

INFORMATION VERSUS AESTHETICS: THE GUT ISSUE  
IN BILLBOARD CONTROL

Remarks of Ross D. Netherton  
Research Director,  
Commission on Highway Beautification

At the 53rd Annual Meeting of  
Highway Research Board  
Washington, D.C.  
January 24, 1974

Control of the use of roadside areas for commercial advertising has received attention at the State and local levels of government since the turn of the century, and has been a feature of the Federal-aid highway program since 1958. During this time State and local law on this subject has continued to evolve steadily, if not always speedily, from principles of property law, nuisance and zoning law, adapting to new conditions created by new technology, and as new insight into the arts and sciences of land-use planning and design have suggested new approaches to managing the visual environment.

By comparison, the evolution of the Federal law regarding billboard control has had a checkered history. First suggested, but not adopted, in the Federal-Aid Highway Act of 1956, then brought into the Federal-aid law in 1958, and subsequently redesigned and expanded as the Highway Beautification Act of 1965,<sup>1</sup> the present law remains the subject of controversy; and Congress has indicated in its Conference Committee report on the Federal-Aid Highway Act of 1973 that it intends to consider new legislation on roadside advertising in 1974.<sup>2</sup>

Why, after 15 years of effort, does this problem appear to be so difficult to resolve?

One view -- easily the favorite theme of the popular press whenever this subject arises -- is that the controversy over roadside billboards represents a clash of irreconcilable interests, namely the desire to make highways aesthetically pleasing pitted against the desire to sell things to the captive audience of drivers on the highway. Sometimes this controversy is represented as involving the interest of the public in protecting its investment in the highway and the interest of the private landowner in the full freedom of the use of his land. In either case the main debate focuses on the issue of beauty vs. economics, with the economic interest equated to keeping people employed in the advertising industry and in businesses using roadside signs to reach their markets.<sup>3</sup>

It is the theme of this paper that the national policy for control of roadside advertising should not be administered primarily as a problem of balancing aesthetic needs versus jobs. Rather it should be approached as a problem of accommodating aesthetic needs and information needs. When the issue is put in those terms, it is submitted that the competing interests are not irreconcilable, that an accommodation can be reached so that in

the trade-offs that are made there need be very little, if any, compromise of the aesthetic goals, and that, overall, the highway user gains by improvement of the service provided by the highway system.

### Legislative Background

The history of Federal-aid billboard legislation in 1958 and 1965 indicates that Congress recognized this information problem and provided means to deal with it.

Testimony before the U.S. Senate in 1957 documented not only the beginning of developmental work on improved systems of information services by AASHO, the Bureau of Public Roads, and certain of the turnpike authorities, but the keen interest of Congress in these programs.<sup>4</sup>

When Congress enacted the Bonus Act in 1958, it provided four exceptions to the prohibition of advertising along the Interstate System, namely:<sup>5</sup>

- (1) directional and other official signs or notices required or authorized by law;
- (2) signs advertising the sale or lease of the property on which they are located;
- (3) signs erected or maintained pursuant to authorization or permitted under State law, and not inconsistent with the national policy and standards of this section, advertising activities being conducted

- at a location within 12 miles of the point at which such signs are located; and,
- (4) signs erected or maintained pursuant to authorization in State law and not inconsistent with the national policy and standards of this section, and designed to give information in the specific interest of the traveling public.

Two things about this list of exceptions are apparent: first, they are a mix of public responsibility and private sector license for providing motorist information; and second, they reflect Congress' concern primarily for information relating to travel objectives or services in the specific interest of the traveling public.

The national standards promulgated pursuant to the 1958 law refined and expanded these emphases.<sup>6</sup> Class 2 signs were administratively interpreted to include not only those advertising sale or lease of property, but also "activities being conducted upon" the site. Class 3 signs, advertising places within 12 miles, were oriented to facilities and services which typically constituted intermediate travel objectives for motorists, and which included a wide variety of businesses. Class 4 signs, dealing with information in the specific interest of the traveller, supplemented the other classes by identifying or characterizing services directly related to motoring and

and outdoor recreation, and provided for the use of brand names or symbols associated with these services which were important to their patronage.

Administrative interpretation also authorized the use of Class 3 and 4 signs in "informational sites" where publicly sponsored directory boards and panels provided space for advertising messages.

Between 1958 and 1965, twenty-five States enacted Bonus laws,<sup>7</sup> but, aside from allowing Class 3 and 4 signs to continue carrying the burden of information for the expanding Interstate travel, virtually the only move to expand official information signing was the appearance of the "FOOD-FUEL-LODGING" service sign. Informational sites were, for various reasons, not popular with State highway departments. Part of the slowness in implementation of the law, also, was the fact that the Bonus program was tied to the completion of individual Interstate projects, and during this period relatively little of the Interstate System was completed.

