A waterfront redevelopment project in Hamburg, Germany integrates active public space into urban design.
COMMUNITY PLANNING

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Myself and other Lexington Division of Planning staff hosted a mock planning commission meeting at Transylvania University’s Sustainability Summit to teach middle school students about development planning.
Innovative and accessible public input events were essential to the success of Imagine Lexington.
In 2016, the City of Lexington’s Division of Planning began the process of updating their comprehensive plan. Staff felt tremendous responsibility to assemble a plan based on what the citizens of Lexington wanted for the future of their city, as well as the needs of interested parties and organizations, such as the Building Industry Association of Central Kentucky and Fayette Alliance. In order to reach and engage as many Lexingtonians as possible, staff knew their public input would have to exceed levels of any and all previous comprehensive plan updates. Creating materials for social media and other engaging media sites, such as Youtube, staff saw successful and celebrated public engagement.

With an interest and skillset in graphic design, I designed the logo (above) for Lexington’s 2018 comprehensive plan, Imagine Lexington. I also assisted in creating the plan’s branding scheme, website, and educational videos. Eye-catching, informational, and educational graphics were created with the goal of engaging as many generations in the comprehensive planning process as possible.

Working with other staff, we scripted, filmed and edited a series of educational videos about the comprehensive planning process to serve as public engagement resources. One of the videos was nominated for an Ohio Valley Regional Emmy in the Informational/Instructional Program category. Videos can be viewed at www.youtube.com/playlist?list=PLJscpaFZQDQulsczJlG5HPzdTHnXAYHbQ6

Social media engagement during the comprehensive planning process has revolutionized local governments’ reach to typically under-represented generations, such as Millenials and Gen Z’s, and invite them to follow and explore the urban planning process. As The City of Lexington’s Planning Tech, creating eye-catching and informative social media posts was a daily task of my position, and further challenged me to communicate planning concepts in a relatable and useful manner.

Adopted in 2019, Imagine Lexington has been instrumental in progressing the City of Lexington towards sustainable land management and development. The Division of Planning has continued to prioritize transparency by hosting Imagine Lexington in a web-based format at www.imaginelexington.com.

Eye-catching and informative social media graphics were key to Imagine Lexington’s successful public engagement.
The last two years of my time working as the Planning Tech for Lexington’s Division of Planning were dedicated to the process of updating the City’s Comprehensive Plan. Faced with a steady growth rate and tremendous pressure to expand the urban growth boundary, staff conducted numerous quantitative analyses to assess the efficiency and density of land uses existing within the urban area. One of the analyses conducted was a floor area ratio (FAR) analysis of commercial properties along Lexington’s major corridors. Conducted solely in ArcGIS, building square footage data was acquired from the Fayette County, Kentucky Property Valuation Administrator’s office, the FAR of each commercial property was calculated, and FAR values of Lexington’s corridor and non-corridor commercial properties were compared to standards set by staff.

Recognizing development intensity context varies depending on the property’s location within the city, staff created three boundaries for which different FAR standards would be applied. The boundaries used were the existing Central Business District, Infill and Redevelopment Zone, and the Urban Services Area boundaries. The results of this analysis made evident to staff that commercial property development density needed to be addressed within the comprehensive plan update due to the high percentage of properties that did not meet the FAR standards established by staff.

The map to the right was created as a part of the initial steps of the FAR analysis of Lexington’s corridor commercial properties. Staff worked together to decide on which roads should be classified as Lexington’s major corridors, as well as from which zoning categories the commercial properties would be selected.

The map to the left shows vacant land within Lexington, Kentucky as of 2016. This was another quantitative analysis that was integral to the recommendations set forth in the comprehensive plan update. Staff worked together to define and list criteria for “vacant” land. As the Planning Tech, I was responsible for conducting the inventory and maintaining the database of vacant land within Lexington’s urban growth boundary.

Every year, building and demolition permit data was acquired from the Building Inspection Office and geo-located within ArcGIS in order to update the vacant land database. Every three or four years, new aerial images were flown for Lexington, and an extensive, property-by-property update of the database was conducted.
Public engagement and input are important for every comprehensive plan, but the staff of the Lexington’s Division of Planning knew Imagine Lexington would not be successful without outstanding public engagement opportunities. With the aim to make public meetings accessible, casual, and enjoyable, staff hosted open house style meetings all around the community of Lexington. These meetings featured topic-specific stations for which each staff member was individually responsible for designing boards and public input methods at each of the stations.

Assigned the station dedicated to implementing the comprehensive plan, I utilized maps as methods of public input to get location-specific feedback from citizens. In order to do this, I provided a variety of stickers designed as emojis, ranging from smiling to angry faces, for citizens to share how they feel about certain places in Lexington. While citizens visited my station and talked with me about the maps, I took notes on our conversation and the specific concerns they shared with me. Staff utilized this data to highlight potential implementation items, such as parks or corridor studies, if citizens were unhappy with available park amenities or frustrating traffic patterns they experience.

