

GREATER HILL DISTRICT

MASTER PLAN

Energy, Climate Adaptation, and Utilities

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Objectives for Tonight

- Discuss what needs to be updated, expanded, added through the lens of these Infrastructure topics:
 - Energy
 - Climate Adaptation
 - Utilities



Neighborhood Plan Guide: <https://pittsburghpa.gov/dcp/neighborhood-planning-guide>

What's in the Neighborhood Plan Guide?

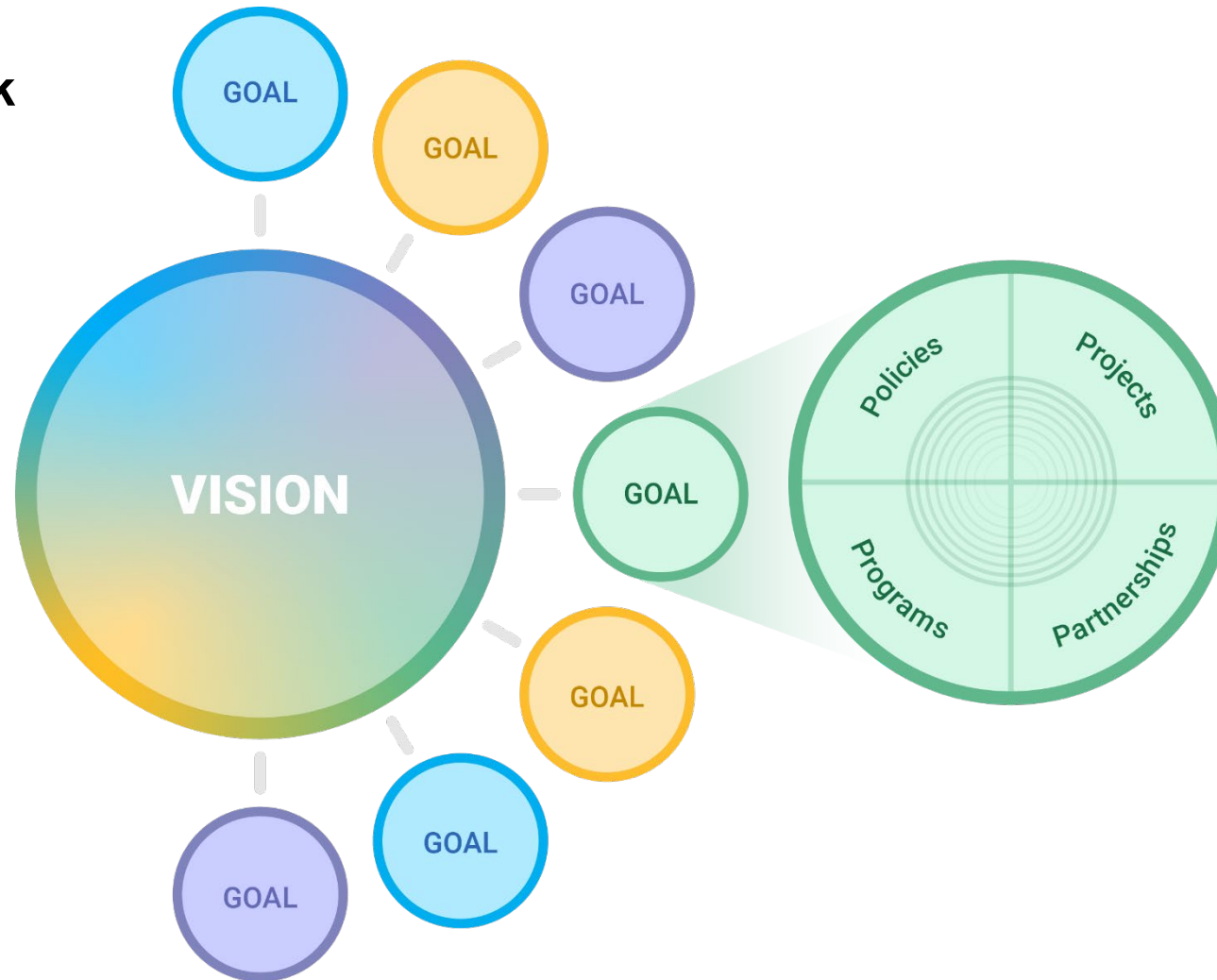
Adopted by the Planning Commission in March 2020

