Iowa Tax Increment Financing

Tax Credits Program Evaluation Study

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Preface

Iowa law (section 2.48) directs the Legislative Tax Expenditure Committee to review all tax expenditures with assistance from the Department of Revenue. The schedule included in this law requires a review in 2018 of property tax revenue divisions for urban renewal areas authorized by Iowa Code section 403.19. This is the Department of Revenue's second economic study completed for this expenditure. A prior study of property tax increment financing was completed in 2013.

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

Lucas Beenken	Iowa State Association of Counties
Biswa Das, PhD	Iowa State University
Peter Fisher, PhD	Iowa Policy Project
Carrie Johnson	Iowa Department of Management
Erin Mullenix	Iowa League of Cities
Ted Nellesen	Iowa Department of Management
Julie Roisen	Iowa Department of Revenue

The assistance of an advisory panel implies no responsibility for the content and conclusions of the evaluation study. This report was also reviewed by Amy Rehder Harris. This study and other evaluations of Iowa tax credits can be found on the Tax Credits Tracking and Analysis Program web page on the Iowa Department of Revenue website.

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Executive Summary

Scope of Analysis

Tax Increment Financing (TIF) is a practice whereby municipalities use anticipated increases in property tax revenues to finance improvements for public purposes. This evaluation study describes and analyzes the economic aspects of TIF with attention to their state-level policy implications. This study does not evaluate any individual TIF projects.

The major findings of the study are these:

Background of Urban Renewal and Tax Increment Financing

- The basic steps in the TIF process for urban renewal in Iowa include establishing a taxable valuation "base" for the TIF area. Subsequent increases in taxable value above the base are termed the "increment". Revenues from property taxes on all or part of the increment are separated from revenues derived from the base, diverted to the TIF authority, and used for urban renewal purposes. Revenues from debts levies and other specified levies are exempt from TIF.
- TIF has a direct impact on the State General Fund through its interaction with the State School Foundation Aid formula.
- Iowa Code provides the statutory authority for TIF, which has been allowed in the state since 1969 for areas designated by cities as "blighted." Authority was expanded in 1985 to allow TIF for economic development and to allow counties to establish areas.
- In 2012, Iowa again updated its TIF law by establishing new reporting requirements and restricting TIF from being used to relocate businesses within municipalities.

Tax Increment Financing Around the United States

- Forty-nine states and the District of Columbia allow TIF. Only Arizona does not allow TIF.
- Three states, including Connecticut, Kansas, and Texas, restrict the use of TIF to commercial or industrial property.
- At least 36 states reference blight as either a prerequisite for the implementation of TIF or as one of various conditions under which it is allowed. However, only three states, including Alaska, Nevada, and Tennessee, categorically require a finding of blight prior to the establishment of any TIF area.
- Fifteen states require that TIFs meet some kind of "but for" test as part of approval procedures such that the municipality must demonstrate that improvements would not occur but for the existence of the TIF. In general, Iowa does not have this requirement.

- In 32 states, Iowa among them, TIFs may be financed through issuance of general obligation bonds, whereby a municipality pledges its full faith and credit to repayment.
- Fourteen states provide for some type of exclusion from TIF of overlapping school districts.

Findings About Tax Increment Financing in Iowa

- The use of TIF in Iowa has expanded markedly over time. Between assessment years 2000 and 2017, the number of TIF urban renewal areas in which incremental valuation was greater than zero increased by 59 percent, from a count of 1,125 to 1,787. Over the same period, the amount of taxable value in TIF increments has increased by a multiple of more than two and a half, accounting for an estimated $341 million in property tax revenues in FY 2019 and accounting for an estimated 5.9 percent of total property tax revenues in Iowa.
- Some 413 current TIF urban renewal areas have base years of 1995 or prior and 1,369, or three quarters, have base years of 2001 or later. TIF urban renewal areas established after 1995, except those based on a finding of slum or blight, are required to expire within 20 years.
- In assessment year (AY) 2017, 53 percent of property comprising TIF areas in Iowa was commercial property, 25 percent was residential, and 19 percent was industrial. Incremental valuation of industrial property accounted for a quarter of all industrial property in the state; incremental valuation of property classed as commercial accounted for 18 percent of commercial property.
- Tax revenue diversion to TIF affected 258 of 330 school districts in AY 2017. Across the state, $11.4 billion of total school district valuation was in TIF increments, resulting in total revenue diversions of $130.6 million, of which $61.6 million was shifted to State taxpayers through the State Foundation Aid Formula.
- As of AY 2017, TIF areas are located in 95 of Iowa's 99 counties. Among those 95 counties, valuation in used TIF increments amounts to less than one percent of net taxable value in ten counties and ten percent or more in ten counties.
- Between assessment years 2000 and 2017, the assessed value of all urban property in Iowa increased by 45 percent in real terms. Urban property that had been in TIF in 2000 increased in assessed valuation by 80 percent over the same period.

Economic Analysis of Tax Increment Financing in Iowa

- This study examined the relationship between TIF and economic activity in terms of jobs and wages among core-based statistical areas (CBSAs). These are counties or groups of counties that are socially and economically tied to an urban center through commuting. Statistical analyses found that the percent of urban property tax revenues diverted to TIF does not explain any of the employment and wage growth that occurred during the period 2002 through 2017, controlling

for other factors that can explain economic activity and the initial industrial mix of each CBSA.

- The study found a weak relationship between the degree to which TIF is concentrated in industrial property and growth in manufacturing jobs.
- This economic analysis is subject to important limitations and does not suggest that on an individual basis TIF cannot result in positive economic outcomes. Although they share similar purposes, the hundreds of TIFs in the state have been established to address unique local circumstances and objectives. This study does not assess whether particular projects have met the goals of their localities.

I. Introduction

Tax Increment Financing (TIF) is a practice whereby municipalities use anticipated increases in property tax revenues to finance improvements for public purposes. A method of paying for community improvements with future tax revenues, the practice is premised on the expectation that property valuations will increase as a result of such improvements. Iowa law permits cities and counties to designate TIF areas for the purposes of addressing slum or blight or promoting economic development. This evaluation study describes and analyzes the economic aspects of TIF with attention to their state-level policy implications.

Section II of this report provides background on TIF, including a description of the basic steps of the TIF process in Iowa and a brief history of this financing mechanism. Section III provides an overview of TIF laws throughout the country and how these vary among the 50 states. Section IV provides a review of existing literature concerning TIF, including reports of academic research as well as other published information pertaining to TIF, particularly in Iowa. Section V provides an overview of findings on TIF in Iowa, highlighting trends in TIF revenues and valuation. Section VI provides an analysis of the economic effects of TIF in the state. The final section of this report provides a brief discussion of conclusions.

II. Background of Urban Renewal and Tax Increment Financing

Many types of authorities levy property taxes in Iowa. Taxing authorities include counties, cities, school districts, townships, community college districts, hospital districts, fire protection districts, and sanitary sewer districts. Whereas the jurisdictions of authorities in the same category are mutually exclusive such that, for example, the jurisdiction of one county does not overlay that of another county, the jurisdictions of different kinds of authorities are not. Jurisdictions of different types of authorities, such as cities and counties or cities and school districts, overlap one another. Each geographical area that is subject to a unique set of taxing authorities constitutes a property tax district. There are nearly 14,000 such districts in Iowa.

In Iowa, a city or county can establish a TIF area in order to direct property tax revenue toward investments in one or more property tax districts where it has jurisdiction. Once a TIF area is established, subsequent increases in property value in the area are designated as the increment. Property tax revenues associated with the value of the increment, including taxes levied by other contributing jurisdictions, are diverted to the city or county that established the TIF. Certain levies, such as debt service levies, are exempt from being diverted in this way.

The purpose of TIF is to enable the city or county to incur debt in order to fund local infrastructure improvements. Such improvements, in turn, are expected to remedy blight or spur economic development that leads to increases in property value over time. In theory, such growth expands the tax base of all overlapping jurisdictions once the TIF

expires. The incurred debt is paid off over time using the taxes diverted to the special revenue fund of the tax authority that established the fund.

A. Basic Urban Renewal and TIF Process in Iowa[1]

The basic steps in the TIF process for urban renewal in Iowa are as follows:

1. A city or county identifies a project to encourage urban renewal and designates a specific geographic area as an urban renewal area. An urban renewal area encompasses one or more TIF areas, with each TIF area made up of each unique set of taxing jurisdictions within the urban renewal area and each TIF associated with a single urban renewal area. The city or county may issue bonds for the urban renewal project and use TIF revenues to finance this debt. In general, municipalities do not need the permission of other taxing authorities in order to establish a TIF.
2. A taxable valuation "base" is established for the TIF area. That base equals the valuation of the property in the base year, which is the year prior to the certification of the TIF area. The tax revenue from the base value continues to be allocated to the existing taxing authorities. Under certain circumstances (usually the impact of taxable value rollbacks), the base value can decline and even fall to zero, leaving the traditional taxing authorities with no revenue from the entire TIF area.
3. Any increase in taxable value above the base is termed the "increment". Revenues from property taxes on the increment are separated from revenues derived from the base and used for urban renewal purposes. The increment consists of any increases in taxable value over the base, including any increases due to revaluation of existing property, which occurs as a result of property value inflation, as well as the value of new construction. The TIF authority (a municipality or its urban renewal agency) may access the revenues generated from the increment value, but is not required to access the entire amount of revenues attributable to the increment value. The valuation on the portion of the increment associated with the accessed revenues is known as the "used increment."[2] Revenues from the unused increment revert to the other taxing authorities of the district.
4. Revenues from debt levies, the school Physical Plant and Equipment Levy (PPEL), and, for FY 2014 and after, the Instructional Support Levy (ISL) do not go to the TIF.
5. Funds used from urban renewal projects must be used for express, allowable purposes only. The revenues apportioned to TIF authorities may only be used to retire indebtedness, including local government general obligation bonds, TIF revenue bonds, and other indebtedness, such as bank loans or money owed to a

[1] Adapted from Iowa Legislative Services Agency "FY 2017 Annual Urban Renewal Report: Tax Increment Financing (TIF)." Available: https://www.legis.iowa.gov/tif/pdf/TIF_ANNUAL_REPORT_FY2017.pdf

[2] Throughout this report, except as noted or as apparent from context, the term "increment" is used to refer to the used increment; i.e., the portion of maximum incremental valuation associated with the revenues apportioned to TIF authorities.

separate fund of the local government itself. Allowable uses also include rebates for debt owed as part of development agreements between local governments and property owners.

6. Once designated, the geographic area of the TIF may be amended by the city or county.
7. Urban renewal areas created prior to 1995 and any area created on a finding of slum or blight are not required to expire. Since 1995, economic development areas are limited to 20 years duration, but only if they are not also designated slum or blighted.

In its declaration of policy concerning urban renewal, Iowa Code (2018, §403.2) recognizes two primary purposes for this financing mechanism; namely, to eliminate slum or blight and to promote economic development. With respect to areas of slum and blight, this declaration of policy notes that such areas consume disproportionate amounts of State revenues because of their eroded tax bases and because of the extra services required for police, fire protection, and other forms of public services and facilities. These costs serve as a motivation to dedicate public resources to address the blight. As for economic development, Iowa Code indicates that it can consist of a range of activities; these include investments to promote commercial and industrial enterprise, public improvements in support of housing, and the location and expansion of supporting services. The code's declaration of policy also indicates that such activities are necessary, in part, to address the continuing need for programs to alleviate and prevent conditions of unemployment.

TIF has a direct impact on the State General Fund through its interaction with the State School Foundation Aid formula which is the means by which the State equalizes the distribution of resources across school districts. Because the used increment is not included in a school district's tax base, revenues contributing the local property tax portion of the school finance obligation under the formula is lower as a result of TIF; in turn, the State General Fund portion of the funding burden is higher as a result.

B. Brief History of Urban Renewal and Tax Increment Financing in Iowa

Iowa Code Chapter 403 provides the statutory authority for TIF, which has been allowed in the state since 1969. Iowa law initially limited TIF to areas designated by cities as "slum" or "blighted." It was expanded in 1985 to allow TIF for economic development; i.e., in areas "designated by the local governing body as appropriate for commercial and industrial enterprises." During the 1990s, TIF was made available for use by counties in stages, which now possess the same TIF urban renewal authority as cities in the state.

The practice of TIF gained impetus nationally in the 1980s, spurred perhaps by the economic difficulties of the times. Swenson (2012) argues that TIF in Iowa expanded partly as a response to the farm debt crisis, the rural economic dislocations that ensued, and a decline in the state's traditional manufacturing sector. At the same time, federal support for roads, housing, and other infrastructure decreased. This led many states, Iowa among them, to broaden state and local economic development authorities (Johnson and Kriz, 2001; Swenson, 2012). TIF expanded in scope, becoming a source

of finance for such basic government expenditures as police and fire protection as well as providing support for economic development broadly defined (Johnson and Kriz, 2001). In Iowa, allowed purposes came to include activities to promote commercial and industrial enterprise, supporting services, and housing.

In 2012, with the passage of House File 2460, Iowa again updated its TIF law. In addition to establishing new reporting requirements for municipalities with TIF urban renewal areas, the legislation modified local procedures. For example, it required municipalities to consider alternative development options and placed conditions on TIF fund monies used for relocating businesses within a municipality.

Senate File 295, passed during the 2013 Iowa legislative session, made a number of changes to property tax that affected TIF, although somewhat indirectly. Among other provisions this legislation created the Business Property Tax Credit; reduced valuation growth limitation to three percent; introduced a property tax rollback for commercial, industrial, and railroad property and tax replacement; and created a multiresidential property classification. While these provisions do not directly affect administration of TIF, they do affect rates of property valuation growth, the process which underlies TIF. In particular, valuation growth for all multiresidential property, including such property in TIF increments, is slowed as a result of the legislation. Unlike commercial and industrial property, the limitation on allowable growth for multi-residential property is not backfilled by the State.

III. Tax Increment Financing Around the United States

The Council of Development Finance Agencies (CDFA) has periodically published summaries of TIF laws and policies among the states since at least 2008. Its most recent update, issued in 2015, is the primary source for the state-by-state information provided below. Information from other published sources, as noted, is also incorporated. While the comparative analysis of states' TIF laws and policies provided in the Iowa Department of Revenue's 2013 evaluation study of TIF remains broadly applicable, the CDFA notes that eleven states have made amendments to their TIF statutes since that time. The results of these changes are reflected in the analysis below.

<u>Types of Property Allowed</u>

Forty-nine states and the District of Columbia allow TIF. Only Arizona does not (see Table 1).[3] In 2011, however, California, which accounts for more TIF-funded debt than any other state, dissolved the redevelopment authorities in the state and prohibited local governments from issuing new TIF bonds for purposes of redevelopment (Luby and Moldogaziev, 2014). Use of TIF, however, remained allowable in California for more limited purposes, namely for financing infrastructure improvements (CDFA, 2015). In 2015, that state authorized expanded use of TIF by Community Revitalization and

[3] See: https://www.cdfa.net/cdfa/tifmap.nsf/search.html

Investment Authorities (California Association for Local Economic Development (CALED, 2017).[4]

As of 2018, three states (including CT, KS, and TX) restrict the use of TIF to either commercial property only (as in KS) or to commercial and industrial property (in CT and TX). The remaining 47 states (including the District of Columbia), Iowa among them, also allow TIF for residential or mixed-use property.

In sixteen states, including the District of Columbia, TIFs can be approved only by cities or by redevelopment authorities authorized by cities. (Cities include municipal entities such as townships, boroughs, and incorporated villages.) In the other 34 states that allow TIF, TIFs may be also approved by counties and, in some instances, school districts and community college districts.

Blight

The history of TIF is rooted in efforts to mitigate urban blight. Statutes in most states reference blight as either a prerequisite for the implementation of TIF or as one of various conditions under which it is allowed. This is true for at least 36 states, including Iowa which, as noted in Section I, allows TIF either where blight or slum conditions obtain or for purposes of economic development. As TIF has evolved, the importance of a finding of blight or similar conditions as a pre-requisite for TIF appears to have diminished somewhat among most states, such that it remains a sufficient but not always necessary condition. According to information published by the CDFA, blight appears to be a singular requirement in only three states: Alaska, Nevada, Tennessee. For 33 other states, blight is to a greater or lesser degree a consideration, albeit not a necessary condition for the implementation of TIF. In one state (Virginia) blight is reported as a factor in consideration, but TIF is allowable for development needs generally, regardless of blight. Moreover, it must be emphasized, the very definition of blight may vary by state, such that the distinctions on this point are not hard and fast. In the fourteen other states that allow TIF, including the District of Columbia, blight is not indicated as any kind of requirement for TIF.

"But For" Test

States sometimes require that TIFs meet some kind of "but for" test as part of approval procedures. With this prerequisite, the authorizing entity must find that improvements would not occur but for the existence of the TIF. According to the CDFA, states that do not have a requirement for blight typically impose a "but for" test.[5] Of the 36 states for which blight figures as some kind of TIF prerequisite, as noted above, only twelve require a "but for" test or offer it as an alternative to a blight requirement. However, of the 14 states (including the District of Columbia) in which blight is not a factor in the approval of TIFs, only three impose a "but for" requirement. These are the District of

[4] https://www.cacities.org/Resources-Documents/Policy-Advocacy-Section/Hot-Issues/New-Tax-Increment-Tools/CALED-TIF-Primer-3-17-FINAL.aspx

[5] "For states that do not list this as a requirement, potential TIF districts or projects typically have to pass a 'but for' test. This test requires that but for the TIF assistance, growth or development at the proposed level would not occur" (CDFA, 2015, p. 5).

Columbia, Vermont, and Washington. There are 15 states whose TIF approval procedures include a "but for" test that is applicable under at least some circumstances. These include four of the six states that border Iowa: Illinois, Minnesota, Missouri, and Nebraska. In none of these four states, however, does statutory law prescribe the means whereby municipalities shall make this determination.[6] Iowa does not impose this requirement except that when TIF is used to finance construction of public buildings the municipality must provide an analysis of alternative development and funding options and the reasons such options would be less feasible than the proposed urban renewal plan.

In 31 states, only property taxes are eligible TIF revenue sources while seven other states, including Iowa, limit TIF finances to revenues from property tax and sales tax. The other twelve states allow a broader mix of revenue sources to be captured by TIFs. Such other revenue sources include various types taxes and payments, many of which are not applicable in all states; these include, for example, business license taxes, economic activity tax, gross receipts tax, hotel tax, local payroll tax, and personal property tax.

General Obligation Bonds

Another way in which TIF laws vary from state to state is with respect to the manner in which states allow TIF projects to be financed. Among the considerations of most interest in this regard is whether local governments may issue general obligations bonds for the purpose. General obligation bonds, often called G.O. bonds, are secured by a municipality's pledge of its full faith and credit to repayment backed by unlimited taxing authority. Issuing G.O. bonds, municipalities are obligated to levy property tax if necessary to meet debt service requirements. Thirty-two states, including Iowa, allow TIF projects to be financed through issuance of G.O. bonds. Among these are all of the states that border Iowa except for South Dakota.

Along with G.O bonds, revenue bonds are the other basic type of municipal bonds. Revenue bonds are distinct from G.O bonds in that they provide a guarantee of repayment based solely on revenues generated from specified revenue-generating activity. Despite the technical distinction between G.O. bonds and revenue bonds, and the standing attached to G.O. bonds among credit-rating agencies and bond investors, in practice, municipalities face serious consequences for defaulting on revenue bonds and are typically strongly averse to the prospect. This is because municipalities, as with any borrower, face consequences for default, including reduction of credit-worthiness and higher costs of borrowing.

Eminent Domain

Under the principle of eminent domain, a government may condemn private property and take it for public use. Where the practice is allowed for TIF, municipalities may

[6] Citations for the relevant laws of neighboring states are provided in the references list. They include sections of the following: Economic Development Project Area Tax Increment Allocation Act of 1995 (Illinois); Establishing, Changing Plan, Annual Accounts (Minnesota); Plan; approval; findings (Nebraska); Real Property Tax Increment Allocation Redevelopment Act (Missouri).

claim eminent domain to condemn private property for the purposes of economic development. Laws of 38 states, including Iowa, allow authorities to employ eminent domain for TIF purposes.

Impact on School District Finances

Although it was conducted nearly two decades ago, work by Johnson and Kriz (2001) delineates another area of difference among states' TIF laws that remains highly relevant. As these authors note, because property taxes are so central to school district budgets, the potential impact of TIF on school district budgets is particularly keen. Johnson and Kriz identified fourteen states that, in one way or another, exclude overlapping school districts from TIF. Iowa is not among these states. In Iowa, incremental school district property taxes in a TIF area, except those associated with certain levies, are diverted to the TIF authority. In addition, Johnson and Kriz identified 21 states that restrict either the land area of TIF areas or the percentage of assessed value within municipalities that can be captured by TIF. Iowa law does not impose such limitations.

IV. Literature Review

Tax increment financing is the subject of a fairly extensive body of academic and professional literature. Interest in the topic as a subject of academic inquiry is fairly recent, having captured the attention of researchers around the turn of the millennium. This interest coincides with growth in the use of TIF across the country.

Early Research

An early collection by Johnson and Man provided an overview of TIF's basic aspects as well as a useful primer on its applications in practice, with particular focus on economic outcomes in various states (2001). In a separate review of research available to that time Man (2001) suggests that studies of TIF have generally found it to have a beneficial impact, citing in particular research suggesting that TIF programs stimulate increases in property values. Nevertheless, Man conceded that as TIF becomes more common and cities come to adopt it as a kind of defensive policy it can become less effective over time. Dye and Merriman (2006) are still more critical. Concerned with whether TIF in fact causes economic growth or whether it is merely associated with growth because it is implemented where growth would occur anyway, these authors found TIF areas in certain cities grew no more rapidly than non-TIF areas in other similar cities. Moreover, they suggest that growth in TIF areas often results from the transfer of value, industry, or commercial enterprise, etc. from one part of an economic region to another, such that TIF-related growth comes at the expense of those other areas. Of particular note for the present study, Dye and Merriman also found that land use and the mix of property within a TIF also matter to the prospects of its net economic impact. For example, they found that commercial development within a TIF area can particularly hinder commercial property value growth in the non-TIF areas of the same communities. These findings largely comport with at least one study with a focus on Iowa. Subramanian (2005), in a study of TIF in Polk County, found that TIF areas have

a positive influence on property values when they encompass both commercial and industrial property rather than only residential property.

Studies by Swenson and Eathington (2002a and 2002b) addressed the extent to which TIF areas in Iowa promote economic growth more generally. Summarizing their findings, these authors write that they include "virtually no statistically meaningful economic, fiscal, and social correlates" with TIF (2002b, p. 1). In a later review, Swenson (2012) reported no significant correlation between, on the one hand, TIF activity in Iowa and, on the other, either area-wide job growth or population growth. However, the authors did find slight correlation between TIF effort in the state and manufacturing job growth, slight correlation between TIF and per capita property taxes in non-benefited areas, as well as evidence of inter-community competition.

Research Since the Iowa Department of Revenue's 2013 Evaluation Study of TIF

Among the themes in the literature on TIF is concern with the impact of the use of TIF on various key metrics, including tax rates, property valuation, and conventional measures of economic conditions such as number of businesses, employment, and sales tax revenue. Hicks, Faulk, and Quirin (2015) assess the effects of TIF in Indiana during a period that, like other research reviewed here, includes the years of the Great Recession. However, unlike other research reviewed here, these authors are not concerned with the impact of the Great Recession, per se. These authors used a spatial panel model to test for spatial interactions and spillover effects of TIF. In the first stage of their research strategy, the authors found that larger TIF districts are associated with higher effective tax rates in other areas within the same counties. In addition to impact on tax rates, these authors were concerned with estimating the net effect of TIF districts on assessed valuations. They found that while TIFs are linked to positive, but small, growth in property values, TIFs were also found to have uniformly negative impacts on other measures of economic development, including employment, number of businesses, and sales tax revenue.

Fullerton (2017) reports on a quasi-experimental study that evaluated growth in the assessed value of parcels in TIF districts in Jackson County, Missouri, a county which comprises a large portion of the Kansas City metropolitan area. Fullerton compared the valuation growth of TIF districts to that of non-TIF districts in the county and found that TIF significantly and positively affected such growth. Valuations in TIF districts increased more rapidly than valuations outside of TIF areas. This effect held true within property types; for example, valuations of residential, commercial, office, or retail property in TIF districts grew more rapidly than the same type of property not located in TIF districts.

In addition to TIF's effects on measures of economic development, such as jobs, property values, and tax rates, research has been concerned with what might be conceived as TIF's externalities. Perhaps no other questions have more captivated researchers, policymakers, and taxpayers than those around TIF's impact on schools. Bruno and Quesada (2011) point out that , in Chicago at least, a city with a great deal of TIF, public discourse around TIF has focused on schools. Bossard (2011) reviewed

data from Minnesota to estimate the relationship between property valuation growth in school districts and TIF intensity. Employing the school district as the unit of analysis, Bossard found that, during the period 1992 through 2007, Minnesota school districts benefitted from higher revenue as a result of TIF in areas of low TIF intensity but that school districts in areas of high TIF intensity received lower revenues. The author termed this "negative spillover" from TIF (p. 76). Bossard found that most school districts in Minnesota have benefitted from positive spillovers. However, specifying the optimal level of TIF intensity as the level at which the TIF valuation in the school district maximizes the positive revenue effect, the author notes that the optimal level of TIF intensity steadily declined over the years under study. This suggests that TIF's ability to result in positive spillover had reached a point of diminishing returns.

