Chapter 3 notes:
- There is a distinct difference between Web App Builder and Experience Builder

- These builders can create apps without the user ever having to code. However, they still create pure HTML and JavaScript apps that are cross-platform

- The have responsive web design technologies

- They include widgets that are flexible and immediately configurable

- Both use a collection of themes or templates so you can customize the app you create (how does this happen behind the scenes?)

- Web App Builder has been used in the past as a web app builder and experience builder is the newest generation

- Experience Builder is different because it provides flexible layouts so you can build map-centric and non-map-centric app that can be displayed on a fixed or scrolling screen and on single or multiple pages. Web App Builder only allows you to create app that are map-centric and displayed on a fixed screen.

- Experience Builder can also integrate both 3D and 2D content within one app

- Experience Builder also function with trigger actions and these interact with widgets based on an action a user performs

- The workflow for both Web App Builder and Experience Builder consists of the following: 1. Pick a theme or template or start from scratch 2. Add content 3. Add widgets 4. Configure your widgets and this includes the widget styles and actions 5. Preview, publish, and share

- There are certain widgets that are data-independent such as Basemap gallery and Measurement (not related to operational data layers)

- There are certain widgets that are data-dependent such as Query and chart widgets (related to specific attribute fields of specific layers in the web app)

- Both Web app builder and experience builder have three editions: Embedded in arcgis online (does not allow users to use custom widgets) Embedded in Portal for arcgis (allows users to use custom widgets) and Developer edition (allows users to create and use custom widgets)
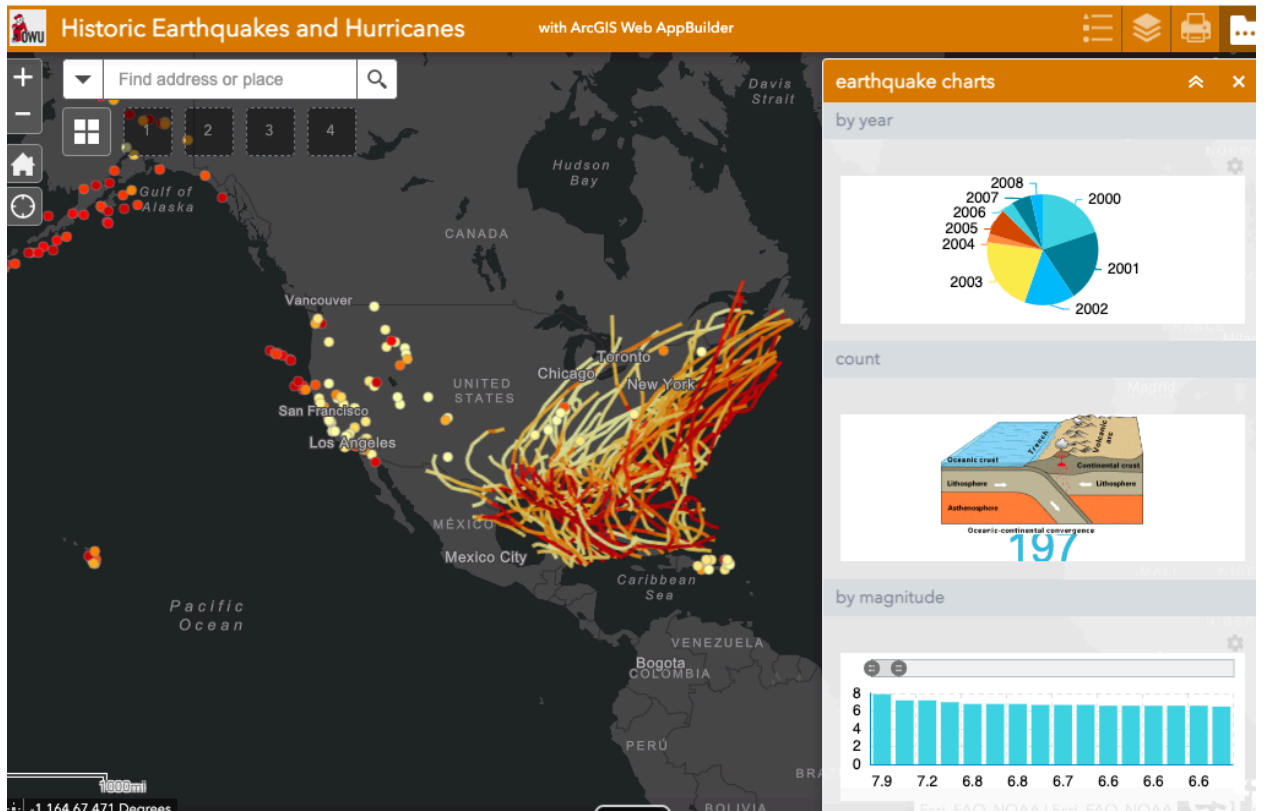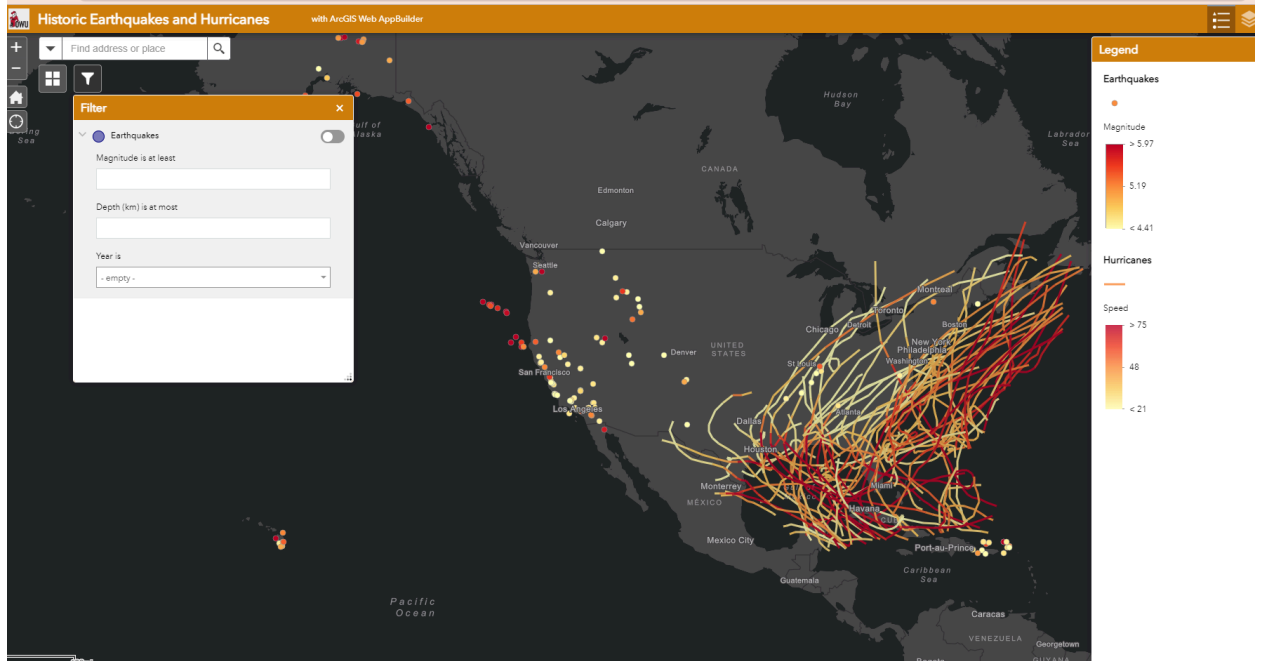
Tutorials:

