

PASSENGER COMFORT: A STUDY OF JOURNEY AVERAGE ASSESSMENTS OF VEHICLE RIDE

Passenger comfort studies to date have been based on assessment of vehicle ride over 10-second (quarter-mile) intervals. An attempt is made in this report to determine the relationship between the 10-second comfort index and comfort rating for a complete journey. However no relationship could be derived between these values, because all seated comfort values measured were within a narrow range.

Good correlation was found between the BR 10 second passenger comfort rating and the UIC N_{MV} values. Consequently this shows that use of the mean BR comfort index or UIC procedures both give similar assessments of journey average comfort. A further comparison has been given in a separate report.

A passenger survey showed that, for seated passengers, various tasks are ranked in increasing order of difficulty as follows:

- Sitting
- Reading
- Drinking
- Standing
- Walking
- Writing

Business passengers were found to be more critical of the ride, whilst trying to write, than passengers in general. Previous work by Southampton University suggests that different parameters are important to bring about improvements in the ride for various tasks.

A weak correlation has been shown to exist between the journey average standing passenger assessments and the number of exceedances at the 10% of passengers dissatisfied level. The number of exceedances per unit time may be a useful parameter for ranking either vehicles or routes.