

An aerial photograph of the University Heights neighborhood in Buffalo, New York. The image shows a mix of residential houses, including a prominent red house in the foreground and larger institutional buildings in the background. A road with a roundabout is visible in the center. The text 'EXPLORING THE UNIVERSITY HEIGHTS' is overlaid in large white letters on a dark blue background.

EXPLORING THE UNIVERSITY HEIGHTS

THE UNIVERSITY HEIGHTS AND
UB SCHOOL OF ARCHITECTURE AND PLANNING

2017





HOW ARE WE EXPLORING THE UNIVERSITY HEIGHTS?

Over its fifty-year history, the University at Buffalo School of Architecture and Planning has established the City and region as its living laboratory for learning and doing. This commitment has been in studios, service learning programs, research-to-practice partnerships, and countless student and faculty-led projects across the region.

Building on that legacy, the School is taking an intentional approach to study its campus home and the surrounding University Heights neighborhood over a continuous, multi-year engagement. Research faculty and professional staff will look at the data – to understand the context of the

neighborhood's assets, challenges and existing conditions. Faculty and students will explore deeper dives into specific issues in the community – through the lenses of urban planning and architecture. We will learn together, from one another, using the community's input and feedback to establish the multi-year living laboratory.

This report represents the work produced in calendar year 2017 and serves as a foundation for further exploration in the years to come.



PROGRAM GOALS

This effort will advance four specific goals that can inspire ideas for future development and investment:

Build a knowledge base on the neighborhood's existing conditions, assets and challenges. Assembly of this data-driven context will offer partners from the public, private and non-profit sectors neighborhood-specific data that can inform decisions.

Create visions for the future that can inspire developments to promote the neighborhood's growth and revitalization.

Catalyze action by identifying potential projects, programs, or infrastructure investments capable of spurring additional investment in the residential and commercial areas throughout the neighborhood.

Develop a series of tools that can assist local community groups, planners, and potential investors to implement revitalization strategies for the neighborhood.

6 Where is the University Heights?

SCHOOL EXPLORATIONS FOR 2017

Through the 2017 calendar year, students, faculty, and professional research staff worked hands-on in the University Heights neighborhood, looking at key sites and issues, to identify potential design and planning solutions. Highlights include two master's level studio courses, a graduate-level urban design seminar, several undergraduate and graduate level course projects, and a baseline assessment of the University Heights neighborhood conducted by the research staff at the UB Regional Institute that frames the neighborhood in data and past and ongoing planning work.

9 What do plans say about the University Heights?

Qualitative assessment of 29 recent planning documents looking at the Heights. This plan review yields seven key planning themes that relate to community needs, strengths, or contemporary issues for the neighborhood.

UB Regional Institute - Summer 2017

13 What does the data say about the University Heights?

A look at what the data says about neighborhood demographics, economic trends, land uses, real estate market, crime patterns, and more. This quantitative assessment helps frame the neighborhood's key strengths and challenges.

UB Regional Institute - Summer 2017

29 How can we re-imagine some of the key neighborhood nodes?

Graduate-level studio course that looked at architectural interventions to advance key community priorities and maximize the potential for the campus and community to formulate a coherent articulation.

ARC 606 – Articulating the Edge: Imaging the Futures of the University Heights

Instructor: Erkin Ozay - Spring 2017

67 What do City and Campus relationships look like in other places?

Studying the evolution of the university institution, the idea of campus, and its connection to place, this urban design seminar course developed a series of case studies that look at how various university campuses expanded and their relationship with the surrounding context.

ARC 589 - Urban Design - Town & Gown

Instructor: Greg Delaney - Spring 2017

83 How can we make Bailey Ave healthy, equitable, sustainable, and imageable?

Graduate-level urban design seminar course that offers design solutions to inform current and future planning for the Bailey Avenue streetscape and several of its vacant or underutilized lots

ARC - URP 565 – Understanding Good Urban Form

Instructor: Hiro Hata - Fall 2017

91 What could transit-oriented development around the University Station look like?

This graduate-level course brings together students from our real estate development and urban design disciplines to prepare a professional urban design and real estate development analysis of the area surrounding the University Metro Rail Station.

ARC 607-2 / ARC 609– Option Studio - Urban Design

Instructor: Mark Foerster and Hiro Hata - Fall 2017

103 What additional classroom projects explored the University Heights?

An additional classroom project on historic preservation adopted the neighborhood as a “living laboratory” in 2016.

URP 529– Documentation and Field Methods in Historic Presentation

Instructor: Dr. Ashima Krishna - Fall 2016

105 Appendix

Data Sources and Notes
Acknowledgments

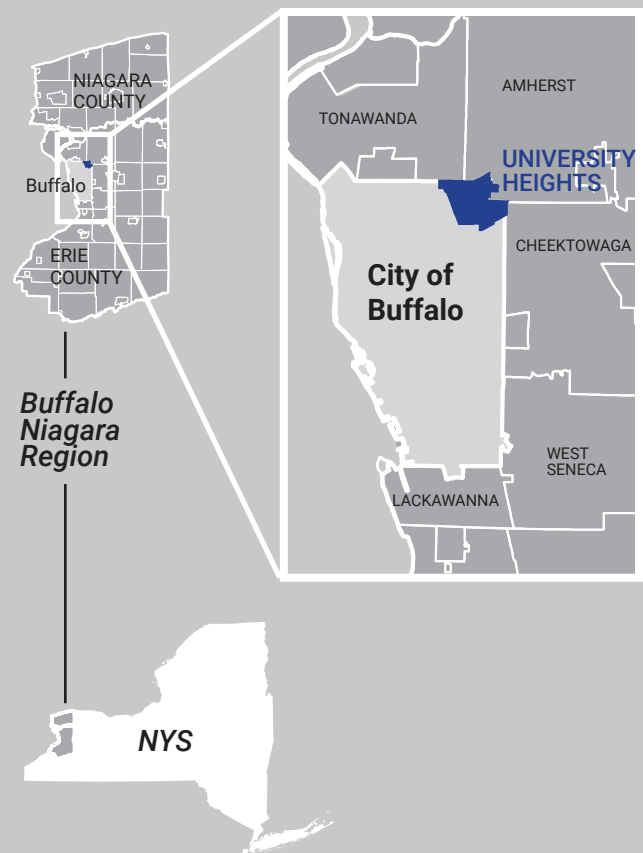


WHERE IS THE UNIVERSITY HEIGHTS?

The University Heights is a neighborhood in the northeast corner of Buffalo, NY, the largest city in Erie County and the Buffalo Niagara region. Originally planned as a street-car suburb of the City, the University Heights neighborhood borders the towns of Tonawanda, Amherst, and Cheektowaga.

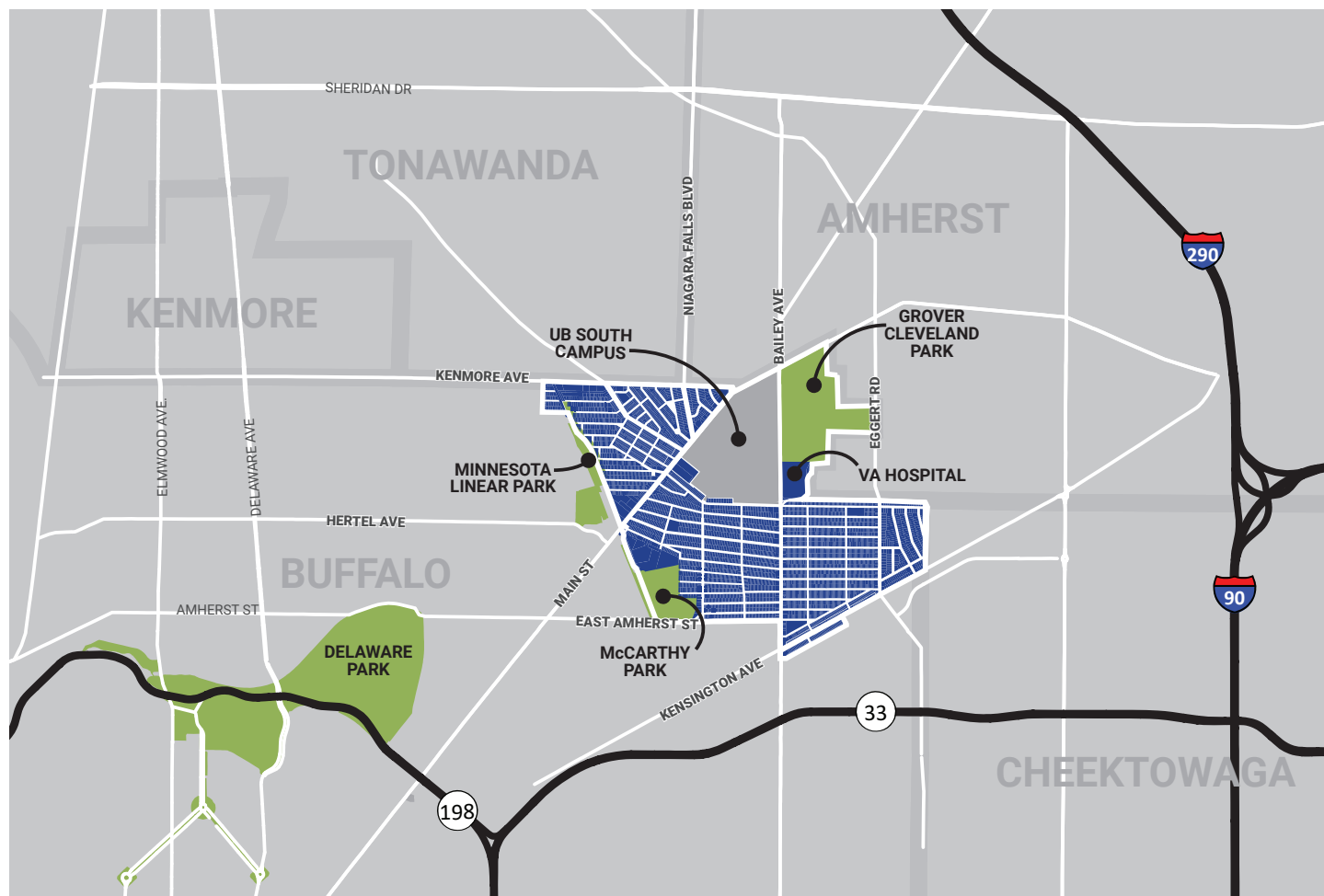
Today, the neighborhood serves as the northern terminus of the City's Metro Rail system as well as the home to the University at Buffalo's South Campus, whose presence creates a unique cultural and demographic dynamic.

Most of the neighborhood consists of single family and multifamily residential homes. Two major commercial corridors, Main Street and Bailey Avenue, differentiate distinct areas of the neighborhood; a third commercial corridor, Kenmore Avenue, runs along the northern border of the neighborhood.



WHERE IS THE UNIVERSITY HEIGHTS?

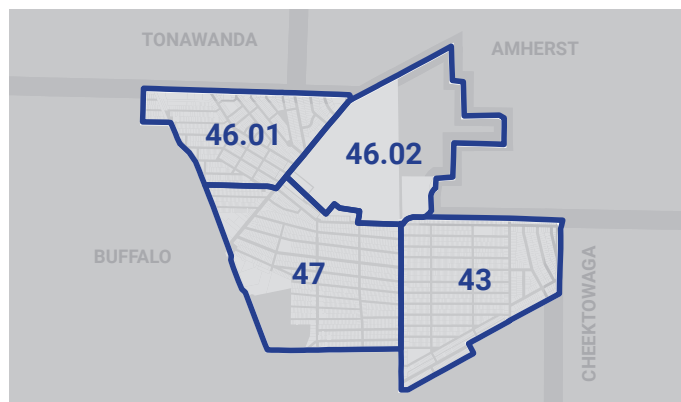
THE UNIVERSITY HEIGHTS STUDY AREA



This geography is bordered by Kenmore Avenue and Main Street to the north; Eggert Road, Grover Cleveland Park and the Buffalo VA Hospital to the east; Kensington Avenue and East Amherst Street to the south; and McCarthy Park, William Price Parkway, and Minnesota Linear Park to the west.

CENSUS TRACTS IN THE UNIVERSITY HEIGHTS

Although the edges of a neighborhood are often more ambiguous than lines drawn on a map, for the purposes of this initiative, the neighborhood boundaries are defined by Census Tracts 43, 46.01, 46.02, and 47.



WHAT DO PLANS SAY ABOUT THE UNIVERSITY HEIGHTS?

Looking at plans for insights on the community

Plans create a guide for the future of a place and offer insights into the needs, desires, values, and vision of a community. A review of 29 plans that have influenced the University Heights neighborhood reveals seven predominant themes important to planning and design work in the community. The plans' objectives, recommendations and visions for the future offer insights into some of the challenges, opportunities, and aspirations that the neighborhood identified in the past. The plan review covered a geographical spectrum ranging from small-scale neighborhood and corridor plans to regional plans for all of Western New York. While plans written specifically for the University Heights provide a greater understanding of priorities at the neighborhood level, citywide and regional plans offer broader implications for the future of the neighborhood.

Neighborhood/Corridor Plans

Buffalo Promise Neighborhood Housing Strategies (2016)
Bailey Fights Blight (2016)
University District Demographic and Socioeconomic Profiles (2016)
University District: A Multimodal Community (2016)
LISC MetroEdge Analysis and Recommendation for Action (2015)
ReTree the District (2014)
Buffalo Promise Neighborhood Community Needs and Perceptions Survey Summary of Findings (2014)
Buffalo Promise Neighborhood Crime and Safety Community Brief (2014)
Public School 63 Brief (2013)
Buffalo Promise Neighborhood Needs Assessment Study (2011)
Northeast Neighborhood News (2004)
The Bailey Avenue Project (1997)
Ken-Bailey Project: A Study in Commercial Revitalization (1978)

City Plans

City of Buffalo Green Code Land Use Plan (2016)
City of Buffalo Green Code Unified Development Ordinance (2016)
City of Buffalo Bicycle Master Plan (2016)
Queen City in the 21st Century: Buffalo's Comprehensive Plan (2006)
Buffalo City Plan (1977)
Buffalo Master Plan (1971)

Regional Plans

Buffalo Niagara's Strategic Plan for Prosperity (2017)
A Strategy for Prosperity Progress Report (2016)
One Region Forward: A New Way to Plan for Buffalo Niagara (2015)
The Racial Equity Dividend: Buffalo's Great Opportunity (2016)
Complete Communities for a Changing Region (2014)
Initiatives for a Smart Economy (2013)
The Buffalo Billion Investment Development Plan (2013)
Framework for Regional Growth (2011)
A Strategy for Prosperity (2011)
Building UB: The Comprehensive Physical Plan (2009)

OVERVIEW OF 7 PLANNING THEMES IDENTIFIED IN THE PLANS

Revitalizing neighborhood commercial corridors is prioritized in neighborhood, citywide, and regional plans. Commercial corridors like Main Street, Bailey Avenue, and Kenmore Avenue are seen as critical to advancing community and economic interests in the University Heights. Plans call for reinvesting in infrastructure and encouraging sustainable development along commercial corridors to make them more aesthetically appealing, safer, and easier to access.



Transit-oriented development along public transit routes is a growing priority for the City and region. Valued for its potential to create more vibrant, walkable, and sustainable neighborhoods, transit-oriented development (TOD) is increasingly promoted as a strategy for revitalizing commercial districts, as well as providing greater access to employment opportunities and services across the region. Given the concentration of multi-modal transit infrastructure in the neighborhood, which includes bike lanes, trails, bus and rail, the commercial corridors in University Heights are seen as a prime location for reaping the benefits of TOD.



Leveraging the university as both a community partner and a catalyst for economic growth is a key theme of plans focused on the University Heights. Connectivity to the university is an important part of the neighborhood's identity, yet its physical proximity to the campus poses challenges and opportunities. It enables the neighborhood to benefit from service learning activities, social and economic entrepreneurship opportunities, UB programs and events, and more. For many residents, it also raises quality of life concerns, especially given the high concentration of transient students in the neighborhood. Opportunities to improve neighborhood-university community relationships, as well as the physical connectivity between campus and the neighborhood, can be critical to a stronger University Heights and a stronger UB.



Promoting equity and opportunity for the residents of the University Heights is an important community priority. The University Heights is diverse in race, culture, income, education, and family structure, so recommendations for its future should address varying needs of diverse residents, and take into account the impact of actions on different populations. Improving educational attainment is also a key strategy for breaking the cycle of poverty and preparing children to enter the workforce of the 21st century.



An engaged and collaborative community is the crux of a vibrant and healthy neighborhood. The University Heights has a strong and storied history of community collaboration engaging residents, business owners, community stakeholders, and community organizations in initiatives and planning efforts. When citizens are active participants in planning, solutions to community problems are also more likely to directly address the needs and desires of neighborhood residents.



Quality of life improvements like crime reduction, increased safety, improved public services, and maintenance of public spaces are all part of the vision for enhancing the neighborhood as a place for people and business to thrive. Neighborhood-level and citywide plans emphasize community collaboration and citizen participation in various programs and initiatives to improve the quality of life for all residents in the University Heights.



Preserving community character is often lifted up as a community priority for the University Heights. Neighborhood-level plans for the University Heights emphasize preserving and reinvesting in the area's unique housing stock and neighborhood landmarks like churches, schools, and businesses that contribute to the community's character. Through sustainable and equitable development practices, residents also desire the enhancement and revitalization of commercial districts that were once the pride of the neighborhood.



WHAT DOES THE DATA SAY ABOUT THE UNIVERSITY HEIGHTS?

Looking to the data to understand the community

Current conditions of the University Heights show a resilient neighborhood that is shaped by both challenges and opportunities. This section covers data on neighborhood demographics, economic trends, land use patterns, real estate, crime, and more. Combined with the themes taken from past and ongoing planning work, the knowledge of existing conditions in the University Heights can help guide community decisions, investments, and future student-based planning and design studies in the neighborhood.

Demographics

The neighborhood is home to many young, college-age adults.
The neighborhood's population is shrinking.
The racial and ethnic composition of the neighborhood is changing.
Many children and young adults in the neighborhood live in poverty.

Jobs and Workforce

Jobs are concentrated in five major industries.
Most employed residents work outside the neighborhood.
Educational attainment of adults lags behind the City.
Labor force participation rates are lower than the City.
More young people are out of work and school than in the rest of the City.
Household incomes are slightly higher than across the City but below the region.

Built Environment

More than half of land is devoted to residential uses.
Historic places contribute to the neighborhood's character.
The neighborhood has a variety of community and recreational assets.

Real Estate Market

There have been many home sales in recent years.
Commercial vacancy rates are more than double residential vacancy rates.

Transportation Options

The neighborhood is connected via diverse transportation modes.
More residents take public transit or walk to work than across the City and region.
Compared to the City, public transit is more of a choice than necessity for residents.

Crime and Safety

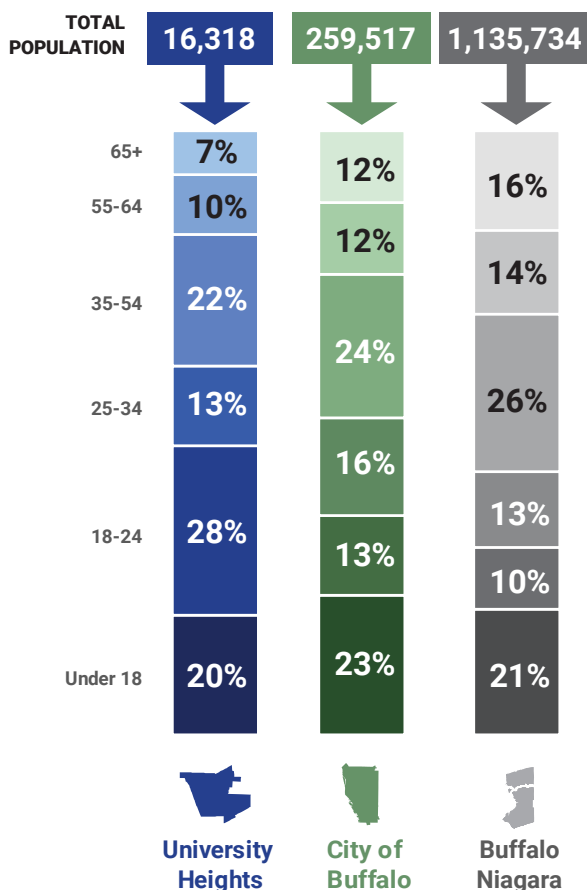
Violent crimes are less prevalent than across the City.
Property crimes in the neighborhood are on the decline.

DEMOGRAPHICS

The neighborhood is home to many young, college-age adults.

Nearly 30% of residents of the University Heights are between the ages of 18 and 24— more than double their share across the City and nearly triple their share across the region. Compared to the City and region, the University Heights has smaller shares of working-age adults ages 25-54 and seniors ages 65 and over. However, this trend doesn't extend to all parts of the neighborhood. Areas east of Bailey Avenue have higher proportions of children and adults ages 35-54, while the area west of Main Street has a higher share of young people ages 18-34.

Age Composition of Residents, 2015

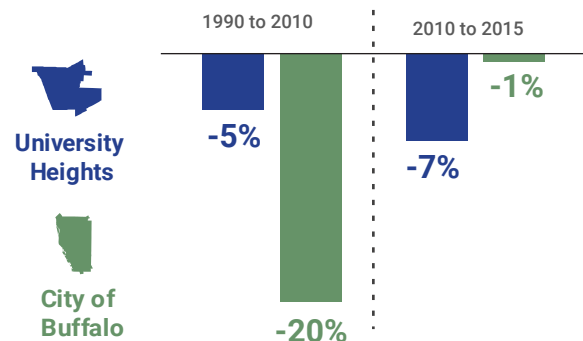


Source: UBRI analysis of data from the US Census Bureau, American Community Survey, 5-year estimates, 2011-2015.

The neighborhood's population is shrinking.

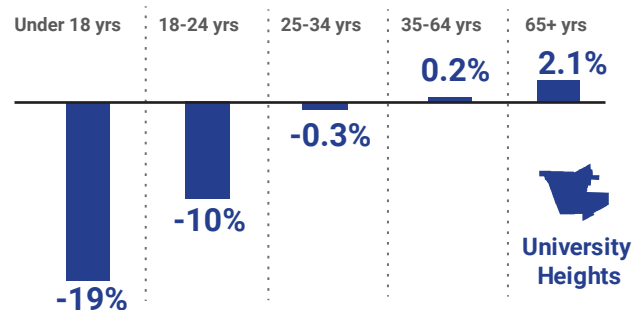
From 1990 to 2010, the rate of population loss in Buffalo was four times greater than the University Heights. But between 2010 and 2015, while the population across the City remained relatively stable, the neighborhood lost 7% of its total population. Driving this decline is the significant drop in the number of young people in the neighborhood, especially among children under 18, whose numbers declined by 19% from 2010 to 2015. Contributing to this decline may also be a decrease in the number of households with marriages, with or without children, during this time period.

% Change in Population, 1990-2015



Source: UBRI analysis of data from the US Census (2010); American Community Survey, 5-year estimates, 2011-2015.

% Change in Population by Age, 2010-2015

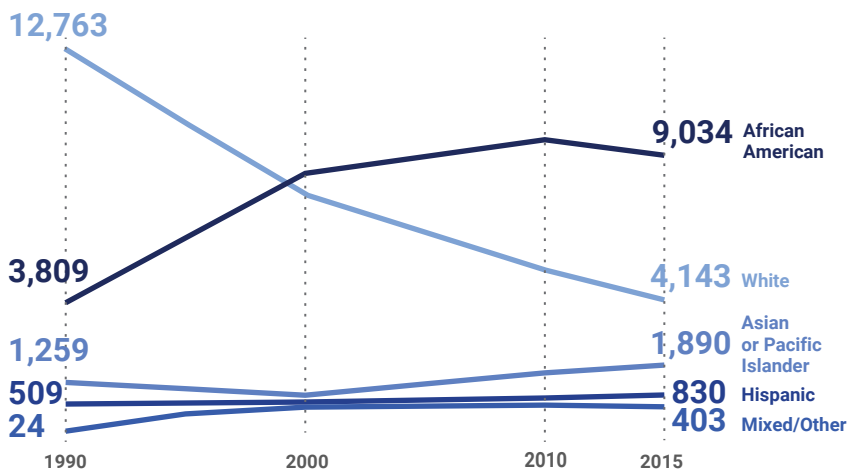


Source: UBRI analysis of data from the US Census (2010); American Community Survey, 5-year estimates, 2011-2015.

The racial and ethnic composition of the neighborhood is changing.

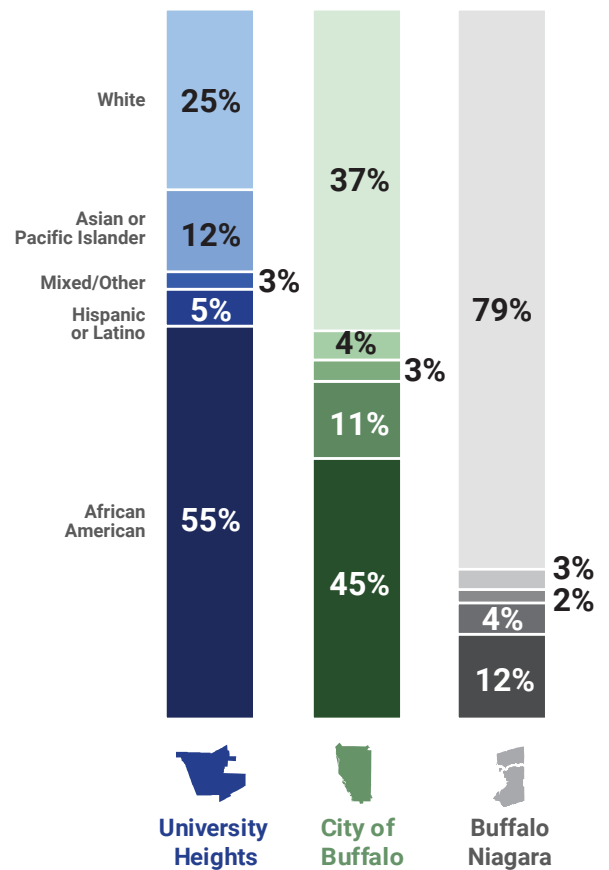
With non-Hispanic Whites making up only 25% of residents in the University Heights, the neighborhood is considerably more racially diverse than the City and region. The neighborhood is predominantly African American, but this is a recent trend. During the 1990s the neighborhood underwent a demographic shift that saw Whites leaving and African Americans arriving. Additionally, about 12% of residents in the neighborhood are foreign born—greater than the share across the City and nearly double the share across the region.

Population by Race/Ethnicity, 1990-2015



Source: UBRI analysis of data from the US Census (1990, 2000, and 2010); American Community Survey, 5-year estimates, 2007-2011; 2008-2012; 2009-2013; 2010-2014; 2011-2015.

Racial-Ethnic Composition of Residents, 2015

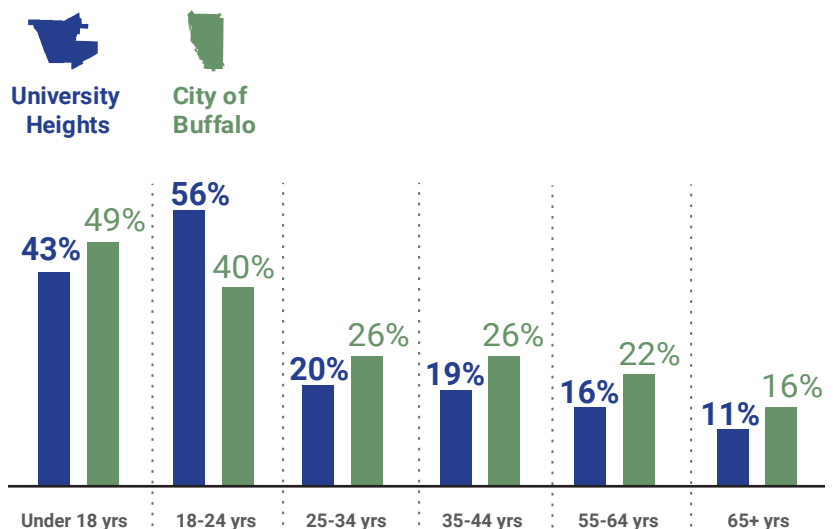


Source: UBRI analysis of data from the US Census Bureau, American Community Survey, 5-year estimates, 2011-2015.

Many children and young adults in the neighborhood live in poverty.

Nearly one third of all University Heights residents live in poverty, which is on par with the city-wide rate. Poverty rates are highest among young adults ages 18-24 and children under 18. While most age groups in the neighborhood experience lower rates of poverty compared to their counterparts across the City, young adults ages 18-24 are significantly more likely to live in poverty. Higher rates of poverty in this age group may be explained by the neighborhood's large student population, as students often do not earn incomes above the poverty line while enrolled in school.

Poverty Rates by Age, 2015



Source: UBRI analysis of data from the US Census Bureau, American Community Survey, 5-year estimates, 2011-2015.

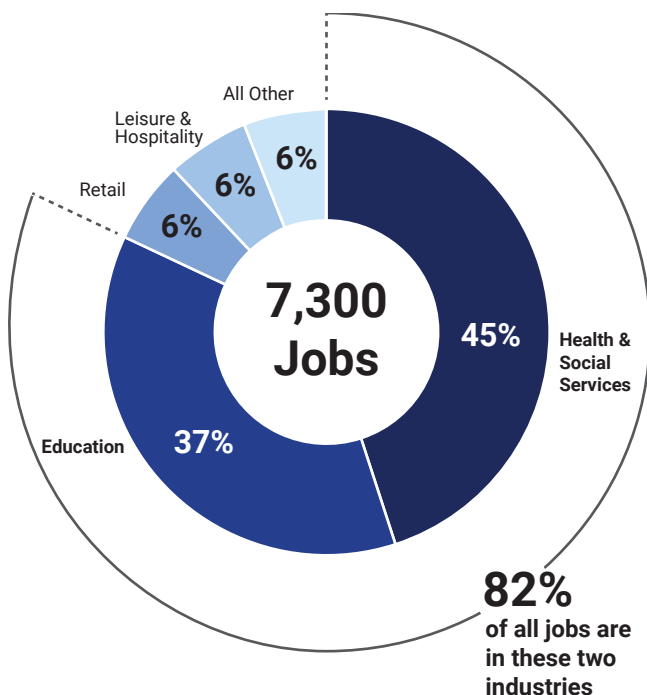
JOBS AND WORKFORCE

Jobs are concentrated in the Health and Education sectors.

Four out of five of the 7,300 jobs in the University Heights are in the Education or Health and Social Services sectors. Many of these jobs are supported by the neighborhood's two largest employers - the Veterans Administration Hospital and the University at Buffalo.

Smaller businesses in the neighborhood are located primarily along the commercial corridors of Kenmore Avenue, Main Street, Bailey Avenue, and Kensington Avenue. Many of these jobs are in Retail or the Leisure & Hospitality sectors and are supported by small businesses. In fact, of the 573 businesses in the neighborhood, those that employ fewer than five people make up 67% of the neighborhood's businesses, while those that employ 20 or more people only constitute about 8% of the neighborhood's businesses.

Industry Composition of Jobs, 2014



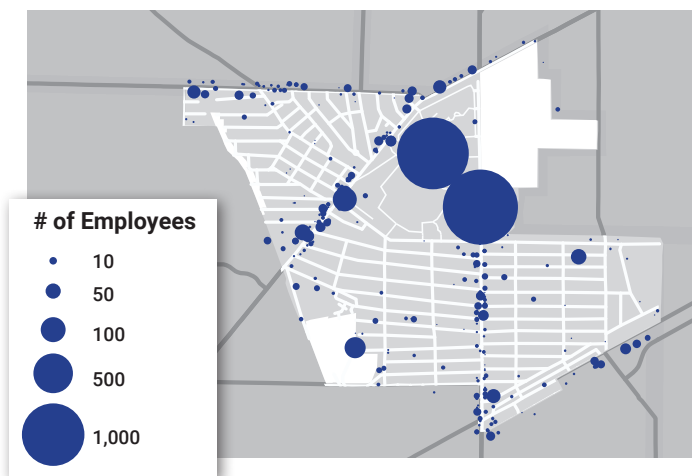
Source: UBRI analysis of data from the US Census Bureau, OnTheMap Application, LEHD, LODES data (2014).



University Heights

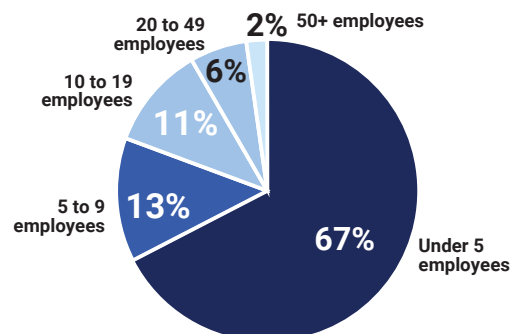
573 EMPLOYERS
7,300 JOBS

Businesses by # of Employees, 2016



Source: UBRI analysis of data from Infogroup, Reference USA Business Database (2016).

% Businesses by # of Employees, 2016

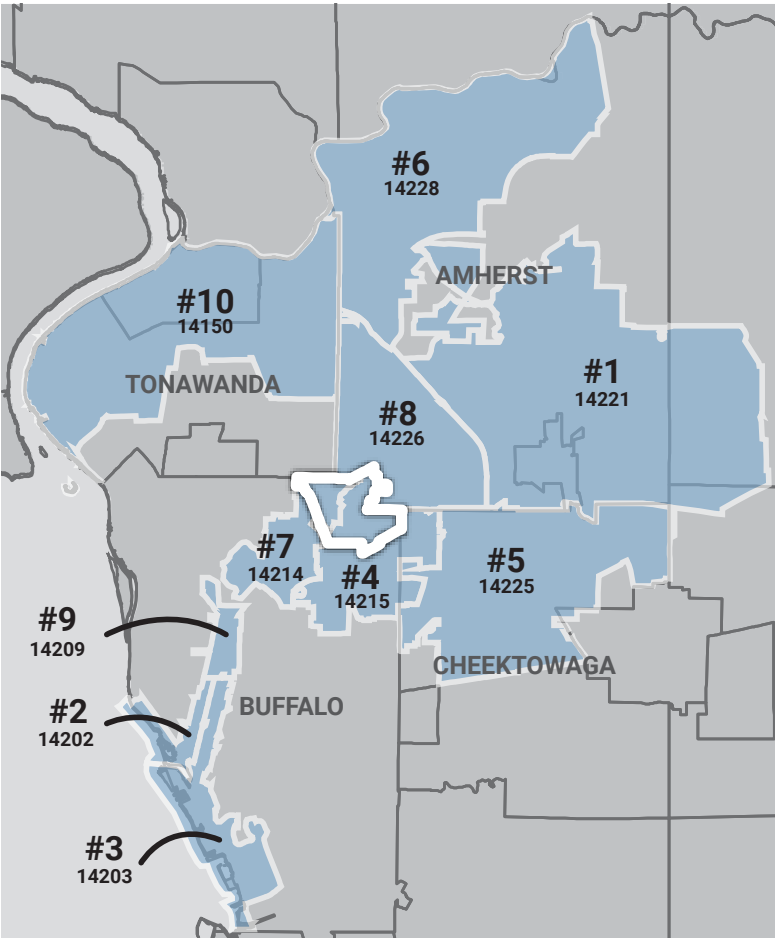


Source: UBRI analysis of data from Infogroup, Reference USA Business Database (2016).

Most employed residents work outside the neighborhood.

Of the 7,597 workers living in the University Heights, only 4% work at businesses located inside the neighborhood. Most employed residents commute to work outside the neighborhood, and many to jobs in the City of Buffalo and its first-ring suburbs like Amherst, Cheektowaga, and Tonawanda. Nearly 70% of workers living in the neighborhood are employed in one of five industries: Health Services, Professional and Business Services, Leisure and Hospitality, Education, and Retail.

Top 10 ZIP Codes Where University Heights Residents Commute to Work, 2014



#1	#2	#3	#4	#5	#6	#7	#8	#9	#10
14221	14202	14203	14215	14225	14228	14214	14226	14209	14150
459	372	361	341	313	287	219	198	162	160

of Commuters from University Heights

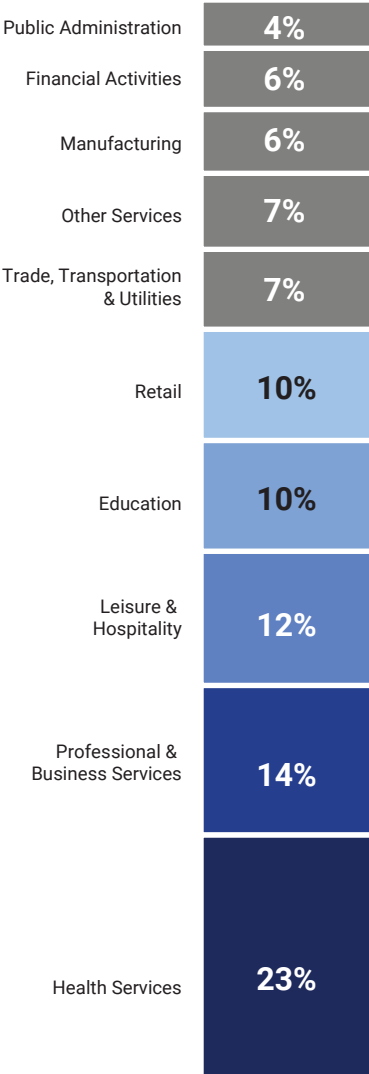
Source: UBRI analysis of data from the US Census Bureau, OnTheMap Application, LEHD, LODES data (2014).