Staff coordinated an award-winning public input opportunity with several community organizations, including the Blue Grass Community Foundation, Fayette County Schools, Leadership Lexington, and the Lexington Public Library. This event, On the Table 2017, enabled people from every community and walk of life to take time to gather around tables and have real conversations about what is important to them, including issues big and small. The photo to the right was captured at a local coffee shop who reserved tables for anyone and everyone to join in on the conversations.

During my last month working as the Planning Tech for the City of Lexington, I was asked to present Imagine Lexington alongside my coworkers Chris Taylor and Chris Woodall, AICP. Together, we reviewed the numerous data analyses and public engagement opportunities utilized during the comprehensive planning process to guide the plan’s vision, goals, and recommendations.

At the conference, I had the honor of accepting, alongside my coworkers, the American Planning Association’s Kentucky Chapter Special Merits Award for Outstanding Public Engagement for Imagine Lexington’s On the Table Initiative.
Public engagement is integral to the success of a community’s growth and development.
The following project was completed as a capstone creative project submitted as a requirement for a Master’s of Urban and Regional Planning degree at Ball State University. This project was reviewed by a three-member committee consisting of Lohren Deeg, ASAI and Michael Burayidi, PhD of Ball State University, and Chris Woodall, AICP of The City of Lexington, Kentucky’s Division of Planning.

While working in Lexington, I witnessed first hand the contrasting public engagement opportunities between comprehensive planning and development planning. Public engagement within development planning operates as an approval-seeking process in contrast to the input-seeking, vision-casting, policy-influencing public engagement process of comprehensive planning. The public’s involvement is pertinent not just in community visioning but all the way through to the implementation of their community’s growth and development. A hindrance to enhancing this opportunity for public engagement is a lack of educational materials for the public to learn about the foundational concepts of development planning.

A review of Lexington’s planning context revealed a need for a resource for the public to learn of the foundational concepts of development planning. An understanding of public engagement and graphic communication best practices, as well as effective and approachable graphic design and narration, was established through a review of related literature and five comparable projects. This research resulted in The Resident’s Guide to Development in Lexington, Kentucky; an educational resource approachable for any reader to learn about the foundational concepts and processes of development planning in Lexington, Kentucky.

This educational resource equips and empowers the public, fostering informed and meaningful public engagement in the development planning process. The public’s involvement is pertinent in the implementation of their community’s growth and development. Effective public participation within the development planning process is dependent upon educational materials that utilize jargon-free, approachable narrative that is supported by simple, engaging graphics.
Residential Types

Low Density
- Primarily attached and detached single-family housing of varying types that should be supported by related uses and community services.

Medium Density
- Primarily attached single-family and multi-family housing of varying types that include parks and other supportive community uses.

Medium-High Density
- Primarily multi-family housing of varying types that include parks and other supportive community uses, like retail and employment opportunities.

High Density
- Primarily high-rise multi-family housing of varying types that include parks and other supportive community uses, like retail and employment opportunities.

Non-Residential & Mixed-Use Types

Low Density
- Primarily neighborhood-serving commercial uses, services, places of employment, and/or a mix of uses within low to mid-rise structures appropriately scaled to the surrounding neighborhood.

Medium Density
- Primarily community-serving commercial uses, service, places of employment, and/or a mix of uses within mid-rise structures with a higher Floor Area Ratio.

High Density
- Primarily regional-serving commercial uses, services, places of employment, and/or a mix of uses within high-rise structures with a high Floor Area Ratio.

Industrial & Production
- Primarily employment land dedicated to the most intense types of development for employment opportunities. This is the only development type where uses are typically incompatible with other uses.

What are other documents we can learn from?

Imagine Lexington.

The 2018 Comprehensive Plan, Imagine Lexington, is designed to create a vision and strategy that will allow Lexington to grow and prosper while preserving, protecting and enhancing existing neighborhoods, downtown and the rural Bluegrass cultural landscape.

Imagine Lexington is structured with goals and objectives, elements, and implementation items. The goals and objectives create the skeleton of the document, while the elements are the flesh that fill out the plan and give it substance. The elements are broken down into seven themes. These themes focus on different subjects like neighborhoods, the economy, and transportation. For each theme, a set of three pillars are created that provide structure and emphasize key concepts. Policies are included within each theme, and guided by the pillars, and give explicit direction and recommendations for steps forward.

Woven within all themes are action items that call out specific next steps in implementing the vision of Imagine Lexington. These action items are organized by short-term and long-term items, as well as internally and externally focused items. Internally focused action items are intended for The Division of Planning or other government agencies to take action on, while externally focused action items are meant for the development community or other related organizations.

For more information on Imagine Lexington, reach out to The Division of Planning or visit imaginelexington.com.
The YWCA is a neighborhood anchor for Muncie, Indiana’s downtown neighborhood, Near East Charles.
Completed in the fall of 2018, the course PLAN 605 - Design and Presentation Techniques, taught by Lohren Deeg at Ball State University, challenged me to assemble an infill and redevelopment proposal for a downtown neighborhood, Near East Charles, in Muncie, Indiana. Throughout this process, I strengthened my analytical skills as we researched the past, present, and future of Near East Charles. By looking at existing land uses, residential and retail market conditions, as well as historic photographs, a comprehensive and contextually-sensitive infill development proposal was completed.

