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# Rural Roads and Bridges: Financing Local Roads and Bridges in Rural Areas

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# **Rural Roads and Bridges: Financing Local Roads and Bridges in Rural Areas**

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## Introduction

The demands on local roads and bridges in many rural areas have changed as the traffic has shifted from being almost exclusively farm-related to serving many non-farm residents who live on the outskirts of a city or who are dependent on employment in a neighboring center. There is some evidence that significant improvements have been made to roads and bridges, although, in general, there are major concerns about quality, in regards to bridges especially, and the ability of local governments to finance needed improvements.

Many changes have occurred in the system used to finance local transportation facilities. The elimination of General Revenue Sharing (GRS) in 1987 directly cut the amount of resources available to support local roads and bridges, because GRS funds were often spent on one-time projects, including capital needs. While the level of funding in the waning GRS years was not high, it nevertheless represented a ready revenue source for these efforts.

A second major funding change arose with passage of the Intermodal Surface Transportation Efficiency Act (ISTEA) of 1991. This legislation revolutionized the funding arrangements, eliminating specific highway designations such as “Federal Aid Secondary,” which included many roads managed by counties, and replacing the previous categories with “Highways of National Significance” and a “Surface Transportation Program.” While safeguards were initiated to preserve funding for some of the off-system roads, local officials have concerns about what expenditures can be counted as rural under the revised system.

The ISTEA legislation also placed rural highway needs in direct competition with those in urban areas and with other transportation modes. In fact, one of ISTEA’s stated purposes is to enable local administrators, especially in urban areas, to finance a variety of transportation needs, including mass transit and highways, all within the context of trying to improve the environment in these areas. In addition, ISTEA funds can be used to promote economic development and for other purposes. This expansion in uses for which the funds can be spent creates uncertainty for local road administrators who were accustomed to a dedicated source of available revenues.

This report examines the arrangements used by counties and towns to finance local roads and bridges and compares current patterns with those recorded during the 1980s. Topics include reliance on various revenue sources, a comparison of change in expenditures and inflation, and the perceptions of local road administrations regarding the adequacy of expected future funding. Often, there is little question regarding the work to be done; rather, the difficulty arises over how to finance the projects. There is a significant need for detailed information regarding revenue and expenditure patterns for roads and bridges. Two basic data sources exist. First, the annual *Highway Statistics* volume, published by the Federal Highway Administration (FHWA) of the U.S. Department of Transportation, contains information by State on a multitude of revenue and expenditure topics. This information, based on a survey of State highway officials, does not permit much of a breakout by population size; however, it does permit a comparison of urban versus rural, in some instances.

Second, the U.S. Bureau of the Census, Governments Division, collects detailed revenue and spending data for all of the governments in the United States. This *Census of Governments* document is published at 5- year intervals, the most recent being 1992, although that data did not become available until 1996. This information provides great detail but suffers from the long time lapse between collection and publication. Information from both sources is used in this report.

A third data source was obtained from a mail survey of county and town highway officials in 1994. The questionnaire used in the 1994 survey is comparable to that used in 1987, so a direct comparison of responses has been made in this report. The questionnaire delved into topics not covered in the other data sources and attempted to obtain information on the attitudes of local administrators about the expected adequacy of future revenue sources.<sup>1</sup>

## Adequacy of Revenue

The level of funding for roads and bridges that are not on the Federal system is determined by local officials through an effort to balance traffic demands with taxes that residents are willing to pay. It is not uncommon to find two units of government spending substantially different amounts on roads and bridges, even when socioeconomic conditions seem comparable. These differences can sometimes be explained by taxpayer preferences for service quality, by resistance to property tax increases, and by the basic philosophy of the governing board.

When asked about adequacy of revenues for local roads and bridges, county respondents to the survey generally reported that funds were inadequate (**table 1**). Nationwide, 69.5 percent reported that funds were inadequate, with 19.8 percent reporting that services had been reduced from the previous year. A greater share of nonmetro respondents (51.2 percent) than metro respondents (46.1 percent) reported inadequate funding, but without reduction in services. There was virtually no difference between the two types of counties in the proportion reporting service reductions. Differences between rural areas and suburban and metro areas most likely reflect the more stagnant economies in the former and a tendency for growth in the latter.

