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MERGING WALKABILITY INTO TAX INCREMENT FINANCING:  
CHAMPAIGN-IL DOWNTOWN FRINGE TIF DISTRICT CASE DEMONSTRATION

BY

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THESIS

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## ABSTRACT

The use of Tax Increment Financing (TIF) in the United States achieved enough time to dismiss the policy of the label “new” or “innovative”, but despite the variety of studies, TIF’s extended possibilities still welcome exploration. With that in mind, urban planning practitioners can push for walkability analyses in TIF districts, accounting for the walkability impact associated with the many developments that happen inside its boundaries.

This knowledge can support scenario planning, provide information to negotiate with developers and help the quest for walkable spaces overall. Moreover, planners can resort to new methodologies that investigate the correlation between walkability and real estate variables, estimating the walkability premiums for the developments inside TIF districts. This can lead to studies that identify the walkability component in projected assessed values, and, consequently, in projected property tax revenues. Planners can use this information to better design the TIF financials, possibly connecting walkability related revenues and walkability related expenditures.

In a case demonstration on Champaign-IL Downtown Fringe TIF, the use of the State of Place methodology revealed a district with significant connectivity infrastructure for pedestrians, but still not sharing the economic vitality of the Downtown Core area. Additionally, a forecasting exercise showed that an announced \$95M mixed-use development inside the Fringe TIF would generate an extra of \$ 150,000 in annual property tax revenue, only because of its walkability impact.

## ACKNOWLEDGMENTS

Working on Master's thesis is not an easy task, especially when you challenge yourself on developing a good work over an initially unknown topic. But I had the luck of counting with the help of many people along the way. First I would like to thank the City of Champaign Planning Department, namely the Senior Planner TJ Blakeman and the Assistant Planning & Development Director Rob Kowalski. They literally opened doors and gave me access to economic development data that other organizations would not feel comfortable sharing. I would like also to thank State of Place in the name of its CEO, Mariela Alfonzo, for teaching me their analytics methodology and allowing its use in this thesis. Without a question, they represent the vanguard in terms of walkability studies. I cannot forget to thank my Economic Development Professor at the Urban Planning Department and Advisor, Marc Doussard, for providing accurate and extremely valuable critique to my work; and my mentor, Sofia Sianis, who opened the real estate world to me and gave permanent academic, professional and personal support through all my experience as an international student in the Master's program. Thanks also to all DURP faculty for all the lessons in the Urban Planning world, thanks to the DURP staff for the always efficient support, and finally to my friends and family, who had to live with a distant Marcus for the last two years.



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## INTRODUCTION

The use of Tax Increment Financing (TIF) in the United States achieved enough time to dismiss the policy of the label “new” or “innovative”. Many cities have used TIFs in many economic development circumstances and with a diverse set of goals, whether related to the original redevelopment concept or modified to a different focus. Despite the wide variety of studies, TIF’s extended possibilities still welcome exploration and, hopefully, innovative approaches that help improving the best practices manual for the policy, as well as producing good outcomes for our cities and its people.

Paying attention to that opportunity, this thesis launches an attempt to move TIF’s flexibility a step further, by developing a perspective focused on the walkability. The topic has good acceptance between urbanists, many of whom have repeatedly called for the benefits associated with dense, walkable neighborhoods. Following this lead, researchers have studied walkability impacts on areas such as health, safety, civic engagement, the local economy and, more specifically, on real estate variables (Florida, 2014). This last measure in particular provides an interesting connection with TIFs, which strongly rely on real estate dynamics to move its financial engine. In a sense, urban planners can see walkability as a “bundle of public values”, covering public goods people appreciate in city, such as sociability, aesthetics, accessibility, and which naturally influence the location market.

Despite the intuitive idea of merging walkability into TIFs due to former’s connection with public values, the urban planning practice apparently only scantily explored it. Some studies find reasons in walkability’s measurement difficulty, pointing out that practitioners have often chosen to ignore it rather than making an effort to translate generic argument to actual numbers and dollar values in the local economic development level (Litman, 2003). Fortunately, some organizations have been developing fast and practical resources that can deliver simple information to planners. The most noticeable – Walk Score – assigns grades for neighborhoods based on a GIS calculated proximity to amenities. Yet, some organizations have developed methodologies that provide even more detailed information and for even more specific locations such as the single street level. The startup State of Place<sup>1</sup> is one of them, having developed a robust tool for measure walkability and its effects on the real estate market.

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<sup>1</sup> I worked as a research assistant intern for State of Place during the summer of 2016. The opportunity gave me the opportunity to learn its methodology and apply it in this thesis.

Taking advantage of new resources, this thesis revisits the theory about TIFs and Walkability to explore a merge potential. And since urban planning arguments make much sense within a specific context, this thesis will also operate a case demonstration, turning its attention to Downtown Fringe TIF, in Champaign-IL. This TIF just recently started operations.

The case choice has a couple of advantages. The first stems from the reason why some people compare Champaign-Urbana to a petri dish. The small cities stand at middle of Illinois' endless flat prairies, surrounded by crop fields from all sides, distant enough from Chicago to not turn into an appendix, and still developing a significant urban economy on its own - with a significant push from the University of Illinois. The urban policies that happen in the area generally produce visible results, or no-results at all, in the same area and with reasonable control, giving urban researches the rare opportunity among social sciences for a smooth methodical learning. The second advantage comes directly from the planning culture. Most of the staff that works at the planning departments in Champaign and Urbana either have an urban planning degree from U of I or maintain some relations with the urban planning department. This reinforces a community open to academic research, willingly to provide data and other kinds of support for enterprise like this thesis.

Given the framework, this thesis has objective to *propose a fitting for a walkability component within Tax Increment Financing*, while running in parallel a case demonstration on Champaign Downtown Fringe TIF. To accomplish the task, this thesis resorts to 1) a review on the literature addressing the topics; 2) research on Champaign planning documents and conversations with Champaign planning department staff; 3) conversations with the Champaign Township Assessor; 4) application of the walkability analysis developed by the startup State of Place, which involves street-level observation of walkability; and 5) advising from University of Illinois department of urban planning faculty as well as conversations with local real estate agents and fellow urban planning students.

This thesis has 5 chapters. The first one – *Tax Increment Financing and its Planning Pool* – draws from the available TIF theory while describing its basic arguments. In this chapter I introduce the concept of the TIF “components”, different parts of the “TIF planning pool” that relate to different policy design perspectives. In the second chapter – *The walkability discussion* – I seek arguments that support the development of the walkability component, visiting the literature that sets the walkability policy within urban planning.

After more abstract and broad discussion, this work turns to the case demonstration. The third chapter – *Champaign and its downtown redevelopment policy* – introduces the city of Champaign, which resorted to TIFs in the 1980s to fund a downtown redevelopment policy. Coming in the sequence the fourth chapter – *The TIF experience in Downtown Champaign* – describes the planning of the two TIF experience downtown Champaign has seen so far, one in downtown core and the most recent in downtown fringe area. And last but not least the fifth chapter – *Walkability analysis on Champaign Downtown Fringe TIF* – describes the application of the State of Place walkability analysis and use the results to establish connections between the walkability and the overall TIF planning.

Some boundaries define the scope of this thesis. Following the urban planning rationale, this study contributes for a coordinated view of many different areas, not digging in specialized knowledge in any of them. The chapters will not debate very specific contents such as the finance details behind TIF analysis or the reasons why individual variables affect walkability. Despite the curiosity, the writing time was limited and after all every work ends with some incompleteness. Other than that, all the values mentioned in this thesis concerning property tax revenues, walkability premiums, rents and similar measures are just rough estimates. Despite coming from real data, they hardly correspond to professional assessments or projections, and should receive credit only as the pieces of an academic exercise.

Local economic policies have always changed to adapt new circumstances and major economic trends. Throughout this process TIF has shown remarkable resilience to the point of becoming a staple in the local economic development handbook, and the best odds are that it will continue to be. Despite bad experiences, TIFs have a big potential to continue improving, and urban planning research represents the medium for that process.

## **CHAPTER 1: Tax Increment Financing and its Planning Pool**

### **1.1 TIF BASICS**

Tax Increment Financing District, or simply TIF, is a local economic development policy designed originally to provide California municipalities a way to match the 1949 Housing Act federal grants. However, the legislators and public officials that conceptualized it achieved much more, and inaugurated a financing model that enabled municipalities to work around budget constraints within a wide variety of circumstances. Over the following decades, TIFs would turn into a mainstream economic development policy in almost every state in the US (Chapman, 2001).

Two legal frameworks created the formal conditions for the operation of TIFs in California, both of them coming from the urban renewal context. The first in 1945, when legislators enacted the California Community Redevelopment Act, enabling cities and counties to create redevelopment agencies – RDAs. They had the mission to move urban renewal forward by removing “blight”, understood generically as any signs of urban deterioration, and for that task received the power to incur debt to finance their operations. The second one came in 1951, when legislators created the concept of tax increment financing within the new California Community Redevelopment Law, and, in the following year, when voters approved an amendment to the state constitution that authorized the distribution of property tax revenues coming from increased assessed values in real estate (Black, 2014; John Chiang - California State Controller, 2011).

State of Illinois legislators approved TIF enabling legislation 25 years later, in 1977. At that time urban areas across the state faced deep economic constraints with losses in retail and manufacturing activity. On top of that, the federal government was cutting funds from traditional renewal policies pipelines, forcing municipalities to come up with innovative solutions finance their redevelopment projects. Nonetheless, these conditions did not support the TIF adoption alone. The State had alternatives and could go for policies that already have sprouted in other places in the U.S., such as industrial retention strategies or workforce development. Weber and O’Neill-Kohl (2013) argue that the private sector – real estate consultants, public finance advisors and law firms – applied a decisive push for the TIF approval. They have already been developing a body of knowledge from where legislators would tap and had a heavy influence on the public subconscious thought that the economic solution rested within the real estate sector (Weber & O’Neill-Kohl, 2013).

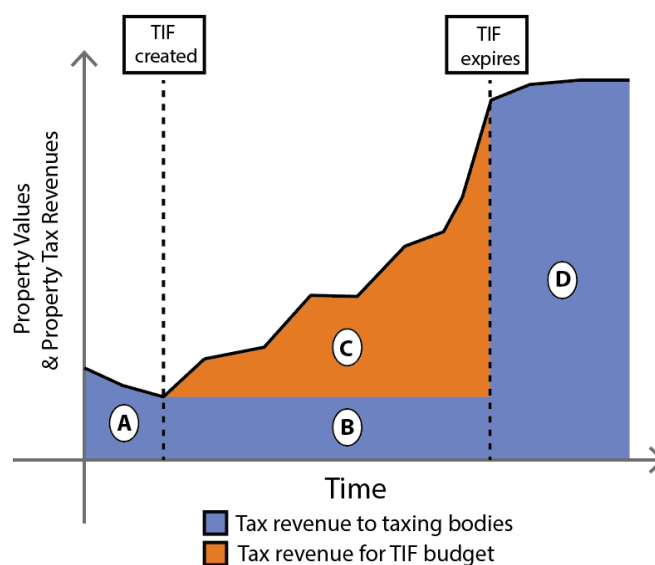
### 1.1.1 Basic Operation

In its core mechanics, the operation of a TIF involves earmarking future increments on tax revenues coming from a specific district. At the same time the entity operating the policy – often the municipality – uses these funds to promote local urban improvements that guarantee the assessed value increase. The government can issue bonds to raise money upfront or only spend as the revenue comes in, using the “pay-as-you-go”. The improvements usually take the form of new public infrastructure or subsidies for redevelopment projects. Legislation typically requires that redevelopment agencies only use TIF when considering that the expected developments inside the district would not happen “but-for” the incentives. Additionally, it also requires the demonstration of “blight” presence in the area.

