A CASE STUDY REVIEW OF TAX INCREMENT FINANCING

For Greater El Paso Chamber of Commerce

August 30, 2002

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I. INTRODUCTION

There has been much debate and discussion throughout the community about the use of tax increment financing for the redevelopment of the downtown and the Border Health Institute (BHI) areas.

What exactly is TIF and does it have a significant positive impact upon the areas in which it is utilized? This paper describes the purposes and history of TIF, the process by which a project is approved, the players in the process, and the larger economic context in which the consequences are felt. In order to give the reader a clearer understanding of TIF, I have separated this paper into two parts. Part I of the paper primarily seeks to give the reader a thorough understanding of TIF without really going into the economics surrounding this finance tool. Part II mainly consists of analysis of TIF while attempting to answer the question of what makes for a good TIF. This is done by looking at the effect TIF has on property values, and examining the negative economic effects TIF can have on an area. The paper also examines case studies of Chicago, Des Moines, and Fort Worth to highlight the level of which TIF can raise property values, beyond the level that would have been expected had the TIF district not been created, to show the effectiveness of TIF as a tool for economic development. A final case study of Pittsburgh is done to examine a bad TIF plan. The main point is that, if done properly, TIF can be a viable option for redevelopment. However, by misusing TIF, local governing bodies may be setting themselves up for problems in the long run. Bear in mind that TIF funded projects are used to underwrite development deemed too risky by the private sector and can put taxpayers at risk in case the project under performs relative to forecast.

PART I: WHAT IS TAX INCREMENT FINANCING?

II. THE THEORY OF TIF

Tax increment financing is a widely used financing tool for economic development intended to stimulate private investment in blighted areas. This instrument allows municipalities to pay economic development costs using future growth in property tax revenues, and is designed to offer local governments the ability to promote projects in areas that the private sector is unwilling or unable to undertake. If redevelopment can be stimulated, property values should rise and commercial activity should increase, creating an incremental increase in the tax revenues generated. TIF gives the city the power to capture this increment to pay off debt incurred to subsidize the development. Thus, the theory is that TIF pays for itself.

III. HISTORY OF TIF^1

TIF spawned from the "urban renewal" movement that resulted from the Federal Housing Act of 1949. From 1949 through 1967, cities were able to secure financial assistance from the federal government in the form of grants for urban renewal projects. California

¹ Sereleas, Lolita., 1998, "The ABCs of TIF," American Planing Association, July.

pioneered TIF in 1951 as a match for federal funds. However, wide spread use of this tool in most states did not take place until the 1970s.

In the 1970s when federal dollars for urban renewal projects began to decline, cities were left looking for other alternatives for funding redevelopment projects. California and Minnesota were the first states to make extensive use of TIF for this application. As the federal government's funding for redevelopment decreased over the years, and because of the success California and Minnesota were have with TIF, states throughout the U.S. began to follow their lead by adopting new legislation which authorized the use of TIF. TIF has proven to be a unique and highly successful tool for urban redevelopment, and is now available in 48 states.

IV. SUMMARY OF TIF

The key to TIF is that public investment spurs private investment that would not otherwise occur. In areas that would not have otherwise received investment, a municipality can decide to create a TIF District as a means of attracting investment to that district. Once the identification of a redevelopment area has taken place, a district plan must then be drawn up and approved. At the time a qualifying area is designated as a TIF District, its property tax base can then be frozen for purposes of regular tax collections by the municipality, the school districts, the county, and all of the other overlying governments. Any additional tax revenues, above the base year or "certified initial equalized assessed valuation," generated by increases in property value within the TIF District, are captured by the TIF administrator, which is typically managed by the City's Finance Department. This incremental revenue can then be used to finance public improvements within the TIF District, an outcome that can be achieved without raising tax rates.

When new development occurs in the TIF District, taxes on the increased values are used to pays costs of the public projects undertaken by TIF. Taxes collected from new taxable value within the TIF District become the source of the TIF District tax increment. Incremental property taxes are collected for the duration of the TIF project until the City's obligations have been paid for.

The City may either issue a bond to pay for the public investment, or require the developer to finance the public investment. In the latter case, known as "Pay-As-You-Go", the developer is reimbursed for the public investment when incremental property taxes become available. In the former case, debt is accrued to finance public investment.

Critics often argue that TIF is used as an economic development tool to attract private investment when it should be used as a redevelopment tool for blighted areas. However, critics fail to realize that if TIF was simply used as a redevelopment tool, not intended to attract private investment, by simply making infrastructure improvement in blighted areas, they would not address the issue of increasing the economic growth for that TIF district. Property values would continue to stagnate, decrease, or increase only marginally if infrastructure was created but not coupled with new jobs and businesses. As the data will show later in this paper, when TIF is used as a leveraging tool for private investment, the establishment of a TIF district usually raises property values in a community beyond the level that would have been expected had the district not been created. Local governments use TIF programs for land procurement and to pay for public improvements that support development, including water and sewer lines, streets, lighting, and parking lots. These infrastructure improvements reduce costs for the private sector, that would have had to incur these cost if they decided to build in that area. The idea is that public expenditures, through the use of TIF, will result in growth in the property valuation through new construction of projects by the private sector.

V. QUALIFICATIONS FOR TIF USE

Throughout the forty-eight states that have authorized local use of TIF, there is one determining qualification common to nearly all of the authorizing legislation, namely, the prevention or removal of blight. In Texas, Chapter 311 of the Tax Code states that TIF projects must be for "purposes of financing [the] rehabilitation and development of blighted areas."²

Typically, the redevelopment authority of the city draws up a plan for development in a particular area. This plan includes the targeted area, project costs, and the point upon which much debate is generated, that the development would not occur without TIF. This requirement, referred to as the "but for" requirement, must demonstrate that development or redevelopment would not occur solely through private investment in the reasonably foreseeable future without the adoption of the TIF portion of the plan. In other words, the local governing bodies leverage the taxpayers to fund a project deemed to be risky by the private sector.

VI. TIF WINNERS & LOSERS

TIF can benefit local governments, private investors, developers, and the community as a whole in a myriad of ways. TIF allows local government bodies to finance a major development project without using general funds or having to contend with bureaucratic restrictions that are placed upon state or federal funds. Local governments also have the added benefit of collecting higher property tax revenues once the bonds have retired, and greater forms of other revenue because of higher levels of employment. Private investors have a tax-exempt bond that generates tax-free returns. Developers have infrastructure paid for, which is the equivalent of an abatement or tax reduction. Property owners in the district can see their property values rise after development occurs. The community as a whole can also benefit because the development initiated as a result of a TIF district can be a catalyst for growth by attracting other firms, and raising the general value of property both inside and outside of the TIF area.

