Highway construction and land acquisition present extension specialists with a host of new problems and, possibly, a new orientation for extension activity. Highway construction affects farm owners and operators, but it also affects owners and occupants of urban and rural residences and commercial establishments. It affects the development of local communities and geographical regions. What should be Extension's role in meeting the serious issues and problems arising at each of these levels?

HIGHWAYS AFFECT ALL OF US

Current highway programs are big—big in terms of miles of highway, size of expenditures, and amount of land used. The Interstate system alone involves 41,000 miles of high-design, controlled-access highways, at a cost of approximately 40 billion dollars. Much of the “I” system will pass through agricultural areas, where farm land will have to be acquired for rights-of-way.

In addition to the million dollar a mile “I” system, plans call for many miles of new and improved state trunk highways that will require acquisition of farm land.

As much as 37 acres of land per mile may be required for a 300-foot “I” system right-of-way, and generally as much as 40 acres for an interchange. In exceptional cases, an interchange may require as much as 200 acres. The “I” system roads will require about 1.5 million acres of farm land in the next ten or twelve years. Of this total, about 409,000 acres are expected to come from cropland and about 376,000 acres from permanent pasture or grazing lands.\(^2\)

More than 90 percent of all intercity passenger traffic passes over highways. Nearly one-fifth of all intercity freight moves on highways, and this amount has nearly doubled since 1949.\(^3\) Of course, practically all traffic between the farm and the city is also on highways.
The Wisconsin Highway Commission reports that more than 60 million automobiles and motor trucks are in use today in the United States. Each year nearly 8 million new vehicles are produced. In ten years, we may expect 80 million vehicles on the roads and in twenty years, more than 100 million.

Excluding expenditures for national defense, the present highway program represents one of our largest public investments. It can be a powerful tool for community and regional development. At the same time, it can be equally destructive.

Nearly every citizen is affected by the program. It affects:

Property owners and operators who lose property.

The community—businesses, residences, and municipal facilities—through or around which high-design highways pass.

The traveling public—both through and local traffic, which includes many transportation interests.

The industrial and commercial interests of a region, which stand to gain or lose from the new transportation network.

Clearly, highways have a tremendous impact on owners or users of land. Construction of these roadways disrupts going farm units and often requires severe adjustments by those units. Assisting farmers with these adjustments is obviously a necessary area of extension activity. But the proper role of the extension specialist in assisting non-agricultural individuals or groups, or community, regional, or national interests is not so clear.

**THE ISSUES INVOLVED**

In general, these issues fall into three categories: (1) highway planning, (2) land acquisition, and (3) adjustment by individuals and communities to the new conditions created by the highway.

**Issues in Highway Planning**

1. Considering the size of our current investment in highways, the first question to be asked is, "Do we need a highway here?" Second, "What kind of highway should be built?" But even before these questions comes the problem of balancing public investments between highways and other things such as schools. Questions of this kind have probably not received attention in proportion to their importance.

2. Location of the highway may be an issue—possibly no adequate procedure has been established for deciding between alternative sites for a proposed roadway. High quality farm land—perhaps in specialized
crops—may be in the roadway area. Yet local farm people may not know of procedures for providing authorities with information on agricultural costs and benefits.

Other local and regional interests may not be represented. Area development as a whole might not be considered. The final decision on location of the roadway may be made before the public has a chance to be heard. Or public hearings may be strictly for public relations and not for fact finding.

3. Local governmental units may lack the legal tools or experience for guiding urban development. For example, they may not be making coordinated use of zoning, access control, and setback, building, and subdivision requirements to bring about orderly development. Most units of local government are not equipped or do not have jurisdiction for planning, financing, or managing major highway programs, or for that matter, other major resource development programs.

4. Plans for the highways may conflict with the plans or needs of the local community. Balancing the interest of individual property owners, the local community, and the state or a larger area is difficult. It may require rather substantial revisions in our planning procedures. However, failure to integrate highway plans with the plans of the local community can be costly.

**Issues in Land Acquisition**

Here the issues are primarily between the individual property owner and the agency managing the highway program. Most often, they concern the value of the land taken and other aspects of the eminent domain procedure.

1. The parties affected by the land acquisition may not be informed of their rights—they may not know which items of damage are compensable and which are not. Further, they may not know which procedures used by the highway agency are required by law and which are merely agency policies. The rules of compensability in the present law may be inadequate.

2. Appraisal procedures of the highway department may not be adequate—the property owner may not be given the chance to point out important and obscure items to the appraiser during the appraisal process. Actually, if the landowner is not consulted during the appraisal he has no voice in determining the value.

3. The negotiation procedure may be inadequate. The owner may not know or may not be told how the offering price was set. Further, he may not know the items for which he is paid or not paid, and why.
Actually, in most instances, “negotiation” involves only “selling” the landowner on the price the purchasing agency has agreed upon.

