# Buildings of Texas Exploring Linked Data by Mapping Places, Events and People over Time

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## Background

The Buildings of Texas project has transformed the way our team from the University of Texas Libraries (UTL) thinks about place, people, and events in managing archival collections.

Data were collected by a team of researchers studying architecturally significant buildings for the two-volume publication, Buildings of Texas. The research materials were donated by architectural historians, Gerald Moorhead and Mario Sánchez, to the Alexander Architectural Archives. Naming ambiguities, vague building location descriptions, and repeated references to people and architectural firms that were difficult to interpret and interconnect were among some of the challenges we faced.

We have used this dataset as a test-bed for exploring data models, geolocating built works in Texas, and mapping our Architectural collections as we develop map-based digital exhibitions and finding aids for archival material.

### Methods

We explored a variety of data models as we moved from a flat spreadsheet into a collection of inter-related datasets.

We needed to be able to manage this dataset flexibly, to move easily between spatial and non-spatial visualizations, and to refer to concepts and typologies defined in widely-used ontologies.

We are contributing our data to both the Getty vocabularies and Wikidata, as a means to broaden representation and allow for multivocality and multiplicity. We have purposely challenged traditional modes of archival description, being mindful of contributing to but also looking beyond perceived authorities

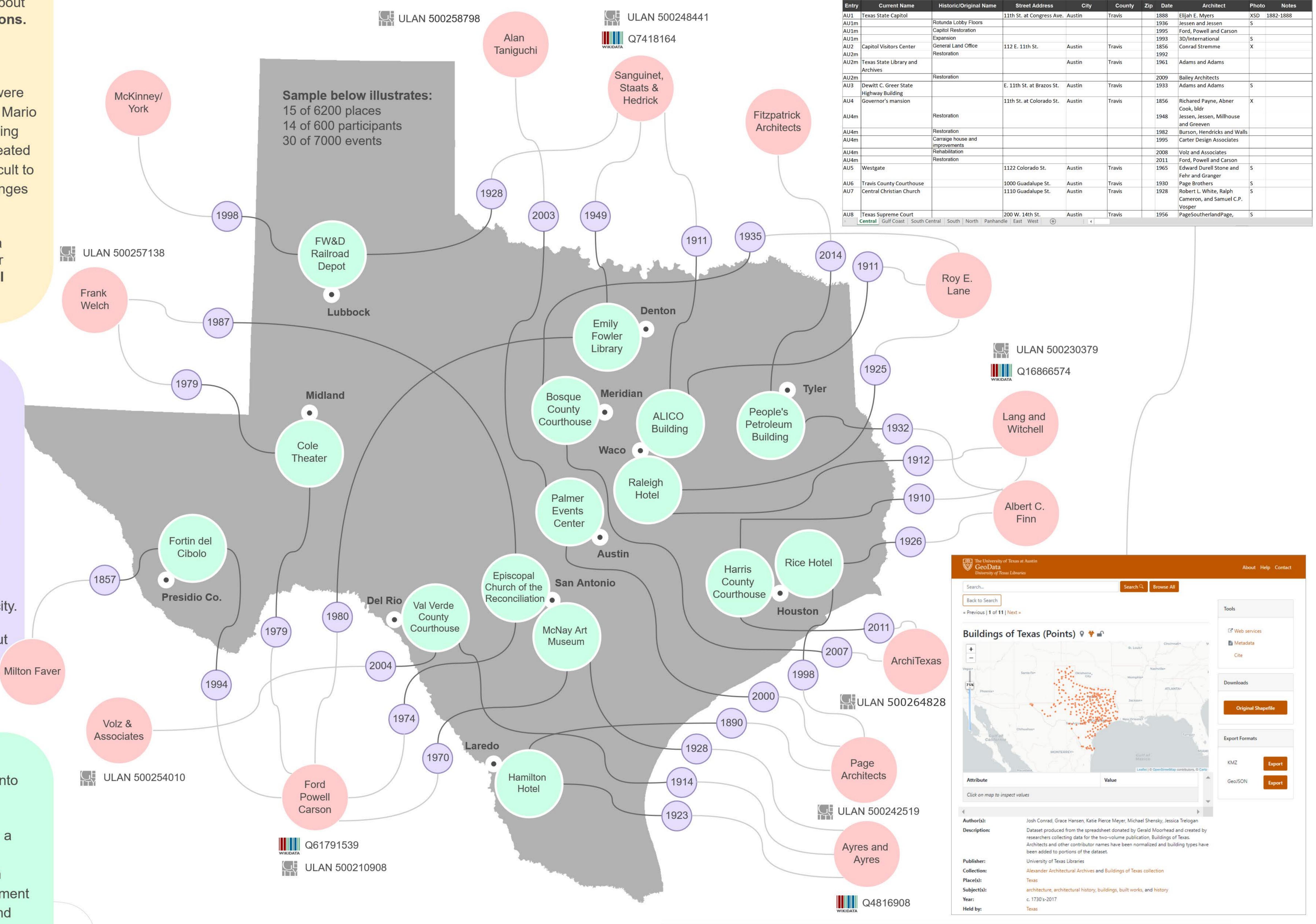
## Results

We turned address information contained in the dataset into coordinate pairs through geocoding.

We spent an enormous amount of energy moving from a collection of spreadsheets, through OpenRefine, to a relational database implemented in a geodatabase within PostgreSQL. Along the way we experimented with document (MongoDB) and graph database (Neo4J) technologies and learned a ton.

RDBMS technologies turned out to be much easier for mapping and managing the data with GIS software, though the graph data model was more expressive of the linkages and interconnectedness of the people, places, and events in the data.





## **Future Work**

This project has launched broader efforts to geolocate and map our architectural collections. We look forward to deepening the connections between the people, places, events, and artifacts in other archival collections at UT Libraries.

## Additional Contributors

We are building on the work of Gerald Moorhead, Mario Sanchez, and a team who conducted research for Buildings of Texas. We are especially grateful to Grace Hansen, who began data cleanup and geocoding, and Irene Lule, who researched the use of GIS for architectural archives. We also want to thank the UT Libraries GIS stakeholder group, the UT Libraries IT developer team, and our colleagues at the Alexander Architectural Archives.