Most part of the literature uses a simple graphic to represent the TIF revenue source. As seen on figure 1 below, a district with somewhat low property values (A) receives a TIF on a specific moment. Immediately, the current property tax revenue is set as base (B), and will continue to generate revenue for all taxing bodies. On the subsequent years, the municipality implements urban improvements that cause an increment in property values & property tax revenues. The funds needed for those come directly from the incremental revenue stream (C). Finally, at the end of the established period, the earmarking is lifted and the taxing bodies can again collect the full share of property taxes, now over an expanded base (D).

Weber (2013) notices that TIF stems from the ideology that public improvements have localized impacts, the same rationale that originally supported Special Assessment Districts in the late 19<sup>th</sup> century. Local governments used them to levy additional property taxes and fund

**Figure 1: TIF classic representation**



public infrastructure in the specific neighborhoods where the extra taxes came from. These districts had an especially recurrent use in the Midwest, due to the lack of strong central governments which could operate comprehensive taxation and public services systems, such as those in East Coast. The lack of annexation also contributed for that scenario, leaving small towns to find their own ways of providing services and other public goods.

### 1.1.2 Becoming Mainstream

TIFs did not enter the basic economic development toolkit for municipalities right after its creation in the 50s, but a couple of decades later. Most authors agree on the idea of a federal funding shortfall in the 70s and other forms of fiscal restriction, like the Proposition 13 in California (Briffault, 2010). Beyond the circumstances, Greifer (2005) recognizes that TIFs turned out to as a flexible way for municipalities to achieve a variety of economic development goals. To support his argument, the author mentions a survey by the International City/County Association that asked government managers about the most common TIF goals. They answered (1) attraction of new business, (2) downtown redevelopment, and (3) retention or expansion of existing businesses. Besides the flexibly, TIFs don't require the creation of new taxes, which defers the policy's impact on government finances and diminish the chance for a strong reactive political opposition.

The widespread use of TIFs also exposed it to questioning. Some researchers investigated its impact on cities' economic output and have found evidence of a net zero effect. In this situation, the TIF would behave as a budget management tool, directing resources from many taxing bodies to specific city-managed projects (Hicks, Michael J., Faulk, Dagney, Howard, 2015). Other studies, addressing the "but-for", have found evidence that cities with TIFs do not have more growth when compared to others that do not use the policy (Dardia, 1998). Others highlight that very often the neighborhoods chosen for a district already have property values in an upward trend, not needing public money to sustain private developments (Fortino, 2011; Velez, 2011). In these terms, the policy would lose its redevelopment of deteriorated areas purpose, turning into an ordinary tool to increase economic concentrations.

Regarding more symbolic experiences, the Chicago case stands out for the large and systemic use of the economic development policy. The TIF Illumination Project<sup>2</sup> – an initiative

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<sup>2</sup> The organization website is available at: <http://www.tifreports.com>.

to analyze and explain Chicago's use of TIFs – has been executing studies that show the magnitude the city's program: in 2014 the total TIF total expenditure achieved \$640 million, distributed over 150 districts. On top of that, the city paid almost \$100 million to banks in finance charges and almost \$9 million to the Department of Planning and Development as staffing costs (Civic Lab: TIF Illumination Project, 2015). Trying to make sense out of the numbers, Weber (2003), for example, found in the statistics that TIFs indeed affected schools districts' finances, while state aid helped to compensate the gap.

The State of California also made it recently to the economic development headlines. In 2012 a combined effect of the Governor, the Legislature, and the Supreme Court, all Redevelopment Agencies (RDAs) in the State were extinguished (about 400), directly ceasing the creation of new TIFs. The drastic outcome happened among a push from the central government to capture more funds for education (Lefcoe & Swenson, 2014). Nonetheless, some deficiencies in the use of TIF also made the agencies vulnerable: a report published by the State Controller a year before pointed that “blight” requirements were not clear enough, enabling the creation of TIFs in questionable circumstances, that all RDAs had problems in satisfactorily reporting, and that independent auditors have been failing to identify operational problems (John Chiang - California State Controller, 2011).

These and other case studies reveal the need of improvement on TIF practices, which, as matter of fact, has been answered. Beyond the academic research, many organizations have been working on best practices manuals for public officials. One example – the Chicago TIF Reform Panel – gathered business leaders, finance experts, public officials and urban leaders to work on recommendations regarding the “transparency, accountability, and efficiency in the use of the policy” (TIF Reform Panel, 2011). Some of them could perfectly apply to many other cities, taken as an overall policy benchmark.<sup>3</sup>

The panel's first recommendation suggests the establishment of clear TIF goals, and preferably within a multi-year Economic Development Plan. This gives transparency regarding policy objectives and the criteria for district designation. On top of that, creates a coherent policy guideline that can relate and provide directions for a set of other public projects that affect the urban space. Another recommendation says the city should establish clear metrics for TIF operation, in order to assess original expectations after TIFs end operation cycles. The

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<sup>3</sup> Another compilation of TIFs critical information, “An Elected Official's Guide”, signed by Nicholas Greifer, adopts a very practical perspective. The author uses a very straightforward and clear language, addressing the major topics related to the TIF. Reading recommended.



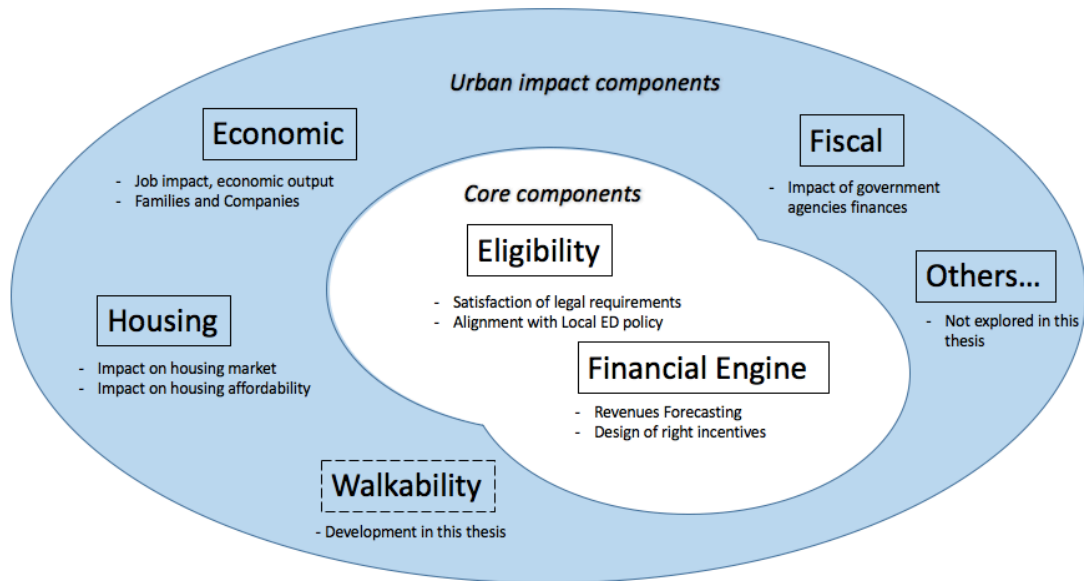
report presents multiple sets of metrics, grouped around their tracking perspective: the individual districts, individual programs or associated programs such as the Small Business Improvement Fund. They cover deliverables such as dollar numbers on attracted private investment, the number of jobs created, the number of affordable units created and the increment in assessed values compared to city global performance. A last noticeable recommendation asks the city to increase its accountability generically, in a way to ensure that all parties involved in TIF operation follow their obligations and answer their responsibilities if the expected outcomes are not met.

## 1.2 THE TIF PLANNING POOL

Besides addressing TIFs holistically and recommending systemic improvements: researchers can study each one of its components. In this thesis I describe six: some regarding the TIF basic operation – Eligibility and Financial Engine – and others related to the TIF impacts on the urban environment – Fiscal, Economic, Housing and Walkability. They regard different policy design perspectives and come together to form what I call the “TIF Planning Pool”. Figure 2 on the next page shows the planning pool concept, depicting how its components organize in relation to each other.

The planning pool makes sense under the holistic approach of the economic development goals and objectives, changing according the demands coming from the community and from the urban planners themselves. Moreover, the study on the planning components provide diverse reference points, which later support future success assessment on TIFs.

**Figure 2: The TIF Planning Pool**



### 1.2.1 Eligibility

All TIF enabling legislations bring some requirements for district designations, assigning city officials the responsibility to demonstrate how every one of them is met in each specific circumstances. As mentioned earlier, the two notorious requirements that appear in most TIF statutes are the “blight” and the “but-for”.

The “blight” condition relates to factors of urban decay<sup>4</sup>, which would give redevelopment a public purpose. Johnson and Kriz (2001) trace down the concept origins to the federal Fair Housing Act of 1949, which extended the authority of local agencies to promote housing projects. To qualify for funding, the legislation required them to design redevelopment plan addressing slums and blight. This set a reference idea for unwanted urban problems, from which other economic development copies would get inspiration and take forward the “blighted area” concept.

Looking to present days, the authors underscore that some cities have extended too much the public purpose justification and started designing districts on areas without clear need for public help. In response to these and other misuses, legislators have adopted preemptive measures like establishing quantifiable thresholds for blight conditions (50% or more buildings

<sup>4</sup> Working on the definition of urban decay, the Illinois enabling legislation sets that a blighted area must present five out of thirteen conditions: dilapidation; obsolescence; deterioration; presence of structures below minimum code standards; illegal use of individual structures; excessive vacancies, lack of ventilation, light, or sanitary facilities; inadequate utilities; deleterious land use or layout; need for environmental clean-up; lack of community planning; and declining property values in a specific pattern (65 ILCS 5 - Illinois Municipal Code Tax Increment Allocation Redevelopment Act).

deteriorated, for example). Moreover, many civil society organizations have been monitoring economic development policies that use TIFs, ensuring the qualitative accountability and social responsibility.

The other basic requirement for TIF designation, the “but-for”, represents the condition that future projects inside the TIF would not happen but for the district incentives. Greifer (2005) joins the literature consensus in stressing out how difficult it is to determine exactly if one project would or would not happen under TIF circumstances, or if any other economic circumstances at all. The “but-for” involves deep knowledge of the real estate market and, still more complicated, future predictions. For that reason it demands demonstration effort from planners, which should see it not as a legal hurdle to overcome but an opportunity to safeguard local financial and political resources (Greifer, 2005)

Addressing these concerns, planners can develop an **Eligibility Study**, which can come integrated into the TIF plan or as autonomous document. Regardless of all uncertainties and ambiguities of the district designation, the local administration does well by documenting all the choices and compiling data that demonstrate the compliance with law and with reasonable judgment.

### 1.2.2 Financial Engine

The financial engine regards the TIF revenue projection and the planning of effective incentives that guarantee the property values increase. Planners recognize a TIF as financially feasible when the projected revenue can indeed cover the costs of the interventions. Following Chapman (1998), the financial feasibility involves the comparison between estimated public costs of the project and the estimated revenue coming from increments in property tax.