Education Expenditures

This line of research is implicitly concerned with TIF's impact on school expenditures per pupil. That is, Bossard suggests that positive spillovers lead to an increase in per pupil expenditures, other things being equal, while negative spillovers do the opposite. Although, as Nguyen-Hoang (2014) notes, TIF research typically concerns its impact on educational *revenues* rather than *expenditures,* the work by Bossard and by Nguyen-Hoang are notable exceptions. Both researchers found greater TIF intensity to be linked to lower educational spending. Nguyen-Hoang contends this association is nonlinear such that TIF's negative impact on educational expenditures is stronger for lower-wealth districts; and, even though long-run returns are the primary justification for TIF in the first place, Nguyen-Hoang found that education expenditures do not rebound once TIF districts expire.

TIF and Jobs

Byrne (2010) evaluated the relationship between TIF and jobs using employment data from the Illinois Department of Employment Security, local property tax rates, and information about TIF districts in that state. Byrne's analysis concerned a period of twenty years and, importantly, assessed employment growth on a city-wide basis; that is whether TIF brings about net employment growth for the city at large or whether its effects reflect employment relocating from one part of a city to another. In this regard, the study partly concerned the relevance of a TIF's purpose; for example, intended for industrial development, housing, commercial business, retail, or other purposes. It found that TIFs' impact on employment did indeed vary by type of TIF. This is an important contribution of Byrne's research and particularly relevant to the economic analysis undertaken in the present study. Byrne found that TIFs whose purpose is to promote retail development are more likely to merely shift local spending to the TIF district from elsewhere within in the city. In contrast, industrialized TIF districts, because they are less likely to attract businesses that compete with other local businesses, are less likely to shift employment. Byrne concludes that TIF use has no general impact on employment. Rather, when disaggregated by purpose, TIF employed for industrial development is associated with a positive impact on net employment and TIFs intended to promote retail development are more likely to have a negative impact.

A study by Girardi (2013) assessed the effect of TIF on employment and wages on a county-wide basis during the decade 2002 through 2012 controlling for factors that can explain economic activity including the industrial mix of each county. As with Byrne, this study sought to account for the prospect of TIF activity displacing activity from elsewhere in the same economic region. Girardi found that the percentage of tax revenues diverted to TIF did not explain employment and wage growth measurable at the county level

Lester (2014) was also concerned with the impact of TIF-funded investments on economic development, in this case conceived of in terms of employment, business creation, and building permits. Lester reviewed a time series panel of these three data points using U.S. Census block groups in Chicago as the unit of analysis, suggesting that block groups provide both sufficiently fine-grained spatial resolution yet allow for analysis of certain socioeconomic control variables available for block groups. The work employed difference-in-differences estimates to compare changes in these variables for a set of TIF areas relative to those experienced by a control group. It was principally concerned with two key questions around TIF in Chicago; one, whether the TIF areas in that city passed the "but for" test or, namely, whether economic growth that occurred within TIFs would have occurred without TIF; and, two, whether TIF stimulated private investment in distressed areas. As to the latter, Lester states plainly, "The argument that TIF designation per se sends a signal to the private real estate market and acts as a catalyst for redevelopment activity is […] soundly rejected" (p. 667). With respect to the former, Lester's findings are similarly clear-cut; although TIF areas demonstrate economic growth, the pace of this activity was comparable to that in other areas of the city that did not benefit from TIF assistance.

Impact of the Great Recession on TIF

Since the publication of the IDR's previous evaluation study of TIF (Girardi, 2013), a number of researchers have availed themselves of data concerning the Great Recession of late 2008 through early 2010 and sought to understand the impact of this watershed period on TIF activity, the passage of time providing the vantage point to assess the impact of the Great Recession on the composition and extent of TIF usage. These impacts are relevant inasmuch as TIF is fundamentally related to property values and the Great Recession was precipitated by a crisis in the housing sector and related financial sectors. As Dye, Merriman, and Goulde (2014) point out, "The Great Recession was accompanied by a large decline in real estate values. Tax increment financing (TIF) allocates future property tax growth to promote local real estate development and is thus particularly vulnerable to real estate market shocks" (p. 697).

Luby and Moldogaziev (2014) analyzed a national dataset concerning municipal bond issuances for TIF during the period 2000 to 2013, with attention to the impact of the Great Recession on the structure and scope of TIF debt securities. These authors were concerned with the size of bond issuances, lengths to maturity, coupon interest rates, and whether local governments sold TIF debt as either revenue bonds, with repayment secured by incremental tax revenues, or as general obligation bonds, which are backed by the full faith and credit of the taxing body. These authors found that the Great

Recession caused a decline in total overall sale of TIF debt and a decline in the relative share of TIF debt for economic development purposes. In short, as property values dropped and in some places collapsed, TIF activity likewise fell off. They found less TIF investment reflected in decreases in both the overall volume of TIF debt issuances as well as in average bond sizes. In addition, reflecting greater risk aversion among investors, they found a decrease in bond maturities and increased interest rates (despite actions of the Federal Reserve Bank which served to hold down interest rates in the broader economy) as investors sought a greater payoff to increased risk. Unlike others who remark on these effects (e.g., Layton, 2016) Luby and Moldogaziev employ statistical techniques, including chi-squared tests, to determine that the difference in TIF activity before and after the Great Recession is in fact likely due to the Great Recession rather than to chance alone or to other factors.

Dye, Merriman, and Goulde (2014) assessed the impact of the Great Recession on TIF valuation, i.e., TIF increments. Dye et al. examined data from Illinois and Nebraska with attention to average growth rates by year, particularly how growth rates may have been affected by the Great Recession, and attention to whether growth rates varied for districts of different sizes. They found high growth rates pre-Recession and low growth rates post-Recession in both Nebraska and Illinois, with the drop in rates sharper for Illinois.

Summary of TIF Research

As with any other policy tool, research on TIF is primarily concerned with its efficacy in achieving its purposes. Because TIF is fundamentally a property tax tool, the most direct evidence of TIF's efficacy is to be found in its impact on property valuation and tax rates. In some sense, however, TIF's ultimate purpose is economic development, including the elimination of blight. Research is thus also concerned with TIF's effectiveness in achieving these purposes as measured, for example, by its impact on jobs, businesses, sales tax revenues, and similar measures. In general, the empirical research discussed here, including work from a variety of peer-reviewed sources, suggests that TIF has a small impact on valuations and rates but virtually no impact, or in some cases a negative impact, on measures of economic development.

V. Findings about Tax Increment Financing in Iowa

A. Findings Overview

Because TIF provides a fundamentally local tool to address fundamentally local concerns, an analysis of TIF from a state-level perspective is perhaps unavoidably general and lacking in detail. Nevertheless, TIF is enabled by State law and constitutes state-level policy and, for this reason, it is meaningful to approach the assessment of TIF from a state-level perspective. The findings described in this section of the report relate to TIF valuation and revenues. The subsequent section, Section VI, provides an analysis of the economic effects of TIF.

The use of TIF in Iowa has expanded markedly in the nearly two decades since 2000, the earliest year for which complete valuation, rate, and revenue data by taxing district has been compiled for this study. Between AY 2000 and AY 2017, the number of TIF urban renewal areas (URAs) where incremental valuation is greater than zero increased by 59 percent, from a count of 1,125 to 1,787 (see Table 2). During the same period, the amount of taxable value in used TIF increments has increased by a multiple of more than two and a half, accounting for $341 million in property tax revenues in FY 2019. (FY 2019 revenues are based on 2017 assessments. FY 2019 revenues reported in this study are budgeted amounts.) Although total property tax revenues in Iowa have also increased, they have increased more slowly than revenues diverted to TIF. During the period between assessment years 2000 and 2017, total property tax revenues increased by 40.6 percent in real terms whereas revenues to TIF increments increased by more than twice this rate, at 84.0 percent. During the nearly four decades between AY 1980 and AY 2017, total property tax revenues increased, in inflation-adjusted terms, from $4.4 billion to $5.9 billion; meanwhile, revenues diverted to TIF increased from just $2.8 million to $349.4 million (see Figure 1).[7] As a share of total property tax revenues, revenues diverted to TIF increased from 0.1 percent to 5.9 percent.

TIF affects most classes of property but commercial property accounts for more than half of TIF incremental valuation and residential property accounts for about a quarter. In 2017, 53 percent of property comprising TIF areas in Iowa was commercial property, 25 percent was residential, and 19 percent was industrial (see Figure 2). Multi-residential property, a new property class as of 2015, and agricultural land and buildings together accounted for less than 4 percent.

The percent of total taxable value used in TIF increments varies markedly by property classification (see Figure 3). While TIF incremental valuation accounted for less than nine percent of total taxable value in 2017, incremental valuation of industrial property accounted for a quarter of all industrial property in the state; incremental valuation of property classed as commercial accounted for 18 percent of commercial property.

Of the 1,787 urban renewal areas in existence in 2017, half have a base year of 2005 or earlier; thus half of existing urban renewal areas have been established since 2006 (see Table 3). Urban renewal areas established after 1995, except those based on a finding of slum or blight, are required to expire within 20 years; 393 of the state's current URAs have a base year of 1994 or prior. In 2017, the total frozen base valuation of TIF urban renewal areas was $10.6 billion and the used incremental valuation of those same areas was $11.4 billion. The revenues estimated to flow to TIF projects in FY 2019, the tax year associated with the 2017 assessment year, was $341 million.

As noted above, TIF areas in Iowa that were established after 1995, except those based on a finding of slum or blight, are required to expire within twenty years. The first cohort

[7] For this study, the author has compiled valuation, rate, and revenue data from the Iowa Department of Management's Property Valuation System by taxing district for years since 2000 only. For aggregate revenues diverted to TIF by for years 1980 through 1999, the author has made use of data published by the Iowa Legislative Services Agency (LSA).

of TIFs subject to this twenty-year limit reached it in 2016; with each year moving forward, successive cohorts of TIFs will do likewise. The present study does not assess the effects of this sunsetting of cohorts of TIFs. However, as more data becomes available, the nature and scope of these impacts such as on revenues and rates will merit investigation.

B. TIF Revenues

The principal function of TIF is to capture revenues from the increment in order to fund improvements in the district. This arrangement necessitates both a sponsoring jurisdiction (an entity that activates a TIF area, such as a city or county) and a contributing jurisdiction (taxing jurisdictions covered by the TIF area). Because all contributing jurisdictions contribute taxes to the used increment revenue stream but only the sponsoring jurisdictions have access to the revenue, TIF, by definition, diverts a portion of revenues from one taxing jurisdiction to another. The rationale for this system is that it obliges contributing jurisdictions to share the costs of the economic development from which they will also ultimately benefit.

The diversion of revenues from school districts is of particular note for at least two reasons. For one, school districts can overlap city and even county boundaries and, because of this, TIF-financed urban renewal efforts in a given city can be partly supported by nonresidents; that is, by school district taxpayers who are nonresidents of the city or county in which the TIF is located. Also, because only cities and counties can authorize TIF urban renewal areas, school districts are subject to TIF practices over which they can have little control.

Secondly, the Iowa school finance formula funds education principally on a per pupil basis and, under the formula, education costs are shared by local and State General Fund taxpayers; because the primary levies used to meet these per pupil costs are applicable only to non-TIF valuation, revenues diverted to TIF amount to a shift of tax burden. That is, because school districts must meet most per pupil educational costs with only non-TIF valuation, foregone school levies on the TIF increment must be made up in the form of higher rates on non-TIF valuation. The total tax shift for school districts can thus be calculated as applicable school levies on the TIF increment.[8] These school district levies on TIF valuation are shifted partly to State taxpayers by means of the State Foundation Aid formula, whereby the State General Fund reimburses school districts for the amount of Uniform Levy revenues that are lost to TIF; this equates to the first $5.40 of the school district levy on the used increment. While total tax shift equates to each district's Operating and Management levies on increment valuation, and that component of this total that is backfilled by the Uniform Levy constitutes a shift to General Fund taxpayers, the remainder falls to school district taxpayers. The tax shift

[8] The Operating Levy and Management Levy are the only two classes of school levy to which TIF is applicable. However, the Instructional Support Levies (ISL), which is a component of the Operating Levy, became exempt from TIF effective FY 2014. The Operating and Management Levies are the primary sources for funding for school districts in the state. Excluding the ISL, the Operating and Management Levies combined account for 80 percent of school districts' total levies. Other categories of levy, which are exempt from TIF, include the Physical Plant and Equipment levy (PPEL), and debt service levies.

calculated in this way does not account for other property tax revenues lost by school districts as a result of TIF[9]

Tax revenue diversion to TIF affects most of Iowa's school districts. Of the 330 school districts in Iowa in 2017, 258 had some share of property valuation in a used TIF increment (see Table 4). Although those 72 school districts that did not include a TIF represented more than one fifth of the state's school districts, they accounted for just eight percent of the state's total taxable property valuation; that is, school districts without TIF are much smaller, on average, than those that have property valuation in a TIF increment. These districts without TIF had average taxable valuation of $202.6 million. This compares to $638.3 million in average taxable valuation among school districts with TIFs which, combined, accounted for $164.7 billion of the state's $179.3 billion in taxable valuation.

Altogether, $11.4 billion of total school district valuation in the state was in used TIF increments, resulting in a total diversion of school district revenues of $130.6 million. This diversion of revenue has doubled from $64.8 million in 2001 but remains a small share of statewide total property tax revenues collected by school districts (see Figure 4). Of the total diversion associated with 2017 assessments, $61.6 million was shifted to State taxpayers through the State Foundation Aid Formula.

The amount of property in used TIF increments, and thus the amount of revenues diverted by TIF, varies markedly by school district (see Figure 5). While, as noted above, some 258 Iowa school districts had some level of valuation in TIF during AY 2017, incremental valuation represented no more than one percent of total valuation for 45 of these districts and no more than two percent in another 41 districts. On the other hand, TIF represented ten percent or more of taxable valuation for 46 districts, including ten that had more than twenty percent of valuation in TIF. In two Iowa school districts, TIF accounted for 37 percent of taxable valuation.

The costs of TIF in terms of the diversion of school revenues are somewhat concentrated among comparatively few districts. Ranked in terms of the percentage of used incremental valuation contained in the district, the highest fifth, or quintile, of school districts accounted for 64 percent ($7.3 billion of $11.4 billion) of all school district valuation in used TIF increments (see Table 5). The top two quintiles accounted for 94 percent of district valuation in TIF and an equivalent percentage of the total revenues diverted by TIF.

C. TIF Valuation

Iowa law grants cities and counties the power to divert revenues of other jurisdictions by means of TIF because of its potential to yield improvements and increase valuation. TIF is intended to expand the tax base, increase revenues, and, in the long run, lower tax rates. The most crucial question for any policy tool is, "Does it achieve its objectives?"

[9] Revenues lost by school districts as a result of TIF includes revenues from the Library and Playground levies on TIF valuation and any ISL and PPEL revenue generated on TIF valuations that is needed to make principal and interest payments on certain bonded TIF indebtedness.

For TIF this means, specifically, whether and to what extent it leads to valuation increases that would not have otherwise occurred.

An analysis of trends in TIF valuation must account for its unique feature whereby its valuation from year to year may fluctuate contingent on budget needs. The value of the increment technically equates only to that portion of its maximum value that is used for revenue in any given budget year; i.e., the used increment. In order to meet repayment obligations on outstanding TIF debt in a given budget year, an authority may require less TIF revenue than is available from the total taxable valuation of the increment; i.e., the maximum increment. Thus the valuation of a TIF increment can vary from year to year without a commensurate change in the value of the underlying property. Revenues associated with any unused portion of the increment in any budget year are not diverted to the TIF authority but revert to the jurisdictions represented in the base.

The amount of property an authority has designated for TIF can vary markedly from the amount of TIF valuation it uses in any given budget year. Considered on a county-by-county basis, there are some counties in which comparatively large percentages of property have been designated for TIF but in which only a small share of TIF valuation is used. For example, in AY 2017, the maximum increment represented more than 30 percent of total valuation in four Iowa counties; however, in two of these counties the value of the used increment represented 3 percent or less of the maximum increment. Statewide, 14.7 percent of taxable value is in TIF maximum increments and 6.5 percent is in the used increment. On average among counties, 11 percent of taxable value within each county is included in the maximum increment while only 5 percent of taxable value is in the used increment. These metrics represent a slight decrease since 2012 when they were 14 percent and 7 percent, respectively. Notwithstanding year to year fluctuations, the used increment as a share of the maximum increment can vary markedly from municipality to municipality. In AY 2017 (on which revenues for FY 2019 are based), there were five counties in which the maximum available increment of all TIF areas in the county combined was used for revenues (see Table 6A). In another eight counties, on the other hand, the used increment represented less than 10 percent of the available increment in all TIF areas. Statewide, 44.6 percent of the available increment was used; on average, by county, 50.6 percent of the available increment was used. In this report, except as otherwise noted or as apparent from context, the term “increment” is used to refer to the used increment.

In Section VI, certain information about TIF valuations and revenues is further aggregated by Core-based statistical area, or CBSA, for purposes of the economic analysis discussed in that section. By way of background for that analysis, valuation information aggregated by CBSA is provided here. CBSAs are defined by the U.S. Office of Management of Budget based on population clusters established by the U.S. Census Bureau. They consist of one or more entire counties. The term “CBSA” encompasses both metropolitan and micropolitan statistical areas, with metropolitan areas centered on clusters of at least 50,000 people and micropolitan areas centered on clusters of between 10,000 and 50,000 people. While micropolitan cities are smaller than those that anchor metropolitan areas under this schema, they nevertheless draw

workers, consumers, and economic activity from a wide area. There are nine metropolitan and 17 micropolitan areas in Iowa; collectively, CBSAs comprise 40 of the state's 99 counties. (See Appendix 1 for a map of CBSAs and a list of counties in each. Note that the analysis here does not include any data for counties outside of Iowa.)

Aggregating the foregoing county-level data by CBSA indicates that in AY 2017, at least 90 percent of the available increment was used for revenues in four of the 26 CBSAs in the state (see Table 6B). Meanwhile, there were four CBSAs in which the used increment represented less than 20 percent of the available increment, including one CBSA in which it was less than ten percent. In metropolitan statistical areas only, on average 44.2 percent of the maximum increment was used; for micropolitan statistical areas, which are those CBSAs centered on lower-population cores, the average was only slightly lower at 41.2 percent.

Most TIF increment valuation is in urban property; i.e., property within city limits. In AY 2017, TIF valuation in urban property was $9.8 billion, a quantity representing 9.1 percent of urban valuation (see Table 7A). The amount of TIF valuation in rural property is much smaller, although not trivial. In AY 2017, $1.6 billion, or 13.7 percent of the state's TIF increment valuation, was in rural property. By county, the median percentage of urban property valuation in TIF was 6.2 percent; the median percentage of rural property valuation in TIF was 0.1 percent. There were 61 Iowa counties in which urban property valuation in TIF represented 5 percent or more of total urban taxable valuation but only 14 counties in which rural property valuation in TIF represents accounts for 5 percent or more of total rural taxable valuation.

By CBSA, the median percentage of urban property valuation in TIF was 7.4 percent and the median percentage of rural property valuation in TIF was 0.1 percent. Of the state's 26 CBSAs there were seven in which the percentage of urban property valuation in TIF exceeded 10 percent (see Table 7B). This was true of rural property in one CBSA (Mason City). However, rural valuation in TIF averaged just 1.4 percent of total rural property among all CBSAs. On average among metropolitan statistical areas only, 9.4 percent of urban property was in TIF increments and TIF maximum increments represented 21.5 percent of all urban property. In this regard, on average, metropolitan and micropolitan statistical areas differ very little; these values for micropolitan statistical areas were, respectively, 7.6 percent and 20.6 percent.

As of 2017, TIF areas were located in 95 of Iowa's 99 counties (see Table 8A); that is, every county except Decatur, Monroe, Van Buren, and Wayne. During the nearly two decades between 2000 and 2017, the total net taxable value of property increased in all counties; meanwhile, TIF increment valuation actually dropped in 32 counties. The average net taxable value in TIF increments was 7 percent. TIF valuation amounted to less than one percent of net taxable value in 14 counties but ten percent or more in ten counties.[10]

[10] For this statistic, total net taxable value includes all classes of rural and urban property.

Annual snapshots of the same valuation data for 2000 and 2017 for CBSAs show that TIF increment valuations in metropolitan statistical areas increased by 166.0 percent over the period; growth for micropolitan statistical areas overall was 71.5 percent (see Table 8B). Among metropolitan statistical areas, TIF valuation growth ranged from 44.8 percent, in the Sioux City area, to ten times this rate, or 447.3 percent, in Dubuque. Percentage growth was as high as 1,100 percent among the micropolitan statistical areas, although this level of growth occurred in Storm Lake, which had TIF valuation of only $2.1 million in 2000. Growth was negative in five micropolitan statistical areas.

Between assessment years 2000 and 2017, the assessed value of all property in Iowa increased 53 percent in real terms (see Figure 6). While this impressive level of growth is partly attributable to historic increases in agricultural land, urban property, which excludes most agricultural land, grew by nearly as much over the period; assessed valuation of urban property increased by 45 percent between 2000 and 2017 and, growth for urban property excluding property in TIF areas was nearly as strong, at 44 percent. Meanwhile, urban TIF (including both bases and increments) increased in assessed valuation by 80 percent. In other words, in terms of valuation, urban property in TIF increased at a pace nearly twice as great as the rate of urban property as a whole during the period. Note, however, that these measures do not account for changes in valuation as a result of the TIF process itself; that is, measured growth in TIF valuation partly reflects increases in the amount of property designated as TIF and measured growth in non-TIF property is likewise attenuated for the same reason. Meanwhile, these changes are partly offset by the value of property in TIFs that expired during the period.

Overall change in valuation of all categories of property varies by county (see Figure 7A). Between assessment years 2000 and 2017, the assessed value of all property increased, in inflation-adjusted terms, by just 12 percent in Jasper County, which experienced the least valuation growth, and by 203 percent in Dallas County, which experienced the greatest. Altogether, four counties experienced growth on this metric of more than 100 percent. The median percentage increase during the period was 51 percent.

Considering the same data aggregated for CBSAs presents a similar picture, with percentage growth ranging quite widely (see Figure 7B). The assessed value of all property increased in real terms by just between 10 and 15 percent in two CBSAs but by more than 100 percent in another. Property valuation growth was between 25 and 50 percent in fifteen of the state's 26 CBSAs. It was greater than 50 percent in another six.

For urban property, defined as all property within cities, real changes in assessed values during the period were even more varied. For this property, the county median percentage increase was 21 percent. In 6 counties, assessed valuation of city property actually decreased in real terms during the period (see Figure 8A). For others, it increased dramatically; in two counties the assessed value of city property increased by more than 100 percent.

Aggregated by CBSA, growth in urban property valuation during the period was negative for three areas (see Figure 8B). Including these, urban property value increased by less than 25 percent in half of the state's 26 CBSAs. Growth was greater than 50 percent in eleven.

Valuation growth of urban property in TIFs by county (including both bases and increments and only those TIF areas that existed throughout the period) was likewise wide-ranging.[11] In 27 counties, the aggregate value of city property in TIFs decreased; meanwhile, in ten counties, it increased by more than 100 percent (see Figure 9A). Among the 89 counties with urban valuation in TIFs throughout the period between 2000 and 2017, median growth in assessed valuations for this property was 15 percent.

Of the 25 CBSAs that had urban property in TIF in both 2000 and 2017, there were five in which the value of city property in TIFs decreased (see Figure 9B). CBSAs diverge fairly markedly on this measure; more than half of the CBSAs, or 14 of the 25, experienced growth in urban TIF valuation between 2000 and 2017 of less than 20 percent; eight had growth of between 25 and 55 percent and, for the remaining three, urban TIF valuation grew by more than 100 percent over the period.

VI. Economic Analysis of Tax Increment Financing in Iowa

In addition to descriptions of revenues and valuation, this evaluation study provides an economic analysis of TIF in Iowa, seeking to assess the extent to which TIF contributes to economic development in local economies. While this analysis makes use of the same overall approach as that employed for the Department of Revenue's 2013 evaluation study of TIF, the present study enjoys advantages over the prior study and incorporates certain changes.

