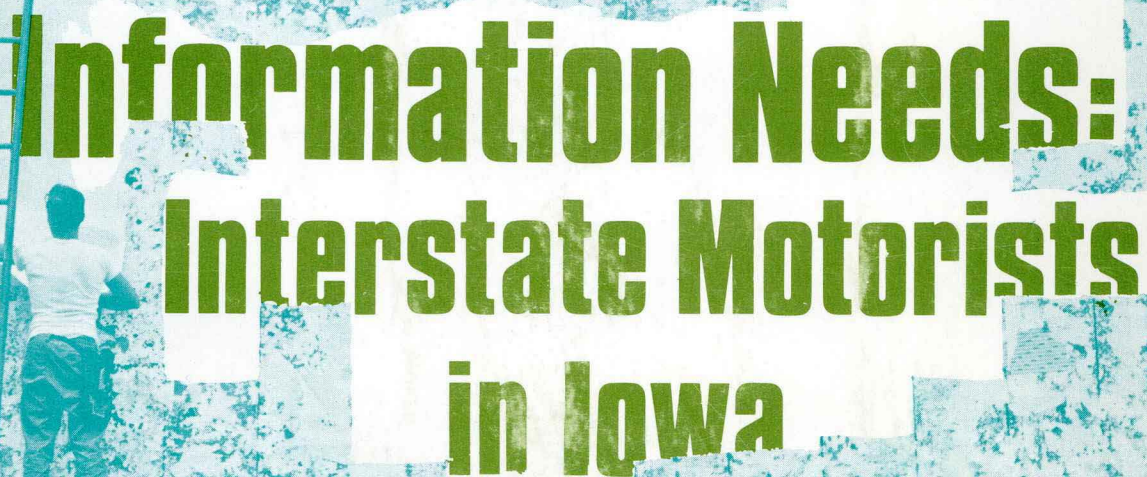


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A photograph of a person on a ladder painting a wall, overlaid with a large green title. The person is wearing a white shirt and dark pants, and is standing on a ladder that is leaning against a wall. The wall is covered in white paint, and the person is using a brush to apply it. The title is in a bold, green, sans-serif font and is centered over the image. The background of the image is a light, textured surface, possibly a wall or a piece of paper. The overall color scheme is dominated by the green of the title and the white of the paint.

Information Needs: Interstate Motorists in Iowa

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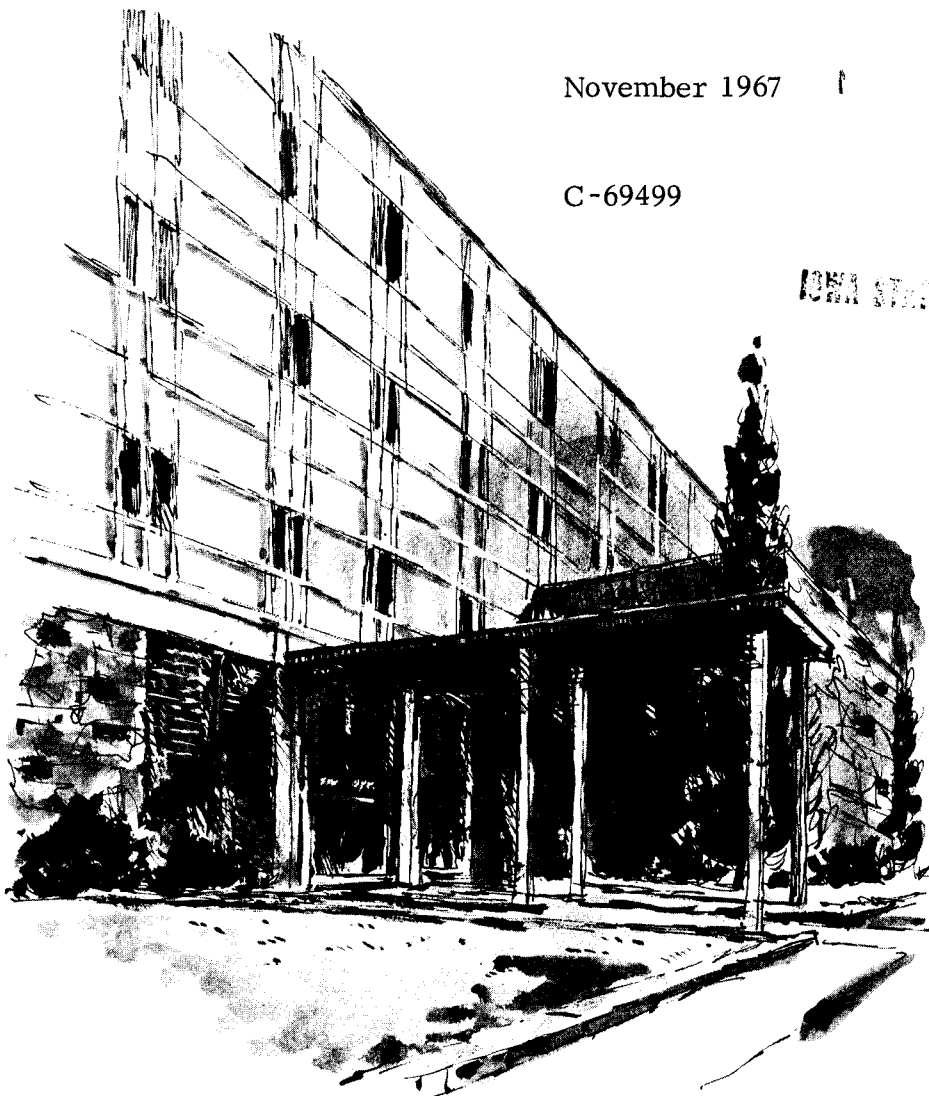
INFORMATION NEEDS: THE INTERSTATE
HIGHWAY MOTORIST IN IOWA

Report to:

THE IOWA STATE HIGHWAY COMMISSION

November 1967

C-69499



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Arthur D. Little, Inc.

This report has been prepared
in cooperation with the

IOWA STATE HIGHWAY COMMISSION

and the

DEPARTMENT OF TRANSPORTATION
FEDERAL HIGHWAY ADMINISTRATION
BUREAU OF PUBLIC ROADS

The opinions, findings and conclusions expressed in this report are those of the authors, and not necessarily those of the State of Iowa, or the Bureau of Public Roads.

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This study, conducted by a team of Arthur D. Little, Inc., staff members, was directed by William E. Griswold. Mr. Griswold was responsible for the overall study design and the day-to-day management of this project.

Peter Metz had major responsibility for the processing and interpretation of the data obtained from over 3000 interviews with Interstate Highway motorists in Iowa. Mr. Metz prepared the chapters in this study which report on our surveys of Interstate motorists and Infosite visitors.

Roger Malek conducted the field survey of official and commercial signs on Interstate 80 in Iowa.

Mary Beth Braden was responsible for the interviews with operators and managers of tourist information centers in Maine, Massachusetts, New Hampshire, and Nova Scotia.

We are indebted to Steven Roberts of the Iowa State Highway Commission, who served as our official contact and provided continuing guidance and assistance throughout the course of this study. Robert Humphrey assisted in the development of the interview format used by the field survey teams and supervised the field interview teams supplied by the Iowa State Highway Commission. The imaginative assistance received from every participating member of the Iowa State Highway Commission staff was an essential ingredient in the successful completion of this project.

William Reehl edited the report, and Norman Law designed the cover.

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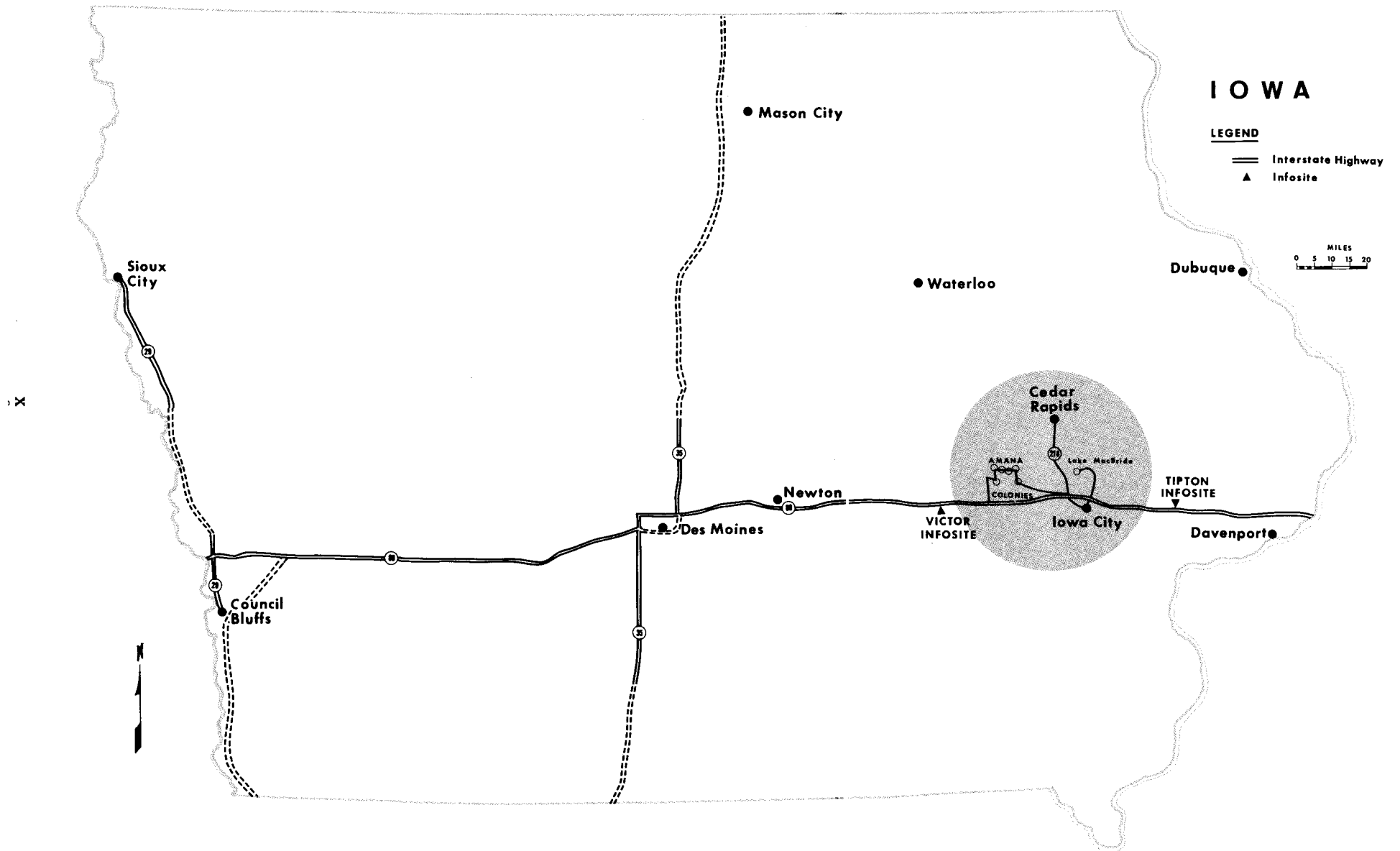


FIGURE 1 IOWA INTERSTATE HIGHWAYS AND LOCATION OF INFOSITES

SUMMARY

A. PURPOSE AND SCOPE

In July 1967, the Bureau of Public Roads, the Iowa State Highway Commission, and Stoner System, Inc., an outdoor advertising company, in a cooperative effort inaugurated a new concept in highway information services. Two information centers were opened at rest areas along Interstate 80 near Iowa City (Figure 1) in an experimental program designed to provide travel information of interest to the motoring public.

The Infosite®, as the information center is called, is housed in an octagonal building about 30 feet in diameter (Figure 2) and provides essentially an indoor form of outdoor advertising. Inside, five of the walls are divided into panels of varying sizes to accommodate the advertising messages of establishments offering lodging or other services to the Interstate Highway motorist. The remaining three walls are glass and, by offering an inviting view of the interior, serve to attract the visitor into the Infosite. Attractively designed, well-lighted, and air conditioned, the Infosite is in sharp contrast to the traditional billboard as an advertising medium. Infosites were erected adjacent to existing rest area buildings which house rest room facilities, a telephone, bulletin board, drinking fountain, and other conveniences.

We were asked by the Iowa State Highway Commission to investigate the following questions:

- What types of information are needed or desired by travelers using the Interstate Highway system in Iowa?
- What alternative media, either existing or new, are available for use in providing the Interstate motorist with the information he desires?
- How does the motorist presently obtain information, and how effective are media currently used in supplying the desired information?
- Does the motoring public accept Infosite as a convenient and effective means of obtaining information?

® Infosite is a registered trademark of Stoner System, Inc.



FIGURE 2 REST AREA BUILDING (FOREGROUND) AND INFOSITE (BACKGROUND)

- Have business enterprises found Infosite effective in communicating with the traveling public?
- What guidelines should be used with regard to the future development of the Infosite concept?

"Information" was defined for this study as that needed or desired by the visiting motorist, as opposed to the well-informed local motorist.*

B. FINDINGS

1. Motorists' Information Needs

To identify motorists' information needs, we had to ascertain some characteristics of these people. More than 3000 drivers of cars bearing out-of-state license plates were interviewed at rest areas and off-ramps on Interstate 80 in Iowa. The majority of the respondents were found to be traveling in family groups on extended summer vacation trips. These travelers came either from states contiguous to Iowa or from states with major urbanized areas, such as New York, Ohio, Pennsylvania, and California. They were passing through Iowa on their way to a destination outside of the state and were planning to spend little, if any, time in Iowa. Many respondents were using Interstate 80 in Iowa for the first time; most of the others had made only one previous trip on Interstate 80 in Iowa in an earlier year. Thus, most of the out-of-state motorists interviewed were persons unfamiliar with Iowa, who intended to rely completely on the information system provided on the highway to meet their need for information. While 10% of those interviewed were businessmen and others familiar with services available along the Interstate, an information system which is designed to meet the needs of family groups visiting the area for the first time will also successfully inform drivers who are more familiar with the area through which they are driving.

On the basis of our interviews with these out-of-state motorists, we find that their information needs fall into three principal categories: routine, specialized, and emergency.

* As a practical means of separating local drivers from visitors, the interview phase of this study was limited to drivers of cars bearing out-of-state license plates. We have assumed that the information needs of Iowa drivers from a distant corner of the state are the same as the needs of drivers from a neighboring state.

✓

a. Routine Needs

The routine needs of the Interstate Highway motorist are those which he can anticipate and which are of interest to a majority of motorists, making it practical for businessmen to locate facilities to serve these needs at intervals along the highway. There are six such needs:

- Fuel - Where can I buy my brand of gasoline?
- Food - Where can we eat?
- Lodging - Where can we stay overnight?
- Rest - How far to the next rest area, and the next after that?
- Highway - What is the best way to get there?
- Tourist - What can we do; what is there to see?

