

## Travel Delay and Modal Split Analysis: A Case Study

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**Abstract :** Journey time and delay study is used to evaluate the quality of service, the travel time and study can also be used to evaluate the quality of traffic movement along the route and to determine the location types and extent of traffic delays. Components of delay are boarding and alighting, issue of tickets, other causes and distance between each stops. This study investigates the total journey time required to travel along the stretch and the influence the delays. The route starts from Kempegowda Bus Station to Yelahanka Satellite Station of Bangalore City. The length of the stretch is 16.5 km. Modal split analysis has been done for this stretch. This stretch has elevated highway connecting to Bangalore International Airport and the extension of metro transit stretch. From the regression analysis of total journey time it is affected by delay due to boarding and alighting moderately, Delay due to issue of tickets affects the journey time to a higher extent. Some of the delay factors affecting significantly the journey time are evident from F-test at 10 percent level of confidence. Along this stretch work trips are more prevalent as indicated by O-D study. Modal shift analysis indicates about 70 percent of commuters are ready to shift from current system to Metro Rail System. Metro Rail System carries maximum number of trips compared to private mode. Hence Metro is a highly viable choice of mode for Bangalore Metropolitan City.

**Keywords :** delay, journey time, modal choice, regression analysis

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