- Overview of the neighborhood planning program and how it fits into citywide efforts
- Required and optional topics for all neighborhood plans
- Planning process in five stages including implementation along with outcomes for each
- Framework for how plan content is organized
- Resources (many and growing): Example goals, indicators, and how they align to P4, EcoDistricts Protocol, and UN Sustainable Development Goals.
- Related guidance: Public Engagement Guide which mandates the creation of Public Engagement Plans for neighborhood plans.



What's in the Neighborhood Plan Guide?

Planning framework



What's in the Neighborhood Plan Guide?

Example implementation matrix

ID	Strategy	PPP	Detail	Timeline (Years)				Funding Source(s)	Implementers (bold = lead)
				0-2	3-5	5-10	Ongoing		
A.3.a	Zone Change	Project	Rezone Elm Street from Urban Industrial to Local Neighborhood Commercial to provide a mixed-use corridor within the neighborhood.	X				None needed	Department of City Planning , Community-Based Organization
A.2.a	Mentorship Program for District Youth	Program	Establish afterschool program within District Elementary School that allows seniors from the community to voluntarily mentor students in grades 6-12.	X				School District, Children's Foundation	District Afterschool Program , District Senior Center
A.1.a	Park Exercise Equipment	Project	Release Request for Solutions for vendors to provide exercise equipment for all ages and abilities. Select most popular options and install in the community park.	X				City Budget	City Dept. of Public Works , CommunityBased Organization
A.2.b	Neighborhood Walks for a Purpose	Program	Create program with residents, businesses and the university that organizes weekly walking tours of the neighborhood with each week focusing on a different issue to address, activity, or topic of interest of faculty.		X			CommunityBased Organization Operating Funds	Community-Based Organization , Business Association, University.
A.1.b	Accessibility Partnerships	Partnership	Create partnerships to ensure that the public right of way is designed and maintained for all users.		X			None needed	District Accessibility Task Force , Transportation Department, and Community-Based Organization



Topics for the Infrastructure Action Team

This chapter includes all the non-transportation systems that nourish and maintain a district including how stormwater is handled, needs for open spaces, the energy systems that serve all buildings, and how waste is reduced and reused. There are many opportunities for these projects to meet multiple objectives (e.g., open spaces that also manage stormwater).



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Topics for the Infrastructure Action Team

Required Topics



Stormwater



Parks and Open
Space



Energy and Utilities



Waste and Recycling



Tree Canopy and
Habitat Restoration



Climate Adaption

Optional Topics



Urban Agriculture



Digital Network



Air Quality



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Required Topics

Energy systems – what is it?

energy system means all components related to the production, conversion, delivery, and use of energy.

Sustainable energy systems should deliver on three dimensions:

- (1) providing safe, secure, and reliable energy while delivering access to energy consumers,
- (2) supplying energy at affordable prices, and
- (3) assuring sustainable development.

Why it is important in a neighborhood plan?

The Hill District is located near 2 District plants and should evaluate how this resource can benefit its residents rather than investing in individual system in every buildings.

Additionally, Pittsburgh climate action plan set a goal to reduce emissions by 50% from 2003 amounts. Through efforts to reduce line loss and modernizing energy systems, this goal can become a reality.

Setting higher energy goals will directly impact residents by potentially reducing their energy use and therefore lower their utility payment.

Required Topics

Energy systems – Examples from the NPG

Example Goals	Example Indicators	SDGs	EcoDistricts	p4
Energy System Planning				
Building energy use intensity is reduced through green building best practices.	- Percentage of buildings meeting 2030 District energy efficiency goals. - Percentage of residents spending greater than 3.5% of their gross income on energy costs. - Number of buildings that have met the standards of 2030 District, LEED, WELL, Energy Star, Living Building, Net Zero, or other green building certifications.	 		
Renewable power and thermal energy are produced on-site.	- Percentage of annual electric supply generated from neighborhood-based renewable sources. - Percentage of buildings connected to a district thermal energy or co-generation system. - Number of renewable energy generating systems.	 		

