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FISCAL IMPACTS OF ALTERNATIVE DEVELOPMENT PATTERNS: BROADWATER AND GALLATIN COUNTIES

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This paper details two fiscal impact studies completed in Gallatin and Broadwater Counties in Southwest Montana. In both studies, the findings are clear: farmland and open space provide local governments with a surplus of revenue from property taxes and other revenue sources while residential development drains local goverment coffers.

INTRODUCTION

The Greater Yellowstone Region is one of the fastest growing rural areas in the country. The twenty counties that make up the ecosystem grew in population by over 12% from 1990 to 1996, while individual counties grew by as much as 50%[1]. As staggering as these statistics are, they are becoming commonplace around the Rocky Mountain West. The real impacts of growth however, are not just in the numbers. We are finding that the *pattern* of development may have the largest impact on local communities, economies and environments. While growth rates and statistics may seem irrelevant, rush hour traffic, loss of farmland and rising property taxes remind us of the very real impacts of growth.

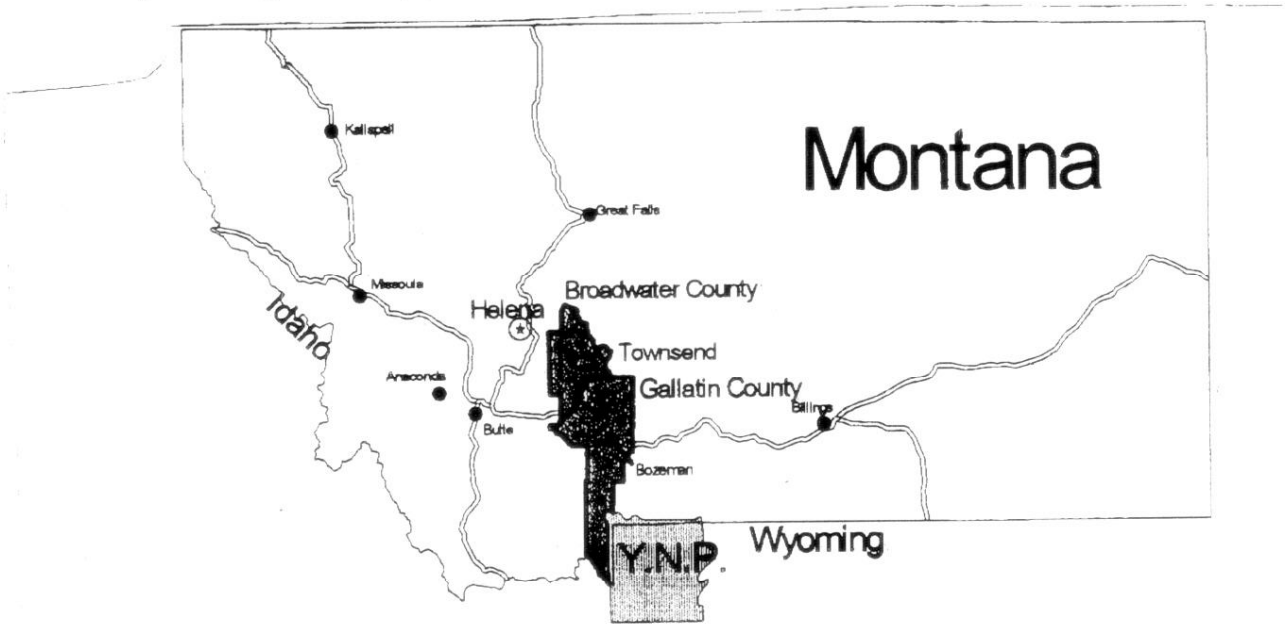
One major impact is clear: poorly planned growth stresses taxpayer and community budgets. This report is the first in a two part series examining the cost implications of alternative growth patterns. This paper details two fiscal impact studies completed in Gallatin and Broadwater Counties in Southwest Montana. In both studies, the findings are clear: farmland and open space provide local governments with a surplus of revenue from property taxes and other revenue sources while residential development drains local government coffers. In fact, studies completed around the country show the same trend: residential land and property demands from $1.02 to $3.25 in facilities and direct services for every dollar contributed in revenue. Agricultural, commercial and industrial land and property on the other hand, only demand on the order of seven to seventy-nine cents from the local government for every dollar provided in tax revenue.

