

The Economics of Land Conservation



A Study Conducted in the Town of West Bend

WRITTEN AND COMPILED BY JORDAN FRIEDBERG

Under the supervision of Nancy Frank

University of Wisconsin, Milwaukee

Department of Urban Planning

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Similar to many communities, a local land trust works to conserve land not within the financial or political reach of the local municipal government. Cedar Lakes Conservation Foundation (CLCF) has been operating in Washington County for nearly 30 years. Over this time, they have acquired or permanently protected over 3000 acres. Through the University of Wisconsin – Milwaukee, they commissioned this study in order to learn more about the economic impact of land conservation.

This would not have been possible without the help from Geoff Maclay, Mary Jo Joyce, Donna Barth, Nancy Frank, Mary Smith, and Ann Runyard.

Many people helped in making this possible, but any errors or omissions are the fault of the author alone.

ABOUT THE AUTHOR

Jordan Friedberg is a former graduate student in the University of Wisconsin-Milwaukee's Department of Urban Planning. This report was produced under the supervision of Professor Nancy Frank.



Special thanks to local photographers, Mary Jo Joyce, Rip Maclay, and Randy Powers, whose work is featured throughout this book.

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EXECUTIVE SUMMARY

Despite the growing volume of analysis of local land use decisions and municipal budgets, little work connects these same land use decisions to local property tax rates. Many costs, most notably for schools, are not paid for by the local municipality, so land use decisions can impact municipal budgets while increasing local property tax rates. This cause-effect disconnect is especially true in rural areas, where costs are spread among fewer property owners and services are delivered across scattered sites.

In rural southeastern Wisconsin, while some areas seek to maintain their rural identity, other communities have welcomed new development, sometimes at rates far outstripping those seen in urban areas. Not surprisingly, many of these land use decisions are hotly debated.

Many public officials and citizens think of undeveloped or agricultural land as “open” or “unused.” Some claim that if this land could be developed (usually as residential property), the local tax base would be enlarged and the cost of municipal services would be spread across more taxpayers, thus decreasing individual property tax bills. They go on to say that conserved land costs other property owners’ money since it is “off the tax roll.” This land is seen as a loss for the community, and not considered relevant to issues such as economic development, tax policy, etc.

At the same time, conservation groups have little research showing exactly why their efforts benefit either municipal budgets or local property taxes. Current tax law assesses most conserved land so that it pays very little, if any, property tax. At the same time, residential property taxes continue to rise as land values and tax rates increase. A constant shift in property tax results, with residential properties increasingly feeling the pinch.

This analysis has several goals. The first objective is to perform a Cost of Community Services analysis using recent local data. The second goal is to dig a little deeper into the conservation versus residential land use conflict. A final objective is to do so in a way that is accessible and clear for both public officials and the public.

In the Town of West Bend, farmland is disappearing quickly. During the period of 2002-2004 alone, the township lost 17% of its farmland. The formerly agricultural land is being converted into two things: residential developments (mostly single-family homes) and conserved natural areas.. Without a holistic way to analyze development costs, township officials and property tax payers have little data on which to base their understanding and decisions about these trends.



This analysis explores the current conditions in the Town of West Bend, and the main land use costs and benefits of converting farmland. Since land use decisions impact not only municipal budgets but individual property taxpayers as well, this analysis looks at the impact of these decisions in a more holistic way than either a traditional cost-benefit analysis or a Cost of Community Services. This study will attempt to calculate a “Net Community Impact” (NCI), or the impact in dollars on the entire community (municipal entities, school districts, and property taxpayers). Everything else being equal, this will determine the impact on local property taxes.

PREVIOUS RESEARCH

Most previous research on the fiscal impact of land use has been in the form of Cost of Community Services (COCS) studies. Other significant types of studies used the Cost-Benefit, Fiscal Impact, Build-out, Life-cycle or Economic Impact Analyses methods. This project uses none of those approaches,, at least not in their traditional senses. Rather, it seeks to compare the main effects of residential development versus land conservation on not just the local municipal budget, but also on every component of local property tax bills. In this way, it walks a fine line between the more established forms of analysis.

COCS studies are valuable since they employ a relatively easy methodology and provide a somewhat standardized set of results, allowing for “apples-to-apples” comparisons. They seek to give local officials and residents a way to analyze the contribution to costs and revenues made by individual land uses. These studies analyze municipal budgets based on land use, resulting in ratios that compare the expense generated for each dollar of revenue collected by each land use.

