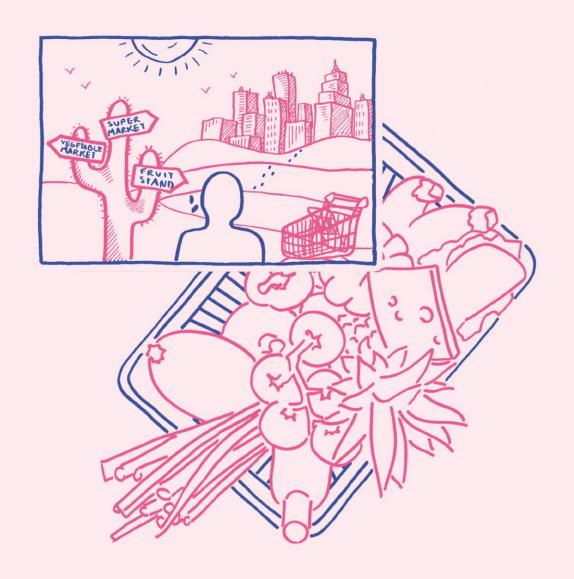
WHAT WILL WE EAT? // REPLENISHING FOOD DESERTS

P5 // Serah Bremer

First mentor // Gregory Bracken
Second mentor // Ulf Hackauf

June 18th, 10:45



O // GENERAL INTRODUCTION

WHAT WILL YOU EAT?

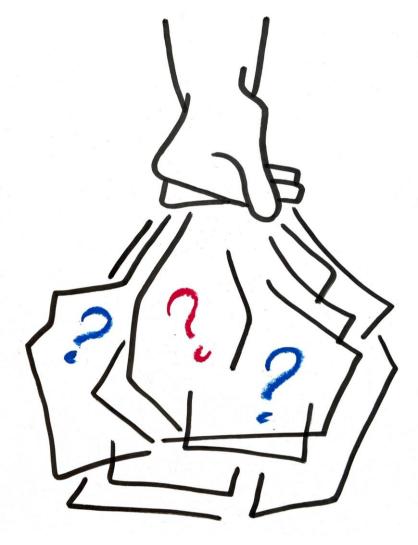
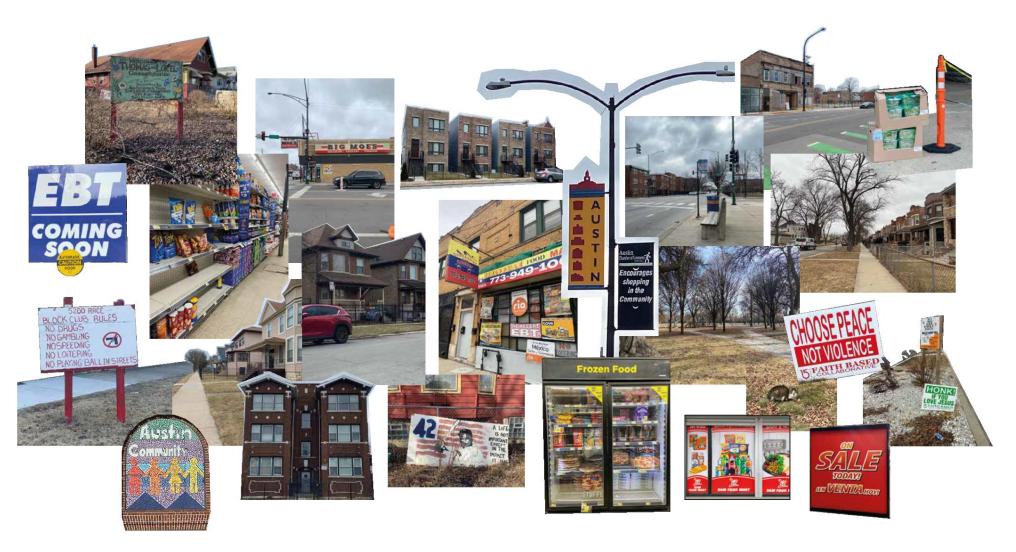


Figure 1 // What will you eat fo dinner? // Source: by Author

THREE NEIGHBORS IN AUSTIN

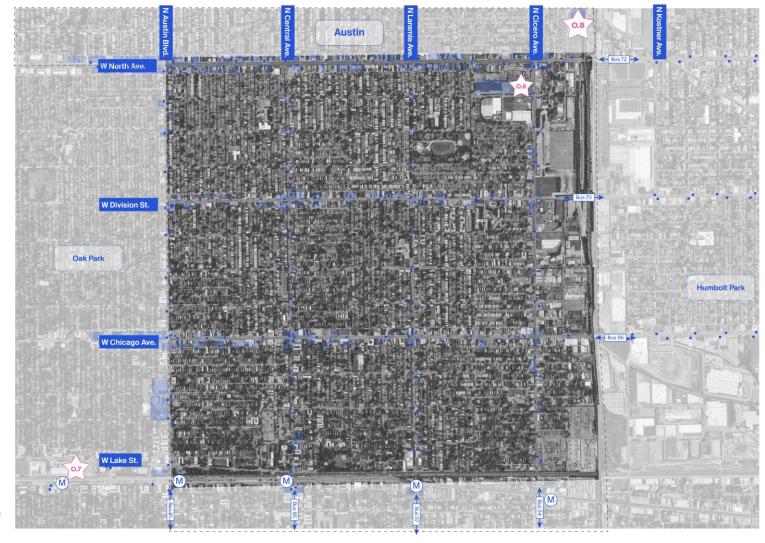


COLLAGE OF AUSTIN



MAP OF AUSTIN

GENERAL INTRODUCTION



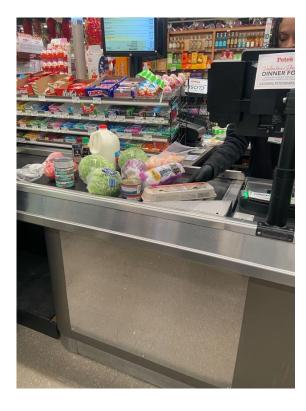
M L-train station grocery store

Figure 4 // Zoomed-in satellite image of selected case neighborhood Austin // Source: by Author.

GROCERY STORE NEAR AUSTIN

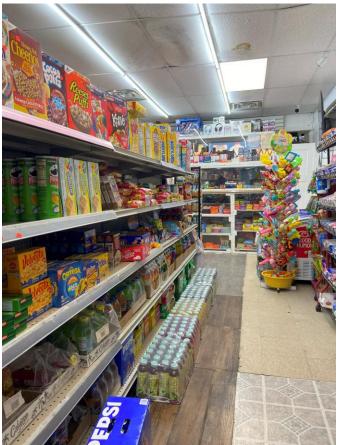






CORNER STORES IN AUSTIN







WALK TO THE GROCERY STORE





WALK TO THE GROCERY STORE

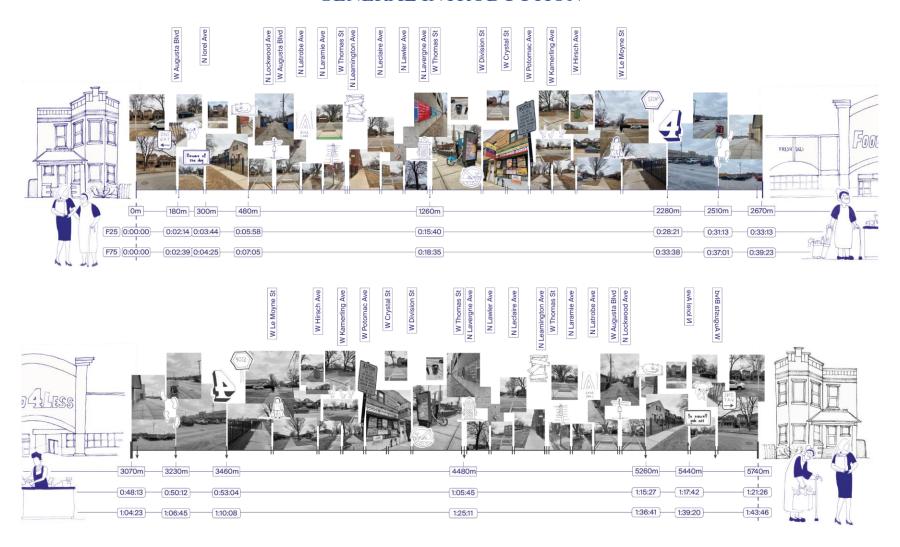


Figure 7 // Visual representation of the journey food desert residents take to the grocery store, including estimated travel time // Source: by Author.

