





COMMUNITY-BASED MASTERPLAN & DESIGN PROPOSALS





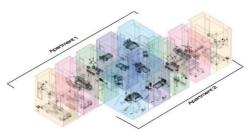




Table of Contents

Introduction	
Project Timeline	1
Neighborhood Photos	3
Research and Engagement	46
Idea Board	47
Asset Board	49
History Board	51
Opportunities Board	53
Physical Conditions	55
Social Conditions	67
Economic Conditions	85
Environmental Conditions	99
Community-Based Master Plan	106
Site Analysis	107
Community Feedback	121
Master Plan:	
Streets, Community Nodes, Housing, Identity	129
Catalyst Projects:	
Landscape Architecture and Architecture	
Neighborhood Intervention	
Public Open Space	
Steetscape	
Housing	
Community Park	
Exhibition	271
A Final Note	286

Introduction

The Dallas-Fort Worth Metroplex, the 4th largest and fastest-growing metropolitan area in the country is facing issues of displacement and gentrification, especially for historically underserved and disinvested communities. Attracted by a thriving economy, new urban dwellers are growing in numbers and are collectively applying pressure on cities to provide housing options in the region. Often policies that shape neighborhoods and cities continue to incentivize developers instead of community building. This results in profit-driven developments that perpetuate historical inequities and injustices that lead to segregated communities.

The integration of equity in the process of planning and design recenters conversations and decision-making by prioritizing the needs of existing residents. The difficulties faced by these communities as well as the reasons for these difficulties demand an honest dialog amongst policymakers, designers, planners, scholars, students, and, most importantly, members of such communities.

The Polytechnic Heights Community-based Master Plan was developed through a participatory process in collaboration with the community, The University of Texas at Arlington, and Community Design Fort Worth. Students from Architecture and Landscape Architecture design courses led by Prof. Dennis Chiessa and Dr. Joowon Im conducted multiple community meetings and research in Polytechnic Heights during Fall 2020 and Spring 2021 semesters. Equipped with data and findings, Dr.Im's Landscape Architecture students developed the community-based master plan in collaboration with architecture students from Prof. Chiessa's design studio and with feedback from stakeholders and design professionals. The work was supported through the CAPPA Conference and Workshop Grant for the Advancement of Diversity and was presented as a key component of discussion at the CAPPA Open City Symposium in April 2021.

The design team worked with diverse community stakeholders including but not limited to Texas Wesleyan University, Polytechnic High School, William James Middle School, United FW Justice Center, business owners, individual members of the community, and more. Using a participatory design process, and avoiding top-down approaches, the work is intended to bring community members together to identify great community resources, examine the neighborhood history and create a shared vision for Polytechnic Heights.

This exhibition showcases the inclusive process that has been done throughout the planning process, the community-based master plan, and individual student projects that provide initial visions of possible catalyst projects within the master plan. We hope that this work can be used by community champions to realize a shared vision for Poly.

Instructors

Dennis Antonio Chiessa, Assistant Professor of Architecture Joowon Im, Ph.D., ASLA, Assistant Profssor of Landscape Architecture

Classes

Architecture Studio II, Spring 2021 Environmental Landscape Planning, Spring 2021 Spacial [In] justice, Fall 2020

Students

MLA Students Melissa Brown Lauren Wardwell Josiah Miller Safa Sayeed Khan MARCH Students Amy Alzidan Terressa Davilmar Iva Galvan Hector Guevara Alaina Gunter Jenise Hiles Lindsay Hubbell Becca Icossipentarhos Kaylee Lamb **Gilbert Livingston** Jamar Parish Katheryn Van Dinh BS ARCH Students Abeneer Dessalenge Jennifer Gonzalez Hannah Milner Patricia Moriel Robert Oberreit Rebeca Rios Alfredo Sanchez Aaron Sopoco Nery Umana

Research Assistant

Kaylee Lamb, Graduate Student, School of Architecture Roger Brooks, Undergraduate Student, School of Architecture

CDFW Project Manager

Rachel Albright



CAPPA, UTA + CDFW

College of Architecture, Planning and Public Affairs:

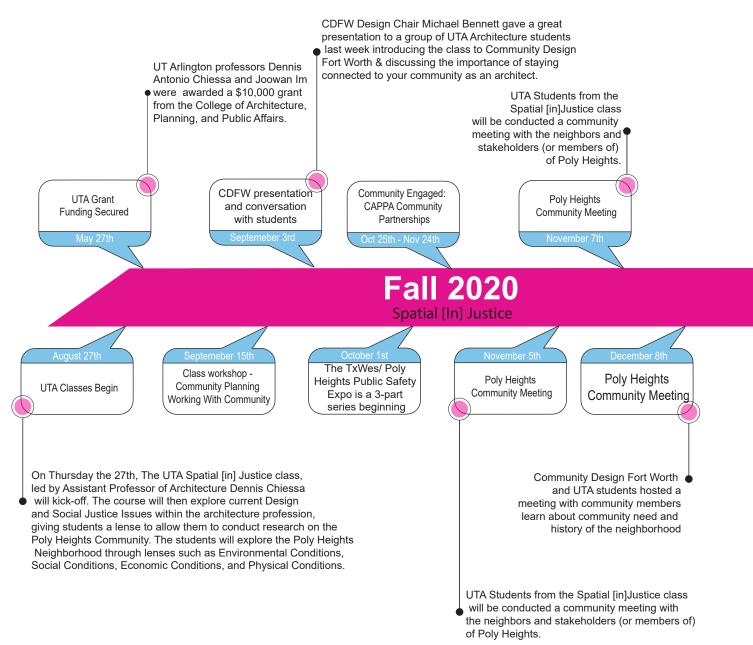
Together our dynamic group of faculty and dedicated staff inspire, motivate, and educate students to pursue excellence in academic scholarship, design practice, creative thinking, and critical reflection. CAPPA provides a comprehensive, collaborative, relevant, and forward-thinking learning experience grounded in the rich traditions of the professional disciplines situated in the college. Located in the heart of DFW, CAPPA is a testing ground for the design and development of healthy, inclusive, environmentally, and ecologically responsive communities.

We, as members of CAPPA, acknowledge a national history of inequity that extends to its academic institutions having denied equitable access and support to qualified students, faculty, and staff. We are committed to achieving diversity, inclusion, and equity in CAPPA through the practice of broadening faculty hiring and promotion, student recruitment, and leadership opportunities within the CAPPA community. Our vision is to create a diverse learning environment that can help us lead within an evolving society.

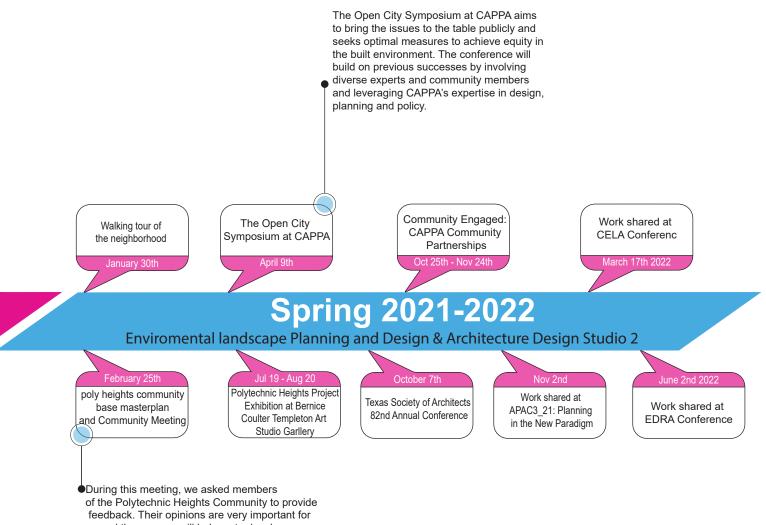
Community Design Fort Worth:

Community Design Fort Worth (CDFW) is a 501c3 organization that believes communitydeveloped and led work can elevate the level of design in our city, improve the lives of its citizens and create a society that succeeds in providing something for everyone. Our organization strives to enhance the quality of life in Fort Worth communities by serving as a resource for community assistance, engaging the public in dialogue about key issues and opportunities, and undertaking long-term visioning in anticipation of future challenges. We emphasize equitable community engagement and community-led design practice.

As an organization of people who work in the built environment, we acknowledge the role that city planning and development practices play in creating and perpetuating systemic inequalities that directly harm low-income people, people of color, and those with disabilities. We also believe in the power of communities to direct their own future and in the grassroots ability to bring significant change to our world. We are committed to building up our community by giving our citizens a voice in a shared Vision for Fort Worth and providing them with the tools they need to see this vision unfold.



TIMELINE



us and the process will help us to develop a

community-driven master plan for Polytechnic Heights that addresses the needs of the community.

NEIGHBORHOOD PHOTOS

This chapter presents various characteristics of Polytechnic Heights and project processes through the photos taken during the project period.

Landscape students working on the Master Plan.

Kak.



Residential Street in the Neighborhood Street

Residential Street in the Neighborhood Street

Bargelast

Polytechnic Heights Neighborhood

Polytechnic Heights Neighborhood

Here ales

Mural at the UFW Community Justice Center

the Parts

Hand Prints on the S 10e

TTO DEC

Sept.

Community Feedback Board Installed at Polytechnic High School

ho

Community Feedback Board Installed at a Local Coffee Shop

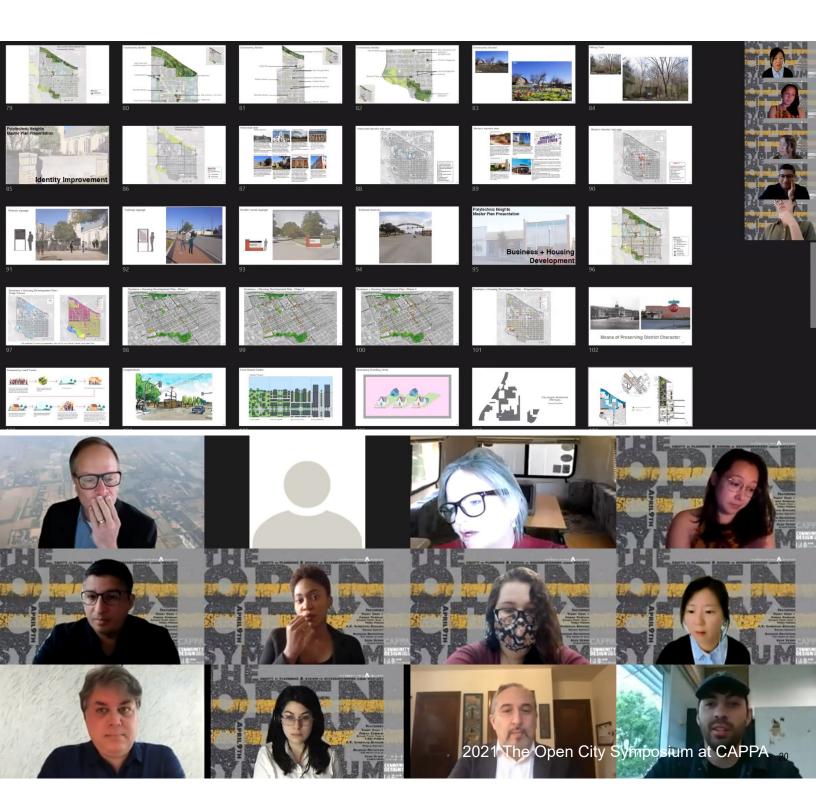
AB.

Interview with Residents

11

Black DFFF

UNIQUE





East Rosedale Street 22

Site Visit to William James Middle School

CRIME

William James Middle School



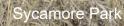
Auditorium at William James Middle School

.

-

EIIIo

Architecture and Landscape Students at William James Middle School 26



Backyard at the UFW Community Justice Center 28









Parking lot at William James Middle School

Courtyard at William James Middle School

JFW Community Justice Center

* United * FORT WORTH COMMUNITY JUSTICE CENTER

Project Brief at William James Mido



ACT. NO D. MILLI MORTON ATTNESS CENTER

#olytechnic Methodist 0 74 11 Polytechnic United Methodist Churcha

Mural on the Building at the UFW Community Justice Center

#END287g

JA.

Community Garden at the UFW Community Justice Center



Backyard at the UFW Community Justice Center 42

-

ililin!

AN AN





RESEARCH AND ENGAGEMENT

Community-engaged within a university setting requires that we, faculty and students, approach the project from multiple avenues. In preparation for the design phase, the students were asked to research the context in two ways, through data collection from publicly available sources and a series of community engagement meetings, workshops, and site visits.

The Community engaged workshops were used to get qualitative information from the residents about their neighborhood. This included contributions to an 'Idea Board,' an 'Asset Board,' an 'Opportunity Board,' and a History board. The workshops were done virtually, on Zoom, with an option for in-person visits during the meeting, although no in-person visitors showed up as we were still in the middle of the COVID-19 pandemic.

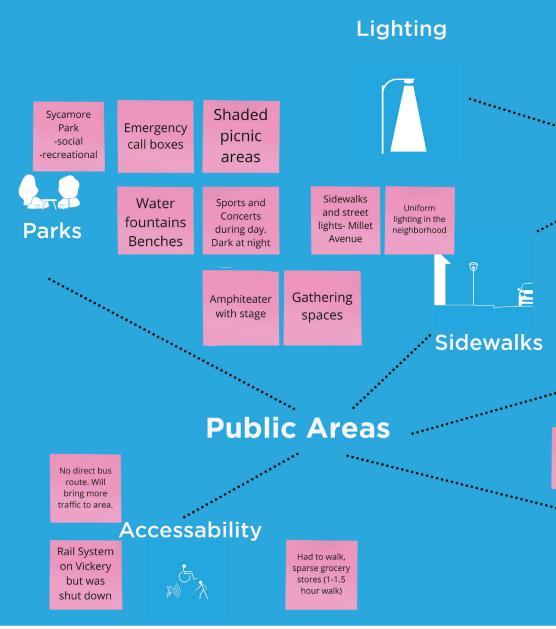
The data collection and urban analysis were conducted in small groups and focused on four lenses to understand the project area: Physical Conditions, Social Conditions, Economic Conitions, and Environmental Conditions.

At the end of the fall semester, the work gathered was given to the landscape architecture and architecture studios as a starting point for their part of the project.

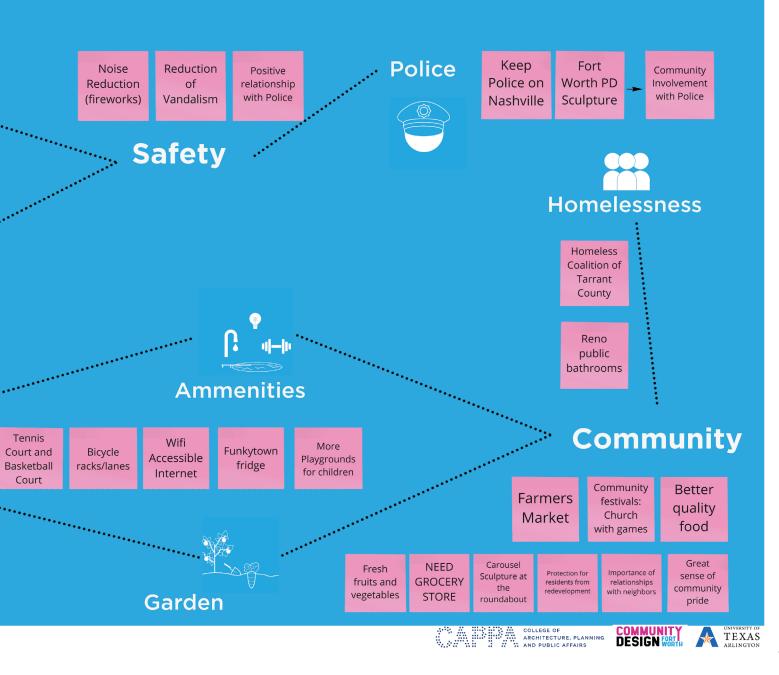
Idea Board

IDEA BOARD

In the multiple community meetings that were hosted, residents were able to express beneficial ideas neighborhood. for their The idea board was used to frame the conversation around key aspects of the community, including safety, public areas, and community concerns within Poly Heights.

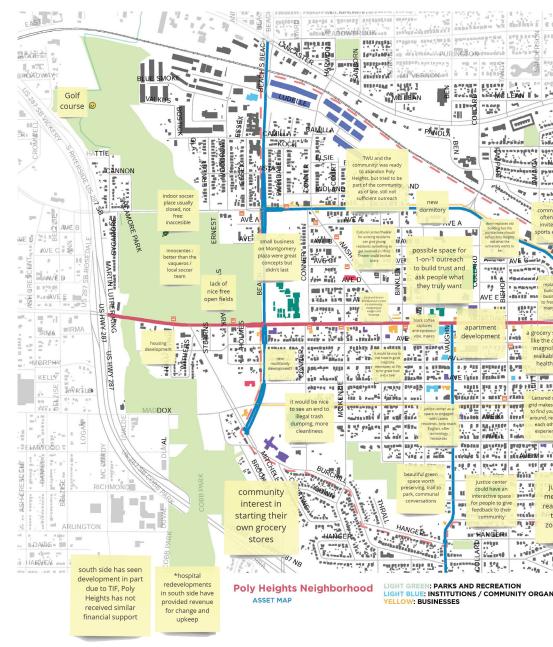


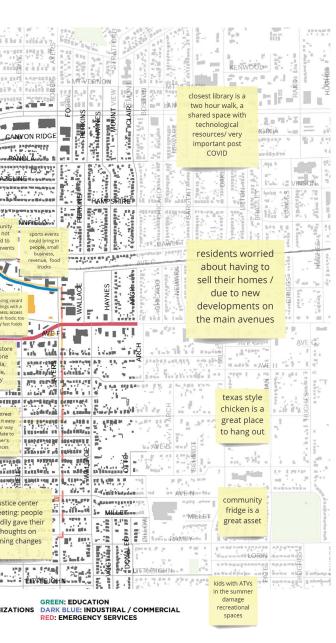
Please share any of your ideas for the neighborhood by typing them on a sticky note and dragging it where you see fit



POLYTECHNIC HEIGHTS NEIGHBORHOOD ASSETS

The Poly Heights Asset Board allowed the community members to locate and express areas and elements within the community that served as either a benefit to the community or expressed value to the Poly Heights area as a whole. Some examples include the community fridge, outreach centers, and small businesses. This board helped the students understand what elements the community values and wants to either highlight or potentially expand.





HOUSES OF WORSHIP

Polytechnic United Methodist Church Holy Name Catholic Church Zion Rest Baptist Church First Cumberland Church **Freshly Anointed Baptist Church** Glory Missionary Baptist Church Avenue L Baptist Church **Ministries Samaritan Church** New Vision Community Church Church of the Living God New Beginnings Baptist Church New Mount Carmel Baptist Church Templo Calvario FW Avenue K Church of Christ New Mount Carmel Baptist Church **EDUCATION Texas Wesleyan University**

Polytechnic Senior High School William James Middle School D. McRae Elementary School TA Sims Elementary School SS Dillow Elementary School Uplift Meridian Preparatory

PARKS AND RECREATION

Sycamore Park Titus Paulsel Park Hall-Tandy Triangle Park Englewood Park

INSTITUTIONS / COMMUNITY ORGANIZATIONS

Poly Heights Neighborhood Association El Shaddai World Outreach Center Center for Transforming Lives Polytechnic Boys & Girls Clubs of Greater Tarrant County Athletes Helping Kids Volunteers of America Sycamore Community Center Tarrant County Homeless Coalition Food Distribution Center United Fort Worth Community Justice Center

BUSINESSES

Foodland Black Coffee Ben's Triple B West Express Eatery Speedway Car Wash Delia's Beauty and Barber Salon Klazz Beauty Salon Upright Barber Shop Mi Salon Taqueria La Guelaguetza Dos Amigos Taqueria Taqueria Y Birreira Tres Coronas Marisco La Jaibita M&A Food Store **Dallas Food Store** Wayne's Grocery Store Family Dollar Nashville Food Mart **Unique Cleaners** Julio's Garage **Curbside Convenience & Donuts**



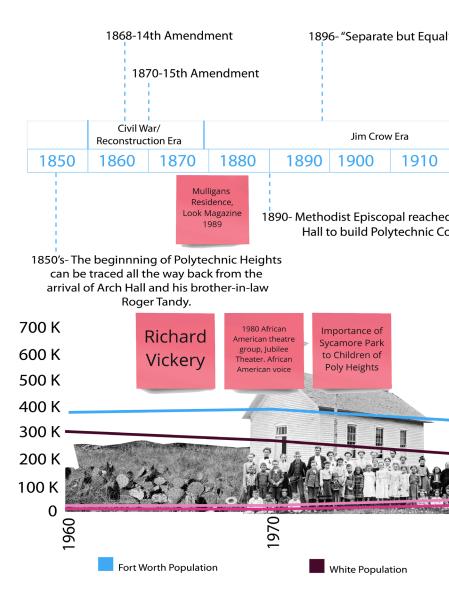




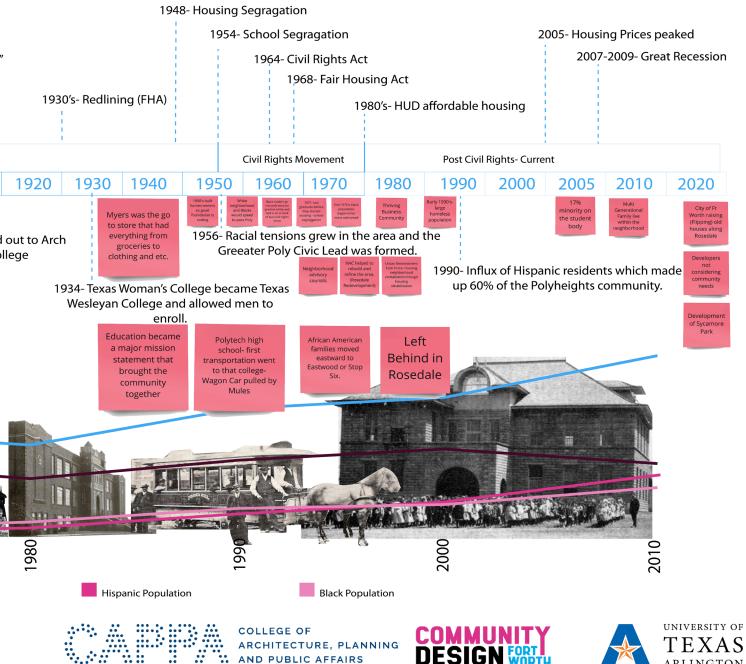
History Board

Polytechnic Heights Through

The History Board presents a historical timeline of the area and encouraged the members of the community to add or expand on it based on their personal knowledge or experiences. Many of the visitors were able to further expand on the history of Poly Heights through their own personal experiences. This allowed for a deeper contextual knowledge of the Poly Heights area.



out History

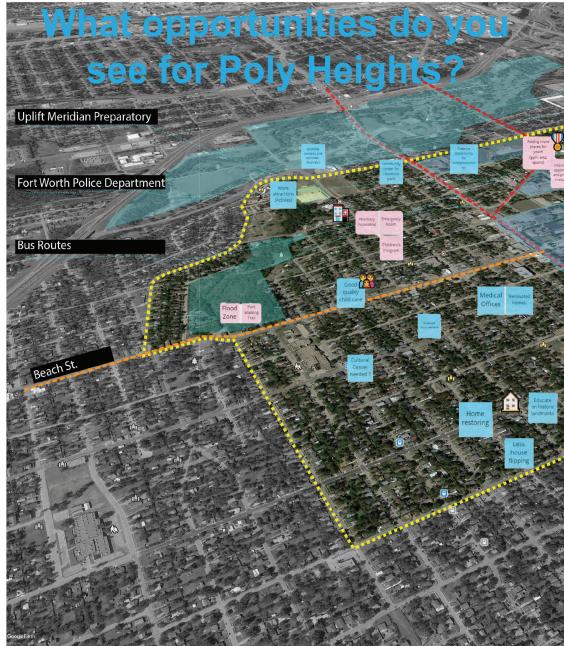


AND PUBLIC AFFAIRS

ARLINGTON

Opportunity Board

The Opportunities Board allowed the community to communicate what opportunities they believe are located in this area. This provided context for several new elements that would benefit the community. Some opportunities for Poly that were discussed include a renovated community center, closer medical offices, a community swimming pool, and a grocery store for fresh produce. This board allowed inhabitants to use their knowledge to tell the students what needs to be renovated, changed, or altered. Without community input, this would have been very difficult for the students to discover.



College of ARCHITECT









Which parks are more convenient for you to visit? And why? ¿Cuales parques son mas convinientes para usted? ¿Y porque?

,	Nearby location
---	--------------------

What opportunities do see for improvements in parks? ¿Que oportunidades pueden tener para mejorar los parques?

Clubhouse (fixed) and Amp. theatre.	Lighting	Equiptment for exercise	Restrooms (placed in clubhouse if possible)
for	Independent	Bike racks	Public wifi
events	food trucks	Bike lanes	(hotspots)

Are the health care centers being used? ¿Las clinicas de salud si se ocupan?



Where is it convenient to add another health care center? ¿Donde sera mas conviniente para tener otra clinica de salud?



Do you see any improvements for schools around the area? ¿Mira alguna oportunidad para mejorar las escuelas en la area?



E Lancaster Ave could possibly have an opportunity for projects E Lancaster Ave tiene posibilidades unas oportunidades para unos projectos.



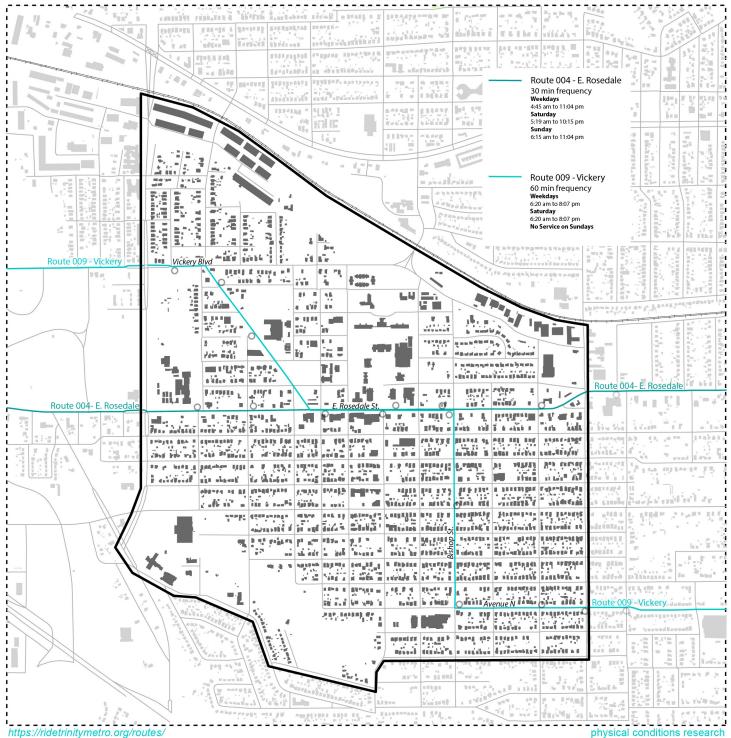
Physical Conditions

Through our investigation of the Poly Heights neighborhood we studied several physical characteristics of the area. These studies included public transportation accessibility, walkability, ecological regions, and topography. Similarly, further studies allowed for the investigation's expansion of the area's physical conditions on a broader spectrum. This research included, zoning, 1930's redlining, vacant lots, education, and religious program. This investgation helped to better understand how the neighborhood functions, elements that are accessible to the community, and the factors that influence its current condition.

