



UNITED STATES
**CLIMATE
ALLIANCE**

The Role of Land Use Planning in Climate Action

Mark Teschauer

2026 Delaware RASCL Summit

March 5, 2026

About Us

The U.S. Climate Alliance is a bipartisan coalition of 24 governors securing America's net-zero future by advancing state-led, high-impact climate action.



An aerial photograph of a city street, showing a mix of urban buildings, green trees, and a central park area with a circular plaza. The image is used as a background for the title text.

Climate and Land Use Planning:

A Policy Guide for U.S. States and Territories

Land use planning is a powerful tool that can help communities meet emissions reduction targets and become more resilient.

Being strategic about how we build and manage our lands can make realizing our climate goals easier and provide opportunities to address other policy challenges.

Collaboration and coordination are essential in realizing more climate-aligned land use outcomes.

The Climate Impact of Your Neighborhood, Mapped

By Nadja Popovich, Mira Rojanasakul and Brad Plumer Dec. 13, 2022

What Goes Into a Household's Emissions Footprint?

TRANSPORTATION

Gasoline, motor oil, air travel, vehicle manufacturing, other transportation

HOUSING

Home electricity, natural gas, fuel oil, housing construction and maintenance, other

SERVICES

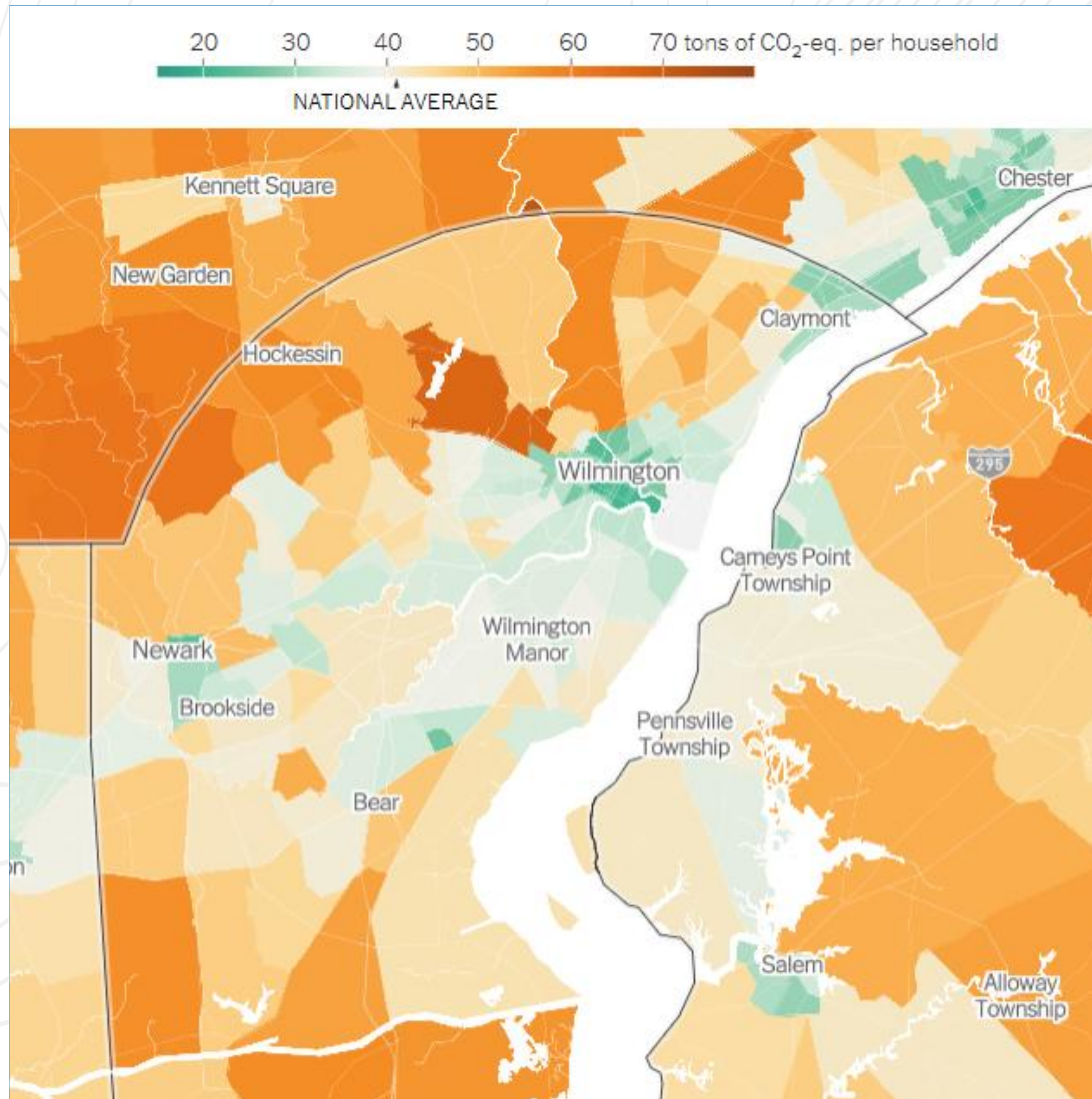
Healthcare, education, other services (emissions from electricity, other sources)