3.1:
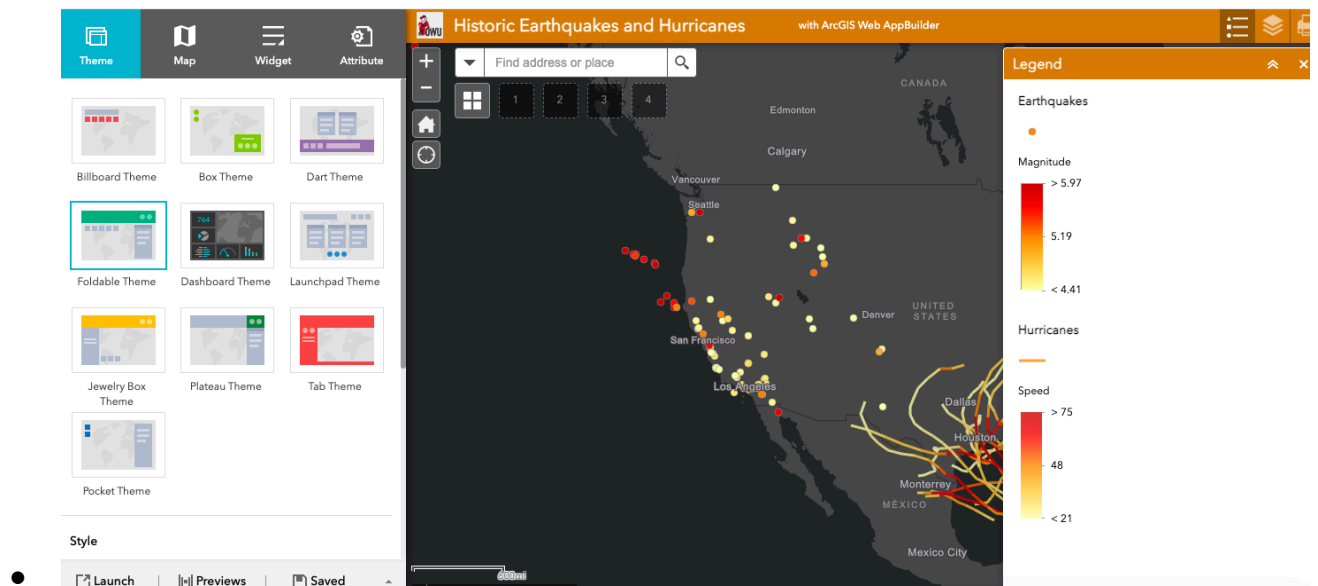
- This tutorial had us edit and create a web builder app, this also included editing the widgets associated with the app we created.

3.2:

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- This tutorial showed us how to create chart-type widgets that were helpful in analyzing the earthquake data associated with the web app.

3.3:

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- This tutorial showed us how to create filter-type widgets that performed certain functions associated with the data in the web application we made. This can be useful when you have large amounts of data that require a filter to sort through all of them within the web application.