Further, communities that have proportionately more agricultural land making up their tax base also have *lower* tax rates. This is contrary to the conventional thinking that expanding the tax base by converting agricultural land to urban uses lowers taxes. The increase in revenue comes with a cost, the high cost of new services. Agricultural land helps offset the costs of residential services and keeps taxes down. Industrial and commercial property also provide a surplus of revenues, but the associated residential development likely offsets the cost benefits of these land uses.

But the problem is not as simple as farmland versus residential land. Growth is not intrinsically bad and when done properly it can add value to communities without unduly raising taxes. There is an expanding body of research that suggests patterns of development that avoid low density, single use, dispersed development and maintain agricultural land help keep the cost of public facilities and services down. The question Westerners should be asking is not whether to grow, but *how* to grow. To begin an exploration of this question this shortened version of the final report is presented in two parts.[2] The first part describes the fiscal impact studies completed in Gallatin and Broadwater Counties and the second interprets the results and compares the findings with similar studies around the country.

GALLATIN AND BROADWATER COUNTY FINDINGS

A fiscal impact study was completed for Gallatin County in 1996 by the Greater Yellowstone Coalition and the Local Government Center at Montana State University in Bozeman[3]. Broadwater County was chosen for a second study to compare a relatively rural county with more developed Gallatin County. Gallatin County has a population of over 60,000 and is experiencing tremendous growth pressures. Broadwater County's population is only 3,800 and it is still very agricultural. Its small pleasant communities and access to outdoor recreation opportunities make it a desirable place to live. It too is experiencing increasing growth pressures.



This study, commonly known as a "cost of services" study, determines the fiscal impacts of land use on the county government and school districts. This is accomplished by reorganizing local financial data to show the demand for services by different land uses in each county. This study follows a methodology defined by the American Farmland Trust to help communities quantify the difference between annual income and the expense of providing services[4].

The five main steps involved are:

1) Defining land use categories
2) Collecting Data
3) Allocating revenues to land use categories
4) Allocating expenditures to land use categories
5) Calculating land use ratios.

The fiscal impact studies in Southwest Montana described in this report focus only on county government and school district services. Municipal government services and special district services such as fire districts, lighting districts, and capital improvement districts are not included in this analysis. The rest of this section details the five steps listed above.

DEFINING LAND USE CATEGORIES

Four land use categories were identified based on those suggested by the American Farmland Trust. They were adapted for this report using the State of Montana's property tax class-code report and interviews with local officials. The land use categories are defined as follows:

Residential: Property used as dwellings including houses, mobile homes, apartments, and farm houses. All forms of residences are included in this category based on the *type* of services they demand, and no distinction is made between the *amount* of services different kinds of residential developments demand or about the occupations of those who live in them.
Commercial: Property actively used for business purposes other than agricultural or forestry. Includes railroads and utilities based on the state of Montana's property tax class code definitions.
Industrial: Property actively used for wholesale production.
Agricultural and Open Space: Farm and range lands, designated forest lands, open lands, property used for recreational purposes, and unimproved (undeveloped) tract land.

The commercial and industrial land use categories were combined in the Broadwater County study.

DATA COLLECTION

Nearly all of the data collected came from just four sources in each county. They are the County Property Class Code Report, the County Revenue Status Report, County Expenditure Preparation Worksheets and School District Trustees Reports. Other data sources came from interviews with local officials and from the State Department of Revenue.