The Bonus program did not result in any widespread development of public information facilities as alternatives to roadside advertising. So, in 1965, when the legislative framework for billboard control was overhauled and expanded to include Federal-Aid Primary highways as well as the Interstate System, the concern for motorist

information again was evident, and led to several changes in the law.

First, the four classes of signs which were exceptions under the earlier law were converted into three categories:

- (1) "directional and other official signs," apparently carried over without change from earlier law;
- (2) "signs advertising sale or lease of property where they were located," also apparently unchanged from the 1958 law; and
- (3) "signs advertising on-premise activities, thus specifying a category which had not been listed specifically in 1958.

Second, the old Class 3 and 4 signs, which had been relied on to provide the bulk of travel information under the Bonus law, no longer qualified as exceptions. In their place, the 1965 law authorized the Secretary of Transportation

in consultation with the States to provide within the rights-of-way for areas at appropriate distances from interchanges on the Interstate System, on which signs, displays, and devices giving specific information in the interest of the traveling public may be erected and maintained. Such signs shall conform to national standards to be promulgated by the Secretary.<sup>8</sup>

Subsequently, Federal Highway Administration (FHWA) standards for such signs were published covering GAS-

FOOD-LODGING signs, roadside area information panels located in safety rest areas and scenic overlooks, and "business signs" to be attached to specific information signs and panels to show brand names, trademarks and names of business establishments.<sup>9</sup>

This same legislation also authorized State highway departments

to maintain maps and permit informational directories and advertising pamphlets to be available at safety rest areas. Subject to the approval of the Secretary a State may also establish information centers at safety rest areas for the purpose of informing the public of places of interest within the State and providing such other information as a State may consider desirable.<sup>10</sup>

The intent of these changes was evidently to increase the proportion of public responsibility in the mix of motorist information services, and correspondingly reduce the scope of the private sector's license, for the Congressional reports quoted with approval correspondence from the Secretary of Commerce committing the department, in cooperation with the States, to early development of improved service signing and adaptation of radio communication technology to motorist information services.<sup>11</sup>

The Secretary's letter noted, however, that signs advertising services and facilities of interest to the traveling public could be erected in zoned and unzoned

commercial and industrial areas, and he expressed the belief that "these signs can to a very great extent take care of the need for informing the traveling public on noncontrolled access portions of the primary system."<sup>12</sup>

This proved to be prophetic, for much of the advertising subsequently erected in roadside commercial and industrial areas contained directional information. Also, existing signs, both in and out of commercial and industrial areas, frequently were altered to include directional messages. As a result, by the end of 1973 Federal officials unofficially estimated that 80 percent of the existing nonconforming signs along Interstate and Federal-Aid Primary highways contained some form or degree of directional information.<sup>13</sup>

Not all signs containing directional information, however, could qualify under the exception for "directional and other official signs." In the national standards for such signs, "directional signs" were defined as:

signs containing directional information about public places owned or operated by Federal, State, or local governments or their agencies; publicly or privately owned natural phenomena, historic, cultural, scientific, educational, and religious sites; and areas of natural scenic beauty or naturally suited for outdoor recreation, deemed to be in the interest of the traveling public.<sup>14</sup>

Accordingly, most food, fuel, lodging, and automotive service facilities, and many tourist attractions remained in the status of nonconforming advertisers whose signs were subject to removal. Many complained that this was a limbo situation, for they could neither acquire status as a lawful exception to the billboard prohibition nor take down their nonconforming signs with assurance that the function of those signs would be performed by other motorist information facilities.<sup>15</sup>

Although the Secretary of Transportation in 1969 promulgated national standards both for official signs giving information for the traveling public and for directional and other official signs, there was little incentive for the States to implement this authority so long as no means were provided to move forward with removal of nonconforming signs.<sup>16</sup> In addition, States which attempted to inaugurate innovative informational facilities or services found they had to overcome an excessively cautious attitude in FHWA, with the result that approval of Federal participation was very difficult to obtain for any type of service signing not already in the traffic engineers' manual.<sup>17</sup>

By the 1970's, therefore, only one facet of the motorist information services which the 1965 beautification

legislation had been implemented on an extensive scale. This was the operation of manned information centers, generally at points of entry into a State and occasionally along main travel routes within the State.<sup>18</sup> On a lesser scale, State highway departments had begun to display varying amounts of travel information in safety rest areas. These facilities ranged from merely posting a State highway system map, to posting special maps of recreational facilities, to marking maps with private food-gas-and-lodging locations, to maintaining regional directory and information boards.

