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Current State Practices in the Transportation-Tourism Interface

This NCHRP digest presents the findings of Phase I of NCHRP Project 2-17(6), "Tourism Travel Contributions to Economic Development." Lowell B. Jackson, P.E., of Greenhorne & O'Mara was the principal investigator. The research team also consisted of Barbara Barnow of Greenhorne & O'Mara; Inc.; Dr. Douglas C. Frechtling of The George Washington University; Dr. Michael D. Meyer, P.E., of the Georgia Institute of Technology; and Alan E. Pisarski, a private consultant.

INTRODUCTION

One of the elements of the Intermodal Transportation Efficiency Act of 1991 (ISTEA) is a requirement that every state consider the general needs of recreational travel and tourism as part of a continuous transportation planning process. ISTEA also requires states to address specific tourist-related activities that affect transportation. The law also stipulates that states incorporate investment strategies into their transportation planning for improving adjoining state and local roads that support tourism growth.

Because many state departments of transportation (DOTs) do not have clear coordination procedures and analytical tools to enable them to achieve these ISTEA objectives, NCHRP developed a research study to provide such technical support. NCHRP Project 2-17(6), "Tourism Travel Contributions to Economic Development," is a two-phase research project designed to examine and refine the institutional practices of the agencies that are counterparts in the transportation-tourism interface: state transportation agencies (DOTs) and state tourism offices (STOs).

Phase I involved a series of data collection and analysis tasks structured to produce an overview of the current state of knowledge and practice in the transportation-tourism interface. Completed in July 1995, the Phase I findings presented here provide a national profile that offers some insight into institutional practices that appear to advance ISTEA objectives. In Phase II of this study, the research team will develop recommendations regarding measurement of tourism benefits, institutional arrangements to support the consideration of tourism, guidelines for state transportation planning, and improvements in traveler information services.

Research Accomplishments

A nationwide survey on how policy makers and planners of state DOTs deal with state tourism offices on issues related to tourism reveals a range of coordination practices and examines those interagency relationships that better integrate tourism into the transportation planning process, as required by ISTEA.

This digest is intended to provide state DOTs and state tourism offices with interim findings of the survey. In addition, this digest can serve as a reference for states considering policies and actions designed to better coordinate their resources to foster tourism growth through the planning, programming, financing, and operations of their transportation systems and facilities.

FINDINGS

The research results presented here are drawn largely from a national survey of DOTs and STOs, which was conducted between December 1993 and March 1994. The survey enabled the research team to identify and evaluate specific practices regarding institutional coordination, consideration of tourism in planning, and traveler information services. Other tasks (which included a literature search, a telephone survey of selected state agencies, and two focus group sessions) were used by the research team to interpret and to validate the results of the national survey.

The highlights of Phase I have been summarized in 20 findings. These findings have been separated into three groups corresponding to the following groups of question topics in the national survey: (1) overall policy and institutional coordination, (2) consideration of tourism in statewide planning and programming, and (3) traveler information services. Brief discussions follow each finding.

Overall Policy and Institutional Coordination

The following eight findings relate to policy and institutional coordination.

A state-level executive or legislative mandate or policy that defines tourism coordination responsibilities facilitates agency interactions.

Most agencies participating in the national survey indicated that interactions with their counterparts tended to be ad hoc; however, if some form of state mandate existed (e.g., a Governor's Executive Order or other legislation), then, other institutional mechanisms (i.e., general or project-specific memoranda of agreement on tourism-related transportation projects) were more likely to exist. Information collected during the telephone survey and in focus group sessions provided early indication of and support for this finding. The focus group sessions were held with representatives of the AASHTO Standing Committee on Planning and attendees at the Educational Seminar for State Travel Officials. Participants indicated that when the state Governor mandates such policies, agencies are more likely to discuss objectives for tourism growth. State representatives provided two examples. The written policy for tourism in North Carolina, developed from the federal tourism policy, encourages communication and coordination from the Governor's level down. Georgia has no state policy; however, there is a Governor's Economic Development Council, which includes Georgia's STO, DOT, the Department of Natural Resources, and private sector groups.

