



Composites of traffic desire lines, transcontinental and State, showing basic potential traffic pattern in Arizona.

Roadside interview and (below) coordinating hourly manual traffic record with automatic machine count, Arizona State-wide traffic survey.

TRAFFIC SURVEY

machine-tabulated. From this data desire lines were drawn on a State map showing where people drive within the State and how transcontinental motorists desire to cross the State. It might be well to point out that desire lines are drawn as straight lines from point of origin to point of destination and do not necessarily follow the path of any present highway. Actually this is one of the major points of the survey: to show where highways are needed where none now exist. Composite maps were prepared for each of the four seasons and finally a single map was prepared to show the average pattern throughout the State on a yearly basis.



In the long-range planning of modern through-highways, now that the early program of connecting small communities has been finished, we are thinking in terms of reduced distance between terminal points, reduced time by new concepts of speed, alinement and grade, reduced congestion, and above all a reduced accident rate. With the trip information between zones, it is possible to assign traffic to any new route and then determine the economic benefit ratio. That is, if the benefit to the motorist in time and mileage saved is greater on a yearly basis than the cost of construction and maintenance, then the new route is economically feasible.

It has been found on many occasions that political influence and local pressure groups, many times acting in good faith but swayed by their own local problems and wishful thinking, interfere to some degree with sound highway planning. With the data obtained from the State-wide origin-destination traffic survey and the maps and tables formulated therefrom, much of this influence can be overcome by showing in a businesslike manner and from an economic standpoint just what can be done that will result in the greatest gains for the motoring public. Economy of funds must be utilized to make substantial improvements in one place rather than a piecemeal distribution spread over the entire highway system which can only result in frittering away badly needed funds without any visible benefits. We are now confident that the State-wide origin-destination survey will set a pattern for other States to follow and for the Arizona motorists it should produce many miles of improved highways in the right place at the least possible cost.