A more significant contrast exists within towns where 40.6 percent of respondents reported inadequate funding. Based on survey responses, however, it does not appear that towns have reduced services as much as counties have. Likewise, it appears that towns with more than 10,000 residents are in markedly better financial position than smaller towns. These differences seem reasonable since the small towns are probably located in more remote rural areas with slower growing, or even stagnating, economies.

At the other extreme, more than one-quarter (28.1 percent) of responding county officials reported adequate revenues but without the possibility of increasing the level of service. Once again, relatively little difference is found between metro and nonmetro respondents. Given the relatively slow increases, or even declines, in pop-

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<sup>1</sup> Throughout this report, counties and towns/townships will be included. For presentation purposes, town/townships will be considered as towns, recognizing that they have different functions and powers.

ulation in nonmetro areas, it is unlikely that expansions in service levels are as much a problem in rural areas as in metro areas.

When compared with a similar question on the 1987 survey, there seems to have been a slight worsening in the fiscal condition in county governments. In that survey, a higher percentage of respondents reported that funds were inadequate but that services had not yet been reduced; this was true in both metro and nonmetro county groups. Relatively little difference was found in terms of the proportion of counties in which services had been reduced in 1994 compared with 1987.

## Revenue Patterns

The types of revenues with which counties and towns can finance roads and bridges differ by State but, in general, property taxes, State aid through a sharing of a tax on motor fuels, and limited Federal aid through the Federal Highway Bridge Replacement and Rehabilitation Program are the most common revenue instruments. In some instances, States allow local governments to impose a local tax on motor fuels, but these tend to be concentrated in relatively few States.

The revenue comparisons in the report are made at two levels. First, revenues are divided by population to adjust for size. These per capita comparisons can then be compared through time. Second, the relative importance of revenues, based on the percentage distribution in the total revenue picture, is used to determine changes in revenue patterns in recent years.

**Per Capita Revenues.** In 1992, counties collected an average of \$656.30 per resident from a variety of revenue sources (**table 2**). This represents a doubling from 10 years earlier when counties collected an average of \$326.89 per resident. During this period, however, prices increased 37 percent which means that, in constant dollars, the revenues collected by counties increased 46.5 percent, so that counties collected an average of \$478.97 per resident in 1982 dollars. Revenue growth was slightly higher during the late 1980s and early 1990s than between 1982 and 1987. These revenues, of course, were spent on diverse county services, not solely on roads and bridges. In fact, the fundability of revenues makes tracing revenues into expenditures difficult. Property taxes collected for the general fund, for instance, can be spent on roads and bridges, law enforcement, or any number of other activities; however, some property taxes are dedicated to specific purposes such as roads and bridges and can be traced directly.

The major change in revenues between 1982 and 1992 was in the level of Federal aid received by counties. At the beginning of the period, counties received an average of \$21.57 per resident, but by 1992, the revenues had declined to \$14.96 per resident, a 30.6-percent decline in nominal dollars. When the effects of inflation are removed, the decline is even greater, 49.4 percent. Thus, in 1992, counties received Federal revenues which provided only about one-half the purchasing power such revenues had provided a decade earlier. A major factor explaining this trend was the elimination of General Revenue Sharing.

In making comparisons of revenues through time, it is important to keep in mind the

Table 1. Revenue Picture for Roads and Bridges, 1994

Question	Counties by Type			Towns by Population Size			
	All Counties	Metro	Nonmetro	All Towns	Less Than 2,500	2,500-10,000	Greater Than 10,000
	(percent)			(percent)			
More Than Adequate Revenue, No Foreseeable Problems	2.4	2.6	2.0	9.5	9.3	9.2	17.4
Adequate Revenue but No Room for Service Increases	28.1	31.1	27.1	49.9	51.0	41.1	50.7
Indequate Funds but Not Cutting Services Yet	49.7	46.1	51.2	33.6	33.0	43.0	21.7
Inadequate Funds and Services Have Been Reduced from Last Year	19.8	20.2	19.7	7.0	6.8	6.8	10.1

Source: IIRA/NACo/NACE Survey of County Officials, 1994 and NATAT Survey of Town and Township Highway Officials, 1994.