#### Refining The Problem

From this legislative history three conclusions emerge: First, Congress viewed development of better information services for motorists as a necessary process to be carried on parallel to the elimination of nonconforming roadside advertising; second, the system which supplanted billboard information should be a mix of public and private facilities and services, with the public sector having the major share of responsibility; and third, for a variety of reasons, this system has not been developed with the speed, scope and imagination that is needed.

Full development of such a statement will take time but at least enough of a start has been made to bring the issue into clearer focus.

For one thing -- and this is fundamentally important -- a conceptual framework for organizing a system of information facilities and services now is clear as a result of research conducted in the past few years. Here special mention might be made of the research of King and Lunenfeld, published by the Highway Research Board in 1971.<sup>19</sup> Analysing the functions of motorist information, they describe the "navigational level" of the driving task in terms of directional information needs, and review current methods of transmission and reception in transit. A similar analysis is applied to service information needs.

This research revealed several conclusions which apply to designing better travel information systems, among them the following:

- (1) Motorists anticipate many information needs by planning before they start to drive, using maps and other travel guides. Terminal destinations, distances, many types of intermediate destinations, main routes and alternates, and many forms of services are covered by such information.
- (2) Motorists constantly check and adjust their initial plans during travel by a decision-making process

which samples information from a variety of sources encountered in-transit. Deliberately, their pre-trip plans have gaps, particularly for intermediate stops, and information obtained in-transit is used for decisions relating to these needs. Some of these decisions are impulse decisions. ("That looks like a nice restaurant. Let's have lunch there.") Some are more deliberate. ("Let's get gas here. I don't want the tank to get too low.") Others may have considerable lead time. ("Let's stop at the next phone booth and call ahead for a reservation.") Some may involve multiple objectives. ("Let's stop for gas next chance we have, and get a place to stay tonight, and then spend the afternoon seeing Crystal Cave.")

- (3) Both of the above planning processes involve distinguishable information needs and information sources; and they are related to a third, namely: directional information guiding the motorist into an intermediate destination from the main travel route. Identification of the proper exit, and guidance into the service facility are the functions involved here.

Using this as a suggestive, if not definitive, approach to the problem of organizing information facilities,

it is possible to look back at the 1958 and 1965 billboard control laws and see the wisdom and the limitations of what Congress called for. The importance of pre-trip planning, using what engineering research called a priori sources, was implicit even though not emphasized in so many words. Its sources were well known, and were capable of supplying most information regarding terminal destinations. Moreover, guidebooks, maps and directories used in pre-trip planning continue to serve motorists while in transit, and one need only note the amount and type of travel information now being put in them to recognize their value.<sup>20</sup>

Expansion and improvement of facilities for information about intermediate destinations was provided in the Federal statute and the national standards by the exceptions for "directional and other official signs" and on-premise signs (particularly on Federal-aid primary highways), and by opening up commercial and industrial areas to billboards. The major innovation, however, involved adding information facilities and services to safety rest areas, and authorizing official signs with certain kinds of travel information within the right-of-way.

As for signing to guide motorists into specific destinations from the main highways, the authority for signs

giving information of interest to the traveling public contemplated use of brand names and other business identification on official service signs, and possible expansion of audio-communication systems to this function.

Although the problem of providing effective alternatives to roadside commercial advertising as sources of directional and service information becomes easier to solve as the roles of information are analyzed in functional terms, the accommodation of information and aesthetic goals ultimately depends on the allocation of responsibilities among the public and private sectors for providing this information. If this mix relies too heavily on the present pattern of commercial advertising, by exempting signs from the prohibitions which otherwise would apply to them, aesthetic needs will be compromised. On the other hand, if it is unrealistic in overloading public agencies with responsibilities they cannot handle, the information gap will remain a serious obstacle to any billboard removal program.

Before attempting to redefine this issue, reference should be made to some engineering principles which should be considered with it. Viewing the problem through the eyes of the motorist, King and Lunenfeld have suggested the following rules:<sup>21</sup>

- ° First things first -- since roadside space available for visual display of information is limited, priorities must be assigned to types of information provided by this means.
- ° Do not overload -- highway users have limitations for processing information as they drive.
- ° Provide as much information as possible prior to starting.
- ° During travel, space the transmission of information rather than allow it to be bunched.
- ° Do not surprise the driver -- put information where he generally expects to receive it.

In addition, they have suggested certain principles to be followed in designing information services for modern highway systems:

- ° Information services are a sub-system of the total highway system, and should be compatible with the highway plan, function and design.
- ° The driver, or rather his ability to receive and use information, is the main controlling element of the system; hence, the information services must be "user oriented."
- ° The system must accommodate the needs of users at all times and in all weather.

