
The Cost of Community Services in Madison Village and Township Lake County, Ohio

October 1993



American Farmland Trust

Lake County
Soil and Water Conservation District



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American Farmland Trust is a private, nonprofit conservation organization founded in 1980 to protect the nation's agricultural resources. AFT works to stop the loss of productive farmland and to promote farming practices that lead to a healthy environment. Its action-oriented programs include public education, technical assistance in policy development and direct farmland protection practices. Basic annual membership is \$20. For membership information, contact the national office.

This report is a publication of AFT's Northeastern Office.

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The Lake County Soil and Water Conservation District is an independent subdivision of the State of Ohio, associated with the Ohio Department of Natural Resources, and funded by county and state taxpayer monies. The Lake SWCD assists all Lake county residents, landowners and communities with land and water related conservation needs. The District is led by a five member board of supervisors who are county residents that volunteer their time for a three-year term. To find out more about the services provided by the Lake SWCD, please stop by or contact our office.

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Respectfully Submitted,
Renee L. Van Horn

Executive Summary

Lake County, Ohio's sandy soils, lake-effect weather and abundant water supply make it a unique agricultural area. Nursery plants, trees and grapes are its primary agricultural crops. Although the state's smallest county, Lake County's production of specialty crops ranks it third in the state for farm cash receipts. Its soils are some of the best in the world. In addition to being a prominent agricultural county with valuable farmland, it has other unique and valuable natural resources.

Residential development pressure is strong in Lake County because of its rural atmosphere, unique natural resources, proximity to the Lake Erie shoreline and accessibility to Cleveland. The continuing rise of urban land prices and the demand for suburban housing is forcing the county to face many difficult land use decisions.

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In Madison Village and Township in Lake County, Ohio's COCS study, AFT found the average ratio of dollars generated by residential development to services required was \$1 to \$1.54. In other words, for every dollar raised from residential revenues, the communities spent an extra 54 cents on average in direct services. These services included education, health and human services, public safety and public works. On the other hand, the average ratio for farm, forest and open land was \$1 to 34 cents -- for every dollar raised, after services were provided, 66 cents remained.

Average Land Use Ratios for Madison Village and Township

Residential	Commercial and Industrial	Farm, Forest and Open Land
\$1: 1.54	\$1: .23	\$1: .34

Introduction

Madison is a peaceful, rural area in Lake County, Ohio, east of Cleveland's statistical metropolitan area. Madison Village lies in the center of Madison Township, the largest township in Ohio. State and federal highways make it possible for urban commuters to live in a rural environment.

Madison was founded in the late 1700s. Originally known as Chapin Township, it is not known how the name Madison was derived. One theory suggests it was renamed for James Madison, who was president at the time. A second theory holds it was because a number of settlers came from Madison, Conn.

Agriculture always has played a primary role in Madison's economy. Once a major port and producer of pig iron, industrial activity today is limited, but Madison boasts many nurseries, vegetable farms, vineyards and orchards. Farmers also produce some grain, but very little livestock.

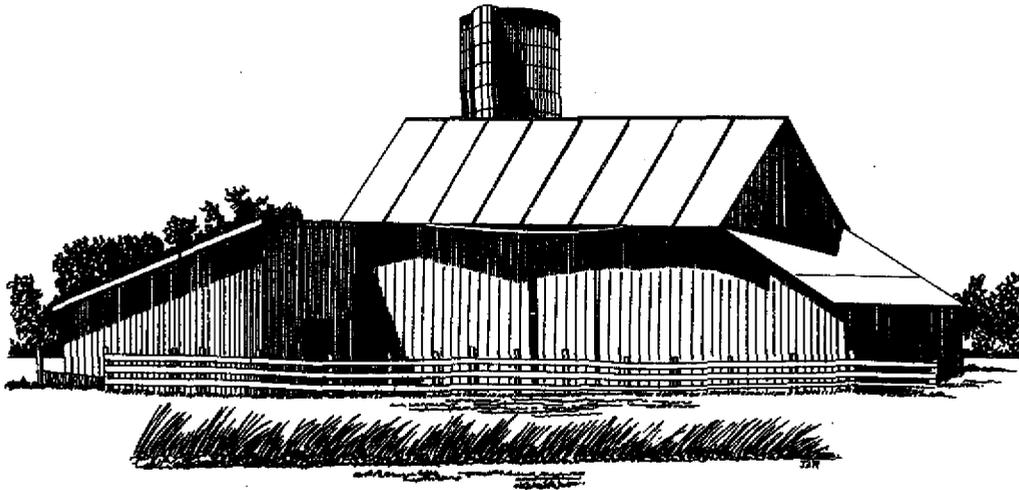
Madison Township's population grew from 12,455 in the 1970s to approximately 15,477 in 1990. The village's population increased from 1,678 in 1970 to 2,477 in 1990. Outmigration statistics suggest that both the village and the township are poised for a new surge of population growth. (Department of the Census, 1990.) As Madison attracts new businesses and industries, its population is likely to grow to accommodate them.

The April 1993 issue of the *Lake County Business Journal* reported that Madison Village has a healthy tax base and varied land use, but the township lacks sufficient industrial base to support population demands. As a result, at 101 mills, Madison has the highest property taxes in Lake County, and one of the highest in the state. Approximately 40.5 percent of the township is in residential use, while only 1 percent is industrial and 3 percent is commercial. The remainder of the township is vacant, open space or undeveloped land. Given these statistics, Madison officials recognize the need for growth but are concerned with how such growth will be managed.

Currently, with the help of the Lake County Planning Commission, Madison is updating its master plan. One of the plan's goals is to accommodate growth without incurring the negative effects of sprawl. Madison trustees and citizens are trying to answer the question, "How can a bedroom community just 45 miles from downtown Cleveland invite growth yet keep its small-town, semi-rural atmosphere?" (*Lake County Business Journal*, April 1993.)

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AFT has completed six COCS studies in the Northeast. All found that agricultural and open lands generate more in revenues than they demand in municipal services. AFT wanted to find out if such findings would be repeated in Ohio. Under the direction of the Lake County Planning Commission and the Lake County Soil and Water Conservation District, Madison Village and Township were chosen for AFT's first COCS study in the Midwest. The study researched the financial profiles of both communities, assessing how revenues were generated and distributed by land use to determine the cost of providing services to residential, commercial and industrial, and farm, forest and open land use categories.

Madison was chosen for several reasons, including local interest for a study, an increase in development pressure and its consideration of a revised master plan. The fact that it also has only one school district, which simplified analysis, further made it a good candidate for a COCS study.

Although Madison Village is officially part of the township, local sponsors wanted to assess the two budgets separately. Therefore, for the purpose of this study, the village and township are treated as separate financial entities.

Ohio's townships and villages have very strict budget mandates, which are outlined in the Ohio Revised Code. Thus, they have little or no control over budget matters. Local budgets provided information on local government administration and operating costs, police protection and local road maintenance. But by the time the village and township receive their portion of property taxes and government aid, expenditures for the school district, county services and the fire district all have been taken out. Therefore, it was necessary to work with the Lake County Auditor's office to determine how to allocate funds for services such as education, county and state road maintenance, health and human services, and fire protection.

This report summarizes AFT's findings in Madison Village and Madison Township. Organized into four main sections: Introduction, Methodology, Findings and Discussion, it also provides detailed tables, appendices and references.

Methodology

The objective of COCS studies is to compare annual income to the expense of public services for different land use sectors. COCS studies are a snapshot in time of costs versus revenues per land parcel. For the Madison study, fiscal year 1992 was chosen because it was a recent, typical year. No extraordinary events, such as a natural disaster, made it different from any other recent period.

