

Modeling Urban Infill and Redevelopment using Local and Nationally-available data

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**Land Use Workgroup
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Infill

- Infill = Development that occurs on underutilized parcels in already urbanized areas

THE CAPITOL RIVERFRONT AT BUILD-OUT

CAPITOL RIVERFRONT



Image courtesy of Interface Multimedia

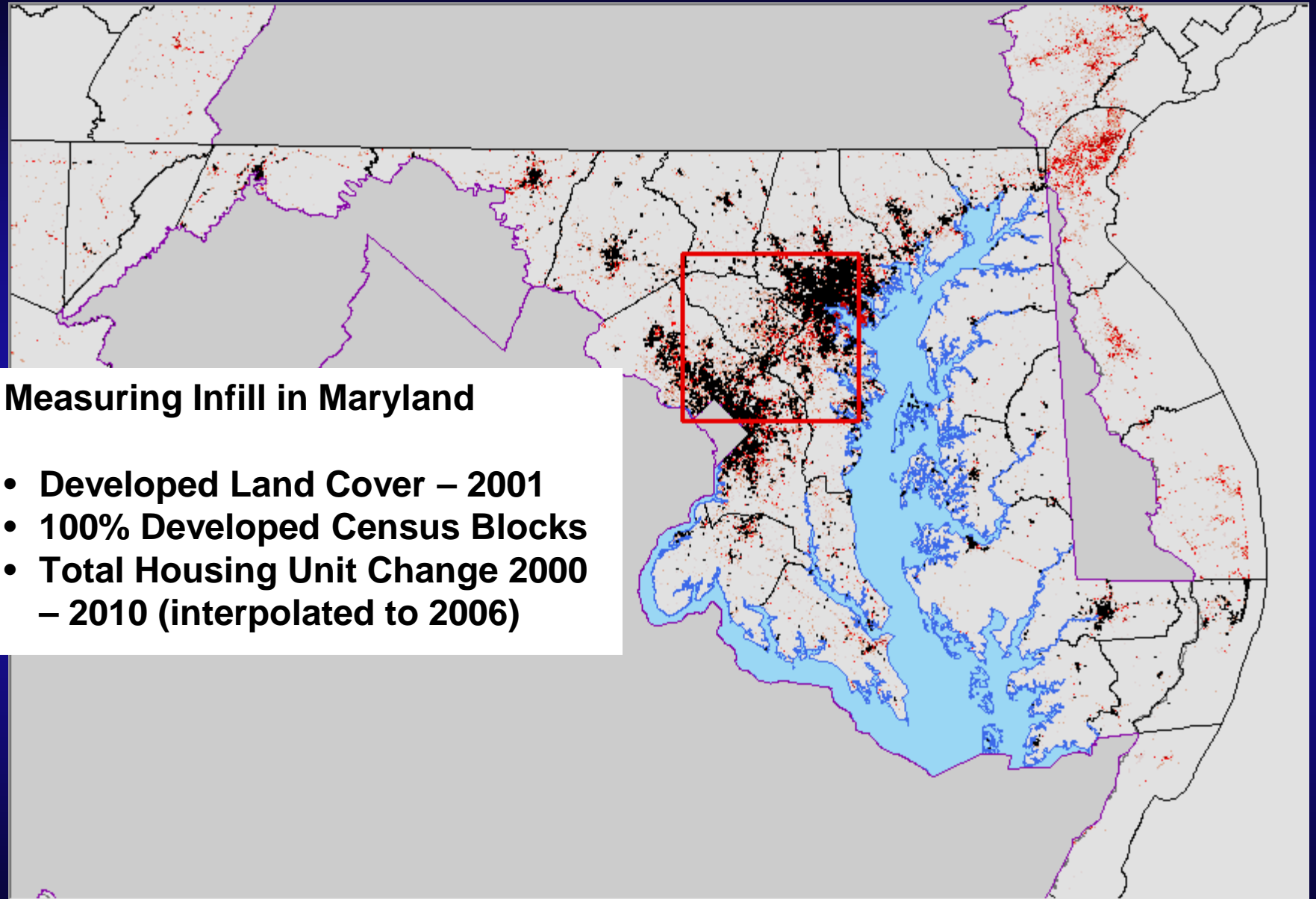


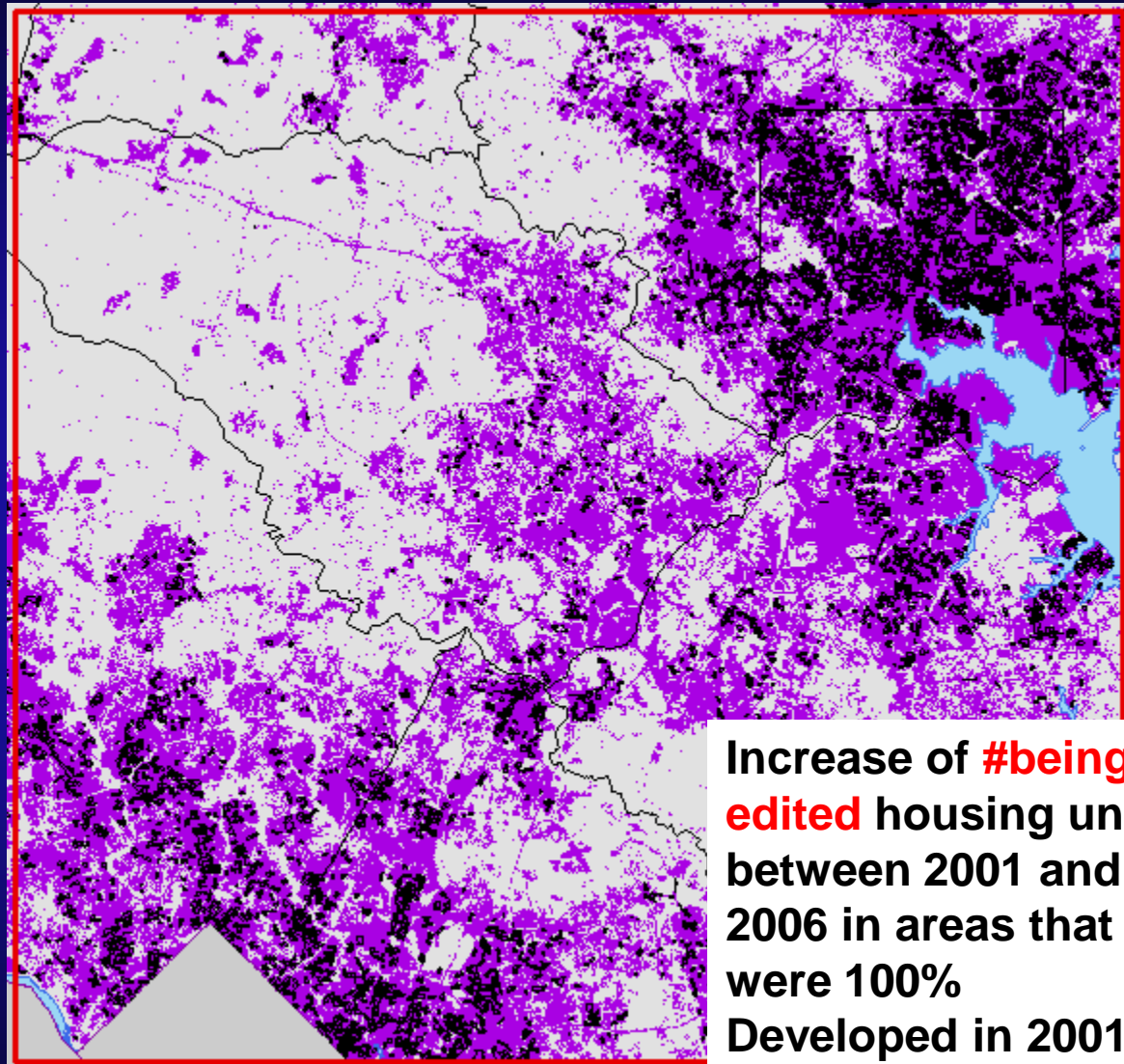
Measuring Infill

- Determine the amount and location of development on vacant and/or previously developed land in **urbanized areas**
- This process requires *local data*
- Not practical on a regional scale due to limited data availability

Defining the Urban Area

- Researchers have defined the urban area based on a set threshold of development intensity as well as density
- Census Urban Areas are currently based solely on population density
- Lack of standard definition for Urban Area in the planning literature



