**IRINA PTICINA**

**INTEGRAL ESTIMATION OF URBAN PUBLIC TRANSPORT SYSTEM SERVICE QUALITY FROM THE END-USERS POINT OF VIEW**

ANNOTATION

The thesis of Irina Pticina “Integral estimation of urban public transport system service quality from the end-users point of view”. The scientific supervisor is Dr.sc.ing., professor Irina Yatskiv.

Work is devoted to a problem of estimation of urban public transport system service quality from the customer’s point of view. The analysis of the existing methods of urban public transport systems service quality estimation is carried out. There is also considered experience of European countries. A methodology of Urban Public Transport System Quality Index (UPTQI) on the basis of the composite indicator is developed. A comparison of quality indicators of public transport system services is carried out, on the basis of which: classification of quality indicators is offered and requirements to quality indicators which need to be included in UPTQI are developed. As result a set of 51 public transport system service quality indicators is developed, which cover various aspects of service quality of public transport system: availability, accessibility, information, time, comfort, customer care, security and environment. Recommendations on the organization of transport surveys are developed to obtain necessary primary data for public transport system service quality indicators. As a key step in the algorithm of UPTQI construction, four methods of the weight coefficients estimation are offered and analysed: the method based on principal components analysis, benefit of the doubt approach, the method based on the analytic hierarchy process and equal weighting. Algorithm of the choice of the missing data imputation method on the basis of the analysis of available data set is offered and realized. The methodology is approved for 62 European cities. The analysis of the influence of the methods of weight coefficients estimation and methods of missing data imputation to UPTQI value is carried out. The analysis of data availability is carried out to estimate the service quality of Riga’s public transport system. The recommendations for transport surveys carrying out are developed, and procedures and tools for public transport system inventory survey and household travel survey are offered.