FOOD

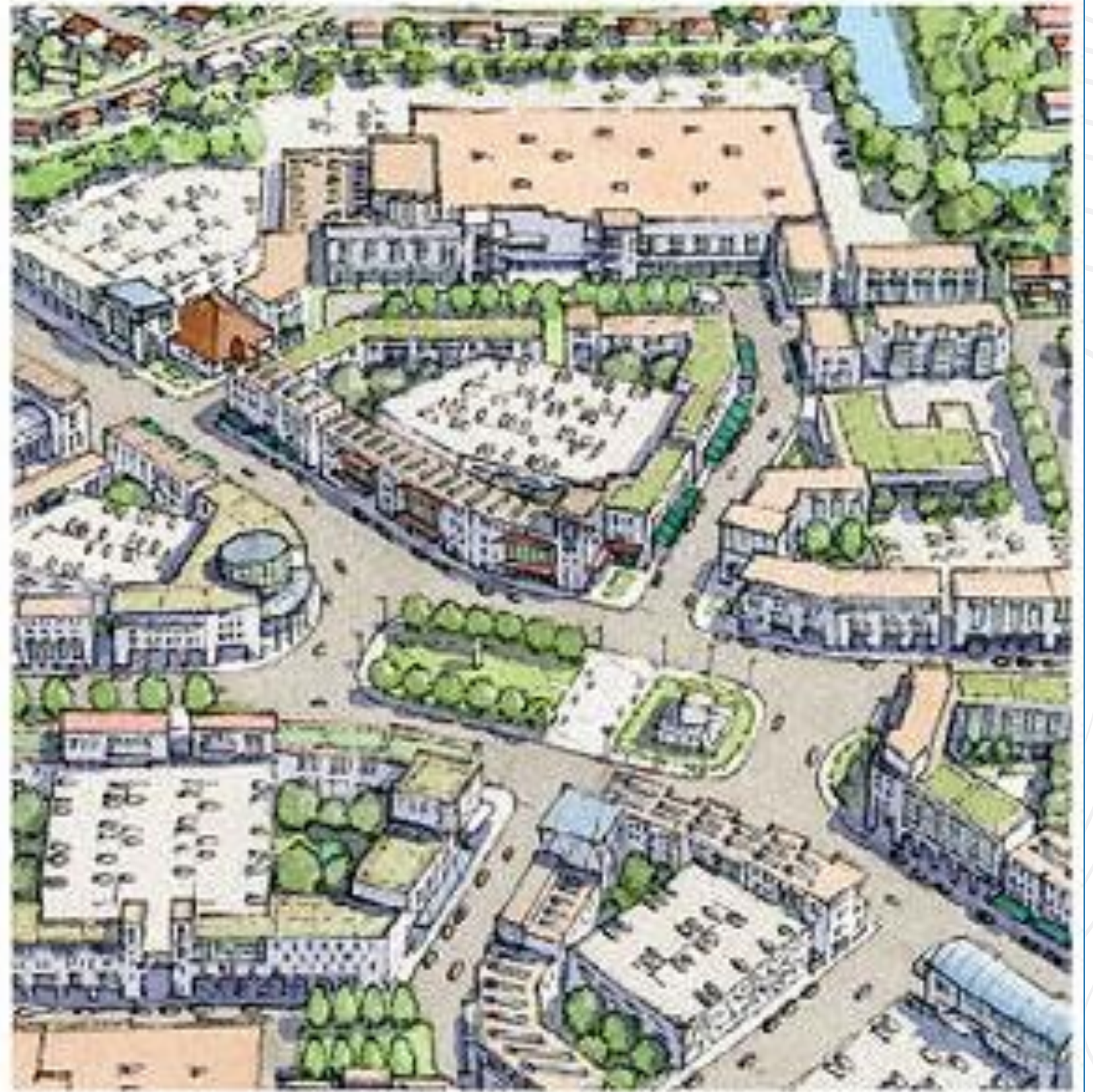
Meat, dairy, cereals, fruits, vegetables, other food, dining out (production, other sources)

GOODS

Apparel, furniture, appliances, other goods (manufacturing, maintenance, other sources)



Source: <https://www.nytimes.com/interactive/2022/12/13/climate/climate-footprint-map-neighborhood.html>



