

HR-363 Clarifying the Quadrennial Needs Study Process

Key Words: Road Funds, Quadrennial Needs Study,

ABSTRACT

The Quadrennial Needs Study was developed to assist in the identification of highway needs and the distribution of road funds in Iowa among the various highway entities. During the period 1978 to 1990, the process has seen large shifts in needs and associated funding distribution in individual counties with no apparent reasons. This study investigated the reasons for such shifts.

The study identified program inputs that can-result in major shifts in needs either up or down from minor changes in the input values. The areas of concern were identified as the condition ratings for roads and structures, traffic volume and mix counts, and the assignment of construction cost areas. Eight counties exhibiting the large shifts (greater than 30%) in needs over time were used to test the sensitivity of the variables. A ninth county was used as the base line for the study.

Recommendations are identified for improvements in the process of data collection in the areas of road and structure condition rating, traffic, and in the assignment of construction cost areas. Advice is also offered in how to account for changes in jurisdiction between successive studies. Maintenance cost area assignment and levels of maintenance service-are identified as requiring additional detailed research.