



## 6 TAX BASE ANALYSIS

**T**his chapter examines tax base strength and diversity in two ways: tax base per household and tax base per developed acre of land within the community. Tax base, as used in this report, is defined as the total County Equalized Value (CEV), which represents one half of the true cash value of taxable real and personal property.

### SUMMARY

The following summarizes the major issues identified from the tax base analysis for Shelby Township:

1. Overall, Shelby Township has the 2<sup>nd</sup> highest assessed value in Macomb County compares to all other townships.
2. Compared with other townships in the County, Shelby Township ranks low in terms of both non-residential and residential CEV per household.
3. Shelby Township's non-residential and residential CEV per household is similar to that experienced by the more developed Macomb County cities of Sterling Heights and Warren.

4. The lower ratio of CEV per household for Shelby Township may be due in part to the age of commercial, industrial, and residential development. Shelby Township has older and more developed areas than the more rural townships in Macomb County like Ray and Washington Townships.
5. When compared to developed acreage, the taxable value for Shelby Township fares better than that experienced with a per household analysis. Shelby Township ranks 2<sup>nd</sup> among its adjacent townships with respect to Total CEV per developed acre. Shelby Township also ranks 2<sup>nd</sup> among its adjacent townships with respect to both residential and non-residential CEV per developed acre.
6. The differences between a per household CEV and a per developed acre CEV could be attributable to a number of factors including total number of housing units/density in the community; the age of the housing stock compared with adjacent townships; and that Shelby Township's non-residential development is less land consumptive due to the availability of utilities and the number of commercial uses that require less land than industrial uses.
7. Over the past 4 years, the value of new non-residential development has been increasing at a faster rate than the value of new residential development. In terms of municipal costs, this is a positive trend since the cost of providing municipal services to residential is higher than the cost associated with non-residential development in terms of the revenue received from each use.
8. Over 60% of the value associated with new non-residential development came from commercial uses and less than 40% from industrial uses. Typically commercial development will place more service burden on Township and is not as fiscally desirable as research office and high tech industrial developments.
9. Based on the most recent new construction trends in Shelby Township, it appears future increases in taxable value due to new construction for non-residential versus residential will increase compared to that experienced in 2001. This may also be a positive trend so long as a greater share of the nonresidential increase is in the areas of high-tech office and industrial uses.

In order to maintain and improve the current tax base composition, the Township should consider the following areas as part of their overall evaluation of growth trends:

- The Township's current tax base may have limited growth potential without a shift in focus. For future nonresidential development, the

### FYI

According to the 1992 and 1997 Economic Census, Shelby Township saw a significant growth in the number of building material and garden supply stores, drug stores, and clothing/department stores. Most of these retail stores doubled and even tripled in number over the 5 year time period.

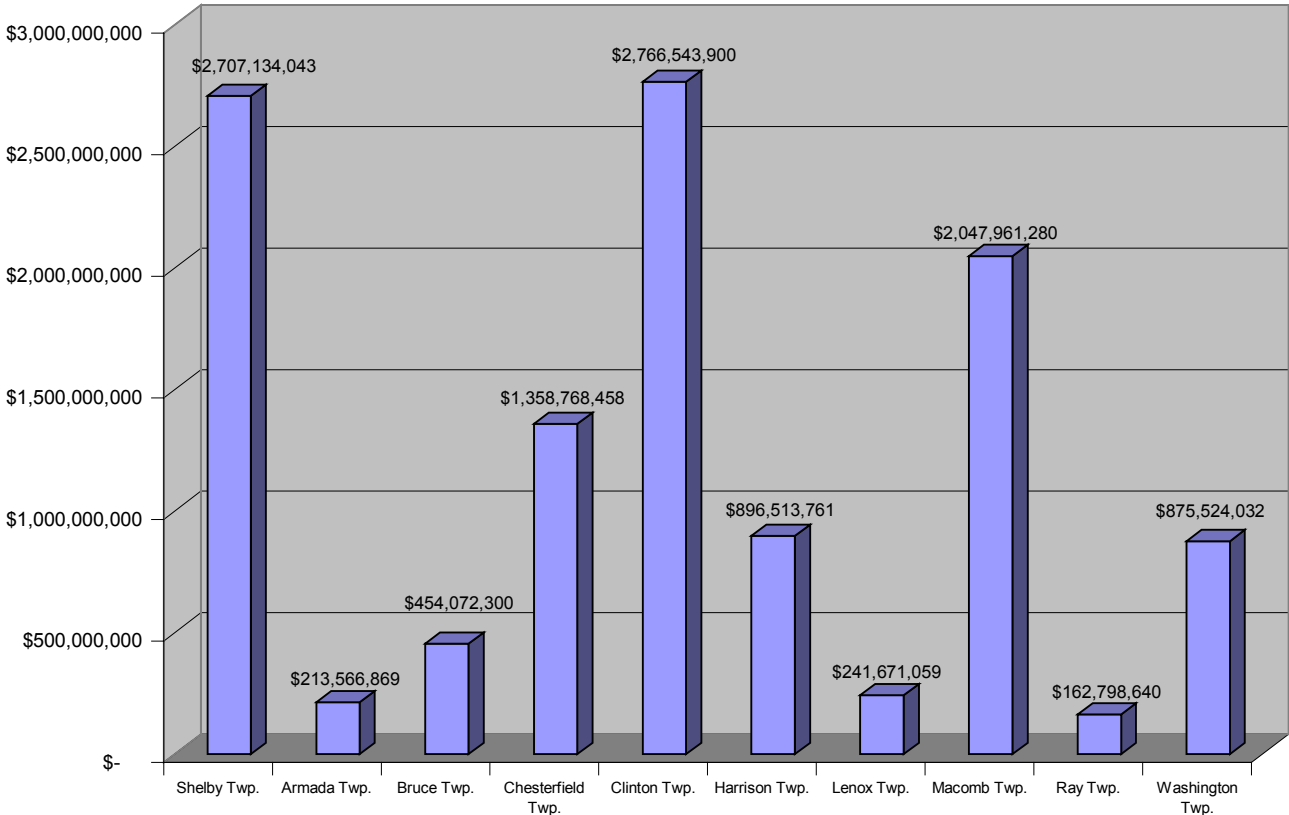
Township should look towards encouraging high-tech office, research and development, and industrial uses that produce more revenue and demand less in municipal services.

