

2017

Data Management Plan for Participatory Technology Assessment and Cultures of Expertise in the U.S. Federal Government

Michelle Armstrong
Boise State University

Jen Schneider
Boise State University

David Tomblin
University of Maryland, College Park

Albertsons Library Research Data Management Team

Collaborative Research: Standard Award: Participatory Technology Assessment and Cultures of Expertise in the U.S. Federal Government

Data Management Plan

Overview

The current proposal will use two primary methods for data collection: in-depth interviews and document analysis. Below is a more detailed description of the plan for managing, storing, and analyzing data. All data collection will be subject to IRB approval at the collaborating institutions.

In-Depth Interviews

When possible and in line with informed consent guidelines, interviews conducted with participants will be audio recorded, and interviewers will also take detailed notes. Notes will be saved as scanned .pdfs and audio recordings as .mp3s. We anticipate conducting around 25-35 interviews total, which should not exceed storage space limitations at our universities. Following the interviews, these notes and recordings will be replicated electronically (i.e., audio files will be saved to desktops and handwritten notes scanned in) and saved to password protected files on the PIs' computers and external hard drives. Senior personnel (including graduate students and undergraduate students who have IRB approval and have completed CITI training), co-PIs, and PIs with IRB approval will have access to this raw data. The interview data will then be transcribed by a professional transcription service and identifying information removed.

These transcripts, and any codes or codebooks produced from these transcripts, will also be saved in password-protected form on the PIs' computers, using Dropbox for sharing capability but also backed up using university information technology storage space and external hard drives. During the active project period, files will be stored on shared networked drives at the three universities, such as those managed by the University of Maryland's Office of Information Technology (OIT) and Boise State's OIT. OIT's research storage facility is Access Control List protected on high availability NAS and SAN devices hosted on secured networks accessed by users and applications via CIFS (SMB), NFS or iSCSI protocols as appropriate. OIT is responsible for daily backups and for managing the dedicated disaster recovery facilities housed off site.

In consultation with the University of Maryland's McKeldin Library Research Services librarians and Boise State University's Albertson Library, the PIs will oversee the organization and management of the various data files, and will be responsible for establishing and maintaining a consistent file naming and organizational structure. Additionally, a descriptive, "ReadMe.txt" metadata file will be created and stored alongside the raw data and will include: document title, author name, software or tool utilized, and a general document description. Where appropriate, additional codebooks and variable-level metadata will be created and stored with the related files.

Following IRB protocols, the research team will make every effort to keep these materials confidential and to remove any identifying information from reports, publications, or other public products produced as a result of the research. Identifiers and

any other documentation that clearly connects particular participants with data will be destroyed three years after the conclusion of the grant, per IRB policy.

Document Analysis and Data Sharing

Many documents to be analyzed for the project are, in general, publicly available. For example, transcripts and recordings of the public meetings hosted by the Department of Energy are available on the world wide web. Data from such publicly available documents will be saved to PIs computer and external hard drives and shared via the password-protected document sharing site Dropbox. Undergraduate and graduate researchers will be involved in such data collection, and senior personnel and PIs will guide analysis efforts.

Documents that are not publicly available will be archived, coded, and analyzed in the same manner as the interviews described above. The PIs will work with the data management and sharing experts at McKeldin Library (and CO-PIs respective institution's libraries) to develop an appropriate strategy for sharing non-confidential materials, such as codebooks and document repositories.

Data Safety Monitoring Plan

The individuals responsible for data safety and monitoring will be David Tomblin (PI) and Jen Schneider (co-PI). Access to confidential data will be limited to members of the research team responsible for analysis, which will include senior personnel and PIs with IRB approval. Quality control will include regular data verification and protocol compliance checks, including consultation with data collection experts at Albertsons Library at Boise State University and McKeldin Library at the University of Maryland, by David Tomblin and Jen Schneider. During the course of the project, David Tomblin and Jen Schneider will monitor the study progress and subject status, any adverse events, and any protocol deviations. Protocol adherence will be monitored by the research team.

Events determined by the Principle Investigator to be unanticipated problems involving risks to subjects or others will be reported by the PI and/or co-PI to the IRB per policy. All study staff members will be informed by David Tomblin and/or Jen Schneider about any unanticipated problems involving risks to subjects or others. If any protocol changes are needed, the PI will submit a modification request to the IRB. Protocol changes will not be implemented prior to IRB approval unless necessary to eliminate apparent immediate hazards to the research subjects. In such a case, the IRB will be promptly informed of the changes following implementation.