Five basic steps were followed in this study.

Five Basic Steps for Conducting A Cost of Community Services Study

1. Meet with local sponsors

Working with local sponsors, define land use categories into:

- * Residential
- * Industrial
- * Commercial
- * Farm, Forest and Open Land

2. Collect data

A. Obtain relevant reports, such as:

- * Year-end financial statements
- * Grand listing
- * Property tax distribution amounts
- * Statements of annual apportionment of taxes

B. Contact appropriate officials, for example:

- * Administrator or Mayor
- * Board of trustees
- * Zoning Commissioner
- * Auditor
- * Clerk/Treasurer
- * Planning commission

C. Contact appropriate departments, such as:

- * Police
- * County engineer
- * Fire
- * Health

3. Group revenues and allocate them by land use:

- * Property taxes
- * Local receipts
- * State aid
- * Miscellaneous

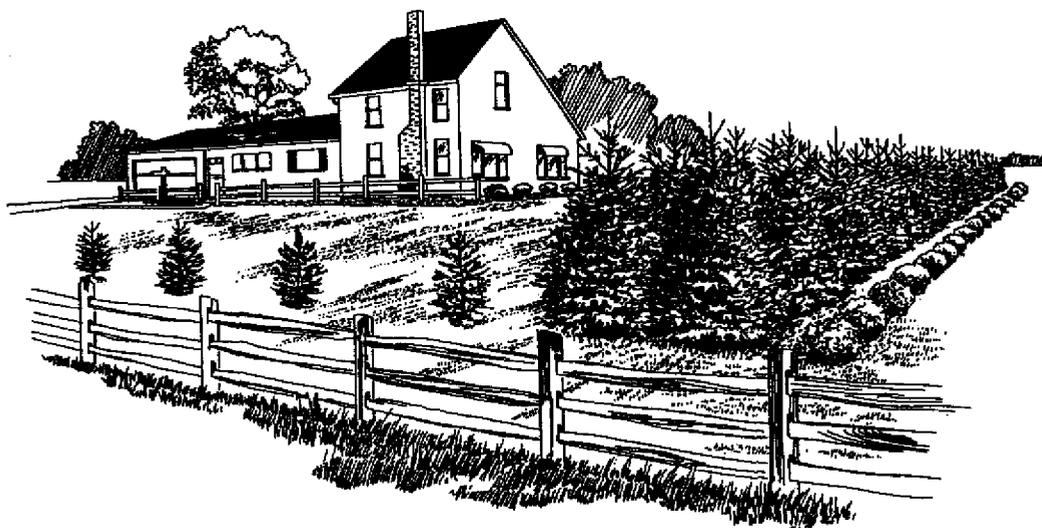
4. Group expenditures and allocate them by land use:

- * General government
- * Health and human services
- * Public Safety
- * Education
- * Public works
- * Recreation

5. Analyze data and calculate ratios.

The Ohio Revised Code mandates very strict methods in which townships and villages may raise and spend money. For instance, villages are allowed to levy income taxes to support general fund expenditures, but townships are prohibited from doing so.

Coordinating information from the county to the village and township is very difficult. The village and township are only responsible for monies they receive from the county for their annual budgets. The county acts as a clearinghouse for disbursing property tax monies to Madison Local School District, the Fire District, Lake Metroparks and several others. Therefore, when the money shows up on the village and townships books, expenditures for those services have already been distributed.



1. Meet with Local Sponsors

The first step in the Madison COCS study was to meet with the study sponsors, Lake County Soil and Water Conservation District and the Lake County Planning Commission. The sponsors introduced AFT to the village and township officials who could provide needed information. Under the direction of those two agencies and Madison officials, land use categories and objectives were established. It was agreed that there would be three land use categories: Residential, Commercial and Industrial, and Farm, Forest and Open Land. Business and industry were grouped together because they only comprised 4 percent of total land use in Madison. The land use categories were defined as follows:

Residential: Property used for dwelling units, **including farm houses**, rental housing and manufactured homes. Apartments and trailer parks are included because the people living in them require the same services as other local residents.

Commercial and Industrial: Property used for business purposes, and property used to create commercial products and utilities.

Farm, Forest and Open Land: Property used for or designated as agricultural land (excluding the house and the home site), Current Agricultural Use Value properties (ORC 5713.30-.38), Forest Tax Law (Forest Reserve) properties (ORC 5713.23-.26) and vacant parcels in excess of five acres.

2. Collect Data

The next step was to gather all relevant financial information. The primary municipal documents available from the village and township were revenue and expenditure year-end reports for fiscal year 1992, zoning and building permits, and police reports. All budgets were analyzed on a fiscal year basis or converted if necessary.

The county auditor's office provided most of the data. Information on disbursement of property tax income, tangible personal property, gasoline, automobile registration and permissive motor vehicle tax money was obtained from the General Accounting Offices, Real Estate Property Division and Data Processing. The Ohio State Bureau of Motor Vehicles and the State Department of Tax Equalization provided additional information on the disbursement of funds to the taxing municipalities.

Once all of the data was collected, the allocation of revenues and expenditures by land use began. Revenues were determined first.

3. Group and Allocate Revenues

Revenues were organized into three categories: Tax Receipts, State Aid and Local Receipts. Information on local receipts and some tax receipts came from the local governments, while the majority of state aid and tax receipt information came from the county and state.

Net property tax collections were compiled on the accumulated tax district cash report. Property taxes were calculated using the Grand List of all properties in Madison Village and Township, the AGRABS (Agricultural Abstract) List of all CAUV properties and the rates of taxation for 1992. Ohio's state classification codes provided code definitions according to use.

Property taxes were the most significant source of revenue generated for both the village and the township. Farm houses were excluded from the amount of revenue generated and applied to the Residential category. This left some properties enrolled in the CAUV program paying very minimal taxes. The county combined agricultural and residential properties when calculating total property tax revenues. Therefore, it was necessary to break out agricultural properties from residential. When that was finished, the result was net property taxes generated by the village and township in fiscal year 1992.

Other tax receipts, such as tangible personal property, gasoline tax, motor vehicle license tax and the permissive motor vehicle license tax were assigned to a land use category according to their application. For example, taxes from liquor permits came from businesses that needed licenses to sell alcohol and, therefore, were applied to the Commercial and Industrial category.¹

After all tax receipts were distributed, other sources of income were allocated on a land use basis. The only state aid that went directly to a taxing entity was the local government fund and the local government revenue assistance fund. State aid to education went directly to the school district, so it was not considered a direct revenue to the village or township.

Local receipts were the last category of revenues allocated by land use. In the cases of miscellaneous money, interest and special assessments, a property tax fall-back percentage was used. Other local receipts were assigned according to their application. For example, the village had a line-item for sidewalks. Because sidewalk fees were paid by all homeowners, these revenues were assigned to the Residential category.

Revenues attributed to public water and sewage and cemeteries, were excluded from this project. This was due to the nature of those monies. Each was considered user-fee oriented. If residents wanted to have city water and sewer service, they paid directly for the service. Many township residents had natural water wells and septic systems.



