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Los Angeles public utilities consumption map proposal

How does your neighborhood influence your resource consumption? Can policy makers more effectively tailor conservation plans to the most consumptive areas? How can we communicate complex information to a diverse and multi-lingual audience?

There are at least 224 distinct languages spoken in the homes of Angelenos this makes traditional written outreach programs extremely difficult and complex. This is why I propose creating a custom map to visualized spatial and temporal data of the volume of water and electricity used averaged by zip code. My map will have two purposes; the first is to assist LA Power and Water to create conservation plans tailored to each zip code. The second purpose is to publish it for LA residents to compare their own neighborhood use to that of the surrounding areas.

The data needed to create such a map is publicly available through LA Open Data. Although not the most up to the minute current data it will give residents a strong idea of trends of use, including one year of severe drought. The two data sets are stored in CSV files and can easily be managed and shared to facilitate updates as new data becomes available.

The map will be styled as a choropleth map with a range of colors representing the varying levels of consumption. This is becoming an increasingly common and familiar map and will be understandable to lay audiences. I would like a minimal amount of user interaction so as to better accommodate the variety of devices, computing power and access to high speed Internet, consistent with a large diverse user group. I will include a toggle to switch between map views for power and water consumption and a slider to change the year of data represented. Additionally I would like to use a hover-over affordance to highlight the zip code and a small info window with the volume of water or electricity used. My goal is to make a map clear enough and intuitive enough to not necessitate a complex ledged.

I will be using a number of coding languages and libraries to complete my map. It will be based in JavaScript utilizing: Leaflet, Omnivore, CSS, HTML, Mapbox and jQuery. My map code will be made public using the GitHub for further improvements and collaborations.

I look forward to working together, thank you for your time and consideration.

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