Required Topics

Utilities – What are they?

How to create a coordinated utility plan for planned development, utility upgrades, lead line replacements and streamlining disruption in the right-of-way.

Why it is important in the neighborhood plan?

This will create roadmap for activities, identify any policies that may need to change at the state level or advocated for with the PUC for water and energy.

Identifying projects early allow for cross department coordination to occur such as adding new tree pits where gas line replacements are happening.

Ability to leverage investments for capital projects.



Required Topics

Utilities:

Example Goals	Example Indicators	SDGs	EcoDistricts	p4
<i>Utility improvement needs are identified, prioritized, and included in a shared timeline.</i>	• <i>Completed utility strategy/plan.</i> • <i>Number of times streets have been opened within the plan period.</i> • <i>Number of infrastructure projects where multiple stakeholders were able to integrate improvements into a single operation.</i>			
<i>Utility providers have contacts at all relevant departments and are part of ongoing and project-based coordination initiatives.</i>	• <i>Presence of utilities at regular and project-based coordination meetings.</i> • <i>Confirmation that both public agencies and utilities have updated contacts.</i>			





Energy and Utilities

- Educate Hill District organizations and developers about C-PACE and how this can be integrated into commercial and multi-family projects.
 - Work with the Urban Redevelopment Authority and other agencies to investitive energy efficiency investment in rental properties.
 - Ensure that all new affordable tax credit projects are adhering to design standards (Green Enterprise Communities, Passive House, LEED, etc.
- Establish programs and services that provide information, resources, and potential funding opportunities that help to reduce energy burden and decarbonize the residential parts of the neighborhood.
- Allocate vacant land or environmentally compromised land for future energy systems. Microgrids, EV charging stations or Carbon sequestration zones.

More on the Greenprint

The Greenprint has three core goals:

- Establish a healthy place with urban development that works in concert with the natural ecology;
- Identify projects and opportunities for leadership and innovation in the local economy; and
- Reframe the identity of the Hill District as "A Village in the Woods" - an example of urban beauty.

The Greenprint defines three distinct regions:

- The Woods, the Hill's outer edge, wraps the community with dense vegetation.
- The Village is a collection of diverse neighborhoods at the geographic center of the Hill.
- Conveyance is the system that moves people, water, and wildlife through the Hill, highlighting historic stream paths.



Woods Zone



Village Zone



Conveyance Zone



Greenprint: Coal Seam Trail



Trail Enmeshed

- An interpretative trail is added along the edge of the Coal Seam. At clearing points in the vegetation, this could provide space for terraces and lookout points.
- Additional vegetation is added to reinforce the coal seam edge and provides a natural trail



Greenprint: Green Enlarged



Greenprint II Projects Map

Project A

Village Street Conveyance and Public Space

Project B

Coal Seam Park and Stairs

Project C

Cliffside Park

Project D

Memory Lane Overlook

Project E

Sugartop Watergarden and Overlook

Project F

Martin Luther King Field and Wetlands

Project G

Addison Terrace Gardens and Trails

Project H

Coal Seam Trail

Project I

Herron Avenue Run



Greenprint: Coal Seam Trail



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Energy and Utilities

- Amend Zoning Code to require projects valued at \$1 million or more to conduct an energy study that identifies feasible solutions for more efficient energy, water, and other resource use.
- Create a table that establishes a policy basis for expectations for sustainability goals for development at different scales. Needs to align with Zoning and Building Code categories.
- For all new infrastructure, assume that new utility lines will be buried regardless of the street on which they travel. If utilities cannot be buried, provide a study that shows why this can't be achieved.

Required Topics

Climate Adaptation– What is it?

How can we ensure that the neighborhood is best prepared to manage and adapt to the impacts of a changing climate

Why it is important in the neighborhood plan?

Climate adaptation will help establish more comprehensive approach addressing the impacts of climate change such as increased rainfall, worsening storms, and additional landslides.

This will create roadmap for activities, identify any policies that may need to change in order to prioritize climate adaptation and resilience.

Ability to leverage investments for capital projects.