Fall-back percentages were used when no other logical method of distribution could be found. The fall-back percentages were obtained by dividing the amount of property taxes generated by land use category by the total amount of property taxes generated by the taxing district. The fall-back percentages were mainly used to obtain the breakdowns for general government expenditures. Both the village and the township had the following fall-backs:

Residential	68 percent
Commercial and Industrial	28 percent
Farm, Forest and Open Land	4 percent

Summary of Revenues

for Madison Village and Madison Township

Village Revenues, Fiscal Year 1992

	Residential	Commercial & Industrial	Farm, Forest & Open Land	Total
Tax Receipts	\$ 1,156,662	\$ 1,024,036	\$ 49,820	\$ 2,230,518
State Aid		129,796		129,796
Local Receipts	225,280	55,034	6,464	286,778
Total \$	1,381,942	1,208,866	56,284	2,647,092
Total %	52%	46%	2%	100%

Township Revenues, Fiscal Year 1992

	Residential	Commercial & Industrial	Farm, Forest & Open Land	Total
Tax Receipts	\$ 6,819,215	\$ 2,966,265	\$ 431,066	\$ 10,216,546
State Aid		304,261		304,261
Local Receipts	237,793	108,707	12,035	358,535
Total \$	7,057,008	3,379,233	443,101	10,879,342
Total %	65%	31%	4%	100%

4. Group and Allocate Expenditures

Expenditures were more difficult to allocate by land use category than revenues. The seven main classes of expenses were: General Government, County, Public Safety, Health and Human Services, Recreation, Public Works and Education.

Education was classified as a residential expense. Health and Human Services were also classified as a residential expense. However, to be accurate, the money allocated for the General Health District was broken down according to the services it rendered. For instance, GHD not only provided community public health services but also environmental health services, which were charged to the Farm, Forest and Open Land category.

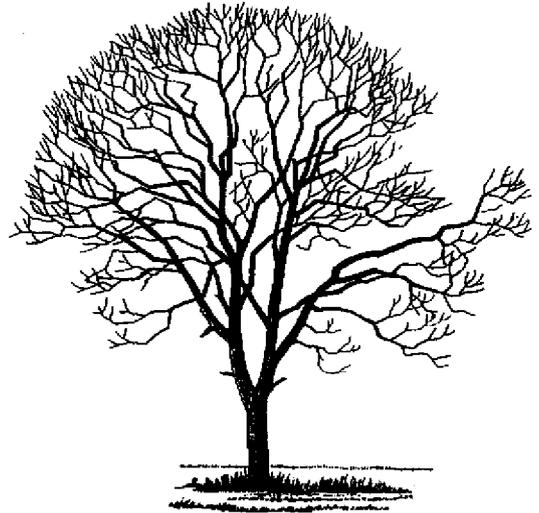
The General Government category was comprised mainly of the general operating costs of the village and township, respectively, and the costs of maintenance and repairs for each of their buildings and sites. It also included the purchase of equipment, supplies, miscellaneous expenditures and site improvements. Operating costs and legal and auditor's fees were allocated by the property tax fall-back percentage.

Expenditures withheld by the county from property taxes were obtained from the disbursement sheets. They were broken down into several categories. These included Madison Local School District, Auburn Joint Vocational School, Lakeland Community College and the Lake County Finance District. These were grouped together, classified as Education and allocated to Residential.

The county also received money for its General Fund for Mental Retardation, Mental Health, Children's Services, Forensic Lab and Narcotics. Health and human services were classified as Residential. Narcotics and the forensic lab were added to the public safety category and also attributed to Residential.

Other expenditures withheld by the county included the Madison Fire District, Lake Metroparks and the amount of monies the village and the township received for their general fund, police, roads and bridges and debt service.

Lake Metroparks contribute to the quality of life in Madison, but measuring that intrinsic value was not possible in this study. Lake Metroparks is a quasi-governmental agency that is responsible for the maintenance and upkeep of park facilities for more than 1,000 acres of land in Madison. Due to its tax-exempt status, Metropark's land provided no property tax revenues, but its operating budget was responsible for many new park facilities. However, for the purpose of this study, it can only be viewed as a direct expenditure from property taxes, which was placed in the Recreation category of expenditures and allocated to the Residential category.



The Public Safety group included police, fire, emergency medical service, civil defense and the county sheriff. The breakdown of police was done after interviews with each chief and research into incident and year-end reports. The fire district was broken down after interviews with the chief and clerk, and after deciphering the approximate percentage of the budget allocated to fire and to emergency medical services. How much time or money the county sheriff actually spent in Madison was unclear, but it is important to note that Madison Township is the only township in Lake County with its own police force.

With the aid of the Lake County Planning Commission, road mileage was assessed by land use to determine the cost of maintenance categorized as public works. Also taken into effect was the cost of the materials necessary to resurface and repair those roads. The township administrator indicated that all roads were resurfaced on a 10-to-15 year cycle, if funds were available. He also indicated that since the materials on a highly traveled road had to last as long as those of a less traveled road, they had to be of higher quality and, therefore, more expensive.

Madison Village paid the township a portion of their property and tangible personal property taxes. This was done because it is still a part of the township, and village residents vote for township trustees. The money was allocated as a Residential expense.

Summary of Expenditures

for Madison Village and Madison Township

Village Expenditures, Fiscal Year 1992

	Residential	Commercial & Industrial	Farm, Forest & Open Land	Total
Education	\$ 1,143,572	\$	\$	\$1,143,572
General Government	183,333	81,603	9,676	274,612
County	36,378	14,018	2,003	52,399
Public Safety	350,882	85,824	3,622	440,328
Township	25,068			25,068
Health & Human Services	113,247	480	69	113,796
MetroParks	53,186			53,186
Public Works	409,009	57,638	6,130	472,777
Total \$	2,314,675	239,563	21,500	2,575,738
Total %	90%	9%	1%	100%

Expenditures FY '92 Township

	Residential	Commercial & Industrial	Farm, Forest & Open Land	Total
Education	\$5,986,904	\$	\$	\$5,986,904
General Government	649,935	266,187	38,027	954,149
County	173,528	66,868	9,553	249,949
Public Safety	1,378,643	463,003	15,515	1,857,161
Health & Human Services	610,784	4,781	683	616,248
Recreation	317,080			317,080
Public Works	791,144	58,058	70,256	919,458
Total \$	9,908,018	858,897	134,034	10,900,949
Total %	91%	8%	1%	100%

The following is a breakdown of the village and township's budgets according to the general categories of revenues and expenditures:

REVENUES			
Village		Township	
Tax Receipts:		Tax Receipts:	
Income Tax	15%	Manufactured Homes	3%
Property Tax	52%	Property Tax	80%
Tangible Personal	11%	Tangible Personal	5%
Estate Tax	0%	Estate Tax	1%
Liquor Tax	0%	Liquor Tax	0%
Gasoline Tax	2%	Gasoline Tax	0%
Motor Vehicle Tax	3%	Motor Vehicle Tax	3%
Permissive Tax	1%	Permissive Tax	2%
Telemedia Tax	0%		
Total Tax Receipts	84%	Total Tax Receipts	94%
Total State Aid	5%	Total State Aid	3%
Total Local Receipts	11%	Total Local Receipts	3%