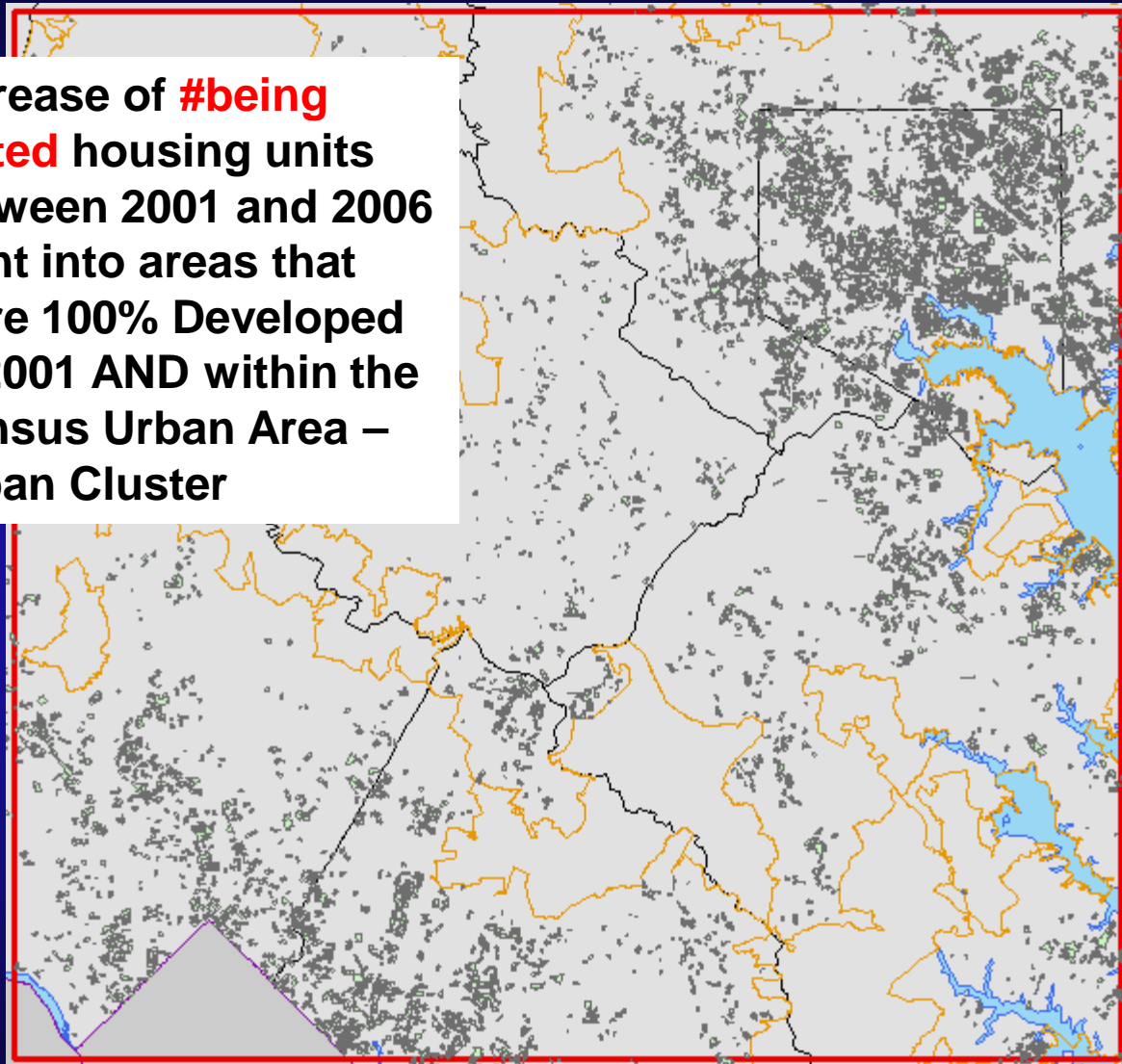




**100 % Developed Blocks
that fall within the Census
Urban Area/Cluster**

This map displays the Chesapeake Bay region, including parts of Maryland, Virginia, and Delaware. The map is color-coded to show land use: cyan blocks represent 100% developed areas within census urban areas or clusters, while orange blocks represent other developed areas. The map also shows the bay's water bodies in light blue, major roads in black, and county or state boundaries in purple. A text box in the lower-left quadrant provides the legend for the cyan-colored blocks.