In most cases, COCS studies indicate that local communities spend at least a dollar for every dollar of revenue that comes from residential land. However, for most other land uses, due to the fact that fewer services are provided, less than a dollar is spent for every dollar collected in revenue.



However, COCS studies have several important problems. First, they fail to separate the costs of agricultural residential property from other residential property. Farm houses are counted as residential, although much of their municipal demands are agricultural in nature. COCS studies also do not provide a way to analyze proposed development, just existing land uses. Because of this, they are not appropriate to use for predictions of future trends.

COCS studies also tend to be somewhat arbitrary in the way certain expenses are allocated. This is most evident in the case of local public education costs. Although local businesses have a direct interest in the schools, the entire expense is allocated to the residential land use category.

Finally, COCS studies often combine agricultural land with other kinds of undeveloped land, calling them “open space.” Combining land uses in this way is not appropriate here because agricultural land is being compared with conserved land.

WISCONSIN TAX LAW

Property taxes provide substantial resources for several levels of government in Wisconsin. Usually assessed every other year, property values are multiplied by a certain percentage to determine the total taxes owed. This revenue is then distributed in appropriate amounts to the various entities.



The total tax rate, or “mill rate,” is comprised of many pieces that vary depending on the location of the property. In the Town of West Bend, all properties contribute to the State of Wisconsin, Washington County, the Town of West Bend, and Moraine Park Technical College (MPTC). Depending on where the property is located, the owner pays one of two public school district rates:

either that of the Slinger School District (properties west of Big Cedar Lake) or that of the West Bend School District (east of Big Cedar Lake). Lastly, properties in one of the three lake protection districts (Big Cedar, Little Cedar or Silver) are assessed an additional rate.

Out of the total taxes collected in the township in 2004, over half went to the local school districts. Nearly a quarter went to Washington County and almost 10% went to MPTC. Eight percent went directly to the township, and very small percentages went to the lake protection districts and the state. These percentages are not exact for every property, because the school mill rates are different and only some properties are subject to the lake district tax. However, the amount that the percentages vary is relatively small.

Before it can be assessed, land is grouped into one of several categories. These categories are: residential, commercial, manufacturing, forest, agricultural, agricultural forest, undeveloped (formerly called swamp and waste). Once the main function of the land is determined, complicated formulas are used to calculate the property’s value.

For the purposes of this project, the “undeveloped” and “forest” categories will be combined. This is due to the fact that they represent relatively small portions of the township and are thought of as open space. Although sometimes thought of as open space, agricultural land makes up such a large part of the township’s acreage that it needs to be dealt with separately. See your local property assessor for more information.

Town of West Bend - Statement of Taxes - 2004		
Elementary and Secondary Schools	\$ 5,711,500.22	54.54%
County Taxes	\$ 2,503,108.33	23.90%
Technical Colleges	\$ 1,044,060.05	9.97%
Town Taxes	\$ 835,592.20	7.98%
Lake Districts	\$ 235,657.37	2.25%
State Taxes	\$ 141,716.64	1.35%
TOTAL	\$ 10,471,634.81	100.00%

COMMUNITY PROFILE



Washington County is northwest of Milwaukee, Wisconsin. Although mostly rural, the City of West Bend, the City of Hartford and several smaller villages and townships provide a variety of living and working environments.

Besides large amounts of undeveloped agricultural land and open space, three large lakes dominate the township’s geography. Big and Little Cedar Lakes, as well as Silver Lake all have large numbers of homes on their shores, and provide recreation for many residents.

COST OF COMMUNITY SERVICES

As previously stated, a COCS study analyzes local municipal expenses and revenues and tries to determine how much of each should be assigned to each land use. In cases where this is unclear, such as the salary of the Town Treasurer, monies are allocated based on a default ratio, which uses the proportion of the land use's value compared to the township's total value.

According to the 2004 valuation, residential properties made up 95.6% of the township's value, while commercial contributed 3.1% and manufacturing 0.3%. Agricultural and undeveloped made up 0.1% each to the overall value, and forest and other contributed



0.4% each. The result of the COCS analysis is ratios that tell us what the municipality pays for each dollar of revenue it receives from each land use.

Tax key data on Washington County from the American Geographical Society Library at the University of Wisconsin Milwaukee includes information on the tax key number, the assessed value of the property, total taxes paid, and the land use classification of the property. Once all the information was combined into one file, the tax keys could be sorted by their land use. As previously stated, all land is taxed using a combination of mill rates to generate the total tax rate for that property. However, the mill rate the township assesses for every property is always the same. So, by using this rate against all the properties' assessed values, we can generate the taxes paid to the town from each property.