Education Diagram

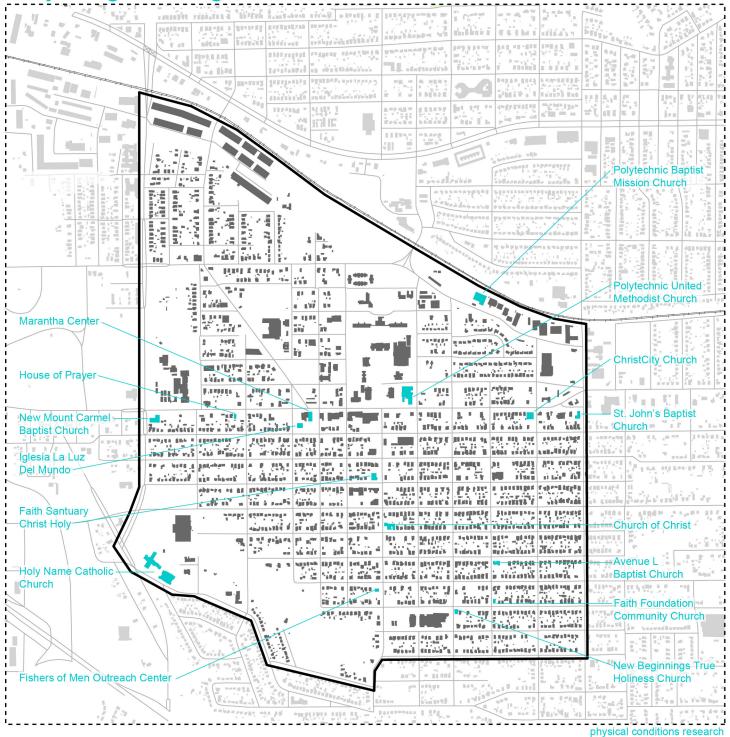
	anterier singer a bereiten eine anterier in der eine singer ander eine singer ander eine singer anterier einer singer anterier	10/
	[1] Statistical Andrew Statistical Statisti Statistical Statistical Statisticae Statisticae Statisticae Statist	
		A the second
		10.0
		12 21
		-
		Contract of the local division of the local
William James Middle	n pierellenten findensete einen bie eine bie eine bie einen bie einen bie einen bie einen bie eine bie eine bie	
School		
		ALL OF AL
		18
		1 11
88a, 1		1111
· · · · · · · · · · · · · · · · · · ·		
		و چا مز
		T
1		
Polytechnic Senior	e wesleyan University	12
High School		
	side in a fie 🛛 🕴 👘 👘 👘 👘 👘 👘 👘	1
		33
		-
	frei befeite errie beite fit eriebeite - went ber befte unter befter ein fin eine biete fichenen bereich beite	$\mathbf{i} = \mathbf{b}$
	Leave we a desired by highly the fourth first the stand of the bar	(0,0 a)
	Ber bie ein ber beiten und ber beiten werten ber beiten werten ber	, 5 ,
	in er berging persenen und eine Berging under in eine Bergins beite für Bergingen ber Berging Bergingen Bergin	5.1
	abare to as a substitution and a finally many finally many basis are are at a substitution of a sub-	
Uplift Meridian Prep	auff ihr a bei bereite bereiten unter in die bereiten einen bei bereiten bei bereiten ber bereiten ber bereiten ber bereiten ber	C
	and demonstrate and being a second and the second and the second se	15
	aufengenten finn und feinen Bauten in bei	- A
	an a	133
	🗶 📠	5.5
	🖕 📲 🐂 👘 🖓 🖉 🖓 🖓 🖓 🖓 🖓 🖓 🖓 🖓 🖓 🖓 👘 🖓 👘 👘 👘 👘 👘 👘 👘 👘 👘	à r
	and the state of t	
	- Anostre Ara an base of the set	-
	Broad turis a matter dan bereiten an ander an ander ander ander an ander an ander an ander an ander an ander an	~
		dia ta a
		1
		, X. T Nor
	Pakaayaya mir ji anginin ata ata ata ata ata ata ata ata ata at	1.0.1
·	physical conditions resear	irch
	physical conditions research	aut

Bus Routes



physical conditions research

Poly Heights Religious Institutions

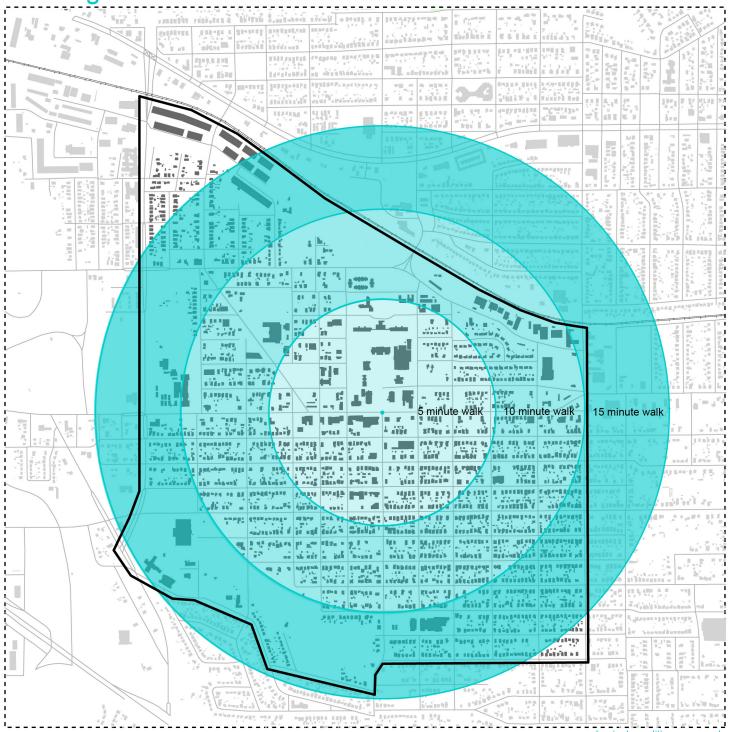


Green Space

	and and the	Antonia 1868 anton 1		1.1.1.1.1.1.1.1.1.1.1.1.1.1.1.1.1.1.1.	
	AND	나라 가지 않는 것 같아. 가지 않는 것 같아. 가지 않는 것이 없다. 가지 않는 것이 없는 것이 없이 않이 없는 것이 없이 않이 없는 것이 없는 것이 없 않이 않이 않이 않이 않이 않이 않이 않이 않이	Reference Park	i titui mari	
		International and the state of	Kly	de Warren Park),000 sqft	
	a an	REPRESENTATION OF THE PARTY OF	. 25 1.23 0		
		Alight and a set of the			
			- Inner	annannt ruhadann	
			- states	tellanadaatta aadalla k	
			A de la de la constance de la	 Président de la contraction de la c	
Middle School Track			States and	a gi ya ku ku aya da ya Kana ku	
and Field	ten an merten gente				
					Polytechnic Cemetary
High School Track		and a set of the set o			
and Field					
			The standard		Shalom Park
Football Field	A STREET ALS AND		4 - 22		
			an or a partie and a	programme a program a de	na se
	Providenti erte alle data	they fan antige a ges stores	B	nen net ber genne-tigt	Lange All the second states
	a state a particular state a s	August and and an a state	and the second states		A CONTRACT OF A
Hall-Tandy Triangle Park		allen and and a second	· · · · · · · · · · · · · · · · · · ·	a hanninger finterfinterin Vermitter	energet 1
	- Annie dan	anna ann an an Miriada	Cunnight une the merenbert	Bangen unter aufe Baraufet	
		f gelanes på att slåra e galf til	ten an an an and a state	nien gente unsprechtigte Bereichten Billereicht ge	Restant P
	X H	na a na santana baganta bataba Ana a na santana baganta bataba Ana a na santana bataba	a fabras firentes preingen		ten filten antikerten in Bener
Titus Paulsel Park			a and a second s	e ge energen ganteringer Bergeft blind eller äber v	Allen and an
	an a		an Denter and a state	r rangenaria rangentare Rangen al taut taut	1. If
			apontre des gab Baong at Bésard tendén ^a n a rajaha	Aufersteine Belefen an	
	the second secon				
			in the second se		
16	Pakserers,				

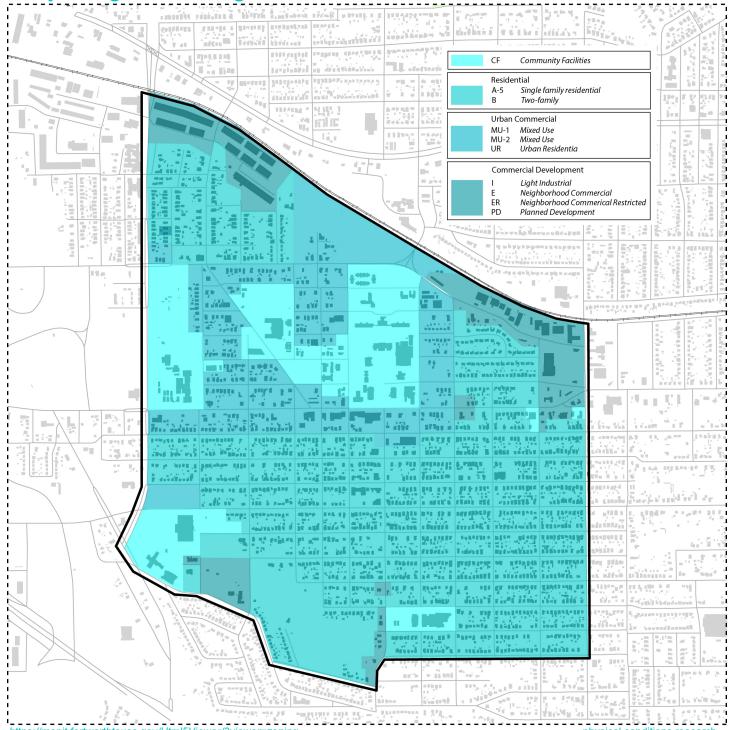
physical conditions research

Walking Radius



physical conditions research

Poly Heights Zoning

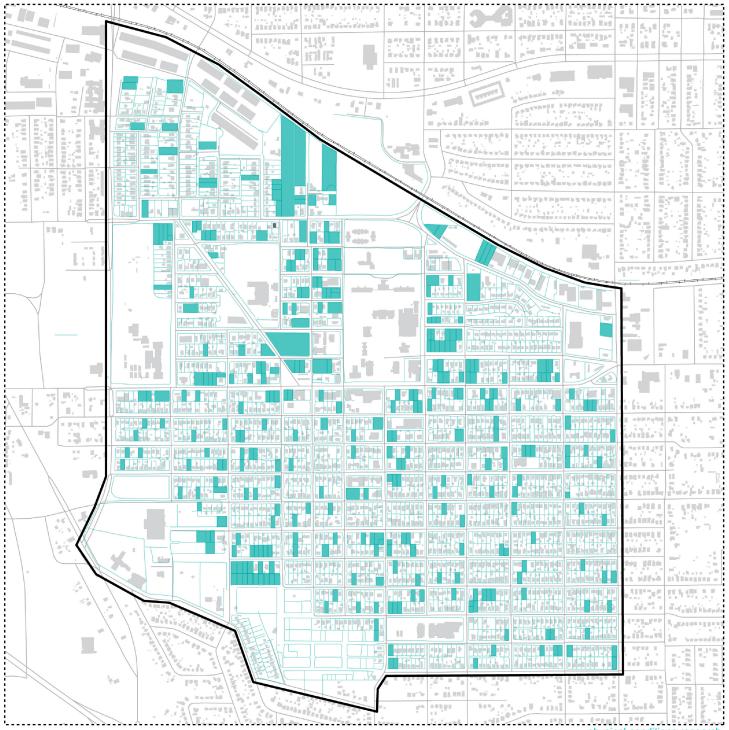


https://mapit.fortworthtexas.gov/Html5Viewer/?viewer=zoning

61

physical conditions research

Vacant Lots

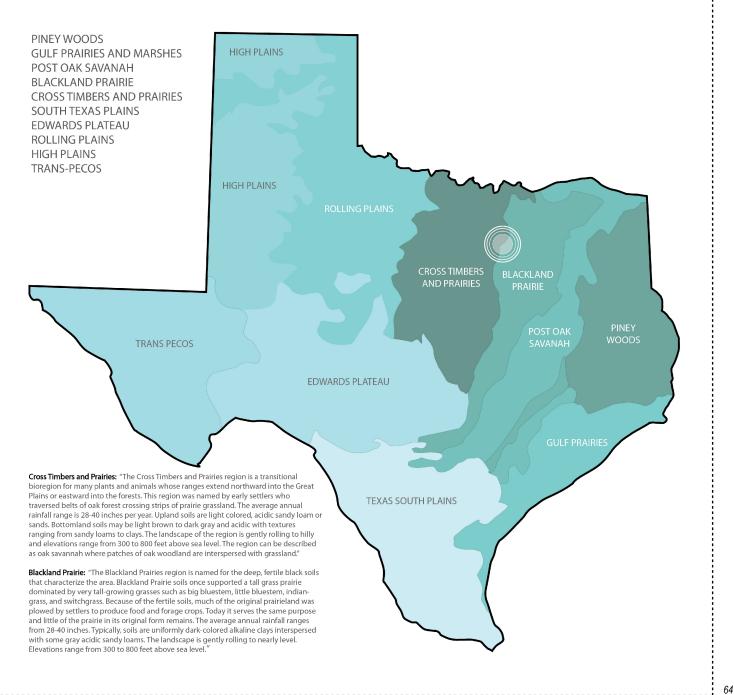


physical conditions research

Lighting



Ecological Regions

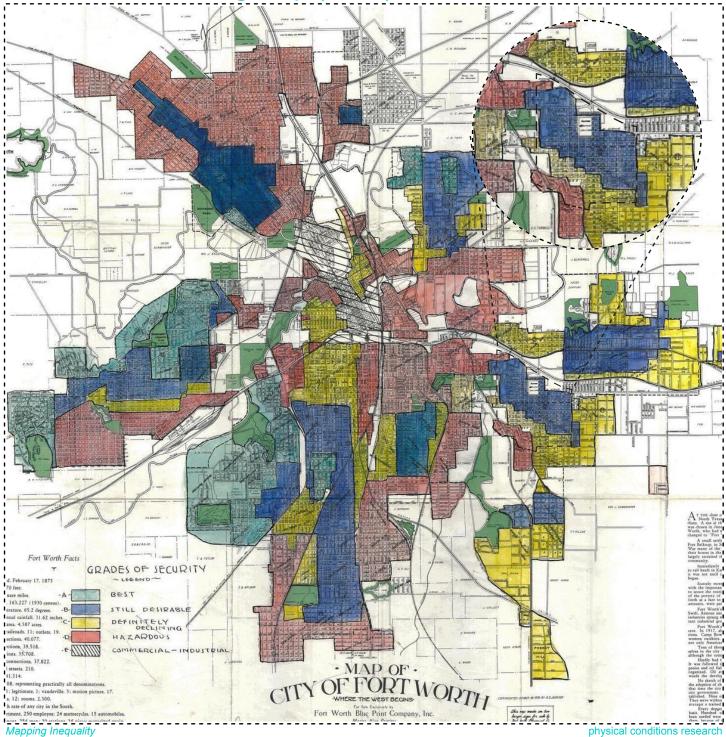


Topography



physical conditions research

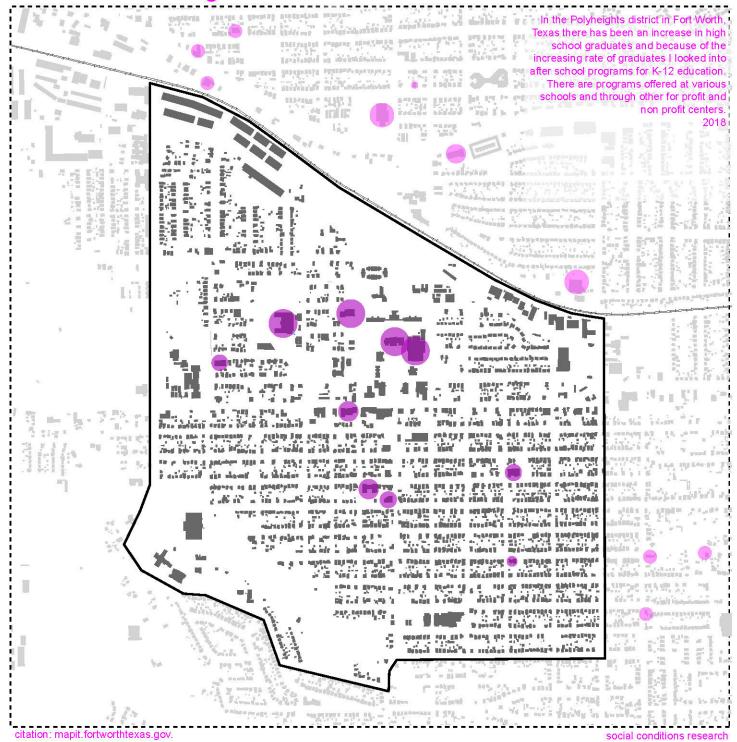
Fort Worth Redlining Map (1930)



Social Conditions

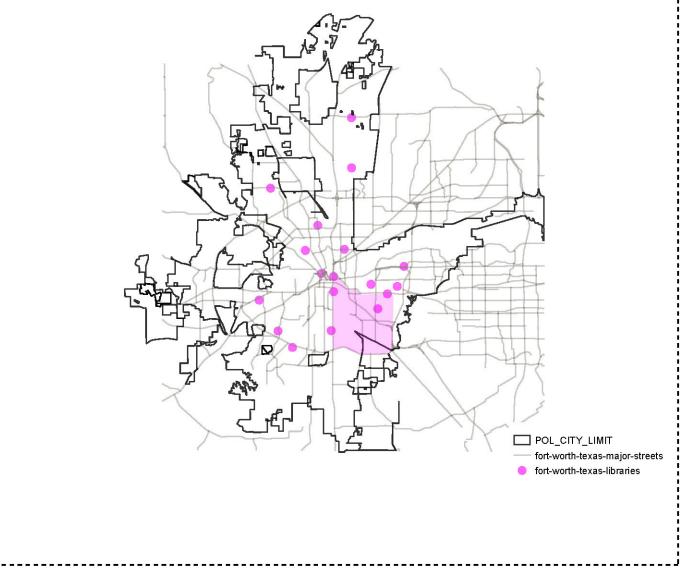
Sources available to the community of Fort Worth and Poly Heights. Through our investigation into Poly Heights neighborhood we thought it would be important to research how the community functions with the resources available. We looked into various social conditions including crime, healthcare, education, and transportation options.

After School Programs



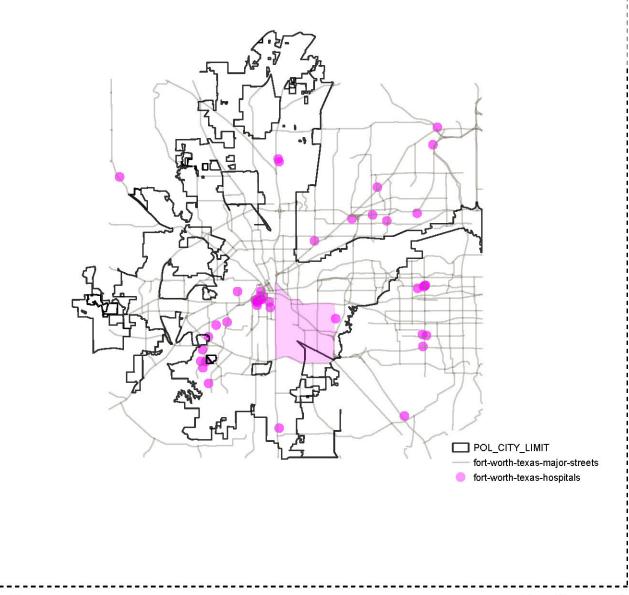
Libraries

In the Polyheights district in Fort Worth, Texas there are low literacy rates therefore we looked into the libraries in the area to find locations where books were available to the public. 2018



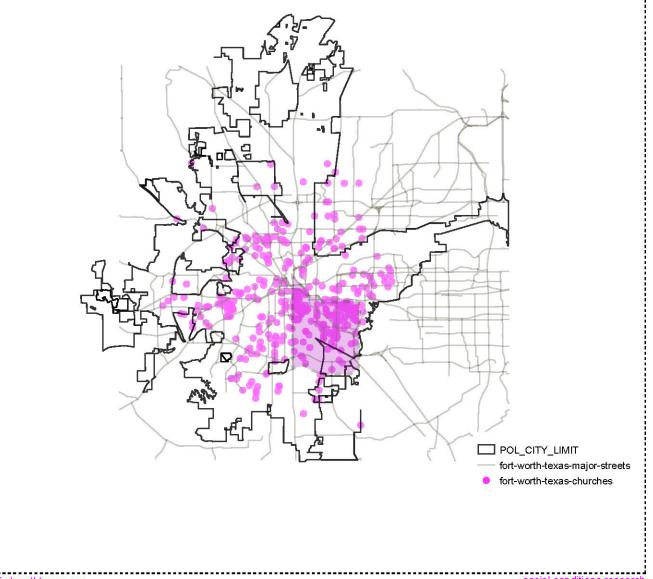
Hospitals

In the Polyheights district in Fort Worth, Texas there has been an increase in health problems therefore we researched where you could recieve healthcare in Fort Worth. There are numerous clinics and facilities associated with hospitals. 2018

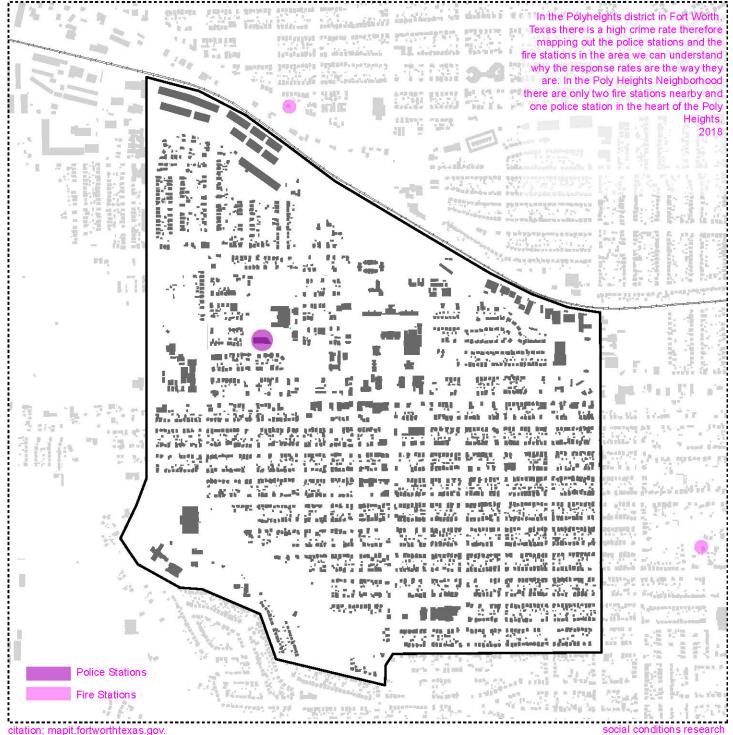


Church Locations

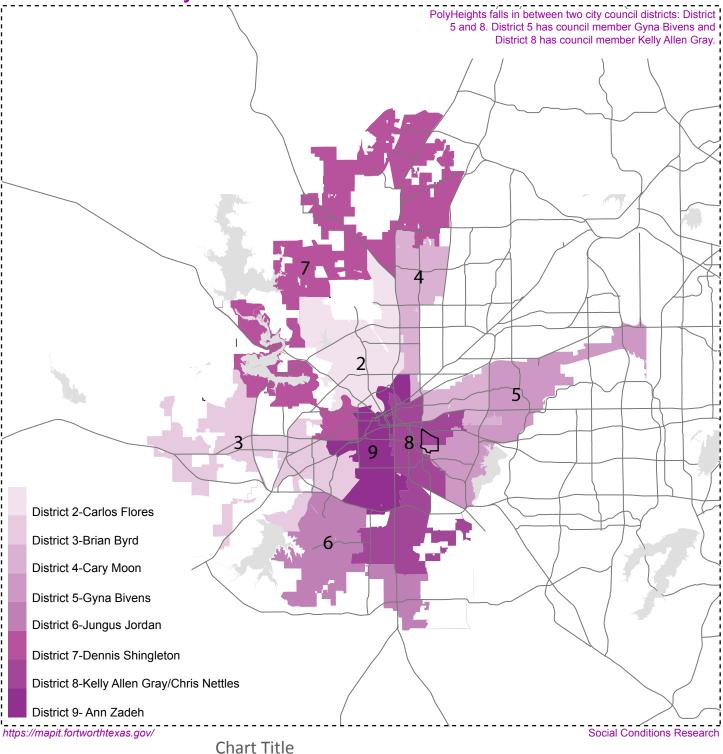
In the Polyheights district in Fort Worth, Texas there are numerous churches that allow for people of different religious groups to practice their faith. 2019



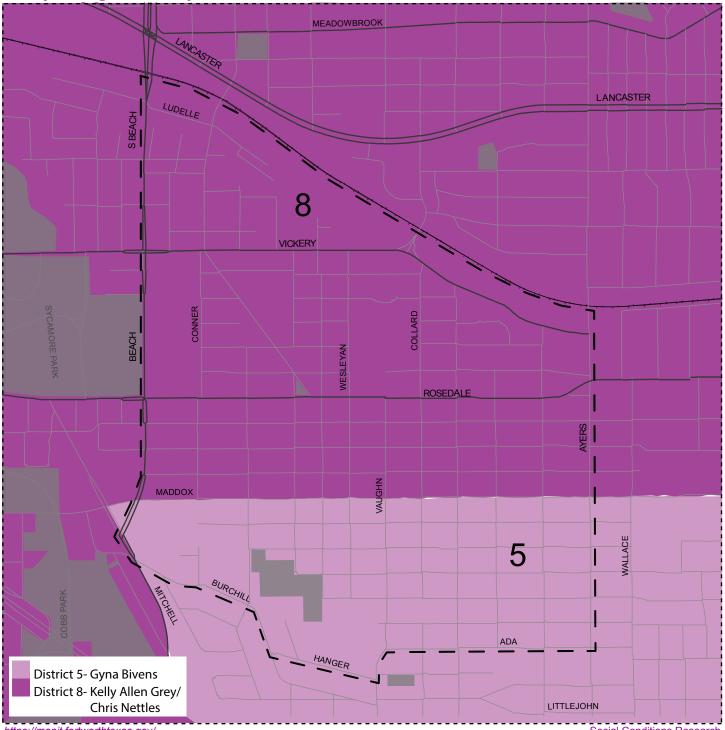
Police Stations/Fire Stations



Forth Worth City Council District



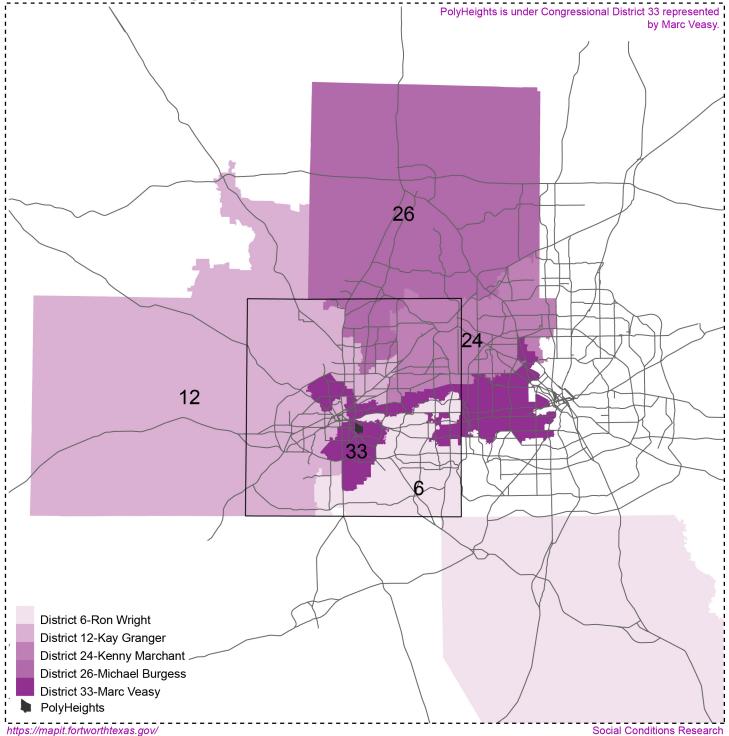
PolyHeights City Council Districts



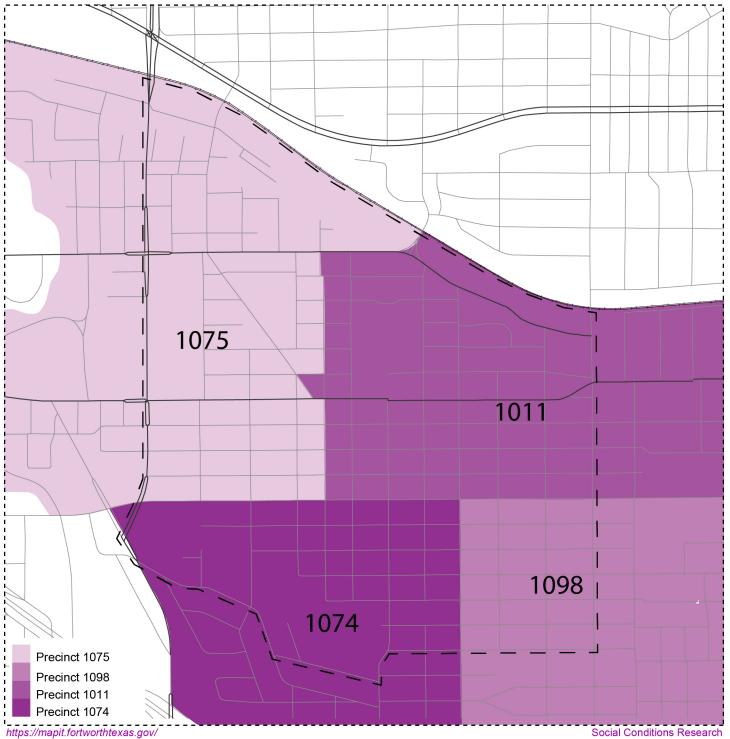
https://mapit.fortworthtexas.gov/

Social Conditions Research

Fort Worth Congressional Districts



Voter Precincts

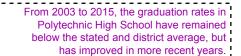


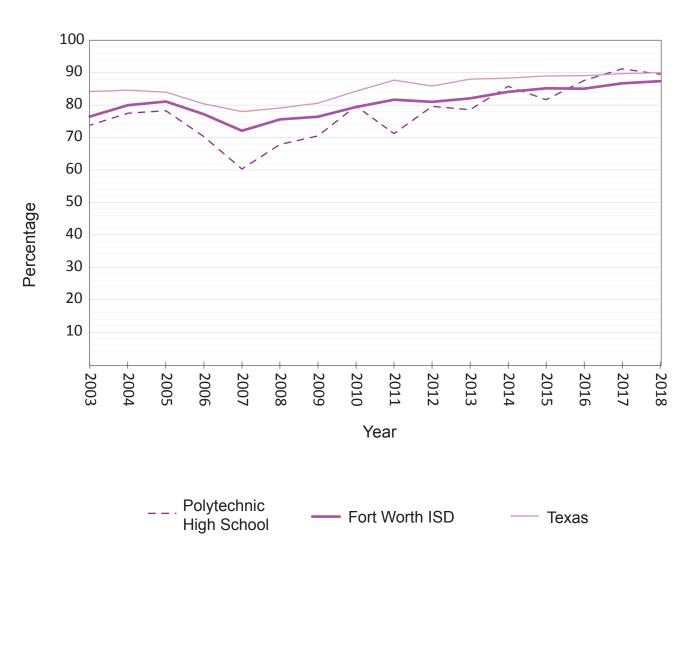
Educational Attainment (2018-2019)



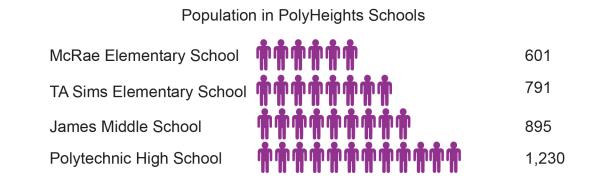
https://schools.texastribune.org/

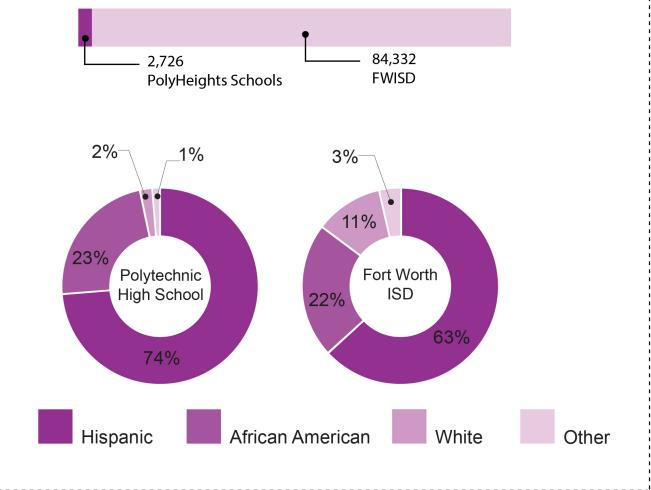
Graduation Rate Over Time





Education: Population & Ethnicity (2018-2019)