**Table 2. Per Capita Sources of Revenues for Counties**

<i>Expenditure Functions</i>	<i>1982</i>	<i>1987</i>	<i>1992</i>	<i>Pct. Chg. 1982-1987</i>	<i>Pct. Chg. 1987-1992</i>	<i>Pct. Chg. 1982-1992</i>
		<i>(dollar)</i>			<i>(percent)</i>	
General Revenue						
Current	\$326.89	\$464.40	656.30	42.1	41.3	100.8
Constant	326.89	390.52	478.97	19.5	22.7	46.5
Intergovernmental Revenue						
Current	133.40	164.92	237.80	23.6	44.2	78.3
Constant	133.40	138.69	173.55	4.0	25.1	30.1
State Government						
Current	106.63	140.16	211.08	31.4	50.6	98.0
Constant	106.63	117.86	154.05	10.5	30.7	44.5
Federal Government						
Current	21.57	17.38	14.96	-19.4	-13.9	-30.6
Constant	21.57	14.61	10.92	-32.3	-25.3	-49.4
General Revenue from Own Sources						
Current	193.50	299.47	418.50	54.8	39.7	116.3
Constant	193.50	251.83	305.42	30.1	21.3	57.8
Taxes						
Current	112.49	171.46	244.69	52.4	42.7	117.5
Constant	112.49	144.19	178.58	28.2	23.9	58.8
Property Taxes						
Current	—	124.70	179.99	—	44.3	—
Constant	—	104.86	131.36	—	25.3	—
Other Taxes						
Current	—	46.76	64.71	—	38.4	—
Constant	—	39.32	47.22	—	20.1	—
Charges and Miscellaneous						
Current	81.06	128.01	173.80	57.9	35.8	114.4
Constant	81.06	107.65	126.84	32.8	17.8	56.5
Implicit Price Deflator						
State and Local (1982=100.0)	100.0	118.9	137.0			
		<i>(percent)</i>				
Reliance on Revenues						
General Revenue	100.0	100.0				
Intergovernmental Revenue	40.8	35.5	36.2			
State Government	32.6	30.2	32.2			
Federal Government	6.6	3.7	2.3			
General Revenue from Own Sources	59.2	64.5	63.8			
Taxes	34.4	36.9	37.3			
Property Taxes	—	26.9	27.4			
Other Taxes	—	10.1	9.9			
Charges and Miscellaneous	24.8	27.6	26.5			

NOTE: The following 12 States were excluded from the county analysis: Alaska, Connecticut, Delaware, Maine, Massachusetts, New Hampshire, North Carolina, Pennsylvania, Rhode Island, Vermont, Virginia, and West Virginia. These States were excluded because another level of government has responsibilities for roads and bridges. Also, 27 counties were excluded from the analysis because of discrepancies in the data.

Source: U.S. Bureau of the Census. *Census of Governments, Finances of County Governments*, (GC82[4-3]); U.S. Bureau of the Census. *Census of Governments, Finance Statistics*, computer tapes, 1987 and 1992; and U.S. Bureau of the Census. 1994. *Statistical Abstract of the United States 1994* (114th ed.). Washington, DC.

relative importance of each revenue source. For instance, while Federal aid was an important source of revenue during the 1980s, and its decline negatively affected the ability of counties to provide services, the amount received was small compared with other revenue sources such as property taxes or even State aid.

State aid increased nearly one-third (31.4 percent) in nominal dollars between 1982 and 1992, from an average of \$106.63 per resident to \$211.08 per resident. When price increases during this period are removed, however, the increase in purchasing power was 10.5 percent. The increase in State aid clearly more than offset the decline in Federal aid during this period. Thus, more responsibility has been placed on State governments in financing local public services.

Counties have made substantial strides in raising revenues from local sources. Between 1982 and 1992, for instance, these revenues increased 57.8 percent in constant dollars. Due to constraints on types of revenues that can be collected, most of this increase came from growth in taxes, which increased 58.8 percent in purchasing power. However, there also was a substantial increase in charges and miscellaneous revenues during this period—56.5 percent.