Climate Adaptation

- Establish more comprehensive approach to hillsides and undermined sites including stabilization, restoration, invasive species management, building redevelopment, etc.
- Public-private partnership between City, institutions, and non-profits to stabilize hillsides and implement ideas generated in previous studies.
 - Greenprint review and inclusion of examples
- Amend Zoning Code to put new limits on redevelopment on areas that are steeply sloped and landslide prone, or undermined. Add restoration requirements for hillside disturbances. Add landscaping requirements the ensure habitat restoration occurs, allow for different types of habitat.

Where can you find us?



Pittsburgh City Planning



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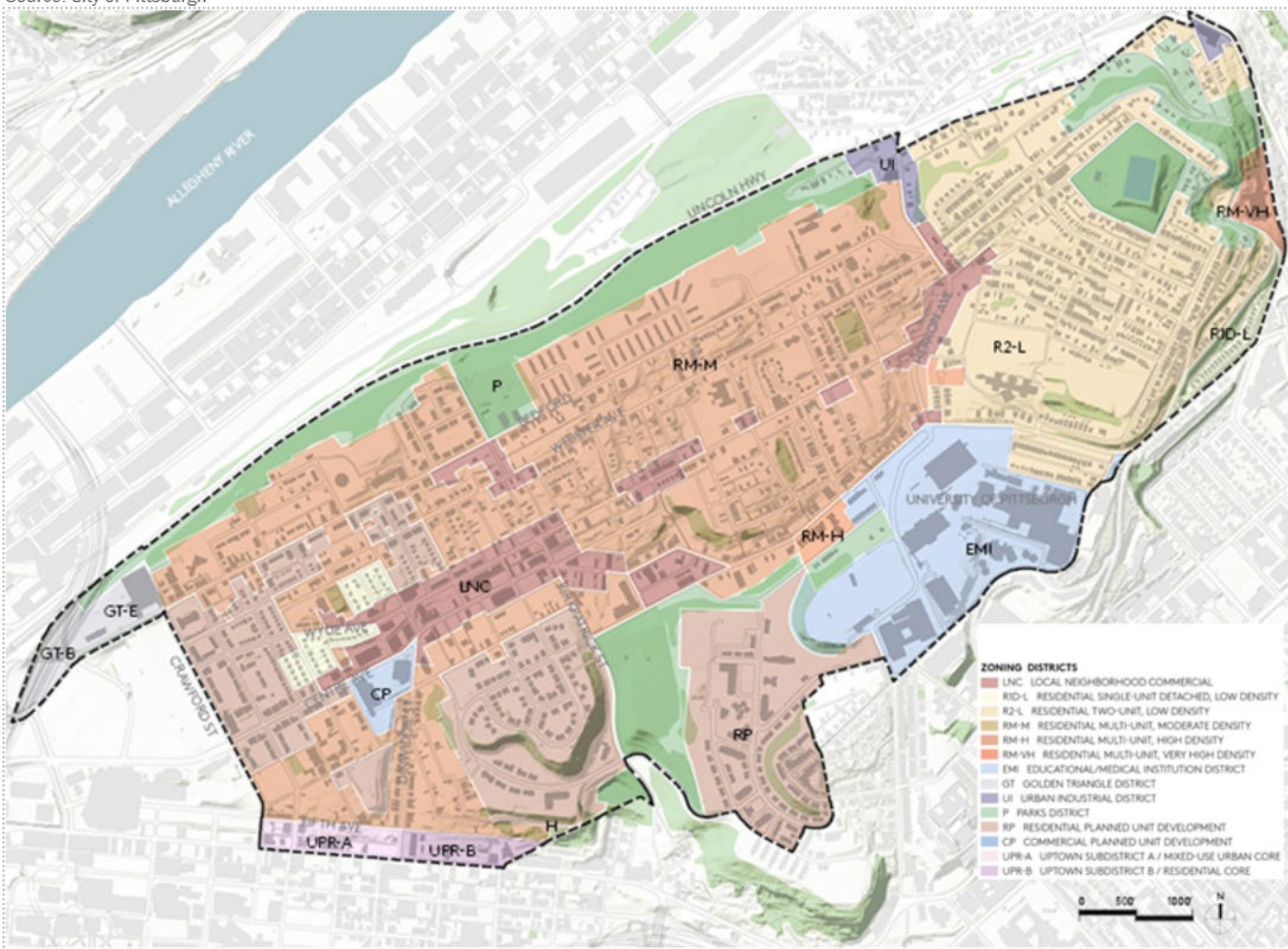
@planpgh

