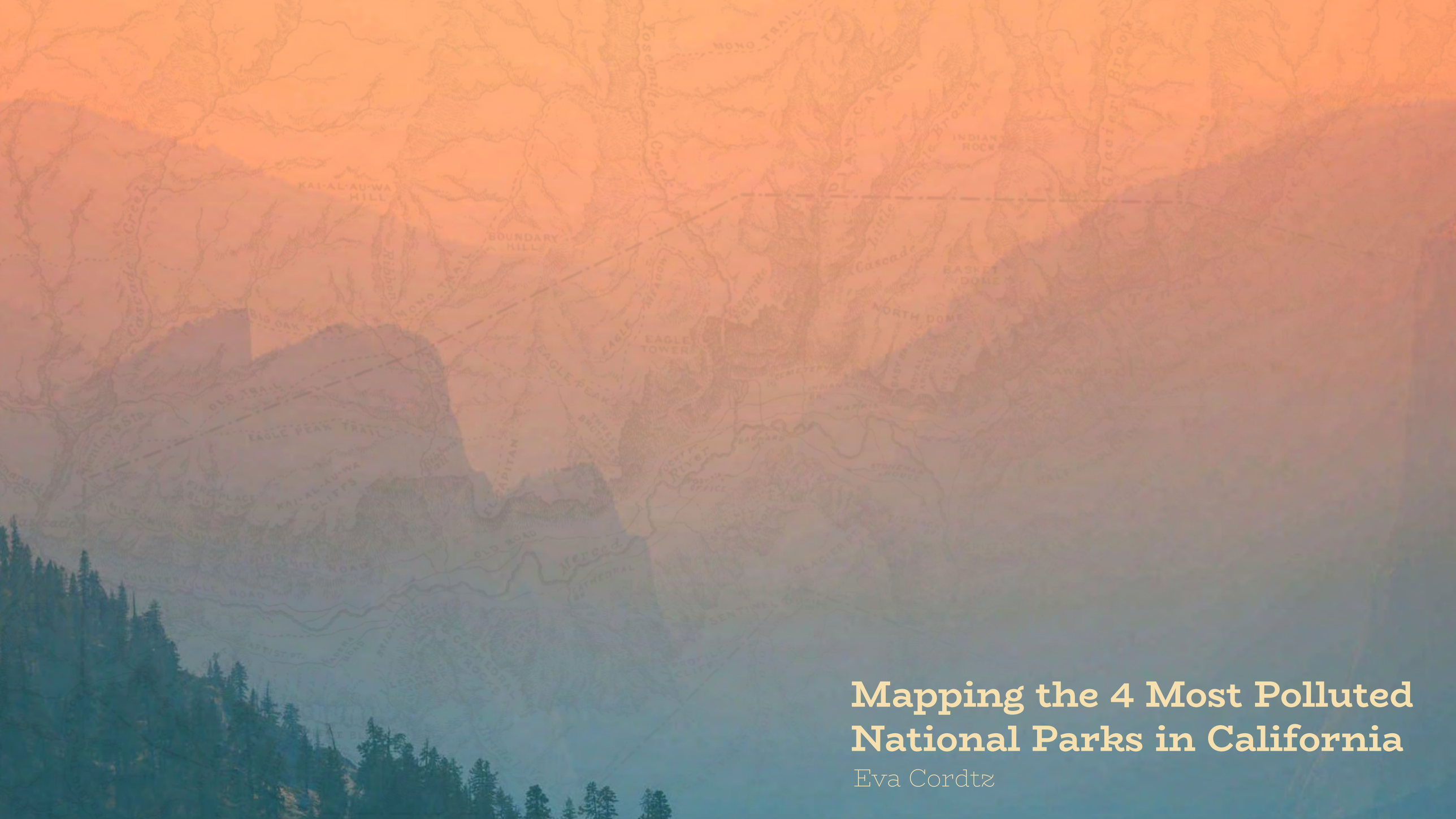
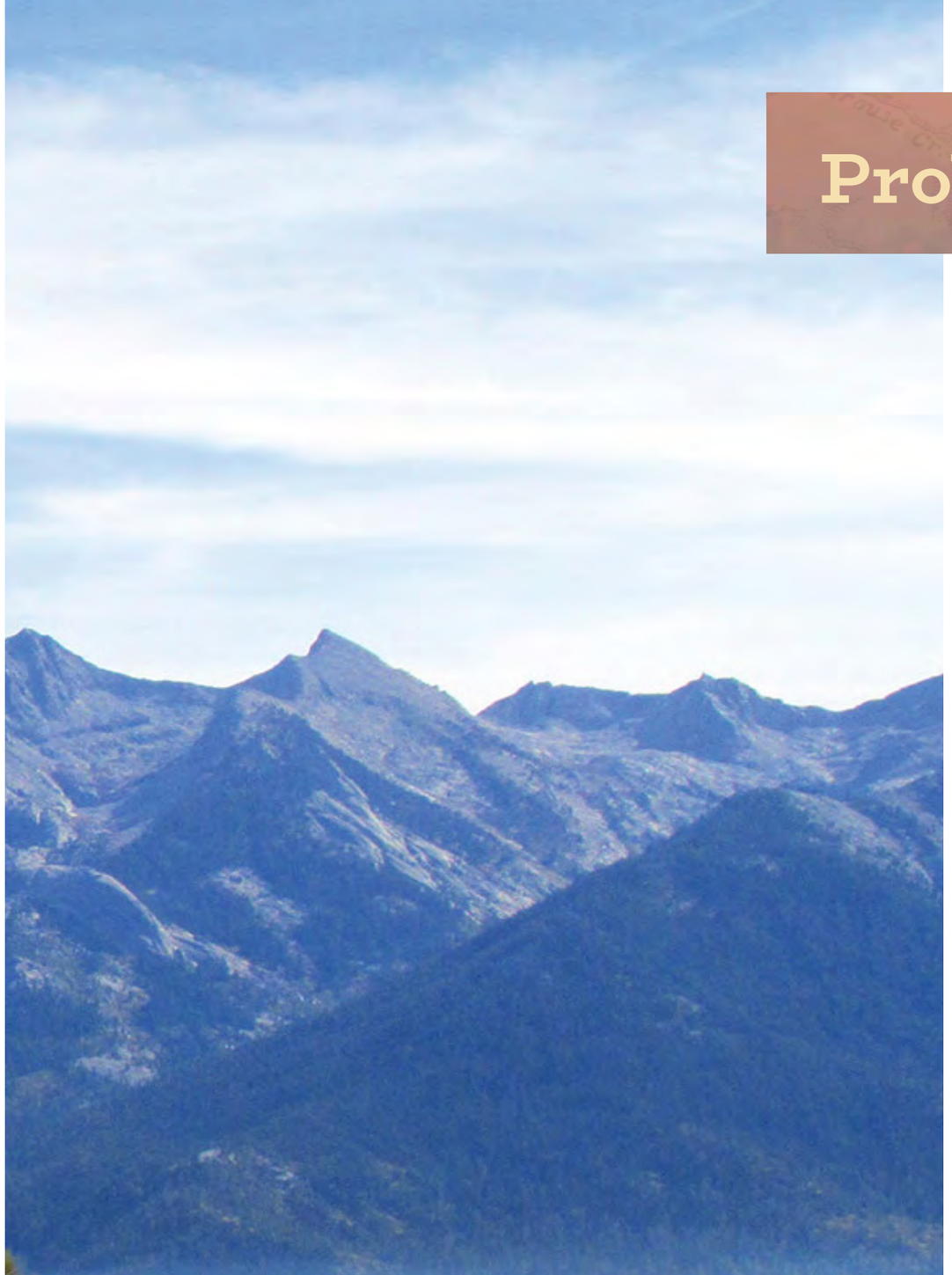