On the expenditure side, planners project the redevelopment subsidies or public infrastructure which might attract developers’ interests. In this task, city officials should collect advice from multiple business and real estate agents, in order to get a feel for the area’s market potential. The city might have to work in a more detailed TIF budget if it plans to issue bonds, but still, it generally can initiate the TIF based on estimates.

However the biggest financial reference for any investment policy and also for TIFs lies in the revenue side. City officials have to provide a forecast on all revenue sources, taking into account the expected developments, and estimating projection has a lot of eyes on it. Maybe the first result stakeholders will hold planners accountable for is if the TIF recovered

the funds to pay for its investments. The increment in equalized assessed values<sup>5</sup> receives the most attention here among other economic performance data, as it determines in the end the increment on property tax revenues and the biggest part of TIF income. Again, planners can work on details, operating an individualized parcel research to identify new assessments potentials, or consulting the local assessor to understand which features have the biggest impact on values.

Some TIF enabling legislations allow other revenue sources than the property tax – sales, hotel, utility taxes, among others. Mikesell (2001) analyzes non property Tax Increment Programs in 6 states, describing the motivations and standard procedures of each program. The author highlights that authorities, despite providing their TIFs with an initial revenue stream boost, face challenges to relate it to the subsidies given. Broad economy changes would have a much bigger effect on sales taxes, for example, than an isolated subsidy for the development of retail square footage. Moreover, non-property tax increment districts seem to find a smooth design only in clear boundary economic projects, such as suburban malls in undeveloped land. The problem here would lie within the public purpose, why these type of developments would need public support? Which blight would they fight against?

To clarify and refine the TIF financial component, planners can develop a **Financial Feasibility Study**, or alternatively a **Revenue Forecast Analysis**. One example: a TIF in the city of Norwich-CT, would support the redevelopment of an abandoned hotel that had attracted vandalism to a neighborhood. The projections indicate 250,000 in incremental utilities revenue, and 170,000 in property taxes (City of Norwich & Josh Portier - City Comptroller, 2013). This study considered a set of scenarios and forecasts based on market research.

### 1.2.3 Fiscal

The Illinois Tax Increment enabling legislation requires that every TIF plan present an estimation on the demand impact of services provided by overlapping districts. Still, local authorities frequently expand this idea and provide more information in a **Fiscal Impact Analysis**. Again, this study usually comes embedded into the main TIF plan, but can receive separated development. The fiscal analysis essentially quantifies the local costs and revenues

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<sup>5</sup> An assessed property value becomes “equalized” when it receives some discount/increase based on the current assessment policy from the local authority.

associated with various types and scales that can happen within the district (Edwards & Huddleston, 2009).

Interesting issues can receive some thought. The most basic fiscal impact of a TIF is the increment property tax revenue itself, which brings a positive fiscal result for the city. The “but-for” argument guarantees that the development would not happen but for the incentive provided; however, it only circumvents the TIF district itself. The argument does not cover other taxing bodies’ jurisdiction, which might face other outcomes, both in the short and in the long terms. If the development that happens inside the TIF would break ground elsewhere, then the city extra tax revenue would just be net neutralized by an equal tax loss from other districts. This highlights not only the importance of the “but-for” study, but also a multi-district fiscal impact vision.

Researchers have been investigating TIF effects under complex frameworks of regulations and multiple interests. Weber (2015) calls the attention for TIF funds transference between agencies, equalization formulas on assessed values and tax caps. The Illinois’ property tax extension limitation law – PTELL – provides an example. In a debate about education funding, she accurately calls our attention for the fact that property tax raise caps tend to affect non-TIF areas more. This happens because new constructions (which will receive assessments for a first time, standing outside caps reach) have a bigger chance to break ground inside TIF areas, considering both the financial incentives and the political support. At the end of the day, non-TIF taxing bodies see themselves stuck with stagnant revenues, having to wait 23 years to get a share of the city new economic development.

#### 1.2.4 Economic

Second to the financial return, the economic development results also attract attention. Number of new jobs, new businesses, new restaurants, extra income, among other data, can convey the message that the city has performed a good administration, capable of fulfilling promises of growth. Politicians and other economic development stakeholders seeks those results, and keep moving their resources if they obtain good feedback.

To work on refining projections about these numbers, planners can develop **Economic Impact Studies**, explaining on how the expected economic activity created within the TIF will affect its surroundings. For instance, an study for a TIF in downtown Kirksville-MO, calculated that projects for a movie theater, a senior housing and new retail stores would add to the

community a total of 90 new jobs and an extra of \$1.5M of annual income (Community Policy Analysis Center, 1999). These numbers can look small at a first glance, but they could spark people's imagination in Kirksville, with its modest 17,000 population.

Typically, economic impact studies operate from the backbone of an output-input matrix, which accounts for the interactions between different sectors in the economy and estimates multipliers for each one of them. The model widely accepted – IMPLAN – was originally developed by U.S. Department of Agriculture forest service to measure the impact of alternate uses for forest resources, but ended having its application extended (University of Wisconsin Center for Cooperatives, n.d.). IMPLAN accounts effects from three sources: direct effects (change in the industry itself), on indirect effects (changes within supplier's activity) and on induced effects (industry changes cause by employee's payroll). These three types of data add up to inform what a specific development or pool of developments will bring to the community in terms of jobs, additional income for workers and economic output.

Some Impact studies, though, take advantage of the already structured model and work a simplistic mechanical operation for economic impact studies. The data provided by the developer goes into the program and deliverables come out. The result ends up only confirming the pro-growth narrative, throwing up numbers for plain advertising. Planners, nonetheless, can indeed provide a more elaborate approach by promoting simple measures like calculating the opportunity costs, both for the public and the private money. If these resources would not have gone for the TIF district, they would have land elsewhere. This loss of opportunity should go into the input-output matrix as well, producing balanced results from a holistic perspective.

### 1.2.5 Housing

TIFs' investments can bring consequences regarding the local housing market. Rising property values usually come with higher residential rents, tied to a market demand from citizens who can compete for the best spaces. The increased assessed values can also pressure owners with increasing property taxes, possibly leading to financial constraints. While most redevelopment projects have these caveats, planning can use the legislation and their own work to provide compensations, most of them targeting to restore the housing affordability.

Many cities set affordable housing obligations for TIFs. The City of Chicago, for example, established that its residential developers working on projects with more than 10 units and receiving any kind of public support must provide a minimum 10% of their units

affordable. This requirement also extends to situations of “planned development” where the city negotiates some zoning requirements for a specific project (City of Chicago, n.d.). Considering most projects end up fitting in one of these scenarios, the affordable housing turns out as a routine practice.

Addressing these issues, a **Housing impact analysis** or **Affordable Housing analysis** generally describes the compliance with legal requirements. Still, this type of analysis can go beyond and provide on recommendations for more socially equitable economic outcomes.

With these topics in mind, the State of Minnesota designed a regulation framework for “Housing TIF Districts”. The state legislators created the possibility for a TIF proceeds to directly fund housing projects’ costs, given that specific conditions are met. The developer using the model must provide units for low and moderate income individuals, following a rule of percentage and the applicable regulations from federal and local levels. One point in the program holds a particular interesting point for the TIF discussion: it discards the “but for” requirement, by acknowledging that low-income projects most probably do not generate than a regular market use. In this scenario, the legislator prioritizes the public benefit of low-income units supply, in comparison to the simple property tax base swell (Minnesota House of Representatives: House Research Department, n.d.).

This represents a clear break from TIF’s conception as a redevelopment policy and a demonstration of how TIFs can be used to achieve difference objectives. The property values increment still works, but now falls a little behind on the list of priorities.

#### 1.2.6 Other components

Beyond Minnesota’s housing approach, many other cases demonstrate TIFs flexibility. The examples below show only a glimpse of the body of experiences.

In Pittsburgh the policy supported a residential development on a riverfront site that was formally occupied by a big slag heap – the Summerset at Frick. Despite focusing on high end single family homes, the development still had support from public money due to the high environmental remediation costs, that would make the project unfeasible. The case relates to Pittsburgh history that one had a strong industrial sector, heavily based on the river banks. TIF help came in 2013 in the second phase of the project, involving 75% of the new property tax revenues coming from already occupied homes and 45% coming from new homes. The

resources funded public infrastructure such as roads, pipes and bridges (Schooley, 2013; Swaney, 2001).

Another example regards investments related to research and development. The University of Louisville-KY received a TIF in 2012 from the Kentucky Economic Development Finance Agency to fund the expansion of its Office and Research Park. About \$600 million coming from property, sales and occupational taxes, over a period of 30 years, would support the construction of a new conference center, research and development building, a technology center and a new parking structure. (Finley, 2014; Hailey, 2012).

These examples show TIF again gaining distance from the redevelopment origins, towards and more generic economic development policy. As more new types of TIF use appear, planners can explore the new components within the policy design, pushing better ways to comprehend and tailor TIF impact into the urban environments.

### 1.2.7 Walkability

My research did not find significant mentions about a walkability component within the TIF Planning Tool. Still, from an abstract standpoint, planners could push walkability as a final goal for TIFs, just like in the Minnesota case when legislators pushed for affordable housing goals. Walkability seems to relate with a large set of public benefits, both in qualitative and financial terms. The next chapter explains these ideas.



## CHAPTER 2: The walkability discussion

The walkability discussion we see today most probably appeared as a result of the suburbanization and sprawl that happened after the second world war. The historical circumstances at that time pushed cities away from walkable patterns with an intensity yet unseen. Nonetheless, they also planted the seeds for the movement that would come years later trying to restore community features that Americans once took for granted.

Before the 1945 most cities in metropolitan areas presented “walkable urbanism”, which Leinberger (2009) defined as a built environment patterns where people satisfy most of their everyday needs such as work, education, shopping, social relations and entertainment within walking or transit distance. The author states that the transportation alternatives that developed until the post-war, such as horses, rail transit and buses had indeed allowed the expansion of cities, but always in contained patterns. The cities maintained density at their centers and around transit stations, considering most part of the public still had to walk the last mile to arrive at home<sup>6</sup>.

The suburbanization broke these limits, allowing cities to advance into large portions of unoccupied land but while greatly lowering their densities. Leinberger (2009) again identifies the new pattern the “drivable sub-urbanism”, where people need cars not only to commute from and to work but also for nearly all trips related to daily errands. The unfeasibility to walk or bike comes from both the long distances and the lack of infrastructure, leading to deleterious unintended consequences. Besides the car dominance, Leinberger mentions 1) the social segregation, leading to geographically defined clusters of poverty; 2) the environmental issues such as the air quality, heat islands and overconsumption of land; 3) health implications such as obesity and asthma; and 4) economic effects like strained personal finances and oil dependency.

Urbanists frequently refer to the term “new urbanism” while addressing the urban design movement that that strives to reverse the suburban trend bring back cities’ traditional features and their benefits. Grant (2006) states the new urbanism works brings proposes for

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<sup>6</sup> Detailing this overall design perspective Angel (2012) describes how cities evolve decentralized through history, starting from the exclusively walking cities from ancient times. The omnibus and horsecar in the latter nineteenth century, and the trolleys and commuter railroads in the early twentieth century helped the decentralization, but did not changed the monocentric features of cities. Car, buses and trucks made the difference in the second half of the twentieth century, enabling multiple centers where people could actually live and work without commuting to a centrality.

urban form and development that draw from historical lessons from classical European cities, vibrant ethnic neighborhoods and small towns. Representing a breaking point from modernism, it resorts to the appeal of mixed-use compact communities to provide architectural patterns that facilitate walking and nest urban identities.