² City of El Paso Planning, Research & Development, 2002. "Tax Increment Financing: Blight Analysis for TIF Districts Two and Three."

While the benefits of TIF for those involved can be vast, those benefits also have costs associated with them. The potential losers in the TIF policy are the residents of the city who are not included in or near the TIF, school districts; and, also, potentially, the residents in the TIF district. In some states, including Texas, the creation of a TIF district removes property value growth from the tax rolls of school districts and other units of local government whose taxing boundaries overlap a TIF district. Thus, some argue that TIF could actually take money away from educational institutions and other units of local government. To exacerbate the situation, since the increased tax receipts from TIF do not go to the city, county, and school district until the bonds are retired, non-district residents and businesses, through increased taxes, finance any increased service needs in the targeted area.³ This system therefore punishes those outside of the district. In addition, if eminent domain is exercised low-income residents who once lived in the poor neighborhoods inside the TIF district must relocate to another area that they can afford. This can be difficult if comparable housing is not available.

Municipal abuses are always possible. Cities have been known to designate large portions of the city as tax increment districts in order to generate increments which are not connected to the project.⁴ However, the danger lies in the possibility that an increment may not materialize and the city must then turn to its general funds in order to pay the debt service on the bonds.

TIF	THE COSTS AND BENEFITS					
POTENTIAL						
PARTICIPANTS	COSTS	BENEFITS				
• The City, County, School Board, Hospital District, Community College District	will have to wait an average of forty years in order to use the increased taxes for service needs. ⁵ will have to cover the costs	don't have to use general fund money or have to worry state strings being attached to a project.				
	the bond repayment funds do not materialize.	are able to collect on the higher property taxes from the TIF project once the bonds are retired.				
		are able to collect the increased wage tax, sales tax, and				

The following chart highlights the potential costs and benefits associated with the different participants involved in the TIF process.

³ Ibid.

⁴ Haulk, Jake and Montarti, Eric, 1999. "A Primer on Tax Increment Financing in Pittsburgh," *Allegheny Institute Report* #99-06, June.

⁵ In El Paso, Texas District #2 is proposed to last 50 years and District #3 is proposed to last 30 years. Their average (30+50)/2 = 40 years.

			property tax revenue generated from an increase of employment, which result from the project.
•	The Taxpayers	fund a project that	have new facilities to
		the private sector	enjoy as a result of
		found to be risky.	TIF, which may also cause more
		will have to cover future	businesses to move
		increases in property taxes to help make up for lost	into the area.
		general fund revenues.	see blighted areas revitalized that may
			have remained.
•	The Developers	pays for a major portion	have their
		of the project.	infrastructure costs
			reduced or
			completely paid for
			by the public sector.

PART II: ANALYSIS OF TIF

What makes a good TIF? This is perhaps the most important question one attempts to answer when examining TIF. The reader should recognize by the end of the paper that a "good TIF" should create jobs, not merely transfer them from another location; lead to value-added activity and have positive economic multiplier effects on the local economy; and be devoted to blighted areas, not ones with substantial value.

VII. LITERATURE REVIEW ON PROPERTY VALUES AND ECONOMIC GROWTH

Some questions researchers have attempted to answer are whether cities that have adopted TIF plans are experiencing greater growth in property values, and if the adoption of TIF plans stimulates economic growth. These are two very important points in terms of understanding the effectiveness of TIF as a tool for economic development. The effectiveness of TIF on economic development is seen when property values rise beyond the level that would have been expected had the district not been created. Thus, a review of the literature on economic growth and TIF adoption will be undertaken to answer these questions.

John E. Anderson (1990)⁶ looks at cities in Michigan that have adopted TIF plans to examine whether they experience greater growth in property values. In looking at 255 Michigan cities, of which 63 had established TIF districts, he finds that, empirically, while controlling for sample selection bias, cities adopting TIF experience higher

⁶ Anderson, John E., 1990. "Tax Increment Financing: Municipal Adoption and Growth," *National Tax Journal*, June: 155-163.

aggregate property value growth than those who did not. While this is true empirically, this does not imply, however, that the growth in those cities that have adopted TIFs is necessarily due to TIF adoption. It may simply means that the TIF mechanism is used by faster growing cities to fund economic development projects. Anderson did not address the issue of causality because of data limitations for Michigan cities.

Richard F. Dye and David F. Merriman (2000)⁷ conducted an analysis of 235 municipalities in the metropolitan Chicago region to answer the question of whether TIF districts hinder economic growth. They find that those cities, towns, and villages that had TIF districts grew more slowly than those municipalities that did not use TIF. Whereas Anderson did not address the issue of causality, Dye and Merriman claim that TIF causes a reduction in aggregate growth. However, *within* the TIF district Dye and Merriman do find that TIF does help enable growth. This positive effect on growth *within* the TIF district creates an even greater negative effect outside the district causing a reduction in overall aggregate growth. And this is why the TIF has reduced aggregate growth in those cities, towns, and villages that used TIF.

Dye and Merriman raise an important implication of what could happen when TIF is misused.⁸ Why does TIF help growth within the TIF distirct but hurt growth outside the district by a larger amount? According to Dye and Merriman's hypothesis "government subsidies reallocate property improvements in such a way that capital is less productive in its new location. A business is induced by the promise of a subsidy to locate in an otherwise less promising area within a municipality. But other business that might be attracted to locate near it are deterred by the inferior location and instead go to another municipality. The TIF has reduced growth."⁹ So, essentially, when TIF is misused there is the possibility that it can channel development and infrastructure improvements into non-optimal areas.

Unlike Dye and Merriman, Joyce Y. Man and Mark S. Rosentraub¹⁰ (1998) found that the adoption of a TIF program stimulated property value growth in the TIF district and the surrounding community. Man and Rosentraub use a data set of 150 cities in Indiana of which 29 cities had at least one TIF district. They measure TIF efficacy by comparing pre-TIF to post-TIF property value changes, with respect to growth in median housing value (rather than aggregate value), in Indiana communities and found that there is a positive association between property value growth and TIF adoption.

While the research on TIF has been diverse, there are some similarities in the findings in the three studies addressed in this section. There seems to be a positive association

⁷ Dye, Richard F. and David F. Merriman, 2000. "The districts hinder growth," *Policy Forum*, Volume 13, Number 4, 2000.

⁸ Under section heading INEFFICIENT DEVELOPMENT DECISIONS I go into greater depth on the topic of TIF misue.