- ° Basic features of the system should be uniform to prevent confusion in interregional travel.
- ° Because implementation of any information system requires allocation of scarce resources, it should be designed to be feasible within available resources.

### Re-defining the Issues

These rules and principles are not very helpful to legislators until they are applied specifically to the issues presented in the billboard control program. And in re-defining the issue of aesthetics vs information, the hardest problem is deciding how much reliance should be put respectively on private commercial signing and on public facilities.

If it is asserted as an hypothesis that the desired goals of visual quality require elimination of billboards to the greatest extent possible, it follows that in-transit travel information should be provided entirely by public facilities -- official signs, information centers and rest area director plazas, and service and guide signs, together with such audio communication facilities and a priori sources as may be developed.

To say whether this is practical, however, calls

for testing its feasibility and desirability separately for each of the three major areas of informational needs.

Major destination directional information. The first category of needs deals with information about major destinations -- generally terminal destinations for travel -- and directions for reaching them. Can these needs be met without roadside commercial signing? On balance, the prospect is that they can.

Pressure for providing such information to motorists while traveling can be substantially reduced by pre-trip planning and in-transit consultation of informational materials carried with the motorist in his car. Lead time for making decisions is longest when major destinations are involved; and as this lead time lengthens there is more opportunity for access to sources of information, and less need to furnish information to motorists in transit. Decisions which modify pre-trip plans may be based on information provided in rest areas, or at other intermediate stops. Official signing within the right-of-way can provide directions to major tourist or recreational attractions.

Commercial billboards generally add little, if any, important information not available in this way; and they have the additional disadvantage of going contrary to certain basic principles of highway information systems.

For example, roadside billboards erected at random are not compatible with the principles of transmitting information where users expect it (i.e., on the right-of-way where other highway signs are), of adhering to functional priorities among types of information (i.e., advertising sites go to the highest bidders regardless of whether motorists' need for the particular advertising message at that time and place), and compatibility with the highway system's overall design (i.e., currently there is little correlation of land-use planning within and outside rights-of-way in rural areas).

Intermediate destination directional information.

When dealing with the need for information about intermediate destinations, such as overnight lodging, food services, automotive services, and day-use of recreational or tourist attractions, the likelihood that in-transit needs can be furnished entirely by public facilities may be less certain than where major terminal destinations are involved.

First, pre-trip planning is less complete regarding intermediate destinations, and leaves more of those decisions to be worked out in-transit, sometimes as impulse decisions. Brand names and national chain services and facilities tend to be important to many

motorists when making stops of short duration for these services. At the same time, independent businesses catering to highway travel and tourism want opportunities to be identified, and special regional or local tourist and recreational attractions seek recognition. These factors put pressures on the public information facilities which, up to the present, most States have been unwilling to accommodate.

On the other hand, it is questionable that private commercial signs can be given a much larger license to provide this type of information without seriously impairing highway aesthetic goals. If the estimate that upwards of 80 percent of the existing nonconforming signs in controlled roadside areas contain some form of directional information is accurate, then to allow any significant number of these signs to become new exceptions to the law's billboard prohibition would have to be seriously questioned. In addition, the same incompatibility with the principles of sound highway information systems cited earlier would apply here.

Possibly there is a middle ground on which a very limited number of additional private directional signs could be granted exceptions without compromising aesthetic goals, provided they were selected to give directional and service information which was not readily available

through public facilities, and provided, also, that their size, lighting, spacing and number were limited to make them compatible with sound information system principles. Exploration of such a middle ground has not been sufficient to indicate what the most desirable mix of functions should be.

Local directional information. Service signs and guide signs to assist motorists in reaching specific locations within the vicinity of a known destination comprise the third type of signing need against which the hypothesis of public responsibility must be tested.

Statutory authority for Federal approval of and participation in expansion of systems of service signs and guide signs for Interstate highways already exists. Currently a few State highway agencies are in the process of moving from the first generation of such signs, utilizing the GAS-FOOD-LODGING legend, into a second generation using logograms and graphic symbols to identify particular service facilities and brands of service. Initial impressions of the oil companies as to the effectiveness and feasibility of such signing are favorable. The major obstacles to prompt and widespread implementation of logo sign programs are the needs for Federal enabling legislation for use of such signs on Federal-Aid Primary highways, for enabling legislation

in some States to permit placement of such signs within rights-of-way, and for a more liberal attitude by FHWA in approving experimental or developmental work for this type of information.