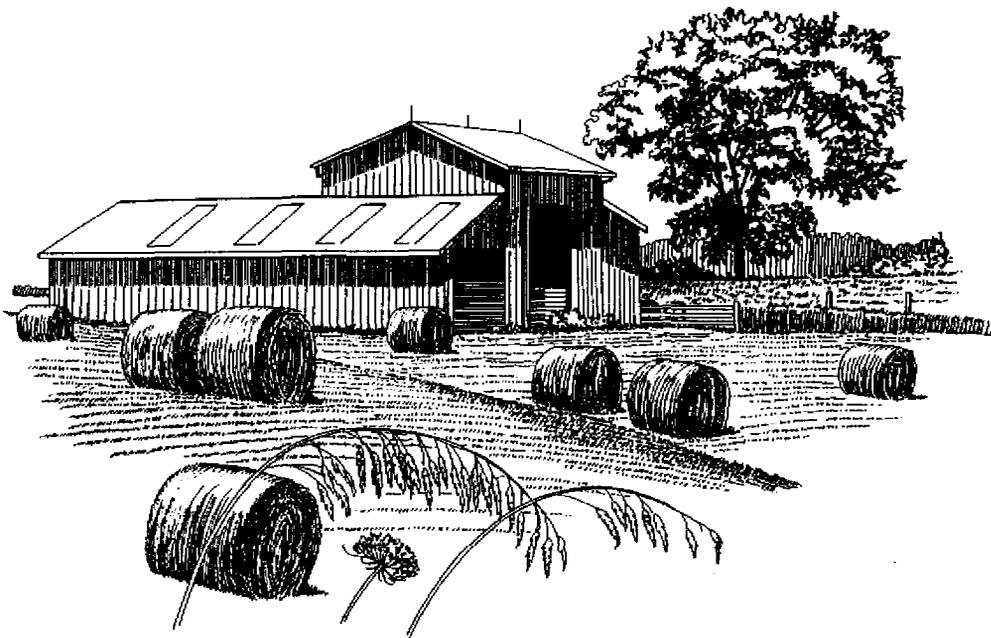
EXPENDITURES

Village		Township	
Education	44%	Education	55%
General Gov't	11%	General Gov't	9%
County	2%	County	2%
Public Safety	17%	Public Safety	17%
Health/Human Svc.	4%	Health/Human Svc.	6%
Lake Metroparks	2%	Recreation	3%
Public Works	18%	Public Works	28%

This breakdown gives details of revenue sources and how village and township money was spent. Each category shows approximately the same results, barring public works expenditures. The township obviously generated a greater amount of property tax income, whereas the village generated more revenues from an income tax and from tangible personal property. (Please refer to the appendix for a more detailed account of the logic and distributions of revenues and expenditures.)

5. Analyze Data and Compute Ratios

Once the revenues and expenditures were allocated according to land use, ratios were computed to show for every dollar how much it cost to serve each land use sector. The findings are outlined in the following section.





Findings

The Lake County COCS findings were consistent with those of AFT's previous studies. The demand for residential services far outweighed the income residential taxes raised. The Commercial and Industrial and Farm, Forest and Open Land categories showed a positive balance, as was expected. Farm, Forest and Open Land, like Commercial and Industrial, created a surplus that helped maintain the financial equilibrium of both the village and the township.

The village's residential expenditures exceeded its residential revenues by \$932,733, creating a ratio of \$1 : \$1.67. For every dollar of revenue that was generated, and additional 67 cents was necessary to satisfy the demand for community services. The township's residential expenditures exceeded its revenues by \$2,851,010, creating a ratio of \$1 : \$1.40.

Commercial and Industrial ratios indicated that for every dollar of revenue generated, it cost 20 cents in the village and 25 cents in the township to provide public services. Major expenditures for this category were public works and police and fire protection.

Finally, Farm, Forest, and Open Land, although not a large revenue generator, only cost 38 cents in the village and 30 cents in the township. It is important to note that most of the agricultural properties in Madison were either enrolled in the Current Agricultural Use Value program or the Forest Reserve program. Therefore, when the tax value of the house and home site was taken off the parcel, very little revenue was left to be attributed to the Farm, Forest and Open Land category. (The home site, usually one acre, is the land the house is built upon and directly adjacent.)

Summary of Revenues & Expenditures by Land Use Category

Village	Revenues	Expenditures	Balance	Ratio
Residential	\$1,381,942	\$2,314,675	\$(932,733)	1: 1.67
Commercial/Industrial	1,208,866	239,563	969,303	1: .20
Farm, Forest & Open Land	56,284	21,500	34,784	1: .38
Total \$	2,647,092	2,575,738	* 71,354	

Township	Revenues	Expenditures	Balance	Ratio
Residential	\$7,057,008	\$9,908,018	(2,851,010)	1: 1.40
Commercial/Industrial	3,379,233	858,897	2,520,336	1: .25
Farm, Forest & Open Land	443,101	134,034	309,067	1: .30
Total \$	10,879,342	10,900,949	* (21,607)	

* According to Generally Accepted Accounting Principles Standards, Madison Township and Village must balance their budgets. However, since figures were obtained at the county level, from revenues generated, not just received, there was a discrepancy. Please refer to the methodology section for a detailed explanation.



Discussion

The Madison Village and Township, Lake County, Ohio study is a snapshot in time that offers local officials a new perspective on the current contributions of major land uses. Although the study is not meant to be predictive nor to judge the intrinsic merit of one land use over another, it does include farmland and forestland, land uses that are usually ignored in other types of fiscal studies. Because Madison is at a turning point, it is hoped that the findings will be useful as the community tries to accommodate growth without succumbing to suburban sprawl. Because communities typically judge the value of resource-based land uses on their gross contribution to the tax base, it is further hoped that the data disclosing the tax benefits of Farm, Forest and Open Lands will be used to support future conservation efforts.

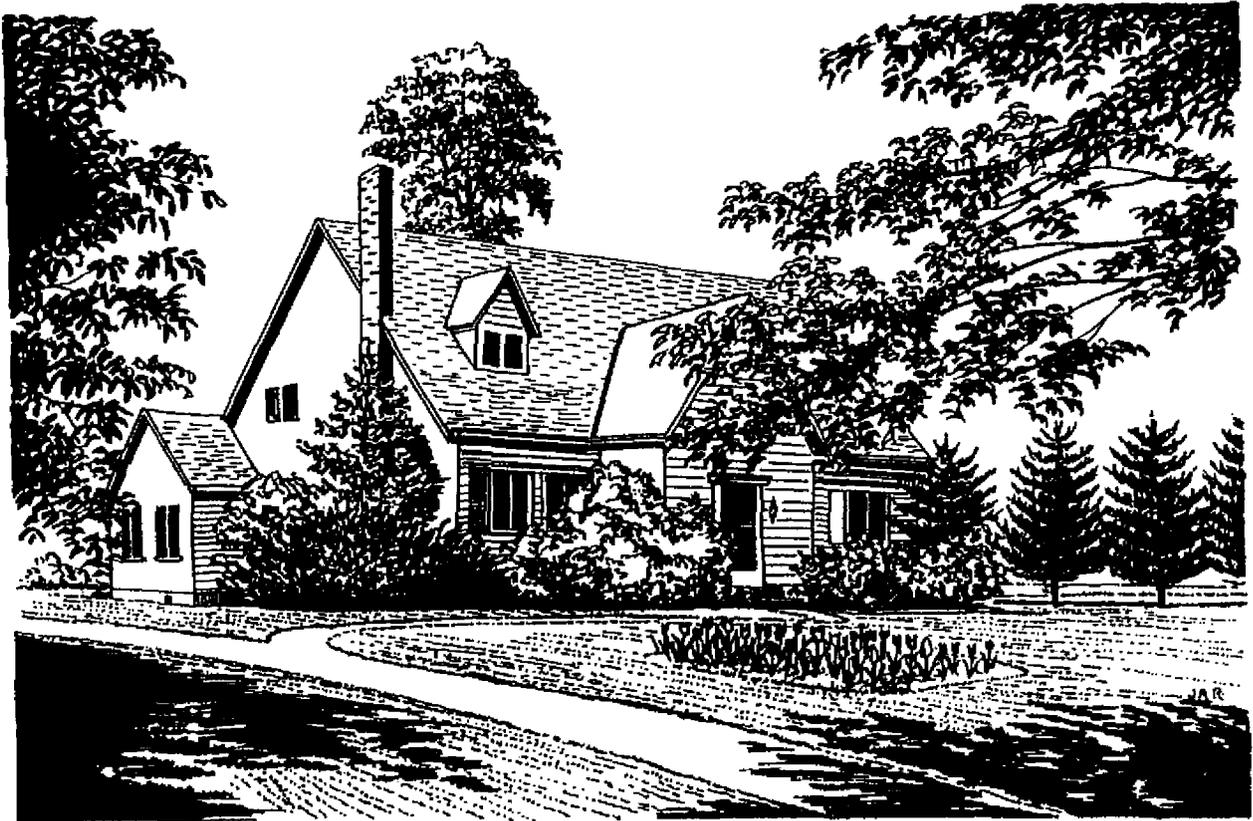
The Madison findings fit the general pattern of previous COCS studies. Residential land use, because of its high demand on public services, cost both the village and the township more than it provided in revenues. Other community land uses helped offset the shortfall. For example, even though farmland in Madison Township only paid \$443,101 in property taxes, its demand on services was so low that it contributed 70 cents on the dollar. As expected, commercial and industrial development also benefited the revenue base and provided needed goods and services.