3.4:
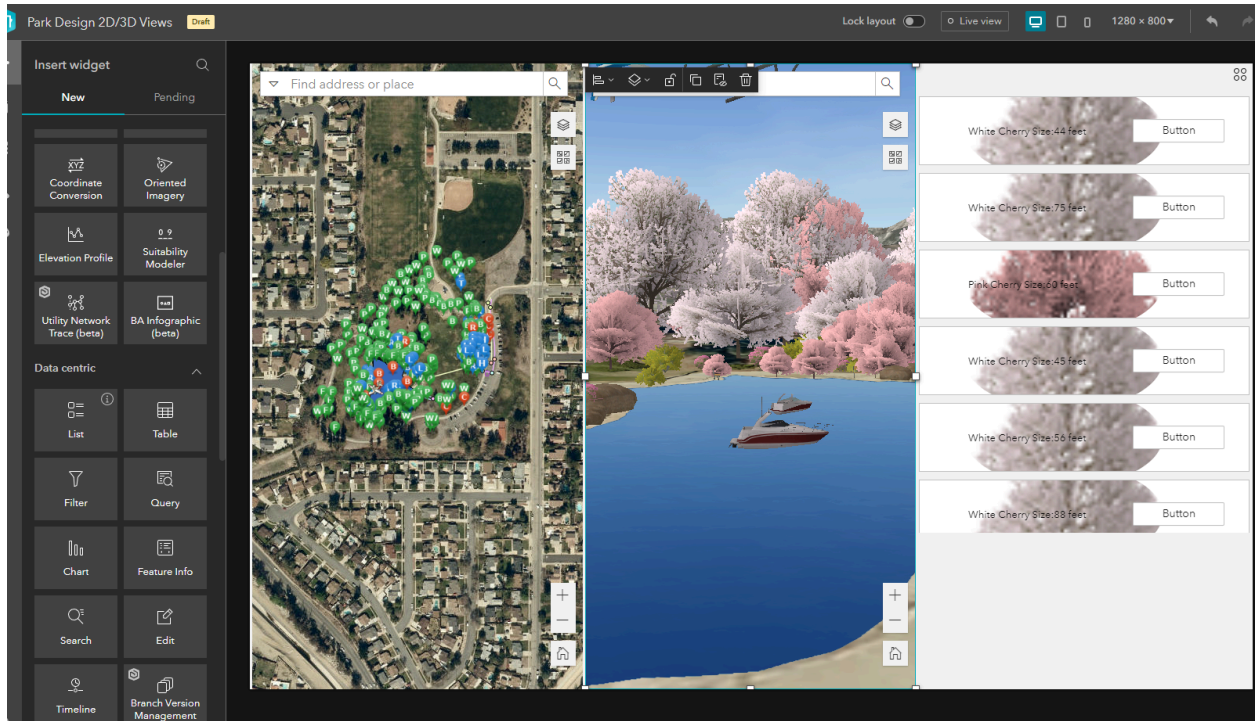
- This tutorial showed us how to create a web app with experience builder which is quite different from using web app builder. Experience builder includes different ways to create a web app using a variety of widgets, maps, and images.

3.5:

- Problems: This tutorial is not close to the updated version of experience builder and most things have a different name. Much of the drag-and-drop stuff from the tutorial about widgets does not work at all.

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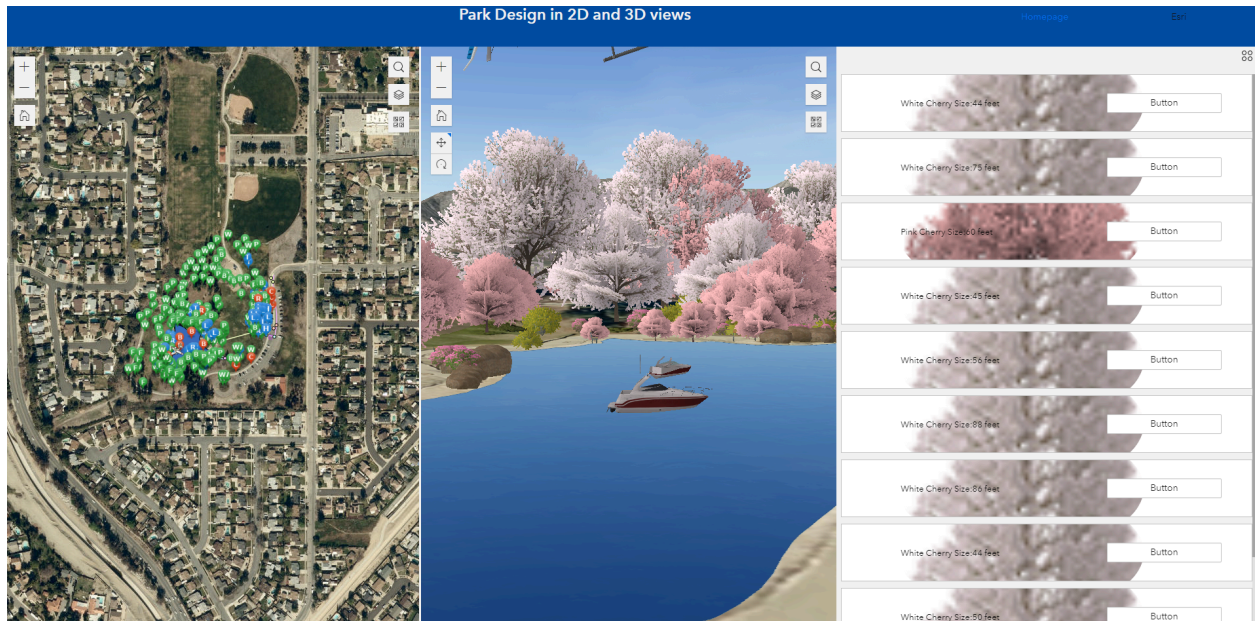
● This final tutorial was about configuring actions and menus for our experience builder app that was created to show trees and their size in both a 2D and 3D platform on the app itself.