Even a casual examination of the data (**table 2**) shows that local revenue sources have increased in importance in financing county services. This point is made even clearer when the relative importance of various revenue sources in the aggregate revenue collections are examined (**table 2**). State and Federal aid represented 40.8 percent of the county revenues in 1982, but by 1992, represented 36.2 percent. Taxes in 1982 represented 34.4 percent of the revenues compared with 63.8 percent in 1992. Charges and miscellaneous revenues represented 24.8 percent at the start of the period, compared with 26.5 percent in 1992.

While it is difficult to trace many revenues by specific use, the FHWA estimates the sources of revenues used on local roads based on information collected statewide. In 1982, for instance, the estimate is that an average of \$3,690 was collected per mile, compared with \$6,415 per mile in 1992. This increase of 73.8 percent in nominal dollars converts to an increase of 46.4 percent when inflation has been removed. Thus, counties and towns collected an average of \$5,401 per mile in 1992, compared with \$3,690 collected 10 years earlier.

Property taxes collected specifically for roads amounted to \$763 per mile in 1982 and \$1,084 in 1992, an increase of 42.1 percent. In constant dollars, however, the 1992 figure was \$913 per mile, an increase of 19.6 percent, and virtually no increase was reported between 1987 and 1992. Interestingly, a much larger increase (63.5 percent) was reported in general fund appropriations, which represent revenues collected from general property taxes and/or other revenue sources that are not dedicated to roads and bridges.

The precise reason for the shift in financing patterns from dedicated taxes to general appropriations is not clear, but it may be that other revenue sources are being tapped in the general fund. For instance, sales taxes or another revenue source could support

road and bridge expenditures, thereby relieving pressures on property taxes. A substantial increase (86.1 percent) in local highway user imposts was also reported during this period. A comparison of the revenue patterns makes clear that more responsibility for highway finance rested with local governments in 1992 than in 1982.

While intergovernmental aid increased in aggregate from \$1,623 per mile in 1982 to \$2,094 per mile in 1992, the substantial shift from State to Federal aid was noted earlier. In purchasing power, aggregate State and Federal revenues increased 35.5 percent during this period, compared with an increase of 53.7 percent for local revenues. When compared in terms of relative importance, local revenues represented 49.3 percent in 1982 and 51.8 percent a decade later. Dedicated property taxes, however, decreased from 20.7 percent to 16.9 percent; whereas revenues from general appropriations increased from 16.8 percent to 18.8 percent of total revenues collected.

The comparison of revenues collected yields several findings. First, there has been a substantial increase in the revenues collected both on a per capita and a per mile basis. Counties and towns are making major strides in providing the resources to maintain a high-quality transportation system. Second, more of the burden of financing this system has been placed on local and State governments, especially local governments, as the Federal Government withdrew resources. Third, the increases in revenues collected have exceeded inflation, and local highway administrators had more purchasing power in 1992 than in 1982.

## Expenditures

The most direct comparison of local road and bridge services is based on expenditures for these purposes. However, there is no one-on-one comparison between expenditures and services because of productivity variations. More productive use of resources by one agency than another, for instance, can mean that two governments spending the same amount could generate different levels or quality of service. Nevertheless, expenditures probably come as close as any measure to services provided. In 1992, counties spent an average of \$52.24 per capita for highways (roads and bridges) compared with \$32.13 per capita 10 years earlier (**table 3**). In constant dollars, the expenditures increased 18.7 percent. While this increase is significant, it is substantially less than the increase of 58.2 percent for overall county expenditures. Thus, while county road administrators spent more, roads lost ground relative to other county services.

Detailed information was not readily available to compare changes between construction and maintenance expenditures during this period. The data available for 1987 to 1992, however, indicate relatively little difference between these two expenditure categories in terms of increases. Current expenditures increased 5.6 percent, compared with 5.4 percent for capital outlays.

The relative position of highways within the aggregate county expenditures is even clearer when highway expenditures are computed as a percentage of the expenditure total. In 1982, highway expenditures were 10.5 percent of the county total expenditures; by 1992, they represented only 7.9 percent. This trend may reflect growth in

## Financial Management Strategies

other services needed in expanding metro areas or may reflect relatively slow growth, or decline, in revenues typically used to finance roads and bridges.