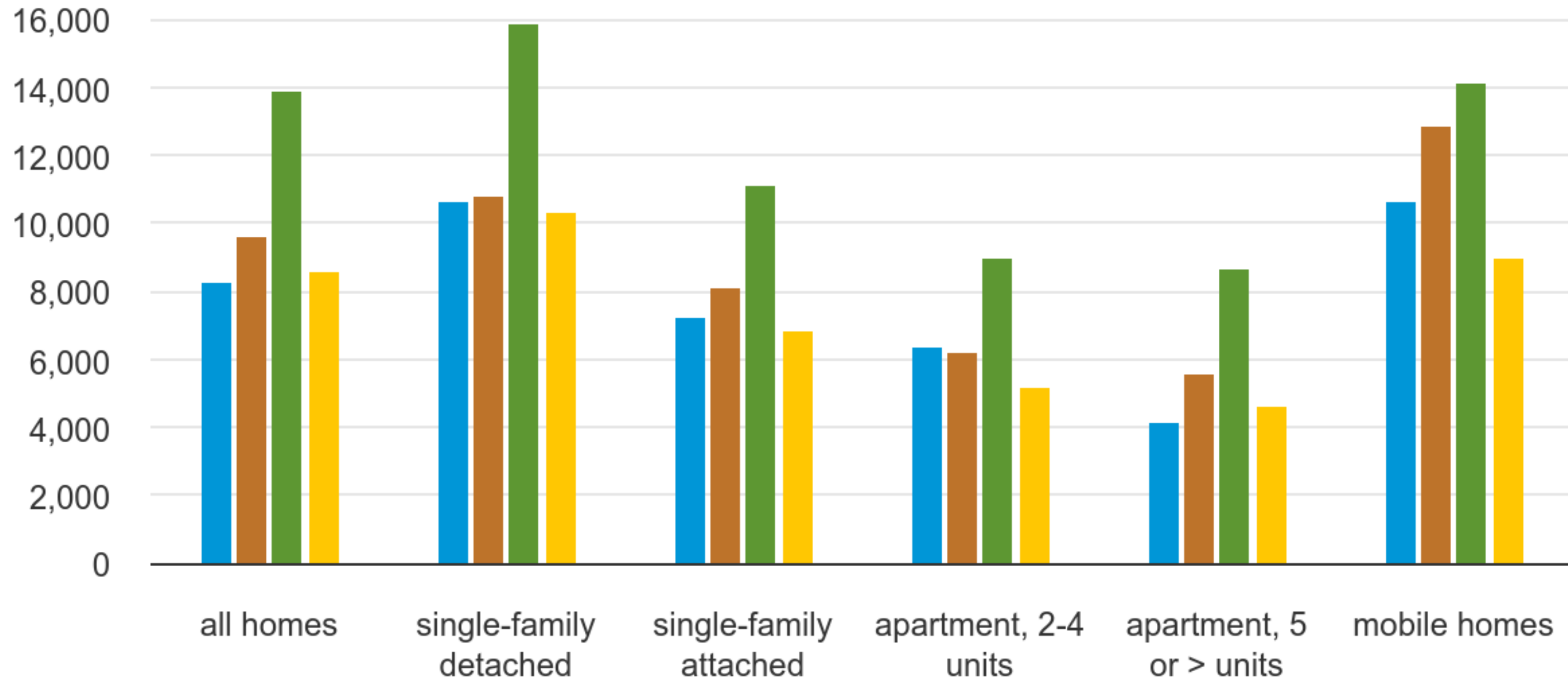
Source: <https://www.terrain.org/articles/28/tachieva.htm>



Source: Downtown Dover Partnership

Average annual electricity consumption by type of home and census region, 2015

kilowatthours



● Northeast ● Midwest ● South ● West



Data source: U.S. Energy Information Administration, 2015 Residential Energy Consumption Survey

Source: <https://www.eia.gov/energyexplained/use-of-energy/electricity-use-in-homes.php>



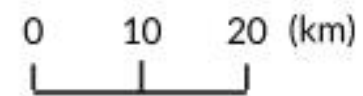
Source: <https://americanrockproducts.com/insights/exploring-the-versatility-of-concrete-in-residential-construction/>



Source: <https://www.denverwater.org/tap/digging-past-new-buses-start-rolling>

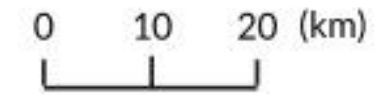
Atlanta and Barcelona have similar populations and wealth levels but very different carbon productivities

ATLANTA'S BUILT-UP AREA



POPULATION: **2.5 MILLION**
URBAN AREA: **4,280 KM²**
TRANSPORT
CARBON EMISSIONS: **7.5**
TONNES CO₂ PER PERSON
(PUBLIC + PRIVATE
TRANSPORT)