- App Idea:

I would create a web app based on what I learned in chapter 3 with the parcel data located within the Delaware data. This parcel layer data should provide me with enough information and data to create a web app that shows the areas of land considered natural in Delaware county and all of their attributes. This would mean creating an app showing a map along with widget filters such as a column chart showing the amount of acreage for each natural or rural land parcel in the Delaware county. The app would also include an information summary widget for each parcel so that when you click on the parcel in the map a pop-up of summary information shows. However this does seem like a lot of data.

Chapter 4 Notes:

- There are many advantages to mobile GIS and these include, mobility, location awareness, ease of data collection, near-real-time information, large volume of users, and versatile means of communication. All of these have their own advantages that can create a need for mobile GIS.

- However mobility comes at a price with the small sizes of mobile devices there is problems with battery life, storage capacity, and CPU speed.

- Positioning technology is a key factor for mobile GIS and is slowly becoming better and evolving as the needs of mobile GIS are evolving.

- There are many broad applications for mobile GIS

- Feature layers are different in mobile GIS and using different editing capabilities is what allows others to see your hosted feature layer.

- Feature layers can contain a feature template

- There are different mobile app development strategies that can all be used depending on the type of app.

- ArcGis has native apps for field and indoor operations, ArcGIS workforce, Arcgis navigator, Arcgis explorer, Arcgis collector, Arcgis survery123, Arcgis quick capture, Arcgis tracker, arcgis indoors mobile app, arcgis companion, and arcgis appstudio (which allows the user a development environment for building native GIS custom app across platforms including ios and android).

- All of these mobile applications were made with a specific purpose in mind and most of which is to make mobile GIS in the field easier and more straightforward.

4.1:

- This tutorial showed us how to create a survey form using survey123 and display different kinds of questions and data within our survey.

4.2:

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- This tutorial showed us how to collect data using the survey123 mobile app and then look at and review the data collected on the survey123 website as the creator of the survey. This was interesting because the interaction between the mobile app and the website was like getting a look behind the scenes of how surveys and data collection really happen.

4.3 / 4.4:

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- These two tutorials showed us how to create domains, web maps, and feature layers that we could use in arc collector which is now arc field maps. These tutorials also showed us how to collect the data using the mobile app and then view this data in the web maps we created earlier.

4.5:

