes	yes	yes	yes	yes	yes
Public beautification	yes	yes	yes	yes	yes	yes	yes	yes
Public parking	yes	yes	yes	yes	yes	yes	yes	yes
Municipal buildings	yes	yes	yes	yes	yes	yes	yes	yes
Interest on financing	yes	no	no	yes	no	no	yes	no
TIF administration	yes	no	no	yes	no	no	yes	no
Park construction	yes	yes	yes	yes	yes	yes	yes	yes
Eligible private costs								
Rehab existing building	yes	no	no	yes	no	no	yes	no
New vertical construction	yes	no	no	no	no	no	yes	no
Demolition costs	yes	no	no	yes	no	no	yes	no
Job training	yes	yes	no	no	no	no	no	no
Private parking structures	yes	no	no	yes	no	no	yes	no
Slum housing	no	yes	no	no	no	no	no	no
Economic development	no	yes	no	no	no	no	no	no
Qualified types of projects								
Residential	yes	yes	no	yes	yes	yes	no	yes
Commercial	yes	no	yes	yes	yes	yes	yes	yes
Industrial	yes	no	no	yes	yes	yes	yes	yes
Mixed use	yes	no	no	yes	yes	yes	yes	no
"But for" required	no	no	no	yes	yes	yes	no	yes
Cost-benefit required	no	no	yes	no	yes	yes	no	no
Feasibility requirement	no	no	yes	no	no	yes	no	no
Public hearings required	yes	yes	yes	yes	yes	yes	yes	yes
Blight requirement	yes	no	no	yes	yes	yes	yes	yes
TIF length								
Maximum length of TIF (a)	25	20	20	26	23	15	15	25

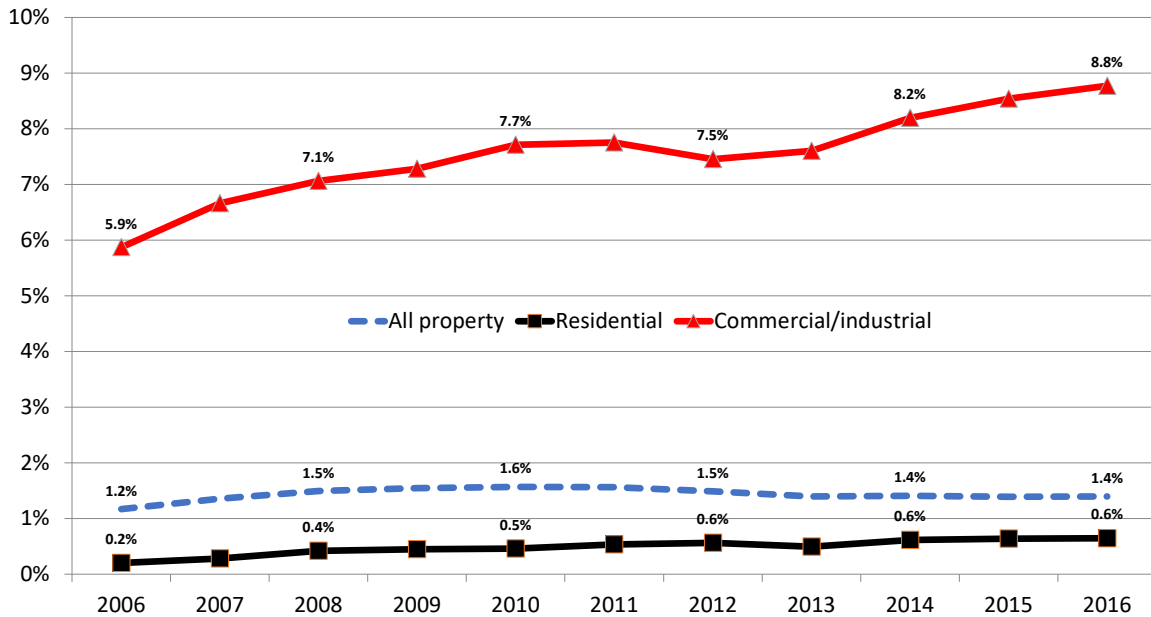
Source: CDFA Data

Note: (a) Iowa housing allowed 20-year TIF; Source: Council of Development Finance Agencies (CDFA)
<https://www.cdfa.net/cdfa/tifmap.nsf/index.html>

Overview of Nebraska TIF

Figure 1.5 shows Nebraska TIF value as a percent of total assessed value for the period 2006 to 2016 by category. As presented, total Nebraska commercial/industrial TIF as a percent of total commercial/industrial assessed value expanded from 5.9 percent in 2006 to 8.8 percent in 2016. Residential TIF assessed value as a percent of total assessed residential value grew from 0.2 percent in 2006 to 0.6 percent in 2016. Total TIF assessed value as a percent of total assessed value in the state advanced from 1.2 percent in 2006 to 1.4 percent in 2016.

Figure 1.5: Nebraska TIF value as percent of total assessed value by type, 2006-16



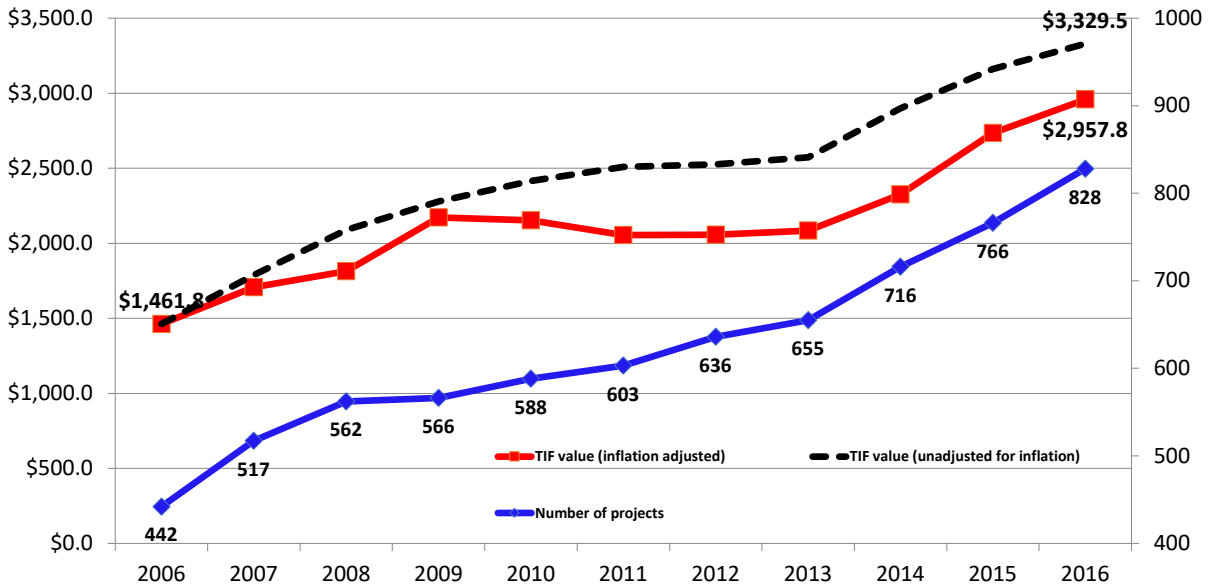
Source: Goss & Associates calculations
 Note: all Nebraska communities included.



Cheyenne County, Nebraska Courthouse. Source: Wikimedia Commons

Figure 1.6 shows Nebraska TIF in inflation adjusted, and unadjusted values from 2006 to 2016. On the right axis of Figure 1.6 is the number of TIF projects which ranged from 442 in 2006 to 828 in 2016. During this period of time Nebraska overall TIF projects expanded at a compound annual growth of 8.6 percent unadjusted for inflation, and 7.3 percent adjusted for inflation.

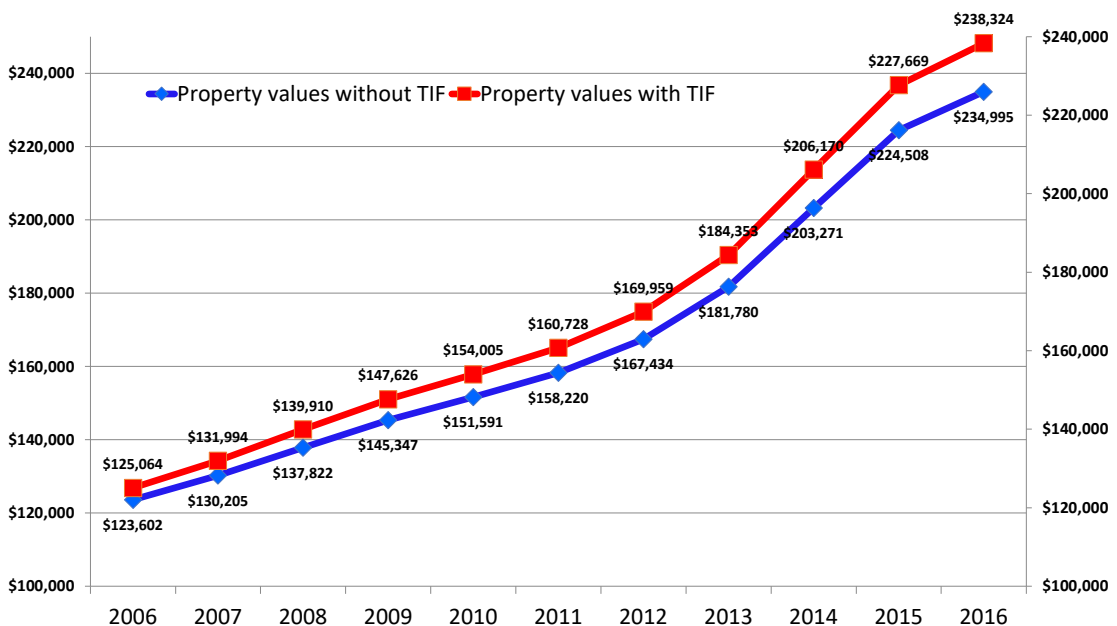
Figure 1.6: Nebraska TIF (in millions of \$s left axis), and number of projects (right axis)



Source: Goss & Associates calculations
 Note: all Nebraska communities included.

Figure 1.7 also shows the rising importance of TIF in Nebraska as the value of the TIF property increased over the period, 2006-16..

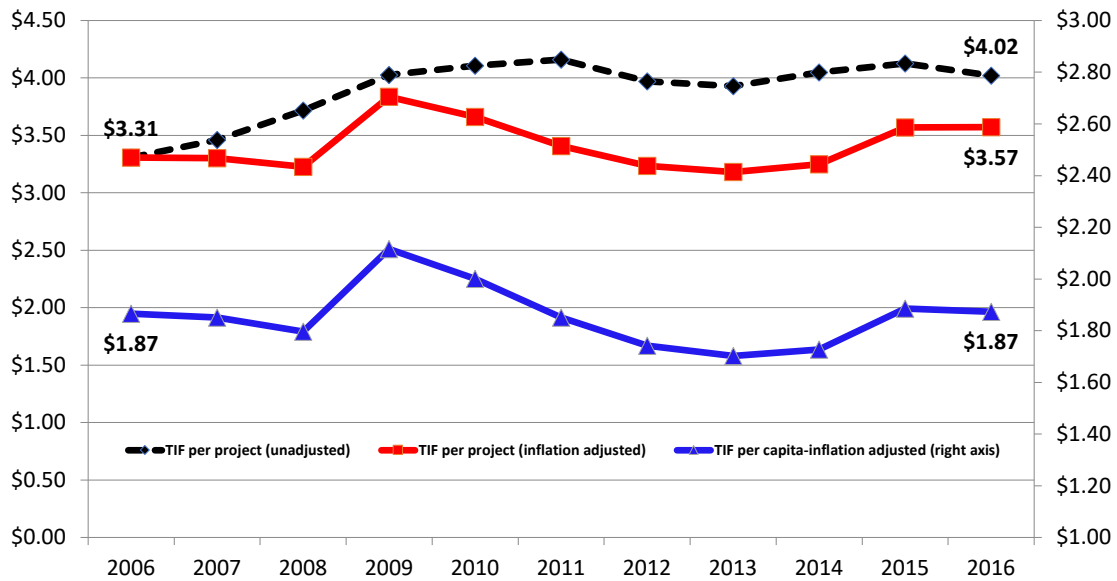
Figure 1.7: Nebraska’s assessed property values (in millions of \$s) unadjusted for inflation



Source: Goss & Associates calculations
 Note: all Nebraska communities included.

Figure 1.8 profiles the expansion in TIF per project from 2006 to 2016 indicating that per project, TIF expanded from \$3.31 million per project in 2006 to \$4.02 million per project in 2016. This represents a compound annual growth of 2.0 percent. Given that overall TIF increased at 8.6 percent, data indicate that the rapid 8.6 percent annual growth in total Nebraska TIF came from approving a larger number of projects.

Figure 1.8: Nebraska TIF per-project (in millions of \$s left axis) and per capita (right axis), 2006-2016



Source: Goss & Associates calculations
 Note: all Nebraska communities included.

Data indicate that the rapid 8.6 percent annual growth in total Nebraska TIF came from approving a larger number of projects.

