cost \$15,000 or more per project for projects with a length of less than one mile. Section 11 provides that if the estimated cost is less than \$15,000 per mile or \$15,000 per project for projects with a length of less than one mile, the work

may be done by the Secretary of Agriculture on his own account.

Considerable uncertainty exists as to whether the present requirement that construction costing \$10,000 or more per mile be advertised and let to contract applies to projects of less than one mile in length but with a "per mile" estimated appnes to projects of less than one line in length but with a "per mile" estimated cost of \$10,000 or more. For example, an access road of only .1 mile in length estimated to cost \$1,000 could on a per mile basis cost \$10,000 per mile. Under strict interpretation of 23 U.S.C. 205(c) such a road construction project would have to be advertised and let to contract. As a result, the theoretical advantages of advertising and contracting those small projects over force account construction are offset by the procedures, time, and detailed plans and materials required for advertising and contracting are such project. for advertising and contracting any such project. The size of such projects often results in no bids or bids that are necessarily inflated to cover the costs of bidding, moving in and out, and meeting insurance, bond, and other costs to the contractor associated with such projects. On larger projects these costs can be so spread out as to make up a much smaller percentage of the total or per mile cost.

Past experience in construction of forest roads and trails has shown that \$15,000 is approximately the point at which acceptable bids can be expected to be received in practically every case. Establishing \$15,000 as the minimum estimated construction cost at which advertising and contracting is required will reduce the higher costs and administrative problems resulting from efforts to contract small projects that are generally unattractive to most prospective contractors and which in most cases can be more efficiently and economically con-

structed by force account.

TOPICS

Sections 5(2), 12, and 13 of H.R. 17134 (Sections 11-13 of H.R. 16994) would provide specific authorization for TOPICS, the program to improve traffic operations on the major streets of our urban areas, which I mentioned briefly earlier.

There has been a steady increase over the years in the attention and effort the States and Public Roads have directed toward improving transportation in urban areas. But the problem is still far from adequately met. The number of people living in our urban areas continues to grow at a high rate. Personal income-already at the highest level in our history-is also rising rapidly, influencing living patterns in a way that generates a growing amount of travel on the part of the average family unit. Similarly, the trend toward dispersal in the pattern of land use development in urban areas generates additional travel as a way of urban life. The cumulative effect of these trends is that the increase in vehicle miles of travel in many urban areas is increasing at more than double the rate of population growth.

The reconstruction of principal roadways and the betterment of existing

streets through application of traffic engineering principles to improve traffic flow and increase safety are objectives of any urban street and highway program. Federal-aid for urban highways has previously emphasized the improvement of principal urban arterials through construction or reconstruction.

To develop a balanced urban street and highway system, attention must also be directed to other than the principal streets and highways in urban areas-to those that carry a heavy burden of local traffic and also control the efficiency

those that carry a neavy burden of local trains and also control the ellicities of trip movements between main highways and ultimate trip destinations. It was against this background in February 1967 the Bureau of Public Roads initiated, on a pilot basis, a new program designed to raise the efficiency of existing street and highway systems in urban areas. It was termed the Traffic Operations Program to Increase Capacity and Safety (from which was derived the acronym "TOPICS"). A copy of guidelines issued at that time is included for

The projects generally are limited to traffic engineering and operational types of improvements on a network of existing streets which are selected as a part

of the transportation planning process.

The types of improvements, most of which may be accomplished with existing right-of-way, which are eligible for Federal-aid participation, include the following:

1. Channelization of intersections.

2. Providing additional traffic lanes on approaches to signalized inter-