Online at <https://engage.pittsburghpa.gov/ghdmp>

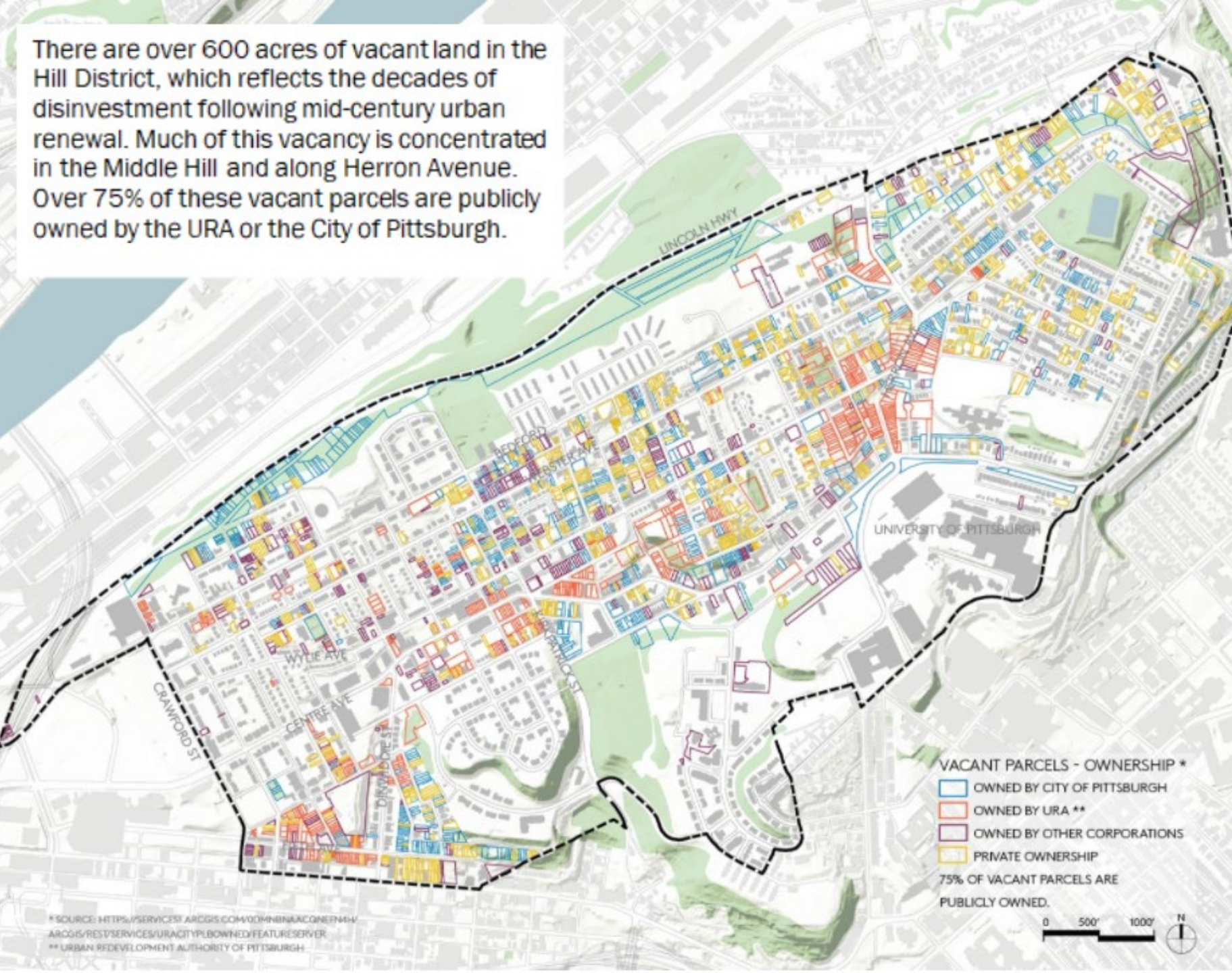


Exhibit 64. Zoning Districts

Source: City of Pittsburgh



There are over 600 acres of vacant land in the Hill District, which reflects the decades of disinvestment following mid-century urban renewal. Much of this vacancy is concentrated in the Middle Hill and along Herron Avenue. Over 75% of these vacant parcels are publicly owned by the URA or the City of Pittsburgh.