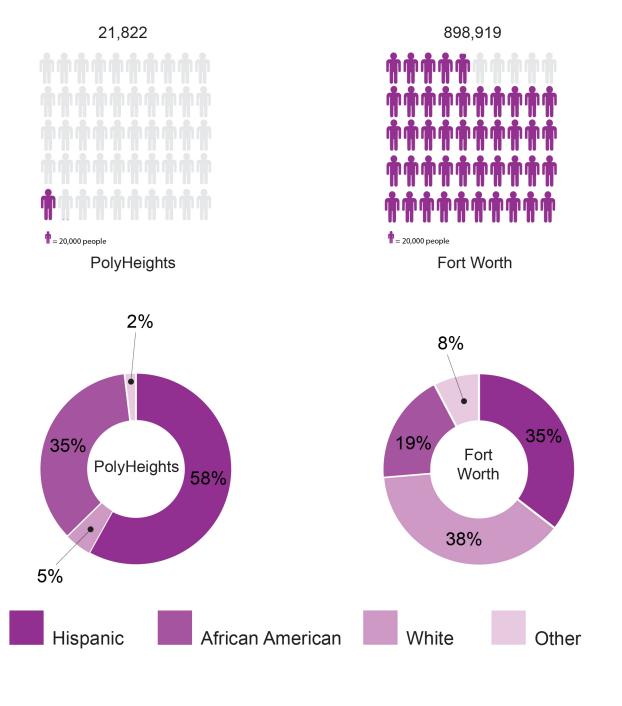


https://schools.texastribune.org/

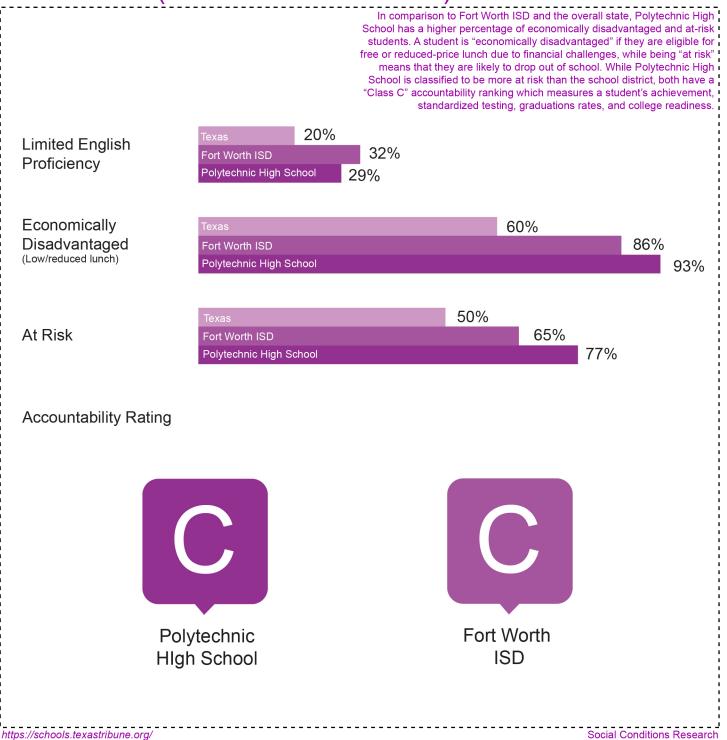
79

Social Conditions Research

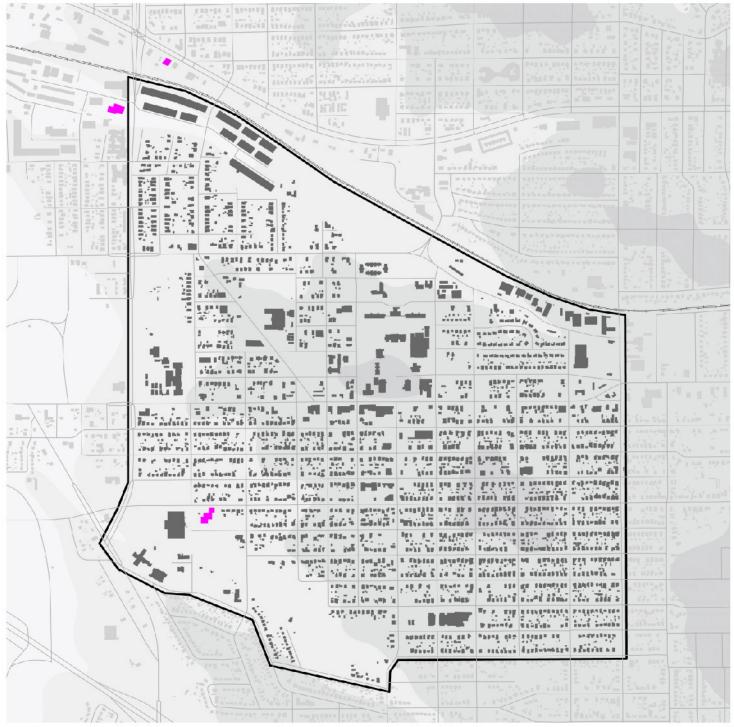
Population & Ethnicity (2018)



Risk Factors (2018-2019 School Year)

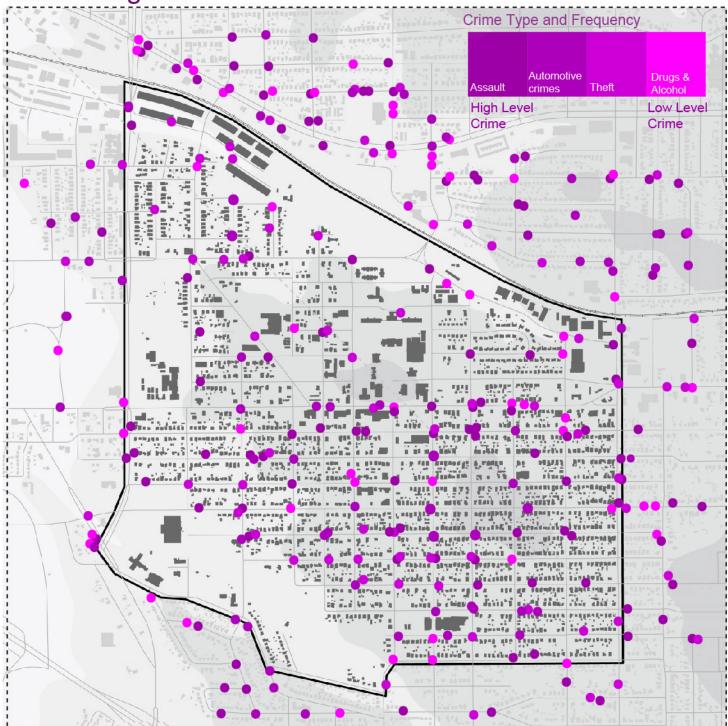


Homeless Coalition and Centers



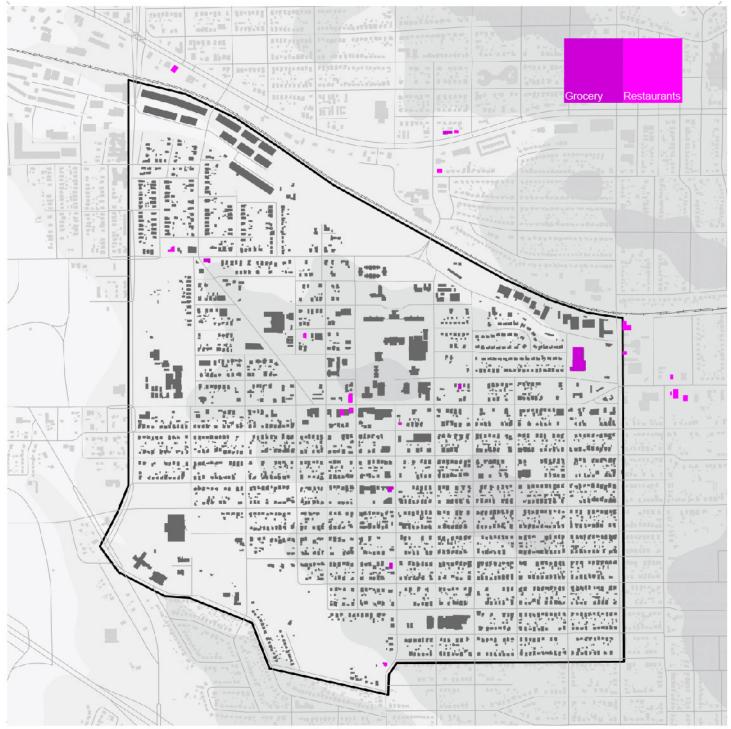
Crime Diagram

Pre-Covid



January 2020 to March 2020

Food Source



Economic Conditions

The ethnically diverse Polytechnic Heights community is in an optimal location in regards to job access and opportunities with its proximity to Fort Worth's Central Business District. However, the neighborhood hasn't experienced an influx of new businesses and attractions like other neighborhoods surrounding the city center. The following graphics and statistics highlight the strengths and challenges of a neighborhood that was once considered ideal for Fort Worth's 'middle class.'

Key Statistics

Housing in 76105

Home Value (Percentage of Occupied Housing Units) Fort Worth Median Home Value: \$185,000 (2016)

\$50,000 or Less : 15.24%

\$50,000 to \$99,999 : 24.72%

\$100,000 to \$149,999 : 2.26%

\$150,000 to \$199,999 : 1.43%

\$200,000 to \$299,999 : 0.18%

\$300,000 to \$499,999 : 1.33%

\$500,000 to \$999,999 : 0.41%

Building Age of Housing Units

Housing Unit Built 1939 or Earlier : 21.26%

Built 1940 to 1949 : 11.78%

Built 1950 to 1959 : 29.25%

Built 1960 to 1969 : 12%

Built 1970 to 1979 : 11.18%

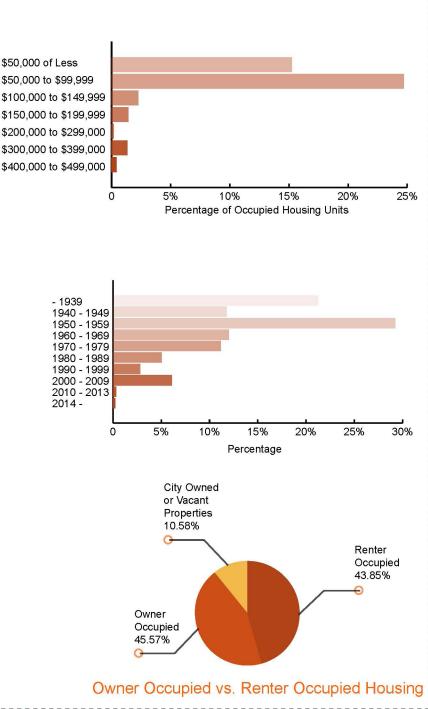
Built 1980 to 1989 : 5.05%

Built 1990 to 1999 : 2.82%

Built 2000 to 2009 : 6.11%

Built 2010 to 2013 : 0.33%

Built 2014 or Later : 0.22%



Economic Conditions Research

Key Statistics



Household Income (Number of Households)

\$10,000 or Less

\$10,000 to \$14,999 \$15,000 to \$24,999

\$25,000 to \$34,999 \$35,000 to \$49,999

\$50,000 to \$74,999 \$75,000 to \$99,999 \$200,000 or More

0

76105 Median Household Income: \$29,423 Fort Worth Median Household Income: \$58,448

\$10,000 or Less : 1,387

\$10,000 to \$14,999 : 373

\$15,000 to \$24,999 : 1,139

\$25,000 to \$34,999 : 797

\$35,000 to \$49,999 : 1,002

\$50,000 to \$74,999 : 1,041

\$75,000 to \$99,000 : 397

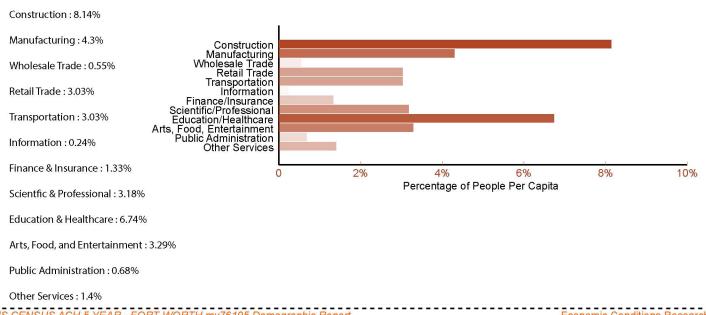
\$100,000 to \$149,999 : 348

\$150,000 to \$199,999 : 35

\$200,000 or More : 47

87

Civilian Employment by Industry (People Per Capita)



300

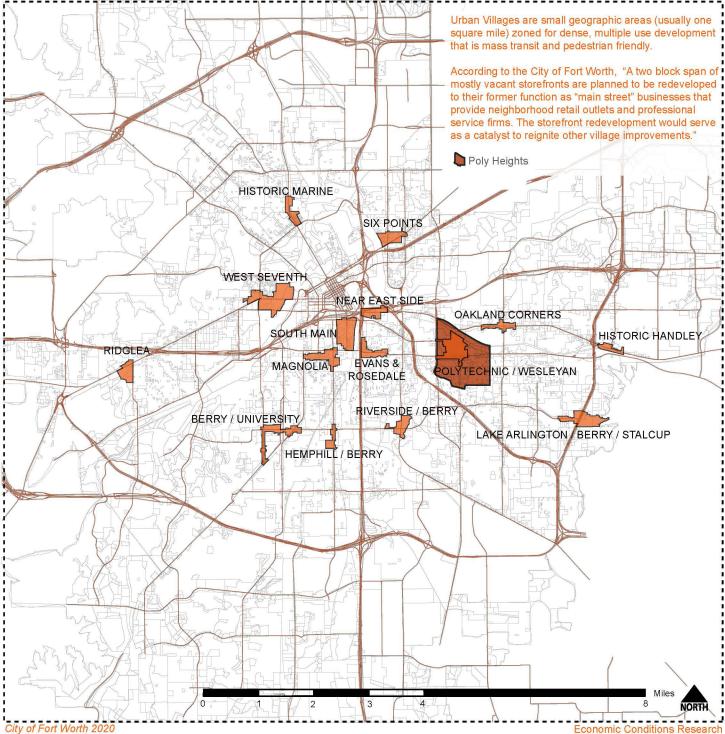
600

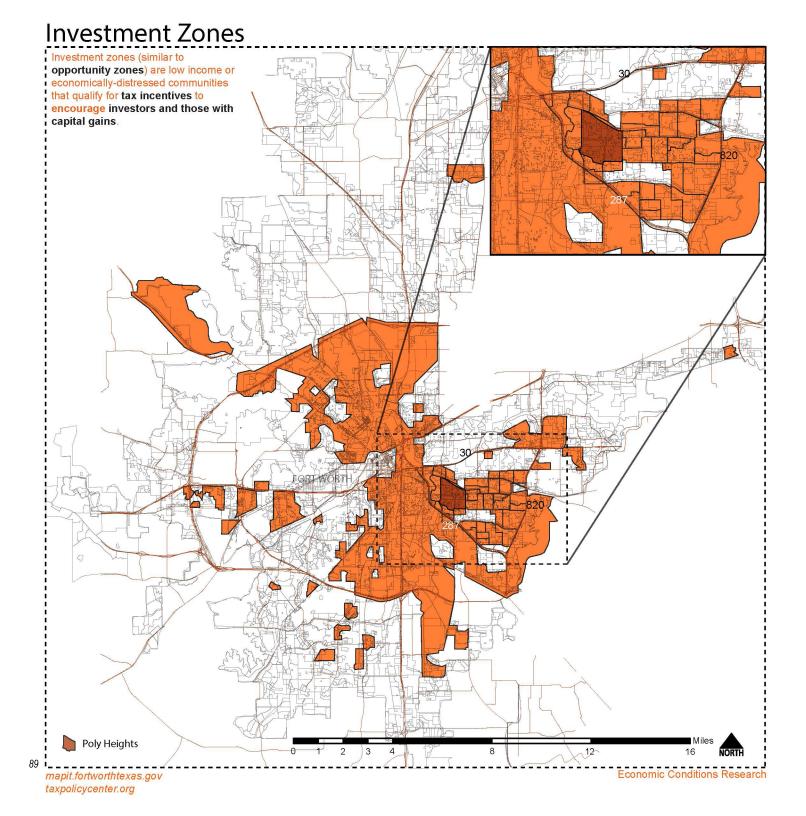
Number of Households

900

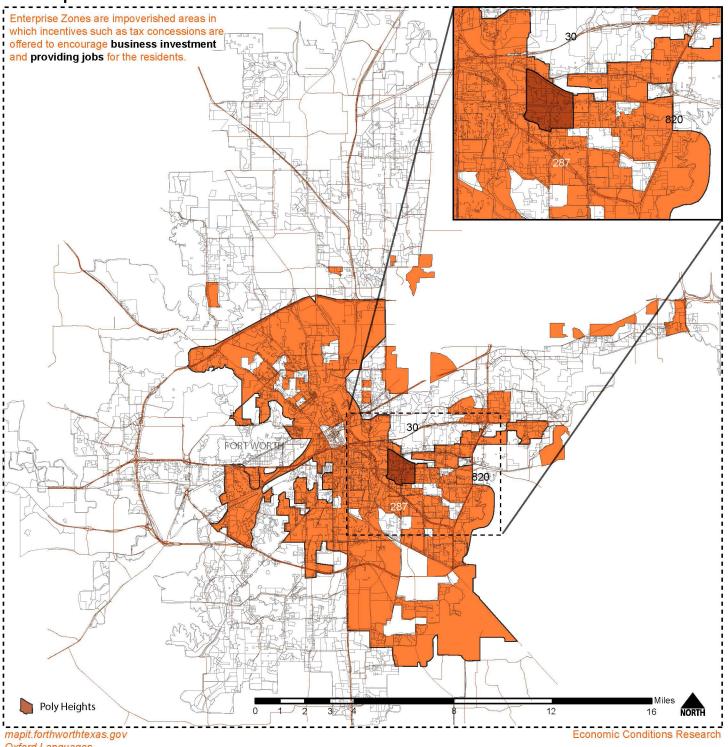
1200

Fort Worth Urban Villages





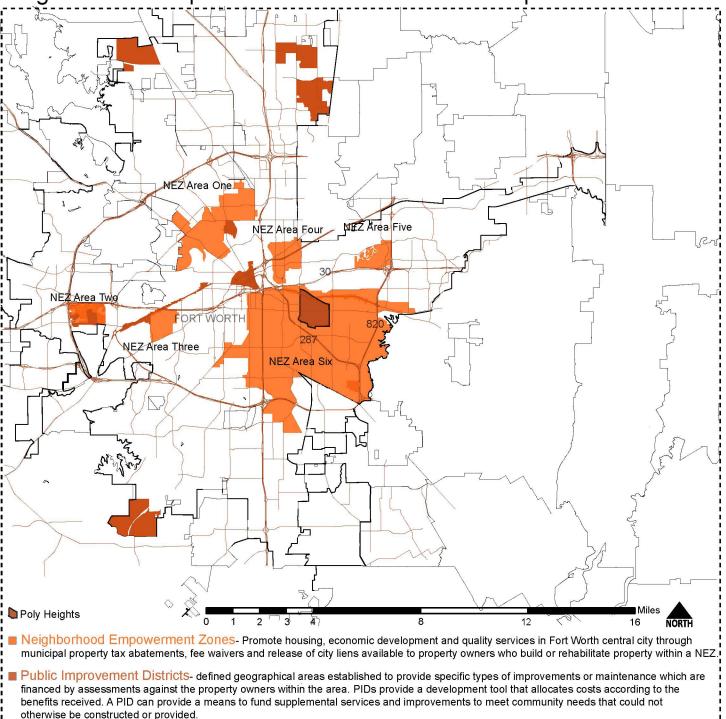
Enterprise Zones



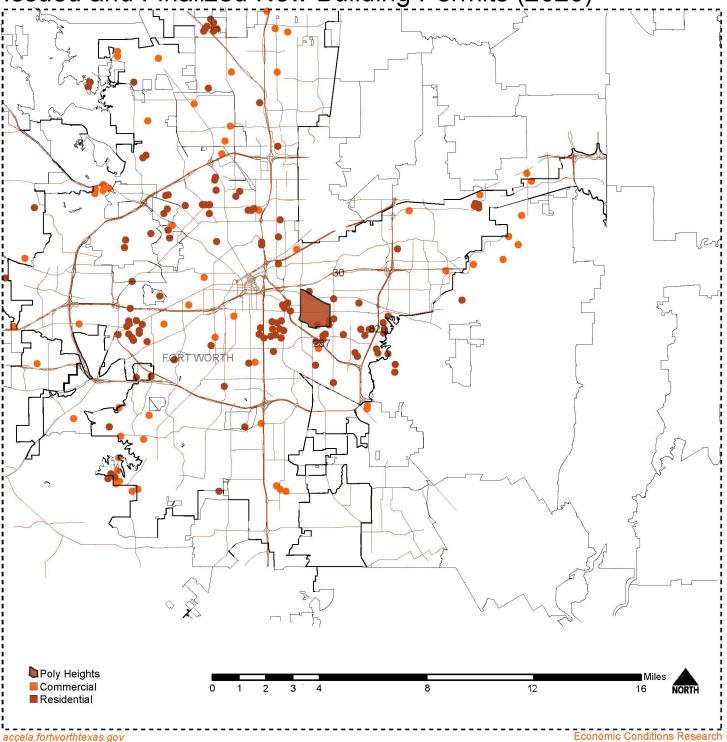
90

Oxford Languages

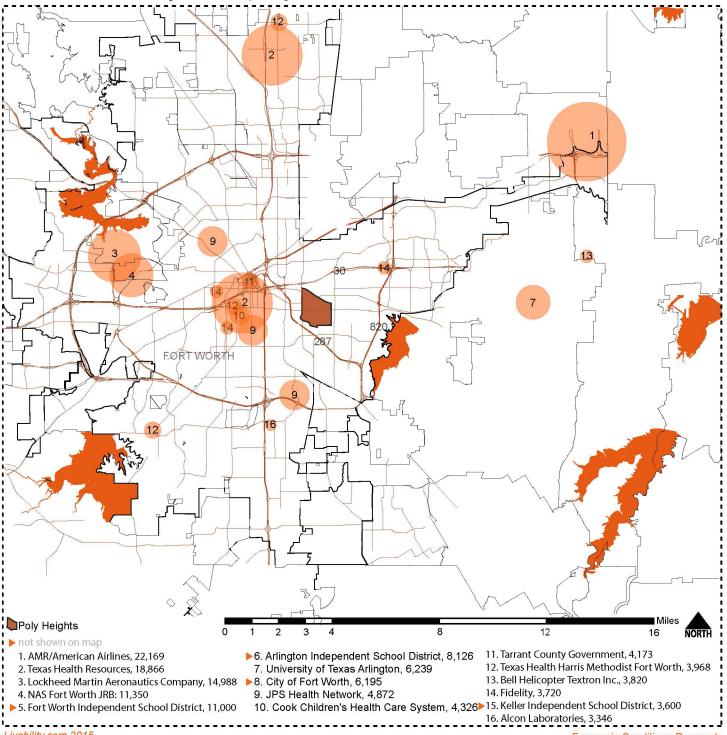
Neighborhood Empowerment Zones and Public Improvement Districts

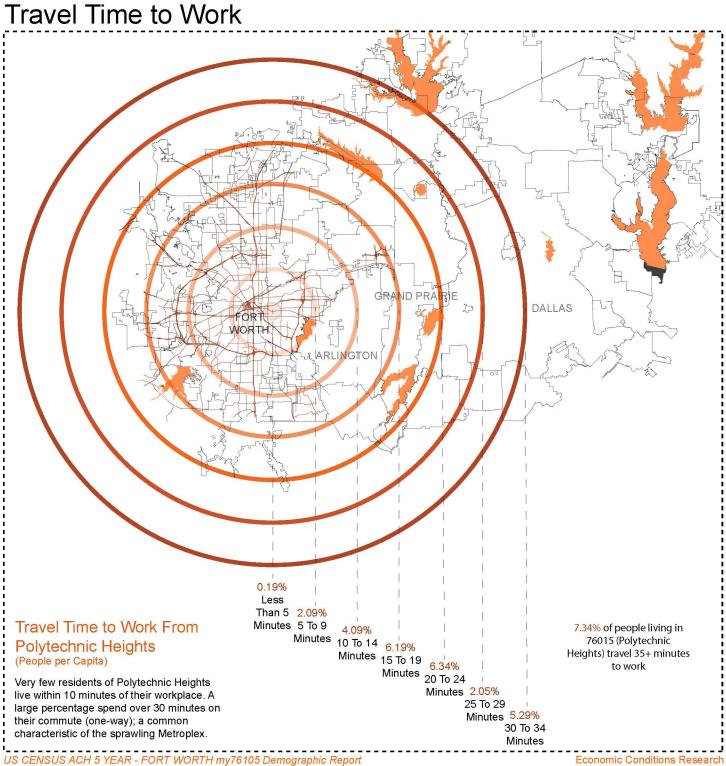


Issued and Finalized New Building Permits (2020)



Fort Worth Major Employers





Texas Wesleyan Univeristy Employment

Overview

Student to Faculty Ratio:	15 to 1				
Number of Faculty:	133 Full-time / 144 Part-time				
Number of Staff:	356 Full-time / 157 Part-time				
Faculty Average Salary:	\$68,143				
Staff Average Salary:	\$45,327				
Student Population:	2,236				

Average Faculty Salary by Academic Rank

Total 133 faculties (full-time instructional staffs) and the average salary for all faculties is \$68,143 (equated to 9-month contract).

The average salary of Professor is \$79,462 over 35 Professors.

The average salary of Associate professor is \$67,064 over 44 Associate professors.

The average salary of Assistant professor is \$64,671 over 45 Assistant professors.

The average salary of Instructor is \$46,758 over 9 Instructors

Average Staff Salary by Occupation

At Texas Wesleyan University, there are 223 full-time non-instructional staffs and the average salary for the staffs is \$45,327. Next list shows the average salary of population position at Texas Wesleyan University.

The average salary of Management position is \$89,637 over 42 Management staffs.

The average salary of Computer, Engineering, and Science position is \$58,308 over 3 Computer, Engineering, and Science staffs.

The average salary of Business and Financial Operations position is \$47,281 over 15 Business and Financial Operations staffs.

2019-2020

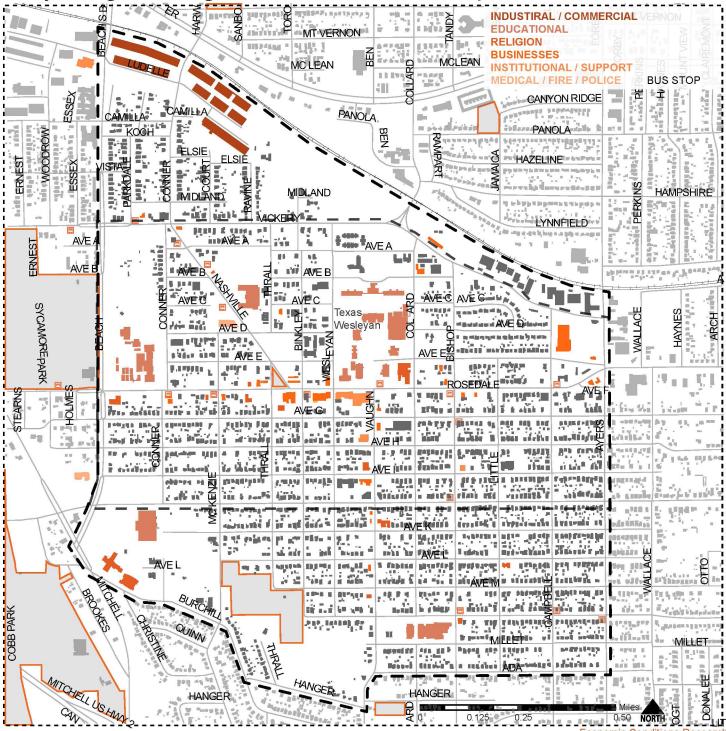
Faculty Profile

2016-2017

	Full-Time				Part-Time				
L School	Tenured	Tenured Track	Non Tenured	Total FT	Tenured	Tenured Track	Non Tenured	Total PT	Combined Total
Arts/Letters	24	4	6	34	0	0	39	39	73
Business	10	5	1	16	0	0	13	13	29
Education	18	9	1	28	0	0	28	28	56
GPNA/DNAP	2	1	8	11	0	0	2	2	13
Natural/Social Sciences	18	15	1	34	0	0	15	15	49
Provost Office	2	0	0	2	0	0	0	0	2
Library	3	1	0	4	0	0	0	0	4
Developmental Programs	0	0	6	6	0	0	2	2	8
Total	77	35	23	135	0	0	99	99	234

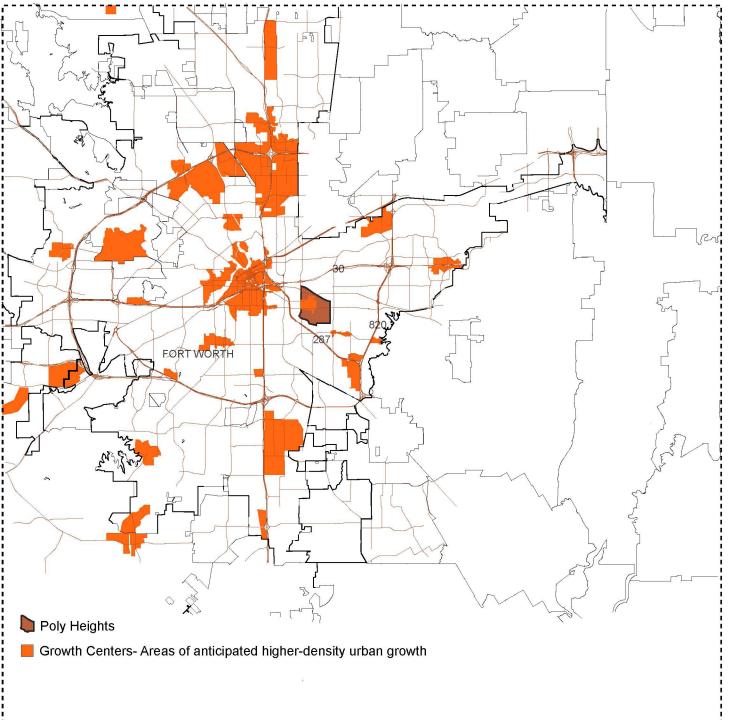
The number of full time faculty includes those with administrative rank, such as Provost Office, Library, and Developmental Programs Source: Human Resources faculty data October 2016

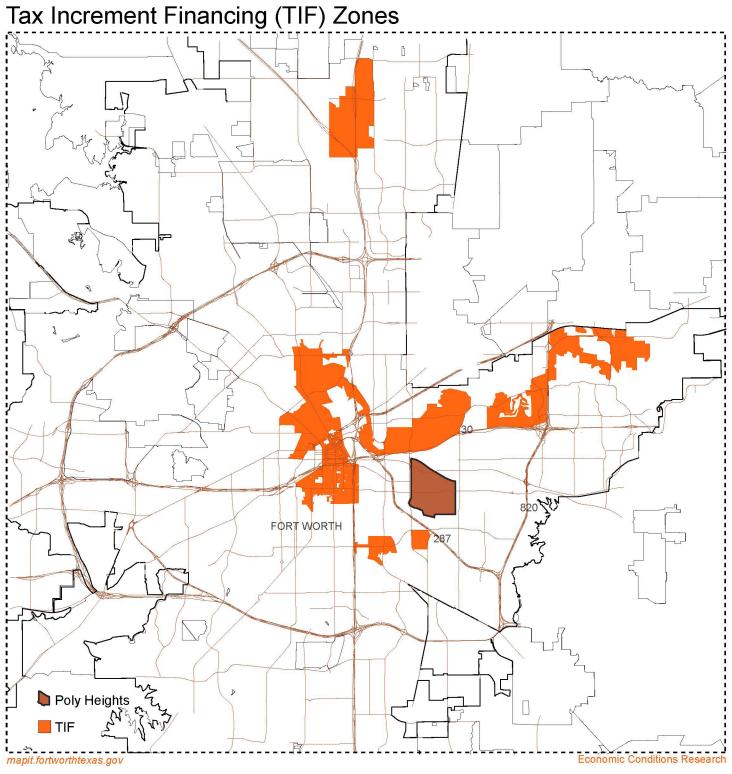
Poly Heights Neighborhood - Assets Map



Economic Conditions Research

Growth Centers



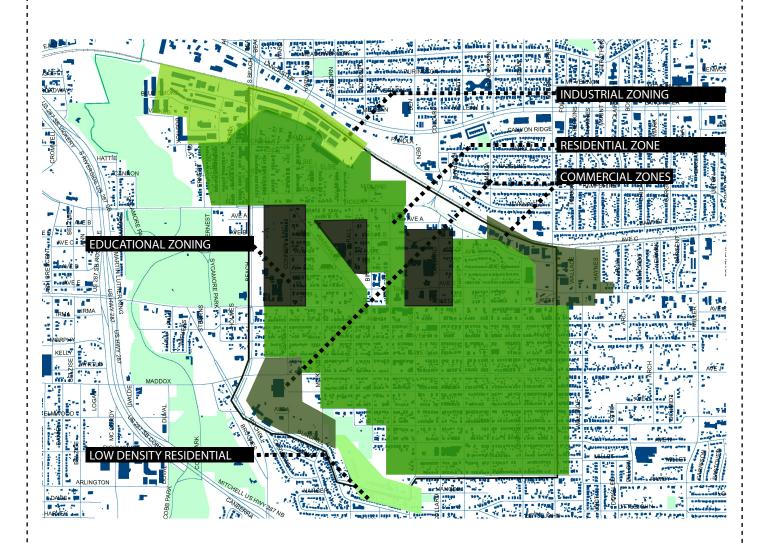


Environmental Conditions

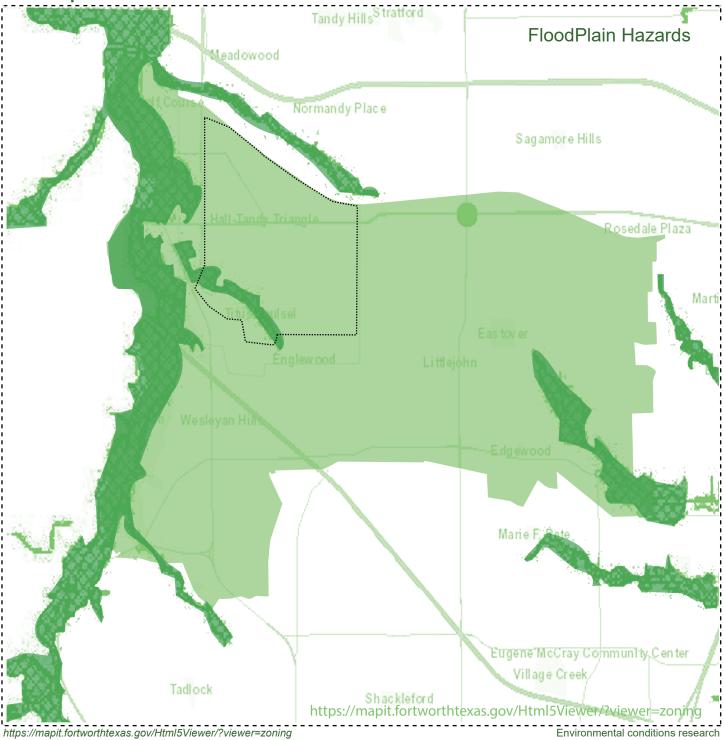
The investigation process consists of the existing environmental conditions of the Poly Heights community. This includes for the boundaries, demographics, cleanup locations, zoning, and rainfall/-flood hazards. The diagrams shown are important in the community to indicate a comprehensive understanding of the approaching neighborhood environment. Along with this understanding we can indicate improvement in the area that could make the neighborhood more efficient.