The first three of these needs are generally served through private enterprise at service stations, restaurants, and motels which locate at points adjacent to Interstate Highway interchanges, generally so as to be visible to the approaching motorist. In Iowa, attractively designed rest areas are provided at 25 - 30 mile intervals as a part of the Interstate Highway design. Facilities include parking, rest rooms, drinking water, picnic tables, telephone, and an official bulletin board. Highway information is available to a limited extent from the State Highway map and official detour map which is posted on the bulletin board. A limited amount of tourist information is obtainable from a display rack on the rest area building which contains brochures furnished by the Iowa Development Commission.

Not True

In our interviews with out-of-state motorists on Interstate 80 in Iowa, we obtained a fairly detailed description of what the motorist is seeking in each of the six routine information areas. The standard "Food, Fuel, Lodging - Next Exit" sign leaves many questions unanswered. In the case of fuel, 60% of the motorists interviewed indicated that they preferred a particular brand; 71% carry an oil company credit card. Information on the availability of a brand is obtained largely from on-premises pylon signs and from jumbo billboards which are set back the required 660 feet from the Interstate right-of-way. On perceiving that he should begin to look for gas, the typical motorist generally begins by passing up competitive brand stations as he looks for a station offering his preferred brand. As the fuel supply dwindles, if he is unsuccessful in locating the brand he is looking for, loyalty bows to necessity, and the motorist turns off at the next station which comes into view. Chief reasons cited as the advantages of using a credit card are the convenience of receiving one monthly billing, and the deferment of the requirement for payment to a future month which leaves more cash available to the motorist for other current expenses.

For most Interstate Highway motorists, meal requirements are less exacting. In the case of family groups on extended vacation trips, which comprise a significant proportion of the total travelers on Interstate 80, the noon meal is generally a very informal affair. About 30% of those interviewed planned to eat a picnic lunch, often at the rest area where they were being interviewed. The remainder intended to look for a facility such as a snack bar or cafeteria where a light lunch could be obtained. For supper, a more formal meal was desired, but information requests generally focused on moderately priced restaurants such as those operated in connection with a motel.

Available in restaurants

For the 10% of motorists who were on camping trips, information on the location of camp grounds near Interstate 80 proved especially difficult to obtain unless they happened to have the official Iowa State highway map. For families not camping, information about motels located at points convenient to the Interstate Highway was most often in demand. From a given point, morning requests for motel information centered on cities several hundred miles away. The focus of requests moved gradually closer until mid-afternoon, when information on motels in nearby communities was requested. Drivers generally planned to reach a specific destination each evening, and proved receptive to an offer to set up a confirmed motel reservation in their destination city.

The rest areas located along Interstate 80 in Iowa are extremely well designed and offer many amenities not generally available at rest areas in other states. While expressing enthusiasm for these thoughtful details, many motorists were not aware that the rest areas are spaced at 25- to 30-mile intervals along Interstate 80. A commonly voiced complaint was that the standard sign "Rest Area - 1 Mile" only partially fulfills the motorists' information need; he also wants to know how far it is to the next rest area so that he can decide whether to stop at the area just ahead.

Available in Rest Areas

In the case of highway information, most motorists would like to be able to obtain a road map of Iowa. In most cases, however, they are unwilling to detour very far off the Interstate Highway to obtain one, because of their uncertainty as to how much time will be required and whether a map can be obtained at a given exit. Once a map is in hand, motorists are most often interested in confirmation of the fastest and most direct route to their destination, together with suggestions on alternate routes which may be somewhat slower but much more scenic.

When a tourist information service is available, inquiries center on what there is to see and do along the way. While some motorists are traveling on itineraries planned in advance, others have only a general destination in mind and are especially interested to know of points of historical significance, educational interest, or natural beauty which they could visit along their route.

←

b. Specialized Needs

The specialized needs of the Interstate Highway motorist are those which he can anticipate, but which are of interest only to a minority of motorists. It is thus less practical to provide for them as frequently as for routine needs.

Examples of specialized information needs include the following:

- ↓ • Pets - Where can we walk our dog?
- ↓ • Camping - Where can we find a campsite?
- Supplies - Where can we purchase groceries?
- Mail - Where can we post a letter?
- Hobby - Where can we hunt for minerals, etc.?

The motorist desiring specialized information may or may not be motivated to make a special stop in an effort to obtain it. While specialized information requests are of genuine importance to the persons making them, their variety is such that it is almost impossible to anticipate them, making it especially difficult to provide for these requests in advance.

c. Emergency Needs

The emergency needs of the Interstate Highway motorist are those which he cannot anticipate, but which may result in great inconvenience if information on how to obtain help is not readily available. Examples of emergency needs include the following:

- Car Service - Where can we obtain a qualified mechanic?
- Accident Assistance - How do we call the police?
- Fire Protection - Where can I report a fire?
- Medical Treatment - How can I send for a doctor?

Emergency needs usually must be met under circumstances different from those applicable to routine or specialized needs. First, the motorist in an emergency is often faced with the loss of the use of his car and is thus unable to travel very far for help. Second, he nearly always is unable to wait very long; emergency services, if they are to aid the Interstate motorist, must ideally be available anywhere along the highway and with a minimum of delay. Lastly, since emergency service facilities are almost never located directly on the

Interstate Highway, the motorist requiring such service -- unless a state police car stops to investigate -- must almost invariably walk to a telephone, or send someone else to a telephone to summon help.

2. Available Channels of Communication

Four basic channels are available for use in communicating with the Interstate Highway motorist, depending on (a) whether he is moving or standing still and (b) whether the communication is visual or aural. Each of these channels is commonly used to convey certain types of information, as Table 1 illustrates.

TABLE 1

AVAILABLE CHANNELS OF COMMUNICATION

<u>Type of Channel</u>	<u>Motorist</u>	<u>Devices Used*</u>	<u>Information Conveyed</u>
Visible	In Motion	Official Highway Sign	} Highway Food, Fuel, Lodging
		Standard Billboard	
		Jumbo Billboard On-premises Pylon	
Visible	Standing Still	Highway Map	} Highway Tourist Food, Fuel, Lodging
		Poster	
		Bulletin Board Advertising Panels	
Audible	In Motion	Car Radio	News, Weather, Time
Audible	Standing Still	Telephone	Emergency
		Information Agent	All Information Needs


One of the subsidiary questions which we were asked to investigate was whether or not it would be necessary or desirable to develop new methods or systems of communication to better meet the information needs of the Interstate Highway motorist. Mention was made of electronic systems which would make it possible to communicate highway information directly to the drivers of cars which were appropriately equipped. From a technical standpoint, direct radio

* See Table 2 for definitions of sign terms

TABLE 2

GLOSSARY OF SIGN TERMS


<u>Type of Sign</u>	<u>Description</u>
Official Highway Sign	Standard information sign erected in conformity with AASHO standards. Highway direction signs have white reflectorized letters on green background. Supplementary information (e.g., "Food, Fuel, Lodging") is presented in white letters on blue field and reflectorized only if available at night.
Standard Billboard	Commercial advertising sign measuring 10 x 20 feet and located adjacent to right-of-way.
Trailer Sign	Commercial advertising message lettered on standard 40-foot highway trailer parked along right-of-way. (Since trailer is not a "billboard," some advertisers feel it does not violate ban on advertising signs.)
On-premises Pylon	Outdoor advertising sign mounted on tall tower so as to be visible for a mile or more in each direction. (Advertising signs are permitted less than 660 feet from Interstate right-of-way when they are on premises of business establishment doing the advertising.)
Jumbo Billboard	Oversized 20 x 40 foot billboard designed to be legible from distances greater than 660 feet.

communication could easily be developed with existing communications equipment. That such means have not been adopted for more general use is due both to their cost and to the relatively effective coverage possible with the four communication channels listed above. Rather than developing new communication devices, we believe that efforts should be directed toward making more effective use of the basic devices already employed. 

To date, it has been the practice to place greatest reliance on signs (visual - motion) as a means of communicating with motorists. Car radios, rest area bulletin boards, and wayside telephones have not been widely relied upon as means of communication. Each of the communications devices discussed is simple and effective. Signs, however, have the advantage of providing nearly complete "coverage" of the motoring public. In addition to being easily created and installed, a message on a well-placed sign will be read by nearly all motorists driving past that point. Radio is potentially an effective means of communicating with the motorist and should be further explored, but it cannot be used to reach the occupants of the one car in ten that has no receiver. Posters, bulletin boards, and advertising panels located at rest areas provide an excellent means of communicating with all motorists who stop there, but not all motorists do. Since most specialized information requests call for an individual response, the telephone is a potentially effective means of answering requests from a number of rest areas at a central facility. That this has not been done is due not only to the problem of cost but also to the fact that existing signs answer most of the motorists' questions. Signs are simple, comparatively inexpensive, and very effective.

3. Means Presently Used for Communication

One of the premises which led to the development of the Infosite concept was the belief that, since outdoor advertising signs within 660 feet of the right-of-way are banned on Interstate 80 in Iowa, an "information gap" would result. Federal and State laws, it was asserted, have virtually eliminated advertising signs from the Interstate System. Infosite was designed to fill this "information gap" by providing an esthetically acceptable channel for communication of commercial messages at convenient points along the highway.

In fact, we find that this "information gap" does not exist. One of the principal problems of Interstate 80 in Iowa is not the lack of information signs suited to the motorists' needs, but rather the trend toward an ever-increasing proliferation of legal and illegal billboards. 

On the 165-mile segment of Interstate 80 between Des Moines and Davenport, we counted a total of 509 highway signs (363 official, 146 commercial). In either direction there is one sign every 2/3 of a mile on the average (254 signs in 165 miles). The motorist driving at the posted Iowa Interstate speed limit is faced with a new sign on an average of about every 30 seconds.

The channel of communication which the majority of motorists stated was their sole source of information while traveling on Interstate 80 was the highway sign, both official and commercial. A minority of motorists stated that they made use of service station maps and/or guide books for supplementary information; this practice will presumably continue regardless of any changes made in the information provided through official channels.

Thus, there is no shortage of information available to the motorist traveling on Interstate 80. In fact, in over 4000 interviews, over 90% stated that they had no difficulty obtaining the information they felt they required.

The problem which we find with the information system on Interstate 80 is not a lack of information, but a lack of controlled information. Specifically, current information controls hinge on whether a sign is commercial or non-commercial. The ban on commercial signs within 660 feet of the right-of-way has not resulted in a reduction of the number of commercial billboards. Convinced that signs are an effective means of communicating with their customers, businessmen have simply placed their billboards beyond the 660-foot limit and, of necessity, made these Jumbo billboards several times larger than the former roadside billboards.

Instead of judging signs by whether or not they are commercial in content, we conclude that a more effective kind of control would be to permit, for a fee, advertising which meets rigid esthetic standards and to enforce removal of uncontrolled advertising. The alternative is acceptance of the continued proliferation of Jumbo billboards. Only by offering legitimate channels for communication of commercial messages can the use of less desirable communication techniques be controlled or reduced.

In this context, the Infosite, rather than offering a means of providing information where none was thought to be available, should be considered as one acceptable means of offering an alternative and controlled means of communication for advertisers who will otherwise present their message on a Jumbo billboard.

Evaluated in this light, a somewhat restructured Infosite is a potentially effective means of communicating needed information to the motoring public.

4. Motorists' Acceptance of Infosite

From the point of view of esthetics and safety, the Infosite represents a dramatic improvement over conventional forms of outdoor advertising. The Infosite is well-designed and offers an attractive addition to the rest area complex.

While the billboard message must be read in a brief glance away from driving duties, and therefore may contain only a brief message, the Infosite advertising panels permit the motorist to read a much more complete message in safety and comfort and at his own pace. To assure that Infosite would be a complete success from the motorist's point of view, Stoner System, Inc., has gone out of its way to provide, at its own expense, additional information services which it felt would be of interest to Infosite visitors. Advertising space which is currently unsold, rather than being left blank, has been filled with special information panels depicting tourist attractions throughout Iowa. Since tourist information is one of the needs which is not currently well fulfilled by the present information system, the limited amount of tourist information provided received especially favorable comments. Rarely, in our opinion, has an outdoor advertiser carried out a project with more taste or professionalism.

Interviews with Infosite visitors reveal that the Infosite has gained a high degree of initial acceptance as a convenient and effective means of obtaining the limited spectrum of information which is currently available there. Of those interviewed, 99% indicated they had found the information which they originally sought, and 96% indicated that this information was helpful. But 6% indicated that they were disappointed by some aspects of Infosite, and 5% said there was information which they wanted but could not find. The Infosite was classed as a "good idea" by 99% of the persons interviewed.

The chief problem cited by Infosite visitors was the lack of breadth and scope in the information available. The motorists' reaction might be summarized as, "It's nice, as far as it goes." Thus far, Infosite has attracted advertisements only from firms within a limited geographic area. Of the six routine information needs of Interstate Highway motorists, only lodging is covered at all effectively by Infosite. For each of the information needs which are covered, too few business enterprises are participating, with the result that the motorists' choices are severely limited. ✓

When the Infosite concept was being developed, it was thought of in terms of its attractiveness to persons seeking accommodations in neighboring communities along the Interstate. Experience has shown that because the Interstate Highway System makes extended automobile trips practical, most morning inquiries concern out-of-state communities 300 or 400 miles away, where the traveler plans to be that evening. Only in the afternoon do visitors begin to request information on nearby accommodations and restaurants. Thus, as presently conceived, one limitation on the effectiveness of the Infosite is the restriction of its scope to a local rather than a state-wide area. ✓

Current Infosite clients number less than twenty. Advertising space has been purchased by twelve hotels or motels, two service stations, two chambers ✓

of commerce, and one tourist attraction. Of the six information needs, only lodging is adequately represented, and then only if the motorist is seeking accommodations in the Des Moines - Iowa City area.

From the motorists' point of view, the Infosite is of only limited usefulness in providing fuel, food, lodging, highway and tourist information. The Infosite experiment does, however, provide four important insights which suggest ways of restructuring the present information system:

- Small advertising panels at rest areas are effective substitutes for roadside billboards and offer advantages of safety and completeness in addition to being esthetically superior.
- ✓
- Motorists' acceptance of direct-line reservation telephones from a rest area to a lodging establishment ✓ is high, and sales generated by such a telephone will more than offset the cost of its installation.
- Successful operation of a public building located in a rest area along an Interstate Highway requires that a full-time attendant be on duty to safeguard the property ✓ whenever the building is open.
- The choice of location of an Information Center should take into account the fact that motorists' inquiries will cover all communities within a one-day drive beyond the center, not just the area in which the center is located.