Conclusions

Supporting studies and analysis presented in this section demonstrate the rising importance of TIF as an economic redevelopment tool in Nebraska and the U.S. It was concluded that despite Nebraska’s more restrictive TIF requirements, the assessed value of TIF projects in the state has grown at a significant pace over the past 10 years. Subsequent sections of this study will examine the economic impact of Nebraska’s expanding use of residential TIF, and commercial/industrial TIF.

Section 2: The Impact of Residential TIF on Rural Nebraska

Section Highlights¹⁶

- During the TIF period for non-metro Nebraska, the average residential TIF:¹⁷
 - Base value decreased at an annual rate of 2.9 percent. Likewise, the property tax collected on the base value sank by 3.3 percent per annum, falling from an average of \$21,383 to \$12,941 over the 15-year TIF period.
 - Incremental (or excess) TIF value expanded at an annual rate of 4.5 percent. Likewise, the property taxes collected on the incremental value climbed by 4.1 percent per annum, rising from an average of \$13,021 to \$23,675 over the 15-year TIF period.
- Annually, in 2017 dollars, the average residential TIF project:
 - Added \$1.6 million to sales, \$204,300 to wages & salaries, and \$50,700 to self-employment income for the TIF period, and supported 17.6 jobs each year of the TIF period.
- Over a 20-year period, average residential TIF produced approximately \$923.6 thousand in local tax collections in 2017 dollars.
- The local taxpayer experienced a 3.8 percent rate-of-return for the first 15 years of the TIF plus one year of construction. For the full 20 years of the TIF, local taxpayers experienced a 3.6 percent rate-of-return.

¹⁶TIF base value is the assessed value of the property while TIF incremental value is the assessed value of the property after TIF funding.

¹⁷122 residential TIF projects were included in the sample. A total of 47 projects were either too short in time duration or the data were incomplete, and not included. Since the property must be in a blighted area, it is not unusual for the base property to lose value over the TIF period. A description of IMPLAN is presented in Appendix B.

Introduction

This section analyzes residential TIF projects located in Nebraska communities designated as first class cities, second class cities, and villages. TIF projects in the cities of Lincoln and Omaha were not included in the analysis. The sample of TIF projects was retrieved from the annual reports compiled by the Nebraska Department of Revenue's Property Assessment Division. Available reports allowed for the research team to analyze projects with origination dates from 1996 to 2014. The TIF projects utilized in the final report were restricted to projects for which at least three years of data were available.

The average residential TIF project added 17.6 jobs each year of the TIF period.

The projects were standardized and analyzed over the 15-year TIF period. The first stage of the analysis involved the conversion of all dollar amounts for the projects into 2017 dollars to allow comparison of projects across time periods and varying durations. The discount factor used was the average municipal bond rate for long-term bonds issued by Nebraska tax authorities during the last ten years, or 4.7 percent.

IMPLAN modeling software was used to evaluate the economic and fiscal impacts of the TIF projects. IMPLAN produces estimates for the direct activity at the TIF location, as well as, the "spillover" activities associated with business-to-business and household spending driven by activity at the TIF project. A description of the IMPLAN system is contained in Appendix B.

TIF project excess value, in 2017 dollars, was input into the IMPLAN model for the residential impact. The personal property valuation estimated is based on data from the Nebraska Department of Revenue, Property Assessment Division.¹⁸ Appendix A contains a schematic of TIF project impacts.

The use of IMPLAN allows the investigator to analyze the impact on sales, income, jobs and taxes for all industries and households impacted by the TIF project. Further, the impact on local tax coffers can be estimated, providing policy-makers with a more robust understanding of the full impact of TIF projects on the local community.

Each project was identified as residential or commercial/industrial. The report provides the average economic and fiscal impact for each of these types of projects. The results serve as a benchmark for economic redevelopment professionals and local policy-makers when assessing local TIF projects.

Also, each TIF project involves some element of construction activity (e.g., new construction, tenant improvement, or demolition of an existing dilapidated structure). For this stage of the project, an estimate is made of both the economic and fiscal impacts to the local community.

Residential TIF¹⁹

The residential sample includes 122 projects with a duration of at least three years for all communities in Nebraska, except for Lincoln and Omaha. The sample includes projects originated during the 1996 to 2014 time period. An additional 47 projects did not meet the minimum three-year duration requirement to be included in the analysis. Table 2.1 provides a summary of the projects included in the analysis.²⁰

The average residential project has an initial base property valuation of \$983,590. During the TIF period the base value decreased at an annual rate of 2.9 percent. Likewise, the tax amount collected decreased by 3.3 percent per annum, falling from \$21,383 to \$12,941.

The incremental improvement to the property results in an addition to the valuation of \$810,917. This incremental improvement increases in value at an annual rate of 4.5 percent, resulting in a valuation of \$1,573,264 by the end of the TIF period.

Table 2.1: Summary of average residential projects in Nebraska, originated 1996 to 2014 (2017 dollars)

Residential projects	Base tax rate	Incremental improvement valuation	Base taxes	Incremental improvement taxes
TIF year: initial	2.173969	\$810,917	\$21,383	\$13,021
TIF year: end	2.030159	\$1,573,264	\$12,941	\$23,675
Compound annual growth rate	-0.5%	4.5%	-3.3%	4.1%

Source: Nebraska Department of Revenue: Property Assessment Division; Goss & Associates

Note: Base tax rate is property taxes per \$100 of assessed value

¹⁸A description of IMPLAN is contained in Appendix B.

¹⁹As well as commercial and Industrial sites, residential areas are often sites of urban decay, and as such may benefit from TIF funding for redevelopment and improved housing.

²⁰The standard error of the estimates is 4.7 percent.

TIF projects may be viewed as being comprised of three phases. First, the construction/tenant improvement phase involves the period of time during which physical improvements are made to the existing property. While the economic and fiscal impact to the local community may be temporary, the community typically receives a boost to economic activity during the construction phase. For the purposes of this report, it is assumed that all construction activity associated directly with the TIF project occurs during the span of one year.

The second phase of the TIF project involves ongoing economic activity transacted at the TIF project. During this phase the project will generate activities that create additional business and household spending (indirect and induced impacts). These spillover activities can generate a significant amount of additional economic activity and an incremental increase to local tax revenue streams. The TIF project drives increases in property tax revenue (both real and personal), sales and other local taxes.

During the second phase the property taxes associated with the incremental improvement to the TIF project’s real property do not flow to the local tax authorities, but are used to pay interest and principal on TIF bonds or loans. However, the local

community benefits from the increased economic activity at the project location. The project boosts sales, income, jobs and taxes in the community beyond the TIF project.

For the typical project, the payback occurs during the third phase of the project in the 16th year. In phase three, the taxes collected on the improved real property flow to the local tax authorities.

Table 2.2 summarizes the economic impact for the first and second phases of the typical residential project. The construction phase increases sales activity in the community by \$2.2 million during phase one. Local wage income increases by \$571,253 and income for the self-employed rises by \$119,036. Local jobs increase by 15.5.

During phase two, the ongoing economic activity at the project increases local sales by nearly \$1.6 million per year, or \$23.8 million during the 15-year TIF period. In addition, on an annual basis, the TIF project increases wage and salary income by \$204,274 and self-employment income by \$50,725. During the TIF period of 15 years, the project increases wage income by \$3.1 million and self-employment income by \$760,875. The TIF project supports 17.6 jobs annually for the 15-year TIF period.

Table 2.2: Annual economic impact of average Nebraska residential TIF (2017 dollars)

Economic Impact	Construction (one year)	TIF project: annual impact (average)	TIF project: 15-year impact (total)
Sales (output)	\$2,209,938	\$1,586,305	\$23,794,575
Wage and salary income	\$571,253	\$204,274	\$3,064,110
Self-employment income	\$119,036	\$50,725	\$760,875
Jobs	15.5	17.6	17.6

Source: Goss & Associates from the IMPLAN system

Construction Period (Phase 1)

The construction phase impacts industries outside of construction. Table 2.3 lists the top ten impacted industries, excluding construction. The wholesale trade sector tops the list with an increase of \$53,398 during the construction, or Phase 1, due to the TIF project. The average sales increase for the top ten non-construction industries is \$31,995.

Table 2.3: Top 10 industries experiencing impacts from average residential TIF outside construction (one year construction period only) 2017 dollars

	Sales	Wage and salary income	Self-employment income	Jobs
Wholesale trade businesses	\$53,398	\$20,079	\$3,348	0.4
Monetary authorities and depository credit intermediation activities	\$41,776	\$5,899	\$0	0.1
Transport by truck	\$32,760	\$11,782	\$2,526	0.3
Architectural, engineering, and related services	\$31,327	\$16,150	\$2,871	0.3
Retail Stores - Motor vehicle and parts	\$31,141	\$14,440	\$1,468	0.3
Food services and drinking places	\$27,644	\$8,360	\$510	0.6
Offices of physicians, dentists, and other health practitioners	\$27,163	\$14,317	\$2,862	0.2
Nondepository credit intermediation and related activities	\$25,143	\$10,781	\$1,314	0.2
Private hospitals	\$24,841	\$11,590	\$124	0.2
Ready-mix concrete manufacturing	\$24,755	\$5,176	\$34	0.1

Source: Goss & Associates from the IMPLAN system



Cash-Wa Distributing Co., Kearney, NE
Source: Google Street

TIF Operational Period (Phase 2)

Table 2.4 lists the top ten industries impacted by the ongoing activities at the project location. The real estate industry tops the list with a \$1.3 million annual increase in sales activity for the average TIF project.

As noted previously, the TIF project drives additional economic activity in the local community. This additional activity comes first from the construction phase, and then from business-to-business and household spending that occur as a result of the ongoing activity at the project location. The additional activity generates tax revenues that flow into local coffers throughout the first and second phases of the project. The additional revenue comes in the form of additional property tax revenue (both real and personal), local sales tax, and other taxes (including motor vehicle license fees). The property tax collections are over and above that used to pay the TIF bond principal.

Table 2.4: Top ten industries impacted by the average annual TIF project activity (2017 dollars)

	Sales or total	Wage and salary income	Self-employment income	Jobs
Real estate establishments	\$1,324,525	\$122,638	\$40,152	15.2
Nondepository credit intermediation and related activities	\$20,964	\$8,989	\$1,096	0.2
Monetary authorities and depository credit intermediation activities	\$16,995	\$2,400	\$0	0.1
Insurance carriers	\$11,589	\$2,847	\$63	0.1
State and local government electric utilities	\$11,574	\$3,376	\$0	0.1
Food services and drinking places	\$11,138	\$3,368	\$205	0.2
Offices of physicians, dentists, and other health practitioners	\$10,016	\$5,280	\$1,055	0.1
Private hospitals	\$9,154	\$4,271	\$46	0.1
Services to buildings and dwellings	\$8,489	\$2,869	\$253	0.2
Wholesale trade businesses	\$7,986	\$3,003	\$501	0.1

Source: Goss & Associates from the IMPLAN system

Tax Impacts

Table 2.5 lists the fiscal impact from the average residential TIF project. During the 15-year TIF period, local tax revenue receives a boost of \$252,533 (column 1) from the ongoing activity, or base value, at the project.

For the 15-year TIF period, property taxes on the average residential TIF project, incremental value, adds \$0 (column 2) to local tax collections. On the other hand, directly (column 1) and indirectly (column 6), the average residential TIF increases local tax collections by \$549,628 (column 7).

For a 20-year period, the average residential TIF project boosts local property tax collections at the TIF project by \$491,691 (column 1 + column 2) and increases indirect tax collections by \$431,894 (column 6) for total local tax collections of \$923,585 (column 7).²¹

Table 2.5: Local impact of average residential TIF project (2017 dollars)

	Real property taxes		Fiscal impact from spillover activity at TIF project				Total local tax collections
	(1) Base ²¹	(2) On incremental improvement	(3) Property Tax (real and personal)	(4) Local option sales tax	(5) Other taxes, fees and licenses	(6) Total fiscal impact	(7) Total local tax revenues
Construction and tenant improvement	\$0	n.a.	\$19,963	\$3,444	\$5,817	\$29,224	\$29,224
Initial TIF year 1	\$21,383	n.a.	\$2,544	\$4,379	\$6,099	\$13,021	\$34,404
TIF year 2	\$20,630	n.a.	\$2,655	\$4,570	\$6,365	\$13,589	\$34,219
TIF year 3	\$19,903	n.a.	\$2,770	\$4,769	\$6,642	\$14,182	\$34,085
TIF year 4	\$19,201	n.a.	\$2,891	\$4,977	\$6,932	\$14,801	\$34,002
TIF year 5	\$18,525	n.a.	\$3,017	\$5,194	\$7,235	\$15,447	\$33,972
TIF year 6	\$17,872	n.a.	\$3,149	\$5,421	\$7,550	\$16,120	\$33,992
TIF year 7	\$17,243	n.a.	\$3,286	\$5,658	\$7,880	\$16,824	\$34,067
TIF year 8	\$16,635	n.a.	\$3,430	\$5,904	\$8,223	\$17,558	\$34,193
TIF year 9	\$16,049	n.a.	\$3,579	\$6,162	\$8,582	\$18,324	\$34,373
TIF year 10	\$15,483	n.a.	\$3,736	\$6,431	\$8,957	\$19,123	\$34,606
TIF year 11	\$14,938	n.a.	\$3,899	\$6,711	\$9,347	\$19,957	\$34,895
TIF year 12	\$14,412	n.a.	\$4,069	\$7,004	\$9,755	\$20,828	\$35,240
TIF year 13	\$13,904	n.a.	\$4,246	\$7,310	\$10,181	\$21,737	\$35,641
TIF year 14	\$13,414	n.a.	\$4,431	\$7,629	\$10,625	\$22,685	\$36,099
End TIF year 15	\$12,941	n.a.	\$4,625	\$7,962	\$11,089	\$23,675	\$36,616
Year 16	\$12,485	\$33,172	\$4,827	\$8,309	\$11,572	\$24,708	\$70,365
Year 17	\$12,045	\$34,620	\$5,037	\$8,671	\$12,077	\$25,786	\$72,451
Year 18	\$11,621	\$36,130	\$5,257	\$9,050	\$12,604	\$26,911	\$74,662
Year 19	\$11,212	\$37,706	\$5,486	\$9,445	\$13,154	\$28,085	\$77,003
Year 20	\$10,817	\$39,351	\$5,726	\$9,857	\$13,728	\$29,310	\$79,478
Total 20 years	\$310,712	\$180,979	\$98,623	\$138,857	\$194,414	\$431,894	\$923,585
Total 15 years	\$252,533	\$0	\$72,290	\$93,525	\$131,279	\$297,095	\$549,628

Source: Nebraska Department of Revenue; Property Assessment Division; Goss & Associates from the IMPLAN system

²¹The construction activity will likely involve some overlap with the TIF period and the source data do not provide a separate time period for the construction activity. Therefore, to remove the potential for double counting tax revenue on the base value, the base value taxes received in TIF year 1 have been included.

