

Scenic Byways Data Needs, Resources, and Issues

BOB L. SMITH

Three national policy issues are suggested for consideration by those concerned with making informed policy decisions in transportation, particularly in the area of scenic byways: Should there be a national scenic byways program? Should there be a nationally identified scenic byways system? Should scenic byways be eligible for increased federal funding or a special category of federal funding? Whether the answers to these policy issues are "yes" or "no," certain data are needed if the states are to continue or begin scenic byways programs. Specific data and sources are suggested for use by those charged with scenic byways marketing, selection/designation, corridor protection/enhancement, and maintenance. Economic impact data are of legitimate interest to all levels of government as well as the private sector. Data needs and sources are suggested in this paper. Because there is virtually no information available on the economic impact of scenic byways, it is recommended that economic impact data be gathered for several years and a series of economic impact models be developed and refined as the data become available.

The following national policy issues should be considered by those concerned with making informed policy decisions in transportation, particularly in the area of scenic byways:

1. Should there be a national scenic byways program?
2. Should there be a nationally identified scenic byways system?
3. Should scenic byways be eligible for increased federal funding or a special category of federal funding?
 - The basis for such funding would logically require some minimum level of usage by scenic byways recreationists as well as some minimum criteria for scenic byways designation.
 - There could also be some "system requirement" (i.e., the enhancement or completion of a nationwide, regional, or state scenic byways system).
 - A minimum level of positive economic impact (benefits) on the region could be estimated or perhaps a benefit/cost (B/C) ratio greater than 1.0 could be required.
 - An estimate of the positive economic impact on a region could also spark regional (state or local) public and private investment in the protection/enhancement of the byway corridor.
 - Another basis for such funding could be a documented need for preserving/enhancing the byway corridors to increase the enjoyment and use of the corridors, as well as to avoid adverse safety and environmental consequences.
 - Federal funding or other assistance could be used in the coordination of efforts, collection of data, and prepa-

ration/dissemination and periodic updating of a document, *Scenic Byways: Status and Statistics*.

Whether the answers to these three policy issues are "yes" or "no," the following information is needed if states are to continue (or begin) scenic byways programs.

GENERAL INFORMATION

Factors that are important to the scenic byways user (recreationist) in the selection or rejection of a given route need to be identified. This information should provide insight regarding the importance of protecting/enhancing a scenic corridor.

In order to travel scenic byways, the public must be able to determine

- Where the byways are located;
- The level of scenic quality and the location and types of recreational, historic, and cultural sites;
- Whether the route is all-weather and what the type of roadway surface is; and
- Whether the route is suitable for only limited sizes and types of vehicles (e.g., only four-wheel drive vehicles).

There should be some system of informing the public of the above through maps, booklets, or brochures prepared by national, regional, and state organizations.

SPECIFIC SCENIC BYWAYS DATA NEEDS

The following specific scenic byways data are needed:

1. Location of byways (for a national registry, maps, etc.).
2. Criteria used in byway selection (enhances the chances that designated scenic byways will consistently "deliver as promised").
3. Physical characteristics such as surface type, right-of-way, and roadway width; number of lanes; functional classification; geometrics; minimum desirable design standards or criteria; and a description of specific techniques, such as commentary driving, that were used to conduct a safety analysis of the road (useful in byway safety evaluations).
4. Physical condition of roadway surface, drainage, etc., i.e., a sort of scenic byways "sufficiency rating" (useful in byway safety evaluations).
5. Traffic information such as volumes; count of recreationist users (for use in economic/impact studies); level of service; types of recreation vehicles prohibited, e.g., tour buses;

weather problems that warrant road closure to recreationists; and speeds (to determine whether speeds on scenic byways are different from speeds on similar but nonscenic roads).

6. Accident experience of all users and of recreationists only (to determine whether "scenic roads" are safer than "nonscenic" roads).

7. History of "tort claims" lawsuits, judgments, and settlements (to help answer the concern that enticing the public to scenic byways will result in greater tort claims losses).

8. Jurisdiction with control over the byway (where to direct questions about the byway).

9. Maintenance/upgrading of road: whose responsibility, dollars spent, and sources of funds (to determine costs for B/C ratios in economic impact studies).

10. Protection/enhancement of byway corridors (for economic impact studies and as a guide for others): (a) What, if anything, was done? (b) How was it done, i.e., scenic easements, purchase, zoning, other? (c) What were the costs and who made the payments, i.e., federal, state, or local government, or private funds?

11. Marketing campaign: description of campaign, responsibility, and origin of funds—public or private (for economic impact studies and as a guide for others).

12. Location/type/amount of recreation and historic sites in the scenic corridor and in the area directly impacting the byway (for economic impact studies and estimation of future scenic byways recreationist traffic).

Some of the above data are currently being collected, but they are not available in a central location, organized by byway and state. State DOTs usually collect these data in states that have roads designated as byways. In other states, it is unlikely that the state DOT collects the information.

ECONOMIC IMPACT DATA

The economic impact of scenic byways is an important area of concern for all levels of government, as well as the private sector. However, virtually no information is available on this subject.

