

Emergency Dining Management Plan



HOUSING & FOOD SERVICES - DINING
UNIVERSITY of WASHINGTON

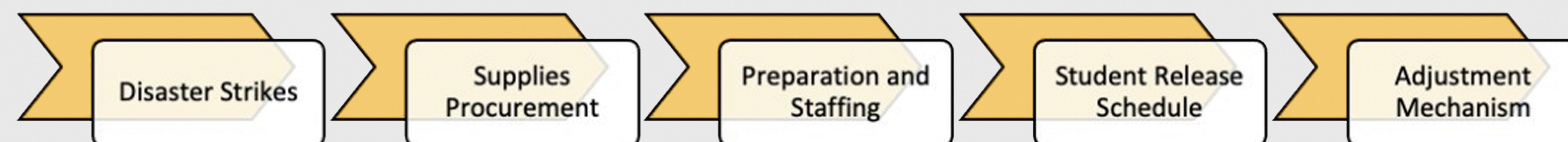
The Preppers: Cliff Chen | Mason Dickens | Matty Dunham | Wall Guo

Goal Statement

Develop an **Emergency Dining Plan** that will feed 10,000 student residents across the University of Washington campus in the case of an emergency.

- 1 US. Foods **reliably delivers** all necessary food and water supplies within 24 hours
- 2 Emergency entails **total loss** of power, water, and natural gas
- 3 HFS can provide **sufficient staffing** for this process