SECTION 2: THE IMPACT OF RESIDENTIAL TIF ON NON-METRO NEBRASKA

Table 2.6 lists property taxes on the incremental value of the TIF. These yearly taxes are used to pay interest plus principal on the TIF bond or loan. In some cases, a portion of the total \$359,640 may be paid to the developer for items such as demolition costs.

Table 2.6: Incremental real property taxes on average residential TIF, 15 years (used to pay off bonds or bank loans) (2017 dollars)	
	Real property tax on incremental valuation
Initial TIF year 1	\$17,482
TIF year 2	\$18,245
TIF year 3	\$19,041
TIF year 4	\$19,871
TIF year 5	\$20,738
TIF year 6	\$21,643
TIF year 7	\$22,587
TIF year 8	\$23,573
TIF year 9	\$24,601
TIF year 10	\$25,674
TIF year 11	\$26,795
TIF year 12	\$27,964
TIF year 13	\$29,184
TIF year 14	\$30,457
End TIF year 15	\$31,786
Total	\$359,640

Source: Goss & Associates from the IMPLAN system



City of York Municipal Building in York County, Nebraska.
Source: Wikimedia Commons

Rate-of-Return for Taxpayer Provided Infrastructure, Including Schools, Highways and Police Protection

Table 2.7 lists the added yearly costs in 2017 dollars incurred by the local taxpayer as a result of the average TIF project and benefits. For the first 15 years of the TIF, total costs sustained by the local taxpayer were \$245,980 (column 3). The first 20 years of the average TIF project generated total local taxpayer costs of \$357,822. As presented in Table 2.7, the net benefits to the local taxpayer are \$303,649 for the construction period plus the 15-year TIF period, (column 4). For the full 20 years of operations plus the construction period, the local taxpayer receives a net monetary benefit of \$565,764, (column 4).

Table 2.7: Taxpayer costs and tax collections for average residential TIF, 20 years (2017 dollars)

	Incremental Property taxes on residential TIF (1)	Tax collections (including spillover but excluding base) (2)	Public sector costs (3)	Net benefit (cost) to taxpayer (4)
Construction and tenant improvement period	n.a.	\$29,224	\$23,727	\$5,497
Initial TIF year 1	n.a.	\$34,404	\$10,804	\$23,601
TIF year 2	n.a.	\$34,219	\$11,275	\$22,944
TIF year 3	n.a.	\$34,085	\$11,767	\$22,318
TIF year 4	n.a.	\$34,002	\$12,280	\$21,722
TIF year 5	n.a.	\$33,972	\$12,816	\$21,156
TIF year 6	n.a.	\$33,992	\$13,375	\$20,617
TIF year 7	n.a.	\$34,067	\$13,959	\$20,108
TIF year 8	n.a.	\$34,193	\$14,568	\$19,625
TIF year 9	n.a.	\$34,373	\$15,203	\$19,170
TIF year 10	n.a.	\$34,606	\$15,866	\$18,740
TIF year 11	n.a.	\$34,895	\$16,559	\$18,337
TIF year 12	n.a.	\$35,240	\$17,281	\$17,959
TIF year 13	n.a.	\$35,641	\$18,035	\$17,606
TIF year 14	n.a.	\$36,099	\$18,822	\$17,277
End TIF year 15	n.a.	\$36,616	\$19,643	\$16,973
Year 16	\$33,172	\$37,193	\$20,500	\$49,865
Year 17	\$34,620	\$37,831	\$21,394	\$51,056
Year 18	\$36,130	\$38,532	\$22,328	\$52,334
Year 19	\$37,706	\$39,297	\$23,302	\$53,701
Year 20	\$39,351	\$40,127	\$24,319	\$55,160
Total construction period + 15 years	\$0	\$549,628	\$245,980	\$303,649
Total construction + 20 years	\$180,979	\$742,607	\$357,822	\$565,764

Source: Goss & Associates from the IMPLAN system output

Table 2.8 lists the rate-of-return, adjusted for inflation, on taxpayer provided infrastructure. As indicated, the taxpayer experiences a 3.8 percent rate-of-return for the first 15 years of the TIF plus one year of construction. For the full 20 years of the TIF, taxpayers experience a 3.6 percent rate-of-return.

Table 2.8: Net rate-of-return, adjusted for inflation, to local taxpayer for average residential TIF			
	Public costs	Total local tax collections	Compound annual rate-of-return
First 15 years	\$245,980	\$549,628	3.8%
Full 20 years	\$357,822	\$923,586	3.6%

Source: Goss & Associates from the IMPLAN system

Using the non-metro Nebraska average mill levy from Nebraska tax authorities, the impact on cities and school districts can be estimated. Table 2.9 on the following page shows the impact to the city and school district resulting from the TIF project.

As presented, for the full 20 years in 2017 dollars, city property taxes on the base value totaled \$19,535, (column 3), and school taxes on the base value totaled \$191,677 (column 4). Over the course of 20 years, the average residential TIF generated \$37,113 in city property taxes, (column 1), and \$364,162 in school property taxes, (column 2).

The net revenue enhancement from the TIF for city coffers was \$17,580, (column 5), and for schools was \$172,483, (column 6). Compounded annually, this represents an increase of 3.3 percent in city property taxes and 5.5 percent in school property taxes.

The net revenue enhancement from the TIF for city coffers was \$17,580 and for schools was \$172,483. Compounded annually, this represents an increase of 3.3 percent in city property taxes and 5.5 percent in school property taxes.

Table 2.9: Impact on City and School district tax authorities, average residential TIF (2017 dollars)

	Share of property tax with TIF project indirect property taxes		Share of property tax without TIF project		Revenue enhancement with TIF: City (5)	Revenue enhancement with TIF: Schools (6)
	City (mill levy: \$0.4245 per \$100 of assessed value) (1)	School district (mill levy: \$0.8880 per \$100 of assessed value) (2)	City (mill levy: \$0.4245 per \$100 of assessed value) (3)	School district (mill levy: \$0.8880 per \$100 of assessed value) (4)		
Construction and tenant improvement period	\$1,255	\$12,315	\$0	\$0	\$1,255	\$12,315
Initial TIF year 1	\$1,504	\$14,760	\$1,344	\$13,191	\$160	\$1,569
TIF year 2	\$1,464	\$14,364	\$1,297	\$12,727	\$167	\$1,638
TIF year 3	\$1,425	\$13,987	\$1,251	\$12,278	\$174	\$1,709
TIF year 4	\$1,389	\$13,629	\$1,207	\$11,845	\$182	\$1,784
TIF year 5	\$1,354	\$13,289	\$1,165	\$11,428	\$190	\$1,861
TIF year 6	\$1,322	\$12,968	\$1,124	\$11,025	\$198	\$1,943
TIF year 7	\$1,291	\$12,664	\$1,084	\$10,637	\$207	\$2,027
TIF year 8	\$1,261	\$12,378	\$1,046	\$10,262	\$216	\$2,116
TIF year 9	\$1,234	\$12,109	\$1,009	\$9,901	\$225	\$2,208
TIF year 10	\$1,208	\$11,856	\$973	\$9,551	\$235	\$2,304
TIF year 11	\$1,184	\$11,620	\$939	\$9,215	\$245	\$2,405
TIF year 12	\$1,162	\$11,401	\$906	\$8,891	\$256	\$2,510
TIF year 13	\$1,141	\$11,197	\$874	\$8,577	\$267	\$2,619
TIF year 14	\$1,122	\$11,009	\$843	\$8,275	\$279	\$2,734
End TIF year	\$1,104	\$10,836	\$814	\$7,983	\$291	\$2,853
Year 16	\$3,174	\$31,143	\$785	\$7,702	\$2,389	\$23,441
Year 17	\$3,251	\$31,895	\$757	\$7,430	\$2,493	\$24,464
Year 18	\$3,333	\$32,700	\$731	\$7,169	\$2,602	\$25,531
Year 19	\$3,420	\$33,562	\$705	\$6,917	\$2,715	\$26,645
Year 20	\$3,514	\$34,480	\$680	\$6,673	\$2,834	\$27,807
Total 20 years	\$37,113	\$364,162	\$19,534	\$191,677	\$17,580	\$172,483

Source: Goss & Associates from the IMPLAN system; Nebraska Department of Revenue

Conclusions

Estimates presented in this chapter indicate significant and positive economic impacts from 122 residential TIF projects implemented between 1996 and 2014. After accounting for growth in public costs for infrastructure, including schools and highways, it was concluded that on average, residential TIF projects across the state produced a rate-of-return of 3.8 percent for the 15 years of the TIF plus one year of construction, and 3.6 percent over 20 years.

Section 3: The Impact of Commercial and Industrial TIF on Nebraska's Rural Communities

Section Highlights²²

- During the TIF period, the average commercial/ industrial TIF:
 - Base value decreased at an annual rate of 1.5 percent. Likewise, the property tax collected on the base value sank by 2.2 percent per annum, falling from an average of \$13,568 to \$9,910 over the 15-year TIF period.
- Incremental improvement valuation increased at an annual rate of 3.3 percent. Likewise, the property tax collected on the base value expanded by 2.6 percent per annum, advancing from \$38,812 to \$55,914 over the 15-year TIF period.
- Annually, the average commercial/ industrial TIF project:
 - Added \$6.0 million to sales, \$1.8 million to wages & salaries, and \$192,456 to self-employment income for the TIF period and supported 56.1 jobs each year of the TIF period.
 - Over a 20-year period, produced an average of approximately \$2.2 million in local tax collections.
- Analysis shows that the Nebraska taxpayer experiences a 5.6 percent rate-of-return for the full 20 years of the TIF plus one year construction period

Introduction

This chapter analyzes commercial/industrial TIF projects located in Nebraska communities designated as first class cities, second class cities and villages. TIF projects in the cities of Lincoln and Omaha are not included in the analysis. The sample of TIF projects was retrieved from the annual reports compiled by the Nebraska Department of Revenue's Property Assessment Division. Available reports allowed for the research team to analyze projects with origination dates from 1996 to 2014. The TIF projects utilized in the final report were restricted to projects for which at least three years of data were available.

The projects were standardized and analyzed over a fifteen-year TIF period. The first stage of the analysis involved the conversion of all dollar amounts for the projects into 2017 dollars; constant dollars that allow for comparison of projects across time periods and varying durations. The discount factor used was the average municipal bond rate for long-term bonds issued by Nebraska tax authorities during the last ten years, or 4.7 percent.

Commercial and Industrial

The commercial and industrial sample includes 411 projects with a duration of at least three years for all communities in Nebraska, except for Lincoln and Omaha. The sample includes projects originated during the 1996 to 2014 time period. An additional 125 projects did not meet the minimum three-year duration requirement to be included in the analysis. Table 3.1 provides a summary of the projects included in the analysis.²³

²²Unless otherwise indicated, all financial data are stated in 2017 dollars.

²³The standard error of the estimates is 2.3 percent.

SECTION 3: THE IMPACT OF COMMERCIAL AND INDUSTRIAL TIF ON NEBRASKA'S NON-METRO COMMUNITIES

The average commercial and industrial project has an initial base property valuation of \$633,744. During the TIF period the base value decreased at an annual rate of 1.5 percent. Likewise, the tax amount collected decreased by 2.2 percent per annum, falling from \$13,568 to \$9,910.

The incremental improvement to the property results in an addition to the valuation of \$1,832,878. This incremental improvement increases in value

at an annual rate of 3.3 percent; the tax amount increases 2.6 percent per annum. At the end of the TIF period the incremental valuation is \$2,879,939.