4. The timing and speed of acquisition may impede farm adjustment and increase the cost of adjustment by the farm owner and operator. Taking land before crops are harvested or moving a barn after it has been filled with hay are examples. New procedures should be considered for giving the landowner advance information on land-taking plans. Purchase (and payment) for the right-of-way well in advance of construction may be feasible and desirable.

5. Condemnation procedures may need modification. They may be too slow and thus interfere with the operation of the highway program. They may be too costly. Unless the property to be taken is of high value and is badly misappraised, eminent domain procedures are no alternative. The small landowner has no recourse but to accept the first offer.

The New Highway Creates Issues

1. The individual farm owner or operator must adjust his farm to the loss of land. The farm family is forced to make a major decision. Should more land be rented or purchased at the same location? Should the remaining land be sold and the family move to a new location? Should the land be held to capitalize on any new higher valued use that may result from urban expansion in general or the new highway in particular?

   In making adjustments, these farm families need all the usual types of information used in making wise farm and family management decisions, plus information specifically related to highway land acquisition. They need information concerning tax regulations regarding funds received for condemned property and concerning reinvestment requirements to avoid paying the capital gains tax. Farm and home development agents should have clients along today’s new highways.

2. Highways influence the agricultural, recreational, commercial, and industrial development of an entire state or region. The new highways will undoubtedly reduce transportation time and may reduce transportation costs for firms in the area. This will affect the competitive position of different regions. Some crops and livestock may be more efficiently produced in new areas. Along with other forces that encourage integration of firms, the new highway may cause by-passing of existing processors.

3. High-design highways often create serious traffic problems. Traffic from a completed segment of the “I” system may be channeled
into a community where local roads and service facilities cannot handle the traffic.

4. The highway can make new areas accessible to the traveling public. More people may attempt to use these areas than can be accommodated with existing facilities. We may see many recreational areas in this situation.

5. The local community may be seriously affected by the new highway. It may be by-passed. The new “ribbon” development of business and services along the highway will receive not only the traveler's business but also that of local residents. University of Minnesota researchers found that a Minnesota town of 10,000 to 12,000 population or larger may not be affected much when by-passed by the highway. Smaller towns, however, may be very seriously affected.

New residential, commercial, and industrial areas are opened by the highway where adequate local government services, if available at all, are available only at high cost.

Road construction may disrupt school, milk, and mail routes. A high-design highway through an irrigated valley could create some serious problems for the district.

6. Adequate feeder roads for the “I” system should be built. Once built, they should be protected with access restrictions and zoning regulations to insure their continued usefulness. For example, in a few years, the encroachment of uncontrolled development on a high-design roadway near Pittsburgh has largely wasted that expensive structure. The road is soon to be used as a local street and replaced by a new highway at a cost of several million dollars.

Present policy is to have no services for the traveling public on the “I” system right-of-way. Whether this policy continues is in itself an important issue. However, if it does continue and if the feeder road is not properly designed and protected, the feeder road can become so congested as to jeopardize the entire investment in the highway—both public and private.

7. Advertising billboards and signs along highways are creating increasingly difficult conflicts not only between the traveling public and the advertisers, but also between businessmen who may compete with each other to attract the traveler's eye.

WHAT CAN AGRICULTURAL EXTENSION DO?

Agricultural Extension is an educational organization. As such, we have responsibilities for gathering existing information and making

it available to those who make decisions. Because we work closely with people, we have the responsibility, too, for describing the impact of a highway program on rural people and their communities. But probably the most important service of the educator is to inspire and encourage people to do something about their problems and to facilitate their efforts.

The new highway creates many new problems which we are poorly equipped to handle. (No one else is as well equipped, however.)

In addition to our present programs, what can Agricultural Extension contribute toward resolving of specific problems created by the highway program?

**Mobilize the Facts**

Although no one specialist in a state has much pertinent information, many people have some important information to contribute.

1. Specific specialists may be sought to do a specified job—call a meeting, issue a memorandum, testify in a hearing, etc.

2. Agricultural Extension may actually sponsor activities that would pool information from a variety of sources. Here are agencies that should not be overlooked:

   - General university departments such as law, geography, commerce, sociology, economics, etc.
   - State offices, particularly the attorney general’s office, economic development and planning agencies, etc.
   - Agencies specifically responsible for the highway program—the state highway commissions, district and county highway people, and state representatives of the Federal Bureau of Public Roads.
   - Nongovernmental organizations representing people affected by highway changes.

3. Agricultural Extension has an opportunity, particularly at the local level, to observe the full impact of the changing highway on local land use. We have a responsibility to record these observations and make them known to both researchers and the state agencies that carry out the highway program. We should help define the problem for both research and action.

