A Test of the Concept of a Household Shopping-Travel-Behavior Corridor

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ABRIDGMENT

•THE QUESTIONS of whether household movement patterns depict a corridorized character is still largely unknown. In addition, the fact that a corridor may exist based on movement patterns does not answer the question of whether the construction of a new highway results in positive economic or social benefits within the existing corridor frame or within a new corridor frame.

There is no question that the construction of a new highway creates the potential for new land uses in an area near a new highway and hence presents the opportunity for new functional activities. On the other hand, are the economic developments, which take place near the new highway, transfers out of existing functional capacity in the corridor or primarily transfers of economic development from other proximate corridors? The fact that the new highway will generate as well as divert traffic from existing highways and arterials suggests that at least some increases in demand will take place within the area (for example, the demand for gasoline). The key factor in determining whether a new highway generates additional demand and not mere transfers of functional activity and consumer movements is to establish the investment and consumption responses that the new highway stimulates.

The research reported here is the result of a study conducted in Jefferson County, Alabama (conterminous with the Birmingham SMSA), during 1965 to ascertain whether there is justification for the concept of a household travel-behavior corridor. The findings are based on the results of 700 household interviews. The households were identified by using probability sampling techniques. Specifically, the research was designed to yield at least partial answers to the following questions. (a) Is a corridorized concept of travel behavior justified? (b) What is the general shape of such a corridor (elliptical, elongated)? (c) Do gravity models aid in explaining travel-behavior patterns within such an area? (d) Does travel behavior within the corridorized area depict a rational cost-conscious process? (e) Do demographic and economic variables aid in explaining the process of travel behavior? (f) What are the frequency, number, and duration of trips generated from such an area?

Conclusions were as follows. (a) The shopping-travel behavior of households depicted a rational, cost-conscious approach to the process of obtaining goods. (b) Relationships to functional retail centers were isotropic in character, and retail functional hierarchies apparently were easily perceived by households. (c) Corridor formulations were realistic and will be useful for additional analysis. (d) Gravity formulations were of only limited usefulness in explaining the origins and destinations of trips originating from the total area of analysis. (e) Demographic and economic variables did not adequately explain travel behavior within the corridorized areas.

Findings of this research are available in more detail in the following three volumes published by the Alabama State Highway Department, Montgomery: Land Use Analysis and Consumer Household Shopping Travel Behavior in a Highway Corridor Area: Theoretical Framework, Summary, Findings, and Conclusions, HPR Report 31-A, 1968; Land Use Analysis in a Highway Corridor Area, HPR Report 31-B, 1968; and Consumer Household Shopping Travel Behavior in a Highway Corridor Area, HPR Report 31-C, 1968.

Paper sponsored by Committee on Origin and Destination.