7,597 RESIDENTS IN THE LABOR FORCE

96% working outside the University Heights

4% working in the University Heights

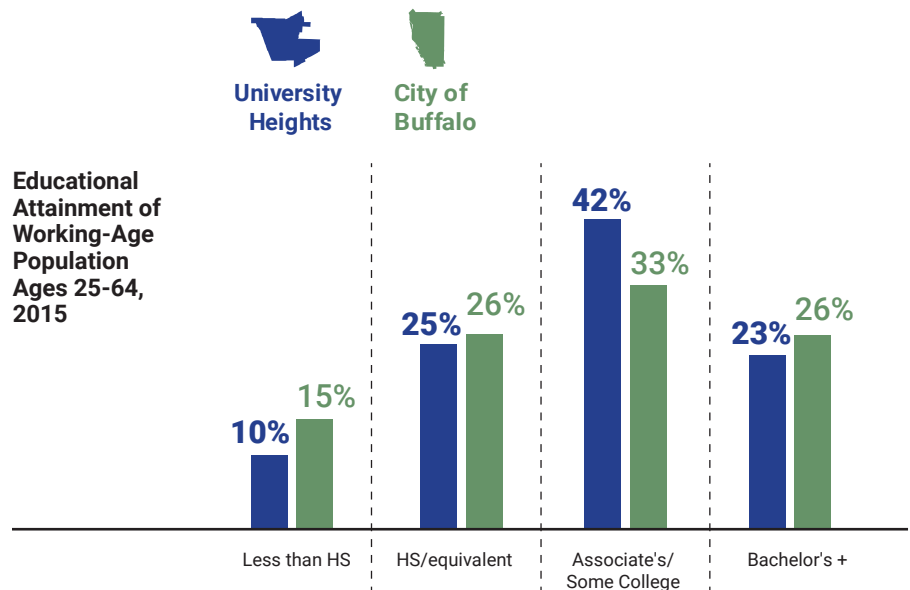
Industry Composition of Workforce, 2014



Source: UBRI analysis of data from OnTheMap Application, LEHD, LODES data (2014).

Educational attainment of adults lags behind the City.

Nine out of 10 adults ages 25 to 64 in University Heights have at least a high school diploma. Compared to the City and region, a larger share of residents in the neighborhood has completed some college education or an associate's degree – but a smaller share has a bachelor's degree or higher. The relatively higher proportion of adults in the University Heights that have completed some college or an associate's degree may be related to the large student population living in the neighborhood.

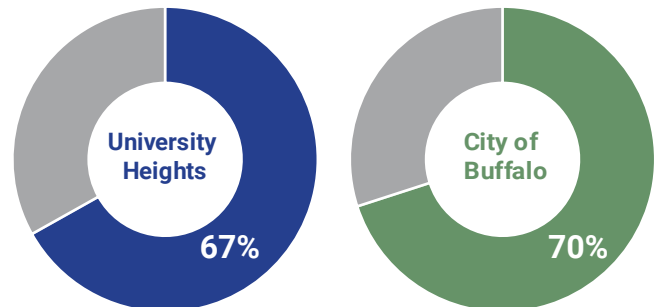


Source: UBRI analysis of data from the US Census Bureau, American Community Survey, 5-year estimates, 2011-2015.

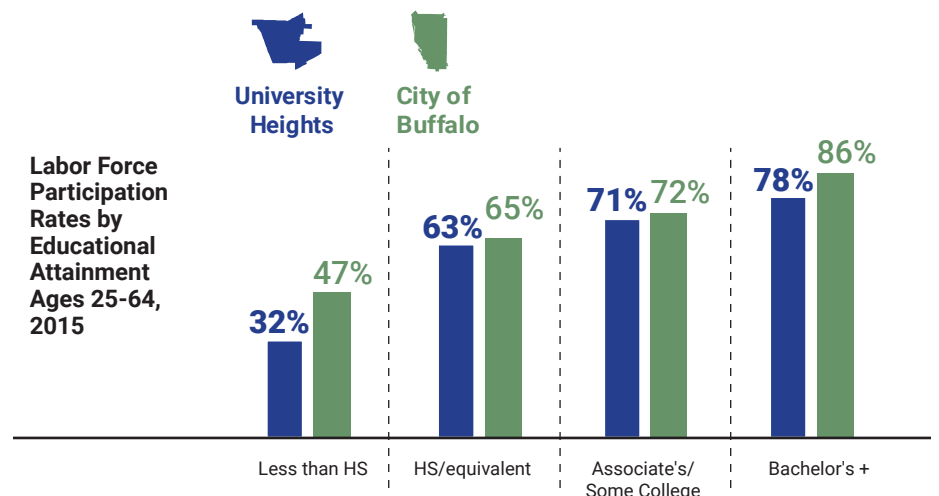
Labor force participation rates are lower than the City.

While two-thirds of residents ages 25 to 64 in the University Heights are employed or looking for work, this proportion is slightly smaller than for the City. Labor force participation rates of neighborhood residents ages 25 to 64 lag behind the City even when controlled for level of educational attainment. At every level of educational attainment, there is a smaller proportion of residents in the University Heights employed or looking for a job than for residents across the City. The gap is greatest for residents with less than a high school diploma and with a bachelor's degree or more.

Labor Force Participation Rates of Working-Age Population Ages 25-64, 2015



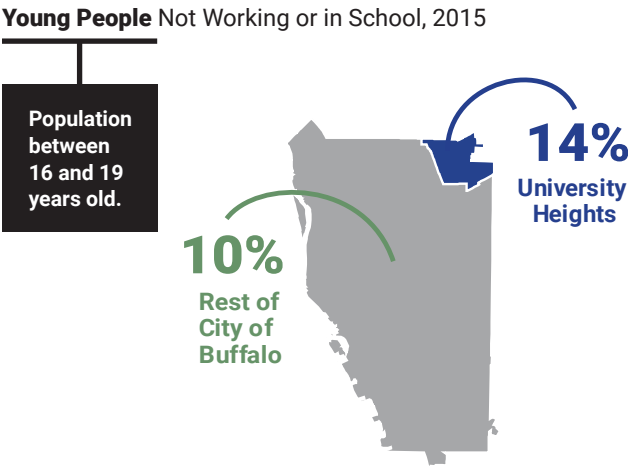
Labor Force Participation Rates by Educational Attainment Ages 25-64, 2015



Source: UBRI analysis of data from the US Census Bureau, American Community Survey, 5-year estimates, 2011-2015.

More young people are not in school or working than in the rest of the City.

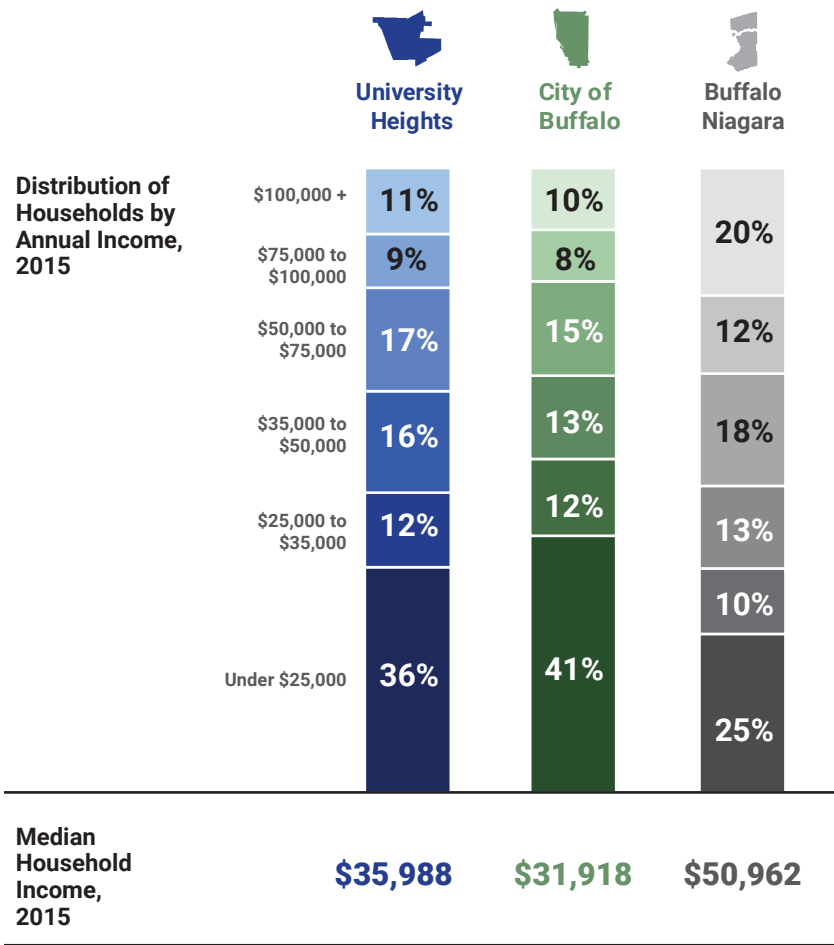
Of the 1,777 young people ages 16 to 19 living in the University Heights, 14% are neither employed nor enrolled in school. Young people in the neighborhood ages 16 to 19 are more likely to be not enrolled in school and unemployed or outside of the labor force than in the rest of the City.



Source: UBRI analysis of data from the US Census Bureau, American Community Survey, 5-year estimates, 2011-2015.

Household incomes are slightly higher than across the City but below the region.

The median household income in the University Heights is \$35,988, which is slightly higher than the median household income for the City, but only about two-thirds of the median household income for the region. While the neighborhood has a slightly lower percentage of households with annual incomes under \$25,000 compared to the City, over a third of households in the neighborhood fall in this category.



Source: UBRI analysis of data from the US Census Bureau, American Community Survey, 5-year estimates, 2011-2015.

BUILT ENVIRONMENT

More than half of land is devoted to residential uses.

Although more than half of the land area in the University Heights is devoted to residential uses, a variety of land uses are located throughout the neighborhood. A fifth of the land area in the neighborhood is designated for community services, including the UB South Campus and the Veterans Administration Hospital. Nearly another fifth of the neighborhood's land area is dedicated to wild, forested, conservation lands or public parks such as McCarthy Park and Grover Cleveland Park. Commercial uses are concentrated along the major corridors of Kenmore Avenue, Main Street, and Bailey Avenue, and comprise about 7% of the land area in the neighborhood.

Land Use Distribution, 2016



Source: Erie County Parcel Data, January 2016.

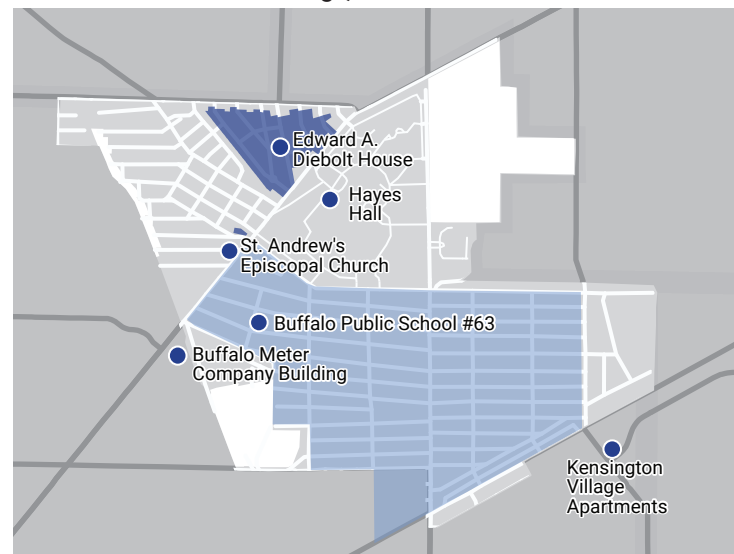
Historic places contribute to the neighborhood's character.

The University Heights is home to a number of federally recognized historic sites, including two historic districts and several historic buildings that are listed on the National Register of Historic Places. There is also a third proposed historic district that would encompass a considerable area of the neighborhood stretching from Main Street to Kensington Avenue and Eggert Road.

Historic Districts and Buildings, 2016

- University Heights NRHP Historic Sites
- University Heights NRHP Historic Districts
- University Heights NRHP PROPOSED Historic Districts

Source: UBRI analysis of Erie County Parcel Data, January 2016; UBRI Property Analysis of Neighborhood; National Register of Historic Places Geospatial Dataset, 2014; University Bailey District Historical Context Survey, 2016; New York State Historic Preservation Office, Cultural Resource Information System, 2017.



The neighborhood has a variety of community and recreational assets.

The University Heights is home to a variety of community assets and recreational facilities, including: an art gallery, community gardens, schools, community centers with services and activities, a theater and music venue, places of worship, community organizations, and a university campus. Nearly 30 block clubs are located on streets throughout the neighborhood. Several parks are located on the edges of the neighborhood and pocket parks are located throughout residential areas.

Block Clubs

- | | |
|-------------------------------------|--|
| 1 Berkshire Block Club | 15 Merrimac Street Block Club |
| 2 Custer/West Northrup Block Club | 16 Minnesota Avenue Block Club |
| 3 Dartmouth Avenue Block Club #1 | 17 Montrose Block Club |
| 4 Dartmouth Park Block Club | 18 Northrup - East Winspear Block Club |
| 5 Dartmouth Rising Stars Block Club | 19 Rounds Avenue One Block Club |
| 6 Dunlop Avenue Block Organization | 20 Rounds Avenue Block Club #2 |
| 7 Heath Street Block Club | 21 Shirley Avenue Block Club #1 |
| 8 Hewitt/Comstock BC | 22 Stockbridge Avenue Block Club #1 |
| 9 Hewitt Harmony Block Club | 23 Stockbridge Avenue Block Club #2 |
| 10 Hewitt-Westminster Block Club | 24 Stockbridge #3 |
| 11 Highgate Ave. BC | 25 University Park Block Club |
| 12 Judges Row Block Club | 26 William Price Parkway BC |
| 13 Kensington, Orleans to Bailey BC | 27 Winspear Avenue Block Club |
| 14 Lisbon Ave. BC | |

Community Centers, services and organizations

- | | |
|------------------------------------|--|
| 1 Bailey Ave. Business Association | 4 University Heights Community Development Association |
| 2 Friendship Foundation Inc | 5 University Heights Community Laboratory |
| 3 Gloria J Parks Community Center | 6 University Heights Tool Library |

Community and Recreational Assets, 2016



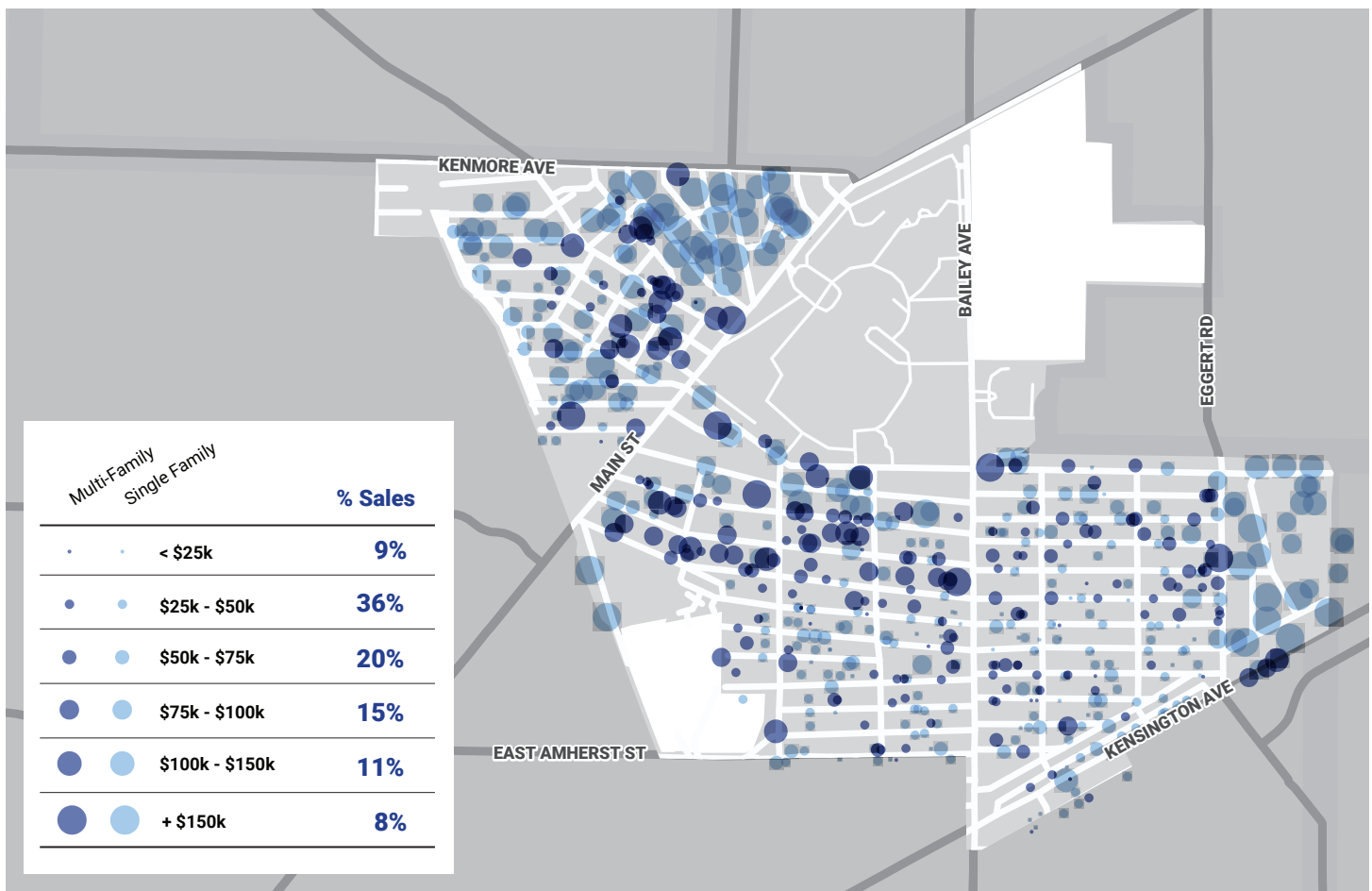
Source: UBRI analysis of Erie County Parcel Data, January 2016; UBRI Property Analysis of Neighborhood; Grassroots Gardens WNY Online Community Garden map, accessed at grassrootsgardens.org/community-gardens, 2017; University Heights Collaborative Block Club List, accessed at ourheights.org/block-clubs, 2017.

REAL ESTATE MARKET

There have been many home sales in recent years.

Since 2014, over 380 homes were sold in the University Heights, with total sales of nearly \$27.7 million. From 2015 to 2016, annual home sales in the neighborhood increased by 16%. However, 36% of the homes sold in the University Heights since 2014 sold for \$25,000 - \$50,000, which is less than the median home value for both the neighborhood (\$63,882) and the City (\$68,800). Home sales are distributed throughout the entire neighborhood, but higher value sales are concentrated in the northwest corner of the neighborhood, directly south of UB South Campus, and east of Eggert Road. Home sale values close to Bailey Avenue and Kensington Avenue are particularly low compared to other parts of the neighborhood. Selling prices also appear to be higher in areas of the neighborhood with concentrated sales of single-family homes compared to areas with more multi-family home sales.

Home Sales by Selling Price, 2014-2017

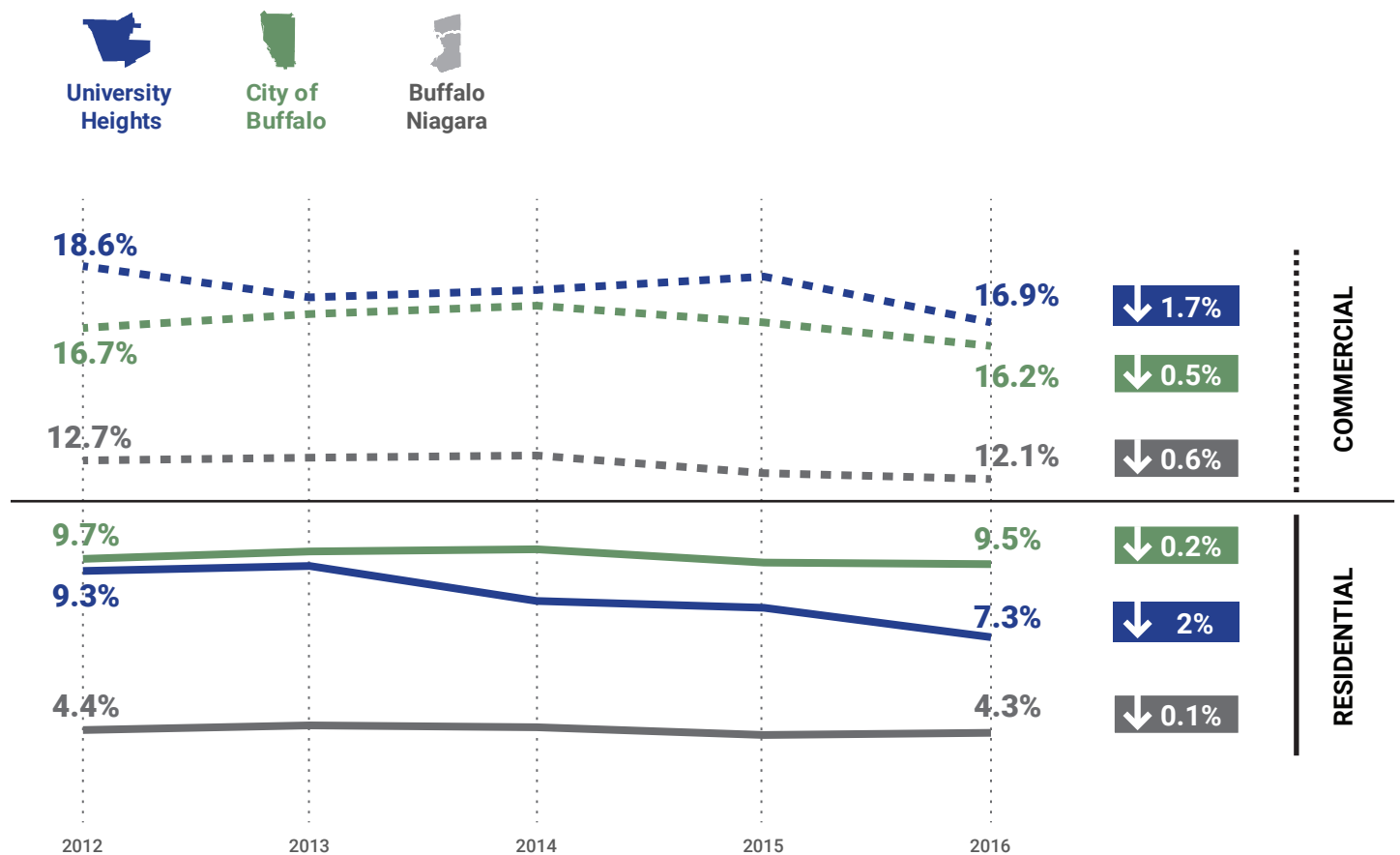


Source: UBRI analysis of Redfin Sales Data, 2014-2017. *NOTE: Excludes sales in January, 2014.

Commercial vacancy rates are more than double residential vacancy rates.

Since 2013 vacancy rates for both commercial and residential properties in the University Heights declined at a greater level compared to the City and region. Residential vacancy rates of about 7% for the University Heights are lower than across the City, but commercial vacancy rates of nearly 17% for the neighborhood are higher than both the City and region. Residential vacancy rates are lowest in the northwest corner of the neighborhood but increase to the east and south. Vacant residential properties also tend to appear more frequently further away from UB South Campus.

Average Annual Vacancy Rates for Commercial and Residential Addresses, 2012-2016



Source: UBRI analysis of HUD Aggregated USPS Administrative Data on Address Vacancies, 2012 to 2016.

TRANSPORTATION OPTIONS

The neighborhood is connected via diverse transportation modes.

There are two NFTA Metro Rail stations located in the University Heights and both stations provide free parking services for riders through Park and Ride lots. Bus routes are located along the major streets of the neighborhood and the University Metro Rail Station is served by over 10 bus routes that provide service to areas within the City and surrounding suburbs. UB also offers shuttle service and car-sharing service to members of the university. Several bike lanes and trails intersect the neighborhood and there are Reddy Bikeshare racks close to the campus.

Transportation Options, 2016

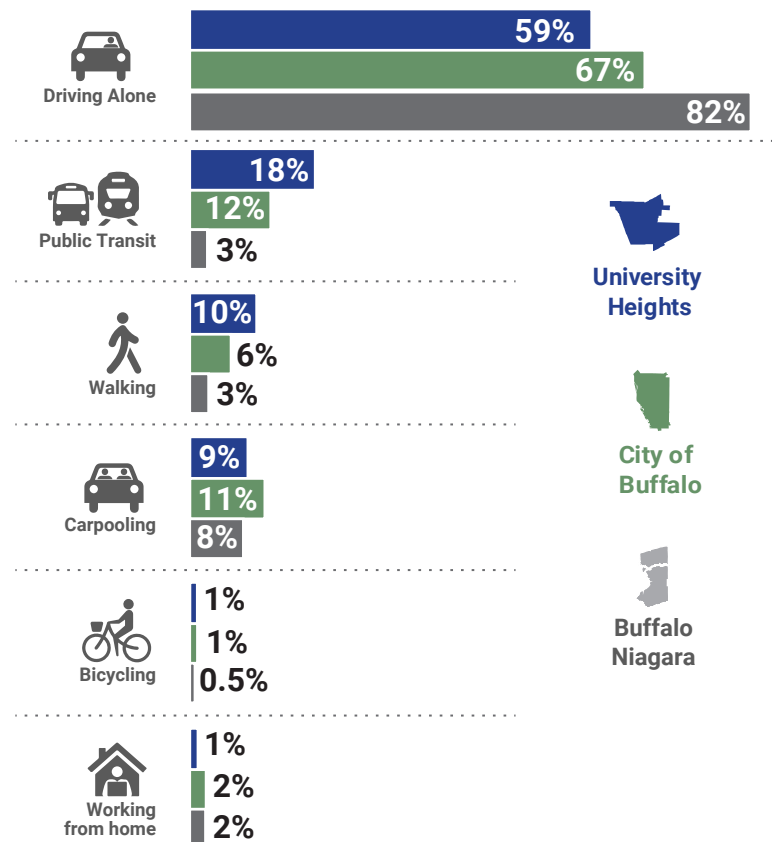


Source: UBRI analysis of Erie Co. Parcel Data (2015); NFTA (2016); City of Buffalo Master Bicycle Plan (2016); City of Buffalo Department of Public Works Proposal to City of Buffalo Bicycle and Pedestrian Advisory Board (2017); Reddy Bikeshare System Map accessed at reddybikeshare.socialbicycles.com/#map.

More residents take public transit or walk to work than across the City and region.

Nearly 20% of workers in the University Heights take public transit to commute to work and 10% of workers walk to work. Alternative modes of travel, like public transportation and walking, are more commonly used by workers in the University Heights to commute to work than by workers across the City and region.

How People Travel to Work, 2015

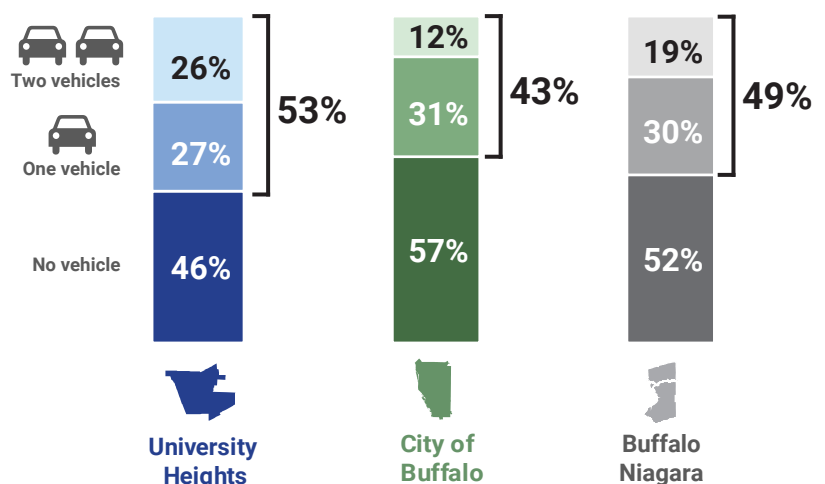


Source: UBRI analysis of data from the US Census Bureau, American Community Survey, 5-year estimates, 2011-2015.

Compared to the city, public transit is more of a choice than necessity for residents.

About 53% of transit commuters in the University Heights have at least one vehicle in their household, which is higher than the city-wide rate of 43%. Furthermore, 26% of transit commuters in the neighborhood have two vehicles in their household, which is more than double the percentage across the City. About 46% of transit commuters in the University Heights do not have a vehicle in their household, meaning the necessity of riding transit is not as high as it is across the City, where 57% of transit commuters have no vehicle.

Transit Commuters by # of Vehicles in Household, 2015



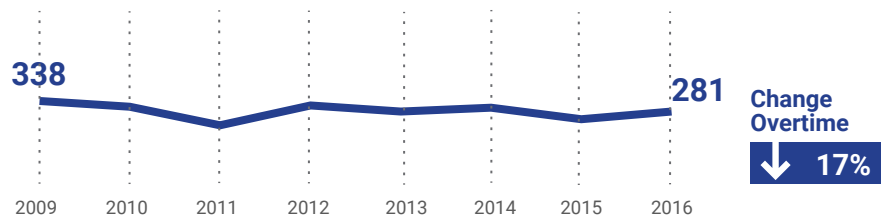
Source: UBRI analysis of data from the US Census Bureau, American Community Survey, 5-year estimates, 2011-2015.

CRIME AND SAFETY

Violent crimes are on the decline.

With the exception of robbery, rates of all violent crime types are equal to or slightly lower in the University Heights than across the City. Between 2009 and 2016, the neighborhood saw a noticeable decline in the number of violent crimes. Incidents of violent crime tend to concentrate around Main Street and Bailey Avenue south of UB's campus, but are also dispersed into the residential areas immediately adjacent to Bailey Avenue.

Violent Crimes, 2009-2016



Source: UBRI analysis of Buffalo Police Department data, (2009-2016), accessed at socrata.com, 2017.

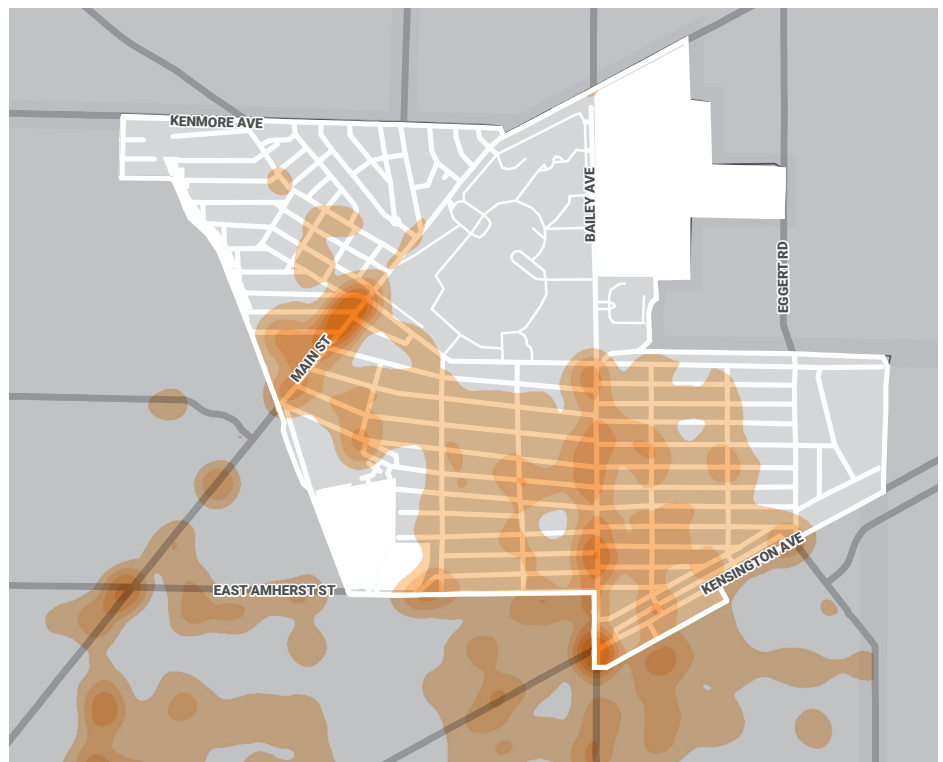
Violent Crimes per 1,000 Residents, 2016

	University Heights	City of Buffalo
Assault	11.1	11.4
Homicide	0.2	0.2
Robbery	5.0	3.7
Rape	0.9	1.1
TOTAL	17.2	16.4

Source: UBRI analysis of Buffalo Police Department data, (2009-2016), accessed at socrata.com, 2017.

Concentration of Violent Crime Compared to City-wide average, 2009-2016

- over 5 times higher
- 4 - 5 times higher
- 3 - 4 times higher
- 2 - 3 times higher
- 1 - 2 times higher

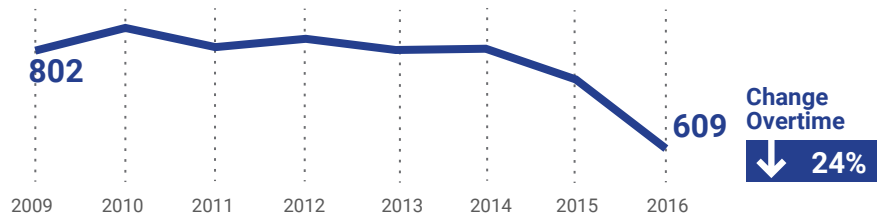


Source: UBRI analysis of Buffalo Police Department data, (2009-2016), accessed at socrata.com, 2017. UBRI Analysis.

Property crimes are less prevalent than across the City.

From 2009 to 2016, the number of property crimes in the University Heights fell by about 24%. Similar to violent crime, property crime is concentrated in areas on Main Street and Bailey Avenue, but is more dispersed through smaller side streets in the neighborhood. The University Heights also has a lower overall rate of property crime compared to the City.

Property Crimes, 2009-2016



Source: UBRI analysis of Buffalo Police Department data, (2009-2016) accessed at socrata.com, 2017.

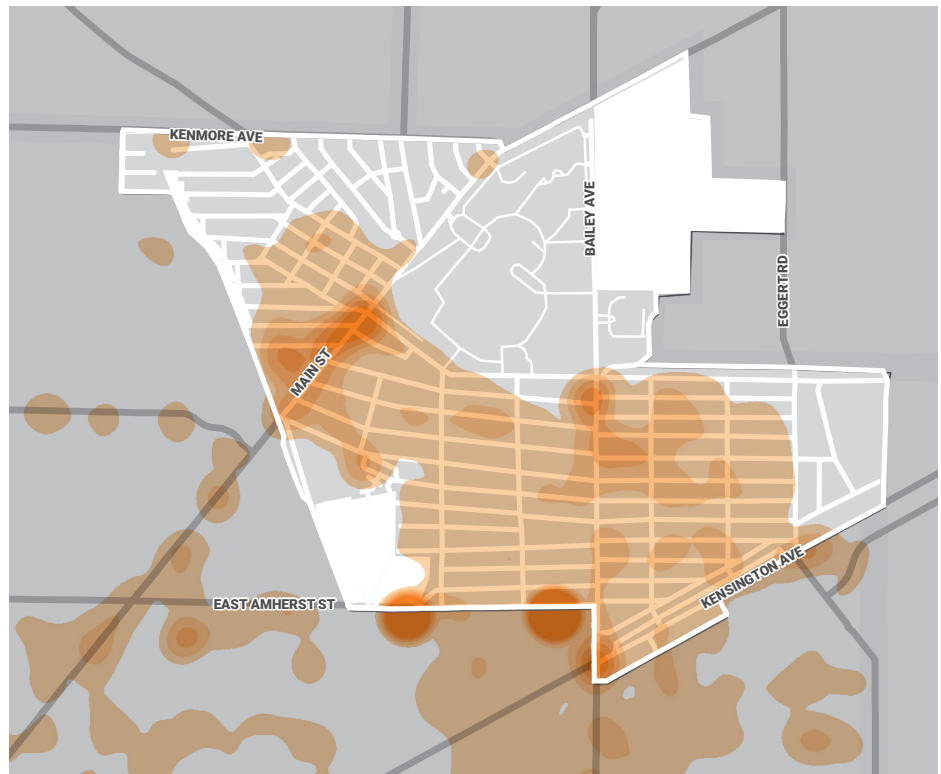
Property Crimes per 1,000 Residents, 2016

	University Heights	City of Buffalo
Larceny	20.7	26.8
Burglary	13.5	10.8
Motor Vehicle Theft	3.1	3.8
TOTAL	37.3	41.4

Source: Buffalo Police Department data, (2009-2016), accessed at socrata.com, 2017.

Concentration of Property Crimes Compared to City-wide average, 2009-2016

- over 5 times higher
- 4 - 5 times higher
- 3 - 4 times higher
- 2 - 3 times higher
- 1 - 2 times higher



Source: UBRI analysis of Buffalo Police Department data (2009-2016) accessed at socrata.com, 2017. UBRI Analysis.

ARTICULATING THE EDGE

URBAN DESIGN GRADUATE RESEARCH
SPRING 2017 STUDIO
Studio Instructor: ERKIN ÖZAY

The University District presents a compelling urban condition. Here, the institutional scale of the campus is juxtaposed with the infrastructural scale of the transfer station and the residential scale of the surrounding neighborhoods. While the campus has a distinct civic character, it lacks clarity at its edges. Expansive surface parking and undistinguished commercial plazas exacerbate the sense of groundlessness.

The studio investigated formal strategies to orchestrate these various scales in order to reveal and maximize their latent potential. The students focused on six key sites identified in the *UB 2020 Plan*.

Studio Documentation: ARISHA SHAHID

BRANDON BAXTER
CHARLES CANFIELD
MARCO DASILVA
KRISHNA DAYALAN
JOSHUA ERNI
ANTHONY GARFALO
MANDEEP KAUR
HO KYUNG LEE

KAILEY MCDERMOTT
KAMILLAH RAMOS
ANDRES SANTANDREU
ARISHA SHAHID
TAYLOR WOOLF

PROGRAM GOALS

The studio sought to address the following guiding questions.