⁹ Dye, Richard F. and David F. Merriman, 2000. "TIF Districts Hnder Growth," *Policy Forum*, Volume 13, Number 4.

¹⁰ Man, Joyce Y. and Rosentraub, Mark S., 1998. "Tax Increment Financing: Municipal Adoption and Effects on Property Value Growth," Public Finance Review, 26, 523-547

between TIF and increasing property value growth in those districts in which TIF has been adopted. However, the effects of TIF on the surrounding communities are mixed.

VIII. ISSUES AND CONCERNS

The idea of there being a positive association between TIF and increasing property value growth, as indicated in the literature above regarding TIF, provides evidence of the effectiveness of TIF as a tool for economic development. The effectiveness of TIF on economic development is seen when property values rise beyond the level that would have been expected had the district not been created. This unequivocally occurs when TIF is used properly. (See three case studies of cities in the appendix.) However, as will be expounded on further in this section, when inefficient development decisions are made, property values can fall when TIF is used. One last issue addressed is the negative effect TIF can possibly have on poverty concentration.

A. Inefficient Development Decisions: Is what is being built what the community needs?

When new development occurs, is what is being built what the community needs? Before construction occurs, a cost benefit analysis should be done to examine the net economic and fiscal benefits to a multi-jurisdictional area of impact as well as the types and quality of jobs created because of TIF. There is no point in building a new building if it is simply going to contribute to a process of transferring jobs and tax base for a zero sum game. For instance, if a developer builds a new office building downtown, with the support of Tax Increment Financing, and becomes fully occupied; one wonders what has happened to the occupancy rates of office buildings in neighboring sites? Do the office towers in the neighboring sites become less full? Has the economy gained anything from this office building?

IF TIF moves development from one city or one area to the next, the result is a zero sum gain for the region at large. The economy has not gained anything new from this newly built office building. The idea is that an increase in supply of the same type of, for example, retail centers or office building as in the case above, in an area, will cause a decrease in property value.¹¹ Say, for instance, there is an adequate existing retail center already serving the market. Then, the city wants to build two additional retail centers because they want to expand commercial development. In order to attract developers into the area the city uses a TIF. The city by using a TIF in this scenario has adversely caused property values to fall, which is exactly what you do not want to see happen when using a TIF. Here is why and how property values can fall when using TIF:

In order for the two new retail centers to become competitive with the existing retail center they must find a way of attracting retailers. One way of attracting retailers is to offer them lower rents. This is what would cause property values to fall. Suppose that for the existing retail center net income is \$10 per square foot and has a capitalization

¹¹ Beggs, Brad. Summer 2000 "The Effect of Tax Increment Financing on Property Values," Development Strategies Review, pp. 8-9.

rate¹² of 8%. Suppose also that net income comes in the form of rent being paid by the retailers at the retail center. Property value thus far is 125 (10/8%) per square foot. Now suppose that two new retail centers are to be built. And in order to compete with the existing retail center they must offer lower rent; lowering rent by \$1 per square foot to \$9 per square foot. With the same capitalization rate of 8%, property values fall to \$112.50 (\$9/0.08) per square foot for the two new retail centers. Thus, one can see that as the market is correspondingly overbuilt property values would decrease.

TIF in this scenario was innocuously used to overbuild the market of retail centers, which had an adverse effect of causing property values to fall. The higher site acquisition and development costs, due to the lower rents that must be offered to retailers, caused property values to decrease. However, it is important to note that TIF did not directly cause the decrease in property values, but rather it was that the market was being overbuilt. TIF was simply a means of making a project possible that would not otherwise have been built. TIF subsidies were used to attract developers to build these projects. Though, on a macro level the city gained nothing. Retailers simply moved to nicer newer retail centers leaving the existing retail center less full.

B. On Eminent Domain

The greatest assistance to a developer under the TIF process is that of eminent domain. However, the government need not use TIF for the sole purposes of obtaining eminent domain powers because the government possesses that power regardless. Eminent domain is the government's right to appropriate private property for the purposes of redevelopment or economic development, usually with market value compensation to the owner. Before a city can adopt a TIF redevelopment plan and approve the use of TIF, the city must determine that the area be blighted, which fits the criteria for the use of eminent domain powers. In other words, the power of eminent domain is part of the overall package of TIF. A city need not use TIF if its sole purpose is to obtain the power of eminent domain because the city possesses that power already.

For a city to simply use TIF for eminent domain powers, as a means of attracting investment and development, into an area that would not reasonably be expected without public intervention, would be to abuse TIF. This power of eminent domain the government has alleviates many headaches for the developer. The developer does not have to worry about difficult negotiations with hold-outs of residents, and there are no concerns over title. The developer simply indicates to the redevelopment agency the land that will be needed to build on. Though, if eminent domain powers are used as part of the overall package of TIF, that is, using TIF for infrastructure improvements and using TIF as a means of redeveloping an area by leveraging private funds, this is an added bonus for the developer.

C. Effects on Poverty Concentration

¹² The capitalization rate is the discount rate used to determine the present value of a stream of future earnings. This rate is equal to net operating income divided by (in our case) expected value of the retail center.

The combination of TIF with eminent domain powers, and the requirement that these powers only be exercised in "blighted" communities may be viewed, by some, as a "strategy of poverty concentration to protect property values."¹³ That is, TIF is used to eliminate blight by supporting revitalization activities, which, in theory, will cause property values to increase. When the power of eminent domain is used, the low-income residents who once lived in the poor neighborhoods, that have been replaced by tax increment financed redevelopment projects, must now relocate to another area that they can afford. That neighborhood now suffers from the multiplier effects of greater concentrations of poverty. "Poverty has not been addressed or ameliorated, but has been removed to a greater concentration elsewhere."¹⁴

IX. CONCLUSION

This paper has shown what TIF is, what makes a good TIF, and has tried to give the reader an idea of when it ought to be used. This paper has tried to show the negative effects TIF may have on an area, as seen by inefficient development decisions and the negative effects on poverty concentration. Looking at the paper as a whole one ought to be able to see the larger economic context in which consequences, both good and bad, TIF can have on a community.

Today, 48 states utilize TIF to pay for redevelopment projects. Minnesota perhaps has the largest number of TIF Districts in its state, comprising of approximately 2103 districts. The state of Illinois has 782 TIF Districts. Cities in California have up to seventeen percent of the tax base captured by TIF districts.¹⁵ What does all this mean? The main point is that if done properly, TIF can be a viable option for redevelopment. Though, with the tremendous increase in the use of TIF the potential for abuse in the adoption decision also increases.

