

DEVELOPMENT OF A PLANNING PROCESS FOR A FUNCTIONAL AND RECREATIONAL BICYCLE SYSTEM

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ABRIDGMENT

•THE PURPOSE of this investigation was to develop a planning process to serve both functional and recreational travel demands in a community. This process involves determining the demands for bicycle travel and developing a bike transportation system to satisfy the demands at an acceptable level of service. An assessment of the desired level of service was obtained through an opinion survey on bicycle travel in the community.

The planning process consists of the following five phases:

1. Organization,
2. Study design,
3. Data collection,
4. System development, and
5. Route design.

The demands for bicycle travel are developed through the study design and data collection phases, and development of a feasible bicycle system is accomplished through the system development and route design phases.

The first four phases of the bike planning process were conducted by the technical staff with volunteer assistance from a community service group for home interviews. The final phase of route design involves decisions by local officials on the precise locations of the bikeways within the bicycle corridors that were defined in the system development phase. In addition, the technical staff provided details on geometric design, signing, marking, and pavement design of the various bikeways after the final location and the degree of traffic separation had been determined for each segment of the bicycle system.

The development of a bicycle system was based on the selection of bicycle corridors to satisfy varying degrees of demand for bicycle travel. Therefore, a functional classification system was adopted to develop a system of different classes of bikeways that reflect the variations in user demands. Geometric design criteria were selected in accordance with the functional classifications of the bikeways.

The bicycle planning process was applied to the development of a functional system for a university campus and a functional-recreational system for a contiguous community of 10,000 persons. Although these two bike studies were conducted separately, regional and intercommunity considerations of bicycle travel resulted in the integration of these two bicycle systems.