ALLOCATING REVENUES TO LAND USE CATEGORIES

The heart of this study is the allocation of revenues and expenditures to the land use categories.

Revenues are grouped into six revenue categories that reflect the main sources of revenue for both the county government and school districts. They are:

1) Property Taxes
2) Licenses and Permits
3) Intergovernmental Transfers
4) Charges for Services
5) Fines and Forfeitures
6) Miscellaneous Revenues

Property is classified by use in the Property Class Code Report and was allocated to the appropriate land use category. For example, class 03, code 1101 property is defined as Tillable Irrigated Land and was allocated to the agricultural and open space land use category. Class 04, code 2107 property, defined as Commercial Tract Land was allocated to the commercial land use category. Actual property tax revenues were simply allocated to land use categories at the same proportion as taxable value.

It was expected that Broadwater county, being more rural in character, would have a larger proportion of its tax base in agricultural land and have a smaller proportion in residential land than Gallatin County. However, the commercial and industrial category is proportionally higher in Broadwater County because of several large industrial sites.

All other revenues were allocated to land use categories based on the direct source of the revenue. For example, revenue from poker machine licenses and concealed weapon permits were allocated to the commercial and residential land use categories respectively. Revenue from restaurant inspection charges were allocated to the commercial land use category, and revenue from a fine for prosecuting a home burglary was allocated to the residential land use category.

Schools receive income from the same revenue categories as the county government with a few exceptions. The school districts receive state and county equalization property tax revenues and state aid to transportation. These revenues are generated from property tax state-wide and redistributed to the counties. These revenues were allocated to land use categories at the same proportions as other property tax revenues.

Some intergovernmental transfers such as the corporate license tax were attributable to land use categories and were allocated to the appropriate land use category. However, revenues that both the county and schools receive as transfer payments from state and Federal governments not generated in the county were not considered revenues attributable to a land use category and were left out of this analysis. This was done so that the land use categories were not unfairly biased and so that transfer payments don't mask the contributions of county revenue sources. To balance the omission of transfer revenues, an equal amount of expenditures were left out of the analysis.

Some county revenues, such as miscellaneous and prior period revenues, could not be attributed to a land use category. In these cases, fall-back percentages were used to allocate revenues to land use categories. Fall-back percentages simply allocate revenues to land use categories at the same proportion as taxable value.

Tables 1 and 2 show total revenues for the county government and school districts in Gallatin and Broadwater Counties.

Table 1. Total County and School District Revenues, FY 1994, Gallatin County, MT.

	Ag/Open	Residential	Industrial	Commercial	Total
Property Tax	$692,608	$4,061,193	$179,929	$1,554,663	$6,488,393
Licenses & Permits	$1,856	$521,743	$246	$48,562	$572,407
Intergovernmental	$20,596	$177,768	$50,899	$370,978	$620,241
Charges For Services	$84,080	$3,496,905	$26,702	$319,680	$3,927,367
Fines & Forfeitures	$9,477	$111,482	$3,459	$173,797	$298,215
Miscellaneous	$55,606	$227,700	$15,809	$96,370	$395,485
Education	$2,874,712	$17,332,733	$1,707,294	$8,334,294	$30,249,033
Total	**$3,738,935**	**$25,929,524**	**$1,984,338**	**$10,898,344**	**$42,551,141**
Percent	**8.79%**	**60.94%**	**4.66%**	**25.61%**	

Source: Gallatin County Revenue Status Report, FY 1994; School District Trustees Reports, FY 1994.

Table 2. Total County and School District Revenues, FY 1996, Broadwater County, MT.

