ough sig-

avel. often e unthey ably of all

le as inual and

ent of 10uld

judg

been one of state, fective es are

tantly et this zen of

iths in nity of on our

nent of

The Effectiveness of Interstate Sign Systems

B. R. FLENER Traffic Engineer Division of Traffic

Although signing has always been an important part of traffic operation, its importance has never been as great as on the Interstate Highway System. This is

from outside is access highwa off from the o many sources Interstate moti pendent on si and it is, then state Signing ly as possible. Fortunately Highway Pro signing system made to requir of the design These signing

due in part to the fact that by isolating the motorist from outside interference, these modern controlledaccess highways have also, in the process, cut him off from the outside business world and eliminated many sources of guidance and information. The Interstate motorist is, therefore, almost totally dependent on signs for any information he receives, and it is, then, of utmost importance that the Interstate Signing System fulfill its obligation as effective-

Fortunately, at the beginning of the Interstate Highway Program, the need for an exceptional signing system was recognized, and provisions were made to require adequate signing as an integral part of the design of each Interstate Highway facility. These signing requirements are set forth in the "Manual For Signing And Pavement Marking Of The National System Of Interstate And Defense

Highways," published by the American Association of State Highway Officials. The Manual is approved by the U.S. Bureau of Public Roads, and every Interstate signing project must adhere to the principles outlined therein. This universal application of one set of high signing standards has resulted in a modern and uniform sign system throughout the Interstate Highway network.

To uphold and execute these standards on Interstate routes in Kentucky is the responsibility of the Traffic Division and it might be of interest to briefly discuss some of our particular signing practices.

To begin with, the heart of any signing system is the guide, or directional signs, and it is appropriate that our major efforts are directed toward their design. It is also logical that most of these signs are for interchanges since it is at and on the approaches to interchanges that the greatest need for guidance exists. Depending upon the complexity of the interchange, various sequences of guide signs are used but basically each provides three points of information.

1. Identification of the intersecting route or routes.

2. A maximum of two principal destinations served by the interchange.

3. Directions on when and where to exit.

Judging from our mail, our choices of guide sign destinations are not always popular ones and I would like to take this opportunity to elaborate on the method of their selection. In choosing destinations at an interchange, it is our practice to choose the nearest community on the intersecting route in each direction from the Interstate as shown on the Offficial Kentucky Highway Map. This procedure ade quately serves the motorist by identifying the interchange, and avoids the problems of our having to determine relative importance of all the communities on the intersecting route. I'm sure you will agree we could never make a satisfactory choice under those circumstances. When there are additional communities of major importance on the intersecting route and there is a legitimate need on the part of the Interstate motorist for this information, then a supplemental sign may list up to two additional destinations served by the interchange. Generally, however, standard signing is adequate, and additional signs are discouraged. After the guide sign messages have been carefully selected and designed, the signs themselves must be prominently and effectively displayed. Depending upon operational requirements, they may be erected at the roadside or mounted overhead but in either case, efforts are made to insure they are properly exposed.

Another signing area which has only recently become important in Kentucky is the use of Interstate Services Signs. As long as only short, unconnected sections of Interstate highways were in use the need for this special type signing was not so great; however, as completion of additional sections has opened extended mileages of Interstate highway to traffic, it has become necessary to provide the motorist with information on essential commercial services. Obviously, to be effective and of benefit to the motorist this information must be consistent and to assure that it is consistent a policy has been developed to govern installation of all official Interstate Services Signs.

This policy assumes that in urban areas, such as Louisville and Covington, adequate motoring services are available at every interchange and special signing is not required. However, on rural sections where such services are not available at every interchange, the driver will need to be given information on services that will enable him to conveniently schedule his stops.

Again judging from our mail, the public is not yet fully aware of our policies in this area, and you may benefit from a brief rundown on the subject. Those services that are considered to be sufficiently essential to Interstate motorists to warrant special official signing at rural interchanges are gas, food and lodging and these are the only services that may be specified on the interchange signs. When these services are available to the motorist, he should expect them to be of average or above average quality and to be available during normal business hours. The service facilities should also be located within a three mile radius of the interchange to be reasonably accessible to the Interstate motorist. When these basic require ments are met then services signing is justified, and appropriate signs are installed.

With the prohibition of advertising on or near Interstate highways, there is a natural desire on the part of many travel-related businesses other than gas, food and lodging to also be represented on the official services signs. Such businesses as truck icing, and trailer parks, while definitely of benefit to some, cannot be considered as essential to the average Interstate traveler, and their requests for signing must be denied. However, in denying the requests or demands for such signing that would be contrary to current service signing policy, we do so from our conviction that our primary obligation is to the motorist and that to deviate from what we believe to be correct practice is to render him a disservice.

By only briefly touching on a few aspects of our Interstate signing practices, I have hoped to show that although Interstate signing was conceived in principle to be a complete and uniform system of signing that would be adequate to the needs of the Interstate motorist, the implementing of these principles and concepts is the responsibility of each individual State Highway Department. How well each of

these

overa

these agencies fulfills its obligation will directly determine the effectiveness of the overall signing system.

It is our firm conviction that second only to the initial sign design, is the importance of a constant and continuing evaluation of motorist reactions to these signs. Only through such a program can we be sure that our signing efforts are producing proper results. Whenever it is evident that individual signs or particular signing practices are not completely effective, it is a further obligation on our part to determine why and to make any changes that are needed.

Motorist reactions are, obviously, not something we can measure in precise terms. There are, however, results of his reactions that can be measured, and that can correctly be considered as indications of signing deficiencies. If a deficiency exists, for example, there is almost certain to be some degree of driver confusion or indecision, and the resulting accidents, near accidents, or merely inconvenience, is just as certain to come to our attention. This information may be in the form of State Police accident records. Or it may come from our own observation of excessive skid marks or other similar clues of near accidents. Or it may come from written complaints or reports from drivers who have become lost. In some cases, it may immediately become apparent that signing is the problem. In others, special studies may be required to establish this fact. In still other cases, something other than signs may be found to be causing the problem. In any case, however, careful interpretation of this type of information can serve to tell us how well Interstate signing is doing its job.

I have made no attempt here to conclude that the Interstate signing system is as effective as it could be, or even that it is as effective as it should be. It is my own personal opinion that it adequately meets the needs of the majority of Interstate users, and that by fulfilling that stated purpose, it should be considered as successful. However, it can only remain successful as long as the majority of you, as users, remain satisfied. The simplest way that we can know of your feelings is from you directly, and for this reason we solicit your comments or criticism at every opportunity. There will be some time left after the slides I am about to show, and I invite you to use that time for any questions or comments you may have on this subject.

s that olicies Those ists to g and When verage s. The change equirestalled. re is a s, food inesses be consigning ng that iviction vhat we

ade-

lems

nter-

oice

im-

f the

ip to

dard

sign

st be

ents,

fforts

ky is

ns of

ot so

eages

torist

nd of

t it is

Inter-

gton,

gning

ilable

ctices, I rinciple e to the cepts is each of