Although the survey results indicated that having a mandate is beneficial, in a disturbingly high number of states, counterpart agencies in the same state disagreed about whether state mandates or policies existed. The implications of this finding are that written policies are necessary, that the existence of such policies must be publicized, and that such policies must be enforced.

The existence of some formal policy or memorandum of agreement between DOTs and STOs facilitates discussion between the agencies.

Of those respondents reporting the existence of a general memorandum of agreement for planning and implementation activities, 77 percent described having "many discussions" with their counterpart agencies. It is likely that having a formal process results in more frequent discussions on planning and implementation and that such discussions improve statewide transportation planning and the delivery of services and facilities. Moreover, the survey results indicated that states with such DOT-STO agreements tended to measure more explicitly how transportation benefits tourism and to use objective, analytical techniques to do so.

The number of DOTs developing policies that relate transportation investment to tourism is high—this probably is attributable to the effects of ISTEA.

Although transportation planning traditionally emphasizes engineering concerns related to capacity, cost, the environment, and safety, appreciation of the link between transportation investment and economic development has increased. According to the survey, more than three-quarters of the DOTs had or were developing policies to develop tourism.

In the telephone survey conducted for this project, the research team reviewed policy documents dealing with transportation investment. Among those states surveyed, Oregon had taken the strongest initiative in the area of investment. The Oregon Tourism Division has developed a simplified model for estimating tourist expenditures related to investments involving a facility or program event intended to attract visitors. Although the model has drawbacks (i.e., there are no measurement standards or estimation techniques), this agency's attempts to quantify economic effects is significant.

DOTs are most involved with tourism projects that relate to the DOTs' traditional role of developing roads.

The research confirmed that DOTs have primary responsibilities for road-related projects (e.g., scenic byways, signage, rest areas, scenic turnouts, and bicycle paths), even though such projects enhance tourism. DOTs and STOs frequently share responsibilities for welcome centers and tourist information. This finding helps define an arena for potential or enhanced coordination activities. DOTs are comfortable taking a primary role in road-related projects where their technical capabilities and funding responsibilities are relevant. The research indicates that STOs are comfortable directing or participating in activities with a heavy marketing component (e.g., welcome centers, tourist information maps, and rest areas).

This finding introduces a recurrent problem—differing orientations and understandings on the part of the counterpart agencies. DOTs approach transportation projects, including those that are tourist-oriented, from an engineering perspective and they tend to focus on design. STOs adopt a marketing perspective to evaluate program priorities. These different orientations and organizational structures in counterpart agencies must be considered when developing ways to improve coordination and resolve conflicts.

DOTs and STOs interact most in regard to welcome centers and development and distribution of tourist information (including maps).

The survey results and focus group findings indicated that DOTs and STOs are most likely to interact on issues relating to welcome centers and tourist information. This finding may be most useful to those states where coordination between agencies is minimal. In these states, developing institutional mechanisms (i.e., policies and procedures) specifically for welcome center and map activities may facilitate greater interaction between DOTs and STOs. The focus group sessions revealed that clarifying each agency's role (in designing, producing, funding, and distributing tourist information maps) will result in better working relationships.

DOTs interact with those groups traditionally most involved with project development; STOs interact with tourism-related groups.

The analysis of the national survey results indicated that those groups with whom the DOTs interact the most—elected officials, local community groups, metropolitan planning organizations, and special interest groups—are those groups least likely to interact frequently with STOs. Not surprisingly, STOs are more likely than DOTs to interact with representatives of the tourism industry. That each agency is likely to have input from different sources, however, can be valuable during planning.

For those transportation activities related to tourism identified in the survey, DOTs provide most of the funding.

That DOTs fund most transportation projects dealing with tourism is not, in itself, an obstacle to coordination; however, the focus group sessions revealed two problems with incorporating STOs into the state transportation planning process. First, many STOs are not familiar with the process—particularly, the approval and budgeting cycle. Second, STOs familiar with the programming cycle are frustrated by its orientation to long-range planning, which contrasts with their shorter, more reactive planning and budgeting processes.