5. Business Acceptance of Infosite

The effectiveness of the Infosite as an advertising medium from the point of view of business enterprises appears to be limited to those establishments whose location and product meet rather narrowly defined criteria. It is no surprise that two-thirds of the advertisers currently under contract at the Infosites are lodging establishments; lodging is the largest single purchase the motorist is likely to make each day and, therefore, the one to which he devotes the most advance planning.

In addition to being effective largely for motel advertising, the utility of the Infosite appears to be even further restricted in scope. Motels of well-known national chains which either have a large percentage of referral business from units in other cities or are located so as to be clearly visible from Interstate 80 have evidenced little interest in becoming Infosite advertisers. Their

explanation is simply that they enjoy such a high rate of occupancy through advance reservations and from motorists who stop after seeing their motel from the highway that additional advertising is unnecessary. Similarly, hotels located in cities some distance from the Interstate find that Infosite advertising is of limited effectiveness, since most through travelers cannot be induced to detour very far from their intended line of travel for accommodations. However, for a motel which is located adjacent to an interchange but is not visible to the approaching motorist, Infosite advertising can be very effective; the monthly cost of an advertising panel in the Infosite is offset by new business in a few days.

For establishments offering fuel or food, the benefits of Infosite advertising are much less apparent. Purchase of meals and fuel are largely made on an "impulse" basis when a service station or restaurant is seen ahead on the road. Two service stations have placed advertisements; their message, however, is directed primarily to the motorist requiring road service. The odds of a motorist breaking down within easy walking distance of an Infosite being fairly remote, only one or two calls to the service station have been recorded to date. For retail gasoline sales, service stations rely heavily on on-premises pylon signs which put their brand symbol in a position to be seen by the approaching motorist a mile or more down the road. In addition, the principal oil companies have long used the practice of indicating on their free highway maps the location of those of their retail service stations which are located at points convenient to Interstate Highway interchanges.

Except as an incidental part of hotel or motel advertising, restaurant advertising was not attracted by the Infosite format. Restaurants located along Interstate 80 in Iowa are chiefly of the snack bar or luncheonette type, and are often operated as an adjunct to service stations to provide an added attraction to motorists. Visibility of the restaurant from the highway appears to be a prime factor in generating sales, and extensive use is therefore made of on-premises pylon signs by these establishments. While the evening meal may represent something more of a planned purchase, it is often eaten at the hotel or motel selected, thus making lodging advertising the principal generator of evening meals sales.

One tourist attraction, Amana Colonies, has purchased space at Infosite and apparently has found the results to be quite effective. Founded in 1854 as one of the early experiments in communal living, the Amana Colonies today consist of six farm villages where visitors may observe handicrafts and trades being practiced in the traditional manner and can sample home-cooked recipes served family style in one of several restaurants. Because of the prominence of Iowa as a farming state and the growing interest of tourists in American history, the glimpse of 19th Century rural America provided at the Amana Colonies has been popular with tourists. Prior to the opening of the Infosites, the State of Iowa erected "historic markers" (Figure 3) at rest areas on Interstate 80



FIGURE 3 AMANA COLONIES' HISTORIC MARKER WITH REST
AREA PICNIC FACILITIES IN BACKGROUND

explaining the historical significance of the Amana Colonies. Official highway signs marked "Amana Colonies" also guide the prospective visitor to the correct exit. Thus, the advertising panel at the Infosite serves primarily to heighten interest already created by official signs. Visitors inquiring about the Amana Colonies at the Infosite were shown an advertising panel displaying a map of the best route from the Infosite to the Amana Colonies and were assured by the Infosite attendant that the Amana Colonies represented a worthwhile tourist stop-over. Since there are few attractions worthy of tourists' attention along Interstate 80, it is not surprising that the Infosite advertisement produced a measurable increase in the number of Amana Colonies visitors during the latter part of the summer. However, the success of the advertisement was based in part on the fortunate location of the Infosites a few miles on either side of the Amana Colonies exit, and on the semi-official aura surrounding the Amana Colonies name, which serves to add legitimacy to the advertising message. In our judgment, Lake McBride State Park and the Herbert Hoover Memorial in West Branch are the only other Iowa tourist attractions along Interstate 80 which could be expected to achieve similar results through Infosite advertising.

From the point of view of the businessman, one of the difficulties with Infosite is a lack of differentiation in the product price range. This occurs in part because Infosite was conceived as an advertising medium which would substitute for the outdoor billboard. Infosite display panels are priced from a minimum of \$95 a month for a 2 x 2 foot panel to \$720 per month for a 4 x 12 foot panel. To date, the largest single purchase has been the 4 x 4 foot panel at \$324 per month. By way of comparison, the monthly rental costs for a Jumbo billboard range from \$230 to \$350 per month. Thus, while the basic Infosite panel costs about one-third as much as a Jumbo billboard, it reaches only that segment of the total audience which stops at the rest area, or about 10% of the total traffic. While the Infosite panels appear to be priced competitively with billboards, there is a gap in the product price range between \$5 and \$95 per month. For \$5 per month, an advertiser may obtain a simple listing of his name and telephone number in a directory positioned next to the telephone. However, unless a visitor's attention is called to the directory by the Infosite attendant, most visitors would overlook it in favor of the attractive back-lighted advertising panels. Lack of a panel priced at, say, \$25 per month has prevented Infosite from attracting advertising by family-run or single-unit businesses which cannot afford either a billboard or one of the present Infosite panels.

No discussion of the business acceptance of Infosite would be complete without considering its success from the point of view of the advertising agency which has undertaken to operate the center. In the planning stages of Infosite, a chief question was whether or not its advertising concept would prove acceptable to potential advertisers. The experience to date has shown that acceptance is high for businesses falling within the criteria discussed above. Little initial consideration was given to the question of whether or not Infosite would prove

successful from the point of view of Stoner System, Inc., which is responsible for its day-to-day operation under contract with the Iowa State Highway Commission. Since Infosite does not return a profit to the advertising agency, further implementation of the concept is out of the question, and even the continuation of the two experimental units is in doubt.

Because of the "information gap" on which Infosite was based was found in fact not to exist, sale of advertising space at the Infosites has fallen far below initial expectations. Furthermore, costs have been substantially higher than anticipated because the original plans failed to consider that an attendant would be needed whenever the building was open.

Each Infosite would provide a gross annual income to Stoner System of \$83,500 if all of its panels were rented. Direct operating costs, including the cost of the lease, wages, utilities, maintenance, taxes, etc., amount to \$24,500 or 30% of the gross income. Indirect operating costs (central office personnel, field sales representatives, travel expenses, supplies, etc.) about equal direct operating costs, as in comparable industries.

Current sales of advertising at each Infosite total about 20% of the space available. Thus, despite the fact that sales calls have been made on nearly all of the businesses located adjacent to Interstate 80 in Iowa and offering services to motorists, a 50% improvement in sales is required to raise income from 20% to 30% of potential gross sales, at which point direct operating costs would just be covered. To cover both the direct and indirect operating costs, current sales would have to be tripled, since fully allocated costs amount to 60% of the potential gross income. Only if more than 60% of the space were sold would any net income accrue to Stoner System, Inc.

The lack of interest on the part of major fuel companies and certain chain motels (already committed to pylon signs and Jumbo billboards) suggests that while the current level of sales may be improved upon somewhat, there is no reasonable prospect of tripling the level of sales, as would be required to meet costs. Based on present trends it is unlikely that Stoner System would be interested in continuing to support the Infosite project beyond expiration of its current contract.

C. CONCLUSIONS

Initially, when the goals of this study were defined for us by the Iowa State Highway Commission, one of the six steps to be accomplished during our work was the development of a set of guidelines governing the future development and expansion of the Infosite concept. Based on the results obtained to date at the two experimental Infosites, it has become apparent that while they have made a worthwhile contribution to our understanding of how the information needs of the Interstate Highway motorist may be best served, they are not self-supporting, and, therefore, expansion or even continuation of the Infosite concept appears unlikely.

Among the many reasons which made the Infosite approach appear attractive was the fact that it was set up in such a way as to offer the potential of furnishing information to the Interstate Highway motorist at virtually no cost to the Iowa State Highway Commission. The building was constructed by the Highway Commission and leased to Stoner System, Inc. on a basis which recovers the entire cost of the building over the life of the lease. In addition, Stoner System, Inc. pays the cost of maintenance services and utilities, so the only costs to the Highway Commission are administrative costs. If the demand for a medium of communication with the Interstate Highway motorist had been such that two-thirds or more of the advertising space offered for sale at the Infosite was subscribed, the Highway Commission would have succeeded in providing a cost-free information service, and Stoner System would have developed a communications medium uniquely suited to meeting the information needs of the Interstate Highway motorist. This objective is not currently being met, primarily because, despite "anti-billboard" prohibitions, ample opportunity exists for businessmen to reach Interstate motorists by means of outdoor advertising.

It was the intent of the anti-billboard legislation to eliminate, or at least severely restrict, the use of outdoor advertising signs along the Interstate Highway system. When the present law against erecting outdoor advertising within 660 feet of the right-of-way was placed into effect, it was presumed that no advertiser would be interested in erecting a sign located over 200 yards from its intended readership. The ban has not been effective, because it ignores the fact that certain businesses, principally motels and service stations, depend for their survival on patronage from travelers using the Interstate Highway; to attract this patronage, they must make their presence known to the potential customer. Since the law provides for no alternative means of communication, they must either violate it or erect a Jumbo billboard beyond the 660-foot limit.

Three factors make possible the continuing reliance on outdoor advertising:

- Loopholes in the present law permit some signs to be erected legally within 660 feet of the right-of-way. The principal exceptions permit signs within 10 miles of a commercial zone and signs on the premises of a business offering services to the Interstate motorist.
- Enforcement of the ban on signs less than 660 feet from the right-of-way has been haphazard. Effective procedures for determining which signs are illegal and bringing about their removal are just now being developed.
- The development of the Jumbo billboard permits the outdoor advertising industry to continue to offer space to advertisers while conforming with the 660-foot limit.

Even supposing that enforcement procedures bring about eventual removal of most signs less than 660 feet from the right-of-way, under the present information structure the long-term trend is clear: rather than eliminating billboards, the ban will encourage the use of Jumbo billboards, which, from an esthetic point of view, are even more objectionable than the conventional kind. If this trend is to be counteracted, the total information system should be restructured so as to utilize the best aspects of each of the four available communication channels to communicate to motorists each of their six principal information needs.

Currently, only official highway signs are permitted along the roadside. However, the Infosite experiment has demonstrated not only that commercial signs provide information which a motorist is desirous of obtaining, but also that such signs can be esthetically attractive.

A restructured information system should not attempt to ban all commercial messages; rather, it should establish standards for approved commercial messages and insure the removal of all signs that violate these standards. Probably, the only really effective way of halting the trend toward Jumbo billboards would be to amend the current legislation so as to prohibit all outdoor advertising legible from the right-of-way on the Interstate Highway. Short of this, the Jumbo billboard can be expected to remain a permanent part of the landscape. However, its rate of growth can be slowed down if the information system on the Interstate Highway provides the businessman with an effective alternative at reasonable cost.

D. RECOMMENDATIONS

The following steps are recommended as a means of providing a more effective and esthetically pleasing information system for Interstate Highway motorists in Iowa:

1. As a first step, whatever action is necessary should be taken to eliminate all illegal outdoor advertising within 660 feet of the right-of-way of the Interstate Highway. On the segment between Des Moines and Davenport, two advertisers account for a majority of all such signs.

2. Standards governing official Interstate Highway signs should be reviewed to identify opportunities where either more complete information can be provided without increasing the present number of signs, or the information presently provided can be displayed with a reduced number of signs. For example, the current practice is to list the distance to an exit on one sign: "Newton - 1 Mile," and "Food, Fuel, Lodging - Next Exit" on a second sign. By placing symbols of a knife and fork, a gas pump, and a bed, along the bottom of the first sign, the information which now requires two signs could be displayed on one. Moreover, since symbols can be recognized much more rapidly than words, the length of time when each driver's attention is distracted would be reduced.

Similarly, altering the rest area signs to show the distance not only to the next rest area but also to the subsequent one would meet an often voiced request for more definite information about the choice being presented. The sign "Rest Area - 1 Mile" gives the driver no clue as to how far he may have to go before reaching another rest area, unless he happens to know that they are spaced 25 to 30 miles apart along Interstate 80 in Iowa. By abbreviating the word "mile," the same sign area could be modified to read, for example, "Rest Areas - 1 mi. & 28 mi.," thus providing better information at very little added cost.

3. Pressure on businessmen to use the visible in-motion channel of communication for food, fuel, and lodging information cannot be expected to lessen unless use of the remaining channels of communication for advertising is permitted. The Infosite experiment has demonstrated that effective use can be made of the visible standing-still channel for commercial messages, which are not only accepted by the motorist but prove effective for certain types of businesses.

The chief obstacle to continued use of the Infosite approach is that costs exceed revenues, largely because the efforts of Stoner System, Inc. to provide a full-service information center had to be carried out before the market support for such a center could be determined. We recommend that the

Iowa State Highway Commission experiment further with the use of the visible standing-still channel for display of commercial messages at rest areas, by erecting a display of advertising panels on an outdoor bulletin board. The latter could be either an expansion of the existing foyer bulletin board at the rest area building or a separate board mounted on posts and protected by a simple pitched roof. Signs of this latter type are now in use in Colorado.

One approach to such a display would be to mount an official state highway map in the center of the bulletin board and to sell small panels around the edge to motels and other businesses. Because the outdoor bulletin board could be operated on a much more modest budget than the Infosite, the cost of individual panels would be lower; greater representation from service stations and restaurants would then be more likely than is presently the case. Advertisers' panels could be tied into the state highway map to show the location of each business on the map.

Because the outdoor bulletin board requires no attendant and consumes no utilities, it offers both the highway commission and the advertising agency which would operate it a more economical alternative to the Infosite. The Infosite experiment showed that businessmen would buy advertising space at an Interstate Highway rest area; the Highway Commission should capitalize on this knowledge to provide for a more balanced information format.

4. An official state highway map offers a potentially effective means of communicating a great variety of supplemental information to the Interstate Highway motorist. We recommend that the policy of the Highway Commission regarding the official map be altered so as to permit its use for display of a wider variety of information which, though not strictly highway information, is of demonstrated interest to the Interstate Highway motorist. In its 1967 version, the Iowa highway map fulfills most adequately its principal mission of showing the current state of highway facilities, but it largely overlooks the opportunity for communicating supplementary information.

