ArcGIS Online and Google MyMaps

For this mini-lab, we will compare ArcGIS Online and Google MyMaps with Mapbox. FYI, there are many more web mapping platforms out there, both open source and proprietary, for non-developers and developers alike.

Lab instructions:

ArcGIS Online

1. Create a public (free) ArcGIS Online account here: https://www.arcgis.com/home/index.html
2. Click on "Map". A new map will load. Then click on "Add" and click "Add Layer from Web". Select "A Tile Layer" and add your Mapbox tile layer URL (the ArcGIS one). You'll have to add a title and credits.
3. Notice the extent—it zooms to the entire extent of the US, instead of just Burlington. We can add any custom basemaps this way. Notice your 3D buildings are again not enabled, because ArcGIS Online doesn't support 3D visualization natively (you can do 3D visualization, it just requires a different set of instructions).
4. Create a new map—we don't need our Mapbox map anymore.
5. Choose a basemap that you like.
6. Click "Add layer". Here we can add a layer from a service, as we did above (note: we could add any of the data from the Open Geodata Portal this way!), or we can manually upload data. We're going to do the latter, just to try.
7. Note that they require a zipped shapefile. Choose two (small) layers of your choice from the Open Geodata Portal, one polygon and one point, and download them as zipped shapefiles. Upload them to your map.
    1. *Explore the attribute options and symbology options. What do you like? What do you dislike?*

Google MyMaps

8. Often, web mapping requires a certain amount of prep work in a desktop GIS software. We need to convert our impervious surface file into a KML file, which is Google's GIS file format of choice. KML (or KMZ) files can be created and edited within Google Earth but can also be exported from QGIS and other desktop GIS software. Today we are going to download KML files from the Open Geodata Portal, but we could also use QGIS to export preexisting data as KML for use within MyMaps.

9. Go back to the two layers you downloaded from the Open Geodata Portal, one polygon and one point, and download them as KML files (note: they must be less than 5MB).
10. Go to www.google.com/mymaps and create a new map. Select "Add layer" and then click "Import" to bring up an import screen. Import the two layers you downloaded.
11. Notice that you can measure things as well as edit or create data very easily.
    1. *What kind of features do you notice about MyMaps that aren't available within QGIS, Mapbox, or ArcGIS Online?*
    2. *What features aren't present within MyMaps that were available within QGIS, Mapbox, or ArcGIS Online?*

*note: italics questions in this lab are purely to help you develop the submission below.

To submit:

Your employer, TrailWorld is searching for a convenient web mapping platform on which to display their data to clients. Write a short (<1 page) letter to your employer advocating for the use of one or more of the online platforms you explored today. Provide clear and well-supported reasons for selecting the platform/s you chose.