

1991

## Our State's Transportation Infrastructure: Can It Support Maine's Way of Life?

Steven C. Deller

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### Recommended Citation

Deller, Steven C. . "Our State's Transportation Infrastructure: Can It Support Maine's Way of Life?." *Maine Policy Review* 1.1 (1991) : 90-93, <https://digitalcommons.library.umaine.edu/mpr/vol1/iss1/9>.

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# **Resource challenges for local governments**

## **Maine Policy Review (1991). Volume 1, Number 1**

*by George K. Criner, Steven C. Deller, Dennis E. Gale, and Christopher Spruce  
University of Maine System*

For most of the era since 1960, when environmental policy and resource policy have been central public issues, the focus of public debates on those policies was at the federal and state levels. But as we enter the last decade of the century, we find that more and more of the decisions and policies that will determine the quality of life for our citizens are being made at the local level. Issues that have historically been local prerogatives-water supply, solid waste disposal, sewerage disposal, land use planning, and transportation infrastructure - are increasingly identified as crucial for effective environmental policy and for insuring "quality of life." To be sure, those local decisions are often constrained by a wide variety of state and federal policies on environmental policy and resource use. But clearly, effective management of quality of life issues by local governments will require more than reluctant reaction to rules and deadlines imposed from above.

In this series of articles, three authors (Dennis Gale, Steven Deller, and George Criner) examine the match between the increasing demands for local action on environment-related issues and the local resources available to meet those demands. Local planning efforts under Maine's growth management law, local transportation infrastructure decisions, and local solid waste planning are each examined. (A later article by Nick Houtman separately examines local water planning.) The narrow funding base afforded by the property tax, as always, an important concern. But a common concern also emerges over the ability of small governmental units, which often rely heavily on the New England tradition of volunteer government, to manage the new array of technical issues. The fourth author, Christopher Spruce, asks *i/we* should not think more carefully about the creation of an increasingly complex set of intergovernmental special districts at the municipal level. Might a single broad-based general governmental unit, perhaps a form of reinvigorated county-level government, provide a better umbrella for cooperative efforts by local governments?

(The papers in this collection were completed prior to the announcement by Governor McKernan, as part of his budget amendments, that he would seek to delay or eliminate a number of mandates imposed on local government by state government. Although the pressures of certain deadlines may be relieved, these resource issues will certainly not disappear from the agendas of towns and cities across Maine.) - *Editor*

## **Our state's transportation infrastructure: Can it support Maine's way of life?**

*by Steven C. Deller*

*Department of Agricultural and Resource Economics, University of Maine*

The quality of Maine's infrastructure is a vital index of economic vitality. Reliable and safe transportation, clean water, modern telecommunication services, and the secure disposal of wastes are basic requirements not only for a high quality of life, but also for a solid foundation for our economy. Their absence presents an unacceptable dimension of risk and hardship to everyday life and acts as a barrier to social and economic development.

Can Maine's infrastructure support current activities in a way that future potential development, either social or economic, is not hindered? Unfortunately, a growing collection of evidence suggests that a problem may be looming (Deller 1991). This is particularly true in rural communities where the rising number of federal and state laws may require large investments in new infrastructure. For example, the Safe Drinking Water Act is requiring many smaller communities to invest large sums of public monies into water supply systems that are either antiquated or simply not in place.

While the merit of such requirements can be argued, they introduce a potential constraint to future growth and development. Unless the requirements of these laws are met, current and future economic activities may be threatened. Existing firms that are not in compliance with environmental regulations due to the lack of quality infrastructure, such as adequate sewerage treatment facilities, may be forced to relocate or simply close. New firms may likewise be barred due to an inadequate stock of physical infrastructure (Goode and Rauniyar, 1991).

Another concern in Maine and, indeed, across America, is the rapid deterioration of the infrastructure that is in place (Choate and Walter 1981; Congressional Budget Office 1983). The most evident example of this problem is the local network of roads and bridges (Waker and Chicoine 1987). For rural areas, the transportation network is particularly important for economic activity and a high quality of life. In a recent study conducted at the University of Maine, local road officials identified nearly one in three miles of local road as requiring major repair (Deller and Halstead 1991). Of equal concern is the number of deficient bridges, nearly one in four, according to these same officials. (Note that maintenance of most bridges, whether on state or municipal highways, is the responsibility of the state.) While these local assessments are similar to national assessments, there is cause for concern.