The comparison of expenditures for roads and bridges supports the earlier findings concerning revenues. There has been an expansion in the resources devoted to local transportation, but that increase has been relatively less than the total amount spent by county governments. While these figures can provide information on the resources actually spent, they do not comment on their adequacy. Namely, increases of the magnitude reported may or may not be enough to meet local needs. Previous discussions about adequacy suggest that they are not.

Many county governments are restricted in the amount of property taxes that they can collect. These restrictions are usually found in property tax rate limits, but, in some instances, levy limits are imposed. These limits, combined with limits on other revenue sources that can be collected plus relatively slow growth in assessed valuation, have limited the growth in property taxes available to finance roads and bridges.

When asked whether real property tax rates can be raised without a referendum, 55 percent of respondents replied “no” (**table 4**). A substantial difference was found by metro status, with 58.1 percent of the nonmetro counties and 48.0 percent of the metro counties reporting property tax rate limits. The most likely explanation is that, without home rule, which some larger counties have, the nonmetro counties are more likely to face limits.

The responses to property tax rate limits by towns were unexpected. Nationwide, 56.6 percent of responding towns reported that a referendum is needed to increase property tax rate limits. When compared by size, however, a strong negative relationship is found between need for referendum and size of town. In fact, 71 percent of towns larger than 10,000 reported that a referendum is needed to increase property tax rates, compared with 53.4 percent of towns smaller than 2,500. The reason for this pattern is not yet known.

Delving further into local support for roads and bridges, respondents were asked whether the most recent referendum to increase taxes for local roads and bridges had passed. In general, taxpayers are less likely to support a county road/bridge referendum than one for towns (**table 4**). For instance, 57.4 percent of county respondents reported that the referendum had failed, compared with only 21.5 percent of the towns. Among counties, nonmetro counties (59.0 percent) were more likely to have a failed referendum than metro counties (53.7 percent), but the difference is not large.

In the case of towns, size is important in determining success of a referendum. Nationwide, 22.3 percent of towns smaller than 2,500 reported that the last referendum had failed compared with only 6.3 percent of towns larger than 10,000. There could be several explanations for this finding. First, larger towns may be better able to market the referendum and gain public support because they have more staff and resources. Second, smaller towns may have a larger farm contingent in the area and property taxes tend to adversely affect farm groups to a larger extent because of

**Table 3. Per Capita Expenditures for Counties**

<i>Expenditure Functions</i>	<i>1982</i>	<i>1987</i>	<i>1992</i>	<i>Pct. Chg. 1982-1987</i>	<i>Pct. Chg. 1987-1992</i>	<i>Pct. Chg. 1982-1992</i>
		<i>(dollar)</i>			<i>(percent)</i>	
General Expenditures						
Current	\$304.58	\$456.97	\$660.38	50.0	44.5	116.8
Constant	304.58	384.28	481.96	26.2	25.4	58.2
Capital Outlay						
Current	33.25	50.08	66.37	50.6	32.5	99.6
Constant	33.25	42.11	48.44	26.7	15.0	45.7
Current Operation						
Current	271.07	406.89	594.01	50.1	46.0	119.1
Constant	271.07	342.16	433.52	26.2	26.7	59.9
Highway						
Current	32.13	42.93	52.24	33.6	21.7	62.6
Constant	32.13	36.10	38.13	12.4	5.6	18.7
Capital Outlay for Highways						
Current	—	13.07	15.87	—	21.4	—
Constant	—	10.99	11.58	—	5.4	—
Implicit Price Deflator						
State and Local (1982=100.0)	100.0	118.9	137.0			
		<i>(percent)</i>				
Reliance on Expenditures						
General Expenditures	100.0	100.0				
Capital Outlay	10.9	11.0	10.0			
Current Operation	89.0	89.0	90.0			
Highway	10.5	9.4	7.9			
Capital Outlay for Highways	—	2.9	2.4			

NOTE: The following 12 States were excluded from the county analysis: Alaska, Connecticut, Delaware, Maine, Massachusetts, New Hampshire, North Carolina, Pennsylvania, Rhode Island, Vermont, Virginia, and West Virginia. These States were excluded because another level of government has responsibilities for roads and bridges. Also, 27 counties were excluded from the analysis because of discrepancies in the data.