	Ag/Open	Residential	Comm/Ind	Total
Property Tax	$178,710	$239,220	$479,059	$896,989
Licenses & Permits	$8,631	$35,907	$5,140	$49,678
Intergovernmental	$12,801	$40,235	$92,425	$145,461
Charges For Services	$13,271	$65,462	$50,368	$129,101
Fines & Forfeitures	$11,949	$13,387	$32,166	$57,502
Miscellaneous	$98,873	$64,483	$266,525	$429,881
Education	$608,051	$621,479	$1,644,114	$2,873,645
Total	**$932,286**	**$1,080,173**	**$2,569,797**	**$4,582,257**
Percent	**20.4%**	**23.6%**	**56.0%**	

Source: Broadwater County Revenue Status Report, FY 1996; School District Trustees Report, FY 1996.

These data show that 60% of all revenues in Gallatin County accrue from residential land while 26%, 9% and 5% accrue from commercial, agricultural and industrial land and property respectively. In Broadwater County, 56% of all revenues come from commercial and industrial property, 24% from residential property, and 20% from agricultural property.

ALLOCATING EXPENDITURES TO LAND USE CATEGORIES

Expenditures are grouped into six expenditure categories reflecting the major public service categories. They are:

1) General Government
2) Public Safety
3) Public Works
4) Social Services
5) Debt Service
6) Education

Expenditure data were taken from county expense summary worksheets and school district trustees reports. Most expenditures are made to provide services directly to certain land use categories.

In these cases the allocation of expenditures is straightforward. For example, health and education services are residential services. Other expenditures were harder to allocate, and in some cases no allocation could be made. For example, general government expenditures for the commissioners could not be allocated to a land use category. In these cases, expenditures were allocated using fall-back percentages that allocate expenditures to land use categories at the same proportion as revenues. In the case of the commissioners, revenues come from the general fund, so the expenditures were allocated to land use categories at the same rate that the general fund revenues were allocated. This insures that no land use category is unfairly biased when no determination can be made.

Public safety services include the sheriff's department, search and rescue, civil defense and the county coroner. The sheriff's department expenditures were allocated to land uses based on a review of incident reports, ticketing data and interviews with sheriffs department officials. Allocations were made after determining what percentage of activities were attributable to each land use category and based on employment figures. For example, a burglary or trespass at a business was considered commercial, domestic abuse was considered residential, and livestock or agricultural equipment damage was considered agricultural. It was found that much of the sheriff's budget is spent protecting homes and businesses.

Public works consist of road, bridge and noxious weed services among others. Neither Gallatin nor Broadwater counties keep records of road use by the categories we are looking for, essentially agricultural vs. commercial vs. residential use. Additionally, some of the road use is attributable to out of county users. For these reasons, no land use allocations could be made for road and bridge expenditures. Half of the noxious weed expenditures were allocated to the agricultural land use category to recognize that agriculture reaps many of the direct benefits of spraying. The remainder were allocated using fall-back percentages to recognize that other land uses benefit as well, and some expenditures are made for education and activities other than spraying.

Social services include health services, social and economic services, and culture and recreation. Most of the social services were allocated to the residential land use category, but some services were allocated to other land use categories. For example, restaurant inspections and some extension agent services were allocated to the commercial and agricultural land use categories respectively. Debt service expenditures were made in Gallatin County to retire bonds for the county rest home and detention center. Tables 3 and 4 detail the total expenditures in Gallatin and Broadwater Counties.

Table 3. Total County and School District Expenditures, FY 1994, Gallatin County, MT.

	Ag/Open	Residential	Industrial	Commercial	Total
General Government	$267,994	$2,527,584	$53,522	$918,167	$3,767,267
Public Safety	$162,095	$1,778,180	$32,084	$524,293	$2,496,652
Public Works	$272,511	$1,169,360	$56,720	$362,380	$1,860,971
Social Services	$206,663	$4,204,305		$96,772	$4,507,740
Debt Service	$9,647	$257,700	$6,208	$35,903	$309,458
Education		$27,587,343			$27,587,343
Total	**$918,910**	**$37,524,472**	**$148,534**	**$1,937,515**	**$40,529,431**
Percent	**2.27%**	**92.59%**	**0.37%**	**4.78%**	

Source: Gallatin County Expenditure Preparation Worksheets, FY 1994; Gallatin County Expense Summaries, FY 1994; Gallatin County School District Trustees Reports, FY 1994.