As with the residential TIF projects in Section 2, commercial/industrial TIF projects are broken down into three periods or phases. Phase 1 is the one-year construction period; Phase 2 is the 15-year TIF period and; Phase 3 is the five years beyond the end of the TIF project period.

Table 3.1: Summary of commercial and industrial projects in Nebraska, 1996 to 2014 (2017 dollars)

Commercial and industrial projects	Base valuation	Incremental improvement valuation	Base taxes	Incremental improvement taxes
TIF year: initial	\$633,744	\$1,832,878	\$13,568	\$38,812
TIF year: end	\$516,239	\$2,879,939	\$9,910	\$55,914
Compound annual change	-1.5%	3.3%	-2.2%	2.6%

Source: Nebraska Department of Revenue: Property Assessment Division; Goss & Associates



Central City, Nebraska. Source: Wikimedia Commons

During the second phase the property tax associated with the incremental improvement to the TIF project's real property does not flow to the local tax authorities. However, the local community benefits from the increased economic activity at the project location and spillover economic activity outside the TIF project, but in the community. Thus, the project boosts sales, income, jobs and taxes in the community.

For the typical project, the payback occurs during the third phase of the project when the increased valuation associated with the commercial and industrial TIF project, along with the ongoing economic activity at the project, result in project payback.

Table 3.2 summarizes the economic impact for the first and second phases of the typical commercial and industrial project. The construction

Phase 1 increases sales activity in the community by \$4.9 million. Local wage income increases by \$1,537,689 and income for the self-employed increases by \$223,656. Local employment increases by 43.2.

During Phase two, the ongoing economic activity at the project increases local sales by nearly \$6.1 million per year. In addition, on an annual basis, the TIF project increases wage and salary income by \$1.8 million, and self-employment income by \$192,456 supporting an average of 56.1 jobs per year.

During the TIF period of 15 years plus construction, the project increases total sales by \$90.8 million, wage income by \$26.6 million and self-employment income by \$2.9 million. The TIF project supports the activities of 56.1 jobs.

Table 3.2: Average commercial/industrial TIF economic impact summary Phases 1 and 2 (2017 dollars)

Economic Impact	Construction	TIF project: annual impact (average)	TIF project: 15-year impact (total)
Sales (output)	\$4,857,635	\$6,054,703	\$90,820,548
Wage and salary income	\$1,537,689	\$1,773,532	\$26,602,978
Self-employment income	\$223,656	\$192,456	\$2,886,846
Jobs	43.2	56.1	56.1

Source: Goss & Associates from the IMPLAN system

Construction Phase (Phase 1)

The construction phase of a TIF project impacts additional industries outside of construction. Table 3.3 lists the top ten impacted industries, excluding construction. The wholesale trade sector tops the list with an increase of \$124,800 due to the TIF project. The average sales increase for the top ten non-construction industries is \$73,070.

Table 3.3: Top 10 industries experiencing impacts from average commercial and industrial TIF (one year construction period) (2017 dollars)

	Sales	Wage and salary income	Self-employment income	Jobs	Average income per job
Wholesale trade businesses	\$124,800	\$46,928	\$7,825	0.8	\$64,815
Architectural, engineering, and related services	\$116,389	\$60,002	\$10,667	1.0	\$68,324
Monetary authorities and depository credit intermediation activities	\$90,213	\$12,739	\$0	0.3	\$42,497
Food services and drinking places	\$69,955	\$21,155	\$1,289	1.5	\$14,603
Offices of physicians, dentists, and other health practitioners	\$69,518	\$36,643	\$7,325	0.6	\$74,305
Private hospitals	\$63,650	\$29,696	\$318	0.6	\$53,542
Nondepository credit intermediation and related activities	\$58,627	\$25,139	\$3,064	0.5	\$60,562
Securities, commodity contracts, investments, and related activities	\$48,625	\$7,926	-\$534	0.4	\$20,697
Real estate establishments	\$48,063	\$4,450	\$1,457	0.6	\$10,724
Insurance carriers	\$40,858	\$10,039	\$223	0.2	\$61,040

Source: Goss & Associates from the IMPLAN system

TIF Operational Period (Phase 2)

Table 3.4 lists the top ten industries impacted by the ongoing activities at the TIF project location. The industries in Table 3.4 represent those that receive the largest boost to sales from the spillover activities related to the TIF project. The average annual sales for the top ten industries is \$343,343; ethanol manufacturing tops the list with annual sales of \$1.1 million.

As noted previously, the TIF project drives additional economic activity in the local community. This additional activity comes first from the construction phase and then from business-to-business and household spending that occur as a result of the ongoing activity at the project location. The additional activity generates tax revenues that flow into local coffers throughout the first and second phases of the project. The additional revenue comes in the form of additional property tax revenue (both real and personal), local sales tax, and other taxes (including motor vehicle license fees).

Table 3.4: Top ten industries impacted by the TIF project ongoing activity (2017 dollars)

	Sales	Wage and salary income	Self-employment income	Jobs
Ethanol manufacturing	\$1,085,427	\$62,659	\$3,485	0.9
Warehousing and storage	\$478,908	\$226,442	\$4,027	6.6
Management of companies and enterprises	\$289,720	\$155,215	(\$160)	1.7
Hotels and motels, including casino hotels	\$264,876	\$129,863	\$297	5.6
Office administrative services	\$263,972	\$123,176	\$10,920	6.2
Retail Stores - General merchandise	\$233,665	\$58,514	\$2,677	3.5
Retail Stores - Food and beverage	\$229,163	\$123,726	\$10,823	2.5
Real estate establishments	\$212,862	\$19,709	\$6,453	2.4
Nursing and residential care facilities	\$188,166	\$107,306	\$1,124	3.7
Food services and drinking places	\$186,667	\$56,449	\$3,441	4.1

Source: Goss & Associates from the IMPLAN system

The average annual sales for the top ten industries is \$343,343; ethanol manufacturing tops the list with annual sales of \$1.1 million.

Tax Impacts

Table 3.5 exhibits the fiscal impact from the TIF project. During the 15-year TIF period, plus construction, local tax revenue receives a boost of \$1.3 million from the ongoing activity at the project (column 7). When viewed over a 20-year period, Phases 1, 2, and 3, the total enhancement to local tax revenue is \$2.2 million (column 7). Property tax continues to be collected on the base valuation and a cumulative \$174,751 in property tax revenue is generated during the 15-year TIF period. A total of \$221,096 in tax revenue is collected on the base property for the 20-year period (column 1).

The incremental improvement generates a total of \$684,091 in indirect property tax revenue during the TIF period based on indirect impacts (column 3). After the TIF period expires, the property tax generated on the incrementally improved property begins to flow to local tax authorities totaling \$302,527 (column 2) for a total of \$963,065. Local tax revenue is enhanced by a total of \$2.2 million (column 7) during the three phases of the TIF project (20 year time period used plus construction). The average annual lift to local taxes is \$107,894.

Table 3.5: TIF tax impact for average commercial/industrial project (2017 dollars)

	Real property taxes		Fiscal impact from spillover activity at TIF project				(7) Total local tax revenue
	(1) Base valuation	(2) On incremental improvement	(3) Property Tax (real and personal)	(4) Local option sales tax	(5) Other taxes, fees and licenses	(6) Total fiscal impact	
Construction and tenant improvement	\$0	n.a.	\$35,635	\$6,458	\$11,705	\$53,799	\$53,799
Initial TIF year 1	\$13,568	n.a.	\$35,790	\$9,864	\$15,336	\$60,990	\$74,558
TIF year 2	\$13,267	n.a.	\$36,735	\$10,125	\$15,741	\$62,601	\$75,868
TIF year 3	\$12,972	n.a.	\$37,706	\$10,392	\$16,157	\$64,255	\$77,228
TIF year 4	\$12,685	n.a.	\$38,702	\$10,667	\$16,584	\$65,953	\$78,638
TIF year 5	\$12,403	n.a.	\$39,725	\$10,949	\$17,022	\$67,696	\$80,099
TIF year 6	\$12,128	n.a.	\$40,774	\$11,238	\$17,472	\$69,484	\$81,612
TIF year 7	\$11,859	n.a.	\$41,852	\$11,535	\$17,934	\$71,320	\$83,179
TIF year 8	\$11,595	n.a.	\$42,957	\$11,840	\$18,407	\$73,205	\$84,800
TIF year 9	\$11,338	n.a.	\$44,092	\$12,153	\$18,894	\$75,139	\$86,477
TIF year 10	\$11,086	n.a.	\$45,257	\$12,474	\$19,393	\$77,124	\$88,210
TIF year 11	\$10,840	n.a.	\$46,453	\$12,803	\$19,905	\$79,162	\$90,002
TIF year 12	\$10,600	n.a.	\$47,680	\$13,141	\$20,431	\$81,253	\$91,853
TIF year 13	\$10,365	n.a.	\$48,940	\$13,489	\$20,971	\$83,400	\$93,765
TIF year 14	\$10,135	n.a.	\$50,233	\$13,845	\$21,525	\$85,604	\$95,738
End TIF year 15	\$9,910	n.a.	\$51,560	\$14,211	\$22,094	\$87,865	\$97,775
Year 16	\$9,690	\$57,392	\$52,923	\$14,586	\$22,678	\$90,187	\$157,268
Year 17	\$9,475	\$58,908	\$54,321	\$14,972	\$23,277	\$92,570	\$160,952
Year 18	\$9,264	\$60,464	\$55,756	\$15,367	\$23,892	\$95,015	\$164,744
Year 19	\$9,059	\$62,062	\$57,229	\$15,773	\$24,523	\$97,526	\$168,646
Year 20	\$8,858	\$63,702	\$58,741	\$16,190	\$25,171	\$100,103	\$172,662
Total - 20 years	\$221,096	\$302,527	\$963,065	\$262,072	\$409,113	\$1,634,250	\$2,157,874
Total - 15 years	\$174,757	\$0	\$684,091	\$185,184	\$289,571	\$1,158,850	\$1,333,601

Source: Nebraska Department of Revenue: Property Assessment Division; Goss & Associates from the IMPLAN system

²⁴The construction activity will likely involve some overlap with the TIF period and the source data do not provide a separate time period for the construction activity. Therefore, to remove the potential for double counting tax revenue on the base value, the base value taxes received in TIF year 1 have been included.

SECTION 3: THE IMPACT OF COMMERCIAL AND INDUSTRIAL TIF ON NEBRASKA'S NON-METRO COMMUNITIES

Table 3.6 lists the property taxes levied on the average commercial/industrial project which is used to pay the TIF bond interest plus principal. After the 15-year TIF period expires, the property tax of \$302,527 is remitted to local taxing authority for the five years after the TIF period ends (Table 3.5, column 2).

Table 3.6: Incremental property taxes on average commercial and industrial TIF, 15 years (used to pay off bonds or bank loans) (2017 dollars)

	Property tax on incremental valuation
Initial TIF year 1	\$38,812
TIF year 2	\$39,837
TIF year 3	\$40,890
TIF year 4	\$41,970
TIF year 5	\$43,079
TIF year 6	\$44,217
TIF year 7	\$45,386
TIF year 8	\$46,585
TIF year 9	\$47,815
TIF year 10	\$49,079
TIF year 11	\$50,376
TIF year 12	\$51,707
TIF year 13	\$53,073
TIF year 14	\$54,475
End TIF year 15	\$55,914
Total	\$703,214

Source: Goss & Associates from the IMPLAN system



Thurston County Courthouse. Source: Wikimedia Commons

Rate-of-Return for Taxpayer-Provided Infrastructure Including Schools, Highways and Roads

Table 3.7 lists tax collections, excluding taxes on the base TIF, but including the property taxes on the TIF property beginning in year 16, for 20 years of an average commercial/industrial TIF project. As presented for the first 15 years plus one year of construction, the costs for taxpayer infrastructure of \$1,299,329 exceeded the property tax collections of \$1,158,850.

Data show that for a full 20 period, property tax collections of \$1,936,779 (column 2) surpassed costs of taxpayer infrastructure of \$1,834,556 (column 3).

