

October 18, 2019

Decoding Zoning

Applying Data Science to Transform Land Use Research and Practice



Solomon Greene, Senior Fellow
Lydia Lo, Research Analyst

Why Do We Need Better Zoning Data?

Current State of Zoning Data

Approaches

- Surveys
- Manual coding
- Proxies

Drawbacks

- Expensive
- Incomplete
- Difficult to update
- Low reliability

Better Zoning Data Can Improve...

Research

- Compare across places and over time
- Identify causal pathways
- Assess local innovation and reforms

Practice

- Understand what works and where
- Support regional collaboration
- Support engagement and participation

Outcomes

- Smarter, more inclusive, and more effective land use planning and regulation

Improving Zoning Data in the Greater Washington Region

- Experience with Regional Housing Framework
- Wide variation across states and jurisdictions
- Strong regional collaboration and leadership across broad range of issues, from housing to climate



Decoding Zoning

Our Proposal

- Identify local and regional needs, priorities, use cases and concerns
- Review codes and develop a standard framework
- Automate the collection and classification of codes using state-of-the-art data science
- Iterate with key stakeholders to ensure accuracy and utility
- Produce regional dataset and data tool
- Expand to other regions

NSF Smart and Connected Communities Goal:

*“To accelerate the creation of the scientific ... foundations that will **enable smart and connected communities** to bring about new levels of economic opportunity and growth, safety and security, health and wellness, and overall quality of life.”*

– National Science Foundation Smart and Connected Communities Program Description

NSF-SCC Planning Grant

- Three phases

1. Identify needs and use cases
2. Develop standard framework
3. Produce technical specs

- Two advisory committees

1. Community Advisory Committee
2. Technical Advisory Committee



MWCOG's Role

- Help build the use case
- Identify pilot locations
- Provide review and guidance

Urban Institute Resources

- How Housing Matters: www.urban.org/zoning
- Urban Greater DC: www.greaterdc.urban.org



Contact Us

- Solomon Greene: sgreene@urban.org
- Lydia Lo: llo@urban.org
- Graham MacDonald: gmacdonald@urban.org