

APPENDIX E: DETAILED GIS RISK ASSESSMENT METHODOLOGY

- Collected Critical Infrastructure Data
- Collected Data Categories
 - Point
 - Line
 - Area
 - Building Footprint
 - Parcels
 - Hazards
- Merged Critical Infrastructure Data Categories into a single layer
 - Used Merge operations
 - and by created new layers and aggregated features into new layer using paste special command (Hazards)
- Clipped all merged layers by Community and unincorporated county boundaries.
- For Each Community and Unincorporated area did Spatial Join with points, lines, areas, parcels and footprints (Target Feature) and the hazard feature layer (Join Feature) for the respective jurisdiction (Join Operation – One to Many; Match Option – Completely Within for points and intersect with line and areas data)
- Copied fields into MS Excel to analyze data by Hazard Type and Critical Infrastructure Category.
- Extracted values from MS Excel
- Critical facilities
- Residential and commercial structures. Current Market Value