One superior aspect of the present study is that it concerns economic growth over a longer period. Whereas the 2013 evaluation study evaluated economic growth over a period of ten years, the present study makes use of an additional five years of data, just as communities in Iowa have had an additional five years for measurable economic growth to have occurred. Additionally, with respect to timing, as the prior study concerned economic growth over the ten years ending in 2012, the present study is further removed from the Great Recession. Lasting, technically, from late 2008 through early 2010, the Great Recession doubtless slowed growth in jobs and wages for much of the latter half of the period under consideration in that earlier study. The present study also employs a slightly different set of metrics as independent variables in its statistical analyses, discussed below.

[11] The data presented in Figures 9A and 9B, which concerns valuation growth between 2000 and 2017 for urban TIF property, excludes property that became part of a TIF between 2000 and 2017 and excludes any property that was part of a TIF in 2000 but was no longer part of a TIF after 2000. It concerns both TIF bases and increments.

In determining whether economic development efforts promote economic activity, researchers must be careful to distinguish between activity that represents a true net gain to a local economy and that which simply reflects a shift from elsewhere within it. Economic analysis, in other words, must somehow account for the possibility that incentives can relocate rather than create investment. As Peters and Fisher (2004) point out, for an incentive to benefit a local economy as a whole, the benefits to the community gaining jobs must exceed the losses experienced by other communities in the same local economy. To address this methodological concern, the 2013 study analyzed data on a county-by-county basis. The present study employs the Core-based statistical area (CBSA) as the unit of analysis. CBSAs, by definition, are counties or groups of counties that are socially and economically tied to an urban center through commuting. CBSAs are thus eminently suited to demarcating local economies. In addition, because they consist of one or more entire counties, CBSAs are easily adapted to an analysis using data aggregated by county.

As noted above, CBSAs comprise 40 of the state's 99 counties. Data pertaining to the other 59 counties in Iowa is not explicitly evaluated in this analysis. The 40 counties that are part of CBSAs accounted for 86.4 percent of urban TIF valuation in AY 2017 and 81.4 percent of jobs in Iowa in that year.[12]

In assessing economic growth in Iowa CBSAs, it must be recognized that CBSAs contain certain acknowledged ingredients of growth to greater or lesser degrees. For example, some CBSAs contain greater levels of employment in high-growth industries, more human capital, or superior existing infrastructure. While, in themselves, these are neither necessary nor sufficient for every conceivable form of new investment, CBSAs where such components of growth already exist are better positioned for investment than those areas in which they are comparatively lacking. In order to assess the link between TIF and economic activity, research design must control for such variation by accounting for the likelihood that CBSAs with key advantages will experience greater job and wage growth over time. Such an approach recognizes that where TIF projects do more than relocate economic activity within a local economy, they produce net gains in economic activity that are measurable at the CBSA level.

This analysis estimates the relationship between, on one hand, the percentage of property tax revenues diverted to TIF, and on the other, growth in employment and wages in the CBSA. It is concerned with growth over a period of fifteen years. Because TIF is largely concentrated in urban property, i.e., property within cities, and because the proportion of urban property varies widely for CBSAs, CBSAs are analyzed in terms of the percentage of urban property tax revenues diverted to TIF. The first step of the analysis is thus to estimate the percentage of total revenues from urban taxing districts in each CBSA diverted by TIF during the period of analysis, which corresponds to assessment years 2000 through 2015. This value serves as a proxy for the amount of investment to promote economic activity in urban areas within the CBSA as a result of tax increment financing.

[12] This information can be calculated from data provided in Tables 7B and 10.

Because it is not possible to observe economic outcomes for a given CBSA both in the presence of and in the absence of TIF, it is not possible to establish whether the economic activity that ensues in a CBSA after a TIF is the direct result of the TIF. Instead, the present economic analysis offers evidence on whether different levels of economic growth measured at the CBSA level can be explained in part by different levels of the use of TIF within each CBSA, controlling for other aspects of the local economy.

Economic growth for the period is evaluated in terms of the change in the number of people employed and the change in aggregate wages for each CBSA. For both jobs and wages, actual growth is considered in terms of the percentage difference between 2002 and 2017 levels. In addition, both measures are specified in terms of the relationship between actual growth and a standardized growth estimate. For this study, these relationships are expressed as the rate of growth above or below standardized growth; for example, the rate of employment growth above standardized growth for a CBSA is calculated as the actual growth in the number of jobs minus the standardized growth estimate for the number of jobs in the CBSA during the period and expressed as a percentage of 2002 employment. That is, the rate of employment growth above standardized growth represents the extent to which growth in the number of jobs in the CBSA outpaced the standardized growth estimate for employment in that CBSA over the period. Likewise, the rate of wage growth above standardized growth reflects the extent to which actual growth in aggregate wages exceeded the standardized growth estimate for aggregate wages during the period, expressed as a percentage of 2002 aggregate wages.

Rather than presuming that economic growth in Iowa's less economically dynamic regions should match the growth of their higher-performing counterparts, this design provides a means by which growth in each CBSA is assessed on its own terms. The percentage serves as a single number that expresses growth in economic activity at the CBSA level in a way that accounts for the unique mix of industry in each CBSA at the start of the period. This technique adapts a conventional shift-share approach to economic analysis and provides a well-tested method for meaningful comparisons of economic growth (see, for example, McDonough and Sihag, 1991). The approach is apt because it controls for the confounding effects on economic activity of both geographic area and industry mix in accounting for the effects of TIF revenues (Barff and Knight, 1988). It must be emphasized that this methodology is indifferent to each CBSA's economic growth relative to statewide growth *per se*. In no way does this methodology presume that economic growth at the CBSA level must exceed statewide levels of growth for any beneficial impact of TIF revenues to be measurable. On the contrary, this methodology is appropriate precisely because it controls for each CBSA's unique predisposition towards economic growth.

Data for measures of employment and wages was obtained from the United States Department of Labor's Bureau of Labor Statistics (BLS) for each county and aggregated by CBSA. BLS data was assembled on the number of people employed and annual average pay in each of the following industrial sectors for years 2002 through 2017:

- Manufacturing
- Retail Trade
- Financial Activities
- Professional and Business Services
- Education and Health Services
- Leisure and Hospitality
- All Other

This classification includes all private sector employment; non-specified industries are aggregated in the “all other” group. To calculate aggregate wages by CBSA, the number of people employed in each sector was multiplied by the average annual pay for that sector and summed across sectors. Employment and wage growth vary by industrial sector across the state and within each CBSA. Again, including changes in employment and wages by sector provides a means of accounting for the make-up of local economies.

For the period of fiscal years 2002 through 2017, the median percentage, by CBSA, of urban property tax revenues diverted to TIF was 6.2 percent. That is, in 13 of the 26 CBSAs in Iowa, the percentage of total property taxes of urban districts that was diverted to TIF aggregated over the past 18 years was greater than 6.2 percent, and in the 13 other CBSAs it was less than 6.2 percent. At least ten percent of urban district property tax revenues were diverted to TIF in six Iowa CBSAs, including three metropolitan statistical areas and three micropolitan statistical areas. The percentage of property taxes in urban taxing districts diverted to TIF by CBSA varies from 2.7 percent to 15.8 percent (see Figure 10). This level of variation provides a suitable basis for comparison among CBSAs.

In 2002, there were 1.19 million people employed in the private sector in Iowa. This number grew to 1.30 million in 2017, an increase of 9.7 percent. During the fifteen years between 2002 and 2017, despite overall growth in employment, Iowa experienced a 5.3 percent decrease in manufacturing jobs and 0.4 percent decrease in the number of retail jobs. Meanwhile, the state added jobs in other sectors, most notably in professional and business services, education and health, and financial activities (see Table 9). Since each CBSA hosts a different mix of industries, employment gains or losses in any individual sector result in different levels of gains or losses across CBSAs. Areas with a high percentage of jobs in manufacturing—the sector that experienced the largest decrease statewide—would be expected to have gained fewer jobs overall, or even lost jobs, compared to areas where manufacturing was a smaller share of total employment at the start of the period.

Standardized growth estimates for both employment and wages for the period 2002 through 2017 were positive for all CBSAs. That is, based on statewide growth by industry and the mix of industry in each CBSA, growth in employment and wages would have been positive for each CBSA had it been proportional to growth in the state as a whole. In fact, however, economic expansion during the period was generally disproportionate with respect to both employment and to wages.

Employment

Actual growth in employment during the period exceeded standardized growth estimates for five of the state's nine metropolitan statistical areas and for just three of the state's 17 micropolitan statistical areas (see Table 10). Remembering that metropolitan statistical areas in Iowa are larger than micropolitan statistical areas, the overall pattern can be summarized as, in general, expansion among the state's larger cities and contraction among other parts of the state.

While growth exceeded standardized estimates for just above half of the metropolitan areas of the state, all nine of these areas did experience positive employment growth during the period. However, for statistical areas anchored on smaller cities in the state, i.e., micropolitan statistical areas, as well as for the parts of the state that are not part of either metro- or micropolitan statistical areas, the picture is quite different. As noted, employment growth exceeded standardized estimates in only three micropolitan areas. In fact, job growth was negative for all but six of these areas; eleven of the state's seventeen micropolitan statistical areas experienced net employment decreases during the period, with the largest percentage decreases occurring in Newton, Marshalltown, and Spencer. Among all CBSAs, the largest net employment gains, in percentage terms, were experienced by Des Moines-West Des Moines, Iowa City, and Ames.

Aggregate Wages

Aggregate wages represent the total annual wages paid to workers in the CBSA and was calculated by multiplying the number of people employed by their average annual pay. This economic analysis assesses growth in aggregate wages between 2002 and 2017 in real terms, i.e., in terms of 2018 constant dollars. This metric thus accounts for differences in wages across sectors in addition to differences in the employment mix across CBSAs. Aggregate wages are analyzed in addition to employment because economic impacts of job losses can be at least partially offset by wage gains; for example, aggregate wages could increase if a place were to experience an increase in the number of better-paying jobs despite decreases in the number of lower-paying jobs. As with employment, changes in aggregate wages between 2002 and 2017 varied markedly by industrial sector (see Table 9). Real aggregate wages decreased by 0.9 percent for jobs in retail trade, the only sector in this analysis in which wages decreased; in this case, too, the wage decrease outpaced employment decreases. Aggregate wages in manufacturing grew during the period, but by only 6.6 percent. In comparison, aggregate wages increased by 76.1 percent for professional and business services and by 50.2 percent for financial activities. Overall, real aggregate wages increased by 25.7 percent during the period.

Between 2002 and 2017, as with employment, the standardized estimates for growth in aggregate wages were positive for all CBSAs (see Table 11). Real growth in aggregate wages averaged $1.1 billion among metropolitan statistical areas, but varied widely, from $265 million for the Sioux City area to $5.3 billion for Des Moines-West Des Moines area. In percentage terms, the Ames metropolitan statistical area experienced the largest growth in aggregate wages at 51.2 percent and the Sioux City area, where

growth was 13.3 percent, had the smallest. Among micropolitan statistical areas, growth ranged even more widely. Among these areas, aggregate wages increased the most in the Storm Lake area, where they grew by 35.1 percent. Aggregate wages fell by approximately this amount, or 34.6 percent, in the Newton area.

Growth in aggregate wages outpaced the standardized estimates for growth in four of the nine metropolitan areas. That is, for these four areas, aggregate wages increased at a faster rate than the state as a whole, controlling for the mix of industry at the start of the period. However, this was true of only three of the state's 17 micropolitan statistical areas. As with employment, the overall pattern is one of economic relocation from areas outside of Iowa's CBSAs and from its smaller urban clusters to larger metropolitan areas.

The overall average standardized estimate for growth in aggregate wages between 2002 and 2017 was $459.4 million. This average pertains to all counties in Iowa, including those that are not in a CBSA; it is equivalent to the statewide average of actual increases for the period. In 2002, aggregate wages to people employed in private sector industries statewide were $48.2 billion (in 2018 constant dollars). Standardized and actual aggregate wages increased by $12.4 billion during the subsequent decade and a half. Over all CBSAs, the standardized changes ranged from $45.3 million in the Oskaloosa area to $4.1 billion in the Des Moines-West Des Moines area, while actual changes ranged from a loss of $187.7 million in the Newton area to a gain of $5.3 billion in Des Moines-West Des Moines. This latter gain accounted for 43 percent of the statewide total increase in aggregate wages over the period.

Evaluating the Relationship Between TIF and Economic Growth

In order to assess the relationship between the percentage of urban property revenues diverted to TIF and employment or wage growth by CBSA, i.e., whether and to what extent there is a statistically significant relationship between TIF use and growth in economic activity, a number of statistical analyses were conducted. In order to measure the strength and direction of the relationship between, on the one hand, the percentage difference between standardized growth estimates and actual changes in employment and wages and, on the other, the percentage of urban property tax revenues diverted to TIF, a correlation coefficient (Pearson R) was calculated (see Table 12). The Pearson R has a range of -1 to 1. A correlation coefficient that is positive and large would indicate a relationship in which higher levels of TIF revenues correspond to greater degrees of economic growth; a coefficient that is negative and large would suggest an inverse relationship, one in which higher levels of TIF revenues are detrimental to economic growth. This calculation produced coefficients of quite low magnitude, both positive and negative, suggesting that measures of employment and wage growth do not rise or fall with measures of TIF revenues in each CBSA. Additional correlations were calculated separately for Iowa metropolitan statistical areas and micropolitan statistical areas. In both cases, correlation coefficients were quite modest.

However, a simple correlation may not reveal a true relationship between TIF and economic growth if other factors obscure it. A regression analysis can be used to control

for such conflating factors. Given certain assumptions, this statistical procedure calculates the variation in a given measure that can be accounted for by various contributing factors. In this case, the analysis measures how much of the variation in the employment or aggregate wage growth among CBSAs can be explained by the percentage of urban property tax revenues diverted to TIF, controlling for other measurable factors likely to be related to growth.

For this study, two groups, or sets, of regression analyses were conducted. The first set consists of four regression models that concern the relationship between overall TIF and overall jobs and wages, without respect either to the type of property contained in the TIF or to the industry with which jobs and wages are associated. A second set of analyses model the relationship between TIF and employment using data disaggregated by property classification and by industry.

Again, the first set of regression analyses consists of four models that concern the relationship between overall TIF and overall jobs and wages. Within this set, the first two analyses assess the relationship between TIF revenues and economic outcomes in terms of actual growth of employment and aggregate wages. The second two analyses measure the relationship between TIF revenues and, respectively, the rate of employment growth above standardized growth and the rate of wage growth above standardized growth.

The models assess the degree to which variation on these several measures of economic growth among CBSAs can be accounted for by TIF revenue diversion, controlling for certain other factors. Specifically, these models assess how well variation in economic growth among CBSAs can be explained by the following factors (see Table 13):

- percentage of urban property tax revenues diverted to TIF in fiscal years 2002 through 2017 (based on 2000 through 2015 assessments);
- postsecondary degree attainment rates (percent of CBSA residents age 18 to 64 who have earned an associate's or higher degree from college, based on U.S. Census 5-year estimates for the period 2012 through 2016);
- whether the CBSA is a metropolitan statistical area;
- net taxable value of urban property in the CBSA, excluding gas and electric, as of AY 2000, per working-age person.

Postsecondary degree attainment rates are included because it is expected that employment and aggregate wage growth are strongly associated with higher levels of educational attainment among residents. Based on U.S. Census 5-year estimates for the period 2012 through 2016, the statewide postsecondary degree attainment rate was 41.9 percent. Among CBSAs, levels of postsecondary degree attainment ranged from 28.9 percent in the Storm Lake area to 56.5 percent in the Spirit Lake area.

Likewise, it is anticipated that larger, more populous areas would enjoy certain economic advantages. For example, metropolitan statistical areas, as compared to micropolitan statistical areas, have larger existing worker and customer bases and

benefit from the cluster effects and economies of scale associated with their sheer size. Thus, the analysis considers whether a CBSA is designated a metropolitan statistical area, which in general represents a larger population and larger geographical area than a micropolitan statistical area.[13] Use of the metro-/micropolitan designation, rather than population itself, is suitable because the distinction is based the population of the core urban cluster, rather than the entire area itself. That is, it is supposed that the distinction represents a qualitative difference, rather than one of degree only.

Employing the net taxable value of urban property in each CBSA in 2000 as a factor helps to account for the existing base of property value available to support jobs. It is another measure of the economic capacity in place within the CBSA at the start of the period. Values for this measure range from $241 million in the Fairfield area to $11.9 billion in the Des Moines-West Des Moines area. For the regression analyses, this measure is evaluated on a per-capita basis for the working-age population of the CBSA in 2000.

Regression Analyses

The first regression analysis suggests that the percent of urban property tax revenues diverted to TIF in 2002 through 2017 does not explain any variation in the level of employment growth during the decade and a half (see Table 14). The analysis found a strong and statistically significant relationship between employment growth and whether the CBSA is a metropolitan (larger) statistical area. These findings confirm what was seen in the statistics considered above, that greater employment growth was associated with larger metropolitan areas, which are population and economic centers. The standardized regression coefficient for this factor was 0.61, or nearly twice the value of that for postsecondary attainment rates, the next highest-contributing factor.[14] The analysis did find a fairly strong relationship between employment growth and an areas' postsecondary attainment rates, as one might expect, but this relationship was not statistically significant in this analysis. The overall model yielded an adjusted R-square of 0.47, signifying that, taken together, these factors explain 47 percent of the variation in the measured employment growth among CBSAs over the period as reflected in the model.

The second regression analysis was concerned with actual wage growth between 2002 and 2017; it assessed the degree to which the same four factors used in the first

[13] A CBSA is designated as metropolitan or micropolitan based on the population of the urban center that anchors it. Strictly speaking, the overall population of a micropolitan area may be larger than that of a metropolitan area. However, this is not the case for any micropolitan areas in Iowa.

[14] The standardized coefficient, or beta weight, is an alternative measure of the regression coefficient. It characterizes the covariation in the dependent variable and the predictor variable in terms of deviation from the mean; specifically, it represents the number of standard deviations change in the dependent variable for each standard deviation change in the predictor variable. Unlike the (unstandardized) regression coefficient, the standardized regression coefficient is indifferent to the variable's scale of measurement and thus can be used to compare variables with respect to their relative contribution to the overall model. Standardizing coefficients in this way is a basic technique of statistical analysis and is wholly separate from the method employed in this study for standardizing measures of economic growth among CBSAs.

regression can account for variation in this measure among CBSAs. Similar to the first analysis, this procedure found that the percent of urban property tax revenues diverted to TIF between 2002 and 2017 does not explain variation in the level of wage growth during the decade and a half (see Table 15); the modest negative relationship between the percentage urban property tax revenues diverted to TIF and aggregate wage growth in the model was not statistically significant. However, as with the first regression, this second estimate yielded a fairly strong, statistically significant, positive relationship between the dependent variable and whether the CBSA is a metropolitan statistical area.

The results of these two regression analyses suggest that greater use of TIF within a CBSA does not explain either actual higher employment growth or actual aggregate wage growth. However, as noted above, actual measures of percentage change in employment or wages do not control for the variation in what might be termed the predisposition for economic growth among CBSAs. For this reason, the standardized measures of growth calculated for this study are better measures of relative economic growth among CBSAs. In contrast to simple differences in percentage growth, the standardized measures account for the industrial mix in each CBSA at the start of the period. In this way, they account for the disadvantage faced by CBSAs that had higher representation of industries that experienced employment losses and wage stagnation.

The third regression analysis considered variation in the rate of employment growth above standardized growth among CBSAs. Again, this is the difference between actual employment growth and standardized estimates for employment growth as a percentage of actual employment in 2012. The analysis assessed the degree to which variation on this measure among CBSAs can be accounted for by TIF revenues, controlling for a number of the same factors assessed in the first and second estimates. However, for this third regression, the model specification was revised to exclude urban taxable value per working-age person because this factor was found to make a statistically weak contribution to both of the earlier models.

As with those other estimates, the third regression analysis found that the percent of urban property tax revenues diverted to TIF in FY 2002 through 2017 does not explain any variation in the rate of employment growth above standardized growth among CBSAs in Iowa during the decade and a half (see Table 16). This suggests that employment growth, even when measured in a standardized way, cannot be explained by the diversion of revenues by TIF. Once again, the analysis did find a strong and statistically significant relationship between employment growth and the CBSA's standing as a metropolitan statistical area. This finding suggests that employment growth over the period was higher within the state's largest population centers regardless of TIF usage. The explanatory power of the overall model, i.e., the model R-square, though statistically significant, was fairly small, and lower than the first model's.

The fourth regression analysis concerned the rate of wage growth above standardized growth. Once again, this regression analysis found that the percent of urban property tax revenues diverted to TIF in 2002 through 2017 does not explain any variation in the

level of aggregate wage growth relative to standardized estimates for such growth during the decade and a half (see Table 17).

Analysis Disaggregated by Property Classification and Industry

As noted above, a second set of analyses model the relationship between TIF disaggregated by property classification and employment data disaggregated by industry. Because factors related to aggregate wage growth were found to be of very little predictive value in the previous analyses, only measures of employment, including employment in manufacturing industries and the rate of employment growth above standardized growth, are considered as dependent variables in the following analyses.

This disaggregated analysis builds on other research that suggests that different types of TIF can be more effective than others in achieving policy goals, as discussed in Section IV. Dye and Merriman (2006), for example, found that land use and the mix of property within a TIF are relevant to its prospects for net economic impact. Similarly, Byrne (2010) found that TIF use has no general impact on employment but that TIFs of industrial property are more likely to lead to net increases in employment. Byrne suggests that this is because industrialized TIF districts are less likely to attract businesses that compete with other local businesses, whereas TIFs whose purpose is to promote retail development are more likely to merely shift local spending from elsewhere within a city.

The fifth regression analysis assessed the effect of industrial TIF on the rate of total employment growth above standardized growth of total employment. As with the initial set of models, TIF intensity is measured in terms of the percent of total urban property tax revenues diverted to TIF, except that in this instance it includes only *revenues by industrial property in TIF increments*. The analysis indicates that the percent of total urban property tax revenues diverted for industrial property in TIF increments from 2002 through 2017 does not explain any variation in the rate of employment growth above standardized growth during the decade and a half (see Table 18). The analysis did find statistically significant relationships between the rate of employment growth above standardized growth and both postsecondary attainment rates and areas' metro-/micropolitan status. As with other models, the relationship between measured growth and the latter of these factors was particularly strong. The model yielded an adjusted R-square of 0.37, signifying that, taken together, these factors explain 37 percent of the variation in the rate of employment growth above standardized growth among CBSAs over the period as reflected in the model.

The sixth regression model is identical to the fifth model except that, instead of standardized rates of employment growth overall, it seeks to explain variation in standardized rates of change in manufacturing employment only (see Table 19). As with that other model, analysis of this model yielded no evidence for a relationship between the percentage of urban property tax revenues diverted by industrial property in TIF increments and growth in manufacturing employment between 2002 and 2017. Indeed, the model furnishes virtually no explanatory power whatsoever, as its adjusted R-square is just 0.04.

The previous two analyses assess whether variation among CBSAs in employment growth, variously measured, can in part be explained by the share of total urban property tax revenues diverted by industrial TIF property; put another way, whether the absolute degree of TIF intensity, or TIF effort, in industrial property is associated with job growth. As we have seen, those two analyses provide no evidence for such a relationship.

The seventh regression analysis considers TIF in a slightly different way. For this final procedure, TIF is understood in terms of its concentration in industrial property. It assesses the question, “Does the degree to which TIFs are concentrated in industrial property bear on whether manufacturing job growth outpaces standardized growth estimates?” Here, industrial concentration refers to the percent of urban property taxes diverted to TIF that are derived from industrial property, rather than the total over all property classifications. In operational terms, the analysis is concerned with the difference between actual manufacturing employment growth in a CBSA and standardized estimates for manufacturing employment growth and whether this difference can partly be explained by industry-intensiveness of TIF.

This regression analysis found that TIF industrial concentration does, after accounting for whether a CBSA is a metropolitan statistical area, explain a small amount of variation in the rate of manufacturing employment growth above standardized growth in manufacturing employment (see Table 20). The magnitude of the calculated effect was such that a 16 percentage point difference in TIF industrial concentration equates to a seven percentage point difference in manufacturing employment above standardized growth; the standardized rate of growth in manufacturing jobs varied among CBSAs from -51 percent to 36 percent. However, the coefficient for TIF concentration in industrial property was statistically significant to only the ten percent level; this is to say that there is a less than ten percent chance that the calculated relationship is due to chance. In addition, although the analysis found a relationship between standardized employment growth in manufacturing and industrial intensity of TIFs, the explanatory power of the overall model was extremely small; altogether, the model predictors explain only 15 percent of the variation in standardized manufacturing employment growth among CBSAs. For this regression analysis, predictors were selected into the model on the basis of their contribution to the predictive strength of the model overall; that is, the model adjusted R-square was used as the criterion for selecting the set of explanatory variables that most parsimoniously predict the rate of manufacturing employment growth above standardized growth from the available data. This regression analysis thus excludes postsecondary education as a model predictor.