The particular nature and function of local directional and guidance information makes it possible to use sources which do not depend on roadside visual displays. Low power radio transmissions, such as have been used for guiding traffic within metropolitan airport complexes, and for guiding traffic and giving interpretive information in the National Parks, offer opportunities to develop local systems of audio communication for motorist information. There is also room for more extensive and innovative forms of printed information which can be used both for pre-trip planning and carried intransit for local direction-finding; and there are indicators that this type of publication will continue to increase with support from both public and private sectors.

Can private commercial roadside advertising do better than these officially-sponsored and supervised sources of information for local direction-finding? Evaluated functionally, the balance is in favor of having this information provided as a public responsibility.

Typically, local guidance is needed in the vicinity of interchanges and business districts where driving tasks are most difficult, and need for elimination of competing demands for the driver's attention is recognized. The need for adherence to sound principles of designing highway information systems is correspondingly urgent, and is threatened by permitting private signing to take over a larger share of responsibility for this information.

#### Aesthetics vs Information: A Tentative Balance Sheet

Having started by asserting that achievement of effective control of roadside advertising depended on devising a satisfactory accommodation of aesthetic goals and motorist information needs, it is fair to ask for a balance sheet on how close it is possible to come to such an accommodation. At the moment, this balance sheet must be regarded as tentative. A new system of motorist information services is beginning to emerge, and its ability to cover the so-called "information gap" resulting from removal of existing nonconforming billboards remains to be determined.

Tentatively, therefore, the following factors comprise the frame of reference for considering whether further legislation is needed:

1. Congress has recognized the need for increasing the facilities and programs which provide information to

motorists as they travel, and has authorized State initiative and Federal participation in such activity as part of the Federal-aid highway program.

2. Implicit in this legislation is the policy decision that publicly operated or sponsored information facilities and services should replace the present uncoordinated pattern of private commercial advertising signing to the extent that it is possible to provide acceptable levels of information service by these means.
3. For various reason, Congress has not extended this authority to all highways for which the national policy calls for control of roadside advertising; nor have the States moved on a wide scale to implement their authority in this field; nor has FHWA actively encouraged experimental and developmental work in this field on the scale needed.
4. Enough research and development has been carried out, however, to establish the probability that most of the information needs of motorists can be met by the types of facilities and services authorized in the 1965 Federal law.
5. Just as major categories of land-use are subdivided

to allow responsive treatment of local areas under zoning codes, it is necessary to recognize functional distinctions relating to motorist information in order to assure that service standards are realistic. In evaluating the capability of public information facilities to provide adequate levels of service, it is thus necessary to deal separately with three types of information functions, namely: directional information for major (terminal) destinations; directional information for intermediate destinations and services in-transit; and directional guidance within local destination areas.

6. Evaluation of the capabilities of public motorist information service systems in the three functional areas above, plus consideration of the extent to which private commercial advertising signing can be made compatible with the principles for sound principles for sound development of highway information systems, should be the basis for allocating responsibility for such services among the public and private sectors.
7. The combination of facilities currently authorized for development of public motorist information services

appears adequate to provide an acceptable level of services for direction-finding to major travel destinations and for guidance within major destination areas.

8. It is not so clear that directional information for intermediate destinations and automotive services can be provided at acceptable levels solely by presently authorized public facilities. However, to assure that private commercial signs are compatible with sound principles for highway information signing, any private signing which is permitted to perform this function should be closely correlated with public information service programs, and regulated to assure this result in practice.

## REFERENCES

1. In connection with the Federal-Aid Highway Act of 1956 it was proposed that the bill authorize Federal participation in acquisition of roadside advertising rights adjacent to Interstate highways. At the objection of certain Senators, however, the amendment was withdrawn.

Subsequently, separate legislation on this subject was enacted as PL 85-381, April 16, 1958, 72 Stat. 89. For legislative history of this act see 85th Congress, 2d Session, H. Rep. 1480, March 6, 1958; S. Rep. 1407, March 22, 1958; Conference Report 1591, April 2, 1958.

This was replaced by the Highway Beautification Act of 1965, PL 89-285, October 22, 1965, 79 Stat. 1028. For legislative history of this act, see 89th Congress, 2d Session, S. Rep. 709, September 14, 1958; H. Rep. 1084, September 22, 1958.

2. U.S. House of Representatives, Committee on Public Works, "Conference Report on the Federal-Aid Highway Act of 1973," H. Rep. 93-410, 93d Cong., 1st Sess., July 27, 1973, 65.
3. See the author's discussion in R. Netherton, "The Accommodation of Highway Beautification and Outdoor Advertising" in J. Houck (ed), Outdoor Advertising: History and Regulation,

(Notre Dame: Univ. of Notre Dame Press, 1969), 203-248

See, also, the remarks of Senators Kuchel and Neuberger discussing the 1958 law in S. Rep. 1407, 85th Congress, 2d Sess., as follows:

Not only is State action left paramount, but provision is made...for the reasonable advertising needs of off-highway businesses that must be able to reach and attract travelers on the new expressways. We have recognized that limited access roads bypass many hotels, motels, resorts, and other tourist facilities which are accessible only by leaving the interstate highway at an exit to seek them out. A State may wish, in regulating signboards consistent with the policy and standards of this bill, to make provision for signs informing the traveler of such facilities accessible to him from the next exit. This bill permits recognition of such State regulation in the agreements for Federal assistance.