LIVING IN A FOOD DESERT



Figure 8 // Collage illustrating struggles of living in a food desert // Source: by Author, sources for images: Hawaii Foodbank (2023), Cactus Food & Liquors (2018), Batiz (z.d.), New Life Ministries COGIC (z.d.), One Hope Nation (z.d.-a), One Hope Nation (z.d.-b), and Chatman (2023)

CURRENT SITUATION // FOOD DESERT



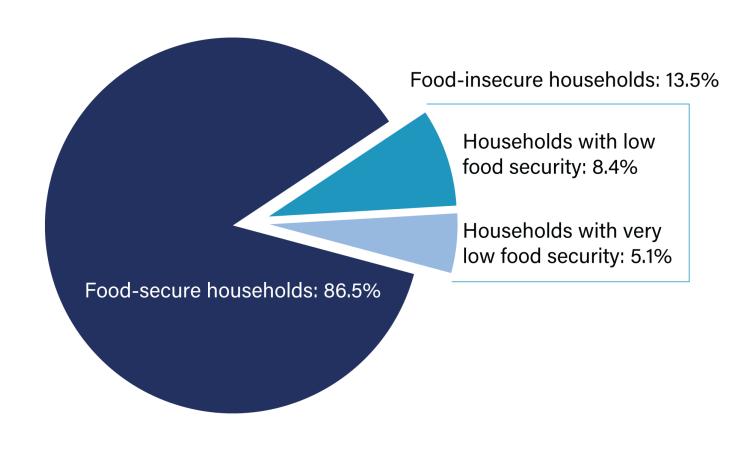
Figure 9 // Collage illustrating the current food desert situation in Austin // Source: by Author, sources for images: Rinaldi (2018), Stoervoer Festival (2025), Hagen (2017a), Hagen (2017b), One Omaha (2023), Walmart (2019), Saba (2022), Olive Branch Cookery School (z.d.), Public Building Commission of Chicago (z.d.), Getty Images (2025), Bulthuis (2014), and David (2021).

FUTURE SITUATION // FOOD OASIS



1// INTRODUCTION

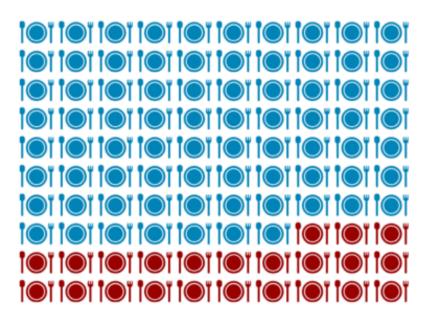
FOOD INSECURITY IN THE U.S.



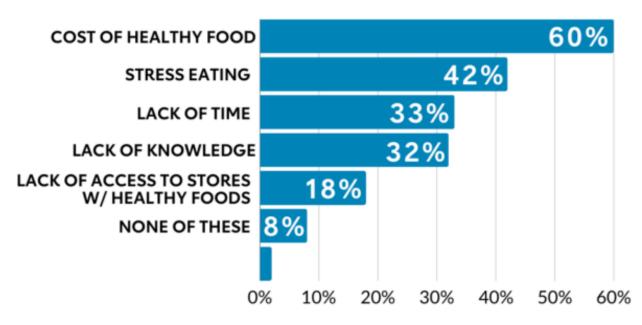
ACCESS AND AFFORDABILITY

INTRODUCTION

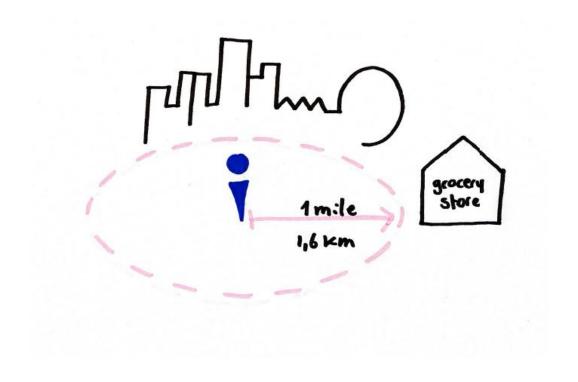
77% would like to eat a healthier diet



What are the biggest barriers to you eating a healthier diet?



FOOD DESERT DEFINITION



DESERT // NOUN OR VERB?

INTRODUCTION

desert 1 of 4 noun (1)

des-ert ('de-zərt ◄)

Synonyms of desert >

- arid land with usually sparse vegetation
 especially: such land having a very warm climate and receiving less than 25 centimeters (10 inches) of sporadic rainfall annually
- 2 : an area of water apparently devoid of life
- 3 : a desolate or forbidding area lost in a desert of doubt
- 4 archaic: a wild uninhabited and uncultivated tract

```
desertic (de-'zər-tik ()) adjective
desertlike ('de-zərt-|līk ()) adjective
```



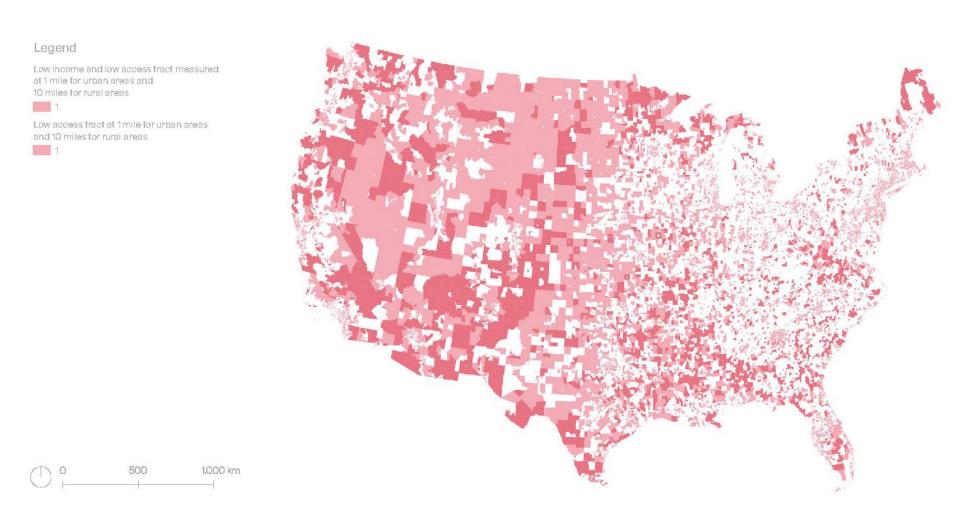
de-sert (di-ˈzərt ◄))

deserted; deserting; deserts

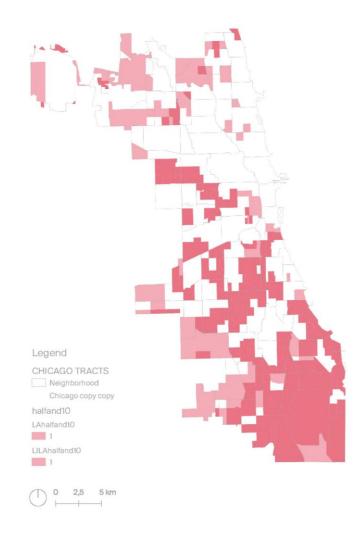
transitive verb

- to withdraw from or leave usually without intent to return
 desert a town
- 2 a : to leave in the lurch desert a friend in trouble
 - b: to abandon (military service) without leave