DOTs are more likely to resolve conflicts about tourism-related transportation activities at the policy level of the executive branch (e.g., cabinet office, commission, and Governor) than are STOs.

In most states, the DOT is a cabinet-level agency; STOs are typically subordinate units of departments of commerce or economic development. Because DOTs generally resolve conflicts at the upper level of the executive branch of government rather than at the operating level, the process for implementing activities is slower than in the STO culture in which conflicts tend to be resolved at the operating level. DOT institutional characteristics (e.g., the size, number of layers of the organization, political sensitivity, process requirements, and large costs of many transportation projects) increase the tendency toward longer implementation times. To improve coordination during planning, DOTs and STOs must address the longer time required by DOTs for final implementation and the differing processes used to resolve conflicts.

Consideration of Tourism in Statewide Planning and Programming

The second set of findings in the national survey relates to the areas of transportation and tourism planning practices (also defined as procedures and processes). The use of analytical tools in considering tourism benefits was emphasized. The sources of data explored in the survey were as follows:

- Tourists entering and leaving the state,
- Origin/destination (O/D) data for tourist travel,
- Visits to recreation sites,
- O/D data for transport terminals,
- Tourism expenditures in regions,
- Tourism expenditures statewide,
- Tourism-related business receipts, and
- Tourism-related employment.

STOs use a wider range of tourism-related data in their planning than do DOTs. DOTs seem to prefer those strategies and data analysis techniques that fit with their traditional roles.

STOs collect and use many more types of tourism-related data than DOTs do in support of decision making. A comparison of data sources used by agency type is presented in Figure 1. Of the STOs, 55 percent reported using all eight types of data listed in the survey; only 6 percent of the DOTs reported doing so. DOTs lead slightly in using O/D data for tourist travel and for transportation terminals. Nearly all of the DOTs used O/D data on visitors; three-fourths of the DOTs used counts of visitors to recreation sites or O/D data for major transportation terminals or both. Only about a third of the DOTs reported any use of statewide or regional tourist expenditure data.

These results suggest (1) that DOTs are not using many of the commonly available tourism-related data in their transportation planning and (2) that, if deemed important for decision making, more tourist-related data probably are available from the STOs.

According to DOTs and STOs, among the eight types of data listed in the national survey, O/D data are among the most desirable for incorporating tourism needs into statewide transportation planning.

When DOTs and STOs were asked to identify the types of data that they would prefer to use for planning, O/D data on tourists was ranked first by the DOTs and second by the STOs. This suggests an area for cooperative planning. O/D information on visitors assists transportation planners (i.e., DOTs) to develop infrastructure that facilitates travel and contributes to economic development. These same data enable tourism marketers (i.e., STOs) to determine where to direct promotional programs and to determine the effects of such efforts.

Some agencies indicate that they <u>choose</u> not to employ the other seven types of tourist data in their transportation planning, rather than identifying any obstacle in obtaining it.

Many agencies do not recognize, for planning purposes, much value in securing the types of data they do not already have. Regardless of whether or not they are aware of the availability of additional data, these agencies are not interested in acquiring such data. This limited perspective on which data are helpful for planning must be addressed because some agencies have found these data useful in transportation planning and economic development analyses.