Thus the claim which the Congress is called upon to balance...ultimately is reduced to the financial interest of the billboard industry itself, as against the interest of the traveling public in the undisturbed view of the American countryside surrounding our magnificent highways, free from the blatant attacks of billboard salesmanship.

4. U.S. Senate, Committee on Public Works, Hearings on Control of Advertising on Interstate Highways, 85th Cong., 1st Sess., March 18-21, 26-27, April 2, 1957, 184, 353-354, 388.
5. See remarks of Sen. Kuchel and Neuberger in note 3 above. For contrasting views of Senators Kerr, Scott, Hruska, and Martin, see S. Rep. 1407, 85th Cong., 2d Sess. as follows:

In an apparent effort to placate the owners of small businesses, restaurants, motels, service stations, etc. the bill permits signs...advertising activities within

12 miles of the point of the sign. This, it seems to us, is a perfectly specious provision. Such a sign is approximately 2 ft square, and being located at a distance from the highway, is utterly valueless, especially for night drivers.

The...[section listing exceptions to the prohibition] is a legal jungle...These three qualifications... are not only impossible of definition, but contain ambiguities which should be beneath the dignity of the Congress to enact.

6. 23 Federal Register 8793, November 13, 1958.
7. California, Colorado, Connecticut, Delaware, Georgia, Hawaii, Illinois, Iowa, Kentucky, Maine, Maryland, Nebraska, New Hampshire, New Jersey, New York, North Dakota, Ohio, Oregon, Pennsylvania, Rhode Island, Vermont, Virginia, Washington, West Virginia, Wisconsin.
8. 23 U.S. Code, "Highways", sec. 131(f).
9. 23 Code of Federal Regulations, Sec. 750:201 - 750.209.
10. 23 U.S. Code, "Highways", sec. 131(i).
11. U.S. House of Representatives, Committee on Public Works, Report to accompany S. 2084, Highway Beautification Act of 1965, H. Rep. 1084, 89th Cong. 1st Sess., September 22, 1965, at 6-7, quotes the Secretary's letter as follows:

The administration recognizes that the present signs and procedures of informing the traveling public, along the Interstate System, are inadequate and must be improved. The Bureau of Public Roads, in cooperation with the State highway departments, has been working for some time on policies and procedures for replacement of signs which are now limited largely to notices that food, fuel, and lodging are available at the next interchange.

The Department of Commerce will start immediately on developing a system of signs to give the motoring public more information about services and facilities available within reasonable distances of the main traveled roadway where such information is not otherwise reasonably provided.

In those instances, primarily along the Interstate System and controlled access portions of the primary system, where motorist service information is not otherwise available, the Department...in cooperation with the State Highway Departments will erect signs giving specific information on services and facilities. This would include specific brand names of gasoline, the names or other specific identification of lodging and food facilities and other specific information of interest to the motoring public regarding recreation, historic sights, hospitals and similar information.

The Bureau of Public Roads, the State highway departments and the Highway Research Board also have started work on utilizing available technology to develop communications systems along our highways to provide information to the motorists. This includes the actual development of a pilot project of installing a communication system along a section of the interstate highway in which prerecorded messages can be transmitted into an automobile with a standard radio which is traveling along the highway. This research and development work will be pursued vigorously so that this additional means of informing the traveling public of services and facilities can be made available in future years.

12. Ibid. at p. 7.
13. Interview with Chief, Scenic Enhancement Division, Federal Highway Administration, November 10, 1973.
14. 23 Code of Federal Regulations, sec. 750.153(r).
15. One effort to help signs for motorist services and travel attractions gain the status of exceptions to the prohibitions of the statute was made by the House Public Works Committee in the proposed Federal-Aid Highway Act of 1972. The House version of this bill authorized exceptions for signs giving directional information about rest stops, campgrounds,

truck stops, food-gas-and-automotive services, lodgings, and others. U.S. House of Representatives, Committee on Public Works, "Federal-Aid Highway Act of 1972", H. Rep. 92-1443, 92d Cong., 2d Sess., September 25, 1972, 11-12.