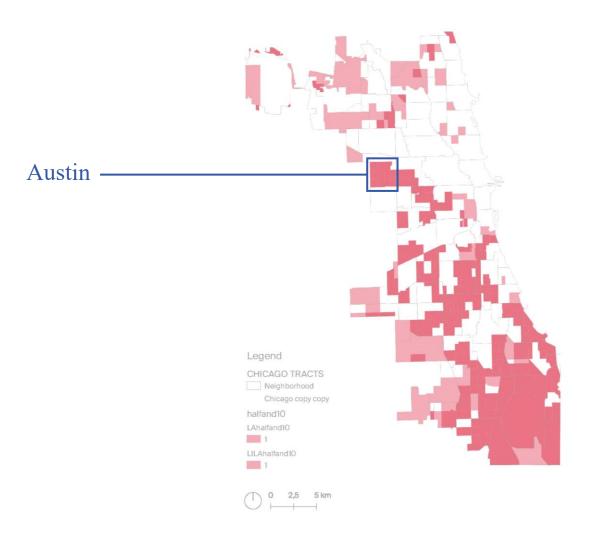
LANDSCAPE OF FOOD DESERTS



FOOD DESERTS IN CHICAGO



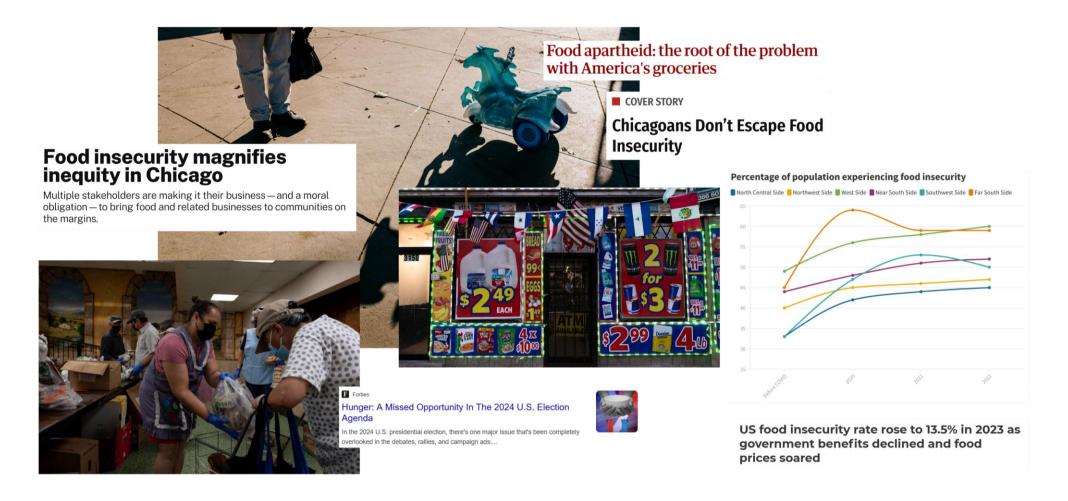
FOOD DESERTS IN CHICAGO



2 // RESEARCH FOCUS

PROBLEM STATEMENT

RESEARCH FOCUS



PROBLEM STATEMENT

RESEARCH FOCUS

In **Chicago**, nearly one million residents live in food deserts with limited access to affordable and nutritious food. Despite being the third-largest U.S. city, **food access** remains deeply unequal. In areas like **Austin**, this stems from structural **inequalities** in urban planning, which have created disinvested food environments with few grocery stores. As a result, residents often rely on convenience stores or fast food, contributing to poor health caused by unbalanced diets.

While the link between **food insecurity** and **systemic inequality** is well established, more insight is needed into how **material**, **social**, **and institutional infrastructures** shape local food environments. This research analyzes the distribution and causes of food deserts in Chicago and explores urban planning strategies to improve **equitable food access**.

The ideal outcome is a neighborhood where all residents, regardless of income or background, can **access nutritious food**. This project proposes **spatial interventions** that enhance physical access, strengthen local food systems, and empower communities, providing **urban designers** and **policymakers** with targeted, practical **tools** to address food inequality within food deserts.

Keywords: Food Desert | Food Insecurity | Urban Inequality | Urban Planning | Spatial Equity

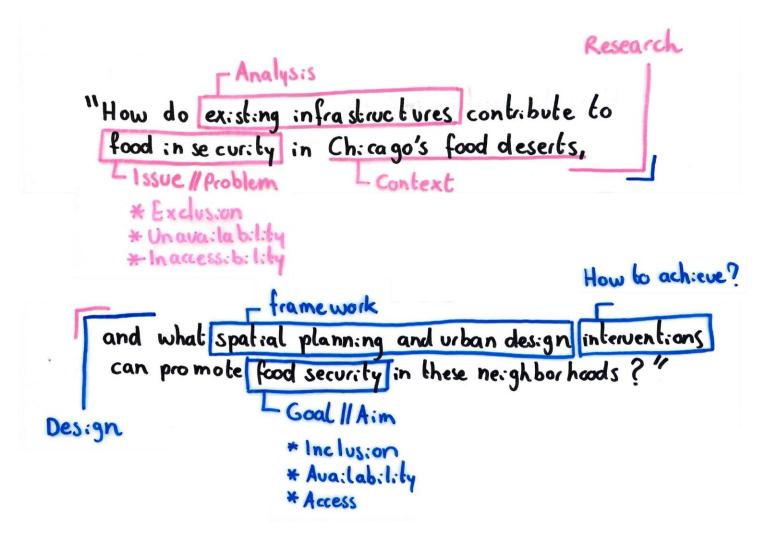
MAIN RESEARCH QUESTION

RESEARCH FOCUS

"How do existing infrastructures contribute to food in security in Chicago's food deserts, and what spatial planning and urban design interventions can promote food security in these neighborhoods?"