Source: U.S. Bureau of the Census. *Census of Governments, Finances of County Governments*, (GC82[4-3]); U.S. Bureau of the Census. *Census of Governments, Finance Statistics*, computer tapes, 1987 and 1992; and U.S. Bureau of the Census. 1994. *Statistical Abstract of the United States 1994* (114th ed.). Washington, DC.

Table 4. Management Issues

Question	Counties by Type			Towns by Population Size			
	All Counties	Nonmetro	Metro	All Towns	Less Than 2,500	2,500-10,000	Greater Than 10,000
	(percent)			(percent)			
Does your county/town have a formal, or informal, policy of not using volunteer help because of liability issues?							
Yes	39.5	42.9	31.7	47.0	45.8	48.0	51.5
No	60.5	57.1	68.3	53.0	54.2	52.0	48.5
If local real property taxes are used for roads and bridges, can you raise property tax rates for roads and bridges without referendum?							
Yes	45.0	41.9	52.0	43.4	46.6	36.5	29.0
No	55.0	58.1	48.0	56.6	53.4	63.5	71.0
If no, did the last referendum to increase taxes for local roads or bridges pass?							
Yes	42.6	41.0	46.3	78.5	77.7	76.4	93.8
No	57.4	59.0	53.7	21.5	22.3	23.6	6.3
If the last referendum did pass, how much increase was requested?							
Dollar Amount	\$2,292,841	\$2,456,033	\$2,029,641	\$177,581	\$141,626	\$334,254	\$331,418
Percent Increase	20.8	20.8	21.0	26.3	25.0	22.7	31.8
During the past 5 years have any nontax revenues been imposed for roads and/or bridges?							
Yes	12.6	10.2	17.3	7.1	6.2	13.0	6.2
No	87.4	89.8	82.7	92.9	93.8	87.0	93.8

Source: IIRA/NACo/NACE Survey of County and Town/Township Highway Officials, 1994.

the heavy investment in land. Both explanations may be factors in explaining the patterns.

Respondents were also asked how much was raised in successful referendums. They were asked the dollar amount raised, as well as the percentage that the increase represented in property tax collections. Both measures permit a comparison by size of government. In general, counties tended to ask for smaller increases through referendums than towns did. The average county reported an increase of 20.8 percent compared with an average increase of 26.3 percent for towns. Virtually no differences were found between nonmetro and metro counties in the percentage of increases requested. For towns, however, the differences were much greater when compared by size. Smaller towns requested an average increase of 25 percent compared with a requested increase of 31.8 percent in towns larger than 10,000.

In general, local governments are limited by State statutes in the types and amounts of revenues they can raise, but in some States they can use non-tax revenue sources such as license fees dedicated to road and bridge maintenance and finance. These revenue sources are not common, however. Nationwide, 87.4 percent of responding counties reported that they had not imposed nontax revenues for road and bridge purposes. These revenues are slightly more common in metro counties (17.3 percent) than in nonmetro (10.2 percent) counties, which probably reflects size and differences in tax base.

Even fewer towns (7.1 percent) reported using nontax revenues. A pattern is not clear by size, with towns between 2,500 and 10,000 more often reporting this revenue source than either smaller or larger towns. These differences may reflect variations by State more than size, because towns within the same State are likely to face the same revenue-raising restrictions.

One method of producing more service with fewer dollars is to effectively use volunteer labor, and such programs are fairly common among local government agencies. One limiting factor is the liability incurred by a government if a volunteer is hurt or if a volunteer injures a person or damages property while working for the government. Thus, 39.5 percent of the responding counties have a policy against using volunteers because of liability issues. With this in mind, it appears that volunteers are more in use in metro areas than in rural areas. Towns are more likely to have a policy, formal or informal, against using volunteers due to liability concerns, with 47.0 percent reporting such a policy. Larger towns are more likely to report such a policy, although overall, the differences related to town size are not substantial. Clearly, liability issues are a concern and may limit the use of volunteer efforts in maintaining roads and bridges.

## Fiscal Responses

Given that budgets are tight, it is important to understand the responses of local road administrators when a revenue shortfall occurs. Respondents were asked to report their strategies in two categories: those of less than 1 year and those of more than 1 year (**table 5**). The strategies were reported using a five-point scale where one is

highest priority. In a 1-year strategy, respondents assigned highest priority to postponing new construction and reconstruction of roads and bridges. This strategy makes sense, because a current clientele is not using the facilities, and, in a sense, services are not being cut. One might also note that respondents placed second highest priority on reducing expenditures rather than on increasing revenues.