Table 4. Total County and School District Expenditures, FY 1996, Broadwater Co., MT.

	Ag/Open	Residential	Comm/Ind	Total
General Government	$87,237	$211,100	$275,999	$574,336
Public Safety	$82,295	$149,645	$224,092	$456,032
Public Works	$104,469	$104,357	$268,846	$477,672
Social Services	$18,870	$207,407	$11,826	$238,103
Education		$2,842,836		$2,842,836
Total	**$292,871**	**$3,515,345**	**$780,763**	**$4,588,979**
Percent	**6.38%**	**76.60%**	**17.01%**	

Source: Broadwater County Expense Summaries, FY 1996; School District Trustees Report, FY 1996.

These data show that of all expenditures made to provide county government services and education in Gallatin County, 93% went for residential services, 5% for commercial services, 2% for agricultural services and less than 1% for industrial services. In Broadwater County, 77% went for residential services, 17% for commercial and industrial services and 6% for agricultural services.

CACULATING LAND USE CATEGORIES

The land use ratios are calculated by dividing total expenditures by total revenues. In both Gallatin and Broadwater counties these ratios clearly show that residential land and property does not pay its way while agricultural, commercial and industrial land and property provide the local government with a surplus of revenues. Residential land demands $1.45 and $3.25 in direct services for every dollar contributed in revenue to the county government and school districts in Gallatin and Broadwater Counties respectively. Conversely, agricultural, commercial and industrial land only demands $0.25, $0.18 and $0.07 respectively in Gallatin County and $0.31 and $0.30 for combined in Broadwater County for every dollar provided in revenue to the county government and school districts. Tables 5 shows the land use ratios for Gallatin and Broadwater Counties.

Table 5.

Gallatin County

	Ag/Open	Residential	Industrial	Commercial	Total
Total Revenues	$3,738,935	$25,929,525	$1,984,337	$10,898,344	$42,551,141
Total Expenditures	$918,909	$37,524,472	$148,533	$1,937,515	$40,529,429
Ratio	**$1.00 : 0.25**	**$1.00 : 1.45**	**$1.00 : 0.07**	**$1.00 : 0.18**	

Broadwater County

	Ag/Open	Residential	Comm/Ind	Total
Total Revenues	$932,286	$1,080,173	$2,569,797	$4,582,256
Total Expenditures	$292,872	$3,515,345	$780,764	$4,588,981
Ratio	**$1.00 : 0.31**	**$1.00 : 3.25**	**$1.00 : 0.30**	

INTERPRETING THE RESULTS

These data clearly show that residential land does not "pay its way" while farms and ranches provide a surplus of revenues to the local government. This is simply because most services, like education and health services, are for people. Education is the single most costly service accounting for 62% of total expenditures in Broadwater County. Considering residential property only contributes 24% of total revenues, it is clear that farmland is paying the costs of residential development in Broadwater County.

Many other "cost of services" studies around the country have found the same thing. A recent cost of services study completed in Idaho by the University of Idaho Department of Agricultural Economics and Rural Sociology found that in Canyon County "residential property received an average of $1.08 in services while residential property in Cassia County received an average of $1.19 in services for every $1.00 provided in revenues.[5]" Agricultural and commercial property in those same counties only demanded between 41 and 87 cents on the dollar. A similar study completed in three Utah counties by the Utah State University Economics Department for the Utah Department of Agriculture found that residential development demanded from $1.11 to $1.27 in services for every dollar provided in revenue while farmland and commercial property only demanded from 25 to 99 cents[6].

In every case the findings are the same. Residential property always demands more in services than it provides in revenue... while farmland, commercial and industrial property consistently provide a surplus of revenues.

