EXAMPLE

Mapping scenario:

LFUCG paid for a tree expert consulting group, Davey Resource Group, to complete an Urban Tree Canopy (UTC) Analysis for Lexington. Davey produced in September 2015 the *Comprehensive UTC Analysis Report: Lexington, Kentucky*. This report includes in-depth overview and analysis of the current canopy in Lexington (it's spatiality, variability, values and ecosystem benefits, challenges, etc.) and suggestions for how Lexington can both maintain and enhance its urban forest. Further, the Davey created a UTC Web Viewer tool (LINK) and an extensive database of canopy analysis layer files.

While the Web Viewer tool already exists, its scope is spread thin, rendering it complicated and clunky to use. The report discusses the vast set of intended audiences: "government managers, local planners, watershed groups, and neighborhoods for use in education, outreach, and project planning." Also presented are two example scenarios of intended users: a citizen-led tree planting campaign and an academic study. There are also some design/layout elements which could be improved. The goal of this project is to re-create a UTC web-based interactive map for Lexington, using the same data but with the narrower focus of educating and presenting a call-to-action for Lexington citizens.

What do I want to get out of this project?

- An intuitive interface that visually represents the data in a meaningful way and allows for interaction with which the data can explored

What do I want the users to get out of it?

- See the current tree canopy situation in Lexington (where it is, how much, where the potential planting sites are, etc.)
- Understand the extensive benefits of trees in Lexington (provision of ecosystem benefits and services, measured numerically and monetarily)
- Learn of the potential for canopy enhancement in Lexington, including the goal of 30% canopy and the potential for 54% canopy, and understand how such small increases in percentages can radically increase the benefits Lexington and its citizens receive from city trees
- Locate and position themselves spatially (their residence, their place of work, their neighborhood, council district, etc.) within the canopy situation in Lexington and be educated about the specifics of canopy (current, goal, potential) for the area(s)
- Be informed of opportunities for involvement and feel an urgency to take part in the urban forest movement in Lexington

Content requirements:

- Data displayed on basemap which includes the Urban Service Area and Lexington council districts
- Multiple layers (??) are available for users to view (and overlay?)
- City-wide information/data presented to user (info panel) about UTC, UTC in Lexington, tree benefits, etc.
- Council-district specific information provided presented to user (popup or hover)
- Legend will inform users of the map's current content
- LFUCG logo?
- Information about how to get involved is provided, linked to
- Davey report is linked to / available for download?
- Data available graphically in a chart/diagram/graph?

Functional specifications:

- Data layers tiled and drawn on map
- Ability to zoom manually (user chooses) and dynamically (when user searches address, zooms to address)
- Popups or hover actions on each council district providing specific information
- Additional calculations are completed and this dataset is joined/added to map
- Search bar will allow users to search an address in Lexington to obtain specific UTC information about that area
- A ui selection list will allow users to toggle on and off data layers on the map
- If including chart/diagram/graph, will update dynamically