

Activity-Based vs. Location-Based Household Travel Survey - A Comparison of Two Recent Pretests Conducted in New York Metropolitan Area

Kuo-Ann Chiao, New York Metropolitan Transportation Council

Abstract

This paper presents the experience learned from two pretests of a household travel survey conducted in New York metropolitan area. As part of its Transportation Models/Data Initiative project, New York Metropolitan Transportation Council (NYMTC) is planning to conduct a regionwide household travel survey with a sample size of 12,000 households. To ensure the survey's success in the 31-county study area with complex travel and demographic characteristics, two pretests were conducted in the past year. This paper discusses the similarities and differences of these two survey pretests. The survey instruments used in these two survey pretests were different. Both pretests used Computer Aided Telephone Interview (CATI) programs to record information, however, the second pretest used worksheets to record travel information instead of CATI. With a sample size of 300 households, the first pretest used "activity-based" concept to design the travel diary and to retrieve and record travel information. With a sample size of 250 households, the second pretest used "location-based" concept which tried to trace the movements of an individual among different locations and the purposes of being at those locations. The organization of the paper is as follows.

Section 1 states the background of the household travel survey with emphasis on its integration with the need of land use, transportation and air quality models. Section 2 presents the overall design of the household travel survey and the major differences between the two pretests. Sections 3 and 4 illustrate and discuss results of the first and second pretests, including sample size, recruitment rate, retrieval rate, interview length, and problems encountered. Section 5 compares the results of the two pretests and discusses their implications. Section 6 summarizes the findings and provides suggestions on future design and implementation of household travel surveys.