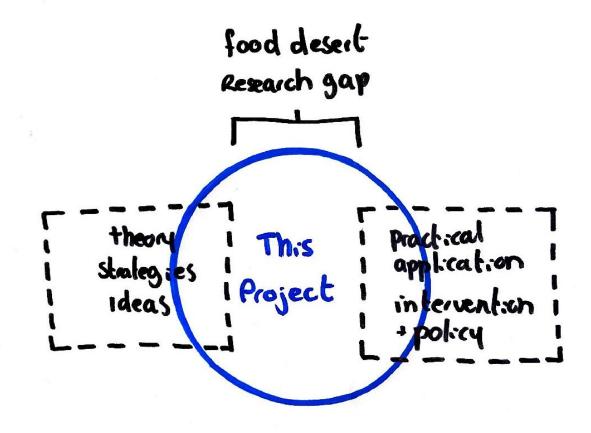
MAIN RESEARCH QUESTION

RESEARCH FOCUS



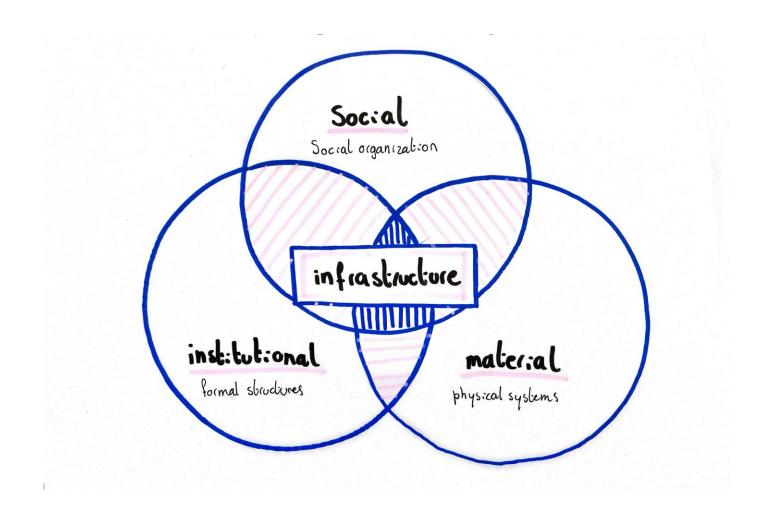
SCIENTIFIC RELEVANCE

RESEARCH FOCUS

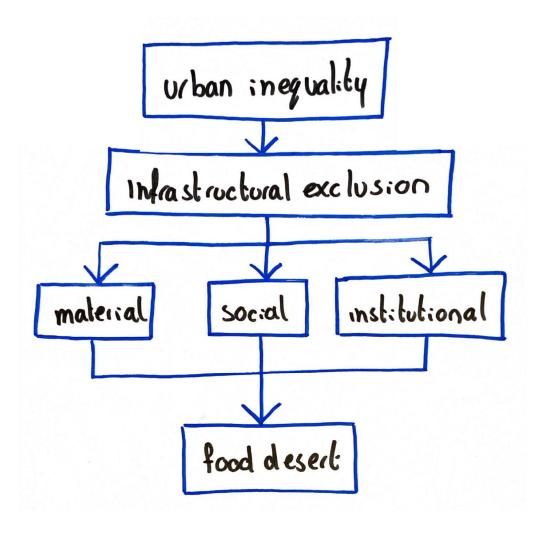


4//THEORY

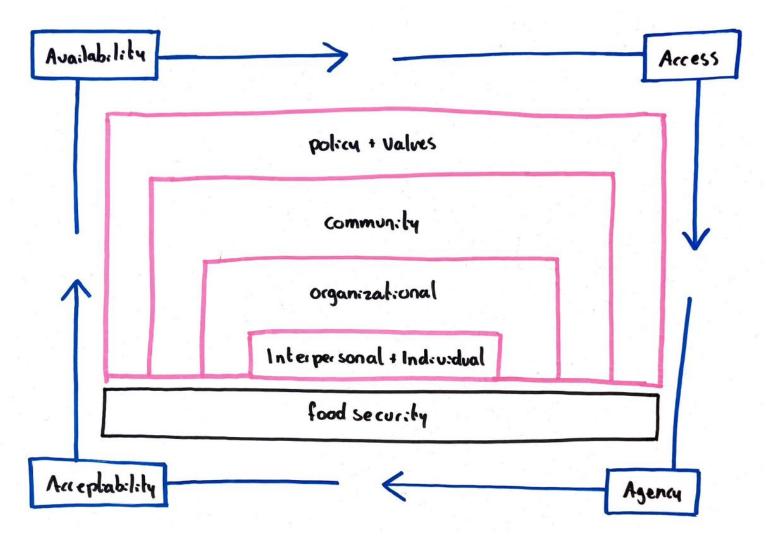
INFRASTRUCTURAL APPROACH



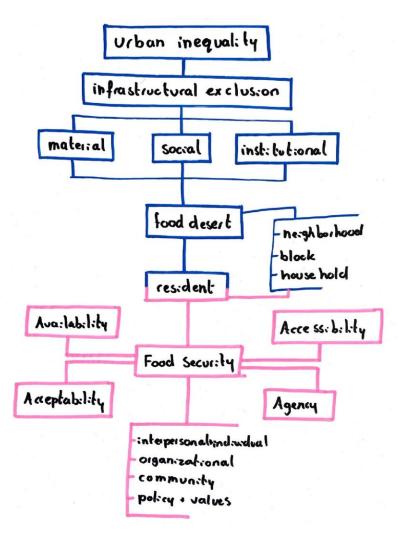
INFRASTRUCTURAL EXCLUSION



FOOD SECURITY



THEORETICAL FRAMEWORK



5 // INFRASTRUCTURE ANALYSIS

NETWORK OF EXCLUSION

INFRASTRUCTURE ANALYSIS

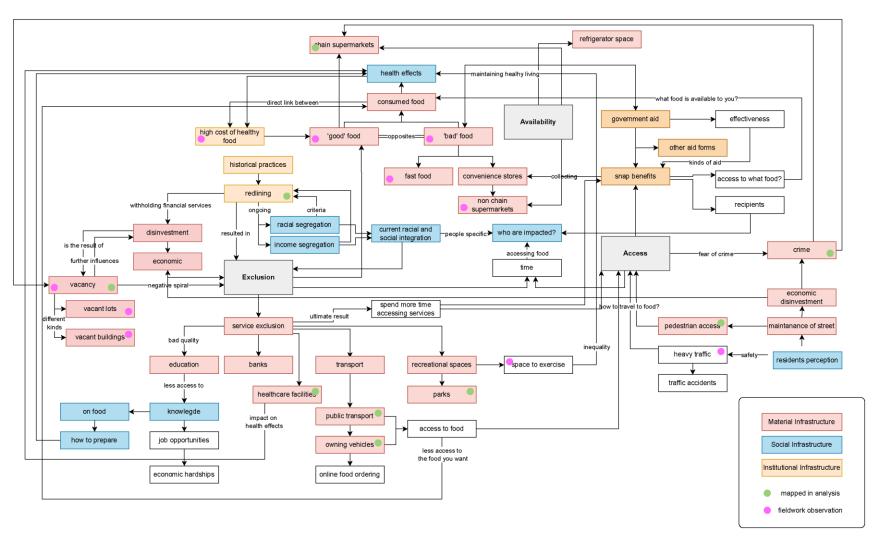
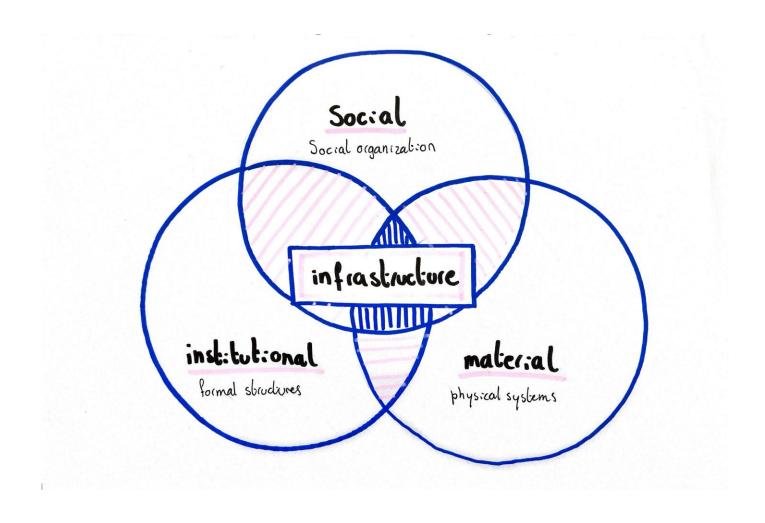


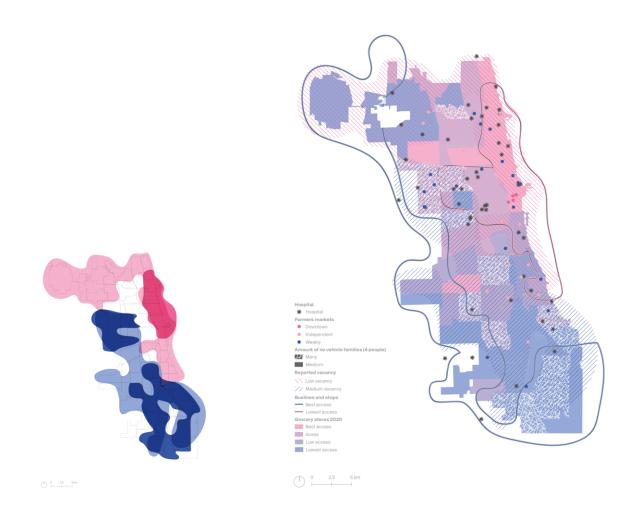
Figure 25 // Illustration on how the different categories of infrastructure interact // Source: by Author.