We recommend that the map be redesigned and enlarged to fulfill a broader role. Color should be used more imaginatively to emphasize important features, as is done by the State of South Dakota. Iowa's map unaccountably shows the State in yellow and surrounding states in white, which is opposite of the customary practice on nearly all state highway maps.

In addition to the map's central function as a guide to the location of roads and communities, it can also answer most tourists' questions regarding historic sites and recreation areas in the space available on the reverse side of the map. An example of effective utilization for this purpose is Vermont's official highway map, a copy of which will be found inside the back cover of this report. The reverse side of this map provides a comprehensive listing of state

parcs and forests, historic places, museums, fish and game information, public golf courses, privately owned camp grounds, community swimming areas, and radio and television stations in Vermont. The advantage of this approach is that it answers most tourists' questions by means of a single information device. The listing of Iowa radio stations and their frequencies, both on the highway map and on rest area bulletin boards, would be a desirable step toward greater utilization of the audible in-motion channel for communication to motorists.

For the map to serve as a basic guide to motorists desiring information, a means must be provided for getting it into his hands. Since only a small proportion of motorists will plan sufficiently well in advance to send for a copy by mail, it seems essential that additional outlets be provided. One approach would be to offer the map for sale in vending machines at rest areas for a nominal fee. While the state highway map has traditionally been issued free of charge, experience has shown that leaving them in a rack unattended leads to abuses in their use. Since the maps are costly to produce, it would seem reasonable to regulate their distribution through vending machines, while still making the state highway map available free of charge at Highway Commission offices.

5. While the above steps are being carried out, we recommend that a continuing evaluation be made of the demand for approved commercial advertising space and the trend in the development of additional Jumbo billboards. Should the policy of eliminating illegal billboards produce sufficient demand, we recommend that serious consideration be given to the establishment of state-sponsored information centers at gateway points in Iowa (initially Council Bluffs and Davenport). These should be staffed by competent travel advisers from the appropriate state agencies. All that would be needed to attract large numbers of visitors to such centers would be an official sign reading "Iowa Information Center - State Highway Map." Information centers would most likely serve primarily in the promotion of Tourism in Iowa, a function which is currently the responsibility of the Iowa Development Commission.

At the center, Interstate motorists could obtain assistance in planning their trip across Iowa and suggestions on points of interest where they might want to stop. Because most tourists want information about overnight accommodations, it would be appropriate for the information center to operate a referral service by which motorists could be directed to specific lodging establishments. Since hotels and motels would be the greatest beneficiaries of such a service, they should be allowed to defray the cost of the service through purchase of controlled advertising panels of the Infosite type.

While an information service of this kind is probably best regarded as the responsibility of the Iowa Development Commission, it can only be placed into effect as a part of an overall information system conceived and directed by the Iowa State Highway Commission.

6. Meeting the demand for information on emergency services requires separate consideration, since the motorist does not know that he will need such information until the emergency occurs. At present, motorists in need of emergency services cannot rely on police patrols for prompt assistance, and the cost of increasing the frequency of patrols to cover every point along the highway several times an hour would be prohibitive.

The emergency information problem is, in essence, one of reaching a telephone from which the motorist can communicate his difficulty to the competent agency. The solution lies in making telephones more readily available along the Interstate Highway. The Highway Commission's policy has been not to list "telephone" as a service alongside food, fuel, and lodging, since it is assumed that wherever the latter is available, a telephone can be found; however, since in many emergencies the motorist is deprived of the use of his car, the availability of a telephone at a service station or motel does not meet his particular need. An interim solution would be to include a telephone symbol on the current rest area signs to call motorists' attention to the fact that a pay telephone is available in the foyer of rest area buildings.

In the long run, a more effective solution would be the installation of emergency telephones at half-mile intervals along the right-of-way, as has been done on the Adirondack Northway between Albany, New York, and the Canadian border. If a telephone system permits less frequent police patrols, the cost of the installation might be more than offset by the reduced cost of highway patrolling.

I. SURVEY OF MOTORISTS

A. COMPOSITION AND CONDUCT OF THE SURVEY

Our survey of motorists on Interstate 80 was designed to establish a profile of their characteristics and their information needs. The first five-day series of interviews was conducted during the period July 10-14, 1967. The second series took place on August 23-27, 1967. Teams provided by the Iowa State Highway Commission conducted the interviews at two rest areas and two exit ramps. The rest area interviews were conducted at the two Infosites: the Victor rest stop eastbound (approximately 38 miles west of Iowa City) and the Tipton rest stop westbound (approximately 24 miles east of Iowa City). The off-ramp interviews took place at heavily used exits leading to Iowa City half-way between the two Infosite locations: the U.S. 218 exit eastbound and the Iowa 1 exit westbound.

The July interviews were spread over two shifts at both the rest stops and the off-ramps, giving coverage from 8:00 a.m. to 8:00 p.m. On each shift, one interviewer was stationed at each rest stop (Figure 4) and two interviewers were stationed at each off-ramp (Figure 5). This assignment of manpower produced a total of 1723 valid interviews -- 440 at the rest stops and 1283 at the off-ramps. To produce a more nearly equal division of interviews by location, the assignment of interviewers was changed in August to two 2-man shifts at each rest stop and one 2-man shift at each off-ramp. This resulted in a total of 2570 valid interviews -- 1126 from the rest stops and 1444 from the off-ramps.

The questionnaires used by the interviewers at off-ramps and at rest areas during the August interview series are shown in Figures 6 and 7 respectively. The July questionnaires were similar, but the August format incorporated a refined version of some of the questions. The questionnaires were designed in consultation with staff members of the Iowa State Highway Commission, and the final format reflected both the requirements for question content and the constraints of size and length imposed by field interviewing conditions. The layout of the forms was designed to facilitate coding the responses in preparation for computer processing. The question content was governed by the necessity of keeping the interview time short enough to be acceptable to the people being interviewed. This time was felt to be somewhat under five minutes at the rest areas, where people generally anticipate a leisurely stop, and under one minute at the off-ramps, where respondents were interviewed in their cars. During each series, only a small number of motorists declined to be interviewed.

The questionnaire used at the off-ramp is generally a condensed version of that used at the rest area. With a few exceptions, the questions on the off-ramp questionnaire are repeated verbatim in the rest area questionnaire.



**FIGURE 4 A CALIFORNIA FAMILY BEING INTERVIEWED AT
THE TIPTON REST AREA**



**FIGURE 5 AN ILLINOIS FAMILY BEING INTERVIEWED AT
THE U. S. 218 OFF-RAMP NEAR IOWA CITY**

RECORDER _____

MOTORISTS INFORMATION QUESTIONNAIRE

IOWA STATE HIGHWAY COMMISSION

LOCATION _____ DATE _____ HOUR PERIOD _____

Iowa 1 - Code 1 US 218 - Code 2

6	Station Number	7	Auto License	8	Type of Car	9	Camper	10	Male (1) Female (2)	11	Adult (1) Teen (2)	12	No. of Occupants	13	No. of Occupants	14	When did trip start	15	When will trip end	16	CITY	STATE	17	STATE	18	TRIP PURPOSE
---	----------------	---	--------------	---	-------------	---	--------	----	---------------------	----	--------------------	----	------------------	----	------------------	----	---------------------	----	--------------------	----	------	-------	----	-------	----	--------------

WHAT IS THE FARTHEST POINT FROM (LICENSE PLATE) YOU ARE DRIVING TO?

STATE

Std.	= 1
Compact	= 2
Small	= 3
Pickup	= 4
Other	= 5

CAMPERS

Not camping	= 0
Caravan	= 1
Pop up	= 2
Bus or Van on Pickup	= 3
on Pickup	= 4

Today	= 0
Yesterday	= 1
Two days ago	= 2
Three days ago	= 3
Four days ago	= 4
Five days ago	= 5
Six days ago	= 6
Seven days ago	= 7
Eight days or more ago	= 8

Today	= 0
Tomorrow	= 1
Two days from now	= 2
Three days from now	= 3
Four days from now	= 4
Five days from now	= 5
Six days from now	= 6
Seven days from now	= 7
Eight or more days from now	= 8
Don't know	= 9

No response	= 0
Business	= 1
Vacation and/or visit.	= 2
School	= 3
Other (specify)	= 4

No response	= 0
This is first time	= 1
1967	= 7
1966	= 6
Earlier	= 5
Don't know	= 9

One time (this trip)	= 1
Two times	= 2
Three times	= 3
etc.	= 4
Eight or more times	= 8
Don't know	= 9

No response	= 0
To go to Iowa City	= 1
To take a connecting route to another destination	= 2
Food	= 3
Fuel	= 4
Lodging	= 5
Car Service	= 6
Other	= 7

No response	= 0
Friend or relative	= 1
Infosite	= 2
Road map	= 3
Guide Book	= 4
DX Sign	= 5
Howard Johnson sign	= 6
Official Hwy. sign	= 7
Past experience	= 8
Other	= 9

INTERVIEWER COMMENTS _____

FIGURE 6 QUESTIONNAIRE USED AT OFF-RAMPS

RECORDER _____

LOCATION _____

(A. I CODE 1 - US 218 CODE 2 - TIPTON REST CODE 3 - VICTOR REST CODE 4)

DATE _____

1 2 3 HOUR PERIOD _____

4 5

MOTORISTS INFORMATION QUESTIONNAIRE

IOWA STATE HIGHWAY COMMISSION

6	Station Number
7	Auto License
8	Type of Car
9	Camper
10	Male (1) Female (2)
11	Adult (1) Teen (2)
12	No. of Occupants
13	When did trip start
14	When will trip end
15	What is the farthest point from (license plate) you are driving to?
16	TRIP PURPOSE
17	If visiting or staying at any place in Iowa list name of place
18	CITY
19	STATE
20	COUNTY
21	Visit Purpose
22	Length of Stay
23	When was the last time you travelled this section of I-80
24	Including this trip how many times have you travelled I-80 in Ia, the last 2 yrs
25	Have you noticed any signs - "Food, fuel, lodging, next exit?"
26	If "yes" did you turn off at one of them?
27	If "yes" what were you looking for?
28	Did you find it?

STATE: _____

TYPE OF CAR: 1 Std., 2 Compact, 3 Small, 4 Pickup, 5 Other

CAMPERS: 0 Not camping, 1 Caravan, 2 Pop up, 3 Bus or Van, 4 on Pickup

When did trip start: 0 Today, 1 Yesterday, 2 Three days ago, 3 Four days ago, 4 Five days ago, 5 Six days ago, 6 Seven days ago, 7 Eight days or more ago, 8 Don't know

When will trip end: 0 Today, 1 Tomorrow, 2 Three days from now, 3 Four days from now, 4 Five days from now, 5 Six days from now, 6 Seven days from now, 7 Eight or more days from now, 8 Don't know

TRIP PURPOSE: 0 No response, 1 Business, 2 Vacation and/or visit, 3 School, 4 Other (specify)

If visiting or staying at any place in Iowa list name of place: 0 No response, 1 Sleep - rest, 2 Sight seeing, 3 Recreation, 4 Visit Friend or Relative, 5 Business

Visit Purpose: 0 No response, 1 Highway Info, 2 Food, 3 Fuel, 4 Lodging, 5 Auto Service, 6 Tourist, 7 Community, 8 Recreation, 9 Other

Length of Stay: 0 Not overnight, 1 One night, 2 Two nights, etc.

When was the last time you travelled this section of I-80: 0 No response, 1 This is first time, 2 1967, 3 1966, 4 1965, 5 Earlier, 6 Don't know

Including this trip how many times have you travelled I-80 in Ia, the last 2 yrs: 0 No response, 1 One time (this trip), 2 Two times, 3 Three times, 4 Four times, 5 Five times, 6 Six times, 7 Seven times, 8 Eight or more times, 9 Don't know

Have you noticed any signs - "Food, fuel, lodging, next exit?": 0 No response, 1 Yes, 2 No, 3 Don't know

If "yes" did you turn off at one of them?: 0 No response, 1 Yes, 2 No, 3 Don't know

If "yes" what were you looking for?: 0 No response, 1 Food, 2 Fuel, 3 Lodging, 4 Auto Service, 5 Tourist, 6 Community, 7 Recreation, 8 Other, 9 Other

29	Did you stay overnite near I-80 last nite?
30	If "yes" how did you learn of the place at which you stayed?
31	CITY
32	STATE
33	COUNTY
34	Where did you stay?
35	CITY
36	STATE
37	COUNTY
38	Where will you stay tonight?
39	LODGING
40	If known, how did you learn of that place?
41	If you don't know how will you locate a place?
42	Was your most recent gasoline purchase made on or near I-80?
43	If "yes" how did you learn of that gas station?
44	Approximately how many miles will you drive before you stop for gas?
45	Without naming the brand do you prefer a particular brand of gasoline?
46	Do you carry a gasoline credit card?
47	Was your last meal at a place on or near I-80?
48	If "yes" how did you learn of that place?
49	CITY
50	STATE
51	COUNTY
52	In what city will you eat next?
53	What type of meal are you planning to have?
54	Is there anything you have had difficulty finding information about on I-80 in Iowa?
55	If "yes" what was it?
56	What services have been easy to find?
57	Have you noticed any advertising signs on I-80 in Iowa?
58	If "yes" what were they advertising?
59	Does your car have a radio?
60	What is the model year of your car?

LODGING: 0 No response, 1 Friend or relative, 2 Infostite, 3 Gas Station or restaurant personnel, 4 Guide book, 5 Past experience, 6 Just look around area or community, 7 Sign on Interstate, 8 Map, 9 Other (specify)

Where did you stay?: 0 No response, 1 Friend or relative, 2 Infostite, 3 Gas Station or restaurant personnel, 4 Guide book, 5 Past experience, 6 Just look around area or community, 7 Sign on Interstate, 8 Map, 9 Other (specify)

Where will you stay tonight?: 0 No response, 1 Friend or relative, 2 Infostite, 3 Gas Station or restaurant personnel, 4 Guide book, 5 Past experience, 6 Just look around area or community, 7 Sign on Interstate, 8 Map, 9 Other (specify)

LODGING: 0 No response, 1 Friend or relative, 2 Infostite, 3 Gas Station or restaurant personnel, 4 Guide book, 5 Past experience, 6 Just look around area or community, 7 Sign on Interstate, 8 Map, 9 Other (specify)

In what city will you eat next?: 0 No response, 1 Picnic at Roadside Table, 2 Meal in car at Drive-in, 3 Sandwich Lunch at counter, 4 Restaurant meal, 5 Don't know, 6 Other (specify)

What type of meal are you planning to have?: 0 No response, 1 Highway Info, 2 Food, 3 Fuel, 4 Lodging, 5 Auto Service, 6 Tourist, 7 Community, 8 Recreation, 9 Other

Is there anything you have had difficulty finding information about on I-80 in Iowa?: 0 No response, 1 Highway Info, 2 Food, 3 Fuel, 4 Lodging, 5 Auto Service, 6 Tourist, 7 Community, 8 Recreation, 9 Other

If "yes" what was it?: 0 No response, 1 Highway Info, 2 Food, 3 Fuel, 4 Lodging, 5 Auto Service, 6 Tourist, 7 Community, 8 Recreation, 9 Other

What services have been easy to find?: 0 No response, 1 Highway Info, 2 Food, 3 Fuel, 4 Lodging, 5 Auto Service, 6 Tourist, 7 Community, 8 Recreation, 9 Other

Have you noticed any advertising signs on I-80 in Iowa?: 0 No response, 1 Yes, 2 No, 3 Don't know

If "yes" what were they advertising?: 0 No response, 1 Food, 2 Fuel, 3 Lodging, 4 Auto Service, 5 Tourist, 6 Community, 7 Recreation, 8 Other, 9 Other

Does your car have a radio?: 0 No response, 1 Yes, 2 No

What is the model year of your car?: 0 No response, 1 1968, 2 1967, 3 1966, 4 1965, 5 1964, 6 1963, 7 1962, 8 1961, 9 Earlier

INTERVIEWER COMMENTS _____

FIGURE 7 QUESTIONNAIRE USED AT REST AREAS

In the case of identical questions, numerical results from the two questionnaires have been combined to yield a single response total.

