

DEVELOPMENT OF TRIP GENERATION MODEL USING ACTIVITY BASED APPROACH

ABHISHEK L. HEDAU¹ & S. S. SANGHAI²

¹PG Student, Department of Civil Engineering, G. H. Rasoni College of Engineering, Nagpur, Maharashtra, India

²Assistant Professor, Department of Civil Engineering, G. H. Rasoni College of Engineering, Nagpur, Maharashtra, India

ABSTRACT

Trip generation for work is one of the main purposes of travel in the urban areas. Activity based methods predicts behavior of traveler as derivative of activities. By predicting which activity performed at particular destination and time, trips and their timing and locations are used to develop activity based trip generation models. The aim of this paper is to develop activity based trip generation model which addresses shortcomings of the conventional trip based approach. In this study, trip generation model phenomenon has been studied for households in Trimurti Nagar in Nagpur city. Home-interview method is adopted to collect data to develop the trip generation model. Activity patterns are classified into five types and selected as dependent variables while other variables like age, gender, income, travel time, travel cost, etc., are selected as independent variables in the NLOGIT package to obtain the most statistically well accepted predicted activity pattern of individuals. The goal of the paper is to determine activity travel pattern behavior of individual and development of activity travel pattern choice model for work commuters and calculate the aggregated travel demand for Transportation Analysis Zone i.e. Trimurti Nagar, Nagpur

KEYWORDS: Activity Base Approach, Trip Rate, Travel Data, Work Commuters, Trip Based Approach, Activity Patterns, Choice Model