While proponents of unplanned growth often present farmland and other undeveloped lands as awaiting a "highest and best use," generally considered residential development, the COCS findings show the positive tax benefits of maintaining these lands in their current use. The costs of providing new residents with services such as education, police and fire protection, road maintenance and ultimately public sewer and water, must be evaluated along with the gross contribution to the tax base. By examining these relationships in the present, this study suggests the costs of new residential development would have to be offset further because they are already straining local resources. And while existing commercial and industrial land uses are providing far more in revenues than they demand in services, unplanned growth in these areas may not solve the fiscal imbalance. If new commercial and industrial development does not meet the needs of local residents, and does not reflect local skills, values and resources, it is likely to be followed by increased demand for new housing, traffic congestion, pollution and other factors that typically accompany urbanization.

Further, it must be noted the Madison COCS is not a comparison between fiscal management in the village and the township. Their budgets are too different. What the study does show is that farmland and forestlands are a positive tax contributor to both entities and deserve fiscal respect.

Indeed, the findings challenge the notion that development options are always necessary for a community to ensure economic stability and suggest that development should not be judged solely on its gross addition to the tax base. Madison Village and Township residents must consider the net effects of their land use in the present as well in the future.

In so doing, residents and local policy-makers should be encouraged to evaluate the total economic contribution of farmland and forestland. Farmland contributes more than the surplus created from property taxes and includes economic multipliers as commercial uses in its own right. Farming is more than well managed open space; it is an industry that adds to the local employment base and supports a



profusion of other businesses. At the same time, farming is a cost-effective way to maintain rural qualities and protect open space. Significantly, while farmland provides these benefits, many of which are hard to quantify, it also more than pays its way in property taxes.

Yet the threat of conversion cannot be willed away. Inevitably, Madison Village and Township will have to accommodate growth. Thus, the issue is not whether to develop but how, where and why to develop. The challenge is not to fight growth but to protect a working balance between open lands and urban use.

Usually flat and well drained, good farmland is good for other uses. As a result, urban and suburban uses conflict directly with farmland. In addition, because of the assumption that private open lands are best used for some kind of improvement or another, planning and zoning tend to be geared more to an urban environment than to a rural one.

In this context, Madison Village and Township may want to investigate ways to support local agriculture and protect its most valuable farmland resources. Investing in resource-based industries is an investment in infrastructure, just as it is to support other types of businesses that may lack some of the natural amenities that accompany agriculture. The investment also supports a coalition of related interests, such as: wildlife protection, hunting, fishing, recreation, tourism, historic preservation, and floodplain and wetland protection.

All told, although communities grappling with growth often neglect planning for privately owned, permanent open space, given the findings of this study and the other cultural and economic values of agriculture, public farmland protection efforts might prove a valuable long-term investment in both Madison Village and Township.

Local Sources of Information

Madison Village

Actual Revenues and Expenditures, Fiscal Year 1992
Distribution Amounts by Land Use
Division of Taxation, Income Tax Report
Police Year-End Report, 1992
Settlement Distributions-Delinquents Paid, 1992
Statement of Semi-Annual Apportionment of Taxes

Madison Township

Appropriation Status Report, Fiscal Year 1992
Crime Records by National Code
Distribution Amounts by Land Use
Manufactured Homes Distribution Amounts
Police Incident Reports
Receipt Account Status Report, Fiscal Year 1992
Settlement Distributions-Delinquents Paid, 1992
Statement of Semi-Annual Apportionment of Taxes
Township Road Maintenance Map

Other Sources

Accumulated Tax District Cash
Additional Motor Vehicle License Tax Distributions
Agrabs (Agricultural Abstracts) Listing of CAUV Properties
Alternate Local Government Formula
Appropriations - Fire District
Auto Registration Distributions
Cost of Community Services Handbook
"Does Farmland Protection Pay?" COCS for Three Massachusetts Towns
General Health District Annual Report
Grand List
Lake County Business Journal, April 1993
Lake County Comprehensive Annual Financial Report
Lake County Highway Map
Lake Metroparks Comprehensive Annual Financial Report
License Tax Statistics Report
Local Government Revenue Assistance Fund Allocations
Local Government Fund Allocations
Madison Area Comprehensive Development Plan, 1975

Ohio Estate Tax Law
Ohio's Farmland Preservation Act
Ohio Forest Tax Law
Ohio Revised Code
Permissive Tax Codes
Permissive Tax Computation Reports
Population Densities
Property Classification Codes
Rates of Taxation for 1992
Summary of Cash Balances, Receipts and Expenditures-Fire District

Interviews and Contacts

Madison Village

John Sample, Village Administrator
Linda Glanzer, Clerk/Treasurer
Linda Reed, Administrative Assistant
Edward Matty, Police Chief
Tim Behm, Tax Administrator

Madison Township

Phil Blair, Township Administrator
Linda Blankenship, Clerk
Nan-C Dade, Administrative Assistant
Valerie Leitch, Zoning
Rich Svargerko, Police Chief
Karen Kingery, Administrative Assistant
Ned Foley, Township Trustee

Lake County Planning Commission

Dave Gilmer, Director
Jim Barchok, Planning Coordinator

Lake County Soil and Water Conservation District

Tom Franek, Pollution Abatement Specialist

Lake County Auditor's Office

Edward Zupancic, Auditor
Mitchell Sahadi, Chief Deputy Auditor
Linda Beck, Real Estate
Barb Hogya, General Accounting
Joe Dowd, Financial Manager
Lindsay Taylor-Evans, MIS Director
Kim Myers, Data Processing
Janet Frowerk, Group Leader
Lynn Bittinger, Real Estate

Lake County Engineer's Office

Dave Pethel, Planner

Central Collections Agency

Carol Breitenbach, Collections Agent

General Health District

Joel Lucia, Health Commissioner

Board of Education

Edward Szabo, Treasurer

Lake Metroparks

Steve Madewell, Assistant Director, Planning & Natural Resources
Kenneth Kleppel, Division Head of Finance

Ohio State Offices

Edward Oakley, Bureau of Motor Vehicles
Dave Stone, Department of Tax Equalization
Cindy Cummins, Department of Tax Equalization
Dave Alzmyer, Department of Tax Equalization



FORMULAS AND EXAMPLES

Revenues

Property Taxes:

Calculating property taxes was a lengthy process that required the use of the Grand List, AGRABS List, Rates of Taxation, and the general property tax formula:

Assessed property value x gross tax rate x state reduction factor

Rates of Taxation:

Gross Tax Rates for 1992

Village	92.56
Township	100.96

State Reduction Factors for 1992

Village	res/agr	.395141
	comm/ind	.394881
Township	res/agr	.393488
	comm/ind	.355927

Effective Rates for 1992

Village	res/agr	55.985785
	comm/ind	60.18
Township	res/agr	61.233506
	comm/ind	65.03

A) Formulas for excluding the house and home site:

1. Gross Tax on property: This amount can be obtained from the tax bill or by doing the formula using the 35 percent total assessed value.