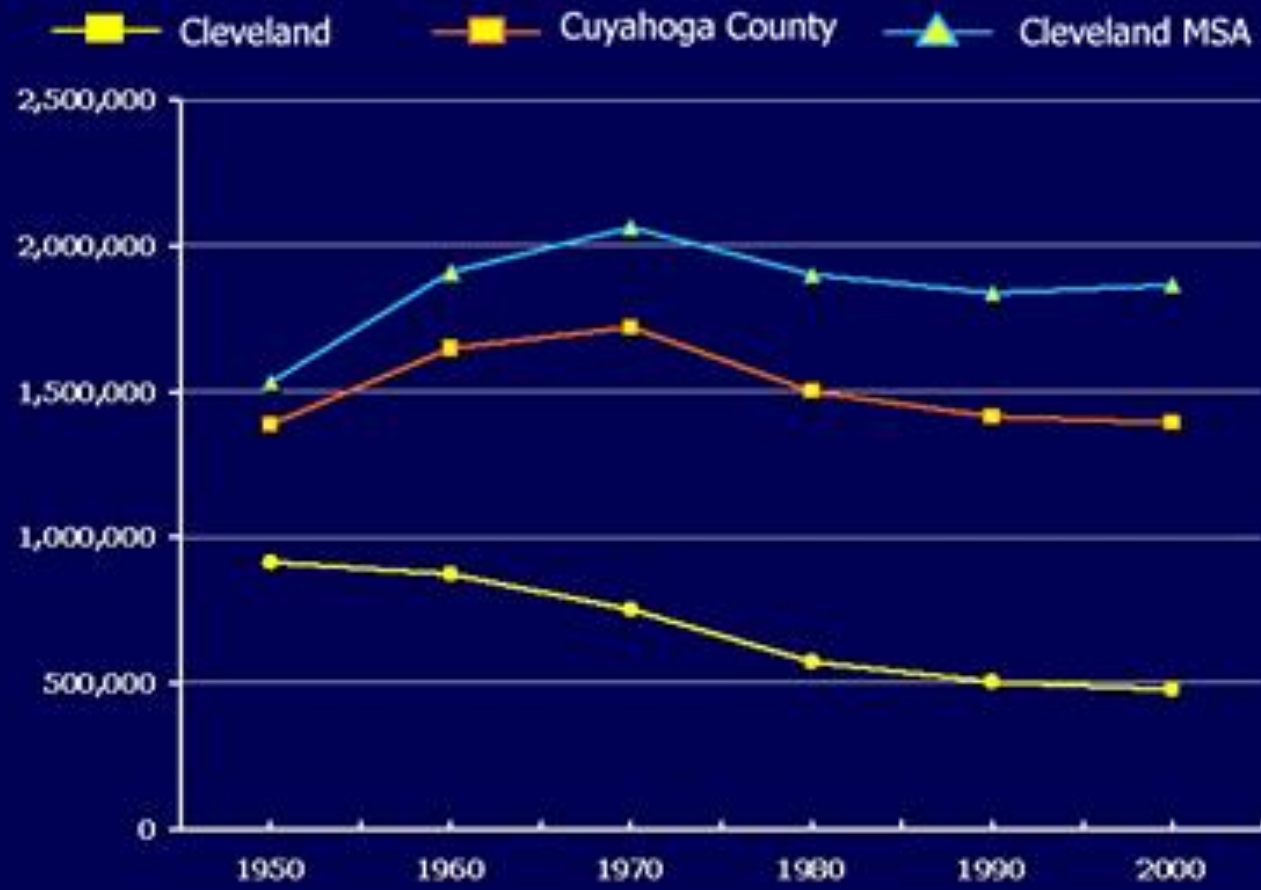
BARCELONA'S BUILT-UP AREA



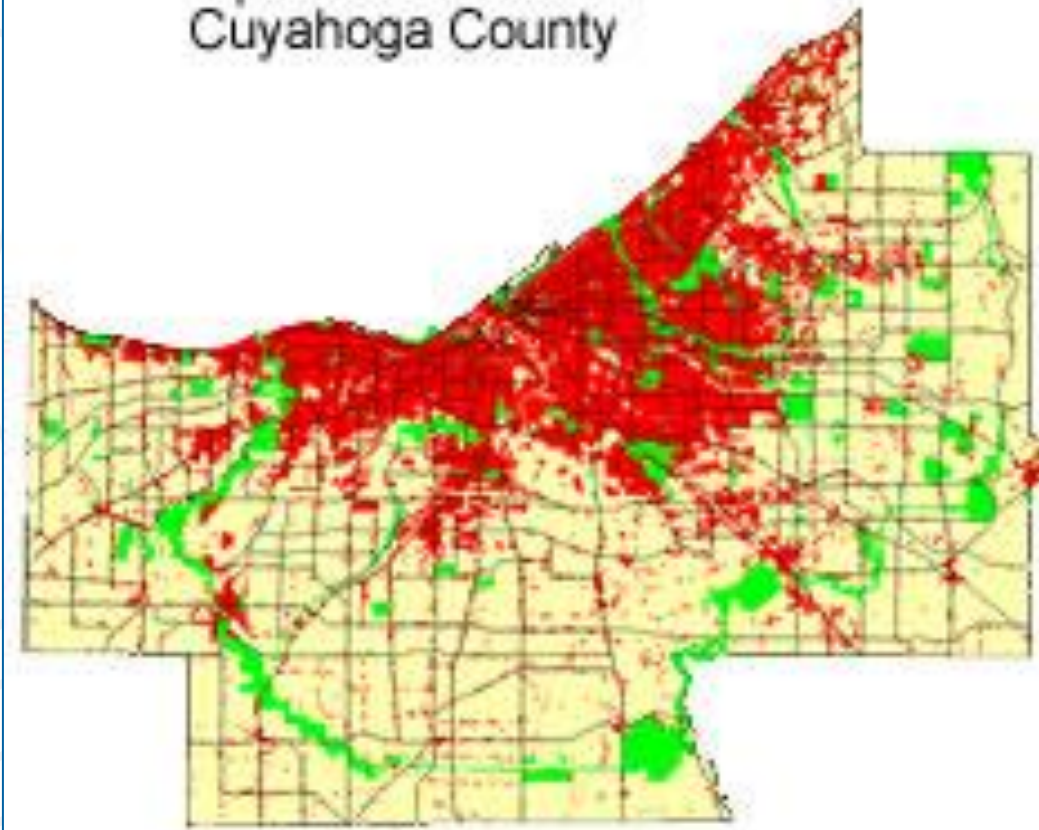
POPULATION: **2.8 MILLION**
URBAN AREA: **162 KM²**
TRANSPORT
CARBON EMISSIONS: **0.7**
TONNES CO₂ PER PERSON
(PUBLIC + PRIVATE
TRANSPORT)