INFRASTRUCTURAL APPROACH



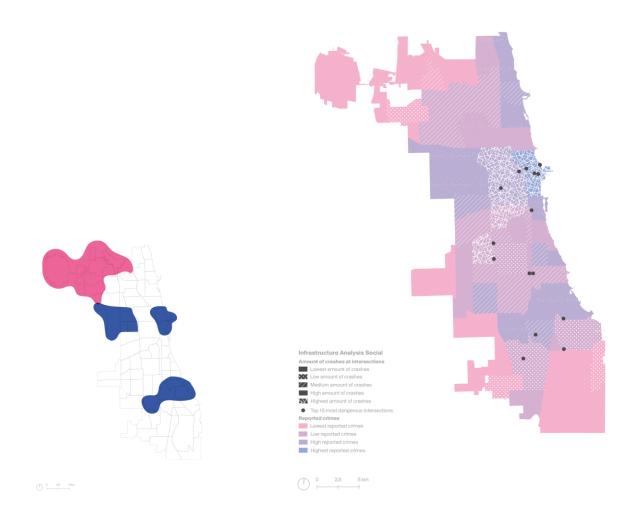
MATERIAL INFRASTRUCTURE

INFRASTRUCTURE ANALYSIS



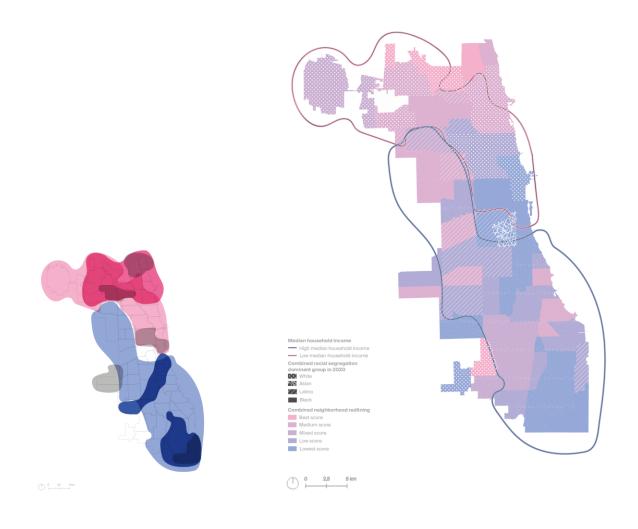
SOCIAL INFRASTRUCTURE

INFRASTRUCTURE ANALYSIS



INSTITUTIONAL INFRASTRUCTURE

INFRASTRUCTURE ANALYSIS



6 // CASE SELECTION

CASE SELECTION

CASE SELECTION

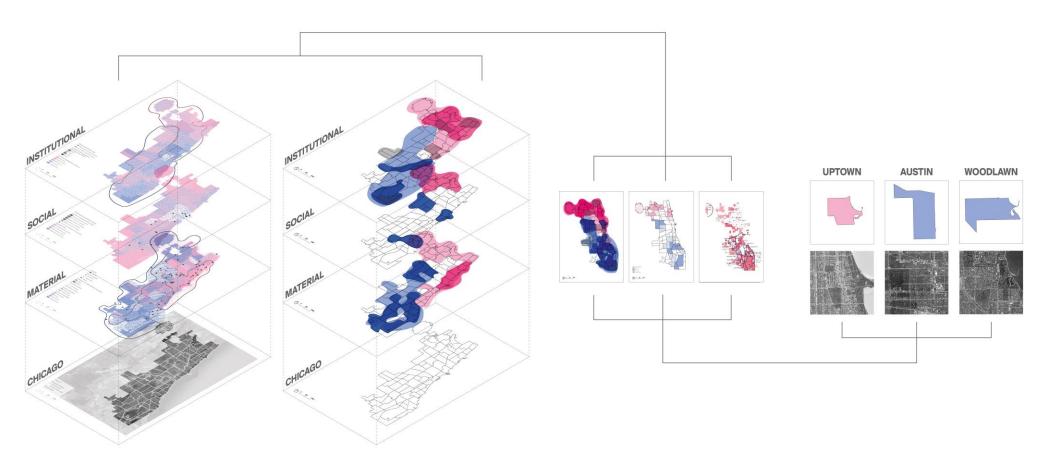
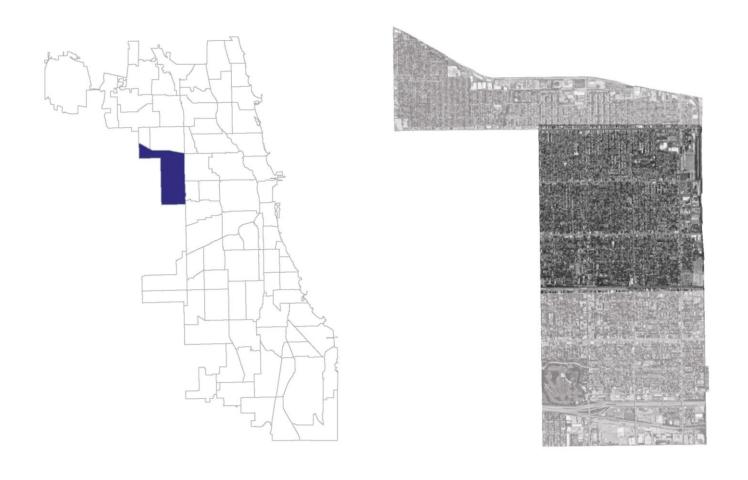


Figure 31 // Scheme depicting the process of turning the infrastructure analysis into a case neighborhood // Source: by Author.

7// CASE AUSTIN

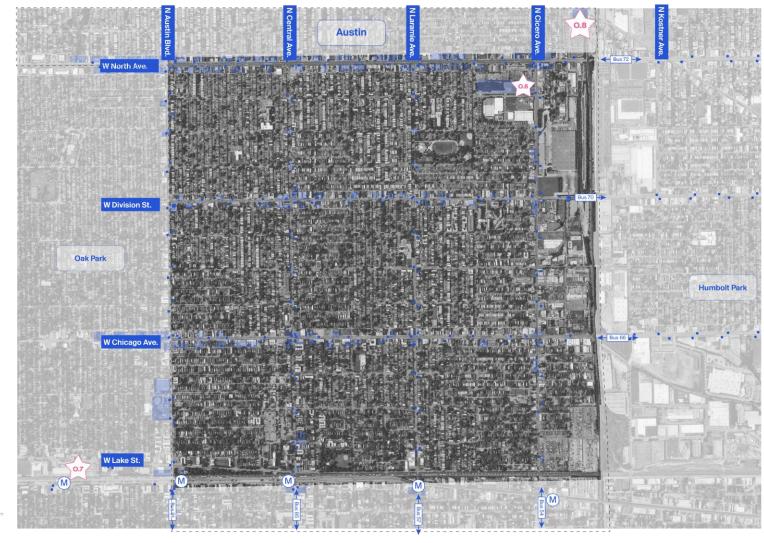
CASE SELECTION: AUSTIN

CASE SELECTION



MAP OF AUSTIN

OBSERVATIONS



M L-train station grocery store

Figure 33 // Zoomed-in satellite image of selected case neighborhood Austin // Source: by Author.

TIMELINE OF BECOMING A FOOD DESERT

OBSERVATIONS

Phase 0: Early Foundations (1865-1950s)

Phase 1: Economic Decline & Racial Segregation (1950s-1970s)

- White Flight & Redlining
- Declining Property Values & Tax
 Revenues

Phase 2: Deindustrialization & Urban Job Loss (1970s-1990s)

- Industrial Job Losses
- Rise of Low-Wage World
- Crime & Disinvestment Rise
- Economic Disinvestment

Phase 3: Grocery Store Closures & the Rise of Fast Food (1990s-2010s)

- Supermarket Flight
- Corporate Decision-Making
- Fast Food & Convenience Stores

 Fill the Void

Phase 4: Policy Failures & Community Struggles (2010s-Present)

- Lack of Policy Support
- Persistent Health Disparities

1865 1874 1899 1890s Henry Austin purchases 470 Austinville nears 1,000 resi-Population surpasses 4,000; Austin is annexed into the City acres, founding the future dents, driven by expanding largest settlement in Cicero of Chicago neighborhood railroads Township 1920 1950 1930s 1929 Austin develops into a dense Population hits ~130,000; Austin Town Hall is built. Strong transit network forms: residential area with some Greek immigrants join diverse signaling civic pride streetcars and the Lake Street industry community. "L" boost connectivity 1950s-60s 1960s Early 1960s 1962 Middle-class Black families Black families move into Austin Redlining practices prevent Lake Street "L" extension as white residents leave due to Black residents from securing begin moving in enhances downtown access blockbusting and racial bias. loans and investment 1970s **Late 1960s** 1968 Mid-Late 1960s Industrial jobs disappear as Shrinking property values MLK Jr.'s assassination sparks White flight escalates: Chicago's manufacturing sector reduce Austin's tax base. unrest; decline accelerates blockbusting and redlining limiting public services declines take hold Early 1980s 1930s Mid 1980s 1980s-90s Austin is predominantly Black; Service industry jobs replace Crack epidemic and War on Economic disinvestment disinvestment and vacancy stable employment, often with Drugs increase incarceration intensifies: grocery stores and businesses close or leave low wages and community instability 2000s-2010s 2000s 1990s-2000s 1990s Fast food, liquor stores, Chains prioritize suburban Supermarkets withdraw from Crime grows; social services and dollar stores replace sites based on profitability Austin citing low profits and lack coordination full-service grocers algorithms security concerns 2010 2011 2010s 2024 Austin Coming Together is Let's Move! campaign brings Health disparities (obesity, Crime grows: social services founded to drive coordinated national attention to food diabetes, etc.) persist due to lack coordination revitalization deserts like Austin poor nutrition access