Summary of Regression Analyses

The analyses presented here suggest that TIF leads to no net employment or wage gains when measured for entire local economies. Indeed, for all of those models described above that concern growth in overall employment and overall wages, the coefficient for TIF use is negative, although it is also statistically insignificant. However, along lines suggested by other published research, such as by Dye and Merriman

(2006), Byrne (2010), and others, the coefficients for TIF use in industrial property are not only positive but also approach statistical significance. The focus here on industrial property in particular is largely informed and motivated by that earlier research. Indeed, with the last regression analysis discussed above, we do observe a measurable impact of industry-concentration in TIF, albeit a weak one. Byrne suggests industrial-property TIFs have greater tendency to increase employment because they are less likely to attract businesses that compete with other local businesses. It would follow that TIF has a small effect on manufacturing and other export industries that can be placed with relatively little consideration of local factors of production or market demand. On the other hand, such factors necessarily constrain growth in retail, services, and residential construction. These kinds of industries depend on a local customer base and would thus seem to be less responsive to incentives, like TIF, that are location-based.

VII. Conclusions

This evaluation study has undertaken to improve understanding of TIF in Iowa, in particular the implications of its use for the state as a whole. Although TIF is a local economic development tool, a statewide perspective is appropriate because this analysis is concerned with TIF as a matter of state policy. For this very reason, however, this study offers no specifics concerning the nature of any individual TIF-funded projects, the particular goals those projects have sought to achieve, or the extent to which TIF is regarded as instrumental in achieving them. Although they share a common funding mechanism, the hundreds of TIFs in the state exist to address a wide range of objectives and unique local circumstances. This study does not assess the extent to which each locality's use of TIF has helped it to achieve its own particular goals.

This study provides background on TIF law and procedures in Iowa; it offers a summary of TIF policies among the 50 states, and provides a review of research literature on TIF; and it presents descriptive information concerning the scope and composition of TIF in the state. This information concerns valuations and revenues over time disaggregated in various ways, including by property classification and by geography.

In addition, this study provides an economic analysis of TIF. This assessed the economic impact of TIF in terms of net gains in the number of jobs and aggregate wages to local economies in Iowa. This approach is apt. As set out in the Iowa Code's declaration of policy concerning TIF urban renewal, TIF exists in part to finance efforts to alleviate and prevent conditions of unemployment.

The study was careful to distinguish net economic gains from the effects of economic displacement; i.e., the movement of economic activity to a place from elsewhere in the same local economy. The study employed Iowa's 26 core-based statistical areas, or CBSAs, as its units of analysis. CBSAs consist of one or more entire counties that are anchored on a city or set of cities to which the entire area is socially and economically

tied through commuting. The analysis found no evidence that TIF results in increased economic activity measurable at the CBSA.

While this evaluation study provides a unique and useful analysis, it is subject to important limitations. In particular, for any individual community, use of TIF financing can represent but one component of a broader strategy of investment. An analysis of TIF revenues and their impact on economic activity in isolation from complementary efforts at the community level may overlook the impact of any more comprehensive set of efforts. In addition, this evaluation study focused on a limited set of measures. A host of local factors affects local economic activity. While the measures analyzed here are eminently suitable to the questions this study addressed, the use of different measures might have led to consideration of different questions. Again, this evaluation study sheds light on the relationship between TIF and economic growth at the CBSA level. By contrast, a study using different methods might have approached a somewhat different set of questions. For example, case study methods might be used to engage local governments and businesses to address questions around the circumstances under which TIF might lead to economic growth and the kinds of obstacles that might make it less likely to. Additionally, for example, this study does not directly evaluate the relationship of TIF to property tax rates. For reasons described in this study, cohorts of TIFs began to reach the twenty-year limit on their effective periods beginning in 2016; the effects of this sunsetting of cohorts of TIFs, the nature and scope of these impacts such as on revenues and rates, will merit investigation as more data becomes available.

Nevertheless, this study shows that TIF revenues, in themselves, cannot explain any of the variation in economic development among CBSAs observable over a period of fifteen years between 2002 and 2017 in terms of jobs and wages. Moreover, among the measures used, it demonstrates that variation in economic growth is primarily explained by whether the CBSA is a metropolitan area or a micropolitan area; that is, by whether the CBSA is centered on a larger or smaller city. The pattern of development seen in the data analyzed for this study can be summarized as, in general, expansion among the state's metropolitan areas and contraction among other parts of the state; in other words, by economic relocation from Iowa's less developed areas and from its smaller urban clusters to its larger population centers. Patterns in economic growth in Iowa's cities thus seem to primarily reflect the agglomeration effects associated with more structural, historical processes of urbanization. By this process, development accumulates in self-reinforcing ways around urban centers. In this view, the economic development efforts associated with TIF, effective though they may sometimes be, are in competition with much larger economic forces.

References

Barff, Richard. A., & Knight III, Prentice L. (1988). Dynamic Shift-Share Analysis. *Growth & Change*, 19(2), 1-11.

Bossard, J. A. (2011). *The Effect of Tax Increment Financing on Spillovers and School District Revenue.* Doctoral Dissertation, University of Nebraska - Lincoln.

Bruno, R., & Quesada, A. D. (2011). *Tax Increment Financing and Chicago Public Schools: A New Approach to Comprehending a Complex Relationship.* Labor Education Program White Paper. University of Illinois at Urbana-Champaign.

Byrne, P. F. (2010). Does Tax Increment Financing Deliver on Its Promise of Jobs? The Impact of Tax Increment Financing on Municipal Employment Growth. *Economic Development Quarterly, 24*(1), 13-22.

Council of Development Finance Agencies. (2008). *2008 TIF State-By-State Report.* Accessed October 12, 2018, from http://www.cdfa.net/cdfa/cdfaweb.nsf/0/8ee94afeece08bc988257936006747c5/$FILE/CDFA-2008-TIF-State-By-State-Report.pdf

Council of Development Finance Agencies. (2015). *2008 TIF State-By-State Report An Analysis of Trends in State TIF Statutes*. Accessed October 12, 2018, from https://www.cdfa.net/cdfa/cdfaweb.nsf/ordredirect.html?open&id=201601-TIF-State-By-State.html

Dye, Richard, & Merriman, David (2006). Tax Increment Financing: A Tool for Local Economic Development. *Land Lines, 18*(1), 2-7. Accessed June 1, 2013, from http://www.lincolninst.edu/pubs/1076_Land-Lines--January-2006--Volume-18--Number-1

Dye, R. F., Merriman, D. F., & Goulde, K. (2014, September). Tax Increment Financing and the Great Recession. *National Tax Journal, 67*(3), 697-718.

Economic Development Project Area Tax Increment Allocation Act of 1995., 65 Illinois Compiled Statutes 5/11-74.4-1 et seq. (2013). Accessed December 27, 2013, from http://www.ilga.gov/legislation/ilcs/ilcs3.asp?ActID=822&ChapAct=65 ILCS 110/&ChapterID=14&ChapterName=MUNICIPALITIES&ActName=Economic Development Project Area Tax Increment Allocation Act of 1995

Establishing, Changing Plan, Annual Accounts (Subdivision 3), 2013 Minnesota Statutes, Section 469.175. (2013). Accessed December 27, 2013, from https://www.revisor.mn.gov/statutes/?id=469.175

Funderburg, R. (2018): Regional employment and housing impacts of tax increment financing districts, Regional Studies, DOI: 10.1080/00343404.2018.1490013

Fullerton II, B. E. (2017). *The Effects of Tax Increment Financing On Assessed Land Values.* Doctoral Dissertation, University of Southern Mississippi.

Girardi, A. (2013). Iowa Tax Increment Financing. Tax Credits Program Evaluation Study. Iowa Department of Revenue. https://tax.iowa.gov/sites/files/idr/TIF%20Evaluation%20Study%202013.pdf

Greenbaum, R. T., & Landers, J. (2014, September). The Tiff Over TIF: A Review of the Literature Examining the Effectiveness of the Tax Increment Financing. *National Tax Journal, 67*(3), 655-674.

Hicks, M. J., Faulk, D., & Quirin, P. (January, 2015). *Some Economic Effects of Tax Increment Financing in Indiana.* Policy Brief. Ball State University Center for Business and Economic Research.

Layton, D. (January, 2016). *Effects of the Great Recession on Tax Increment Financing in the United States, Georgia and Atlanta.* Center for State and Local Finance, Andrew Young School. Georgia State University.

Legislative Services Agency (Iowa). (2018). *Iowa FY 2017 Annual Urban Renewal Report Tax Increment Financing (TIF).* Report, Fiscal Services Division. October 13, 2018, from https://www.legis.iowa.gov/docs/publications/DF/924166.pdf

Lester, T. W. (2014, March). Does Chicago's Tax Increment Financing (TIF) Programme Pass the 'But-for' Test? Job Creation and Economic Development Impacts Using Time-series Data. *Urban Studies, 51*(4), 655-674.

Luby, M. J., & Moldogaziev, T. (2014, September). Tax Increment Debt Finance and the Great Recession. *National Tax Journal, 67*(3), 675-696.

Man, Joyce Y. (2001). Effects of Tax Increment Financing on Economic Development. In C. L. Johnson, & J. Y. Man (Eds.), *Tax Increment Financing and Economic Development: Uses, Structures, and Impact* (pp. 101-109). Albany, NY: State University of New York Press.

McDonough, Carol C., & Sihag, Balbir S. (1991). The incorporation of multiple bases into shift-share analysis. *Growth & Change, 22*(1), 1-10

Plan; approval; findings. Nebraska Revised Statute 18-2116. (2013). Accessed December 27, 2013, from http://nebraskalegislature.gov/laws/statutes.php?statute=18-2116

Johnson, Craig L., & Kriz, Kenneth A. (2001). A Review of State Tax Increment Financing Laws. In C. L. Johnson, & J. Y. Man (Eds.), *Tax Increment Financing and Economic Development: Uses, Structures, and Impact* (pp. 31-56). Albany, NY: State University of New York Press.

Johnson, Craig L., & Man, Joyce Y. (Eds.). (2001). *Tax Increment Financing and Economic Development: Uses Structures and Impact.* Albany, NY: State University of New York Press.

Peters, Alan., & Fisher, Peter. (2004). The Failures of Economic Development Incentives. *Journal of the American Planning Association, 70*(1), 27-37.

Phuong Nguyen-Hoang. (2014). Tax Increment Financing and Education Expenditures: The Case of Iowa. *Education Finance and Policy, 9*(4), 515-540.

Real Property Tax Increment Allocation Redevelopment Act; Missouri Revised Statutes, Chapter 99, Municipal Housing, Section 99.810. (2013). Accessed December 27, 2013, from http://www.moga.mo.gov/statutes/C000-099/0990000810.HTM

Subramanian, Ananda (2005). *Evaluating Tax Increment Finance Districts in Polk County, Iowa.* Ames, Iowa: Iowa State University.

Swenson, David (2012). *Tax Increment Financing in Iowa: Background, Research, and Recommendations. Presentation to the House Ways and Means Subcommittee 27 February 2012.* Iowa State University, Department of Economics. Accessed June 19, 2013, from http://www.econ.iastate.edu/research/other/p14935

Swenson, David, & Eathington, Liesl (2002a). *Do Tax Increment Finance Districts in Iowa Spur Growth or Squander Public Resources.* Iowa State University, Department of Economics.

Swenson, David, & Eathington, Liesl (2002b). *Do Tax Increment Finance Districts in Iowa Spur Regional Economic and Demographic Growth.* Iowa State University, Department of Economics. Accessed June 19, 2013, from http://www.econ.iastate.edu/research/extension/p7182

Iowa's Tax Increment Financing

Tax Credits Program Evaluation Study

Tables and Figures

Table 1. Tax Increment Financing Policies by State

State	Year Authorized	Eligible Tax Revenue Sources*	Financing May Include General Obligation Municipal Bonds	Only Cities** May Authorize TIFs	Blight is a Requirement or Allowable Condition of TIF	"But For" Requirement	Maximum Length of TIF Designation***	Eminent Domain Use Allowed by Statute	Types of Property R: Residential C: Commercial I: Industrial M: Mixed Use O: Other
Alabama	1987	Property Tax	Yes	No	Yes	No	30 years	Yes, limited.	R, C, I, M
Alaska	2001	Property Tax	Yes	Yes	Yes	No	No limit	Yes	R, C, I, M, O
Arizona	N/A								
Arkansas	2001	Property Tax	No	No	Yes	No	40 years	Yes	R, C, I, M
California	1952	Property Tax	No	No	Yes	No	50 years	Yes, limited.	R, C, I, M
Colorado	1975	Property Tax, Sales Tax, Other Sources	No	No	Yes	No	25 years	Yes, limited.	R, C, I, M
Connecticut	1959	Property Tax, Sales Tax	Yes	Yes	No	No	Not specified by state law.	Yes	C, I
Delaware	2002	Property Tax, Other Sources	Yes	No	Yes	Yes	30 years	Yes	R, C, I, M
District of Columbia	1998	Property Tax, Sales Tax, Other Sources	Yes	Yes	No	Yes	Not specified by state law.	No	R, C, M
Florida	1969	Property Tax	No	No	Yes	No	40 years	No	R, C, I, M
Georgia	1985	Property Tax, Other Sources	No	No	No	No	Not specified by state law.	No	R, C, I, M
Hawaii	1985	Property Tax	Yes	No	No	No	Not specified by state law.	Not specified by state law.	R, C, I, M, O
Idaho	1987	Property Tax	No	No	Yes	No	20 years	Yes, limited.	C, I, M
Illinois	1977	Property Tax, Sales Tax	Yes	Yes	Yes	Yes	50 years	Yes, limited.	R, C, I, M
Indiana	1981	Property Tax	Yes	No	Yes	No	25 years	Yes, with legislative approval.	C, I, M

Table 1 (Continued). Tax Increment Financing Policies by State

State	Year Authorized	Eligible Tax Revenue Sources*	Financing May Include General Obligation Municipal Bonds	Only Cities** May Authorize TIFs	Blight is a Requirement or Allowable Condition of TIF	"But For" Requirement	Maximum Length of TIF Designation***	Eminent Doman Use Allowed by Statute	Types of Property R: Residential C: Commercial I: Industrial M: Mixed Use O: Other
Iowa	1969	Property Tax, Sales Tax	Yes	No	Yes	No	20 years	Yes, limited.	R, C, I, M
Kansas	1976	Property Tax, Sales Tax, Other Sources	Yes	Yes	No	No	20 years	Yes	C
Kentucky	2000	Property Tax, Sales Tax, Other Sources	Yes	No	Yes	Yes	40 years	Yes, limited.	R, C, I, M, O
Louisiana	1988	Property Tax	Yes	No	No	No	30 years	Not specified by state law.	R, C, I, O
Maine	1977	Property Tax	Yes	Yes	Yes	No	30 years	Yes	R, C, I, M
Maryland	1980	Property Tax	No	Yes	No	No	Not specified by state law.	No	R, C, I, M
Massachusetts	2003	Property Tax	Yes	Yes	No	No	20 years	Yes	R, C, I, M
Michigan	1975	Property Tax	No	No	No	No	30 years	Yes, limited.	R, C, I, M
Minnesota	1979	Property Tax	Yes	No	Yes	Yes	26 years	Yes, limited.	R, C, I, M
Mississippi	1986	Property Tax, Sales Tax	No	No	No	No	30 years	No	R, C, I, M
Missouri	1982	Property Tax, Sales Tax, Other Sources	Yes	No	Yes	Yes	23 years	Yes	R, C, I, M
Montana	1974	Property Tax	No	No	Yes	No	40 years	Yes, limited.	R, C, I, M
Nebraska	1978	Property Tax	Yes	Yes	Yes	Yes	15 years	Yes	R, C, I, M
Nevada	~1959	Property Tax	No	No	Yes	No	45 years	Yes	R, C, I, M
New Hampshire	1979	Property Tax	No	Yes	No	No	Life of bonds	No	C, I, M

Table 1 (Continued). Tax Increment Financing Policies by State

State	Year Authorized	Eligible Tax Revenue Sources*	Financing May Include General Obligation Municipal Bonds	Only Cities** May Authorize TIFs	Blight is a Requirement or Allowable Condition of TIF	"But For" Requirement	Maximum Length of TIF Designation***	Eminent Doman Use Allowed by Statute	Types of Property R: Residential C: Commercial I: Industrial M: Mixed Use O: Other
New Jersey	2009	Property Tax, Sales Tax, Other Sources	Yes	Yes	Yes	Yes	Not specified by state law.	Yes	R, C, I, M
New Mexico	2006	Property Tax, Other Sources	Yes	No	No	No	Not specified by state law.	No	R, C, I, M
New York	1984	Property Tax	No	No	Yes	Yes	Not specified by state law.	Yes	R, C, I, M
North Carolina	2004	Property Tax	Yes	No	Yes	Yes	30 years	Yes, limited.	C, I, M
North Dakota	1973	Property Tax	Yes	Yes	Yes	No	30 years	No	R, C, I, M
Ohio	1976	Property Tax	Yes	No	Yes	No	30 years	Yes	R, C, I, M
Oklahoma	1992	Property Tax, Sales Tax, Other Sources	Yes	No	Yes	Yes	25 years	Yes, limited.	R, C, I, M
Oregon	1960	Property Tax	Yes	No	Yes	No	Not specified by state law.	Yes, limited.	R, C, I, M
Pennsylvania	1990	Property Tax, Sales Tax, Other Sources	Yes	No	Yes	No	20 years	Yes	R, C, I, M
Rhode Island	1956	Property Tax	Yes	Yes	Yes	Yes	25 years	Yes	R, C, I
South Carolina	1984	Property Tax	No	No	Yes	No	Not specified by state law.	Yes	R, C, I, M
South Dakota	1978	Property Tax	No	No	Yes	No	20 years	Yes	R, C, I, M, O
Tennessee	1945	Property Tax, Sales Tax	Yes	No	Yes	No	Not specified by state law.	Yes	R, M
Texas	1983	Property Tax, Sales Tax	No	No	Yes	No	Not specified by state law.	No	C, I

Table 1 (Continued). Tax Increment Financing Policies by State

State	Year Authorized	Eligible Tax Revenue Sources*	Financing May Include General Obligation Municipal Bonds	Only Cities** May Authorize TIFs	Blight is a Requirement or Allowable Condition of TIF	"But For" Requirement	Maximum Length of TIF Designation***	Eminent Doman Use Allowed by Statute	Types of Property R: Residential C: Commercial I: Industrial M: Mixed Use O: Other
Utah	1968	Property Tax, Sales Tax, Other Sources	No	No	Yes	No	Not specified by state law.	Yes	R, C, I, M
Vermont	1985	Property Tax	Yes	Yes	No	Yes	20 years	Yes	R, C, I, M
Virginia	1988	Property Tax	Yes	No	Yes	No	Not specified by state law.	Yes, limited.	R, C, I, M
Washington	2001	Property Tax, Sales Tax	Yes	No	No	Yes	Not specified by state law.	No	R, C, I, M
West Virginia	2002	Property Tax	No	No	Yes	No	30 years	Yes	R, C, I, M
Wisconsin	1975	Property Tax	Yes	Yes	Yes	No	40 years	Yes	R, C, I, M
Wyoming	1983	Property Tax	Yes	Yes	Yes	Yes	25 years	Yes	R, C, I

* Property taxes can include payments in lieu of taxes (PILOTs). The term "other sources" refers to various types taxes and payments, many of which are not applicable in all states; it includes business license taxes, economic activity tax, gross receipts tax, hotel tax, local payroll tax, and personal property tax.

** "Cities" includes municipal entities such as townships, boroughs, and incorporated villages and redevelopment authorities that may be authorized only by cities. "Cities" does not include states, counties, public school districts, or community college districts.

*** A number of states provide for different maximum lengths of TIF duration given various circumstances; the table reflects the longest duration allowable in terms of number of years.

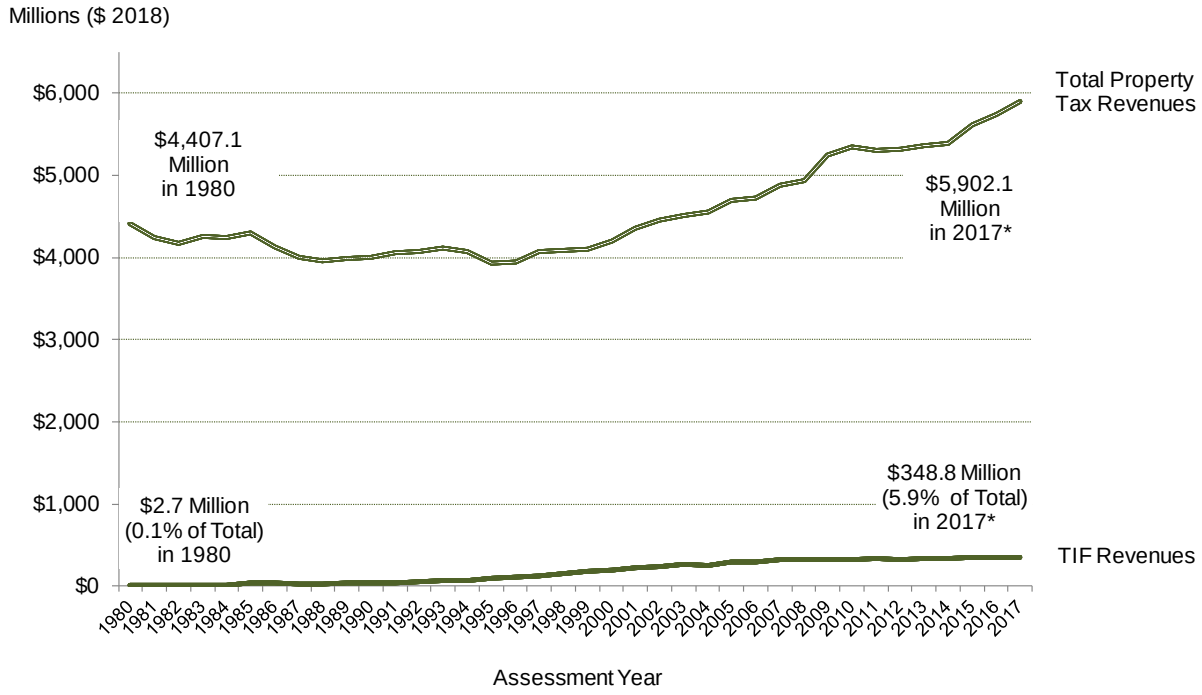
Sources: The table synthesizes information published by various sources, in particular the Council of Development Finance Agencies (CFDA, 2008 and 2015). See the CFDA's TIF State-By-State Data Search at https://www.cdfa.net/cdfa/tifmap.nsf/search.html and its 2015 TIF State-By-State Report at https://www.cdfa.net/cdfa/cdfaweb.nsf/ordredirect.html?open&id=201601-TIF-State-By-State.html.