Table 3.7: Taxpayer costs and tax collections for average commercial and industrial TIF, 20 years (2017 dollars)

	(1) Property taxes on commercial and industrial TIF	(2) Tax collections (including spillover but excluding base)	(3) Public sector costs	(4) Net benefit (cost) to taxpayer
Construction period	\$0	\$53,799	\$55,213	(\$1,414)
Initial TIF year 1	\$0	\$60,990	\$68,665	(\$7,675)
TIF year 2	\$0	\$62,601	\$70,480	(\$7,879)
TIF year 3	\$0	\$64,255	\$72,342	(\$8,087)
TIF year 4	\$0	\$65,953	\$74,253	(\$8,300)
TIF year 5	\$0	\$67,696	\$76,215	(\$8,519)
TIF year 6	\$0	\$69,484	\$78,229	(\$8,745)
TIF year 7	\$0	\$71,320	\$80,295	(\$8,975)
TIF year 8	\$0	\$73,205	\$82,417	(\$9,212)
TIF year 9	\$0	\$75,139	\$84,594	(\$9,455)
TIF year 10	\$0	\$77,124	\$86,830	(\$9,706)
TIF year 11	\$0	\$79,162	\$89,124	(\$9,962)
TIF year 12	\$0	\$81,253	\$91,478	(\$10,225)
TIF year 13	\$0	\$83,400	\$93,895	(\$10,495)
TIF year 14	\$0	\$85,604	\$96,376	(\$10,772)
End TIF year 15	\$0	\$87,865	\$98,923	(\$11,058)
Year 16	\$57,392	\$147,579	\$101,536	\$46,043
Year 17	\$58,908	\$151,478	\$104,219	\$47,259
Year 18	\$60,464	\$155,479	\$106,973	\$48,506
Year 19	\$62,062	\$159,588	\$109,799	\$49,789
Year 20	\$63,702	\$163,805	\$112,700	\$51,105
Total construction + 15 years	\$0	\$1,158,850	\$1,299,329	(\$140,479)
Total construction + 20 years	\$302,528	\$1,936,779	\$1,834,556	\$102,223

Source: Goss & Associates from IMPLAN system output

Thus, over 20 years, the average commercial/industrial TIF project provides a 5.6 percent rate-of-return for taxpayer provided infrastructure.

Table 3.8 lists the rate-of-return on taxpayer provided infrastructure. As indicated, the taxpayer experiences a -10.8 percent rate-of-return for the first 15 years of the TIF plus one year of construction. For the full 20 years of the TIF, taxpayers experience a 5.6 percent rate-of-return.

Table 3.8: Net rate-of-return to local taxpayer for average commercial/industrial TIF			
	Public costs	Total local tax collections	Compound annual rate of return
First 15 years	\$1,299,329	\$1,158,850	-10.8%
Full 20 years	\$1,834,556	\$1,936,799	5.6%

Source: Goss & Associates from the IMPLAN system
 Note: Does not include property taxes collected on the base TIF value

Using the non-Omaha and non-Lincoln average mill levy from Nebraska tax authorities, the impact on cities and school districts can be estimated. Table 3.9 shows the impact to the city and school district resulting from the TIF project. At the end of 20 years, both the city and school district receive a 472.4 percent increase in property tax revenue as a result of the TIF project.

At the end of 20 years, both the city and school district receive a 472.4 percent increase in property tax revenue as a result of the TIF project



Adams County Courthouse. Source: Wikimedia Commons

Table 3.9: Impact on City and School district tax authorities (2017 dollars)

	Share of property tax with TIF project, base + indirect		Share of property tax without TIF project		Revenue enhancement with TIF: City	Revenue enhancement with TIF: Schools
	City (mill levy: \$0.4245 per \$100 of assessed value)	School district (mill levy: \$0.8880 per \$100 of assessed value)	City (mill levy: \$0.4245 per \$100 of assessed value)	School district (mill levy: \$0.8880 per \$100 of assessed value)		
Construction and tenant improvement	\$2,240	\$21,983	\$0	\$0	\$2,240	\$21,983
Initial TIF year 1	\$2,250	\$22,078	\$853	\$8,370	\$1,397	\$13,708
TIF year 2	\$2,310	\$22,662	\$834	\$8,184	\$1,475	\$14,478
TIF year 3	\$2,371	\$23,261	\$816	\$8,003	\$1,555	\$15,258
TIF year 4	\$2,433	\$23,875	\$797	\$7,825	\$1,636	\$16,050
TIF year 5	\$2,497	\$24,506	\$780	\$7,651	\$1,718	\$16,855
TIF year 6	\$2,563	\$25,153	\$762	\$7,482	\$1,801	\$17,672
TIF year 7	\$2,631	\$25,818	\$746	\$7,316	\$1,886	\$18,502
TIF year 8	\$2,701	\$26,500	\$729	\$7,153	\$1,972	\$19,347
TIF year 9	\$2,772	\$27,200	\$713	\$6,994	\$2,059	\$20,206
TIF year 10	\$2,845	\$27,919	\$697	\$6,839	\$2,148	\$21,080
TIF year 11	\$2,921	\$28,657	\$682	\$6,687	\$2,239	\$21,969
TIF year 12	\$2,998	\$29,414	\$666	\$6,539	\$2,331	\$22,875
TIF year 13	\$3,077	\$30,191	\$652	\$6,394	\$2,425	\$23,797
TIF year 14	\$3,158	\$30,989	\$637	\$6,252	\$2,521	\$24,737
End TIF year	\$3,242	\$31,807	\$623	\$6,113	\$2,619	\$25,694
Year 16	\$6,935	\$68,052	\$609	\$5,978	\$6,326	\$62,075
Year 17	\$7,119	\$69,850	\$596	\$5,845	\$6,523	\$64,005
Year 18	\$7,307	\$71,696	\$582	\$5,715	\$6,724	\$65,980
Year 19	\$7,500	\$73,590	\$570	\$5,588	\$6,930	\$68,002
Year 20	\$7,698	\$75,534	\$557	\$5,464	\$7,141	\$70,070
Total	\$79,568	\$780,735	\$13,900	\$136,393	\$65,668	\$644,342

Source: Goss & Associates from the IMPLAN system; Nebraska Department of Revenue

Conclusions

Estimates presented in this chapter indicate significant and positive economic impacts from 411 commercial and industrial TIF projects implemented between 1996 and 2016. After accounting for growth in public costs for infrastructure, including schools and highways, it was concluded that on average commercial and industrial TIF projects across the state produced a rate-of-return of -10.8 percent for the 15 years of the TIF and 5.6 percent over 20 years.

Section 4: Nebraska TIF by County

Section Highlights

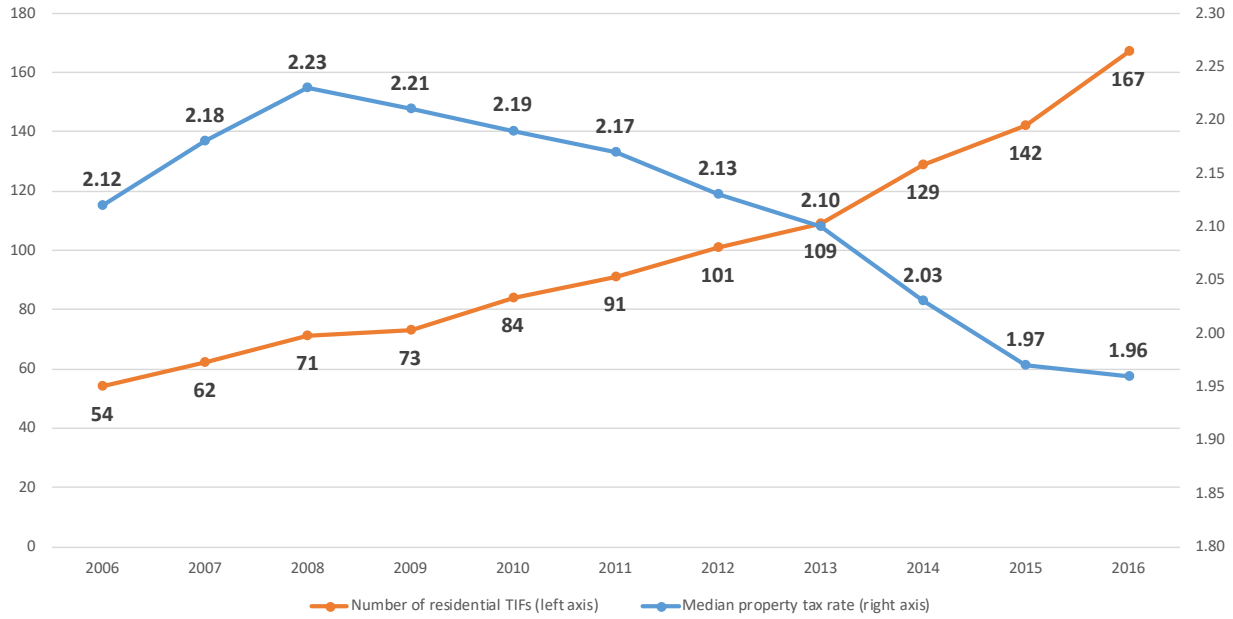
- Residential TIF
 - o In 2006, 31 rural communities in Nebraska used residential TIF to stimulate growth. By 2016, 62 rural communities in the state had active residential TIF projects.
 - o Between 2006 and 2016, the median property tax rate for districts with residential TIF declined from \$2.12 per \$100 of assessed value in 2006 to \$1.96 per \$100 of assessed value.
 - o The median excess value of Nebraska residential TIF projects expanded from \$347,900 in 2006 to \$367,400 in 2016.
 - o In 2016, Cheyenne County had the highest residential TIF per capita at \$796 growing its per capita residential TIF by 9.8 percent between 2011 and 2016.
 - o In 2011, Polk County led the state with per capita residential TIF of \$796.
 - o In terms of growth in TIF usage, Phelps County led the state by expanding per capita residential TIF from \$58 in 2011 to \$474 in 2016, a \$416 increase.
 - o It is concluded that on average between 2011 and 2016, counties with residential TIF projects added 14.8 jobs and experienced a population increase of 106 resulting from TIF.
 - o For all Nebraska counties between 2011 and 2016, residential TIF projects added 1,234 construction jobs, and 1,218 permanent operating jobs.
- Commercial/Industrial TIF
 - o The number of rural communities using commercial/industrial TIF expanded from 91 in 2006 to 121 in 2016.
 - o In 2016, Fillmore County had the highest commercial/industrial TIF per capita at \$10,604, growing its per capita commercial/industrial TIF by 32.7 percent compounded annually between 2011 and 2016.
 - o In 2011, Boone County led the state with per capita commercial/industrial TIF of \$8,826.
 - o It is concluded that on average between 2011 and 2016, counties with commercial/industrial TIF projects added 19.5 jobs and experienced a population increase of 67 resulting from TIF.
 - o For all Nebraska counties between 2011 and 2016, commercial/industrial TIF projects added 7,852 construction jobs, and 10,280 permanent operating jobs.

Residential TIF in Nebraska

Figure 4.1 shows that the number of residential TIF projects in Nebraska, excluding the cities of Lincoln and Omaha, expanded from 54 in 2006 to 167 in 2016. Furthermore, during this same time period, the median property tax rate for districts with TIFs declined from \$2.12 per \$100 of assessed value in 2006 to \$1.96 per \$100 of assessed value. In 2006, 31 rural communities in Nebraska used residential TIFs to stimulate growth. By 2016, 62 rural communities in the state had active residential TIF projects.

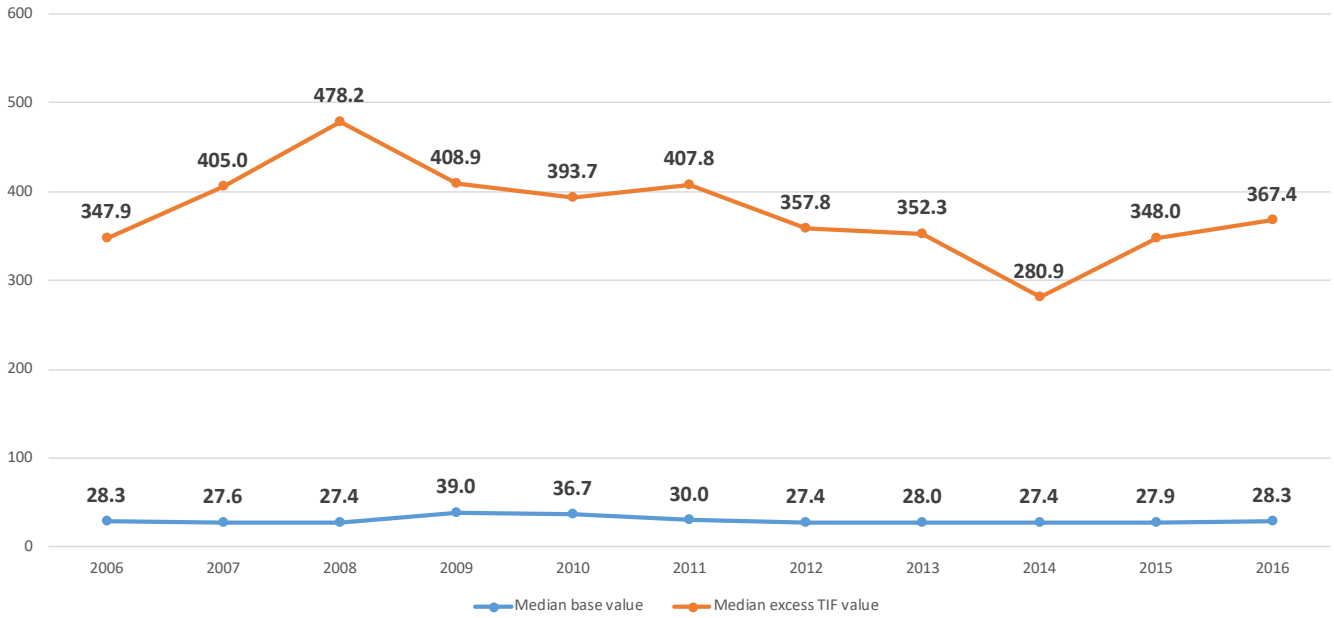
Figure 4.2 shows that the median excess value of Nebraska residential TIF expanded from \$347,900 in 2006 to \$367,400 in 2016. As presented, the median base value of properties in TIF was \$28,300 in 2006, rising to a peak value of \$39,000 in 2009. The median base value was \$28,300 in 2016.