CURRENT SITUATION // FOOD DESERT



8 // OBSERVATIONS

CATALOGUE OF OBSERVATIONS

OBSERVATIONS



FOOD SECURITY/SCALE |

NETWORK OF OBSERVATIONS

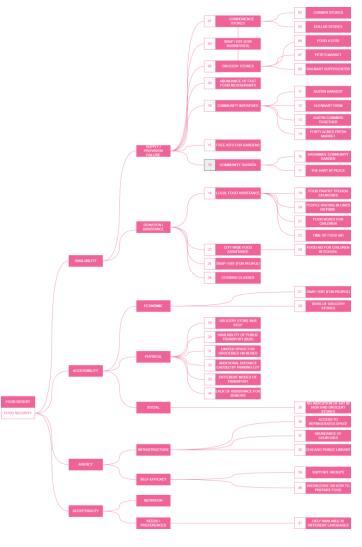
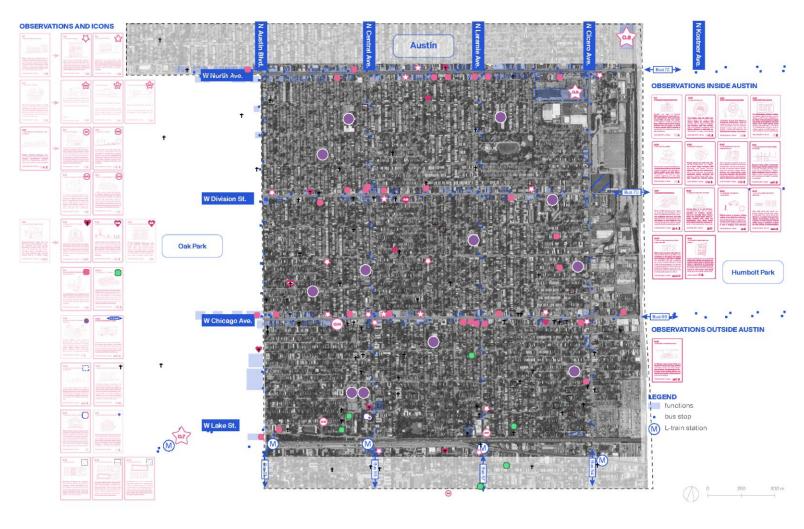


Figure 37 // Network of observations // Source: by Author.

LOCATION OF OBSERVATIONS



0.2 // CORNER STORES





0.32 // ADDITIONAL PARKING LOT DISTANCE





9 // INTERVENTONS

CURRENT SITUATION // FOOD DESERT

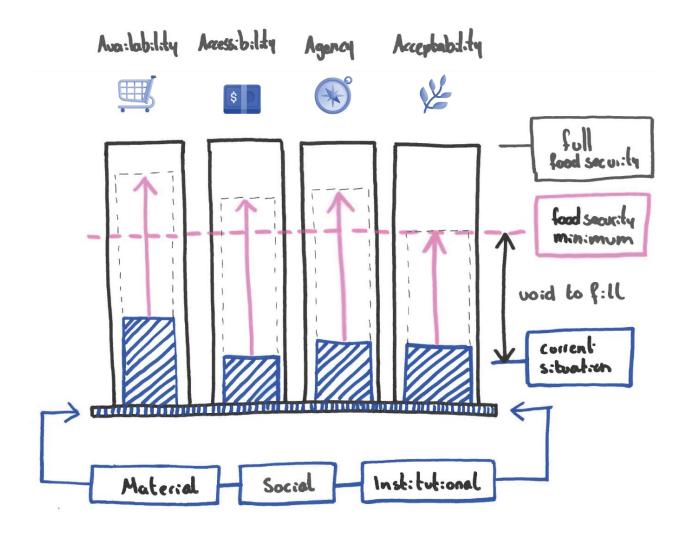


FUTURE SITUATION // FOOD OASIS

INTERVENTIONS



WHAT TO ACHIEVE?



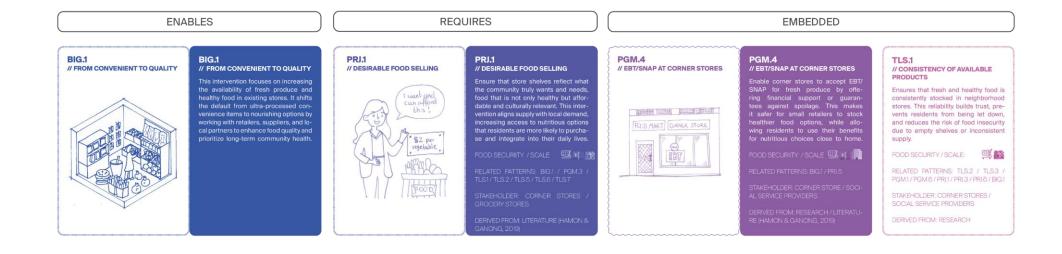
CATALOGUE OF INTERVENTIONS



Figure 44 // Catalogue of interventions // Source: by Author.

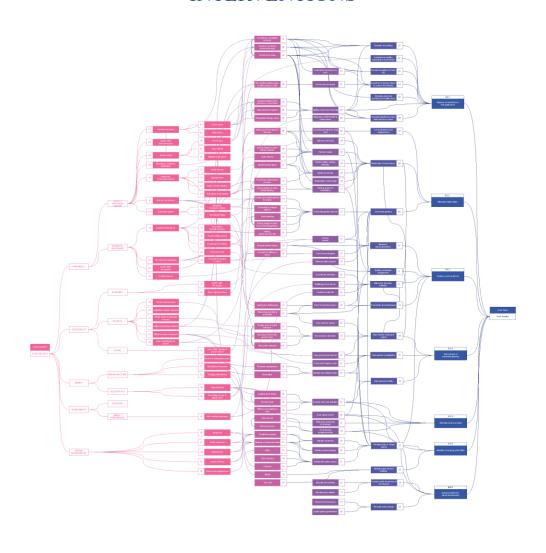
CATALOGUE OF INTERVENTIONS

INTERVENTIONS



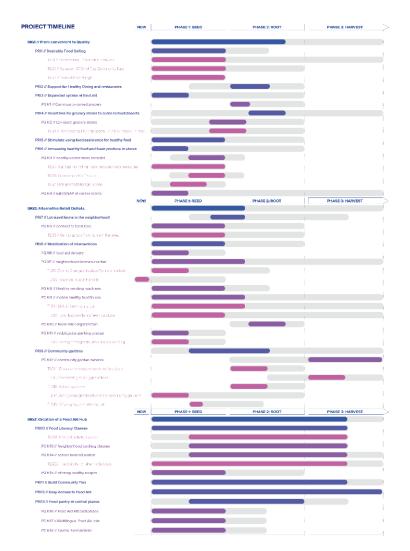
OBSERVATIONS INTO INTERVENTIONS

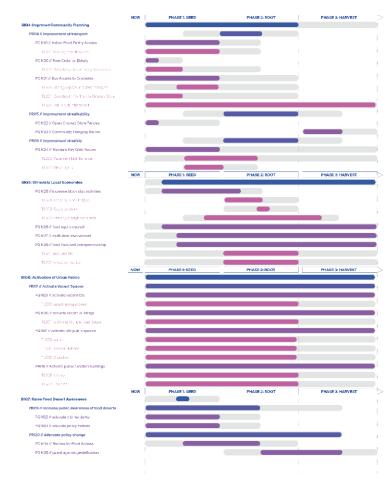
INTERVENTIONS



10 // STRATEGY

TIMELINE OF STRATEGY





ORGANIZATION OF INTERVENTIONS



Figure 48 // Catalogue of interventions // Source: by Author.

PHASE 0 // NOW

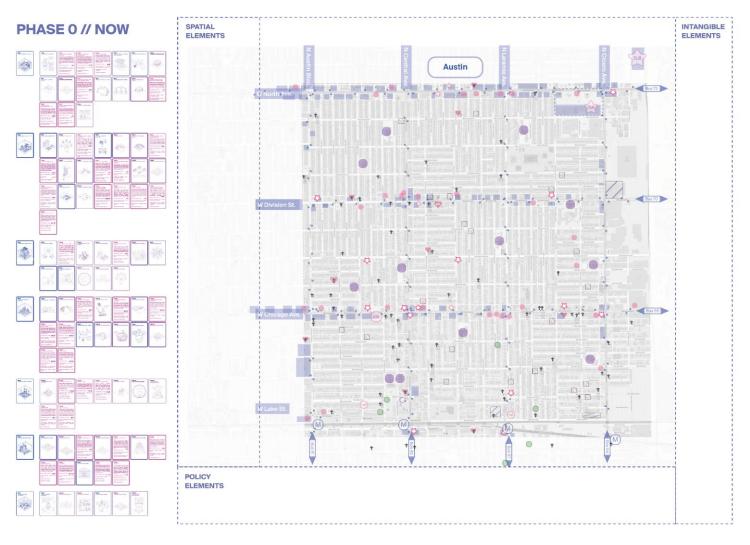


Figure 49 // Phase O: Map of Austin and the location of the interventions // Source: by Author.

PHASE 1 // SEED



Figure 50 // Phase 1: Map of Austin and the location of the interventions // Source: by Author.

PHASE 2 // ROOT



Figure 51 // Phase 2: Map of Austin and the location of the interventions // Source: by Author.

