Exploring population distribution and motion dynamics through mobile phone device data in selected cities – lessons learned from the UrbanAPI project

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1 ABSTRACT

The paper discusses experiences of development and implementation of public motion explorer (PME) tool as part of the EU FP7 project urbanAPI. This tool is applied on three EU cities with the objective to investigate population distribution dynamics and anonymous population movement patterns within urban environments as an instrument to map shapes of urban attractivness and assessibility and as a support for transportation and infrastructure planning. The paper describes technical details of public motion explorer application by demonstrating the different applications for the City of Vienna, Bologna and Vitoria-Gasteiz and discusses the results of the first round of the user evaluation using Criteria Indicators and Metrics methodology. The initial results indicate that the application is intuitive and highly useful for city planning and provides the evidence-based information, which is either expensive or difficult to collect using other approaches.