Zoning Map

Zoning areas in Polytechnic Heights community. This includes industrial, residential, commercial, and education zones in the area.

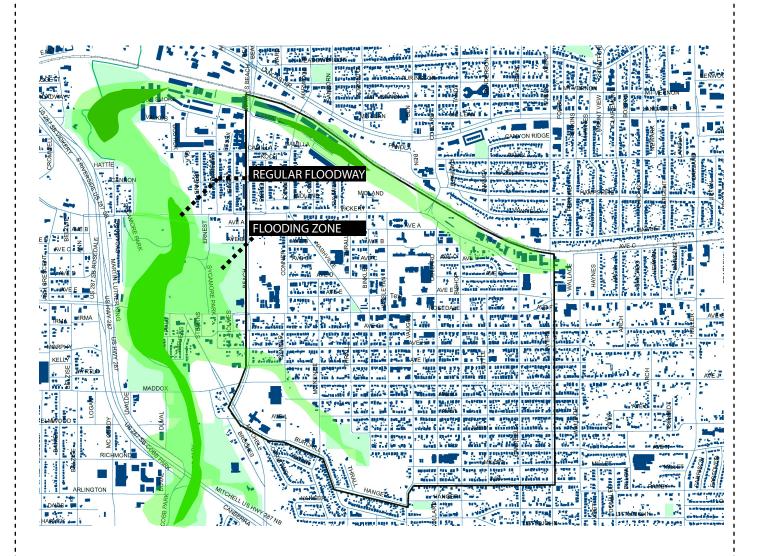


Floodplain



Floodzone

Flooding zones shows where the area in Polytechnic Heights mainly floods during a storm.



FEMA Flood Map Service Center: Search By Address. (n.d.). Retrieved November 24, 2020, from https://msc.fema.gov/portal/search?AddressQuery=polytech

Public parks

Size comparison between diffrent parks around DFW area



Public parks around DFW





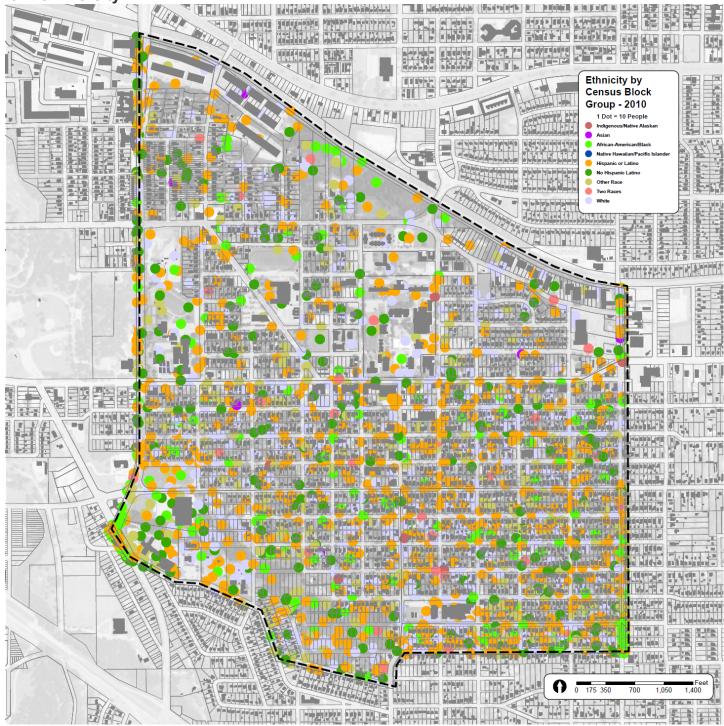
COMMUNITY-BASED MASTER PLAN

The community-based master plan started with additional research and community meetings to narrow down what could be evolved in Polytechnic Heights that would be accepted and embraced by community members. Using the previous research, a preliminary plan was developed and distributed around the neighborhood to get feedback from community members. With the feedback, the master plan was developed focusing on enhancing cultural activities and history, creating a sense of place, and preparing for future development while protecting the neighborhood characteristics. The master plan had four main focus areas such as street improvements, enhanced identity, community nodes, and local business + housing implementation.

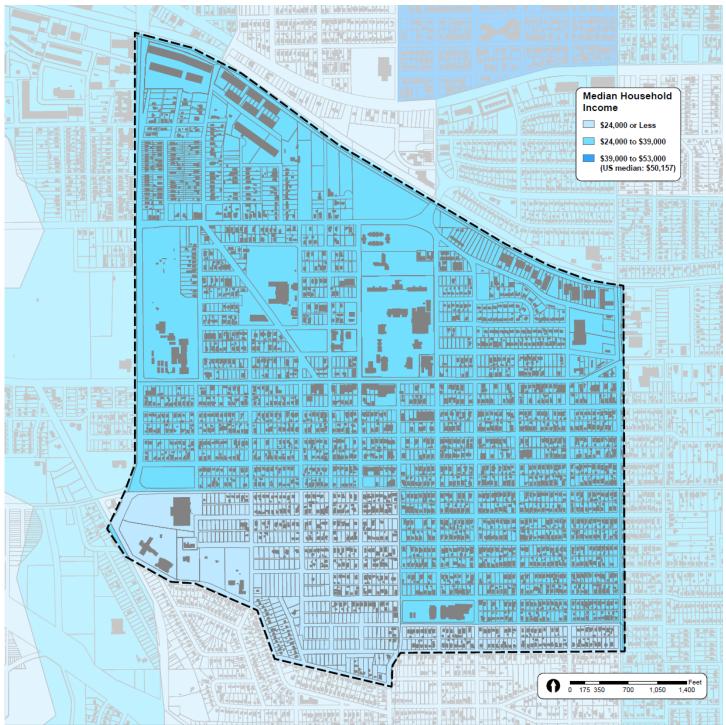
Site Analysis



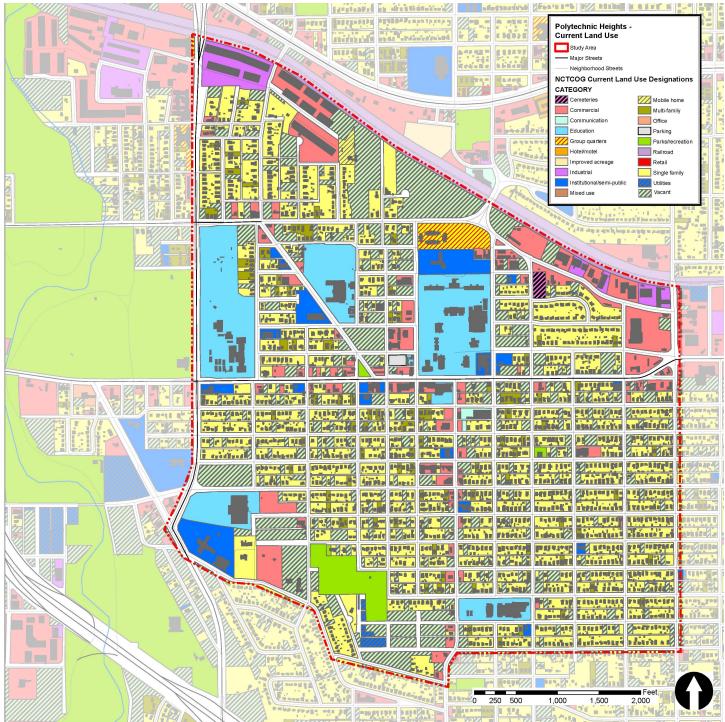
Ethnic Diversity



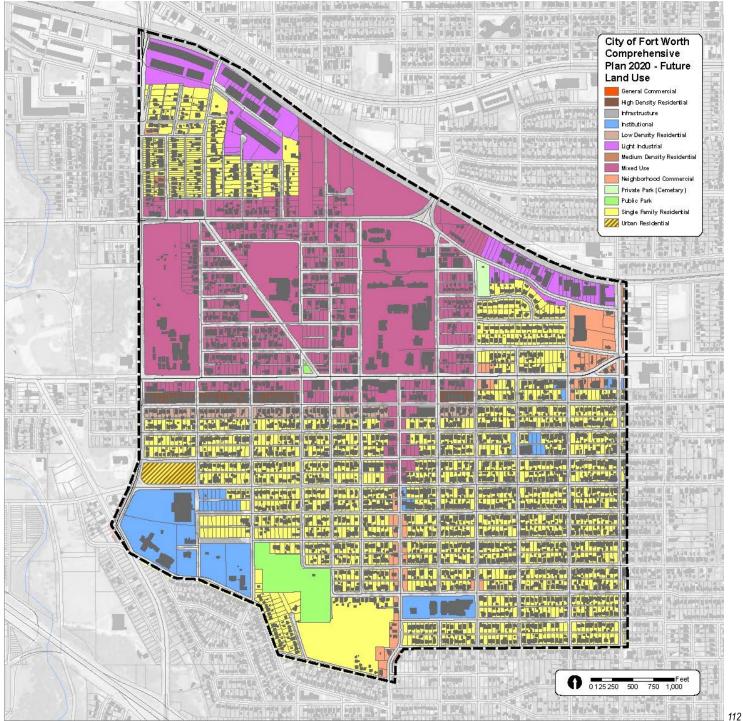
Median Household Income



Current Land Use

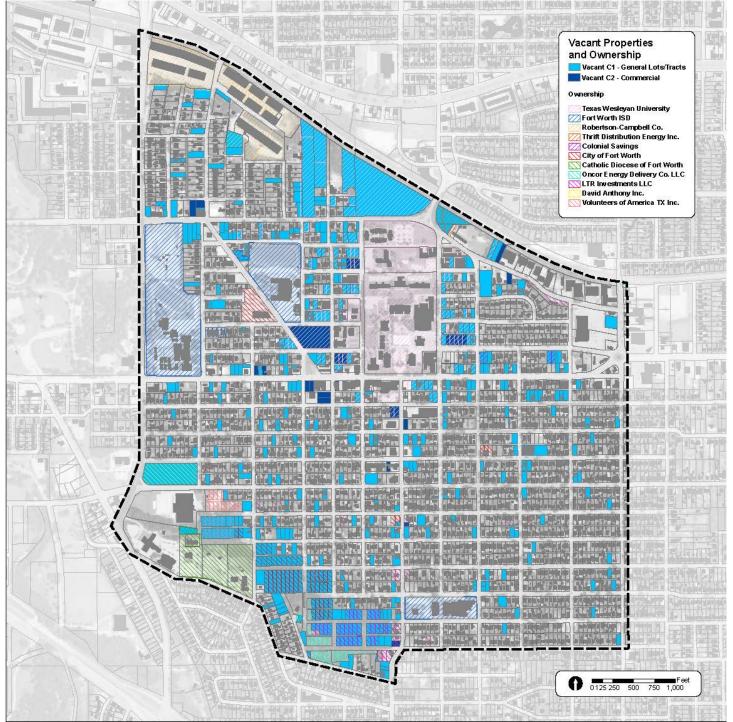


Future Land Use

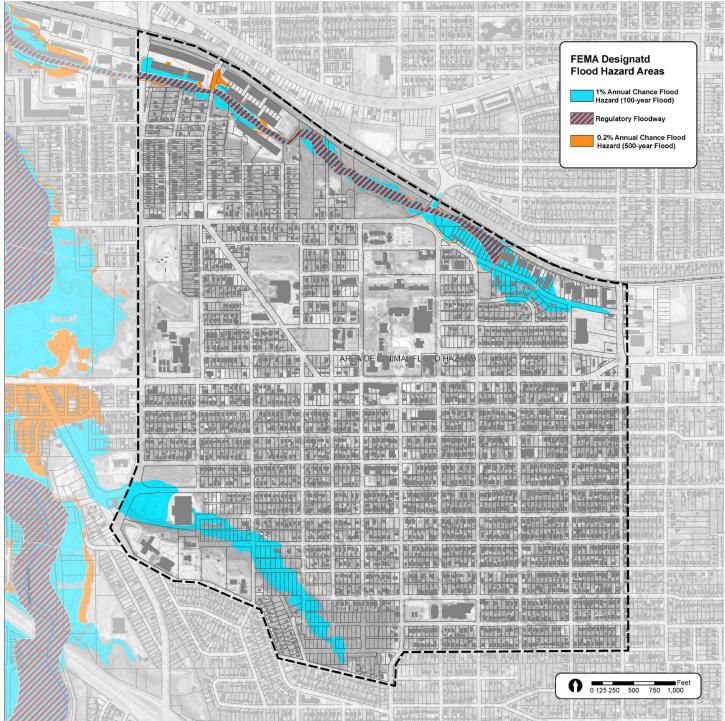


13

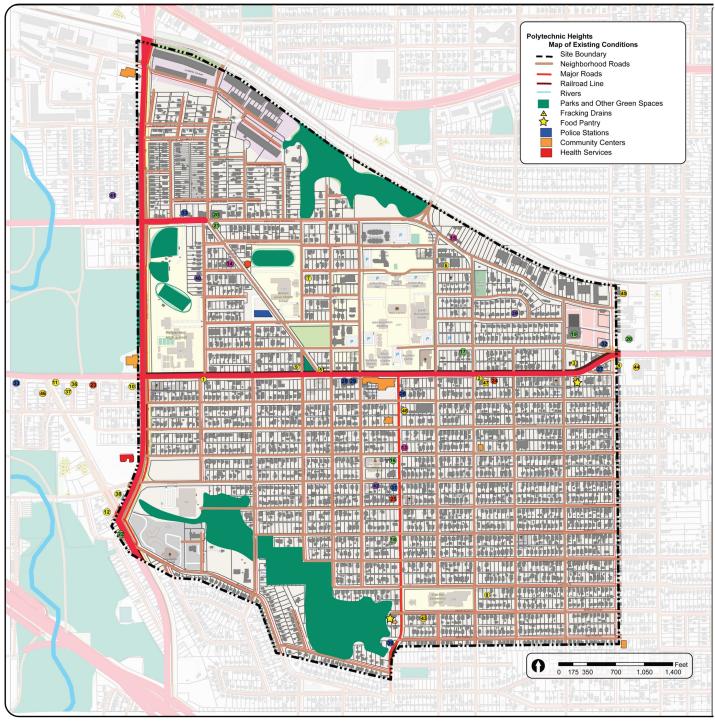
Vacant Properties



Flood Hazard Areas



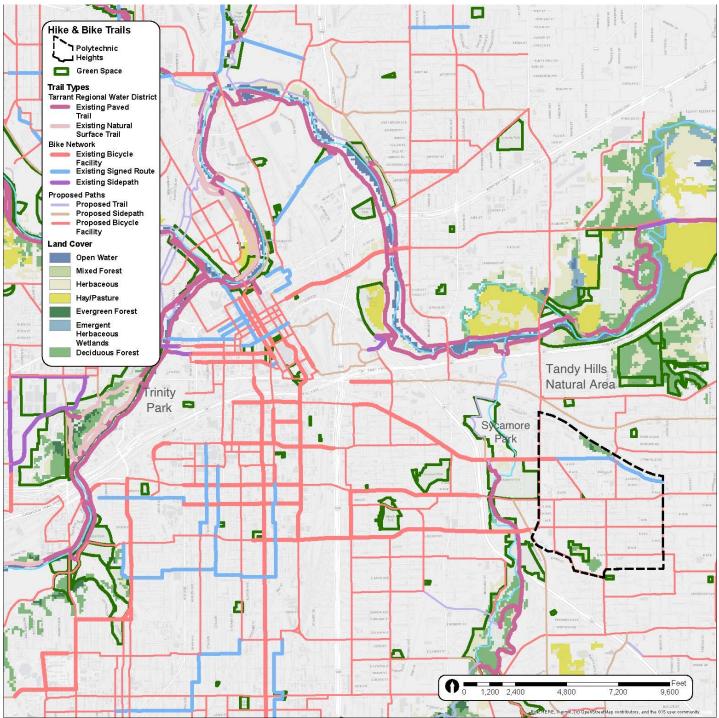
Existing Businesses

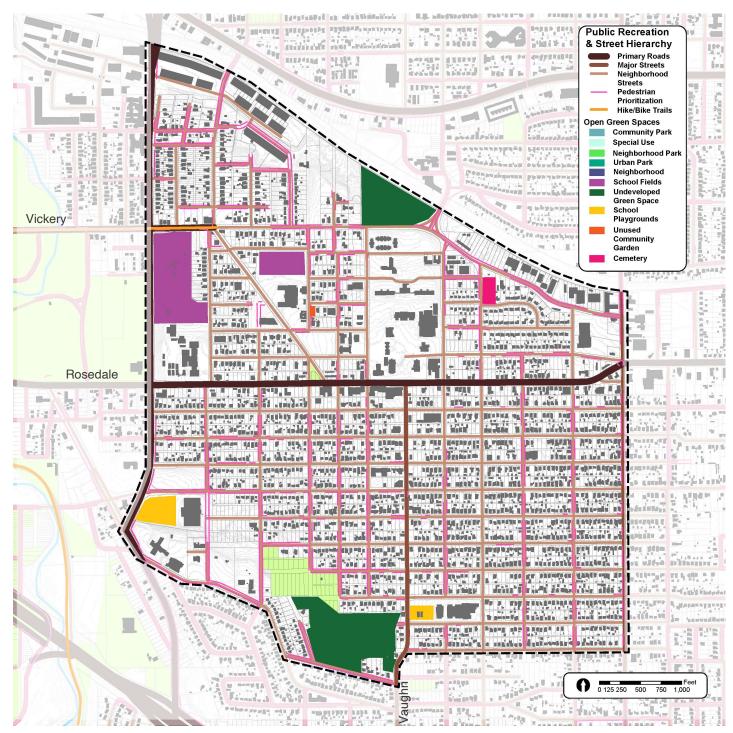




Existing Businesses							
Salons							
	Salon, BeYOUtiful Hair Studio						
Barbershops	Upright Barber Shop						
Gas Stations	Texaco FW, Dallas Food Store, Gas & Go, J						
	& K Food Store						
Car Washes	Speedway						
Cafes	Black Coffee, AM Donut & Coffee						
Dining	Subway, Triple B, Taqueria La Guelaguetza, Dos Amigos Taqueria, Micheladas Olmos, Taqueria Y Birrieria Tres Coronas, Bierra y Taqueria Cortez, Curbside Convenience & Donut						
Car Repair	Anderton Paint & Body, Armstrong Paint & Body, Vallin Shop Complete Auto, Five Star Tire Shop, Supreme Auto Services, Rosedale Auto Services, Top Shop						
Venues	Jazzy Lady, Chandelier Ballroom, Mi Salon						
Grocery	Wayne's Grocery, Frankie's Convenience, M & A Food Store, Foodland Market, Family Dollar x2, Nashville Food Mart, Rainbow People Foodmart						
Lawn Care	Green Car Services, Turfpro LLC, Juan Molinero Lopez Lawn Care, B&B Landscaping and Lawn						
Tax Service	Pot of Gold Tax						
Clothes	The Athlete's Foot, Botas Rojero						
Bank	Southside Bank, Western Union						
Auto Sales	B&R Auto Sales, Alex Autos, Amir Auto Sales						
Dry Cleaning	Unique Cleaners						

Street/ Trail Networks & Open Spaces





Social and Developmental Conditions:

The challenges we identified included the general walkability of the streets: many of the sidewalks in the residential areas and along the main arterials are broken up or very narrow, making foot traffic in areas difficult. Also, there was not much shade and few places to rest. There could be improvements made to the safety of pedestrian crossings and many of the busier roads could benefit from traffic calming measures. There could be more access to public gathering spaces for activities inside the neighborhood itself and many of the bus stops in the neighborhood lacked protection. As opportunities, there are many churches and community outreach centers. Poly Heights is a distinct area with a lot of civic pride and history, and benefits from being a family-oriented neighborhood. There are many opportunities to be explored through the relationships with local schools, as well as with Texas Wesleyan University. Lastly, the vacant storefronts located along Rosedale and Vaughn are a great opportunity for locally-owned businesses to open shop and fill the needs of the people who live in Poly Heights.

Cultural and Recreational Conditions:

Poly Heights is one of the older neighborhoods in Fort Worth and has a history of change which contributes greatly to its uniqueness. There were not many spaces for children of multiple age groups to play. Wayfinding and signage that could illustrate the history of the area and aid with community identity and pride can be created. Some of the opportunities we identified in Poly Heights included the rich history and culture of the neighborhood and the people who live there. There was a potential connection to public art with the murals that are in some areas and these could help foster a connection to the local artist community of Fort Worth if more were added. Sycamore Park, located immediately west of our focus area presents a great number of opportunities to be explored. Lastly, the historic cemetery might be a potential source of cultural interest.

Environmental and Ecological Conditions

pollution, and flooding. There are a fair number of vacant properties that are located throughout the neighborhood. There are also some portions of the neighborhood (on the north and southwest) that are located inside of the FEMA-designated 1%-annual chance flood hazard. LID structures and rain gardens can provide many opportunities to explore aesthetic treatments of rainwater and to bring in more green spaces. The streets through the residential areas as well as the main arterials lacked trees and shade. The neighborhood has undeveloped green spaces and densely wooded areas that are located around the southwestern and northern boundaries of Poly Heights. There are existing trail connections that connect to the greater network of hiking and biking routes that circle Fort Worth and connect to other parts of the metroplex, which suggests that Trail-Oriented Development (or TrOD) could be a potential strategy to facilitate growth and connectivity in the neighborhood.

Community Feedback

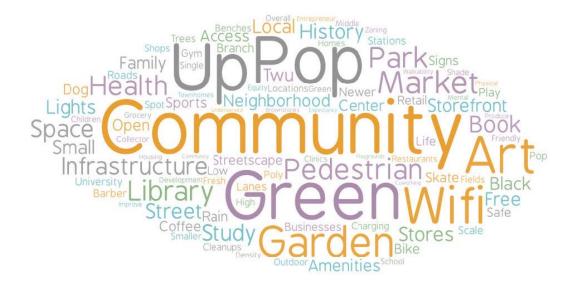
Community Feedback: Miro Boards

								SCHOOL -
STREET	COMMUNITY	LOCAL		ENVIRONMENTAL/		POLITICAL/	ENHANCED	COMMUNITY
IMPROVEMENTS	NODES	BUSINESSES	HOUSING	ECOLOGICAL	TRAIL NETWORK	ECONOMIC	IDENTITY	PARTNERSHIP
sidewalks are in really bad shape	in community center on sycamore - small kitchens, small rooms; big basketball courts; open to family reunions; kids area is too small // would be nice to expand this kind of resource	lots of fast food - no sit down	Problem: Not enough parking spaces, low residential density and renovation costs are high	like the idea of a plant pallete to attract pollinators and sensory experience *disney land/world landscapes*	bike from Sycamore Park to Cobb Park	Apart of District 8 in Fort Worth. Infrastructure for community network does not extend into Poly. Sycamore Center is closest source	Beech and Vickery is by far the most commonly used entry used by Residents, TWU faculty, police officers	issue of scheduling - some people play sports after school hours, has not been problematic but would be better if scheduled
walkability for students would be great as well - this will allow them to go out into the neighborhood	Healthy food, Farmers market?	wants Organic food availability in the area.	The lots facing Rosedale are very shallow, immediately behind them are single-family housing. It's difficult to develop these lots because of the amount of time it would take.	people end up waiting for food trucks in their cars so are emitting fumes while they wait - more communication on a place to park and waik to food trucks	About 20 bike rider High School students	funding could likely come from city funds (mayor and city manager have acknowledged that this area has been overlooked; admitted that resources have not been given to Poly and will be given to Poly for resources)	Create an "entrance/boundary" so you enter/leave the community. Something to enter into	availability of facilities/track at poly HS
pedestrian connections to sycamore park	a regularly scheduled market for local vendors	Vacant buildings too old to be renovated to have more businesses in the area	Not enough density to develop mixed-used housing or businesses	still having an issue with ATV riders - having a designated spot would be great; Give ATV': their own space - Cobb or Sycamore		residential tax is 40% (one of the highest in TX)	why spend money on aesthetics when basic needs like food access are an issue?	some unauthorized use (of school fields?)- but not problematic
walkability is an issue	suggestions for pop up markets: flea markets, renaissance faires, swap meets, farmers markets, etc	present low density housing can not support more local retail and businesses (multi-use building proposal)	Unhoused residents need to be considered in redevelopment (community space and or housing)	keep greenspace in the community during growth		Poly was left on its own during the storm and aftermath	residents have a sense of pride about Poly	concerns of accessibility outside of school hours - liability etc.
disabled community is left out and	highlight murals and art of the community	TWU focuses more on student -oriented retail				money leaves the community to spend in other parts of Fort Worth	art: latino art, black historic figures, cowboys dan (there is a small white population) residents have a sense of pride about being part of FW, but it's complicated	communicate TexWes amenities available to the community.
students have a bad perception of the neighborhood and are afraid to walkaround	community garden is a good way to help people learn to grow their own food and interact with each other	Not interested in nail salons etc.				ree wifi (city of FW is supposedly working on this)	poly & fort worth - poly sets itself apart from Fort Worth. Residents have pride about Poly, then Fort Worth	organizations utilizing campus spaces for events
Vickery to Beach, Rosedale to Beach and then to	Community gardens can create food sovereignity, and can act as an inclusive process	Not interested in a lot of chains. ex: McDonalds.				Gentrification will force out low-income residents who make the community what it is.	is important so that TWU and visitors	access to sporting events - available but needs to be communicated
More easily identified bus stops	a gym would be great a lot of kids use portable basketball	would be okay with an Hardware store etc				how can we improve the area without pricing people out of their own neighborhood?	mural behind bank at circle - mural completed by poly hs students	twu amenities
trasir caris would be	hoops a lot - they are looking for something to occupy their time; a lot of kids end up putting the hoops in the street which is not safe for them and frustrating for drivers	Valuing local businesses and being cautious with gentrification (local POC business owners)				increase the boundary of Poly heights to match the proposed plan in order to greater influence the results	video group - neighborhood focus?	amenities need to be communicated more effectively to community
bus stops are hard to identify; more buses; accessibility to public transit	neighborhood likes food trucks but only have concrete areas - gravel lined area that is accessible to pedestrians would be great (like south Austn once had)	need more access to healthy food, restaurants for public school students and twu				notifying residents of resources can be an issue that arises	media unit of hs covers sports events, school spirit, stories pertinent to area	Baker Bldg at TWU on East Rosedale can be used for community events ; encourages and welcomes community events
prioritize basic rights (i.e. walkability, green space, art to honor history)	more activities to keep kids of all ages busy	service station bldg requires a lot of renovation				neighborhood association wants to expand its boundary to include our project boundary	murals - student work (along with tcu)	Making sure that the community already knows all the activities and resources that are offered to them by TWU Residents are encouraged to come and use them
	pop-up markets - could be a place to start to keep money in community and start bringing community together	types of businesses - to be developed along rosedale - student oriented retail/twu					Grafitti, vandalism issue (make is less accessible)	Baker building (East rosedale) encourages and welcomes community events
The public transport system is not effective for students. It's difficult and time consuming for students to move around using the system. It may take 45 mns to an hour just to get to one place.	like idea of more children's play areas but make sure to keep children from playing in the street and perhaps fix the structures to the ground.	avoidance of chain retail, looking for more beneficial community/campus- oriented businesses					no longer art dept/degree at twu- outside focus. gallery/art studio available for art exhibits/general ed curriculum	sufficient parking at TWU - have to walk far so they want closer parking



