

## Seismic Ground Motion Data Analyses for North-East Arkansas Dataset

Dataset available at: <https://doi.org/10.5281/zenodo.4273204>

(This dataset supports report **Site-Specific Seismic Ground Motion Analyses for North-East Arkansas**, <https://doi.org/10.5281/zenodo.4273199>)

This U.S. Department of Transportation-funded dataset is preserved in the Zenodo Repository (<https://zenodo.org/>), and is available at <https://doi.org/10.5281/zenodo.4273204>

The related final report **Site-Specific Seismic Ground Motion Analyses for North-East Arkansas**, is available from the National Transportation Library's Digital Repository at <https://rosap.ntl.bts.gov/view/dot/58929>.

### Metadata from the Zenodo Repository record:

Title: Seismic Ground Motion Data Analyses for North-East Arkansas

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Description: Estimation of liquefaction resistance and shear velocities are key elements in the assessment of potential earthquake damage of existing and new construction sites. The Arkansas Department of Transportation (ARDOT) and other agencies in the region need ground motion response analysis (GMRA) data of specific construction sites. As part of a recent ARDOT's Transportation Research Committee (TRC) project, researchers have conducted geophysical investigations several construction sites in northeast Arkansas over the past twelve years. The current study gathered the previously reported test data and estimated seismic hazard properties such as shear wave velocity profiles and seismic hazard coefficients for nearby locations. Finally, seismic hazard profiles and liquefaction maps have been generated for selected sites in northeast Arkansas.

Tran-SET Project: 19GTASU01

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Keywords: Seismic Ground Response Analysis, Liquefaction Analysis, Cone Penetration Testing

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### Dataset description:

This dataset contains 1 file collection described below.

#### 19GTASU01-Data-20201114T002705Z-001.zip:

- 19GTASU01-Data Folder
  - Seismic\_Project\_Raw Data Folder
    - Craighead\_All\_CPT\_Data\_Interpretation.xls
    - Craighead\_All\_Liquefaction\_Analysis.xls
    - Crittenden\_ALL\_CPT\_DATA\_XLS.xls

- Crittenden\_ALL\_LA\_DATA\_XLS.xls
- Cross\_ALL\_CPT\_DATA\_XLS.xls
- Cross\_ALL\_LA\_DATA\_XLS.xls
- Green\_Clay\_CPT\_Data\_Interpretation.xls
- Green\_Clay\_CPT\_LA\_Analysis\_results.xls
- LEE\_CPT\_DATA.xls
- LEE\_LA\_DATA.xls
- Mississippi\_ALL\_CPT\_DATA\_XLS.xls
- Mississippi\_ALL\_LA\_DATA\_XLS.xls
- Poinsett\_CPT\_DATA.xls
- Poinsett\_LA\_DATA.xls
- SFC\_CPT\_DATA.xls
- SFC\_LA\_DATA.xls

File Type Descriptions:

- The .xlsx and .xls file types are Microsoft Excel files, which can be opened with Excel, and other free available software, such as OpenRefine.

**National Transportation Library (NTL) Curation Note:**

As this dataset is preserved in a repository outside U.S. DOT control, as allowed by the U.S. DOT's Public Access Plan (<https://ntl.bts.gov/public-access>) Section 7.4.2 Data, the NTL staff has performed *NO* additional curation actions on this dataset. NTL staff last accessed this dataset at <https://doi.org/10.5281/zenodo.4273204> on 2022-05-05. If, in the future, you have trouble accessing this dataset at the host repository, please email [NTLDataCurator@dot.gov](mailto:NTLDataCurator@dot.gov) describing your problem. NTL staff will do its best to assist you at that time.