The total from each land class is then a matter of adding up the pieces. Other local sources of revenue, such as shared revenue

from the State of Wisconsin, transportation aid, permits, licenses, fees, etc were also included and allocated. For example, all building permits for residential properties were allocated to the residential category, commercial permits to the commercial category, and so on. Since shared revenue is distributed by the state based on population, this entire amount was allocated to the residential category.

The next step is to look at municipal expenses, and determine how to allocate them across the land uses. Just as with revenues, when an exact allocation was not clear, expenses were allocated based on the default percentages. Almost 70% of total township expenses went to two categories: fire protection and public works. During 2004, all the fire calls to tax keys in the township were from residential properties. Some calls were due to inadvertently tripping the alarm during construction. Although an accident, these alarms would not have been caused had the construction not taken place, so they are included.

Cost of Community Services				
Land Use	% Total Acres	Revenues	Expenses	Ratio (In \$)
Residential	41.55%	\$1,120,973	\$1,011,541	\$1: 0.90
Commercial	7.17%	\$31,766	\$17,772	\$1: 0.56
Manufacturing	1.10%	\$2,923	\$1,720	\$1: 0.59
Agricultural	31.25%	\$10,275	\$573	\$1: 0.06
Undeveloped/Forest	18.40%	\$10,871	\$2,866	\$1: 0.26
Other	0.53%	\$2,171	\$2,293	\$1: 1.05

Source: The Town of West Bend

Public works expenses are an example of a situation in which monies were allocated based on the default percentages. So an expense like the \$97,000 that went for paving Paradise Drive on the east end of the township was split according to these percentages.

Finally, once all revenue and expense items have been allocated, simple ratios show what the revenues are for every dollar spent on each land use.

The last column can be read as, “For each dollar of revenue the township receives from this land use category, the township spends \$X.” Taxes on residential properties provide the overwhelming majority of the township’s revenues, but also generate

nearly an equal amount of expenses. This means that as far as the municipal budget is concerned, the impact of residential development is relatively neutral.

The rest of the table shows that the other categories of land use generate far less than \$1 in expenses for each dollar of revenue they produce for the township. The only exception is the “other” category. As the far left column shows, this category makes up a very small part of the town’s total acreage. Also, although there is not much revenue from this category, there are no direct costs. All of the expenses in this category are portions of items allocated based on the default percentage, what we might call a “fixed cost.” For these two reasons, this ratio for the “other” category is not significant.

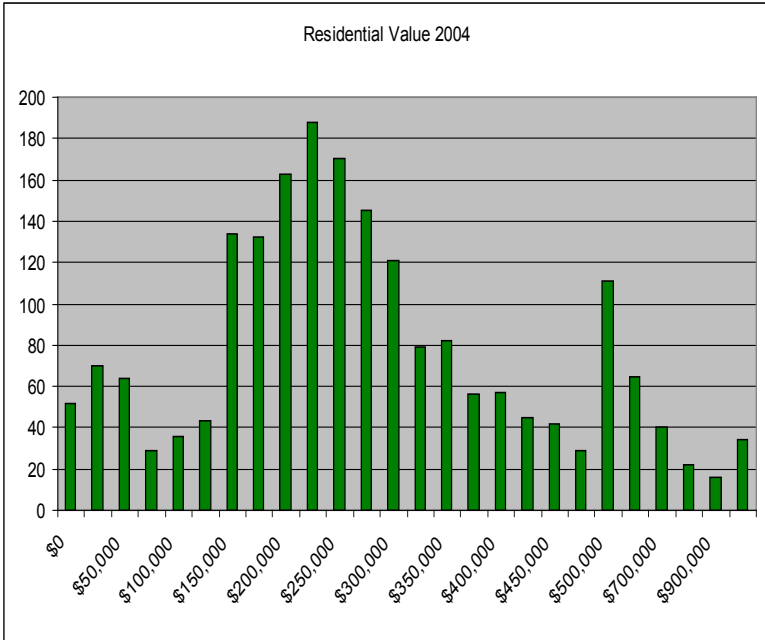
RECENT TRENDS

During the decade between the 1990 and 2000 censuses, Washington County added 22,165 residents, making it the fastest growing county in southeastern Wisconsin. The Town of West Bend is also growing although not at the same rate as the rest of the county. Located in the middle of Washington County, the township is home to 4,834 residents as of the 2000 Census. Seen highlighted below, the town is located immediately west and south of the City of West Bend, encompassing a total of 6,609 acres, according to 2004 figures..