THE ADVANTAGES OF TIF ¹⁶	THE DISADVANTAGES OF TIF ¹⁷
The economic base of the municipality may be strengthened by private economic development that would not have taken place without the TIF incentive.	Cities may stretch the definition of "blighted" to create TIF districts that could be developed without public subsidies.
Tax increment financing promotes economic development without tapping into general	TIF can effectively freeze much of the tax base of a city for up to 50

¹³ Ouinones, Ben., 1993, "Facing Up To Tax Increment Financing," Economic Development & Law Center Report, April. Pg. 15

¹⁴ Ibid.

¹⁵ Chapman, Jeffrey I., 1998. "Tax Increment Financing as a Tool of Redevelopment," Local Government Tax and Land Use Policies in the United States, Helen Ladd, ed. Cheltenham, U.K. and Northhamption, MA.

¹⁶ Chart from Calia, Roland. 2002. "The Future of TIF in Illinois" *Metropolitan Planning Council*. ¹⁷ Ibid.

funds.

TIF makes it easier for cities to lure private development.

Once private development and the financing within a TIF district are complete, the permanent increase in economic value becomes part of the tax base for all jurisdictions.

The system does not lower tax revenues presently collected. The redevelopment costs are paid for by the increased taxes generated from new revenue sources rather than being subsidized by taxes from other areas. It is a self-sufficient system.

TIF can be advantageous to a city in the long run since it will attract new industry, create more jobs and expand the city's tax base. Other taxing bodies ultimately benefit from these changes.

TIF is locally controlled, allowing cities to be responsible for development and redevelopment.

TIF can be used to lower costs. TIF money covers infrastructure costs that a developer would have otherwise had to pay for. years, while at the same time producing development that increases service demands (education, police and fire protection) without supplying revenues to finance them.

There is no guarantee that a renewal effort will always generate the anticipated new private investment. If the tax increment does not materialize and the tax base fails to meet the expected level, bonds will have to be repaid from the city's general fund.

This system does not provide for full accountability. Because the operations of redevelopment agencies are often obscure, taxpayers often have little knowledge of and limited control over decisions which significantly affect the amount of tax revenues available to the city, school districts and other local governments.

Other taxing bodies are often forced to give up part of their tax revenues with little say on how the revenues are spent.

Taxpayers outside the project area implicitly subsidize any increased service needs of the area during its long-term redevelopment period.

Because TIF is locally-based, it is not tied to regional planning.

X. SUMMARY OF KEY FINDINGS

Tax Increment Financing (TIF) can be an innovative method to fund redevelopment projects at the local level. It relies on the increase in property values in a specific area to pay some or all of the development costs.

TIF began in California in 1951 as a match for federal funds. Today, 48 states utilize TIF to pay for redevelopment projects.

The following characteristics are common of areas containing TIF districts: TIF districts on average are located in areas that are more economically disadvantaged than the municipality as a whole. TIF districts are located in areas with higher unemployment rates, lower incomes, higher vacancy rates and older structures than the rest of the municipality.¹⁸

From the random examination of TIF districts throughout the U.S., property values rose beyond the level that would have been expected had the district not been created. This is important in terms of understanding the potential effectiveness of TIF as a tool for economic development.

One of the major arguments against TIF is that it is not used to create jobs, but rather to move existing jobs into new facilities.

The only safeguards to prevent abuse of TIF are strict oversight and a strict limitation of their uses—that is, the redevelopment of blighted areas that does not result in a shifting of jobs and businesses.

What makes a good TIF? A "good TIF" should:

- create jobs, not merely transfer them from another location.
- lead to value-added activity and have multiplier effects on the local economy.
- be devoted to blighted areas, not ones with substantial value.

APPENDIX A: THREE CASE STUDIES

In areas that have used TIF as a means of raising property values, critics may argue that property values would have increased anyway without TIF. However, to challenge that argument an examination of three case studies from various parts of the county indicates that property values rose beyond the level that would have been expected had the district not been created. Thus, using TIF caused property values to increase. This is important

¹⁸ Byrne, Paul F. 2002. "Determinants of Property Value Growth for Tax Increment Financing Districts," University of Illinois at Urbana-Champaign; Department of Economics; January. Information was based on a study Byrne did regarding Illinois TIF Districts. The sample size Byrne used for econometric analyses was 89 observations (i.e., 89 TIF districts) spread over 67 municipalities. The TIF districts from his sample were examined from the period 1990 to 1993. To date the state of Illinois has approximately 782 TIF districts.

in terms of understanding the effectiveness of TIF as a tool for economic development. Though, in the case of Fort Worth, a TIF District (#4) still to new to examine, TIF was used because the City believed that using TIF would raise property values beyond the level had they not created the district.

Although, only three case studies are highlighted here to illustrate the potential for an increase of property values by using TIF, other TIF Districts are experiencing the same effects as these three case studies. For instance, data from TIF District #3 in Fort Worth also indicates that the local taxing entities would receive \$94 million in ad valorem revenue by using TIF, as compared with the \$54.5 million in ad valorm revenue if the City did not use TIF.¹⁹ Looking at the success Dallas has had with its TIF district, the City Center TIF District's assessed tax value in 2001 was \$1,537,635,260.²⁰ This represents an increase of \$635.7 million over the assessed value of the base year (1996) value²¹. This is an increase of 70.5 percent in five years. Also, as seen in the literature review section, three different states were aggregately experiencing property value growth with their TIF Districts.

A. TIF in Chicago: A Case Study²²

Since its inception in Illinois under the Tax Increment Allocation Redevelopment Act of 1977, TIF has been used in the Chicago region dating back to 1984. Since that time, there have been tremendous results from those projects. Chicago has successfully implemented TIF redevelopment projects throughout the City to induce private investment in areas that would not reasonably be upgraded without the use of TIF. Below are descriptions of the progress Chicago has made from the use of TIF.

As of December 31, 1997, the City had adopted forty-four TIF districts. All of these districts as of July of 1998 have been in existence for almost one year, which is long enough to generate sufficient data with which to assess the impacts and benefits of Chicago's TIF program.

Between 1984 and December 31, 1997, these 44 TIF districts have produced 53 executed redevelopment agreements between the City and private developers. The result has been a wide range of public and private improvements and developments. Of the 52 redevelopment agreements, six redevelopment agreements covered private redevelopment projects for which no TIF assistance was provided.

