

GIS at a Glance

Presented July 21, 2023

AGENCY OVERVIEW

Mission: DHCD leads City efforts to promote thriving neighborhoods through community revitalization investments; supporting homeowners; funding critical programs and neighborhood stakeholders; creating and preserving affordable housing; and ensuring safe conditions through code enforcement.

Framework for Community Development

RESEARCH & ANALYTICS TEAM

Kimberly Rubens - Chief of Policy & Research
Henry Waldron - Director of Research & Analytics
GIS Analyst - TBD
Research Analyst - TBD

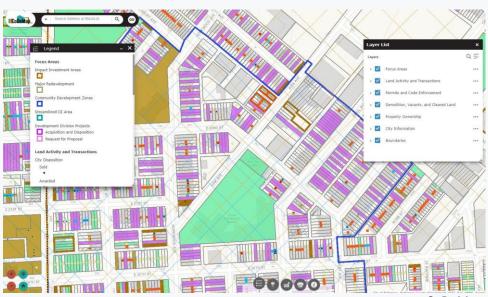
GIS USAGE

Common Tools:

- ArcMap Still holding on to 10.7
- ArcGIS Pro Getting the hang of it
- ArcGIS Online Apps galore
- Microsoft SQL Server The backbone of all data work
- Power BI Data Viz (can embed in ESRI apps)

Our Products (all publicly available):

- CoDeMap
- Investment Map
- Buy Into Bmore
- <u>Impact Investment Area Project Tracker</u>
- Housing Market Typology (2023 Update)
- App Gallery



CoDeMap

GIS USAGE

Decision Making:

- 1. Property-Level Planning
- Reviewed and assigned strategies to all vacant buildings (VBNs) in Impact Investment Areas Zone 1s and Community Development Zones (3,200+ properties)
- Assembled team from DHCD and Dept. of Planning (Neighborhood Development Officers, Neighborhood Planners, Lawyers, Development team, etc.)
- Will continue to track the outcomes of the assigned strategies

2. Using AI to Identify Roof Problems

- Partnered with Carnegie Mellon's Data Science for Social Good program in 2022
- Used aerial imagery to automatically detect roofs with highest likelihood of severe issues
- Utilized data from 2018 project in which YouthWorks interns manually identified roof problems using an in-house GIS app
- Generated list of 1,000 properties which helped identify dozens of properties for emergency demolition and stabilization
- Plan to re-run model on annual basis when new imagery is released
- Roof data available on CoDeMap













The degradation of a vacant building from 2005 to 2016

GIS USAGE

Challenges:

- Aging data infrastructure
- Keeping up with latest tools
- Maintaining and documenting datasets/boundary layers



QUESTIONS