Increased population growth has resulted in a sizeable increase of students in the local public schools. While the town is served by both the West Bend and Slinger schools districts, a majority of the residential development in the last ten years has affected the Slinger schools. Over the past 11 years, the Slinger School District grew by 40%.

Although not all the children in the West Bend and Slinger schools districts live in the township, many families have made the town their home. When 2004 residential property values are graphed, a fairly statistically normal curve appears, peaking between \$150,000 and \$350,000.



Two things about this graph are significant. First, the small peak at the low (left) end is imaginary. That is, these properties are zoned as residential but do not have homes on them. They are empty lots. Second, the peak at the top (right) represents “Lake Homes,” i.e. very expensive houses along each of the three lakes (Big Cedar, Little Cedar and Silver) in the township. Of

these homes, 288 are assessed at more than \$500,000, and 28 are assessed at \$1 million. These kinds of values, while not unique to the township, are not found in every community.

Land use in the township has also been changing. First, the township lost 459 acres (6.5% of the total township acreage) during 2002-2004 due to annexation. However, the township completed a border agreement with the City of West Bend in 2004, controlling this border. Besides shrinking in size, the township’s designation of individual land uses also changed. From 2002-04, the agricultural category of the township shrunk by 426 acres, or by four percentage points.

Town of West Bend: Acreage by Land Use, 2002-4						
Land Use	2002		2003		2004	
	Acres	% of Total	Acers	% of Total	Acres	% of Total
Residential	2,792	39.5%	2,853	42.1%	2,746	41.5%
Commercial	523	7.4%	474	7.0%	474	7.2%
Manufacturing	110	1.6%	73	1.1%	73	1.1
Agricultural	2,491	35.2%	2,303	34.0%	2,065	31.2%
Undeveloped/Forest	1,108	15.7%	1,034	15.3%	1,216	18.4%
Other	39	.06%	39	0.6%	35	0.5%
Total	7063		6,776		6,609	

Source: Wisconsin Department of Revenue: Bureau of Equalization

Not all land use shares were shrinking, however when the undeveloped and forest land use categories are combined, their share grew by 106 acres, or 2.7 percentage points. Also, the residential share of the township’s acreage shrunk by 46 acres, but grew by two percentage points. In other words, the town got smaller, but the residential share of its land use increased. After reviewing this data, the main land use trends are a shrinking agricultural base that is being converted into either residential development or undeveloped/forest land. The remainder of this study will analyze the costs and benefits associated with this conversion.

RESIDENTIAL DEVELOPMENT ON AGRICULTURAL LAND

As previously stated, one of the township’s significant land use trends is the conversion of agricultural land into residential properties.

This section will analyze the main costs and benefits of this conversion.

The Ciriack and Basler farms were used as an example to illustrate the impact of this conversion. These farms, totaling 160 acres, were subdivided in 1996-97, creating 80 residential lots. According to 2004 assessments, 73 of these lots have been developed, with property ranging in value from \$212,000 to \$380,000 each.

Individually, the Ciriack farm became the West Lake subdivision, and now produces more than \$173,000 in total property taxes per year (in 2004 dollars). So far, it has added over \$11 million to the town's tax base. The Basler farm became the Basler Heights subdivision, and now generates more than \$138,000 per year in total property taxes. It has added nearly \$9 million to the township tax base.

It is critical to remember that these figures are total tax revenues, and not just township tax revenues. As stated before, some of that tax revenue goes to the State of Wisconsin, Washington County, the local school districts, MPTC, and the lake protection districts.

More property tax income was not the only change, as municipal expenses also change due to this development. For example, streets in both subdivisions need to be plowed each winter. This report will not quantify this cost but only acknowledge its existence, due to significant difficulties in determining this cost.

Another municipal cost is related to the roads themselves. While the township is not responsible for paying to install the roads in the subdivision because that cost is underwritten by the developers, it does have to maintain and eventually replace the roads. Again, this cost will not be specifically determined, only acknowledged.