Economic Benefits of Chicago's TIF Program

Chicago's TIF program has had dramatic financial and economic implications for the City and other jurisdictions, including: a) the implementation of a substantial number of

¹⁹ City of Fort Worth, Texas "Fort Worth Tax Increment Finance District #3"

²⁰ Economic Development Department, "Annual Report Reinvestment Zone Number Five" *City Center Tax Increment Financing District*; October 1, 2000 – September 30, 2001.

²¹ For information regarding the investments made by the private sector see Appendix C.

²² Information regarding this case study is from the Department of Planning & Development, Christopher

R. Hill, Commissioner, article "Review of Tax Increment Financing in The City of Chicago." July 1998.

new public and private improvements and developments; b) the creation and retention of a significant amount of jobs; c) the generation of incremental property tax dollars (IPT) for use in the redevelopment process; and d) dramatic increases in equalized assessed valuation (EAV).

Economic benefits of Chicago's TIF program include:

Private Development Stimulated

According to city officials, Chicago's TIF districts have generated a substantial amount of private development that would not have occurred without TIF assistance. In total, Chicago's TIF districts have resulted in new construction, rehabilitation and expansion totaling approximately 7,040,400 square feet of space. Of this total, approximately 5,704,400 square feet, or almost 81 percent, has been in new construction. City officials believe that these benefits are a direct result of the City's use of TIF. "Without TIF, these project areas would not have been upgraded or redeveloped. In the absence of TIF, these areas would continue to be characterized by decline and disinvestment, and would continue to be neglected by the private sector community."²³

Development includes:

-More than 1,100 high quality new housing units. -Approximately 4,912, 600 square feet of new commercial space and 422,100 square feet of rehabilitated or expanded commercial space.

-Approximately 1,705,600 square feet of industrial space, including 791,800 of new space and 913,800 square feet of rehabilitated or expanded space.

Public/Private Investment Leverage

The City's TIF districts have generated total public and private investments of approximately \$1,985,913,000 of which approximately \$1,713,980,000 or 86.3% has been in private investment. In other words, for every one dollar the City has invested in these TIF districts, the private sector has invested \$6.30.

Jobs Retained and Created

It is estimated that completion of the current TIF redevelopment projects will result in the retention of approximately 22,150 existing jobs and the creation of approximately 6,400 new jobs within Chicago.

Growth in Current EAV

The equalized assessed valuation (EAV) of Chicago's TIF districts is increasing at a significantly higher rate than the EAVE in other parts of the City, clearly illustrating the

²³ Ibid.

success of the program in stimulating private investment and enhancing the future tax base for taxing districts.

When the City's first TIF (North Loop/Central Loop) terminates in year 2006, an estimated \$937,746,000 in new EAV will be made available to all taxing agencies having jurisdiction over the Redevelopment Project Area. In the year 2019, when the last of the current 44 TIF districts is dissolved, the aggregate amount of new EAV resulting from these districts is estimated to total \$3,232,830,000.

Incremental Property Taxes

It is clear, in terms of understanding the effectiveness of TIF as a tool for economic development, that the establishment of TIF districts in Chicago has raised property values beyond the level that would have been expected had the district not been created. Since 1984, Chicago's TIF districts have generated a total of over \$270 million in incremental property taxes that have been available for use by the City to fund redevelopment activities. Incremental property taxes grew from less than \$2 million in 1987 to nearly \$50 million in 1997. It is estimated that the growth in property taxes within these TIF redevelopment projects areas would have been less than \$5 million if no TIF districts had been designated.

Assessment Year	Collection Year	Incremental Property Tax
1983	1984	\$0
1984	1985	0
1985	1986	0
1986	1987	1,985,000
1987	1988	5,054,000
1988	1989	7,083,000
1989	1990	10,608,000
1990	1991	20,143,000
1991	1992	24,925,000
1992	1993	29,814,000
1993	1994	36,581,400
1994	1995	40,791,000
1995	1996	43,969,000
1996	1997	49,631,000
Total		\$270,584,400

The following table summarizes the fourteen-year historic growth (1984-1997) in incremental property taxes for the 44 current TIF districts.

HISTRORIC INCREMENTAL PROPERTY TAXES

B. Des Moines, Iowa: A Case Example of an Increase in Property Values Through the Use of TIF.

In the 1960s retail shopping began moving out of the central commercial business district in downtown Des Moines, Iowa. Located in the district are several large insurance companies, government and finance offices, and a large media firm. After noticing the decay in the area that resulted from retail business moving out, the city began a revitalization program and to define a TIF in 1973; though TIF did not actually take place until 1977. Since 1977 the TIF project has included land assembly, streetscape improvements, parking garages, and a skywalk system that provides indoor linkage of major buildings.

Lawrence and Stephenson note that the observed growth in downtown Des Moines as a result of the TIF program has been remarkably successful, and is seen by looking at the taxable valuation data. In 1993, the most recent data, at the time, indicated that the total increment of \$449 million was well over 10 percent of the total taxable valuation in the city and about 5 percent of the county's total.

Though opponents of TIF are likely to argue that the growth downtown Des Moines has seen would have happened anyway without TIF. To disprove this belief one can look at the natural increment and see the effectiveness of TIF as a tool for economic development. To calculate the natural increment—the estimated valuation growth that would have occurred without the TIF program—Lawrence and Stephenson used industrial and commercial valuations. The records projected that the annual growth rate between 1978 and 1983 would be 6.214 percent, and 4.054 percent between 1983 and 1993²⁴. From 1973-1978 there were no TIF-financed investments. By looking at the chart and comparing the actual total increment to the natural increment, it is clear that TIF generated most of the observed valuation growth. The valuation growth gain is seen by subtracting the actual total increment from the estimated natural increment.

Time	TIF Levy	Actual Total Increment	Natural (No-TIF) Increment	Valuation Gain
1973	\$0	\$0	\$0	\$0
1974	\$0	\$8,447,542	\$8,447,542	\$0
1975	\$0	\$17,899,834	\$17,899,834	\$0
1976	\$0	\$28,476,382	\$28,476,382	\$0
1977	\$0	\$40,310,904	\$40,310,904	\$0
1978	\$1,739,888	\$53,554,355	\$53,554,355	\$0
1979	\$2,285,890	\$69,394,345	\$61,295,626	\$8,098,719
1980	\$2,359,200	\$71,038,805	\$69,517,940	\$1,520,865
1981	\$3,207,999	\$95,975,795	\$78,251,189	\$17,724,606
1982	\$3,643,821	\$109,519,565	\$87,527,121	\$21,992,444

The following table summarizes the sixteen-year historic growth (1973-1998) in incremental property taxes for the downtown TIF district.

