Transport and the Gig-economy: Understanding How Changes in Employment Arrangements Impact Travel Demand

Motivation
- Information and Communication Technologies (ICT) allow for flexible work arrangements and locations, as well as the temporal fragmentation of work activities.
- Evidence
  - Increase in the proportion of part-time jobs (Fig. 1).
  - Growth of gig-economy (Fig. 2)
- This transitional trend has great potential to change observed spatio-temporal travel patterns and, consequently, peak-travel.

Objectives
- Explore the evolution of employment and travel in the past two decades based on aggregate statistics and time-series analysis
- Model individual-level activity-travel patterns associated with different work arrangements to identify potential transportation effects of future changes in work

Preliminary Results

Source: Here’s a provocative look at the impact of Uber and the gig economy on Australia’s job market, David Scott, Business Insider Australia, February 26, 2019.

Fig. 1 Proportion of employment arrangement (Australia)

Fig. 2 Growth of gig-economy

Fig. 3 Summary of transitional trend of employment arrangement in Australia

Fig. 4 Time of day proportion changes of region of Queensland (Greater Brisbane, Gold coast, and Sunshine coast)

More Information

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