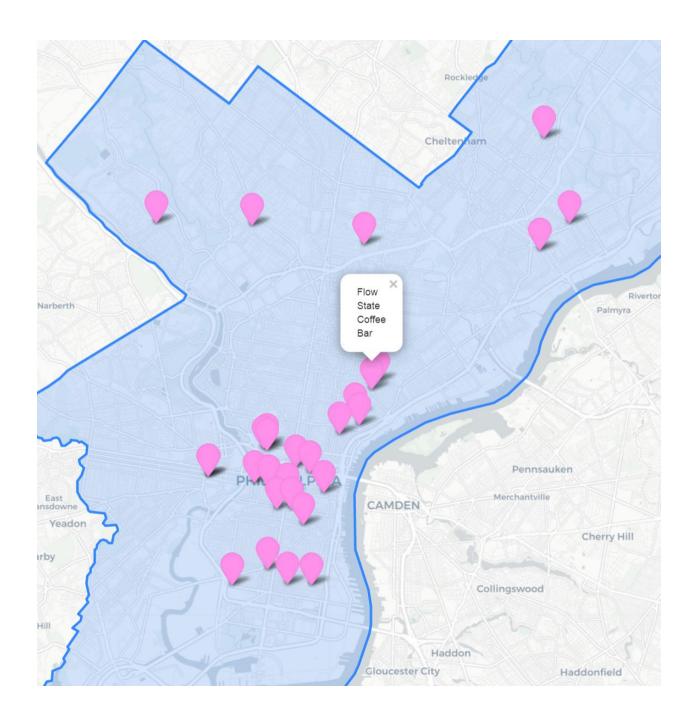


Twenty-nine bakeries in Philadelphia were picked inserted into a CSV and then routed using ESRI ArcGIS Online's Plan Route tool from the home location, marked off in blue. The inset magnifies a cluster of the bakeries in the Art Museum district. The total route is about 42.5 miles. Interactive map gives more details about each bakery.



https://github.com/terraluke/TourDeDonut

For my final project, I wanted to utilize folium, a Python wrapper that creates an HTML map for my dynamic map. For my static map, I also wanted to use Folium and MapZen to create the route but MapZen, unfortunately, isn't in existence as it wasn't able to get enough funding. Through Temple University I have access to ESRI ArcGIS Online and was able to use a proprietary routing tool. This tool did not give me the flexibility I was hoping for from MapZen but it produced the desired map.

My process was very straightforward and replicable if one wanted to do something other than bakeries. I picked out my desired locations and created a CSV. I went to Google and copied the coordinates into the CSV accordingly. While I am on my tour, I would like to update the CSV to include what donut I had and a rating out of five. With WiFi access, this could mean the map is updated in realtime. After the CSV was created, I started working on my dynamic map first as that was the map I was most excited about. Using class examples and other Github repositories, I was about to gather all the information I needed to load in the CSV, convert a shapefile to geojson and create a map with the information loaded into the map.

Once I finished my dynamic map I started working on my static map. I used the same

CSV I generated for the dynamic map and brought that into ArcGIS Online. As easy as ArcGIS

Online is to use it is a very closed environment and doesn't allow for much customization.

Counter to ArcMap, the desktop application, there wasn't a layout view that allowed me to pick and choose what I wanted to add to my map. For example, during the map creation phase,

there is a scale bar that I wanted to have on my print out map, but the only thing outside of the map frame the program would allow me to add is the legend. I'm thinking the software is intended to be used to create a Web App but that is operationally clunky and was beyond want I was interested in doing. It also was very black-boxed as the program produced what I asked for but it all happened behind the scenes. The routing tool seems to use traffic data but it is not explicitly said. Even though all my points are in Philadelphia, there was a certain time of day that it routed me into New Jersey and had me cross the Tacony Bridge to get to the Northeast part of Philadelphia instead of taking Broad St and Roosevelt Blvd. The only way to change this was to give the program a different time of day. And once the route was produced it couldn't be exported. I was hoping for a shapefile that I could add to my Folium map.

The layout was mostly to show all the points. I picked pinks and purples as those colors are often associated with donuts. I added an inset as there was a tight cluster of bakeries within a couple of blocks that made it hard to see all of them at that scale.

The results of the static map were surprising. To visit all the bakeries, it would take about 42.5 miles for the whole circuit, the same start and finish location. The City of Philadelphia is about 20 miles from head to toe but I would think the concentration near Center City would reduce the milage.