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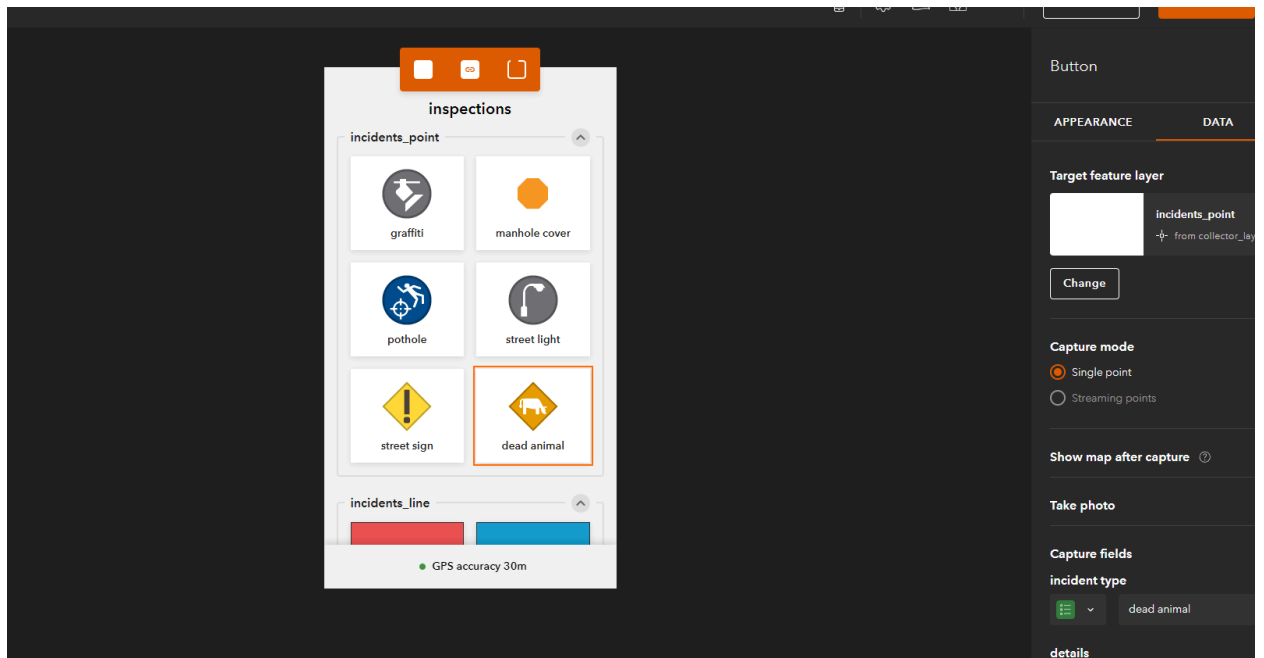
- This tutorial showed us how to create an arcgis quick capture project. The goal of this is to be able to use in the field to identify the incident points we created in the previous exercises.

4.6:

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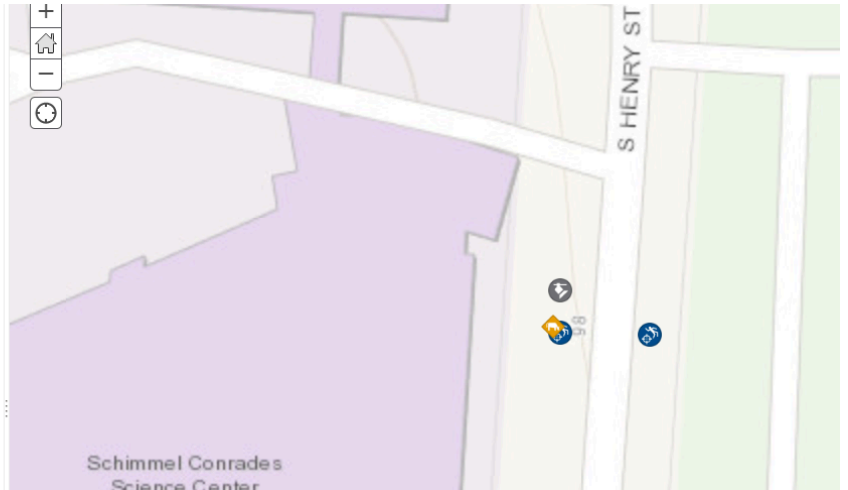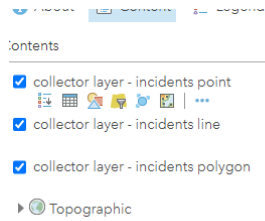
- This tutorial showed us how to capture data using the quick capture mobile app and this data we collected then showed up on our map we created in 4.3, with the same location as an incident we recorded earlier in a previous exercise as you can see by the figure shown.