- ❑ Older areas of the Township should be reviewed for potential redevelopment opportunities that would be provide a positive impact to the Township’s tax base.
- ❑ The update of the Township’s Master Plan should examine the infrastructure and service demands that will result from different types of land uses. The findings of that examination should be considered when determining appropriate future land uses.

**OVERALL TAXABLE VALUE**

As shown in Figure TAX-1, Shelby Township ranks 2<sup>nd</sup> in terms of total CEV compared with all other Townships in Macomb County. The highest-ranking township is Clinton with slightly more total CEV than found in Shelby.

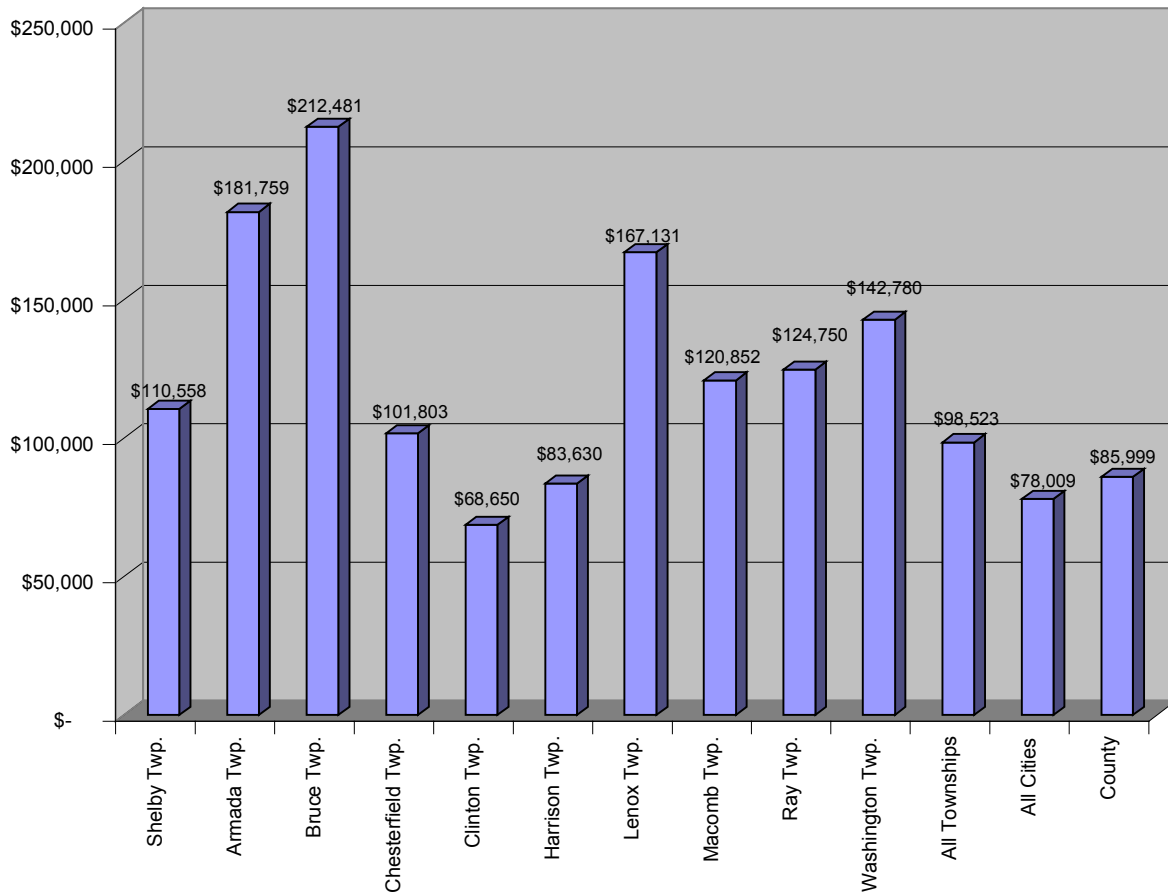
Figure TAX-1  
**Total CEV For All Townships, 2001**  
 Source: 2001 Equalization, Macomb County