Tree Canopy



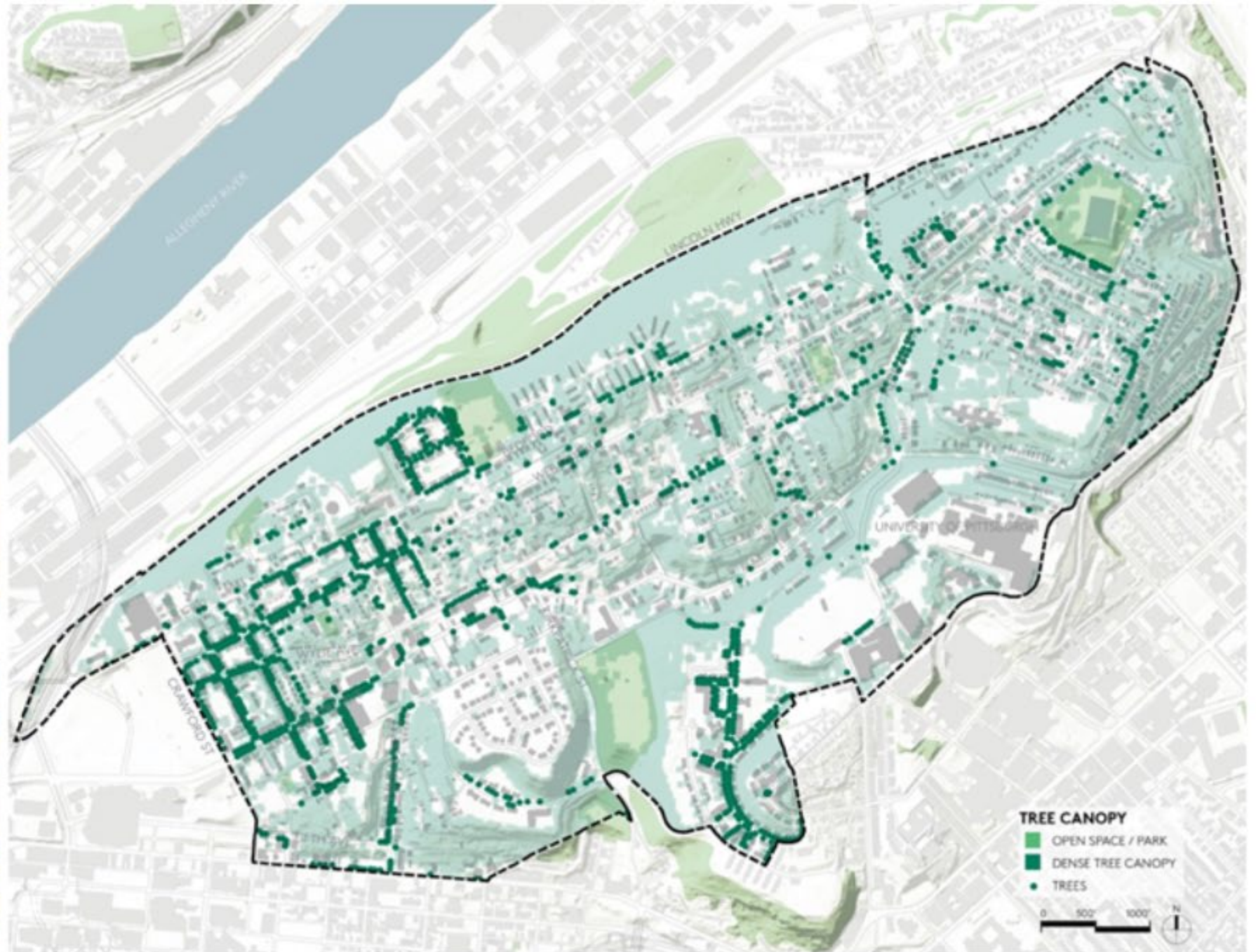
Street trees in newer redevelopments

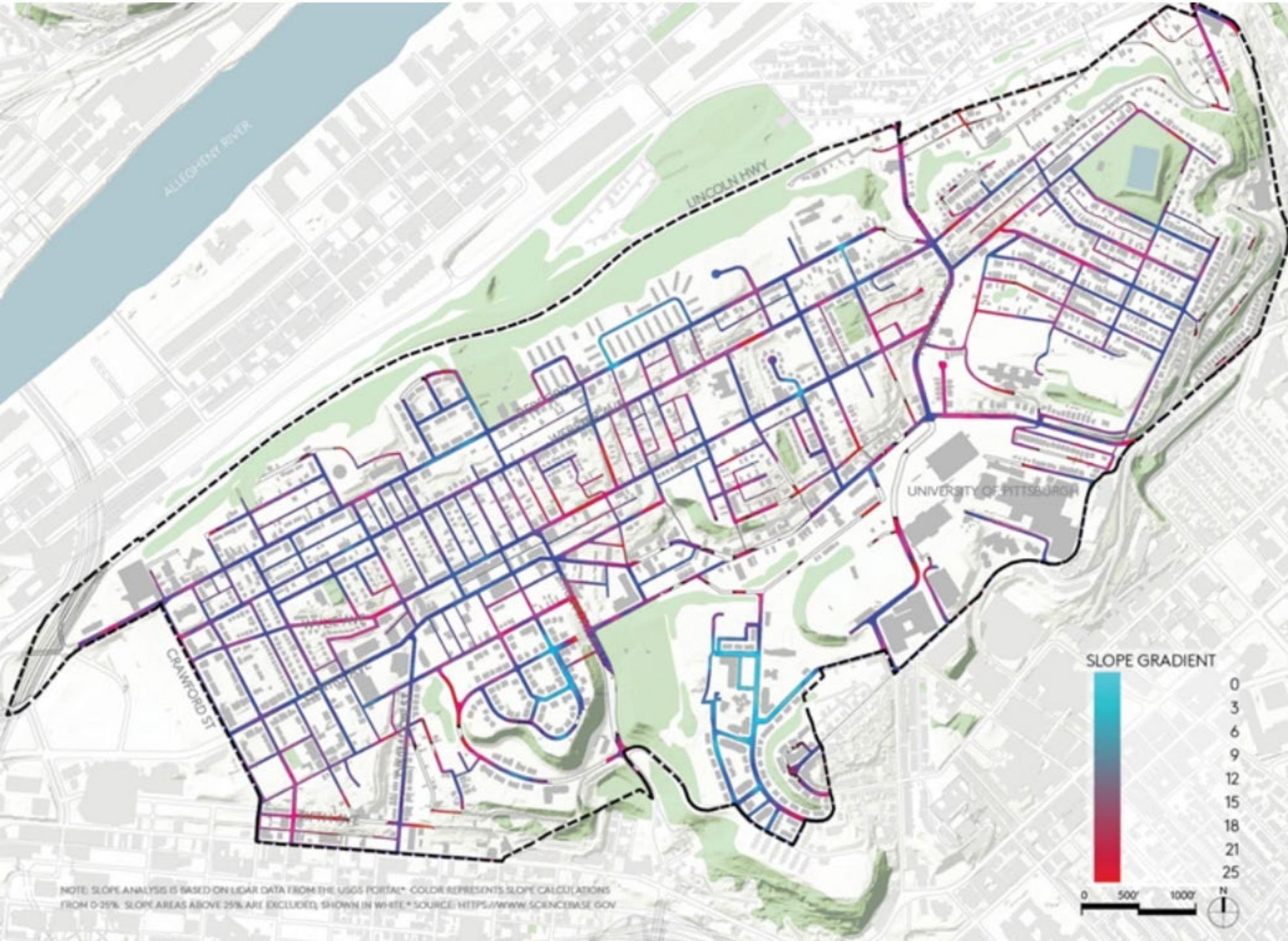


Dense tree canopy on properties



Commercial districts without shade







The study area has a diverse housing stock that reflects the historical evolution of the neighborhood. Each of the following architectural types has been analyzed for characteristics by construction era, historical role, public realm and site design.