Among county respondents, the third highest priority is to reduce equipment expenditures. The same was true for towns. In essence, these strategies are an attempt to defer costs—either for roads and bridges directly or for equipment used for maintenance and construction. While these strategies might make sense for 1 year, they are not viable strategies over the longer term. Postponing maintenance can, in effect, lead to higher overall costs in the long run and may cause serious accidents on the transportation system.

While counties placed a high priority on reducing expenditures, officials in town governments reported increasing property taxes as an even higher priority than postponing new construction. This response was most often reported in towns smaller than 2,500, but, even in larger towns, property tax increases ranked higher than postponing construction and reconstruction. These responses may reflect the current condition of the roads and bridges and/or the inability of towns to save a serious amount of funding by postponing construction. Another explanation is that small rural towns may not have much construction underway because populations are not increasing.

County road administrators assigned the highest priority in raising revenues to either motor vehicle license/wheel taxes or fees for services. Raising local property taxes ranked third in priority. For obvious reasons, metro counties placed higher priority on private development fees and expansions in tax bases than did nonmetro counties. However, metro counties did not place a high priority on raising property taxes, probably because property taxes in many suburbs have already increased substantially, and this solution would face significant resistance from taxpayers. Another major difference in responses between counties and towns is the importance of proceeds from bonds and notes. This revenue source was rated relatively low by county respondents (4.12) but fairly high (2.65) by town officials. Borrowing rated more favorably in smaller towns than in those larger than 10,000.

Over a longer planning horizon, the fiscal strategies differ only slightly. Postponing new construction and reconstruction still ranked most important but seemed a higher priority in nonmetro than in metro counties. One explanation is that metro counties, in general, are growing faster with more pressures on local transportation systems. Essentially, the same is true for postponing reconstruction. Reducing equipment expenditures also ranked relatively high and it seems reasonable that some equipment can be repaired and made to last yet another year. Under tight budgets, this can be an attractive strategy if the alternative is to reduce employees. Somewhat surprisingly, deferring maintenance ranked lowest in importance in counties, even below wage freezes or cuts by attrition. Apparently, respondents recognize that continued deferral of maintenance can ultimately mean higher costs. Deferring maintenance was more acceptable to town administrators, however.



**Table 5. Revenue Shortfalls**

Item	Counties by Type			Towns by Population Size			
	All Counties	Nonmetro	Metro	All Towns	Less Than 2,500	2,500-10,000	Greater Than 10,000
<i>Rank by Preference Where 1 Is First Choice</i>							
Less Than One Year							
Reduce Expenses							
Cut by Attrition	4.26	4.36	4.17	4.72	4.72	4.71	5.00
Wage Freeze or Cut	4.77	4.84	4.68	4.17	4.08	4.68	3.96
Reduce Equipment Expenses	3.30	3.25	3.39	3.24	3.31	3.12	2.97
Postpone New Construction	1.92	1.81	2.06	1.64	1.58	1.66	2.17
Postpone Reconstruction	2.94	2.80	3.22	2.19	2.12	2.50	2.75
Defer Maintenance	4.83	4.80	4.90	3.34	3.21	3.80	4.13
Cut Administrative Expenses	4.58	4.76	4.21	4.14	4.07	4.40	4.65
Increase Revenue from Other Sources							
Local Property Taxes	2.77	2.54	3.26	1.40	1.34	1.57	2.13
Local Sales Taxes	3.11	2.90	3.50	3.30	3.23	3.30	3.71
Motor Vehicle License or Wheel Tax	2.50	2.30	2.88	2.38	2.39	2.17	2.64
Private Development	3.30	3.45	3.11	3.56	3.51	3.79	3.36
Fees for Service	2.64	2.69	2.56	2.63	2.55	2.90	2.43
More Private (In Kind) Donations	4.33	4.25	4.40	4.09	4.23	4.09	3.73
Proceeds from Bonds and Notes	4.12	4.20	3.97	2.65	2.51	3.43	3.29
More Than One Year							
Reduce Expenses							
Cut by Attrition	3.70	3.74	3.69	4.72	4.65	4.87	4.62
Wage Freeze or Cut	4.86	4.90	4.80	4.12	4.07	4.33	4.09
Reduce Equipment Expenses	3.55	3.61	3.46	3.23	3.19	3.23	3.54
Postpone New Construction	2.01	1.87	2.20	1.65	1.61	1.67	1.92
Postpone Reconstruction	3.12	3.00	3.36	2.22	2.11	2.50	2.88
Defer Maintenance	5.09	5.04	5.23	3.42	3.27	3.82	4.46
Cut Administrative Expenses	4.41	4.59	4.04	4.06	4.02	3.98	4.82
Increase Revenue from Other Sources							
Local Property Taxes	2.78	2.59	3.18	1.30	1.25	1.39	1.74
Local Sales Taxes	3.12	3.06	3.20	3.13	3.02	3.20	3.56
Motor Vehicle License or Wheel Tax	2.36	2.15	2.73	2.33	2.21	2.50	2.92
Private Development	3.27	3.49	3.00	3.68	3.65	3.69	4.00
Fees for Service	2.64	2.67	2.60	2.89	2.66	3.09	3.50
More Private (In Kind) Donations	4.37	4.27	4.48	3.92	3.86	4.13	4.31
Proceeds from Bonds and Notes	4.16	4.23	4.05	2.69	2.52	3.32	3.58