Figure 4.1: Number of residential TIFs in Nebraska and median property tax rates for TIF projects, 2006-2016



Source: Goss & Associates

Figure 4.2: Median value of residential TIF and median base value (in thousands), 2006-2016



Source: Goss & Associates

SECTION 4: NEBRASKA TIF BY COUNTY

Table 4.1 lists per capita excess value for residential TIF by Nebraska counties for 2011 and 2016. Cheyenne County had the highest 2016 residential TIF per capita at \$796 growing its per capita TIF by 9.8 percent between 2011 and 2016. In 2011, Polk County led the state with per capita TIF of \$796. In terms of growth in TIF usage, Phelps County topped the state by expanding per capita TIF from \$58 to \$474, a \$416 increase.

Table 4.1: Per capita residential TIF, excess value, 2011 and 2016

County	Per capita residential TIF Increment value		
	2011	2016	Growth (\$s), 2011-16
Adams	\$140	\$173	\$33
Boone	\$9	\$337	\$329
Buffalo	\$0	\$23	\$23
Cass	\$27	\$122	\$94
Cedar	\$0	\$373	\$373
Chase	\$0	\$317	\$317
Cheyenne	\$725	\$796	\$71
Custer	\$0	\$194	\$194
Dakota	\$70	\$61	-\$9
Dawson	\$349	\$285	-\$64
Dixon	\$50	\$48	-\$2
Dodge	\$0	\$0	\$0
Douglas (Excluding Omaha)	\$72	\$217	\$145
Furnas	\$0	\$344	\$344
Gage	\$189	\$87	-\$102
Gosper	\$225	\$422	\$197
Hall	\$41	\$385	\$344
Hamilton	\$26	\$50	\$24
Holt	\$130	\$0	-\$130
Howard	\$1	\$0	-\$1
Jefferson	\$0	\$42	\$42
Keith	\$0	\$20	\$20
Knox	\$23	\$0	-\$22
Lancaster (excluding Lincoln)	\$0	\$3	\$3
Lincoln	\$62	\$95	\$32
Madison	\$0	\$4	\$4
Merrick	\$491	\$698	\$207
Nance	\$0	\$163	\$163
Nemaha	\$401	\$666	\$266
Phelps	\$58	\$474	\$416
Pierce	\$0	\$113	\$113
Polk	\$796	\$40	-\$756
Red Willow	\$0	\$15	\$15
Saline	\$37	\$62	\$26
Sarpy	\$12	\$12	\$0
Saunders	\$34	\$255	\$221
Scotts Bluff	\$134	\$0	-\$134
Seward	\$0	\$17	\$17
Thayer	\$16	\$44	\$28
Thurston	\$0	\$185	\$185
Valley	\$0	\$344	\$344
Washington	\$16	\$29	\$14
Wayne	\$166	\$498	\$331
York	\$274	\$41	-\$232

Goss & Associates based on data from Nebraska Dept. of Revenue

Table 4.2 contains data describing Nebraska’s 93 counties by residential TIF intensity. As presented, counties with 2016 active TIF projects bested counties with no 2016 active TIF projects in terms of population growth, job growth, median household income, and employment to population ratios. On the other hand, counties without residential TIF projects topped counties with residential TIF in terms of unemployment rates, and the percent of population receiving government cash assistance.

Table 4.2: Economic metrics (medians) by residential TIF intensity, 2016							
	Unemployment rate		% with cash assistance	% below poverty level	Population growth	Job growth	Employment to population
No TIF Projects	2.9%	\$47,692	1.3%	7.5%	-2.7%	-2.5%	63.6%
All residential TIF counties	3.4%	\$52,775	1.6%	7.5%	0.0%	0.7%	65.6%
Top quartile	3.1%	\$53,116	1.4%	6.7%	-0.3%	-0.9%	64.1%
Second quartile	3.9%	\$51,767	2.0%	8.6%	-0.9%	-0.4%	64.4%
Third quartile	2.0%	\$50,864	1.6%	6.0%	0.2%	1.6%	65.9%
Bottom quartile	3.5%	\$55,149	1.7%	7.6%	3.7%	3.3%	66.9%

Source: Goss & Associates calculations based on U.S. Census data

Table 4.3 on the following page lists the impacts of residential TIF investment between 2011 and 2016 by Nebraska county. As presented, Douglas and Lancaster counties, outside of Omaha and Lincoln, experienced the largest gain of 602 permanent jobs from business activity supported by TIF investment. Thus, the communities of Ralston, Valley, Waterloo and Waverly experienced a 7.1 percent gain from 2011 and 2016 over and above the temporary job addition from construction activity from the \$44.7 million TIF investment.

For all Nebraska counties between 2011 and 2016, residential TIF projects added 1,234 construction jobs, and 1,218 permanent operating jobs. In terms of permanent jobs, this represents an average gain of 0.51 percent for all counties with residential TIF. (median of 0.24 percent). Permanent annual jobs supported per \$1,000,000 of TIF for the period were 14.8.

SECTION 4: NEBRASKA TIF BY COUNTY

Table 4.3: Employment gains from residential TIF, 2011-16

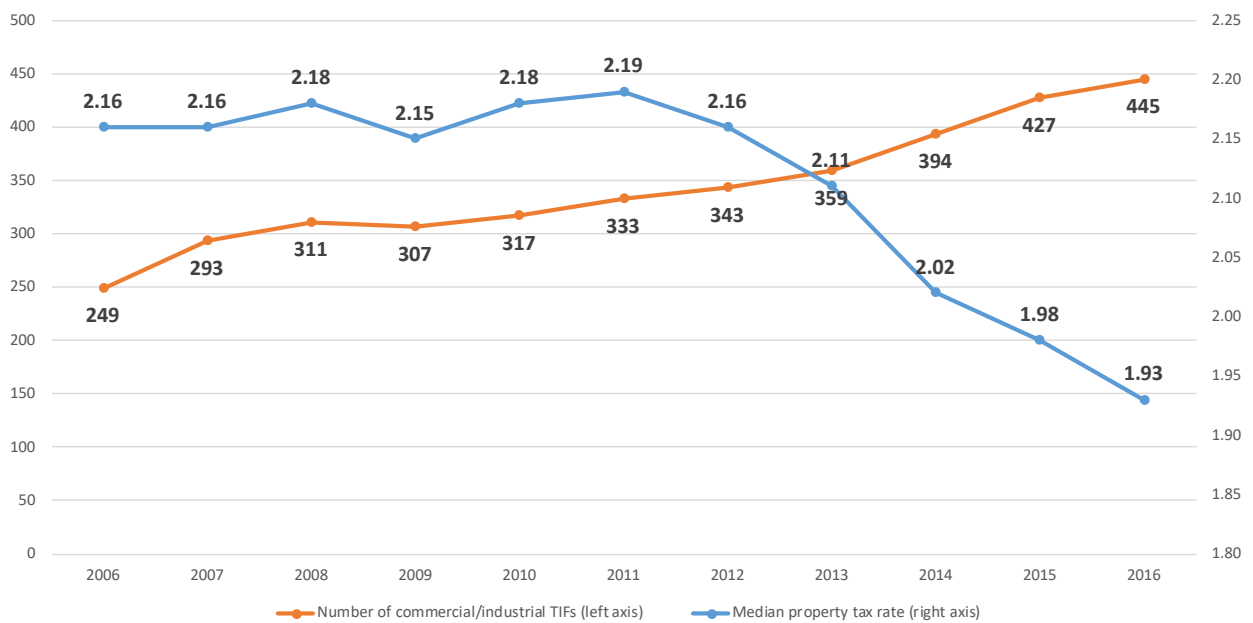
County name	Residential investment +(2017 \$s)	Annual employment supported by residential TIF		Added permanent employment	
		Construction (temporary)	Operations (permanent)	Without TIF	With TIF
Adams	\$1,958,521	27	26	-175	-149
Boone	\$1,071,755	15	14	-62	-48
Buffalo	\$712,225	10	10	2,125	2,135
Cass	\$1,101,601	15	15	-87	-72
Cedar	\$3,198,214	44	43	59	102
Chase	\$944,994	13	13	-76	-63
Cheyenne	\$10,828	0	0	-45	-45
Custer	\$2,428,249	33	33	116	149
Dawson	\$1,199,685	16	16	130	146
Douglas/Lancaster Outside Omaha & Lincoln	\$44,660,311	610	602	-245	357
Furnas	\$1,686,406	23	23	-42	-19
Gosper	\$346,308	5	5	11	16
Hall	\$15,801,921	216	213	791	1,004
Hamilton	\$212,421	3	3	-103	-100
Jefferson	\$246,044	3	3	-273	-270
Kearney	\$486,266	7	6	-112	-106
Keith	\$172,724	2	2	-208	-206
Lincoln	\$3,236,396	44	44	-40	4
Madison	\$129,436	2	2	110	112
Nance	\$552,232	8	7	11	18
Nemaha	\$969,717	13	13	80	93
Phelps	\$302,408	4	4	10	14
Pierce	\$696,896	10	9	-221	-212
Polk	\$227,173	3	3	60	63
Red Willow	\$170,144	2	2	-112	-110
Saunders	\$2,980,625	40	40	-144	-104
Seward	\$207,403	3	3	-107	-104
Thurston	\$1,259,442	17	17	-46	-29
Valley	\$1,169,594	16	16	50	66
Wayne	\$1,843,064	25	25	15	40
York	\$436,537	6	6	33	39
Total	\$90,419,540	1,234	1,218	1,503	2,721

Source: Goss & Associates from the IMPLAN system

Commercial and industrial TIF in Nebraska

Figure 4.3 shows that the number of commercial and industrial TIF projects in Nebraska, excluding the cities of Lincoln and Omaha, expanded from 249 in 2006 to 445 in 2016. Furthermore, during this same time period, the median property tax rate for projects with TIF decreased from \$2.16 per \$100 of assessed value in 2006 to \$1.93 per \$100 of assessed value. In 2006, 91 rural communities in Nebraska used commercial and industrial TIF to stimulate growth. By 2016, 121 rural communities in the state had active commercial and industrial TIF projects.

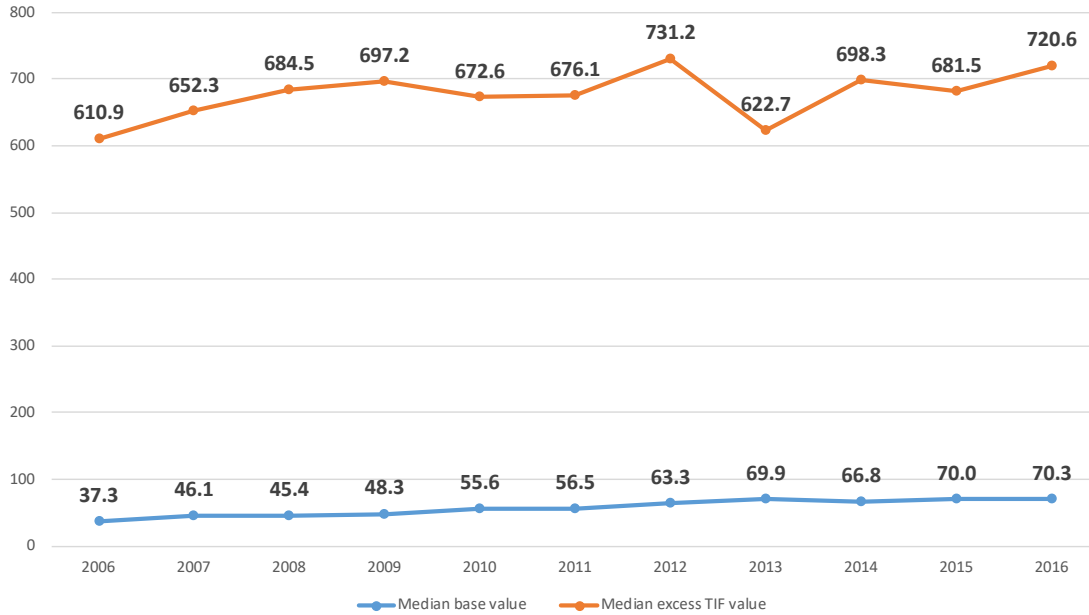
Figure 4.3: Number of commercial and industrial TIFs in Nebraska and median property tax rates for TIF projects, 2006-2016



Source: Goss & Associates

Figure 4.4 shows that the median value of Nebraska commercial and industrial TIF expanded from \$610,900 in 2006 to \$720.6 thousand in 2016. The most recent peak in median excess value occurred in 2012 at \$731,200. As presented, the median base value of properties in TIF increased from \$37,300 in 2006 to \$70,300 in 2016.

Figure 4.4: Median value of commercial and industrial TIF and median base value (in thousands), 2006-2016



Source: Goss & Associates

Table 4.4 on the following page lists per capita commercial/industrial TIF by Nebraska counties for 2011 and 2016. Fillmore County had the highest 2016 commercial/industrial TIF per capita at \$10,604, growing its per capita TIF by 32.7 percent between 2011 and 2016. In 2011, Boone County led the state with per capita TIF of \$8,826. In terms of growth in TIF usage, Dundy County led the state by expanding per capita TIF by \$5,053, from \$402 to \$5,455. The median growth in TIF usage was \$205 per capita.

