Tools Used

1. Source data
    a. 11 PurpleAir sensors around Claremont
        i. www.purpleair.com/map
    b. Filter by longitude and latitude
    c. Using R OpenAir package to get timeseries data of those air sensors over a week, hourly average
    d. Convert to AQI value
        i. https://aqs.epa.gov/aqsweb/documents/codetables/aqi_breakpoints.html
        ii. https://docs.google.com/document/d/15ijz94dXJ-YAZLi9iZ_RaBwrZ4KtYeCy08goGBwnbCU/edit
    e. EA101_final_project.R in 01_Documentation file
2. 15 minute intervals (enable time animation)
    a. 12/18 8am - 12/20 8am
    b. But focused on 12/19 data
3. Symbology for Air quality layers
    a. Based on AQI levels
    b. https://airnow.gov/index.cfm?action=aqibasics.aqi
4. Interpolation(heat map)
    a. Input: air quality data points at a specific time (claremont_sensors_121919_0830.lyr, claremont_sensors_121919_1200.lyr, claremont_sensors_121919_1800.lyr in 04_Analyzed)
    b. IDW
    c. Z Value: AQI
    d. Boundaries: boundary of city,
    e. Output: raster data with z score,
    f. https://www.researchgate.net/post/Can_anyone_suggest_how_to_do_spatial_interpolation_in_Arc_GIS_using_air_quality_monitoring_data_and_emissions
    g. http://www.nature.com/jes/journal/v15/n2/full/7500388a.html
    h. http://www.ncbi.nlm.nih.gov/pmc/articles/PMC2233947/
    i. https://www.ncbi.nlm.nih.gov/pmc/articles/PMC4997435/
    j.
5. Time series
    a. Enable time series
    b. Time zone: UTC (to match World Traffic Service data)
6. Animation
    a. https://desktop.arcgis.com/en/arcmap/latest/extensions/network-analyst/consuming-the-traffic-service-from-arcmap-10-2-.htm
    b. http://desktop.arcgis.com/en/arcmap/10.3/map/animation/making-a-group-layer-animation.htm
    c. https://www.youtube.com/watch?v=qQaj233WAa0

7. Overlay with World Traffic Service
    a. Getting historical world traffic data
    b. Possibly helpful
        i. https://desktop.arcgis.com/en/arcmap/latest/extensions/network-analyst/consuming-the-traffic-service-from-arcmap-10-2-.htm
8. Layout view
    a. Dynamic Text > Current Time
    b. Legend
    c. Export map as PDF file

Further directions:
More data points in Claremont
Expand region to LA
Other considerations: fire, holidays
Live data,automatic update (possible in ArcGIS Pro?)
Compare with AQMD, EPA data