²⁴ Lawrence, David B. and Stephenson, Susan C., 1995, "The Economics and Politics of Tax Increment Financing," *Growth and Change*, Vol. 26, Winter pp. 105-137.

1983	\$4,224,459	\$126,331,795	\$97,379,460	\$28,952,335
1984	\$3,963,839	\$115,229,415	\$104,206,013	\$11,023,402
1985	\$5,073,021	\$143,782,787	\$121,693,366	\$22,089,421
1986	\$3,163,785	\$192,920,210	\$134,594,423	\$58,325,787
1987	\$4,428,387	\$230,324,110	\$148,018,450	\$82,305,660
1988	\$3,985,625	\$240,335,694	\$161,986,647	\$78,349,047
1989	\$4,696,682	\$301,978,670	\$125,457,597	\$176,521,073
1990	\$5,818,920	\$312,534,687	\$191,644,682	\$120,890,005
1991	\$4,082,779	\$374,076,392	\$207,381,355	\$166,695,037
1992	\$6,335,739	\$415,965,886	\$223,755,947	\$192,209,939
1993	\$10,042,176	\$448,534,181	\$240,794,315	\$207,739,866
1994	\$7,001,107	\$483,413,714	\$258,523,367	\$224,890,347
1995	\$7,122,043	\$521,855,680	\$276,971,102	\$244,884,578
1996	\$7,262,480	\$563,113,799	\$296,166,653	\$266,947,146
1997	\$7,234,731	\$608,910,645	\$316,140,334	\$292,770,311
1998	\$7,063,387	\$658,080,649	\$321,156,961	\$336,923,688

C. Case Study: Fort Worth, Texas

Introduction

The Fort Worth case study provides a good example of why a city chooses a TIF, the goals the City sets for a TIF to accomplish, and how a City allocates it's funds to accomplish its redevelopment goals.

Background

From 1994 through 1997 property values in what was designated as district # 4 in Fort Worth, Texas decreased 8 percent whereas compared with property value increases of 23 percent in the County and 16 percent in the City. The City began a revitalization program to combat the decreasing property values and redevelop this area in 1997

In May 1995 the City Council adopted the Southside Medical Strategic Plan. The plan was to revitalize 1,400 acres of the Medical District located immediately south of the Central business District. After \$150,000 and two years of planning, the City of Fort Worth, the Transportation Authority, and many private businesses located within the District, decided that TIF would be the tool used to support and encourage private investment in the area. The TIF was established on November 25, 1997²⁵. It is scheduled to terminate on December 31, 2022 or when the incremental tax revenues contributed to the District reach \$60 million, whichever comes first. During the two-year planning initiative reviews of citizens, businesses, government, property owners, and

²⁵ It is important to note that prior to the City Council approval to use TIF, the reinvestment zone that would use TIF received support and resolutions to participate from other taxing entities, including the Fort Worth Independent School District, Tarrant County, The Tarrant County Hospital District, Tarrant County Junior College System, and the Tarrant County Water Control District #1.

community stakeholders were heard. TIF District #4 was created to provide funding for new public infrastructure to support the revitalization and redevelopment of this area.

Project Plan

TIF was chosen because it could be used to encourage and support private investment in the area. The City recognized that improvements in public infrastructure would be needed to attract new investment. However, the cost of the required infrastructure exceeded the City's normal funding amounts and the improvements were needed in advance of the City's normal funding cycle. TIF would allow the City to provide funding for major capital improvements and to provide funding for public infrastructure which encouraged private investment. TIF also gave the City the power of eminent domain to acquire private property in order to carry out an area-wide redevelopment strategy for the district; though, the need for the relocation of property owners is not envisioned due to the high percentage of vacant land in the region.

According to the City, the lack of a strong land use policy and supporting zoning ordinances contributed to deteriorating land values and a substantially declining residential base within the District. It was believed that without the use of TIF the average annual growth of taxable real property would only be 1 percent into the indefinite future. However, with the use of TIF it was estimated from 2001 through 2010 that the average annual change in taxable values of the zone to be at 5 percent. From 2011 through 2015 it is predicted that the annual growth rate would slow to 4 percent. From 2015 through 2022 it is predicted that annual growth would slow to 3 percent.

The purpose of Fort Worth TIF No. 4 is to:

- Attract new investment and encourage revitalization of the Southside of Forth Worth, which is an area that will continue to decay without TIF financed infrastructure.
- Create redevelopment momentum that will create substantial financial gains to local taxing jurisdictions both during and beyond the life of the TIF.
- Recreate an economically viable, mixed-use, central city neighborhood.
- Leverage the resources and energy of an existing community based revitalization initiative, Fort Worth South, to recognize the goal of revitalizing the District.
- Serve as a catalyst for the revitalization of areas adjacent to the TIF.

How are they going to do this?

Development Concepts²⁶

²⁶ City of Fort Worth, Texas "Fort Worth Tax Increment Finance District #4."

The conceptual plan for the revitalization of the Development District is based on the need for a rational land use pattern, reinforced by zoning. The City feels that this will provide a foundation for growth and stability, as well as a framework within which both short-and long-range decisions are made about physical development of the District. Elements addressed in the plan include land use and redevelopment opportunities, urban design and open space, and transportation and parking.

The physical planning concepts that served as the framework for the plan are as follows:

- Reinforce existing medical institutions by providing opportunities for expansion and encouraging the development of medical-oriented services in close proximity.
- Stabilize and enhance existing viable neighborhoods by encouraging infill or appropriate uses and prohibiting development of incompatible uses.
- Provide additional opportunities with the development of mixed use/residential district at Hemphill Street and Rosedale Street.
- Provide an economic stimulus for the existing Magnolia Avenue commercial corridor by encouraging the development of office and residential uses in areas immediately adjacent to the corridor.
- Provide for the development of a community-oriented retail center to serve the needs of District employees and residents.
- Encourage the development of high-quality, freeway-oriented commercial development along the planned realignment of Interstate 30.
- Provide for new business growth and job creation within the District through the establishment of a Technology Park and Vickery Business District.
- Provide for long-term, moderately priced hotel accommodations.
- Encourage a stimulus for economic revitalization of the Evans Avenue Corridor by encouraging "freeway" oriented development at the Rosedale Street interchange with Interstate 35W.
- Establish redevelopment opportunities that will serve as a catalyst for the revitalization of the District and surrounding areas.

And the estimated price tag, financed through TIF, to implement these goals that would serve as incentives for private sector investment:

\$2,700,000 in residential development.

