## TITLE:

Enhancing activity surveys through online social networking data

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## **ABSTRACT:**

Predicting and understanding human mobility patterns is an important research topic in the field of transportation. Current methods of data collection in this area involve household travel surveys which are notoriously expensive leading to infrequent collection and antiquated datasets. The recent boom in online social networking (OSN) offers a bountiful new source of data enhancing existing travel surveys, feeding new transportation models and providing insight into the social interactions influencing travel behavior. This research focuses on enhancing current data collection methods for travel and activity surveys by investigating the degree to which OSN user contributions mirror their everyday activities. This involves extracting spatial and temporal information from the OSN application *Facebook* through native *checkins*, 3<sup>rd</sup> party data and Natural Language Processing. This resulting information is then checked against real-world activities provided through a self-reported survey. Preliminary results indicate that data contributed by many OSN members would not only enhance existing travel and activity surveys, but also offer a means of predicting future activities and travel.