To begin our research, an inventory of existing land uses was conducted. The graphic to the right is a hand-drawn land use map of the Near East Charles neighborhood. This exercise aided in cataloging the unique shapes and relationships buildings take within the neighborhood. Using this graphic helped me compose a proposed infill land use map.

After completing a map of existing land uses, a proposed infill land use map was required for the Near East Charles Neighborhood. My proposal includes contextually-sensitive single-family residential, multi-family residential, and retail infill. This proposal includes a drastic reduction in surface parking with the focus to bring life back into downtown Muncie, Indiana.

In order to further understand the context of the Near East Charles Neighborhood, historic photographic research was conducted. This analysis revealed the variety of residential development history, the YMCA’s presence as a long-standing community anchor, and the important role community amenities, such as Muncie Music, play within downtown.

**NEAR EAST CHARLES LAND USE ANALYSIS**

In order to further understand the context of the Near East Charles Neighborhood, historic photographic research was conducted. This analysis revealed the variety of residential development history, the YMCA’s presence as a long-standing community anchor, and the important role community amenities, such as Muncie Music, play within downtown.

**NEAR EAST CHARLES HISTORICAL ANALYSIS**

**EXISTING LAND USES**

**PROPOSED INFILL LAND USES**

**416 & 420 S. Elm**

**YMCA**

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MEGHAN JENNINGS  URBAN PLANNER
Below is an analysis of residential and retail market rates applied to my infill proposal for the Near East Charles neighborhood. These values help sell the case for redeveloping this neighborhood as the investment and profit potential is substantial.

**LEASING RATES**

**RESIDENTIAL:**
150,000 SQFT
- avg monthly rate - $1,000
- avg unit size – 1,500 sqft
- avg $/sqft - $0.60/sqft

$90,000 MONTHLY

**LEASING RATES**

**RETAIL:**
46,000 SQFT
- avg monthly rate - $2,000
- avg unit size – 3,000 sqft
- avg $/sqft - $0.70/sqft

$32,200 MONTHLY

The graphics below illustrate my proposal of a development coalition with potential partners, including the City of Muncie, Muncie Arts & Culture, the YMCA, the YWCA, and Muncie Music.

A logo, branding scheme, and set of icons were designed to communicate the goals and initiatives of the development coalition and their work within the Near East Charles Neighborhood.

**NEAR EAST CHARLES DEVELOPMENT COALITION**

Continuing efforts of Muncie’s downtown cultural zone; connecting communities, establishing a downtown identity, enhancing quality of life, and cultivating the creative class.

**RESIDENTIAL**
renovating downtown residential presence

**CULTURAL TRAIL**
celebrating history

**RETAIL**
enhancing downtown quality of life

**MAKERSPACES**
live-work opportunities

**STREETSCAPE**
connecting downtown neighborhoods

**ART PARK**
active, colorful public space

**MEGHAN JENNINGS URBAN PLANNER**
The next step in the infill and redevelopment proposal process for the Near East Charles Neighborhood was modeling concepts within SketchUp. The graphic below is my modeled infill proposal incorporated into the existing urban fabric. This graphic aids in communicating the size and relationship to other buildings my proposed infill takes, and makes clear the vision for the neighborhood’s revitalization through the Near East Charles Development Coalition.

An important skillset to have for communicating to others the vision for development is hand-drawn sketches and illustrations. These graphics are quicker to create and do not require the use of technology as they could easily be done on a napkin or spare sheet of paper. Though simple in detail, this sketch communicates the contextually-sensitive nature of the infill proposal.

Designed as a Muncie Arts & Cultural Trail destination, the Art Park proposal (below) would bring life to the Near East Charles Neighborhood as an active, colorful public space. Installation and programming partnerships with Muncie Arts & Culture, neighborhood makerspaces, Muncie Music, the YMCA, & the YWCA would be established to ensure the Art Park is a lively space that reflects the heart and vision of the community. This graphic exercise challenged me to think of how people would use this space if the development proposal became reality, and allows me to communicate this vision to others.
The inspirational Townley Square of Lexington, Kentucky, photographed by Rich Design Studios.

THE VILLAGE AT COLD SPRING

RESEARCH

PROPOSAL

KEY MAPS

INDIANA

MARION COUNTY

INDIANAPOLIS
As a final project for the Master’s Urban Land Use Planning course at Ball State University, we were asked to propose a subdivision plat for client, Ken Taylor with Campus Diggs. Taylor had interest in developing mixed-use and duplexes on a property in Indianapolis, Indiana at the intersection of 30th Street and Cold Spring Road. We were to assemble a village-style development featuring at least 50,000 sqft of commercial, forty apartments, and thirty-five subdivided duplexes.

**RESEARCH**

The first step in the process was to research existing conditions of the site including land uses, multi-modal network, as well as local zoning and subdivision regulations.

Existing just to the north of the site is Marian University. Taylor stated he envisioned the development to serve as a town center and off-campus residential for older students and faculty. To the east of the site is a large golf course, to the south are religious facilities, and to the west is an established single-family neighborhood.