For example: Total assessed value = \$21,780

$21,780 \times \text{Gross Tax Rate}/1,000 (100.96) = 2,198.91$
 $2,198.91 \times \text{State Reduction Factor } (.393488) = 865.24$
 $2,198.91 - 865.24 = 1333.67$ gross tax on the property

2. Tax on the House: 35 percent Improvement Value = \$9,980
Improvement value obtained from the homestead sheet.

$$\begin{aligned} 9,980 \times .10096 &= 1007.58 \\ 1007.58 \times .393488 &= 396.47 \\ 1007.58 - 396.47 &= 611.11 \text{ tax on the house} \end{aligned}$$

3. Tax on the Homesite: homesite value (12,000) x 35 percent
Homesite value obtained from the agrabs list or from the auditor's computer program.

$$\begin{aligned} 12,000 \times .35 &= 4200 \times .10096 = 424.03 \\ 424.03 \times .393488 &= 166.85 \\ 424.03 - 166.85 &= 257.18 \text{ home site tax value} \end{aligned}$$

In order to break out the house and the home site (land that the house sits on) from the rest of the land, one must add the tax on the house to the tax on the home site.

$$611.11 + 257.18 = 868.29 \text{ dwelling tax}$$

Then take the gross property tax and subtract the dwelling tax from that.

$$1,333.67 - 868.29 = **465.38 \text{ tax on land excluding house and home site}$$

An easy way to check:

Take the total land tax: 35 percent land value (from Grand List) and do the formula.

$$\begin{aligned} 11,800 \times .10096 &= 1191.33 \\ 1,191.33 \times .393488 &= 468.77 \\ 1,191.33 - 468.77 &= 722.56 \end{aligned}$$

Then take the total land tax and subtract it from the home site value.

$$722.56 - 257.18 = **465.38 \text{ tax on land excluding house and home site}$$

B) Formula for CAUV properties:

1. If the property was vacant and enrolled in the CAUV program, it was first assigned a CAUV value.

$$\begin{aligned} 35 \text{ percent Assessed Value} &= \$21,390 \\ \text{CAUV value} &= \$4,460 \end{aligned}$$

$$\begin{aligned} 4,460 \times .10096 &= 450.28 \\ 450.28 \times .393488 &= 177.18 \\ 450.28 - 177.18 &= 273.10 \text{ CAUV tax value} \end{aligned}$$

2. If the property had a house on it and was CAUV, the formula was performed on only the CAUV value of that property. This ensured that only the land enrolled in the program was used, and not the value of the house or home site.

C) Formula for Forest Reserve properties:

1. If the property was vacant and enrolled in the Forest Reserve program, the formula was performed after taking the 100 percent land value, deducting it by 50 percent, and then deducting another 35 percent.

$$\begin{aligned} 100 \text{ percent land value} &= \$6,500 \\ 6,500 \times .50 &= 3,250 & 3,250 \times .35 &= 1,137.50 \\ 1,137.50 \times .10096 &= 114.84 \\ 114.84 \times .393488 &= 45.19 \\ 114.84 - 45.19 &= 69.65 \text{ Forest Reserve tax value} \end{aligned}$$

Vacant properties in excess of five acres were subtracted for their perspective categories and added to Farm, Forest and Open Land. It was very important to remember that the state reduction factors for Commercial and Industrial properties differ from the Agricultural and Residential ones.

Income Tax:

The Central Collections Agency indicated that from the gross revenue of \$395,782, \$73,000 could be attributed to Madison residents who lived in the village and worked in the village, or lived in the village and worked in another city that had an income tax less than 1 percent. Therefore, \$73,000 was attributed to the residential category. Approximately \$100,000 could be attributed to the business paying a net operating tax. The remainder of the money was from other city residents working in the village. Therefore, those monies were considered a Commercial and Industrial revenue.

Tangible Personal Property:

From what the county auditor's office explained about tangible personal property, it is money that was received from taxation on business machinery, equipment, etc. Therefore, the entire sum of that money was contributed to commercial and industrial.

Manufactured Homes:

All of the revenue received in the township for manufactured homes was considered Residential revenue. That included property taxes generated from land the trailers sit on.

Estate Tax:

This information was extremely confidential. The Lake County Probate Court would not give out any information on estate taxes, except that if it was their choice, they would attribute the money to Residential. The village and township clerk agreed with this approach.

Liquor and Telemedia Tax:

Both revenues were attributed to Commercial and Industrial. Liquor permits are sold to businesses so they may sell liquor in their establishments. The telemedia tax is similar to a franchise tax.

Gasoline Tax:

For the village, the gasoline tax was distributed according to the number of vehicles that were registered. There were 2,551 passenger cars and other non-commercial vehicles registered, which is about 94 percent of all vehicles (2,718). Fourteen farm vehicles were registered, constituting approximately half of 1 percent of all vehicles registered. And there were 153 vehicles registered that were commercial in nature, which is about 5.6 percent of all vehicles. This does leave room for error because there is a large number of farm vehicles not registered.

The money the township generated from the gasoline tax is put into a state pool and then distributed evenly among the townships in Ohio. However, since the amount of money was relatively small, it was also distributed using registration figures. There were 12,408 passenger cars and other non-commercial vehicles, which is 96 percent of the total number of cars registered (12,952). There were 45 farm trucks, which is about one third of 1 percent and approximately 3.8 percent commercial vehicles.

Motor Vehicle License Tax:

For the village, the number of vehicles registered was used for the distribution amounts of the license tax.

Once again, the revenues generated by the township are put into a state pool and distributed to each township. However, this money is distributed on the basis of road mileage maintained by the township. The Lake County Planning Commission aided in the calculation of road mileage figures according to land use.

The township was required to maintain 52 total miles:

42.5 miles residential	82 %
9.0 miles agricultural	17 %
.5 miles comm/ind	1 %

Permissive Motor Vehicle Tax:

Both the village and the township's permissive motor vehicle tax money was distributed on the basis of the percentage of road mileage it maintained.

