



— BALTIMORE CITY —  
DEPARTMENT OF HOUSING &  
COMMUNITY DEVELOPMENT

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# 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](#)
- [Impact Investment Area Project Tracker](#)
- [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



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# QUESTIONS