### **Road deterioration**

Although various reasons may explain why any particular section of road or bridge may be inadequate, there are some general reasons for the level of deterioration experienced in Maine. First, and perhaps foremost, is the age of the road network. The majority of today's local road network was constructed in the early 1900s or in the work programs of the 1930s, an era of relatively slow travel when cars and, in particular, trucks were small and light-weight. Today's vehicles are not only larger, but also significantly heavier, than what our roads and bridges were designed to handle. In the same University of Maine study, local officials identify heavy truck usage as the single largest source of excessive wear and tear on the local (*i.e.*, municipal) road network.

A second cause of the deterioration of the local road system is purely financial. The increase in traffic demands have not been matched with a correspondingly higher level of public resource

commitment to repair and/or replacement. Beyond supporting local schools, the local road system is often the biggest expense for many smaller communities in Maine. The state finances approximately one-quarter of the cost of municipal road budgets; the remaining three-quarters is derived from local sources. During times of tight budgets, many towns are forced to cut back in road maintenance and repair expenditures. While a common practice in many communities, repeated appeal to this option will result in not only a further deterioration of the network, but also more costly reconstruction repairs in the long-term. Unfortunately, these reconstruction repairs are beyond the financial resources of most communities, hence they do not take place.

A third cause is institutional. As Professor Gale has described in the preceding article, town government has a rich history in Maine. The town has primary responsibility for not only setting local policy, but also providing local services such as public educator waste disposal, and local transportation. An unfortunate drawback to this institutional arrangement is the inherent smallness of operation. The cost of providing key public services may be unnecessarily high because economies of scale in operations have not been captured. Small governmental units are also unable to achieve "economies of scope" in management. These economies of scope arise when managers are able to apply their experiences from one area to the solution of problems in another area. For example, a town manager who supervises dozens of different contract for different types of goods and service each year obtains a wealth of experience unavailable to a similar official who handles only one or two such contracts per year. School consolidation is one example of how small communities combine to capture such economies.

Given limited financial resources, the ability of the town to sustain an effective road maintenance repair schedule comes into question. For towns with limited (or no) professions staff, the long term costs of road maintenance may be increased if the technical issues in road maintenance are not understood. The Maine Local Road Center of the Maine Department of Transportation does provide technical training for local governments. Local governments also have the option of contracting with private engineers and private contractors to obtain professional services. Even so, access to these outside services presents a real management challenge for volunteer town officials or part-time administrators. The difficulty of maintaining consistent professional involvement in local road maintenance can raise cost for two reasons. The implementation of any given improvement may not be cost-effective, and the design of improvements may necessitate that the same roads be maintained more often.

### **Resource options**

Even if the Maine economy were in much better shape, local resources would not be sufficient to meet the growing demands placed on our aging infrastructure or to address the mandates from the federal government. The best that we can hope to do is to make better uses of our limited resources. To achieve this end, several possible options have been put forth. Five are outlined here:

First, public officials should consider alternative arrangements for the provision of infrastructure services. Cooperative arrangements between neighboring towns to share equipment and personnel can result in significant cost savings. Group purchases of materials and certain pieces

of equipment also may be helpful. Policies aimed at capturing economies of scale must be developed.

Second, a larger network of technical assistance should be developed. Circuit-rider programs providing engineering expertise should be examined. Counties might be given the authority and responsibility to hire engineers trained in road repairs, waste disposal, and general planning functions to aid local officials.

Third, towns need to develop detailed, long-term strategic plans for road improvements (and also for waste disposal and the provision of safe water). By developing such plans, officials would be in a better position to adapt to changing revenue pictures, and thus to make better use of revenue windfalls and to minimize the impact of budget shortfalls.

Fourth, town officials need to recognize the complexity of the infrastructure problems their community faces. To address these complexities, officials can work to upgrade their own management skills.

Finally, town governments in Maine need to enhance their revenue-generating capabilities. Currently, monies available to support local infrastructure problems come from formula state aid programs, from special grants (especially federal) or from local revenues. Unfortunately, the complexity and limitations of special grant programs effectively prohibit many smaller communities from applying. Increasing management skills, however, can help eliminate this obstacle. These federal grants are also less available today. Increasing locally-generated revenues means increasing the property tax. This is not a viable option for many Maine communities. Alternatives to the property tax, such as the local option sales tax, user dedicated fees, or an increase in state aid, all require serious attention.

Economic renewal must be the premier focus of state and local policy in this decade. The stock of physical infrastructure strategically underpins our economy and quality of life. Without attention to the deterioration of that infrastructure, economic renewal will be thwarted, if not impossible. We have no choice but to face the complex task of rebuilding our infrastructure as a prerequisite to economic renewal and maintenance of our way of life.

*Steven Deller is an assistant professor of community development with the department of agricultural and resource economics, University of Maine. He is the author of several publications on rural economic development policy. He also is co-editor of The Maine Business Research Report.*