A Madison Approach to TIF
Feasibility Analysis

Presentation to the State of Wisconsin Legislative Council
Study Committee on Review of Tax Increment Finance

by

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City of Madison

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City of Madison TIF Credentials

- 40 TIDs created since 1977
- 15 active TIDs
- Average TID lifespan – 12 years
- $117 million of TIF invested in 70 projects
- $1.6 billion of growth in all active TIDs
- 1:17 public/private leverage ratio
Introduction

• TIF is based upon real estate value growth through development.

• Some communities have a knowledge of TIF but ask:
  – Where do development projects come from?
  – What influences a developer’s decision to invest?
  – Why do developer’s request TIF assistance?
  – How do I know if a project needs TIF?

• Promoting understanding of the real estate feasibility analysis can lead to answering these questions and underwriting better TIF deals.

• So…let’s start.
Define the Market

“Don’t buy real estate. Buy a set of assumptions.”
- James Graaskamp, UW-Madison School of Urban Land Economics

Rents
- Higher rents attract more value and investment

Vacancy Rates
- Vacancy demonstrates market demand for a particular real estate product
- Low vacancies drive rents higher, high vacancy drives rents lower

Cost
- Land cost, construction material, labor cost and parking

Capital Markets
- Interest rates, financing costs, returns on riskier investments

Location
- Population centers, amenities, natural resources, education, employment, transportation, income and other demographics, etc.

Sound Planning & Regulation
- Planning and zoning, building code
- Sound planning attracts the quality investment
Attract Equity

Do developers invest their own equity?

- Rarely—that’s not necessarily a bad thing.

- Generally, developers leverage other people’s money as equity in the project.

- The developer demonstrates to investors that the investment is:
  - Relatively secure
  - Competitive with other high-return, higher-risk investments

- A primary tool to attract investors is the cash flow projection
Key Elements of the Cash Flow Projection:

- **Net Operating Income (NOI)**—One of two most important numbers on the cash flow. Used to calculate value and debt attraction.

- **Cash Flow**—The amount of return before income tax that investors are promised over time.

**What does a cash flow projection look like?**
Example of a Cash Flow Projection

<table>
<thead>
<tr>
<th>Cash Flow</th>
<th>Year 1</th>
<th>Year 2</th>
<th>Year 3</th>
<th>Year 4</th>
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<tbody>
<tr>
<td>Gross Rent</td>
<td>$ 1,000,000</td>
<td>$ 1,030,000</td>
<td>$ 1,060,900</td>
<td>$ 1,092,727</td>
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<tr>
<td>Vacancy @ 5%</td>
<td>$ (50,000)</td>
<td>$ (51,500)</td>
<td>$ (53,045)</td>
<td>$ (54,636)</td>
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<tr>
<td>Effective Gross Income (EGI)</td>
<td>$ 950,000</td>
<td>$ 978,500</td>
<td>$ 1,007,855</td>
<td>$ 1,038,091</td>
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<td>Expenses (25% of Gross)</td>
<td>$ (250,000)</td>
<td>$ (257,500)</td>
<td>$ (265,225)</td>
<td>$ (273,182)</td>
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<tr>
<td>Net Operating Income (NOI)</td>
<td>$ 700,000</td>
<td>$ 721,000</td>
<td>$ 742,630</td>
<td>$ 764,909</td>
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<tr>
<td>Debt Service</td>
<td>$ (350,000)</td>
<td>$ (350,000)</td>
<td>$ (350,000)</td>
<td>$ (350,000)</td>
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<tr>
<td>Cash Flow</td>
<td>$ 350,000</td>
<td>$ 371,000</td>
<td>$ 392,630</td>
<td>$ 414,909</td>
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<td>Net Present Value @ 10% ROI</td>
<td>$ 1,203,170</td>
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What is a fair return on equity investment?
Fair Return on Investment

- Madison’s best practice allows developers a return consistent with market expectations for their product.

- Returns vary between the product type—i.e. apartments, condominium, office, industrial land, etc.

- In Madison, current cash-on-cash returns range between 6% and 12% for various types of projects and investors.

- Madison adjusts TIF assistance if the return is out of line with market expectations.

Generally, a fair return on investment:

- Exceeds the cost of financing but is less than a higher-risk investment like stocks or venture capital.

- Is influenced by the type of developer—a long-term portfolio manager vs. a short term, fee-based developer will have different assumptions.

How does the developer estimate investment to get a desired profit?
Methods of Estimating Investment

- **Net Present Value (NPV)**—One method to calculate equity investment is the “net present value,” which is the discounted value of a series of cash flows over time. The method shows how much an investor would risk in today’s dollars for the promise of cash flows over a period of time.