How can we achieve a rich level porosity at the edges of the campus in order to strengthen its relationship with the surrounding neighborhoods?

How can the existing and future campus amenities be made more accessible to the surrounding neighborhoods?

What are the appropriate mixed-use, transit-oriented development opportunities around the campus, which could help nurture healthier and denser neighborhoods?

Given the changes taking place in higher education, what may the future of UB's South (Main-Bailey) Campus look like?

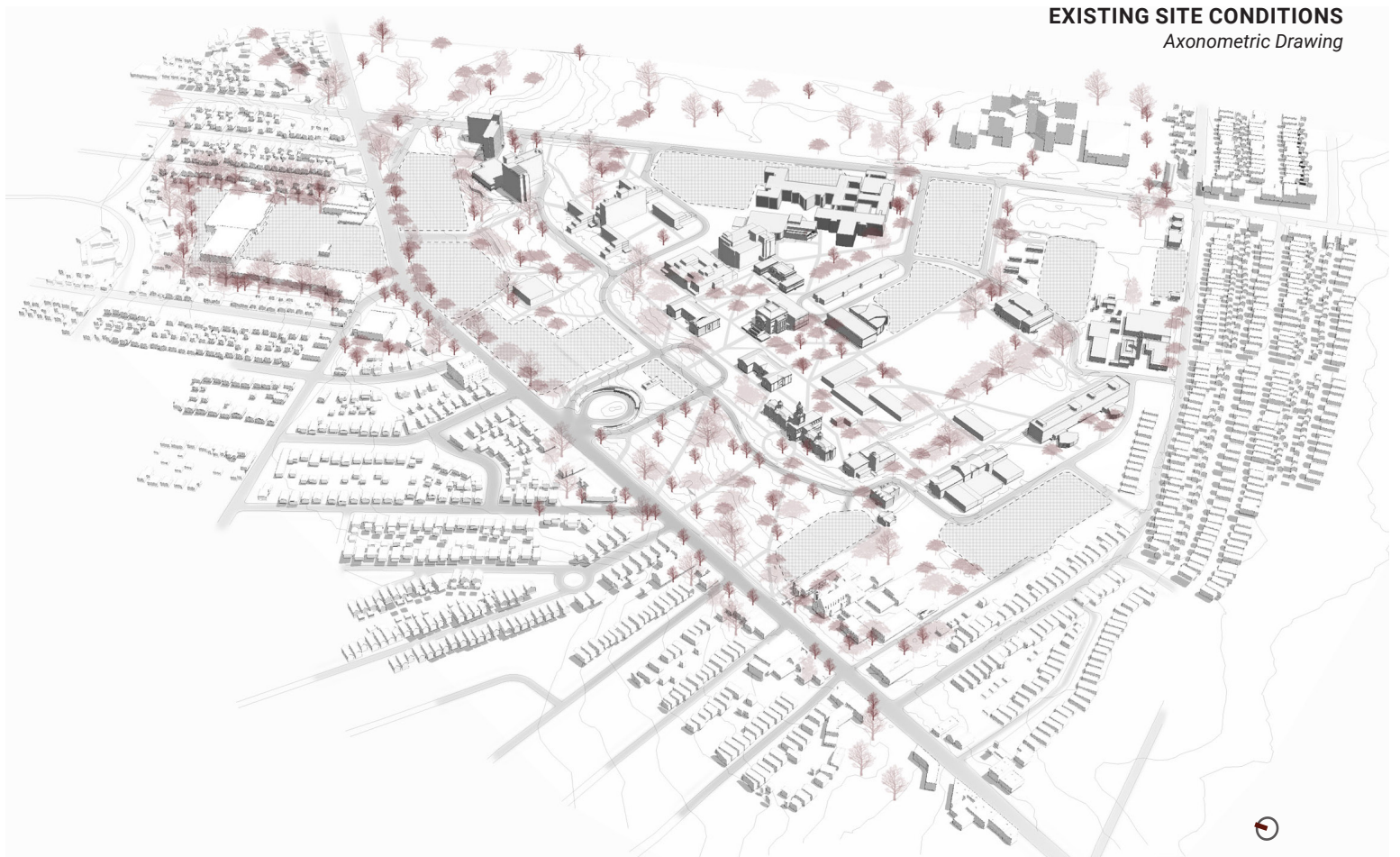
What are the most appropriate future -proof typologies for residential, commercial, institutional, and transportation uses appropriate for this specific context?

Image Source : UB Archives

EXISTING CONDITIONS

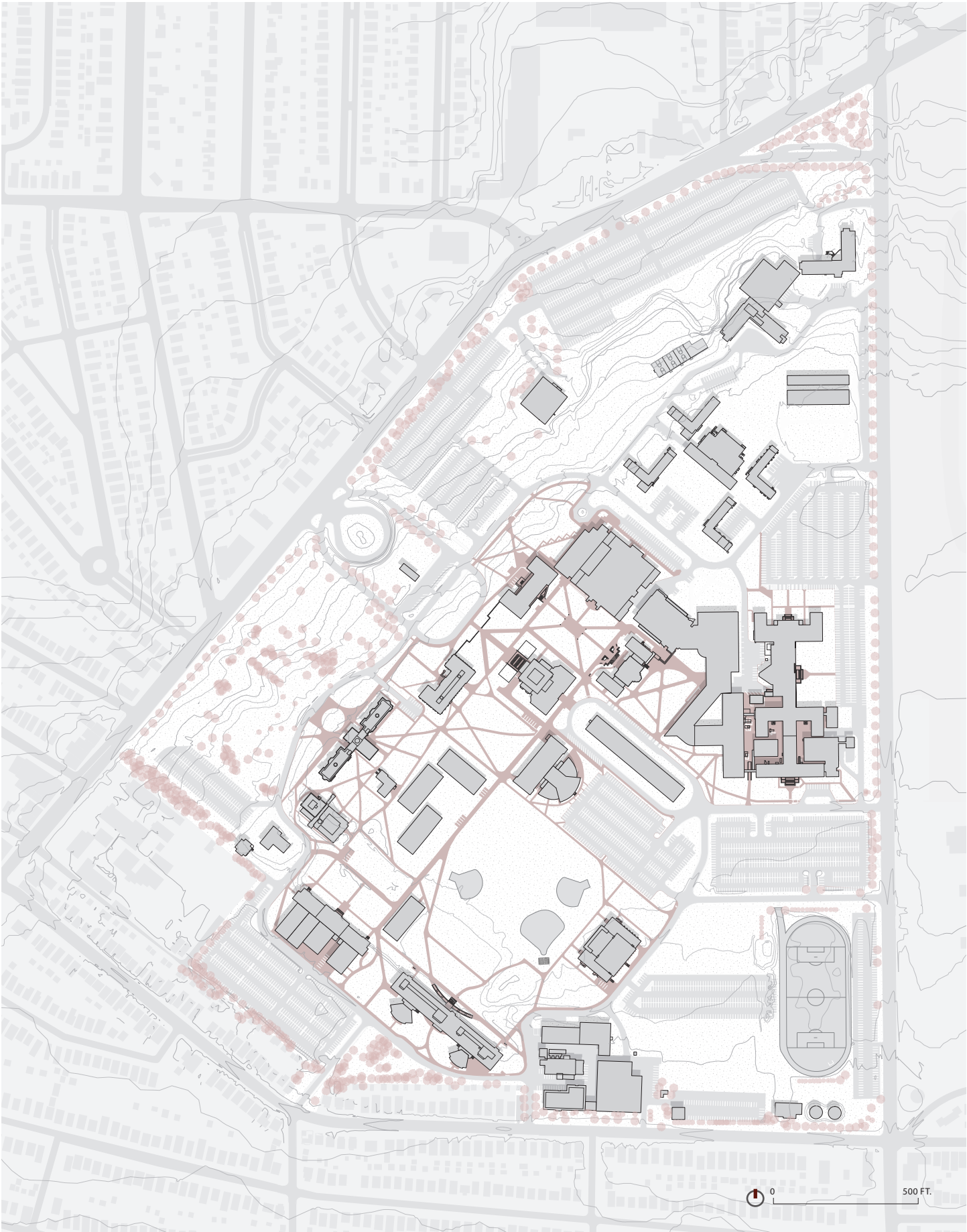
In its current condition, the campus is disconnected from its neighborhood and given its low density (7,600 population/153 acres), it lacks an effective presence to activate meaningful ground activity. Neither the campus, nor the neighborhood effectively makes use of each other's assets.

Given the generous reserve of space and stable residential developments surrounding the campus, the neglected campus/city edge presents a great potential.



EXISTING SITE CONDITIONS

Axonometric Drawing



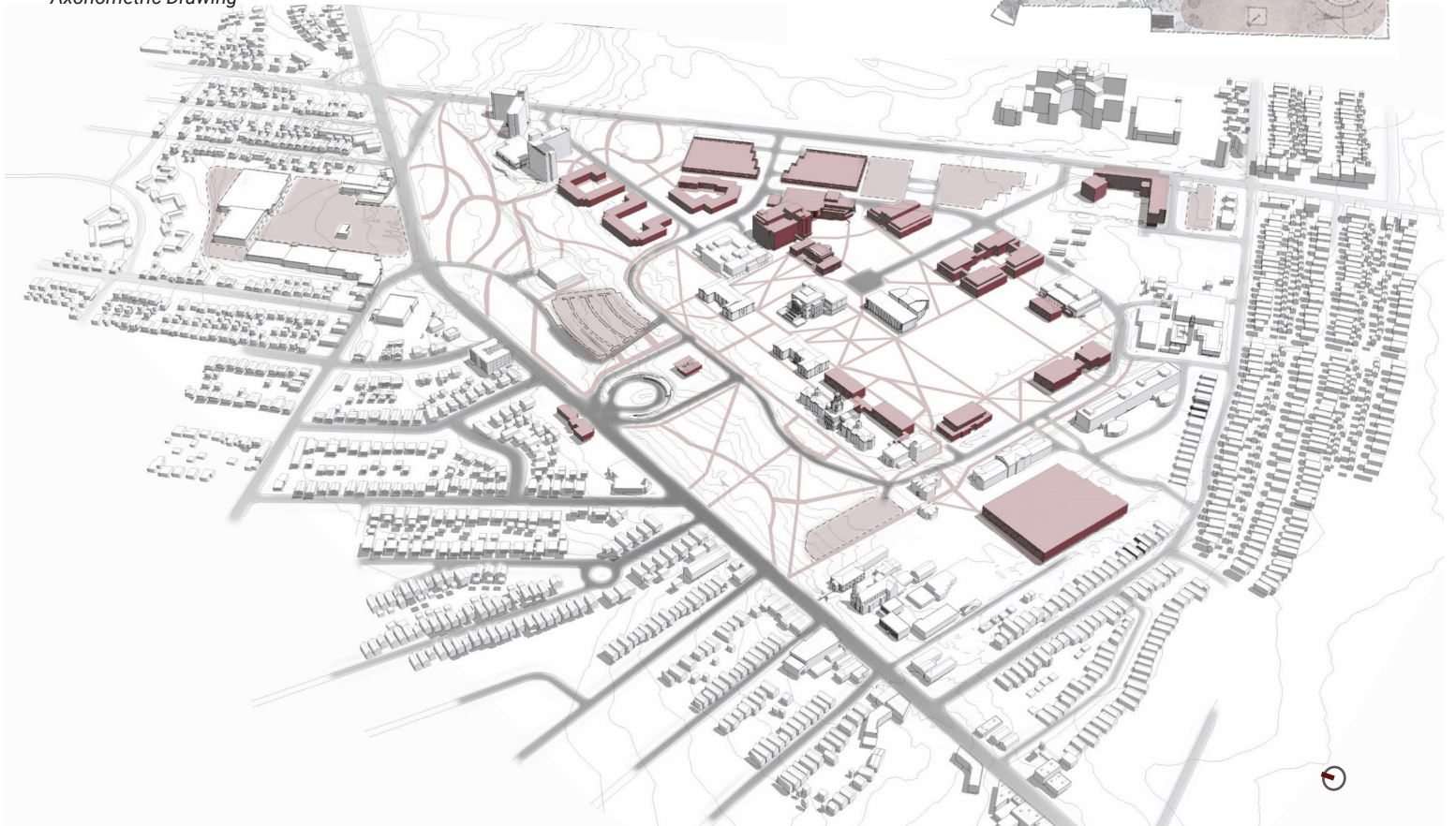
ANALYZING UB 2020

The *UB 2020 Plan* is based on very specific ideas regarding the city/campus relationship and identifies six key sites along Main, Bailey and Winspear Streets for better articulation.

Starting with a re-reading of the plan and focusing on each of these sites in detail, the students developed urban design ideas that could programmatically thicken and bring legibility to the campus edges.

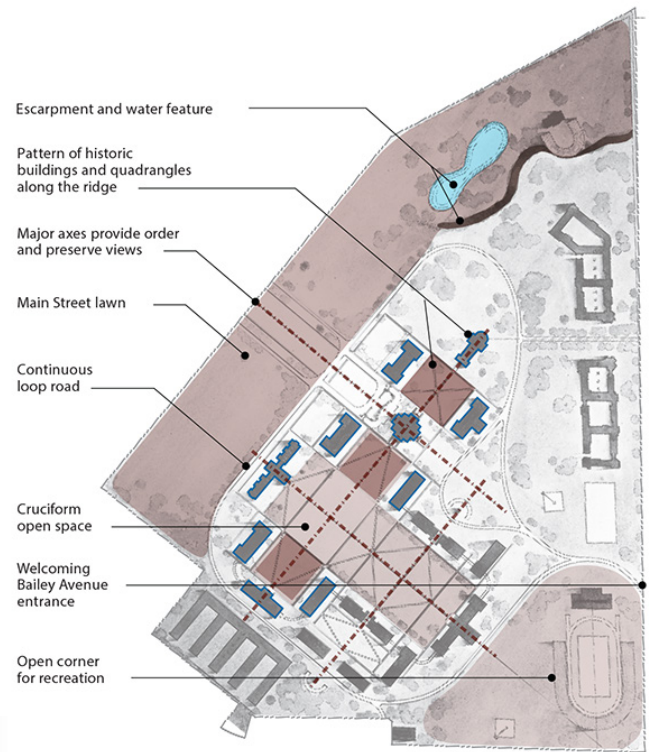
UB 2020 PLAN

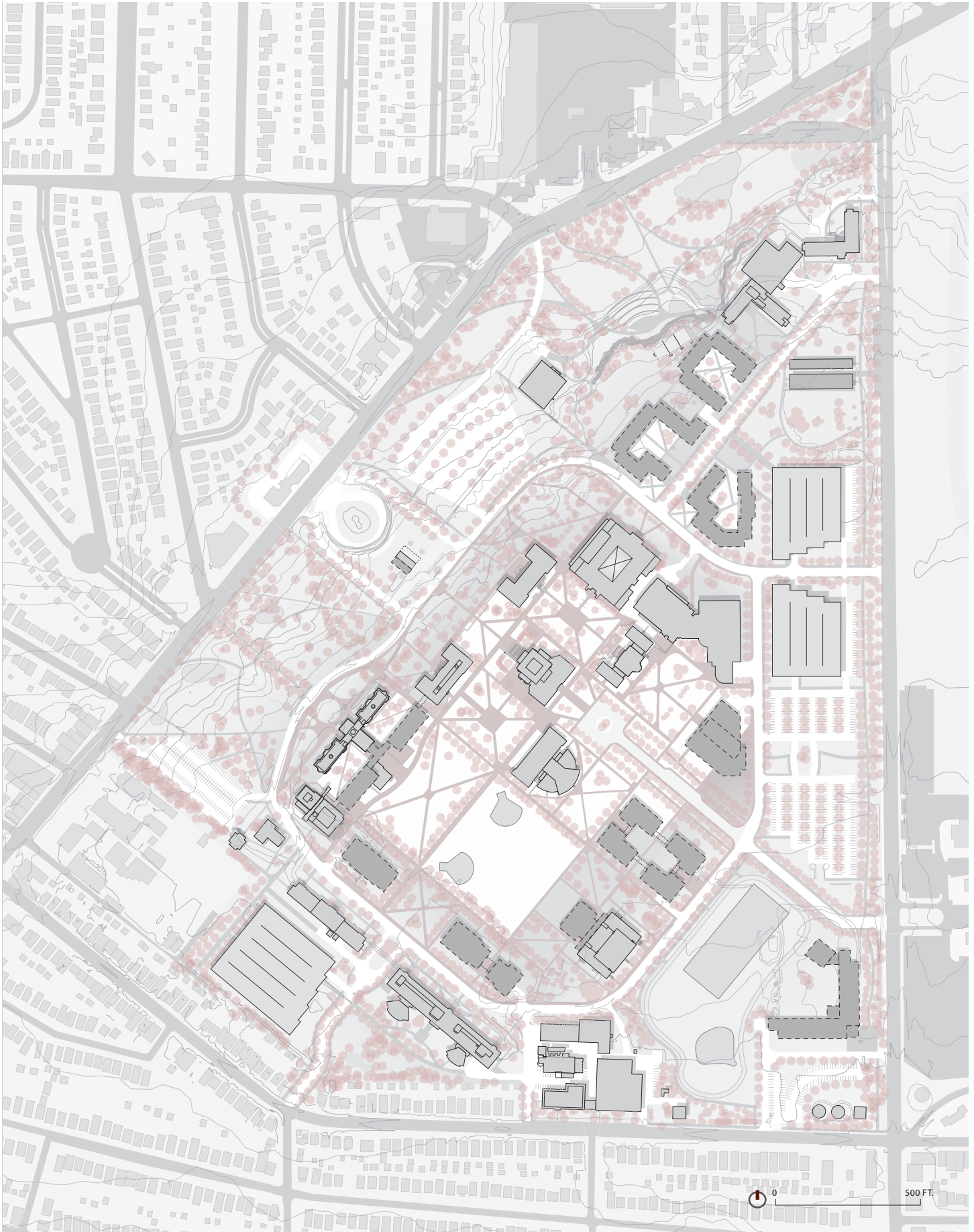
Axonometric Drawing



ANALYSIS OF 1930 E. B. GREEN PLAN

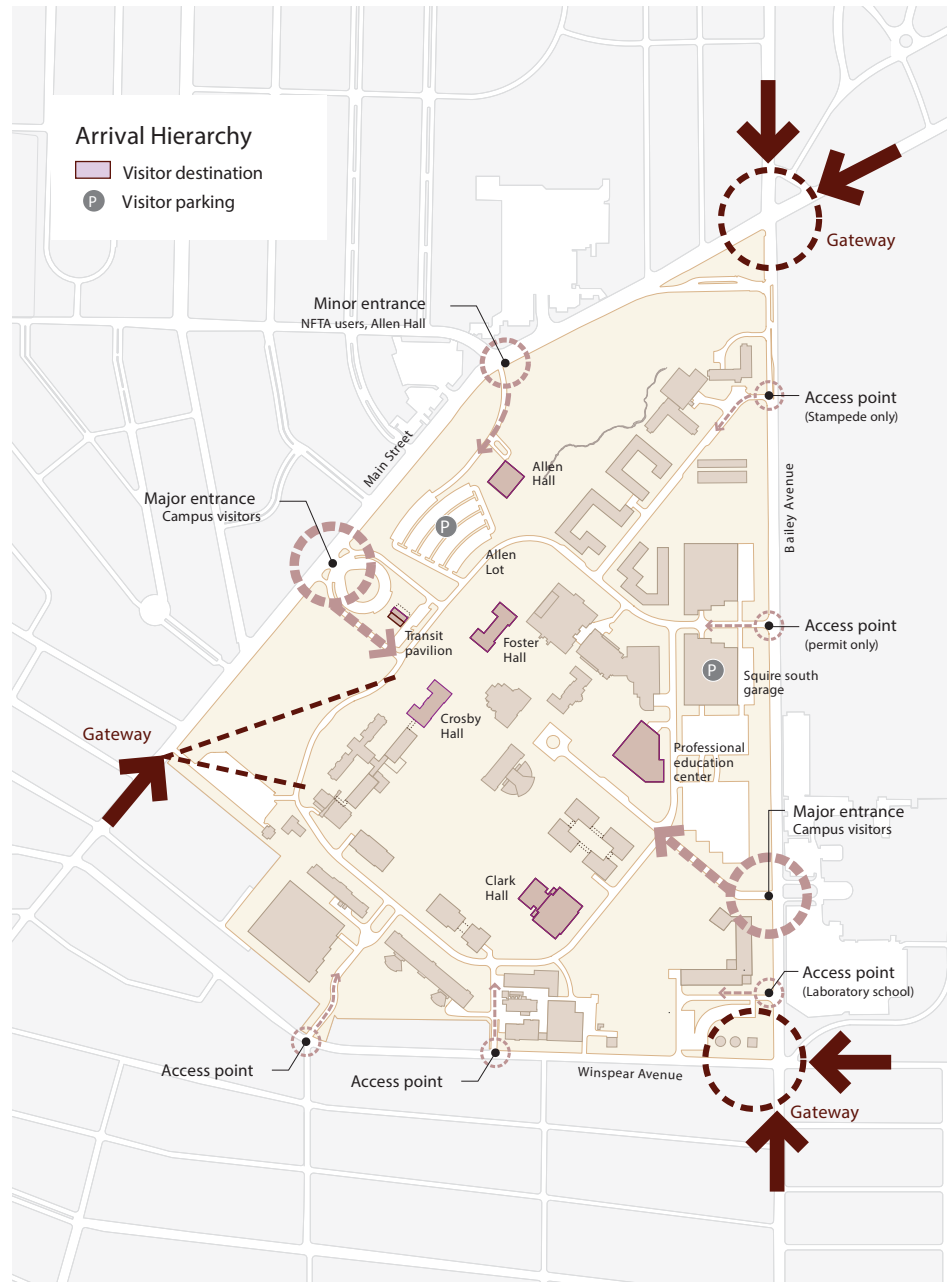
-Building UB, The Comprehensive Physical Plan





The six sites are not only meant to provide better connectivity between the campus and neighborhoods but also of paramount importance in terms of their visual impact at different scales.

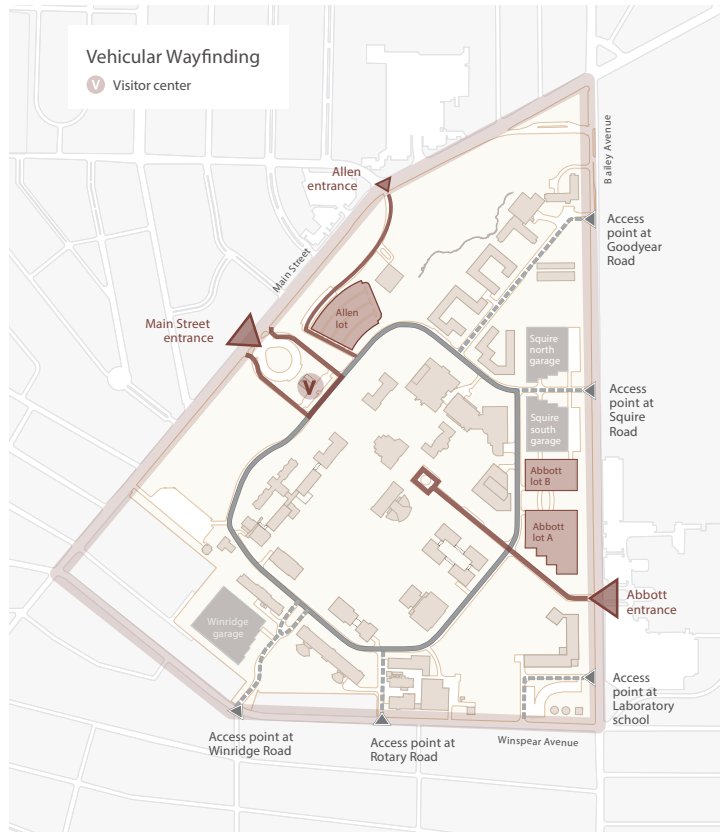
ARRIVAL HIERARCHY (UB 2020)
-Building UB, The Comprehensive Physical Plan



VEHICULAR WAYFINDING (UB 2020)

-Building UB, The Comprehensive Physical Plan

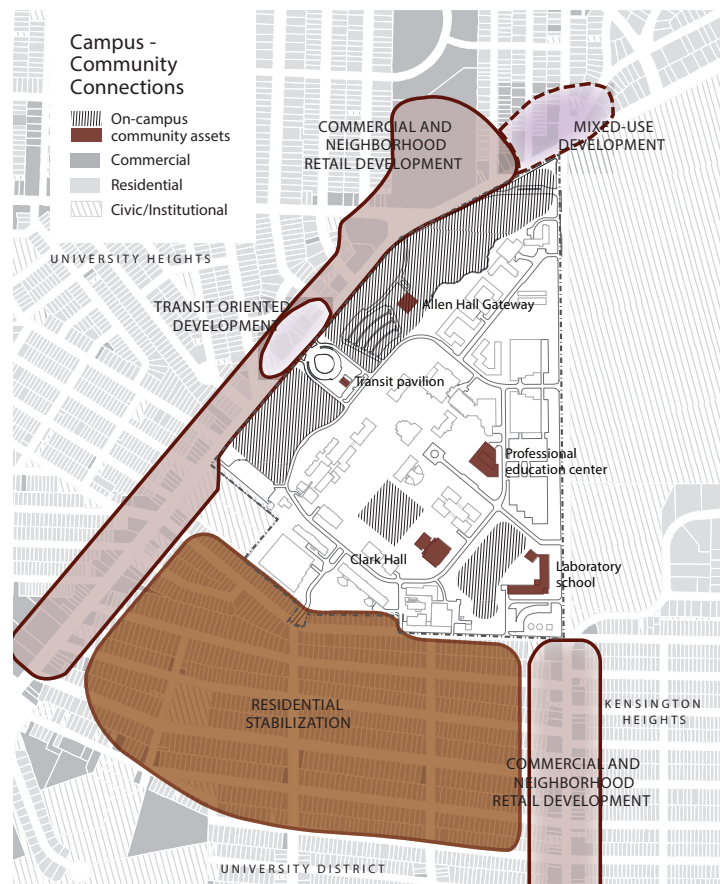
Circulation framework suggests completion of the loop road and reduction of vehicular traffic by limiting the surface parking on campus.



CAMPUS COMMUNITY CONNECTIONS (UB 2020)

-Building UB, The Comprehensive Physical Plan

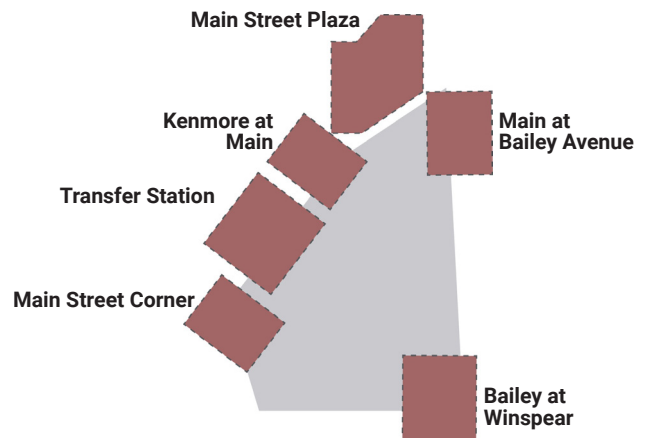
UB 2020 plan also lays out broad parameters for urban stabilization and development at the campus edges.



SIX INTERVENTIONS PROPOSED

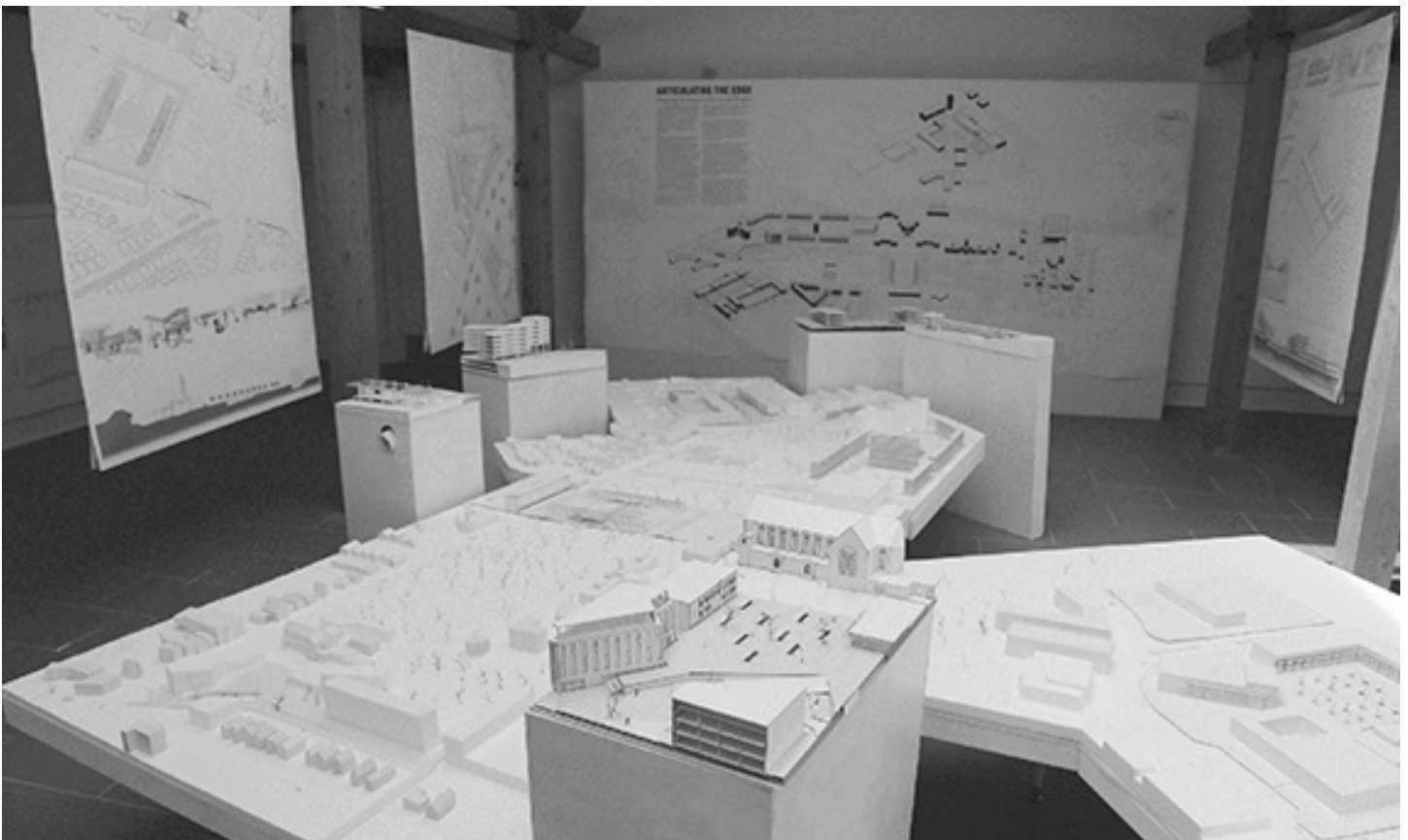
While the students were asked to start their projects by looking carefully at the edge conditions in isolation, the projects presented opportunities for improving the functioning of the campus by establishing a clear and experientially rich circulation scheme that could tie these interventions together.

The six proposals connect with a circulation backbone that traverses the site in both directions and culminate at well-articulated terminus points. These major and minor gateways orchestrate various city and campus assets that could provide meaningful entry sequences for different constituencies and the general public.



EXHIBITION PHOTOGRAPH

-Alexander J



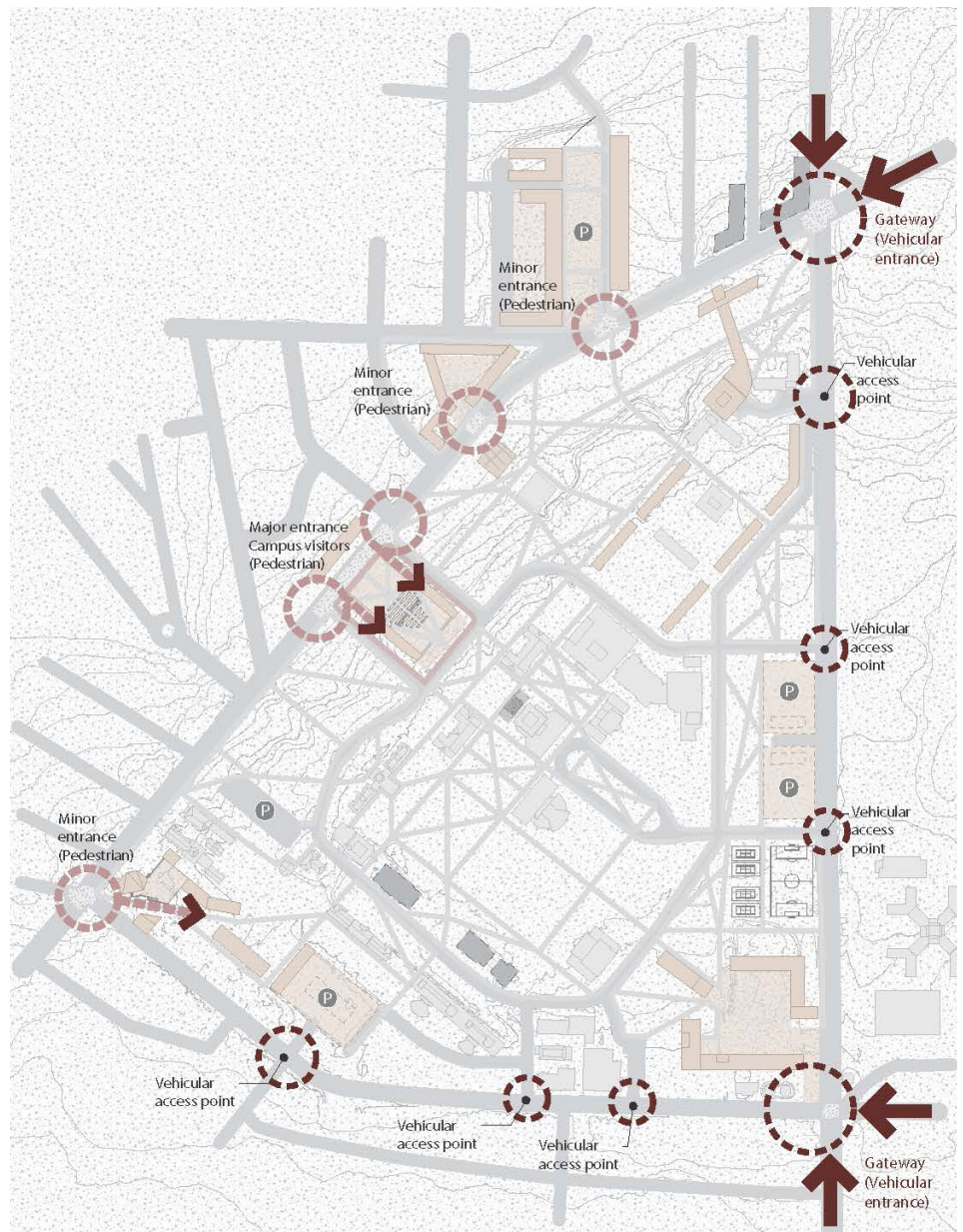


ANALYZING SIX INTERVENTIONS

These diagrams demonstrate the parallels between the *UB 2020 plan* and the 6 interventions proposed by the students.

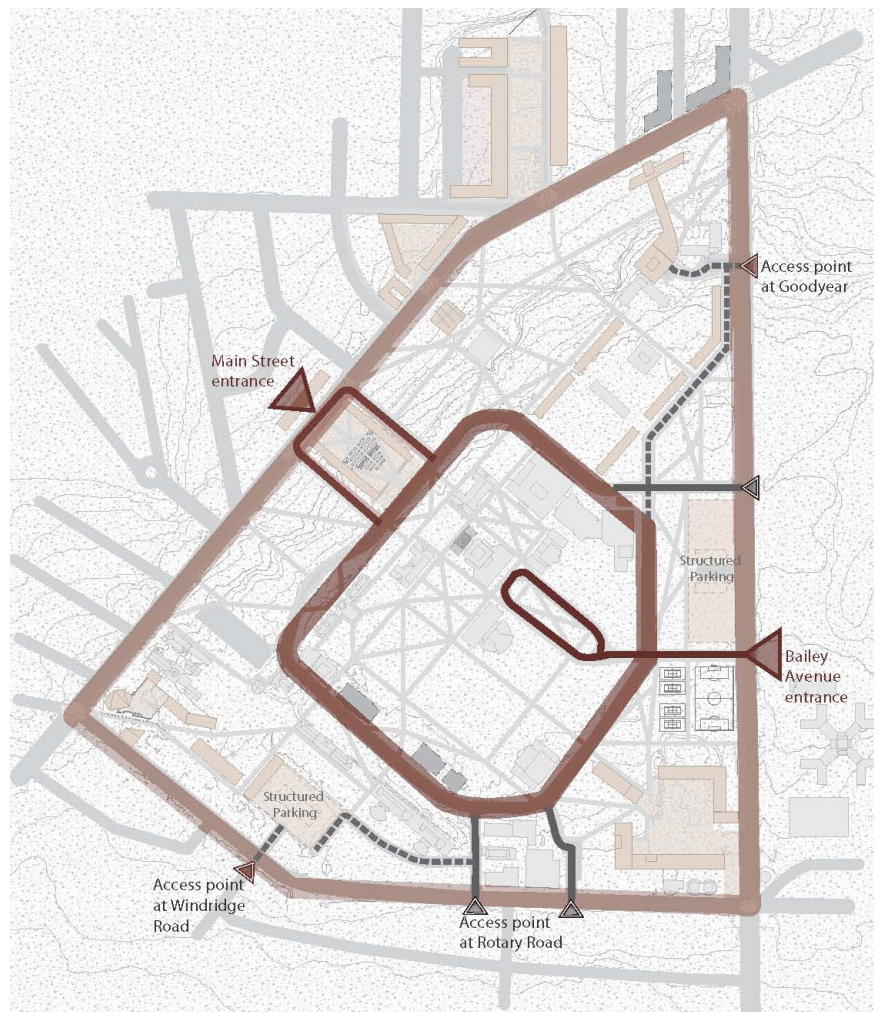
In many cases, the access to the campus grounds and campus amenities are strengthened by well-articulated threshold conditions that visually orchestrate campus and neighborhood landmarks as a means to enrich the pedestrian experience.