Assessing the surrounding land uses and existing multi-modal network, the site’s main commercial access should be to the north along 30th St, while the main residential access should be to the east along Cold Spring Rd.

Pulling inspiration from Evans Farm in Lewis Center, Ohio and Townley Park in Lexington, Kentucky, the town center should feature quality of life amenities, and the residential comprised of small lots with houses pulled up to the street.

**PROPOSAL**

Human-centered designed mixed-use features 50,000 sqft of ground floor commercial and 48 apartments, an average size of 1,250 sqft, above on the second floor. The town center features a large pavillion which could host a farmers market, concerts, and gallery events.

An urban neighborhood of 35 duplexes on subdivided lots is accessed by a grid of narrow roads and a safe pedestrian network. Landscaping and linear park border the site to the south and west to buffer surrounding uses from the proposed dense development.

Shared parking is tucked behind the commercial development and is accessible to the duplexes when their on-street parking (1 spot per unit) is full.
PLANNING RESEARCH

PROJECTS

NEW URBANISM IN LOWCOUNTRY

MASTER’S RESEARCH ON NEW URBANIST DEVELOPMENTS IN SOUTH CAROLINA.

EISENHÜTTENSTADT

MASTER’S STUDY ABROAD RESEARCH ON GERMANY’S FIRST “SOCIALIST” CITY.

MUNCIE HOUSING ANALYSIS

MASTER’S RESEARCH AND POLICY PROPOSAL ON HOUSING IN MUNCIE, INDIANA.

A summer study abroad trip to Germany in 2019 with Ball State’s College of Architecture and Planning.
Porches and proximity to the street create an instant feeling of community and inclusion.
The following excerpted sections are from research conducted as a final project for the course CAP 598 - Charrette Graphics, taught by Lohren Deeg. The complete project can be accessed through ResearchGate.net; New Urbanism in Lowcountry: A Review of the 1990s Traditional Neighborhood Developments - Newpoint, I’On, and Habersham - and the New Urbanist Momentum They Created.

**1990’S LOWCOUNTRY NEW URBANISM**

Tucked within lowcountry scenery are three traditional neighborhood developments (TNDs) that serve as the head runners of the new urbanist movement within South Carolina - Newpoint, I’On, and Habersham. From the years of 1993 to 1997, Vince Graham and Robert Turner completed these three TNDs. Graham and Turner first worked in Beaufort, SC on Newpoint and then separated to do individual projects. Turner’s next project, Habersham, was also in Beaufort, while Graham’s next project, I’On, was in Mt. Pleasant, SC (just east of Charleston).

Graham and Turner had to rely on PUDs to implement their TNDs as the regulations and standards of Beaufort and Mt. Pleasant would not implement their TNDs as the regulations and standards of Beaufort and Mt. Pleasant would not allow legally for their style of development. Seeing the success of these developments, the communities of Beaufort and Mt. Pleasant have continued the New Urbanism momentum by updating codes and regulations, approving other TND developments, and retrofitting suburban developments. What Graham and Turner observed and celebrated of Lowcountry, the region now sees and advocates for itself.

**NEW POINT BEAUFORT, SC**

Rich with history and grand Live Oak trees, Beaufort became home to Graham and Turner’s first TND development, Newpoint. As the first Graham and Turner TND project, Newpoint overcame political approval hurdles and pushback from the public before serving as the kickstarter for the new urbanism movement in Lowcountry.

Approved in 1993, Newpoint consists of 130 single-family homes across 53.6 acres. A total of 7,662 square feet (sqft) of commercial is developed within the site, and 5.9 acres are dedicated to public open space and parks.

The homes of Newpoint are close to the street, boast large porches, and the sidewalks are set back from the curb. The streets of Newpoint are narrow and lined with large trees, keeping driving speeds slow. The provision of alleys keeps garages, parked cars and trash cans off of the street frontage.

Newpoint’s commercial uses include everything from a locally-known flower shop and pizza parlor, to an insurance office. There is on-street parking provided, as well as an overflow lot, but the proximity of the commercial to the residential uses encourages pedestrian access over vehicular. The design of the commercial and residential structures keeps in line with the vernacular architecture of Lowcountry. Several natural areas are preserved and made accessible to the public within Newpoint, including ponds and riverfront park and dock.

With the success of Newpoint, Graham partnered with DPZ and Dover, Kohl & Partners to create Lowcountry’s next TND in Mt. Pleasant, SC. Graham was drawn from Beaufort to Mt. Pleasant because in 1992, Mt. Pleasant had adopted a town-wide Master Plan that incorporated Traditional Neighborhood Design, and in 1994 approved a Strategic Plan that further encouraged TNDs.

Approved in 1997, I’On consists of 700 single family homes across 243 acres. A total of 30,000 sqft of commercial is developed within the site, along with several civic uses, including parks, churches, and events space.

