API Community Food Asset Mapping Project

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Prepared for:

Asian Pacific Islander Council

Overview

Starting in 2020, the **Asian Pacific Islander (API) Council**, a coalition of 57 nonprofits who focus on underserved API communities in San Francisco, partnered with the **Stupski Foundation** to develop an implementation plan to address food access within 7 API neighborhoods in San Francisco. In the development of this implementation plan, the API Council has launched a multi-phase mixed-methods exploration to gather data related to this topic.

To date, this effort has included a thorough document review, 5 strategy sessions with CBO representatives from five neighborhoods, 16 key informant interviews, and a survey of ~500 API community members. To complement these efforts, the API Council would like to commission a food access map, based upon data surfaced during these aforementioned phases of the project. This map would help API Council members explore how API community members are accessing food, interacting with various typologies of food and experiencing their community's food resources. Potential also exists for better understanding the nexus of cultural preservation, economic health, and transportation/mobility.

This proposed map will bring together data from a variety of sources, including **SF Food Resource Viewer**, **SF Marin Food Locator**, **Bay Area 2-1-1**, and **FoodPantries.org**. In addition, it will include the option to show demographic data from the U.S. Census Bureau, enabling the viewer to see disparities between food assets and API populations.

On behalf of the API Council, Kathleen Doll (an evaluation consultant with **Intention 2 Impact, LLC**) has reached out to David Keyes, head of R for the Rest of Us. David regularly works with organizations to use R to more effectively communicate results, including through complex interactive maps such as the one required for this project. In a call on March 19, Kathleen and David discussed the project and came to some conclusions on what its scope might look like.

Scope of Work

This project involves several phases:

Data Collection

Data from the sources above and others will need to be collected, organized, and cleaned. We discussed creating a Google Sheet that will hold all of this data, which has the dual benefit of enabling collaborative data collection and makes it straightforward to import into R. In addition to

collecting data for version one of map, this piece includes the development of code that can be rerun in order to update maps at any time.

Demographic data on the API population will be collected using the tidycensus R package. A package I use regularly, tidycensus allows a direct connection the Census Bureau API, making it straightforward to collect demographic data on the API population that could be shown on the map alongside the food assets component.

Design and Implementation

Design of the map will almost certainly be done using an R package called Leaflet. Working collaboratively, we will determine the best design in order to communicate effectively. This includes items like basemap styles, marker shapes and colors, tooltip styles, and more.

In addition to the design elements specific to the map itself, we will also work together to create any text elements as part of the project. This might include an overview of the map as well as text explaining the larger project, the status of the API community in San Francisco in general, etc.

While a final decision will be made collaboratively with Kathleen, my inclination is to build this project using the R package known as Distill. This would allow us to build a one-page version for now that can be easily transitioned into a larger website in the future if desired.

Publishing

After the map is designed and implemented, it will be published online. The good news is that this can be done for free using Netlify. An extremely high-quality static site web hosting company, Netlify also makes it possible to regenerate new versions of the map any time changes occur. While a "final" version can be launched in late April/early May, in reality the map can be updated at any point by simply updating the Google Sheet that holds the data and rerunning the R code.

Documentation

In order to ensure that Kathleen or others are able to update the map in the future, I will generate documentation of how it was made and how it can be updated. This consists of both written documentation within the R code itself as well as up to three hours of instructional Zoom calls (which can be recorded if desired) after launch.

Timeline

All work will be completed by May 15 at the latest, but, depending on the speed of food assets data collection, can likely be completed by the end of April