4.7:

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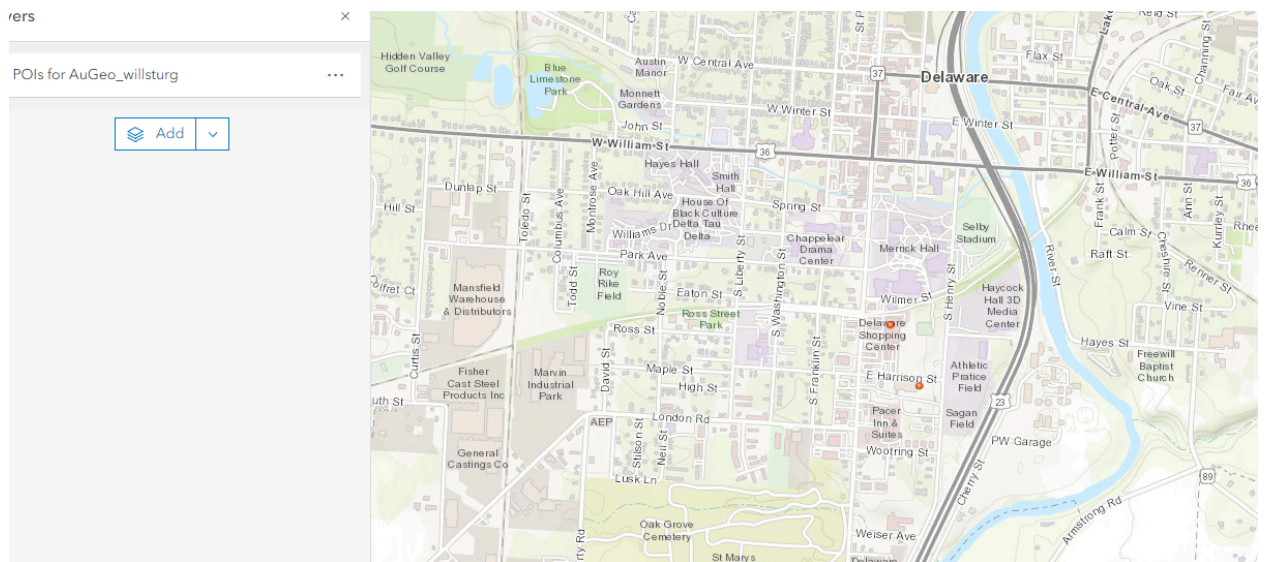
- This tutorial showed us how to create points of interest for AuGeo and how to prepare that data for the use of AuGeo on our mobile devices.

