

# Affordable Housing and Access to Food Pantries

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## Project Summary

This project aims to improve access to food pantries for residents of affordable housing. By leveraging data analytics, extensive surveying and community engagement, the project seeks to identify gaps in food accessibility and implement solutions to ensure that all residents have reliable access to nutritious food. The value added includes enhanced food security, improved community health outcomes, and strengthened support networks within the community.

**Stakeholders:** The potential stakeholders in this project include residents of affordable housing communities, local government agencies, food pantry organizations, and community service providers. These stakeholders are directly affected by the availability and accessibility of food resources.

## 6-Month Roadmap (Tentative)

### 1. Month 1-2: Data Collection and Basic Analysis

- Collect data on current food pantry locations, hours of operation, and usage patterns.
- Analyze data to identify areas with limited access to food pantries.
- Migrate the analysis from Python Notebooks to a real-time dashboard that displays current data and insights.

### 2. Month 3-4: Surveys and Community Engagement

- Conduct surveys and focus groups with residents to gather insights on food accessibility challenges.
- Partner with local organizations to understand barriers and opportunities.

### 3. Month 5: Strategy Development

- Develop a strategic plan to address identified gaps in food access.
- Propose potential solutions such as new pantry locations, extended hours, or mobile food services.

### 4. Month 6 and after: Implementation and Monitoring

- Begin implementation of selected strategies, by suggesting to local government agencies.
- Establish monitoring mechanisms to track progress and impact.

## Project History

The project is currently in its initial stage, with a basic analysis of available data for LA County completed. This analysis can be extended to include new locations for pantries and affordable housing. The next step is to develop a real-time dashboard that provides insights based on the data. Additionally, upon successful completion in LA County, the project can be extended and pitched to various other counties.

### Analysis and Key insights

- The preliminary analysis revealed that over 95% of the listed affordable housing units had a food pantry within a one-mile radius.
- The city of Los Angeles had the highest number of pantries associated with any affordable housing units and also had the highest number of pantries not linked to any affordable housing units.

### Tools and Libraries

- For this analysis, several Python libraries were utilized extensively. The primary libraries include Pandas, NumPy, GeoPandas, and Folium.