\$900,000 in retail development.

\$10,000,000 in business development.

\$12,800,000 in streetscape/boulevard/parkways/and gateway costs.

\$13,000,000 devoted to creating 50 acres of open green space i.e., parks.

\$15,000,000 to enhance public education facilities.

\$100,000 devoted to arterial directional and informational signage.

\$3,500,000 in parking structures.

\$2,000,000 in expenses associated with managing and administrating the TIF District.

for a total of \$60,000,000 in public funds.

Financing the Project

New public infrastructure investments within TIF District #4 are expected to be funded on a pay-as-you-go basis using available cash increment as it is created. At this time the District does not expect to use public debt instruments to finance improvements.

The District will enter into development agreements with investors, property owners, and developers to reimburse over time the cash investments they make in new public infrastructure associated with private development. The City anticipates that TIF funds would be spent, as they become available to accomplish other elements of the Project Plan.

As of 2000, Fort Worth TIF District #4 had not entered into any agreements and has not entered into any financial obligations. From 2000 to 2002, the TIF project stagnated. That is, since very little, if any, construction had occurred in the area, property values decreased marginally since 1997. Currently, however, the TIF board has several projects lined up for the next twelve months in an effort to revitalize the depressed area. These projects involve the construction of two parking garages for mixed-use development centers, a parking garage for hotel patrons and the general public, and the building of condos in an area called Oleander.

APPENDIX B: AN EXAMPLE OF A BAD TIF PLAN

Case Study: Pittsburgh, Pennsylvania.

In Pittsburgh, TIF has largely been used to build retail developments and commercial establishments. The most notorious use of TIF was for the construction of a new downtown department store and refurbishment of the company's former store into office space. The price tag for this development was \$130 million, not including relocation

costs and lost tax revenues. The increased value of the buildings after spending \$130 million was only \$38 million. At this rate, Pittsburgh will experience rapidly diminishing returns from the overuse of TIF. In order to fully understand the ramifications of these projects, a closer look is necessary.

In 1995, Pittsburgh's Urban Redevelopment Authority (URA) found that fifty percent of the structures in the area known as the Center Triangle District were deteriorating. The Center Triangle District is an area located in downtown Pittsburgh, which contains a major department store, Lazarus, and office buildings. The city found that the Center Triangle District would benefit from the use of TIF in redeveloping the area. Mainly because the City wanted to keep Lazarus downtown and did not want the department store to relocate elsewhere. The City also felt that redeveloping the existing Lazarus store into office space would be a good way to reuse the existing store.

The first phase of the TIF project was the Penn Avenue Place project, which took the old Lazarus building and converted it to office and retail space. Before any construction occurred, the Lazarus building had a market value of \$11,209,000. When the project was completed private investors would have spent \$53,400,00, with \$10 million provided by TIF to acquire and refurbish the Lazarus building. Although, the predicted estimated gains of converting the building were to generate \$1,383,197 in new taxes the actual figures were less than the prediction. After the building was completed the market value for the property was at \$35,312,000, and only generating \$1,142,088 in taxes, which is \$241,109 less than than predicted.

Meanwhile, the new Lazarus store took several pre-existing businesses and leveled them in order to construct a new store and parking garage. This phase of the project cost a total of \$78,100,000. \$19,950,000 of which was provided by TIF and \$58,150,000 was in private investor funds. Before construction occurred, the URA found the market value of the property to be \$11,735,000. After \$78,100,00 was spent on redevelopment, the market value of the property rose a mere \$26,500,000, increasing property taxes by \$861,044, which is less than \$116,999 that was predicted. Thus, the overall Center Triangle District TIF project was not generating the necessary tax revenues to service the TIF backed bonds totaling \$29,950,000.

In addition to having spent \$130 million dollars for a return of only a \$38 million increase in property values, there are several negative aspects of this development project. First, pre-existing business buildings were leveled in order to construct a new store and parking garage. More money was incurred to demolish and acquire these deteriorating buildings than they were worth; \$28 million was spent to acquire and demolish buildings that had a market value of over \$22 million. Second, the old Lazarus department store building was converted to office space. Thus, basically, developers spent over \$130 million to transfer jobs from one area to another; office workers now work in nicer buildings and department store owners now have a nicer store, yet on the macro-level the city gained nothing.

APPENDIX C: DALLAS

A. Dallas City Center TIF District²⁷

Dallas's City Center TIF District's assessed tax value in 2001 was \$1,537,635,260.²⁸ This represents an increase of \$635.7 million over the assessed value of the base year (1996) value. This is an increase of 70.5 percent in five years. The following chart details the projects completed, and how much money was spent on the various TIF projects in one of Dallas's TIF districts. From the fourteen projects listed in the chart below, they will generate approximately \$440 million in new investment as of September 30, 2001.

Project	Units/Hotel Rooms	S.F. Retail or Office	Approx. Investment	Status	TIF \$ Spent	Year Comp.
1900 Elm (Titche- Goettinger)	129 apartment Units	15,000 s.f. of retail space	\$11.8 million	Complete	\$0	1997
Adams Mark Hotel 400 North Olive Street	1,844 hotel Rooms		\$70.0 million	Complete	\$0	1998
Kirby Building - 1509 Main Street	156 apartment Units	15,000 s.f. of retail space	\$21.5 million	Complete	\$1.38 million	1999
Wilson building - 1623 Main Street	135 apartment Units	10,000 s.f. of retail space	\$18.0 million	Complete	\$3.80 million	1999
Magnolia Building - 1401	330 hotel rooms/suites		\$35.0 million	Complete	\$0.59	1999
Santa Fe II - 1122 Jackson Street	205 apartment Units		\$18.7 million	Complete	\$0	1999
2020 Live Oak Street		130,000 s.f. of office space	\$3.2 million	Complete	\$0	2000
Stone Street Gardens		29,000 s.f of retail space	\$3.0 million	Under Construction	\$0.28 million	2001
Universities Center at Dallas		20,000 s.f. of educational space	\$3.0 million	Under Construction	\$3.0 million	2002
Jackson Street	8 Condominium units	5,000 s.f. of retail space	\$4.0 million	Under Construction	\$0	2002
Boren Building		20,000 s.f. of retail space	\$3.7 million	Planned	Pending	2002
1505 Elm Condos	67 Condominium units		\$12.0 million	Under Construction	\$0	2002
Main Street Retail Initiative		Coordinated Merchandising	Investment shown on	Planned	\$0.15 million	2003

City Center TIF Project Status

²⁷ Chart information from Economic Development Department, "Annual Report Reinvestment Zone Number Five" *City Center Tax Increment Financing District*; October 1, 2000 – September 30, 2001.