- In our example, an investor seeking a 10% cash-on-cash return over 4 years, could invest about $1.2M of equity in the project based upon the discounted value of these cash flows.

- **Internal Rate of Return (IRR)**—This is a more complex variant of NPV in which the amount invested and discounted value of the cash flows are equal. The “internal rate” is the rate required of each cash flow to achieve an overall desired rate of return. An IRR higher than the cost of capital and the desired rate is generally believed to be a good investment.

- **Leverage**—Lastly, if the project is able to attract a maximum amount of bank investment, called “leverage,” the amount of required equity is reduced and the return will be higher.
Attract Leverage

Bank Underwriting Methods:

- There are two underwriting methods to bank lending: **cash flow** and **liquidation**.

- In the **cash flow** method, banks determine if NOI is sufficient to repay the loan.

- NOI is the **first source** of operating profit before income tax and investors

- The best measure of cash flow method is the “debt coverage ratio” or DCR.

**Debt Coverage Ratio**—These days banks use a “DCR” between 110% and 130% of NOI over debt service.

In our example, $700,000 of NOI divided by a 1.20 coverage ratio equals $583,000 of potential debt service.

Assuming a 30-year mortgage, at 5% interest, this figure would support a mortgage of about **$9,410,000**.
Liquidation Method:

- Banks estimate if the completed project will have sufficient **fair market value**, in the event of foreclosure, i.e. “liquidation,” to recover the bank loan.

- Fair market value is determined by independent appraisal of observed, comparable sales and estimated income value of the project.

- One of the most important factors in estimating fair market value is the capitalization or “cap rate.”

The Cap Rate:

- Represents the **cost of capital** to the project.

- Assumes that an investor will pay for the **NOI generated** by a property, given the cost of capital to purchase it.

- Gauges the quality of a comparable sale—whether a buyer paid too much or too little.

- Estimates the **potential income value**, when comparable sales are unavailable, by dividing an estimated NOI by a cap rate

- Is either “**observed**” through an appraisal of comparable sales or “**derived**” by calculation.
Observed Cap Rate:

Assume that three comparable apartment properties sell in your market. By dividing the sale price of the property by the NOI, we get:

Property A: Price: $5,500,000
NOI: $335,500  Cap Rate = 5,500,000 / 335,500 = 6.1%

Property B: Price: $6,200,000
NOI: $378,200  Cap Rate = 6,200,000 / 378,200 = 6.2%

Property C: Price: $5,100,000
NOI: $300,600  Cap Rate = 5,100,000 / 300,600 = 5.9%
Derived Cap Rate:
Assume that 80% of the financing is a bank loan at 5% interest and 20% of the project is equity expecting a 10% return, then the cap rate is derived as follows:

\[
.80 \times .05 = .040 \\
.20 \times .10 = .020 \\
\]
Cap Rate = .060 or 6%

Income Value Estimate:

\[
\begin{array}{cc}
\text{NOI} & \$700,000 \\
\text{Cap Rate} & .06 \\
\end{array}
\]
= $11,667,000
**Loan to Value Ratio**—As a further hedge against risk, banks discount the estimated value by 20-25%.

In this case, we assume a 20% discount, meaning that the “Loan to Value” ratio or “LTV” is 80%.

Estimated Value @ Cap: $11,667,000  
Discount x LTV @ 80%  
Loan Size $9,334,000

Now the bank knows that their range of risk is between $9.3 and $9.4M.

Let’s assume the bank chooses the lower figure of $9,300,000.
Analyze Cost

Once investment is analyzed, the developer analyzes the cost to develop the project:

- Land: $2,000,000
- Hard Construction: 8,000,000

Soft Cost:
- Construction Interest, Finance: 400,000
- Architect/Engineer: 100,000
- Legal/Accounting: 50,000
- Developer Fee: 250,000
- Contingency: 800,000

Total Soft Cost: 1,600,000

Total Cost: $11,600,000
Determine Feasibility

Sources and Uses of Capital (and Gap):
Comparing both the investment sources and the estimated project cost, i.e. “uses”, the developer believes that there is a financing gap.

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<table>
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<tbody>
<tr>
<td>Bank Loan</td>
<td>$9,300,000</td>
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<tr>
<td>Equity Attracted</td>
<td>$1,200,000</td>
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<tr>
<td>Total Sources of Capital (Sources)</td>
<td>$10,500,000</td>
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<tr>
<td>Less: Cost (Uses)</td>
<td>(11,600,000)</td>
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<tr>
<td>Gap</td>
<td>($1,100,000)</td>
</tr>
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</table>

When there is a gap, the developer often seeks TIF.

How do we know it’s a real gap?
Gap Analysis

Philosophy and Approach:

- Manipulated assumptions create an artificial gap.
- Gap analysis is the best method to prove the “but for” exists.
- Gap analysis is an analytical method to ground-truth the developer’s assumptions.
- Gap analysis focuses on what the project needs—not what the developer wants.