Table 4.4: Per capita commercial and industrial TIF incremental value, 2011 and 2016

County	Per capita commercial and industrial TIF Increment value		
	2011	2016	Growth (\$s), 2011-16
Adams	\$439	\$509	\$71
Antelope	\$209	\$368	\$159
Boone	\$8,826	\$929	-\$7,897
Box Butte	\$51	\$1,504	\$1,453
Brown	\$557	\$557	\$0
Buffalo	\$1,208	\$1,732	\$523
Burt	\$0	\$83	\$83
Butler	\$268	\$602	\$335
Cass	\$45	\$633	\$588
Cedar	\$0	\$1,213	\$1,213
Chase	\$0	\$831	\$831
Cherry	\$312	\$797	\$484
Cheyenne	\$528	\$4,820	\$4,292
Clay	\$21	\$0	-\$21
Colfax	\$0	\$115	\$115
Cuming	\$1,017	\$825	-\$191
Custer	\$344	\$1,689	\$1,345
Dakota	\$2,521	\$2,599	\$78
Dawes	\$106	\$0	-\$106
Dawson	\$2,879	\$2,137	-\$742
Dixon	\$1	\$2,262	\$2,261
Dodge	\$339	\$494	\$155
Douglas (excluding Omaha)	\$2,092	\$2,502	\$410
Dundy	\$402	\$5,455	\$5,053
Fillmore	\$7,988	\$10,604	\$2,616
Frontier	\$500	\$169	-\$331
Furnas	\$3,275	\$3,253	-\$22
Gage	\$3,402	\$2,194	-\$1,209
Garfield	\$0	\$316	\$316
Greeley	\$0	\$728	\$728
Hall	\$792	\$1,098	\$306
Hamilton	\$1,922	\$1,966	\$44
Harlan	\$677	\$736	\$60
Holt	\$3,888	\$2,601	-\$1,287
Howard	\$219	\$87	-\$132
Jefferson	\$393	\$645	\$252
Johnson	\$552	\$359	-\$193
Kearney	\$87	\$427	\$340
Keith	\$1,087	\$2,191	\$1,104
Kimball	\$418	\$397	-\$21
Knox	\$93	\$199	\$107
Lancaster (excluding Lincoln)	\$578	\$1,487	\$909

Continued on the following page

Goss & Associates based on data from Nebraska Dept. of Revenue

(Continued) Table 4.4: Per capita commercial and industrial TIF incremental value, 2011 and 2016

	Per capita commercial and industrial TIF Increment value		
Lincoln	\$1,822	\$211	-\$1,611
Madison	\$157	\$283	\$126
Merrick	\$3,892	\$4,655	\$763
Morrill	\$8,304	\$3,623	-\$4,681
Nance	\$442	\$1,364	\$922
Nemaha	\$934	\$1,437	\$503
Nuckolls	\$0	\$3,257	\$3,257
Otoe	\$115	\$164	\$49
Pawnee	\$249	\$265	\$15
Perkins	\$0	\$1,628	\$1,628
Phelps	\$664	\$1,733	\$1,068
Platte	\$831	\$176	-\$655
Polk	\$165	\$429	\$264
Red Willow	\$885	\$811	-\$75
Richardson	\$65	\$2,041	\$1,976
Saline	\$72	\$370	\$298
Sarpy	\$82	\$619	\$536
Saunders	\$1,230	\$1,034	-\$196
Scotts Bluff	\$475	\$630	\$156
Seward	\$0	\$333	\$333
Sherman	\$279	\$2,290	\$2,011
Thayer	\$664	\$2,286	\$1,621
Thurston	\$0	\$158	\$158
Valley	\$5,222	\$5,779	\$558
Washington	\$240	\$345	\$105
Wayne	\$34	\$923	\$888
Webster	\$83	\$106	\$23
York	\$1,864	\$1,286	-\$577

Goss & Associates based on data from Nebraska Dept. of Revenue

Table 4.5 on the following page contains data describing Nebraska's 93 counties by commercial/ industrial TIF intensity. As presented, counties with 2016 active TIF projects out-performed counties with no 2016 active TIF projects in terms of population growth, job growth and median household income. On the other hand, no residential TIF counties topped counties with residential TIF in terms of unemployment rates, the percent of population receiving government cash assistance and employment to population ratio.

Table 4.5: Economic metrics (medians) by commercial/industrial TIF intensity, 2016

	Unemployment rate	Median Household income	% with cash assistance	% below poverty levels	Population growth	Job growth 2011-16	Employment to population
No TIF projects	1.9%	\$48,750	0.7%	7.4%	-3.4%	-4.3%	64.9%
All commercial and industrial TIF counties	3.2%	\$50,815	1.7%	7.5%	-1.2%	-0.3%	64.4%
Top quartile	3.5%	\$48,731	1.7%	8.2%	-1.4%	-0.8%	64.1%
Second quartile	2.4%	\$53,613	1.3%	7.5%	-1.1%	0.9%	65.9%
Third quartile	3.6%	\$48,776	1.6%	7.2%	-0.5%	-1.2%	63.7%
Bottom quartile	3.0%	\$51,192	2.0%	7.1%	-1.1%	-1.2%	63.4%

Source: Goss & Associates calculations based on U.S. Census data

Table 4.6 lists the impacts of commercial/industrial TIF investment between 2011 and 2016 by Nebraska county. As presented, Sarpy County experienced the largest gain of 2,415 permanent jobs from business activity supported by the TIF investment. Cheyenne County ranked second in terms of permanent jobs supported at 599. Dundy County's TIF investment accounted for a state high of 3.48 percent from 2011 and 2016 over and above the temporary job addition from construction activity from the \$10.8 million TIF.

For all Nebraska counties between 2011 and 2016, commercial/industrial TIF projects added 7,852 construction jobs, and 10,280 permanent operating jobs. In terms of permanent jobs, this represents an average gain of 0.54 percent for all counties with commercial/industrial TIF (median of 0.50 percent). Permanent annual jobs supported per \$1,000,000 of TIF for the period were 19.5.

Table 4.6: Employment gains from commercial/industrial TIF, 2011-16

County name	Commercial /industrial investment (2017 \$s)	Annual employment supported by commercial/industrial TIF		Added permanent employment	
		Construction (temporary)	Operations (permanent)	With TIF	Without TIF
Adams	\$13,621,295	195	298	-149	-447
Antelope	\$3,218,730	46	87	-150	-237
Boone	\$5,194,118	74	106	-48	-154
Box Butte	\$14,010,559	202	173	231	58
Buffalo	\$17,736,160	254	362	2,135	1,774
Burt	\$771,053	11	21	-318	-339
Butler	\$1,838,338	26	25	-65	-90
Cass	\$11,336,579	162	288	-72	-360
Cedar	\$10,651,064	153	146	102	-44
Chase	\$4,121,379	59	122	-63	-185
Cherry	\$2,193,150	31	30	258	228
Cheyenne	\$43,286,052	620	599	-45	-644
Colfax	\$1,077,849	15	24	247	223
Custer	\$18,528,141	265	350	149	-201
Dakota	\$7,459,133	107	114	-698	-812
Dawson	\$9,742,221	140	191	146	-45
Dixon	\$17,310,449	140	144	-74	-218
Dodge	\$5,091,243	73	84	333	249
Douglas/Lancaster outside Omaha/ Lincoln	\$9,655,229	138	184	-245	-429
Dundy	\$10,797,843	155	133	-179	-312
Fillmore	\$15,534,792	223	194	-133	-327
Furnas	\$6,408,128	92	144	-19	-163
Gage	\$118,791	2	2	215	213
Garfield	\$829,788	12	11	-76	-87
Greeley	\$2,210,463	32	45	-96	-141
Hall	\$22,500,940	322	536	1,004	468
Harlan	\$226,922	3	4	-107	-111
Holt	\$2,165,547	31	65	93	28
Jefferson	\$2,809,529	40	61	-270	-331
Kearney	\$614,253	9	8	-106	-114
Keith	\$17,863,107	256	388	-206	-594
Knox	\$1,270,200	18	33	-82	-115
Lincoln	\$7,500,938	107	172	4	-168
Madison	\$10,416,337	149	153	112	-41
Merrick	\$1,381,163	20	21	131	110
Morrill	\$1,866,397	27	50	-68	-118
Nance	\$12,929,265	185	92	18	-74
Nemaha	\$1,857,490	27	46	93	47
Nuckolls	\$11,937,232	171	111	174	63
Otoe	\$1,423,595	20	38	69	31
Perkins	\$6,134,053	88	125	-117	-242
Phelps	\$11,764,838	169	189	14	-175
Platte	\$5,570,947	80	133	534	401
Polk	\$2,570,305	37	55	63	8
Red Willow	\$18,060,994	259	385	-110	-495
Richardson	\$16,679,116	239	150	72	-78
Sarpy	\$94,316,775	1,351	2,415	8,879	6,464
Saunders	\$7,304,700	105	76	-104	-180
Scotts Bluff	\$13,576,318	195	302	109	-193
Seward	\$6,198,799	89	117	-104	-221
Sherman	\$4,280,623	62	53	-46	-99
Thayer	\$8,796,063	127	117	-22	-139
Thurston	\$1,325,128	19	25	-29	-54
Valley	\$4,828,854	70	98	66	-32
Wayne	\$9,259,806	133	192	40	-152
York	\$14,793,552	213	184	39	-145
Totals	\$555,414,271	7,852	10,280	12,014	1,734

Source: Goss & Associates from the IMPLAN system

Population Impact of Nebraska TIF, 2011-16

Next, this study examines the TIF affected county population. Regression analysis was used to complete this task. Equation 4.1 is estimated for county, and population growth. The IMPLAN system does not provide population impacts.

$$\text{PopGain} = \beta_0 + \beta_1 \text{C\&ITIF2011} + \beta_2 \text{C\&ITIF2011_16} + \beta_3 \text{ResTIF2011} + \beta_4 \text{ResTIF2011_16} + \beta_5 \text{Metro}$$

(4.1)²⁵

Table D.1 in Appendix D contains estimates for Equation 4.1. Several important outcomes surface:

1. The model explains 90.0 percent of the variation in county population (i.e. 10.0 percent remains unexplained).
2. Each of the independent variables is statistically significant at the 90 percent level of confidence or higher.
3. Residential TIF investment between 2011 and 2016 has a statistically significant impact on county population gains.
 - a. The impact is statistically significant at the 99 percent level of confidence (i.e. a 99 percent likelihood that residential TIF investment increases population).
 - b. On average each \$1,000,000 in TIF investment adds 106 to county population.
4. Commercial TIF investment between 2011 and 2016 has a statistically significant impact on population growth between 2011 and 2016.
 - a. The impact is statistically significant at the 99 percent level of confidence (i.e. a 99 percent likelihood that residential TIF investment increases population).
 - b. On average each \$1,000,000 in TIF investment adds 67 to county population.

Conclusions and Policy Recommendations

This chapter has demonstrated the rapid growth in the use of residential TIF in Nebraska. Data also show that the median property tax rate for TIF projects with residential TIF declined from \$2.12 per \$100 of assessed value in 2006 to \$1.96 per \$100 of assessed value in 2016. Likewise, median property tax rates for commercial/industrial TIF projects declined from \$2.16 per \$100 of assessed value in 2006 to \$1.96 per \$100 of assessed value in 2016.

On the following page are recommendations based upon the findings of this study.

²⁵PopGain = change in county population between 2011 and 2016; C&ITIF2011 = average commercial/industrial TIF in county in 2011; C&ITIF2011_16 = change in the average commercial/industrial TIF between 2011 and 2016; ResTIF2011 = average residential TIF in county in 2011; ResTIF2011_16 = change in the average residential TIF between 2011 and 2016; Metro = indicates whether county is a metropolitan county; JobGain = change in county employment between 2011 and 2016.