The community of I’On feels welcoming and comfortable to walk around. Homes are pulled up close to the street and have porches lining the sidewalk. Even though the homes are grand, they do not feel cold. Their proximity to each other and to the pedestrian communicate togetherness and inclusion. I’On’s commercial uses are varied and designed with pedestrian accessibility in mind.

The amount of commercial provided is in proportion to the much larger site. Everything from a hotel, to restaurants, boutiques, a dentist’s office, even civic uses, can be found in I’On. The Lowcountry architecture is incorporated into the design of both the residential and retail spaces. The scenery within I’On is beautiful. Live Oaks arch over sidewalks and fill front yards, while the waterfront aspect of I’On is preserved and celebrated.

Located to the west of Beaufort, along the marshes of the Broad River, lies the next development in Lowcountry’s TND history. Building on the success of Newpoint, Turner sought out a much larger site for his next development, Habersham. Similar to Graham’s strategy with I’On, Turner also brought DPZ into the development team.

Approved in 1996, Habersham consists of 1,000 residential units across 266 acres. A total of 25,000 soft of commercial space is provided, along with 73 acres of open space. Habersham also provides civic uses in a fire station and several parks throughout the site.

The homes of Habersham range in size, the lots are well landscaped and single-family detached homes have larger yards than those found in I’On. Turner has successfully incorporated cottages, townhouses, duplexes, apartments, and mixed-use into the fabric of Habersham. This residential variety creates a range of affordability for residents and enables Habersham to be an adaptable, age-in-place neighborhood.

Habersham’s commercial space was successful in filling the mixed-use commercial with offices and residences located on the second and third floors. The commercial uses themselves include restaurants, an ice cream parlor, boutiques, and office space. Habersham’s preservation of the Lowcountry marsh landscape is beautiful. Many ponds and lakes exist within the site and are home to a few alligators.
Eisenhüttenstadt, Germany was the first planned "socialist city" of the German Democratic Republic.
THE FIRST SOCIALIST CITY

Located on Germany’s eastern border sits the first planned “socialist city” of the German Democratic Republic (GDR). Seeking relief, an escape, from the rubble and destruction left by WWII, the GDR created a city for the people. The GDR adopted Sixteen Principles of Urban Planning to guide development. The GDR reflected their socialist morals for protecting the working class, equally providing for all, and prioritization of efficiency in these sixteen principles of urban planning. These guiding principles sought to enable development and design that provided for the needs of the city, its industry, and its people.

PLANNING SOCIALIST URBANITY

Originally named Stalinstadt, Eisenhüttenstadt was founded for the area’s existing iron and steel industry. This resource served the GDR’s vision for developing the first planned “socialist city” as it created an opportunity to develop a strong workforce to support the city and the region. Without industry there could be no people, and without people, there could be no city. They further emphasized the importance of the city providing for its people by requiring residential developments to be mixed-use and that roads must serve, not sever or hinder, the city and its people.

REUNIFICATION REPERCUSSIONS

When eastern Germany was reunited with the west, the economic impact of the city’s iron industry greatly diminished. A massive outmigration from Eisenhüttenstadt occurred due to the lack of available jobs. The city struggles to maintain its structures as vacant housing continues to increase available jobs. The city struggles to maintain its industry, and its people.

THE SIXTEEN PRINCIPLES OF URBAN PLANNING, SUMMARIZED

1. The structure and architectural expression of the city reflects the political life and national consciousness of the people.
2. The aim of town planning is the harmonious satisfaction of the human right to work, housing, culture and recreation.
3. The city is built by the industry for the industry.
4. The growth of the city must be subordinated to the principle of expediency and must be kept within certain limits.
5. The city planning must be based on the principle of the organic and consider the historical structure of the city.
6. The city center is the political hub for the life of its people.
7. For cities that lie on a river, it must become one of the main arteries and the architectural axis.
8. The traffic has to serve the city and its population. It must not tear the city apart and not hinder the population.
9. The public squares are the structural basis of the planning of the city and its overall architectural composition.
10. The residential areas consist of residential districts; in them are all necessary cultural, utilities and social facilities.
11. The city must create healthy and quiet living conditions through the supply of light and air.
12. In the city, life is urban; outside the city life is rural.
13. Multi-story construction is more economical than one- or two-story construction.
14. The urban planning and architectural design of the city fosters its individual, unique identity.
15. There is no abstract scheme for urban planning and architectural design.
16. Plans must be completed for the planning and construction of districts as well as its squares and main streets.

THE REALITY OF TODAY

Due to substantial population loss and diminishing structural quality, Germany’s federal government launched in 2002 the program “Stadtumbau Ost” (“Restructuring Cities in the East”). Aimed to strengthen the urban and economic fabric of towns and cities in the former GDR, this program will subsidize both demolition and infill/redevelopment projects for qualified cities. Eisenhüttenstadt was successful in acquiring funds from “Stadtumbau Ost” and has developed a general economic development strategy that will focus on developing niche businesses centered around their iron and steel production, continue to diversify their economic base, and will improve the city’s infrastructure.

