Data Management Plan

National Science Foundation, Humans, Disasters, and the Built Environment: *Place Attachment in Mitigation and Recovery: A Mixed Methods Study of Residential Adjustment Following Wildfires*

Data Types
This study will generate the following primary data: participant consent forms, participant-authored photographs, audio (.mp3 or .wav) recordings of interviews, written transcriptions of audio files, participant-generated recovery timeline diagrams, survey responses, and archive of key documents related to recovery and mitigation programs and local historical context.

Human Subjects Data
All investigators have successfully completed training modules on Human Subjects Research and Social and Behavioral Responsible Conduct of Research through the Institutional Review Boards (IRB) at their respective institutions. IRB approval for this project will be submitted upon funding approval. To ensure participant confidentiality, all original documents will be stored in a locked file in a locked office at University at Albany. Participants will be assigned pseudonyms and unique alphanumeric codes to link the various data types. Identifying information will be stored in a locked file separate from the rest of the data. Information acquired via our Qualtrics survey will not be reasonably identifiable by the researchers. Data will be archived in its entirety in a secure password protected cloud storage and project space on DesignSafe-CI. Hardcopies of all deidentified data, once primary research objectives are completed, will be digitized and uploaded to the Project space in DesignSafe-CI.

Ethics and Privacy
The PIs and RAs will follow the policy that informed consent statements, if applicable, will not include language that would prohibit the data from being shared with the research community. The PIs and RAs will remove any direct identifiers in the data before depositing. Once deposited, the data will undergo procedures to protect the confidentiality of individuals whose personal information may be part of archived data. These include (1) rigorous review to assess disclosure risk, (2) modifying data if necessary to protect the confidentiality, (3) limiting access to datasets in which risk of disclosure remains high, and (4) consultation with data producers to manage disclosure risk.

Data Storage, Security, and Access Provisions
Hard copies of original documents will be stored in a locked file in a locked office at University at Albany or University of North Texas. Working digital files will be stored on a password-protected server with routine backup procedures at the University of North Texas (UNT) or University at Albany. Analysis on de-identified participant data will be performed using a variety of software (Excel, SPSS, FileMaker Pro, and NVIVO) with password protection capabilities. The PI, co-PIs, and graduate research assistants (GRAs) will maintain shared administrative access to all data.

Anonymized study data and metadata (i.e., policy briefs, anonymized transcripts, photos, captions, adjustment pathways, and survey data) will be curated and published in ***DesignSafe-CI*** to promote further public use by other hazards researchers at the conclusion of the study when a final report is delivered to NSF. If requested prior to final reporting, access to the data will be provided via contact with the PI. De-identified data will, in principle, be available for access and sharing as soon as is reasonably possible, and not longer than two years after the acquisition of the data. The data will be preserved for at least three years, as required by NSF guidelines. Results from this project will be disseminated through a policy white paper, peer-reviewed paper publications, conference presentations, and community forums.

The PIs will be responsible for data management and will monitor compliance with the Data Management Plan, ultimately transferring responsibility for data management to DesignSafe-CI. DesignSafe-CI will be used for end-to-end data management, analysis, and publication. The PI will work within the DesignSafe-CI Data Depot to store and share data in a private “My Data” space and collaborate on documents in the “My Projects” space. Each space allows the management of access to include only those individuals – the research team - with permission to access the data. All data collected as part of the research, as well as any processing scripts and products from data analysis will be stored in the My Data and My Projects

space for this team. Project data will be kept private until the completion of the project and dissemination plans. Upon completion of primary research objectives and dissemination, study protocols, data, and metadata will be published through DesignSafe-CI. The research team will work with DesignSafe-CI staff and guidelines to curate the data from the study including organizing, categorizing, and describing the data within the DesignSafe-CI Data Depot. DesignSafe-CI provides assistance from a curator for training and to guide research teams through the process to meet minimum metadata requirements. The research team will comply with all Institutional Review Board regulations regarding human subjects data. Data with Personal Identifiable Information (PII) will be protected. Following DesignSafe-CI publishing procedures, data with more than three indirect identifiers will not be shared publicly. This data will be available to be requested by researchers by contacting the project investigators. When data is not shared to protect PII or limited due to indirect identifiers, aggregate summary measures will be shared in DesignSafe-CI. Upon completion of the curation and publication process, the data receive a Direct Object Identifier (DOI) and a DataCite schema for citations. The dataset will be licensed through an Open Data Commons Attribution license when submitted to DesignSafe-CI.

Metadata
All data types in this research project will be accompanied by a separate metadata file that will specify: 1) author, 2) data format, 3) date of creation or last modification, 4) procedure(s) used in collecting the data, and 5) confidentiality requirements.

Re-Use, Re-Distribution and Production of Derivatives
De-identified data will be curated and published in DesignSafe-CI with metadata, data collection instruments, study protocols, and outputs. This will be publicly available for re-use. Guidelines for use will be included in the published information. For researchers or practitioners that would like further access to data that is not published due to containing Personally Identifiable Information (PII), information for the PI will be provided to reach out to discuss collaboration to achieve objectives. DesignSafe-CI and IRB will be consulted with each request for access to ensure standard for the protection of human subjects are upheld.