

SEPTEMBER 14, 2017

Revenue and Transportation Interim Committee  
Megan Moore, Research Analyst

## HJ 18: MSUB TIF ANALYSIS SUMMARY

The Revenue and Transportation Interim Committee heard testimony at its 2017-2018 interim organizational meeting suggesting that the committee review available analyses of the use of tax increment financing (TIF) in Montana as part of the [House Joint Resolution No. 18 study](#) of tax increment financing. The suggestion also included an indication that MSU Billings, the Department of Commerce, and the Department of Revenue have published such reports. Staff did not find reports published by the Departments of Commerce or Revenue so this summary focuses on the paper, “Analysis of the Performance and Potential of Tax Increment Financing Districts in Yellowstone County Montana” published by the Center for Applied Economic Research at MSU Billings.<sup>1</sup>

### Summary of “Analysis of the Performance and Potential of Tax Increment Financing Districts in Yellowstone County Montana”

The Big Sky Economic Development Authority asked the MSU Billings Urban Institute to analyze the performance of TIF districts in Yellowstone County. The MSU Billings Center for Applied Economic Research (CAER) performed the analysis on behalf of the MSU Billings Urban Institute. This summary includes an overview of the research questions, methodology, assumptions, findings, and discussion sections within the report. In a few places labeled “Additional Considerations,” staff comments are included to provide additional context.

### Question 1: Are the TIF districts located within Yellowstone County producing more economic growth within these districts than they would have produced without the benefits of TIF designation?

#### Methodology

To answer the question of whether TIF districts generate economic growth at a greater rate than if TIF was not used, the authors estimated the growth in property values<sup>2</sup> inside and outside of the districts and used the change in property value as an estimate of the economic activity.

#### Assumptions

The analysis estimates average growth in property values between 1984 and 2008 at a rate of 3.8% per year for property within Billings but outside a TIF district.

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<sup>1</sup> Scott Rickard, Ph.D. and Jonna Jones, “Analysis of the Performance and Potential of Tax Increment Financing Districts in Yellowstone County Montana,” Center for Applied Economic Research, Montana State University Billings, January 2011.

<sup>2</sup> The property values were estimated for years in which a reappraisal was not conducted because the analysis occurred when residential and commercial property was valued on a 6-year cycle.

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### Findings

Multiplying the 3.8% average annual growth rate by 15 years (the minimum time period after which a tax increment provision expires), the authors infer that the property values in TIF districts must grow by at least 57% to conclude that the TIF generated economic activity at a greater rate than if TIF was not used. For Laurel, the estimated average growth rate is 4.3% per year and the total growth required to show more economic activity in a TIF district is 64%

The analysis concludes that, through 2010, the total growth in property values in four of the six Billings districts and in the Laurel district was greater than the growth in property values for property outside of the districts but within the respective city limits.

### Additional Considerations

- The 3.8% average annual growth rate appears to be based on *market* value while the total growth of districts that use TIF is based on *taxable* value.
- The analysis arrives at a total growth rate required to determine whether the use of TIF resulted in more economic activity by multiplying the average annual growth rate by 15 years, which is the number of years a tax increment provision is in effect if the increment is not pledged to the repayment of bonds. If the increment is pledged to bond repayments, the tax increment provision is in effect until the bonds are repaid. The analysis does not take into account this longer timeframe, though none of the Yellowstone County districts had issued bonds when the analysis was published in 2011.

## Question 2: Do TIF districts shift costs from residents and businesses located in TIF districts onto other taxpayers living within the same taxing jurisdiction but outside the boundaries of the district?

### Methodology

The methodology for this question was to estimate the cost of providing services to a TIF district and to compare this cost with the tax revenue generated from the base taxable value of the district. If the cost of providing services is greater than the revenue generated from the district, the assumption is that costs are shifted to other taxpayers.