## TAX BASE PER HOUSEHOLD

In 2001, Macomb County had an average CEV per household of \$85,999. As shown on Chart Tax-2, all cities within the County averaged \$78,009 per household and Townships \$98,523 CEV per household. Shelby Township's average CEV per household ranks 7<sup>th</sup> among the ten larger, Macomb County townships included in this study. However, Shelby's CEV per Household is higher than the average CEV per household for all townships and the entire county. Among the Macomb County townships adjacent to Shelby (Ray, Washington, and Macomb) Shelby has the lowest CEV per household.

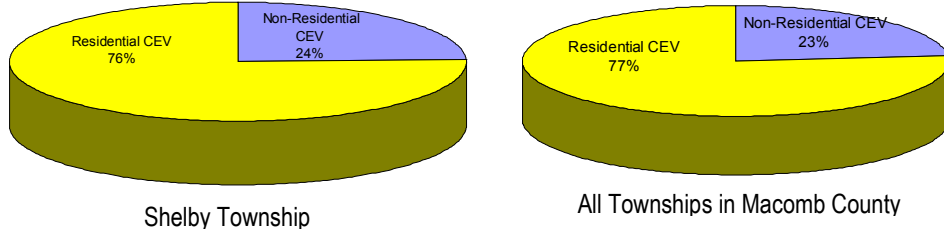
Figure TAX-2  
**Total CEV Per Household, 2001**  
 Source: 2001 Equalization, Macomb County; 2000 US Census



To more fully evaluate the strength of a community's tax base, it is also important to examine the compositions of the tax base. This chapter examines two main categories of real and personal property, residential and non-residential.

Figure TAX-3  
**Shelby Township's Residential Tax Base, As A Percent of Total Tax Base,  
 Compared to All Townships in Macomb County**

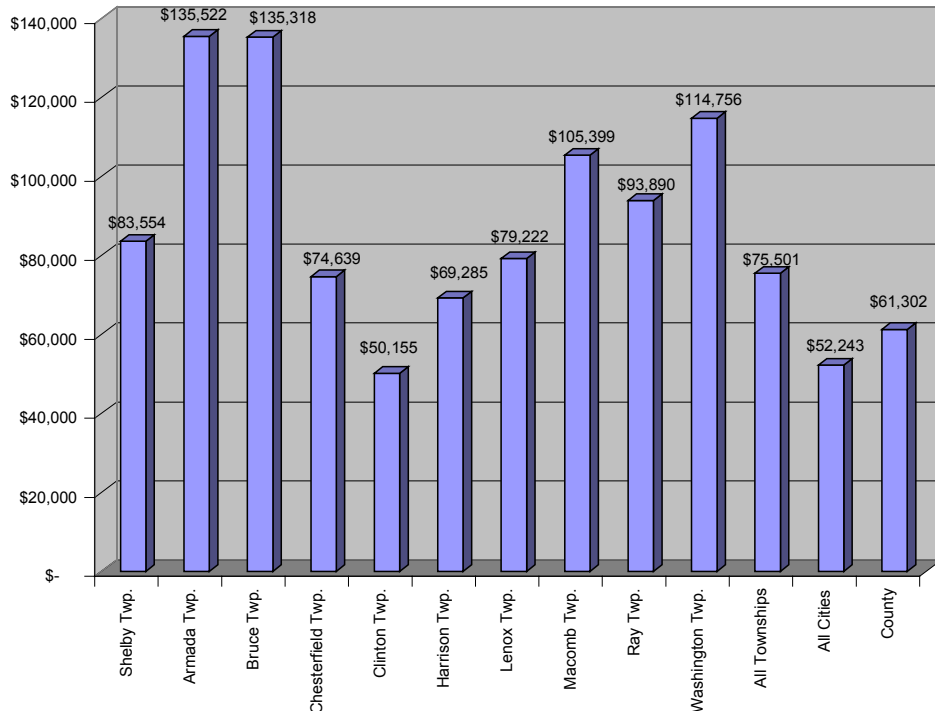
Source: 2001 Equalization, Macomb County