Community Feedback: Surveys

STREET				POLITICAL/		SCHOOL - COMMUNITY
IMPROVEMENTS	COMMUNITY NODES	LOCAL BUSINESSES	HOUSING	ECONOMIC	ENHANCED IDENTITY	PARTNERSHIP
More storefronts with green		More accesss to health clinics	wants low density/single	Improve overall health and life		
infrastructure	Community history	and centers	family homes	expectancy within this zip code	Community history	Favorite place is near university
		favorite business is black	missing middle housing-			Wants to see improvement at Poly
pedestrian-scale	pop-up library and study spot	coffee	townhomes, brownstones	Improve zoning	bigger signs for TWU	High School
			Monthly neighborhood			
storefronts with green		wants more local businesses	cleanups to paint/clean	provide equity to underserved		
infrastructure	neighborhood market	near university	up homes	areas		
newer street lights with		favorite place to hang out is				
benches	community art	black coffee				
safe bike lanes	free wifi & charging stations	small businesses				
storefront with green						
infrastructure	access to more fresh produce	coworking spaces				
	needs more initiatives to					
	improve physical and mental	Areas surrounding school				
pedestrian amenities	health within the community.	need more development				
	free wifi & charging stations	Branch locations				
rain gardens	pop-up	Book stores				
	Need more parks or places for					
neighborhood streetscape	kids and family to gather	family-friendly barber shop				
street lights	Skate Park	local restaurants				
smaller collector roads	Free wifi for outdoor study	small retail shops				
walkability	Dog park	next magnolia?				
trees for shade	Market	more grocery stores				
		program to fund small				
	Pop-up library	businesses				
	pop-up library	gym				
	community art	book stores				
	neighborhood market	sports amenities				
	community garden					
	community art					
	community garden					
	accessible sports fields for the community					
	playgrounds					
	community garden					
						31
	play center for children					31



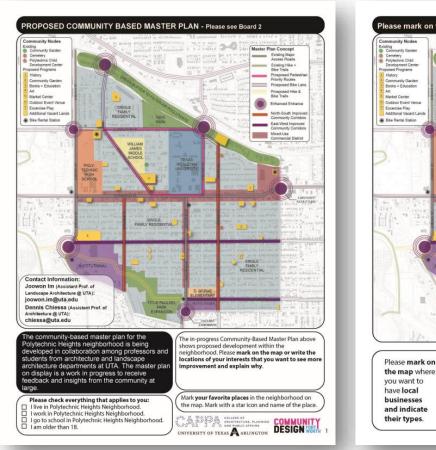
Community Feedback: Black Coffee

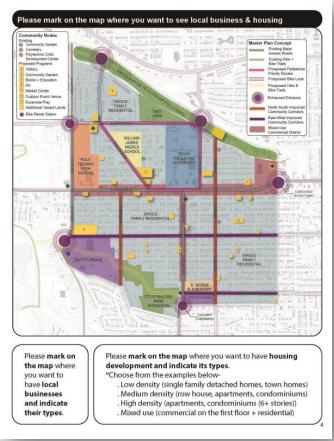
STREET					
IMPROVEMENTS	COMMUNITY NODES	LOCAL BUSINESSES	TRAIL NETWORK	POLITICAL/ECONOMIC	ENHANCED IDENTITY
			hiking/park areas keep natural, landscape and make it		outdoor mural of the areas history - public acknowledgement of
Bicycle lanes	Swimming pool	Natural food store	accessible	not gentrification	community pride
				financial literacy programs for community and SBA assistance	
Pedestrian Cross Walks	Arts district	Bike repair shop/station		to prevent gentrification	
Cleaning our communities				add more service to polytechnic	
street		More access to healthy foods		united center	
more street lights	-0	More access to health centers			
		Revamp gas stations so that			
		they are clean and feel comfortable visiting the			
pedestrian/bike friendly		bathrooms			
better street lights		More groceries near us			
	Community art / community				
street lights	mural area w/ rotating artwork	natural grocery store			
		target superstore			
		more services for quick home			
	community library	repairs			
	farmers market	more restaurants			
	dog park	natural grocery store			
	farmers market with local	natural healthy food/grocery			
	vendors	store			
	free wifi charging stations	thrift store			
	dog park				
	community gardens				
	open farmers market (fresh				
	produce)				
	open farmers market (fresh				
	produce)				
	open air swap market				
	courtyard for outdoor yoga				

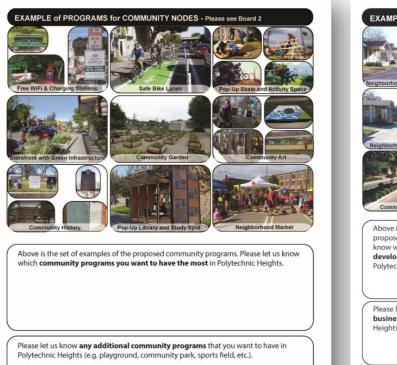


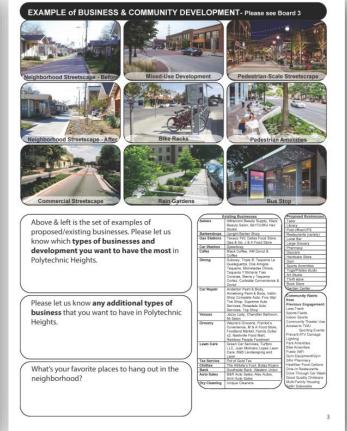
Community Feedback: Polytechnic High School and Middle School



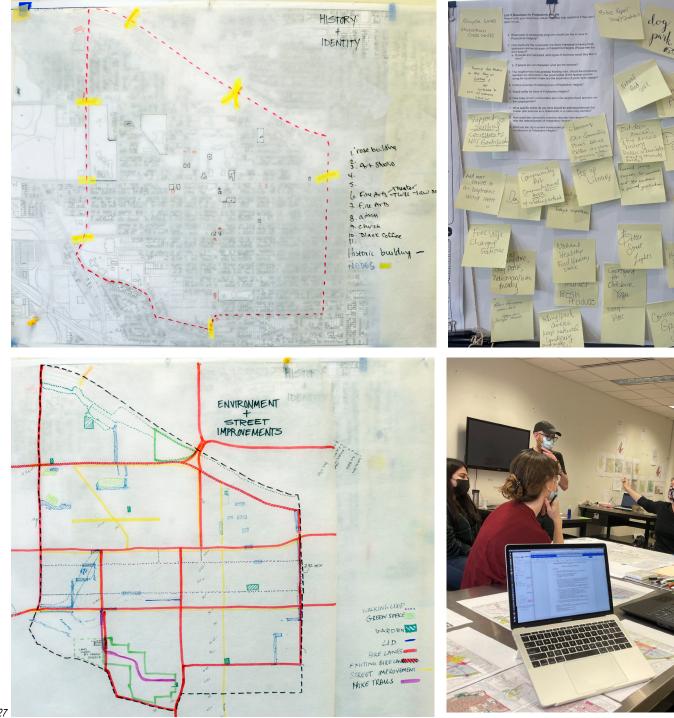


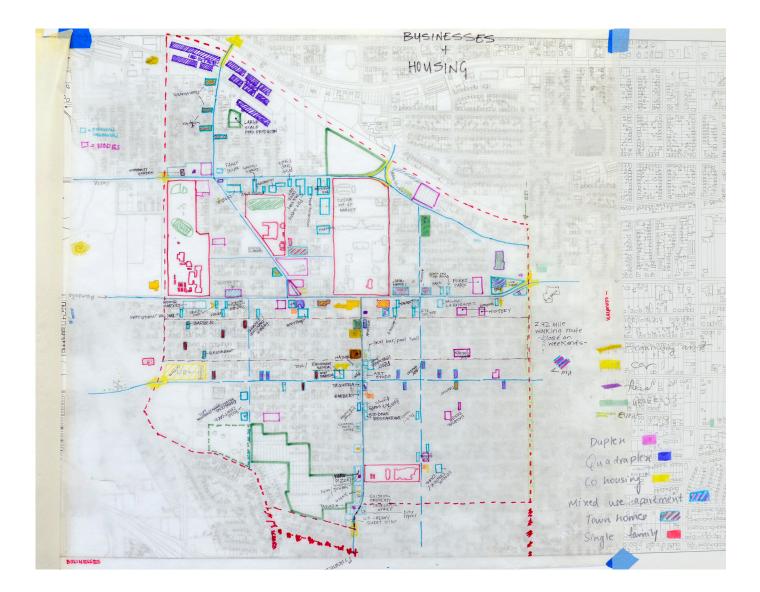


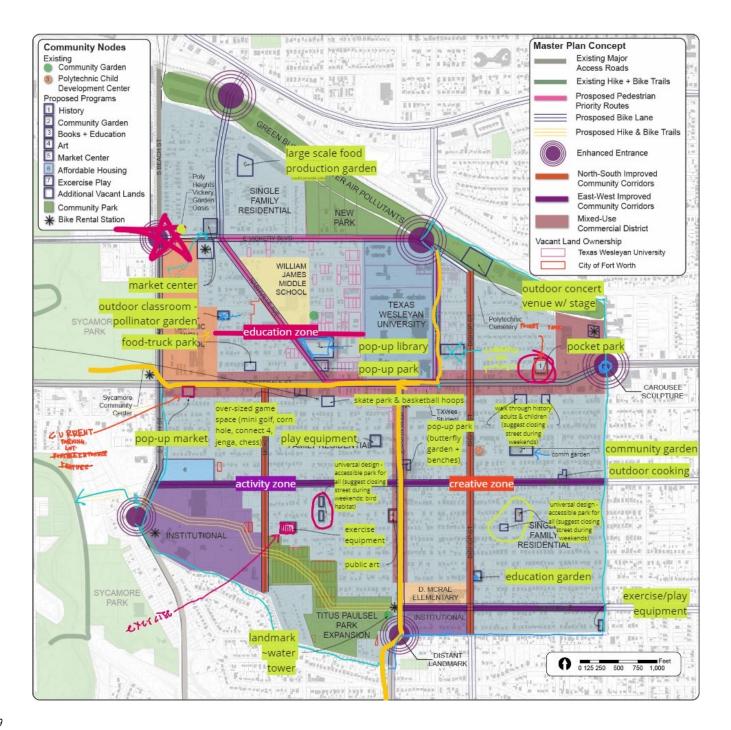




Processing Feedback







Master Plan: Streets, Community Nodes, Housing, Identity

Master Plan: Cultural Goals

Objectives

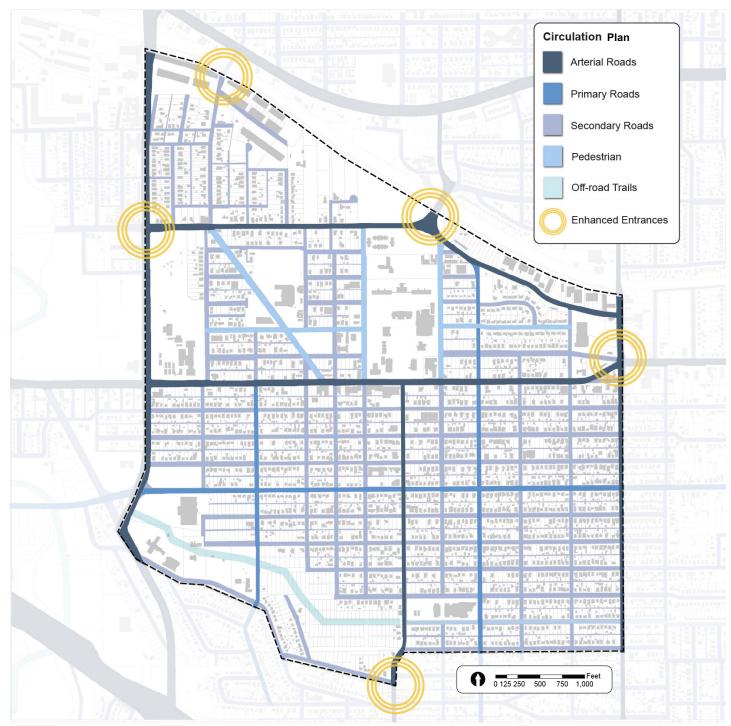
Promote historical education and understanding through signage, online information, and events.

Create a connection from Polytechnic Heighs to hike & bike trails throughout the city.

Develop a framework for art programs that can be integrated with art throughout Fort Worth.

Propose cultural events which will expand upon existing events and connect with local businesses, institutions, and vacant lands.

Master Plan: Cultural Goals



Master Plan: Environmental Goals

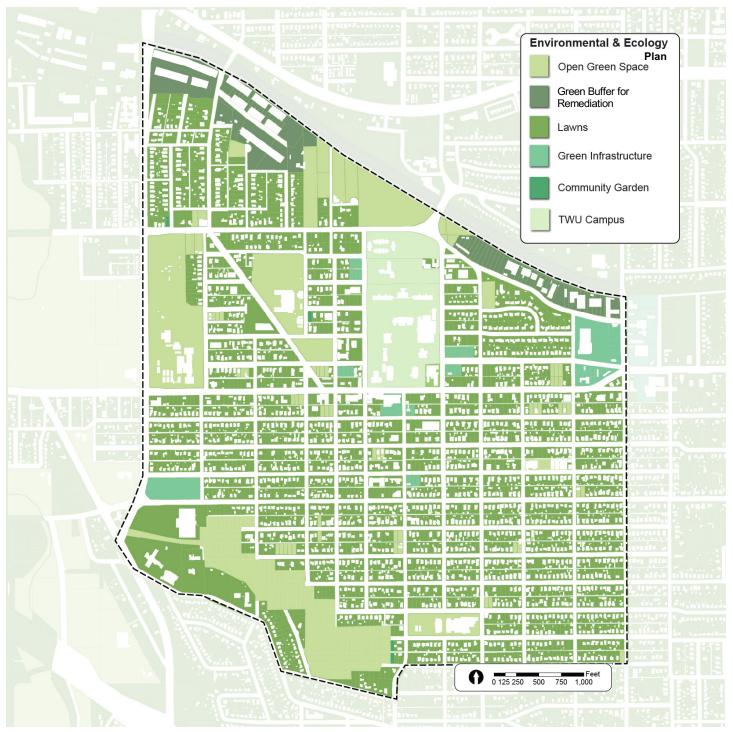
Objectives

Propose a decentralized green infrastructure system (e.g. street trees, rain gardens, bioswales, rainwater harvesting) to provide sustainable stormwater management measures for potential flooding and drainage risks.

Integrate native plants to promote biodiversity and a healthy ecosystem

Increase access to green open space.

Master Plan: Environmental Goals



Master Plan: Social Goals

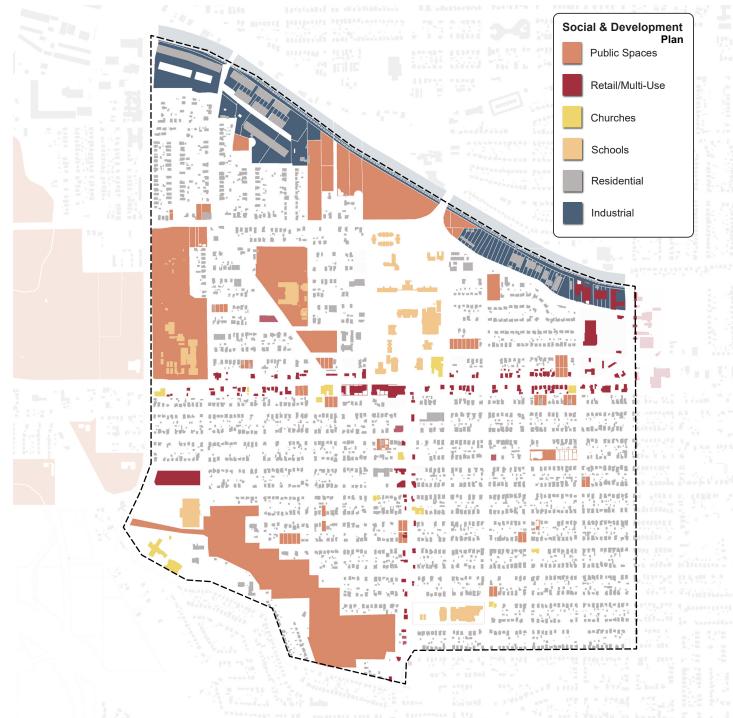
Objectives

Introduce a plan to enhance the local economy to make it more self-sufficient.

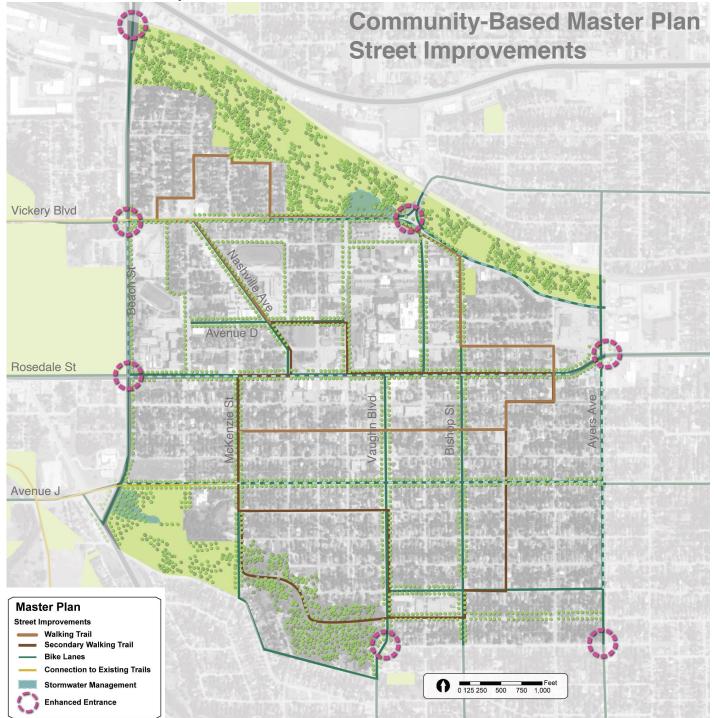
Improve walkability by increasing pedestrian amenities and through trafficcalming techniques

Develop strategies to strengthen the network between local institutions based on the needs of the community.

Master Plan: Social Goals



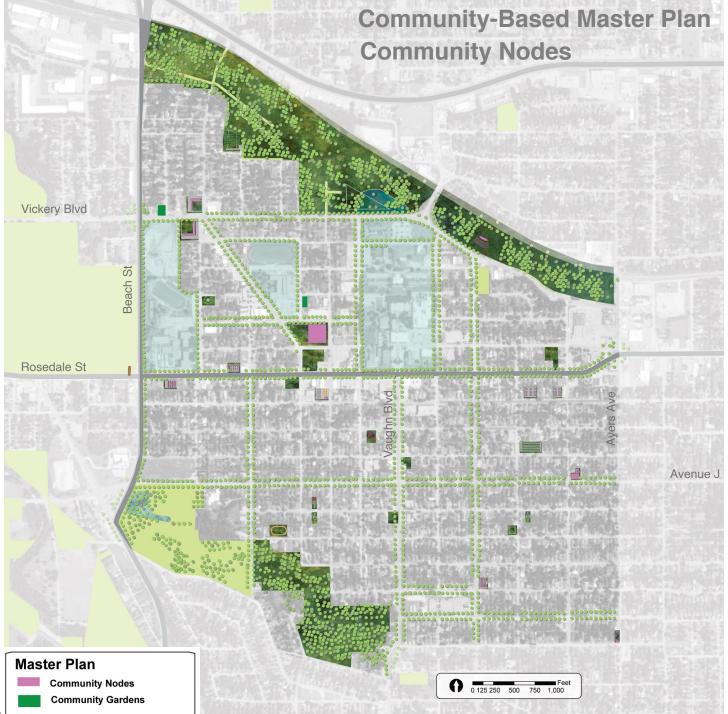
Master Plan: Street Improvements



Master Plan: Enhanced Identity



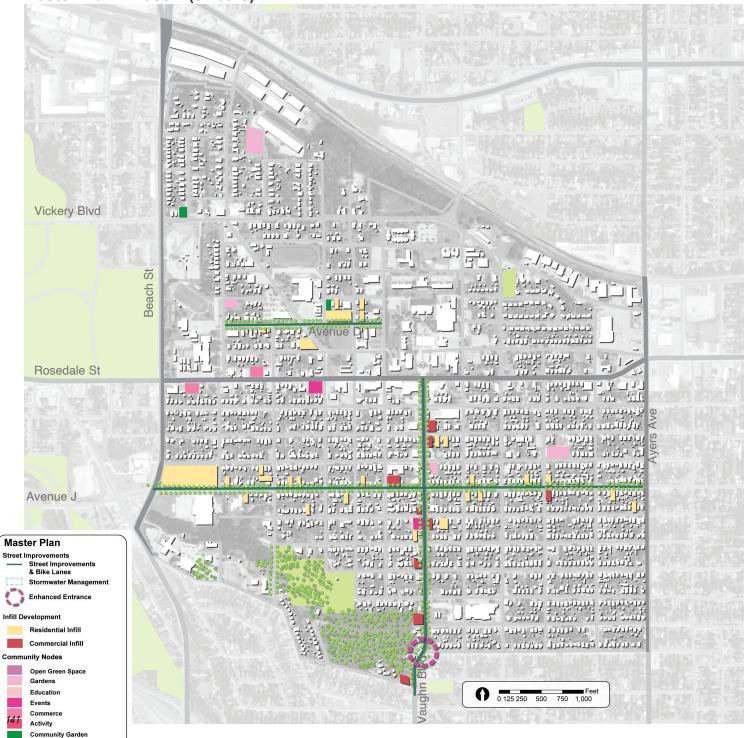
Master Plan: Community Nodes



Master Plan: Local Businesses + Housing

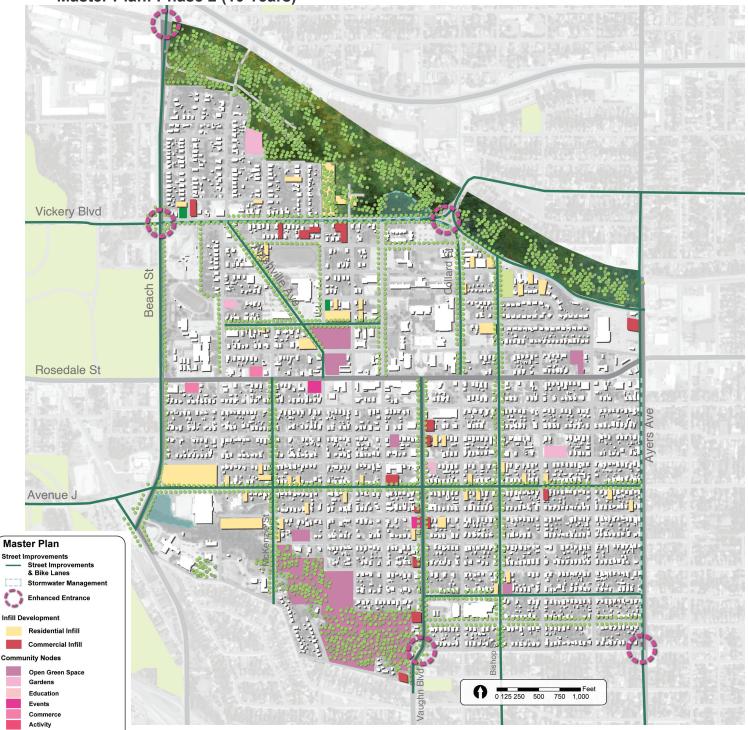


Master Plan: Phase 1 (5 Years)



Master Plan: Phase 2 (10 Years)

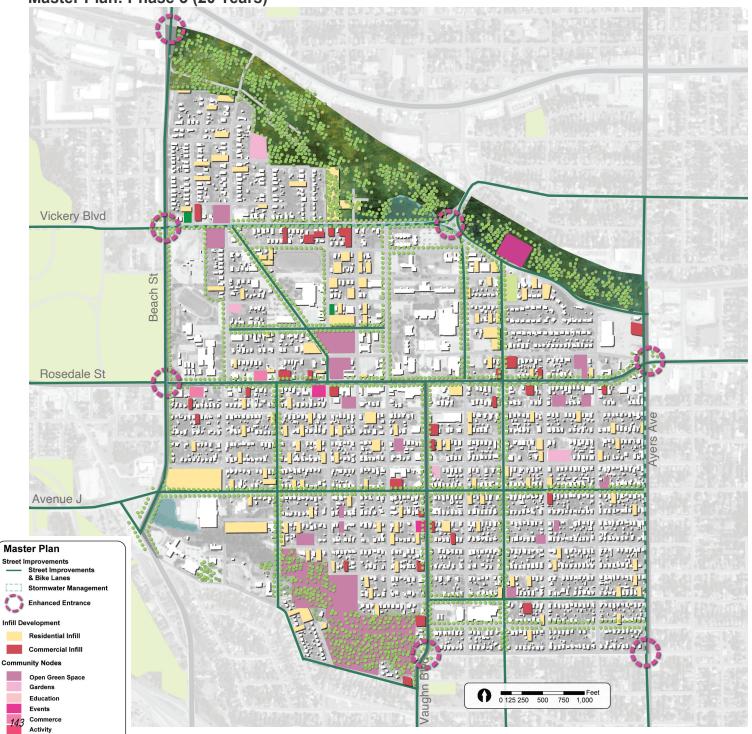
Community Garden



142

Master Plan: Phase 3 (20 Years)

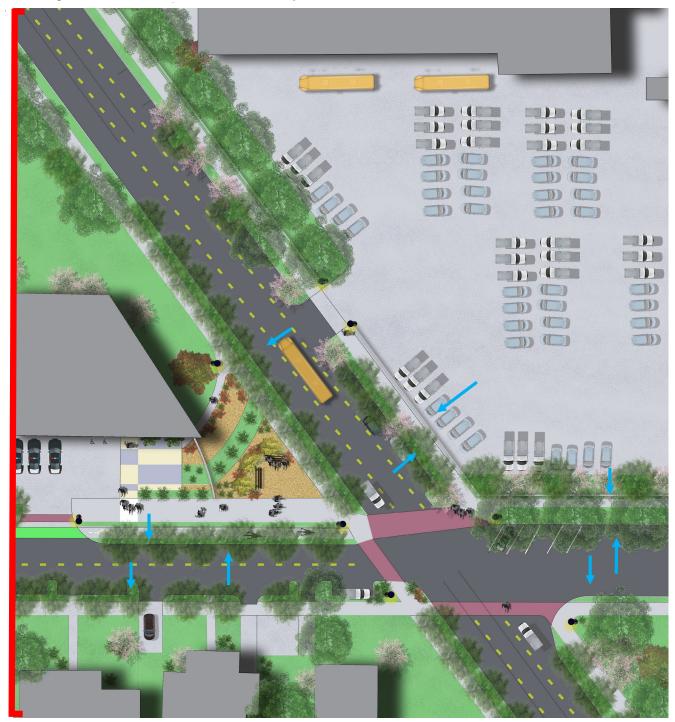
Community Garden

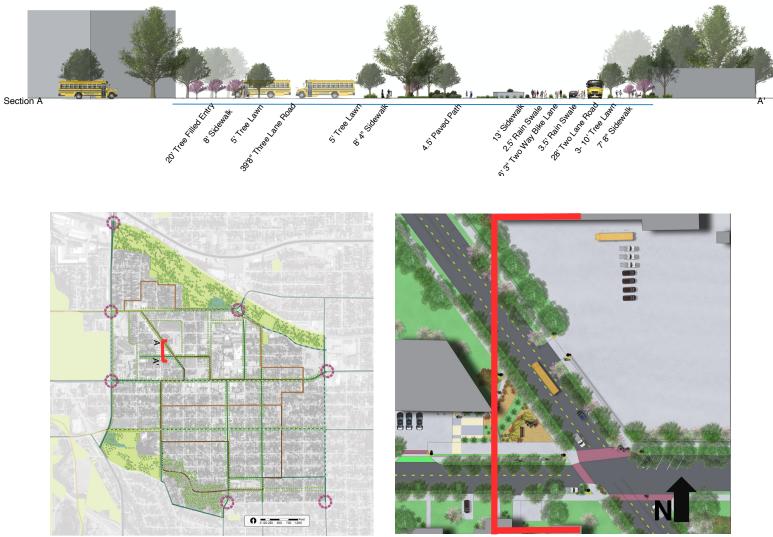


Master Plan: Walking Radius

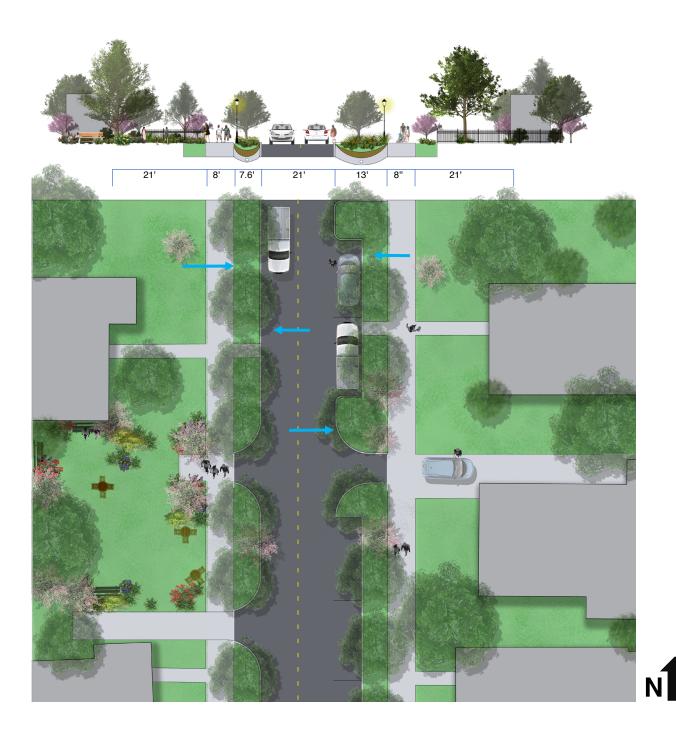


Community-Based Master Plan- Street Improvements

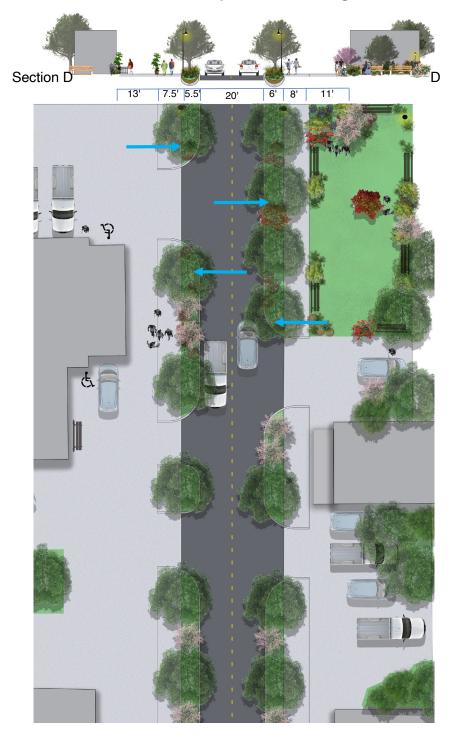




Master Plan: Residential Street Improvement- Avenue K & Little Rd

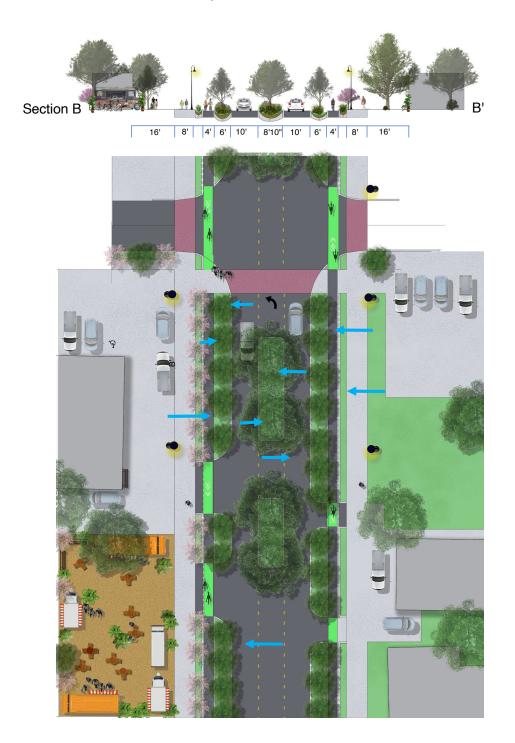


Master Plan: Residential Street Improvement- Vaughn Blvd. & Ave I





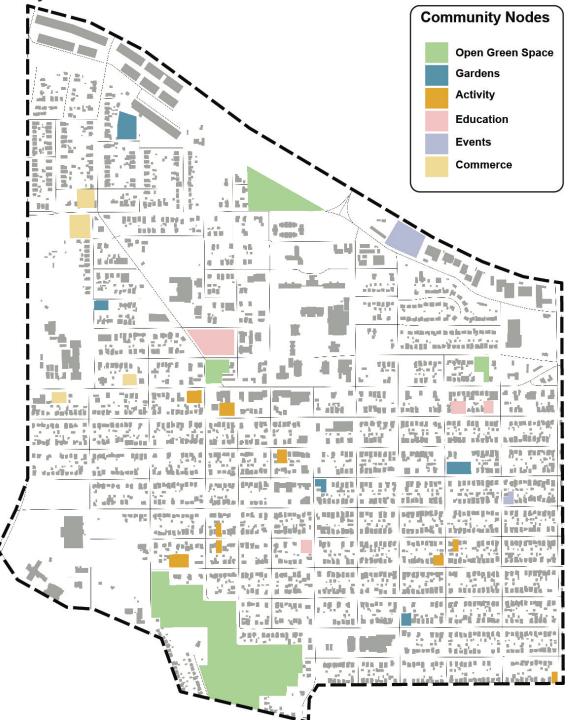
Master Plan: Residential Street Improvement- Rosedale Blvd & McKenzie St