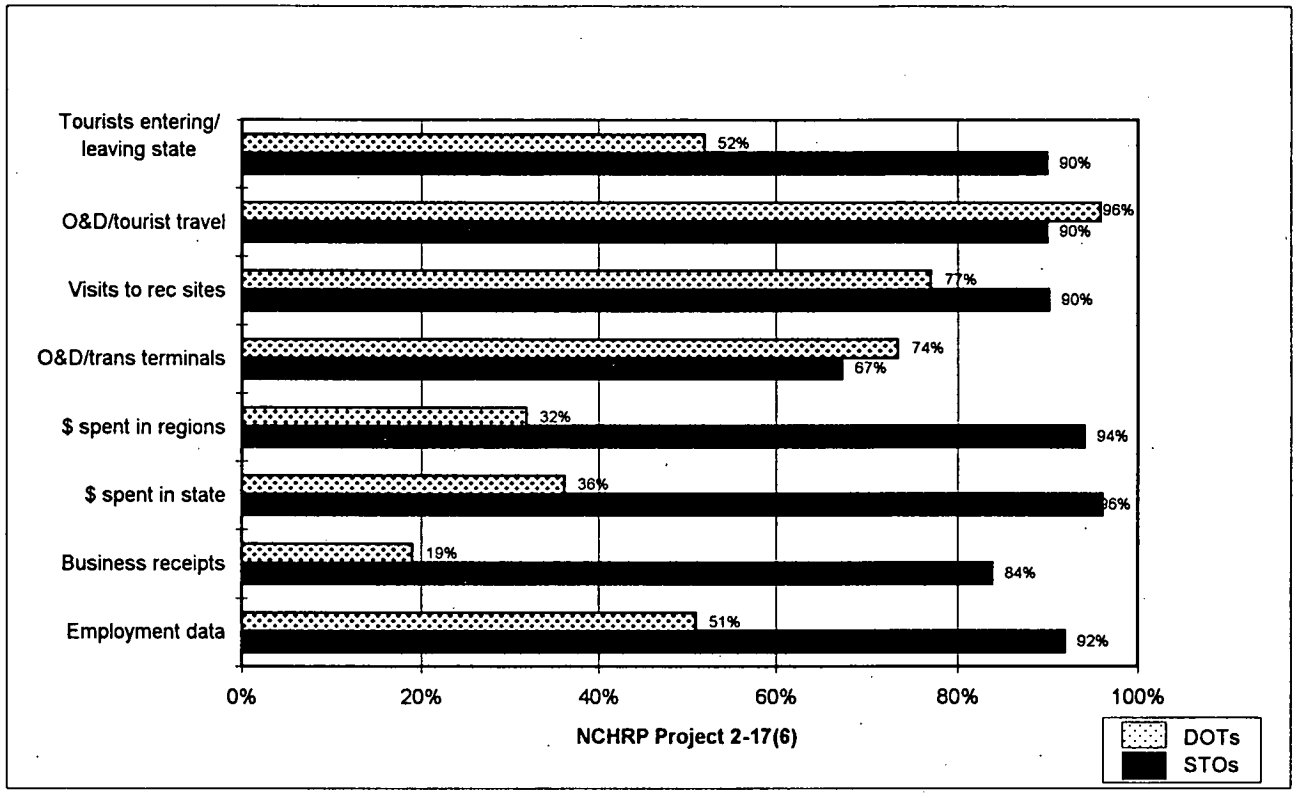

Figure 1. Data sources used (by agency type).

DOTs and STOs need to communicate better about whether or not the economic benefits of tourism are considered in transportation planning and what specific methods are actually used.

In only six states did agencies agree that the economic benefits of tourism were explicitly considered when establishing transportation project priorities. In a few states, agencies agreed that the economic benefits of tourism were not considered when establishing transportation project priorities. The agencies from the remaining states gave mismatched responses (i.e., DOTs and STOs from the same state gave contradictory responses). Of all the DOTs surveyed, two-thirds reported that the practice of considering economic benefits was in place or in progress; in contrast, of all the STOs surveyed, less than a third reported that the practice was in place or in progress, approximately another third reported that they were not in practice, and the remaining third indicated they did not know.

This recurrent situation of counterpart agencies having different perceptions of actual practice indicates the absence of effective institutional mechanisms to connect the two agencies. Better coordination will facilitate planning.

Theoretically, agencies can supplement each other in the types of analytical capabilities used for measuring tourism benefits; however, actual sharing of data does not seem to be occurring. STOs use statewide economic models and outside consultants extensively; DOTs use "default values, rules of thumb, etc." to assess the economic benefits of tourism in transportation projects. Only in the case of using corridor or subregional models is there any overlap.