Population decline has also impacted Cuyahoga County despite slight growth in the larger metropolitan area

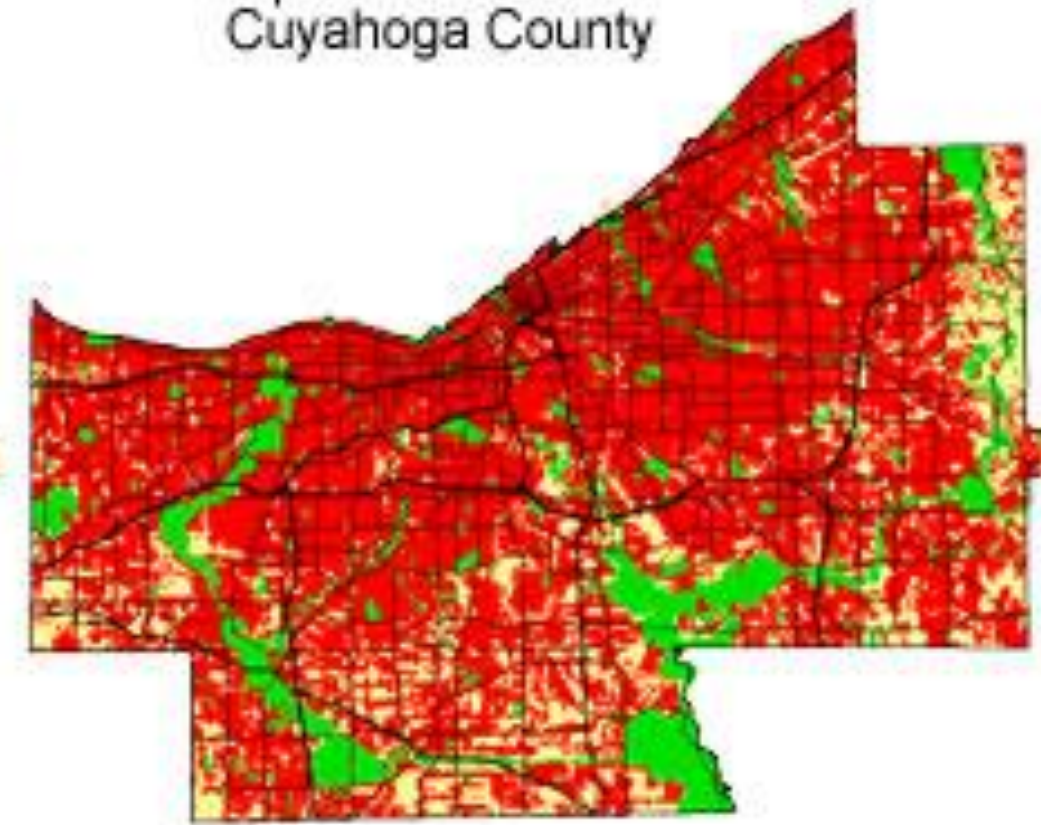
Change in Population
1950 - 2000



Development Pattern - 1948
Cuyahoga County



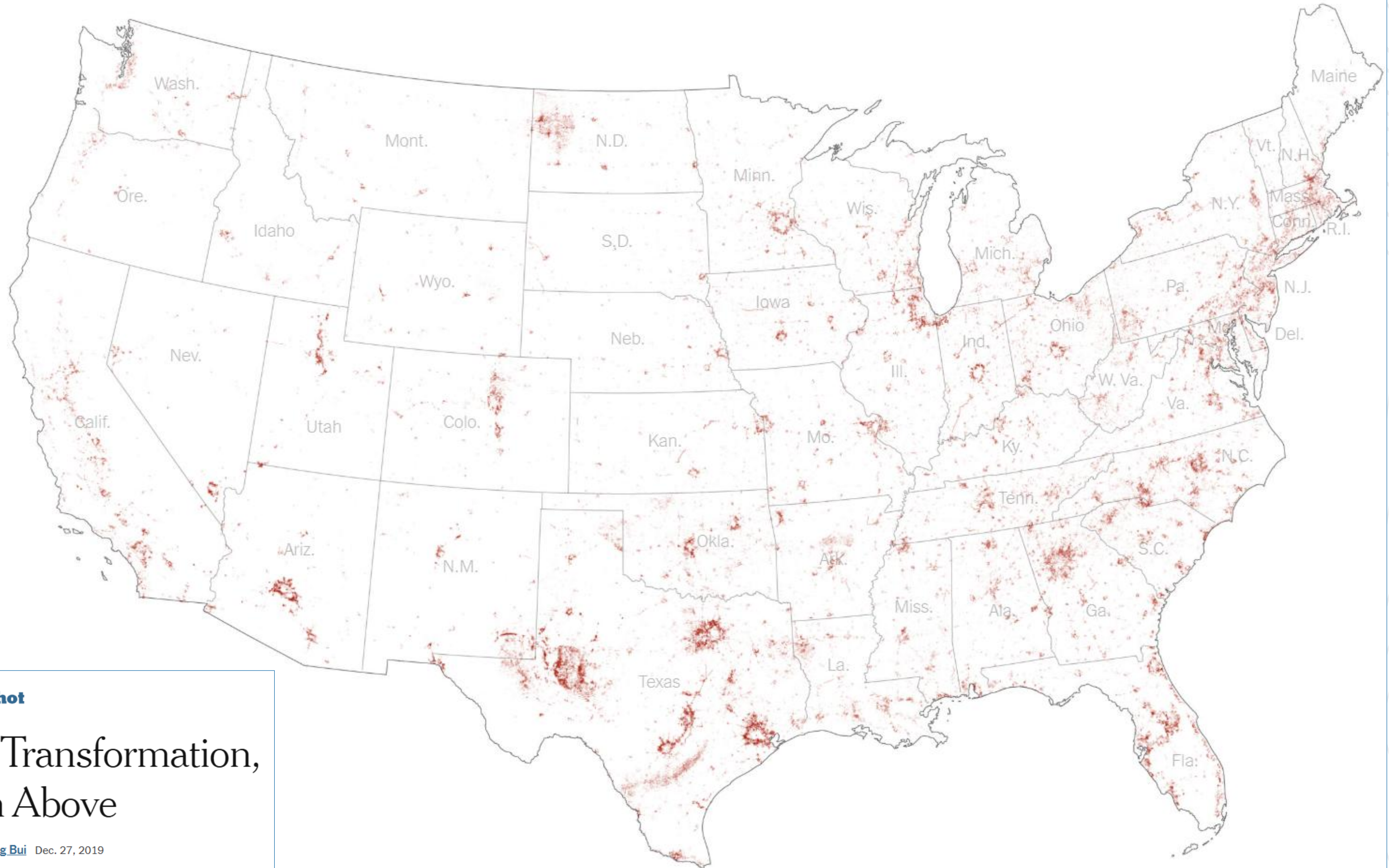
Development Pattern - 2002
Cuyahoga County



Source: Cuyahoga County Planning Commission

Source: https://planning.clevelandohio.gov/cwp/pop_trend.php/ed_oview.php

Land newly developed this decade



 TheUpshot

A Decade of Urban Transformation, Seen From Above

By [Emily Badger](#) and [Quoctrung Bui](#) Dec. 27, 2019

Data only available for continental U.S. Source: Descartes Labs analysis

Source: <https://www.nytimes.com/interactive/2022/12/13/climate/climate-footprint-map-neighborhood.html>



High Meadows
Environmental
Institute

Houston's urban sprawl increased rainfall, flooding during Hurricane Harvey



 UNIVERSITY OF HOUSTON

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SOME HOUSTONIANS STILL STRUGGLING FIVE YEARS AFTER HARVEY

By [Sally Strong](#)

September 02, 2023 — [People](#) / [Research](#)

Source: <https://www.uh.edu/news-events/stories/2022-news-articles/august-2022/08252022-harvey-anniversary-flood.php>

Source: <https://environment.princeton.edu/news/houstons-urban-sprawl-increased-rainfall-flooding-during-hurricane-harvey/>



Source: <https://www.usgs.gov/water-science-school/science/impervious-surfaces-and-flooding>