As shown in Figure TAX-3, Shelby Township's residential tax base, as a percent of total CEV, is slightly lower than the average of all other townships within the County. However, as shown in Figure TAX-4, Shelby Township's residential CEV per household ranks 6<sup>th</sup> among the larger townships in Macomb County, which is slightly higher than the Township's ranking for total CEV per household. The Township's residential CEV per household is considerably higher than the township average in Macomb County of \$75,501 per household or the entire county's average, including cities, of \$61,302. The lower CEV per household for Shelby Township is similar to the averages identified for larger cities in the County. This is reflective of the age of both residential and non-residential development in Shelby Township being similar to older cities rather than adjacent townships where development is newer.

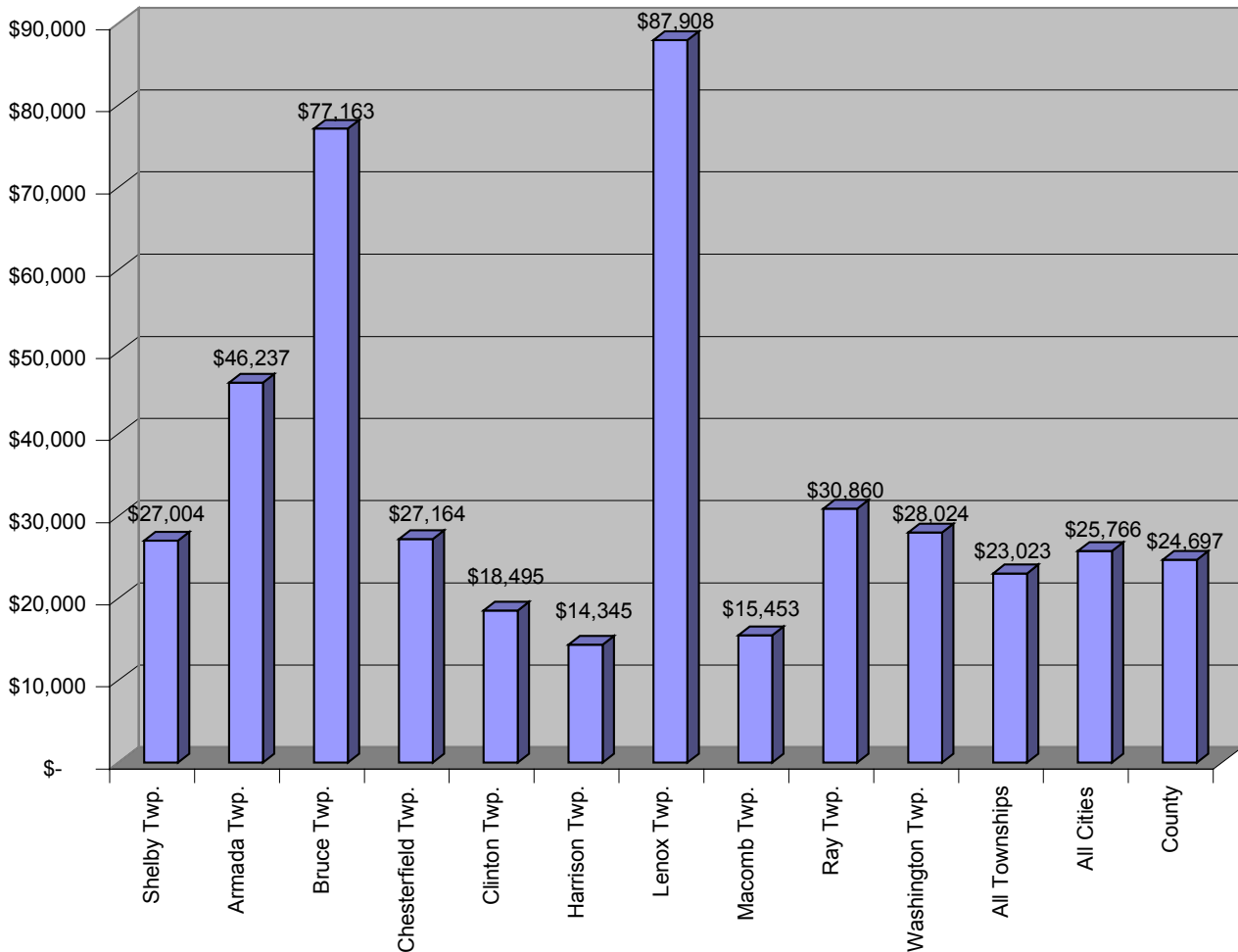
Figure TAX-4  
**Residential CEV Per Household**

Source: 2001 Equalization, Macomb County



Shelby Township's non-residential CEV per household ranks 7<sup>th</sup> among other townships in Macomb County. However, Shelby Township's non-residential CEV was slightly higher than the average for all other townships, cities, and the County. Unlike Shelby Township's position in residential CEV per household, Shelby ranks 3<sup>rd</sup> among the adjacent townships of Macomb, Ray, and Washington with non-residential CEV per household.