## 2.1 WALKABILITY BENEFITS

Following the narrative, the acclaimed benefits associated walkability often oppose the problems associated suburbanization and driving. Addressing the health issue, a report by the organization Active Living Research (2016) has compiled researches supporting that walking and cycling daily effectively provides the recommended daily levels of physical activity. In one example, Hamer and Chida (2008a, 2008b) have found that the risk of cardiovascular diseases decreases 16% for people who walk 3 hours a week and 11% for people who have active commuting habits. More broader than that, studies by the Physical Activity Guidelines Advisory Committee (2008) shows a significant difference in the risk to suffer from diseased between more and less active groups of people. For cardiovascular issues and stroke, more active people had diminished risks at a 20 to 35 percent rate. For colon cancer, around 30%, and for breast cancer, 20%.

Also concerning walkability benefits, Gilderbloom, Riggs and Meares (2015) explored measurement resources such as walk score to define to relation between walkability, housing values, crime and foreclosures in Louisville-KY. The results showed significant impacts for all variables.

The literature goes on, adopting different perspectives that either address walkability directly or associated topics like active transportation. The results don't always show benefits – in one example Dong (2017) finds that more walkability can correlate positively with burglary, while having no statistically significance on robbery rates – nevertheless they progressively strengthen the walkability's importance and the space it occupies among urban planning policies.

### 2.1.1 Economic Benefits

A significant streamline of research explores walkability's economic effects. Litman (2003) comes from the transportation background to underscore a noticeable negligence of

planners towards walking. A few factors would explain this: first of all, walking would be difficult to track and systematically measure; second it would involve few or no economic resources at all, not having a lobby movement like it happens with the car and bus industry; and third the mistaken belief that pedestrians find their own paths and don't need significant support from planning. To counter this perspective, Litman identifies areas where studies can explore walkability economic benefits: consumer costs savings, public costs savings, efficient land use (amount of land occupied by the right-of-way), equity, among others.

Shifting from transportation to a land use focus, Leinberger (2009) points to walkability benefits from high densities. The author develops a "more is better" premise, where developments and activities within close range of each other generate a net economic benefit for the system as a whole. Residential, retail, entertainment and other uses can come together bring positive externalities a stimulate flexibility in the use of urban.

Whichever the benefit approach, a number of professionals have adopted the walkability narrative as a great promise for cities regarding economic development, in a similar fashion to what happened a few years ago with the creative class concept from Florida<sup>7</sup>. Showing this in a TED talk, Jeff Speck (2013) makes an overview of the main arguments for walkable cities: health issues related to driving, an inflated household spending with transportation, the potential for public savings, and finally, the tendency of young and talented millennials to migrate to walkable cities. This "next big thing" argument has indeed attracted interest, stimulating many studies (Dollinger, 2015; Flint, 2014; Glum, 2015; National Association of Realtors, 2015).

### 2.1.2 Effects on Real Estate

Some researchers have tried to take a step further and narrow down the economic effects of walkability into the real estate industry. This translates into the "walkability premium" concept, which communicates how much people are willing to pay more to live, work or simply use more walkable locations. On this topic, Cortright (2009) analyzed data regarding 90,000 home sales in 15 markets across the United States and crossed the information with evaluations from Walk Score. The author found out that in 13 of those markets one point

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<sup>7</sup> The creative class idea states that a group of occupations related to creativity would drive the success of cities in the post-manufacturing times (Florida, 2002). Since the idea initial publishing, a number of studies have come in the sequence to investigate the statement.

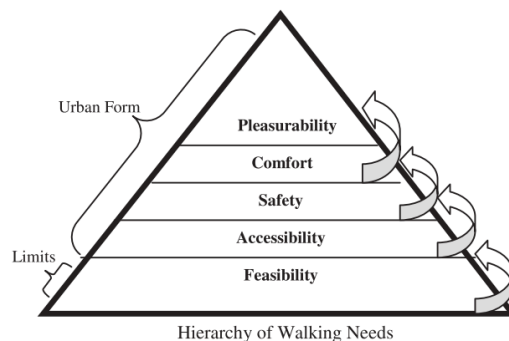
in the Walk Score scale would bring an appreciation that ranged from \$500 to \$3,000 in the final property value. Pivo & Fisher (2011) turn the same type of analysis to 4,200 commercial developments, also using Walk Score for reference. They found that walkability indeed capitalizes into higher values of retail, office and industrial property, and that market agents associate developments in more walkable areas with a lower risk and higher income.

## 2.2 WHAT DRIVES WALKABILITY

If assumed beneficial, the next step in the walkability narrative regards explaining its causes and how urbanists can reproduce them. The literature here is extended, covering a wide set of studies where researchers isolate variables seeking statistically significant correlations. In a second level, other researches compile the work already done, coming up with models that synthesize the most accepted theories. Urban planning practitioners can directly benefit from them, using their valuable outputs for public policy design.

Alfonzo<sup>8</sup> (2005) organized many studies to produce a socio-ecological model which describes how 1) individual, 2) group, 3) regional and 4) physical-environmental factors influence physical activity. The last category brings the direct connection with urban design and urban planning. Alfonzo organizes the physical-environmental factors in five levels of hierarchical needs, setting an order for influence on the pedestrian decision to walk. Important to notice that this structure only comes as reference for a behavior, not a ridged scheme, checklist, or a fixed thought sequence. Figure 3 below shows the author's representation of that idea.

**Figure 3: Alfonzo's Representation of Hierarchical Walking needs**



**Source:** Alfonzo, M. A. (2005). To Walk or not to Walk: The Hierarchy of Walking Needs. *Environment and Behavior*, 37(6), 808–836.

<sup>8</sup> Alfonzo also developed “State of Place”, the walkability measurement resource which will be used by this thesis in the later chapters.

The first level, the feasibility, regards the actual possibility for the walk, such as available time for the travel or a person's health situation. For the accessibility, the pedestrian evaluates the walking connection between places, like the presence of sidewalks, reasonable distances and the absence of barriers. On the third level, the pedestrian considers safety components directly, such as the presence of other people, litter, graffiti and the visibility from the buildings. On the last steps of the hierarchy, the comfort components relate to features that give the walk the feeling of ease and contentment, such as sidewalks width and protection from traffic, while the pleasurability component relates to features such as architectural aesthetics and liveliness of a street (Alfonzo, 2005)<sup>9</sup>.

The development of detailed theories like Alfonzo's opens the way for measurement tools that identify walkability in specific locations. This proves particularly useful for exploring the walkability influence in the context of local economic development policies such TIFs, and developing the walkability component in the TIF Planning Pool. Chapter 5 will give sequence to this development, while applying the walkability analysis methodology based on Alfonzo's work. However, before diving into the case study, this thesis changes focus to set its frame by describe Champaign its redevelopment policy.

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<sup>9</sup> Malfonzo draws these relations from many other studies. See the article "To Walk or not to Walk" for a complete list of sources.

### CHAPTER 3: Champaign and its downtown redevelopment policy

Formally incorporated in 1861, Champaign locates at Central Illinois with a current population around 86,000 and growing at a steady 2% rate per year. The city's current median household income – \$42,000 – stands below the average for the State of Illinois – \$57,000 – but above its nearby city peers. Its twin city Urbana holds a median household income of \$32,000 with half of Champaign's population – about 42,000 people<sup>10</sup>. Both cities have their identity closely intertwined with the University of Illinois, created in the early years following the formal incorporation.

Champaign's downtown originally developed to concentrate most part of the city's economic activity and social functions: banks, shops, entertainment, public buildings, services, among others. Department stores attracted people from the neighboring cities, forming crowds that made secondary businesses viable. On top of that public transportation benefited the area, connecting it to Urbana and other parts of the Champaign<sup>11</sup>.

However, like many other cities across the United States downtown faced significant economic decline in the post-war. The construction of Interstate highways and suburban regional shopping centers had brought an extremely attractive location for retail. The first mall in Champaign – Country Fair Suburban Mall – opened in 1959 at the intersection of Mattis and Springfield Avenues. But an even bigger project – Market Place Mall – opened in 1975 just north of I-74 and Neil St., attracting big traditional retailers, such as the department stores JC Penny's and Sears.

In the struggle to survive, the businesses that stayed tried renovating their spaces, installing fixtures like sheet metal façades which seemed modern but devaluated the historical aspect. On a more radical approach, other stakeholders pressured for the demolition of buildings for the creation of new parking spaces (McCollum, 2010). This was the case of the 1901 historical flat-iron building, which located alongside Neil and Hickory Streets. The flatiron had a unique triangular shape<sup>12</sup>, as a result of its site unique dimensions, located precisely on meeting of two grid patterns – the railroad-parallel historical network and the

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<sup>10</sup> Source: U.S. Census Bureau, 2005-2015 American Community Survey.

<sup>11</sup> See appendix A for a brief overview of Champaign's early history.

<sup>12</sup> For images and other references go to: Blakeman, T. J. (n.d.). Champaign History: A parcel by parcel collection of historical photos documenting the built environment of Champaign, Illinois [blog]. Retrieved March 5, 2017, from <http://champaignhistory.blogspot.com/2012/12/1-east-main-street.html>

traditional north-south-east-west scheme – breaking the dull pattern of box shaped structures. Champaign citizens naturally recognized it as a landmark, still, this was not enough to avoid its tear down in the mid-70s (Blakeman, n.d.; City of Champaign, 2006).

### 3.1 FIRST REDEVELOPMENT EFFORT

Public authorities started working early to prevent downtown’s economic. On the first policy wave, the city concentrated efforts around a vision for an “all-weather” pedestrian mall. The project symbolized a planning strategy focused on copying the uprising suburban patterns, as depicted in in a 1969 Design Concept Study. The planning worked around a few core objectives: 1) retention of big retail stores, 2) prime accessibility for automobiles, 3) a generous amount of parking spaces, 4) closing of a small segment on Neil Street for exclusive pedestrian use, and 5) the construction of a pedestrian rotunda to create a focus point, at the intersection of Neil and Taylor streets (Williams, 1969).

Planners wanted to make downtown more walkable, but clearly adopted a suburban retail center ideal, that demanded radical changes in the landscape (City of Champaign, 2006). Surprisingly or not, the same “solution” appeared in the other urban twin. In 1964 the City of Urbana built a full enclosure shopping center for itself – the Lincoln Square Mall. The city conceived the development as a way to anchor retail, in the scenario of a booming auto traffic that crossed Urbana through expressways such as Cunningham Avenue and University Avenue. The mall achieved initial success, drawing customers from a 50-mile radius (City of Urbana, 2012)<sup>13</sup>.

However, for Champaign the downtown mall did not work, and the planners’ fear of economic decline confirmed. Downtown lots many businesses and became an exclusive 9 to 5 workplace.