ARRIVAL HIERARCHY



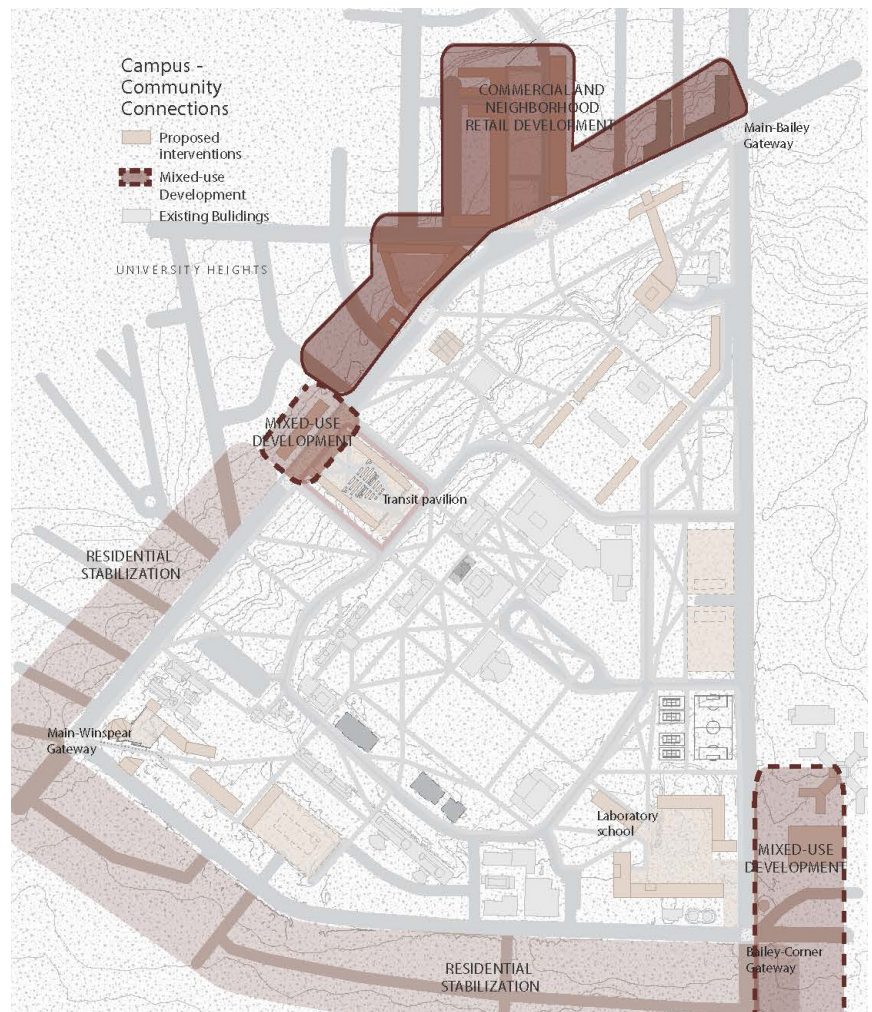
VEHICULAR WAYFINDING

Circulation diagram allows for limited surface parking and better connections with the public transportation nodes in order to encourage pedestrian activity and transit use.



CAMPUS COMMUNITY CONNECTIONS

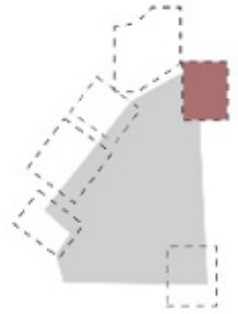
Community connections:
Potential developments at the
edges can be oriented toward the
green spaces and recreational
landscapes located on the
campus.





PROPOSED INTERVENTION

MAIN AT BAILEY AVENUE

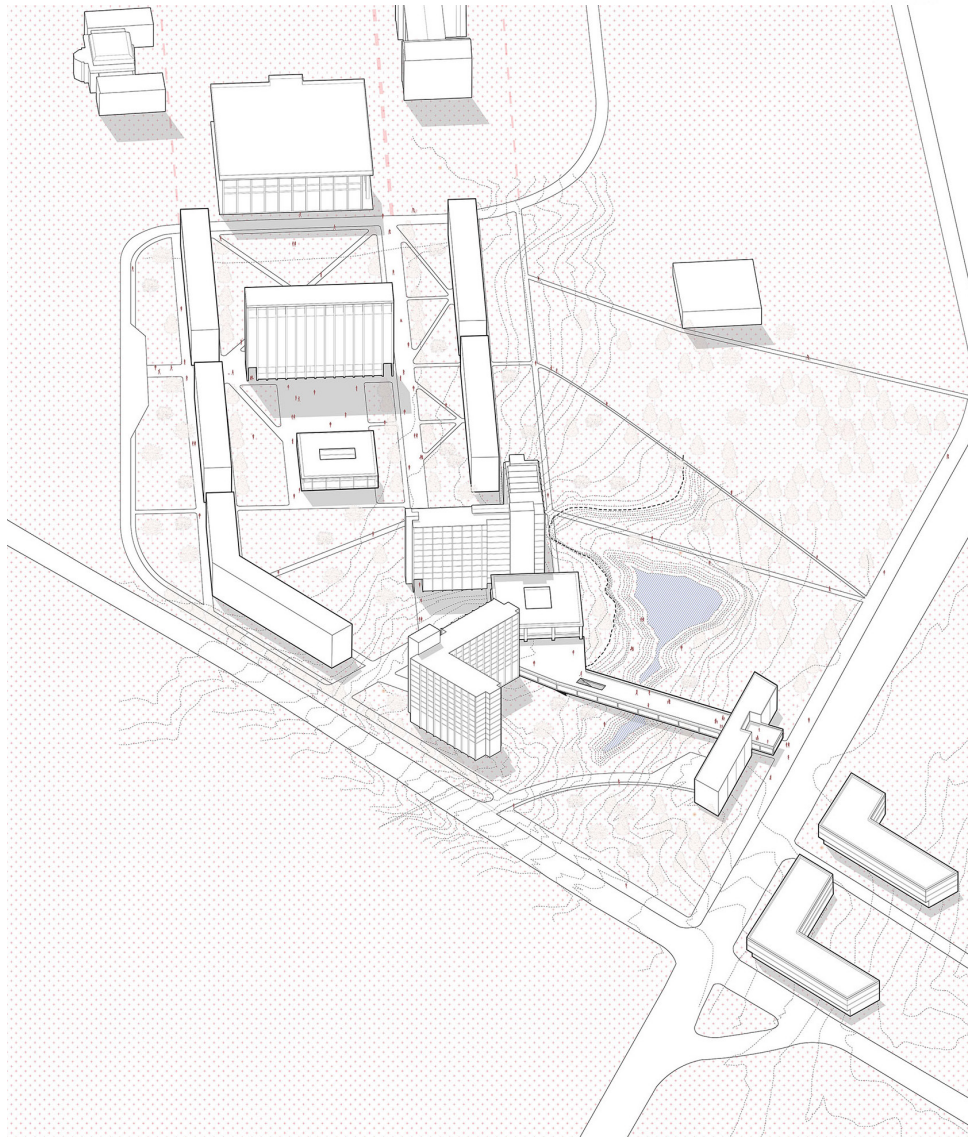


This proposal is predicated on a “ladder” circulation system that forms two parallel axes in the North South direction. The more formal alley way connects the existing quads with a new residential quad. The adjacent promenade connects the students with the recreational landscapes along the Main Street, while revealing the embankment formed by the historic quarry, which is revealed as a water feature in the landscape.

A connection building along the Main Street functions as a hybrid mixed use building that connects the students and the general public.

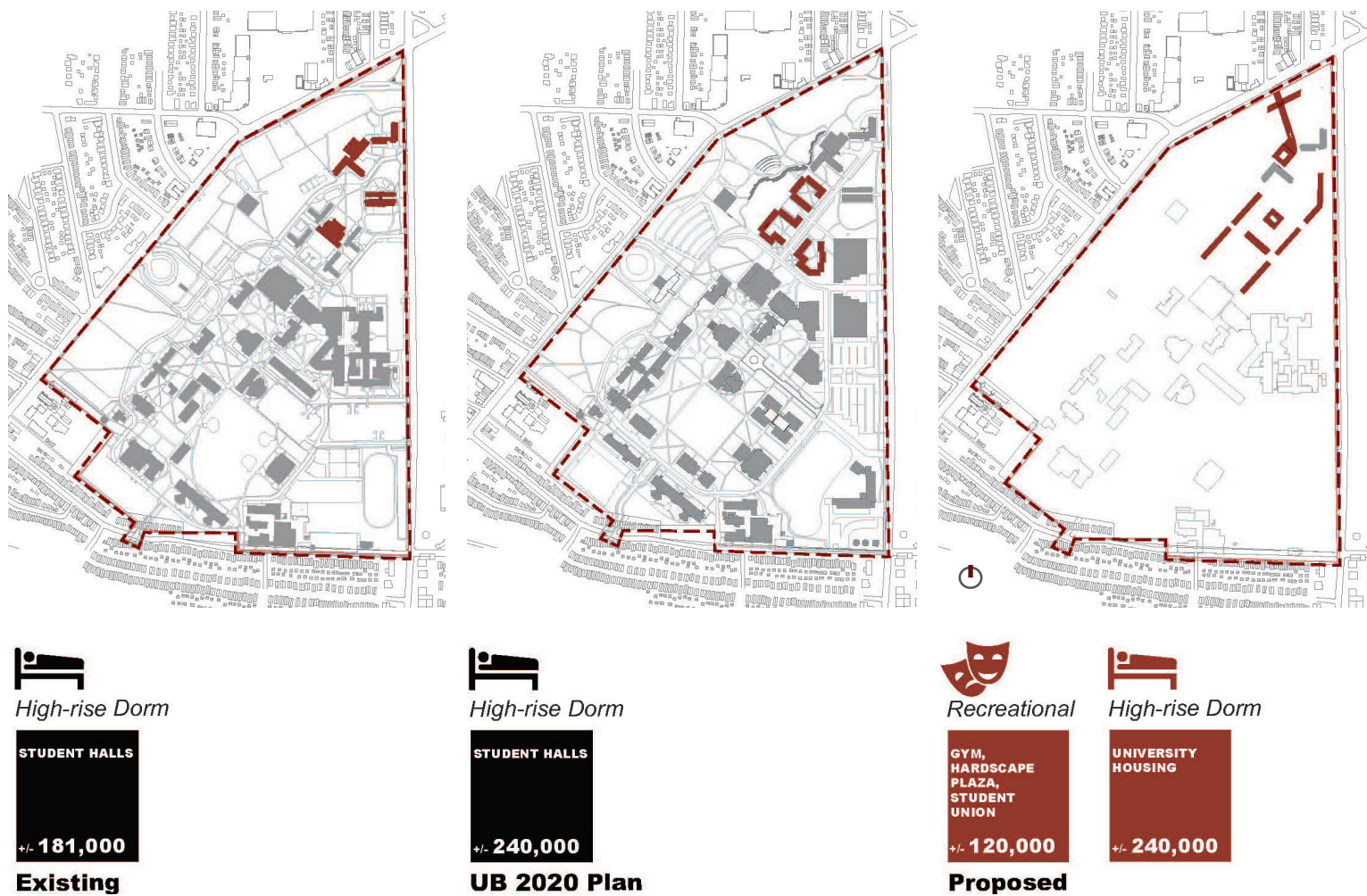
The proposal eliminates the “Jersey Left” at the Main-Bailey intersection, in order to increase the park space and allow better access to the daycare and other service facilities.

ANDRES S. | CHARLES C.
Project Credits



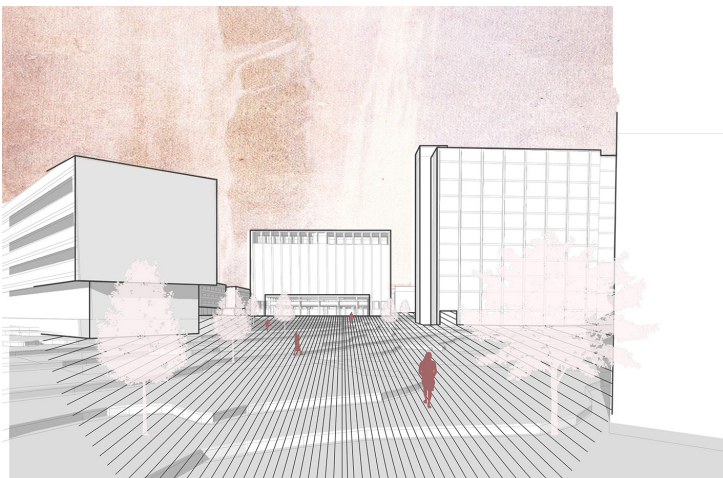
Axonometric Drawing

COMPARATIVE ANALYSIS OF PROGRAM
Figure Ground Diagrams

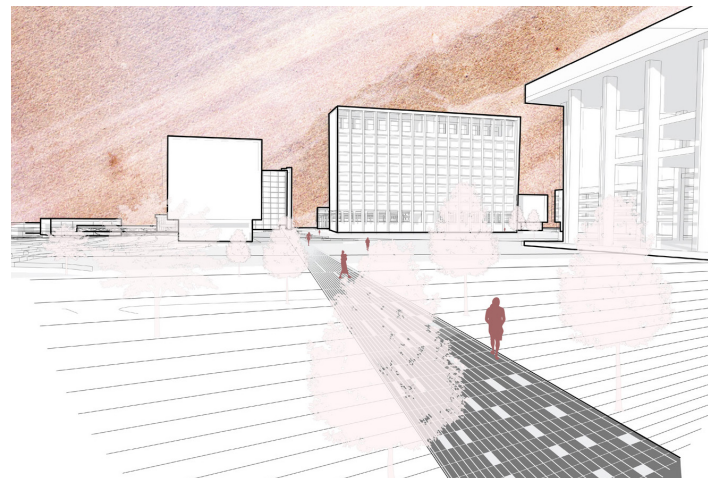




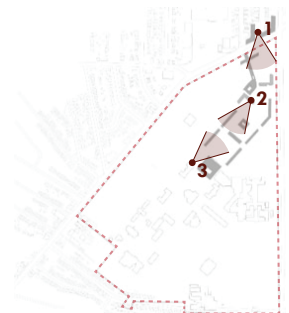
VIEW FROM MAIN STREET
Perspective Drawing 1

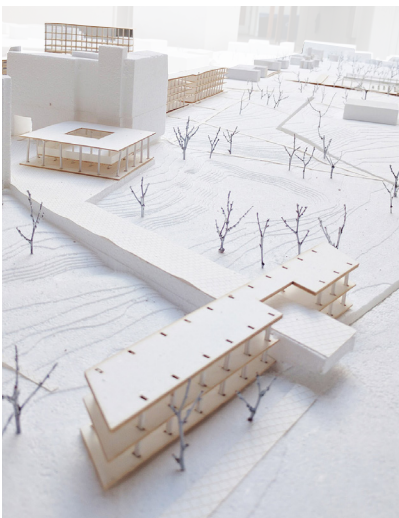


VIEW FROM GOODYEAR HALL
Perspective Drawing 2



VIEW FROM MAIN CIRCLE
Perspective Drawing 3

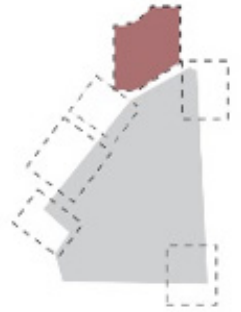




MODEL PHOTOGRAPHS

PROPOSED INTERVENTION

MAIN STREET PLAZA

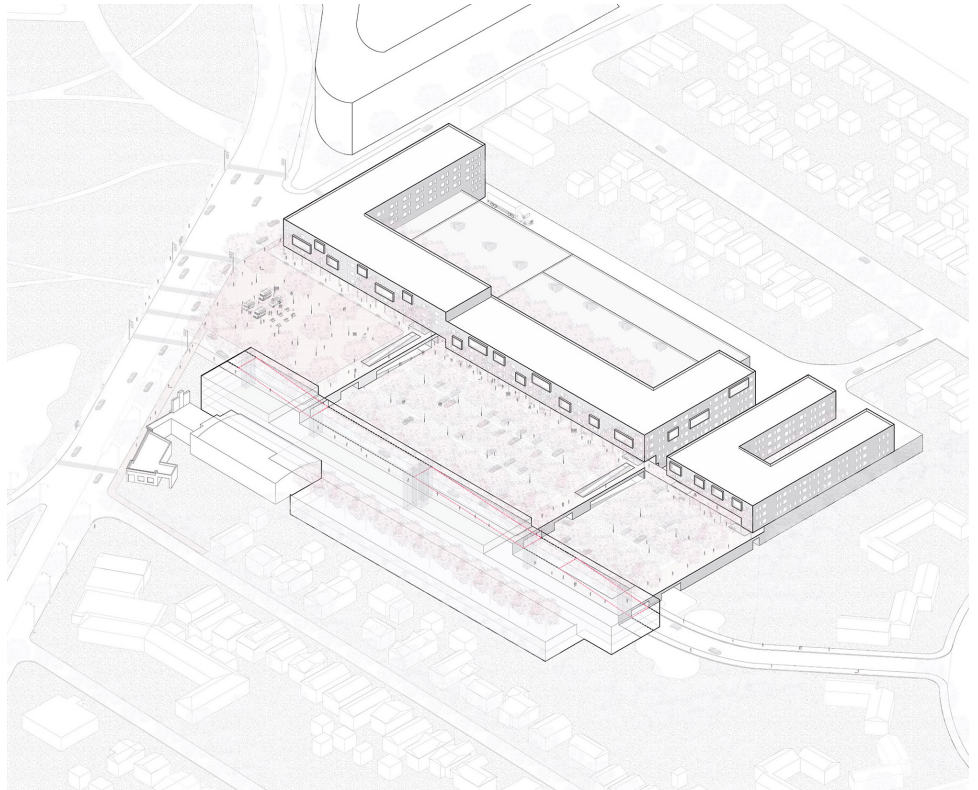


This project proposes an entirely different way of thinking about the regional shopping center as a potential public space.

By using the natural topography to subdivide the surface parking and increasing the density through a well-calibrated mixed-use programs, the project introduces temporary uses that could activate the courtyard during times of limited parking need.

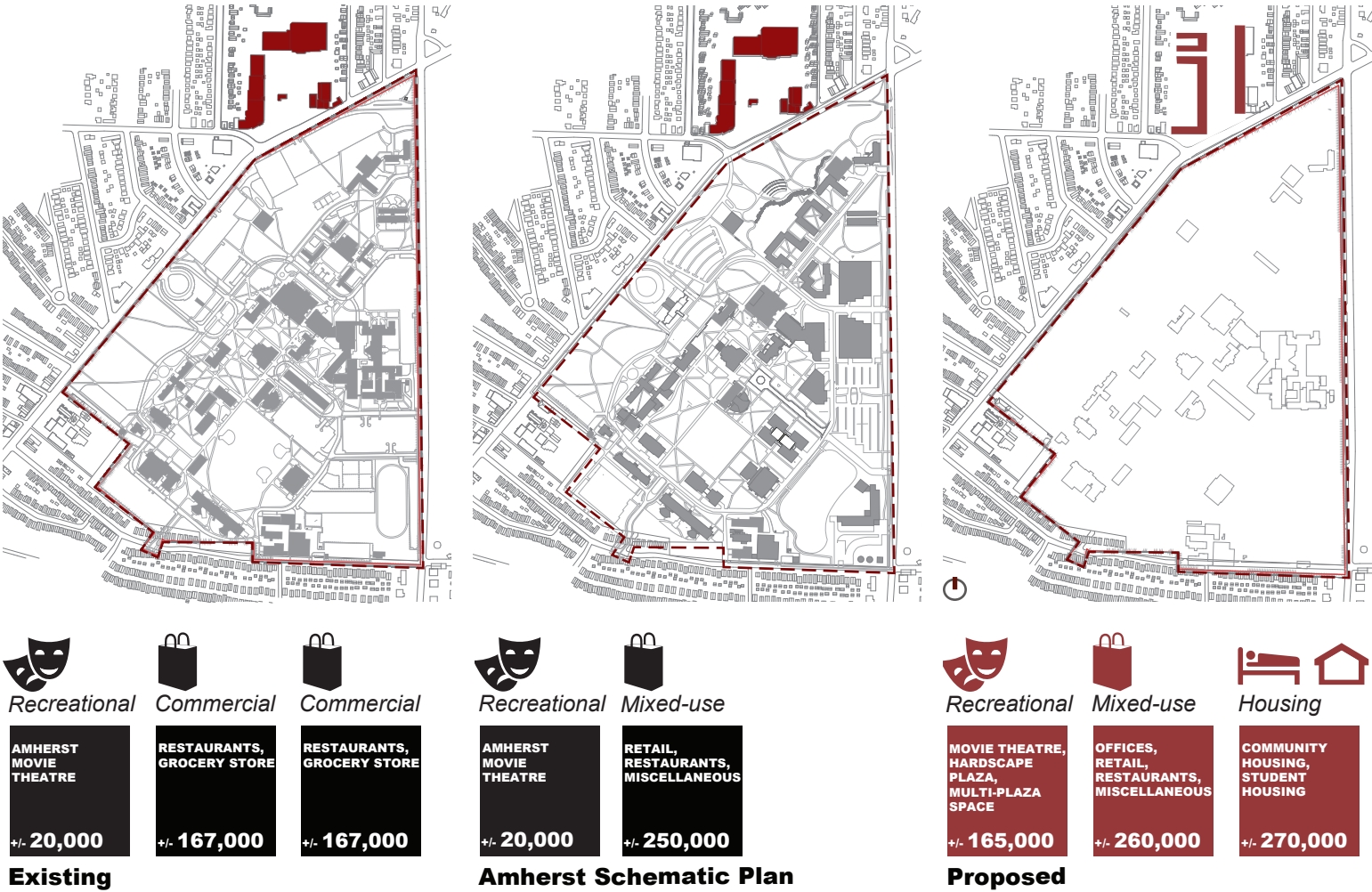
In this configuration, parking becomes a landscaped plaza that connects with the linear park at the edge of the campus and the northwest neighborhoods.

ARISHA S. | ANTHONY G.
Project Credits



Axonometric Drawing

COMPARATIVE ANALYSIS OF PROGRAM
Figure Ground Diagrams

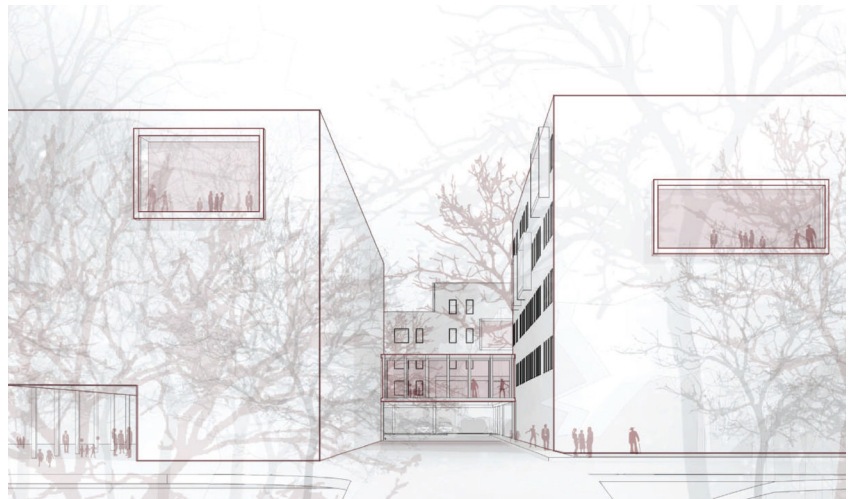




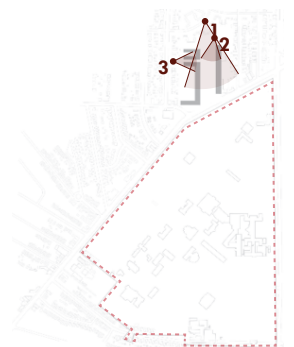
VIEW OF MAIN STREET FROM PRINCETON
Perspective Drawing 1



**VIEW FROM NORTH ENTRANCE
(PRINCETON AVE)**
Perspective Drawing 2



**A VIEW FROM A SERVICE ROAD ENTRANCE
(WINDERMERE BOULEVRD)**
Perspective Drawing 3





MODEL PHOTOGRAPHS

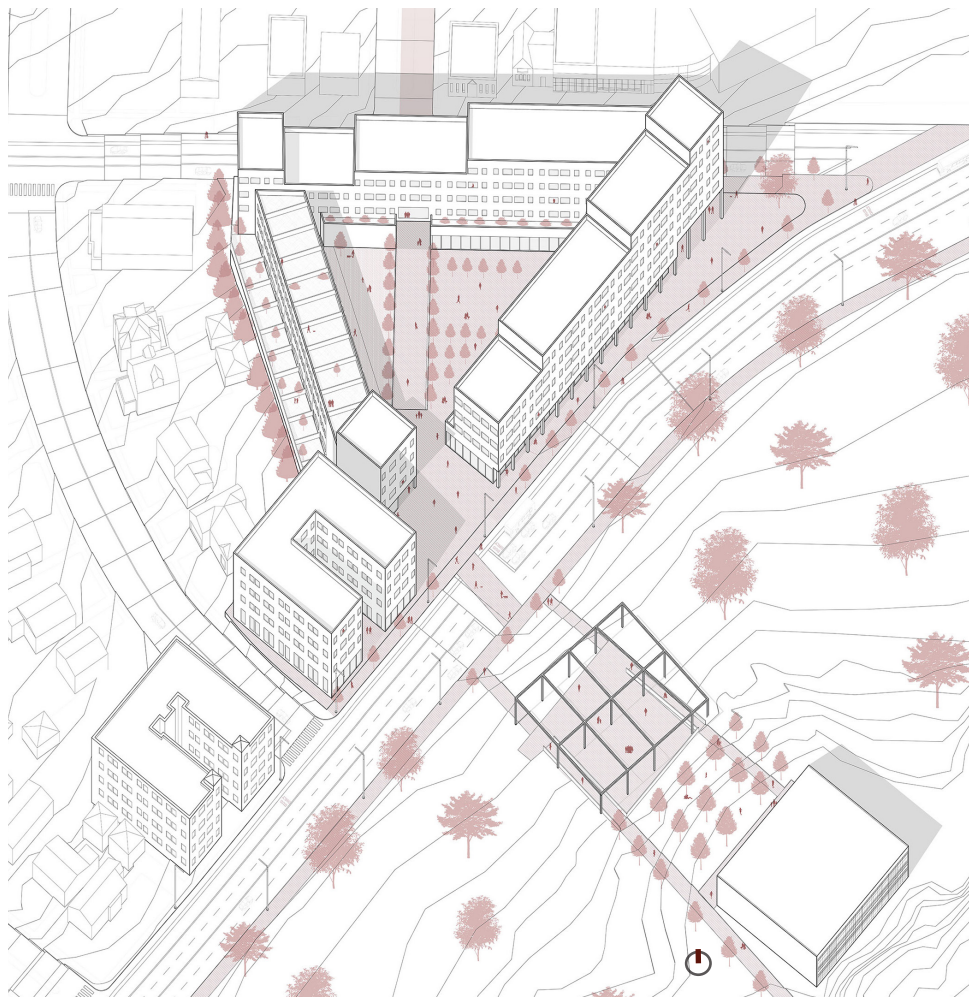
PROPOSED INTERVENTION

KENMORE AT MAIN

This project proposes a transit oriented, high density development, which could organize the pedestrian and vehicular movement at this very important but overlooked intersection.

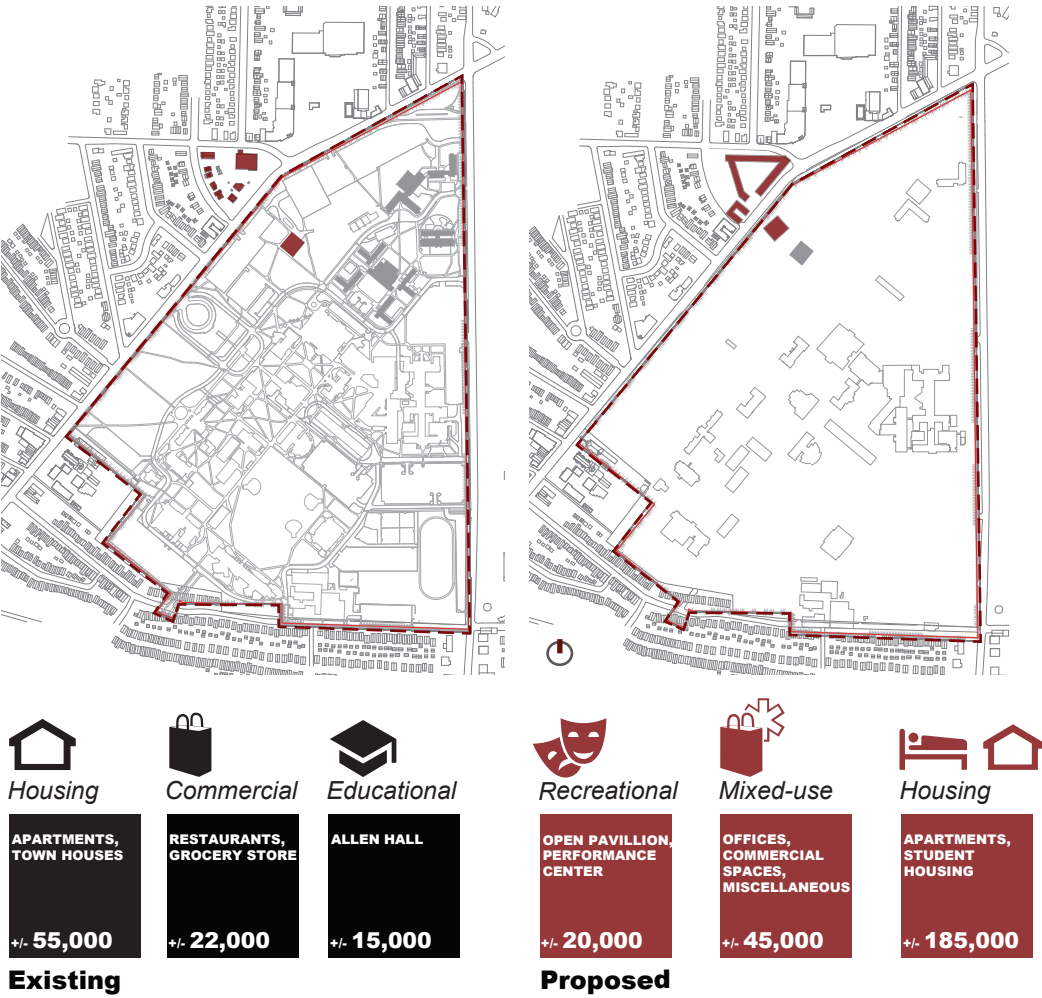
The proposal intends to serve as a landmark by making intelligent use of the challenging site geometry and creating an informal campus entry by appropriating the Allen Hall as a communal amenity open to the general public.

HO KUNG L. | MARCO D.
Project Credits



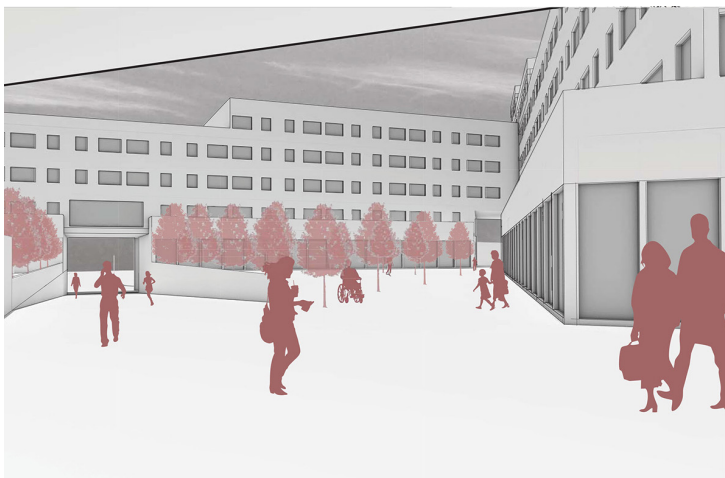
Axonometric Drawing

COMPARATIVE ANALYSIS OF PROGRAM
Figure Ground Diagrams





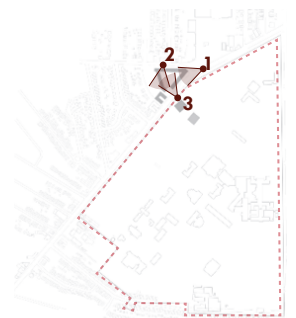
VIEW FROM MAIN STREET
Perspective Drawing 1



VIEW OF THE PLAZA
Perspective Drawing 2



PEDESTRIAN ENTRANCE TO THE PLAZA
Perspective Drawing 3

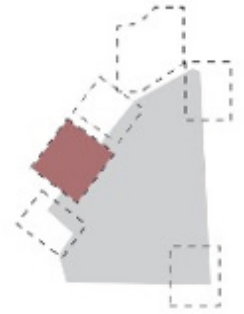




MODEL PHOTOGRAPH

PROPOSED INTERVENTION

TRANSFER STATION

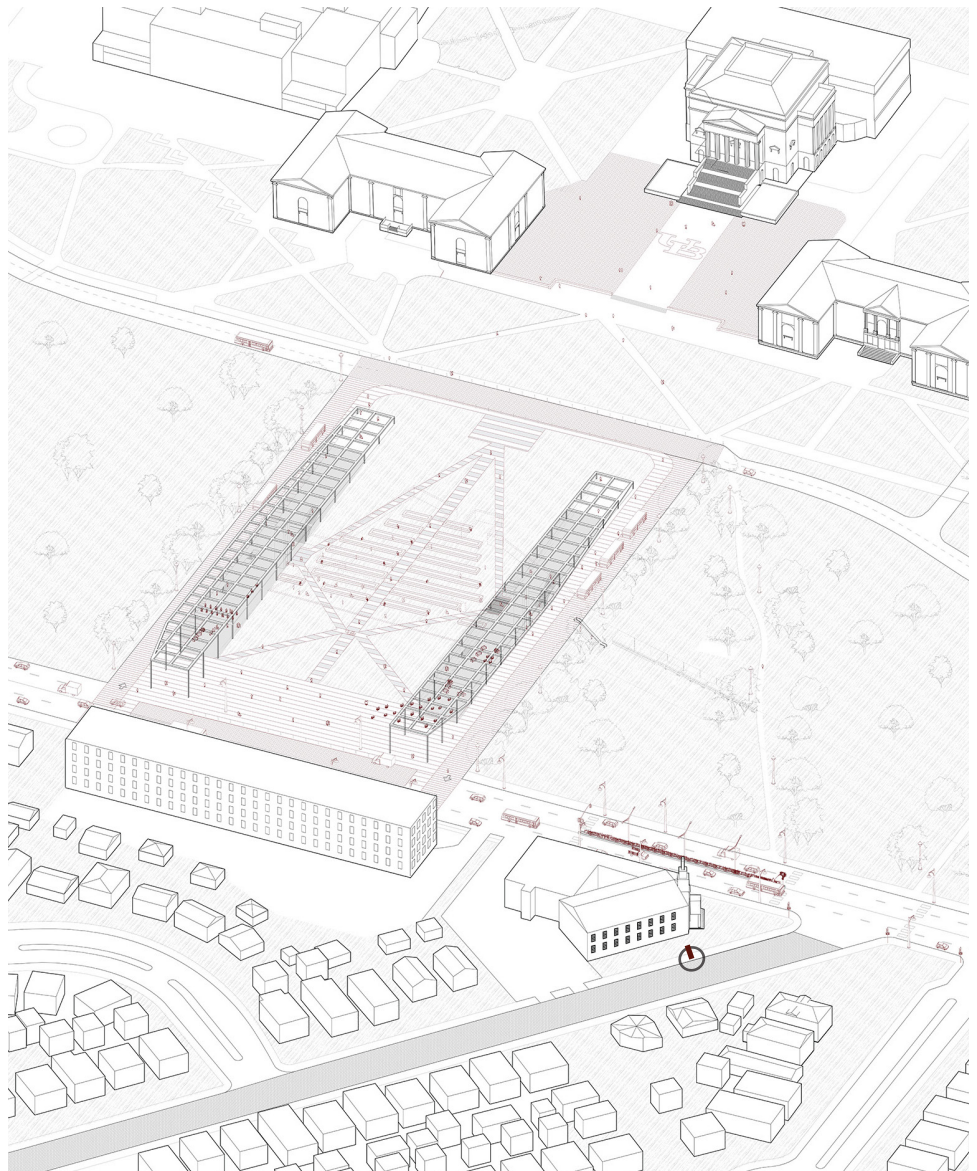


This audacious proposal seeks to construct conditions of co-existence between the campus and the NFTA station. While the station is very important in the overall urban transit network, the commuters do not get to experience the university's landscape as the bus stations are sunken in a pit surrounded by a high wall.

The proposal reconstructs the historic axis that connects the library with the city and places the bus station in two linear buildings that allow the passengers to experience the campus landscape, while providing thermal comfort.