The American Farmland Trust has completed numerous cost of services studies as well, and even though the ratios vary, in every case the findings are the same[7]. Residential property always demands more in services than it provides in revenue, ranging from $1.02 to $3.25 demanded in services for every dollar contributed in revenue, while farmland, commercial and industrial property consistently provide a surplus of revenues[8].

A second significant finding of these studies is that counties with a higher proportion of their tax base in agricultural land have lower taxes. Gallatin County has nearly 60% of its tax base in residential property meaning high tax revenues. The value of a mill in Gallatin County is nearly ten times the mill value in Broadwater County[9]. Additionally, Gallatin County has lower per capita costs than Broadwater County meaning economies of scale are in effect. It costs nearly double the amount to provide county services for each resident in Broadwater County than in Gallatin County. All this should point to lower taxes in Gallatin County, but the opposite is true[10]!

This is most likely due to two factors. First, Broadwater County still has much of its tax base in agricultural property that off-sets the cost of residential land use. Gallatin County, with more residential land and a higher tax base, has little agricultural land left to subsidize residential services. Second, most new growth in Gallatin County is low density, dispersed development that is more costly to provide services to than compact development.

A study in the state of Connecticut revealed the same pattern: larger more developed areas consistently have higher taxes than rural areas[11]. Cassia County in Idaho has an average tax rate 29% lower than more urban Canyon County[12]. Similarly, the cost of services study in Utah states that agricultural land in rural areas subsidize residential land to a greater extent than in larger areas and when

the scope of the study was expanded out of rural areas, "the degree of subsidization is reduced, sometimes significantly." The conclusion is this: *if Broadwater County loses its agricultural base by converting farmland into residential subdivisions, property taxes will rise.*

However, it is important to note that these fiscal impact studies do not predict the future impact of new growth, or distinguish between different types of growth within each land use category. They simply give a clear picture of the current contributions of existing land uses. Because of this, "cost of service" studies have been criticized for their lack of ability to suggest alternative development options. However, the affect of the pattern of development on the cost of providing local government services is the subject of many studies around the country. The results again are consistent: communities can protect agricultural land and keep taxes down by encouraging the right *pattern* of development.

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For example, the state of New Jersey found that if new growth were planned (compact, mixed use development) rather than following current development trends (low density, dispersed development) the state could save 400 million dollars in municipal and school costs, $740 million in road costs, $440 million in water supply and sewer infrastructure costs, and save 130,000 acres of farmland by the year 2010[13]. Additionally, the American Farmland Trust found that California's Central Valley could save nearly $29 billion by the year 2040, as well as reduce farmland loss by over 2 million acres with efficient compact growth instead of low-density urban sprawl[14].

It follows that if low density dispersed development is more costly than compact development, then towns that don't find ways to curb sprawl will end up with higher taxes. But simply limiting growth, or making it pay its full costs through impact fees, benefit assessments and other creative means of raising revenues may not be effective in producing the desired outcomes. Finding sustainable, efficient ways of dealing with the cost implications of development requires addressing the *pattern of new development*. Ironically, most existing regulations and development trends nearly mandate sprawl. Zoning ordinances, subdivision review processes, federal subsidies and property taxes all influence the choices landowners and communities make about the mix of uses, location, and rate of new development. Like most markets, development too is a governmentally regulated activity. The impacts of present land use regulation upon development patterns will be the subject of a third paper in this series dealing with the costs of development. It is our hope that the series will contribute to a clearer understanding of the cost implications of different development patterns enabling communities to better able to plan for the future.

HOW TO DO A COST OF SERVICES STUDY

Cost of service studies are not difficult to complete. You should expect that it will take one person working full time 2 to 3 months to complete the study in a rural county, though it may take longer in larger counties and cities. The researcher need not be an economist or accountant, but the ability to organize large amounts of data and work with local elected officials and staff is essential. The Greater Yellowstone Coalition has put together a packet of information including the American Farmland Trust methodology[15] and copies of fiscal impact studies completed in Utah, Idaho and Montana that will help communities complete their own study.