Table 2. Urban Renewal Areas, Valuations, and Revenues (AY 2000-2017)

Assessment Year	Count of Urban Renewal Areas	Frozen Base Valuation ($ Millions)	Increment Valuation ($ Millions)	Estimated TIF Revenues ($ Millions)
2000	1,125	$6,600.56	$4,463.29	$130.32
2001	1,201	$7,005.59	$5,227.33	$156.38
2002	1,242	$6,897.99	$5,353.61	$163.97
2003	1,230	$7,517.38	$5,988.17	$191.26
2004	1,229	$7,473.07	$5,950.08	$191.75
2005	1,281	$7,440.91	$6,864.54	$222.81
2006	1,296	$7,624.06	$7,287.87	$237.78
2007	1,421	$7,918.90	$7,987.01	$260.21
2008	1,443	$7,977.85	$8,352.04	$271.96
2009	1,527	$7,928.34	$8,493.94	$279.65
2010	1,582	$8,523.12	$8,669.49	$283.16
2011	1,626	$9,020.07	$9,231.24	$296.86
2012	1,614	$9,349.63	$9,540.10	$292.51
2013	1,673	$9,389.67	$10,300.92	$313.89
2014	1,688	$9,373.44	$10,299.14	$312.97
2015	1,707	$9,957.52	$10,852.85	$327.02
2016	1,785	$10,320.96	$11,046.54	$331.53
2017	1,782	$10,625.53	$11,398.89	$340.81

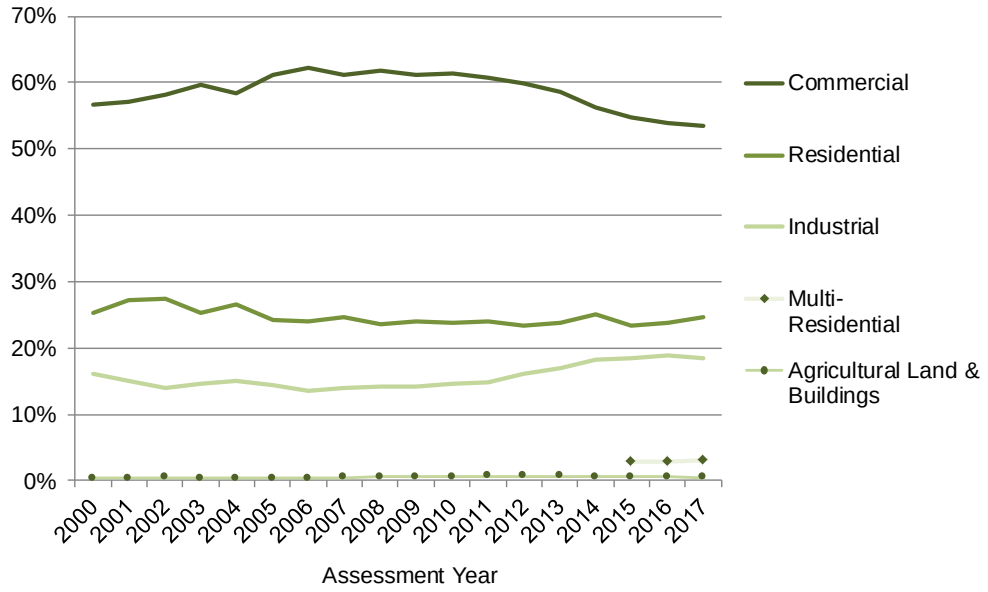
Note: Includes only TIFs where incremental valuation is greater than zero. Revenues from 2017 assessments are budgeted. The abbreviation “AY” means “assessment year.”
Source: Iowa Department of Management Property Valuation System

Figure 1. Total Property Tax and TIF Revenues (AY 1980-2017)



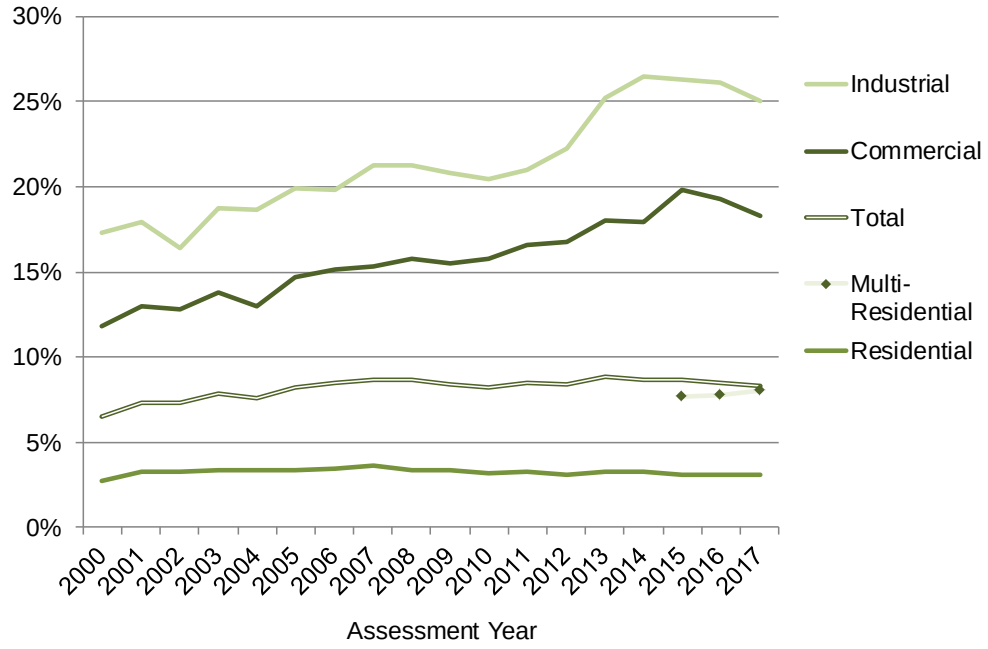
* Revenues from 2017 assessments are estimated.
Sources: Legislative Services Agency (Iowa); Iowa Department of Management Property Valuation System

Figure 2. Increment Valuations by Classification (AY 2000-2017)



Note: Multi-residential property became a new classification effective in 2015. It includes certain property formerly classified as commercial. Revenues from 2017 assessments are budgeted.
Source: Iowa Department of Management Property Valuation System

Figure 3. Share of Taxable Value in TIF Increments, by Classification (AY 2000-2017)



Note: Revenues from 2017 assessments are estimated
Source: Iowa Department of Management Property Valuation System

Table 3. Urban Renewal Areas in AY 2017: Valuations and Revenues by Base Year

Base Year	Count	Frozen Base Valuation ($ Millions)	Incremental Valuation ($ Millions)	TIF Estimated Revenues ($ Millions)
1980 and Before	15	$518.8	$508.2	$19.2
1981	1	$1.8	$1.6	$0.1
1982	3	$123.0	$238.0	$10.0
1983	3	$40.6	$14.5	$0.5
1984	2	$19.0	$15.0	$0.4
1985	10	$23.8	$33.8	$1.1
1986	11	$42.4	$123.4	$4.2
1987	24	$229.4	$307.3	$10.4
1988	38	$457.2	$713.0	$22.0
1989	41	$253.0	$556.2	$16.3
1990	50	$219.5	$385.1	$11.2
1991	26	$137.5	$292.4	$8.6
1992	56	$487.7	$623.8	$21.5
1993	77	$507.2	$783.3	$23.2
1994	35	$161.1	$115.1	$3.3
1995	21	$55.3	$39.9	$1.3
1996	29	$210.3	$159.0	$3.9
1997	34	$156.2	$254.2	$7.6
1998	43	$268.2	$420.2	$13.0
1999	57	$924.9	$690.4	$19.9
2000	55	$267.4	$472.4	$14.4
2001	39	$130.0	$120.7	$3.5
2002	85	$621.4	$489.6	$14.2
2003	44	$129.3	$161.8	$4.5
2004	55	$208.8	$275.4	$8.2
2005	47	$160.4	$116.9	$3.5
2006	61	$240.8	$342.9	$9.9
2007	83	$378.2	$374.7	$10.5
2008	79	$565.6	$410.7	$10.0
2009	84	$212.5	$395.4	$9.9
2010	92	$594.3	$252.3	$6.3
2011	82	$428.3	$264.8	$7.6
2012	90	$138.7	$321.3	$8.7
2013	75	$186.0	$331.0	$9.1
2014	73	$415.5	$240.3	$7.2
2015	84	$471.0	$300.5	$8.9
2016	65	$615.6	$87.5	$2.8
Not Reported	13	$24.9	$166.1	$3.8
Total	1,782	$10,625.5	$11,398.9	$340.8

Note: Includes only URAs with TIF valuation greater than zero. Revenues from 2017 assessments are estimated

Source: Iowa Department of Management Property Valuation System

Table 4. TIF Increment Valuations and Revenues in Iowa School Districts (AY 2001-2017)

	School Districts without TIF		School Districts with TIF							All School Districts		
Assess-ment Year	Count	Taxable Valuaton* ($ Millions)	Count	Taxable Valuation in TIF ($ Millions)	Taxable Valuation Excluding TIF ($ Millions)	Total Taxable Valuation ($ Millions)	School District Revenues Diverted to TIF ($ Millions)	Tax Shift to District Taxpayers ($ Millions)	State Foundation Aid Tax Shift as a Result of TIF ($ Millions)	Taxable Valuation Excluding TIF ($ Millions)	Taxable Valuation Including TIF ($ Millions)	Total School District Revenues from Operating and Management Levies** ($ Millions)
2001	110	$12,230.0	260	$5,227.3	$86,975.4	$92,202.8	$64.8	$36.6	$28.2	$99,205.4	$104,432.7	$1,219.9
2002	98	$10,140.5	272	$5,353.6	$91,506.2	$96,859.9	$67.6	$38.7	$28.9	$101,646.8	$107,000.4	$1,264.7
2003	100	$9,240.4	267	$5,988.2	$89,429.2	$95,417.4	$79.1	$46.8	$32.3	$98,669.6	$104,657.8	$1,289.3
2004	98	$10,610.0	267	$5,950.1	$90,176.8	$96,126.9	$78.8	$46.7	$32.1	$100,786.8	$106,736.9	$1,323.3
2005	108	$12,885.7	257	$6,864.5	$92,829.9	$99,694.4	$91.8	$54.7	$37.1	$105,715.6	$112,580.2	$1,394.2
2006	107	$12,894.7	257	$7,287.9	$95,314.1	$102,601.9	$98.5	$59.1	$39.4	$108,208.8	$115,496.6	$1,443.5
2007	99	$12,451.2	263	$7,987.0	$102,065.2	$110,052.2	$107.6	$64.5	$43.1	$114,516.4	$122,503.4	$1,530.2
2008	95	$12,667.7	266	$8,352.0	$107,454.8	$115,806.9	$114.5	$69.4	$45.1	$120,122.5	$128,474.6	$1,621.9
2009	93	$11,264.4	266	$8,493.9	$114,130.5	$122,624.4	$120.0	$74.2	$45.9	$125,394.9	$133,888.8	$1,754.4
2010	87	$11,232.0	264	$8,669.5	$119,477.2	$128,146.7	$121.0	$74.2	$46.8	$130,709.1	$139,378.6	$1,803.0
2011	82	$11,293.6	266	$9,228.7	$124,207.5	$133,436.2	$124.0	$74.1	$49.8	$135,501.1	$144,729.8	$1,787.1
2012	83	$11,682.8	263	$9,512.1	$129,188.6	$138,700.7	$115.1	$63.8	$51.4	$140,871.4	$150,383.5	$1,679.2
2013	76	$12,261.5	262	$10,272.3	$131,551.0	$141,823.3	$121.5	$66.0	$55.5	$143,812.5	$154,084.7	$1,679.8
2014	74	$12,796.5	262	$10,275.0	$134,261.2	$144,536.2	$121.3	$65.8	$55.5	$147,057.7	$157,332.7	$1,709.1
2015	76	$14,646.2	257	$10,830.2	$138,891.5	$149,721.7	$128.2	$69.7	$58.5	$153,537.7	$164,367.9	$1,774.6
2016	74	$13,175.6	259	$11,019.2	$146,538.7	$157,557.9	$129.2	$69.7	$59.5	$159,714.3	$170,733.5	$1,836.8
2017	72	$14,589.7	258	$11,398.9	$153,282.7	$164,681.6	$130.6	$69.1	$61.6	$167,872.4	$179,271.3	$1,899.8

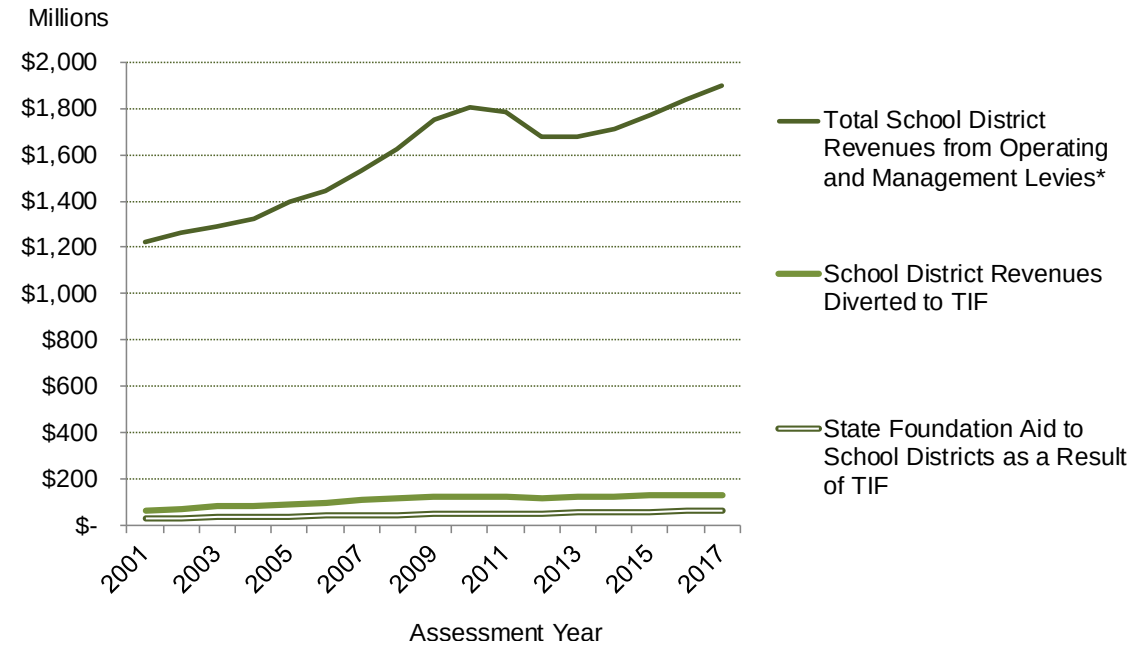
* For the entire table except in TIFs, total taxable valuation includes utilities. Revenues from 2017 assessments are budgeted.

** Excludes revenues from Instructional Support Levies beginning in AY 2012.

Note: Revenues from 2017 assessments are estimated.

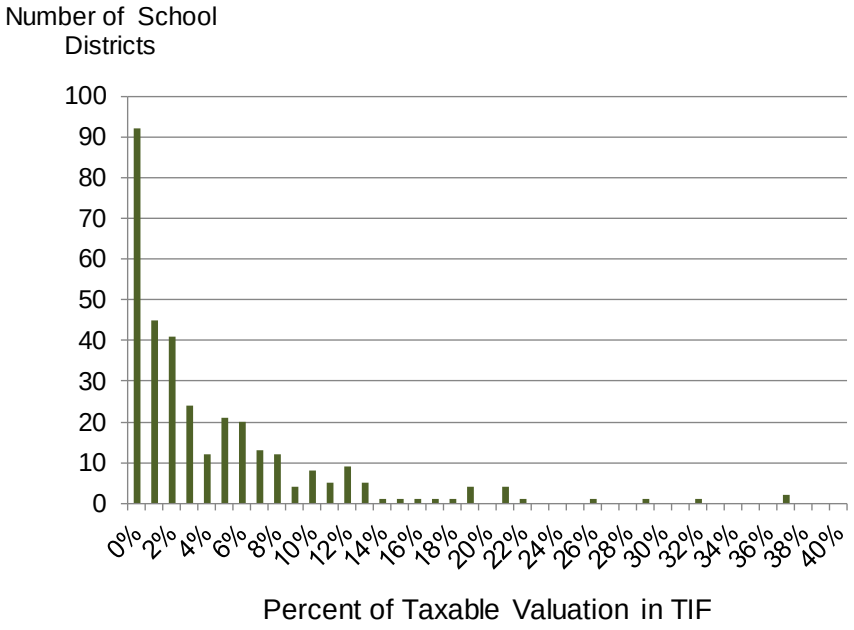
Source: Iowa Department of Management Property Valuation System

Figure 4. Iowa School District Revenues, TIF Diversions, and State Foundation Aid as a Result of TIF (AY 2001-2017)



* Excludes Revenues from Instructional Support Levies beginning in AY 2012.
Note: Revenues from 2017 assessments are estimated.
Source: Iowa Department of Management Property Valuation System

Figure 5. Number of Iowa School Districts by Percent of District Taxable Valuation in TIF Increments (AY 2017)



Source: Iowa Department of Management Property Valuation System

Table 5. Valuation, Revenues, and Tax Shift for Iowa School Districts by Quintile (AY 2017)

Quintile of Percent of District Valuation in TIF	Range	District Revenues on Taxable Valuation Excluding TIF* ($ Millions)	Total School District Valuation ($ Millions)	School District Valuation in TIF ($ Millions)	Tax Shift to District Taxpayers from TIF ($ Millions)	State Foundation Aid Tax Shift from TIF ($ Millions)
Highest Fifth	7.0% - 37.4%	$618.43	$59,799.40	$7,333.48	$44.97	$39.60
Fourth Fifth	3.3% - 7.0%	$664.10	$61,342.89	$3,355.11	$20.20	$18.12
Middle Fifth	1.4% - 3.3%	$258.45	$24,031.62	$548.73	$3.06	$2.96
Second Fifth	0.0% - 1.4%	$221.71	$21,446.76	$161.57	$0.83	$0.87
Lowest Fifth	0.0% - 0.0%	$137.09	$12,650.58	$0.00	$0.00	$0.00
Total	0.0% - 37.4%	$1,899.79	$179,271.26	$11,398.89	$69.06	$61.55

* Includes operating and management levies only. Excludes revenues from Instructional Support Levies.
Tax shift to other taxpayers represents revenues from applicable school levies on TIF increments less backfill from the State Foundation Aid formula. Revenues from 2017 assessments are estimated.
Source: Iowa Department of Management Property Valuation System

Table 6A. Net Taxable Valuations in TIF by County (AY 2017)

County	TIF Increment ($ Millions)	TIF Maximum Increment ($ Millions)	Total Net Taxable Valuation ($ Millions)	Percent of Maximum Increment in Used Increment	Percent of Total Net Taxable Valuation in Used Increment	Percent of Total Net Taxable Valuation In Maximum Increment
Adair	$146.8	$176.4	$651.2	83.3%	22.6%	27.1%
Adams	$16.0	$16.0	$353.3	100.0%	4.5%	4.5%
Allamakee	$23.0	$60.8	$830.7	37.9%	2.8%	7.3%
Appanoose	$11.6	$31.0	$409.9	37.5%	2.8%	7.6%
Audubon	$13.1	$25.1	$430.2	52.1%	3.0%	5.8%
Benton	$39.5	$89.4	$1,465.9	44.1%	2.7%	6.1%
Black Hawk	$451.4	$797.2	$5,719.4	56.6%	7.9%	13.9%
Boone	$41.8	$267.5	$1,411.5	15.6%	3.0%	19.0%
Bremer	$77.1	$119.7	$1,330.5	64.4%	5.8%	9.0%
Buchanan	$21.7	$73.2	$1,079.9	29.7%	2.0%	6.8%
Buena Vista	$26.7	$26.7	$1,112.0	100.0%	2.4%	2.4%
Butler	$49.3	$57.5	$860.8	85.8%	5.7%	6.7%
Calhoun	$1.2	$1.2	$706.1	100.0%	0.2%	0.2%
Carroll	$74.8	$81.6	$1,443.3	91.7%	5.2%	5.7%
Cass	$43.4	$153.9	$963.4	28.2%	4.5%	16.0%
Cedar	$26.5	$162.5	$1,266.8	16.3%	2.1%	12.8%
Cerro Gordo	$103.9	$396.9	$2,634.6	26.2%	3.9%	15.1%
Cherokee	$9.9	$21.9	$840.9	45.2%	1.2%	2.6%
Chickasaw	$10.4	$17.7	$794.1	58.7%	1.3%	2.2%
Clarke	$18.6	$23.8	$437.9	78.3%	4.3%	5.4%
Clay	$43.9	$196.1	$1,146.5	22.4%	3.8%	17.1%
Clayton	$47.9	$64.3	$1,072.4	74.5%	4.5%	6.0%
Clinton	$117.2	$227.9	$2,329.8	51.4%	5.0%	9.8%
Crawford	$12.3	$73.2	$1,055.6	16.9%	1.2%	6.9%
Dallas	$691.2	$1,636.6	$6,092.2	42.2%	11.3%	26.9%
Davis	$4.1	$15.1	$362.4	27.1%	1.1%	4.2%
Decatur	$0.0	$0.0	$275.4		0.0%	0.0%
Delaware	$49.7	$195.3	$1,225.8	25.4%	4.1%	15.9%
Des Moines	$133.5	$242.8	$1,649.4	55.0%	8.1%	14.7%
Dickinson	$238.7	$624.4	$2,870.9	38.2%	8.3%	21.7%
Dubuque	$443.2	$601.3	$5,146.6	73.7%	8.6%	11.7%
Emmet	$6.0	$27.7	$578.7	21.5%	1.0%	4.8%
Fayette	$27.1	$91.2	$1,110.0	29.7%	2.4%	8.2%
Floyd	$56.5	$147.2	$880.7	38.4%	6.4%	16.7%
Franklin	$148.7	$200.1	$905.5	74.3%	16.4%	22.1%
Fremont	$6.3	$30.6	$578.6	20.7%	1.1%	5.3%
Greene	$21.8	$37.4	$677.6	58.3%	3.2%	5.5%
Grundy	$32.0	$152.8	$871.7	21.0%	3.7%	17.5%
Guthrie	$154.6	$315.6	$882.9	49.0%	17.5%	35.7%
Hamilton	$32.7	$73.9	$964.2	44.3%	3.4%	7.7%
Hancock	$20.9	$38.4	$950.9	54.4%	2.2%	4.0%
Hardin	$59.7	$146.7	$991.0	40.7%	6.0%	14.8%
Harrison	$5.6	$46.9	$941.0	12.1%	0.6%	5.0%
Henry	$25.9	$285.9	$864.5	9.0%	3.0%	33.1%
Howard	$82.5	$146.9	$707.2	56.1%	11.7%	20.8%
Humboldt	$38.5	$61.9	$706.7	62.2%	5.4%	8.8%
Ida	$24.0	$34.9	$577.7	68.8%	4.2%	6.0%
Iowa	$38.1	$78.7	$1,012.3	48.4%	3.8%	7.8%
Jackson	$24.1	$129.4	$1,130.0	18.6%	2.1%	11.5%
Jasper	$87.6	$147.1	$1,557.7	59.6%	5.6%	9.4%
Jefferson	$5.7	$6.1	$847.2	94.0%	0.7%	0.7%

Table 6A (Continued). Net Taxable Valuations in TIF by County (AY 2017)

County	TIF Increment ($ Millions)	TIF Maximum Increment ($ Millions)	Total Net Taxable Valuation ($ Millions)	Percent of Maximum Increment in Used Increment	Percent of Total Net Taxable Valuation in Used Increment	Percent of Total Net Taxable Valuation In Maximum Increment
Johnson	$757.0	$1,354.5	$8,778.3	55.9%	8.6%	15.4%
Jones	$32.0	$41.4	$1,068.6	77.3%	3.0%	3.9%
Keokuk	$1.9	$1.9	$620.2	97.3%	0.3%	0.3%
Kossuth	$18.8	$98.8	$1,371.4	19.1%	1.4%	7.2%
Lee	$37.2	$65.0	$1,278.2	57.3%	2.9%	5.1%
Linn	$610.7	$2,533.7	$11,266.2	24.1%	5.4%	22.5%
Louisa	$3.6	$11.4	$618.6	31.5%	0.6%	1.8%
Lucas	$8.5	$22.0	$335.6	38.6%	2.5%	6.6%
Lyon	$56.4	$164.9	$951.8	34.2%	5.9%	17.3%
Madison	$44.5	$65.6	$866.2	67.9%	5.1%	7.6%
Mahaska	$6.6	$174.1	$1,051.7	3.8%	0.6%	16.6%
Marion	$73.1	$136.6	$1,512.7	53.5%	4.8%	9.0%
Marshall	$31.7	$178.5	$1,636.4	17.7%	1.9%	10.9%
Mills	$28.0	$28.0	$958.1	100.0%	2.9%	2.9%
Mitchell	$207.0	$233.6	$854.3	88.6%	24.2%	27.3%
Monona	$12.6	$16.1	$717.9	77.9%	1.8%	2.2%
Monroe	$0.0	$137.9	$454.1	0.0%	0.0%	30.4%
Montgomery	$9.2	$46.9	$585.6	19.6%	1.6%	8.0%
Muscatine	$95.4	$197.4	$2,034.2	48.3%	4.7%	9.7%
O'Brien	$117.9	$118.7	$1,031.1	99.3%	11.4%	11.5%
Osceola	$40.4	$60.3	$570.0	66.9%	7.1%	10.6%
Page	$10.0	$27.2	$685.7	36.8%	1.5%	4.0%
Palo Alto	$48.0	$145.9	$767.8	32.9%	6.3%	19.0%
Plymouth	$160.0	$300.2	$1,788.0	53.3%	8.9%	16.8%
Pocahontas	$6.1	$23.7	$796.7	25.7%	0.8%	3.0%
Polk	$2,461.6	$5,967.6	$25,218.1	41.2%	9.8%	23.7%
Pottawattami	$247.9	$398.9	$4,857.7	62.2%	5.1%	8.2%
Poweshiek	$103.3	$169.4	$1,198.3	61.0%	8.6%	14.1%
Ringgold	$27.5	$89.0	$348.8	30.9%	7.9%	25.5%
Sac	$9.1	$9.1	$764.4	100.0%	1.2%	1.2%
Scott	$439.7	$1,089.8	$8,839.2	40.3%	5.0%	12.3%
Shelby	$29.8	$73.5	$859.0	40.5%	3.5%	8.6%
Sioux	$302.2	$368.4	$2,092.1	82.0%	14.4%	17.6%
Story	$326.0	$388.1	$4,830.9	84.0%	6.7%	8.0%
Tama	$21.4	$40.3	$968.2	53.1%	2.2%	4.2%
Taylor	$2.2	$2.3	$389.0	97.4%	0.6%	0.6%
Union	$2.7	$50.3	$511.4	5.4%	0.5%	9.8%
Van Buren	$0.0	$5.1	$347.0	0.0%	0.0%	1.5%
Wapello	$19.9	$154.8	$1,099.2	12.8%	1.8%	14.1%
Warren	$192.4	$193.3	$2,237.4	99.5%	8.6%	8.6%
Washington	$23.8	$75.6	$1,225.7	31.4%	1.9%	6.2%
Wayne	$0.0	$0.0	$324.5		0.0%	0.0%
Webster	$141.1	$143.7	$1,805.3	98.1%	7.8%	8.0%
Winnebago	$176.2	$182.4	$751.2	96.6%	23.5%	24.3%
Winneshiek	$0.6	$69.9	$1,288.4	0.9%	0.0%	5.4%
Woodbury	$359.9	$951.1	$4,309.5	37.8%	8.4%	22.1%
Worth	$168.2	$238.8	$746.3	70.4%	22.5%	32.0%
Wright	$40.1	$51.9	$885.1	77.1%	4.5%	5.9%
Total	$11,398.9	$25,574.1	$174,201.3	44.6%	6.5%	14.7%