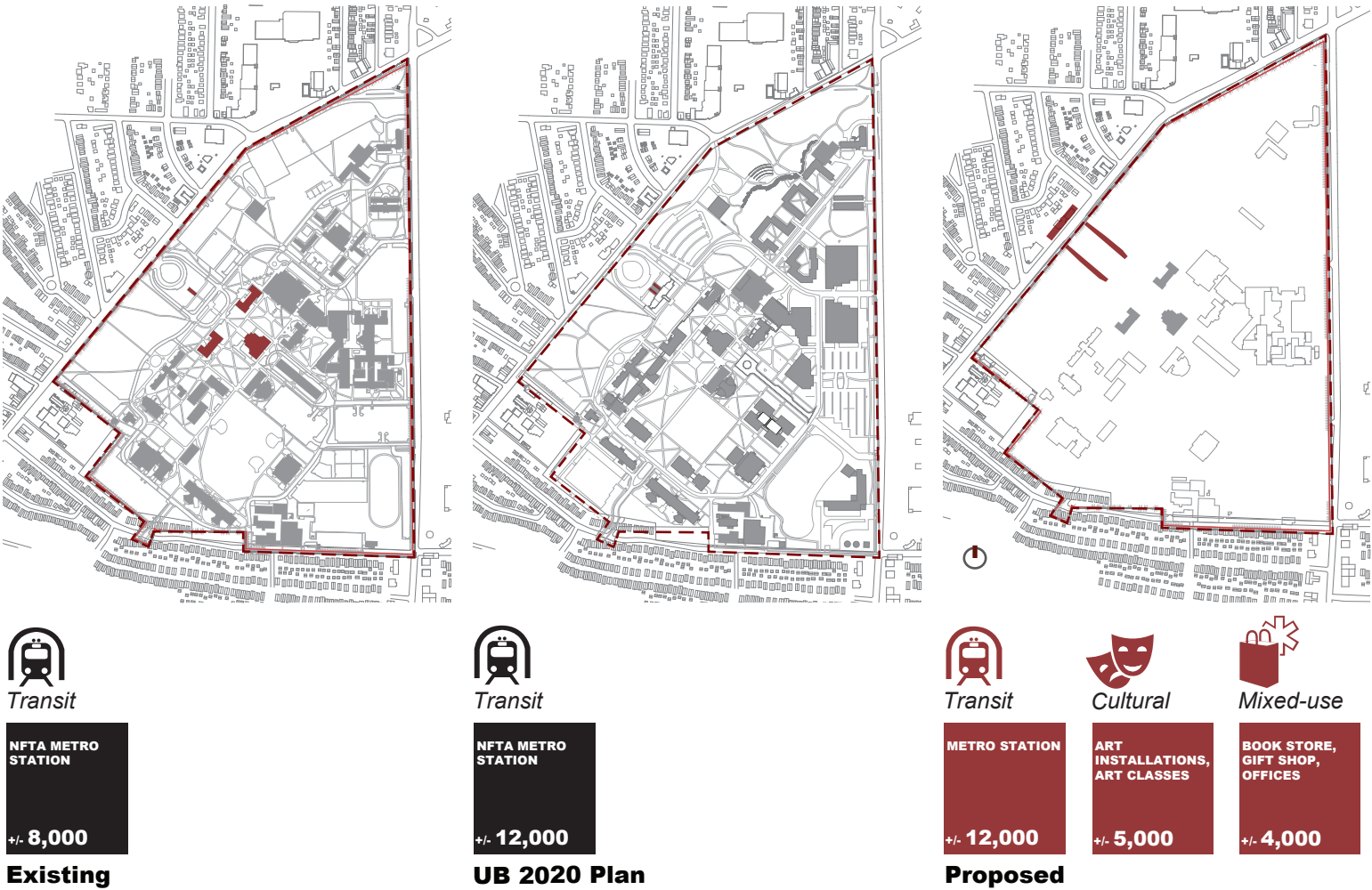
These thin also contain other functions such as a box office for the university events, a café, and a book store that passengers get to experience as part of their daily routines.

KAILEY M. | KAMILLAH R. | MANDEEP K.
Project Credits



Axonometric Drawing

COMPARATIVE ANALYSIS OF PROGRAM
Figure Ground Diagrams

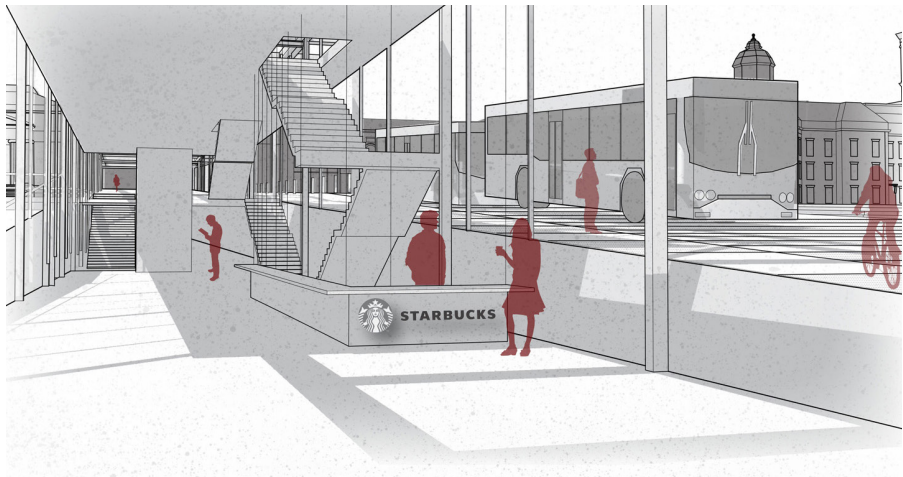




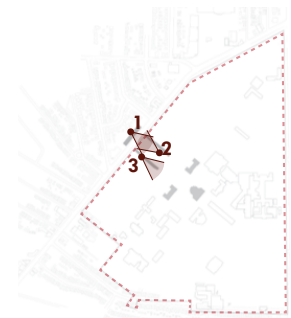
VIEW FROM MAIN STREET
Perspective Drawing 1

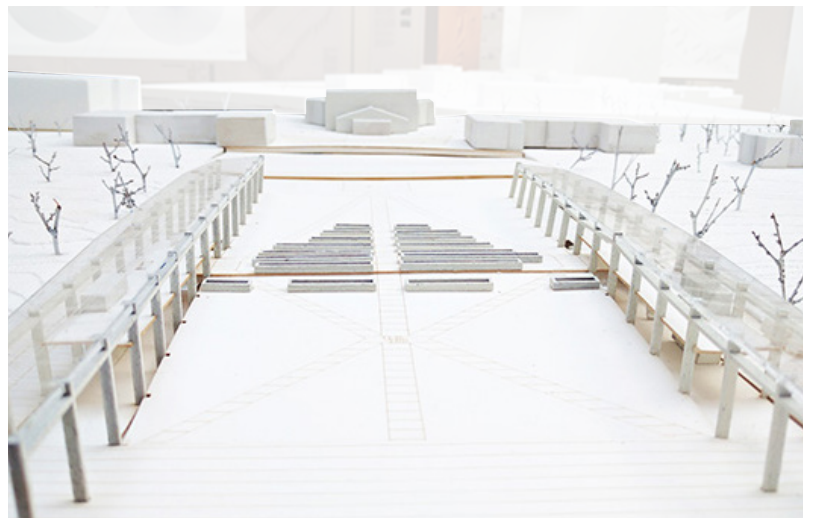
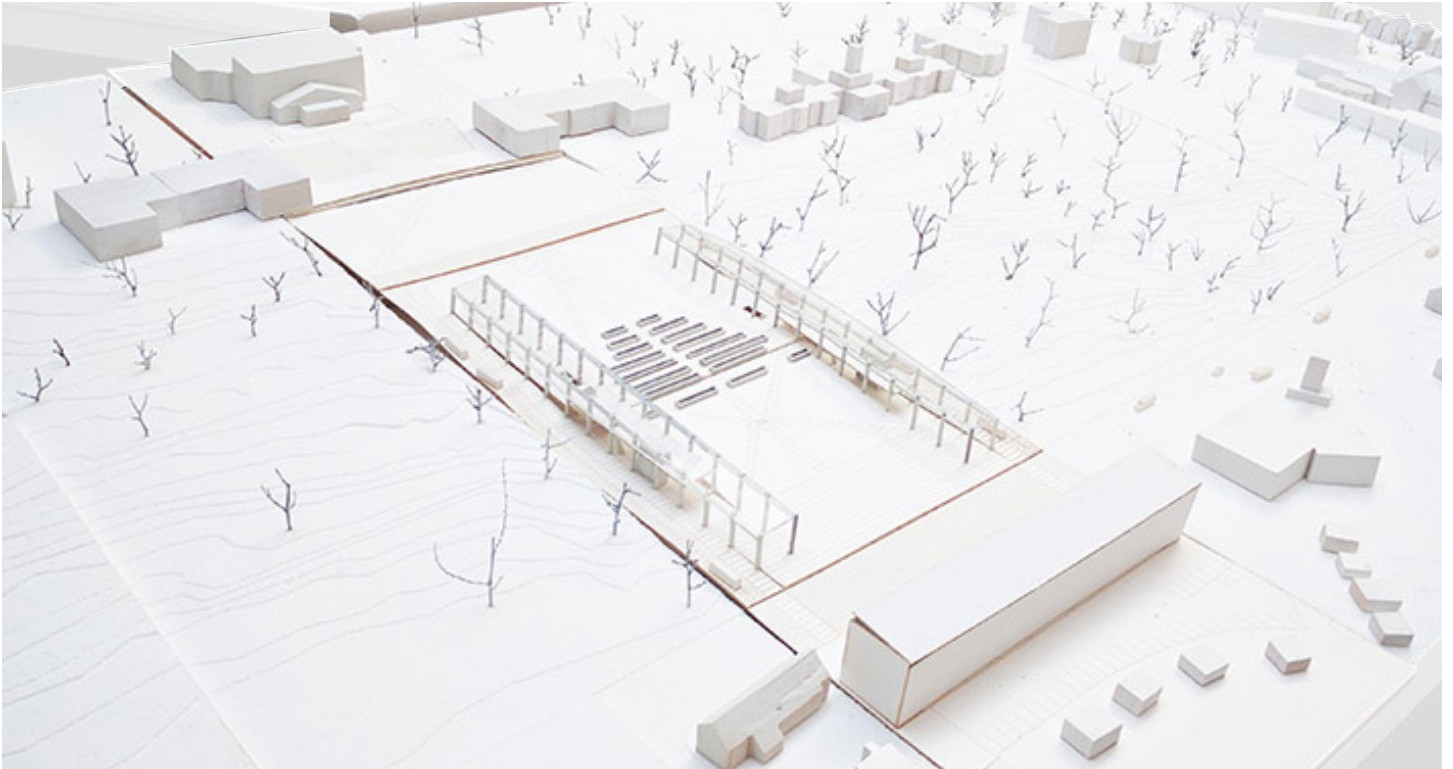


VIEW OF THE PLAZA
Perspective Drawing 2



VIEW FROM THE WALKWAYS
Perspective Drawing 3





MODEL PHOTOGRAPH

PROPOSED INTERVENTION

MAIN STREET CORNER

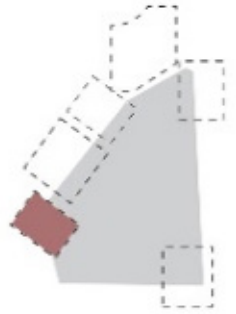
This proposal tests a new entry condition at the Main and Winspear corner that could serve as a mixed-use public space with increased foot traffic.

The intervention also organizes the vehicular traffic while preserving existing landmark structures.

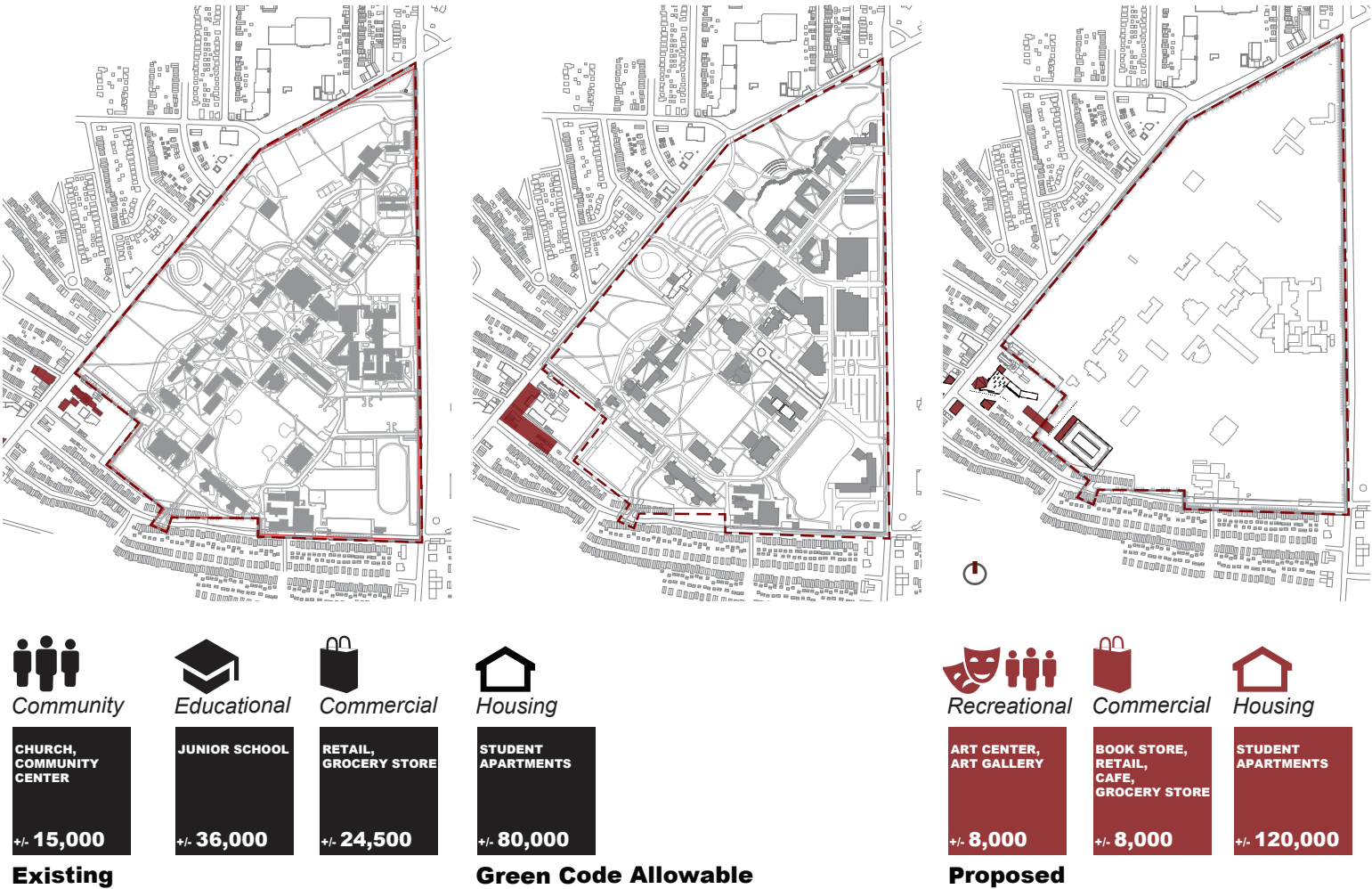
JOSHUA E. | KRISHNA P.
Project Credits



Axonometric Drawing



COMPARATIVE ANALYSIS OF PROGRAM
Figure Ground Diagrams

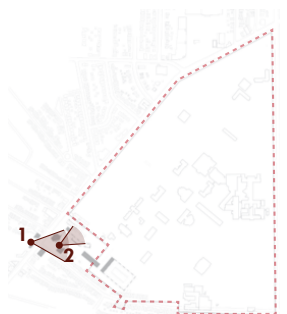




VIEW FROM MAIN STREET
Perspective Drawing 1



VIEW OF THE PLAZA
Perspective Drawing 2

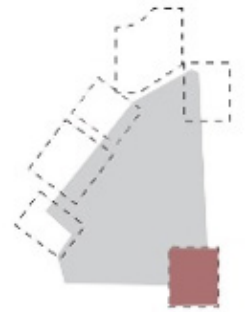




MODEL PHOTOGRAPH

PROPOSED INTERVENTION

BAILEY AT WINSPEAR

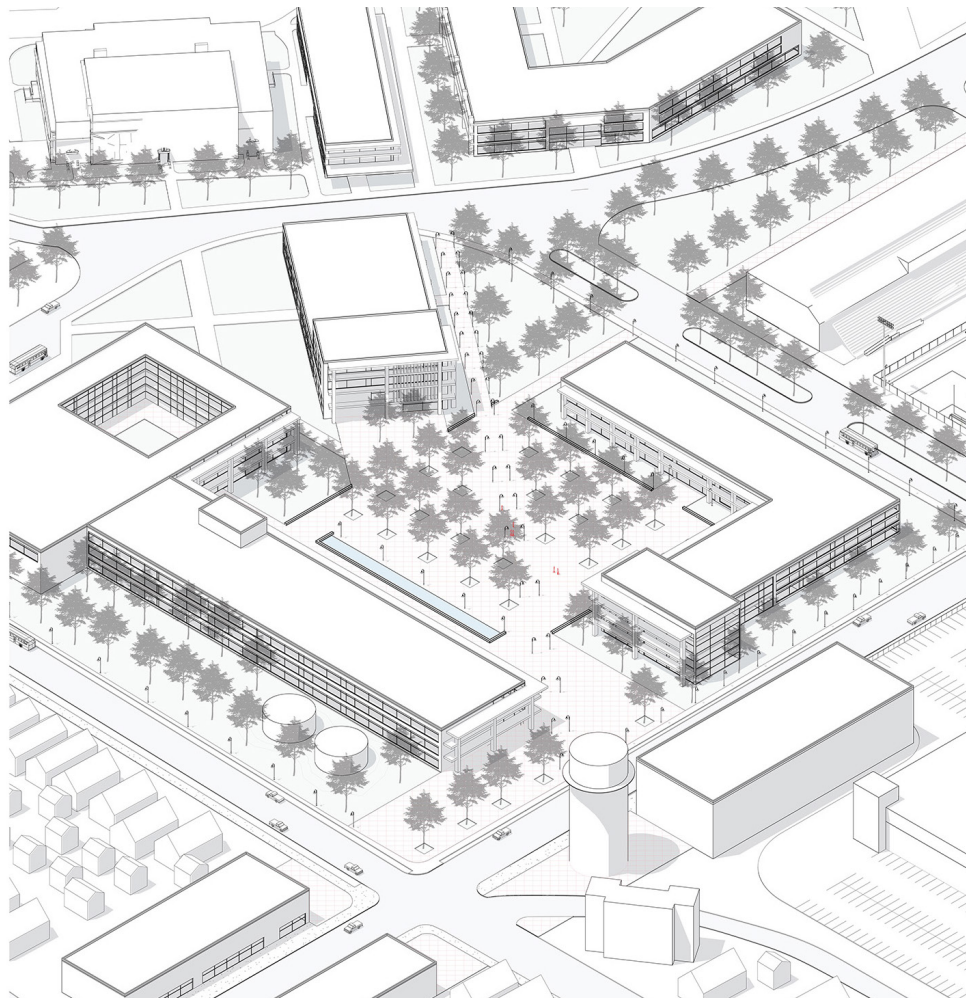


This proposal introduces a mixed campus quad defined by a new public high school, as well as the schools of Education and Executive Education.

Proposed as a part of the UB 2020, the idea for a lab school could potentially provide an important connection with Bailey avenue and the surrounding communities.

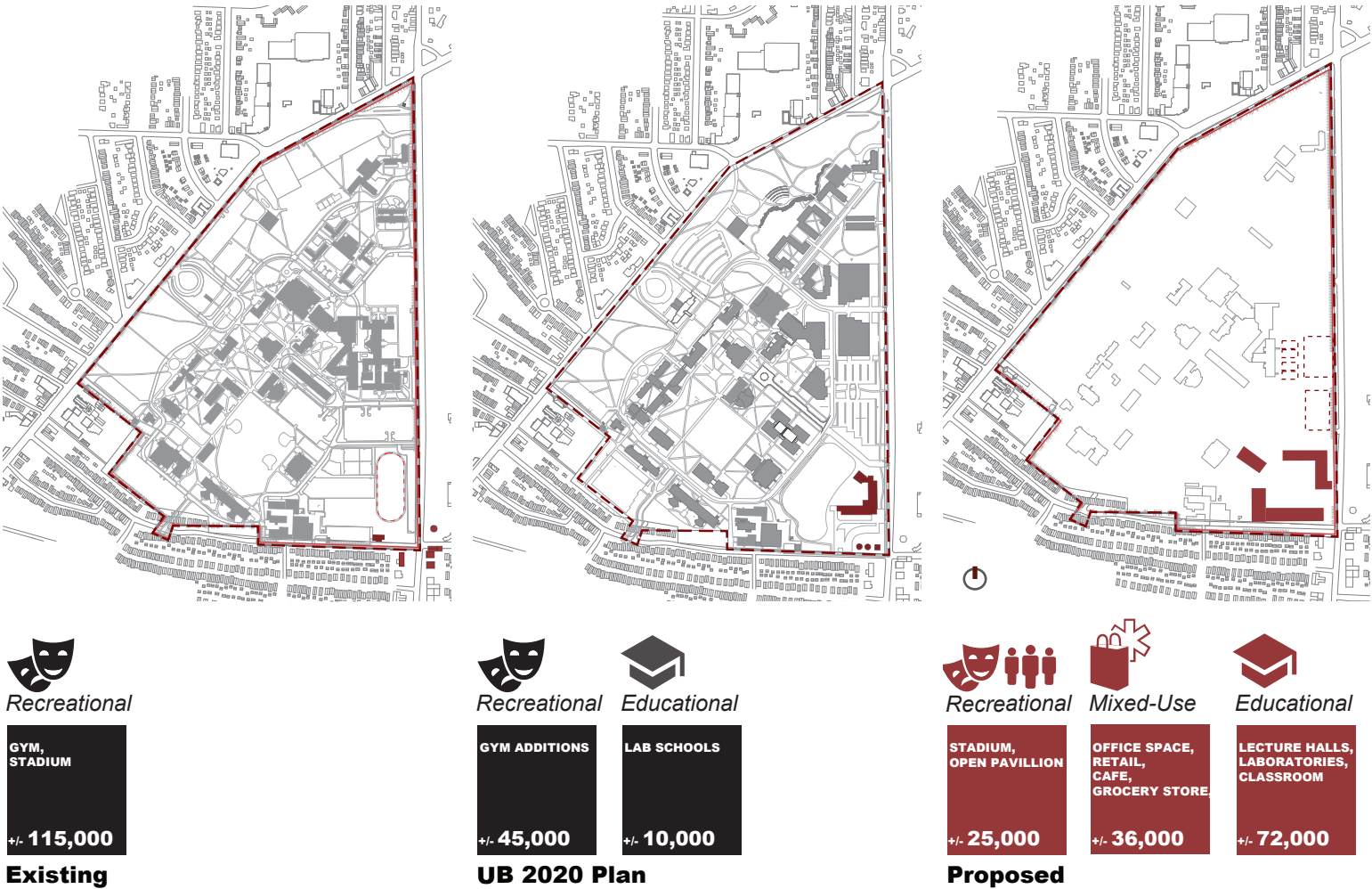
The project identifies a potential gateway condition by establishing a strong axis that terminates at the existing water tower, and a welcoming plaza where different groups can mix. The proposal also expands the recreational uses in this area for shared use by the community and students.

BRANDON B. | TAYLOR W.
Project Credits



Axonometric Drawing

COMPARATIVE ANALYSIS OF PROGRAM
Figure Ground Diagrams





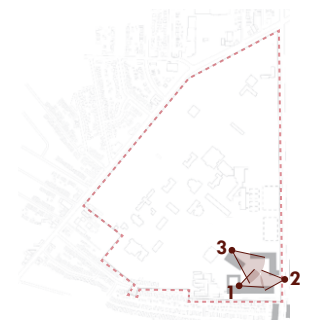
VIEW OF THE PLAZA
Perspective Drawing 1



VIEW OF THE PLAZA
Perspective Drawing 2



NORTH ENTRANCE TO THE PLAZA
Perspective Drawing 3





MODEL PHOTOGRAPHS

TOWN AND GOWN PARTNERSHIPS

URBAN DESIGN GRADUATE RESEARCH
SPRING 2017
Instructor: GREGORY DELANEY

The interdependent, yet often contentious relationship between city and campus is one that has guided campus organization and design since the dawn of the university. As a complement to the studio and technical methods courses in the Urban Design Graduate Research Group, this intellectual domain will begin by studying the evolution of the university, the idea of campus, and its connection to place.

From the origins of Plato's Academy and the emergence of the university in medieval Italy, to Oxbridge and the University of Virginia, students gained a deeper understanding of the university before working through a series of case studies on American universities that specifically focused on the challenge of expansion, the complexity of edge-condition, and the ever-tenuous relationship between a campus and its surrounding context.

TOWN-GOWN PARTNERSHIPS CASE STUDIES

The late twentieth and twenty-first centuries have ushered in a new form of town-gown partnership. Universities have begun to bridge the gap through direct development partnerships with communities—crossing the street and extending their reach into existing neighborhoods in the name of increased density, improved housing conditions, commercial development, and more vibrant public space. It was the aim of the seminar to investigate these and other types of town-gown partnerships in an interest in planning for the coming decades here at the University at Buffalo.

PART 1: Case Study on urban campuses Historical town-gown divide.

The motivations behind these developments are varied and multifarious, from fostering stronger relationships between campus and community, to building greater urban density and mixed-use, offering greater variety in student housing options, founding new anchor institutions, cleaning up neglected and derelict historic districts, improving on- and off-campus safety, and building greater urban vibrancy and street-life. Much of these developments take place at the campus's edge, but some extend farther into the surrounding neighborhoods and community.

PART 2: The History of Campus Edge

Synthesizing the case studies research into a graphic presentation. Featuring a single composition in three layers—each layer representing a moment in the history of campus-edge development. Students developed the research on their campus and its edge to select three critical dates in the development of town and gown. The drawing required some real investigative research in order to build each layer.

Image Source : UB Archives

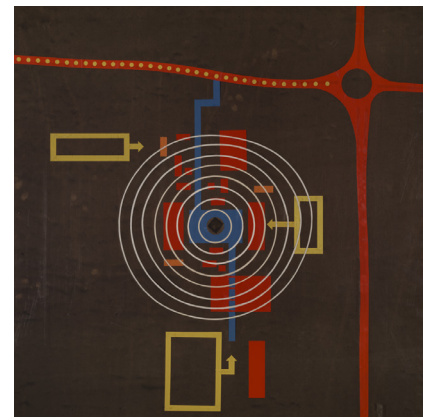
UNIVERSITY OF ILLINOIS AT CHICAGO

The University of Illinois at Chicago (UIC) was founded relatively late compared to most American Universities. After WWII, at the peak of the modernist movement, UIC purchased a 100-acre parcel of land in a residential community in South-West Chicago with plans to accommodate 32,000 students. Chicago architect Walter Netsch of Skidmore, Owings & Merrill was hired as the campus planner. The school was developed with unique constraints—an expressway fronting the North and East and railroad tracks lining the South. Netsch's contribution is known as the Eastern campus and is framed by the free-way interchange. Upon opening in 1965, enrollment at UIC grew exponentially, becoming the fastest growing campus in the country by 1981.

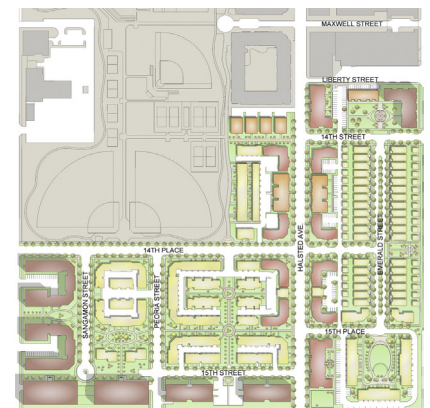
Upon this substantial growth a two campus system was developed, the second expanding upon existing medical buildings to the West. The East and West campus are connected by a vibrant three quarter mile corridor that is home to Greektown and Little Italy. The connecting Taylor Street is largely fronted with 2-3 story historic red brick fabric and offers numerous commercial centers, eateries and bars. Adjacent to the North and South of Taylor Street is a mix of apartments and townhouses for both single and multi-family residential communities, as well as a series of parks.

In the past two decades, campus planners have looked to further accommodate the growing campus, but the unique constraints of UIC present an interesting challenge for new development. Rather than acquiring the land between the campuses on Taylor Street, UIC invested in the expressway-fronted Maxwell Street. Here on the East side of the campus, sits University Village, a public/private project started in 2001, that is entering its final phase. The 58-acre development incorporates roughly 900 dwelling units and 200,000 square feet of retail and office space, all catered to professional students, postgraduates and faculty.

The success of the project is yet to be seen. Postgraduates seem reluctant to pay substantially more to live in campus-developed apartments rather than renting from the abundant housing stock between campuses on and around Taylor Street. Although originally touted as low-cost and market rate, the residential townhouse units are selling for up to \$849,000. Campus apartments cost substantially more than elsewhere—with rents upwards of \$11,000 a year per student for a 4-bedroom apartment. Many of the commercial spaces currently lay dormant.



Walter Netsch's Campus Diagram



Final phase of UIC's University Village

Year Founded: 1965

School Type: Public, Research

Total Enrollment: 29,048

Total Endowment: \$2.278 Billion

Endowment/student: \$11,594

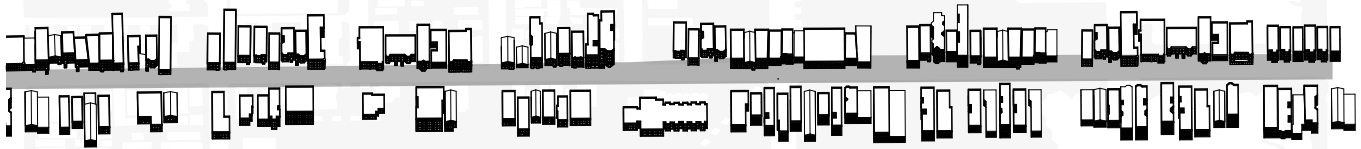
Surrounding Neighborhood Population: 61,768

Total Building Square Footage: 15,000,000 Sq. Ft

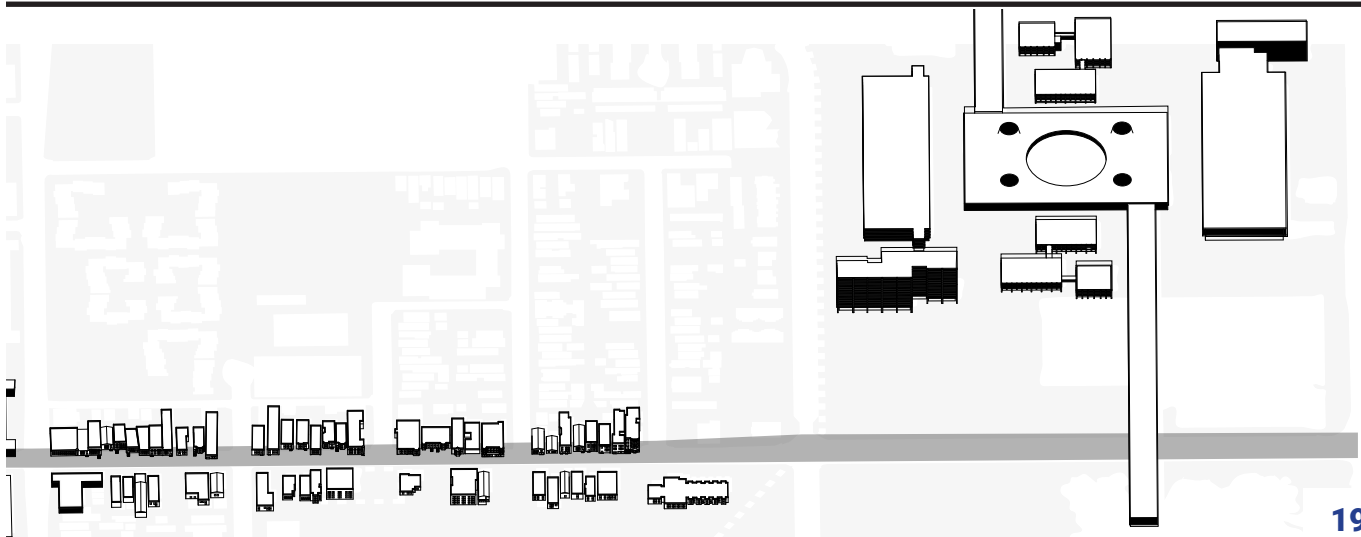
Affiliations: University Research Association,
Great Cities' Universities

UNIVERSITY OF ILLINOIS HISTORY OF THE CAMPUS EDGE

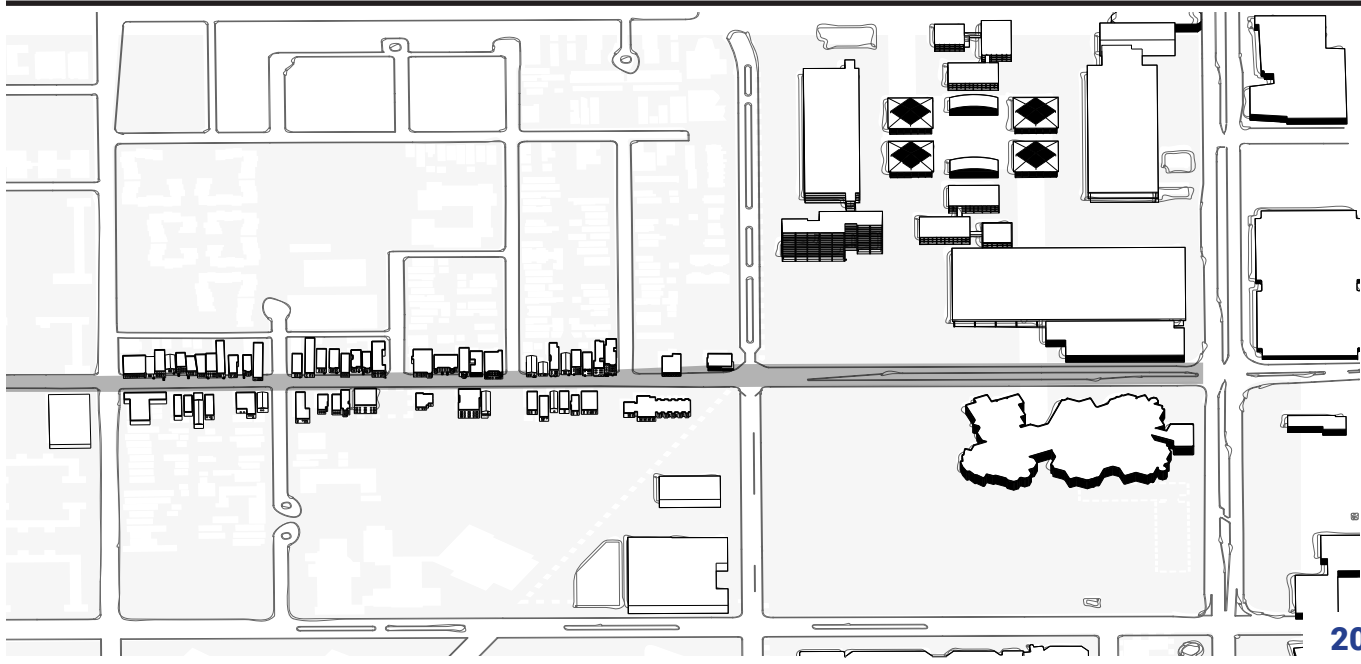
The ultimate benefits of universities acting as developer come into question in light of other campuses, such as the University of Cincinnati and The Ohio State University, where large portions of historic urban fabric were demolished to make way for lucrative development ventures. In these cases, elevated rates of crime, inadequate infrastructure, and poor student living conditions gave cause to redevelopment around the campus. At UIC however, developers and planners recognized the strong connection between the campus and the vibrant Taylor Street corridor and focused development in areas where the “Town” presence was not as prevalent. But UIC may have suffered from these decisions. At Ohio State and Cincinnati, the new developments at the doorsteps of the campuses have become successful and lucrative. But at UIC, the vacancies and lack of activity in the University Village may be seen as a negative consequence of fabricating a campus gateway where an existing one already thrives.



1913



1965



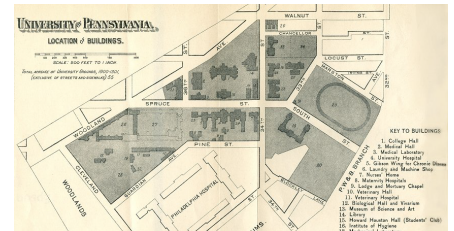
2017

UNIVERSITY OF PITTSBURGH

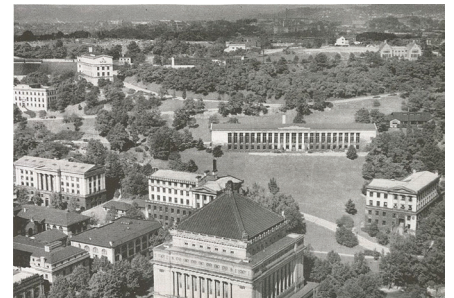
Originally named the Pittsburgh Academy, the University of Pittsburgh (“Pitt”) began its life in a log cabin on the American frontier in 1787. In 1830, the University moved into a three-story building on Third Street in downtown Pittsburgh. After the great fire, a new building was constructed in Downtown in 1845, which also burned down in 1849, so another building was built in 1854. Tired of shifting campuses, the university laid down its corner stone for a permanent campus in 1908. Located directly adjacent to the Oakland neighborhood, the campus is surrounded by several residential communities—such as Shady Side, Uptown, Squirrel Hill, Polish Hill, and Terrace Village. Carnegie Mellon and Carlow University are along the east and the west of Pitt’s campus, , creating a high density of students in the area.

