**Understanding and Guiding Pedestrian and Crowd Motion for Improving Transportation (Driving) Efficiency**

**Data Management Plan**

### Data description

This project will use data from multiple sources, including data collected from passenger vehicles equipped with cameras, GPS sensors, and other motion sensors and data collected from drones or elevated cameras capturing pedestrian motion and pedestrian/vehicle interactions. Some of this data will be collected on the Ohio State University campus as part of this research activity, potentially including elements collected in previous research activities, and some may be provided by collaborators including the Dalian University of Technology. We may also use publicly available research datasets.

Data products will include journal and conference level research papers and presentations, software codes written in commonly available languages include Matlab, Python, C and C++, simulations and their results, and the results of image processing and other video and data analysis approaches.

### Data format and standards

Image data used and created by the project will be stored in standard open digital image and video formats, for example JPEG and MPEG-4/H.264. Numerical data will be stored in standard open file formats such as Matlab, Excel, CSV, and plain text.  Software will be managed using standard version control SVN and GIT repositories. Tools such as Matlab, common video players including VLC and OPENCV, as well as custom developed software will be employed.

### Policies for access and sharing

Research results, including datasets, algorithms, and software developed, will be disseminated in scientific publications and presentations as well as final reports that will be available on the Mobility21 and other websites. The PI and OSU Technology Commercialization Office will make an evaluation regarding invention disclosure, patentability, and other intellectual property issues that may require protecting or limiting access to software and source codes, otherwise those materials will be available on request.

We intend to make datasets collected in this activity, both the raw image and extracted trajectories of pedestrians, publicly available for use by other researchers through a website. Other publicly available datasets used will be fully cited and documented.

We do not expect any data used or produced in this project to fall under ITAR or other Export Control regulations. None of the data used in this project will contain personal information.

We will comply with The OSU Research Data Policy.

### Plans for archiving and preservation

Data will be stored on local, professionally managed servers with regular backup as well as cloud-bases services such as Buckeye Box. Digital and written data will be retained by OSU for a minimum of 5 years following the end of the project, as per the OSU Research Data Plan. Simulation and analysis data that is easily recreated may not be considered for long-term storage and preservation.