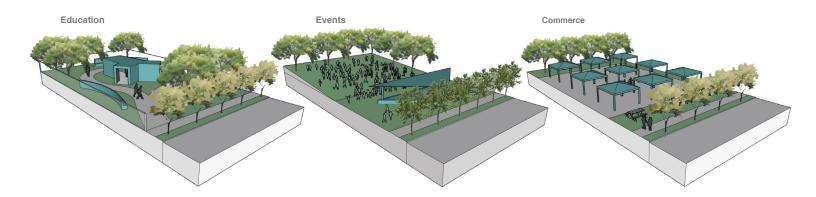
Master Plan: Plant Recommendations



Community Nodes



Community Nodes: Vacant Land Use Typology

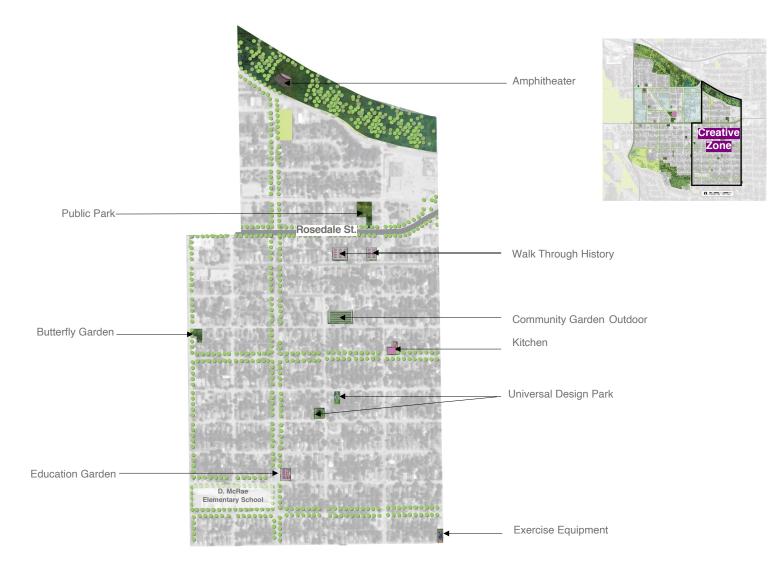




Community Nodes: Education Zone



Community Nodes: Creative Zone



Community Nodes: Activity Zone



Community Nodes: Community Garden- Before & After

Before



After

Housing Development: Plan



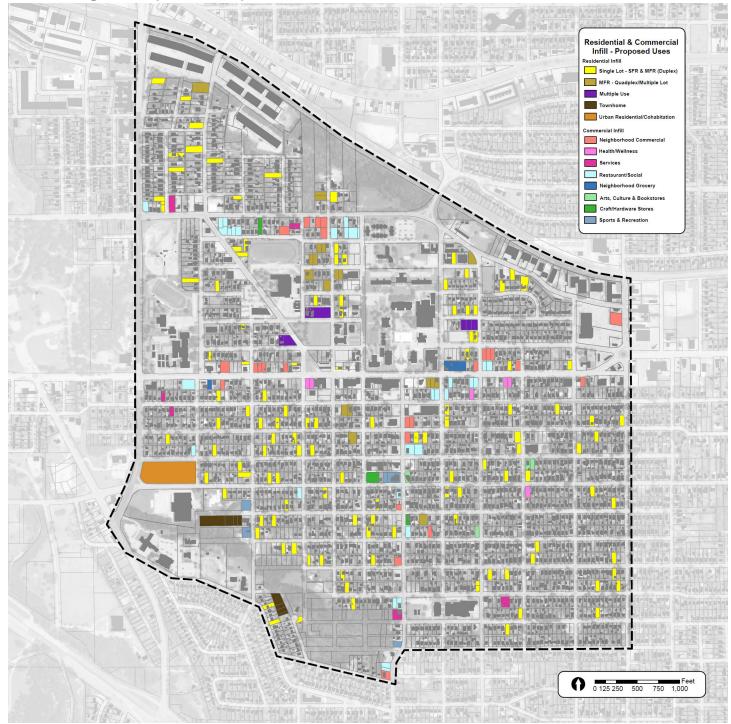


Phase 1





Housing Development: Proposed Use



Housing Development: Comprehensive



Housing Development: Prototypes



Low Density/SFR

Medium Density/MFR

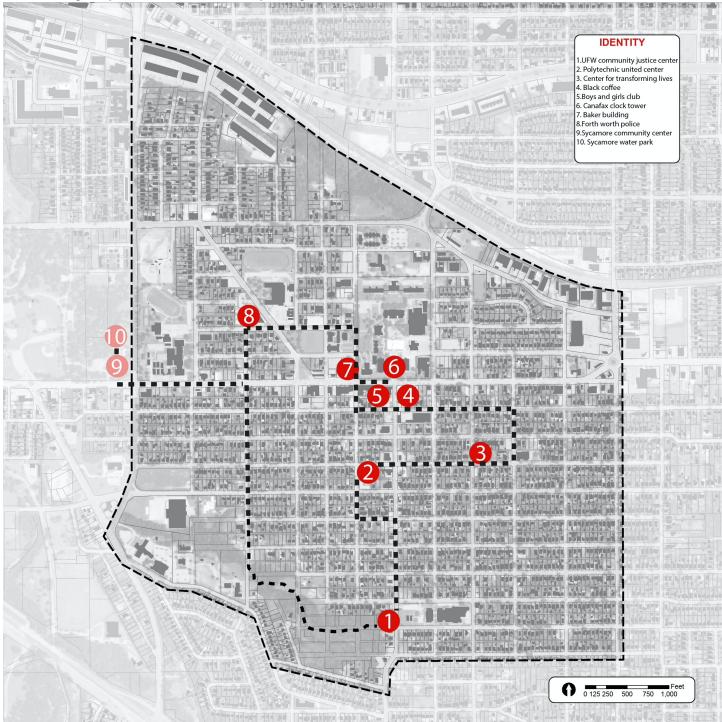
High Density/Townhome

Commercial/Mixed Use

Identity Improvement: Historical Locations



Identity Improvement: Contemporary Locations



Identity Improvement: Historical Buildings

Polytechnic High School



The Polytechnic Heights community originally grew around the Manchester Cotton Mill and merged with the city of Fort Worth in 1922. The first school associated with the Manchester community was formed in 1886.

Shannon's Funeral Home



Shannon Funeral Chapel dates back to 1906 and the polyheights branch was built in 1937. The Shannon funeral chapels and cemetery have provided obituary, funeral, memorial, burial, cremation, and cemetary services for Forth Worth and the surrounding area.

Polytechnic Cemetery



Polytechnic Cemetery is the 1000th Historic Texas Cemetery. Descendants of those buried in the cemetery, which dates back to 1895.

William James Middle School



William James; helped organize the Polytechnic School District in 1906. 1927--Fort Worth Architect William G. Clarkson designed William James Middle School.

Polytechnic United Methodist



The current building was completed in 1952, and our church "birthday" is 1892, just two years after the university was founded. This means the congregation has shared ministry with the campus for 120 years.

Ann Waggoner Fine Arts Building



The Fine Arts Auditorium portion of this building was originally constructed for the Polytechnic Methodist Church in 1908-1909, enlarged in 1923, and remodeled in 2002. This building includes teaching studios, rehearsal rooms, offices, an electronic piano laboratory, and the Fine Arts Auditorium, which includes Martin Hall.

Identity Improvement: Entrance Design



CATALYST PROJECTS: LANDSCAPE ARCHITECTURE AND ARCHITECTURE

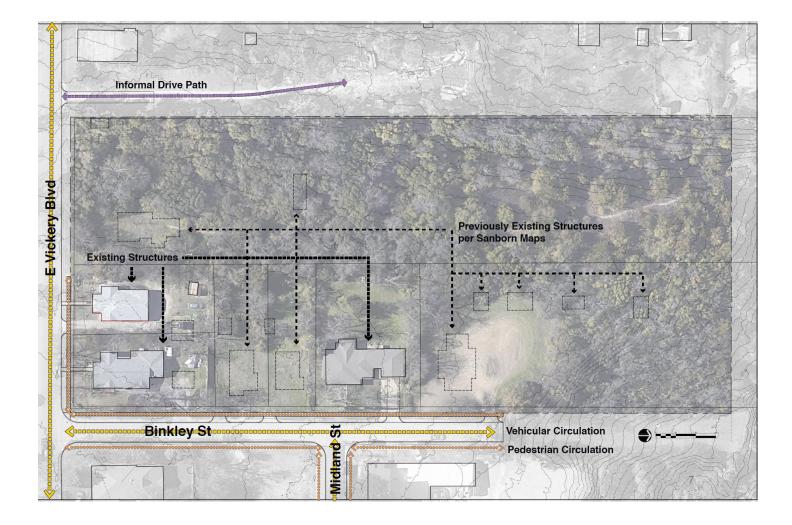
Detailed design proposals have been developed for selected sites to explore the best practices for revitalizing existing spaces that are degraded but have the potential to provide benefits to the neighborhood by landscape architecture and architecture students. The projects include housing infill, street improvement, community park development, accessibility improvement, community center complex, and more.

Binkley Street Cohousing Project: Site Location

Josiah Miller



This cohousing project focused more on the low-density infill housing in two blocks with different conditions. One is a vacant 5-acre lot, mostly owned by TWU, and the other one is a block with existing single-family homes. Both are developed just enough to show housing opportunities available. Currently, the site has a number of existing buildings and multiple vacant lots for infill single-family and duplexes.



Binkley Street Cohousing Project: Site Plan





Aerial Perspective - View towards NW

Binkley Street Cohousing Project: Section A-A'



South Garden

Outdoor Dining Area



Binkley Street Cohousing Project: Section B-B'



Central Gathering Space



Basketball Court

Playground

Binkley Street Cohousing Project: Rendering of South Garden Area

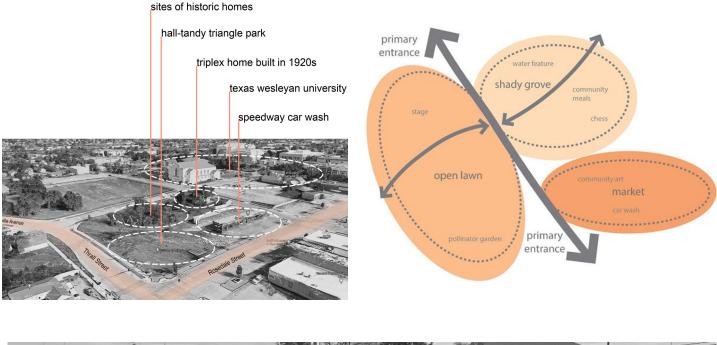


Binkley Street Cohousing Project: Rendering of North Garden Area

177



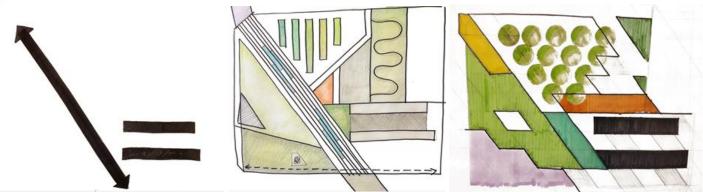
Hall Tandy Memorial Park: Site Conditions and Programs

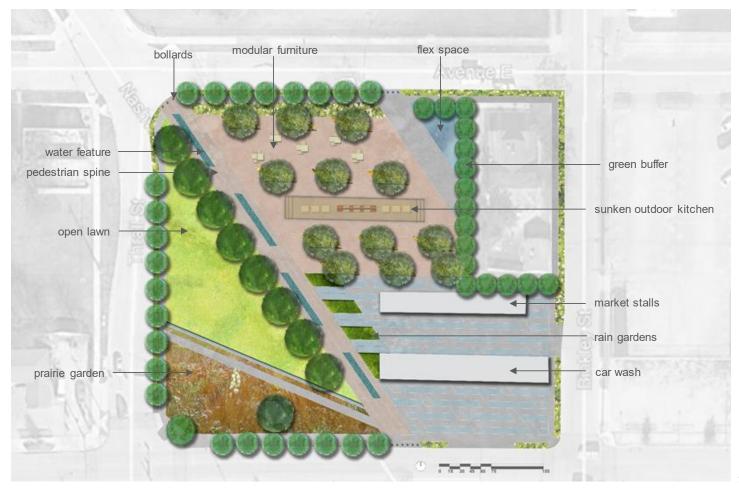




The block used to be bisected by Nashville Avenue, which connected all the way through to Rosedale Street. In 2014 they began demolition on that section of road and the once functional park in the southwest corner was never fully restored. Keeping in mind the existing conditions and the historic journey this land has been through, this design reinstates the primary axis that Nashville Avenue created, serving as a main pedestrian spine through the site. On the west, an open lawn with a pollinator/prairie garden will serve to revitalize the park space. On the northeast corner, where the historic homes once stood, a shady grove will create a sense of enclosure to enjoy outdoor activities. Where the carwash sits, a program is suggested where half of the stalls can continue to be used for washing cars, while the other half of the stalls can serve as a structure to house community markets.

Hall Tandy Memorial Park: Site Plan Lauren Wardwell



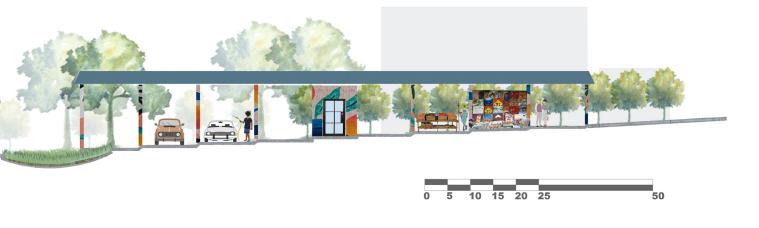


Hall Tandy Memorial Park: Section A-A'



L





Hall Tandy Memorial Park: Section B-B'



	1	
Outdoor Activity	Sunken	Outdoor Activi
	Outdoor	
	Kitchen	





Car Wash and Market Stalls



Hall Tandy Memorial Park: North Entrance to Nashville Avenue

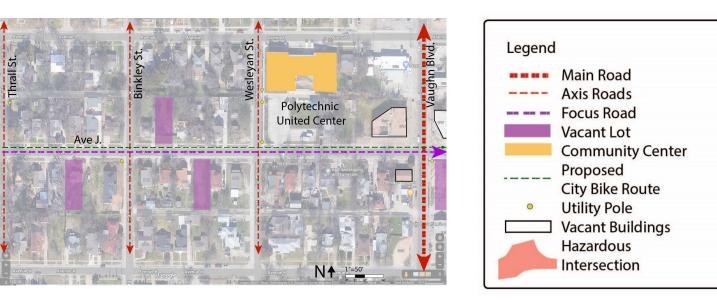


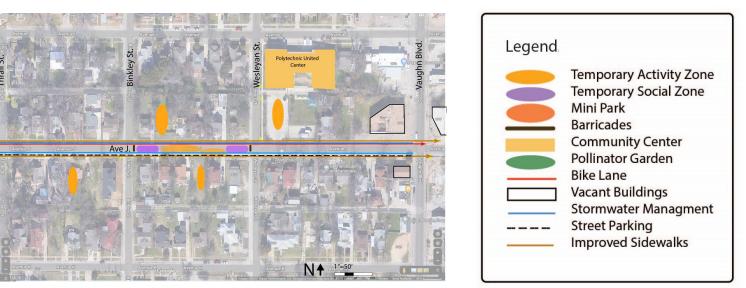
Avenue J Street Improvements: Site Conditions

Melissa Brown









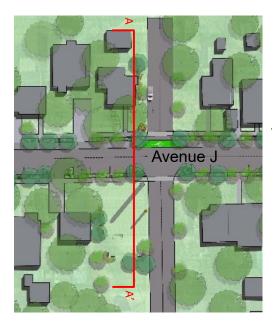
Avenue J Street Improvements: Section A-A'











Avenue J Street Improvements: Street Fair

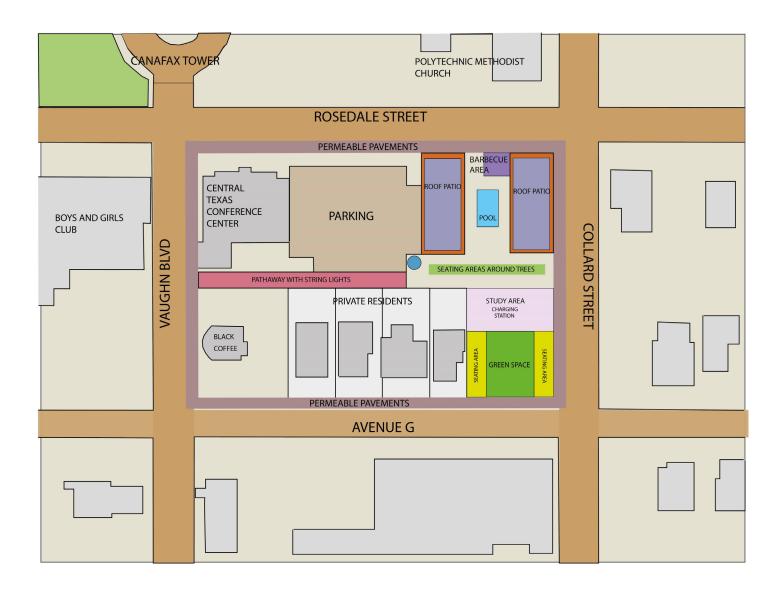
191



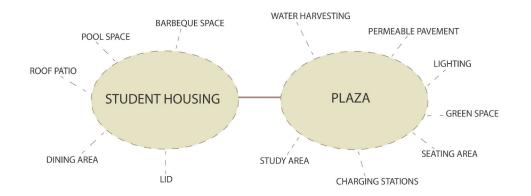
Avenue J Street Improvements: Improved Streetscape and Community Park

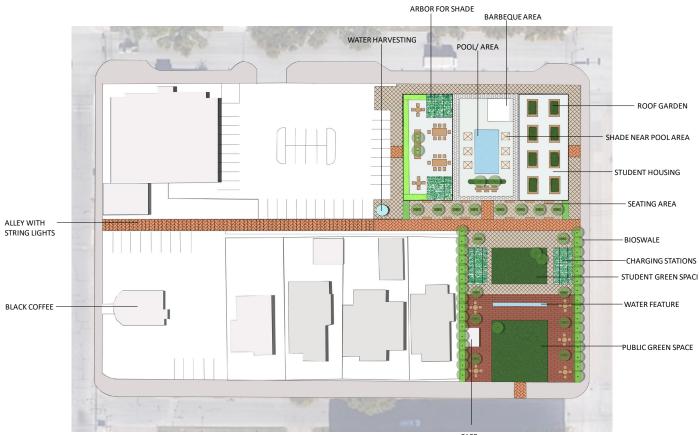






New Texas Wesleyan Student Housing: Site Plan

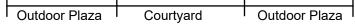




New Texas Wesleyan Student Housing: Section 1

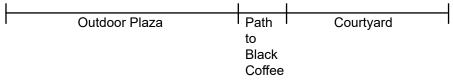






New Texas Wesleyan Student Housing: Section 2





New Texas Wesleyan Student Housing: Outdoor Plaza



CAFE

PUBLIC GREEN SPACE

WATER FEATURE

New Texas Wesleyan Student Housing: Outdoor Plaza



STUDENT GREEN SPACE

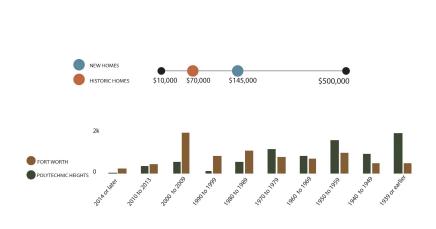
SHADE AREA

Housing + Neighborhood Conditions

Becca Icossipentarhos

RESIDENTIAL HOME BY YEAR BUILT







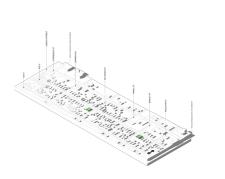


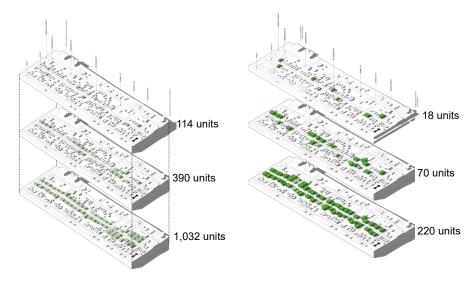
- Light Industrial
- Mixed-Use Low Density
- Mixed-Use High Density
- Planned Development
- High Density Residential
- Multi-Family High Density
- Multi-Family Medium Densi
- Two-Family Housing
- □ Single-Family Housing
- Commercial
- Neighborhood Facilities
- Uacant Lots

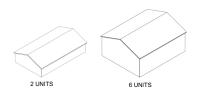
Housing types, zoning, and adjacencies were analyzed in order to find out how higher-density housing options could be made available as the community continues to grow. Vacant lots (the green rectangles) were identified for this purpose.

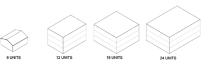
High Density Options

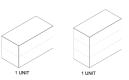
This is a diagram of three different potential implementations of the housing design- using 6,12,18,24 unit prototypes. This is a diagram of three different potential implementations of the housing design- using 1 unit prototypes infilling with townhomes. In this high denstiy zoning example on Rosedale, vacant lots were infilled with the duplexes and larger houses that were common in the neighborhood . This added an additional 24 units.

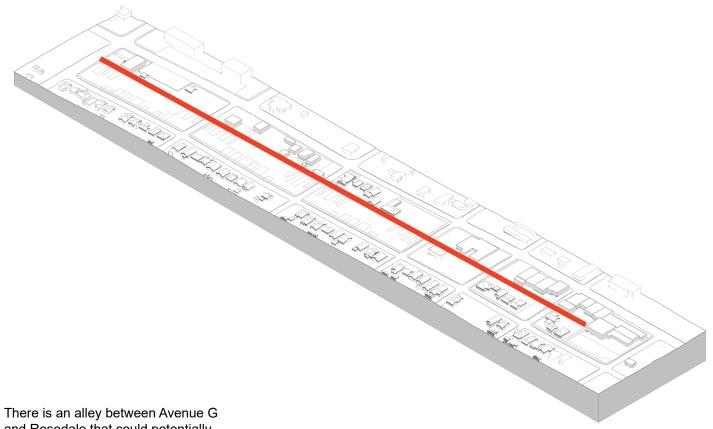




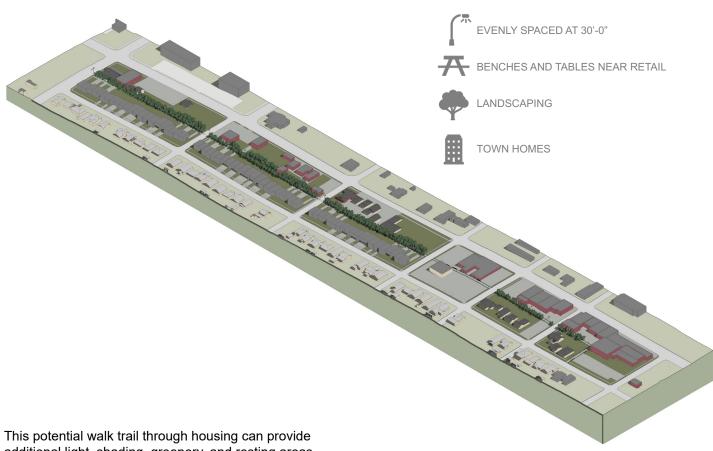








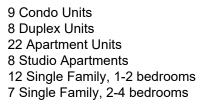
and Rosedale that could potentially become a walking trail, acting as a bridge between commercial and residential spaces.



additional light, shading, greenery, and resting areas, creating a safe walkway for residents and students while providing an inviting space near Rosedale. This will hopefully result in a rise in foot traffic and a more desirable area for new residents and local businesses.

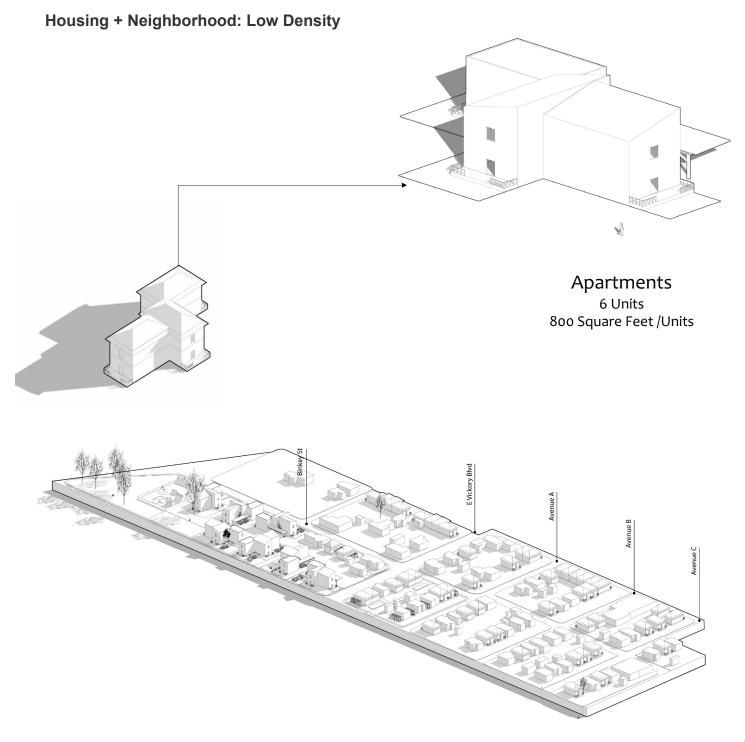




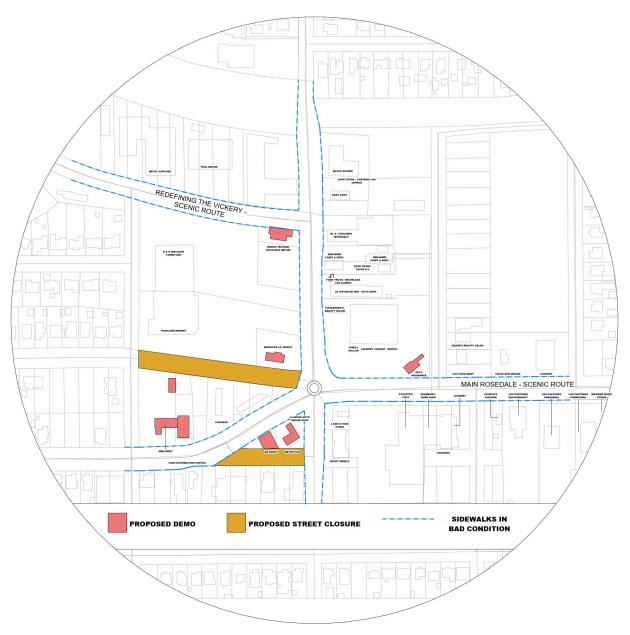


In this example, the focus was placed on housing in low density zoning. The white buildings are existing, and the green are the possible single family/duplex infill options.