The interviews were administered during two 5-day periods a month apart for several reasons. First, the two phases allowed a check on the results at approximately the midway point; this was utilized to make revisions and refinements in the questionnaire and to alter interviewer manpower assignment. Second, separating the two phases by a month reduced the chances of accidental selection of an abnormal time period that might have influenced all of the interviews. As originally conceived, the two phases were also meant to provide samples of motorists taken both before and after the opening of the Infosites (which took place in mid-July). This objective was later modified, as it appeared to be impractical to interview people with the 4- to 5-minute rest stop questionnaire as they came out of the Infosite, after they had spent a considerable portion of their planned rest time inside. Instead, a shorter questionnaire directed specifically at Infosite visitors was designed, and visitors were interviewed by the Infosite attendant; results of this survey are reported in Chapter III. Though the full rest area questionnaire was not directed at Infosite visitors, a small fraction of the people who were interviewed at the rest stops and the off-ramps had visited an Infosite.

B. RESULTS OF THE SURVEY

1. Profile of Motorists

Since the August interview series embodied several refinements and improvements over the July interview series, and since the number of interviews made in August was 50% greater than in July, this discussion will focus on the figures obtained from the August interview series. Where the July survey produced significant differences or other useful information, they are also discussed.

The first part of the questionnaire was designed to identify the personal characteristics and travel activity of out-of-state motorists traveling on Interstate 80. The typical out-of-state car traveling across Iowa during the summer months contains an average of three occupants, including the driver. Only 14% of cars interviewed had one occupant. Drivers were nearly all (83%) males, and only 4% were teenagers.

Over three-quarters of those interviewed were traveling on a vacation or pleasure trip; about 13% were traveling for business reasons. Considering size of group and trip purpose together, it is apparent that a significant portion of the out-of-state travelers on Interstate 80 are family groups traveling on

vacation. In fact, 42% of the vehicles were cars containing three or more occupants who were on a vacation trip; occupants of these cars accounted for 60% of the total number of travelers.

Trips of long duration are also the rule. Over 62% of those interviewed were on trips of one week duration or longer. Less than 10% were on one-day trips.

When asked whether they would be stopping in Iowa for a visit or a stopover, 40% indicated that they would be doing so, but the remainder planned to drive directly from one side of Iowa to the other without any significant visit or stay. Of those who planned to stay or visit in Iowa, 18% indicated it would be less than overnight, an additional 44% planned to stay just one night, and only 8% planned to stay one week or more. The average length of this stay or visit was 2 nights when only those staying or visiting were considered and 0.8 night when all travelers were considered.

Of those who would be making a stay or visit in Iowa, 30% gave Des Moines as the location. The next most popular area was Iowa City with 7%. Visiting friends or relatives was the reason given by 43% of those staying. An overnight rest stop was the reason given by 37%, and sightseeing or recreation accounted for only 14% of planned visits.

Approximately half of the motorists were making their first trip on this section of Interstate 80; 20% had made two trips on Interstate 80 in the last two years, and 13% had made eight or more trips. The average number of trips on Interstate 80 in Iowa made by each motorist in the last two years was 2.5. If the 13% who make repeated trips are not counted, the average number of trips is less than one per year. Thus, a majority of drivers interviewed have little or no previous experience with driving on Interstate 80 and can be presumed to rely heavily on whatever information system is provided.

In the July interviews, the state of registration of the vehicles was found to correspond closely to the state of origin. Consequently, in August the state of registration indicated on the vehicle license plates was assumed to be the origin of the trip. A comparison of the states of registration (origins) for July and August is given in Table 3. It is seen that the originating states in July correspond closely to those in August. The first eight states are in exactly the same ranking. This table suggests that out-of-state motorists come largely from states which are either urbanized and heavily populated, or are contiguous to Iowa. Illinois, the origin for 30% of the respondents, is both contiguous and urbanized.

TABLE 3

STATE OF REGISTRATION

<u>Order</u>		<u>Auto License</u>	<u>August</u>		<u>Cumulative</u>
<u>July</u>	<u>August</u>		<u>Respondents</u>	<u>Percent</u>	<u>Percent</u>
1	1	Illinois	757	30	30
2	2	California	184	7	37
3	3	Michigan	177	7	44
4	4	Ohio	165	6	50
5	5	Nebraska	160	6	56
6	6	Indiana	137	5	61
7	7	Wisconsin	133	5	66
8	8	New York	100	4	70
13	9	Missouri	83	3	73
9	10	Pennsylvania	69	3	76
11	11	Minnesota	54	2	78
--	12	South Dakota	43	2	80
12	13	Kansas	41	2	82
		Other	448	18	100

The August interview asked for the farthest point of travel from the state of registration. This has been listed in Table 4 and compared with the results of the July interviews, which asked specifically for the trip destination. While Iowa was listed as the destination by almost one-third of the motorists, this means that two-thirds were not traveling to Iowa but passing through it on their way to other, often distant, destinations. This destination list, in contrast to the origin list, contains many states noted for their scenery or recreation, which is in keeping with the predominant trip purpose, vacationing.

Classifying vehicles by type, the survey found 83% were standard sedans, 12% were compacts or small foreign cars, and 4% were pickup trucks. About 11% of the vehicles were equipped for camping; of these, 40% were using a car-towed travel trailer, 23% had a pickup-mounted cabin, and 30% had a pop-up camp trailer.

The cars were predominately newer models, with two-thirds being 1965 models or newer. Only 6% were 1960 models or older. Car radios were installed in 91% of the vehicles.

TABLE 4

FARTHEST STATE FROM HOME

<u>Order</u>		<u>State</u>	<u>August</u>	<u>Percent</u>	<u>Cumulative</u>
<u>July</u>	<u>August</u>		<u>Respondents</u>		<u>Percent</u>
1	1	Iowa	778	31	31
2	2	California	249	10	41
4	3	Colorado	237	9	50
6	4	Nebraska	168	7	57
3	5	Illinois	153	6	63
9	6	Canada	94	4	67
5	7	Wyoming	87	3	70
-	8	South Dakota	71	3	73
-	9	New York	64	2	75
8	10	Wisconsin	54	2	77
-	11	Washington	49	2	79
-	12	Minnesota	45	2	81
7	13	Michigan	43	2	83
		Other	450	18	100

2. Services Used by Motorists

The second part of the questionnaire dealt with the services and facilities used by the motorist on Interstate 80. When asked where they had stayed the preceding night, 33% responded that they had stayed in Iowa, 29% in Nebraska, and 17% in Illinois. Next in order were Indiana with 5% and South Dakota with 4%. Forty-one percent of those interviewed had stayed the previous night near Interstate 80. Des Moines was the most often chosen overnight stop in Iowa, and Council Bluffs was next, attracting 24% and 9%, respectively, of those staying overnight in Iowa.

When asked where they would stay that night, 37% indicated Iowa, 31% Illinois, and 14% Nebraska. Sixteen percent of the respondents did not know in what state they would be spending the night. Of those who were planning to stay the night in Iowa, 21% expected to stay in Des Moines, 20% in Iowa City, 16% in Davenport, and 5% in Council Bluffs.

Sixty-one percent of the motorists had eaten their previous meal on or near Interstate 80. Questioned as to where they would eat their next meal, 28% did not know; however, of those who did know, over three-quarters expected

to eat in Iowa. Another 18% said they would eat in Illinois. Of those who planned to eat their next meal in Iowa, 28% indicated it would be at Davenport, 18% at Iowa City, and 15% at Des Moines. With regard to the type of meal, 44% planned to eat a full restaurant meal, 29% planned to picnic, 10% planned a light restaurant lunch, and 12% did not know what type of meal they would have next.

When asked if their most recent gasoline purchase had been on or near Interstate 80, nearly three-quarters of the motorists responded affirmatively. Sixty percent had a preferred brand of gasoline, and 70% carried one or more oil company credit cards. The average anticipated mileage before the driver planned to buy gas again was 141 miles, or about half the cruising range of a standard American sedan.

3. Information Sources Used by Motorists

The third portion of the survey was directed at the motorists' use of information sources and their utility to him.

Those who had stayed overnight on or near Interstate 80 on the previous night were asked how they had been informed of their place of lodging. Nearly 40% had obtained information from a sign along the highway. An additional 18% had "just looked around," 16% had used a guide book, 13% had used the advice of a friend or relative, and 4% had followed the advice of restaurant or gas station personnel.

Of those who knew their place of lodging for the coming night, 34% had learned of it through a friend or relative, 22% through a guide book, 20% through experience, and 5% through an Infosite. Slightly under half of those interviewed had chosen their place of lodging by the time of the interview.

Of respondents who had not chosen their place of lodging, 58% expected to select it by "looking around," 14% named highway signs as their expected source of information, 13% mentioned a guide book, and 8% planned to use information obtained at an Infosite.

Of those who had eaten their most recent meal on or near Interstate 80, a highway sign was listed as the source of information by 70%. Fifteen percent had "looked around," and 4% had used the advice of a friend or relative to select a place to eat.

Over 95% of those who had made their most recent purchase of gasoline on Interstate 80 had learned of the gas station from a highway sign or by "looking around."

When asked if they had noticed any advertising signs on Interstate 80, less than 58% said they had. These people listed fuel, food, and lodging (in decreasing order of frequency) as the items most often advertised. Thus, not all motorists react to on-premises pylons and Jumbo billboards as "advertising signs" -- at least not when, as is the case in Iowa, their use is limited almost exclusively to advertisements by food, fuel, and lodging establishments which cater to the motorists' needs. Nearly everyone (98%) had observed the signs "Food, Fuel, Lodging, Next Exit." Three-quarters of the motorists reported they had turned off at such a sign, and 97% of those said they had found what they were seeking. Of those who had turned off, 71% had fuel as their principal objective, 21% were seeking food, and 4% were seeking lodging.

Ninety percent of those interviewed reported that they had experienced no difficulty in finding anything they desired on Interstate 80. However, of the 10% who had experienced difficulty, one-third said they had trouble getting highway information and another 20% had difficulty finding lodging information. When asked what services had been easy to find, two thirds of those responding listed fuel. The next most frequently listed item was tourist information, listed by 13% of the motorists. (Tourist information was obtainable through brochures displayed in racks at each rest area building on Interstate 80.)

When motorists were asked why they were exiting from Interstate 80 at each of the two off-ramps, 31% had exited to take a connecting road to their destination, 25% were going to Iowa City, 15% were seeking fuel, 14% were seeking food, and 11% were seeking lodging.

Asked how they knew that they could find what they sought at that exit, 37% replied they had been informed by an official highway sign, 23% knew from experience, and 16% had used a road map. (Note that change of highway was the reason for exiting for 56% of the respondents.)

From this survey, a composite picture emerges of the Interstate motorist, his use of services, and his need for information. The most common traveler is in a family group on an extended vacation trip. He is passing through Iowa on his way to some other destination. About one-third of these travelers stay overnight in Iowa, and three-quarters purchase at least one meal and one tank of gas near the Interstate Highway. The travelers generally have little difficulty in obtaining the information they require about services they need. Because they are probably making their first trip through Iowa, the information category causing them the most difficulty is highway and route information.

II. SURVEY OF SIGNS

In developing the Infosite concept, Stoner System, Inc. reasoned correctly that motorists want to obtain certain types of travel-related information, and that businesses supplying these services want to present their advertising message to the motoring public. Infosite was based on the impression that existing regulations governing outdoor advertising along Interstate 80 in Iowa had so severely restricted the use of advertising signs that an "information gap" had been created.

When the results of the July interview series were compiled, we learned that a majority of motorists had obtained information regarding food, fuel, and lodging from roadside signs. From this, it was apparent that roadside signs were a much more important part of the Interstate information system than had originally been expected. To gain a better understanding of the number and variety of signs to be found on Interstate 80, we made a special census of signs using as a test area the 165-mile segment between Des Moines and Davenport. During a round-trip drive over this segment, we noted the location of each sign and classified it as to type. The results are shown in Table 5.

TABLE 5

INVENTORY OF SIGNING ON INTERSTATE 80 IN IOWA*
(165-mile segment between Des Moines and Davenport)

<u>Type of Sign</u>	<u>Number Counted Both Directions</u>	<u>Average Number Each Direction</u>	<u>Average Number Per Mile</u>
Official:			
Directional	261		
Services	<u>102</u>		
Subtotal	363	181	1.1
Commercial:			
Jumbo Billboards	85		
Standard Billboards	25		
Trailer-as-Sign	3		
On-premises Pylon	<u>33</u>		
	146	<u>73</u>	<u>0.4</u>
Total Signs	509	254	1.5

*Numbers for each sign type are approximate as of August 1967. Actual number of each type and total may vary by one or two, depending on criteria used.

The test segment contained two principal types of signs. Official signs, which indicate the distance to a destination or the location of services, are erected by the Iowa State Highway Commission in conformity with standards set forth by the American Association of State Highway Officials. Commercial signs, which bear the message of a private advertiser, are placed by private enterprise. Most commercial signs are placed in locations which take advantage of exceptions to the ban on advertising along Interstate Highways, and some appear to be outright violations of the ban.

A. OFFICIAL HIGHWAY SIGNS

Official highway signs are color coded into two categories for ease of interpretation. The standard directional sign consists of reflectorized white lettering on a green background. While the use of directional signs varies somewhat, depending on the location, the sequence is generally as follows: at a point one mile before an exit a sign indicates the name of the town and the distance to the exit. At the exit, the name of the town is repeated together with the word "Exit" and an arrow pointing to the off-ramp. Following the exit, a sign shows the distance to the next exit and the distance to a major city along the route, so as to give the traveler a relatively fixed point of reference. Thus, at least three directional signs are used at each exit in each direction.