A final municipal cost that changes significantly because of residential development is the cost of fire protection. Currently, fire protection is provided by the Addison, Slinger and West Bend fire departments. No matter which department provides the service, the township is responsible for negotiating agreements and paying

for the service. Currently, the town negotiates using three year averages of the number of fire calls. So although an additional call or two may not result in an immediate increase in the overall cost, the extra calls will eventually result in a higher rate being negotiated in the next contract. In 2004, residents made 17 calls to the various fire departments that serve the township. In one case the call was cancelled, so there were 16 calls billed to the township. Every one of these calls was to a residential property.

While in theory all other parcels were still protected, it is worth noting that the entire fire protection budget went to residential property. In this way, it is reasonable to assume that more residential development will lead to more calls to the fire department. In fact, several of the calls happened while residential properties were being developed, suggesting that not just “finished” properties are vulnerable.

Returning to the example at hand, how can the cost for the Ciriack and Basler subdivisions be estimated? Since the key ingredient in figuring the yearly service cost of fire protection to the township is the total assessed value of the township, the assessed value of the two subdivisions can be used to estimate the cost of protecting the subdivisions. Using the formula of subdivision value divided by total township value, the subdivision’s share of the total cost of providing fire protection is approximately 3%.

o Fire Protection



Because the total township cost for fire protection during 2004 was about \$417,000, and because the Ciriack and Basler subdivisions make up about 3% of the township’s total assessed value, the estimated cost in 2004 to provide fire protection service was \$12,505.

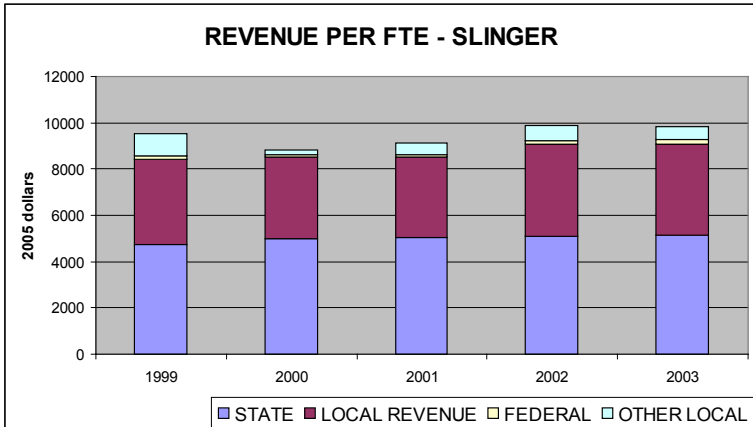
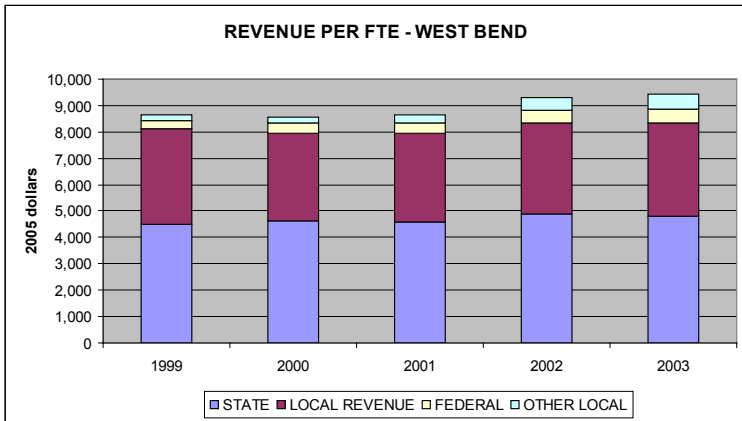
In addition to these costs, there are costs related to residential development that the township does not pay for. Instead, these costs are paid by the local property owners through their property tax bills. There are many costs that are extremely difficult to quantify and would be more appropriately analyzed by an expert in their respective subjects. Some costs from converting agricultural land to residential include: increased traffic, increased use of the underground water supply, contamination from septic systems, auto fluid leaks, and less storm water absorbed into the ground (leading to runoff and increased flooding). These costs will only be acknowledged and not expressly quantified.

There are also some expenses to other municipalities than the township that come with residential development of agricultural land. For example, an increased population is likely to result in more calls to the sheriff's department, which is a county expense. It is outside the scope of this analysis to evaluate the impact on municipalities other than the township, so these impacts have not been calculated.

There is one large cost not included in the municipal budget that can be quantified: public schools. In Wisconsin, public schools get their revenues from four sources. Figures from the state Department of Public Instruction (DPI) show just over half of a school district's yearly revenue comes from the State of Wisconsin. About 40% comes from local property taxes (levied by the district directly), and the small remainder comes from the federal government or other local sources, such as fees or interest.