4.8:
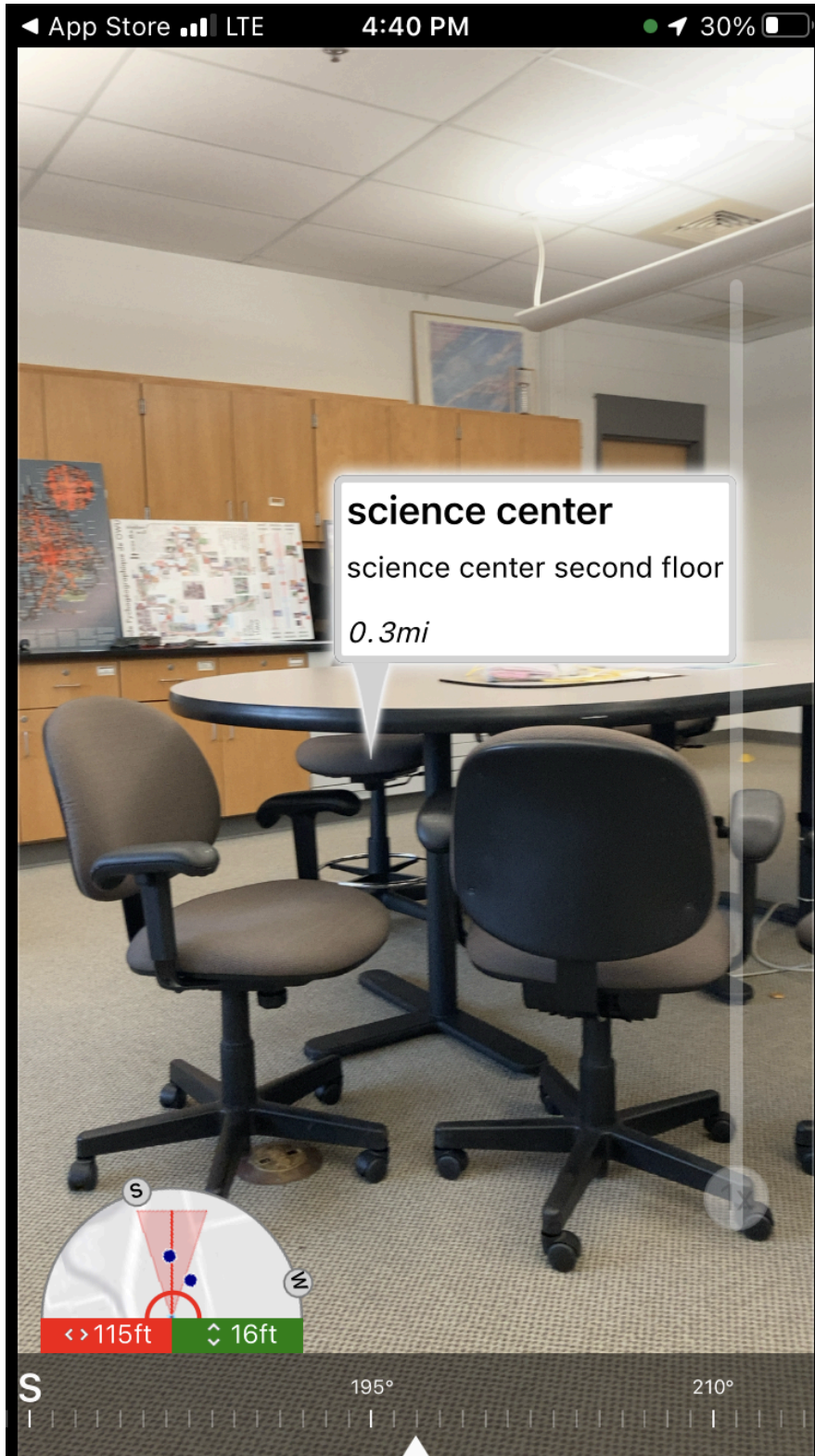
- This tutorial showed us how AuGeo actually works on a mobile device and how you can see how far away the POI you created is from you and the direction it is in as well.

App Idea-

With the Delaware data available I think that the best survey to make using survey123 would be to create a survey asking local law enforcement to identify areas (parcel data) that have the highest rates of crime. I think that the best use for this will be to help law enforcement create a safer city by knowing which areas of Delaware to patrol based on the results from the survey. They could even use survey123 to collect data and take photos of the aforementioned areas.

Using Collector or QuickCapture to collect data in the Delaware area can have many applications. I think that the best application for using these applications would be to collect data in Delaware based on the street layer centerline data and the suburb district layer in the Delaware dataset and allow citizens to use quick capture or collector to collect data based on emergency situations. What I mean by this is that citizens will be able to report a flood or a break-in based on the location of the street layer centerline and suburb district layer and the basemap of Delaware as well. This will help emergency responders in a timely manner so that they can see the data presented and even images of the emergency that is occurring at the specific location in the quick capture or collector app.