Service signs are displayed on a blue background to distinguish them from the green background of the official directional signs. In Iowa, the white lettering of service signs is reflectorized only when the services can be obtained at night. The common service signs indicate the availability of fuel, food, and/or lodging at each exit. The criteria developed by the Highway Commission to determine where fuel, food, and lodging signs shall be erected are listed in Table 6. While these criteria are excellent, the Interstate Highway motorist is generally not aware of them, with the result that the usefulness of the standard service sign is greatly diminished. The motorist may assume that the absence of a sign means no services at all, when limited service may actually be available. Even where an official sign indicates that food and fuel are available, he may not know whether he can obtain them late at night; only the well-informed motorist will know that reflectorized signs indicate 24-hour service. Again, the signs give no indication of whether the desired services are adjacent to the Interstate or in a nearby community. Finally, they tell nothing about the brand or other measure of quality, which poses a problem for the motorist who wants to use a credit card.

Service signs are also used to indicate the location of rest areas, which have been placed at intervals of approximately 25 miles along Interstate 80. The sign used says "Rest Area - 1 Mile" and is followed by a second sign at the rest area turnoff. A commonly voiced request, by drivers who did not

TABLE 6

POLICY FOR SERVICE SIGNS ON IOWA'S INTERSTATE SYSTEM
(Approved October 1963)

Service signs shall be erected on Iowa's Interstate System when the following conditions are met:

1. The distance from the exit ramp to the service shall be: Gas, no more than one mile; Food and Lodging no more than three miles.*
2. Services should be available at all times (24 hours a day).** No signing for gas will be erected (reflectorized or nonreflectorized) if service is not available from 7:00 a.m. to 10:00 p.m.
3. All servicing facilities shall be licensed as required by the Code of Iowa.
4. Gasoline stations shall offer services common to their operation. Fuel offered as an incidental to other businesses would not meet this condition.
5. Facilities serving food must have a seating capacity of at least 25.
6. Facilities offering lodging must have a combined minimum of 10 units. A unit in this reference is one room with no more than two beds.
7. If an interchange is within the built-up area of a city or town, no signs will be erected.

* The sign message will state the service available. At the end of the exit ramp another sign with an arrow added to the message shall be erected to direct the motorist to the services.

** All signs shall have a blue opaque background. Those services having 24-hour service shall be identified by a white reflectorized message; all other services that qualify for signing will be identified by a nonreflectorized message.

know that rest areas in Iowa are spaced at 25-mile intervals, was for information on the distance to the next rest area; this would permit the motorist to make a decision as to whether to stop at the rest area he is approaching or to continue to the next one. A simple means of accomplishing this goal without increasing the existing number of signs would be to replace the legend "Rest Area - 1 Mile" with "Rest Areas - 1 Mi. and 28 Mi." Little, if any, additional space is required to convey this added information. Further, since rest areas in Iowa offer an above-average range of services, many motorists felt it would be helpful to indicate them on the rest area signs. It might be possible to meet this request through the use of symbols to indicate the availability of a telephone, drinking water, etc.

We counted a total of 102 service signs along the segment of highway surveyed; together with the 261 directional signs, there was a total of 363 official signs, or an average of more than one per mile in both directions.

A continuing difficulty which can impede the development of the best possible information system for Interstate Highway motorists is the necessity of modernizing official signing standards to reflect design innovations which provide better information or greater safety to the motorist. Iowa has been progressive in this respect: its signing contracts let in 1967 incorporate the most modern techniques now available. However, signs installed in earlier years are made obsolescent by current improvements in safety and legibility. As the Interstate Highway program proceeds, it will be necessary to develop standards governing the eventual replacement of signs which were erected without the benefit of current knowledge on the safety aspects of placement and construction.

B. COMMERCIAL SIGNS

In theory, erection of commercial signs along the right-of-way of interstate highways is forbidden under the ban on outdoor advertising contained in the Highway Beautification Act, more commonly known as the anti-billboard law. States which agree to comply with the provisions of this act qualify for a bonus of 1-1/2% on the federal monies which they receive for Interstate Highway construction. Our survey of Interstate 80 in Iowa showed that the existence of several loopholes in the law, combined with uneven enforcement, have led to substantial reliance on billboards for communication between commercial enterprises and the motorist.

Several important exceptions to the ban on outdoor advertising have led to the continued use of this channel of communication:

- (1) Commercial signs are permitted along the right-of-way of Interstate Highways within a "commercial zone," which is defined as the area within approximately 10 miles of a "major city."
- (2) Pending a revised agreement between the Bureau of Public Roads and the Iowa State Highway Commission, two amendments to the existing agreement provide exceptions under which outdoor advertising is permitted: the Cotton amendment permits outdoor advertising along certain segments of Interstate Highways for which the right-of-way was acquired prior to 1958, and the Kerr amendment permits outdoor advertising when the right-of-way is within the city limits of an incorporated city bordering the Interstate.
- (3) Advertising signs are permitted on the premises of a business establishment located adjacent to the Interstate, provided that the signs advertise only the services available at that location.
- (4) The ban on outdoor advertising is limited to the area within 660 feet (1/8 mile) of the Interstate. While this requirement effectively prevents a sign from being seen in a built-up or heavily wooded area, in rural Iowa the Interstate Highway is bordered by flat farmlands which give unobstructed vistas over considerable distances. This fact has led to the development of the Jumbo billboard (Figure 8), which has four times the area of a standard billboard and is designed to be legible even when located more than 660 feet from the right-of-way. Such signs escape the jurisdiction of the Iowa State Highway Commission under present legislation.

In our survey of Interstate 80 between Des Moines and Davenport, we counted 85 Jumbo billboards. Generally illuminated at night, these cost from \$2500 to \$4000 to erect, including only direct labor and material costs. Lease acquisition, illumination, repainting, sales costs, etc. are additional. The monthly rental for a Jumbo billboard in Iowa is typically \$250 but ranges between \$230 and \$350. Space rates on these signs tend to rule out their use for general institutional advertising by insurance agents or automobile dealers, since the good will obtainable through advertising exposure cannot be easily equated with the high monthly cost. Thus, the principal users are establishments that offer services to Interstate Highway motorists directly along the road in their direction of travel. With very few exceptions, Jumbo billboards along Interstate 80 in Iowa advertise only food, fuel, and lodging.



FIGURE 8 JUMBO BILLBOARD NEAR GRINNELL, IOWA

The Jumbo billboards serve a function in giving motorists information about facilities available along the road, distances to these facilities, and brands of services offered. They provide information in a fashion which gives the motorist sufficient time to make comparisons and to make a decision regarding his preferred choice of the services. However, because of the large size which is required to make them legible from such a distance, they obstruct the view of considerable portions of the landscape and largely circumvent the intent of the Highway Beautification Act.

In our survey of signs, we also counted approximately 25 standard billboards located immediately adjacent to the right-of-way. Without further investigation, it was impossible to determine whether they were in areas exempt under the Cotton or Kerr amendments, or whether they were in violation of existing legislation.

One rather ingenious adaptation by the advertiser to the restrictions against billboard advertising was observed. In three locations, standard 40-foot over-the-road trailers were repainted to display the advertiser's message and then parked (less tractor) in a field adjacent to the Interstate (Figure 9). One can only speculate on why the advertiser chose to use a trailer to display his advertising message; either it is assumed that the trailer, not being a billboard, does not fall within the "anti-billboard" legislation, or the use of the trailer permits easier removal of the sign and re-use of the trailer for transportation in the event that the Highway Commission rules that the practice violates existing legislation.

On-premises pylons are signs located close to the Interstate right-of-way, directly on the premises of a business establishment such as a restaurant or a motel. These signs are referred to as pylons because, as shown in Figure 10, they generally consist of tower-like structures designed to place the establishment's name or brand symbol high enough to make it visible to approaching motorists from a considerable distance.

Gas stations frequently erect very tall pylons for displaying large replicas of their brand symbols. These signs may be located fairly close to the right-of-way, because they are on the premises of the business which is advertised. Such signs offer the motorist sequential but not comparative information. At each such location, the motorist is confronted with an offer to render service and a brief visual picture of the brand and quality of the service which is available; however, he has only a few seconds to make a decision before passing the exit ramp, and he has no information regarding alternative choices of similar services available farther down the road.



FIGURE 9 TRAILER-AS-SIGN (LEFT) AND STANDARD BILLBOARD (RIGHT)



FIGURE 10 ON-PREMISES PYLON SIGN

Considering all the various types of commercial signs, we observed a total of 146, which is an average of about one every two miles in each direction on the segment surveyed.

When both commercial signs and official signs are considered together, one or another occurred at an average rate of 1.5 per mile. At the Iowa Interstate posted speed limit of 75 miles per hour, the motorist encounters a new sign approximately every 30 seconds.

Figure 11 illustrates the concentration of official and commercial signs along the segment of Interstate 80 between Davenport and Des Moines. This plan is not intended to be an exact inventory, as some signs may have been overlooked and others added since the survey was made in August; rather, it shows the approximate spacing and concentration of each of the three principal types of signs: (1) official roadside signs, (2) commercial roadside signs, and (3) Jumbo billboards.

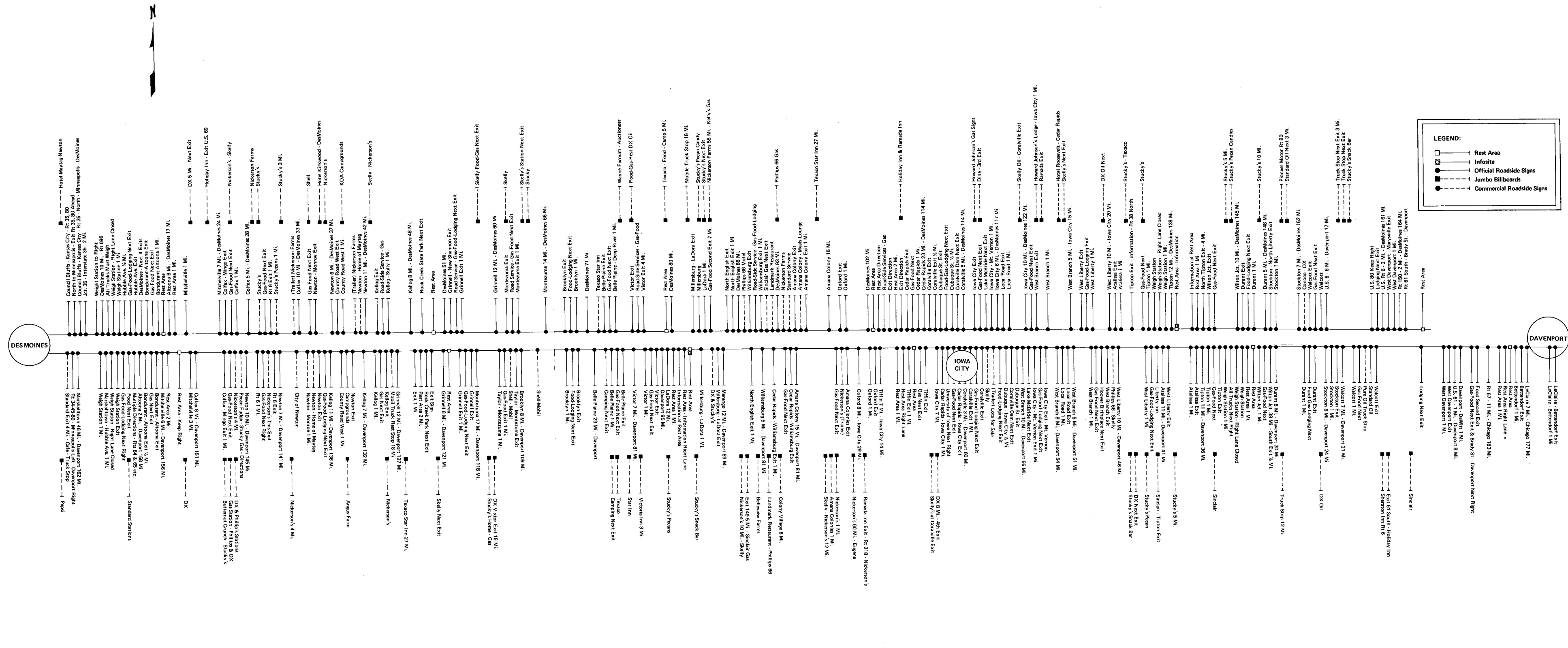


FIGURE 11
 PLAN OF SIGNING ON INTERSTATE 80 BETWEEN DAVENPORT AND DES MOINES

III. SURVEY OF INFOSITE VISITORS

A. COMPOSITION AND CONDUCT OF THE SURVEY

To evaluate the user's response to the Infosite concept, a survey was made of visitors to the Infosite. As explained in Chapter I, the full rest-area questionnaire could not be used for this purpose, as it was felt to be too lengthy for a person who had just spent a considerable portion of his rest time in the Infosite. Thus, a shorter (under one minute) version was developed in consultation with Stoner System, Inc., specifically for interviewing Infosite visitors (Table 7).

The questionnaire format was designed so that it could be filled out either by the person answering the questions or by an interviewer. Numeric answers to questions were provided to facilitate coding the responses for computer processing. This questionnaire was administered during the last two weeks of August at both of the Infosites. The attendant invited some visitors to answer the questionnaire and provided one to any visitor who volunteered. In some cases, the attendant served as an interviewer in filling out the questionnaire.

Valid replies were obtained from 458 motorists. On several of the questions, multiple answers were permitted; for example, a person could indicate he had stopped at the rest area to change drivers and to use the telephone. For questions of this kind, the total number of responses exceeds the total number of questionnaires.

B. RESULTS

1. Visitor Profile

Since the interviews took place at the two rest stops which contained the Infosites, the visitors can fairly reliably be ascribed to have characteristics similar to those of Interstate 80 motorists as reported in Chapter I. However, the survey was conducted within the Infosites, so there was no easy means to question only those from out of state. The home state of those answering the questionnaire is shown in Table 8. Approximately 28% were from Iowa. A comparison of this with Table 3, which lists the state of registration of out-of-state motorists on Interstate 80, shows some differences in the order of ranking, but it also shows that, like the out-of-state motorists on Interstate 80, the out-of-state Infosite visitors are largely from heavily populated and urbanized states or states contiguous to Iowa.