Source: Iowa Department of Management Property Valuation System

Table 6B. Net Taxable Valuations in TIF by Core-Based Statistical Area (AY 2017)

Core-Based Statistical Area	TIF Increment ($ Millions)	TIF Maximum Increment ($ Millions)	Total Net Taxable Valuation ($ Millions)	Percent of Maximum Increment in Used Increment	Percent of Total Net Taxable Valuation in Used Increment	Percent of Total Net Taxable Valuation In Maximum Increment
Metropolitan Statistical Areas	**$7,578.1**	**$17,147.4**	**$98,694.2**	**44.2%**	**7.7%**	**17.4%**
Ames	$326.0	$388.1	$4,830.9	84.0%	6.7%	8.0%
Cedar Rapids	$682.2	$2,664.6	$13,800.7	25.6%	4.9%	19.3%
Davenport-Moline-Rock Island	$439.7	$1,089.8	$8,839.2	40.3%	5.0%	12.3%
Des Moines-West Des Moines	$3,544.3	$8,178.7	$35,296.7	43.3%	10.0%	23.2%
Dubuque	$443.2	$601.3	$5,146.6	73.7%	8.6%	11.7%
Iowa City	$780.7	$1,430.2	$10,004.0	54.6%	7.8%	14.3%
Omaha-Council Bluffs	$281.6	$473.8	$6,756.9	59.4%	4.2%	7.0%
Sioux City	$519.9	$1,251.3	$6,097.5	41.5%	8.5%	20.5%
Waterloo-Cedar Falls	$560.5	$1,069.7	$7,921.7	52.4%	7.1%	13.5%
Micropolitan Statistical Areas	**$1,450.9**	**$3,521.1**	**$28,529.3**	**41.2%**	**5.1%**	**12.3%**
Boone	$41.8	$267.5	$1,411.5	15.6%	3.0%	19.0%
Burlington	$133.5	$242.8	$1,649.4	55.0%	8.1%	14.7%
Carroll	$74.8	$81.6	$1,443.3	91.7%	5.2%	5.7%
Clinton	$117.2	$227.9	$2,329.8	51.4%	5.0%	9.8%
Fairfield	$5.7	$6.1	$847.2	94.0%	0.7%	0.7%
Fort Dodge	$141.1	$143.7	$1,805.3	98.1%	7.8%	8.0%
Fort Madison-Keokuk	$37.2	$65.0	$1,278.2	57.3%	2.9%	5.1%
Marshalltown	$31.7	$178.5	$1,636.4	17.7%	1.9%	10.9%
Mason City	$272.1	$635.7	$3,380.9	42.8%	8.0%	18.8%
Muscatine	$95.4	$197.4	$2,034.2	48.3%	4.7%	9.7%
Newton	$87.6	$147.1	$1,557.7	59.6%	5.6%	9.4%
Oskaloosa	$6.6	$174.1	$1,051.7	3.8%	0.6%	16.6%
Ottumwa	$24.0	$169.8	$1,461.6	14.1%	1.6%	11.6%
Pella	$73.1	$136.6	$1,512.7	53.5%	4.8%	9.0%
Spencer	$43.9	$196.1	$1,146.5	22.4%	3.8%	17.1%
Spirit Lake	$238.7	$624.4	$2,870.9	38.2%	8.3%	21.7%
Storm Lake	$26.7	$26.7	$1,112.0	100.0%	2.4%	2.4%
All Other Counties	**$2,369.8**	**$4,905.6**	**$46,977.9**	**48.3%**	**5.0%**	**10.4%**
Statewide	**$11,398.9**	**$25,574.1**	**$174,201.3**	**44.6%**	**6.5%**	**14.7%**

Source: Iowa Department of Management Property Valuation System

Table 7A. Net Taxable Valuations by County and Urban or Rural Property Type (AY 2017)

	Urban Property					Rural Property				
County	TIF Increment ($ Millions)	TIF Maximum Increment ($ Millions)	Total Net Taxable Valuation ($ Millions)	Percent of Total in TIF Increment	Percent of Total in TIF Maximum Increment	TIF Increment ($ Millions)	TIF Maximum Increment ($ Millions)	Total Net Taxable Valuation ($ Millions)	Percent of Total in TIF Increment	Percent of Total in TIF Maximum Increment
Adair	$47.0	$51.2	$153.4	30.7%	33.4%	$99.8	$125.2	$497.8	20.0%	25.1%
Adams	$0.0	$0.0	$41.5	0.0%	0.0%	$16.0	$16.0	$311.8	5.1%	5.1%
Allamakee	$23.0	$60.8	$267.1	8.6%	22.8%	$0.0	$0.0	$563.6	0.0%	0.0%
Appanoose	$0.0	$11.3	$154.9	0.0%	7.3%	$11.6	$19.7	$255.0	4.6%	7.7%
Audubon	$1.5	$1.9	$70.9	2.1%	2.6%	$11.6	$23.2	$359.3	3.2%	6.5%
Benton	$39.5	$89.4	$554.7	7.1%	16.1%	$0.0	$0.0	$911.2	0.0%	0.0%
Black Hawk	$451.4	$797.1	$4,922.0	9.2%	16.2%	$0.0	$0.0	$797.5	0.0%	0.0%
Boone	$21.5	$237.9	$554.5	3.9%	42.9%	$20.3	$29.6	$857.0	2.4%	3.5%
Bremer	$76.5	$119.1	$718.8	10.6%	16.6%	$0.5	$0.6	$611.7	0.1%	0.1%
Buchanan	$21.7	$73.2	$408.5	5.3%	17.9%	$0.0	$0.0	$671.3	0.0%	0.0%
Buena Vista	$26.7	$26.7	$488.2	5.5%	5.5%	$0.0	$0.0	$623.8	0.0%	0.0%
Butler	$25.7	$34.2	$264.7	9.7%	12.9%	$23.6	$23.3	$596.0	4.0%	3.9%
Calhoun	$0.1	$0.1	$181.0	0.1%	0.1%	$1.1	$1.1	$525.1	0.2%	0.2%
Carroll	$66.8	$73.6	$768.6	8.7%	9.6%	$8.0	$8.0	$674.7	1.2%	1.2%
Cass	$6.6	$117.0	$298.6	2.2%	39.2%	$36.7	$36.9	$664.8	5.5%	5.6%
Cedar	$24.8	$158.4	$445.0	5.6%	35.6%	$1.7	$4.1	$821.9	0.2%	0.5%
Cerro Gordo	$103.0	$389.9	$1,887.8	5.5%	20.7%	$0.9	$7.1	$746.8	0.1%	0.9%
Cherokee	$2.5	$5.6	$233.6	1.1%	2.4%	$7.3	$16.3	$607.3	1.2%	2.7%
Chickasaw	$10.4	$17.7	$236.0	4.4%	7.5%	$0.0	$0.0	$558.1	0.0%	0.0%
Clarke	$18.6	$23.8	$205.3	9.1%	11.6%	$0.0	$0.0	$232.6	0.0%	0.0%
Clay	$43.9	$196.1	$580.6	7.6%	33.8%	$0.0	$0.0	$565.9	0.0%	0.0%
Clayton	$47.6	$64.0	$349.6	13.6%	18.3%	$0.3	$0.3	$722.8	0.0%	0.0%
Clinton	$117.2	$227.9	$1,486.0	7.9%	15.3%	$0.0	$0.0	$843.8	0.0%	0.0%
Crawford	$12.3	$73.2	$316.9	3.9%	23.1%	$0.0	$0.0	$738.8	0.0%	0.0%
Dallas	$691.1	$1,633.0	$4,984.3	13.9%	32.8%	$0.0	$3.6	$1,107.8	0.0%	0.3%
Davis	$4.1	$15.1	$81.2	5.0%	18.5%	$0.0	$0.0	$281.2	0.0%	0.0%
Decatur	$0.0	$0.0	$93.3	0.0%	0.0%	$0.0	$0.0	$182.1	0.0%	0.0%
Delaware	$49.7	$191.0	$368.6	13.5%	51.8%	$0.0	$4.3	$857.2	0.0%	0.5%
Des Moines	$133.5	$242.8	$1,068.6	12.5%	22.7%	$0.0	$0.0	$580.8	0.0%	0.0%
Dickinson	$222.5	$607.2	$1,774.2	12.5%	34.2%	$16.2	$17.2	$1,096.7	1.5%	1.6%
Dubuque	$439.9	$596.7	$3,743.3	11.8%	15.9%	$3.3	$4.5	$1,403.2	0.2%	0.3%
Emmet	$3.3	$13.1	$203.5	1.6%	6.4%	$2.6	$14.6	$375.2	0.7%	3.9%
Fayette	$19.1	$82.3	$353.2	5.4%	23.3%	$7.9	$8.9	$756.8	1.0%	1.2%

Table 7A (Continued). Net Taxable Valuations by County and Urban or Rural Property Type (AY 2017)

	Urban Property					Rural Property				
County	TIF Increment ($ Millions)	TIF Maximum Increment ($ Millions)	Total Net Taxable Valuation ($ Millions)	Percent in TIF Increment	Percent in TIF Maximum Increment	TIF Increment ($ Millions)	TIF Maximum Increment ($ Millions)	Total Net Taxable Valuation ($ Millions)	Percent in TIF Increment	Percent in TIF Maximum Increment
Floyd	$18.4	$104.8	$347.2	5.3%	30.2%	$38.1	$42.4	$533.5	7.1%	8.0%
Franklin	$15.0	$65.1	$189.2	7.9%	34.4%	$132.2	$135.0	$716.3	18.5%	18.8%
Fremont	$4.0	$13.3	$121.4	3.3%	10.9%	$2.3	$17.4	$457.2	0.5%	3.8%
Greene	$21.8	$37.4	$206.1	10.6%	18.2%	$0.0	$0.0	$471.5	0.0%	0.0%
Grundy	$31.9	$152.6	$290.6	11.0%	52.5%	$0.2	$0.2	$581.2	0.0%	0.0%
Guthrie	$26.3	$26.3	$154.8	17.0%	17.0%	$128.3	$289.3	$728.1	17.6%	39.7%
Hamilton	$12.3	$45.4	$342.9	3.6%	13.2%	$20.4	$28.5	$621.3	3.3%	4.6%
Hancock	$20.9	$38.4	$262.9	8.0%	14.6%	$0.0	$0.0	$688.0	0.0%	0.0%
Hardin	$37.7	$98.2	$366.5	10.3%	26.8%	$22.0	$48.5	$624.5	3.5%	7.8%
Harrison	$5.6	$44.7	$241.4	2.3%	18.5%	$0.1	$2.2	$699.6	0.0%	0.3%
Henry	$25.9	$263.8	$427.8	6.0%	61.7%	$0.0	$22.2	$436.7	0.0%	5.1%
Howard	$3.9	$31.7	$169.8	2.3%	18.7%	$78.6	$115.2	$537.4	14.6%	21.4%
Humboldt	$38.5	$61.9	$277.8	13.8%	22.3%	$0.0	$0.0	$428.9	0.0%	0.0%
Ida	$13.2	$24.0	$152.5	8.6%	15.8%	$10.9	$10.9	$425.1	2.6%	2.6%
Iowa	$33.7	$73.6	$271.8	12.4%	27.1%	$4.4	$5.1	$740.5	0.6%	0.7%
Jackson	$24.1	$127.0	$425.2	5.7%	29.9%	$0.0	$2.4	$704.8	0.0%	0.3%
Jasper	$87.6	$147.1	$744.1	11.8%	19.8%	$0.0	$0.0	$813.6	0.0%	0.0%
Jefferson	$5.7	$6.1	$383.1	1.5%	1.6%	$0.0	$0.0	$464.1	0.0%	0.0%
Johnson	$757.0	$1,354.5	$7,125.4	10.6%	19.0%	$0.0	$0.0	$1,652.8	0.0%	0.0%
Jones	$32.0	$41.4	$337.3	9.5%	12.3%	$0.1	$0.1	$731.3	0.0%	0.0%
Keokuk	$1.9	$1.9	$138.4	1.4%	1.4%	$0.0	$0.0	$481.8	0.0%	0.0%
Kossuth	$14.2	$94.2	$369.0	3.9%	25.5%	$4.6	$4.6	$1,002.4	0.5%	0.5%
Lee	$37.2	$65.0	$677.8	5.5%	9.6%	$0.0	$0.0	$600.4	0.0%	0.0%
Linn	$609.5	$2,526.2	$9,800.7	6.2%	25.8%	$1.3	$7.5	$1,465.5	0.1%	0.5%
Louisa	$3.6	$11.4	$139.5	2.6%	8.2%	$0.0	$0.0	$479.1	0.0%	0.0%
Lucas	$4.3	$18.3	$102.4	4.2%	17.9%	$4.3	$3.7	$233.3	1.8%	1.6%
Lyon	$27.0	$34.1	$245.5	11.0%	13.9%	$29.3	$130.8	$706.3	4.2%	18.5%
Madison	$44.5	$65.6	$282.4	15.8%	23.2%	$0.0	$0.0	$583.8	0.0%	0.0%
Mahaska	$6.0	$172.1	$424.3	1.4%	40.6%	$0.6	$2.0	$627.4	0.1%	0.3%
Marion	$73.1	$136.6	$812.8	9.0%	16.8%	$0.0	$0.0	$699.9	0.0%	0.0%
Marshall	$29.9	$176.7	$895.9	3.3%	19.7%	$1.7	$1.7	$740.5	0.2%	0.2%
Mills	$9.1	$9.1	$225.5	4.0%	4.0%	$18.9	$18.9	$732.6	2.6%	2.6%
Mitchell	$60.1	$84.6	$225.5	26.6%	37.5%	$147.0	$149.1	$628.8	23.4%	23.7%

Table 7A (Continued). Net Taxable Valuations by County and Urban or Rural Property Type (AY 2017)

	Urban Property					Rural Property				
County	TIF Increment ($ Millions)	TIF Maximum Increment ($ Millions)	Total Net Taxable Valuation ($ Millions)	Percent in TIF Increment	Percent in TIF Maximum Increment	TIF Increment ($ Millions)	TIF Maximum Increment ($ Millions)	Total Net Taxable Valuation ($ Millions)	Percent in TIF Increment	Percent in TIF Maximum Increment
Monona	$12.6	$16.1	$166.0	7.6%	9.7%	$0.0	$0.0	$552.0	0.0%	0.0%
Monroe	$0.0	$0.0	$98.6	0.0%	0.0%	$0.0	$137.9	$355.4	0.0%	38.8%
Montgomery	$9.2	$44.0	$202.9	4.5%	21.7%	$0.0	$3.0	$382.7	0.0%	0.8%
Muscatine	$91.6	$193.6	$1,204.2	7.6%	16.1%	$3.8	$3.8	$830.1	0.5%	0.5%
O'Brien	$112.1	$112.9	$346.2	32.4%	32.6%	$5.7	$5.7	$684.9	0.8%	0.8%
Osceola	$11.3	$22.0	$104.6	10.8%	21.0%	$29.1	$38.3	$465.4	6.2%	8.2%
Page	$10.0	$27.2	$275.9	3.6%	9.9%	$0.0	$0.0	$409.8	0.0%	0.0%
Palo Alto	$5.6	$91.1	$208.6	2.7%	43.7%	$42.4	$54.7	$559.1	7.6%	9.8%
Plymouth	$123.6	$263.4	$803.6	15.4%	32.8%	$36.5	$36.8	$984.4	3.7%	3.7%
Pocahontas	$6.1	$23.7	$124.8	4.9%	19.0%	$0.0	$0.0	$671.9	0.0%	0.0%
Polk	$2,439.0	$5,935.1	$23,263.0	10.5%	25.5%	$22.6	$32.5	$1,955.1	1.2%	1.7%
Pottawattami	$247.9	$398.9	$3,186.2	7.8%	12.5%	$0.0	$0.0	$1,671.6	0.0%	0.0%
Poweshiek	$84.0	$133.3	$453.0	18.5%	29.4%	$19.4	$36.1	$745.3	2.6%	4.8%
Ringgold	$0.8	$5.3	$56.4	1.4%	9.3%	$26.7	$83.8	$292.4	9.1%	28.6%
Sac	$9.1	$9.1	$222.3	4.1%	4.1%	$0.0	$0.0	$542.1	0.0%	0.0%
Scott	$439.7	$1,089.8	$7,776.2	5.7%	14.0%	$0.0	$0.0	$1,063.0	0.0%	0.0%
Shelby	$27.0	$70.5	$256.1	10.6%	27.5%	$2.7	$3.0	$602.9	0.5%	0.5%
Sioux	$276.0	$342.1	$1,124.9	24.5%	30.4%	$26.3	$26.3	$967.1	2.7%	2.7%
Story	$281.2	$298.5	$3,852.1	7.3%	7.7%	$44.8	$89.6	$978.8	4.6%	9.2%
Tama	$7.1	$26.0	$272.8	2.6%	9.5%	$14.3	$14.3	$695.4	2.1%	2.1%
Taylor	$2.2	$2.3	$92.7	2.4%	2.5%	$0.0	$0.0	$296.3	0.0%	0.0%
Union	$2.7	$50.3	$257.1	1.1%	19.6%	$0.0	$0.0	$254.3	0.0%	0.0%
Van Buren	$0.0	$5.1	$74.5	0.0%	6.9%	$0.0	$0.0	$272.5	0.0%	0.0%
Wapello	$19.9	$141.2	$645.7	3.1%	21.9%	$0.0	$13.5	$453.5	0.0%	3.0%
Warren	$192.0	$192.9	$1,330.9	14.4%	14.5%	$0.4	$0.4	$906.5	0.0%	0.0%
Washington	$23.8	$75.6	$523.2	4.5%	14.5%	$0.0	$0.0	$702.5	0.0%	0.0%
Wayne	$0.0	$0.0	$72.9	0.0%	0.0%	$0.0	$0.0	$251.6	0.0%	0.0%
Webster	$60.7	$63.4	$848.8	7.2%	7.5%	$80.3	$80.3	$956.4	8.4%	8.4%
Winnebago	$44.3	$50.5	$234.0	19.0%	21.6%	$108.4	$131.9	$517.2	21.0%	25.5%
Winneshiek	$0.6	$32.6	$455.4	0.1%	7.2%	$0.0	$37.2	$833.0	0.0%	4.5%
Woodbury	$339.4	$914.9	$3,351.0	10.1%	27.3%	$20.5	$36.2	$958.5	2.1%	3.8%
Worth	$22.8	$65.6	$133.6	17.1%	49.1%	$145.4	$173.2	$612.7	23.7%	28.3%
Wright	$23.8	$35.7	$278.3	8.6%	12.8%	$16.3	$16.3	$606.8	2.7%	2.7%
Total	$9,813.5	$23,117.2	$107,732.1	9.1%	21.5%	$1,560.5	$2,456.9	$66,469.2	2.3%	3.7%

Source: Iowa Department of Management Property Valuation System

Table 7B. Net Taxable Valuations by CBSA and Urban or Rural Property Type (AY 2017)

	Urban Property					Rural Property				
Core-Based Statistical Area	TIF Increment ($ Millions)	TIF Maximum Increment ($ Millions)	Total Net Taxable Valuation ($ Millions)	Percent of Total in TIF Increment	Percent of Total in TIF Maximum Increment	TIF Increment ($ Millions)	TIF Maximum Increment ($ Millions)	Total Net Taxable Valuation ($ Millions)	Percent of Total in TIF Increment	Percent of Total in TIF Maximum Increment
Metropolitan Statistical Areas	**$7,300.7**	**$16,624.9**	**$77,467.4**	**9.4%**	**21.5%**	**$277.5**	**$522.5**	**$21,226.7**	**1.3%**	**2.5%**
Ames	$281.2	$298.5	$3,852.1	7.3%	7.7%	$44.8	$89.6	$978.8	4.6%	9.2%
Cedar Rapids	$680.9	$2,657.0	$10,692.7	6.4%	24.8%	$1.3	$7.6	$3,108.0	0.0%	0.2%
Davenport-Moline-Rock Island	$439.7	$1,089.8	$7,776.2	5.7%	14.0%	$0.0	$0.0	$1,063.0	0.0%	0.0%
Des Moines-West Des Moines	$3,392.9	$7,852.9	$30,015.4	11.3%	26.2%	$151.4	$325.8	$5,281.4	2.9%	6.2%
Dubuque	$439.9	$596.7	$3,743.3	11.8%	15.9%	$3.3	$4.5	$1,403.2	0.2%	0.3%
Iowa City	$780.7	$1,430.2	$7,648.6	10.2%	18.7%	$0.0	$0.0	$2,355.4	0.0%	0.0%
Omaha-Council Bluffs	$262.6	$452.8	$3,653.2	7.2%	12.4%	$19.0	$21.0	$3,103.7	0.6%	0.7%
Sioux City	$462.9	$1,178.3	$4,154.6	11.1%	28.4%	$56.9	$73.0	$1,942.9	2.9%	3.8%
Waterloo-Cedar Falls	$559.7	$1,068.8	$5,931.3	9.4%	18.0%	$0.7	$0.9	$1,990.4	0.0%	0.0%
Micropolitan Statistical Areas	**$1,173.7**	**$3,184.6**	**$15,459.9**	**7.6%**	**20.6%**	**$277.3**	**$336.5**	**$13,069.4**	**2.1%**	**2.6%**
Boone	$21.5	$237.9	$554.5	3.9%	42.9%	$20.3	$29.6	$857.0	2.4%	3.5%
Burlington	$133.5	$242.8	$1,068.6	12.5%	22.7%	$0.0	$0.0	$580.8	0.0%	0.0%
Carroll	$66.8	$73.6	$768.6	8.7%	9.6%	$8.0	$8.0	$674.7	1.2%	1.2%
Clinton	$117.2	$227.9	$1,486.0	7.9%	15.3%	$0.0	$0.0	$843.8	0.0%	0.0%
Fairfield	$5.7	$6.1	$383.1	1.5%	1.6%	$0.0	$0.0	$464.1	0.0%	0.0%
Fort Dodge	$60.7	$63.4	$848.8	7.2%	7.5%	$80.3	$80.3	$956.4	8.4%	8.4%
Fort Madison-Keokuk	$37.2	$65.0	$677.8	5.5%	9.6%	$0.0	$0.0	$600.4	0.0%	0.0%
Marshalltown	$29.9	$176.7	$895.9	3.3%	19.7%	$1.7	$1.7	$740.5	0.2%	0.2%
Mason City	$125.8	$455.4	$2,021.4	6.2%	22.5%	$146.3	$180.3	$1,359.5	10.8%	13.3%
Muscatine	$91.6	$193.6	$1,204.2	7.6%	16.1%	$3.8	$3.8	$830.1	0.5%	0.5%
Newton	$87.6	$147.1	$744.1	11.8%	19.8%	$0.0	$0.0	$813.6	0.0%	0.0%
Oskaloosa	$6.0	$172.1	$424.3	1.4%	40.6%	$0.6	$2.0	$627.4	0.1%	0.3%
Ottumwa	$24.0	$156.3	$726.8	3.3%	21.5%	$0.0	$13.5	$734.8	0.0%	1.8%
Pella	$73.1	$136.6	$812.8	9.0%	16.8%	$0.0	$0.0	$699.9	0.0%	0.0%
Spencer	$43.9	$196.1	$580.6	7.6%	33.8%	$0.0	$0.0	$565.9	0.0%	0.0%
Spirit Lake	$222.5	$607.2	$1,774.2	12.5%	34.2%	$16.2	$17.2	$1,096.7	1.5%	1.6%
Storm Lake	$26.7	$26.7	$488.2	5.5%	5.5%	$0.0	$0.0	$623.8	0.0%	0.0%
All Other Counties	**$1,339.2**	**$3,307.7**	**$14,804.8**	**9.0%**	**22.3%**	**$1,005.7**	**$1,597.9**	**$32,173.0**	**3.1%**	**5.0%**
Statewide	**$9,813.5**	**$23,117.2**	**$107,732.1**	**9.1%**	**21.5%**	**$1,560.5**	**$2,456.9**	**$66,469.2**	**2.3%**	**3.7%**

Source: Iowa Department of Management Property Valuation System

Table 8A. Net Taxable Value by County (AY 2000 and 2017)