This finding reflects answers to survey questions about four types of analytical capabilities: statewide economic models, corridor or subregional models, default values, and outside consultants. Among those agencies indicating some analytical capability, the use of default values or rules of thumb was identified by nearly half of them—all these agencies were DOTs. In contrast, three-fourths of the STOs reported that

they used one of the four listed capabilities. Overall, STOs are considerably more active in measuring the benefits of tourism than DOTs and are more likely to use quantitative analysis techniques in support of decision making than are their DOT counterparts.

On the basis of the survey results, a preliminary investigation was conducted to determine whether or not the types of economic models used did link transportation investment with tourism growth. Three models were discussed in the two focus group sessions: REMI, a model developed by Regional Economic Models, Inc.; the Highway Investment Analysis Package (HIAP), which was developed by the Federal Highway Administration; and the Travel Economic Impact Model (TEIM), a product of the U.S. Travel Data Center. The Wisconsin DOT used REMI for corridor studies. REMI is an input-output model that looks at overall productivity gains in relation to travel cost reductions associated with travel time, operating costs, and accidents. HIAP provides a cost-benefit analysis of highway projects, where costs are defined in terms of construction and maintenance expenses over time and benefits are defined in terms of travel time, operating costs, and accidents. TEIM produces estimates of tourist spending at the state and local level, including the effect of that spending on employment, labor earnings, and tax revenues.

This quick investigation revealed that several models measured tourism benefits only in terms of job creation. Additionally, all of the models were directed at tourism-related regional projects and did not reflect any separate consideration of transportation.

Traveler Information Services

The last set of findings covered traveler information services. (Note: for the following discussion, "dominance" is used to describe cases where the responses from one agency type were at least twice that of its counterpart.)

All but six agencies report that they are involved in implementing, organizing, or regulating the provision of maps for tourists. Most agencies deal with welcome centers in some capacity. For the 12 other types of visitor information services examined, agencies in the states divide responsibilities and labor informally.

The top three DOT project areas are tourist-oriented highway signage, maps, and special information logos. (Logos are defined as (1) pictorial representations used on limited access highways to indicate the existence of service-oriented facilities such as hotels or restaurants or (2) tourist-oriented signs indicating the number of miles to a tourist site.) These are very traditional areas of involvement for DOTs. The top three STO project areas are brochures, maps, and welcome centers. These results agree with other survey findings that link agencies to their planning and funding responsibilities.

DOTs dominate four operational activities—planning, design, funding, and approval—in 7 of the 13 categories of traveler information services. DOTs tend to dominate all four of these activities in a service category if they dominate any at all. STOs dominate activities in three categories—tourist-oriented road signage, promotional brochures, and interactive video kiosks—and tend to be most active in the design and funding of these.

The dominance of DOT involvement in most of the traveler information services examined in this study further defines their role in a DOT-STO coordination effort. When developing coordination guidelines, a DOT's lead role in planning most of the traveler information services should be addressed.

Tourist-oriented road maps, welcome centers, tourist-oriented road signage, and promotional and informational brochures were the most commonly reported traveler information service activities among the STOs and the DOTs—more than 80 percent of the agencies reported involvement in these activities. DOTs dominate in their involvement with maps and signage, while STOs clearly take the lead in brochures. In the area of welcome centers, DOTs and STOs had similar levels of involvement.

These results identify program areas in which DOTs and STOs are both highly interested and

involved. Institutional mechanisms to encourage interaction in planning and implementing programs in these areas would benefit both agencies and improve the overall delivery of services.

STO activity is concentrated in the planning phase of the tourism-related transportation activities examined, with little participation in the approval stage, and even less participation in facility design and funding. DOTs, on the other hand, participate actively in design and funding, and to a somewhat lesser extent, in approval and planning of these activities.

This finding clarifies the role of the STO in DOT-dominated activities. Taken in combination with other findings, it is clear that STOs are not heavily involved in the administrative or technical activities relevant to most of the traveler information services examined. Usually, this arrangement is acceptable to both agencies because of the distinct functions and expertise associated with each agency; however, the strength of the STOs in data collection and analysis, as used for their own market assessment and subsequent planning, suggests that they could make a valuable contribution to the state planning process.