First, we can investigate the largest component of school revenues, state aid. Adjusted for inflation, state aid to local school districts has risen during the period of 1999-2003. In 1999, the West Bend and Slinger school districts received \$29.4 and \$12.8 million, respectively. By 2003 (the most recent figure available) this had risen to \$32.1 and \$14.4 million. These figures are based on enrollment, and so should be rising for districts like West Bend and Slinger that are growing in size.





Next, let's investigate the second largest component of school district revenues, local tax levies. Both the West Bend and Slinger districts have increased their total levy from \$23.4 and \$9.9 million in 1999 to \$23.5 and \$10.5 million in 2003. This reflects changes in variable costs for things such as office supplies, salary increases, and the rising cost of other contracted services.

In the Slinger district, the levy per FTE, after falling after 1999, has risen back to within \$60 per student of its 1999 level by 2003. The levy per FTE in the West Bend district has been rising steadily since 1999. Both remain critical sources of revenue.

According to the Slinger School District, there are 88 children living in the Ciriack and Basler subdivisions who attend their schools. How much does it cost to educate each of these children? There are two ways to look at this.

First, we could use the total educational cost per FTE. This includes the cost of educating, feeding and transporting each student. For the 2003-04 school year, this was \$9,588 per FTE in the Slinger schools. Finally, multiplying the educational cost per FTE by the number of students, calculates the total educational cost, per year, of the children in the Ciriack and Basler subdivisions. That cost is \$843,744. This is only for those 88 children currently in the subdivision.

However, this figure overestimates the cost, because as previously stated, part of the school budget comes from state aid. So, part of the \$843,744 is offset by state aids, paid on a FTE basis. So the true cost to the local community to educate students from the Ciriack and Basler subdivisions is less.

Another way to calculate the cost to educate children uses tax levy figures directly. DPI also reports the tax levy by each district, and converts that to a FTE basis. The total tax levy per member in 2003-04 for the Slinger Schools was \$3,927. If you multiply 88 students by this figure, you get \$345,576.

This figure, however, underestimates the cost to the community, because the state and federal aids do not come “free.” Part of sales, income and business taxes from the township return to the local community. More students means more state aid (a figure that is tied to enrollment), which means (if all else is equal) higher state taxes to pay for higher aid. Although it is impossible to know in advance how the legislature will solve a budget deficit, they will have to raise taxes or cut spending eventually to remain balanced, which will affect the township. The effect may not be felt immediately, but the potential for such an impact exists nonetheless. The true cost to the local community to educate students from the Ciriack and Basler subdivisions is more.

After totaling everything up using both techniques, we see that although the new developments generate more property tax revenues for the township, that increase is outweighed by an increase in costs. Using the total educational cost figure, the “Net Community Impact” (NCI) to the township for these developments is a loss of more than \$544,000. Using just the tax levy figure, the NCI represents a loss of more than \$46,000.

CONSERVATION OF AGRICULTURAL LAND

Now it is time to turn to the second half of the land conversion analysis in which we look at what happens when agricultural land is converted into undeveloped or forest land, known as “conserved” Property. When this conversion occurs, there is a loss of municipal revenue as the property generally becomes exempt from property taxes. There is also little associated change in expenses.



First, a quick review on how conversion to conservation generally takes place in the township. The most obvious technique is purchase of the property. However, there are several other ways to conserve property that do not include outright purchase. Land can be donated, or have legal agreements such as development easements or deed restrictions placed on the property.

No matter the conservation technique, Cedar Lakes Conservation Foundation (CLCF) conserves three main categories of property. CLCF acquires undeveloped or forest land that it maintains and improves, causing no change in property taxes. It also acquires active farms, which it then rents back to farmers. As long as the land is actively farmed, it continues to generate property taxes.

Lastly, CLCF acquires agricultural land that it then converts into undeveloped or forested lands. In this last case, the property generally will cease to generate property taxes. For this reason,

this last example will be the example used for the analysis since it represents the most extreme case of conservation's impact on township tax valuation .

To make a fair comparison to the agricultural-to-residential development conversion, a parcel of the same size as the Ciriack-Basler farm will be used. Located east of the West Bend Country Club, the Ducharme farm is an actively farmed 160-acre parcel. For the sake of this study only, we can estimate the potential impact should it be conserved.