²⁸ Economic Development Department, "Annual Report Reinvestment Zone Number Five" *City Center Tax Increment Financing District*; October 1, 2000 – September 30, 2001.

		and Marketing Effort	specific projects			
Elm Street Retail	30 apartment units	30,000 s.f. of retail space	\$8.0 million	Planned	Pending	2003
Mercantile Complex - 1704 Main Street	420 apartment units	117,000 s.f. of retail space	\$80.0 million (est.)	Planned	\$21.7 million	2003
Davis Building - 1309 Main Street	183 apartment units	15,000 s.f. of retail space	\$34.0 million	Planned	\$1.35 million	2003
Davis Lot Garage		20,000 s.f. of retail space/ Parking Garage	\$15.0 million	Planned	Pending	2003
Commerce Garage		20,000 s.f. of retail space/ Parking Garage	\$12.0 million	Planned	Pending	2003
Hart Furniture Building - 201 North Harwood Street		16,600 s.f. of office space	\$1.0 million	Planned	\$0	2003 (est.)
Republic Center - 325 North St. Paul Street		500,000 s.f. office renovation	\$50.0 million	Planned	\$0.81 million	2004 (est.)
TOTAL	1304 apartment units/ 2174 hotel rooms	296,000 s.f. of retail space/ 646,000 s.f. of office	\$400.90 million		\$33.05 million	

APPENDIX D: HYPOTHETICAL EXAMPLES OF GOOD AND BAD TIFS

A. A Hypothetical Example of a Good TIF²⁹

- 1. A vacant building sits on a piece of land in a city. Given its location, the redevelopment agency of the city recognizes commercial potential if public improvements were made to entice business development. For a variety of reasons private development is extremely unlikely.
- 2. A tax increment district is created which covers the building and the area around it. The city, county, and the school board agree to participate in the project.
- 3. The redevelopment agency plans improvements in the area, including sewer and water upgrades, and utility and sidewalk improvements.
- 4. An assessment of the property is taken, and the base is valued at \$1,000,000. Given the combined millage rate of the three taxing bodies is 14 mills³⁰, the taxes on the

²⁹ Example from Haulk, Jake and Montarti, Eric., 1999. "A Primer on Tax Increment Financing in Pittsburgh," *Allegheny Institute for Public Policy*, June: pg. 10. ³⁰ Note: A mill is a monetary unit equal to $^{1}/_{1000}$ of a U.S. dollar or $^{1}/_{10}$ of a cent.

base assessment continue to go to the city, county, and school board. A feasibility study is done and the new assessed value, after improvements, is at \$11,000,000.

- 5. This difference is used to determine the tax increment generated by the project: $\$11,000,000 \$1,000,000 = 10,000,000 \times .014^{31} = \$140,000$ to be devoted to paying the bond and, upon termination of the project, to be returned to the three bodies.
- 6. It creates new jobs and economic activity for the county.

B. A Hypothetical Example of a Bad TIF³²

- 1. The redevelopment authority of a city sees an area where a mixed development of residential and commercial uses could succeed. The area currently has several small businesses. The lynchpin of the development is a department store similar to those located in malls around the city. It is believed the store will rebuild the retail corridor of the city.
- 2. The base assessment of the current property is \$30 million dollars. The redevelopment authority plans to purchase the land, relocate the business, grade a nearby slope and construct plazas, all to prepare for the developer's vision of the store. The new assessment of the property, after the project's completion, is estimated at \$50 million. \$15 million in bonds are sold to pay for the public improvements.
- 3. Regardless of the fact that the development is a low-value added industry with no multiplier effect and will generate subsidized competition for other department stores, the store is constructed.
- 4. The forecast for the store is grossly over-stated, and the development only raises the assessment by \$5 million dollars to \$35 million.
- 5. The project fails to produce an increment sufficient to retire the debt of \$15 million, forcing the city to cover the costs by raising taxes.
- 6. It merely shifts jobs and economic activity within the city.

³¹ 14 mills/1000 = .014

³² Example from Haulk, Jake and Montarti, Eric., 1999. "A Primer on Tax Increment Financing in Pittsburgh," *Allegheny Institute for Public Policy*, June: pg. 10.

BIBILIOGRAPHY

Anderson, John E., 1990. "Tax Increment Financing: Municipal Adoption and Growth," *National Tax* Journal, June.

Beggs, Brad. Summer 2000 "The Effect of Tax Increment Financing on Property Values," Development Strategies Review, pp. 8-9.

Byrne, Paul F. 2002. "Determinants of Property Value Growth for Tax Increment Financing Districts," University of Illinois at Urbana-Champaign; Department of Economics. January.

Calia, Roland. 2002. "The Future of TIF in Illinois" Metropolitan Planning Council.

"Center Triangle TIF District Development Report". (1995). Pittsburgh, Urban Redevelopment Authority.

Chapman, Jeffrey I., 1998. "Tax Increment Financing as a Tool of Redevelopment," *Local Government Tax and Land Use Policies in the United States*, Helen Ladd, ed. Cheltenham, U.K. and Northhamption, MA.

City of El Paso Planning, Research & Development. 2002 "Tax Increment Financing: Blight Analysis for TIF Districts Two and Three."

City of Fort Worth, Texas "Fort Worth Tax Increment Finance District #3"

City of Fort Worth "Fort Worth Tax Increment Finance District #4"

Dye, Richard F. and Merriman, David F., 2000 "TIF Districts Hinder Growth," Policy Forum, Volume 13, Number 4.

Economic Development Department, "Annual Report Reinvestment Zone Number Five" *City Center Tax Increment Financing District*; October 1, 2000 – September 30, 2001.

Haulk, Jake and Montarti, Eric, 1999. "A Primer on Tax Increment Financing in Pittsburgh," *Alegheny Institute Report* #99-06, June.

Hill, Christopher R. Commissioner, City of Chicago Department of Planning & Development, 1998 "Review of Tax Increment Financing in The City of Chicago." June.

Lawrence, David B. and Stephenson, Susan C., 1995, "The Economics and Politics of Tax Incremnt Financing," *Growth and Change*, Vol. 26, Winter.

Man, Joyce Y. and Rosentraub, Mark S., 1998. "Tax Increment Financing: Municipal Adoption and Effects on Property Value Growth," Public Finance Review, 26, 523-547

Quinones, Ben., 1993, "Facing Up To Tax Increment Financing," Economic Development & Law Center Report, April.