

Combining survey data and mobile network operator data for commuting statistics

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Abstract

Use of Mobile network data (MNO) integrated with surveys are exploited to produce commuting statistics, traditionally estimated with census data. Availability of MNO data allows for the derivation of recurrent flows between home and work/study locations. These flows serve as a valuable information and can be used as the primary source for producing official statistics by adjusting MNO data coverage with a quasi-randomisation approach. On the other hand, superpopulation model such as spatial interaction models can describe the movement across different places. The methods are applied to estimate commuter flows between municipalities of an Italian region.

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