County	TIF Increment Valuations ($ Millions)			Net Taxable Value (w/out gas and electric) Including TIF ($ Millions)			Percent of Net Taxable Value in TIF Increment	
	Assessment Year		Percentage Change 2000 - 2017	Assessment Year		Percentage Change 2000 - 2017	Assessment Year	
	2000	2017		2000	2017		2000	2017
Adair	10.9	146.8	1243%	339.6	651.2	92%	3%	23%
Adams	0.6	16.0	2722%	189.9	353.3	86%	0%	5%
Allamakee	15.9	23.0	45%	495.5	830.7	68%	3%	3%
Appanoose	1.5	11.6	658%	271.6	409.9	51%	1%	3%
Audubon	2.6	13.1	410%	277.7	430.2	55%	1%	3%
Benton	47.8	39.5	-18%	886.8	1,465.9	65%	5%	3%
Black Hawk	117.0	451.4	286%	3,056.1	5,719.4	87%	4%	8%
Boone	21.6	41.8	93%	872.0	1,411.5	62%	2%	3%
Bremer	26.0	77.1	196%	770.2	1,330.5	73%	3%	6%
Buchanan	18.8	21.7	16%	667.6	1,079.9	62%	3%	2%
Buena Vista	2.1	26.7	1158%	692.7	1,112.0	61%	0%	2%
Butler	14.2	49.3	247%	543.7	860.8	58%	3%	6%
Calhoun	0.0	1.2	0%	547.6	706.1	29%		0%
Carroll	34.9	74.8	114%	837.4	1,443.3	72%	4%	5%
Cass	4.3	43.4	905%	473.9	963.4	103%	1%	5%
Cedar	17.0	26.5	56%	736.2	1,266.8	72%	2%	2%
Cerro Gordo	66.2	103.9	57%	1,576.2	2,634.6	67%	4%	4%
Cherokee	12.6	9.9	-22%	541.7	840.9	55%	2%	1%
Chickasaw	14.6	10.4	-29%	518.0	794.1	53%	3%	1%
Clarke	24.7	18.6	-25%	289.9	437.9	51%	9%	4%
Clay	7.9	43.9	454%	688.4	1,146.5	67%	1%	4%
Clayton	22.1	47.9	117%	652.1	1,072.4	64%	3%	4%
Clinton	60.8	117.2	93%	1,486.2	2,329.8	57%	4%	5%
Crawford	19.8	12.3	-38%	561.9	1,055.6	88%	4%	1%
Dallas	182.3	691.2	279%	1,605.7	6,092.2	279%	11%	11%
Davis	2.7	4.1	49%	224.3	362.4	62%	1%	1%
Decatur	0.7	0.0	-100%	187.7	275.4	47%	0%	0%
Delaware	18.0	49.7	176%	708.3	1,225.8	73%	3%	4%
Des Moines	66.3	133.5	101%	1,130.2	1,649.4	46%	6%	8%
Dickinson	154.4	238.7	55%	1,086.9	2,870.9	164%	14%	8%
Dubuque	81.0	443.2	447%	2,459.0	5,146.6	109%	3%	9%
Emmet	10.4	6.0	-43%	393.0	578.7	47%	3%	1%
Fayette	14.8	27.1	83%	689.3	1,110.0	61%	2%	2%
Floyd	32.3	56.5	75%	567.8	880.7	55%	6%	6%
Franklin	20.7	148.7	619%	544.1	905.5	66%	4%	16%
Fremont	1.2	6.3	407%	378.5	578.6	53%	0%	1%
Greene	7.7	21.8	184%	493.4	677.6	37%	2%	3%
Grundy	28.6	32.0	12%	565.8	871.7	54%	5%	4%
Guthrie	46.5	154.6	233%	483.2	882.9	83%	10%	18%
Hamilton	19.8	32.7	65%	708.7	964.2	36%	3%	3%
Hancock	4.0	20.9	426%	556.4	950.9	71%	1%	2%
Hardin	25.4	59.7	135%	677.6	991.0	46%	4%	6%
Harrison	11.8	5.6	-52%	602.4	941.0	56%	2%	1%
Henry	20.3	25.9	27%	586.6	864.5	47%	3%	3%
Howard	14.2	82.5	483%	370.4	707.2	91%	4%	12%
Humboldt	3.3	38.5	1075%	480.1	706.7	47%	1%	5%
Ida	7.2	24.0	233%	354.7	577.7	63%	2%	4%
Iowa	37.6	38.1	1%	696.5	1,012.3	45%	5%	4%
Jackson	14.0	24.1	73%	594.2	1,130.0	90%	2%	2%
Jasper	58.3	87.6	50%	1,194.2	1,557.7	30%	5%	6%
Jefferson	29.3	5.7	-80%	554.5	847.2	53%	5%	1%

Table 8A (Continued). Net Taxable Value by County (AY 2000 and 2017)

County	TIF Increment Valuations ($ Millions)			Net Taxable Value (w/out gas and electric) Including TIF ($ Millions)			Percent of Net Taxable Value in TIF Increment	
	Assessment Year		Percentage Change 2000 - 2017	Assessment Year		Percentage Change 2000 - 2017	Assessment Year	
	2000	2017		2000	2017		2000	2017
Johnson	271.3	757.0	179%	3,754.1	8,778.3	134%	7%	9%
Jones	21.4	32.0	50%	656.7	1,068.6	63%	3%	3%
Keokuk	0.0	1.9	.	448.7	620.2	38%	0%	0%
Kossuth	0.3	18.8	6328%	887.2	1,371.4	55%	0%	1%
Lee	21.9	37.2	70%	944.5	1,278.2	35%	2%	3%
Linn	343.4	610.7	78%	6,306.0	11,266.2	79%	5%	5%
Louisa	2.0	3.6	78%	423.0	618.6	46%	0%	1%
Lucas	3.8	8.5	122%	227.6	335.6	47%	2%	3%
Lyon	4.0	56.4	1315%	503.9	951.8	89%	1%	6%
Madison	22.8	44.5	96%	461.9	866.2	88%	5%	5%
Mahaska	16.6	6.6	-61%	697.0	1,051.7	51%	2%	1%
Marion	33.9	73.1	116%	862.1	1,512.7	75%	4%	5%
Marshall	47.8	31.7	-34%	1,065.8	1,636.4	54%	4%	2%
Mills	7.0	28.0	298%	536.5	958.1	79%	1%	3%
Mitchell	19.6	207.0	959%	459.6	854.3	86%	4%	24%
Monona	20.6	12.6	-39%	459.4	717.9	56%	4%	2%
Monroe	11.8	0.0	-100%	357.8	454.1	27%	3%	0%
Montgomery	16.4	9.2	-44%	371.3	585.6	58%	4%	2%
Muscatine	146.1	95.4	-35%	1,413.2	2,034.2	44%	10%	5%
O'Brien	31.6	117.9	273%	583.3	1,031.1	77%	5%	11%
Osceola	6.3	40.4	541%	309.1	570.0	84%	2%	7%
Page	2.6	10.0	281%	463.1	685.7	48%	1%	1%
Palo Alto	8.7	48.0	452%	440.4	767.8	74%	2%	6%
Plymouth	74.5	160.0	115%	1,055.5	1,788.0	69%	7%	9%
Pocahontas	1.6	6.1	282%	472.5	796.7	69%	0%	1%
Polk	828.0	2,461.6	197%	12,189.7	25,218.1	107%	7%	10%
Pottawattamie	100.3	247.9	147%	2,628.6	4,857.7	85%	4%	5%
Poweshiek	17.6	103.3	486%	700.7	1,198.3	71%	3%	9%
Ringgold	1.3	27.5	1952%	180.4	348.8	93%	1%	8%
Sac	0.3	9.1	2653%	501.9	764.4	52%	0%	1%
Scott	210.4	439.7	109%	4,962.8	8,839.2	78%	4%	5%
Shelby	31.0	29.8	-4%	532.1	859.0	61%	6%	3%
Sioux	77.9	302.2	288%	1,077.2	2,092.1	94%	7%	14%
Story	119.4	326.0	173%	2,551.1	4,830.9	89%	5%	7%
Tama	8.8	21.4	144%	673.3	968.2	44%	1%	2%
Taylor	1.0	2.2	118%	196.8	389.0	98%	1%	1%
Union	21.6	2.7	-87%	332.6	511.4	54%	6%	1%
Van Buren	0.8	0.0	-100%	217.2	347.0	60%	0%	0%
Wapello	26.8	19.9	-26%	704.1	1,099.2	56%	4%	2%
Warren	10.5	192.4	1734%	1,074.9	2,237.4	108%	1%	9%
Washington	14.2	23.8	67%	709.2	1,225.7	73%	2%	2%
Wayne	7.4	0.0	-100%	212.8	324.5	52%	3%	0%
Webster	29.7	141.1	375%	1,283.0	1,805.3	41%	2%	8%
Winnebago	20.0	176.2	783%	428.4	751.2	75%	5%	23%
Winneshiek	6.4	0.6	-91%	669.3	1,288.4	93%	1%	0%
Woodbury	284.5	359.9	26%	2,697.3	4,309.5	60%	11%	8%
Worth	18.6	168.2	802%	329.4	746.3	127%	6%	23%
Wright	13.9	40.1	189%	630.1	885.1	40%	2%	5%
Total	4,463.3	11,398.9	155%	96,509.4	174,201.3	81%	5%	7%

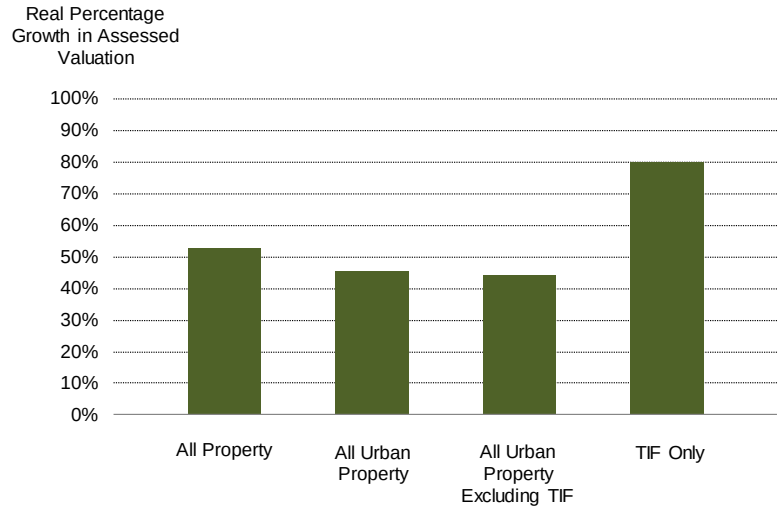
Source: Iowa Department of Management Property Valuation System

Table 8B. Net Taxable Value by CBSA (AY 2000 and 2017)

Core-Based Statistical Area	TIF Increment Valuations ($ Millions)			Net Taxable Value (w/out gas and electric) Including TIF ($ Millions)			Percent of Net Taxable Value in TIF Increment	
	Assessment Year		Percentage Change 2000 - 2017	Assessment Year		Percentage Change 2000 - 2017	Assessment Year	
	2000	2017		2000	2017		2000	2017
Metropolitan Statistical Areas	**2,848.7**	**7,578.1**	**166.0%**	**50,013.4**	**98,694.2**	**97.3%**	**5.7%**	**7.7%**
Ames	119.4	326.0	173.1%	2,551.1	4,830.9	89.4%	4.7%	6.7%
Cedar Rapids	412.6	682.2	65.4%	7,849.6	13,800.7	75.8%	5.3%	4.9%
Davenport-Moline-Rock Island	210.4	439.7	109.0%	4,962.8	8,839.2	78.1%	4.2%	5.0%
Des Moines-West Des Moines	1,090.0	3,544.3	225.2%	15,815.2	35,296.7	123.2%	6.9%	10.0%
Dubuque	81.0	443.2	447.3%	2,459.0	5,146.6	109.3%	3.3%	8.6%
Iowa City	285.6	780.7	173.4%	4,463.3	10,004.0	124.1%	6.4%	7.8%
Omaha-Council Bluffs	119.2	281.6	136.3%	3,767.5	6,756.9	79.3%	3.2%	4.2%
Sioux City	359.0	519.9	44.8%	3,752.8	6,097.5	62.5%	9.6%	8.5%
Waterloo-Cedar Falls	171.7	560.5	226.5%	4,392.1	7,921.7	80.4%	3.9%	7.1%
Micropolitan Statistical Areas	**846.1**	**1,450.9**	**71.5%**	**17,642.2**	**28,529.3**	**61.7%**	**4.8%**	**5.1%**
Boone	21.6	41.8	93.4%	872.0	1,411.5	61.9%	2.5%	3.0%
Burlington	66.3	133.5	101.3%	1,130.2	1,649.4	45.9%	5.9%	8.1%
Carroll	34.9	74.8	114.3%	837.4	1,443.3	72.4%	4.2%	5.2%
Clinton	60.8	117.2	92.7%	1,486.2	2,329.8	56.8%	4.1%	5.0%
Fairfield	29.3	5.7	-80.4%	554.5	847.2	52.8%	5.3%	0.7%
Fort Dodge	29.7	141.1	375.2%	1,283.0	1,805.3	40.7%	2.3%	7.8%
Fort Madison-Keokuk	21.9	37.2	70.1%	944.5	1,278.2	35.3%	2.3%	2.9%
Marshalltown	47.8	31.7	-33.7%	1,065.8	1,636.4	53.5%	4.5%	1.9%
Mason City	84.9	272.1	220.5%	1,905.6	3,380.9	77.4%	4.5%	8.0%
Muscatine	146.1	95.4	-34.7%	1,413.2	2,034.2	43.9%	10.3%	4.7%
Newton	58.3	87.6	50.3%	1,194.2	1,557.7	30.4%	4.9%	5.6%
Oskaloosa	16.6	6.6	-60.6%	697.0	1,051.7	50.9%	2.4%	0.6%
Ottumwa	29.5	24.0	-18.9%	928.4	1,461.6	57.4%	3.2%	1.6%
Pella	33.9	73.1	115.8%	862.1	1,512.7	75.5%	3.9%	4.8%
Spencer	7.9	43.9	454.2%	688.4	1,146.5	66.5%	1.2%	3.8%
Spirit Lake	154.4	238.7	54.6%	1,086.9	2,870.9	164.1%	14.2%	8.3%
Storm Lake	2.1	26.7	1157.7%	692.7	1,112.0	60.5%	0.3%	2.4%
All Other Counties	**768.5**	**2,369.8**	**208.4%**	**28,853.8**	**46,977.9**	**62.8%**	**2.7%**	**5.0%**
Statewide	**4,463.3**	**11,398.9**	**155.4%**	**96,509.4**	**174,201.3**	**80.5%**	**4.6%**	**6.5%**

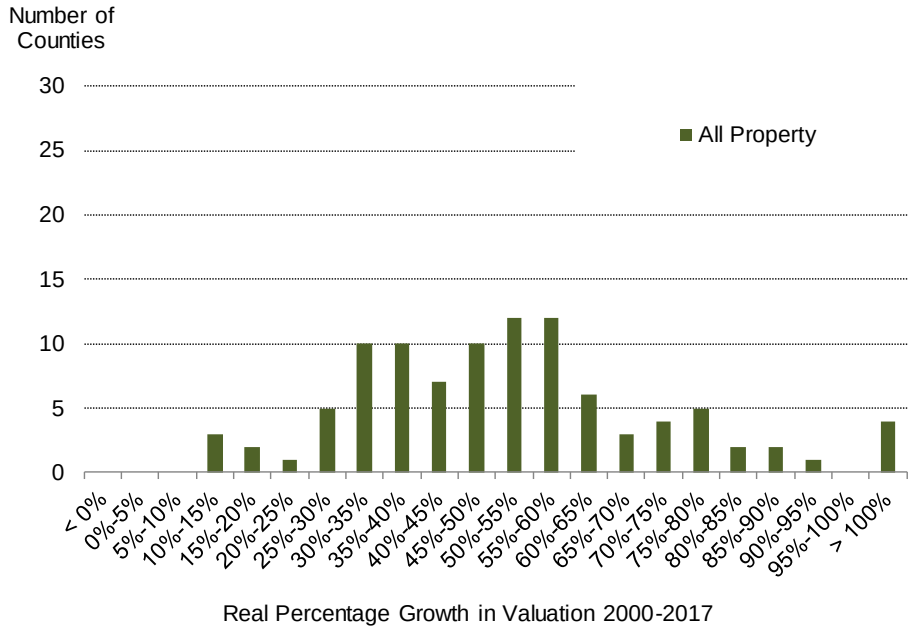
Source: Iowa Department of Management Property Valuation System

Figure 6. Change in Valuations between AY 2000 and 2017 by Property Category



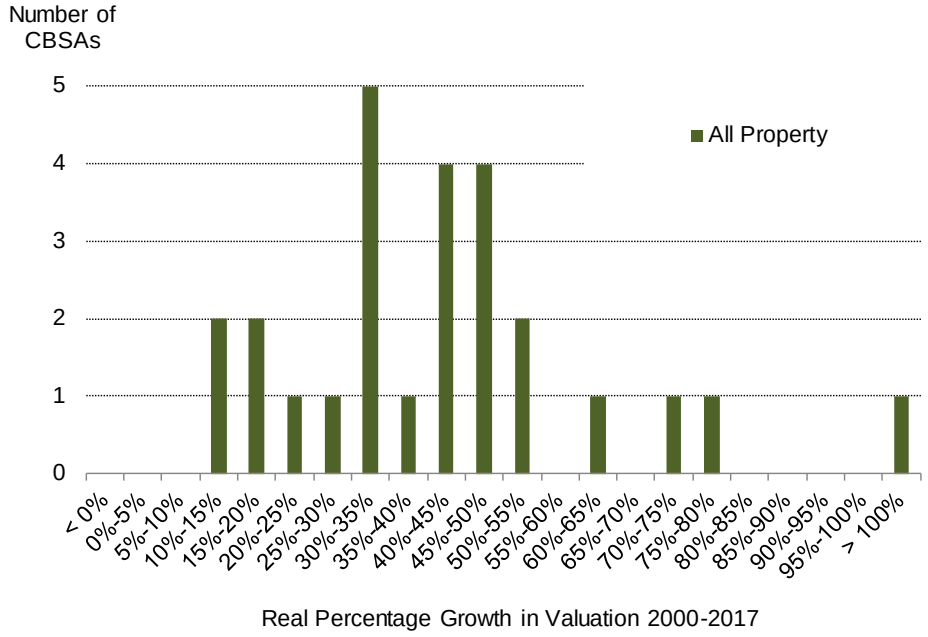
Source: Iowa Department of Management Property Valuation System

Figure 7A. Number of Counties by Percent Growth in Assessed Valuation 2000-2017, All Property



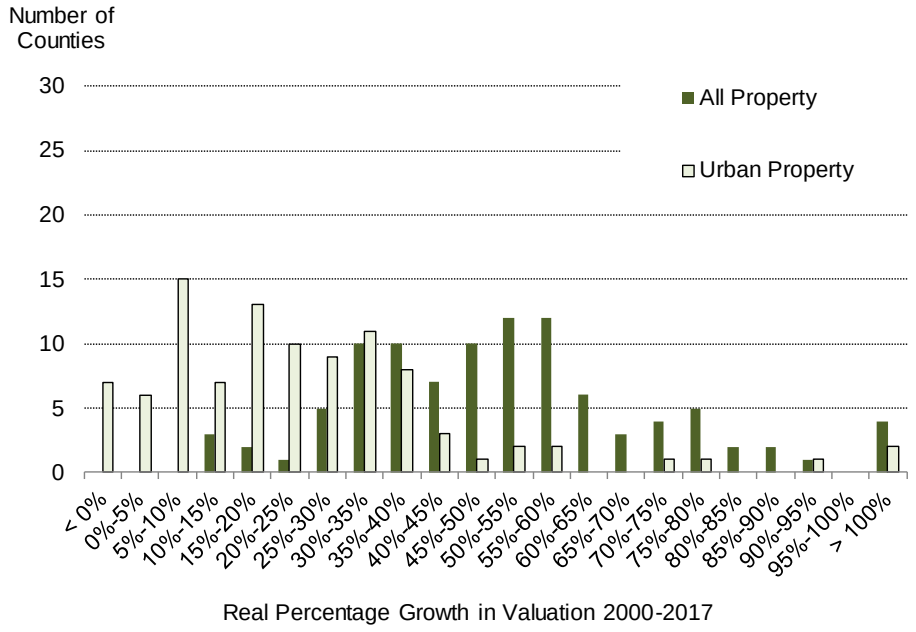
Source: Iowa Department of Management Property Valuation System

Figure 7B. Number of CBSAs by Percent Growth in Assessed Valuation 2000-2017, All Property



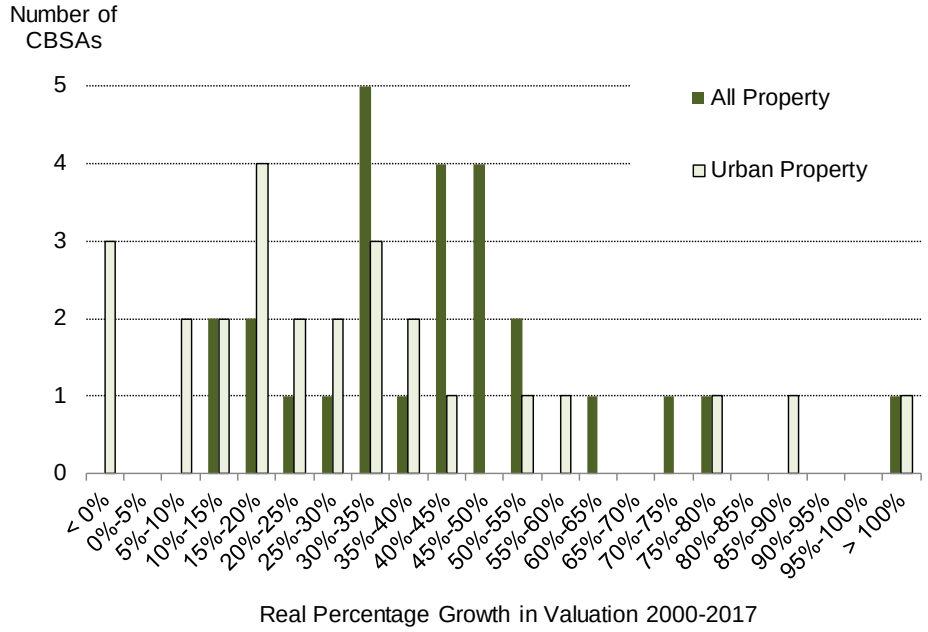
Source: Iowa Department of Management Property Valuation System

Figure 8A. Number of Counties by Percent Growth in Assessed Valuation 2000-2017, All Property and All Urban Property



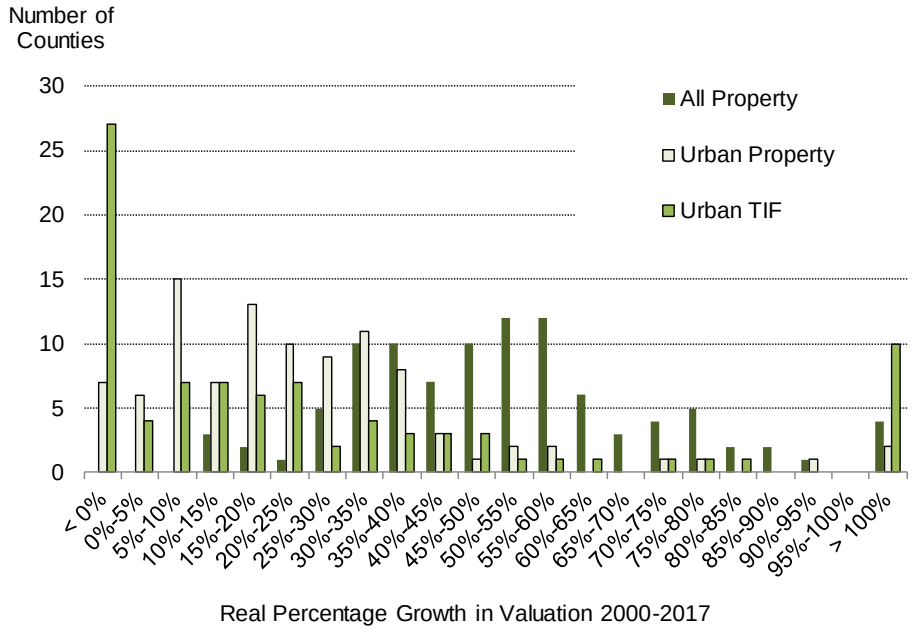
Source: Iowa Department of Management Property Valuation System

Figure 8B. Number of CBSAs by Percent Growth in Assessed Valuation 2000-2017, All Property and Urban Property