PHASE 3 // HARVEST



Figure 52 // Phase 3: Map of Austin and the location of the interventions // Source: by Author.

PHASE 4 // FUTURE



Figure 53 // Phase 4: Map of Austin and the location of the interventions // Source: by Author.

THREE NEIGHBORS IN AUSTIN



LOCATION A // RECLAIMING THE CORNER STORE



Figure 55 // Photgraph of Location A // Source: Google Maps (n.d.-a).

LOCATION A // RECLAIMING THE CORNER STORE

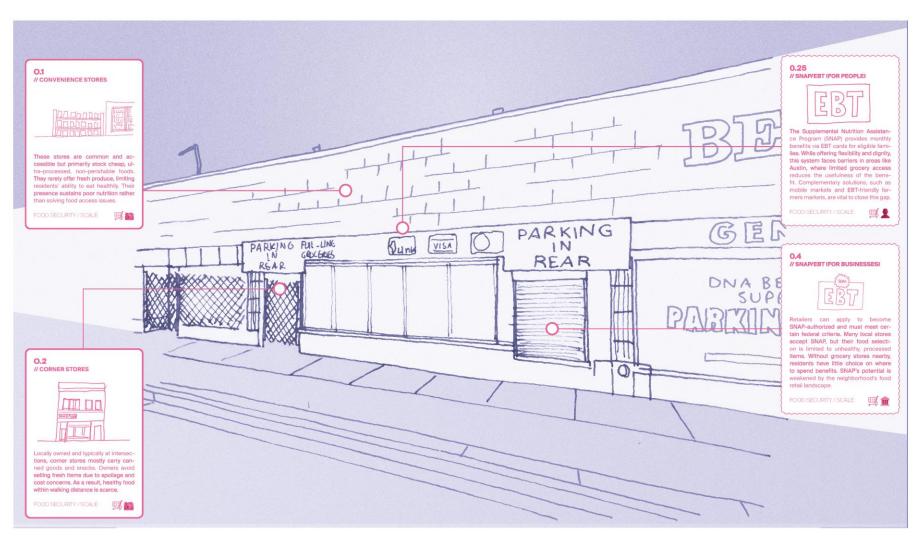
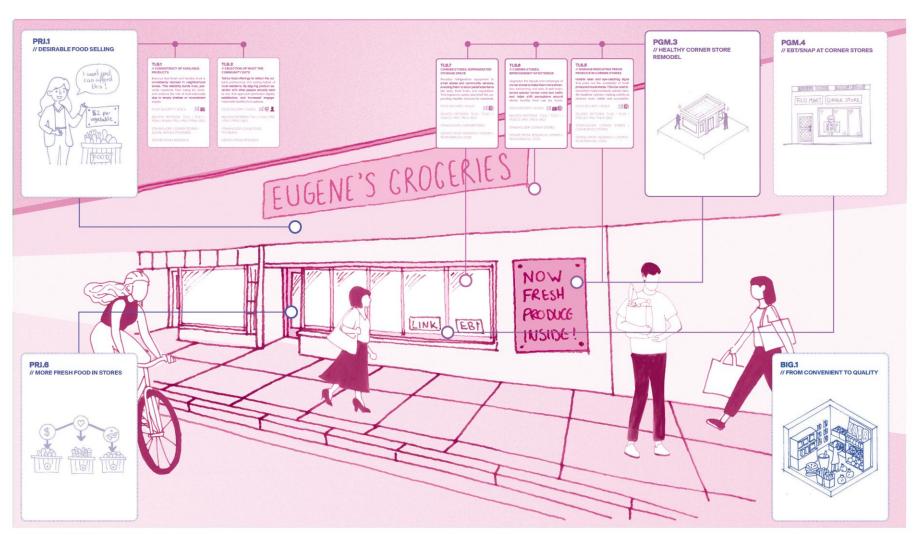


Figure 56 // Visual on Location A, the current situation including the observations // Source:

LOCATION A // RECLAIMING THE CORNER STORE

STRATEGY



70

LOCATION B // CLUSTER OF INTERVENTION



LOCATION B // CLUSTER OF INTERVENTION



Figure 59 // Visual on Location B, the current situation including the observations // Source: by Author.

LOCATION B // CLUSTER OF INTERVENTION

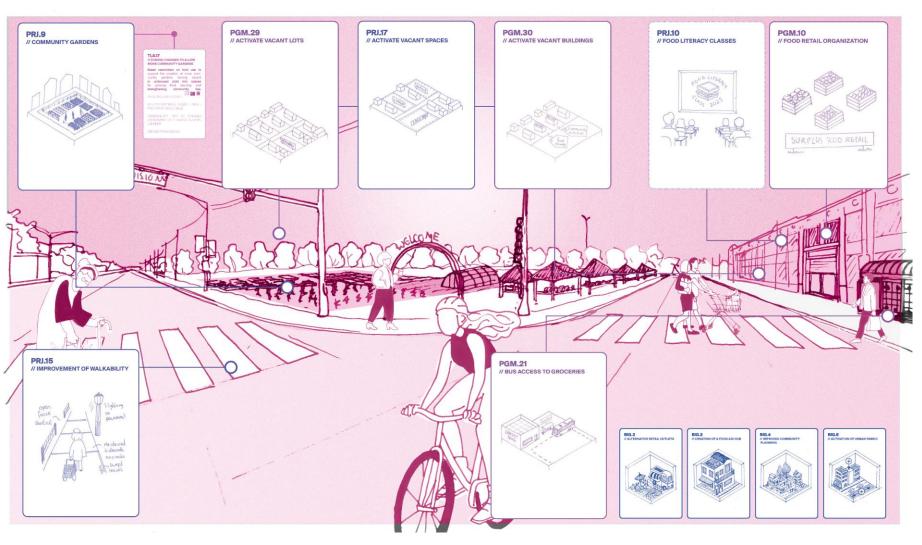


Figure 60 // Visual on Location B, the proposed situation including the interventions // Source: by Author.

LOCATION C // THE AUSTIN FOOD HUB



LOCATION C // THE AUSTIN FOOD HUB

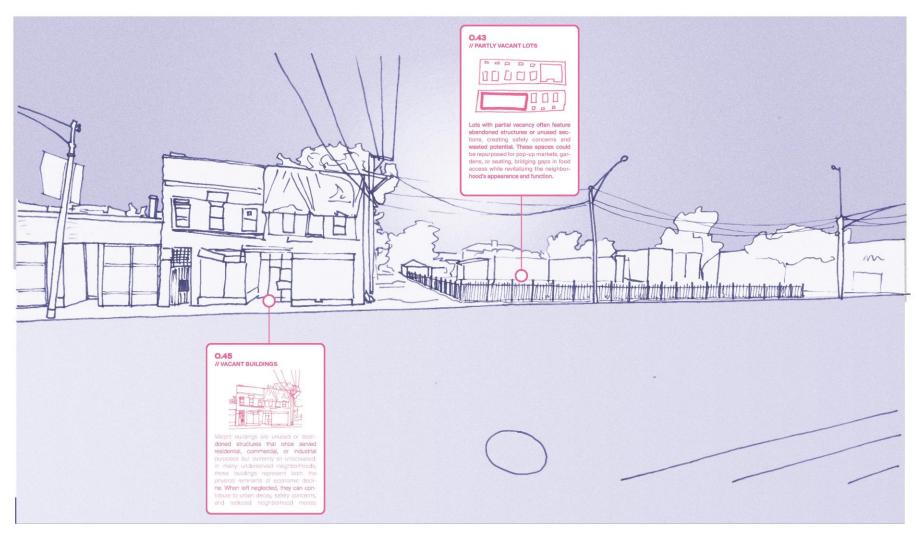
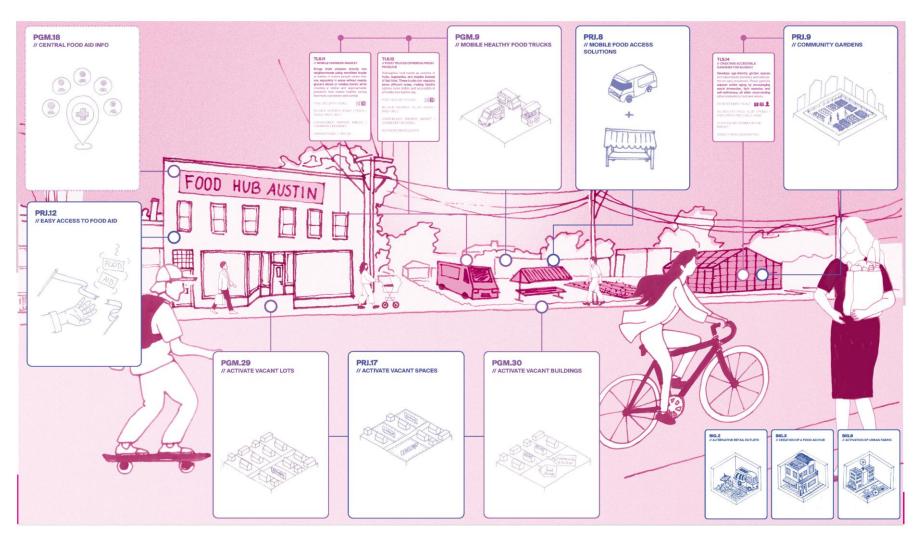


Figure 62 // Visual on Location C, the current situation including the observations // Source: by Author.