See also hearings of the Senate Public Works Committee in 1969 on the so-called "Utah Plan" for removal of nonconforming signs on a company-by-company basis. U.S. Senate, Committee on Public Works, Hearings on Highway Beautification, 91st Cong., 1st Sess., June 17-18, 1969.

16. In the initial years of the program considerable confusion existed over just what the States were expected to do, or if they were expected to do anything. While FHWA worked on development of national standards, the House Committee on Public Works expressed its displeasure over the legislation and its administrative interpretation by holding hearings, and sending letters to the States indicating that they would not be penalized for failure to comply with the law by the date specified in the statute. In 1968 the law was amended to change its provisions regarding determination of commercial and industrial zones. Finally, in FY 1968-69, no authorization of funding for the highway beautification program was provided by Congress.

See generally, R.D. Lamm and S.K. Yasinow, "The Highway Beautification Act of 1965: A Case Study in Legislative

Frustration," 46 Denver Law Journal 437-452 (1969), and House of Representatives, "Restudy of the Highway Beautification Program," Committee Print 91-40, 91st Cong., 2d Sess., September 1970.

17. See, for example, Federal Highway Administration, Official Rulings on Requests for Interpretations, Changes and Experimentations, relating to the Manual on Uniform Traffic Control Devices for Streets and Highways, Vol. IV, (October 1973), P. 2, Case Sn-48(Chng.), denying the request of the Nebraska Department of Roads for continuation of use of Travel Attraction and Radio Travel Information signing.

Criticism of failure to provide adequate official informational signing for Federal-aid highways has been voiced in other connections. See U.S. House of Representatives, Subcommittee on Investigations and Review, Committee on Public Works, "Highway Safety, Design and Operations: The Need for a Safer Driving Environment," Committee Print 93-7, 93d Cong., 1st Sess., July 1973, 11, stating:

Hearings...exposed the great chasm that exists between what the professional disciplines say should be done in signing and geometric design to achieve operations safety and efficiency -- and what actually has been done...

....Instead of information, the motorist often gets misinformation. Instead of an appropriate warning, he may find blithe unconcern. Instead of guidance, he may be confronted by a puzzling combination of design features, signs and other controls that result in confusion and indecision.

18. More than 30 States operate such centers. See Federal Highway Administration, The Motorist Wants To Know, (Washington: GPO, 1970) and National Tourism Resources Review Commission, Destination USA, Vol. 2, "Domestic Tourism," (Washington: GPO, 1973), 103-124.
19. G.F. King and H. Lunenfeld, Development of Information Requirements and Transmission Techniques for Highway Users, NCHRP Report 123, (Washington: Highway Research Board, 1971).

See also: Highway Research Board, Motorist Aid Systems, NCHRP Report 7, (Washington: Highway Research Board, 1971); A. Kuprijanow, S. Rosenzweig and M.A. Warskow, Motorists' Needs and Services in Interstate Highways, NCHRP Report 64, (Washington: Highway Research Board, 1969); C.E. Quinn, " Highway Communication System for the Motorist: The Case For Two-Way Radio," in Highway Research Record 402, (Washington: Highway Research Board, 1972), 9-16; "Motorist Information Systems," in Highway Research Record 414, (Washington: Highway Research Board, 1972; and "Traffic Control and Driver Information" in Highway Research Record 366, (Washington: Highway Research Board, 1971)

20. King and Lunenfeld, note 18 above, show the following summary of directional and service information needs:

p. 31

TABLE 8  
SERVICE-MACROPERFORMANCE INFORMATION NEEDS

ITEM	INFORMATION NEEDED	DEFINITION	PRESENT MEANS OF RECEPTION AND TRANSMISSION
1	Available services; emergency (Type Need)	Indication that emergency services are available and how to obtain them.	1. <i>Visual</i> —perception of signs (USE PHONE FOR ASSISTANCE) 2. <i>A priori</i> —prior knowledge of emergency services available 3. <i>Visual</i> —perception of police car, hospital, etc.
2	Available services * (Type Need)	Indication of services available (or not available) on particular route.	1. <i>Visual</i> —perception of signs (SERVICE AREA 5 MILES) 2. <i>A priori</i> —knowledge from maps, guide books, etc. 3. <i>Visual</i> —perception of service facility
3	Gas management; qualitative + quantitative (Type Need)	Indication of how much gas driver presently has and when he will require more.	1. <i>Visual</i> —perception of gas gauge 2. <i>A priori</i> —knowledge of mpg for car

\* Includes information about where to obtain information.