The analysis uses three models of the present value of the sum of future revenues and costs to estimate the net value or cost of each district. The three models vary in assumptions about growth in the cost of providing services:

1. Cost of services grow only at the 5.2% average annual growth rate
2. Cost of services grow proportionally to the value of TIF investments and at the 5.2% average annual growth rate
3. Cost of services grow proportionally to the value of TIF investments and at half the average annual growth rate

### Assumptions

- Before creation of a TIF district, tax revenue from the district exactly covered the cost of services provided to the district.
- The cost of providing services in Billings grew at an average of 5.2% per year between 1992 and 2009. The 5.2% average growth rate is used to estimate expected growth in the cost of providing services between 2010 and 2025.
- City expenditures in Billings average 0.46% of the market value of Billings properties between 1992 and 2010. The cost of services in the first year of a TIF district is estimated at 0.46% of the total market value in Billings for that year.

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- The market value of properties is assumed to grow at 3.8% per year, the same growth rate that was used for the first question.
- On average, property tax revenue accounts for 30% of total local tax revenue. The revenue derived from the base taxable value of a TIF district represents 30% of the tax revenue generated from properties within the district.

**Findings**

The following table from the analysis summarizes the findings from the three models comparing the present value of estimated cost of services to the present value of estimated revenues.

For Billings TIFs, the cost of services exceeds revenue in two of five districts if costs grow at the average annual rate, in all five districts if costs grow at the average annual rate and proportionally to the value of the TIF, and in 1 of 5 districts if costs grow at half the average annual rate and proportionally to the value of the TIF.

The estimated cost of services exceeds estimated revenues in the Laurel TIF only for the model using the average annual growth rate and increases in service costs proportional to the value of the TIF.

**TABLE 11. COST OF SERVICE DIFFERENCES FOR VARIOUS RELAXED ASSUMPTIONS<sup>3</sup>**

|                                |            | Costs of Service Only<br>Grow Due to Average<br>Annual Growth Rates | Costs of Service Grow Due to Both<br>Increase In TIF Investments and<br>Average Annual Growth Rates | Costs of Service Grow Due to TIF<br>Investments and at One-Half of<br>the Average Annual Growth Rates |
|--------------------------------|------------|---|---|---|
| <b>N. 27<sup>th</sup> 2T3</b>  | % Diff     | 33%   | -29%  | 53%   |
|                                | PV Deficit | \$2,101,603   | (\$3,371,931)   | \$2,877,269   |
| <b>N. 27<sup>th</sup> 2T3A</b> | % Diff     | 2%  | -31%  | 22%   |
|                                | PV Deficit | \$328,204   | (\$4,531,443)   | \$1,817,699   |
| <b>EBURD 2T4</b>               | % Diff     | -10%  | -31%  | 6%  |
|                                | PV Deficit | (\$360,899)   | (\$1,552,212)   | \$192,972   |
| <b>SBBURD 2T5</b>              | % Diff     | -5%   | -30%  | 14%   |
|                                | PV Deficit | (\$378,695)   | (\$4,453,809)   | \$1,190,604   |

<sup>3</sup> Rickard and Jones, p. 26.

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|                    |            |               |               |             |
|--------------------|------------|---------------|---------------|-------------|
| <b>SBBURD 23T5</b> | % Diff     | -27%          | -31%          | -13%        |
|                    | PV Deficit | (\$2,010,163) | (\$2,465,212) | (\$871,128) |
| <b>Laurel 7TI</b>  | % Diff     | 5%            | -32%          | 30%         |
|                    | PV Deficit | \$236,722     | (\$1,758,141) | \$917,469   |