This section of the report details the five steps involved in a cost of services study in more detail.

1) Defining Land Use Categories

It is very important in defining the land use categories that you first consult local officials. They are the leading authorities on the unique character of your community and can give you insight into the existing characteristics and mix of land uses as well as growth pressures and economic and social changes facing the county. In general, four land use categories have been defined for cost of service studies. The land use categories are defined earlier in this report.

In rural counties you may not need to distinguish between commercial and industrial property as was done in Broadwater County. In combining the two categories none of the other definitions should change.

2) Collecting Data

Most of the Data you will need comes from just a few sources. They are:

County Property Class Code Report.

This report details the taxable value of all property by use. The report is broken down by school district and each different type of property is listed by class and code. The report is available from the county assessors office. In Wyoming it is called the Abstract of Taxable Value. A copy of the Property Class Codes that describe the type of property included in each class and code will be helpful in allocating revenues to the land uses.

Property is generally divided into real, personal and motor vehicle property. Real property is mainly land and buildings (improvements), and personal property is generally property and equipment used for business, farm or industrial use. Livestock, office furniture and mining machinery are all personal property. You will simply be rearranging the States codes to fit the land use categories you have defined. The only change this report made was with apartment buildings. The State classifies them as commercial property and this report classifies them as residential property based on the type of services they require. A property class code report recap detailing all rental units in the commercial category was required from the State Department of Revenue to break out commercial apartments.

County Revenue Status Report

This report is a detailed statement of actual revenue at year end for each county fund. This

revenue categories will include property taxes, licenses and permits, intergovernmental revenues, charges for services, fines and forfeitures and miscellaneous revenues among others. In Wyoming, simply ask for the detailed statement of revenues for the fiscal year in question. This report is available from the county treasurers office or from the county fiscal officer. The General fund is generally the largest fund for the county. Other funds include the Road, Fair, Weed, and Poor funds. This report will likely detail revenues for special districts as well. Special districts are taxing districts that provide special services within that district. All fire services in Montana are provided through special districts.

County Expenditure Preparation Worksheets

This report details the expenditures for all the same funds listed in the Revenue Status Report. Some of the main expenditure categories will include salary and wages, supplies and materials and insurance along with specific expenditures like road repairs and spraying for noxious weeds. In Wyoming, the budget for the current fiscal year will have actual expenditures for the previous fiscal year. This report is available from the county treasurers office or from the county fiscal officer.

Often the specific line item expenditure is allocated to land use categories by determining the appropriate allocation for the entire fund balance. For example, expenditures made for oil and gas by the sheriff's department are allocated after determining the appropriate allocation of the total budget. This was accomplished by looking at ticketing data, employment figures, incident reports and interviews with sheriff's department staff.

School District Trustees Reports

There will be a Trustees Report for each school district in the county that details both the revenue and expenditures for that district. The revenues are generally organized into the same categories as the county government funds. Some differences will include state and county equalization funds, county retirement distributions and state transportation aid. The Trustees Reports are available from the county superintendent of schools.

Other Data Sources

You will need to seek other sources of data in situations when the local government does not keep their data in the fashion you need it. This will happen often. Other times, the only source will be the local officials themselves. For example, in Gallatin County there were no records at the County Airport of commercial and private flights. However, the Airport Board was able to give a very accurate estimate of the proportion of flights that fit into those categories and these data were used to allocate expenditures. Appendix A lists all data sources and interview contacts in these studies and will give you an idea of the types of information you may need.