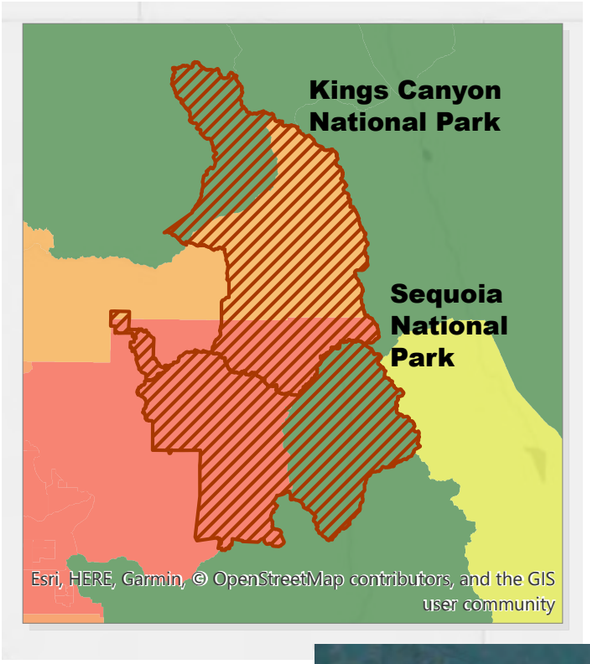
Mapping the 4 Most Polluted National Parks in California