Madison Village must maintain 11 total miles:

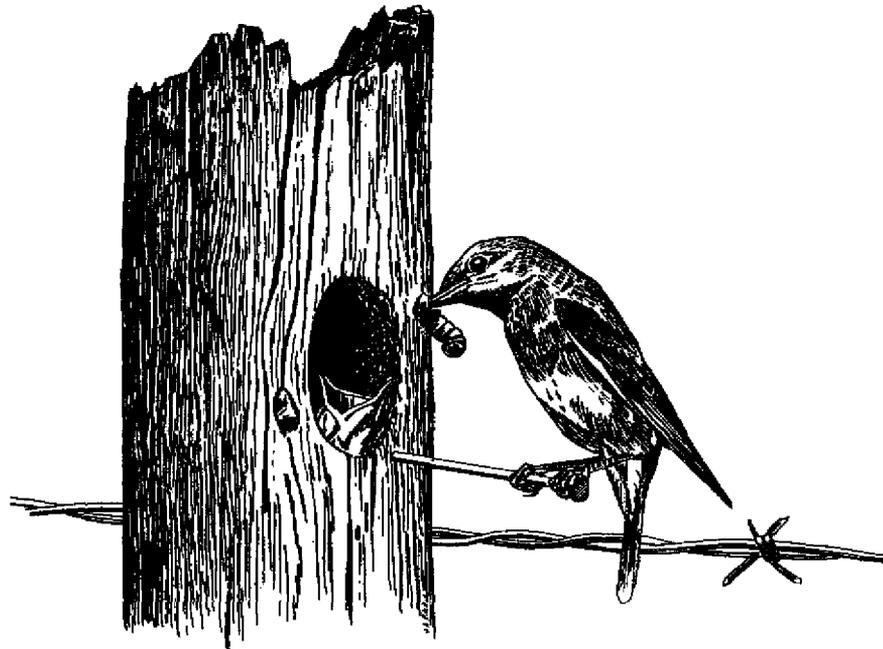
10 miles residential	91 %
0 miles agricultural	0 %
1 mile comm/ind	9 %

State Aid:

The only state aid we discovered for Madison was in the form of the local government revenue assistance fund and the local government fund. The Ohio Revised Code had a very complicated formula used to distribute this money. The money was classified as Commercial and Industrial because it was generated by the corporate franchise tax, financial institutions and dealers in intangibles, and from a small portion of income and sales taxes. The money was earmarked for the village and township's general fund, however 2 percent went to Lake Metroparks and 11 percent went to the county's general fund.

Local Receipts:

Local receipts were obtained from the village and township's year-end reports. Police fines were placed in the Residential category because it was impossible to figure out exactly who incurred the fine. For the village, the administrator explained that any building or zoning permits sold in 1992 were for residential development or additions only. The township had a breakdown of permits purchased by land use category. Fees were allocated based on their purpose. Special assessments, interest and miscellaneous revenues were distributed according to the property tax fall-back percentages.



Expenditures

Education:

Expenditures from property taxes, tangible personal property and manufactured homes for education were distributed at the county level. Using the disbursement sheets, the total amount of expenditures for Madison Local School District, Auburn Joint Vocational School, Lakeland Community College and the Lake County Finance District was allocated to the Residential category.

General Government:

This information was taken directly from the village and township's year-end reports for 1992. This category encompassed mainly the general operating cost of running the municipality. Operating costs, legal fees and auditing fees were allocated by fall-back percentages. The village's Central Collections Agency fees were allocated by the same percentage in which revenues were distributed: 82% percent was commercially generated, and 18 percent was residentially generated. Rentals and leases were allocated according to who was the lessee. For example, the township owns a building in which an agency called Gypsy Moth rents. Since Gypsy Moth's mission is agriculturally related, that amount was allocated to Farm, Forest and Open Land.

County:

Revenue placed into the county general fund came from property taxes, tangible personal property, manufactured homes, the local government and local government revenue assistance funds. The county breakdown of expenditures applied to its general fund was allocated by using the Lake County CAFR. From the total amount generated in the general fund, the breakdown was as follows:

Health and Human Services	2%
Public Works	1%
Judiciary	28%
Public Safety	20%
General Gov't/Miscellaneous	49%

Using these percentages, the village and township's allocations to the county general fund were broken down in the same manner. Health and Human Services was distributed to Residential. In the General Government category, 7 percent was allocated to the Board of Elections, which was then distributed to Residential. The remainder of the money was distributed by fall-back percentage. Judiciary was allocated by fall-back percentage, as well. Public works was added to the money that was generated into the special revenue fund, and will be discussed later. Public safety was broken down because 40 percent of it was for the County Sheriff's department, and the other 60 percent was for civil defense, which was allocated to residential. The county sheriff was applied to Residential, and Commercial and Industrial because it was assumed they were only called for crises.

Public Works:

The money mentioned above for public works (for county and state highways only) was added to the money set aside in a special revenue fund, generated from the motor vehicle license tax, the permissive motor vehicle license tax and the gasoline tax from the village. The Ohio Revised Code mandates that money from the motor vehicle license tax and the gasoline tax must be used to maintain the county engineer's office. Also, money from the permissive motor vehicle license tax, and some from auto registrations must be used to maintain state routes and county roads.

For the Village: \$38,280 was generated from auto registration and was earmarked for state highways. The permissive motor vehicle tax generated \$31,322 and must be used for county and other roads. Finally, money generated through the county general fund was earmarked for the engineer's office.

For state-maintained roads, there were five total miles. There were 3.75 miles that ran through residential areas, and 1.25 that ran through commercial and industrial areas. Therefore, 75 percent was allocated to Residential, while 25 percent was allocated to Commercial and Industrial.

For county-maintained roads, there were 13.85 total miles. There were 10.5 residential miles (76 percent), 1.35 commercial/industrial miles (10 percent), and two agricultural miles (14 percent). Also taken into effect was county intersection reports that indicated which roads had a higher amount of traffic.

For the Township: Money generated for county and state roads totalled \$146,821. Using the Lake County Planning Commission's estimates on mileage by land use, and county traffic studies, the following percentages were revealed:

Residential mileage	70%
Commercial and Industrial mileage	6%
Agricultural mileage	24%

Roads less frequently traveled received less expensive materials for maintenance and resurfacing; and, therefore, cost less to maintain.

From the village and township's budget, the public works section covered village - and township - maintained roads. The breakdowns are as follows:

Madison Village must maintain 11 total miles:

10 miles is residential	91%
0 miles is agricultural	0%
1 mile is commercial and industrial	9%

The township was required to maintain 52 total miles:

42.5 miles is residential	82%
9.0 miles is agricultural	17%
.5 miles is commercial and industrial	1%

Public Safety:

This category included police, fire, EMS, county sheriff, civil defense, county forensics lab and narcotics. Both the village and the township have their own police force.

Police:

The village is in the process of computerizing its incident reports, so most of the information for expenditure allocation came by way of interviews. The police chief provided a year-end report, which did break down types of incidents. From the total budget expenditures of \$278,249, 82 percent was allocated to Residential, 17 percent allocated to Commercial and Industrial, and 1 percent allocated to Farm, Forest and Open Land. The police chief explained that about 30 to 40 man-hours were spent at the Great Lakes Nursery and with other farm-related incidents. From the 12,315 man-hours logged, this only constituted less than 1 percent of their time. Many man-hours were spent with traffic violations and citizen aid. Those calls comprised about 82 percent of total man hours. The remainder of the time was spent on commercial or industrial related calls, such as vandalism, breaking and entering, etc.

The township has its incident reports computerized. After reviewing that information, it was assessed that out of the 13,285 incidents, approximately 73 percent were attributable to residents, 26 percent attributable to commerce or industry and less than 1 percent attributable to farm, forest and open land.

Fire/EMS:

The Madison Fire District is a special tax district that provides the village and township with fire and EMS services. From interviews with the fire chief and the clerk, it was assessed that approximately 70 percent of the incidents were for EMS service. It was impossible for them to break down the cost of each run or the cost of each fire. They are working on answers to those questions themselves. However, 70 percent of the budget was allocated to the EMS service and distributed to Residential and Commercial and Industrial. The remainder of the money was allocated as 80 percent Residential, 18 percent Commercial and Industrial and 2 percent Farm, Forest and Open Land. The chief explained that manufactured homes were very difficult to stop from burning, and the risk to the surrounding homes was very high.