In the early 1900s, the architectural firm Palmer & Hornbostel designed a grand plan for expansion of the University of Pittsburgh, based on the ancient Acropolis in Athens. Had the full plan been realized, the University of Pittsburgh’s Oakland campus would have included 60 buildings designed in the Greco-Roman style. Only four of the planned buildings were completed: Thaw Hall, Pennsylvania Hall, State Hall, and the Mineral Industries Building. Of the four buildings, Thaw hall is the only one still standing. Pitt’s Eberly Hall (originally called Alumni Hall, was the first building to deviate from the “Acropolis Plan”. Originally, the first phases of the Acropolis Plan were executed in what was then the heart of the campus (now considered the ‘upper campus’). Later, this plan was abandoned for a new core established by the 42-story Cathedral of Learning, built in 1936 in the middle of the Oakland neighborhood.

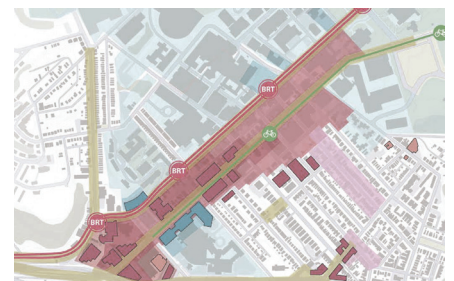
With the massive Cathedral of Learning on the campus, the University of Pittsburgh started to expand by gradually acquiring city buildings in the Oakland neighborhood, eventually turning them into university buildings. The university crawled slowly into the community, shifting ‘Town’ into ‘Gown’. Though many historic buildings were preserved, the neighborhood was greatly encroached upon. This created friction between town and gown, leading to frequent development conflict and multiple halted master plans. The first building to be bought by the university was the Schenley Hotel, which was later renamed the William Pitt Union, (currently the Student Union), which has since acted as an anchor to engage the university with the community. The Apartment complexes built in 1924 behind the William Pitt Union were also bought and renovated by the university in 1956, and are now known as the Schenley Quadrangle Residential Halls.



Original “Acropolis on a Hill” campus vision



Birds-eye view of the acropolis plan, as realized in 1942



Forbes Avenue and Fifth Avenue Corridors



The Oakland 2025 Master Plan

Year Founded: 1787

School Type: Public, coed

Total Enrollment: 28,617

Total Endowment: \$3.525 Billion

Endowment/student: \$123,179

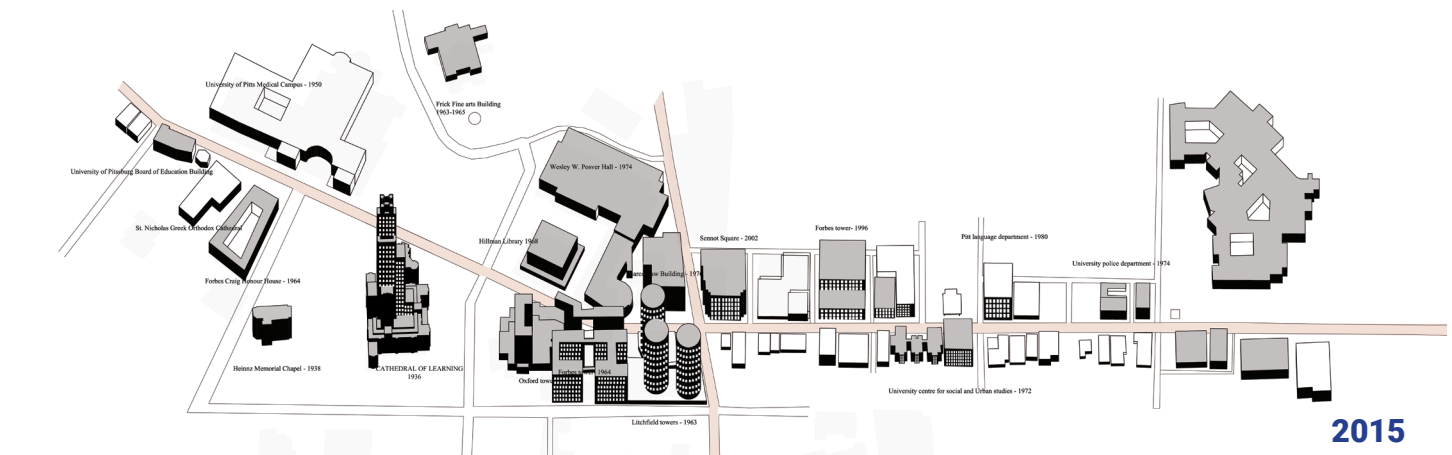
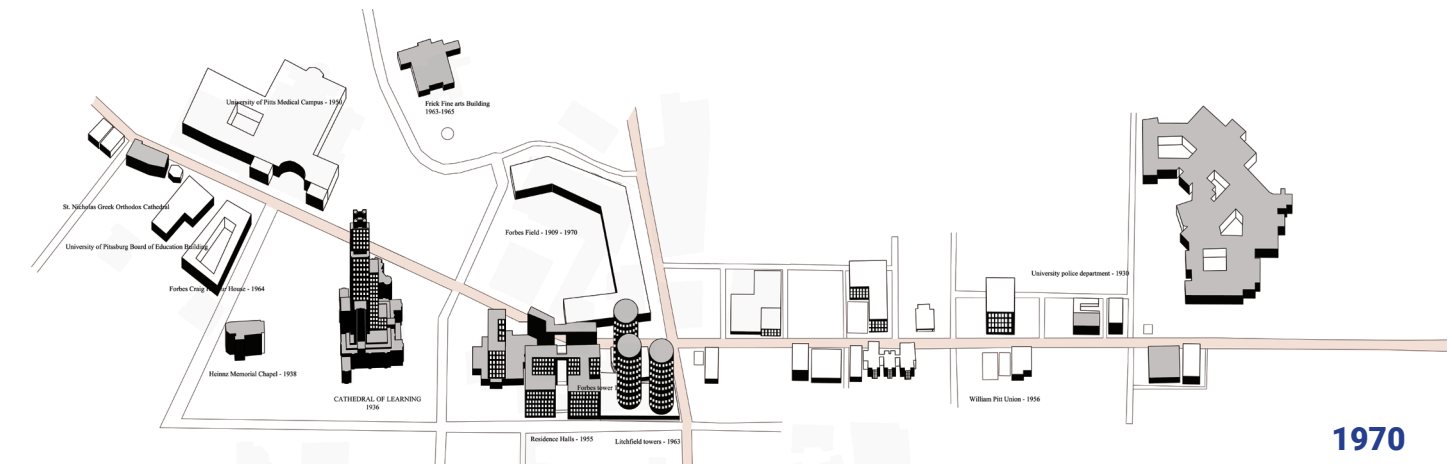
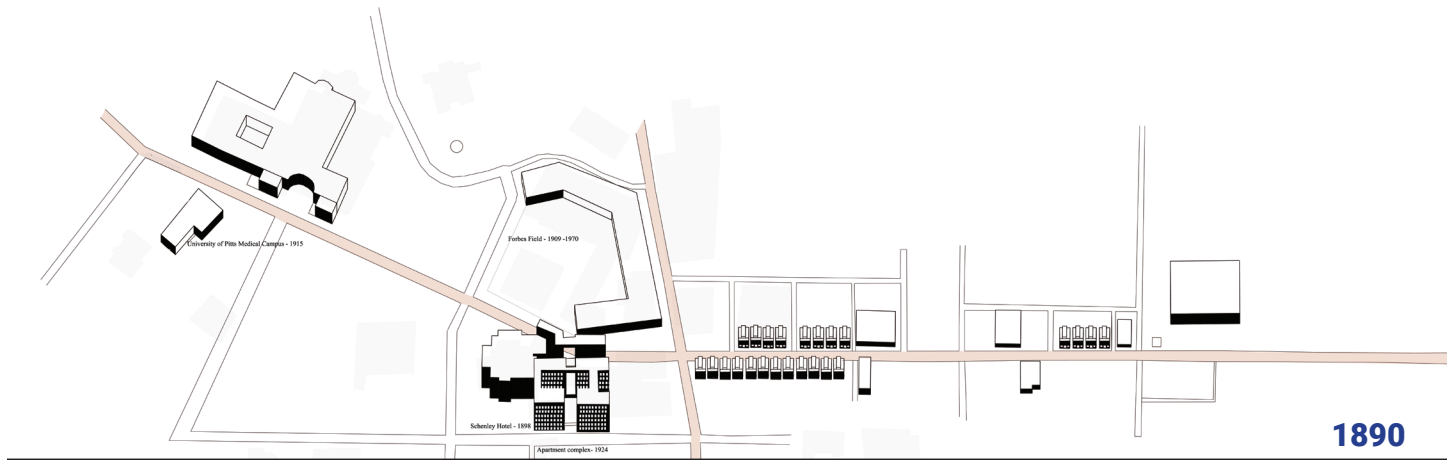
Surrounding Neighborhood Population: 50,274

Total Building Square Footage: 2,137,427 Sq. Ft

Main Campus Contiguous Land Area: 132 acres

UNIVERSITY OF PITTSBURGH HISTORY OF THE CAMPUS EDGE

Since the mid-century, Pitt has taken up various efforts to more effectively serve neighboring communities. For example, future plans are in place to develop several Community Engagement Centers that will be located within neighboring communities with neighborhood ambassadors on staff to foster community-university collaboration. Other campus facilities, like the Rand Building, Sennott Square, and the Schenley Quadrangle, have been built or renovated to incorporate mixed-use activities that support the community. The Forbes Avenue and Fifth Avenue corridors have also been activated with mixed-use buildings that cater to the needs of the community and the university. The Oakland Planning and Development Corporation is now seeking to intensify these corridors by occupying vacant parcels and removing surface parking and expanding the medical campus buildings along the street, which will also benefit the community.



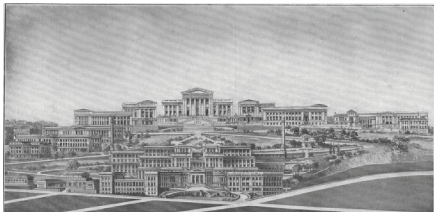
UNIVERSITY OF PENNSYLVANIA

In 1740, Benjamin Franklin presented a vision for a new school in Philadelphia that would be known as the “Public Academy of Philadelphia.” Originally located in the Whitefield Chapel building in the Old City neighborhood of Philadelphia, the school transformed from a small college to the University of the State of Pennsylvania—the nation’s first state university. In 1791, the university was again transformed when it became a private school. It was not until 1871 that the University of Pennsylvania (“Penn”) made its new home in West Philadelphia. Currently located across the Schuylkill River from Center City, Philadelphia, the original land acquisition for the campus was just 10 acres.

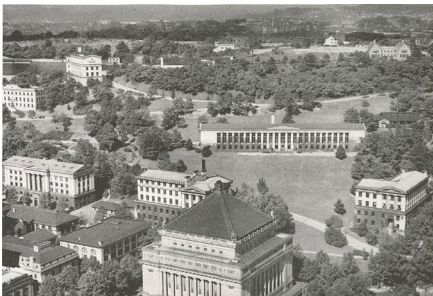
After Penn decided to move to West Philadelphia, up until the post-war era, the expansion of the university was quite modest. Keeping to the east of Woodland Avenue in West Philadelphia, the Penn treated Woodland Avenue as its main border, which limits expansion to the north and the west, due to Drexel University and the Black Bottom neighborhood. It was not until 1948 when Penn began to purchase land in Black Bottom, a poor community west of Woodland Avenue, and convert this diagonal street into a pedestrian path. This change sparked the conversion of the campus from having the prior campus main edge to the center of the campus.

In the late 1960s, the University of Pennsylvania began one of its largest campus expansions in its history. Stemming from additional funds from the University, as well as the creation of the GI Bill, Penn sought land acquisition deals west of its campus to accommodate growing student numbers. Aided by Philadelphia’s Redevelopment Authority, a public-private partnership was created, and the Penn began acquiring land through eminent domain. This expansion created a majority of the present-day campus northwest of Woodland Avenue and as far west as 40th Street, marking a stabilization effort by the university to help adjacent communities. Still, the expansion of the brought about a good amount of controversy from locals. Therefore, the university launched community outreach programs such as Buy West Philadelphia, a program that adds incentives for campus members to purchase goods and services from the local community, and the Penn Home Ownership Services program which gave current employees of the university opportunities to purchase homes at lower costs. Since its inception in 1965, over 1,400 individuals and families have participated in the Penn Home Ownership Services program.

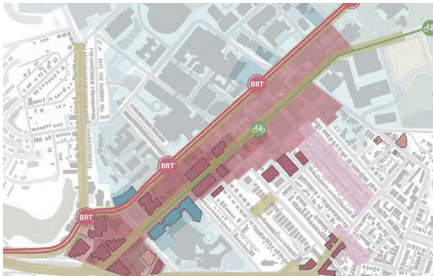
Year Founded:	1740
School Type:	Private, Ivy League, research
Total Enrollment:	24,960
Total Endowment:	\$10.7 Billion
Endowment/student:	\$428,686
Surrounding Neighborhood Population:	29,866
Total Building Square Footage:	14,000,000 Sq. Ft
Main Campus Contiguous Land Area:	299 acres



Original “Acropolis on a Hill” campus vision



Birds-eye view of the acropolis plan, as realised in 1942



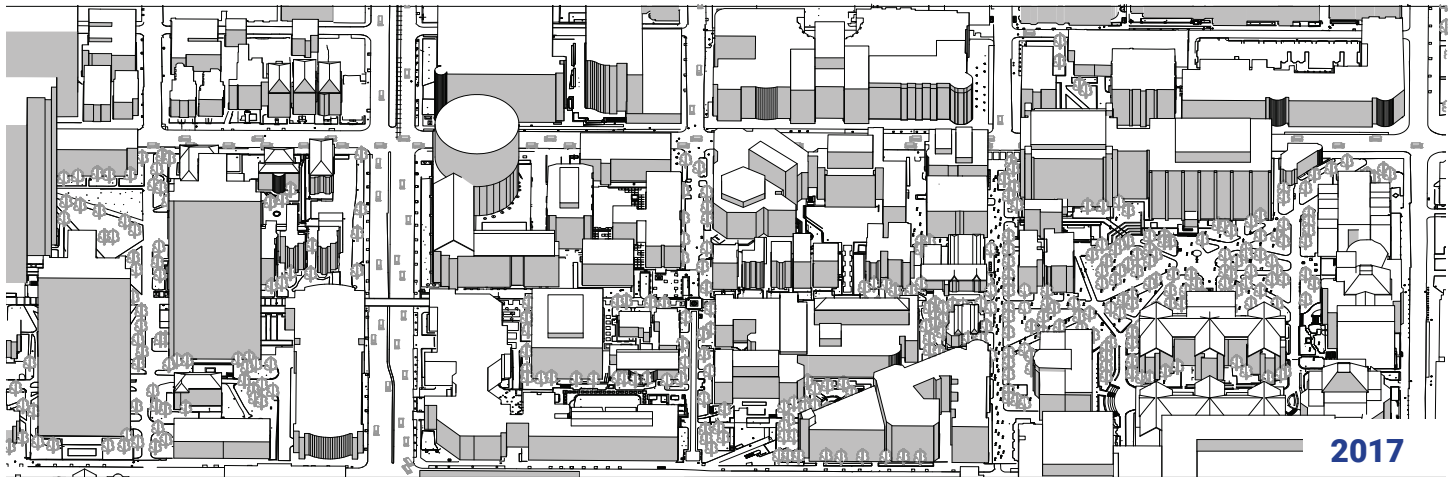
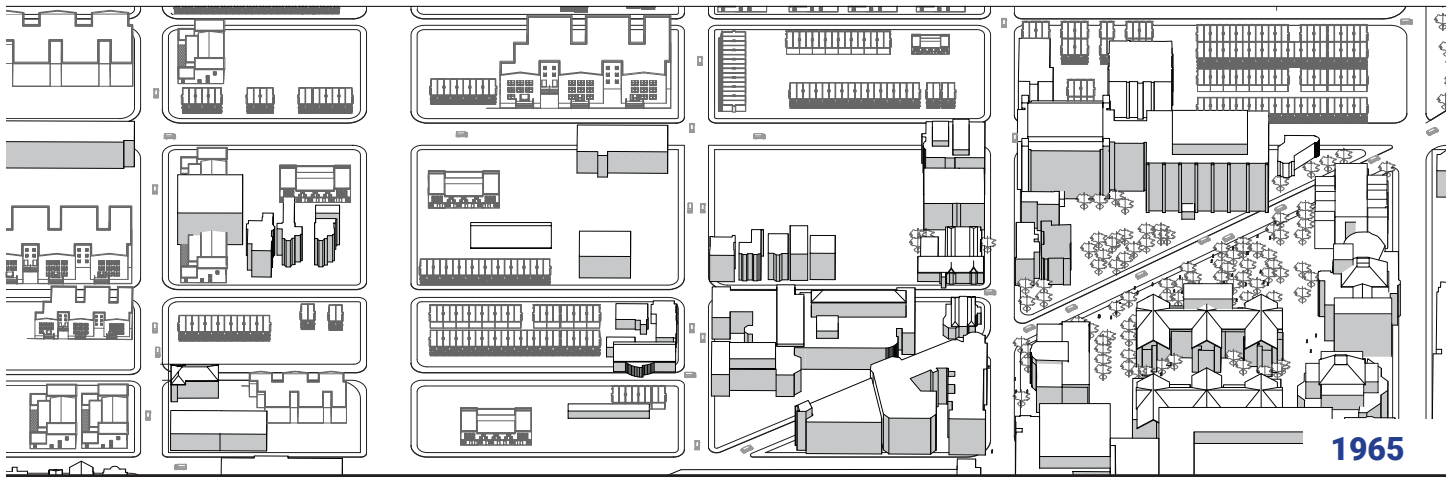
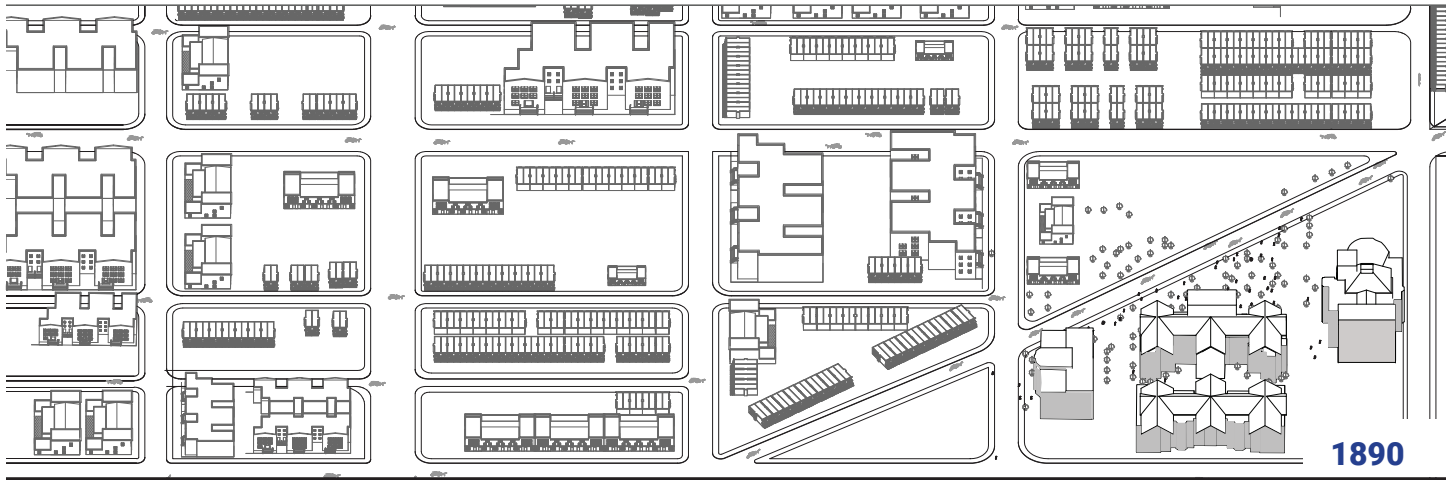
Forbes Avenue and Fith Avenue Corridors



The Oakland2025 Master Plan

UNIVERSITY OF PENNSYLVANIA HISTORY OF THE CAMPUS EDGE

Currently, the University of Pennsylvania is seeking to expand eastward in its new master plan; “Penn Connects.” Penn Connects, (Sasaki Associates, 2006) looks to create a link from the university to the city through strong connections across the Schuylkill River. The current infrastructure and vacant lands to the east of the campus have created previous boundaries for the campus; however, the university has acquired these industrial parcels in order to create this downtown connection. Organization of proposed green spaces, new development, and pedestrian bridges highlight the Sasaki Associates plan to bring the campus eastward.



UNIVERSITY OF CHICAGO

The University of Chicago (UC) was founded in 1890 by the American Baptist Education Society with a large donation from John D. Rockefeller. UC was based upon theoretical and perennial issues rather than the normal applied sciences and commercial utility curriculum. UC became one of the 14 founding members of the Association of American Universities (AAU). The college is set up as an American-style undergraduate liberal arts college with a German-style graduate Research University, and quickly became a national leader in higher education and research. UC was one of the first campus to accept minority and women to university and has had a profound impact on American higher education. UC also is known as a “teacher of teachers,” as teaching is the career path for more than one in seven graduates.

The university is composed of the College, various graduate programs, and interdisciplinary committees organized into five academic research divisions and seven professional schools. Chicago is also well known for its professional schools, which include the Pritzker School of Medicine, the Booth School of Business, the Law School, the School of Social Service Administration, the Harris School of Public Policy Studies, the Divinity School and the Graham School of Continuing Liberal and Professional Studies. The university enrolls approximately 5,700 students in the College and around 15,000 students overall.

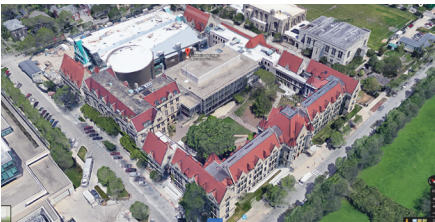
Integrated into the University is the Lab school, which was the first of its kind. The lab school was reflected in the Wall Street Journal’s findings that the school is amongst the top five feeder institutions in the nation for elite colleges. U-High (high school) offers more than 150 different classes. All of these courses are college preparatory courses. Students enrolled in the high school may take classes at UC during their tenure. The school maintains four separate libraries which holds over 110,000 volumes. The lab school was ranked 4th in the nation in 2007 for sending its graduates to elite universities.

The first buildings represented the English Gothic style of architecture, complete with towers, spires, cloisters, and gargoyles. By 1910, the University had adopted even more traditions. During the late 1950s and early 1960s, the University began to add modern buildings to the formerly all-Gothic campus. These included the Laird Bell Law Quadrangle.

Year Founded:	1890
School Type:	Private, coed
Total Enrollment:	15,726
Total Endowment	\$7.1 Billion
Endowment/student:	\$451,482
Surrounding Neighborhood Population:	-----
Total Building Square Footage:	----- Sq. Ft
Main Campus Contiguous Land Area:	217 acres



Shapiro Hall



Lab School



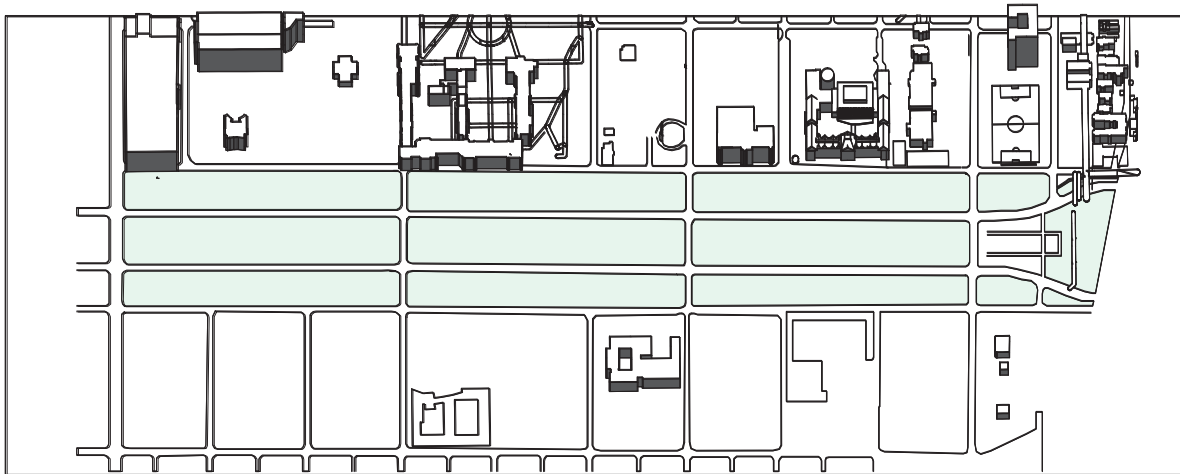
Blaine Hall



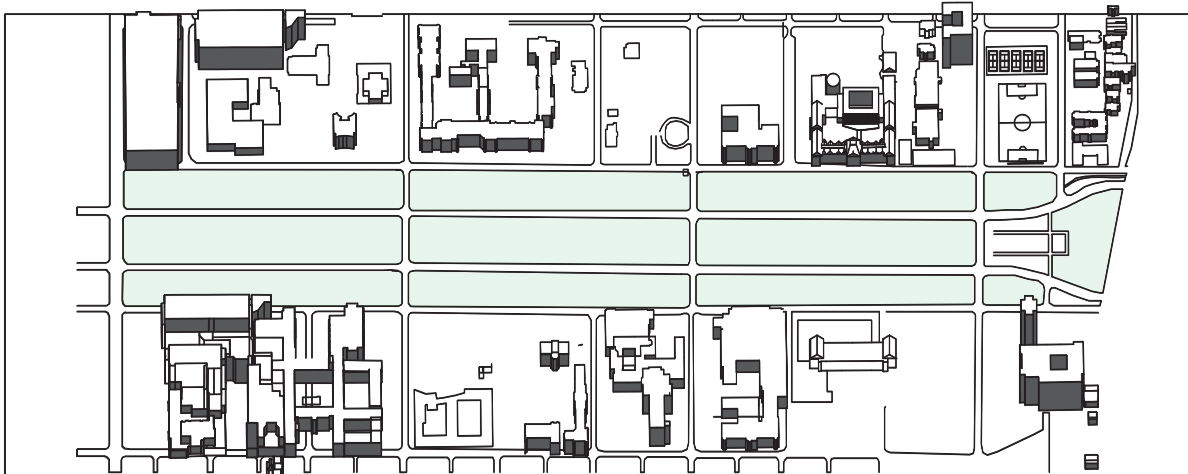
World's Fair Grounds

UNIVERSITY OF CHICAGO HISTORY OF THE CAMPUS EDGE

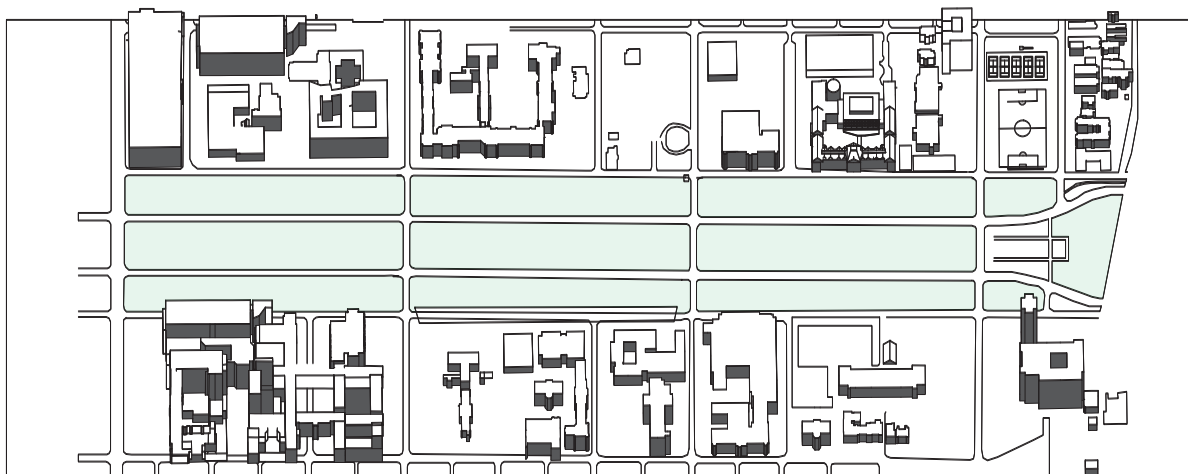
The University of Chicago promotes and supports decent, affordable housing for all residents of the communities. They work to subsidize housing for low-income residents in surrounding neighborhoods, including projects in Woodlawn and Jackson Park Terrace. The university also owns and maintains over 1,500 rental units on the mid-South Side of Chicago, primarily for student and faculty housing. Today, 65 percent of the faculty and around 3,000 staff members live in the neighborhoods surrounding campus.



1955



1973



2017

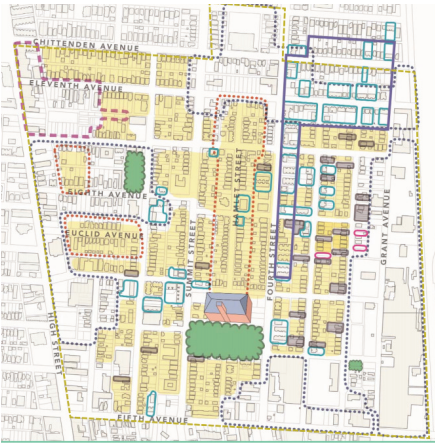
THE OHIO STATE UNIVERSITY

Noticing its dwindling residential and commercial space around its campus, the Ohio State University (OSU) created Campus Partners in 1995, a non-profit organization with the main goal of revitalizing the University District and the Weinland Park District neighborhoods around the campus. Since its founding, the group has taken on significantly significant projects. Throughout this work, Campus Partners collaborated with many partners, including the Weinland Park Collaborative, the City of Columbus, the University District and University District Organization. (1)

Campus Partners has spearheaded many fruitful revitalization efforts since it formed. In 1998, to increase home ownership rates near OSU, Campus Partners created the Homeownership Incentive program to provide faculty and staff with a \$6,000 forgivable loan towards the purchase of a home. Since its conception, 102 faculty and staff have used the program. In 2006, working with the City of Columbus, Campus Partners developed the Weinland Park Neighborhood Plan, which formed the Weinland Park Collaborative (WPC). In the years since, the WPC invested \$30 million to renovate over 300 apartments while attracting nearly \$50 million in philanthropic investments and public funding for the Weinland Park neighborhood.

Campus Partners completed their first large-scale development project in 2005—the GateWay. The GateWay aims to enhance Ohio States southern gateway at 10th and High Street by establishing a commercial hub and a new public space at the campus edge. The project includes 225,000 square feet of retail space, 88,000 square feet of office space, and 188 apartments, which creates a well-defined campus gateway on High Street.

More recently, Campus Partners began their largest built scale project Campus Partners, 15+High, which is set to become the connecting piece between the town and gown in the University District. The project is focused on promoting mixed use development and pedestrian access by reconnecting the neighborhood streets to High Street with pedestrian walkways, creating a new community gathering space, and reducing traffic. The project will include many multi-story office buildings, with retail space on the ground floor, a 150-room hotel, and a 500-space parking garage. The project has been criticized by some for pushing small business owners out to make way for chains, and for creating their own definition of what is historic to allow for the destruction of other historic buildings.



Weinland Park Neighborhood Plan



Gate Way - "The Cut"

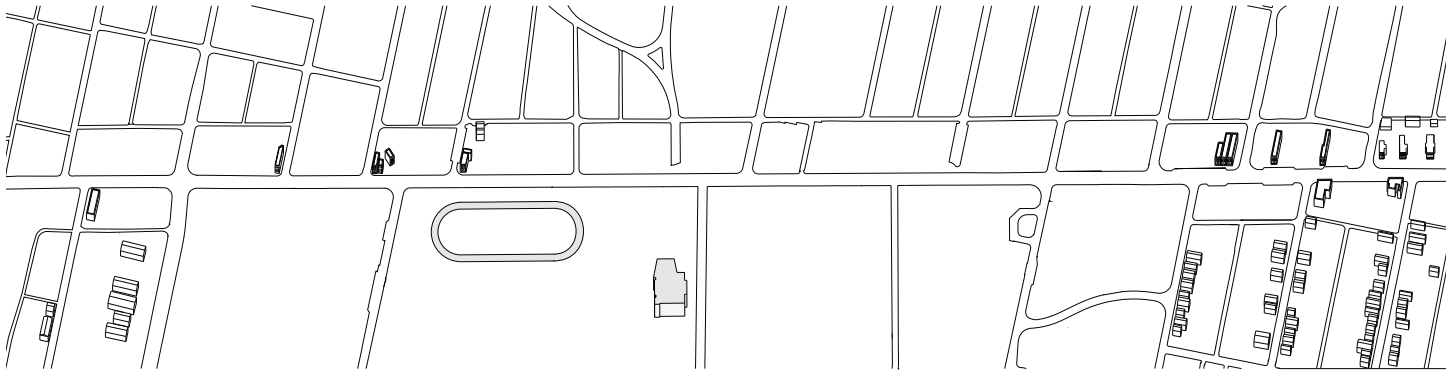


15+ High

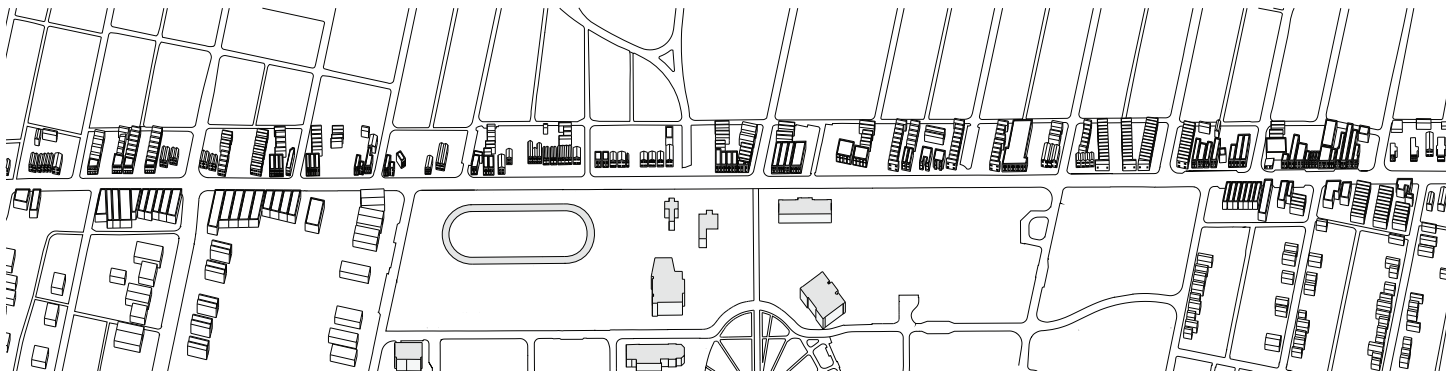
Year Founded:	1870
School Type:	Private, coed
Total Enrollment:	66,046
Total Endowment:	\$3.579 Billion
Endowment/student:	\$54,189
Surrounding Neighborhood Population:	26,940
Total Building Square Footage:	36,000,000 Sq. Ft
Main Campus Contiguous Land Area:	334.5 acres

UNIVERSITY OF CHICAGO HISTORY OF THE CAMPUS EDGE

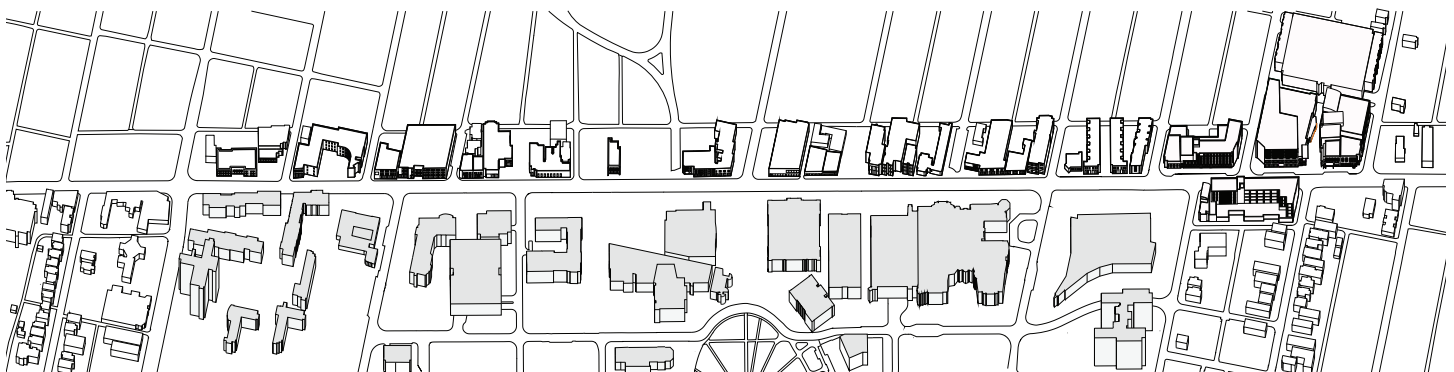
Over the last two decades, Campus Partners has played a major part in the revitalization of the neighborhood surrounding The Ohio State University. Not only by providing faculty and staff with opportunities, but also by reinvesting in the neighborhood and the community. When it comes to the projects located at the edge of town and gown, some have grown to doubt the group's true intentions. Their two large-scale development projects have taken up multiple city blocks and in both cases have removed existing historical buildings and driven out small businesses. Campus Partners initial goal was to revitalize the neighborhood, but has that now shifted from revitalization to commercial development?