Eva Cordtz



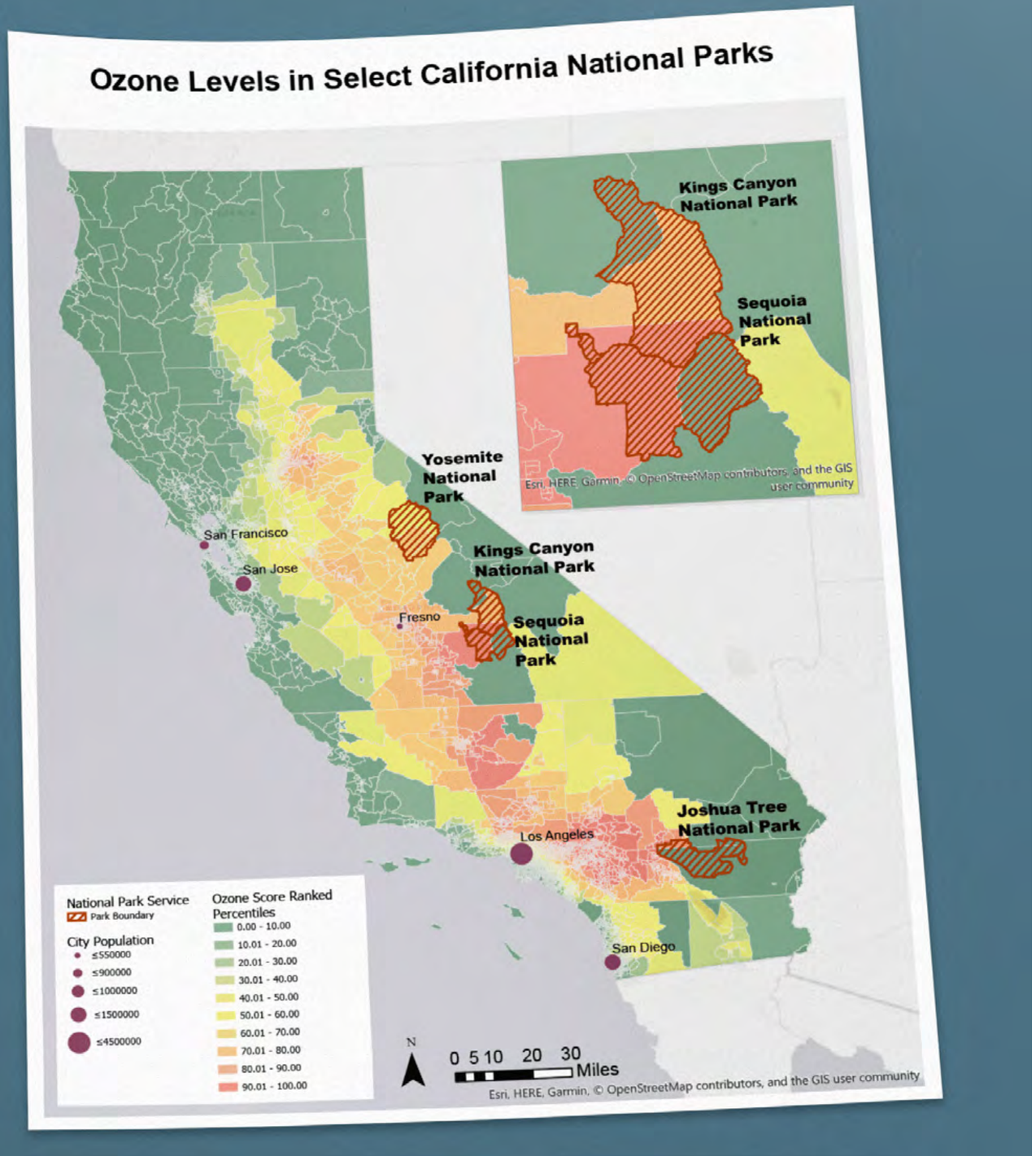
Problem

- **National Parks Conservation Association** analyzed the air quality of 48 National Parks
- Four parks—**Joshua Tree, Sequoia, Kings Canyon, and Yosemite National Parks**—regularly have air that's known to be unhealthy for most park visitors and rangers
- Air pollution affects parks affects **health of both visitors and employees** and **park visibility**
- **Major Cities: 18** Unsafe Ozone Days/per year
- **National Parks: 16** Unsafe Ozone Days/per year



Solution

The goal was to generate a map that illustrated the relationship between the **four most polluted national parks in California, cities, & air quality** because unhealthy air impacts national park **visitation numbers**, & the **health of visitors & park employees**



Process

1. Download NPS Park Boundaries, and load EPA Data from Portal
2. Manually digitize city population data
3. Run geoprocessing > select Park Boundaries to include Joshua Tree, Yosemite, Sequoia & Kings Canyon NPS sites
4. Format symbols for population data, NPS Park Boundaries
5. Label National Park sites, cities, adjust font weight, size, leading
6. Create Map Layout
7. Add inset map
8. Add legend, map scale, north arrow

Challenges

- **Labeling**
  - Double Labels
  - Placement of Labels
- **Pollution Dataset**
  - Heat Map Display
- **Legend Formatting**
  - Resizing format shifts
  - Spacing between graduated symbols
- **Packaged File**
  - Geoprocessing Errors

Take Away

- Data Creation / Digitization
- Format Symbols / Labels
- Legend formatting and creation
- Basic Map Layout
- Inset Map Creation
- Relationship between geodatabase and feature classes


Thank You!