TABLE 7

INFOSITE QUESTIONNAIRE

1. What was your principal reason for stopping at this rest area?

No response	= 0	Have a meal	= 4	<input type="checkbox"/>	1
Change drivers	= 1	Get information	= 5		
Use lavatories	= 2	Rest	= 6		
Use telephone	= 3	Other	= 7		

2. There was a special sign leading up to this rest area. What did it say?

No response	= 0	Information available	= 3	<input type="checkbox"/>	2
Don't know	= 1	Other (specify)	= 4		
Rest area	= 2				

3. Why did you come into the Infosite?

No response	= 0	Restaurant information	= 5	<input type="checkbox"/>	3
Curiosity	= 1	Highway information	= 6		
Lodging information	= 2	Sightseeing information	= 7		
Fuel information	= 3	Other	= 8		
Car repair information	= 4				

4. Did you find this information?

No response	= 0	Yes	= 2	<input type="checkbox"/>	4
No	= 1				

5. Was this information helpful?

No response	= 0	Yes	= 2	<input type="checkbox"/>	5
No	= 1				

6. Did you find anything else that was helpful that you weren't originally seeking?

No response	= 0	Yes	= 2	<input type="checkbox"/>	6
No	= 1				

7. If "Yes," what was it? (Use coding key in Question 3.)

7

8. Was there anything about the Infosite that disappointed you?

No response	= 0	Yes (specify) _____	= 2	<input type="checkbox"/>	8
No	= 1	_____			

9. Do you think Infosite is a good idea?

No response	= 0	Yes	= 2	<input type="checkbox"/>	9
No	= 1				

(Record offered comments) _____

10. What is your home state?

City _____ State _____

10

(County) _____

11. Is there any information you seek at the Infosite that you are unable to obtain?

No response	= 0	Yes	= 2	<input type="checkbox"/>	11
No	= 1				

If "Yes," what information? _____ 12

TABLE 8

HOME STATE OF INFOSITE INTERVIEWEES

<u>State</u>	<u>Number</u>	<u>Percent</u>	<u>Cumulative Percent</u>
Iowa	128	28	28
Illinois	55	12	40
Ohio	35	8	48
Michigan	31	7	55
Indiana	23	5	60
California	21	5	65
Colorado	14	3	68
Nebraska	13	3	71
New York	13	3	74
Canada	10	2	76
Wisconsin	9	2	78
New Jersey	8	2	80
Pennsylvania	8	2	82
Other	90	19	100

For nearly half the people interviewed, obtaining information was one of the reasons for stopping. Approximately one-third stopped to use a lavatory. Twenty-nine percent included "To rest" among their reasons for stopping. "Eating" and "To change driver" were each listed by 7%, while only 2% stopped to use the telephone. (These percentages total over 100% because more than one reason for stopping was given by many motorists.)

When asked why they had come into the Infosite, 42% said they had come out of curiosity. Highway and sightseeing information was desired by 28% and 22% respectively. Other information sought by the Infosite visitors concerned lodging (13%), restaurant (4%), and fuel and car service (less than 2%).

The visitors were asked if they had observed a special sign leading up to the area. Only 63% recalled having seen a sign pertaining to the availability of information.

2. Visitors' Evaluation of the Infosite

In general, the visitors seemed quite well satisfied with the Infosite. Practically all said that they had been able to find what they were seeking when they entered. Ninety-six percent said that the information they got was helpful and useful. When asked if there was any information they wanted but couldn't obtain, only 5% answered affirmatively.

Over three-quarters of those interviewed found some helpful information which they had not originally been seeking when they entered. Most commonly listed in this category was sightseeing information, which was mentioned by 28% of those responding. Lodging and highway information were each listed by about one-quarter of those responding. Restaurant information was listed by 6% and fuel and car repair information by less than 3%.

When asked if they were disappointed by anything in the Infosite, less than 6% said that they were. Almost 99% of those interviewed answered "yes" to the question, "Is Infosite a good idea?"

C. OBSERVATIONS ON THE INFOSITES AND CONCLUSIONS FROM THE SURVEY

Ten of the 15 firms that advertised in the two Infosites are places of lodging (a total of 15 establishments). There were also ads by two auto service firms, one tourist attraction, and two chambers of commerce. In addition to the displays and directory advertising, leaflets provided by the Iowa Development Commission were available for several more tourist attractions.

The places advertised were largely located in the area close to the Infosites or near Des Moines. This does not serve the needs of morning visitors to an Infosite, who have many hours of driving ahead of them and can use information about places which are quite distant. (Even Des Moines is only two hours from the farthest Infosite, Tipton.) There was no advertising from out-of-state establishments within a few hours' drive from the Infosite.

While the visitors were generally well satisfied, it seems apparent that the Infosites are not reaching their potential in supplying a wide range of information needs, in listing a large number of establishments within each information category, or in covering the wide geographic area accessible by Interstate 80 from the Infosites. Coverage of the main information items sought by the visitor -- highway and sightseeing information -- is particularly inadequate. Those who sought this information were 99% satisfied, however, which suggests

a somewhat low level of expectation. In contrast, lodging information, which was covered the best by far of all information needs, was the area in which twice as many visitors found useful information as had sought it; this indicates a much more successful response to the information needs of the Interstate 80 motorist.

IV. SUCCESS OF INFOSITE FOR THE BUSINESSMAN

A. THE ADVERTISER

As a part of our assignment for the Iowa State Highway Commission, we were asked to investigate whether business enterprises have found Infosite an effective means of communicating with the traveling public. Since the two experimental facilities have been in operation for only a few months, it may be too early to evaluate their eventual success as an advertising medium; however, the results achieved to date show that Infosite in its present form is effective only for a very limited clientele. As of September 1967, Infosite had attracted a total of 15 advertising clients. (See roster in Table 10.) Since some display panels advertised establishments at more than one location, the motorist visiting an Infosite was offered a choice of up to 20 establishments, when both display and directory advertising are considered. A summary of the types of establishments advertising at Infosite and their locations is shown in Table 9.

TABLE 9

SUMMARY OF INFOSITE ADVERTISERS
(As of September 1967)

<u>Service</u> <u>Advertised</u>	<u>Location of Establishment</u>				<u>Total</u> <u>Establishments*</u>
	<u>Des Moines</u>	<u>Iowa City</u>	<u>Cedar Rapids</u>	<u>Other</u>	
Lodging	4	2	2	7	15
Tourist	1		1	1	3
Fuel	1			1	<u>2</u>
					20

*Based on sum of display and directory advertising. Some advertising panels advertise more than one establishment.

It is apparent that, while Infosite can serve as an effective promotional medium for certain advertisers, the number of such advertisers is severely limited. First, despite sales efforts which have covered the breadth of Iowa as well as major cities in neighboring states, sales of Infosite advertising are thus

TABLE 10

INFOSITE ADVERTISERS
(As of September 1967)

Display Panels

Parkway Inns		
Hotel Kirkwood	Des Moines	Tipton only
Town House Motor Inn	Cedar Rapids	Both sites
MacMillan Oil Company	Des Moines	Tipton only
Roosevelt Motor Hotel	Cedar Rapids	Both sites
Clayton Associates		
Clayton House Motels	Des Moines	Both sites
	Iowa City	
	Davenport	
	Waterloo	
Boss Hotels	Des Moines	Tipton only
Hotel Savery		
Hotel Fort Des Moines		
Amana Colonies	Amana	Both sites
Ramada Inn	Iowa City	Both sites
Texaco Star Inn	Guernsey	Tipton only
Des Moines Panel	Des Moines	Tipton only
Chamber of Commerce		
Iowa Power and Light		
Northwestern Bell		

Directory Listings

Ladora Motel	Ladora	Victor site
The Crest Motel	Williamsburg	Victor site
Cedar Rapids Chamber of Commerce	Cedar Rapids	Both sites
Bud's DX	Victor	Victor site
Twin Bridges Motor Inn	Bettendorf	Victor site
Liberty Inn Motel	West Liberty	Both sites

far limited to establishments located within one or two hours' drive of the Infosite. From the outset, Infosite has been closely associated with an Iowa image, being a joint effort of the Iowa State Highway Commission and an Iowa advertising agency. Despite the fact that morning visitors to the Infosite inquire about facilities in destination cities in neighboring states, the advertising agency has been unsuccessful in selling Infosite space to establishments located out of state, largely because these businesses already maintain advertising located closer to their community which will be observed by the motorist as he approaches.

Second, Infosite advertising sales have been limited largely to motels. Fifteen of the 20 establishments advertised are motels or hotels. Of the Interstate Highway motorists' information needs – food, fuel, lodging, rest, highway, tourism – only lodging is usually a planned purchase. Purchases of fuel and food may often occur on impulse when an establishment, or its on-premises pylon sign, is seen by the approaching motorist. Of the two fuel advertisers, one emphasizes towing service and the other is a little known regional brand. Many motorists need highway information and want to know where rest areas are located, but neither of these information needs involves a purchase and therefore attracts no advertising. This leaves only tourism and lodging as information needs which might attract advertising. The volume of sales at tourist attractions does not generally justify expensive advertising, and the advertisements in this category are limited to two chambers of commerce and one tourist attraction, Amana Colonies, which has shops and restaurants. Lodging is the only motorist information need associated with a purchase of sufficient magnitude to justify Infosite advertising.

Third, even among lodging establishments, Infosite advertising appears to be effective only for motels which meet certain criteria. Large, nationwide motel chains tend to choose locations which make their establishment visible to the motorist on the Interstate and rely for their success on "walk-in" guests, as well as on their reservations communications network. Hotels and motels located in city centers that are a half-hour's drive or more from the Interstate normally attract guests whose destination is the city where they are located, since travelers who are merely crossing the state are unwilling to detour very far from the highway to reach a place of lodging. For those few motels which are located adjacent to Interstate 80 but are not visible from it, Infosite advertising appears to be a remarkably effective means of generating new business, and its cost is offset by guests' referrals many times over each month. Most motels in the area between Des Moines and Davenport which fall into the latter category are now Infosite advertisers; however, this clientele is too limited to sustain the operating costs of Infosite as originally conceived.

A further difficulty with Infosite, from the point of view of the advertiser, is the lack of product differentiation in terms of the types of display

panels available. The scale of monthly rentals for advertising panels of various sizes is shown in Table 11.

TABLE 11

INFOSITE DISPLAY PANEL SPACE RATES

<u>Panel Size</u>	<u>Monthly Rate</u>
4 x 12 feet	\$ 720
4 x 8	550
4 x 6	460
4 x 4	325
2 x 4	175
2 x 2	95
Name Directory Listing	5

Of the 15 advertising clients, 6 have purchased only the \$5 telephone directory listing which entitles them to display their name and telephone number on a panel adjacent to the Infosite telephone. Of nine advertisers on display panels, nearly all have purchased the 2 x 2 foot panel, which rents for \$95 monthly. Only one advertiser purchased the 4 x 4 foot panel costing \$325 per month; no sales have as yet been made for panels larger than 4 x 4 feet. This is probably due to the fact that the prices for these larger panels exceed by several times the cost of a Jumbo billboard. Yet, for the advertisers, the Jumbo billboard offers the potential of reaching a much greater proportion of Interstate Highway travelers, since Infosite advertising reaches only that portion of total travelers (about 10%) who stop at the rest area where the Infosite is located.

The advertising agency could, at its option, divide the larger panels into the more saleable 2 x 2 foot size, but there has been no need for this; only about 20% of the approximately 350 square feet of advertising space in each Infosite has been sold.

B. THE ADVERTISING AGENCY

In addition to assessing the effectiveness of Infosites for the advertiser, we also found it appropriate to consider their success from the point of view of the advertising agency, Stoner System, Inc., which operates them under contract

to the Iowa State Highway Commission. Stoner System has cooperated with us by supplying a pro-forma statement of its income for the 12-month period ending August 31, 1968, based on the sale of 100% of the advertising space available at each Infosite. These figures are shown in Table 12.

In summary, sales of 100% of the advertising space available at each Infosite would produce annual revenues of \$83,500. Direct operating costs (staff, lease, utilities, etc.) amount to \$24,500, or about 30% of potential sales. Indirect operating costs such as the salaries of salesmen, travel expenses, and central office expenses, taken together with general administrative expenses and amortization, about equal direct operating costs. Thus, on a fully allocated cost basis, sales of 60% of the available space in each Infosite are required before the breakeven point is reached. Current sales yield only 20% of total potential income. Thus, just to cover direct operating costs, a 50% increase in advertising sales, from 20% to 30% of total, would be required. To meet direct and indirect operating costs would require a tripling of the present level of sales.

Both before and after the opening of the Infosites in July 1967, Stoner System, Inc. has engaged in energetic and widespread sales efforts to generate interest in Infosite among advertisers. Sales have not reached anticipated levels primarily because potential clients were found to be relying on on-premises pylons or Jumbo billboards as a principal means of conveying their message to the motoring public. Unless Stoner System, Inc. is successful over the next few months in selling substantial additional advertising space at the Infosites, continued operation of the project will inevitably entail further financial loss, and the agency's future participation should be considered doubtful.

TABLE 12

PRO-FORMA STATEMENT OF ADVERTISING INCOME FOR 12-MONTH
PERIOD ENDING AUGUST 31, 1968

(Based on sale of all available space)

		<u>Percent to</u> <u>Total Sales</u>
Total Potential Sales	<u>\$83,500</u>	<u>100.00%</u>
Cost of Sales:		
Salaries		
Attendants	\$ 6,447	7.72
Maintenance Staff		
Display Units	1,000	1.20
Janitorial	3,600	4.31
Lease Expense	7,976	9.55
Utilities	4,000	4.79
Telephone	810	0.97
Insurance	60	0.07
Taxes - Personal Property	600	0.72
Total Cost of Sales	<u>\$24,493</u>	<u>29.33</u>
Potential Gross Profit	<u>\$59,007</u>	<u>70.67</u>
Operating Expenses:		
Selling Expenses:		
Salaries	5,000	5.99
Travel and Entertainment	2,000	2.40
Auto Expense	1,000	1.20
Sales Material	1,250	1.50
Art and Production	1,500	1.80
Agency Commission	3,000	3.59
Taxes - Payroll	167	0.20
Miscellaneous	150	0.17
Total Selling Expense	<u>\$14,067</u>	<u>16.85</u>
General and Administrative Expense:		
Legal and Accounting	900	1.08
Employee Benefits	1,000	1.20
Office Supplies and Postage	300	0.35
Management Fee	5,000	5.99
Total General and Administrative	<u>\$ 7,200</u>	<u>8.62</u>
Total Operating Expense	<u>\$21,267</u>	<u>25.47</u>
Operating Profit Before Amortization	<u>\$37,740</u>	<u>45.20</u>
Amortization Expense	2,895	3.47
	<u>\$34,845</u>	<u>41.73</u>

Source: Stoner System, Inc., Infosite Division

V. SURVEY OF TOURIST INFORMATION CENTERS

We have recommended that Iowa establish state-sponsored tourist information centers at border points on the Interstate Highway. This chapter provides a summary of the experience of four other states where tourist information centers have been in operation for some time. Our information was obtained from interviews of tourist officials in Massachusetts, Maine, New Hampshire, and Nova Scotia. In each area, both the Director of Tourism and the managers of larger information centers were interviewed.* These areas were chosen because all have well-developed facilities for providing tourist information and for promoting their attractions.