### 3.2 NEW REDEVELOPMENT STRATEGY

As the direct competition with the suburban pattern did not produce results, the city started reviewing its ideas. The next comprehensive document, the 1980 Land use element of the Champaign comprehensive plan starts talking about containing growth in the city and

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<sup>13</sup> Despite the good start, the competition from Market Place mall set the decline for Lincoln Square Mall, which ended losing its anchor tenant in 2002.

stimulating the filling of gaps. And the 1992 Downtown Area Comprehensive plan demonstrates the change towards a redevelopment vision focused on historical and cultural assets, that discarded suburban competition. The 1992 plan explicitly mentions investments on historical façades and the challenge to overcome high vacancy rates for office and retail spaces. These reached 20% – the highest in for Champaign-Urbana areas at that time. Further, the plan made progress with ideas such as the attraction of a hotel, beautification on downtown entrances, and retrofitting buildings for residential uses (City of Champaign, 1992). Many of these ideas continued to appear in the most recent documents such as the 2006 Downtown Comprehensive Plan.

Planners affirm that the 2000s were a flipping point for the comeback, often mentioning specific winner strategies such as: 1) the 1981 Downtown Tax Increment Financing District 2) the new liquor license policy, more flexible to bars and restaurants doing renovations, 3) the redevelopment incentive programs and 4) streetscape investments. Crossing to the 21<sup>st</sup> century, the opening of One East Main in 2004 – a five story retail/office building – and M2 in 2009 – a nine story retail/office/residential building – symbolized the return of investment and market interest. New restaurants, bars and retail businesses have been opening since, with developers studying the feasibility for new projects involving commercial and residential uses.

### 3.3 CURRENT PLANNING FRAMEWORK

As for present day, two planning pieces present the community's current perception of downtown and their ambitions for its future. They are the 2011 Champaign Tomorrow Comprehensive Plan and the 2006 Downtown Plan.

Champaign Tomorrow works primarily with the city identity, highlighting Champaign as a micro-urban community with regional attraction. The plan recognizes strengths in commerce, employment, higher education, research, healthcare and entertainment. In a qualitative assessment, the plan celebrates Champaign's historical achievements such as a set of well-established neighborhoods and the urban-style city center. As for the future scenario, the projections maintain the historical trends, with the planners not expecting a game-changing event on the horizon.

Regarding more specific dispositions for downtown, the comprehensive plan acknowledges it as the economic and cultural heart of the community, a piece of Champaign's "Center City" alongside midtown and campustown. It also establishes streetscape design



expectations around the pedestrian use and the complete streets idea. And last but not least, it works a “growing city” vision for downtown, attaching a set of success measures that include goals for number of new infill developments and fall of building vacancy rates (City of Champaign, 2011).

Older but more detailed, 2006 Downton Plan makes a balance of past downtown planning efforts and reinforces the successful vision that has brought vitality back. It presents three sections: Design; Transportation and Market Demand & Land Use. For the design, the plan recommends the maintenance of historical patterns and distinct urban features, as opposed to suburban. Regarding transportation, it sets the pedestrian mode as the top priority, followed by bike policies. Finally, it recommends for mixed-uses, with significant focus on residential and cultural events. Altogether the 2006 plan works on updating a redevelopment vision and laying the fundamentals for its achievement (City of Champaign, 2006).

## CHAPTER 4: The TIF experience in Downtown Champaign

State of Illinois approved its TIF enabling act in 1977, in a moment where cities faced a serious economic decline. Illinois legislation followed the traditional TIF redevelopment framework, establishing the “but-for”<sup>14</sup> and the blighted area requirements in the core of the policy. The 1977 act also opened the possibility for TIFs on “conservation areas” – not blighted yet, but with structures older than 35 years and factors detrimental to public safety, health, morals or welfare. In 1994, the Industrial Jobs Recovery Law made another extension, allowing TIFs on areas of high unemployment or vacant industrial buildings, regardless of the previously listed factors (Illinois Department of Commerce and Community Affairs, 1998). Illinois also restricts TIF implementation to municipalities<sup>15</sup>.

### 4.1 THE DOWNTOWN CORE TIF

In 1981 the City of Champaign approved its Downtown Core Area TIF Redevelopment Plan. The piece aligned with the narrative downtown Champaign, which thrived 25 years in the past (around 1955), currently struggled with economic decline and the lack of a competitive retail mix. Its eligibility analysis fits Champaign Downtown Core under the “conservation area” category, which “could soon become blighted if its decline is not checked”. The plan lists the TIF as a policy within overall redevelopment strategy, alongside public infrastructure improvements and redevelopment subsidies. The plan established the objectives to fight against the “conservation area” factors, enhance the tax base, and to attract private investments (Urban Programming Corporation of America & City of Champaign, 1981).

The 1981 TIF district covered 20 blocks and 138 buildings. Figure 4 on the next page shows a map of downtown core area, with legend that highlights the observed “conservation area” factors. The most commons were deterioration, obsolescence and depreciation of maintenance.

Planners originally estimated that the district could take its total \$ 7.5M in Equalized Assessed Value to almost \$ 12M over its 23-year term, generating approximately \$ 6M in tax

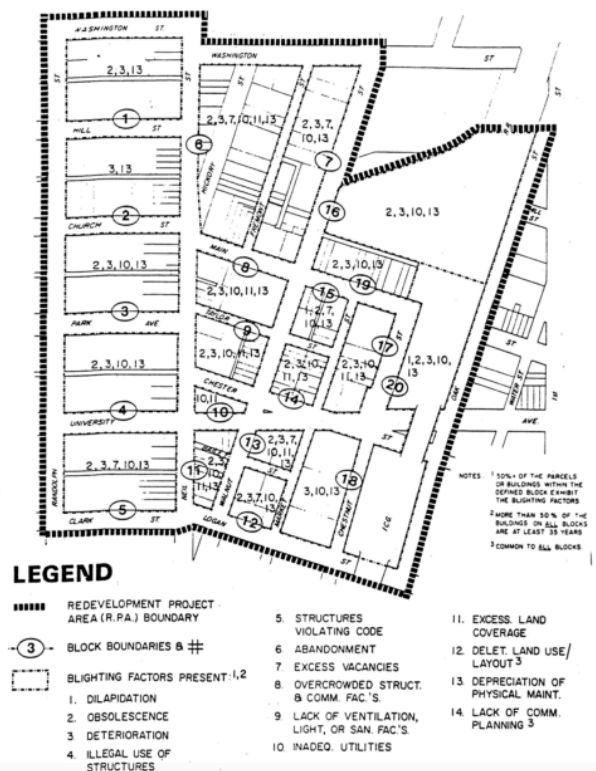
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<sup>14</sup> Some states don’t demand the “but-for”, such as Arizona, Michigan and Colorado.

<sup>15</sup> Other states allow counties to implement TIF, such as Indiana and Maryland; and specific redevelopment authorities, such as New York. For a detailed comparison see Johnson & Kriz (2001).

increment revenues<sup>16</sup>. The money would fund the debt service related to property assembly costs, a building rehabilitation loan program and public improvements<sup>17</sup>. Over the years the City of Champaign grouped TIF related expenses into its current Redevelopment Incentive Programs, which fund 5%-20% of buildings permanent improvements, up to \$100,000 and according to criteria that assess the generated public value (infill development, exterior improvements and historic preservation are some examples). Other versions of the program provide funding for new construction design cost, and reimbursements for businesses that want to implement storefront improvements.

Figure 4: Downtown Core TIF map



Source: Downtown Core Area Redevelopment Plan

The downtown TIF took time before producing the results we see today. Despite achieving the EAV goal (face value) by 1991, it had in its first 20 years a 3.6% average annual growth in property values. Small results if compared to the TIF remaining years, where growth average jumped to 7.2% up the 2015 assessment. Figure 5 on the next page shows this trend.

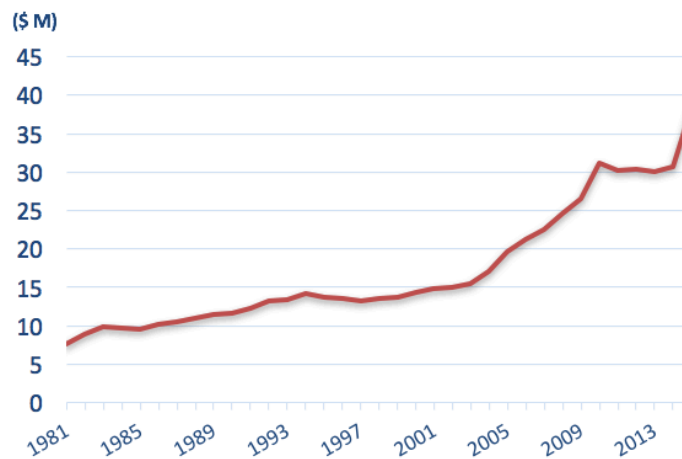
Following its original schedule, the downtown core area TIF would have expired by 2005. The planning department, however, requested the city council an extension for the period allowed in the enabling legislation – 12 years – arguing that the district still needed support to reach a self-supporting economic success. A new \$ 7.5M investment plan followed the proposal, including streetscape improvements, a new parking deck and the continuation of redevelopment incentives. To alleviate the tax burden on overlapping districts, the planning

<sup>16</sup> In present day dollar value, that means taking a \$20 M assessed value to \$ 32M, collecting \$ 16M in tax revenues.

<sup>17</sup> All the information regarding the 1981 TIF comes from the document “Downtown Core Area: Tax Increment Redevelopment Plan & Projects”, prepared by the Urban Programming Corporation of America, from St. Louis, Missouri.

department conceded on releasing 30% of the new incremental tax revenues; with that

**Figure 5: Historical EAVs for Downtown Core TIF**



Source: City of Champaign Planning Department

percentage raising to 50% in 2007, 70% in 2008 and 100% in 2009 until 2017. On October 2015, the city council approved and ordinance amending the TIF plan, which added 12 more years to its term (Champaign City Council, 2005; Monson, 2005).

#### 4.2 EXPANSION INTO THE FRINGE

With the downtown core TIF coming to the obligatory end by December 2017, the planning department had the opportunity to implement an idea that had matured over the years – expand downtown’s comeback beyond its core area through the creation of a Downtown Fringe TIF. A feasibility study<sup>18</sup> developed in partnership with local economic development consultants found out that surrounding blocks also fit under the “conservation area” category, presenting structures older than 35 years old in “danger of declining toward a blighted condition”.

This analysis underscored that these would greatly benefit from all the forms of infill, including redevelopment of existing buildings, preparation of vacant sites for new constructions, and the promotion of mixed uses that complement downtown’s mix (City of Champaign & Kane McKenna and Associates Inc., 2016b). The site where once stood Mervis’ steel recycling facility, at the corner of Marshall and Chestnut streets, provides one example.

<sup>18</sup> *City of Champaign Proposed Downtown Fringe TIF District Eligibility Report.*

The original street grid design served only the industrial activity, not having sidewalk infrastructure neither providing connections with its surroundings. A development on that side would also have to deal with environmental remediation, as a result of the former scrapyard. All these conditions call both for a new public infrastructure and redevelopment incentives (Blakeman, 2015).

The planning department took the necessary steps and moved the idea forward. Among other procedures, it established a Joint Review Board made up of representatives from overlapping taxing districts<sup>19</sup> to analyze and deliberate about the proposal. The board met in October 2016 reviewed the study documents, had its questions answered by the planning department, and ended up recommending the new TIF approval. On January 2017 the city council followed suit and authorized its creation, with a 23 year term (Champaign City Council, 2017; David, 2016).

