**RESEARCH QUESTION**

Where are different types of music most prevalent in America and what correlations are there between the different types of music and the demographics of the places they belong to?

We specifically looked at electronic, hip hop, pop, and rock concerts in America from 2000-2010

**DATA**

- American FactFinder
- MusicBrainz
- SocialExplorer
- Songkick

**METHODS**

- **Music Data**
  - Created a Java program to pull music event locations from Songkick for events labeled as electronic, hip hop, pop, and rock music.
  - Over 121,000 events pulled.

- **Demographic Data**
  - Compiled health and crime data from FactFinder and Social Explorer.

- **Joining the Data**
  - Music points were aggregated to the county polygons through spatial join.
  - Health and crime data were added to same shapefile as the music data.

- **Cartogram**
  - Created visualizations for the distribution of each music tag on the county level.
  - The color gradient represents the density of events.

- **Geographically Weighted Regression**
  - Direct correlations were tested between each music tag and each demographic factor.

- **RESULTS**

  **2000-2010 Electronic Music Concert Events by County**

  **2000-2010 Hip Hop Music Concert Events by County**

  **2000-2010 Pop Music Concert Events by County**

  **2000-2010 Rock Music Concert Events by County**

**CONCLUSIONS**

- The distortions in the cartograms between music tags are fairly similar, but there are subtle differences in specific counties that have more music event, for example, electronic and rock had larger numbers of music events in Clackamas County, Oregon.

- Counties within Massachusetts were consistently in the top five counties that increased in size the most for all music tags.

- Our highest correlations were with chlamydia and violent crimes, this is likely due to the fact that live music tends to occur in midsize to large urban areas.