Procedure Flow

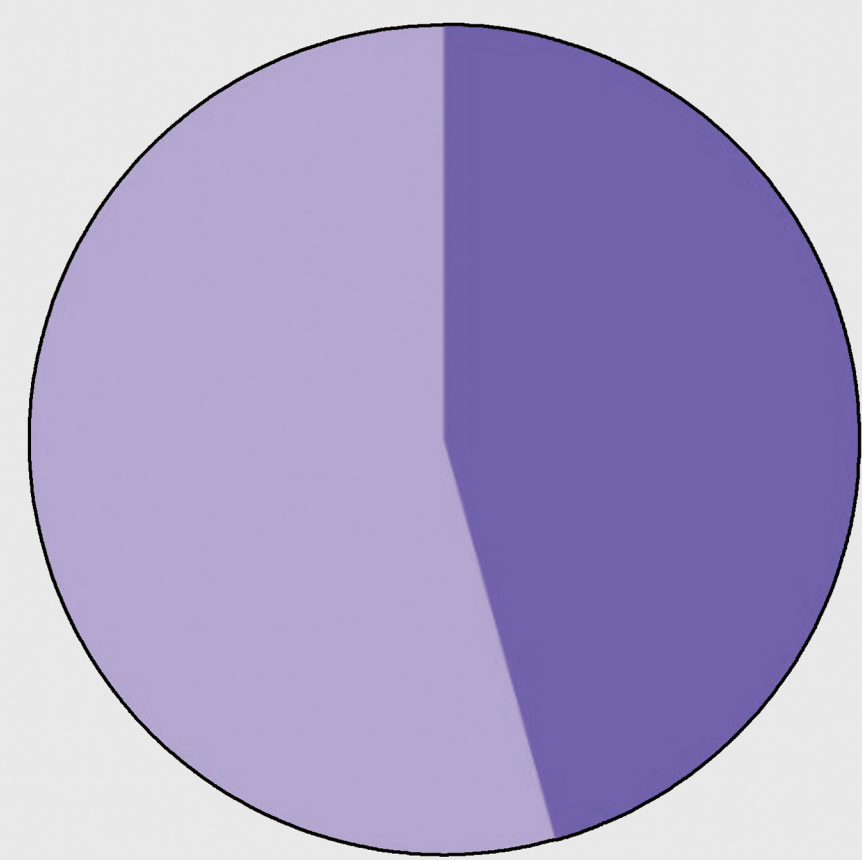


Resource Allocation

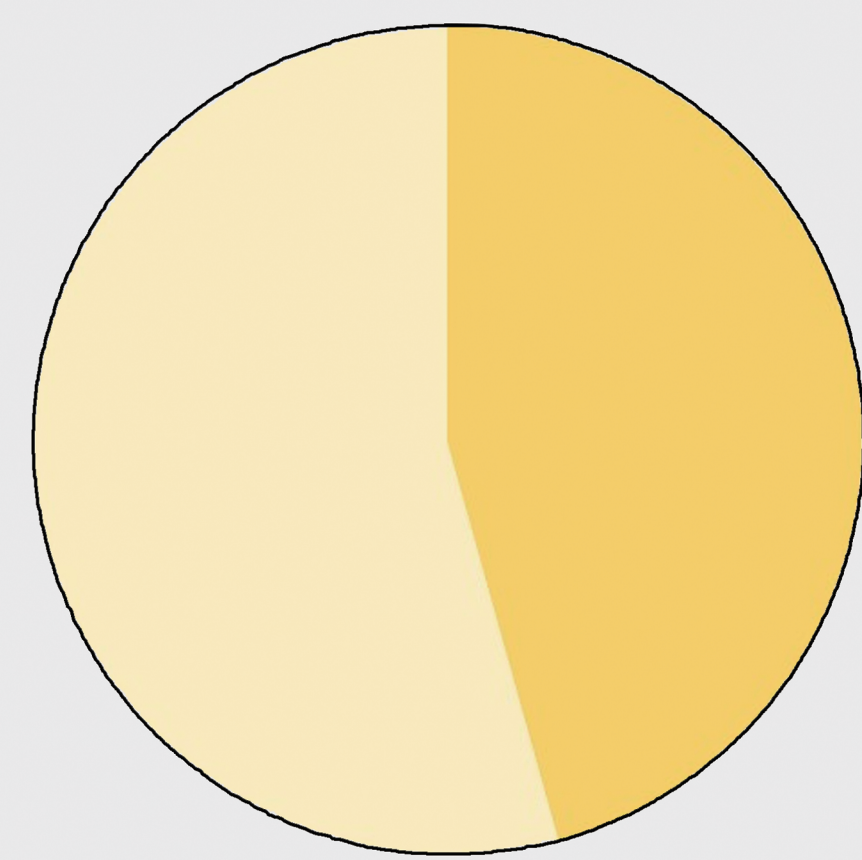
Important concept definitions and requirements:

- **Unit Meal** = Breakfast, Lunch, & Dinner
- Caloric Requirements per day: **2,000 calories**
- Water Requirements per day: **64 oz**

Meal Distribution



Water Distribution

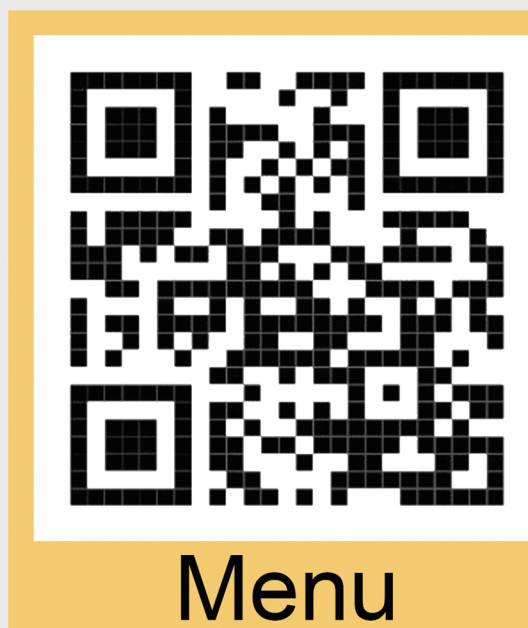


■ Husky Den
■ Local Point

Impact

Our project will enhance public health and safety for **10,000** student residents at the University of Washington during emergencies. Our emergency dining plan:

- Ensures **continuous access** to essential food and water
- **Sets a powerful precedent** for emergency preparedness within the University of Washington and beyond
- Demonstrates a commitment to both **immediate safety and long-term values** of responsible and responsive emergency management