Agricultural land is not assessed the same way as residential property. Instead of being valued at its market value (usually as another use), agricultural land is assessed at its 'Use-Value,' which estimates the income it can provide to the farmer. This generally results in lower values than that for residential properties. Thus, although it is taxed at the same mill rate as residential property, agricultural land will generate less property tax per acre because its overall valuation is lower to begin with.

For example, while the Ciriack and Basler subdivisions were assessed at more than \$20 million once they were developed into residential properties, the Ducharme farm, which is the same acreage, was assessed in 2004 at \$436,300. Even this figure is high, because the farmhouse on this property was valued at \$185,000. So the farmland by itself was valued at \$251,300. But, using the assessment with the house, the 2004 property tax bill totaled over \$5,500.

Thus, because it would no longer generate property taxes if it were conserved and converted to undeveloped land, the entire \$5,500 in tax revenue from the Ducharme farm would be lost, as well as the \$436,300 value it contributes to the township's property tax base.

Unlike the Ciriack-Basler example, expenses do not change significantly when agricultural land is converted to natural areas. Because the property is shifting from agricultural to conservation, there are essentially no changes in municipal services to the property. No roads are built, so no additional plowing is necessary.

While there is always the potential for a fire, there is no reason to think that possibility is more likely if the property becomes a conservancy than if it remains a farm. This assumption is based on the data showing that all fire calls in the township during 2004 were made to residential properties. This conversion is likely to result in some environmental changes that are hard to measure.

First of all, there is likely to be no more fertilizer spread on the property, or tractor gas and oil leaked on the land. Second, more storm water should be absorbed into the ground, reducing runoff, which can lead to flooding. Although some administrative costs related to the zoning changes and potential deed restrictions and easements do occur, these costs are minor and split among the town, county, and the individual filing the paperwork. Lastly, no new school children enter the district, so the education cost also remains unchanged.

Conservation	
Property Taxes Removed	
Ducharme AG Land	\$ (5,581.47)
Ducharme Home	.
TOTAL NEW REVENUE	\$ (5,581.47)
Public Works	\$ -
Fire Protection	\$ -
School	\$ -
Traffic	\$ -
Environment	\$ -
TOTAL NEW COSTS	\$ -
NET	\$ (5,581.47)

Overall, this conversion would result in a loss in total tax revenue for the township but no real change in expenses and some potential environmental benefits. So, the impact is just the loss in property taxes.

Now we can compare the two conversions. When the agricultural land is converted into residential property, the NCI is a loss of \$46,000 to \$544,000 in revenue for the township. When a

similarly-sized parcel of agricultural land is converted into undeveloped land, the NCI is a loss of \$5,500.

In addition, there are several undefined expenses when the land is converted into residential property. At the same time, there are some potential undefined environmental benefits related to the conversion to undeveloped land. For this reason, the NCI difference between the two types of conversion is likely to be even larger.

IMPLICATIONS / CONCLUSIONS / SHORTCOMINGS

Despite some aforementioned limitations, several conclusions can be made from this analysis. First, the school property tax levy is the driving force in the total property tax bill. In the Town of West Bend, the school tax levy comprises approximately 53% of the total property tax bill. This is especially significant because costs for education do not appear in the municipal budget, although municipal officials make land use decisions.



The cost to educate children is so high that houses with children are being subsidized by the other properties in the township, because the cost to educate children far exceeds the additional property tax revenue, and current development is likely to generate even more children. Combined with the increased service costs, and with everything else being equal, current densities and styles of residential development will raise individual property taxes in the town. Using just our example of 160 acres, the overall property tax increase was calculated to be between \$46,000 and \$544,000.