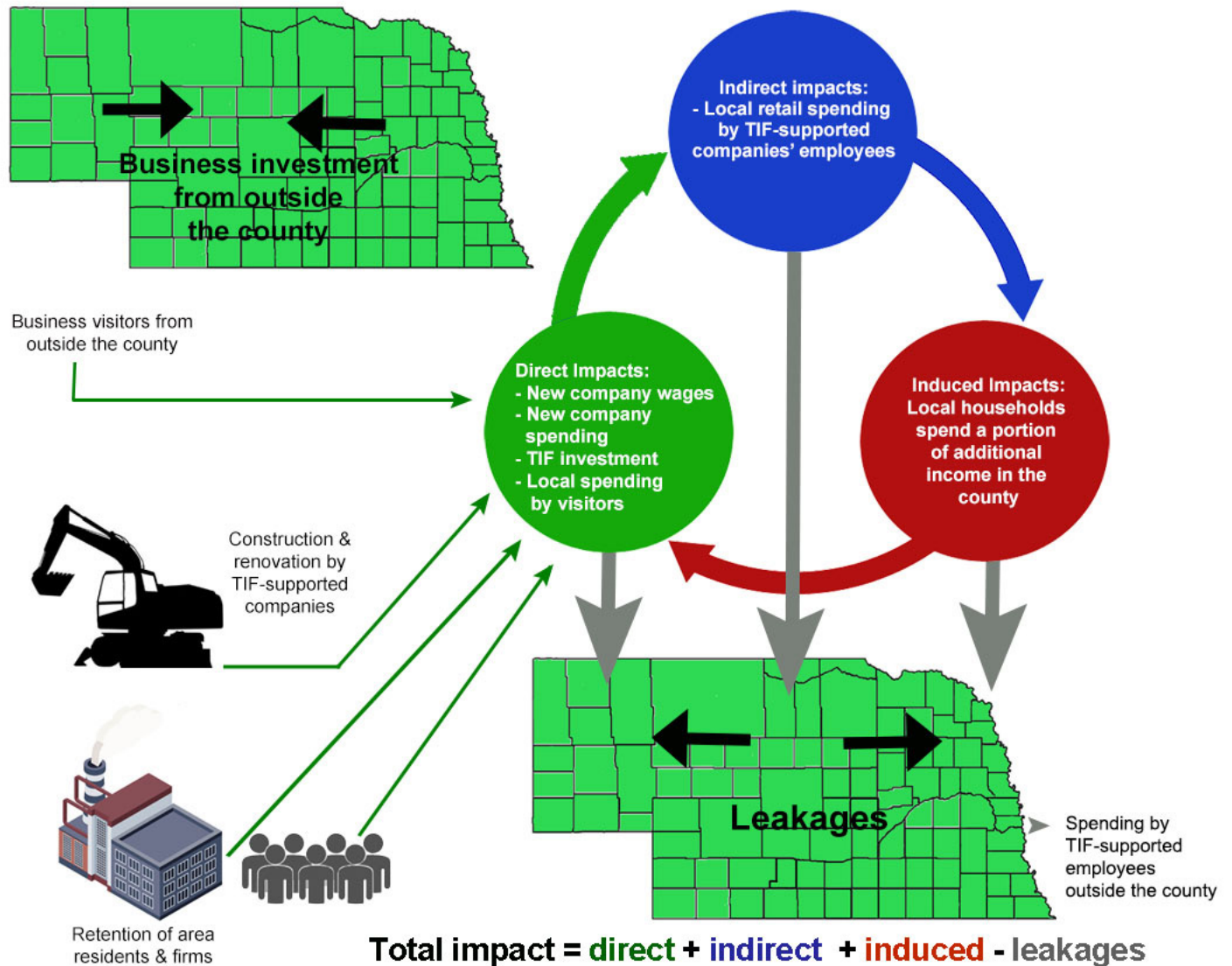
Policy Recommendations Based on Study Outcomes

- A. Keep TIF decisions local. Local policymakers are in a better position to evaluate the negatives and positives of potential TIF projects.
- B. The sources of funds for TIF projects should continue to be local. Allowing the use of state funds for TIF funding would likely result in an “arms race” in terms of TIF funding since the cost would be borne by non-area residents.
- C. Allow other local non-real property taxes as a source of TIF funding. Currently, 16 states permit sales taxes as a source of TIF funding. The authors of this study recommend that the source of any funding remain local. Thus, an expansion in the source of funds for TIF projects to sales taxes include only local option sales taxes. At a minimum, an examination of alternative funding sources for TIF project funding should be forthcoming. Determine the pros and cons of using additional revenue streams (e.g., sales tax) in your development efforts. Determine interest among stakeholders whether using revenue sources beyond real-property taxes is a live option.
- D. Create clear, transparent TIF guidelines and policies. Once the guidelines are developed it is important to follow the guidelines in the application of TIF. An example of a straight-forward, readily available guideline and application may be found here: http://www.scottsbluff.org/document_center/TIF%20Guidelines%2012-01-16%20FINAL.pdf.
- E. Develop a strategy plan that identifies industries and projects best suited for the specific needs of your community. In addition, the development professional should have an understanding of the relative economic and fiscal impacts industries have on a community, i.e., what industries have the most bang for the buck. The development professional should help guide local officials to pursuing best-use projects.
- F. Marshal public and private partners, (e.g., city and county officials, business community leaders, private agencies, school district officials and neighborhood associations). Identify key stakeholder interests and their commitment to local development endeavors. In addition, the economic developer should evaluate stakeholders from the perspective of whether their specific interests are compatible with your development efforts, or do potential conflicts exist? Determine whether the inclusion of representatives of additional local taxing authorities in the TIF process will help with respect to potential negative perceptions of the TIF project (e.g., school district officials).
- G. Proactively communicate the benefits of specific TIF projects. Have a marketing plan that, at a minimum, provides economic and fiscal impact analysis to partners and the public regarding the positive impacts to the community. Use every public address as an opportunity to discuss the importance of TIF in development efforts. Use specific examples and walk the audience through the project with particular attention to the role TIF played in completing the project. Be ready to answer the following types of questions: Did TIF provide gap financing? What other funding sources were available? How many jobs will be created – directly at the project and what spillover job impacts might occur? What additional taxes will be generated by the project?
- H. The assessed value of the base should grow at the same pace as the TIF increment or hold its initial TIF year value throughout the duration of the TIF.

Appendices

Appendix A: Schematic of TIF Impacts

Figure A.1: Schematic of Sample TIF Impacts



Source: Goss & Associates, 2017

Appendix B: Choosing a Technique to Measure Impacts: IMPLAN Multipliers

Impacts provided in this study are estimated using the IMPLAN Multiplier System. The Forestry Service of the U.S. Department of Agriculture developed the IMPLAN multipliers in the 1980s.²⁶ For very populous areas, IMPLAN divides the economy into approximately 500 industrial sectors. Industries that do not exist in the region are automatically eliminated during user construction of the model (e.g. coal mining in Omaha). IMPLAN uses an industry-based methodology to derive its input-output coefficients and multipliers. Primary sources for data are County Business Patterns data and Bureau of Economic Analysis data.

Researchers have used IMPLAN to estimate the impact of changes in military spending on the Washington State economy.²⁷ IMPLAN and RIMS (Regional Input-Output Modeling System) are two of the most widely used multiplier models.

IMPLAN has been compared to other multiplier systems and found to produce reliable estimates.²⁸ Likewise, researchers, in estimating the impacts of opening an automobile assembly plant, concluded that IMPLAN's outcomes are, on balance, somewhat more accurate than RIMS.

IMPLAN multipliers possess the following advantages over other I-O Multiplier Systems:

1. Price changes are accounted for in the creation of the multipliers.
2. Employment increases or decreases are assumed to produce immediate in or out-migration.
3. Multipliers are produced at reasonable costs by third party vendors. In this case, the Minnesota IMPLAN Group produces the multiplier system used in this study.

For the estimated state and metropolitan spillover impacts listed in this chapter, it is assumed that the Nebraska relationships, both state and metropolitan, are the same.

²⁶Goss & Associates is a licensed IMPLAN user.

²⁷Hughes, David, David Holland, and Philip Wandschneider. "The impact of changes in military expenditures on the Washington State economy." *The Review of Regional Studies* 21.3 (1991): 311.

²⁸Oosterhaven, Jan, and Karen R. Polenske. "21 Modern regional input-output and impact analyses." *Handbook of Regional Growth and Development Theories* (2009): 423., Richman and Schwer (1993, p. 143)

Appendix C: Community Impacts

Community impacts are contained in the Supplement to: *TIF Report:
Tax Increment Financing Contributions to Economic Growth in Rural Nebraska*

Appendix D: Modeling the Statistical Impact of Nebraska's TIF, 2011-16

Table D.1 contains estimates of Equation 4.1, and lists results from the estimation of Equation 4.1. As listed, the model explains 91 percent of the variation in county population growth between 2011 and 2016. Furthermore, all of the TIF factors have a statistically significant impact on population at 95 percent level or better. In other words, we (the study principal investigators) are 95 percent confident that Nebraska county TIF projects have a positive impact on county population.

Table D.1: Estimated county employment and population gains, 2011-16 (Equation 4.1)

	Population Growth, 2011-16		
R-Sq	0.91		
Adjusted R-Sq	0.90		
Observations	93		
ANOVA	Degrees of freedom	F	Significance F
Regression	5	171.5	$1.75 * 10^{-43}$
Residual	87		
Total	92		
Variable	Coefficient	P-value	
Intercept (B0)	-402 ^b	1.3%	
C&ITIF2011	0.0169 ^b	4.0%	
C&ITIF2011_16	0.0665 ^a	0.1%	
ResTIF2011	0.1220 ^c	8.9%	
ResTIF2011-16	0.1065 ^a	0.4%	
Metro	2092 ^a	0.4%	

Source: Goss & Associates

Note: a, b, c signifies if the coefficient is statistically different from zero at the 99%, 95% and 90% level of significance.

Appendix E: Past TIF Studies' Major Findings

Table E.1 lists studies completed since 2006 that have examined the impact of TIF projects in the U.S.

	Hicks et al.	Bland & Overton	Carroll	Byrne	Bossard	Kriz	Dye & Merriman	Yadavalli & Landers	Ingraham et al	Lefcoe & Swenson
Year	2016	2016	2008	2006	2011	2013	2006	2015	2005	2014
State	IN	TX	WI	IL	MN	NE	IL	IN	TX	CA
Analysis Level	State	City (Dallas)	City (Milwaukee)	City (Chicago)	School Districts	Nebraska Counties	Chicago and Illinois	State (IN Counties)	City (Dallas)	State
TIF Effective?	No	Yes	Neutral	Yes	Neutral	No	No	No	Yes	No
Major Measure	Employment		Impact on Property Assessed Value	Industrial TIF or not (IV)	TIF Intensity: 2003 (INT and INT^2)	Income Growth		Employment (-)	Population Growth (IV)	
	Hicks et al	Weber et al	Man	Byrne	Lester & El-Khattabi	Greenbaum & Landers	Smith	Merriman Skidmore & Kashian	Gibson	Hicks et al
Year	2015	2003	1999	2010	2017	2014	2009	2011	2003	Year
State	IN	IL	IN	IL	MO	National	IL	WI	IL	State
Analysis Level	State	City (Chicago)	Cities	City (Chicago)	Kansas City and St Louis	County	City (Chicago)	Cities	City (Chicago)	Analysis Level
TIF Effective?	No	No	Yes	No	No	Neutral	Yes	No	Neutral	Yes
Major Measure	Effective County Property Tax Rates	Price of Vacant Industrial Parcel	Employment		Employment: St. Louis	Geographic Region: North Central (IV)	Price growth	Overall Property Value per Capita	Political Influence	

Appendix F: Researchers' Biographies

Ernie Goss is the Jack MacAllister Chair in Regional Economics at Creighton University and is the initial director for Creighton's Institute for Economic Inquiry. He is also principal of the Goss Institute in Denver, Colo. Goss received his PhD in economics from The University of Tennessee in 1983 and is a former faculty research fellow at NASA's Marshall Space Flight Center. He was a visiting scholar with the Congressional Budget Office for 2003-2004, and has testified before the U.S. Congress, the Kansas Legislature, and the Nebraska Legislature. In the fall of 2005, the Nebraska Attorney General appointed Goss to head a task force examining gasoline pricing in the state.

He has published more than 100 research studies focusing primarily on economic forecasting and on the statistical analysis of business and economic data. His book [Changing Attitudes Toward Economic Reform During the Yeltsin Era](#) was published by Praeger Press in 2003, and his book [Governing Fortune: Casino Gambling in America](#) was published by the University of Michigan Press in March 2007.

He is editor of Economic Trends, an economics newsletter published monthly with more than 11,000 subscribers, produces a monthly business conditions index for the nine-state Mid-American region, and conducts a survey of bank CEOs in 10 U.S. states. Survey and index results are cited each month in approximately 100 newspapers; citations have included the New York Times, Wall Street Journal, Investors Business Daily, The Christian Science Monitor, Chicago Sun Times, and other national and regional newspapers and magazines. Each month 75-100 radio stations carry his Regional Economic Report.

Scott Strain is a senior research economist at Goss & Associates. He has worked as an economist and statistician for more than 20 years providing forecasts and analysis across a wide-range of industries. Scott served as an industry economist, working in new product development regarding both quantitative and qualitative research. Strain was Senior Director of Research for an economic development agency, providing economic impact and tax incentive analysis to both private businesses and government entities. He served on the business advisory committee that worked with Nebraska state senators and the director of the state's Economic Development Department to develop the Nebraska Advantage Act – a comprehensive package of business incentives that has helped to add more than \$6 billion in new capital investment and over 13,000 new jobs in the state of Nebraska since the Act's inception in 2006.

Jackson "Alex" Blalock is a financial research assistant with Goss & Associates. A Creighton undergraduate economics major with a 4.0 cumulative GPA in his Junior year, he also serves as the VP of Finance for the Creighton Student Union, providing oversight and management of its financial operations. As an Army ROTC Cadet, he is a graduate of Fort Benning's Air Assault School, a recipient of the Superior Cadet Award, and has served in two unit staff positions simultaneously. In his position of Student Accounts Intern at the Creighton University Business Office, he developed detailed policies and procedures to aid in the training of future interns.