## Data Management Plan for the Small Urban Rural and Tribal Center on Mobility (SURTCOM) Montana State University – Lead Institution Eastern Washington University & North Dakota State University – Consortium Members

1. A high level description of the types of data that the Center anticipates gathering in the course of conducting research activities, including whether the data should be preserved for long-term access.

SURTCOM anticipates primarily gathering demographic, social, and behavior data related to transportation mode (mobility) choices. Data needed for research will be collected primarily from surveys conducted by individual project researchers and will generate data in terms of text files and Excel spreadsheets, which will be "small" databases. The research team will ensure that small-scale databases remain simple to understand, simple to use/update/edit/change/append. Final reports and supporting datasets (the "final dataset") will be preserved for long term access. Potential users of the data include: other researchers/research institutions, transportation planners and city managers.

2. A proposed outline of the standards and machine readable formats that will be used for the entire scope of research activities is as follows:

A majority of the data will be generated through paper and electronic surveys. For electronic surveys, we will use generally accepted applications (e.g. Survey Monkey). Most data collection efforts will take 14-30 days to complete. Initial research data will be stored at the institution where the Principal Investigator resides (Eastern Washington University, Montana State University or North Dakota State University). Stored information will include machine readable versions of datasets. The database schema will clearly identify data format and relevant metadata. The accompanying textual documentation will include all procedures used in collecting the data and definitions for all measures used. The final dataset will be in a format (Excel, CSV, etc.) that is easily accessible to most researchers/individuals.

3. A description of any data access policies that govern (and prevent) the disclosure of identities, confidential business information, national security information, etc., and where public use files may be generated from the data.

SURTCOM (the lead institution and consortium members) will follow all application procedures of their respective university's Institutional Review Board (IRB) which is responsible for reviewing and approving all research involving human subjects. The IRB's mission is the protection of the rights, welfare and wellbeing of human subjects who participate in research. Ethical standards described in the Belmont Report, as well as all applicable federal, state and local regulations are followed, as well as university policies and procedures. SURTCOM anticipates that most research conducted will be categorized by each institution's IRB in the "exempt" category. As noted, "Research in which there is essentially no risk to subjects is exempt from the requirement that it be reviewed by full IRB committee" (Code of Federal Regulations, Part 46, section 101).

4. A general discussion of policies for re-use and re-distribution of research data.

Data supporting the conclusions of published research reports supported by UTC funds (the "final dataset") will be openly published in MSU ScholarWorks, Montana State University's institutional repository. ScholarWorks is a digital repository, managed and maintained by the MSU Library, which contains scholarship generated by MSU faculty—including datasets. All content in ScholarWorks is openly available for the public to view and download, free of charge, via an online interface. Authors may opt to embargo their content for a limited period of time before it is made public. Data in ScholarWorks is documented with Dublin Core metadata, with additional Highwire Press and Schema.org tags to optimize discoverability via search engine.

5. A high level description of how, when, and where the Center plans to archive, preserve, and deposit the research.

Once final reports have been approved by the funding source, SURTCOM will submit the final report and final dataset to Montana State University's ScholarWorks system, an open access institutional repository for the capture of the intellectual work of Montana State University. The ScholarWorks managers at MSU Library will review, approve, and provide a DOI for the report and final dataset. ScholarWorks is a central point of discovery for accessing, collecting, sharing, preserving, and distributing knowledge to the MSU community and the world.

MSU ScholarWorks' secure storage servers are backed up locally and off-site. ScholarWorks runs checksums on data every night, and reports are sent to repository administrators for verification. Original files will be preserved for the long-term, and the MSU Library may migrate files to updated formats as needed to maintain the content in a useable and understandable format into the future.

SURTCOM members may highlight and promote the research through their own websites and media outlets. However, the main repository will be through MSU's ScholarWorks, which will obtain the Digital Object Identifier for each final report and final dataset.