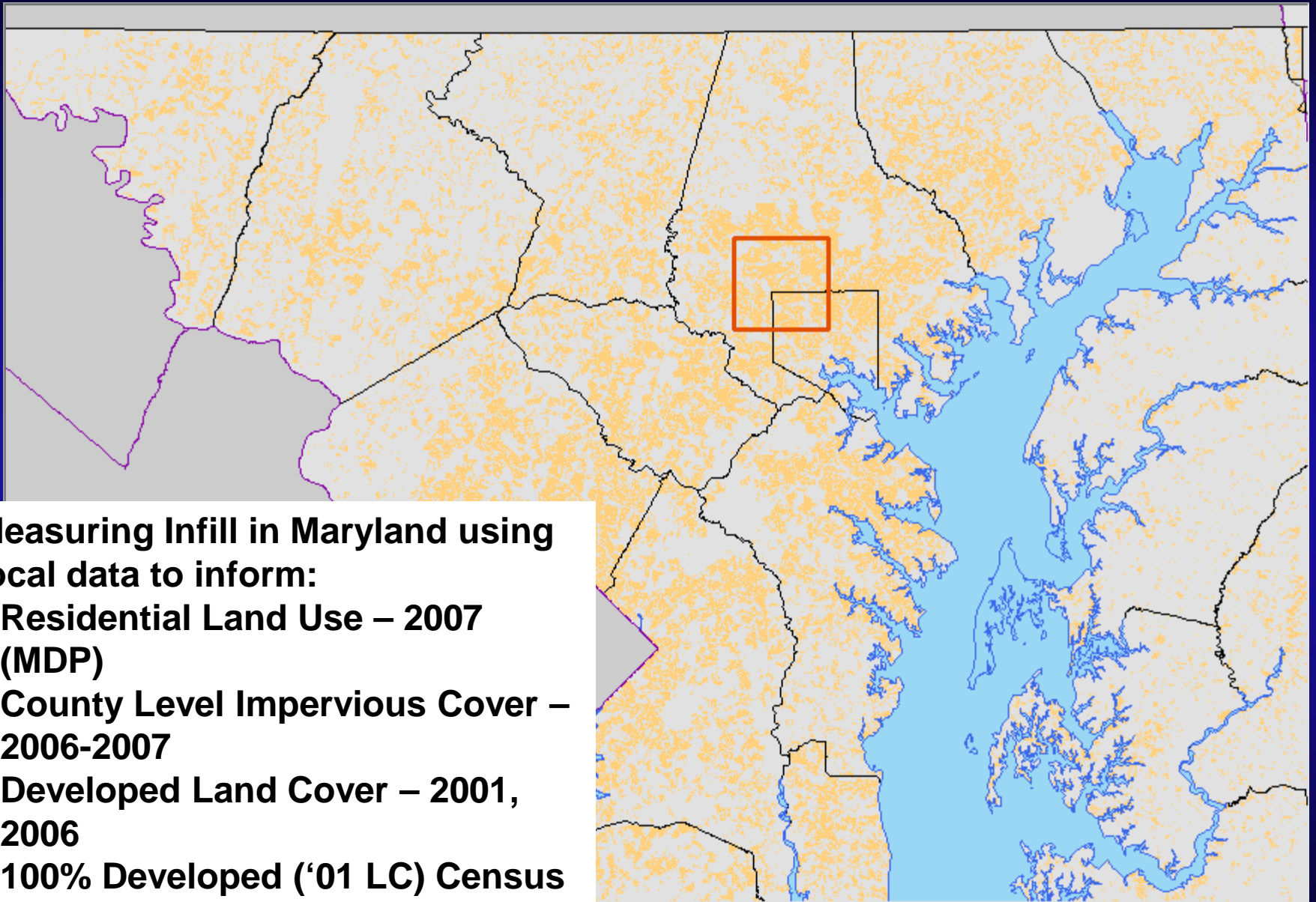
Increase of **#being
edited** housing units
between 2001 and 2006
went into areas that
were 100% Developed
in 2001 AND within the
Census Urban Area –
Urban Cluster



Measuring Infill as a function housing change not visible in land cover change 2000-2006

| | |
|--|---------|
| Census Block Level Total Housing Units | |
| Net Housing Change | 233,339 |
| Net Housing Units | 140,003 |
| Total Population | 12,875 |
| Census | |
| Missed | 1,100 |
| Missed | 97,016 |
| Conservative Pct Infill | 32% |
| Conservative Pct Infill in 100% Urban Area | 31% |

Numbers being
updated as census
relationship process is
being amended....