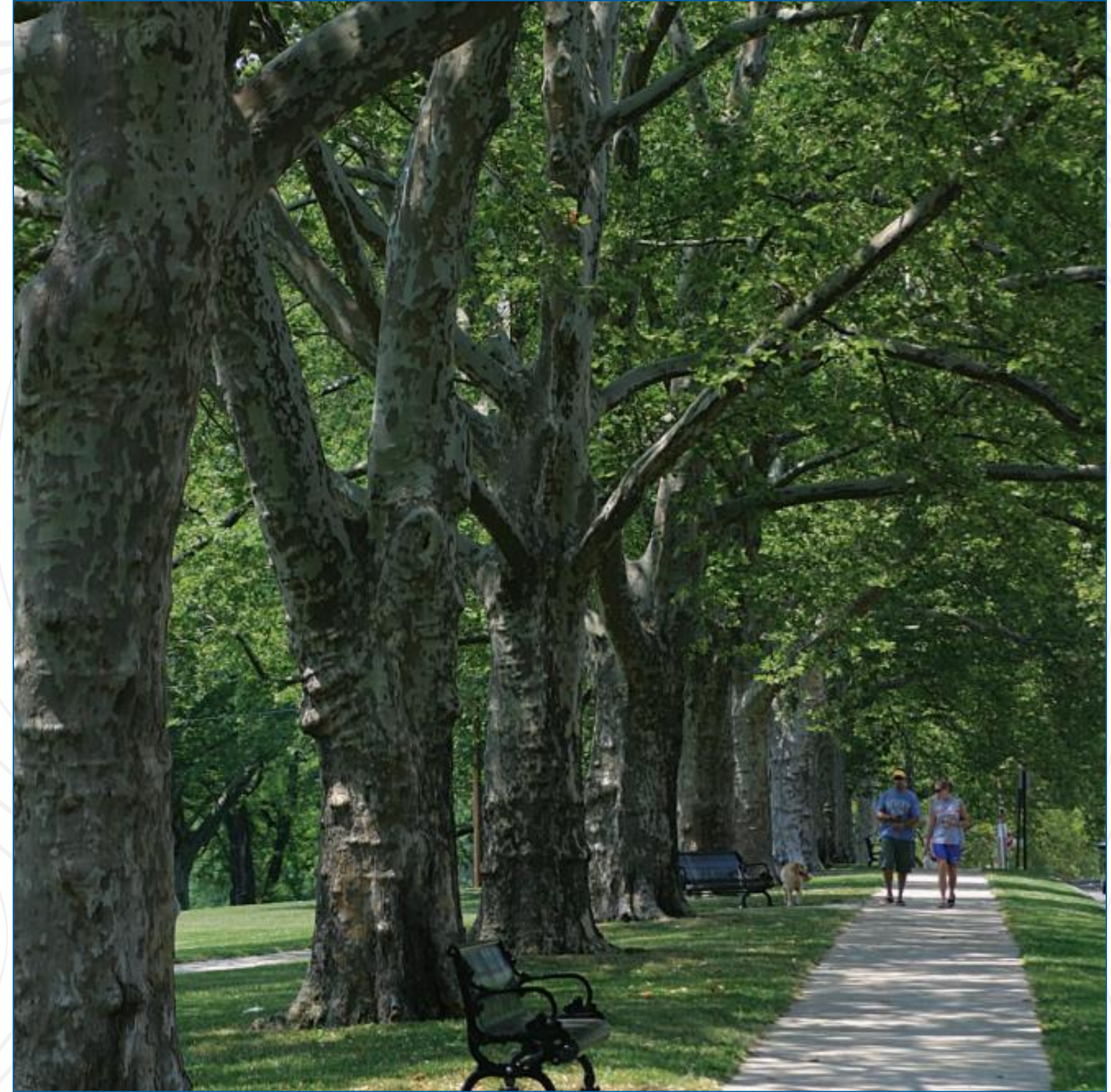
Source: <https://delawarestateparks.blog/2021/08/03/nature-preserves-to-hike-in-delaware/>



Source: <https://dnrec.delaware.gov/wetlands/>



Source: <https://news.delaware.gov/2025/09/25/dnrec-accepting-community-water-quality-improvement-project-grant-proposals-4/>



Source: https://thedch.org/wp-content/uploads/2020/05/Content_Urban-Forest-Report.pdf