- Common areas of gap analysis:
  - **Value**—Are rents, expenses and the cap rate market?
  - **Cost**—Are costs in line with market? Are there unnecessary costs?
  - **Investment Attraction**—Is the bank loan rate, term, standard? Could leverage be increased? What are the equity return assumptions? Are they market? Is equity investment too low?

- Gap is either proven, adjusted or refuted.

What tools are needed to conduct gap analysis?
Required Gap Analysis Tools:

- **TIF Application (Elements)**

  **Project Detail**
  - Land and building area
  - Number of units, parking stalls
  - Number of stories, type of construction
  - Construction schedule, phasing
  - Lease terms and rates
  - Developer’s Estimated Assessed Value

- **TIF Underwriting Standards, Policies**

- **Market Data, Appraisals, Previous Deals**

- **Assessor’s Estimated Assessed Value**

- **TIF Projection or “TIF Run”**
TIF Feasibility

Once the “but for” is proven, the next step of gap analysis is to determine the feasibility of providing TIF assistance.

TIF Feasibility

- New or Existing TID? Amendment?
- Condition of the TID
- Forecasted Tax Increment of Project and TID
- Financial Impact of TID borrowing
- Financial “Cushion” Project and TID
- Impact on municipal borrowing, capital budget

Financing Method

- General Obligation
- Internal Borrowing
- Pay As You Go or “Developer Financed”

Security

- Mortgage, Note, Personal Guaranty
- Development Agreement
- Term Sheet, Authorizing Resolution
## The TIF Projection or “TIF Run”

### TIF Increment Projection
New TID For $11M Project Example - TIF Presentation

<table>
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<tr>
<th>YEAR</th>
<th>CITYWIDE TAX BASE AS OF JAN 1</th>
<th>NET TAX LEVY</th>
<th>TAX RATE</th>
<th>TAX RATE PROJECTION</th>
<th>DISTRICT VALUE AS OF JAN 1</th>
<th>PROJECT VALUE AS OF JAN 1</th>
<th>INCREMENTAL VALUE AS OF JAN 1</th>
<th>INCREMENTAL REVENUE</th>
<th>INCREMENT AFTER COVERAGE</th>
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### Assumptions:

- Annual Increase in Citywide Tax Base: 8.00%
- Annual Increase in Tax Levy: 4.00%
- Annual Increase in Assessment after construction: 2.00%
- Percent of Estimated Increment Available: 50.00%
- Assumed Interest Rate (Discount Rate): 7.00%
- NPV Assumes Discounting to: 2014
- Estimated Project Value: 11,000,000

NPV = 1,848,255

TIF Request: $1,100,000, 59% of TIF

NPV: 924,027
Other TIF Topics

Underperforming TIDS:

- A TID that is unable to meet its financial obligations within its foreseeable lifespan.

- Tracking TID performance:
  - Review annual audits, make projections
  - Compare assessment history to current values
  - Learn what is causing downturn. Is it temporary?

- Symptoms
  - Value declines below base value—negative increment or “decrement”
  - Tax increments are insufficient to recover cost

- Cures
  - Donor –Recipient TID Plan
  - Distressed or Severely Distressed Legislation
  - Re-calculating the Base Value
Preventative Measures:

- Establish and follow TIF underwriting policies and principles.
- Create TIDs with TIF “generators” whenever possible.
- Avoid “single purpose” or single-parcel TIDs.
- Avoid municipally-owned industrial or commercial park TIDs.
- Set aside “cushion” of tax increment in all TIF deals.
- Design realistic TID Project Plans:
  - Avoid “build it and they will come” scenarios
  - Correspond infrastructure spending to value growth when it occurs.
  - Discount growth, interest and tax rate assumptions in TIF projections.
The 12% Value Cap:

TIF Law established a cap to prevent communities from over-extending TIF within their entire corporate limit, thus over-depriving overlying tax jurisdictions of their levy on growth. Generally, large cities like Madison ($23B of EAV, 1.85% of cap) don’t exceed the cap. TIF Law provides that:

- A community shall not have more than 12% of its equalized assessed value captured in tax incremental districts or “TIDs.”

- The penalty for exceeding this cap is the inability to create new TIDs.

- Existing TIDs may make expenditures and operate as intended.

Remedies for Cap Problems:

- TID Closure—Closure of a TID by fully recovering expenditures or pre-paying removes its value from the 12% cap.

- TID Subtraction—TIF Law allows communities to subtract territory from a TID boundary. It may provide room under the 12% cap.

- Operate existing TIDs judiciously until they close.
Questions
Thank You.

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