MEGHAN JENNINGS  URBAN PLANNER
The YWCA is a neighborhood anchor for Muncie, Indiana's downtown neighborhood, Near East Charles.
The following research was conducted as a final project for PLAN 629 - Planning Analysis Studio with Dr. Sanglim Yoo at Ball State University. Working as a team, policy recommendations were created for Muncie, Indiana’s residential, economic, transportation, and recreational uses. I was assigned to assess the conditions of Muncie’s housing market, conduct suitability analyses for development scenarios, and write a final policy memo to the Delaware-Muncie Metro Plan Commission.

**DATA ANALYSIS**

The following is a summary of the data analysis detailed in my final Housing Report for Muncie, Indiana. Population, economic, and development data were assessed. The population in Muncie is slowly declining but is projected to taper off and remain around 110,000. The largest age cohort representation is the working-age cohort but the senior age cohort is projected to experience growth by 2050. Muncie’s households are small in size, one or two person households, and are projected to remain this small. Due to the presence of Ball State, Muncie has a significant amount of renter-occupied housing. Muncie also needs to prioritize cost burdened housing issues. Currently 30% of all housing units are cost burdened, with the majority of these units being renter-occupied. This highlights a significant problem with housing affordability (as well as economic vitality) for the community of Muncie.

Assessing development data revealed that Muncie has a substantial amount of vacant lots. A survey conducted by Scout Muncie reports that there are also many structures in poor condition. Both of these trends lend themselves to easy infill and redevelopment efforts.

The final data analysis resulted in the following recommendations for policy focuses: varying housing types due to smaller households and aging population; affordability is an issue; and there is significant potential for infill and redevelopment. Moving forward, NIMBYism needs to be prepared for and proactive measures should be taken in partnership with Muncie Action Plan to engage and educate residents on infill and redevelopment efforts.

**MUNCIE HOUSING ANALYSIS**

**DATA ANALYSIS**

<table>
<thead>
<tr>
<th>Housing Units</th>
<th>Muncie</th>
</tr>
</thead>
<tbody>
<tr>
<td>Total Units</td>
<td>32,853</td>
</tr>
<tr>
<td>Vacant Units</td>
<td>16%</td>
</tr>
<tr>
<td>Occupied Units</td>
<td>84%</td>
</tr>
<tr>
<td>Occupied Units, Owner-Occupied</td>
<td>51%</td>
</tr>
<tr>
<td>Occupied Units, Renter-Occupied</td>
<td>49%</td>
</tr>
</tbody>
</table>

**OPPORTUNITY ZONES**

An avenue for incentivizing infill housing development are Opportunity Zones. Muncie’s designated census tracts are within downtown and could attract successful residential or mixed-use development projects. The issue of gentrification comes into the conversation surrounding Opportunity Zones and Muncie should be proactive in addressing these issues. An option for addressing gentrification would be to assemble a Prospectus for all Opportunity Zones. This type of document can be utilized to guide the type of development that can take place within these communities. To ensure context-sensitive proposals, the Muncie should seek the input of those who live in the designated census tracts. Their input and experience of what types of development are needed in their neighborhoods are key to the success of Opportunity Zone investments. A partnership with the City, County, Chamber of Commerce, Muncie Action Plan, and the Muncie Land Bank would enhance these efforts.

**SUITABILITY ANALYSIS**

A suitability analysis was conducted in order to assess the infill and redevelopment possibility of properties within Muncie. A five step process was used to apply point values in order to rank properties. Properties with lower point values are of highest priority for residential development, while properties with higher point values are of lowest priority for housing.

**#1 - Source Properties**

**#2 - Floodplain Removal**

The first step in this process was to select suitable properties for residential development. Properties selected were vacant lots or had structures in poor condition. The second step in the process removed any property within the floodplain. These properties are undevelopable and their removal protects the community’s health and safety.
A PROPOSED STRATEGY FOR ADDRESSING MUNCIE'S FUTURE HOUSING NEEDS

The City of Muncie, Indiana is shrinking. The population is aging, the housing stock is degrading, and there is a persistent demand for new housing. New development on the edge of town threatens the sustainability of existing infrastructure systems. Analyzing census data and current development environments exposes the need for a new housing strategy. Through a partnership between Delaware County, The City of Muncie, and Muncie Action Plan, local leaders must adopt an infill and redevelopment plan and strategy in order to meet Muncie’s future housing needs.

CURRENT DATA TRENDS

According to STATS Indiana’s population projections, Muncie will continue to decline but will remain stagnant around 110,000. The projections also reveal that the city will experience population growth within the senior-age cohort (65+). Census data reveals that the average household size is shrinking due to prevalent college-age and senior-age cohorts. These age cohorts place demands on housing to be smaller in size and designed with integrated, active social spaces. Infill and redevelopment housing strategies efficiently use existing infrastructure in the face of a shrinking population and tax base, and allow for smaller housing units to fit within existing neighborhood communities.

INFILL AND REDEVELOPMENT POTENTIAL

An assessment of Muncie’s development environments identifies 2,200 properties, totaling 1,144 acres, as land for potential housing infill and redevelopment. These properties include vacant lots, vacant structures, and structures in poor condition as identified via ScoutMuncie. Although the population is shrinking, degrading structure quality limits the ability to meet future housing needs within Muncie’s existing housing stock. Rather than continue to extend infrastructure, local leaders must prioritize utilizing existing infrastructure to meet Muncie's future housing needs.