DOTs and STOs provide special information services for elderly travelers in about a sixth of the states, services for foreign visitors in about a third of the states, and services for travelers with disabilities in nearly half of the states. STOs dominate in providing information services for foreign visitors— the only category where one type of agency clearly eclipses the other.

DOTs and STOs differ in the levels of service that they provide to the three special user groups evaluated in this study. (These groups were further divided into drivers and non-drivers, with "non-drivers" defined as tourists traveling by means other than automobile [e.g., airplane, train, ship, or bus].) The DOTs and the STOs selected the category of visitors with disabilities as their highest priority for providing traveler information services and included drivers and non-drivers. The category of non-driving visitors with disabilities received slightly more attention from both types of agencies. STOs placed more emphasis on foreign visitors than DOTs. These results confirm that an agency's orientation to serving special user groups relates directly to the functions of the agency. Currently, the elderly receive the least attention from agencies—a situation inconsistent with emerging demographics.

In the survey, agency representatives were asked to identify creative strategies to accommodate special user groups. This initial screening revealed that current efforts are largely traditional in nature. For the elderly, the use of special brochures and large print signs were common responses. For foreign visitors, provision of brochures, maps, and signs in foreign languages was reported frequently. For those with disabilities, providing access to rest areas and information centers was the most frequently mentioned strategy. Phase II will include investigation of the more innovative strategies.

Overall, DOTs anticipate that services for the elderly will be a priority. STOs anticipate that services for those with disabilities and foreign visitors will be a priority.

Figure 2 presents the distribution of responses from DOTs and STOs on future priorities for special user groups. Again, there are differences in the emphasis given by agencies for special user groups. The findings reflect a shift in the DOT perspective, which emphasizes future accommodation of the elderly. STOs place greater importance on future services for visitors (drivers and non-drivers) with disabilities and foreign drivers than the DOTs.

There is no consensus on the importance of providing special traveler information services to visitors who are elderly, foreign, or with disabilities—either now or in the future.

Fewer than half of the agencies reporting indicate that their states have used ISTEA enhancement funds for tourism-related projects.

This finding is disturbing in itself and is made more so by the fact that nearly a fourth of the STOs