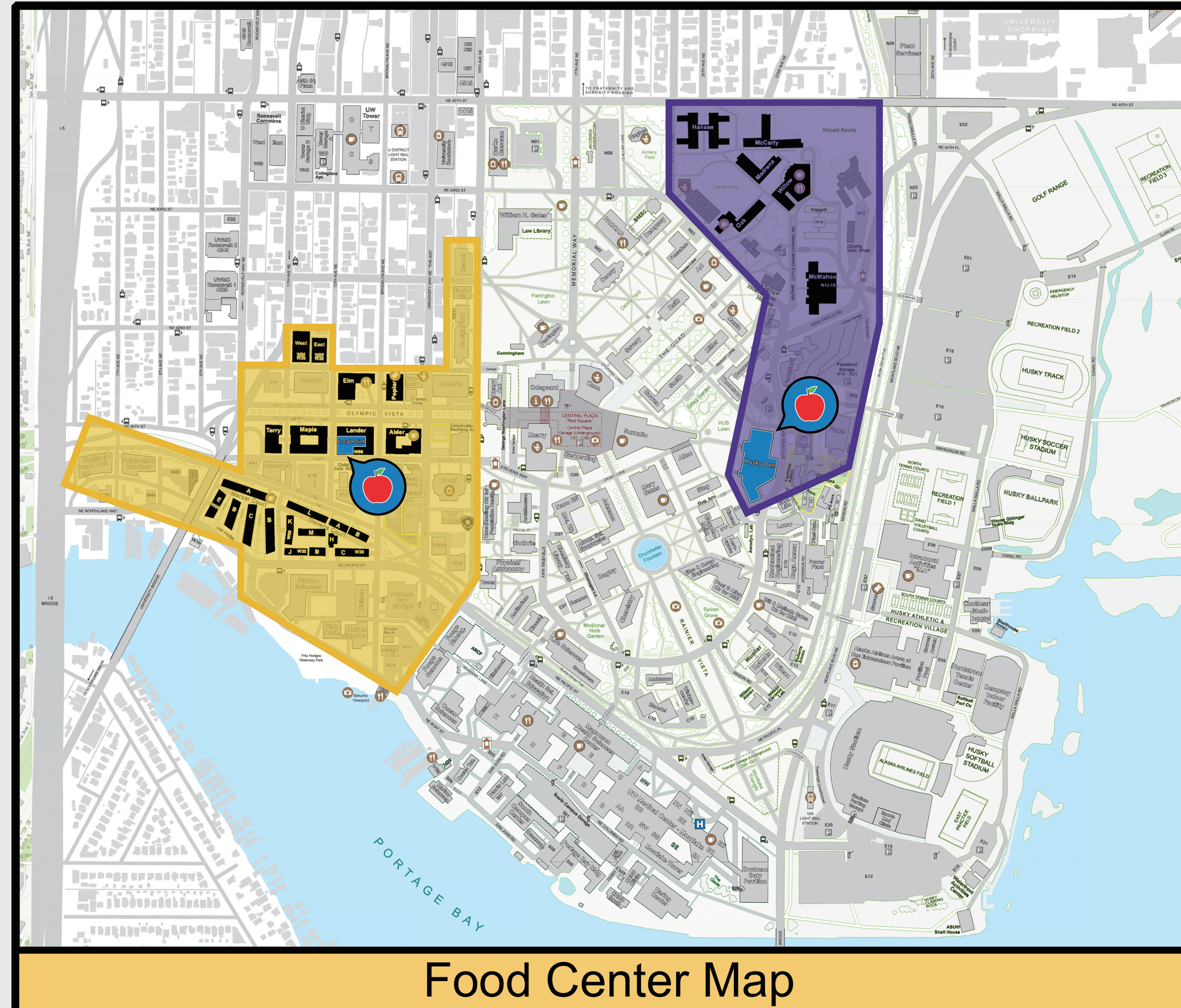


Menu



Protocol

Simulation Analysis

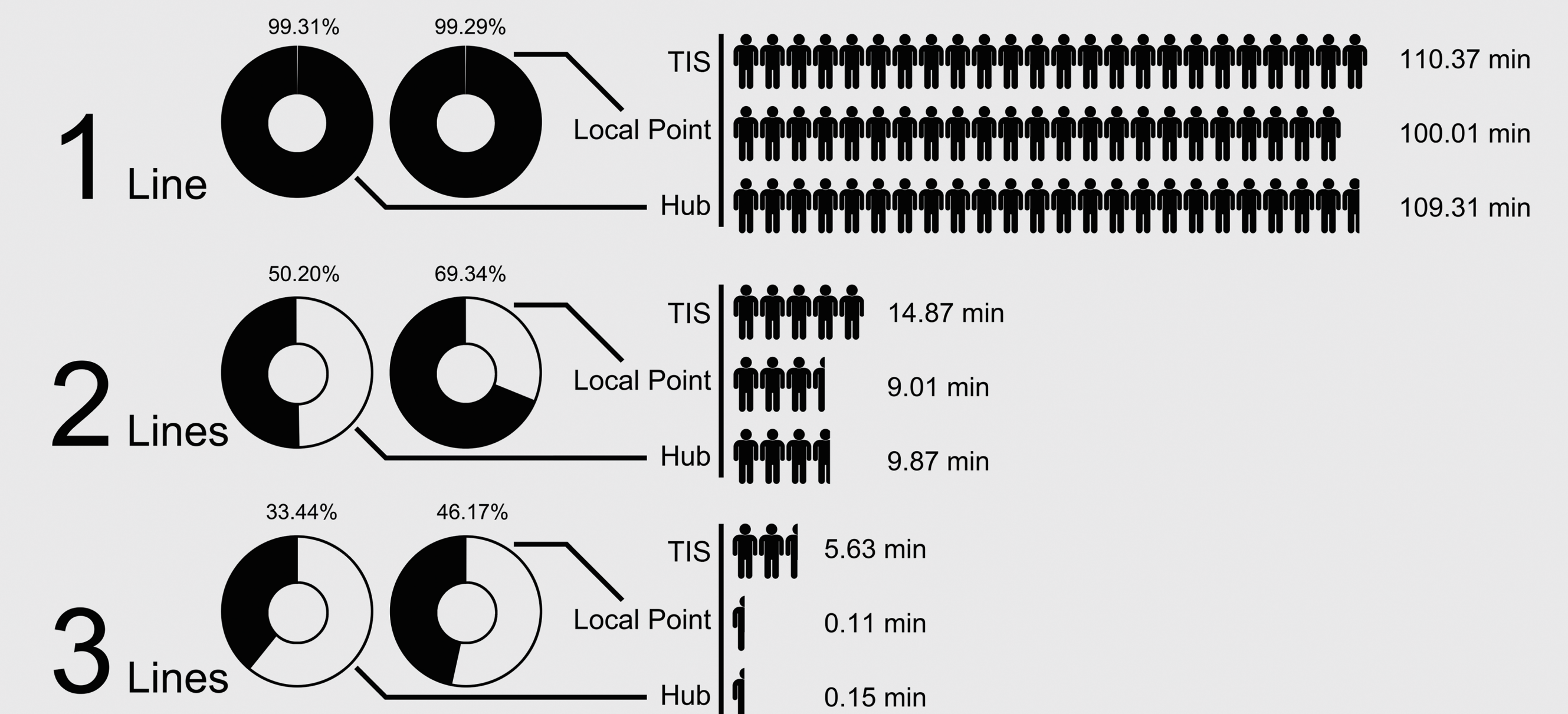


Food Center Map

Experiment Setup

Independent Variables	Response Variables	Control Variables
<ul style="list-style-type: none"> • Number of assembly lines • Release schedule of students 	<ul style="list-style-type: none"> • Scheduled utilization • Average time in system • Queuing time 	<ul style="list-style-type: none"> • Average processing time for one unit: 1.5 minutes • Assembly line capacity: 9-unit meals • Students released by residence hall • Runtime: 10.5 hours • Replications per experiment: 11

Results



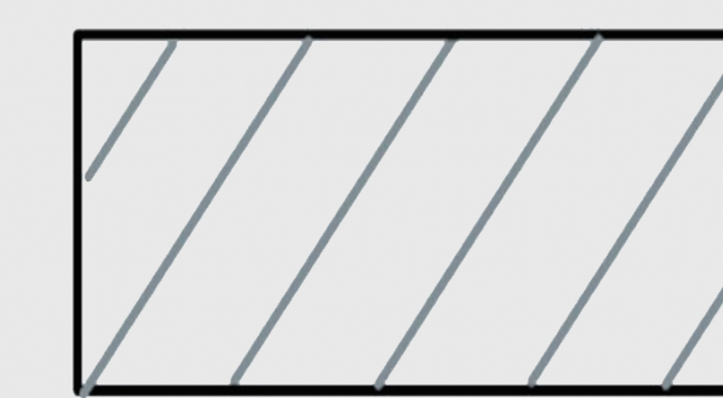
Recommendation

We have delivered a comprehensive **emergency dining management plan** that ensures care for the student residents of the University of Washington.

Essential components include:

- Gantt chart that outlines **procedure, timeline, and staffing requirements**
- A **48 hour buffer period** with an optional 8 hour break before meal distribution
- A recommendation to extend student **emergency backpack provisions** to 48 hours
- **Contingency strategies** for unavailable facilities

Gantt Chart Key



* Processes can be executed concurrently, contingent upon truck delivery schedule

Procedure Step	Staffing (per location)	Hours After Emergency Event										
		0.00	24.00	29.00	36.50	40.00	48.00	58.50	60.00			
Order Placement and Delivery	HFS Dining Director	48 Hour Buffer Period										
Offloading and Storage	2 delivery drivers, 4 order coordinators, 16 helpers	24 Hours					5 Hours					
Sorting	16 helpers	7.5 Hours							Break			
Organize and Set-Up Preparation Line	4 managers, 16 helpers				3.5 Hours			Break				
Meal Prep and Distribution	18 preppers, 18 support staff									10.5 Hours		1.5 Hours
Preparation Line Break Down	16 helpers											