Figure TAX-5  
**Non-Residential CEV Per Household**  
 Source: 2001 Equalization, Macomb County

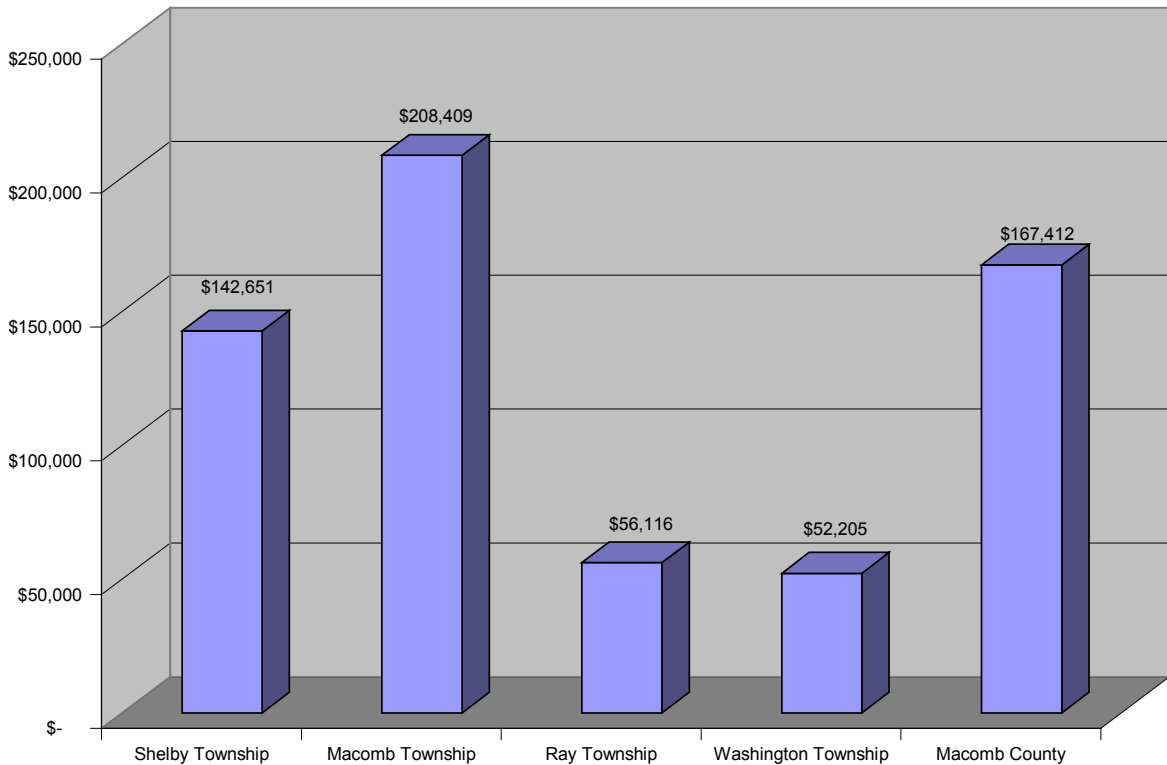


## TAX BASE PER DEVELOPED ACRE

Another method of examining tax base strength is CEV per developed acre <sup>1</sup>. As Figure TAX-6 illustrates, Shelby Township's Total CEV per developed acre is slightly lower than the County average but ranks 2<sup>nd</sup> in comparison to adjacent townships surveyed in the County.