Source: IIRA/NACo/NACE/NATAT Survey of County and Town/Township Highway Officials, 1994.

In terms of raising revenues, county respondents preferred to use motor vehicle license fees or wheel taxes. They also viewed fees for services as a viable option. Once again, towns are more likely to use proceeds from bonds and notes than counties, and towns rated increasing revenues from property taxes as a high priority, especially small towns. Fees for services and revenues from motor vehicle licenses and wheel taxes, both of which tend to emphasize services received, ranked high among towns.

Financing local roads and bridges is an important task for many counties and towns. Some are in relatively prosperous areas with growing populations and tax bases. Others, especially those in agricultural areas, often face slow revenue growth and, in some instances, population declines. While population losses may mean less traffic, they probably still mean that the same mileage and number of bridges must be provided to keep the transportation system viable.

## Conclusions

Previous comparisons of financing patterns and trends yield several findings. First, there has been an increase in constant dollars devoted to roads and bridges. These increases have arisen from additional local revenues and support provided by State governments. This growth in resources is consistent with the findings in other reports that the overall condition of roads and bridges was better in 1992 than in 1987. While substantial growth in expenditures for roads and bridges has occurred, the increases have not been as substantial as overall expenditure increases. Thus, relative to other services, roads and bridges received a smaller proportion of the total budget in 1992 than in 1987.

Second, while counties and towns are collecting more property taxes to finance local roads and bridges, the reliance on property taxes by counties has not increased substantially since 1987. There has been increased reliance on fees and other revenue sources and on expenditures from general appropriations, rather than dedicated property taxes.

Third, in general, respondents from counties and towns reported inadequate revenues but, in most instances, they had not reduced services yet. This situation was reported by almost one-half of the counties and one-third of the towns. Nearly one-fifth of the counties (19.8 percent) reported reduced services; however, only 7 percent of the towns did so. Fourth, those counties and towns that might be faced with budget shortfalls would opt to reduce new construction and/or reconstruction projects, followed by reductions in equipment purchases. These strategies, of course, do not involve displacing employees or freezing wages and, for these reasons, might be preferred. In general, respondents reported that attempts to reduce expenditures ranked higher than revenue increases. In the case of towns, however, strategies for increasing property taxes ranked very high. Whether this option was considered the most viable simply because local administrators have few, if any, other revenues available or because of some other reason is not certain.

The renewal of ISTEA is an important consideration for county and town road administrators, because highways are an important service provided to their resi-

dents. The fact that revenues for specific road classifications are not as dedicated as in previous highway programs has local administrators in rural areas somewhat nervous. They are uncertain how well they can compete with other interests such as public transit and urban highway programs over the long run. Given the importance of roads and bridges in rural areas in providing access to essential public services, as well as marketing agricultural produce, these concerns are warranted.