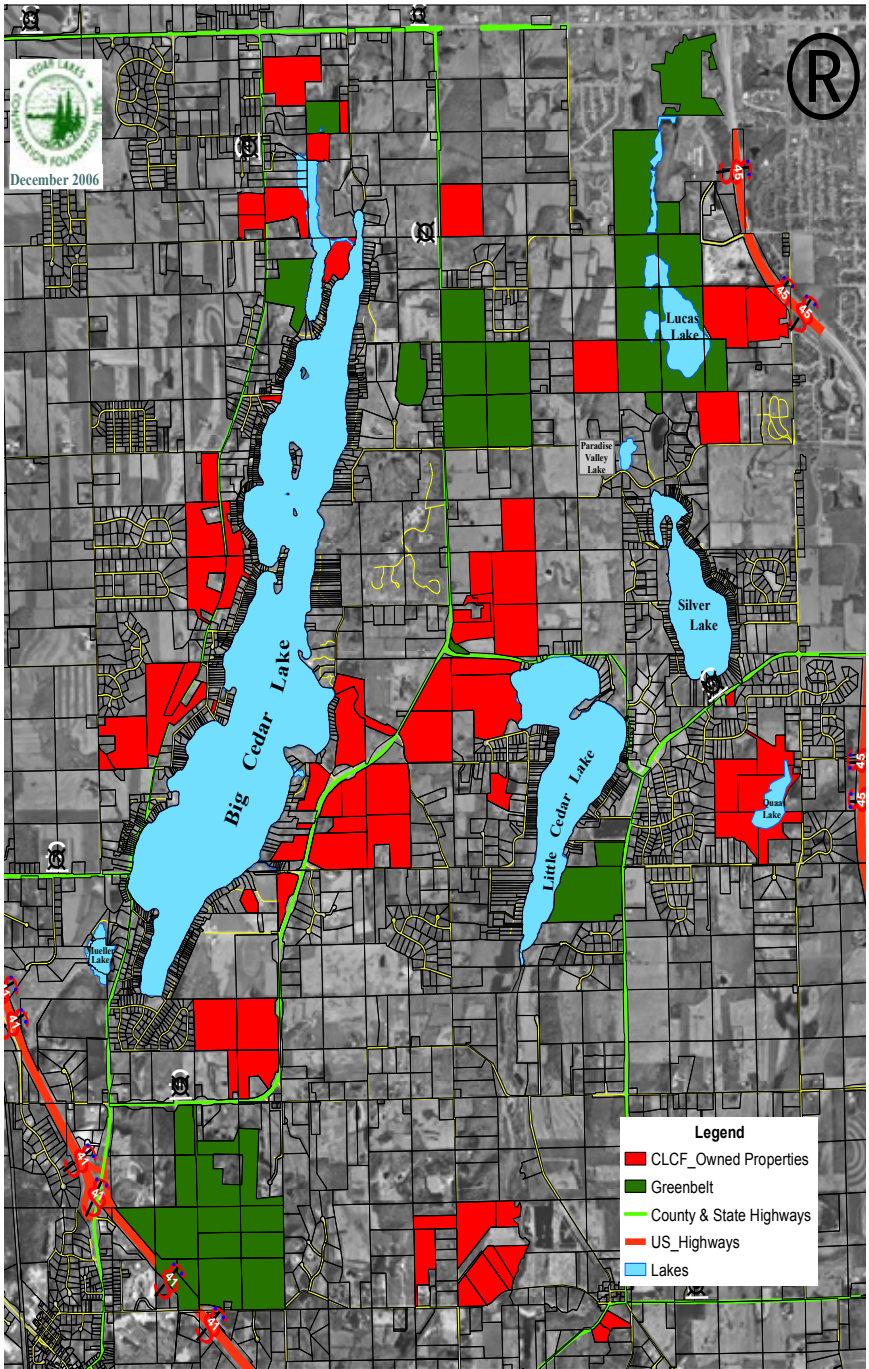
Conversely, undeveloped land has a very small negative NCI. The loss here is the amount of tax revenue generated by the agricultural property before conversion. This loss is mitigated by the fact that

agricultural properties contribute little in property taxes due to use-value assessment. Thus, conserved lands' impact on property taxes is minimal. There may be a small rise, but on a scale that is eight to 100 times smaller than the increase caused by residential development.

This is not to say that rural communities should avoid either children or development. This also does not mean that runaway school costs are the reason property taxes rise. However, it does mean that there are important connections between land use decisions and property taxes. Also, because most land use decisions are made by officials who do not have to bear the entire burden of their impact, a better understanding of the true "community" costs and benefits of development should aid in more informed decision-making. Every community has the right of self determination. This analysis is intended to give community residents and leaders some of the numbers behind their decisions.



Calculating NCI is a delicate balance analyzing both long-term investments and one-time costs. Specific properties were used to illustrate trends, and are not meant to highlight one or another property owner's behavior. Many issues related to this analysis remain unresolved, such as the undefined costs, life cycles of housing and other properties, and the affect of open space on residential property values. Lastly the data used was from the Town of West Bend for 2004, and so is only accurate for that area and year.



Cedar Lake Conservation Foundation, Inc. Complete Property Map