

Mapping Scenario

Post-Secondary education in Kentucky. What and where are the schools that provide a post-secondary opportunity in the Commonwealth? Via a list available at the Kentucky CPE website (<http://cpe.ky.gov/institutions/>), I would like to build a map showing the locations of said schools, as well as such information as enrollment, cost, profit/non-profit, public/private, two-year/four-year, college/university, and traditional/online.

What do I want to get out of it?

A better understanding of the current state of higher education in the Commonwealth of Kentucky, as well as the experience of coding a website that presents this information in a new way.

What do I want users to get out of it?

A look-once resource that quickly shows the breadth and depth (or lack thereof) of educational opportunities, by mixing what they may already know (major schools) with what they may not know (smaller schools, KCTCS, recently closed schools).

Content Requirements

A map showing Kentucky, with the aforementioned schools from this list (<http://cpe.ky.gov/institutions/>), on-screen, with perhaps svg leaflet circle graphics relative to enrollment to signal size, and color distinctions (for the circle or stroke color) for public/private, profit/non-profit, two-year/four-year, etc. Clicking on a school will fill an information pane on the left side of the page with additional information about the school and links for further information, and clicking or hovering over the school will highlight it and bring up a smaller affordance, (perhaps an info window) with quick information such as enrollment, tuition costs, etc.

At least one school (St. Catherine's) that is closed as an example of the changes affecting higher education.

Maybe, just maybe a second map showing the location of the licensed, out-of state, online options mentioned in the CPE list.

Functional Specifications

A geojson with coordinates for each school, and boolean key value pairs for things like public/private (true/false), two-year/four year, Land Grant Institution, etc.

Maybe an affordance of the median income value of the county being moused over.

An affordance regarding basic school information/logo when moused over, with more information (and a picture) available in an info pane at left when the user clicks the school.

SVG circle graphics to graphically illustrate the size of the school relative to others via enrollment counts.

Perhaps a second, national map, showing the spatial distribution of online schools licensed to operate in the state.

Links to the schools available in the info pane at left of website.

Layer control allowing a user to turn off classes of schools they are not interested in so that they may focus on a different class (public/private, etc)

Data Source

Part of this exercise would be data creation, taking the list of institutions at the following website (<http://cpe.ky.gov/institutions/>) and either creating a geojson and lat/lng coordinates for the institutions, as well as the plenary information for the experience of coding the json or inputting the information into a spreadsheet so that I use MapBox's omnivore or a Papa Parse/Leaflet technology.

Technology Needed

As noted in data source, if I create the list as a json, then I should be able to use Leaflet in order to access the data. If I use a spreadsheet, I could use Papa Parse or Mapbox's resources. If I wanted to get fancy, I could use something like Carto's torque js library to instantiate the schools via their inception year.

Doubt I'm capable of fancy at this point, however.