

Chapter 4

Comparative Analysis of Public Transport Users' Perception Targeting Sustainable Transportation

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ABSTRACT

Public transport is one of the main actors of sustainable transportation. To make an increase in the use of public transport systems and a decrease in private car usage are one of the main purposes of decision makers in many countries. Usage of public transport system has a strong relation with the quality of service. Service quality includes many parameters such as comfort, frequency, information system etc. Fare is another important parameter on demand for public transport systems. All of these parameters are varied by users' perceptions. This study focuses on public transport systems of Denizli, Turkey and investigates users' perceptions. Bus and paratransit (minibus) modes are regarded in the study. The public survey is performed for these modes. In the surveys, different questions have been asked to participants. Answer of each question is evaluated separately and distribution of each question for gender, ages and jobs are analyzed. Results obtained are summarized and discussed.

INTRODUCTION

In recent years, there has been a growing awareness of the need to use public transportation resources more efficiently. As a result, it has become very important for public transit systems to evaluate carefully all services so as to provide the most efficient and desirable transit services to the communities that they serve. Public transit customer surveys can play an important role in the evaluation of current and planned public transit services. When a public transit system decides to evaluate current or planned services

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via the use of a customer survey, there are a number of important issues that needed to be addressed to facilitate the data collection process and to ensure that reliable and high quality data are collected, analyzed, and responsibly reported. In some cases, however, the collection of important information about public transit customers and the resulting evaluation has not been supported by comprehensive and methodologically valid surveying techniques. Despite the time and cost associated with such surveying efforts, the results obtained from surveys of public transit customers can be extremely useful to a public transit system's planning and operations functions, as well as to governmental boards, commissions, and councils. Therefore, it is in the best interest of public transit systems to conduct annual periodic surveys of its customers and to make sure that its surveying process is appropriate and correct to meet the desired information needs. The archiving of historical databases should be initiated and used for yearly comparisons of changes in customer demographics, travel patterns, and overall satisfaction with services provided, at a minimum.

Survey Elements

In order to fully identify the many aspects of public transit customer surveying, it is important to examine, review, and summarize the various types of survey instruments (questionnaires) and final reports from as many sources as possible.

The literature notes that all surveys have the following features in common, regardless of the group or topic being surveyed:

- Specific and clearly defined objectives,
- Method of data collection,
- Questionnaire construction,
- Sample size,
- Appropriate level(s) of analysis,
- Accurate and truthful reporting of results.

From this list of survey basics above, there are many interrelated steps involved in the design, planning, and administration of a survey of public transit customers. Before a survey can be conducted, important and sometimes subtle decisions must be made about the objectives and the purpose of the survey as well as its unique characteristics.

In this study, public transportation systems of Denizli, Turkey are investigated. Bus system and paratransit (minibus) modes are taken into account. Public survey method is utilized for the investigation. Two surveys are applied for the bus system and the minibus system. Results of the surveys are analyzed in details and both systems are compared. User satisfactions and perceptions about the public transportation systems are revealed. Studies including analysis of public transportation systems are summarized in the following section. Then application and some details of the surveys are reported. Results of the surveys and comparisons are given in the following sections.

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