1901



1921



2015

NORTHEASTERN UNIVERSITY

Northeastern University sits at the intersection of five key Boston neighborhoods — Fenway-Kenmore, Roxbury, South End, and Back Bay. The University has strongly defined boundaries, including parks, streets, train tracks, and a subway line, that have constrained growth since its founding in 1898. Northeastern grew relatively slowly until it began to change rapidly in the 1990's and early 2000's. As its position on the U.S. News & World Reports rankings of top colleges jumped from 162 in 1996 to 49 in 2013, the number of students attending the University increased substantially. So more student housing was needed, but the University was intent on maintaining a good relationship with the surrounding neighborhoods.

Northeastern's transformation into a well-recognized University began in the late 1960's, after the majority of the University's white, glazed brick campus was built. To accommodate commuters, surrounding vacant industrial buildings to the south were demolished to make way for surface parking lots. Starting in the 1970's, the University redeveloped those surface lots, pushing the campus farther south towards the train tracks, and beginning a gradual transition to a residential campus. In 1999, Northeastern launched a new development, West Village, a complex with eight buildings serving as both residence halls and classrooms pushed the campus across Forsyth Street. Then, infill development along Columbus Avenue and the formation of International Village continued Northeastern's distinctive transformation from a commuter campus to a residential campus. A 2012 campus master plan included designs for multi-use buildings to integrate the campus into surrounding neighborhoods and revitalize the core and edges of the campus while growing across the tracks to the south.

But it's the recent growth of Northeastern into the Roxbury neighborhood on Columbus Avenue that has created controversy. Although the Columbus Avenue projects did not intrude into the Roxbury neighborhood, many residents felt the University was expanding too far. Councilor Tito Jackson, whose district includes Roxbury, did not believe that Northeastern fostered a positive relationship with local residents and criticized the project's lack of affordable housing. The residents question believe that projects like Davenport Commons should be built for the Roxbury community and not the University.



1966



1990



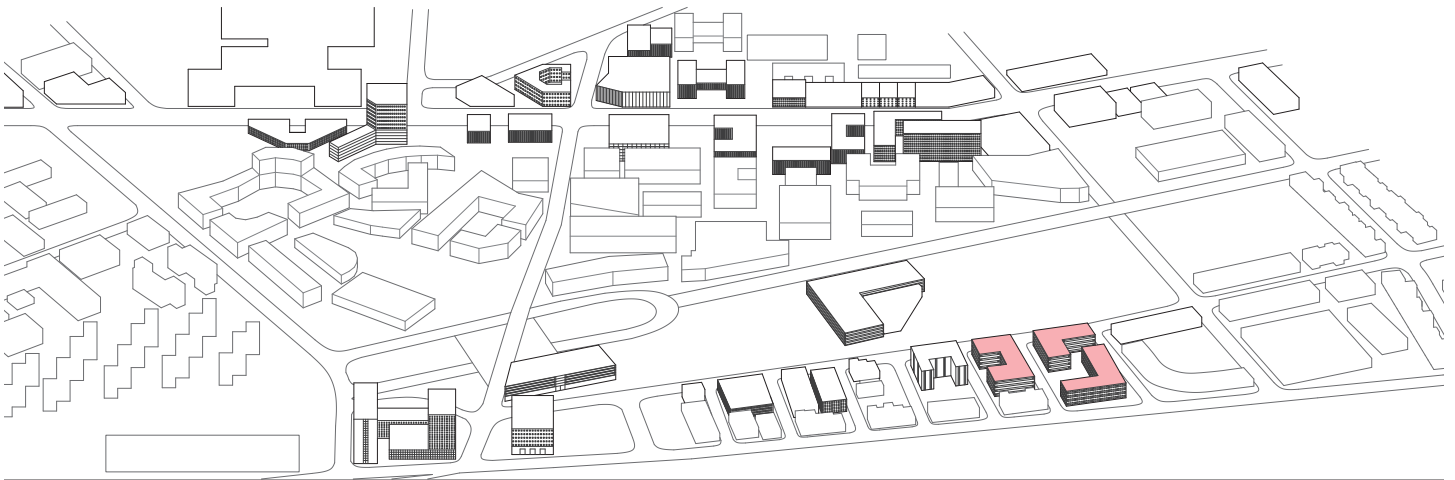
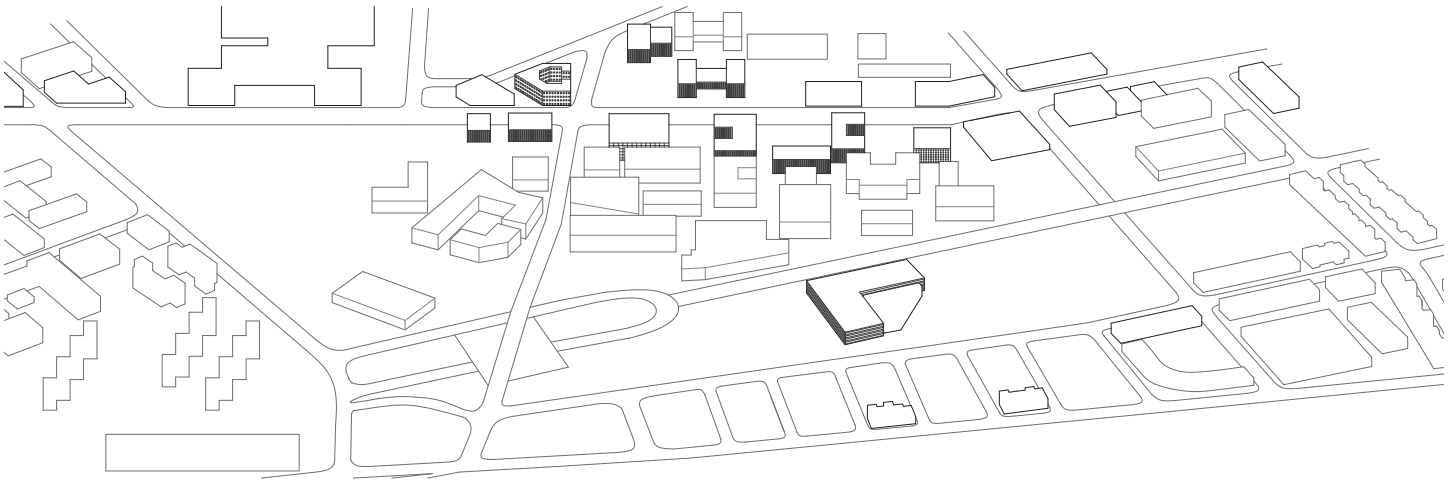
2003

Year Founded:	1898
School Type:	Private, research
Total Enrollment:	19,940
Total Endowment:	\$743 Million
Endowment/student:	\$37,263

Surrounding Neighborhood Population:	59,626
Total Building Square Footage:	2,613,600 Sq. Ft
Main Campus Contiguous Land Area:	73 acres

NORTHEASTERN UNIVERSITY HISTORY OF THE CAMPUS EDGE

Northeastern continues working to benefit its surrounding neighborhoods with academic services and programs. For one, the University allows the community to rent and use its facilities for free. The faculty and students at Northeastern also serve community members with their academic and professional skills—by tutoring, conducting service research, speaking to the public on specialized subjects, and providing other technical assistance. The University also offers specific programs that provide assistance to nearby neighborhoods, including the Roxbury Action Program, the Mission Hill Tenants Association, and a group of Columbia Point Housing Project. Through all these efforts, Northeastern is striving to develop a relationship with its surrounding neighborhoods that is mutually beneficial.



CASE WESTERN RESERVE UNIVERSITY

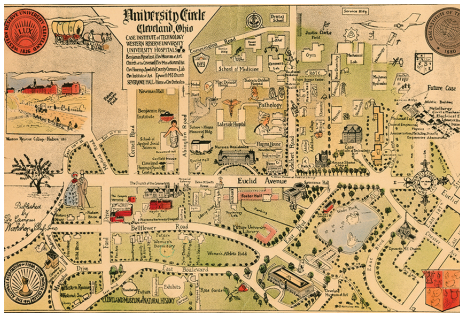
Case Western Reserve University (CWRU) presents a complicated, yet compelling relationship between a university and its surrounding neighborhoods. CWRU occupies 267 acres of land in University Circle, four miles east of downtown Cleveland. Today, CWRU thrives on its collaboration with nearby institutions and neighborhoods, but this was not always the case.

Originally two separate institutions, Western Reserve College and the Case School of Applied Science, the two merged to create CWRU in 1967. But as the combined campus evolved, a disconnect between the campus and the neighboring community emerged. Surrounded by some of the poorest neighborhoods in Ohio, CWRU began to purchase vacant lots and underused buildings in these areas while constructing new facilities within the campus.

The weak relationship between CWRU and its surrounding neighborhoods became a growing problem. The configuration of campus buildings created physical barriers with the community along every edge of the campus. To tackle this, the university worked with the Cleveland Foundation on two plans—the 2005 CWRU Master Plan and Cleveland’s Greater University Circle Initiative. One of the main strategies of the Master Plan was to strengthen the visual and physical links with other institutions and communities nearby by demolishing structures and constructing pathways. The Greater University Circle Initiative realized how a vibrant neighborhood could help revitalize the university and local economy. With this, the initiative drafted multiple projects to improve the neighborhood’s aesthetics and strengthen connections between CWRU and the community. Uptown District, located on 8.2 acres of University Circle, has been one of the initiative’s most successful projects. Uptown District was born out of a public-private-philanthropic partnership between CWRU, the Cleveland Foundation, the City of Cleveland, private donors, and other partners.

After years of financing struggles, the Uptown District now includes many multi-million dollar projects. These include the Museum of Contemporary Art-Cleveland, designed by Farshid Moussavi (\$27 million), a new rapid transit station (\$18 million), the renovation of the Commodore Hotel for mixed-income housing (\$9 million), and the Uptown Wall buildings (\$71 million).

Year Founded:	1826
School Type:	Private, coed
Total Enrollment:	11,340
Total Endowment:	\$1.776 Billion
Endowment/student:	\$156,614
Surrounding Neighborhood Population:	30,650
Total Building Square Footage:	4,065,090 Sq. Ft
Main Campus Contiguous Land Area:	267 acres



Campus Plan before Federation, 1826



Current CWRU Campus



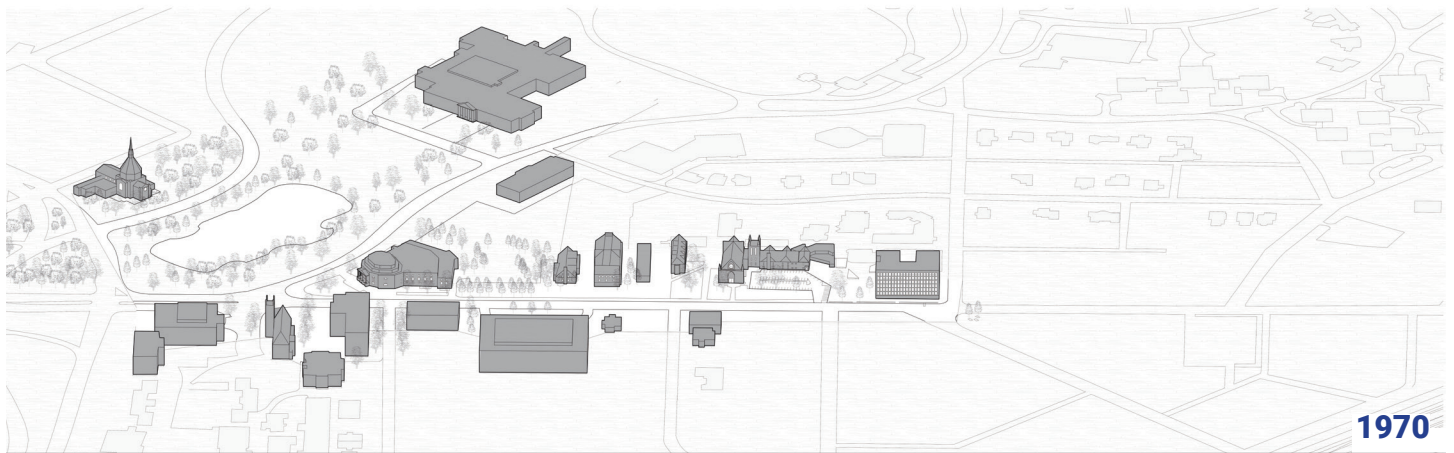
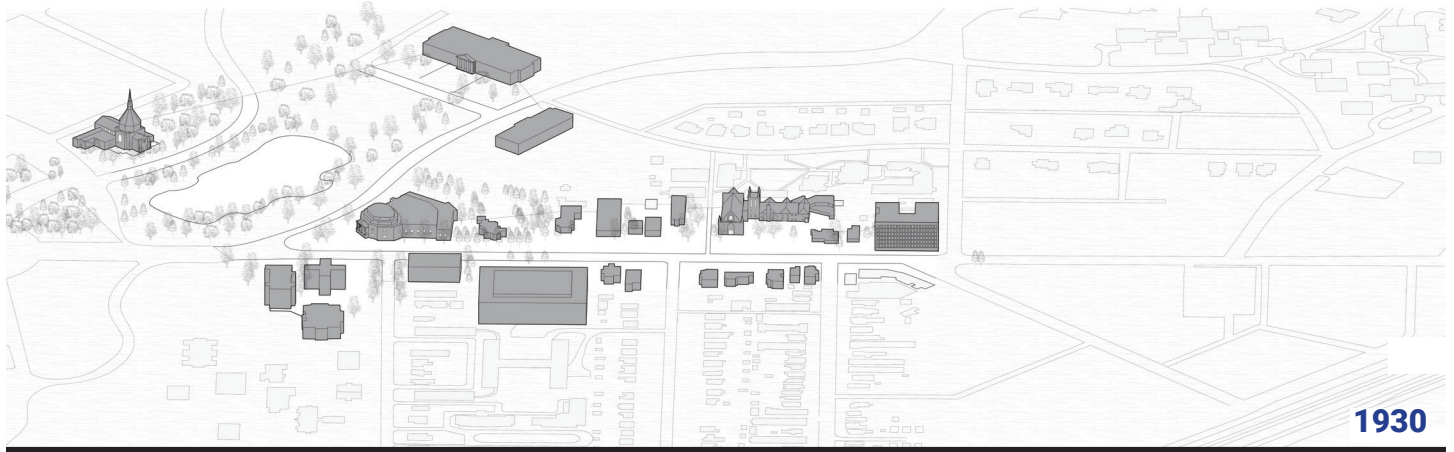
The Wall



Student activity in Toby's Plaza

NORTHEASTERN UNIVERSITY HISTORY OF THE CAMPUS EDGE

Today, in Cleveland, Uptown District has sparked a renaissance in what used to be an underdeveloped ghost-town, where pedestrians were rare after 5pm. Costing over \$200 million, Uptown District is a mixed-use hub that serves as a gateway to numerous cultural, educational, health and art institutions. The project has allowed for the imagination of the district to incorporate the Museum of Contemporary Art Cleveland, Cleveland Institute of Art, the area's only grocery store and university bookstore, student housing, the existing Commodore Place apartments, outdoor public spaces including Toby's Plaza designed by Field Operation, where they have hosted free summer concerts, public art installations, and student and community celebrations, all closely located alongside a beautiful \$18.5 million new rapid transit station, for a total of 223,500 square feet of new development. Uptown District has drawn national attention for its design and demonstration in how anchor institutions can play a major role in driving community change.



ANALYZING THE BAILEY AVE STREETSCAPE

URBAN DESIGN GRADUATE RESEARCH
FALL 2017
Instructor: HIRO HATA

Bailey Avenue is the central corridor of the University Heights neighborhood. Bailey offers a tightly knit urban fabric that bustles with pedestrian activity and frequent vehicle traffic. But vacant lots and storefronts, sparse amenities for pedestrians, and limited green space present many opportunities to reimagine the corridor and maximize its potential.

Through a comprehensive on-the-ground visual inspection and analysis of the urban design of the corridor, three separate teams of students each made targeted proposals for the redesign of the streetscape and vacant lots along Bailey Avenue. These proposals are intended to inform current and future efforts to enhance Bailey Avenue and University Heights.

STUDENTS:

MATTHEW ABBOTT
LAUREN DARCY
CONNOR HANNAN
ZHUOSHU HE
FELICIA KILBIN

SYLVESTER MALLARDI
JEFF REHLER
KAI SUN
DOUG WESSELLS

UNDERSTANDING GOOD URBAN FORM

Mapping the Urban Form

Students used either hand-generated or digitally-generated maps, or a combination of both, to create their own custom-made maps to visually express the look and feel of the corridor from the pedestrian perspective.

Analyzing the Visual and Spatial Structure

Students developed a core skill in the discipline of urban design: and analysis of the visual and spatial structure of the street. While this involved basic planning exercises, like studying land use patterns, students focused on a cohesive visual and spatial investigation of the public realm of built environment along Bailey Avenue.

Envisioning Opportunities

Students applied the urban design skills and local understanding they acquired throughout the seminar to plan and design proposals for improvements along the street and at specific lots, producing ideas for the future of Bailey Avenue.

Students worked in three different segments of Bailey Avenue.

Study Area 1: Winspear Avenue to Dartmouth Avenue

Study Area 2: Dartmouth Avenue to East Amherst Street

Study Area 3: East Amherst Street to Kensington Avenue

MAPPING URBAN FORM

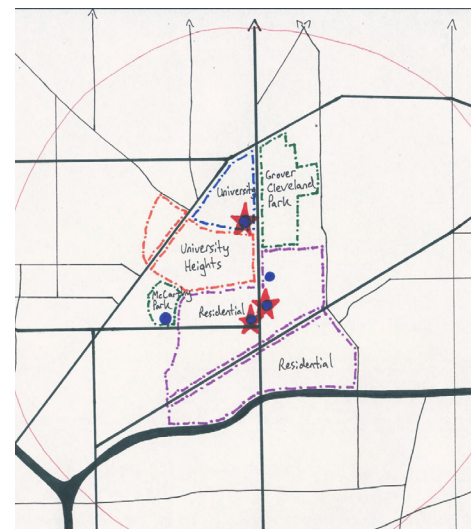
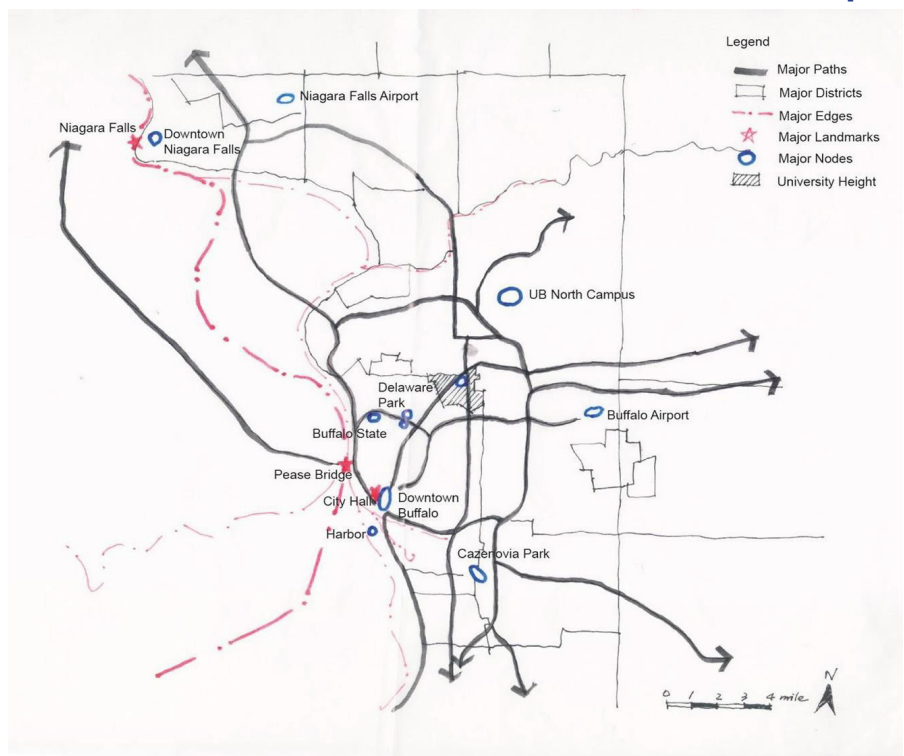
WHY MAP THE URBAN FORM?

Visualizing the urban form of a street—including its major landmarks, activity centers, connecting paths, open spaces and visual barriers—offers a way of understanding the experience pedestrians have when walking through a corridor. Urban planner Kevin Lynch developed a break-through visual survey mapping technique that offers a simple way to visualize the mental map people use to orient themselves in a city, reducing the great complexity of the city to a “mappable” graphic representation. Lynch’s maps are made of five city elements: paths, edges, districts, nodes and landmarks. These are mapped from the neighborhood scale through an on-the-ground visual survey, and at the regional scale for context. Lynch’s maps provide an effective way to visualize any place and express the urban form of the complex city without being overwhelmed.

KEY FINDINGS

Students looked at Bailey Avenue in context of the region, city and neighborhood to map the paths, edges, districts, nodes and landmarks that form one’s mental map of the neighborhood. Part of NYS route 62, a prime north-south connector for the entire Buffalo Niagara region, Bailey Avenue is a central pathway for pedestrians and vehicles in the University Heights neighborhood. At intersections with other major pathways, like Main Street, Bailey forms key nodes for pedestrians. Nearby paths create edges for the urban form, either by restricting pedestrian activity, like the Kensington Expressway, or by limiting vehicle traffic, like the multi-use recreational path in Linear Park. Defining landmarks, like churches, area parks, and the University Campus, help pedestrians navigate the neighborhood and delineate nearby commercial and residential districts.

Selected Examples



ANALYZING THE VISUAL AND SPATIAL STRUCTURE

WHY CONDUCT A VISUAL AND SPATIAL ANALYSIS?

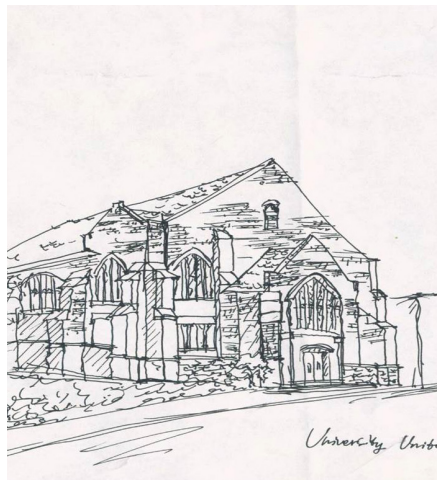
Building off the last exercise, students conducted a deeper analysis of the visual dynamics and spatial structure of the street to fully understand the pedestrian experience on Bailey Avenue. This involved looking at the mix of building styles, land uses, cultural assets, pedestrian amenities, traffic patterns, and environmental conditions along the street.

The analysis reveals strengths of the street to build on, such as architectural assets and transportation access, as well as opportunities to enhance the street in the form of vacant lots, inadequate amenities, and adverse environmental conditions. Pairing a visual survey with a spatial analysis connects the pedestrian perceptions of the street to its socioeconomic conditions, completing a story of how the street exists today that is critical in planning future improvements.

KEY FINDINGS

Students found that simple interventions, like cleaning up refuse and providing trash and recycling amenities along sidewalks, could greatly improve the streetscape. Other steps, like improved landscaping along sidewalks, tree plantings, benches, or public art, could also enhance aesthetics along the corridor. Clearly delineated crosswalks, traffic lanes, and parking spots could calm traffic and significantly improve safety for both pedestrians and vehicles. Promoting cohesive design standards, including transparent storefronts and landscaped parking lots, would make the corridor more welcoming to pedestrians. Fortunately, the neighborhood has many assets, like a community garden, to create a more welcoming environment for neighborhood residents and visitors.

Selected Examples



ENVISIONING OPPORTUNITIES

WHY ENVISION OPPORTUNITIES?

After performing the visual-spatial analysis, students applied their findings to design targeted proposals to enhance the streetscape and key sites along the corridor. Taken together, these proposals present a sound vision for the corridor, grounded by a thorough assessment.

Without a cohesive vision, piecemeal proposals can create a chaotic urban form of dissimilar buildings, untapped vacant sites and streets clogged with traffic. These visions for Bailey Avenue are sound, but would require community involvement and extensive public input to bring to reality. This process was excluded due to the constraints in time and scope of the semester-long seminar. The student work offers a constructive starting point to begin a community conversation on improving the urban form of Bailey Avenue that can spur additional enhancements across the neighborhood.

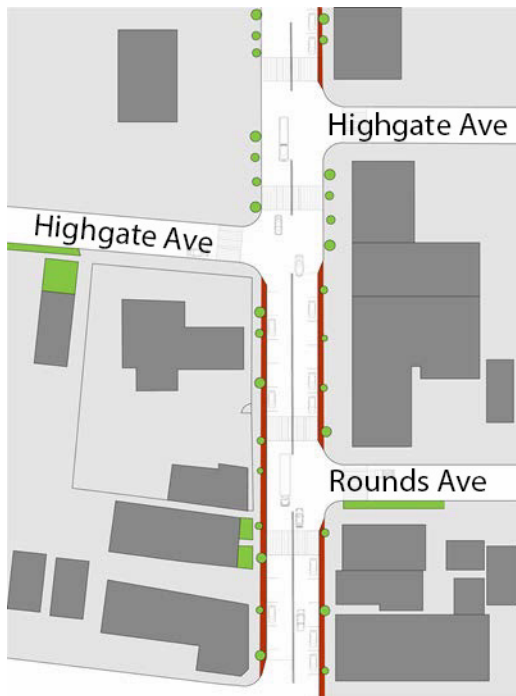
Bailey Ave Study Areas



STUDY AREA 1

WINSPEAR AVENUE TO DARTMOUTH AVENUE

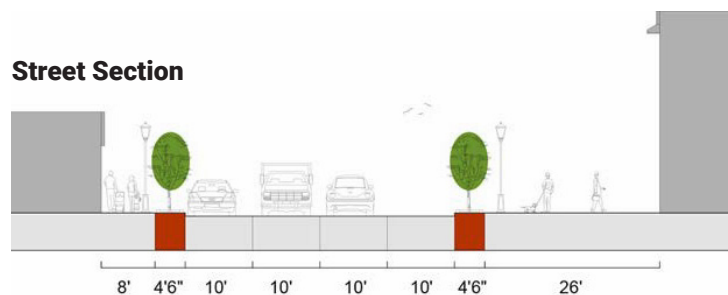
Streetscape Improvements



Proposals for this portion of Bailey Avenue aim to maximize traffic safety and beautify the corridor. To calm traffic and make the street safer for pedestrians and drivers, the width of the street would be reduced and street markings, like crosswalks, would be repainted.

Parking spaces would also be made more visible and clearly delineated, while sidewalks would be widened to welcome pedestrians. The formerly narrow sidewalk would extend further into the street and streetlights would be upgraded to enhance aesthetics and safety. Additional landscape features, including street trees lining both sides of the street, would also be planted to contribute to the pleasant pedestrian experience. These proposals are meant to be refined and enhanced with community input and consultation with applicable governmental agencies.

Street Section



Parcel Improvements



The selected site is a large, vacant lot on Bailey between Dartmouth Avenue and Shirley Avenue. The parcel offers abundant green space that, if enhanced, could provide pedestrians respite from busy Bailey Avenue and restore urban fabric.

The redesigned parcel would be a multi-purpose recreational space intended to accommodate family outings and group/community events. Features such as a pavilion, picnic tables, grilling equipment, playground, sports court and/or food and refreshment stalls could provide opportunities for recreation, socialization or community programs. A rain garden or ecological landscaping could create an aesthetically pleasing connection to the community garden across the street. Proposed uses and amenities would be refined and enhanced with community input and consultation with applicable governmental agencies.



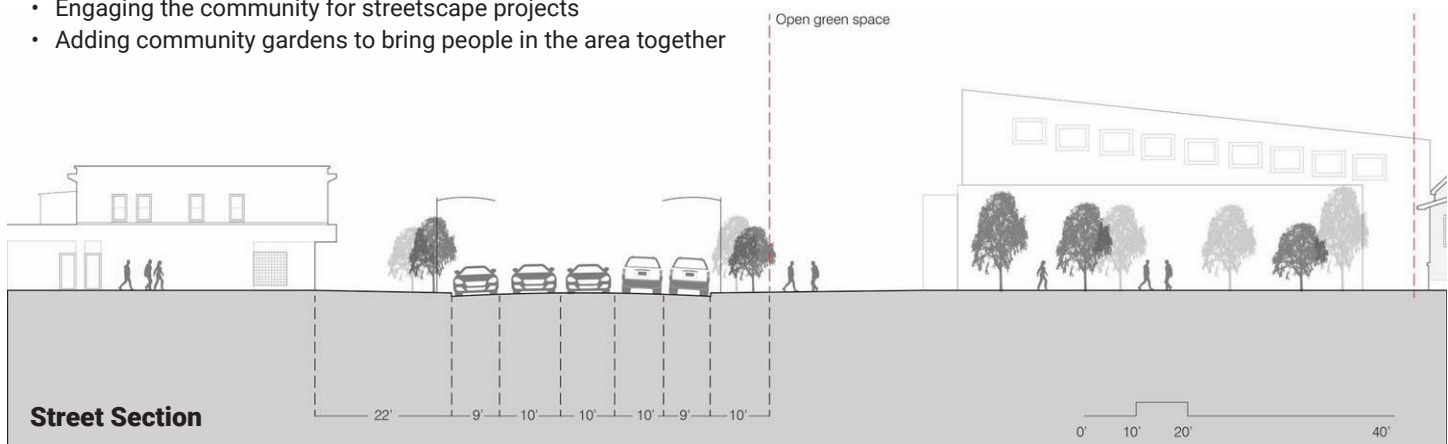
STUDY AREA 2

DARTMOUTH AVENUE TO EAST AMHERST STREET

Streetscape Improvements

Proposals for this section of Bailey Avenue were framed by overarching goals of traffic calming, neighborhood identity, public engagement, and reactivating vacant lots. Specific suggestions include:

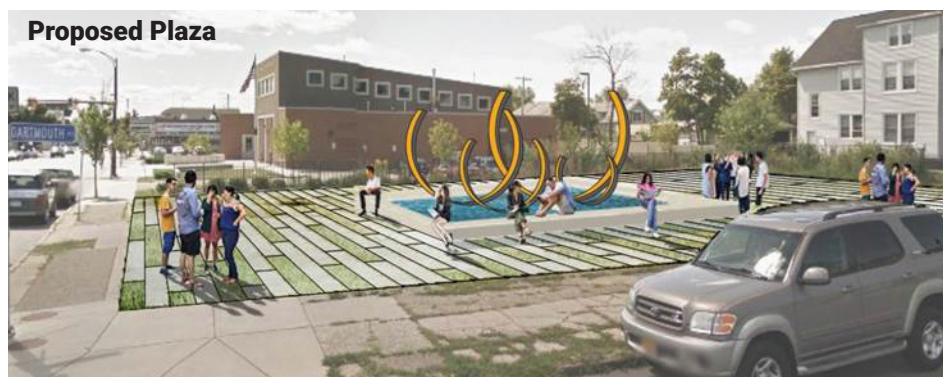
- Painting parking spots and crosswalks to help slow down traffic
- Repaving dilapidated parking and sidewalks
- Engaging the community for streetscape projects
- Adding community gardens to bring people in the area together



Parcel Improvements

Students generated several development options for a selected vacant lot at the southwest corner of Bailey Avenue and Dartmouth Avenue. Opportunities include a business incubator space, community garden, public plaza, and community center. Additional recommendations for the options shown here include:

- **Public plaza** space acts as a landmark for the area.
 - Allows for green infrastructure and storm water management to be brought to the area.
 - Gives people of the area a place to latch onto and maintain so that it keeps the idea of a beautiful streetscape in mind.
- **Community center** that brings people together to engage in public events.
 - Combines previous interventions to make one complete space.
 - Gives the surrounding residents and students at the University a place to interact and formulate new ideas about the street and its identity.



STUDY AREA 3 EAST AMHERST STREET TO KENSINGTON AVENUE

Streetscape Improvements

This portion of Bailey Ave is envisioned as a complete and green street that forms a more welcoming pedestrian environment. Key elements include:

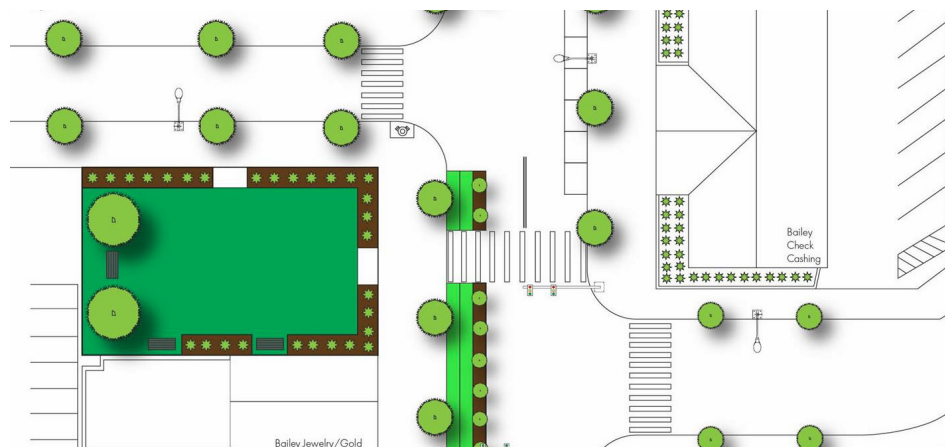
- Reclaiming corner surface parking lots
- Planting trees in vacant tree beds, with rain gardens in between
- Adding high-visibility crosswalks
- Adding a two-way bike lane protected by a 5' tree barrier
- Adding 9' parking on the east side of the street.



Parcel Improvements

The selected vacant lot is located at the corner of Thornton Avenue and Bailey Avenue. Currently, the lot is composed entirely of impermeable surface, and contains no surrounding vegetation.

The proposed use for the vacant parcel is to create a simple park that applies some of the same improvements suggested for the streetscape, like street trees and rain gardens. This park could enhance the streetscape in the interim while leaving open the possibility of redevelopment that would be determined by direct community input, to let citizens decide the best way this land can be used for the future of their neighborhood.



TRANSIT-ORIENTED DEVELOPMENT IN UNIVERSITY HEIGHTS

URBAN DESIGN / REAL ESTATE DEVELOPMENT STUDIO
FALL 2017

Instructor: HIRO HATA & MARK FOERSTER

In many places across the US, and around the globe, development around public transit stations is on the rise. Known as transit-oriented development (TOD), this type of development maximizes the amount of residential, business, and leisure space within walking distance of public transit.

University Station, a Metrorail Station in the University Heights neighborhood, and on the “front lawn” of UB’s South Campus, sits amidst a number of large surface parking lots that present vast potential for TOD.

In this interdisciplinary studio, graduate students from the school’s real estate, architecture and planning programs worked together to examine the possibilities for TOD to make transformative impacts on UB’s South Campus, the University Heights neighborhood, and the City of Buffalo. Students worked in four separate teams, each producing its own development proposal for the area surrounding the station.

STUDENTS:

Team 1: The Hub

COURTNEY COX
ANTHONY GAROFALO
MITCH LAROSA
WONHO LEE
KAI SUN

Team 2: Hayes Hill

YIMO LIU
EAMON RILEY
WENZHUO SHAO
DEVANSHI SHASTRI
CHRIS TRINGALI

Team 3: The Heights

KYLE FECIK
ZHUOSHU HE
CONNOR KENNEY
LINDSAY MACALUSO
CARL REEVES
DHWANI SHAH

Team 4: The Corridor

BILL DOLAN
EUY CHAN JEONG
MUN SUNG KOH
UNNATI PATEL
DENNIS PLAYFAIR
DAN THEOBALD

TRANSIT-ORIENTED DEVELOPMENT IN UNIVERSITY HEIGHTS

The Niagara Frontier Transportation Authority (NFTA) and the Greater Buffalo Niagara Regional Transportation Council (GBNRTC), in partnership with the University at Buffalo (UB), are exploring how to incentivize development in and around Metro Stations, including the University Station on UB's South Campus. A number of parking lots that front UB's South Campus offer great potential for TOD to anchor a walkable neighborhood and enhance connections between the campus, the University Heights neighborhood, and the City of Buffalo.

In an integrated studio, graduate students from UB's real estate development, architecture and urban planning programs considered how parking lots adjacent to University Station could be developed in a way that would be catalytic and transformative for the campus and neighborhood. Each team generated unique proposals, but all explored common themes and pursued common goals (listed below). In doing so, the students produced informed plans, with innovative designs and detailed financial analyses, with key takeaways and recommendations that will offer strategic insight into any future TOD initiatives pursued on or near the University Station.

What to Explore:

- (1) How can this part of the city be enhanced visually, economically, socially and ecologically?
- (2) How can connections between UB and the University Heights neighborhood be improved?
- (3) How can the "town/gown" relationship between the campus and the neighborhood be enhanced?

Goals for Development:

- (1) Be an exemplar of high-quality urban design
- (2) Create synergies with current and planned academic, research, and professional activities on the UB South Campus
- (3) Consider the viability of development as transit-oriented
- (4) Potentially re-purpose economically under-utilized properties to more beneficial uses

Image Source : UB Archives

TEAM #1: THE HUB

The HUB is a three-phase development project encompassing approximately 1.1 million gross square feet of building area and approximately 22 acres of the UB South Campus near the University Heights neighborhood. The HUB is anchored by a large transit-oriented development project and aims to fortify community wellbeing while catalyzing the symbiosis of the university campus with the surrounding neighborhoods. The project consists of a balanced mix of uses that support equitable and sustainable development and promote health and wellness, including affordable and workforce housing, retail, hospitality and event space, a state-of-the-art community wellness and recreation center, and public greenspace.

Given the underlying assets are owned by the State of New York, the project is proposed as a public-private partnership with at least one private developer and several public partners. The University at Buffalo represents the majority interest in the project with a private developer(s) and public agencies such as the Dormitory Authority of the State of New York (DASNY), the State University Construction Fund (SUCF), the Niagara Frontier Transportation Authority (NFTA), and the Greater Buffalo Niagara Regional Transportation Council (GBNRTC) filling varying degrees of smaller, but still critical roles.