TABLE 9  
DIRECTIONAL-MACROPERFORMANCE INFORMATION NEEDS

ITEM	INFORMATION NEEDED	DEFINITION	PRESENT MEANS OF RECEPTION AND TRANSMISSION
1	Directions to intermediate destination * (Type Need)	Information telling driver how to find his way to an intermediate destination (stopover, rest area, city along the way, interchange, etc.).	1. <i>Visual</i> —perception of signs (LONG ISLAND EXPRESSWAY NEXT EXIT) 2. <i>A priori</i> —pretrip mapping, oral instructions 3. <i>In transit</i> —determined by asking someone in transit
2	Directions to final destination (Type Need)	Information telling driver how to find his way to final destination (end of trip).	1. <i>Visual</i> —perception of signs (NEW YORK CITY STRAIGHT AHEAD) 2. <i>A priori</i> —determined by maps, oral instructions, etc. 3. <i>In transit</i> —determined by asking someone in transit
3	Distance to intermediate destination	Indication to driver of how far (in road miles) he must travel to arrive at his intermediate destination.	1. <i>Visual</i> —perception of signing (NEW YORK 90 MILES) 2. <i>A priori</i> —knowledge of distance from map
4	Alternate route; over-all (Type Need)	Indication of different routes available to arrive at destination.	1. <i>Visual</i> —perception of signs (NEW YORK VIA PARKWAY OR EXPRESSWAY) 2. <i>A priori</i> —determined by prior mapping 3. <i>In transit</i> —determined by asking someone in transit
5	Alternate route; segment (Type Need)	Indication of alternate routes available in the event of tie-up.	1. <i>Visual</i> —perception of signs (ALTERNATE ROUTE TO BROOKLYN NEXT EXIT) 2. <i>A priori</i> —prior knowledge of alternate route 3. <i>Auditory</i> —commercial radio
6	Designation; road name/number (Specific Need)	Indication of road name and/or number.	1. <i>Visual</i> —perception of signs (US 1) 2. <i>A priori</i> —pretrip determination
7	Designation; interchange (Specific Need)	Indication of interchange name and/or number.	1. <i>Visual</i> —perception of signs (EXIT 41) 2. <i>A priori</i> —pretrip determination from maps, etc.
8	Designation; entrance (Specific Need)	Indication of entrance name and/or number.	1. <i>Visual</i> —perception of signs (ENTRANCE TO I-95 NORTHBOUND) 2. <i>A priori</i> —pretrip determination from maps, etc.
9	Designation; exit (Specific Need)	Indication of exit name and/or number.	1. <i>Visual</i> —perception of signs (EXIT 17—NEW YORK) 2. <i>A priori</i> —prior knowledge from maps, etc.
10	Designation; turn off (Specific Need)	Indication of turn-off name and/or number (point other than an exit, entrance, or interchange).	1. <i>Visual</i> —perception of signs (ENTRANCE TO HOLIDAY INN PARKING LOT) 2. <i>A priori</i> —determined from maps, etc.
11	Elapsed mileage (Type Need)	Indication of distance traveled (from some reference point).	1. <i>Visual</i> —perception of odometer 2. <i>Visual</i> —perception of mile posts
12	Distance to final destination (Type Need)	Indication of miles to go to destination.	1. <i>Visual</i> —perception of signs (NEW YORK 100 MILES) 2. <i>A priori</i> —pretrip knowledge from maps, etc.

\* Applicable to "service macro" destinations.

21. King and Lunenfeld, note 18 above, at 41-46.

Other major studies which deal with the problem of developing principles for motorist information services are W. Ewald, Jr. and D. Mandelker, Street Graphics, (Washington: American Society of Landscape Architects Foundation, 1971) and City Signs and Lights: A Policy Study, prepared for the Boston Redevelopment Authority and U.S. Department of Housing and Urban Development by Ashley, Myers, Smith, Boston, Massachusetts, January 1972.

See also, F. P. Bosselman, "Regulation of Signs in the Post-McLuhan Age," and P. Horsbrugh, "Criticism of Highway Signs and Advertisements," in J. Houck (ed), Outdoor Advertising: History and Regulation, (South Bend: Univ. of Notre Dame Press, 1969), 99-112, 183-203.

The House Subcommittee on Investigations and Review, in a report of studies over several years, was critical of the failure to adhere to good signing practices on both freeway and non-freeway highways, and charged particularly that too little attention had been given to human needs. As to nonfreeway signs, the subcommittee report concluded that

Signs and control devices are inadequate on a large scale, with traffic management typically a montage of old and new technology, low cost expedients, nonuniformity, and a 'make-do' inventiveness that produces many bizarre conditions for the unsuspecting motorist.

U.S. House of Representatives, Subcommittee on Investigations and Review, Committee on Public Works, "Highway Safety Design and Operations: The Need for a Safer Driving Environment," House Committee Print 93-7, 93d Cong., 1st Sess., July 1973, 19.