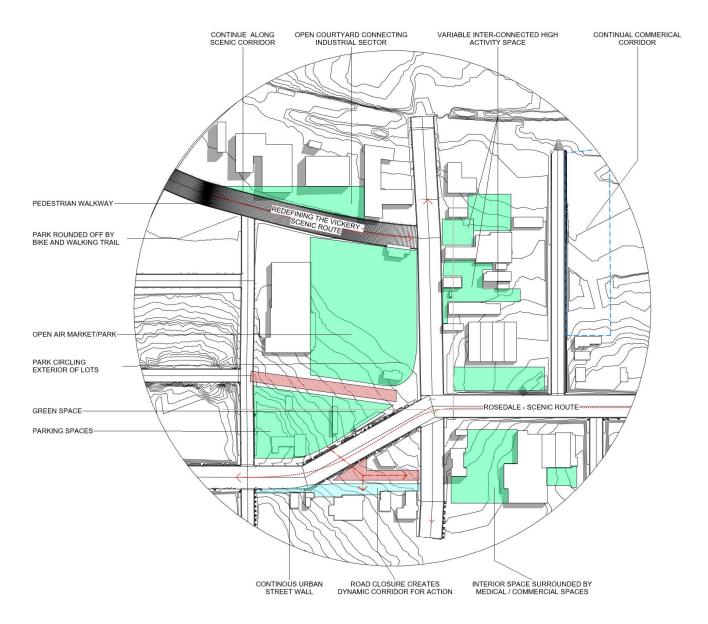


For purposes of this project, there are 3 business centers within Polytechnic Heights. From left to right, these are the Western Roundabout. The Historic Main St strip and the Eastern Roundabout connects Ayers Avenue and Rosedale. This last center is the focus of this project



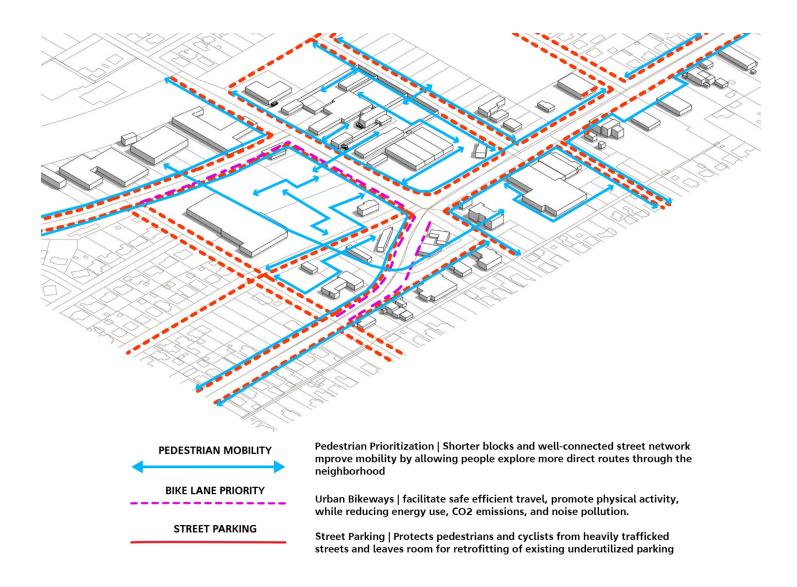
Adaptive reuse of existing infrastructure. The plan is to reuse existing structures and to bring in existing businesses from around Poly to create a cohesive business community where they can benefit from each other's foot traffic and help establish a cooperative local business community.

Community Centers: Strategy Two



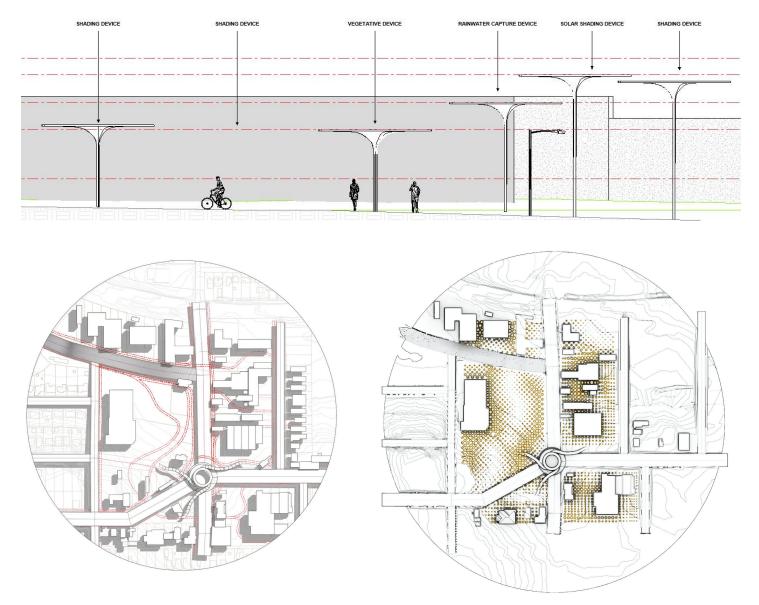
I incorporating the native species recommendations from landscape architecture students increases the biodiversity in the area. While using the larger greenery to create shade, park spaces decrease the amount of concrete and create a place to walk for residents, reducing urban heat island effect.

Community Centers: Strategy Three



This strategy creates walkable streets and a walkable park. The need to slow traffic and the extended sidewalks created an opportunity to build narrower streets that create a sense of safety and walkability. This sense of cohesiveness uses canopies to allow the vibrant street life to come into the park and create transitional and multipurpose spaces.

Community Centers



Canopy structure will act as a connector. Each structure has a unique typology and function. They can act as shading devices, solar generators, water collectors, and green roofs.

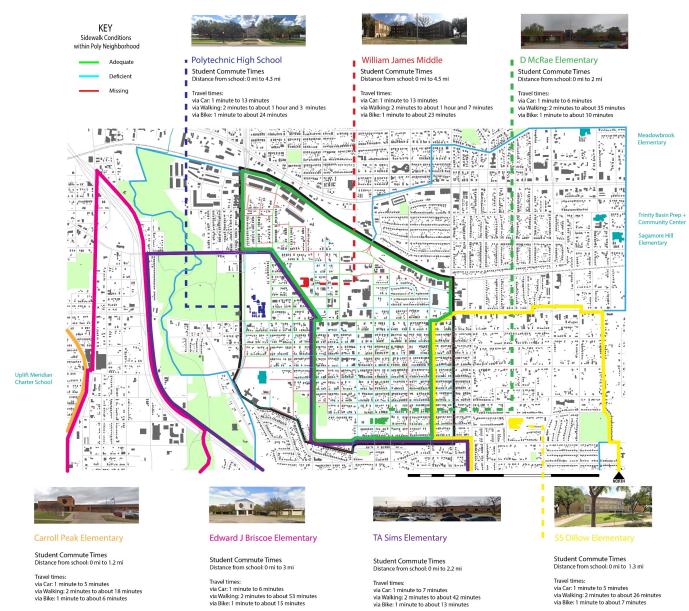
Community Centers



This project will create an enhanced gateway to Polyheights along with a physical anchor to the site. A recognizable urban center that will call to the community.

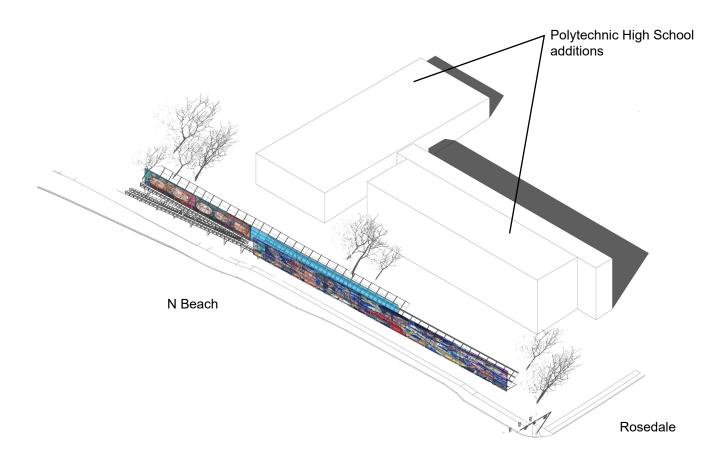
Education Monument

Alaina Gunter



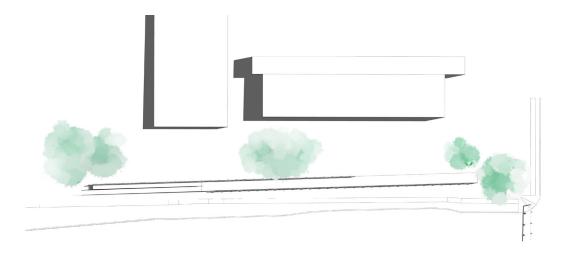
Education is important to every community, as is how it is seen by its inhabitants. In this project, there was a focus on Polytechnic High School. Bringing it to the communities attention while providing a safe and educational path to the school.

Education Monument: Perspective



This will be a monumental entrance into Polytechnic High School that will create a sense of neighborhood identity and a safe way to cross Beach Street. Serving as a type of boardwalk extending out of the sloping terrain.

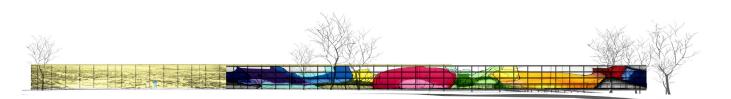
Education Monument: Views



Top View

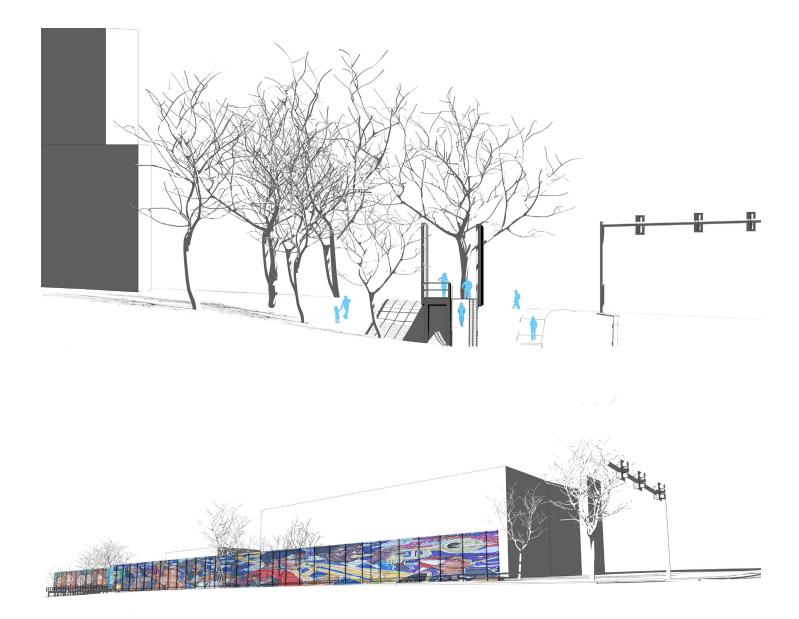


East Elevation



West Elevation

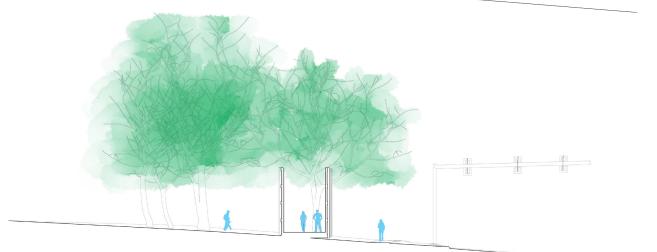
Education Monument: North Elevation

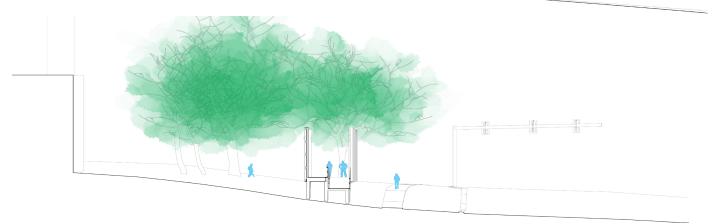


The walls can be used as projections for neighborhood movie nights. It is public art, a monumental entrance, and an educational tool.

Education Monument: Sections







Education Monument: North Elevation

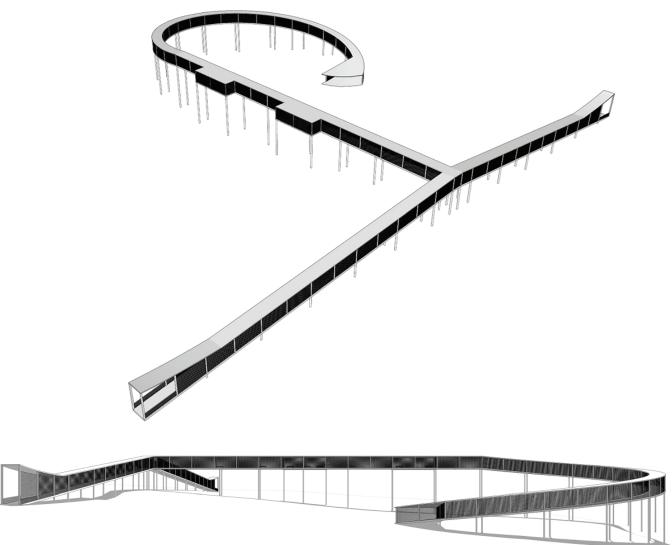


The walls are designed to be semi-opaque covered in murals depicting the history of Polyheights. Potentially connecting to the history trail proposed by the master plan.



Beach Street is 180' long with 4 lanes, running behind Polytechnic High School. The goal for this project is to create a safe pedestrian bridge. Due to its location on Beach and Rosedale, this bridge could become a marker of Polyheights for people entering the neighborhood.

Bridge: Renderings



This bridge will allow pedestrians to walk through a canopy of trees. and see Poly from new heights. This bridge will provide a seating area for lounging, thus giving pedestrians additional public space as well as functional circulation for the street that does not need to consider the vast amount of car traffic. Additionally, this bridge will provide access to public gathering spaces and activities, becoming a new park amenity, a space for children of multiple age groups, and become a part of the communities identity.

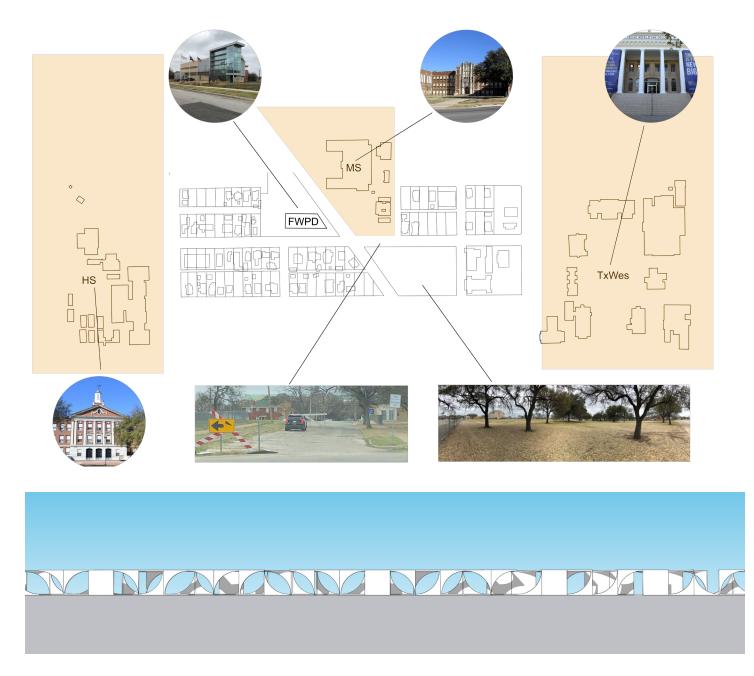




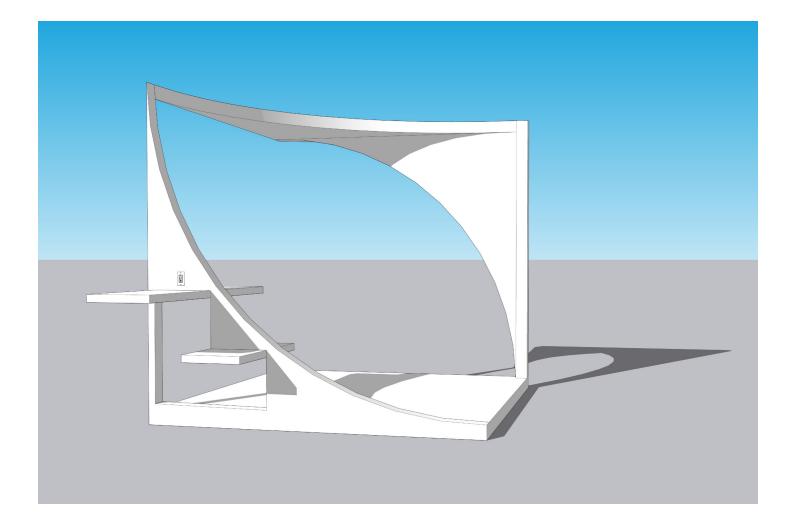


Due to the three large educational institutions, the street grid is broken in several places. The proposed project involves a reconnection of these educational institutions using Avenue D (The bright blue street).

Destination Education



Destination Education: Modules



This is the module for the pedestrian walkway, Defensive architecture is prevalent throughout this area including barricades and unfinished fencing. This modular walkway will attempt to combat this architecture by providing free public spaces with shade and seating, creating a welcoming area for pedestrians.

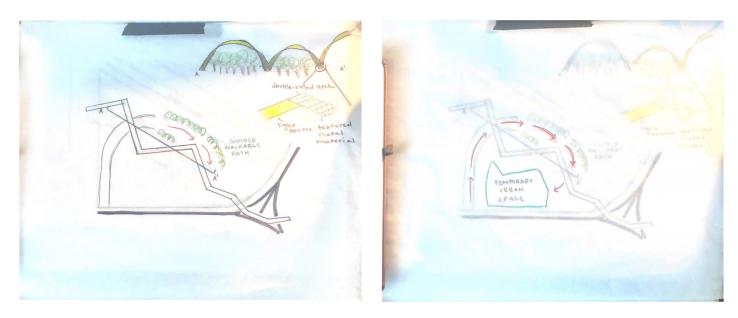
Destination Education: Rendering



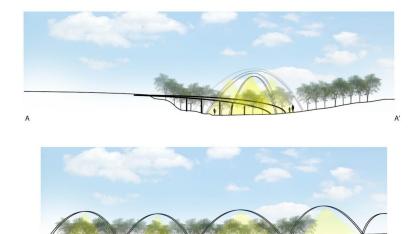




Arches

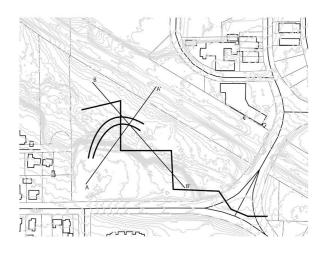


B′

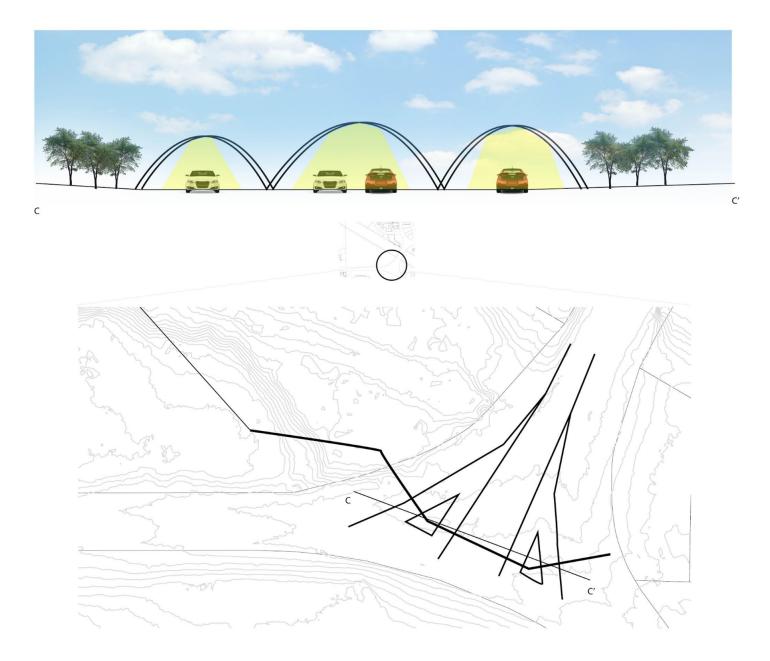


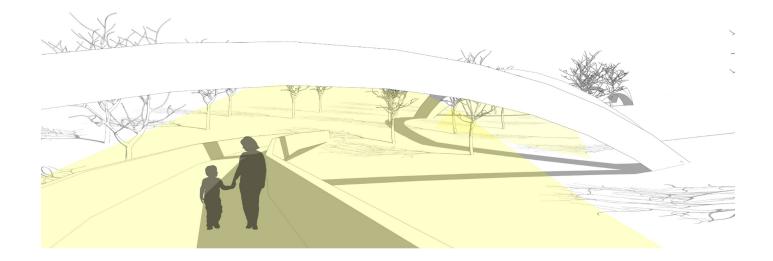
HI TANA

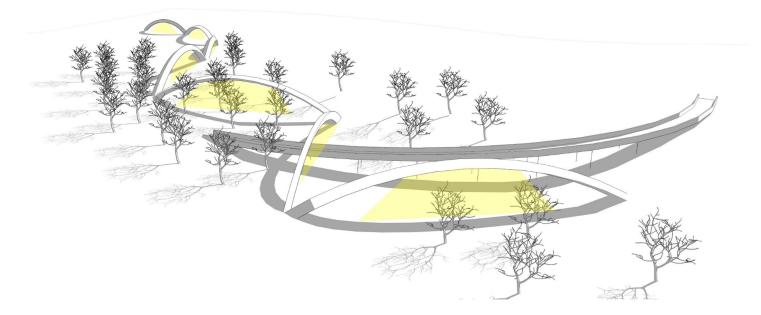
t.



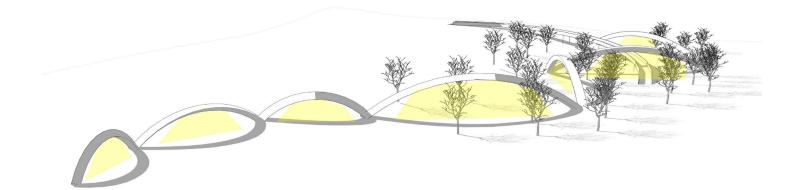
В







Arches: Rendering

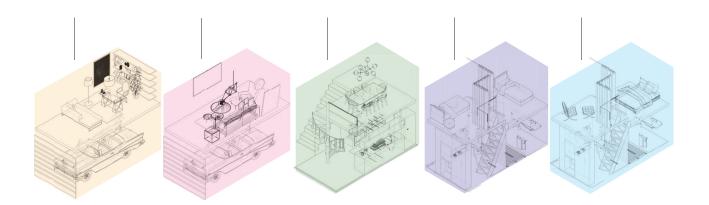


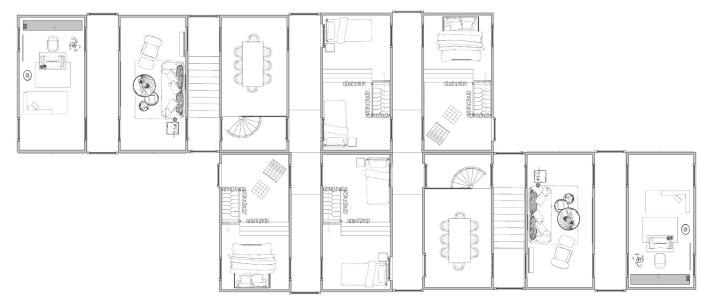
Jenise Hills

Polytechnic Heights is a diverse community currently facing the issues of gentrification. To battle these ongoing issues in a specific way, modest duplexes that sleep four people can be installed in the neighborhood, keeping housing prices lower while maintaining growing urban density.

This project more specifically rotates around the concepts discussed in The Place of Houses, by Moore, Allen, and Lyndon, specifically the chapter on the order of rooms. This chapter investigates the concept of a machine as an object to aid human living, defining everything from dishwashers to the dishes themselves as machines assisting human life.

In discussing and dissecting this topic further, my proposal for a duplex began to form around the concept that machines define space and make it functionally distinct. I chose to design my work by categorizing human life functions and by isolating those functions, and their accompanying machines, into distinct, separate spaces.

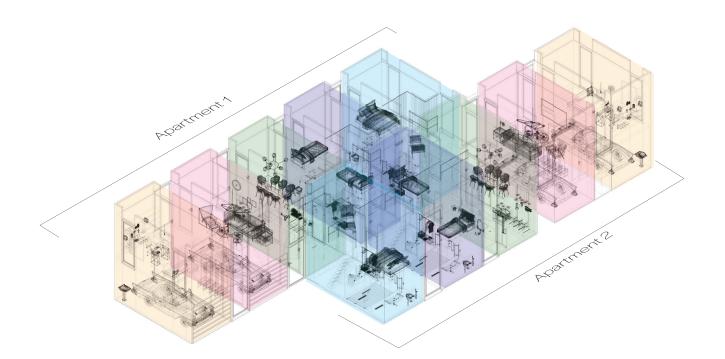




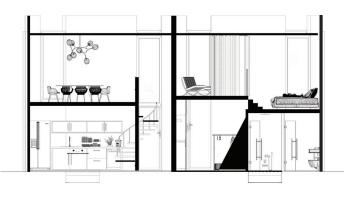
Second Floor



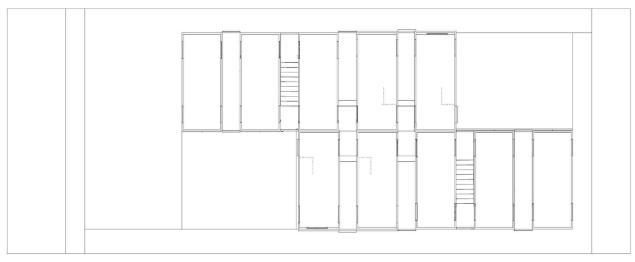
First Floor







Sections

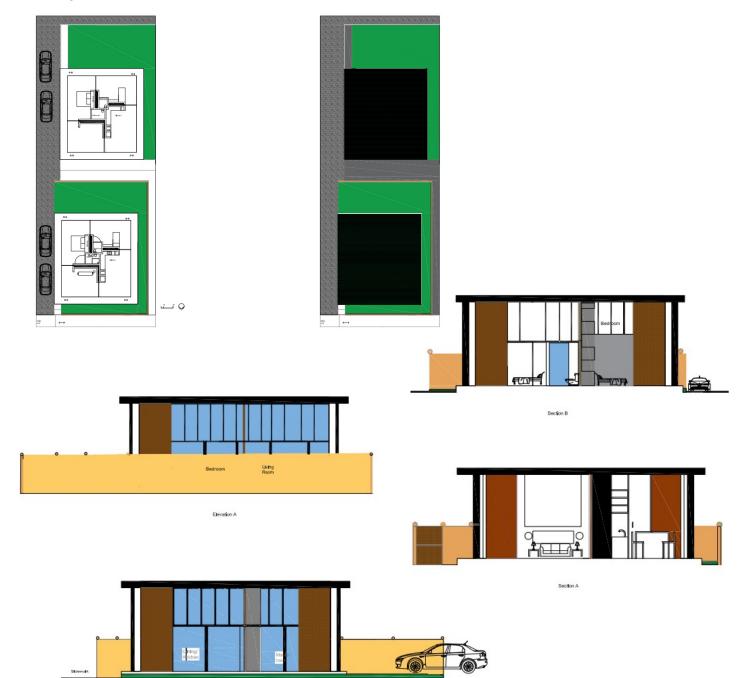


Site Plan

Amy Alzidan

The duplex can also take on the Pin wheel-house name, taking the core wall to be the organizing theme of machinery and technology. The outer parameters are glass sliding doors supported by a grid of columns. The slide doors both, connect and separate the indoor from the outdoor. Four main spaces, starting at the front door where the first space experienced, is the living room. Moving counterclockwise to the kitchen and to the back of the house where two bedrooms face the backyard. Parking space along the sides of the duplexes and a fence separating the two with a private entrance into the duplex closer to the alley

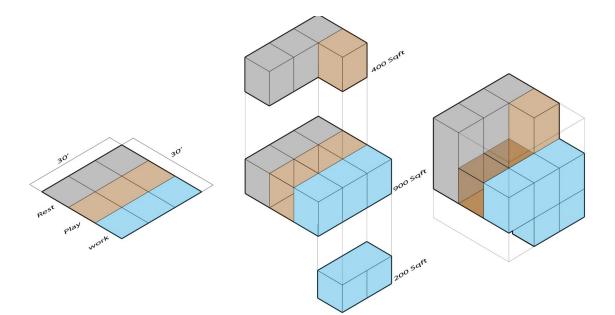




Elevation A

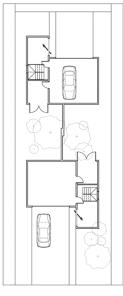
Terressa Davilmar

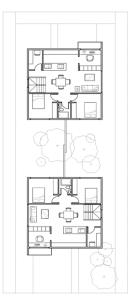
The concept for this project is a further study of John Hedjuk's nine-square grid problem in conjunction with the study of machines. The arrangement of each room is influenced by our residential machines, their functionality, and daily use.