NEXT STEPS

An in-depth analysis, strategy, and plan for Muncie’s infill and redevelopment potential must be conducted in partnership between Delaware County, The City of Muncie, and Muncie Action Plan. This partnership allows for housing needs to be met in neighborhoods and across the city, alike. The planning process must engage the public in the process, adapt context-sensitive strategies, and address NIMBYism if the proposed strategy is to be successful. There is substantial potential for housing infill and redevelopment within existing neighborhoods, and local leaders must act now in order to address the needs of Muncie’s future.
Graphic design is a passion and useful skill, and I am honored to have it recognized as seen here accepting the Best Portfolio Award from Ball State’s Urban Planning Department in 2019.

PROJECTS

DAYTON, OHIO INFOGRAPhICS 50
INFOGRAPHIC PROJECT FOR MASTER’S COURSE ON QUANTITATIVE ANALYSIS.

CARDINAL GREENWAYS 56
DOCUMENT DESIGN AND SOCIAL MEDIA PROJECTS FOR CARDINAL GREENWAYS, INC.

LEXINGTON, KENTUCKY 62
VARIous GRAPHIC DESIGN PROJECTS FOR LEXINGTON, KY’S DIVISION OF PLANNING.

CHARRETTE GRAPHICS 66
SKETCHES AND ILLUSTRATIONS FOR MASTER’S COURSE ON CHARRETTE GRAPHICS.
Me and my family celebrating a birthday with a Pedalwagon in Dayton, Ohio’s Oregon District.
Located in western Ohio, the city of Dayton holds its ground as the core of a large metropolitan area. Although known for its innovation, and nicknamed Gem City in the mid 1800s, Dayton experienced urban decay common of cities in the nation’s Rust Belt during the late 1900s. This research searches for signs of urban core revitalization within demographic and economic trends from 2010 to 2017.

Population

**DAYTON’S PEOPLE**

Although the total population within the urban core of Dayton, Ohio is shrinking, the population pyramid to the right shows a shift in age cohorts. Those aged 20-34 are increasing, which is a demographic trend associated with urban core revitalization.

**# Population**

- **145,609** (2010 population)
- **140,939** (2017 population)

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**INCOME**

**DAYTON’S WEALTH**

A component of urban core revitalization is an increase of income, which has occurred in Dayton from 2010 to 2017. Evident in the maps below, income is concentrating and increasing along corridors and within existing neighborhoods.

**Average household size**

- **2.44**

**INCOME**

**FAMILY HOUSEHOLDS**

- **3.8%** (2010 - 2017)

**NON-FAMILY HOUSEHOLDS**

- **4.9%** (2010 - 2017)

**1-PERSON HOUSEHOLDS**

- **-3.4%** (2010 - 2017)

**AVERAGE HOUSEHOLD INCOME**

- **$30,128** (2017 avg. income)
- **$29,368** (2010 avg. income)
Education

DAYTON'S BRAINS
Dayton is also experiencing an increase in educational attainment, as evident in the chart to the right. Home to two higher education establishments, The University of Dayton and Sinclair Community College, the top three graduating programs speak to the city's changing economy. The top three programs (below) graduated 3,750 students in the 2017-2018 academic year.

Dayton's higher education establishments:
- Engineering
- Business
- Health

Industry

DAYTON'S INDUSTRY
Although Dayton's employment sector is changing by age, income, and educational attainment, Dayton's industry sectors have yet to catch up with the trend of urban core revitalization. Although they reflect the top three graduating programs, the following sectors have not experienced proportional growth: professional, manufacturing, and health care.

Development

An analysis of Dayton's development patterns is necessary to understand how the physical form of the city is reflecting the changes and trends typical of urban core revitalization.

DAYTON'S ZONING
Patterns within a city's zoning speak to the urban form that is enabled. Dayton, due to its industrial history, has industrial zones woven throughout its fabric, while business zones line corridors, and residential zones fill the gaps. Dayton has a strong presence of natural features, including the Miami River and Wegerzyn Gardens MetroPark, of which are classified under the Other zoning category.

Continual expansion of business zones along corridors is key for the success of the revitalization of Dayton's urban core.

Dayton's development density was calculated. The map to the left represents the percent of each grid section that is covered by building footprint. When comparing this density coverage to the zoning coverage above, a dense urban core and dense urban neighborhoods are evident.

As Dayton continues to develop and adapt to their revitalizing urban core, zoning and density will be the biggest tell-tales of the city's success.
A vintage bike, in tribute to Pee Wee Herman, on display at Cardinal Greenways’ 2019 Bike Fest.
During my time as a graduate assistant for the Delaware-Muncie Metropolitan Plan Commission, I worked extensively with Cardinal Greenway, Inc. A privately owned and operated trail, Cardinal Greenways is Indiana’s longest recreational trail totaling 62 miles. The Board of Directors adopts a strategic plan every four years that is used to raise awareness and raise funds. I was asked to lead the design of the 2020-2024 update. The design of the document tells the story of the Greenways while being quick to read, engaging, and exciting. This project challenged me to work with a large team and design for potential investors.