Figure TAX-6  
**Total CEV Per Developed Acre**

Source: 1997 Equalization, Macomb County and 1995 SEMCOG Land Use Survey

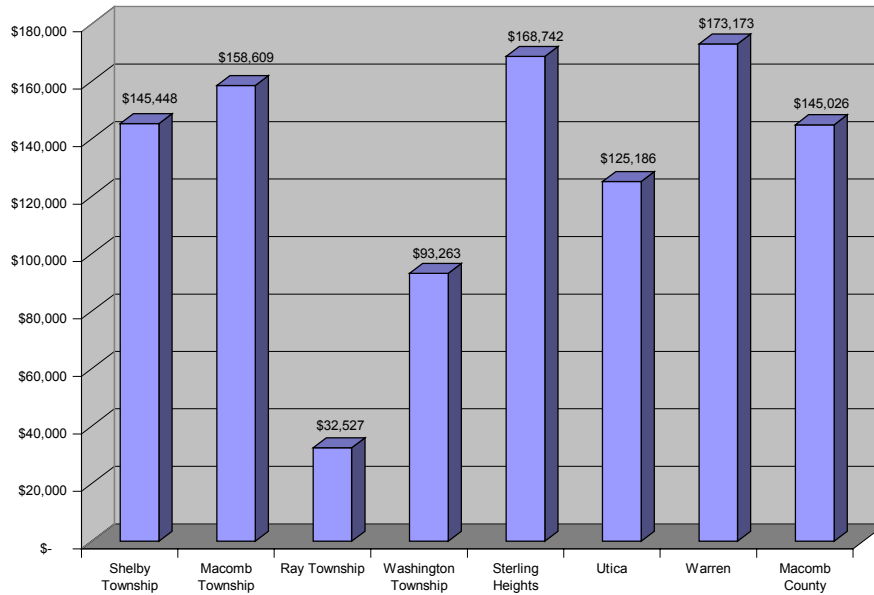


As shown in figure TAX-7, Shelby Township's residential CEV per acre of residential development ranks 2<sup>nd</sup> among the other township's surveyed and is slightly higher than the County's average. The Township's residential CEV per residential acre is also comparable to the range of values found in the larger cities of Sterling Heights and Warren.

<sup>1</sup> The CEV per developed acre analysis is based on SEMCOG 1995 Land Use Summaries and 1997 CEV data from Macomb County Equalization. In addition, the developed acreage data does not include public and quasi-public land uses because they are tax exempt.

Figure TAX-7  
**Residential CEV Per Residential Developed Acre**

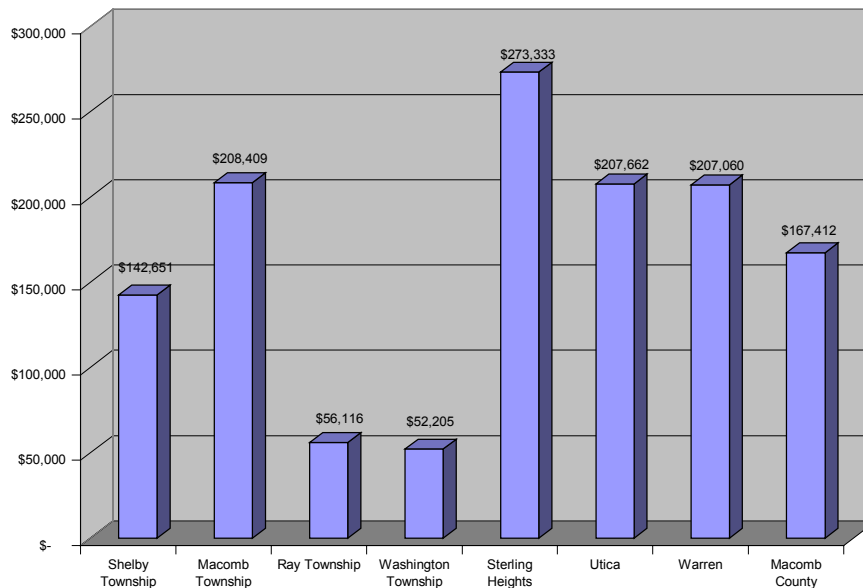
Source: 1997 Equalization, Macomb County and 1995 SEMCOG Land Use Survey



Shelby Township's non-residential CEV per acre of non-residential development ranks 2<sup>nd</sup> among its adjacent townships. Non-residential CEV is lower than the County average. Unlike the experience with residential CEV per residential developed acreage, the Townships average non-residential CEV is far below that experienced by larger Macomb County cities.

Figure TAX-8  
**Non-Residential CEV Per Non-Residential Developed Acre**

Source: 1997 Equalization, Macomb County and 1995 SEMCOG Land Use Survey



## TAX BASE COMPARISON

Numerous studies have been conducted that indicate different types of land uses demand various levels of municipal services, such as schools, fire/police protection, sewer and water, road infrastructure, etc. <sup>2</sup> Because this range in the demand for services precipitates varying municipal expenditures, it is important for communities to evaluate the composition of their tax base. There are also questions related to quality of life, including traffic, noise, and other environmental impacts. The following sections describe the cost-revenue impacts of different land uses and provide a brief description of Shelby Township's tax base composition.