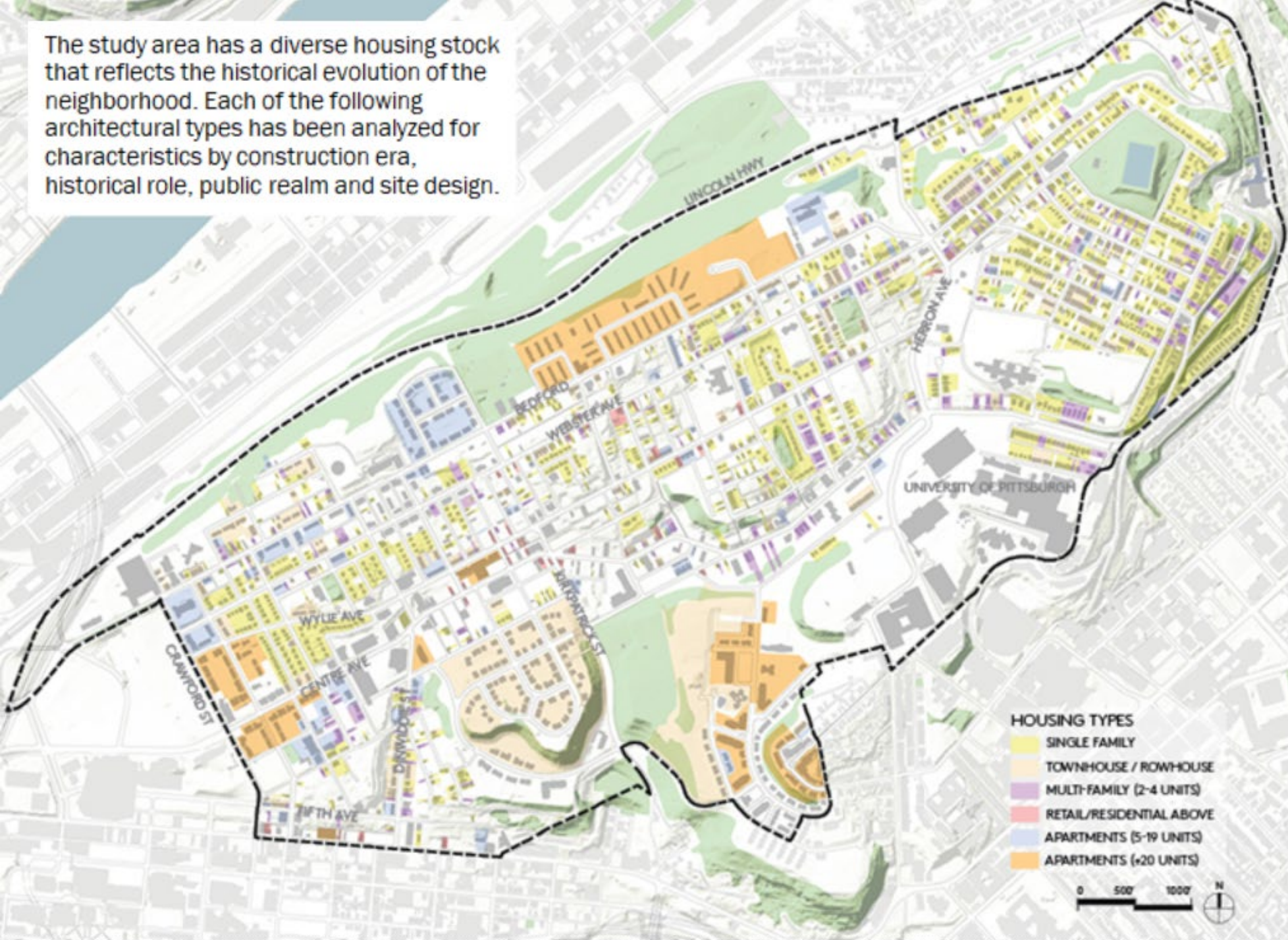


Exhibit 18. Hill District Affordable Housing Stock

Source: National Housing Preservation Database