Scenic byways can be viewed as an addition to a region's tourist attractions. To measure the economic impact of this addition, the increase in tourist trips and expenditures attributable directly to the scenic byways programs must be determined. In addition to the total spending, the types of expenditures and where those expenditures occurred should be identified.

After the tourist expenditures data are obtained, input-output (I-O) models for the states in each region would be required. These models measure the income, sales, and employment impacts of scenic byways programs through the computation of multipliers that measure the impact of tourist expenditures.

An I-O model has been proposed for evaluating the economic impact of scenic byways in Iowa, Kansas, Missouri, and Nebraska. The I-O model for Kansas will be based on *The Kansas Input-Output Model: A Study in Economic Linkages (I)*. Iowa, Nebraska, and Missouri will use models that have adapted national data to these states' economic structure. It is suggested that survey-based I-O models be devel-

oped in those states desiring to use this technique in scenic byways economic impact studies.

Since it is not possible to know the increase in tourist expenditures attributable to scenic byways before their designation and operation, large amounts of data are required to obtain some indirect estimates. A variety of baseline data about the region is necessary. The following data, currently available from the sources listed, should be included:

- Population by age, sex, and race: Bureau of the Census (2);
- Per capita and personal income: *Survey of Current Business* (U.S. Department of Commerce);
- Employment by industry: *Employment and Earnings* (Bureau of Labor Statistics);
- Employment in the tourism industry: *Employment and Earnings* (Bureau of Labor Statistics);
- Automobile ownership: *Motor Vehicle Facts and Figures* (Motor Vehicle Manufacturers Association) and state statistical abstracts;
- List of tourist attractions and population within 100 mi of each: state statistical abstracts (perhaps state departments of tourism);
- Locations of potential scenic byways relative to other regional tourist attractions and population centers: state DOTs;
- Attendance at state parks, historical sites, and recreation areas and at national parks, monuments, and recreation areas: state statistical abstracts, state departments of tourism, national park statistical abstracts (U.S. National Park Service);
- State park and recreational income: state statistical abstracts;
- Recreational facilities at regional tourist attractions (i.e., camping, hiking, fishing, hunting, boating, swimming, and lodging): state statistical abstracts and state departments of tourism;
- Traffic counts on potential scenic byways: state DOTs; and
- Origins and destinations of nonresident visitors to the region: US Travel Data Center.

As much as possible needs to be known about the characteristics of byway recreationists. At a minimum, information should be collected on the types of expenditures they make (i.e., gasoline, hotels/motels, meals and refreshments, groceries, souvenirs, and admissions to tourist attractions). This data is important because different types of expenditures result in different income and employment effects. Possible data sources for this are the US Travel Data Center in Washington, D.C., and state departments of tourism.

In addition to the types and amounts of byway recreationist expenditure, the following data are needed:

- Purpose of the trip,
- Type of trip (weekend or vacation),
- Number of nights away from home,
- Number in the travel party,
- Types of lodging used,
- Mode of transport,
- Types of recreational activity, and
- Repeat trips.

This data may be available from the US Travel Data Center. Otherwise, a sample of the recreationist population could be

interviewed/surveyed. Some data are also available from *Southern Living* and *Better Homes and Gardens* magazines.

A great deal of demographic data on tourists, such as age, sex, race, income, occupation, and education, are also required. This information can be compared to the region's demographics to determine whether regional tourism activity will match or exceed national norms.

To gather the above types of information on tourists, survey studies should be conducted on the economic and demographic characteristics of tourists. This type of information could be gathered through interviews or questionnaire surveys at state parks, recreation areas, historical sites, hotels/motels, and visitor centers.

To obtain an estimate of increased use, traffic counts should be conducted on potential scenic byways, followed by traffic counts in the years following their designation. In order to do this, the traffic due to scenic byways recreationists must be identifiable.

BENEFIT/COST DATA NEEDS

The costs to tourists are primarily the types of expenditures identified above. Data on costs to the states should be gathered in the future (see items 9–11 of the specific scenic byway data needs listed above). The costs to states include

- Signs and other safety measures;
- Maintenance;

- Maps, brochures, and marketing campaigns; and
- Corridor enhancement and protection, including construction of byway turnouts, parking areas, etc.

The increased use of scenic byways, identified by traffic count surveys, can be multiplied by an average benefit per person to obtain total benefits, which can then be compared with public and private costs.

RECOMMENDATION

To develop definitive models of the economic impacts of scenic byways, it is suggested that a number of byways be selected and the previously described needed data be gathered for several years. A series of economic impact models should be developed and refined as the data become available.

REFERENCES

1. *The Kansas Input-Output Model: A Study in Economic Linkages*. Bulletin 6755, Agricultural Experiment Station, Kansas State University, Manhattan, Kans.
2. *Projection of the Population of the United States by Age, Sex and Race: 1988–2010*. Current Population Reports, Series P-25, No. 1017, Bureau of the Census, U.S. Department of Commerce, 1989.