### **Who Uses Municipal Services & Who Pays For City Services**

Recent studies of the sources of local revenues and the corresponding costs of services have identified the importance of a balanced tax base. The University of Michigan School of Natural Resources and Environment completed a Cost Of Community Services Study (COGS) for a rural Washtenaw County township similar to several studies done elsewhere by the American Farmland Trust. The University of Michigan study found that residential land uses in the township used \$1.40 in services for every \$1.00 of tax revenue from that same source. By comparison, commercial and industrial uses demanded only \$0.26 worth of services for every \$1.00 of property taxes paid.

While the results from the above study may have been somewhat exaggerated by the very rural nature of the subject township, they support the basic results of other similar studies. In general, residential uses demand services that cost more than the tax revenues those same residential uses generate. The exact opposite is true of such uses as office, retail, industrial and research.

### **The Growth Equation - Fiscal Impacts of Growth**

Other studies regarding the fiscal impact of growth and development make one very similar point: there is always cost associated with growth. The only debate has to do with how large or small that cost might be. The main discussion within any community involves how the cost of the expected growth and development will be paid.

In a February 1997 presentation at Michigan State University, noted professor and author Dr. Robert Burchell pointed out that single family home development represents 80 percent of the new development in the United States and consumes 90 percent of the land required for development. He also presented a cost-revenue hierarchy of land uses which identified land uses that provide the most revenue to a community while requiring little in output of local capital and operating costs and those land uses which create the opposite effect.

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<sup>2</sup> Mark Wyckoff, "Fiscal Impact of Growth Revisited", *Planning and Zoning News*, Vol. 15, No. 10, August 1997, pp. 4-6  
Michael J. Kinsley, L. Hunter Lovins, "Paying For Growth, Prospering from Development", *Planning and Zoning News*, Vol. 13, No. 9, July 1997, pp. 11-16.  
Mark Wyckoff, "Fiscal Impact of Growth", *Planning and Zoning News*, Vol. 11, No. 3, January 1993, pp. 5.

Table TAX-1  
**The Cost -Revenue Hierarchy of Land Uses**

↑ Municipal Gain (+)	Research Office Parks	↑ School District Gain (+) ↓ School District Loss (-)
	Office Parks	
	High-Rise/Garden Apartments (Studio/1 bedroom)	
	Age-restricted Housing	
Municipal Break Even	Garden Condominiums (1-2 bedrooms)	
	Open Space	
↓ Municipal Loss (-)	Retail Facilities	
	Townhouses (2-3 bedrooms)	
	Expensive Single-family Homes (3-4 bedrooms)	
	Townhouses (3-4 bedrooms)	
	Inexpensive Single-family Homes (4+ bedrooms)	
	Garden Apartments (3+ bedrooms)	
	Mobile Homes	

Source: "The Growth Equation (excerpts from a presentation entitled "Fiscal Impacts of Sprawl")", Planning and Zoning News, August, 1997

As Burchell's hierarchy suggests, Research Office Parks provide the most dollars in the form of tax revenue to municipalities and school districts while requiring the least amount of public expenditure. Most residential land uses provided opposite results for municipalities. While Burchell's study does provide meaningful analysis of public revenue versus cost, it does not take into account other costs and benefits associated with development such as benefits for providing needed community services or the environmental costs of more intense uses. Also, Michigan's Proposal A method of school funding may moderate the impacts of school districts somewhat. Although this study is somewhat generalized and cannot be applied without condition to every community, it is important for Planning Commissioners analyzing development patterns to be aware of these basic concepts.

Most communities should strive to balance the mix of residential and non-residential land uses to provide a more even flow of revenues and expenditures and to address quality of life issues. It is also important for communities to recognize that many retail land uses can demand a significant level of municipal services. Therefore, from a fiscal perspective, it is preferable that the non-residential tax base be comprised of land uses such as office parks, high-tech, and industrial developments. Of course, fiscal considerations do not serve as the sole catalyst behind development policies of municipalities.

As shown in Figure TAX-9, residential property, as a percent of the total CEV in Shelby Township, has steadily increased from 1997 to 2000. By 2001, this percentage decreased to a 5 year low of approximately 76%.