Allocating Revenues to Land Use Categories

This step is fairly straightforward. Most revenues will come from a clearly identifiable source, like property taxes, charges for services, fines and forfeitures and intergovernmental transfers. The main things to remember are: transfer revenues not generated in the county or city you are studying should not be allocated to a land use category; use fall back percentages for any revenue that is generated in the county that you can not identify the source of; be persistent in tracking down the sources of revenues. You should be able to get a very accurate idea of which land uses are providing revenues to the local government. The body of this report and the American Farmland Trust methodology will help you in allocating specific revenues. Unfortunately, there are just too many of them to list here. Each county will have different revenues sources, and even the same

revenue sources will need to be allocated to land use categories in different proportions.

Allocating Expenditures to Land Use Categories

This is the most difficult part of the study. And again, there are simply too many expenditures to list them all. However, there are several guidelines to follow: make sure to subtract all non-county intergovernmental transfer revenues from the expenditures as well; use fall-back percentages that allocate expenditures at the same proportion as revenues when no determination can be made; only allocate expenditures where direct services are provided and do not get sidetracked into trying to determine benefits.

This last point is very important. Many arguments can be made that even though a service like education is provided to private citizens, business will benefit. If we really believe that education has benefits for other land uses, than the community should agree to subsidize this service. But this does not change the essential nature of the service or who it is provided to.

Again, this report and the AFT methodology should aid you in making allocations to the land use categories. Another useful report is an earlier version of the Gallatin County study published by the Local Government Center at Montana State University.

Endnotes

[1] US Bureau of Census, 1997.

[3] Mark Haggerty, *The Fiscal Impacts of Different Land Uses on County and School District Services In Gallatin County, Montana*. Local Government Center at Montana State University, 1996.

[4] The American Farmland Trust. *Is Farmland Protection a Community Investment? How to do a Cost of Services Study*. 1993.

[5] Martha Hartmans and Neil Meyer. *Financing Services for Residential, Commercial, and Agricultural Parcels: The Cases of Canyon and Cassia Counties*. A.E. Extension Series No. 96-13, University of Idaho College of Agriculture, January 1997.

[6] Donald L Snyder and Gary Ferguson. *Cost of Community Services Study: Cache, Sevier, and Utah Counties*. ERI Study Paper #94-19. Economics Department, Utah State University, Logan, Utah. December 1994.

[7] The American Farmland Trust, *The Cost of Community Services in Deerfield, Agawam and Gill, Massachusetts*. 1991. *Farmland and the Tax Bill: The Cost of Community Services in Three Minnesota Cities*. Cornell Cooperative Extension; American Farmland Trust, *Cost of Community Services Study: Dutchess County*. 1989. See Also, *Steven Miller, The Economic Benefits of Open Space*. 1992 and Darryl F. Caputo, *Open Space Pays, the Socioenvironomics of Open Space Preservation*, New Jersey Conservation Foundation.

[8] For a more thorough examination of the literature see; Luther Propst and Mary Schmid, *The Fiscal and Economic Impacts of Local Conservation and Community Development Measures, A Review of the Literature*. Commissioned by the Greater Yellowstone Coalition, Feb. 1993.

[9] A mill is a unit of taxable value equal to one one thousandth of the total taxable value of the taxing unit. Therefore, a high mill value is indicative of high taxable value, or a large tax base, in the county.

[10] The Local Government Center, Montana State University, *Montana Local Government Profiles Fiscal Year 1996*.

[11] The Trust for Public Land, *The Effects of Development and Land Conservation on Property Taxes in Connecticut Towns*. May, 1995.

[12] Idaho State Tax Commission 1995 Annual Report, *1995 Average Property Tax Rates*.

[13] Rutgers University Center for Urban Policy Research. *Impact Assessment of the New Jersey Interim State Development and Redevelopment Plan*. February 1992.

[14] The American Farmland Trust. *Alternatives for Future Urban Growth in California's Central Valley: The Bottom Line for Agriculture and Taxpayers*. October 1995.

[15] American Farmland Trust, *Is Farmland Protection a Community Investment? How To Do a Cost of Services Study*. 1993.