



# THE CULLED PRODUCE RECOVERY PROJECT

North Texas Healthy Communities

## PURPOSE

The Culled Produce Project, initiated by Texas Health Resources in collaboration with the University of Texas at Arlington, is a strategic endeavor aimed at addressing environmental impacts, improving public health, and enhancing the overall well-being of the Fort Worth community. By diverting still fit-for-consumption foods from landfills, this initiative tackles food waste, mitigating environmental and public health impacts associated with food disposal and contributing to a healthier, resilient, and prosperous habitat.

### A VISION FOR SUSTAINABILITY AND WELL-BEING

The project's collaborative model is designed to catalyze a collective response to the intertwined challenges. It embodies a shared commitment to mitigating food waste and the transformation of this surplus into a valuable resource that supports food security and environmental stewardship.

Key components of the project include:

- **Collaboration Across Sectors:** The project leverages a network of diverse stakeholders including higher education institutes, businesses, NGOs, community associations, and government agencies.
- **Sustainability and Community Responsibility:** Rooted in the goals of Texas Health Resources and aligned with sustainability initiatives like the Blue Zones Project, the Culled Produce Project emphasizes the importance of sustainable practices that benefit both the environment and the community's health.
- **Food Recovery and Redistribution:** Main part of the process for this project is the process of identifying, collecting, and optimally redistributing culled but edible food items. This not only reduces waste but also addresses food insecurities by providing nutritious food to vulnerable populations.
- **Innovative Strategies and Technologies:** The project explores innovative methods to optimize the food culling, storage, and transportation processes, including inventory tracking and data analytics for demand forecasting using historical data to current data. This allows for the exploration in procedural gaps such as internal supply chain management within the local markets, exploration of transportation scheduling, etc.
- **Impact Assessment and Continuous Improvement:** Through descriptive analytics and impact assessments, the project evaluates its success in increasing food donations and diverting food from waste. It aims for continuous improvement by identifying areas for enhancement, optimizing processes, and expanding its reach and impact through methods such as surveying.

In its current stages of the project, focuses primarily on surveying and research to deepen its understanding of the operations, environmental, and social intricacies involved in food recovery and redistribution. This phase follows the initial efforts in demand forecasting using ARIMA models and other analytical tools to predict and manage the flow of culled produce more effectively. The goal of these surveys and research activities is to gather actionable insights that will inform the optimization of the project's processes, particularly in terms of reducing compostable waste and improving the allocation of edible food.

## LOOKING AHEAD: ENHANCING EFFICIENCY AND REDUCING WASTE:

The future direction of the project is shaped by the findings and insights gained during the current phase. Key objectives include:

### Decreasing Composted Food

### Improving Food Allocation

### Optimizing Pick-up Schedules

- **Decreasing Composted Food:** Implementing strategies to minimize the volume of food that becomes compost due to spoilage or other factors. This might involve adjusting food recovery frequencies, improving storage conditions, or enhancing the accuracy of demand forecasting.
- **Improving Food Allocation:** Developing more sophisticated methods to match recovered food with the needs of community members and organizations, ensuring that edible food reaches those who can benefit from it most.
- **Optimizing Pick-up Schedules:** Refining the logistics of food recovery based on a deeper understanding of produce lifespan and demand patterns. The aim is to schedule pickups in a way that aligns with the peak periods of food availability and need, thereby reducing waste and improving the efficiency of food redistribution.

**Surveying aims** to guide the project towards understanding the interdisciplinary groups and sub communities within this project for solutions that can make a tangible difference in the community and create a reproduceable implementation of the process to expand the Culled Produce Recovery program throughout North Texas.