Figure TAX-9  
**Residential CEV As A Percent Of Total Cev**  
 Source: 1997 – 2001 Equalization, Macomb County

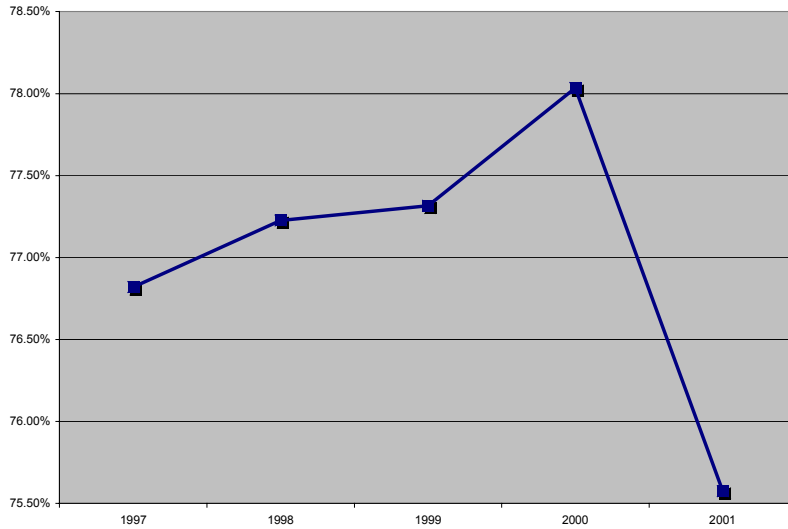
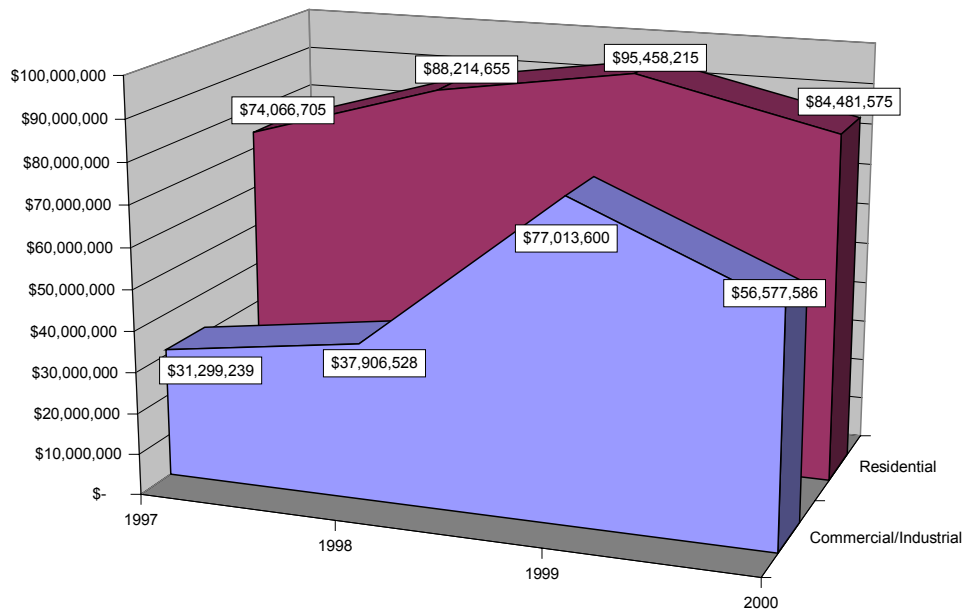


Figure TAX-10 shows Shelby Township’s CEV due to new construction over the past 5 years. As indicated in the chart, Shelby Township’s new non-residential growth has increased at a faster pace than that experienced with new residential growth. However, the tax base value of new residential growth is still outpacing non-residential value. In 1997 new construction value attributable to non-residential growth was 30% of all new construction CEV and by 2001 that percentage increased to about 40%.

Figure TAX-10  
**CEV Due to New Construction**  
 Source: 1997 – 2001 Equalization, Macomb County



Changes in a community's assessed values are due to two main factors. Those factors are changes in market values of existing properties, and value added to new construction. All communities, especially those experiencing rapid growth, need to frequently evaluate their development trends to assess the impact on the demand for services, municipal revenues and the overall quality of life.

In recent years, the number of newly constructed residential housing units has decreased slightly in comparison to the mid-1990's. SEMCOG notes that 441 new single family housing units were constructed in 2000, approximately 37 per month. Based on this trend, if Shelby Township averaged 455 housing units annually, with an average CEV of about \$191,569<sup>3</sup>, \$60,495 of CEV in nonresidential construction per new housing unit (a total of \$27.5 million in non-residential value) would be needed annually to maintain the current tax base composition of 76% single-family residential and 24% non-residential. In 2000, \$56.6 million of non-residential CEV was added to the tax base.

Therefore, if this trend continues, the current ratio of residential to non-residential is likely to decrease, and the non-residential percentage of CEV will increase. It is important to note that of the \$56.6 million of non-residential CEV, 62% came from commercial and 38% came from industrial. Based on the cost-revenue hierarchy of land uses presented in the previous analysis, the high percentage of commercial development places more service burden on the Township and is not as fiscally desirable as high tech, industrial development.

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<sup>3</sup> The 2000 Shelby Township Residential CEV from new construction divided by 2000 new single family housing units.