Each phase of The HUB is estimated to take two and half years to complete on average, with an overall timeline of ten or more years to reach full build-out. The total estimated cost of the entire project is \$252 million.

Phase 1 involves 14 months of construction at a total cost of \$123.9M total costs, generating 8.7% IRR, 8% average cash-on-cash yield (over 20 years), and a net profit of \$21M.

Phase 2 involves 14 months of construction at a total cost of \$57.3M, generating 11.3% IRR, 18% average cash-on-cash yield (over 20 years), and a net profit \$15M .

Phase 3 involves 18 months of construction at a total cost of \$71.1M, generating 12.0% IRR, 31% average cash-on-cash yield (over 10 years), and a net profit of \$10M.

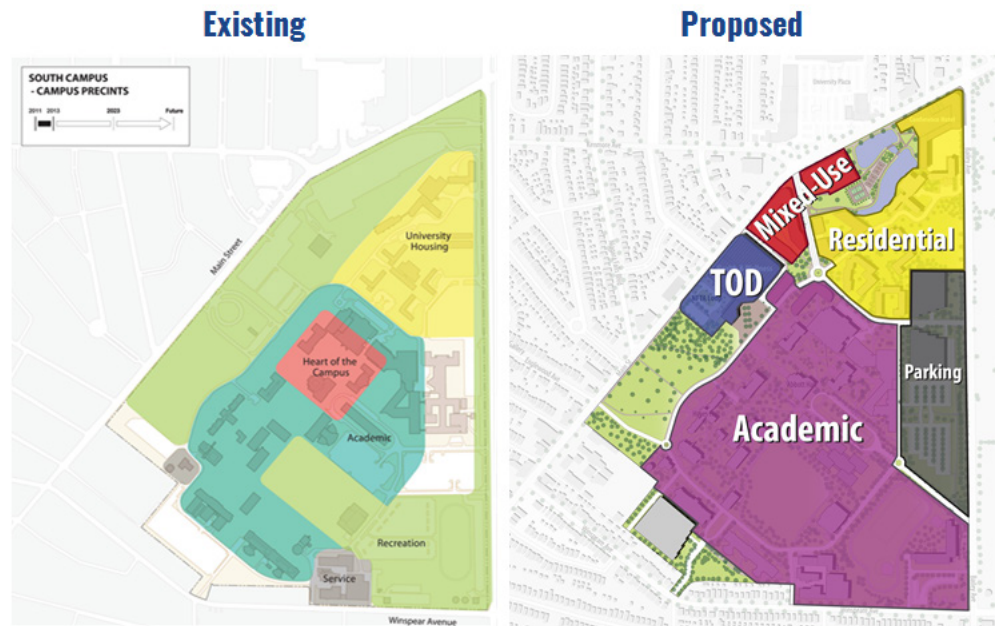
UB 2030



Campus Precincts

The campus is currently introverted from its surrounding uses, lacks street presence, and includes an abundance of underutilized greenspace.

The proposal seeks to build a dense mix of uses along the Main Street spine, while serving as a transit-oriented activity destination with a strengthened residential cluster.



The APEX Center

The APEX Center is envisioned as a critical piece in the overall development vision. The Center is envisioned as a 3-story, 375,000 SF structure built into the Onondaga Escarpment. The site includes: retail fronting Main Street; a bi-level parking structure screened from view by a re-designed University Station and storefront retail; and a high-transparency wellness and recreation center spanning the entire third floor.



TEAM #2: HAYES HILL

This project proposes a \$70 million mixed use development that will be delivered in two phases. The entire buildout will encompass 485,000 SF, includes 417 apartments, a community market, restaurant space, retail and amenity space, several enclosed greenhouses, and a structured parking garage. The theme of this project is to promote the integration of existing community members with the campus and vice versa, with the intention of attracting more students and users to south campus which will in turn attract professional programs to the campus.

The team believes that by creating an in-demand community on campus with the intention of drawing users to the site, the project will spur further development in the area. Upon development of further phases, the project will be the core of this area and will appreciate in value greatly.

The team projected a conservative project level IRR with reversion after ten years of 15.25%. Looking at this investment on a cash on cash basis in two phases workplan:

Phase 1 provides a 4.77% yearly cash on cash return.

Phase 2 provides a 15.18% yearly cash on cash return.

Further returns can be accomplished by acquiring specific private parcels around this site which will appreciate in line with the development of this project. That speculative analysis is not a part of this offering.

This proposal was created with the intention of convincing the University at Buffalo to allow development on the site with UB receiving the benefit of increased interest by both student and professional programs to use the campus, as well as the monetary benefit of land lease payments.

Site Plan

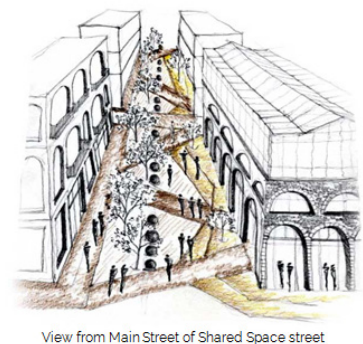


Concept Diagram



- Using the natural contours and expanding them into the architecture
- Providing hard landscaped public sculpture areas
- Using greenery as a wayfinding mechanism

Concept Diagram



- Alternates between semi-public, public, and private spaces
- Architectural details and landscape that act as wayfinding mechanisms

HAYES HILLS DESIGN CONCEPT IMAGES

1. The Circle



2. Law School Steps



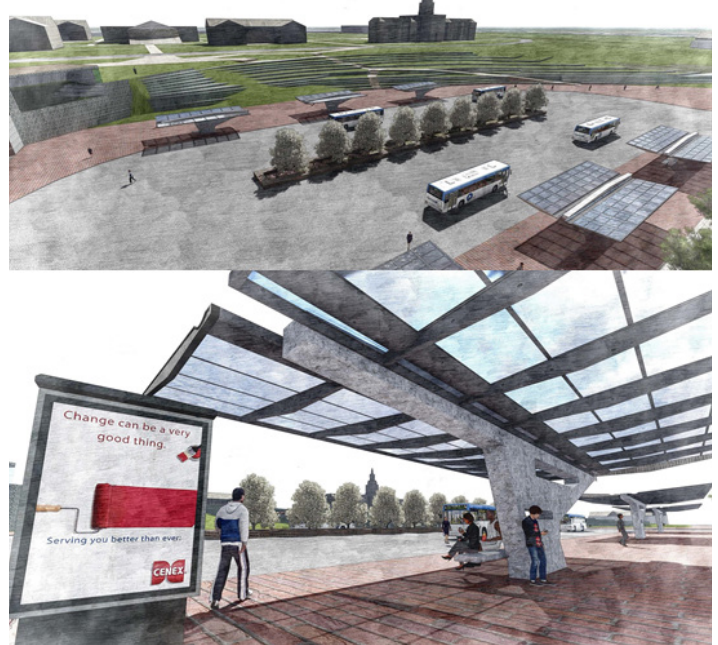
3. "Shared Space" Street



4. The Market



5. Multimodal Station



TEAM #3: THE HEIGHTS

The Heights is a transit oriented development that serves to connect the State University of New York at Buffalo's three campuses while engaging the Buffalo community at large. The development includes 1.2 million SF of space throughout the northwest quadrant of UB's South Campus. The project is anchored in bringing UB's vast academic and economic resources to light while taking advantage of the opportunity to direct the neighborhood toward a positive future. The project vision includes "a vibrant, sustainable hub of innovation which leverages UB's academic assets and strategic location to connect diverse groups of people and ideas."

UB has innovative programming in areas like Entrepreneurship with the Blackstone Launchpad serving as a place for student, faculty, and staff to innovate and start businesses. The campus has a lab dedicated entirely to renewable energy research and engagement. There are a multitude of fabrication areas, including a 3-D printing lab, architectural fabrications space, and engineering machine shops but their current locations are hidden from not only each other but the rest of the UB community. (This development idea would bring resources like these to a single site, where students and faculty can continue to engage with each other and the larger Buffalo community, which is the key to sustainable innovation.)

The development includes multiples phases:

Phase 1 totals \$45 million and includes an Innovation Center with 115,000 SF of non-traditional office, 13,500 SF of retail, a 10,000 SF theatre, 20,000 SF of lab and fabrication spaces open to the public and students, and 240 student housing micro units.

Phase 2 totals \$70 million and includes a 150-room hotel and conference center, a 111,000 SF Alumni Center with an exclusive restaurant for UB alumni and associated offices, 110,900 SF of retail including a new Target prototype geared for the evolving technological needs of college campus occupants, 56,000 SF of housing including rental units for graduate students with families, and a large ice rink and public market to attract the Buffalo community.

Phase 3 totals \$37 million includes mixed-income housing as well as everyday amenities like a daycare center and dining options.

The total project cost is \$152 million with financial returns divided into phases with one ten-year holding period each. Phase 1 requires \$5 million of equity and returns an IRR of 27% and net profits of \$15.8 million. Phase 2, which includes substantial park improvements, requires \$6.97 million of equity and delivers a net profit of \$17.5 million and an IRR of 12.8%. Phase 3 requires \$32.5 million in debt financing and \$3.65 million of equity. It delivers an IRR of 18% and a net profit of \$7.88 million.

Benefits of a Site Plan Proposal:

- Walkable neighborhood
- Inclusive environment for Millennials, Baby Boomers, and in between
- Connecting University and surrounding Residential neighborhood
- Reflecting the scale of the existing built environment

Proposed Site Plan Diagram



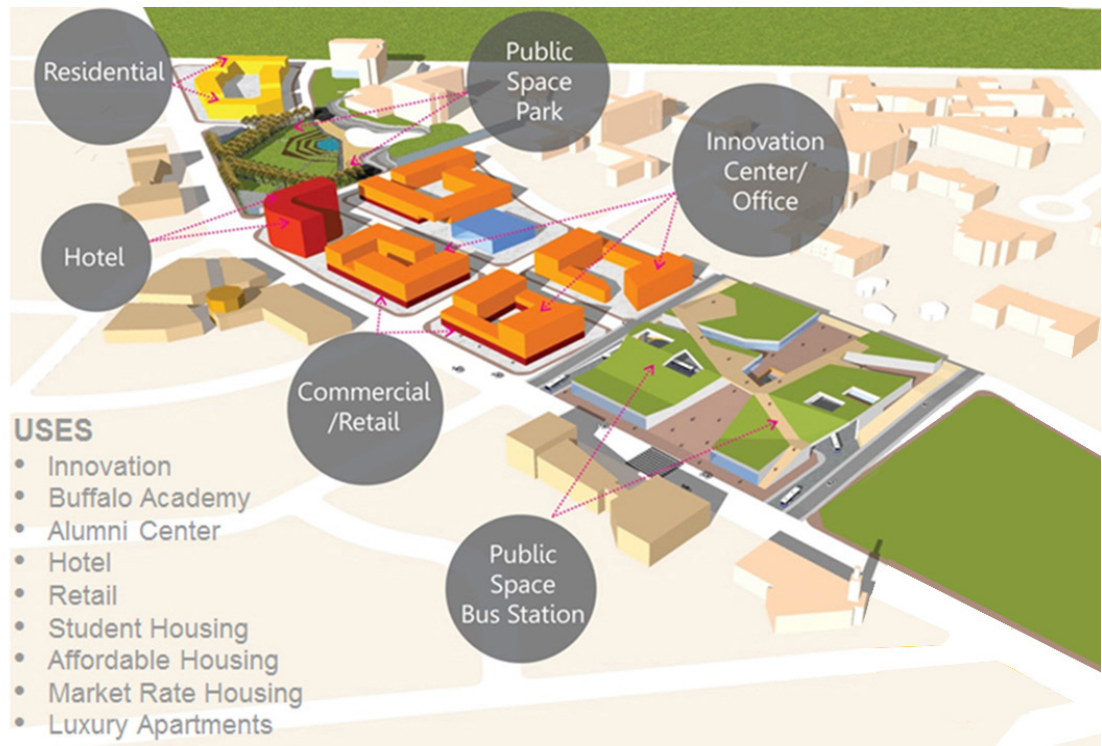
Road Network Modifications



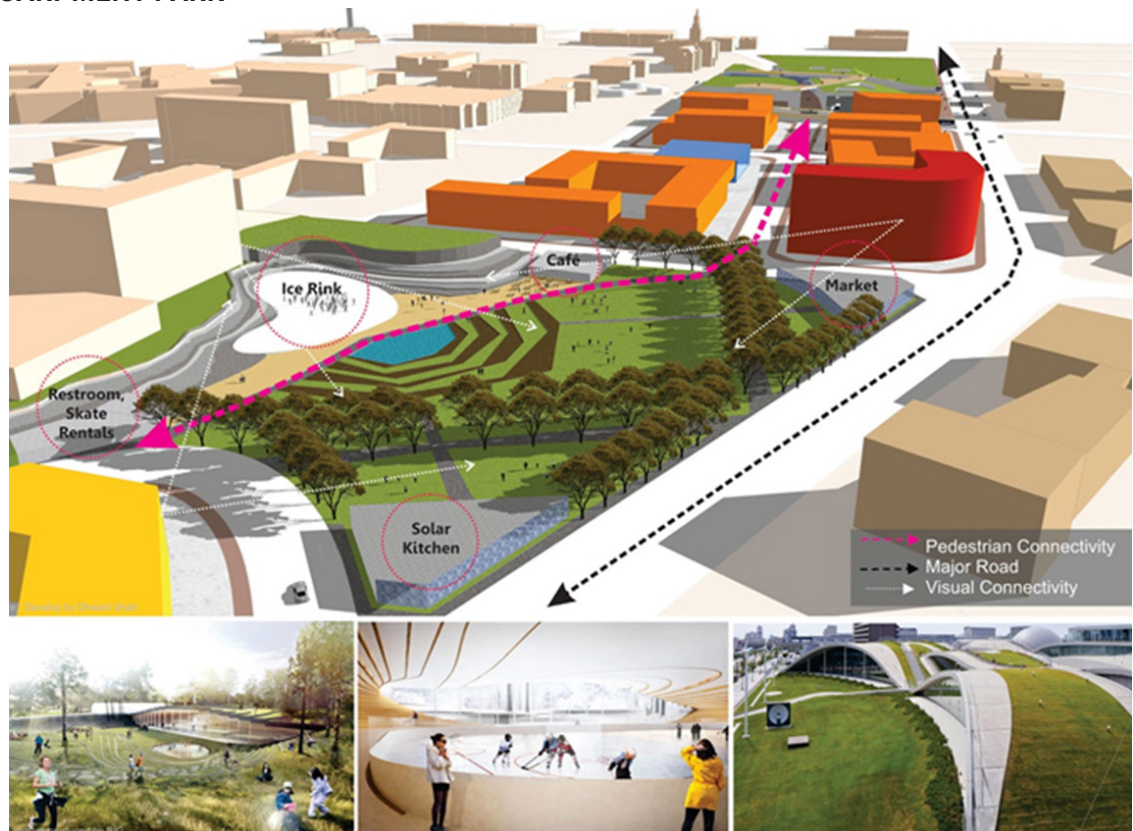
Objectives:

- Weaving the existing road network into University campus
- Connecting Main street to Bailey
- Adding cycle tracks along main street by reducing one car lane on the east side
- Increased walkability

PROPOSED LAND USES



ESCARPMENT PARK



TEAM #4: THE CORRIDOR

This project proposes a 1.3 million SF mixed use development to be built in three phases, over roughly ten years. The development was named “The Corridor” because it adopts a marketplace concept as a pathway between the main buildings to be constructed along Main Street. The project incorporates three product types based on market research: multifamily residential, retail, and office.

All of the buildings are set to be three stories high to preserve the campus views. There is ground floor retail in the first six buildings moving away from the train station, totaling about 110,000 square feet. Above the retail, there is 100,000 SF rentable office space amongst the buildings. Finally, the largest component of the development, multifamily, accounts for about 417,000 square feet of space. To replace existing parking, and provide adequate parking for the new buildings, the team proposes five above-ground parking structures to accommodate the site and Metrorail users.

The total cost of building this development over three phases is projected to be \$164,607,053. Significant grant and other gap funding are required and will be sought to accompany the equity investor to make returns more attractive. The two major grant sources that the team recommends are the TIGER Grant and Economic Development Purposes Grant. A TIGER Grant would be funded through the US Department of Transportation, which awards grants for projects that supplement transit infrastructure, emphasizing access to safe and affordable transportation. The Economic Development Purposes Grant program was also deemed attractive, and the proposed project would qualify as an innovative redevelopment project that connects housing, jobs and transit.

The development is sectioned into three phases.

Phase 1 is the “catalyst site” that aims to spur further investment for the remaining two phases. Phase 1 has a total cost of \$60,622,000 with a project IRR of 17.02%.

Phase 2 cost is \$54,274,000 with an IRR of 26%.

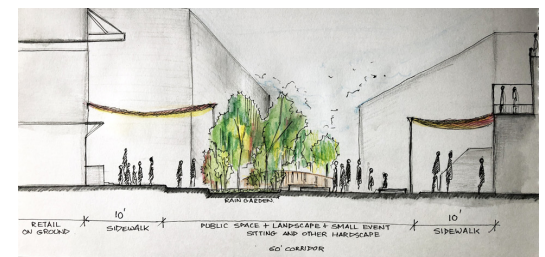
Phase 3 is very similar to phase 2, with a cost of \$49,712,000.

Walkable Neighborhood

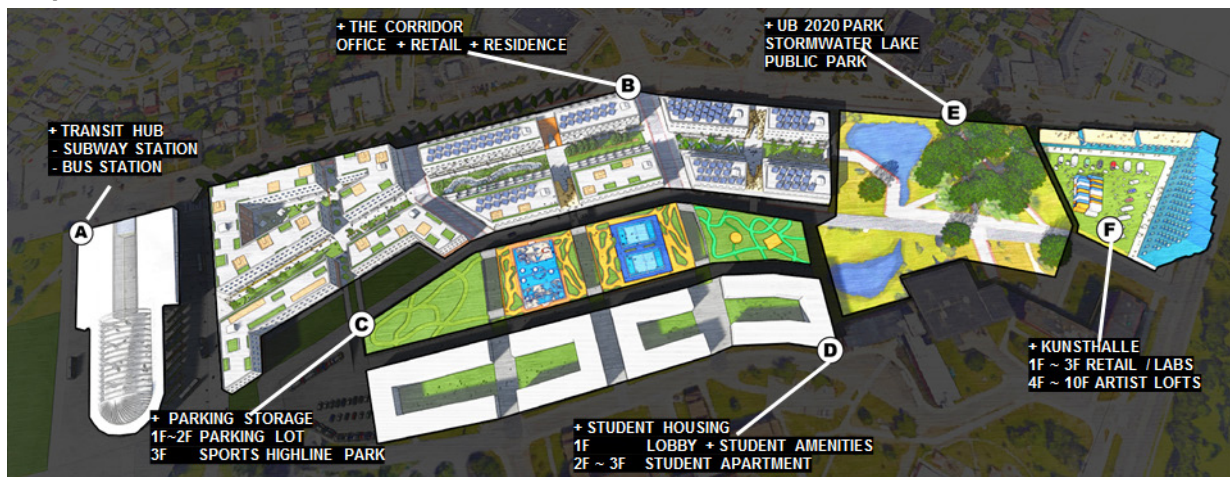


- An increase in walkability
- An increase in safety

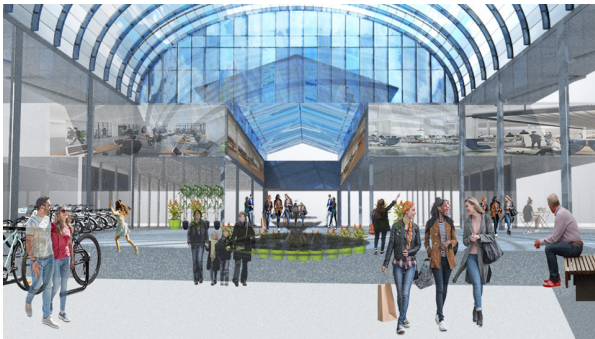
Corridor Proposal



Proposed Uses



THE CORRIDOR DESIGN CONCEPT IMAGES



MAJOR THEMES AND TAKEAWAYS

In consultation with the four student teams, faculty leading this studio offer these takeaways regarding the feasibility, benefits, and key considerations of a transit-oriented development on the University at Buffalo Main St. campus:

1. **It is quite possible to** design a re-development of these parking lot sites that will **close the considerable distance that separates South Campus buildings, activities, and people from Main Street and the University Heights** neighborhood, and in a manner that **preserves the character of the campus** and viewsheds to major landmarks like Hayes Hall.
2. **Greater connectivity between the campus and the University Heights neighborhood** would result from “inviting” the existing street grid into the campus, and by incorporating “complete street” and traffic calming measures along Main Street.
3. **Redesigning the above-ground elements of the Metro Station, to create a safer, more pedestrian-friendly area** is critical to the future success of the South Campus and the University Heights neighborhood.
4. **Incorporating amenities on the South Campus that would be accessible to the community, such as park areas and other green space**, is important to both UB and the neighborhood. Teams hypothesized different ways that this could be done, including a restoration of natural features in and around the escarpment that is located at the northeast end of the site.
5. As recommended in the UB 2020 Plan, **the relocation of professional schools, such as the law and business schools, to the South Campus from the North Campus**, will bring those school faculty and students into a closer relationship with the downtown Buffalo CBD, where courts and major business are located. Right now, **without a vision for creating more attractive improvements to the South Campus, it would be hard to convince these schools to relocate.**

6. The ideas are consistent with the vision, as enunciated in the UB 2020 Plan, to **create a center for executive education on the South Campus**.
7. The strongest visions for these sites focused on how the **South Campus could become an innovation hub and provide facilities to support the wellness and healthy lifestyles** of UB faculty, staff and students, as well as University Heights residents.
8. It would be valuable to **leverage program strengths already in place on the South Campus**, such as SAP's Food Lab and the Buffalo Academy, and relocate these programs and activities from their current space to ones that are closer to Main Street and the community.
9. The most **promising uses for these site include multi-family residential, (flexible) office, hotel, and retail**, in approximately that order. Multi-family was demonstrated to be the most successful use in terms of market demand and financial feasibility, and **should include affordable, workforce, and student housing**. **Office is recommended to be "flexible"** with co-working or other non-traditional professional offices. A **hotel use would complement an innovation hub**, professional school relocations, and executive education programming. Finally, retail largely would serve as an amenity to activate the site and provide life to Main Street.
10. From a financial standpoint, **acceptable investment returns can be obtained by a developer/investor**, and pro forma financial models appear to support the payment of a ground lease to NYS, if a project is undertaken as a **public/private partnership, with incentives such as real estate abatements and tax credits**, and a combination of creative tax-exempt and taxable (conventional) financings.

BAILEY PROJECT NOMINATION FORM

Course: URP529; Documentation and Field Methods in Historic Presentation

Project: Historic Context Study/NRHP Property Documentation Form, University Bailey District. Fall Semester 2016.

Professor: Dr. Ashima Krishna

Students: Kate Hewlings and Shawn Rooney

What was examined?

This survey was conducted to document the architectural significance of buildings in the University Bailey District. This study, completed during the Fall semester 2016, documents properties in the district that relate to one or several historic contexts, as required by the historic district application of the National Park Service. Outside of the aspirations for earning a formal designation as an historic district, this work can inform the public of the district's rich past while plans are made for its future.

Why is this important for the University Heights?

In the early 20th century, a streetcar suburb formed in the University Bailey District, with many buildings exemplifying distinct architectural styles. At this time, the area was a suburban community with architectural uniformity. But from this point to the mid-20th century, the emergence of streetcars restructured the landscape of the district, changing urban design patterns to reflect the broader social and economic changes brought on by the streetcar.

How was it done?

The document analyzes the impact of streetcars on the street design of the University Bailey District in the early 20th century and identifies the building infrastructure based on social and physical changes to the area.

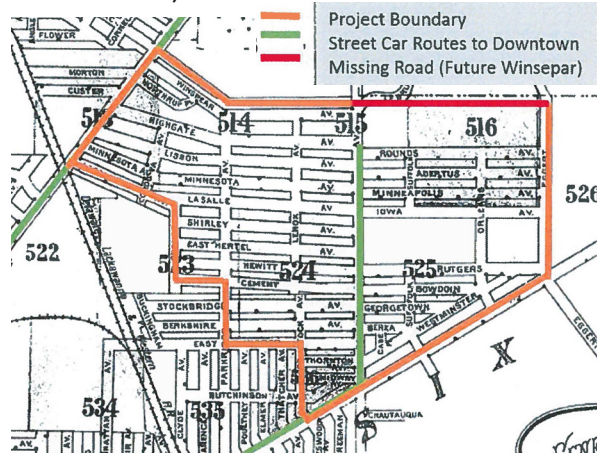
This study includes a sample list of historic buildings of different property types. Included are schools, churches, residential buildings and civic/service buildings.

The distinction and significance of the district and its properties was uncovered through various research tasks—from archival research, map analysis, illustrative edits, and on-site field observations.

University Bailey District Boundary



Streetcar Routes, 1916



OUTCOMES

The sample properties identified are:

- **Two Schools:** Highgate Heights Elementary School P.S. 80, and Lofts at University Heights, formerly P.S. 63.
- **Four Churches built between 1900-1940:** St. Andrews Episcopal Church, St. Joseph's University Parish, New Beginning Church of God, and Bible Society of WNY.
- **Two Working Class Residential homes:** a home that exhibits American foursquare architecture, and Craftsman bungalow style.
- **Two Art Deco Commercial Buildings:** Former Liberty Bank Branch, and a Commercial Retail Building on Kensington Ave.

Building infrastructures:

SCHOOLS



Name: Highgate Heights ES, P.S. 80.
Address: 558 Highgate Ave.
Construction Date: 1929
Significance: Education
National Register Eligibility: Criterion C.



Name: Lofts at University Heights, Formerly Buffalo P.S. 63.
Address: 91 Lisbon Ave.
Construction Date: 1917
Significance: Education
National Register Eligibility: Criterion C.

CHURCHES



Name: St. Andrews Episcopal Church.
Address: 3107 Main St.
Construction Date: 1921-1927
Significance: Religious
National Register Eligibility: Criterion C.



Name: St. Joseph's University Parish.
Address: 3269 Main St.
Construction Date: 1850s, updated 1870 and 1923.
Significance: Religious
National Register Eligibility: Criterion C.



Name: New Beginning Church of God.
Address: 265 Park Ridge Ave.
Construction Date: 1820-1880
Significance: Religious
National Register Eligibility: Criterion C.



Name: Bible Society of WNY
Address: 3344 Bailey Ave.
Construction Date: 1840-1880
Significance: Religious
National Register Eligibility: Criterion C.

RESIDENTIAL



Name: Working Class Residential. American Foursquare architecture.
Address: 117 Winspear Ave.
Construction Date: 1900
Significance: Residential
National Register Eligibility: Criterion C.



Name: Working Class Residential. Craftsman Bungalow.
Address: 100 Winspear Ave.
Construction Date: 1920
Significance: Residential
National Register Eligibility: Criterion C.

COMMERCIAL



Name: Former Liberty Bank Branch
Address: 3065 Bailey Ave.
Construction Date: 1929
Significance: Commercial
National Register Eligibility: Criterion C.



Name: Commercial Retail Building
Address: 1102 Kensington Ave.
Construction Date: 1920s-1940s
Significance: Commercial
National Register Eligibility: Criterion C.

DATA SOURCES AND NOTES

General Notes

References to “the University Heights” are always a reference to the area covered by four census tracts: 43, 46.01, 46.02, and 47.

References to the Buffalo Niagara Region are always a reference to Erie and Niagara counties.

Demographics (Pgs. 14-15)

Age Composition of Residents, 2015

US Census Bureau, American Community Survey, 5-year estimates (2011-2015).

The information about geographic differences in age is also from the American Community Survey 5-year estimates for 2011-2015, broken down at the census tract level. “Areas east of Bailey Avenue” refers to census tract 43 and “areas west of Main Street” refer to census tract 46.01.

% Change in Population, 1990-2015

US Census Bureau, US Decennial Census (1990, 2000, and 2010).

US Census Bureau, American Community Survey, 5-year estimates (2011-2015).

% Change in Population by Age, 2010-2015

US Census Bureau, US Decennial Census (1990, 2000, and 2010).

US Census Bureau, American Community Survey, 5-year estimates (2011-2015).

Population Change by Race/Ethnicity, 1990-2015

US Census Bureau, US Decennial Census (1990, 2000, and 2010).

US Census Bureau, American Community Survey, 5-year estimates for 2010, 2011, 2012, 2013, 2014, and 2015.

This graphic uses the population count by race/ethnicity from the US Decennial Census of 1990, 2000, and 2010, as well as the ACS 5-year estimates for 2011 (2007-2011), 2012 (2008-2012), 2013 (2009-2013), 2014 (2010-2014), and 2015 (2011-2015). Foreign-born population information came from the American Community Survey 5-year estimates for 2011-2015. The Census broadly defines “foreign born” as anyone not living in the U.S. at the time of birth, including: naturalized U.S. citizens, lawful permanent residents, temporary migrants, humanitarian migrants, and unauthorized migrants.

Racial-Ethnic Composition of Residents, 2015

US Census Bureau, American Community Survey, 5-year estimates (2011-2015).

The Census makes a distinction between race and Hispanic ethnicity. The data on race reflects the racial identities of people who do not identify as Hispanic or Latino (that is, White alone, Black or African American alone, etc.). The data on Hispanic or Latino reflects people of all races who identify as Hispanic or Latino.

Poverty Rates by Age, 2015

US Census Bureau, American Community Survey, 5-year estimates (2011-2015).

Jobs and Workforce (Pgs. 16-19)

Industry Composition of Jobs, 2014

US Census Bureau, OnTheMap Application, Longitudinal-Employer Household Dynamics Program, LODES Data (2014).

This graphic demonstrates the breakdown by industry of jobs located within the University Heights. LODES data includes all jobs covered under state unemployment insurance law plus most civilian federal employment. It does not cover people who are self-employed, people in military employment, employees of the U.S. Postal Service, and informal employment.

Businesses by # of Employees, 2016

Infogroup, Reference USA Business Database (2016).

% Businesses by # of Employees, 2016

Infogroup, Reference USA Business Database (2016).

Top 10 ZIP Codes Where University Heights Residents Commute To Work, 2014

US Census Bureau, OnTheMap Application, Longitudinal-Employer Household Dynamics Program, LODES Data (2014).

Industry Composition of Workforce, 2014

US Census Bureau, OnTheMap Application, Longitudinal-Employer Household Dynamics Program, LODES Data (2014).

This graphic demonstrates the breakdown by industry of jobs held by residents of the University Heights, regardless of where the job itself is located. LODES data includes all jobs covered under state unemployment insurance law plus most civilian federal employment. It does not cover people who are self-employed, people in military employment, employees of the U.S. Postal Service, and informal employment.

Educational Attainment of Working –Age Population Ages 25-64, 2015

US Census Bureau, American Community Survey, 5-year estimates (2011-2015).

Labor Force Participation Rates of Working Age Population Ages 25-64, 2015

US Census Bureau, American Community Survey, 5-year estimates (2011-2015).

Labor Force Participation Rates by Educational Attainment Ages 25-64

US Census Bureau, American Community Survey, 5-year estimates (2011-2015).

Young People Out of the Labor Force and School, 2015

US Census Bureau, American Community Survey, 5-year estimates (2011-2015).

“Disconnected Youth” is a term often used to indicate young people who are not enrolled in high school or college and are either unemployed or out of the labor market. Because the data on disconnected youth in the American Community Survey is limited to people ages 16-19, this age range was used for the purposes of this report. However, there is not a well-defined consensus among researchers that a specific age range should be used when referring to “disconnected youth”.

The phrase “Rest of City of Buffalo” refers to the geographical area of the city of Buffalo, excluding the geography of the University Heights.

Distribution of Households by Annual Income, 2015

US Census Bureau, American Community Survey, 5-year estimates (2011-2015).

Median Household Income, 2015

US Census Bureau, American Community Survey, 5-year estimates (2011-2015).

Built Environment (Pgs. 20-21)

Land Use Distribution, 2016

Erie County Parcel Data, provided by Erie County Office of Geographic Information Services, (2016).

Historic Districts and Buildings, 2016

Erie County Parcel Data, provided by Erie County Office of Geographic Information Services, (2016).

University at Buffalo website, <http://www.buffalo.edu/news/releases/2016/07/019.html>, accessed August 11, 2017.

National Register of Historic Places Geospatial Dataset, (2014).

University Bailey District Historical Context Survey, (2016).

The boundary of the proposed University District Historic District was created based on the project outline of the University Bailey

District Historical Context Survey, from the figure titled “Streetcar Routes” (no page number provided).

Historical districts and buildings were identified using the National Register of Historic Places Geospatial Dataset for 2014, retrieved from <https://irma.nps.gov/DataStore/Reference/Profile/2210280>. However, because the dataset is somewhat outdated, Hayes Hall on UB’s South Campus was not present. Hayes Hall was listed on the National Register of Historic Places in June 2016, confirmed through UB’s website at <http://www.buffalo.edu/news/releases/2016/07/019.html>.

Community and Recreational Assets, 2016

Erie County Parcel Data, provided by Erie County Office of Geographic Information Services, (2016).

Grassroots Gardens WNY Online Community Garden map, accessed at grassrootsgardens.org/community-gardens, (2017).

University Heights Collaborative Block Club List, accessed at ourheights.org/block-clubs, (2017).

UBRI Property Analysis of the Neighborhood.

The UBRI analysis of the neighborhood included internet searches related to block clubs, community organizations, religious institutions, recreation areas, community gardens, and other community assets. The analysis also incorporated a review of past planning documents, and outreach to several local community stakeholders from block clubs and neighborhood community organizations.

Real Estate Market (Pgs. 22-23)

% of Home Sales by Selling Price, 2014-2017

Redfin Sales Data, accessed at <https://www.redfin.com/blog/data-center>, (2014-2017).

This data excludes sales in January of 2014, because data from Redfin is only available for the past three years. This data set was downloaded in February of 2017, and therefore the earliest data available was February 2014.

Home Sales by Selling Price

Redfin Sales Data, accessed at <https://www.redfin.com/blog/data-center>, (2014-2017).

This data excludes sales in January of 2014, because data from Redfin is only available for the past three years. This data set was downloaded in February of 2017, and therefore the earliest data available was February 2014.

Sales data was downloaded for the entire city of Buffalo, and then mapped in ArcGIS by address. Addresses with sales were then clipped to the University Heights boundaries, excluding sales outside of the neighborhood on the map.

Annual Averages of Commercial and Residential Units with Undeliverable Addresses, 2012-2016

HUD Aggregated USPS Administrative Data on Address Vacancies, 2012 to 2016.

USPS vacancy data was downloaded at the 2010 Census Tract level for the city of Buffalo and the Buffalo Niagara Region. Vacancy is defined as an address (either commercial or residential) that has not collected mail for 90 days or longer, according to delivery staff on urban routes. It does not include addresses of businesses or homes under construction and not yet occupied.

Vacant addresses are different from vacant parcels; a vacant parcel, as identified by the New York State property class code designated in parcel data, is a lot that is not developed or only has minor improvements. A vacant address, as identified in the USPS vacancy data, is for every unit with an address in a building; therefore, one building or parcel can have both vacant addresses and active addresses.

Transportation Options (Pgs. 24-25)

Transportation Options, 2016

Erie County Parcel Data, provided by Erie County Office of Geographic Information Services, (2015).

Niagara Frontier Transportation Authority, Route and Stop Data, (2016).

City of Buffalo Master Bicycle Plan, (2016).

City of Buffalo Department of Public Works Proposal to City of Buffalo Bicycle and Pedestrian Advisory Board, (2017).

Reddy Bikeshare System Map, accessed at reddybikeshare.socialbicycles.com/#map (August 2017).

University at Buffalo, Interactive Campus Map, accessed at <http://www.buffalo.edu/home/visiting-ub/CampusMaps/maps.html#south>, August 11, 2017.

University at Buffalo, South Campus Shuttle Map, accessed at https://www.buffalo.edu/content/dam/www/shared_assets/campus_maps/SouthCampus_bus-routes-opt.pdf, August 11, 2017.

The Amherst Street bike lane project boundaries are defined in the City of Buffalo Department of Public Works Proposal to City of Buffalo Bicycle and Pedestrian Advisory Board. Proposed bike lanes on Parkridge are identified as a priority project in the City of Buffalo Bicycle Master Plan. ZipCar locations and UB Stampede stops are identified on the South Campus Shuttle Map.

How People Travel to Work, 2015

US Census Bureau, American Community Survey, 5-year estimates, (2011-2015).

Transit Commuters by # of Vehicles in Household, 2015

US Census Bureau, American Community Survey, 5-year estimates, (2011-2015).

Crime and Safety (Pgs. 26-27)

Violent Crimes, 2009-2016

Buffalo Police Department, (2009-2016), accessed at socrata.com, 2017.

Violent Crimes per 1,000 Residents, 2016

Buffalo Police Department, (2009-2016), accessed at socrata.com, 2017.

Concentration of Violent Crimes Compared to the City, 2009-2016

Erie County Parcel Data, provided by Erie County Office of Geographic Information Services, (January 2016).

UBRI analysis of data from the Buffalo Police Department, (2009-2016), accessed at socrata.com, 2017.

Property Crimes, 2009-2016

Buffalo Police Department, (2009-2016), accessed at socrata.com, 2017.

Property Crimes per 1,000 Residents, 2016

Buffalo Police Department, (2009-2016), accessed at socrata.com, 2017.

Concentration of Violent Crimes Compared to the City, 2009-2016

Erie County Parcel Data, provided by Erie County Office of Geographic Information Services, (January 2016).

UBRI analysis of data from the Buffalo Police Department, (2009-2016), accessed at socrata.com

- The image consists of a solid dark blue background. A single, thin, vertical white line runs along the right edge of the frame, extending from the top to the bottom. The line is perfectly straight and uniform in width.