Revenues, Fiscal Year 1992, Madison Village

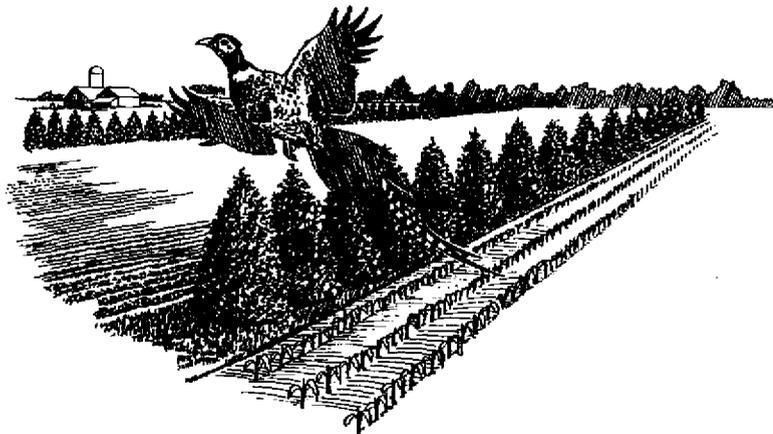
	Residential	Commercial & Industrial	Farm, Forest & Open Land	Total
Tax Receipts				
Income Tax	\$ 73,000	\$ 322,782	\$	\$ 395,782
Property Tax	928,358	396,409	48,981	1,373,748
Tangible Personal Property		283,614		283,614
Estate Tax	10,634			10,634
Liquor Tax		3,362		3,362
Telemedia Tax		6,162		6,162
Gasoline Tax	43,253	2,301	460	46,014
Motor Vehicle Tax	69,092	4,144	379	73,615
Permissive Motor Vehicle	32,325	5,262		37,587
Subtotal \$	1,156,662	1,024,036	49,820	2,230,518
State Aid				
Local Government Revenue Assistance		129,796		129,796
Local Receipts				
Police Fines	29,231			29,231
Permits/Engineering	40,166			40,166
Stratton Place	5,853	70		5,923
Sidewalks	1,276			1,276
Special Assessments	52,967	21,810	3,116	77,893
Interest	2,332	960	137	3,429
Miscellaneous	54,586	22,477	3,211	80,274
Transfers	38,869	9,717		48,586
Subtotal \$	225,280	55,034	6,464	286,778
Grand Total \$	1,381,942	1,208,866	56,284	2,647,092

Expenditures, Fiscal Year 1992, Madison Village

	Residential	Commercial & Industrial	Farm, Forest & Open Land	Total
Education	\$ 1,143,572	\$	\$	\$1,143,572
General Government				
Operating Cost	109,196	44,963	6,423	160,582
Contractors/ Equipment	18,564	7,644	1,092	27,300
Sidewalks	5,821			5,821
Legal Fees	15,148	6,238	891	22,277
Auditor/ DRE	21,586	8,888	1,270	31,744
Mayor's Court Training	113			113
CCA Charges	3,023	13,770		16,793
Stratton Place	9,882	100		9,982
Subtotal \$	183,333	81,603	9,676	274,612
County				
General Government	23,421	8,683	1,240	33,344
Judiciary	12,957	5,335	763	19,055
Subtotal \$	36,378	14,018	2,003	52,399
Public Safety				
Police	236,951	47,320	2,784	287,054
Fire	33,519	7,542	838	41,899
EMS	68,435	29,329		97,765
County Sheriff, Civil Defense	11,977	1,633		13,610
Subtotal \$	350,882	85,824	3,622	440,328
Madison Township	25,068			25,068

Expenditures, Madison Village, continued

Health & Human Services	\$ 113,247	\$ 480	\$ 69	\$ 113,796
Lake MetroParks	53,186			53,186
Public Works				
Operating Cost	44,939	4,444		49,383
Street Lights	29,258	12,047	1,721	43,026
Roads/Maintenance Equipment/ Tools	108,711	10,752		119,463
Contracts (Issue II)	54,253			54,253
Bond and Coupon	4,227	418		4,645
Debt Service	69,126	6,837		75,963
Transfers	45,463	10,369		55,832
County & State Highways	53,032	12,771	4,408	70,211
Subtotal \$	409,009	57,638	6,130	472,777
Grand Total \$	2,314,675	239,563	21,500	2,575,738



Revenues, Fiscal Year 1992, Madison Township

	Residential	Commercial & Industrial	Farm, Forest & Open Land	Total
Tax Receipts				
Property Tax	\$5,943,037	\$2,421,776	\$339,061	\$8,703,874
Estate Tax	81,526			81,526
Manufactured Homes	307,972			307,972
Tangible Personal Property		521,029		521,029
Liquor Tax		16,302		16,302
Gasoline Tax	43,655	1,756	158	45,569
Motor Vehicle Tax	246,807	3,010	51,167	300,984
Permissive Motor Vehicle	196,218	2,392	40,680	239,290
Subtotal \$	6,819,215	2,966,265	431,066	10,216,547
State Aid				
Local Government Revenue Assistance		304,261		304,261
Local Receipts				
Rentals/Leases	1,200		1,100	2,300
Police Fines	46,328			46,328
Fees	2,159	33,310	164	35,633
Special Assessments	49,753	20,487	2,927	73,167
Law Enforcement Trust	5,000			5,000
Interest	35,584	14,652	2,093	52,330
Miscellaneous	97,769	40,258	5,751	143,777
Subtotal \$	237,793	108,707	12,035	358,535
Grand Total \$	7,057,008	3,379,233	443,101	10,879,342

Expenditures, Fiscal Year 1992, Madison Township

	Residential	Commercial & Industrial	Farm, Forest & Open Land	Total
Education	\$5,986,904	\$	\$	\$5,986,904
General Government				
Operating Cost	520,455	214,305	30,615	765,375
Legal Council	22,115	9,106	1,301	32,522
Memorial Day	100			100
Auditor/DRE	103,884	42,776	6,111	152,771
Election Expenses	3,381			3,381
Subtotal \$	649,935	266,187	38,027	954,149
County				
General Government	111,722	41,419	5,917	159,058
Judiciary	61,806	25,449	3,636	90,891
Subtotal \$	173,528	66,868	9,553	249,949
Public Safety				
Police	785,644	261,750	10,067	1,057,462
Fire	176,347	39,678	4,409	220,433
EMS	360,041	154,303		514,344
County Sheriff, Civil Defense	56,611	7,272	1,039	64,922
Subtotal \$	1,378,643	463,003	15,515	1,857,161
Health & Human Services	610,784	4,781	683	616,248
Recreation				
Lake MetroParks	268,883			268,883
Township Parks	48,197			48,197

Expenditures, Madison Township, continued

Subtotal \$	317,080			317,080
Public Works				
Operating Cost	192,055	12,948	10,790	215,792
Township Lights	65,028	7,225		72,253
Roads/ Equipment/ Contracts	431,286	29,076	24,229	484,591
State & County Roads	102,775	8,809	35,237	146,821
Subtotal \$	791,144	58,058	70,256	919,458
Grand Total \$	9,908,018	858,897	134,034	10,900,949



Lake County
SOIL AND WATER
CONSERVATION DISTRICT

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