**An Information Program**

Agricultural Extension should undertake a broad informational program. In addition to farm clientele, the information program should be designed to help rural residents and owners and operators of recreational facilities. Both groups have much at stake in acquisition of rural land for highways.
Such a program would probably include the following types of information:

1. The nature and extent of the proposed highway programs and the "issues" as previously described.

2. How does the highway program work? Particularly needed is the pinpointing of the distinction between the policies and procedures set by law and those that can be modified by the agency concerned.
   - How and by whom is the highway planned?
   - What time in the process can a group of property owners present impact data that might affect location?
   - How is the land acquired and what rights do landowners have (to see the appraiser and his appraisal, to request alternative means of settlement, to object to the appraisal, etc.)?
   - Which items of damage are compensable and which are not?

3. How can farmers and other landowners adjust if their land is taken for a highway? Should the property owner sell the entire property or part of it, should he keep the buildings, and how should he reinvest his capital?

Help Groups of People to Help Themselves

Extension activity may need to be extended to the point of helping the community plan rather than focusing solely on individual farm firms.

In the process of helping communities plan, the extension specialist would likely be following a new approach. In addition to working from a factual base and disseminating information, the specialist would be inspiring people to plan, getting research people to study community problems, and getting action agencies like school, tax, and credit agencies to participate in the process. In taking this approach, the agricultural extension specialist would need to work closely with those in general extension.

PROBLEMS FOR EXTENSION ITSELF

As we undertake extension work in this new area, we can be sure that some adjustment problems for our organization will be created. Experience to date indicates some things we must consider when working on highway problems.

Whose Side Are We on?

Agricultural Extension is a branch of the county, state, and federal government. So, too, are the highway administrative agencies. Must Agricultural Extension accept the highway program as given? What
happens if a group of farmers wish to oppose a proposed highway and seek help from Agricultural Extension? A federal employee by law cannot testify against the federal government. Should a state or county employee testify against these units of government?

The necessary close working relations with the highway departments are difficult to maintain when on occasion the best course of action seems to be for the farmers to organize and oppose a particular roadway or acquisition procedure.

**Legal Aid Needed**

A substantial part of the subject matter deals with law and legal interpretations. Local lawyers and bar associations rather zealously guard their professional prerogatives. Despite this, close working relationships with lawyers are essential. In addition to serving as extension specialists, lawyers can improve the type of legal service available to the individual property owner. Property owners need legal counsel when their land is being taken for highway purposes.

**Farm and Nonfarm Clientele**

The property owners affected by highways are not solely farmers. They are often nonfarmers who own nonfarm land. As in the two areas of zoning, and local and state financing, we are dealing here with decisions of groups that include more than our traditional clientele, the farmers. This is predominantly a land- or rural-oriented problem and we in Agricultural Extension have had experience that should be used.

**Role as an Educator**

As we attempt to inspire and encourage groups to plan for the highway, construct it, and regulate its use, we run the danger of being biased, of having a vested interest, or of taking an irrevocable position. One of the most difficult problems faced by extension specialists is that of participating actively in important affairs of the day and still maintaining a position of influence. To do it, we will need to act like educators:

- Be tolerant of another's position.
- Reappraise our own position as new evidence become available; change it as necessary.
- Respect decisions of the group.
- Remember that we may not always be right.

**EXAMPLES OF MATERIAL THAT WILL BE USEFUL**


Frey, John, “Planned and Unregulated Development in a Pennsylvania Community, A Case Study.”


Harrison, Joseph W., Bibliography: The Economic Effects of Limited Access Highways and By-Passes, Virginia Council of Highway Investigation and Research, Box 3817, University Station, Charlottesville, Virginia.

Hovey, Roy M., and Pine, Wilfred H., “Economic Impacts of the Interstate Highway on Farm Land Ownership and Farm Operations in Trego County, Kansas,” Preliminary report of pilot study, Department of Agricultural Economics, Kansas Agricultural Experiment Station, Manhattan, Kansas, March 1959.


“More Than 14 Million People Want My Property,” Division of Highways, Department of Public Works, State of California, Box 1499, Sacramento 7, California.


Papers presented at 38th Annual Meeting, Highway Research Board, Washington, D. C., 1959, Department of Agricultural Economics, University of Wisconsin, Madison, Wisconsin:

1. Covey, Frank M., “Impact of Police Power Controls Along the Wisconsin Trunk Highway System.”

Raup, Philip M., Research report of economic research on highways conducted by University of Minnesota, Department of Agricultural Economics, University of Minnesota, St. Paul, Minnesota.


Vlasin, Raymond D., “Highway Through Your Farm,” Economic Information for Wisconsin Farmers, August 1959, Department of Agricultural Economics, University of Wisconsin, Madison, Wisconsin.