THIRD FLOOR PLAN

240

FIRST FLOOR PLAN

SECOND FLOOR PLAN

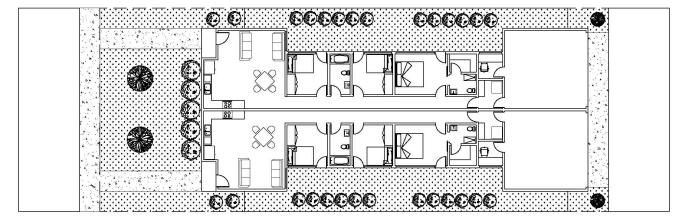


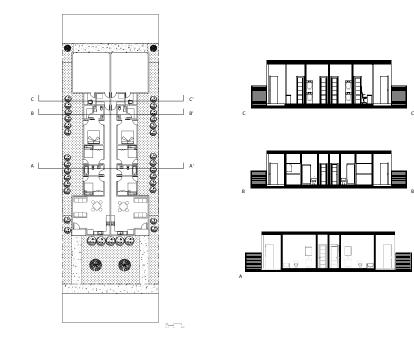


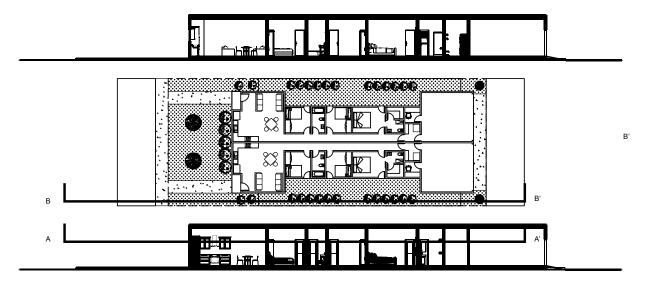








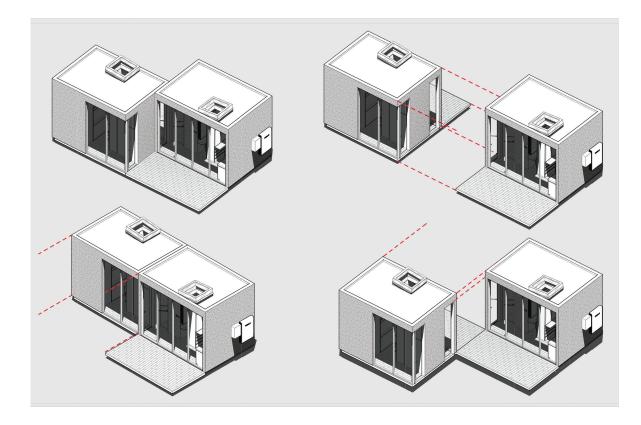




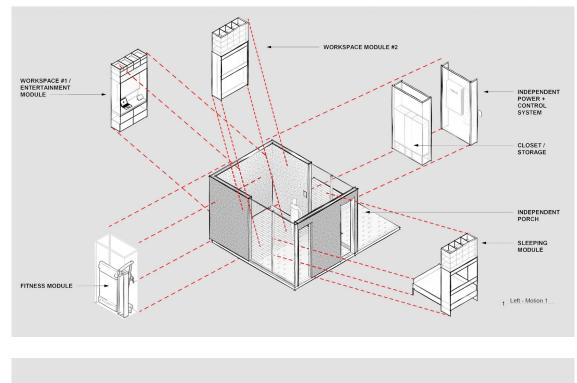
Townhouse: Modular Townhouse

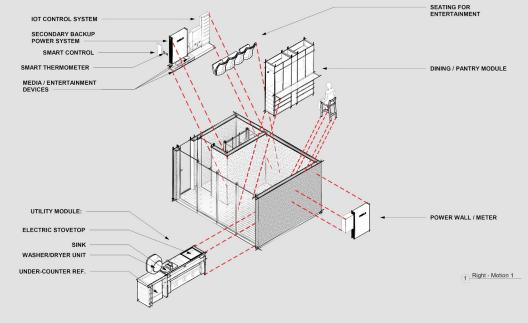
This home has traditionally structured different aspects of family life as a place. Today the home has become even more important than it; we have come to expect the home to also be a space for playing, working, schooling, socializing, and a place for reflection and improvement of the self. The maqunias | mechanicas house is designed around the machines we design our lives around. The house is designed as an intertwining series of spaces; each is connected to and reacts to the next. They are designed to align in their trajectories, all the while allowing the user to control and modify their idea of the home.

The project is divided into two applications: a single-family home and a series of townhomes. Each type is kinetic internally and externally, adapting to the course of the family's life over the next 100 years, accommodating to and in response to their changing needs.

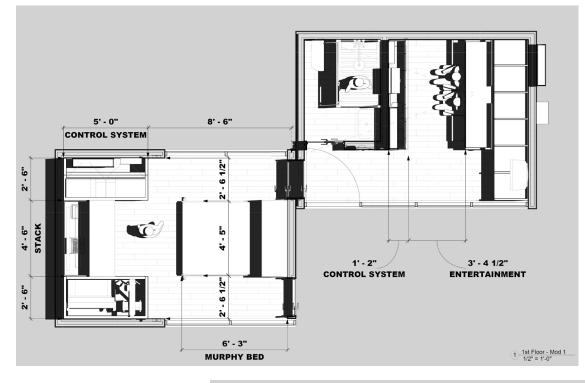


Townhouse: Modular Townhouse



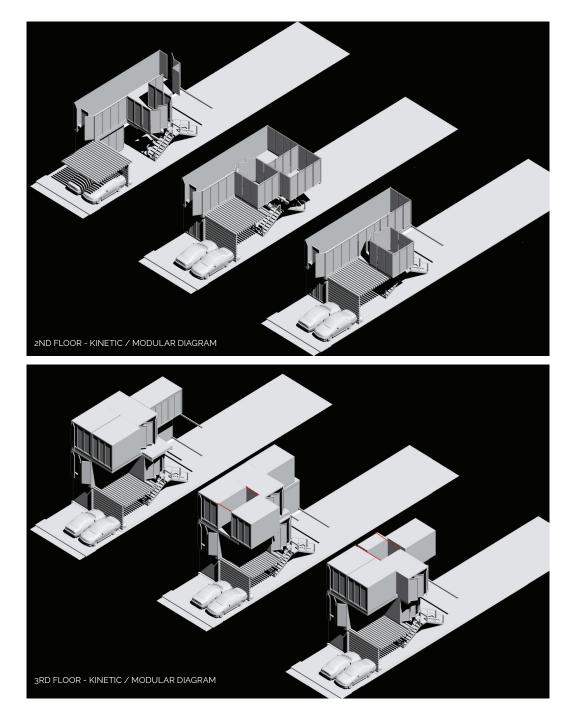


Townhouse: Modular Townhouse





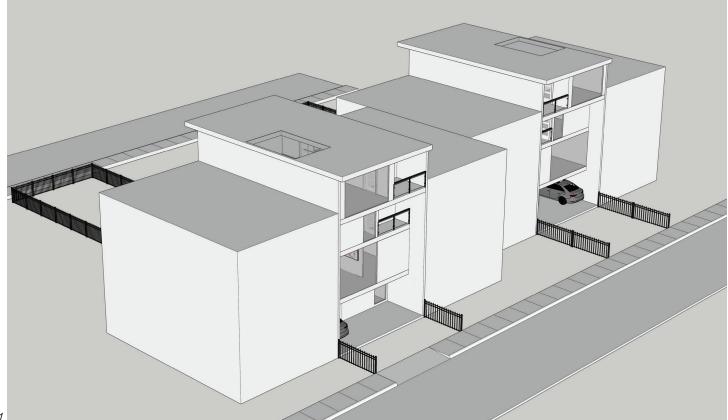
Townhouse: Modular Townhouse

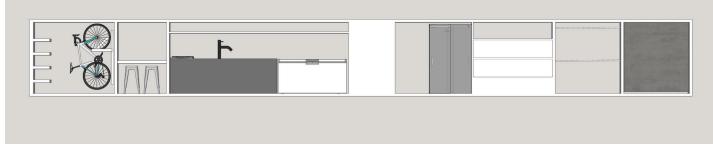


Katheryn Van Dinh

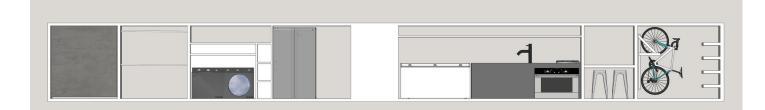
In the last month of the semester, the studio diverged and looked into the idea of organizing space in connection to the machines humanity uses throughout the day. My concept, Circadian, was developed around a layout of machines and space based on the routine of the day. The concept was

further developed on to an existing site with the Polytechnic Heights neighborhood within the constraints of a townhouse.

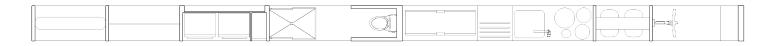




Morning Elevation



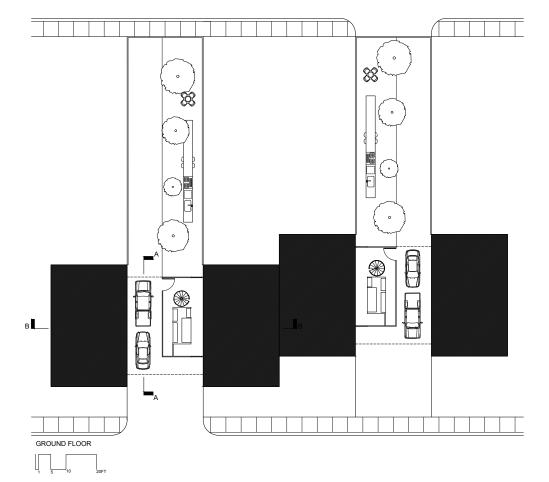
Night Elevation

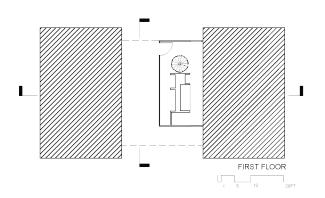


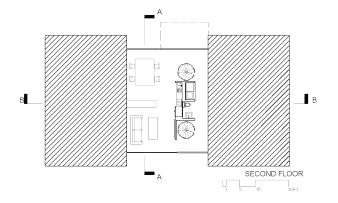
Floor Plan

10

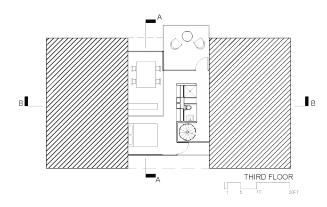
5







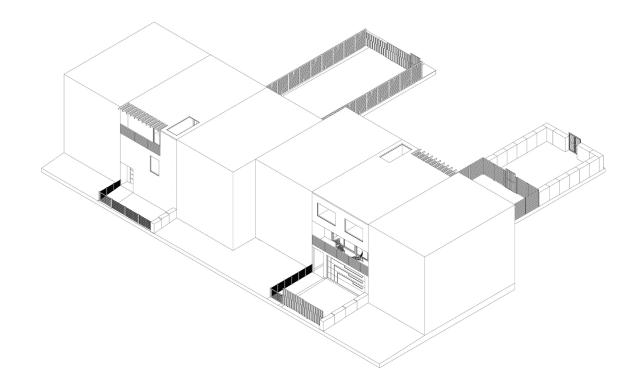


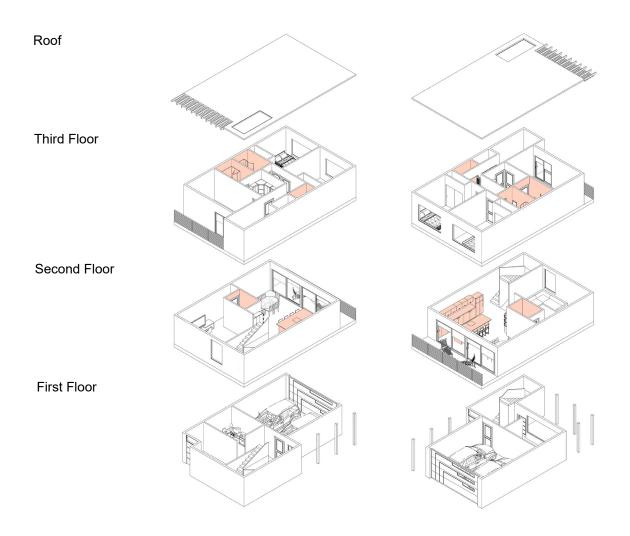


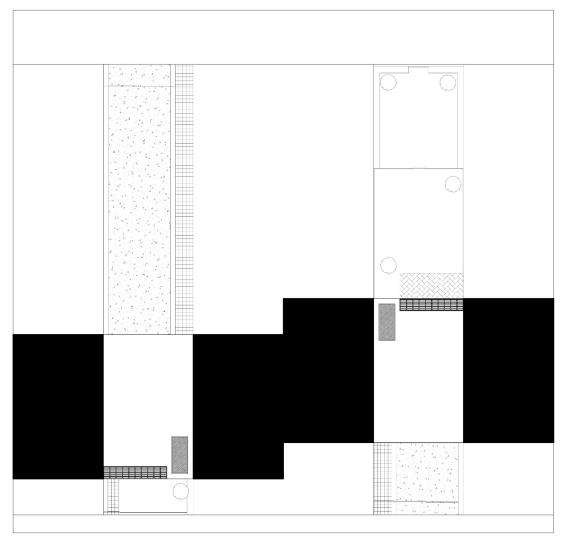


Iva Galvan

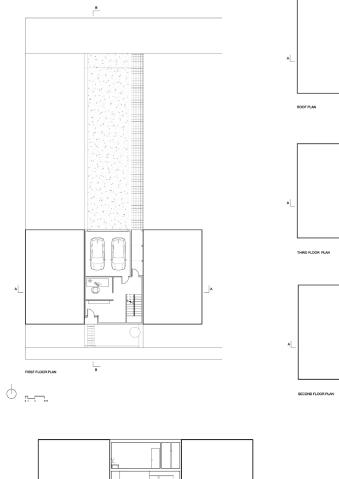
The project was centered on designing a dwelling based on the relationship between humans and machines. I created a condensed unit to demonstrate how machines can be organized and located in a shared, active space; which is placed adjacent to resting spaces, such as a bedroom.







0 1 4 8FT



в

в

в

Б

в

Ĵ

В

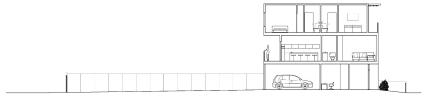
 \square

S .

____A

____A

A



SECTION B

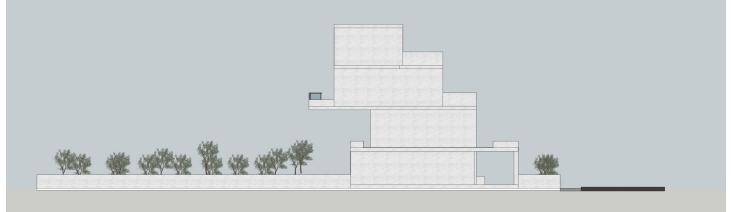






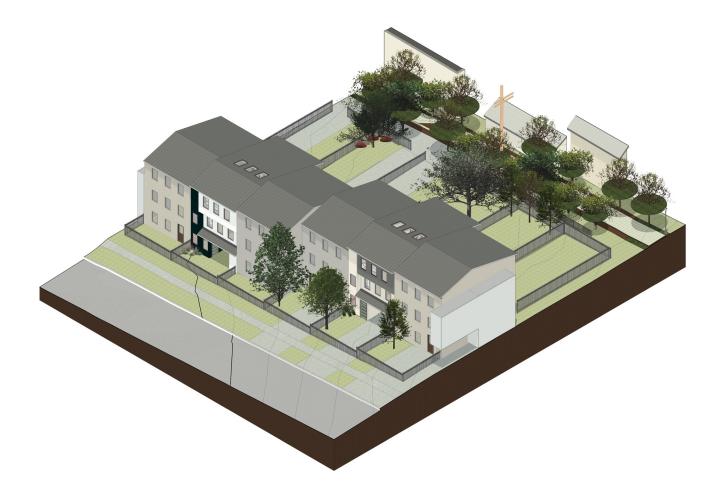


Townhouse: Terrace House

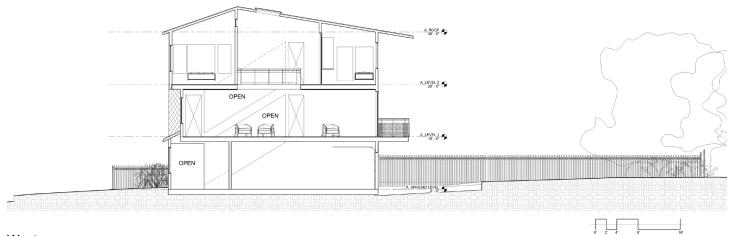






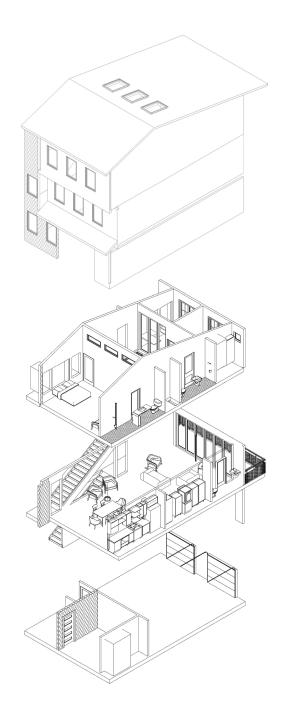


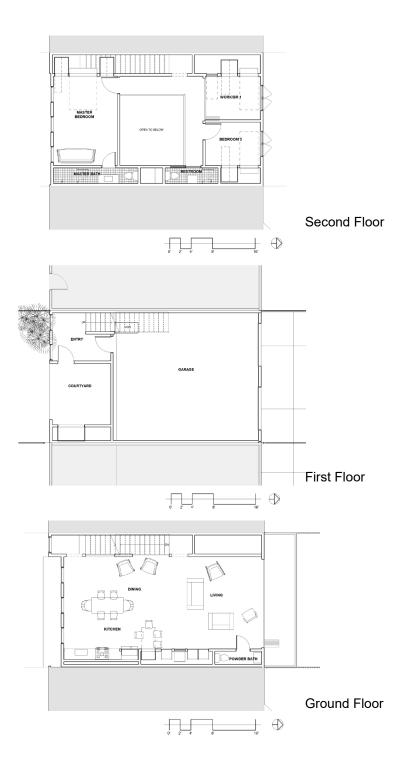
Townhouse: Sections

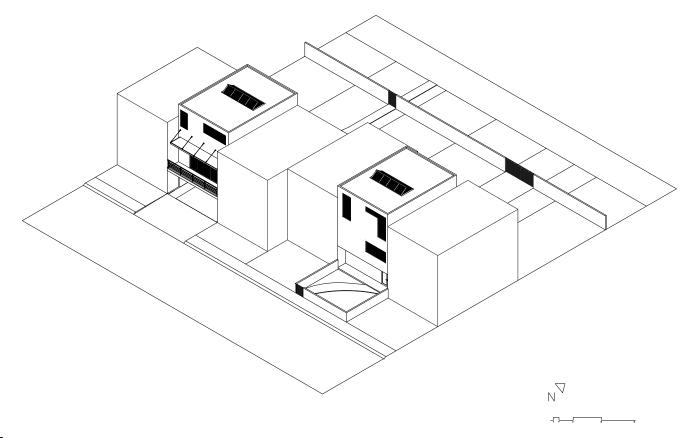












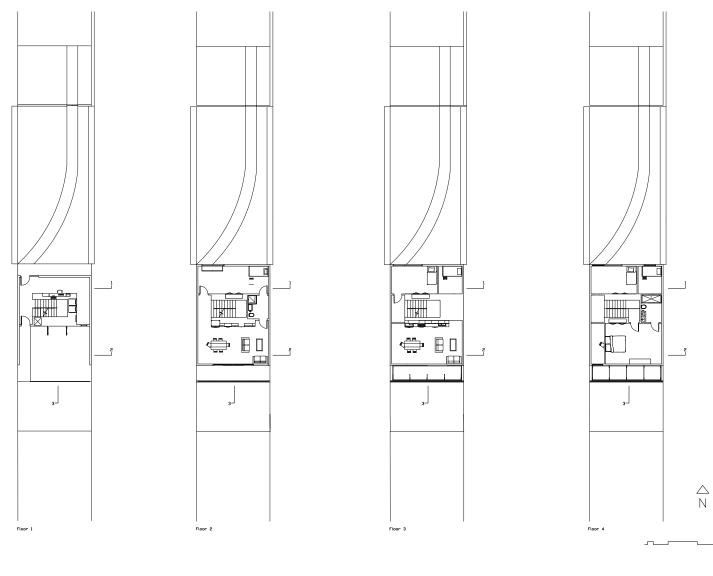
	Fourth Floor	Roof Solar Panels Master Bath Lights Storage Ventilation	Lights Storage Ventilation
	Third Floor		
	Second Floor	Bathroom Kitchen Lights Storage Ventilation	
	First Floor		Powerwall Office Electric Car Chargers Lights HVAC
V	The Co	oncept-	

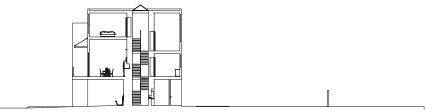
All technology contained within one thick U shaped wall



North Elevation

The Techcore Townhouses





Section 3



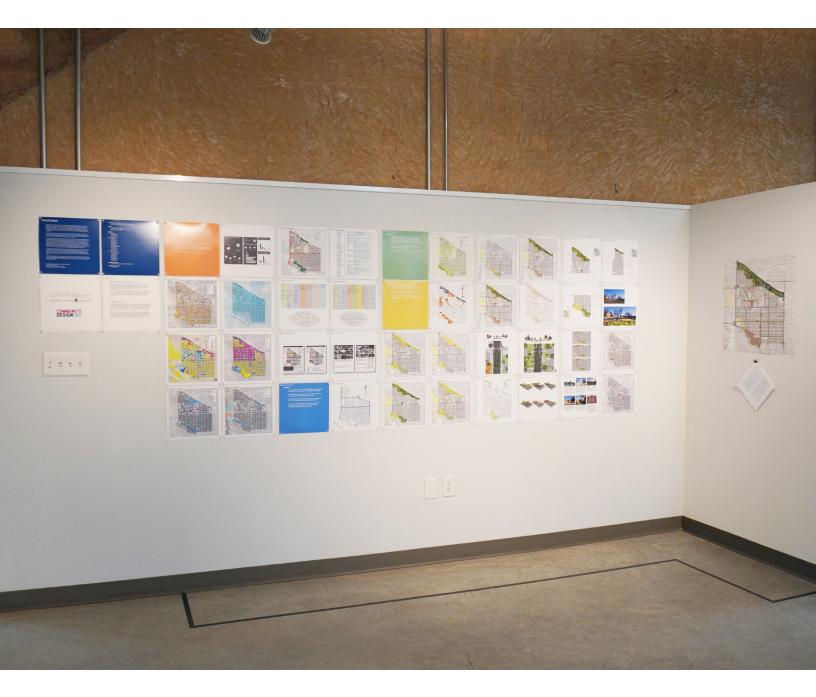
EXHIBITION

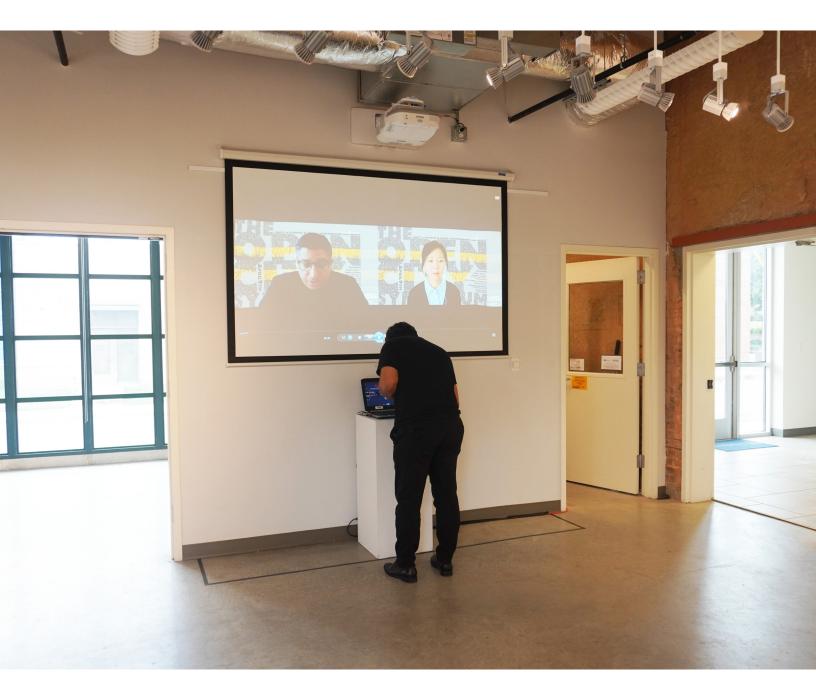




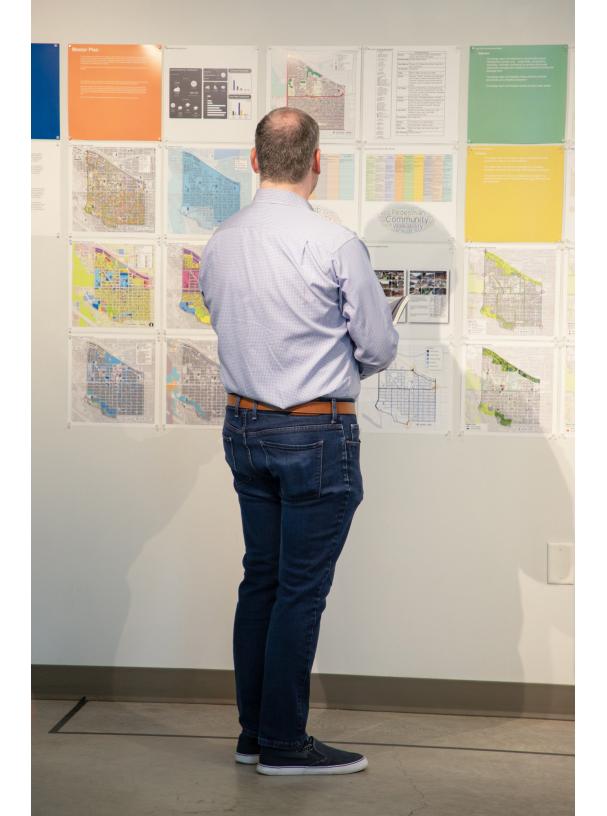


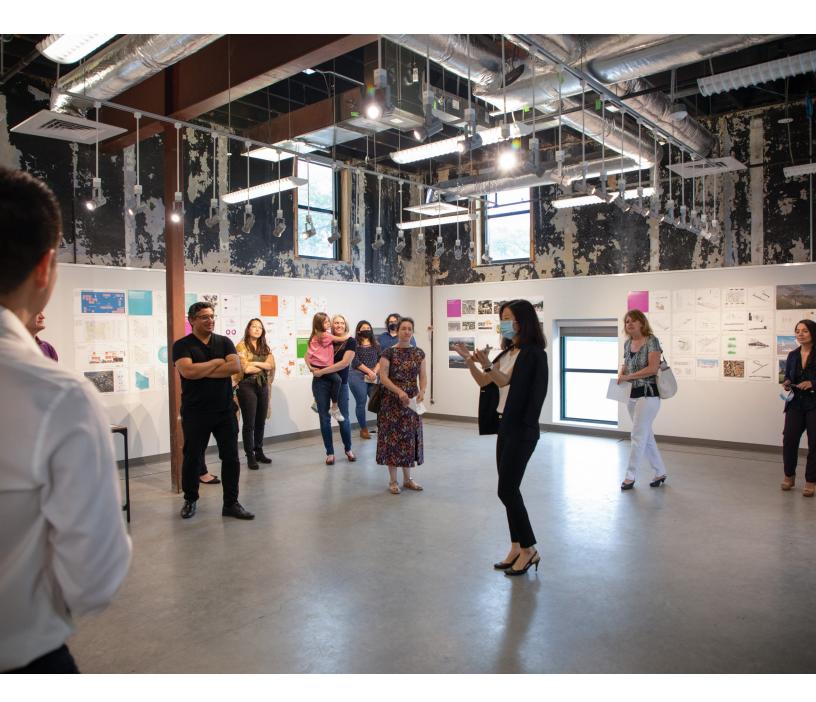
Public Exhibition at Bernice Coulter Templeton Art Studio: July 16- August 20, 2021









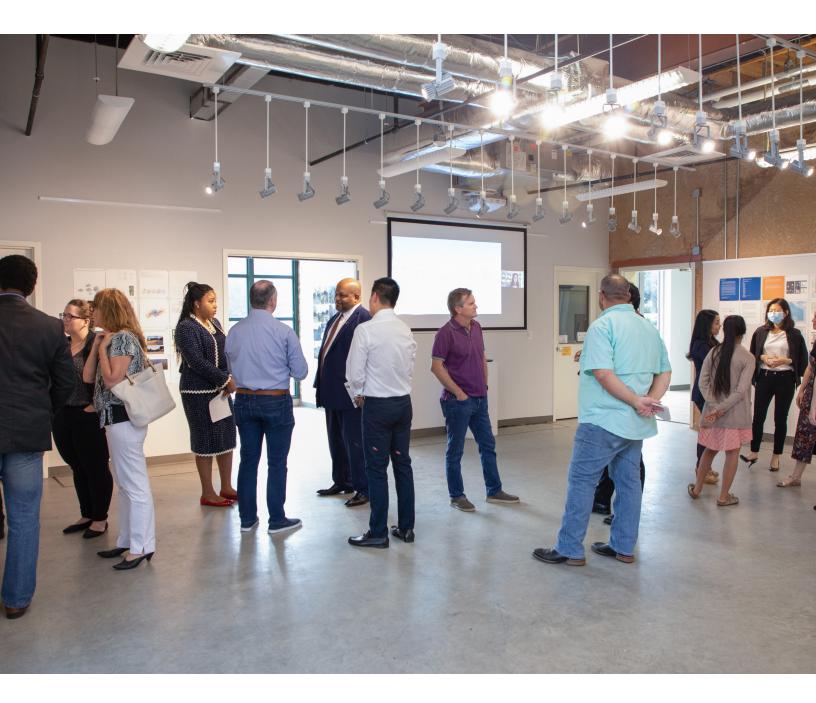




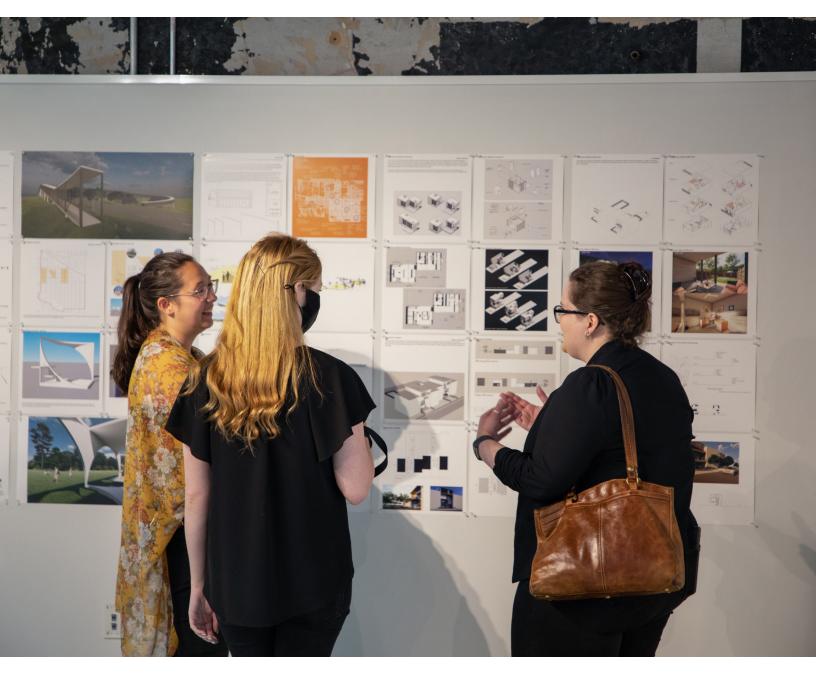














A FINAL NOTE

Our project team would like to thank Texas Wesleyan University, Polytechnic High School, William James Middle School, United Fort Worth Justice Center, Black Coffee, and members of the community who participated in this project for sharing their invaluable insights and wisdom. The work in this book is the result of a collaborative process that centered the needs of community members over a year-long circular process of engagement, research, and design. We want to thank the entire Poly community for this rich learning opportunity that allowed our students to go outside the classroom and use their skills to envision a shared future for the community.