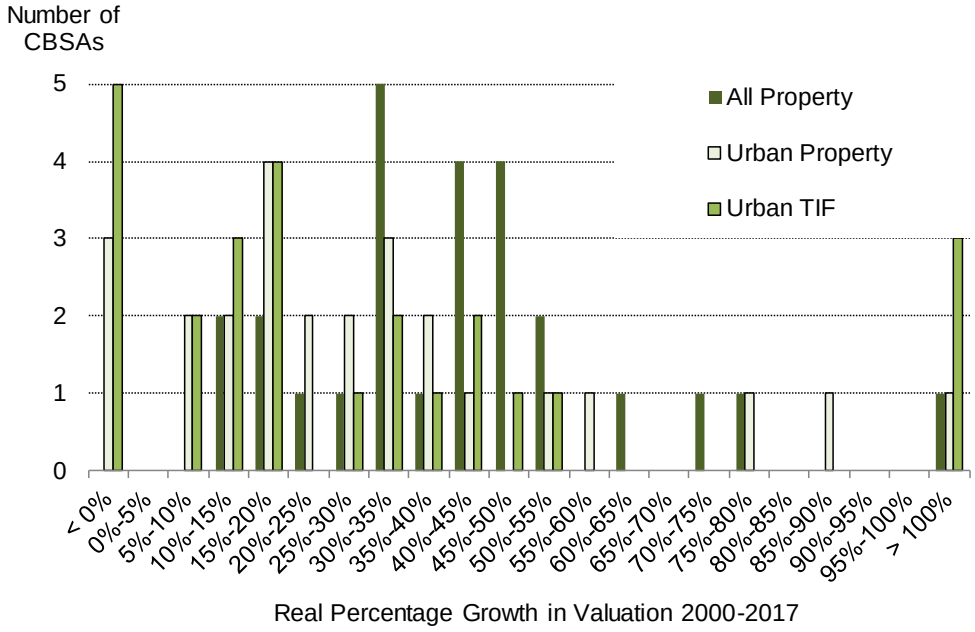
Source: Iowa Department of Management Property Valuation System

Figure 9A. Number of Counties by Percent Growth in Valuation 2000-2017, All Property, Urban Property, and Urban TIF Districts



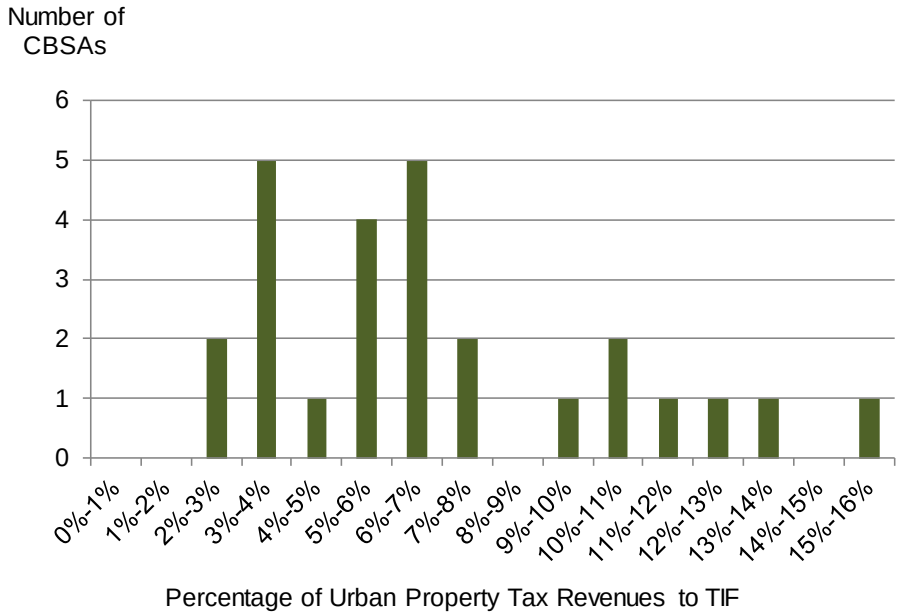
Source: Iowa Department of Management Property Valuation System

Figure 9B. Number of CBSAs by Percent Growth in Valuation 2000-2017, All Property, Urban Property, and Urban TIF Districts



Source: Iowa Department of Management Property Valuation System

Figure 10. Number of CBSAs by Percentage of Urban Property Tax Revenues Diverted to TIF, FY 2002-2017 Combined



Source: Iowa Department of Management Property Valuation System

Table 9. Percent Change in Employment and Real Aggregate Wages in Iowa Between 2002 and 2017, by Industrial Sector

Industrial Sector	Employment	Wages
Manufacturing	-5.3%	6.6%
Retail Trade	-0.4%	-0.9%
Financial Activities	15.7%	50.2%
Professional and Business Services	31.4%	76.1%
Education and Health Services	24.5%	36.1%
Leisure and Hospitality	14.9%	25.8%
All Other Industries	6.8%	21.7%
Total	9.7%	25.7%

Source: U.S. Bureau of Labor Statistics

Table 10. Percentage of Urban Property Tax Revenues to TIF, Employment, and Standardized Employment Growth by Core Based Statistical Area

Core-Based Statistical Area	Percentage of Total Urban Property Tax Revenues to TIF FY 2002 - 2017	Employment 2002	Standardized Growth Estimate	Employment 2017	Actual Change in Employment 2002 to 2017	Percentage Change in Employment 2002 to 2017	Rate of Employment Growth Above Standardized Growth*
Metropolitan Statistical Areas							
Ames	5.4%	26,554	2,844	31,971	5,417	20.4%	9.7%
Cedar Rapids	6.1%	113,346	11,526	125,453	12,107	10.7%	0.5%
Davenport-Moline-Rock Island	4.7%	75,769	8,315	81,630	5,861	7.7%	-3.2%
Des Moines-West Des Moines	9.0%	251,369	31,173	316,630	65,261	26.0%	13.6%
Dubuque	10.2%	45,242	4,495	53,388	8,146	18.0%	8.1%
Iowa City	11.7%	51,921	5,588	62,532	10,611	20.4%	9.7%
Omaha-Council Bluffs	5.4%	36,119	3,587	38,687	2,568	7.1%	-2.8%
Sioux City	13.1%	52,134	5,378	54,184	2,050	3.9%	-6.4%
Waterloo-Cedar Falls	8.0%	70,316	6,703	74,970	4,654	6.6%	-2.9%
Micropolitan Statistical Areas							
Boone	5.6%	6,748	541	6,847	99	1.5%	-6.6%
Burlington	10.2%	19,707	1,543	19,695	-12	-0.1%	-7.9%
Carroll	6.8%	10,495	1,129	10,280	-215	-2.0%	-12.8%
Clinton	6.3%	18,959	1,740	18,587	-372	-2.0%	-11.1%
Fairfield	2.8%	6,460	607	6,392	-68	-1.1%	-10.4%
Fort Dodge	3.9%	15,912	1,547	15,316	-596	-3.7%	-13.5%
Fort Madison-Keokuk	6.9%	14,291	1,123	13,467	-824	-5.8%	-13.6%
Marshalltown	5.6%	15,554	1,005	13,822	-1,732	-11.1%	-17.6%
Mason City	6.4%	24,031	2,511	23,816	-215	-0.9%	-11.3%
Muscatine	3.7%	19,030	1,302	20,810	1,780	9.4%	2.5%
Newton	12.6%	12,243	640	9,510	-2,733	-22.3%	-27.6%
Oskaloosa	2.7%	6,350	485	6,462	112	1.8%	-5.9%
Ottumwa	4.0%	15,151	1,289	15,079	-72	-0.5%	-9.0%
Pella	7.9%	14,718	707	15,250	532	3.6%	-1.2%
Spencer	3.9%	7,780	654	6,986	-794	-10.2%	-18.6%
Spirit Lake	15.8%	7,812	570	8,636	824	10.5%	3.3%
Storm Lake	3.3%	8,427	588	9,261	834	9.9%	2.9%
All Other Counties	8.2%	239,233	17,944	241,543	2,310	1.0%	-6.5%
Total	8.0%	1,185,671	115,533	1,301,204	115,533	9.7%	0.0%

* The rate of employment growth above standardized growth is the difference between actual growth and the standardized growth estimate as a percentage of 2002 actual employment

Sources: Iowa Department of Management Property Valuation System; U.S. Bureau of Labor Statistics; U.S. Census Bureau

Table 11. Percentage of Urban Property Tax Revenues to TIF, Aggregate Wages, and Standardized Aggregate Wage Growth by Core Based Statistical Area

Core-Based Statistical Area	Percentage of Total Urban Property Tax Revenues to TIF FY 2002 - 2017	Aggregate Wages 2002	Standardized Growth Estimate	Aggregate Wages 2017	Actual Change in Aggregate Wages 2002 to 2017	Percentage Change in Aggregate Wages 2002 to 2017	Rate of Wage Growth Above Standardized Growth*
Metropolitan Statistical Areas							
Ames	5.4%	$945,652,775	$248,303,676	$1,429,400,794	$483,748,018	51.2%	24.9%
Cedar Rapids	6.1%	$5,367,998,259	$1,398,575,130	$6,708,160,353	$1,340,162,094	25.0%	-1.1%
Davenport-Moline-Rock Island	4.7%	$3,183,777,072	$813,734,510	$3,666,663,311	$482,886,238	15.2%	-10.4%
Des Moines-West Des Moines	9.0%	$12,325,223,054	$4,148,889,189	$17,670,004,262	$5,344,781,208	43.4%	9.7%
Dubuque	10.2%	$1,839,324,031	$442,343,813	$2,424,151,121	$584,827,091	31.8%	7.7%
Iowa City	11.7%	$1,867,677,306	$492,681,072	$2,497,038,224	$629,360,918	33.7%	7.3%
Omaha-Council Bluffs	5.4%	$1,261,445,254	$300,244,893	$1,550,978,254	$289,533,000	23.0%	-0.8%
Sioux City	13.1%	$1,990,064,444	$487,058,182	$2,255,196,131	$265,131,687	13.3%	-11.2%
Waterloo-Cedar Falls	8.0%	$2,848,948,776	$681,750,111	$3,454,200,479	$605,251,704	21.2%	-2.7%
Micropolitan Statistical Areas							
Boone	5.6%	$234,542,034	$45,815,627	$264,658,995	$30,116,961	12.8%	-6.7%
Burlington	10.2%	$790,828,626	$158,405,937	$831,848,475	$41,019,849	5.2%	-14.8%
Carroll	6.8%	$333,766,849	$83,390,220	$404,036,863	$70,270,014	21.1%	-3.9%
Clinton	6.3%	$702,812,777	$146,441,754	$754,155,935	$51,343,158	7.3%	-13.5%
Fairfield	2.8%	$247,673,618	$61,411,195	$251,396,130	$3,722,512	1.5%	-23.3%
Fort Dodge	3.9%	$629,437,110	$148,028,024	$692,323,278	$62,886,168	10.0%	-13.5%
Fort Madison-Keokuk	6.9%	$542,747,459	$98,839,229	$592,892,736	$50,145,277	9.2%	-9.0%
Marshalltown	5.6%	$611,586,994	$111,471,001	$615,906,419	$4,319,425	0.7%	-17.5%
Mason City	6.4%	$869,681,432	$213,296,046	$982,306,462	$112,625,031	13.0%	-11.6%
Muscatine	3.7%	$887,579,794	$201,704,654	$1,068,353,433	$180,773,638	20.4%	-2.4%
Newton	12.6%	$542,881,050	$82,650,057	$355,172,819	-$187,708,232	-34.6%	-49.8%
Oskaloosa	2.7%	$218,068,926	$45,283,608	$258,256,398	$40,187,473	18.4%	-2.3%
Ottumwa	4.0%	$538,742,778	$112,176,308	$597,300,891	$58,558,113	10.9%	-10.0%
Pella	7.9%	$606,986,851	$90,163,922	$758,110,009	$151,123,158	24.9%	10.0%
Spencer	3.9%	$270,520,062	$59,974,028	$278,089,997	$7,569,934	2.8%	-19.4%
Spirit Lake	15.8%	$250,872,877	$47,896,057	$314,496,723	$63,623,846	25.4%	6.3%
Storm Lake	3.3%	$280,391,656	$59,358,976	$378,745,053	$98,353,396	35.1%	13.9%
All Other Counties	8.2%	$8,037,995,924	$1,623,082,371	$9,576,353,832	$1,538,357,909	19.1%	-1.1%
Total	8.0%	$48,227,227,789	$12,402,969,588	$60,630,197,377	$12,402,969,588	25.7%	0.0%

* The rate of wage growth above standardized growth is the difference between actual growth and the standardized growth estimate as a percentage of 2002 actual aggregate wages.

Sources: Iowa Department of Management Property Valuation System; U.S. Bureau of Labor Statistics; U.S. Census Bureau

Table 12. Correlation between Urban Property Taxes Diverted to TIF and Rates of Employment and Wage Growth Above Standardized Growth

	Correlation Coefficients	
	Rate of Employment Growth Above Standardized Growth	Rate of Wage Growth Above Standardized Growth
Percentage of Urban Property Taxes - All CBSAs	0.103	-0.113
Percentage of Urban Property Taxes - Metropolitan Statistical Areas	0.248	0.016
Percentage of Urban Property Taxes - Micropolitan Statistical Areas	-0.110	-0.261

Source: Iowa Department of Revenue, Research and Analysis Division

Table 13. Additional Data for Regression Analysis

Core Based Statistical Area	Percentage of Total Urban Property Tax Revenues to TIF FY 2002 - 2017	Percent of Population Age 18-64 with Postsecondary Degree (U.S. Census 2012-2016 estimates)	Net Taxable Value of Urban Property (Assessment Year 2000, Billions)	Urban Taxable Value per Working-Age Resident in 2000
Metropolitan Statistical Areas				
Ames	5.4%	42.3%	$1.83	$36,078
Cedar Rapids	6.1%	46.1%	$5.52	$39,472
Davenport-Moline-Rock Island	4.7%	47.2%	$4.16	$44,364
Des Moines-West Des Moines	9.0%	48.9%	$11.89	$41,119
Dubuque	10.2%	42.2%	$1.69	$33,574
Iowa City	11.7%	49.7%	$2.88	$34,043
Omaha-Council Bluffs	5.4%	34.9%	$1.88	$27,805
Sioux City	13.1%	33.0%	$2.23	$31,122
Waterloo-Cedar Falls	8.0%	39.2%	$2.94	$31,187
Micropolitan Statistical Areas				
Boone	5.6%	41.7%	$0.31	$20,689
Burlington	10.2%	38.5%	$0.69	$29,023
Carroll	6.8%	41.8%	$0.41	$36,569
Clinton	6.3%	37.0%	$0.90	$32,017
Fairfield	2.8%	49.8%	$0.24	$25,151
Fort Dodge	3.9%	38.2%	$0.62	$28,350
Fort Madison-Keokuk	6.9%	31.7%	$0.51	$23,705
Marshalltown	5.6%	33.2%	$0.56	$25,633
Mason City	6.4%	43.0%	$1.11	$37,100
Muscatine	3.7%	36.2%	$0.77	$32,092
Newton	12.6%	34.6%	$0.53	$25,067
Oskaloosa	2.7%	37.7%	$0.27	$22,331
Ottumwa	4.0%	31.8%	$0.46	$18,760
Pella	7.9%	40.4%	$0.44	$24,799
Spencer	3.9%	39.8%	$0.35	$36,099
Spirit Lake	15.8%	56.5%	$0.48	$52,355
Storm Lake	3.3%	28.9%	$0.27	$24,619
All Other Counties	8.2%	37.1%	$8.32	$20,232
Total	8.0%	41.9%	$52.23	$31,378

Sources: Iowa Department of Management Property Valuation System, U.S. Census Bureau; U.S. Bureau of Labor Statistics

Table 14. Linear Regression: Explaining Variation in Employment Growth

Independent Variable	Coefficient	Standardized Coefficient	t-value
Intercept	-0.200	0.000	-2.06 **
Percentage of Urban Property Taxes Diverted to TIF	-0.406	-0.132	-0.82
Postsecondary Degree Attainment Rates	0.513	0.319	1.54
Metropolitan Statistical Area	0.133	0.606	3.79 ***
Urban Taxable Value per Working-Age Person	0.000	0.032	0.14
Adjusted R^2	0.467 ***		

Statistical significance of coefficients at the 10 percent, 5 percent, and 1 percent levels are noted as follows: * p <.10; ** p <.05; *** p <.01.

Table 15. Linear Regression: Explaining Variation in Wage Growth

Independent Variable	Coefficient	Standardized Coefficient	t-value
Intercept	-0.055	0.000	-0.31
Percentage of Urban Property Taxes Diverted to TIF	-1.326	-0.279	-1.47
Postsecondary Degree Attainment Rates	0.332	0.134	0.55
Metropolitan Statistical Area	0.164	0.483	2.56 **
Urban Taxable Value per Working-Age Person	0.000	0.194	0.74
Adjusted R^2	0.258 **		

Statistical significance of coefficients at the 10 percent, 5 percent, and 1 percent levels are noted as follows: * p <.10; ** p <.05; *** p <.01.

Table 16. Linear Regression: Explaining Variation in Rates of Employment Growth Above Standardized Growth

Independent Variable	Coefficient	Standardized Coefficient	t-value
Intercept	-0.255	0.000	-2.66 **
Percentage of Urban Property Taxes Diverted to TIF	-0.233	-0.083	-0.49
Postsecondary Degree Attainment Rates	0.454	0.309	1.81 *
Metropolitan Statistical Area	0.109	0.544	3.25 ***
Adjusted R^2	0.376 ***		

Statistical significance of coefficients at the 10 percent, 5 percent, and 1 percent levels are noted as follows: * p <.10; ** p <.05; *** p <.01.

Table 17. Linear Regression: Explaining Variation in Rates of Wage Growth Above Standardized Growth

Independent Variable	Coefficient	Standardized Coefficient	t-value
Intercept	-0.208	0.000	-1.22
Percentage of Urban Property Taxes Diverted to TIF	-0.753	-0.180	-0.89
Postsecondary Degree Attainment Rates	0.404	0.185	0.91
Metropolitan Statistical Area	0.123	0.411	2.06 **
Adjusted R^2	0.112		

Statistical significance of coefficients at the 10 percent, 5 percent, and 1 percent levels are noted as follows: * p <.10; ** p <.05; *** p <.01.

Table 18. Linear Regression: Explaining Variation in Rates of Overall Employment Growth Above Standardized Growth with Industrial Property in TIF

Independent Variable	Coefficient	Standardized Coefficient	t-value
Intercept	-0.263	0.000	-2.47 **
% Urban Prop Taxes from Industrial Property to TIF	0.182	0.020	0.12
Postsecondary Degree Attainment Rates	0.430	0.292	1.70 *
Metropolitan Statistical Area	0.107	0.530	3.21 ***
Adjusted R^2	0.369 ***		

Statistical significance of coefficients at the 10 percent, 5 percent, and 1 percent levels are noted as follows: * p <.10; ** p <.05; *** p <.01.

Table 19. Linear Regression: Explaining Variation in Rates of Manufacturing Employment Growth Above Standardized Growth with Industrial Property in TIF

Independent Variable	Coefficient	Standardized Coefficient	t-value
Intercept	0.176	0.000	0.66
% Urban Prop Taxes from Industrial Property to TIF	0.262	0.015	0.07
Postsecondary Degree Attainment Rates	-0.629	-0.211	-1.00
Metropolitan Statistical Area	0.158	0.388	1.90 *
Adjusted R^2	0.035		

Statistical significance of coefficients at the 10 percent, 5 percent, and 1 percent levels are noted as follows: * p <.10; ** p <.05; *** p <.01.

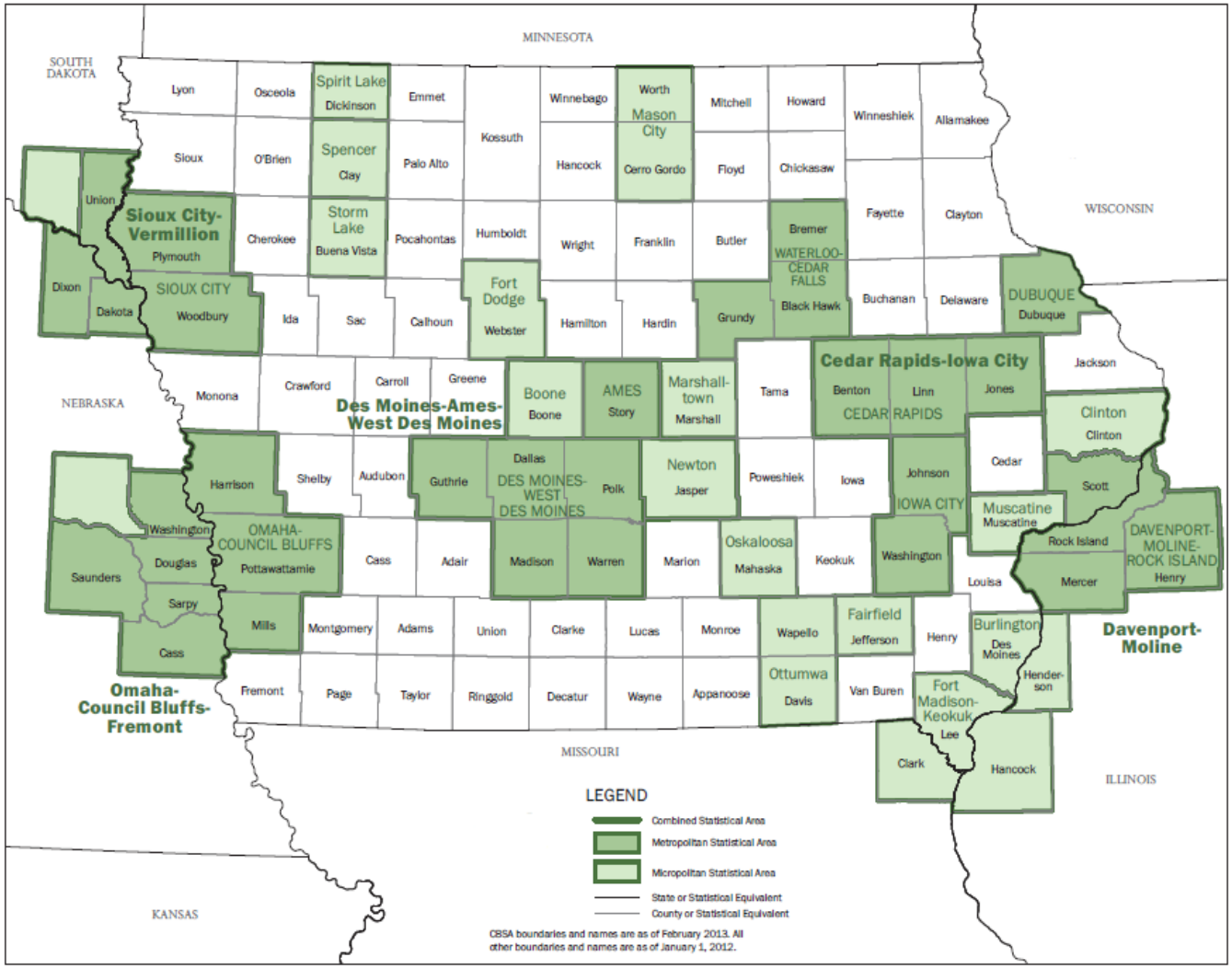
Table 20. Linear Regression: Explaining Variation in Rates of Manufacturing Employment Growth Above Standardized Growth by TIF Industrial Property Concentration

Independent Variable	Coefficient	Standardized Coefficient	t-value
Intercept	-0.155	0.000	-2.32 **
TIF Industrial Property Concentration (1)	0.431	0.346	1.80 *
Metropolitan Statistical Area	0.173	0.426	2.21 **
Adjusted R^2	0.150 *		

(1) TIF industrial property concentration means: Of urban property taxes diverted to TIF, the percent from property classified as industrial

Statistical significance of coefficients at the 10 percent, 5 percent, and 1 percent levels are noted as follows: * p <.10; ** p <.05; *** p <.01.

Appendix 1. Iowa Core-Based Statistical Areas (CBSAs) and Counties



Metropolitan Statistical Areas	
Ames	Story County
Cedar Rapids	Benton County Jones County Linn County
Davenport-Moline-Rock Island	Scott County
Des Moines-West Des Moines	Dallas County Guthrie County Madison County Polk County Warren County
Dubuque	Dubuque County
Iowa City	Johnson County Washington County
Omaha-Council Bluffs	Harrison County Mills County Pottawattamie County
Sioux City	Plymouth County Woodbury County
Waterloo-Cedar Falls	Black Hawk County Bremer County Grundy County

Micropolitan Statistical Areas	
Boone	Boone County
Burlington	Des Moines County
Carroll	Carroll County
Clinton	Clinton County
Fairfield	Jefferson County
Fort Dodge	Webster County
Fort Madison-Keokuk	Lee County
Marshalltown	Marshall County
Mason City	Cerro Gordo County Worth County
Muscatine	Muscatine County
Newton	Jasper County
Oskaloosa	Mahaska County
Ottumwa	Davis County Wapello County
Pella	Marion County
Spencer	Clay County
Spirit Lake	Dickinson County
Storm Lake	Buena Vista County

Source: United States Census Bureau (Available: https://www.census.gov/geo/maps-data/maps/statecbsa.html)