A. INFORMATION NEEDS OF THE MOTORIST

The four areas considered in our analysis have varying geographic locations, which could affect the information needs of motorists traveling through them. Both Cape Cod and Nova Scotia are "destination areas." Since each is a peninsula, visitors do not drive through them on their way to another place. Maine and New Hampshire, on the other hand, are both states through which motorists often pass en route north or south--especially, this year, to Expo 67. This difference, however, did not significantly affect the information needs of motorists who stopped to inquire at information booths; their inquiries were quite similar in the four areas. They are described below, in order of frequency.

1. Directions

In each area, well over half of the inquiries were for directions. These were highest in Maine and New Hampshire, with an estimate of 80-90% of the total at Canterbury, on Interstate 93 in New Hampshire. Most motorists are generally aware of their destinations but want to know the fastest or,

*The Directors of Tourism interviewed were:

Mr. Gerald J. Redmond, Director, Nova Scotia Travel Bureau, Department of Trade and Industry

Mr. Ellis Drover, Economics Division, Department of Trade and Industry (Nova Scotia)

Mr. William Hatch, Director, Maine Publicity Bureau

Mr. Richard French, Assistant Director, Vacation Travel Department, New Hampshire Division of Economic Resources

Mr. Norman H. Cook, Executive Director, Cape Cod Chamber of Commerce

alternatively, the most scenic way to get there. Inquiries for directions in Cape Cod and Nova Scotia tended to be highway directions to cities or places of interest in the area; many of the inquiries in Maine and New Hampshire, on the other hand, were for highway directions to places outside the area, such as Montreal.

2. Accommodations

Another inquiry made by over 50% of the motorists in all areas concerned accommodations (both hotel-motel and camping). In Maine and New Hampshire, where camping facilities are more abundant, about two-thirds of the accommodations questions were for camping information. In Cape Cod and Nova Scotia, on the other hand, most inquiries were for motel, hotel, or resort accommodations. Travelers usually want specific information about available facilities--exact costs, regulations and restrictions, etc. They sometimes want the information agent to make a value judgment and tell them "where they should stay." They may also ask him to make the reservations for them.

3. Information about Terminal Point

Less frequent, but important to the types of information the centers should provide, were specific questions about the travelers' destinations: how do they get to a specific place within a city, what is there to do and see, where should they eat, what sports and recreation facilities are available, is there a schedule of cultural events? Questions such as these are most prevalent in tourist areas such as Cape Cod and Nova Scotia, but the information centers in Maine and New Hampshire also received many requests for city maps and information on entertainment events and recreational facilities in the area.

4. General Information on What is Offered in the Area

A number of tourists stop at the information centers to ask what there is to do in the area. Some will say they are in the area for a week, have a certain amount to spend, and want to know what to do and where to stay and eat. Inquiries of this type require a good deal of individual attention, and sometimes even the working out of an itinerary for the motorist.

5. Other

Other inquiries fall into three areas. First, many tourists come into an information center to seek service facilities--rest rooms, picnic tables, candy

and cigarette machines, help for keys locked in the car, etc. Secondly, some tourists ask more general questions about living in the area -- retirement opportunities, employment possibilities, housing facilities. Finally, some tourists are primarily interested in historical information.

Table 13 summarizes the pattern of motorist inquiries with figures gathered at Kittery, an information site on the Maine Turnpike at the southern tip of Maine. By far the most frequently asked questions in all areas are about

TABLE 13

TOURIST INQUIRIES - KITTERY, MAINE
(January - July, 1967 inclusive)

<u>Subject</u>	<u>Numbers</u>	<u>Percent of Those Classified</u>
Highway Information	6,654	37%
Camping Information	3,783	21
State and National Parks*	2,784	16
Motels	2,446	14
Beaches	905	5
Fishing	700	4
Local Information	515	3
Unclassified - Multiple Requests	<u>14,318</u>	<u>100%</u>
	32,105	

*Many of these also included camping inquiries.

routes (directions) and accommodations. Such inquiries represent an even greater proportion of the total in "en route" areas like Maine and New Hampshire than in "destination" areas like Cape Cod and Nova Scotia. Specific information about points of destination tends to be sought more frequently in the tourist areas but is also important in areas driven through en route to other places.

B. METHODS OF DETERMINING WHAT THE MOTORIST WANTS

The four areas have varying means of determining how many tourists stop at their information centers and what types of questions they ask. The two most frequent of these are guest books and tally sheets. In an information center with a guest book, the information agent asks each inquirer to sign it (his name, home state, and comments). The tally sheet is kept by the agent himself. Each time a motorist asks a question, the agent asks him for his home state and marks this state and the question asked on the tally sheet. The tally sheet provides more accurate information about the types of questions asked than does the guest book, but it also takes up more of the agent's time.

Two more extensive means of gathering information are used in Nova Scotia. As there are only seven points of entry to the province (four ferries, two roads, and one airport), exact statistics on all persons entering and leaving are much more easily obtained than is generally the case. The Nova Scotia Travel Bureau did extensive interviewing of auto passengers last year and is completing the data with interviews of exiting airline passengers this year. Further information on visitors comes from "Order of the Good Time" cards, which are small information cards given to visitors in the information centers and in some motels and hotels; visitors are asked to complete the cards and return them upon leaving Nova Scotia if they stay three days or longer. The information gathered from these cards is considered less reliable than interview data.

A final way of assessing visitor characteristics is to collect data on people who send for information in response to newspaper or magazine advertisements or who request information from an out-of-state tourist promotion office. In addition to analyzing the types of information requested, tourist officials also obtain from this source a list of inquirers' names and addresses, which permits follow-up studies on visitors' social and economic characteristics and on impressions gained during their visit to the area.

C. TYPES OF INFORMATION PROVIDED FOR THE MOTORIST

The four tourist information systems interviewed varied in sponsorship (state vs. private) and, consequently, in their approaches to information dispersal. Three general approaches were evident.

The first approach is seen in New Hampshire, which has a state-sponsored information system that attempts to remain completely objective and impartial. Except for some special private attractions of general public interest (e.g., geological formations, recreation areas, amusement parks), New Hampshire's information centers display no advertising materials published by private

interests. Almost all the literature available in these centers is published by the New Hampshire Department of Economic Development or the Regional Tourism Development Associations. When a person asks for information on dining or accommodations, he is given a "New Hampshire Accommodations and Dining Directory," which is prepared by the New Hampshire Council of Region Associations and lists members of these associations. The same is true of camping, fishing, and other recreation facilities. In addition to limiting the information made available, the information agents are instructed not to mention or recommend specific facilities.

The second approach is taken by Nova Scotia, which has a province-sponsored travel bureau. Here the information agents are also instructed to remain perfectly impartial and to make no recommendations whatsoever. As in New Hampshire, this travel bureau publishes numerous pamphlets on facilities available in Nova Scotia: "Where to Stay in Nova Scotia," "Nova Scotia Events," a camping and tenting guide to Nova Scotia, and a guide to water sports and fishing. However, the centers do display pamphlets advertising privately owned attractions. They neither solicit nor re-order these pamphlets but will willingly display, on racks in the room, almost any brochures which are sent in.

The Nova Scotia Travel Bureau is fairly strict in requiring its information agents to remain objective. They are not allowed to recommend highway routes, accommodations, or eating places. When asked for directions, they give a highway map and point out alternative routes. In fact, due to protests from affected areas, they do not even guide a tourist away from a road which is heavily under construction unless the road is actually closed. Instead of recommending routes, the information agents give the traveler a list of the conditions of all Nova Scotia highways, published about every month by the Travel Bureau.

The third approach is used by the Cape Cod Chamber of Commerce and the Maine Publicity Bureau, both of which are privately sponsored organizations supported by dues-paying members.* Information centers in these areas display both their own general directories of facilities, and information sent in by privately owned hotels, motels, resorts, restaurants, and other attractions. These information centers are less strict about trying to remain completely objective. Information agents are freer to make specific recommendations about roads, accommodations, eating places, and other attractions. To avoid undue favoritism, however, agents make an effort to pinpoint exactly what the tourist wants before they indicate the one or two facilities which might meet his needs most completely.

*Maine Publicity Bureau members make voluntary annual contributions to their organization.

An important decision which has to be made by each information center operator is whether or not to offer accommodation reservations for the traveler. The Cape Cod Chamber of Commerce is the only system which readily offers this service. Others said they might make reservations for very elderly or very lost motorists, but the usual practice is to provide a pay phone on which motorists can make their own calls.

The Director of the Cape Cod Chamber of Commerce suggested that an information center should be careful about the relationships it establishes with motel and hotel owners and proprietors. Proprietors, on occasion, have blamed the information centers when they are not full. To avoid such problems, the Chamber asks motels and hotels to call each information center every morning before 10 a.m. to report their vacancies. The information clerks then send people first to those who call, on a rotation basis where possible. When the information agent calls the motel or hotel, he does not make a reservation but instead says he is sending a party over to look at the accommodations. Following this procedure avoids misunderstandings over a broken reservation if the party does not appear.

D. INFORMATION AIDS

The tourist information systems interviewed have developed several devices to make their services clearer and more useful to the motorist. Some of these used are listed below.

1. General Directories of Facilities

Directories of accommodations and restaurants are used by all four areas to acquaint the tourist with the facilities available. Directories of recreation and sports facilities, camping and tenting areas, and cultural and special events have also been compiled. General directories such as these can save time for the information clerk, since he does not need to probe to determine exactly what the tourist wants in order to give him a specific pamphlet or a specific piece of information. By describing numerous facilities in the area, they can also serve as an effective advertisement for something the tourist might not have thought of before (especially if the information clerk points these things out).

2. Information Book

This device is used in Nova Scotia, where a large percentage of the travelers have previously received general information about the province and

where their requests are often fairly specific. The information book is a large, loose-leafed notebook. Organized and continually up-dated by the Travel Bureau central office, it contains almost any type of information which could be of interest to the tourist and is alphabetized from Antique Shops to Youth Hostels. The information clerks use this book frequently throughout the day, since it permits them to offer expert advice on subjects about which they may have little personal knowledge.

3. Information File

In Maine, each information center has a 5 x 8 card file of all members of the Publicity Bureau by community, listing the services and facilities they offer and their prices. The cards in the centers are Xerox copies of those in the main file at the central Publicity Office in Portland. The information clerks use these files fairly often in the course of a day to respond to inquiries about accommodations and dining places.

4. Tourist Maps

New Hampshire has printed a tourist map which is slightly less detailed than a regular road map and on which information of interest to tourists is highlighted in color. Information agents usually mark alternative routes or destinations on this map and give it to the tourist. Cape Cod has printed an even more simplified, recreation-oriented map, which is less expensive than a road map and more clearly shows the recreation facilities available in various areas. These maps are given to a large percentage of the tourists, whether or not they ask for directions.

Some of the information centers keep detailed road maps under glass on the tops of their counters and use them to point out directions as a supplement to the less detailed tourist maps.

In addition to maps, one New Hampshire information center has found a mileage chart showing distances from that center to the larger towns in surrounding states to be quite popular.

5. Staffing

The Nova Scotia Travel Bureau has a well-developed staff orientation and follow-up program which is designed to enable their information agents to give "first-hand" information in a more knowledgeable manner and to become acquainted with their role in the total tourist industry in Nova Scotia. At the

beginning of each tourist season the staff of the Travel Bureau information centers and the managers of municipal centers meet for a three-day training session which includes a tour of a selected region of Nova Scotia. In mid-October, at the close of the season, the same staff members meet again to report on the activities of the summer -- the types of questions they were asked, complaints and compliments received, etc. The agents also meet with representatives from transportation companies, motels and hotels, special attractions, etc., to explore problems which may have developed and to ask questions.

6. Methods of Promotion

Promotion of tourism and recreation facilities in the area can be accomplished both externally, through regional offices and newspaper and magazine advertising, and internally, by a keen, well-informed agent at the information center itself.

Several of the information systems studied have found that an agent who presents the facilities of the area accurately and enthusiastically can influence tourists to stay in the area. They have found, too, that the more specific the information given (about routes, places to stay, things to see, etc.), the more effective it is as a promotional measure. To eliminate the "favoritism" problem, however, the information agent must be careful to suggest several possibilities. In areas which are not tourist destinations, the tourist does not always ask about sports and recreation facilities; the information agent should sense possible areas of interest and take the initiative to introduce the tourist to them.

Although all the areas studied do some out-of-state promotion, Nova Scotia has the most active program. It uses both magazine advertising and regional travel bureaus. Advertising in the regional editions of major U.S. and Canadian magazines, it concentrates on prime market areas that (in its opinion) are expanding each year. In allocating advertising by geographical area, it tries to stop short of the point at which the trip to Nova Scotia is so long and the length of stay there so short that the advertising hardly pays.

Nova Scotia's regional Travel Bureau offices are in Toronto, Montreal, New York City, and Boston. These offices have proved to be an effective means of promotion. Literature kits are supplied to the offices from the Central Bureau in Halifax, and the offices, in turn, distribute them to potential tourists who come in, call, or mail in an information coupon from a magazine or newspaper advertisement. A record is kept of all tourists to whom mail is distributed, and a sample of them is called at the end of each season to see whether or not they actually went to Nova Scotia. This "conversion rate" is about 40% for those who have come to the office, about 30% for those who have telephoned, and only

about 15% for those who have sent in coupons. The Travel Bureau estimates that of the people entering Nova Scotia, about 50% have previously received literature from one of these regional offices.

Active individual contact and salesmanship are effectively used in these regional offices to promote the area as a tourist attraction and could be used profitably by a "drive through" area such as Iowa in gateway centers. When asked how he would work in Iowa's situation, the Director of the Nova Scotia Travel Bureau said he would change the character of his in-province bureaus to resemble that of his sales-oriented outside offices. He would hire managers and agents as keen, active salesmen, professionally experienced in the subtle sell. He would also instruct them to make fairly specific recommendations about rates, places to stay, and things to see in order to arouse the tourist's interest. In this case, the gateway centers should be structured as travel planning centers with the goal of inducing longer visits by visitors who were "just passing through" but who were sufficiently curious to stop at the gateway center. Once informed of attractions located within easy driving distance of Interstate 80, a substantial proportion of family groups on extended vacation trips could be expected to stop in Iowa for a half a day or more and thus would require overnight accommodations in the state.

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