### Additional Considerations

- The assumption that a TIF district generates sufficient tax revenue to cover services provided to the district before the district is created may or may not be true. Urban renewal districts must include a finding of blight. A blighted area is likely to have stagnant or declining property values and may not generate enough revenue to cover the cost of services provided within the area.
- The assumption that TIF districts contribute revenue to the city in addition to the property tax revenue generated from the base taxable value may be overstated. A staff analysis of local government revenue sources supports the claim that 30% of Billings' revenue is generated from property taxes.<sup>4</sup> However, the analysis assumes that the 70% of revenue that Billings generates from other sources can be generated from TIF districts. This is likely true for revenue that comes from licenses and permits or charges for services but, in 2015, 26% of revenue was in the form of intergovernmental revenues such as entitlement share payments, shared state gas tax revenue, state and federal grants, and district court reimbursements. Increased economic activity in a TIF district may not generate additional intergovernmental revenue.
- The tables showing the results of the models refer to "Restricted Tax Revenues" and assume the same amount of revenue each year. Upon adoption of a tax increment provision, the base taxable value is established and mills are levied against this base. The amount of revenue collected from the base taxable value will fluctuate from year to year as mills are adjusted.

## Opportunity Costs of TIF Districts

The analysis also attempts to answer the question of how much property tax revenue the city would collect if the districts did not adopt tax increment provisions and to compare the revenue estimated to be generated if the district was not created with the cost of services.

### Methodology

This question was answered using two different revenue growth models and then estimates the differences in revenue if the TIF did not exist under two scenarios: one in which TIF investments do not increase the cost of services and one in which TIF investment does increase the cost of services.

<sup>4</sup> Megan Moore, "[Local Government Sources of Revenue](#)," Legislative Services Division, May 2016, p. 14. See Rickard and Jones, p. 19.

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The first revenue growth model estimated tax revenues and cost of services assuming no tax increment provision and no tax increment funded capital investments and used the historic average annual growth in property values and cost of services. The second model used half the historic average annual growth rate in market value for properties within the TIF district boundaries and the average cost of services growth rate.

**Findings**

Both revenue growth models estimate that with the TIF district, property tax revenue will exceed service costs for the Billings districts as a whole and for the Laurel district.

The following table shows the present value of estimated net revenues with the tax increment provision compared to net revenues if the TIF did not exist and assumes no increase in cost of services due to the TIF district.

**TABLE 14. PRESENT VALUE OF THE FUTURE NET REVENUES FROM TIF DISTRICTS COMPARED TO THOSE IF THE DISTRICT DID NOT EXIST, ASSUMING TIF INVESTMENT DID NOT INCREASE COSTS OF SERVICES<sup>5</sup>**

| TIF AREA ASSUMPTIONS          | TIF INVESTMENTS DO NOT INCREASE COS, COSTS AND REVENUES GROW AT AVERAGE RATES | TIF INVESTMENTS DO NOT INCREASE COS, COSTS AND REVENUES GROW AT AVERAGE RATES   |
|-------------------------------|---|---|
| NO-TIF COMPARISON ASSUMPTIONS | PROPERTY VALUES DO NOT CONTAIN TIF INCREMENT AND GROW AT AVERAGE RATES        | PROPERTY VALUES DO NOT CONTAIN TIF INCREMENT AND GROW AT ONE-HALF AVERAGE RATES |
| N. 27 <sup>th</sup> 2T3       | \$2,270,216   | \$2,469,986   |
| N. 27 <sup>th</sup> 2T3A      | \$603,219   | \$932,073   |
| EBURD 2T4                     | (\$272,001)   | (\$168,817)   |
| SBBURD 2T5                    | (\$108,392)   | \$214,828   |
| SBBURD 23T5                   | (\$1,860,549)   | (\$1,681,644)   |
| Laurel 7TI                    | \$335,954   | \$454,612   |
| <b>Total P.V.</b>             | <b>\$968,447</b>  | <b>\$2,221,039</b>  |

In both models, the results suggest that Billings and Laurel will generate more revenue overall with the TIF districts than without them. For Billings, the model assuming that property values grow at average rates shows three Billings TIF districts with negative present values of future net revenue, while the model that uses growth at half the average rate results in negative present value of future net revenue for two Billings districts

The next table shows the present value of estimated net revenues with the tax increment provision compared to net revenues if the TIF district did not exist and assumes an increase in cost of services proportionally to the property value added.

