

Data Management Plan

Roles and Responsibilities

The core project team consists of the principal investigator (PI), Dr. Nabatchi (Syracuse University), a co-principal investigator (co-PI), Dr. McLain (Portland State University), and a postdoctoral fellow (postdoc) (Syracuse University). The core team will design and oversee data collection instruments and activities, data analysis, and data management, as well as the generation of project products, including the database, data collection instruments and protocols, database user manual, publications, and presentations, among others. A doctoral student at Syracuse University and a master's student at Portland State University will assist with various tasks, such as producing instruments and protocols, coordinating and participating in data collection and analysis, and producing and disseminating publications, among other activities. In addition, the PI and co-PI, with input from the postdoc, will identify potential members and convene an advisory group to provide input on the data collection instruments and activities. Finally, we will work with the Syracuse University Qualitative Data Repository (QDR) to assist with organizing, curating, and making available the data and data collection instruments and protocols associated with the Atlas of Collaboration database. (The role of QDR is discussed in more detail below.)

Expected Data

The proposed project will produce several types of data in various data formats, as well as data collection instruments and protocols and a database user manual, most of which will be made available through QDR.

Data. The project will produce several types of quantitative and qualitative data.

- i. *Web-collected data* will be collected on the structural characteristics, physical geography, and social geography for approximately 300 collaborative governance regimes (CGRs) and dozens of collaborative platforms. The web-collected data will be gathered by visiting organizational websites, with data coded and entered into .xlsx or .csv files and deposited with QDR. Methods for inter-coder reliability will be used to ensure data quality.
- ii. *Survey data* will be collected from approximately 5,000 CGR participants. Survey data will be collected via Qualtrics, saved in .csv files, and deposited with QDR.
- iii. *Interview data* will be collected from approximately 75 CGR participants and leaders, collaborative platform managers, collaborative governance practitioners, and policymakers. The interviews will be recorded and transcribed, and qualitative software (e.g., NVivo or ATLAS.ti) will be used to code and analyze the data. Once transcribed, the recordings will be destroyed. We will remove direct identifiers from transcripts before analyzing them and store a re-identification key on a protected server at Portland State University. De-identified transcripts will be deposited with QDR along with coded data in REFI-QDA.
- iv. *Coded legal texts* of approximately 13 pieces of state legislation and agency policy will be collected. The legal texts will be coded with qualitative software (e.g., NVivo or ATLAS.ti). The coded data will be deposited with QDR in REFI-QDA format.

In addition, we expect to identify several datasets established by state agencies or other organizations that provide data on policy outcomes. These data will not be deposited in QDR, though we may, if possible, provide links to the datasets.

Data Formats. We will enter and store data in standard formats (e.g., .docx, .xlsx, .csv), which are used widely and easy to work with in a wide range of applications. For long-term storage, we will follow QDR's preservation policy and convert data files and outputs to the format most appropriate for the dataset and the repository. The research team will decide on those formats in collaboration with QDR and in response to their expert advice.

Data collection instruments and protocols. The research team will prepare at least three sets of instruments and protocols, including: (i) a protocol for gathering web-collected data on CGRs and collaborative platforms; (ii) a protocol for administering the CGR participant survey instrument; and (iii) a protocol for using the interview instrument for actors engaged with collaborative governance. These instruments and associated protocols will be made available via QDR for use by others to contribute to the Atlas of Collaboration.

Database user manual. The research team will work with QDR to develop a manual to guide prospective users of the Atlas of Collaboration in conducting data collection and entry. The manual also will provide information about the types of analyses one can do with the data, with the goal of making the database a publicly available tool that scholars and practitioners will find useful. The database user manual will be deposited with QDR.

Data Storage, Preservation, and Sharing

Back-ups and Data Security. All data and materials will be kept on the password-protected work computers belonging to the PI (at Syracuse University) and the co-PI (at Portland State University), which are backed up on the universities' secure networks. In addition, the data will be synced through the Dropbox app using the research team's professional account, which provides multi-factor authentication and version history.

Data Preservation and Sharing. The PI and co-PI have communicated with the Qualitative Data Repository (QDR) regarding their plan to deposit in QDR the data, data collection instruments and protocols, database user manual, and other documentation generated through the research project. QDR staff have confirmed these project-generated materials are suitable for archiving with QDR. As the designated archive, QDR will take responsibility for managing the data and documentation after they are deposited and will make them available to the broader social science community as openly as possible. In particular, the web-scraped data, survey data, and coded legal texts will be freely accessible without restrictions. De-identified interview transcripts will be made available with appropriate access controls based on their sensitivity. The controls will be developed by the research team in consultation with the advisory group and QDR. Curation and storage fees as quoted by QDR are included in the grant's budget.

QDR is a domain repository that stores, publishes, and preserves digital materials (data and documentation) generated through qualitative and multi-method research. QDR has been certified as a "trustworthy data repository" by CoreTrustSeal. In tandem with the researchers who deposit data with QDR, its trained staff fully curate data to make them usable, discoverable, meaningful, citable, secure, and durably preserved. As part of its curation process, QDR ensures that data are stored in formats appropriate for long-term archiving, assists in the creation of detailed documentation, publishes data with metadata in Data Documentation Initiative (DDI) format, and attaches a Digital Object Identifier (DOI) to data to facilitate findability and allow stable citations to the data. More information about QDR can be found at www.qdr.org.

Period of Data Retention. All data will be deposited with QDR within 12 months of project completion or with the publication of relevant articles and papers, whichever comes earlier. QDR guarantees a minimum retention of 25 years for all deposited data, while aiming to ensure their accessibility in perpetuity.