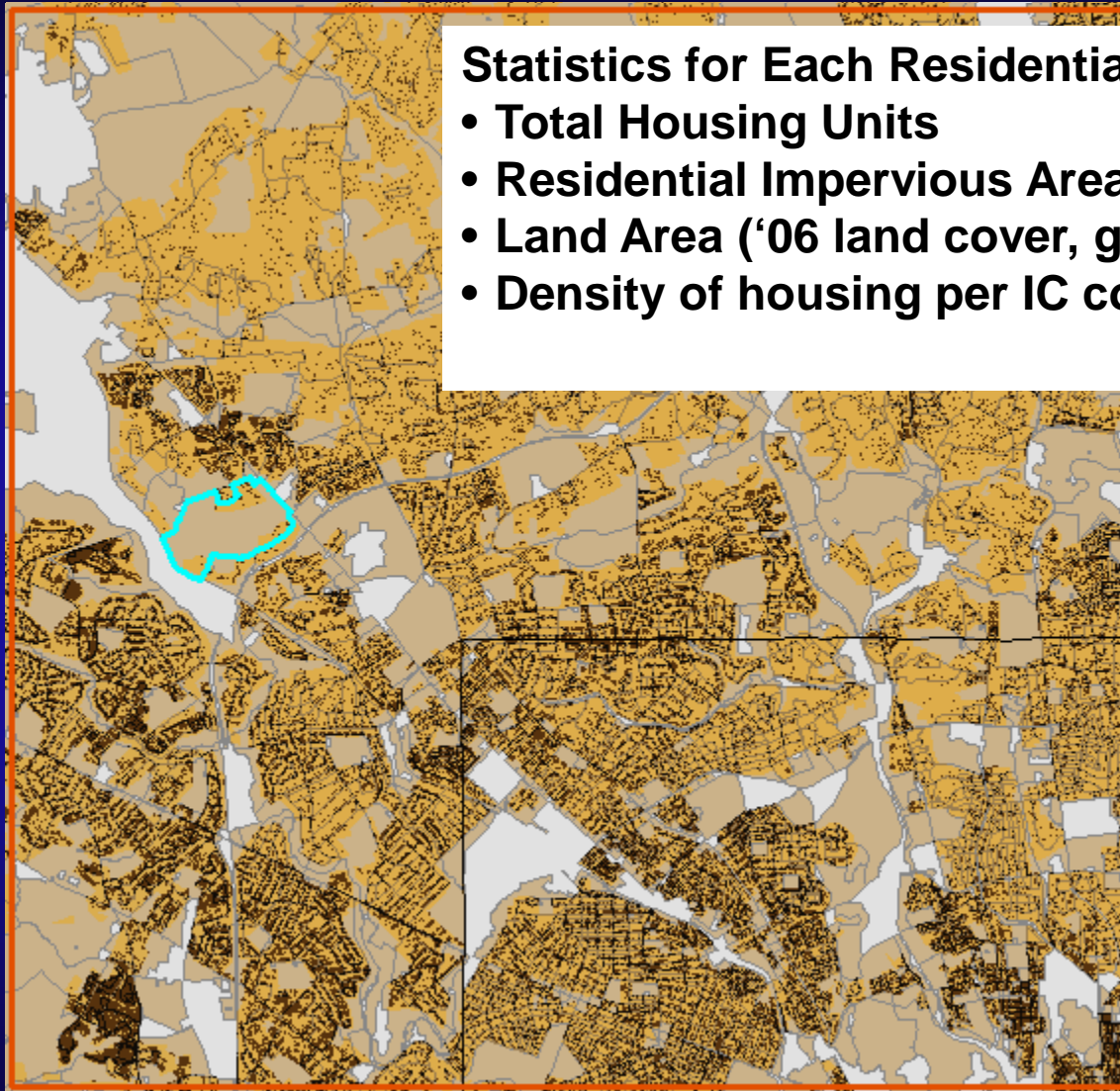


Measuring Infill in Maryland using local data to inform:

