Mobility 21 - Data Management Plan

Incentive Design in Ride Sharing Platforms

All models, data and outputs of this project will reside on workstations within Carnegie Mellon University. They will be periodically and systematically backed up onto multiple external hard drives and centralized backup systems provided by the institution, to ensure full data recovery in the event of equipment failure. The following steps will be undertaken for data management.

Models This project will develop theoretical models, mathematical analyses and numerical results for enhancing the design, management and implementation of ride-sharing platforms to benefit ride-sharing companies, riders, drivers and urban systems as a while. The computational models will be performed using the MATLAB (www.mathworks.com) programming language, commonly used in scientific and engineering research. All software and model codes, along with simple demonstration applications, will be made available to interested parties upon request, and will be transmitted electronically via e-mail.

Data This project will focus on theoretical economic and operational analyses and will be moderately reliant on real-world data. Any data inputs obtained from academic collaborators or partner organizations will be stored in the mySQL or .csv format, in computer servers hosted at Carnegie Mellon University. Data will be made available upon request, whenever this does not violate any agreement with the third parties. When sharing the data, we commit to protect privacy, confidentiality, and security.

Outputs The output data files will characterize the structure of rider and/or driver incentives in ride-sharing platforms. They will be made available in standard .csv format upon request. If the research and discoveries of the project might be secured with intellectual property, we will work with our Technology Transfer Office to protect potential proprietary data.

Presentations and Publications All significant research insights obtained in this project will be promptly shared with the practitioners and the scientific community through presentations in seminars, conferences and symposia, and through publications in scientific journals and reports. All presentations will be made by the researchers involved in the project, and all publications will be co-authored by all researchers who have actively participated in that particular part of the project.