Directly abutting the downtown area, the fringe district covers 340 parcels over an approximate 35 block area (see map in appendix B). It received a \$23M property value assessment for its base fiscal year. Talking with developers and using their own real estate experience, the planning department projected a \$ 27M increment over 23 years, taking the final assessed value to \$ 40M. Most of this growth would come exactly from the infill projects – different from the core area which relied more on renovations. Initial projections gave the TIF a \$40M budget, with expenses divided between the regular redevelopment incentives and public infrastructure improvement. The city does not plan to issue bonds, and expects to fund the TIF using the “pay-as-you-go” method.

The Fringe TIF redevelopment planning document<sup>20</sup> lays down the policy’s connections with the major Downtown Redevelopment strategy. The Fringe would have potential in providing a variety of residential options and new commercial activities for downtown’s mixed-use profile. These would ultimately contribute for the “Center City” vision, as mentioned in the 2011 Champaign Tomorrow comprehensive plan, strengthening downtown as a social and economic center of the community. Downtown would combine the “best of the old and the new”, taking advantage of new businesses to highlight the historical charm. Gateways, multi-modal connections and clear signals would enhance the area’s identity while

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<sup>19</sup> Champaign Unit 4 Schools, Champaign County, Champaign Park District, City of Champaign, City of Champaign Township, and the CUMTD.

<sup>20</sup> *City of Champaign Redevelopment Plan and Project - Downtown Fringe TIF District.*

providing easy accessibility for residents and visitors (City of Champaign & Kane McKenna and Associates Inc., 2016a).

Aware of this major framework we can move on and highlight each one of the planning pool components in the Fringe TIF, following the categories established previously. Champaign's Fringe TIF provides a good opportunity for this exercise, considering its clear limits, straightforward objectives and status as the sequence to a consolidated local economic development policy. We should remember, nonetheless, that not all components need full exploration, as different settings have different analysis demands.

Beginning with the **Eligibility**, the Fringe TIF feasibility study goes over all legislation requirements. It describes each one of the 6 "conservation area" factors – deleterious layout, obsolescence, deterioration, lagging EAV, inadequate utilities, excessive vacancies – and point out that they appear reasonably distributed through the district. The report also builds up its narrative to affirm that the area would not receive developments if not for the public funds allocation.

The redevelopment plan works the **Financial Engine** component, providing estimates for revenues and expenditures, as already mentioned in this chapters Considering that city of Champaign does not plan to issue bonds for raising money, the need for precise calculations on the financials falls short. Moreover, if the TIF does not get the expected revenue, authorities can delay or downsize the related expenses.

Regarding the **Fiscal** component, the planning department works around the basic information, defining the expected change on the City of Champaign financials, and assuring a minimum impact to overlapping taxing districts. On that issue, the redevelopment plan adds a \$ 1M to its budget for reimbursements to the local school district – Illinois legislation demands that if public subsidized housing projects inflate the demand for public education services on a specific area, then the city should provide funding for those extra costs.

Regarding the **Economic** component, the redevelopment does not bring detailed information about number of jobs, additional income or total economic outcome expected, most likely due to the inexistence of any confirmed projects. The stakeholders did not seem to require these type of argument as well, as apparently the current arguments already achieved the buy-in. The **Housing** component also did not receive de full exploration. On this matter the redevelopment plan mentions Illinois' TIF enabling legislation, that dismisses a housing impact study if there is not displacement from 10 or more inhabited residential units.

The last component, the **Walkability** also did not receive further development. However, taking the lead from chapter 2, walkability has many benefits, and can indeed be treated as an objective, sharing some space with the Fringe TIF goals of promoting infill and stimulating economic development. The following chapter will explore more on the walkability component, while developing a fit for it from a financial perspective.

## **CHAPTER 5: The Walkability Component for Champaign Downtown Fringe TIF**

The first step in addressing the walkability of the Fringe District regards the assessment of the current situation. Planners basically have two choices for this: either develop an assessment by themselves or call for external support and resort to methodologies created by the private sector.

Champaign Planning Department already conducted a citywide walkability study in 2013 – the Walk Champaign Pedestrian Plan – which focused on the vision of a “complete, safe, and accessible pedestrian network”. The plan proposes itself as an investment reference for the Champaign Public Works Department. It offers a report on existing conditions and provides three priority tiers for interventions. It goes down a significant level of detail, and map all of the issues regarding sidewalk gaps, crossings, intersections, streetscapes, overpasses and underpasses. In an overall conclusion, Walk Champaign recognizes the existence of major challenges in Champaign walking environment (City of Champaign, 2013).

The “Existing Conditions” section of the Champaign Pedestrian plan offers brings a neighborhood profile for the South Downtown area, which overlaps to some degree with the Fringe District. It provides a detailed balance of a 15-block area regarding pedestrian facilities (sidewalks), crossings, connectivity and overall livability. The document highlights the area’s residential and commercial areas and identifies the existence of a good overall connectivity, regardless of the lack of walking comfort in some spots (City of Champaign, 2013). The plan, however, does not deliver sufficient information for a focused study on the Fringe district.

Looking for alternatives we found that a number of researchers, think tanks and private companies have worked on walkability measurement tools, either for a specific urban context or for cities in general. Among other features, they vary in terms of the data collection procedures, the areas covered, the degree of involvement with the community, and the use of technological resources.

Walk Score appeared in 2007, and became the most popular walkability tool. It uses GIS to calculate the distance of specific locations to urban amenities such as shops, parks, and services in order to assign a final walkability score. It also considers population density and road metrics in its calculations (Duncan, Aldstadt, Whalen, Melly, & Gortmaker, 2011; Herst, 2014). Other methods recur on on-site surveys, such as the AARP Livability Index (AARP Public Policy Institute, n.d.). Some are featured for enabling communities to collect data on



their own initiative, such as the WALC’s Institute walkability survey tool (Walkable and Livable Communities Institute, U.S. EPA Office of Sustainable Communities, Project for Public Spaces, & AECOM, 2012). Walkonomics went in another direction, and designed a resource that draws information from public datasets in order to calculate scores (Walkonomics: Find a Walkable Route, n.d.). Each of these methods has strong points and limitations, while delivering best results under different analysis goals<sup>21</sup>.

In order to assess the walkability of the Fringe TIF district and its benefits, this thesis uses a methodology provided by the startup State of Place, combines some of the techniques mentioned above while covering customized areas such as TIF districts.

## 5.1 STATE OF PLACE METHODOLOGY

State of Place’s walkability assessment is directly derived from Irvine-Minnesota inventory, design to measure a large and diverse group of built environment features that potentially influence people for active transportation (K Day, Boarnet, Alfonzo, & Forsyth, 2006).

### 5.1.1 Data collection

The analysis starts with street-level data collection involving the use of a smart phone app. Surveyors input answers to questions regarding 290 urban environment features that have a fit somewhere in the hierarchy of walking needs (feasibility, accessibility, safety, comfort and pleurability). The observations focus on block faces, which are labelled “segments” and most part of the time begin and end at streets intersections. The data for each segment provides inputs for a proprietary algorithm, which runs calculations and returns an index that ranges from 0 to 100. Lower numbers represent less walkable places. The algorithm also compiles the results for the neighborhood as a whole (State of Place, n.d.).

The methodology presents the results for the collected data divided along 10 different urban walkability design dimensions – density, aesthetics, traffic, safety, connectivity, parks & public spaces, personal safety, form, recreational facilities, pedestrian & bike amenities, and proximity – which represent groups of factor that influence walkability (Saelens & Handy,

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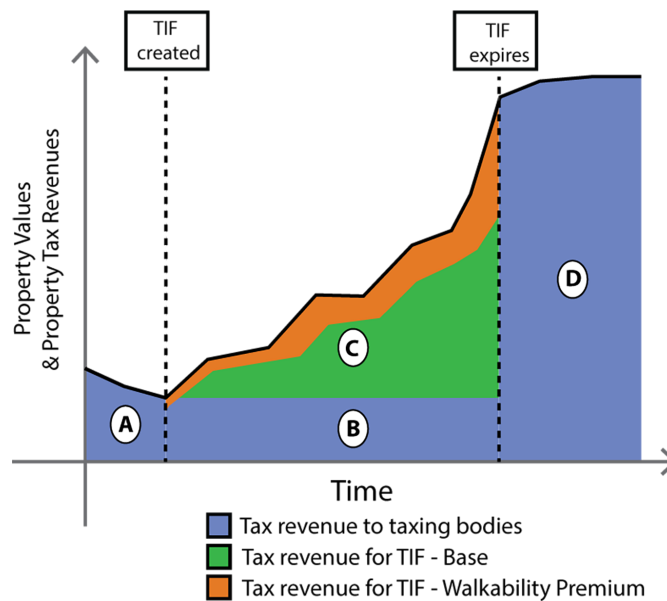
<sup>21</sup> The “Ultimate Guide to Walkability Assessment Tools” (2017c) from State of Place provides more detailed information about 7 walkability assessment tools.

2008). In addition, the software manages and compares the walkability impacts of different projects, which allows for scenario development. This provides a basis for prioritizing streetscape interventions, considering pre-established objectives such as increasing the overall State of Place index or just a specific walkability dimensions (State of Place, 2017b)

Still, a most interesting resource comes from the fact that the State of Place algorithm incorporates real estate variables. The formula assimilated results from a study over diverse neighborhoods in Washington D.C. metro area, which investigated the correlation between walkability and wide set of economic information (Leinberger & Alfonzo, 2012). As a result, the algorithm can reproduce the discovered relations to forecast walkability premiums associated with improvements in the built environment, estimating how many extra dollars landlords might charge for retail, office and residential rents. Walk Score presents a similar analysis but it covers wide areas through bird's eye view, while State Place gets down to each specific block face. We should remember that regression formulas simply represent a tendency, assuming that a set of observed situations will continue in the future. Despite that, they can still help planning by adjusting the expectations.

Here lies the possibility for the critic connection between walkability and TIFs. The information on future revenue streams can lead to projections on future assessed values, and, consequently, on projections of future property tax revenues. Planners can use these estimations to better design the TIF financial engine, connecting walkability related revenues and walkability related expenditures. This becomes possible as more precise walkability measurement methodologies appear, allowing planners to bring walkability into their calculations and local development strategies. Figure 6 on the next page brings the same classic TIF graphic representation shown in chapter 1, but this time depicting the “slice” of the property tax revenues coming directly from the walkability premiums. Given this framework, we can move on and address the results for Champaign Downtown Fringe TIF

**Figure 6:** TIF classic representation with walkability revenue



## 5.2 WALKABILITY ANALYSIS AND RESULTS HEREE

### 5.2.1 Walkability profile

I applied the State of Place methodology to make a walkability assessment exclusively on the area covered by Champaign Downtown Fringe District. The area has a total of 80 segments, from which 25 segments (about 30%) were selected by random sampling for data collection. I used Google Street View to virtually visit them and answer the questions regarding the design features. On the sequence the State of Place staff ran the algorithm and produced indexes for each one of the segments, which ended up ranging from 16.9 to 53.2. Appendix C contains a map of the Fringe district with all the identified segments.