<sup>5</sup> Rickard and Jones, p. 30.

**TABLE 15. PRESENT VALUE OF THE FUTURE NET REVENUES FROM TIF DISTRICTS COMPARED TO THOSE IF THE DISTRICT DID NOT EXIST, ASSUMING COST OF SERVICES GREW PROPORTIONALLY WITH TIF INVESTMENTS<sup>6</sup>**

| TIF AREA ASSUMPTIONS          | TIF INVESTMENTS INCREASE COS, COSTS AND REVENUES GROW AT AVERAGE RATES | TIF INVESTMENTS INCREASE COS, COSTS AND REVENUES GROW AT AVERAGE RATES          |
|-------------------------------|--|---|
| NO-TIF COMPARISON ASSUMPTIONS | PROPERTY VALUES DO NOT CONTAIN TIF INCREMENT AND GROW AT AVERAGE RATES | PROPERTY VALUES DO NOT CONTAIN TIF INCREMENT AND GROW AT ONE-HALF AVERAGE RATES |
| N. 27 <sup>th</sup> 2T3       | (\$3,203,318)  | (\$3,003,548)   |
| N. 27 <sup>th</sup> 2T3A      | (\$4,256,428)  | (\$3,927,574)   |
| EBURD 2T4                     | (\$1,463,314)  | (\$1,360,130)   |
| SBBURD 2T5                    | (\$4,183,506)  | (\$3,860,286)   |
| SBBURD 23T5                   | (\$2,315,598)  | (\$2,136,693)   |
| Laurel 7TI                    | (\$1,658,909)  | (\$1,540,251)   |
| <b>Total</b>                  | <b>(\$17,081,073)</b>  | <b>(\$15,828,481)</b>   |

The results of this model show negative present value of future net revenues for all districts assuming average growth rates and growth at half the average rate.

### Effects on Other Taxing Jurisdictions

The analysis includes a discussion of effects on other taxing jurisdictions and offers the following conclusions:

- Counties and school districts rely more heavily on property taxes so adoption of a tax increment provision has a greater impact.
- Yellowstone County tax revenues have grown at an average rate of 3.7% per year between 1994 and 2009. Property taxes represent two-thirds of county tax revenues. Assuming that the county can collect non-property tax revenue on new economic activity in the TIF district, new revenue to the county is estimated to grow by 1.2% per year (one-third of the revenue that is not derived from property taxes multiplied by 3.7%). Over the same time period, Yellowstone County cost of services increased by 2.9% per year. This results in what the authors call a “built-in deficit of 1.7% of the cost of providing county services.”<sup>7</sup>
  - Additional Consideration: One would need to compare actual tax revenues and actual cost of services, not just their growth rates, to determine whether costs exceed revenues.

<sup>6</sup> Rickard and Jones, p. 31.

<sup>7</sup> Rickard and Jones, p. 33.

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## Additional Complicating Factors

The analysis includes a discussion of two factors complicating the analysis.

The first complication raised by the authors relates to the assumption that a TIF district results in *new* economic activity. If the economic activity is from relocation of businesses elsewhere in the city or new businesses that compete with existing businesses, the city could see a decrease in tax revenues in other parts of the city outside of the TIF district.

The other complication relates to the cost of services estimates. The model estimates that the cost of services grows proportionally to the value of the investment in the TIF district. If the cost of services in the TIF district grows faster (or slower), the findings about whether the district results in a service cost deficit would change. A TIF district with many residences may see cost of services grow disproportionately to the investment in the district because, according to “past research,”<sup>8</sup> residences collect more in services than they pay in property taxes while the reverse is true for businesses.

## What Does this Analysis Miss?

The analysis uses the market value of property and the cost of services to determine whether a TIF district results in additional economic activity. The benefits of a TIF district could be undervalued if additional economic activity is not captured in the value of the property.

The authors also include survey results in Appendix A that include questions about whether and how TIF districts have impacted Yellowstone County.

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<sup>8</sup> Rickard and Jones, p. 34.