CARDINAL GREENWAYS
STRATEGIC PLAN, 2020-2024

Welcome to the Cardinal Greenways.

The Cardinal and White River Greenways, comprised of a continually expanding trail network, are a unique, metropolitan natural resource. The 62 miles of trails are an inspirational, trail network and they are an integral part of the area’s growing public health and environmental movement. The Board of Directors has adopted a strategic plan every four years that is used to raise awareness and raise funds. The strategic plan is a critical tool for attracting new users and unlocking new potential. The 2020-2024 update is the first of its kind and an opportunity to deepen our commitment to the Greenways.

At Cardinal Greenways, we are changing Indiana through neighborhood, community and greenway connections and we are doing so as one of the most privately owned and operated trail systems.

CORE VALUES & GOALS

Vision.
Cardinal Greenways will create a healthy, green community through the development of trails, parks and natural areas, providing opportunities for all to enjoy, learn and appreciate nature and natural resources. The organization will strive to become a national leader in environmental stewardship and sustainability.

Mission.
Cardinal Greenways is dedicated to enhancing the quality of life by developing and operating facilities and trails to actively non-motor people and communities.

Cardinal Greenway Construction Plan

Cardinal Greenways Strategic Plan

INTRODUCTION

CARDINAL GREENWAYS
STRATEGIC PLAN, 2020-2024
Along with designing the 2020-2024 Strategic Plan for Cardinal Greenways, Inc., I designed social media graphics for several of their annual events. BikeFest is a three-day summer event that focuses on bringing the community together around cycling, entertainment, and recreation. I infused this excitement into the following social media graphics.

### #BIKEFEST2019
**JULY 26-28 | MUNCIE, IN**

**BikeFest** is a three-day summer event that focuses on bringing the community together around cycling, entertainment, and recreation. I infused this excitement into the following social media graphics.

**Cardinal Summer**

Launching off the success of the 2019 Bike Fest social media graphics, a branding scheme was created for Cardinal Greenway’s 2020 summer event schedule. In order to visually link the 2020 summer events, I created an overarching branding scheme: Cardinal Summer. Bright colored gradients were utilized to signify the summer season and a bold green color was selected to visually reference Cardinal Greenways’ own brand scheme.

The Cardinal Summer logo to the right was created, establishing the foundational branding scheme for all summer events, including a 5K run and the annual Cardinal Great Greenway Tour (GGT) Ride. Utilizing these graphics, an entire social media marketing strategy was planned for. Unfortunately, the COVID-19 global pandemic forced all 2020 summer events to be canceled, and this branding scheme was never brought to light.
The equine industry is integral to Lexington’s rural heritage and 2017 Rural Land Management Plan.
A regular task of my Planning Tech position in Lexington was assembling and designing presentations for staff throughout the Division of Planning. My ability to tell the story of an event, organization or project in a fun, eye-catching manner was an invaluable asset, of which the Division advantageously utilized. Due to a successful public input event called On the Table 2017, staff was asked to coordinate a panel presentation for the 2018 National American Planning Association Conference in New Orleans, Louisiana on April 21st from 2:45pm-4pm. I was asked to design the presentation and the excerpted slides show how I was able to communicate the story and success of On the Table 2017.

Table 2017, staff was asked to coordinate a panel presentation for the 2018 National American Planning Association Conference in New Orleans, Louisiana on April 21st from 2:45pm-4pm. I was asked to design the presentation and the excerpted slides show how I was able to communicate the story and success of On the Table 2017.

While working for the City of Lexington, Kentucky as the Planning Tech in the Division of Planning, an update to The Rural Land Management Plan was conducted by the Greenspace Commission and Greenspace Planner. I was incorporated into the process by being given the responsibility of designing and overseeing the final edits of the plan. Throughout the process, I worked closely with the Greenspace Planner to ensure the vision of the plan was clearly communicated through its design. The excerpted three pages showcase my ability to design with beauty and functionality. This project challenged me to learn how to design a text-heavy document in an attractive, navigable manner so that it was approachable by the public, and useful for governing bodies and organizations to enact policy recommendations and preserve the historic quality and character of Lexington’s rural lands.

The full document can be found at https://www.lexingtonky.gov/plans-studies-and-surveys.
Sketches can help communicate the essence of a community, like in this gifted illustration from Lohren Deeg.
For a little bit of fun during my final semester of graduate classes at Ball State University, I took a course on charrette graphics. Taught by Lohren Deeg, ASAI, the foundational techniques and elements of charrette graphics were learned, practiced, and finessed. The following graphics are a selection of sketches and illustrations from the course’s exercises. Unfortunately the course’s schedule was cut short due to the COVID-19 global pandemic and the second half of the course work was conducted virtually at home.

The skills and techniques learned will serve as useful tools throughout my career. Speed, simplicity, and clear details are emphasized within these graphics, allowing complex plans and concepts to be translated into easy to understand graphics.