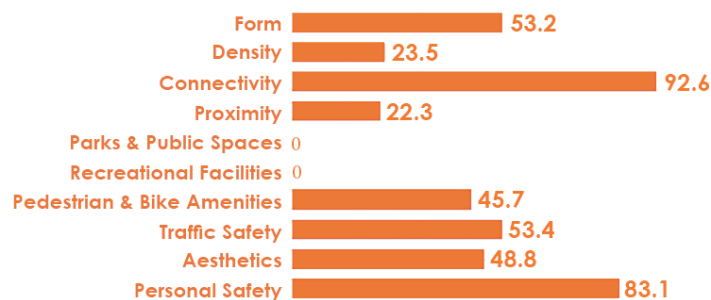
After compiling the individual results, the algorithm assigned the whole TIF district a 45.5 index out of 100, putting it into the 3<sup>rd</sup> out of 5 walkability tiers in the United States. Only 5% of the neighborhoods currently in State of Place database make it into the first tier, with indexes between 80 and 100. These places represent the achievable walkability ideal, with many pedestrian amenities, a balanced mix of uses, an efficient urban form, and all that on top of aesthetically pleasing features (State of Place, 2017a).

Figure 7 shows the 45.5 index broken down into the State of Place profile, with its 10 different walkability dimensions. Figure 8, extracted from a study where State of Place

analyzes the walkability influence of tall buildings (Kristen Day, Alfonzo, Guo, & Lin, 2013), comes in the sequence clarifying which types of questions relate to each dimension. This work will not provide a full description on the State of Place methodology as its operational details constitute proprietary information.

The profile reveals a good connectivity, reflecting that most segments in the district have complete sidewalks on both sides, and its streets are not wide to a point of representing barriers. The personal safety also showed a good score, reflecting a relatively peaceful environment. On the low end, the proximity and density lagged behind, showing an overall low density inside the TIF that does not provide a significant number of pedestrian destinations (retail, bars, convenience stores...). The overall depiction of the fringe area conveys the existence of an area with some public infrastructure but still not sharing the economic activity of core downtown.

**Figure 7: State of Place profile for Fringe TIF**



**Figure 8: State of Place dimensions and how they were measured**

State of Place Index dimensions	Description/Example items
Density/building height	Measure of density based on building concentration and heights
Proximity/land-use mix	Presence of non-residential land uses
Connectivity	Measure of disconnectivity, potential barriers (e.g., six lane roads)
Form	Measure of streetscape discontinuity (e.g., driveways, podium buildings)
Parks and public space	Presence, quality of parks, playgrounds, plazas, etc.
Pedestrian infrastructure/amenities	Features that provide pedestrian comfort (e.g., sidewalk widths, street furniture)
Bike infrastructure/amenities	Features that provide bicyclist comfort (e.g., bike lanes, bike racks, bike parking)
Personal safety	Features related to perceived safety (e.g., graffiti, litter, bars on windows)
Traffic safety	Features intended to increase traffic safety (e.g., traffic signals, traffic calming measures)
Aesthetics (pleasurability and maintenance)	Measures of pleasurability and maintenance (e.g., outdoor dining, building transparency)
Recreational facilities	Presence of gyms and fitness facilities and other recreational uses

Source: Day, K., Alfonzo, M., Guo, Z., & Lin, L. (2013). Designing tall buildings to promote physical activity in China. *CTBUH Journal*, (4).

## 5.2.2 Potential coding weaknesses

While using Google Street View I was careful to analyze the most recent photos possible and within the shortest time period. Table 1 below shows the selected segments for data collection and the date regarding their street view photos. All the street view photos show the landscape in 2015 September or October, in a specific seasonal weather, and at daytime in an apparent normal weekday. This sets the frame for all walkability information. Additionally, we can consider Champaign as relatively calm place, where constructions are not booming, so we can consider photos from 2 years ago as relatively faithful to present reality.

As for the State of Place methodology questions, most are relatively objective and require yes/no answers for the observation of streetscape features, like signalized crossings and street furniture. Only a few require subjective appreciation such as the questions related to the safety. In this particular point I recognize that my answers might overestimate the index, as I believe someone else's answer could probably point to higher levels of threat. Some questions also could not be answered by Google Street View, like the olfactory character of the segment (if there are bad smells). In this case I made assumptions based on my generic experience in Downtown Champaign.

**Table 1:** Selected Fringe TIF segments and their State of Place Index

Segment Number	intersection 1	intersection 2	G Street View photo date	State of Place Index
4	E Eureka St/N Neil St	E Eureka St/Hickory St	Sept 2015	16.9
8	Maple St/N Randolph St	Maple St/N Neil St	Sept 2015	27.4
9	N Randolph St/W Vine St	N Neil St./W Vine St	Sept 2015	37.3
12	N Neil St./W Vine St	E Columbia Ave/N Neil St	Sept 2016	26.0
13	E Vine St/Hickory St	E Columbia Ave/Hickory St	Sept 2015	32.3
14	E Columbia Ave/N Neil St	E Columbia Ave/N Randolph St	Sept 2015	39.4
15	E Columbia Ave/N Neil St	E Columbia Ave/Hickory St	Sept 2015	28.5
16	E Columbia Ave/Hickory St	E Columbia Ave/N Walnut St	Sept 2015	24.9
23	E Columbia Ave/N Market St	E Washington St/N Market St	Sept 2015	37.1
24	N Randolph St/W Washington St	N Randolph St/W Hill St	Sept 2015	33.6
26	E Washington St/N Neil St	E Washington St/Hickory St	Sept 2016	34.2
28	E Washington St/N Walnut St	E Washington St/N Market St	Oct 2015	33.8
30	E Washington St/N Neil St	N Neil St/W Hill St	Sept 2016	38.1
36	E Washington St/Freemont St	Freemont St/Main St	Sept 2015	38.4
44	N Randolph St/W Park Av	N Neil St/W Park Av	Sept 2016	33.1
45	Taylor St/N Walnut	Taylor St/N Market St	Sept 2015	38.2
53	S Randolph St/W University Ave	S Randolph St/W Clark St	Sept 2016	53.2
55	Bailey St/S Walnut St	E University Av/S Walnut St	Sept 2016	22.6
59	Bailey St/S Market St	S Market St/Logan St	Sept 2015	30.8
64	S State St/W Clark St	S State St/W White St	Sept 2015	33.4
67	Logan St/ S Walnut St	S Walnut St/Willow St	Sept 2016	27.6
72	S Market/Willow St	Marshall St/S Market St	Sept 2015	25.0
74	Marshall St/S Market St	Marshall St/S Neil St	Sept 2015	35.0
77	W White St/S Neil St	S Neil St/W Springfield Av	Sept 2016	31.4
37	N Walnut St/E Washington St	Main St/N Walnut St	Oct 2015	31.4

As the Fringe TIF does not incorporate walkability explicitly in its planning or in its objectives, the assessment developed above does not aggregate much value, at least not directly. But, planners can still use the information to improve planning pieces that overlap with downtown redevelopment policy, such as the 2006 Downtown Plan and the Walk Champaign Pedestrian Plan itself.

### 5.2.3 Economic forecasts

The State of Place algorithm calculates the walkability premiums for a given real estate development project. Considering the need for a starting point, I picked a large mixed-use project announced for the southwest corner of the intersection between Washington St. and Walnut St, by Hans Grotelueschen (Hettinger, 2015). The Development would happen inside the Fringe TIF, probably giving it a significant income stream. The developers announced plans to build a hotel, new office and retail spaces, condos and a new venue for Champaign’s Orpheum children’s museum, accounting for a total in \$95M in construction costs (David, 2015). To simplify this exercise, I considered that the development would only create office, retail and residential spaces. Table 2 below shows the economic baseline for the rents associated with these uses in Champaign, which I roughly estimated by talking to the planning department staff and with real estate agents.

**Table 2: Economic baseline values for Washington and Walnut development (rough estimates)**

Office Rents (per sq. foot)	Retail Rents (per sq. foot)	Residential Rents (2 bedroom unit)
\$10.00	\$15.00	\$900.00

The project would build on a site where today sits a large public surface parking lot, specifically the segment number 37, which received a 31.4 State of Place index. Using the conceptual drawings, I took assumptions on how the street would look like and re applied data collection procedure at segment 37 (following Stat of Place methodology), which produced a new State Place index of 39.7. Figures 9 and 10 on the next page show the before/after visuals, giving clues about the interventions in the streetscape: increased density, diversity of uses, new gathering spaces, more street trees among other features.

**Figure 9:** Current site conditions – Washington and Walnut development



Source: City of Champaign

**Figure 10:** Conceptual drawing – Washington and Walnut development



Source: City of Champaign

I inputted the projected change in the State of Place index into the software, alongside the economic baseline values, obtaining the results on table 3. Interesting to notice how the algorithm gives a higher percentage premium for retail and office, confirming a higher dependency of these uses on pedestrian traffic.



**Table 3: Walkability Premiums for Washington and Walnut development (rough estimates)**

	Office Rents (per sq. foot)	Retail Rents (per sq. foot)	Residential Rents (2 bedroom unit)
Economic Baseline	\$10.00	\$15.00	\$900.00
SoP Premium	\$1.13	\$1.30	\$72.64
Additional Transit Premium	\$0.25	\$1.08	\$1.79
Final Price	\$11.38	\$17.37	\$974.43
Premium Percentage	12%	14%	8%

The next step in the analysis regards arriving at the final property values for the Washington and Walnut development. Once we get there, I propose using the income approach property valuation, which establishes that the property value is a function of the income it is expected to produce (Lusht, 2012), to estimate how much of the development’s value comes from the walkability premium. Ultimately, this leads to the development’s property taxes that come from the same premium. But we still need a total property value to move on with this exercise

I spoke to the City of Champaign Township Assessor, Brian P. Christie, and asked him how he would assess a property like the Washington and Walnut development. He answered me that the local practice for complex properties would rely on the cost approach, which operates based on the assumption that the market value of a property equals to the cost to reproduce it (build it from scratch), subtracting the applicable depreciation and adding the land value (Lusht, 2012). Moving on this path we can use construction costs announced by the developer – \$ 95M. However, following lessons from the Assessor’s experience, we can presume that the developers inflated their numbers to call attention from the media and impress the city of Champaign, and downsize the number by half. At the end of the day we can work with an expected \$ 47.5M in construction costs on top of which we can add an estimation for a 15% developer premium<sup>22</sup>, reaching a final market at an approximate \$ 55 M.

Going back to the income approach we have to recur to new assumptions that establish the percentage between uses. Hence, I split Washington and Walnut into 25% office, 25% retail and 50% residential. Table 4 below shows the applicable calculations.

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<sup>22</sup> Developer premium assumption.



**Table 4: Walkability Property Value for Washington and Walnut development (rough estimates)**

	Office	Retail	Residential
Final Market Value		\$55,000,000	
Relative uses (assumption)	25%	25%	50%
Final Market Value per use	\$13,750,000	\$13,750,000.00	\$27,500,000
Premium Percentage	12%	14%	8%
Final Walkability value per use	\$1,670,485	\$1,879,250	\$2,100,528
Final Walkability Market Value		\$5,650,263	

Now with final walkability property value, we can arrive at the walkability property tax revenue. We need first to convert the market value into the assessed value, by just multiplying the former by 1/3. And finally apply the property tax rate, which in the City of Champaign situates been around 8%. Crunching the numbers, we have about **\$ 150,000** in yearly tax revenues coming from the Washington and Walnut development only because of the new walkability features.

Again, information like this can help TIF planning by improving the quality of forecasts concerning the financial engine. Planners can stay aware about the factors that will bring revenue for the TIF and tailor the exiting incentives to contemplate those. Moreover, having the knowledge about what generates value and delivers urban design that they value can greatly enhance local economic development policies.

### 5.3 LIMITS, NEXT STEPS AND PRACTICAL LESSONS

Despite the construction of an argument that points for an interesting walkability application in TIFs, municipalities should be aware of some methodological caveats.

