

DEFINITION OF PUBLIC TRANSPORT ROUTES WITHIN PITESTI CITY AND DETERMINATION OF MOTION SPEEDS USING GPS EQUIPMENT

Authors

Viorel NICOLAE¹, Alexandru BOROIU¹, Florin SERBAN¹, Ionel VIERU¹

¹University of Pitesti, Romania

Abstract

The designing of public transport system uses as inputs motion the speed between bus stations and the average motion speed on the bus routes. Due to high measurement units for space and time, the determination of these figures on the basis of the pool with mobile observers introduces a small precision. We have done some measurements using GPS equipment (Global Position System) mounted on a motor-car that reproduced the motion of a bus on the most important route within Pitesti city, in different time periods, and so we determined with high precision the motion speeds. We noticed that in these conditions the variability of the speeds between bus stations persists and the average motion speed on the route determined by the pool with mobile observers is confirmed, so it could be used for dimensioning the public transport system.

Keywords

Public transport system, bus, motion speed, stations, GPS