# Bus on the edge: Continuous monitoring of traffic and infrastructure – Data Management Plan

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**Data description**

The data will consist of videos and images of the surrounding of a transit bus tagged with GPS localization. All the data will be taken in public places and will contain traffic (vehicles, pedestrian, etc.), infrastructure (road, signs, etc.) and the environment (vegetation, etc.).

**Data format and metadata standards**

The images are in standard JPEG format. The metadata will be in plain text format, describing the scenarios and other relevant information. The metadata will be stored with the images

Most of the raw data will be analyzed on the edge computer inside the bus. Only relevant observations will be send to the central computer on a regular basis. Only some samples of the raw data will be saved for development of the edge computing software.

The final results will be in .csv, GIS or similar format and can be viewed with standard mapping software (ArcGIS, Google Earth, etc.)

**Policies for access and sharing**

Throughout the duration of the proposed work, the PI will in a timely manner communicate any significant findings with the scientific community in accordance with USDOT policy through journal publications, national and international conference presentations, and seminars. The reported results will be made available to the research community, where possible and permitted and upon request.

When sharing the data, the PI commits to protect privacy, confidentiality, and security. If the research and discoveries found during the project might be secured with intellectual property, the PI will work with our respective Technological Transfer Offices to protect potential proprietary data. In addition, the PI will not post to any publicly available site any raw data that are not permitted to share, especially under data usage agreement with private sector.

**Policies for re-use, redistribution, derivatives**

Data derived from this project shall be retained for at least one year. Some of the tools developed in this project will be open source and shared along with research results to research community. The data in this project does not contain private or confidential information.

**Plans for archiving and preservation**

Any used data will reside on PCs and workstations belonging to the PI's university. All data will be periodically and systematically backed up either onto multiple external hard drives, or a centralized backup cloud through the university, to ensure full data recovery in the event of equipment failure.