The first one concerns State of Place analysis. When it uses more than 200 urban design features to create an index and then predict real estate variables, there is a chance it will include variables that already predict the market by themselves. A park, for example, increases the nearby properties just by being a park, and the incentive it provides for walking might be only accessory to the real estate premium. This does not affect the model's predictive power, but brings doubts about walkability's real value. One argument that would diminish this issue's relevance would be to consider walkability as a complex arrangement between many components, which fit together in a unique way that incentive people to go out and enjoy life

in the public realm. State of Place comprehensive view would support that approach, as its algorithm incorporates a large set of features. Whatever the best interpretation, some clarification could be object of specialized research.

The detailed information provided by State of Place also makes sense only considering specific local planning needs. If a municipality seeks a simple walkability overview of a large area, then the Walk Score seems to be a better resource, providing straightforward information and not demanding data collection efforts. Appendix D shows a comparison between both methodologies.

Regarding the economic forecast, the exploration of a “walkability” property tax revenue also grows on top of a delicate assumption – that the properties developed inside TIF have clear income streams. If for some reason the revenue information is not available for the local planning department, or even if the development does not have a significant source of income, then it would become difficult to find out the walkability premium and consequently its impact on TIF finances. Nevertheless, if during the development of TIF’s walkability component planners find out that the economic forecast cannot provide trustworthy estimates, the qualitative work can still aggregate value, describing a development’s walkability features.

As a last consideration, municipalities should understand that the walkability premium might take some time to materialize. Some market agents might believe in the premium of walkable places right away, investing their resources to collect the walkability benefits in the future. But others might behave skeptically and wait until a development minimally demonstrates its promises for a quality, unique place. The same happens with ordinary people, the idea of an attractive place takes time to go from mouth to mouth, until the collective unconscious recognizes a market premium for a specific place-product.

## CONCLUSION

This work developed many fronts to define the fitting of a walkability component within Tax Increment Financing. Two places appeared more suitable. First, TIFs can set walkability among their goals, in the same way some local governments have prioritized housing affordability. In this situation TIF's financial engine still needs the work, but not at the maximum pace that puts the expansion of the tax base above everything. Local governments have all the capacity to design cost efficient TIFs that, more than simply working the valuation game, can deliver interesting social results, like walkable, functional and appealing places for all citizens.

The second fit for walkability comes in the form of a support for TIF's economic engine, refining the comprehension on TIF's value capture dynamic. This use elaborates on the idea that walkability expresses public economic value and that TIFs can simultaneously generate and capture it. Nevertheless, to use that approach local governments need resources to measure the walkability directly at the TIF level and to measure its economic effects. In that task State of Place provides a unique solution.

In fact, when it comes to TIFs designed according to the original redevelopment purposes, the use of walkability as a proxy for public value makes even more sense. The quest for bringing back vitality to downtowns consciously or unconsciously ends up exploring strategies to leverage the walkability potential of central areas. The case of Champaign demonstrates some of these with its programs involving streetscape improvements, liquor licenses, and storefront renovations. On top of that, redevelopment programs can provide unique opportunities to address structural issues in the urban fabric, and promote changes to a more pedestrian friendly environment. The City of Boston provided one example for that when it demolished sections of urban highways, replacing the sites with parks and plazas (Semuels, 2015)

Now looking into Champaign's future, its Downtown Fringe TIF seems to have good chances of delivering interesting. The goals to promote infill and expand the economic vibrancy from downtown's core seem reasonable and articulated within a coherent comprehensive planning. The Washington and Walnut development would provide a significant push for the TIF finances, but unfortunately the developer so far has not expressed interest in taking the project forward. Regardless of this potential frustration, other projects will probably come and provide the TIF with a revenue stream for the next 23 years.

If done right local economic development policies like Tax Increment Financing can produce very positive results for communities. The planners behind them have the precious opportunity to work for the best policy designs and they often dedicate a lot of time and effort towards it. In this context, new perspectives, methodologies and technological resources can always come in, providing valuable contributions towards the best urban planning practice.

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## **APPENDIX A: Brief overview of Champaign historic origins**

Champaign received its creation spark in 1854 with construction of an Illinois Central Railroad branch line, which would connect Chicago to the company's main line. Illinois Central originally initially planned its route north to south, slicing Champaign County and intercepting the County seat – the city of Urbana. However, later calculations pointed out that topography and soil conditions would made the route's construction financially unfeasible. Hence, the rail engineers made small but significant changes to the drawings, and ended up laying the tracks two miles farther west of Urbana.

It did not take much time for the immediate vicinity of the so called Urbana Station to attract its own economic activity. The Doane House, a three story wood frame building, symbolized those early days. It served as both railroad station and hotel, becoming the first reference for social gathering in the area that would be known as the City of Champaign. Urban improvements followed citizens' initiatives to organize common life and address public problems such as mud and pests. Wood planks for sidewalks were among the first streetscape fixtures. It did not take many years for the local citizens to organize themselves politically, and in 1857, they informally incorporate the city of town of West Urbana. Few years later, after further economic and institutional development, the town board decided to take a step further and move formal procedures at Springfield for the official incorporation. And so, the City of Champaign was finally born in 1861 (McCollum, 2005).

Champaign initially unfolded as a rural town. The railroad collected agricultural goods from the farms around train stations, and transported them to big urban centers such as the City of Chicago. In the way back it did the reverse exchange, bringing manufactured goods for the small towns along the lines. Given this initial vocation, Champaign would have turned into a much smaller and unnoticed place, possibility compared to what Paxton-IL is today. The game-changing event happened when the State of Illinois incorporated the University of Illinois using the land grants from the 1862 Morrill Act. Other towns across the state had competitive offers to host the university, but Champaign-Urbana had the most skillful lobby and ended up winning the competition (McCollum, 2005). The University did indeed fulfill its promises, and brought a significant influence for Champaign-Urbana economy.

Over the later years of the 19<sup>th</sup> century and into the first decade of the 20<sup>th</sup> Champaign's downtown, which developed around the railroad station, unfolded. New brick and mortar buildings took the sites of old and weak wood frame structures, which occasionally burned

down due to the fragility of their materials. Trolleys and streetcars connected the east and the west, and the streetscape received more improvements. Champaign dwellers progressively installed gas, electricity and running water in their new homes, which also started receiving radio and television broadcasts (Bial, 1993). On the commercial side, department stores expanded, attracting people from many nearby towns and forming crowds rarely seen on present days (Cunningham & Paul, 2010). All these improvements on downtown influenced it to concentrate most part of Champaign's social functions: retail, food markets, banking, offices, government, dining, lodges, religion, among others (City of Champaign, 2006).

These expansion years stalled in some way with the economic constraint of the first world wars, the 1930's great depression and then the second world war. Still, after the hard times were gone, Champaign thrived again, now surfing the wave of the baby-boom and unblocked income. The US Census<sup>23</sup> demonstrate the population expansion, which jumped from around 23,000 in 1940 to almost 40,000 in 1950, in a near 5.5% annual growth. Present times data shows a much smaller measure, with an annual average of around 1.5% between 2000 to 2010 (from 70,000 to 76,000).

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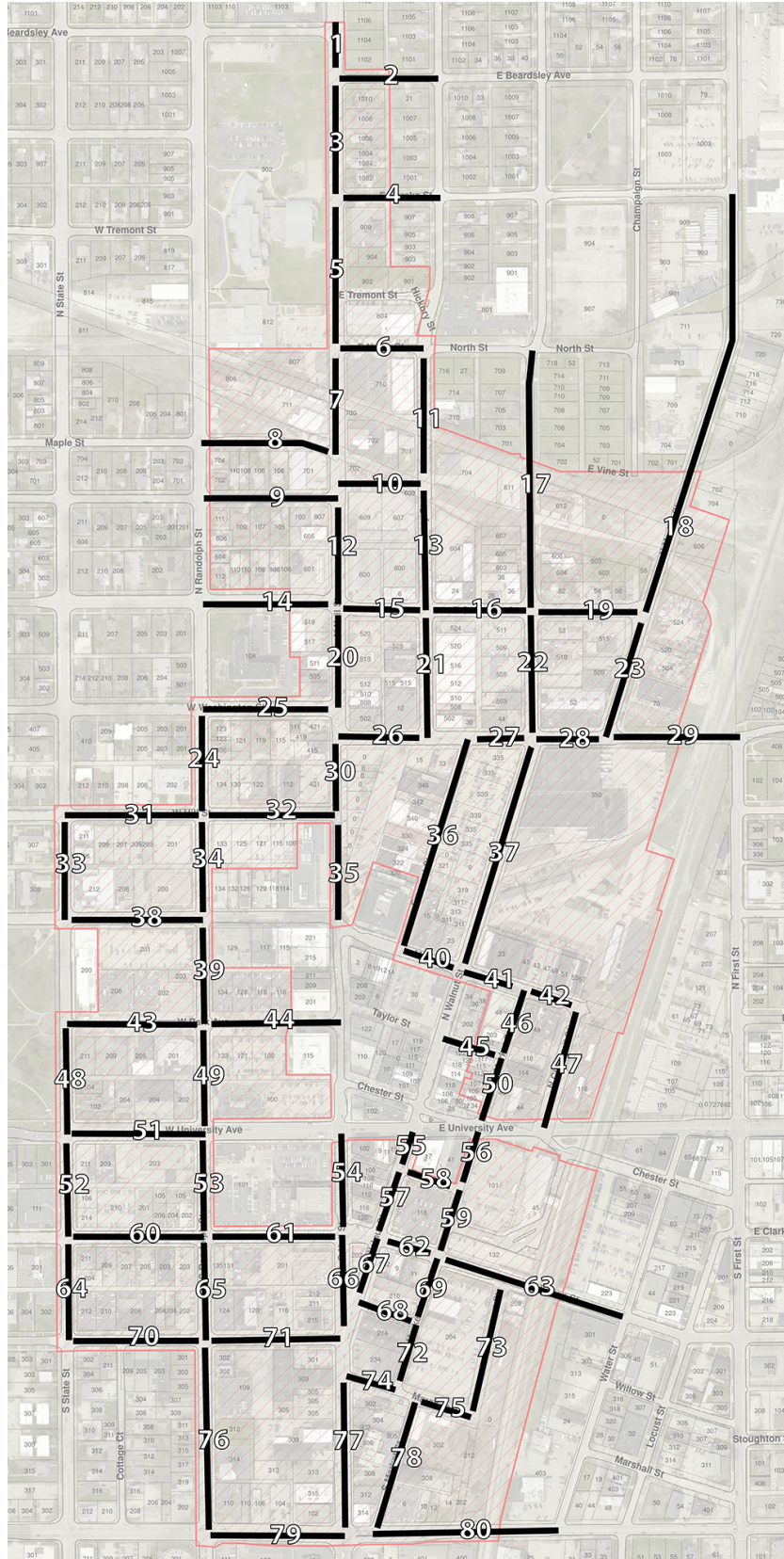
<sup>23</sup> Information retrieved from [www.population.us](http://www.population.us). The website publishes many statistics about current and historical population trends in the US.





# APPENDIX C: Walkability Assessment on the Fringe TIF district

Figure 12: Segments on the Fringe TIF district



## APPENDIX D: Comparison between Walk Score and State of Place

Figure 13: Comparison between Walk Score and State of Place