LOCATION C // THE AUSTIN FOOD HUB

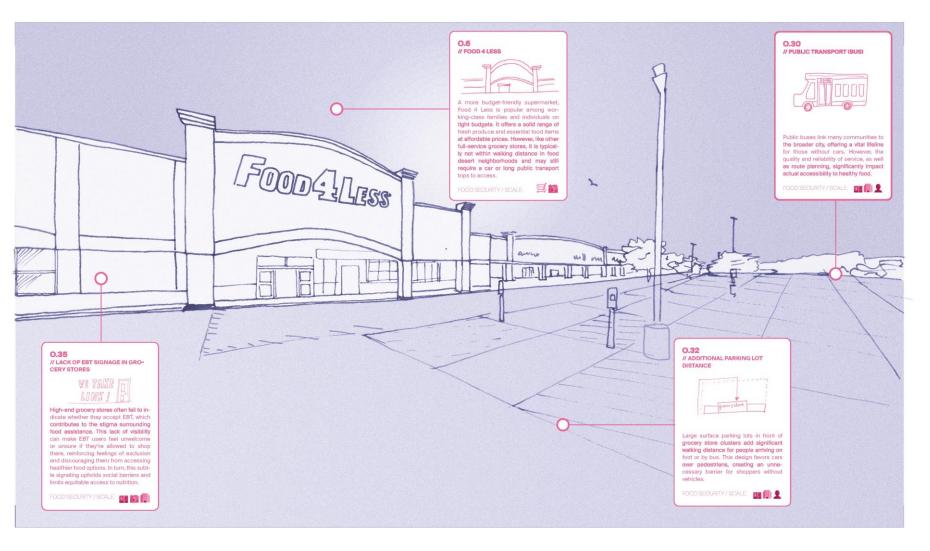


76

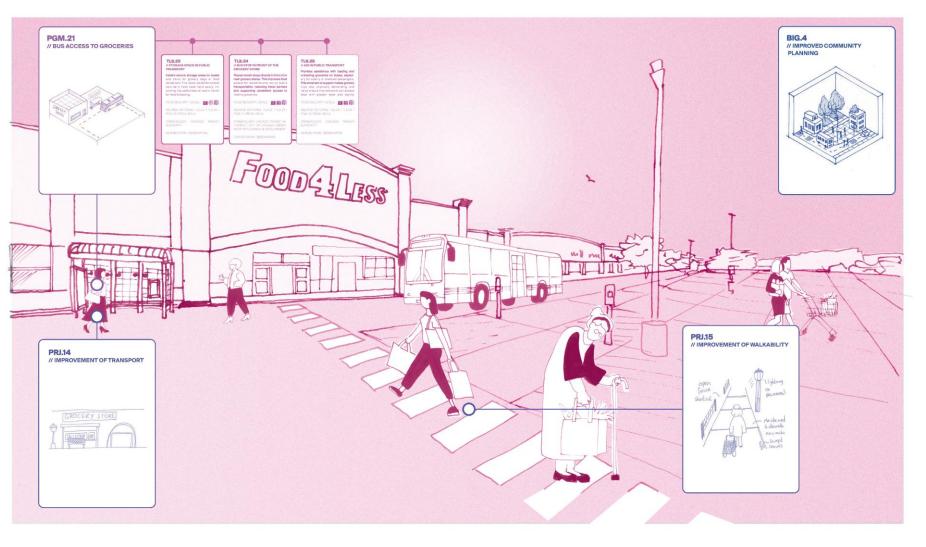
LOCATION D // IMPROVED GROCERY ACCESS



LOCATION D // IMPROVED GROCERY ACCESS



LOCATION D // IMPROVED GROCERY ACCESS



79

9 // CONCLUSION

MAIN RESEARCH QUESTION

CONCLUSION

"How do existing infrastructures contribute to food in security in Chicago's food deserts, and what spatial planning and urban design interventions can promote food security in these neighborhoods?"

CURRENT SITUATION



CURRENT SITUATION

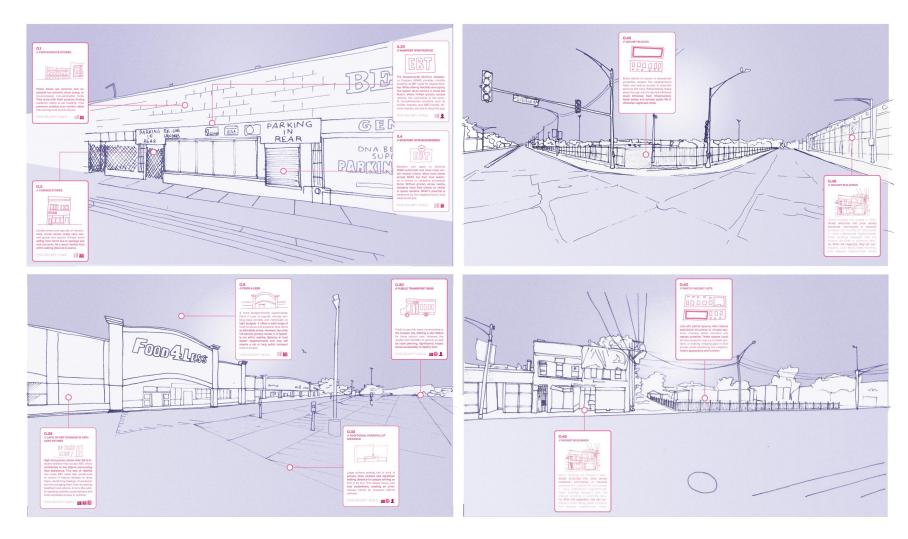


Figure 69 // Collection of the current situation including the observations // Source: by Author.

FUTURE SITUATION



FUTURE SITUATION

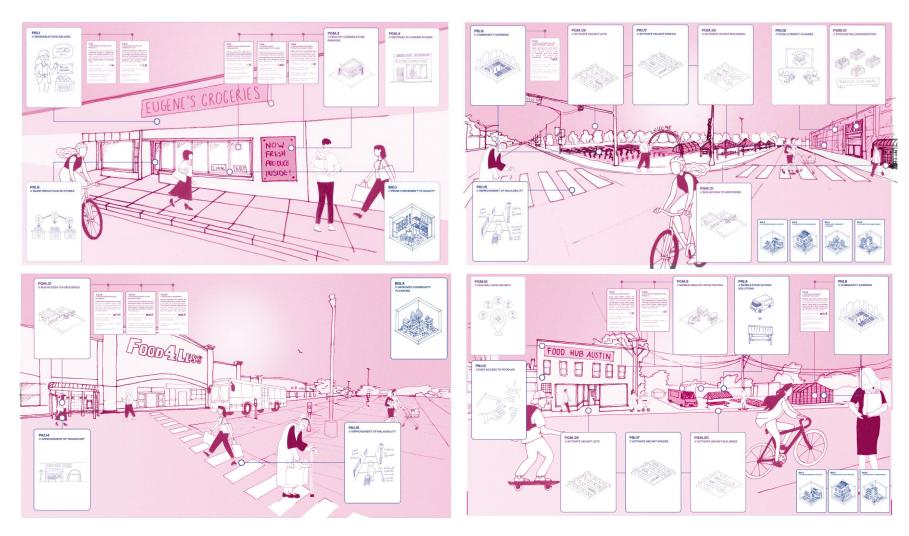


Figure 71 // Collection of the proposed situation including the interventions // Source: by Author.

THREE NEIGHBORS IN AUSTIN



WHAT WILL WE EAT? // REPLENISHING FOOD DESERTS

P5 // Serah Bremer

