

## A Longitudinal Survey Study of Izmir Commuter Rail System (IZBAN)

**Authors :** Samet Sen, Yalcin Alver

**Abstract :** Before Izmir Commuter Rail System (IZBAN), most of the respondents along the railway were making their trips by city buses, minibuses or private cars. After IZBAN was put into service, some people changed their previous trip behaviors and they started travelling by IZBAN. Therefore a big travel demand in IZBAN occurred. In this study, the characteristics of passengers and their trip behaviors are found out based on the longitudinal data conducted via two wave trip surveys. Just after one year from IZBAN's opening, the first wave of the surveys was carried out among 539 passengers at six stations during morning peak hours between 07.00 am-09.30 am. The second wave was carried out among 669 passengers at the same six stations two years after the first wave during the same morning peak hours. As a result of this study, the respondents' socio-economic specifications, the distribution of trips by region, the impact of IZBAN on transport modes, the changes in travel time and travel cost and satisfaction data were obtained. These data enabled to compare two waves and explain the changes in socio-economic factors and trip behaviors. In both waves, 10 % of the respondents stopped driving their own cars and they started to take IZBAN. This is an important development in solving traffic problems. More public transportation means less traffic congestion.

**Keywords :** commuter rail system, comparative study, longitudinal survey, public transportation

**Conference Title :** ICTLE 2014 : International Conference on Transportation and Logistics Engineering

**Conference Location :** Venice, Italy

**Conference Dates :** November 13-14, 2014