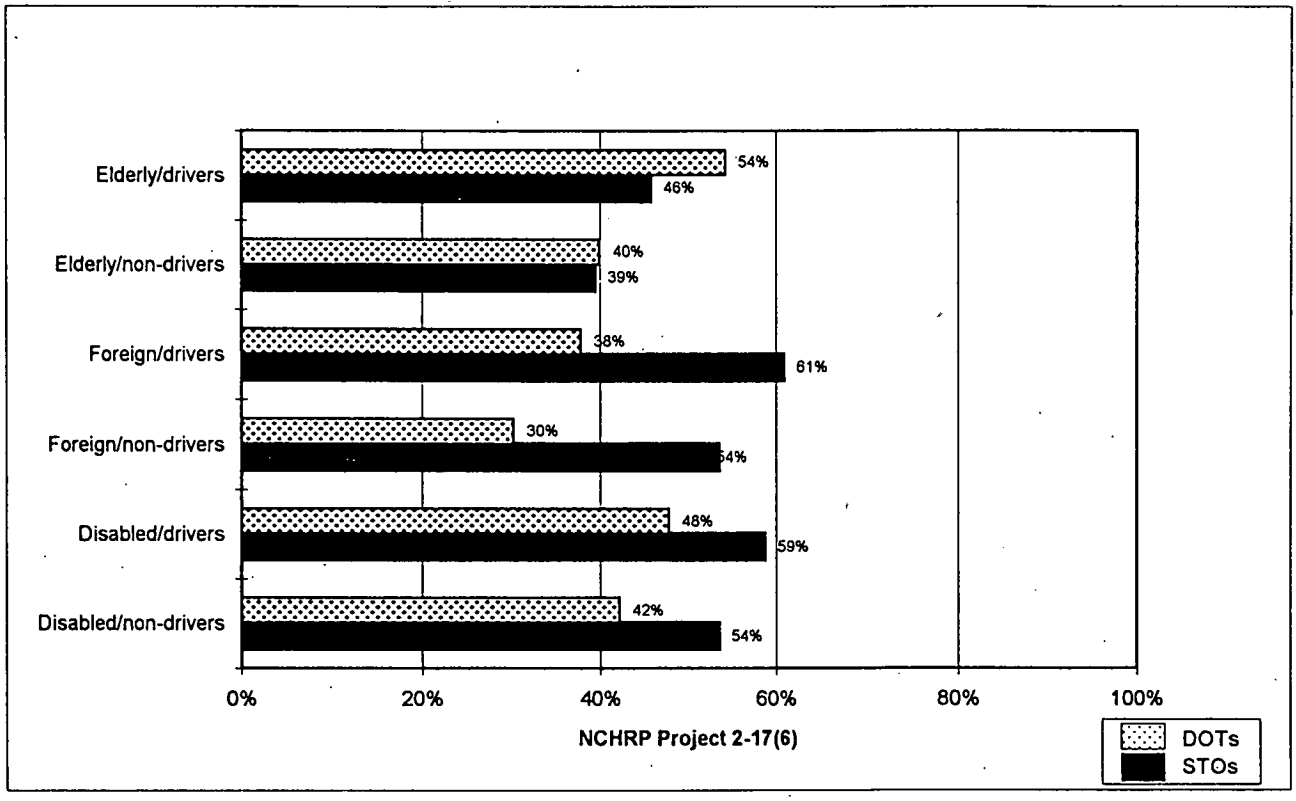

Figure 2. Future priorities for special user groups (by agency type).

reported that they did not know whether ISTEA funds had been used in their states. The analysis revealed that nearly half of the agencies in states with mandates for DOT support for tourism reported that ISTEA funds have been used for tourism benefits. A third of the agencies in states without mandates reported the use of enhancement funds. It is encouraging that about a fourth of the respondents in each group indicated that the use of ISTEA enhancement funds is in progress.

IMPLICATIONS

The Phase I research effort produced a profile of the current practices that DOTs use in addressing tourism in their planning process and the limited influence of STOs in that planning. The importance of this profile is that it reveals the range and predominance of practices that define the current institutional environment in which ISTEA objectives must be implemented. In addition, the research uncovered issues to be addressed in the Phase II effort of developing institutionally feasible recommendations. Phase II will extend the investigation of those economic models and analytical tools relevant to tourism that could facilitate decision making for state transportation planners. Phase I uncovered few such models and tools. Identification of innovative traveler information programs that can increase tourism through transportation investment also will be investigated during Phase II. Among those programs already identified are the joint operation of a travel information center to serve both Minnesota and North Dakota, a travel data delivery system accessible to various organizations in Michigan, and electronic bulletin boards containing potential tourist contacts in Texas.

The issues identified in the research so far touch all aspects of the DOT planning process: policies, processes, procedures, and programs. Each state has its unique DOT and STO organizational structure and objectives for tourism to enhance local resources; however, as in any interagency coordination effort, common factors must be addressed. The central

issues for advancing the transportation-tourism interface have been discussed briefly here and are intended to provide some direction for DOTs in their ongoing efforts to comply with the ISTEA requirements regarding tourism activities.

For more detailed information on the Phase I research, the research team has produced several reports, which can be obtained on loan through the National Cooperative Highway Research Program, Transportation Research Board, 2101 Constitution Avenue, N.W., Washington, D.C., 20418.

These reports include the following:

- *Current Practices in Addressing the Transportation Needs of Tourism: Analysis of Survey Results (Interim Report)* July 1995. A question-by-question analysis of the responses provided by 99 agencies in the national survey.

- *Tourism Travel Contributions to Economic Development: Phase I Report Summary (Interim Report)* July 1995. A task-by-task progress report on the Phase I study effort, which covered a literature review, a telephone survey, two focus group sessions, and a national survey.

- *A Profile of Current DOT Planning Practices in Tourism (Interim Report)* July 1995. A report on the overall research findings that produced a national profile of current DOT practices with regard to tourist-oriented activities, including a review of the six "best practice" states.

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