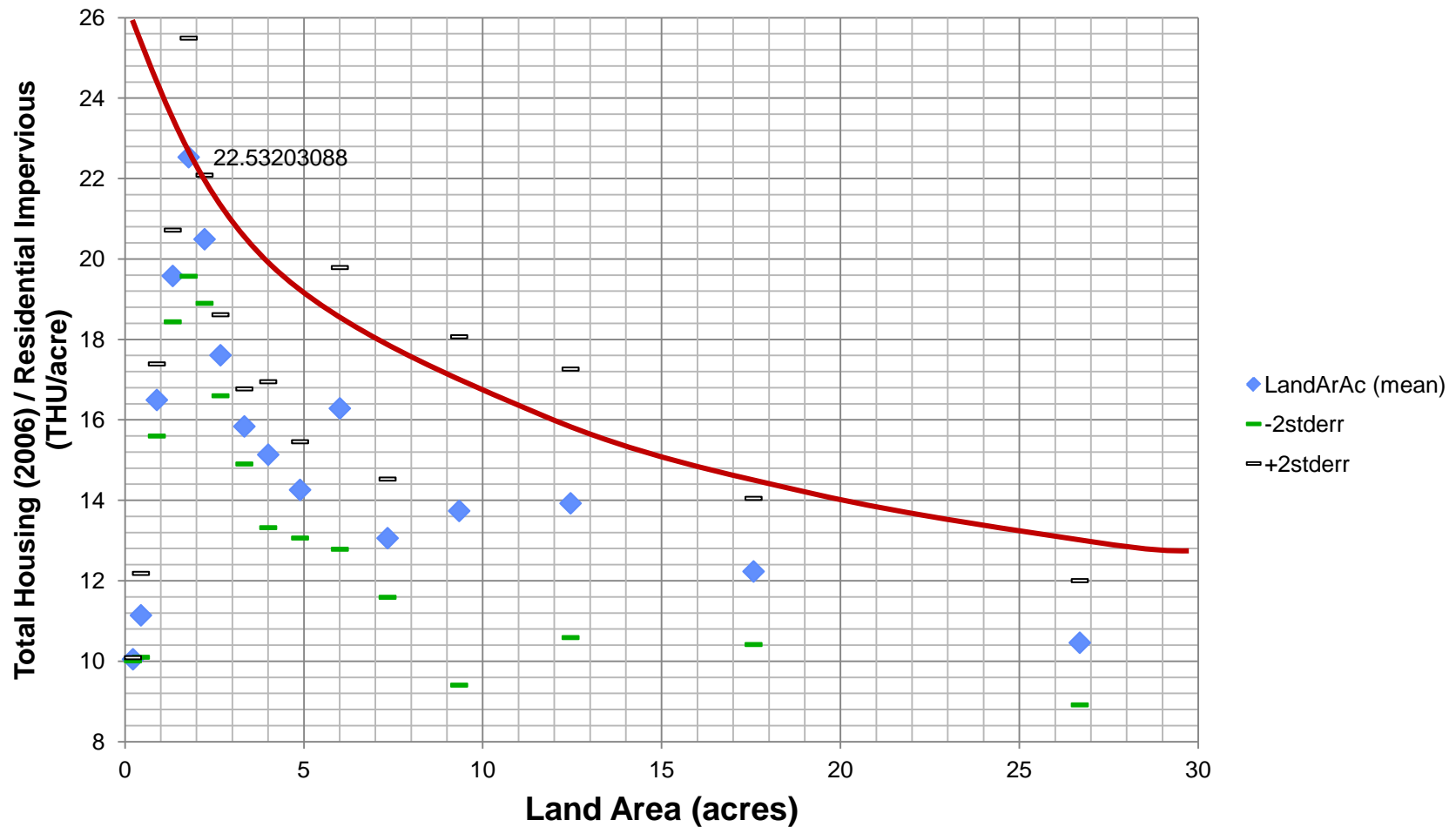
- **Residential Land Use – 2007 (MDP)**
- **County Level Impervious Cover – 2006-2007**
- **Developed Land Cover – 2001, 2006**
- **100% Developed ('01 LC) Census Blocks**

Statistics for Each Residential Block:

- **Total Housing Units**
- **Residential Impervious Area (local data) – ac**
- **Land Area ('06 land cover, geometry tools)**
- **Density of housing per IC cover (THU/ICac)**



Determining the Relationship between housing density and land area – DRAFT



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