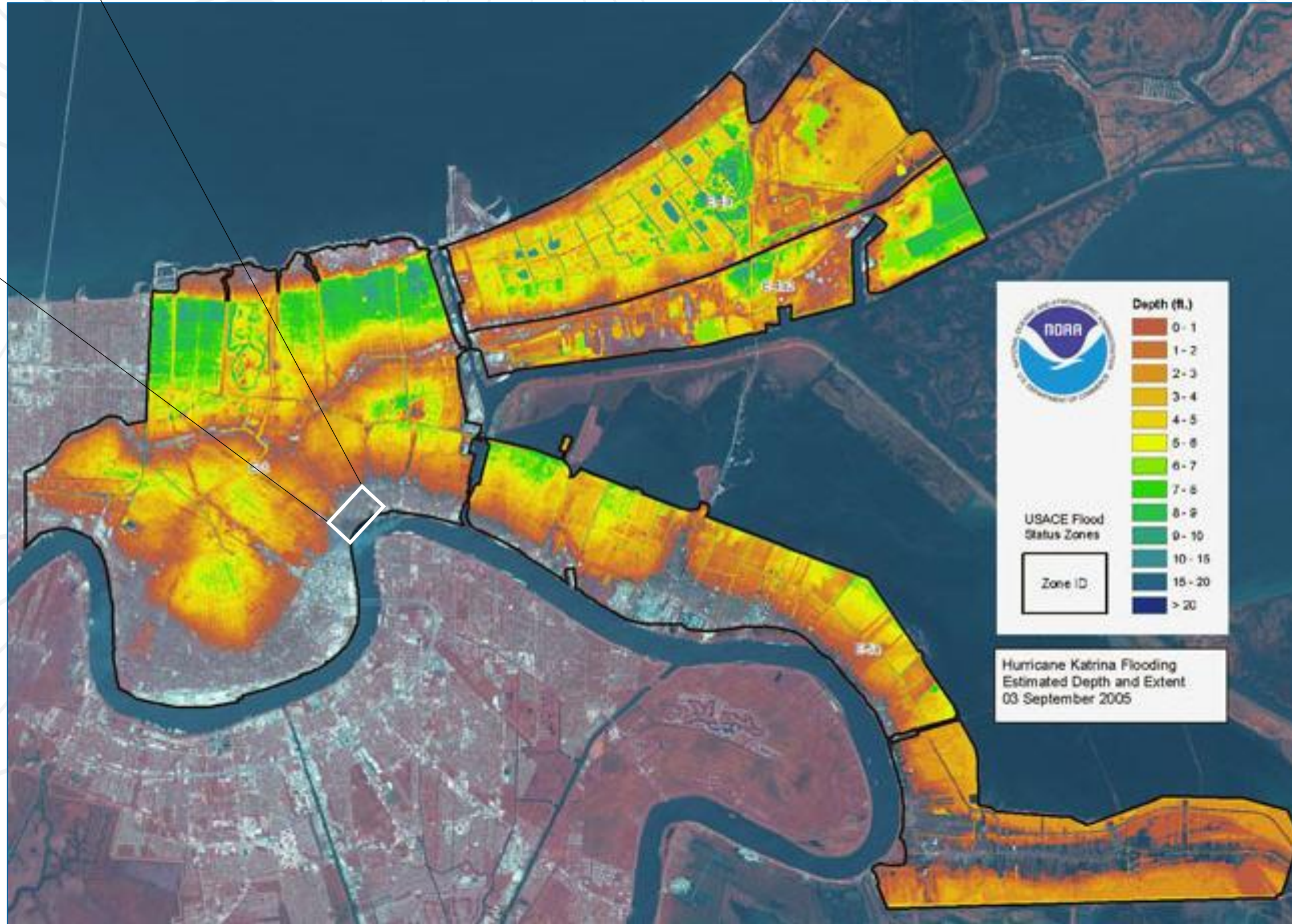
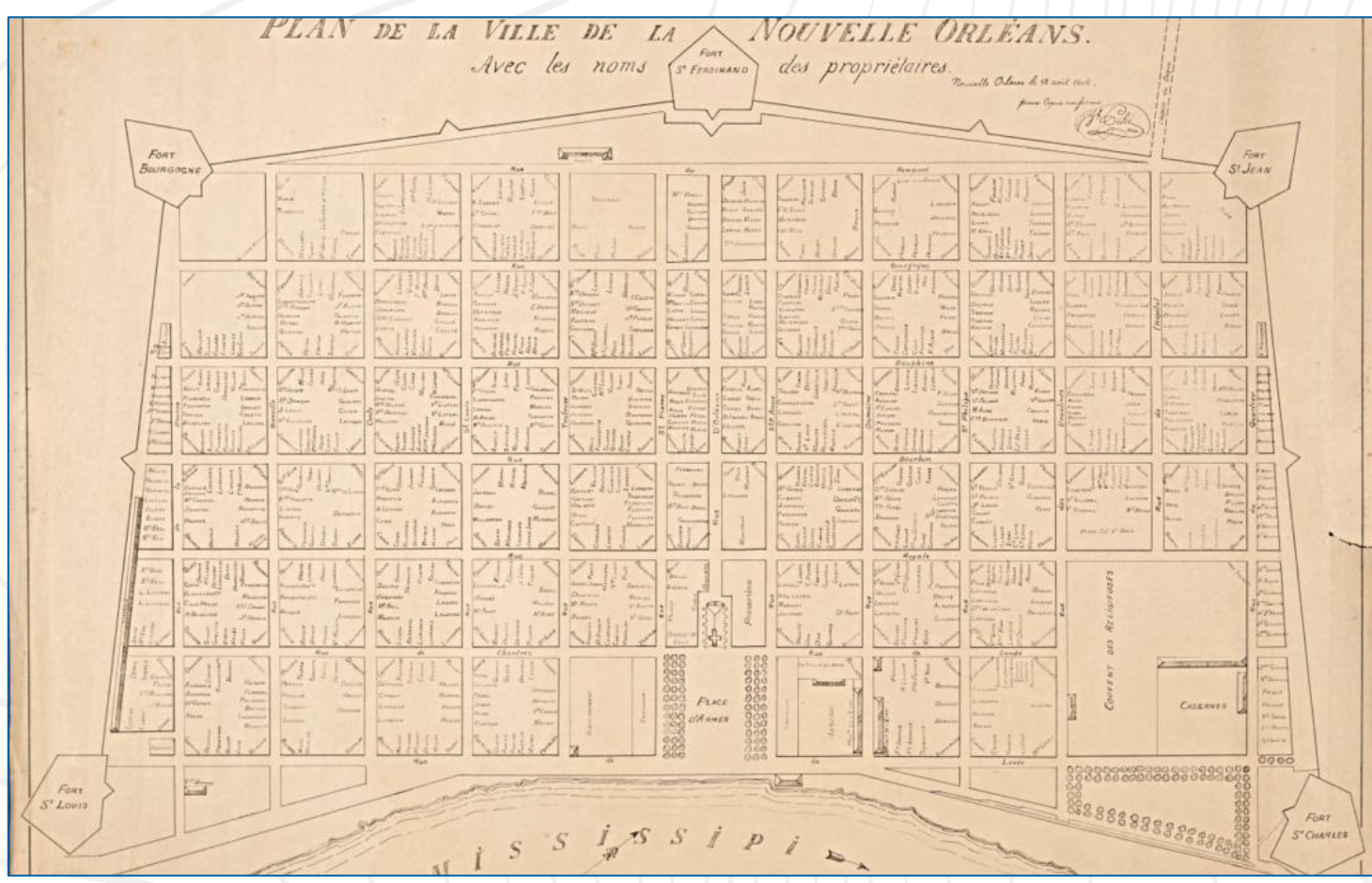


Figure 1: Housing supply and prices



Source: Federal Reserve Economic Data; National Association of Realtors Monthly Supply Data

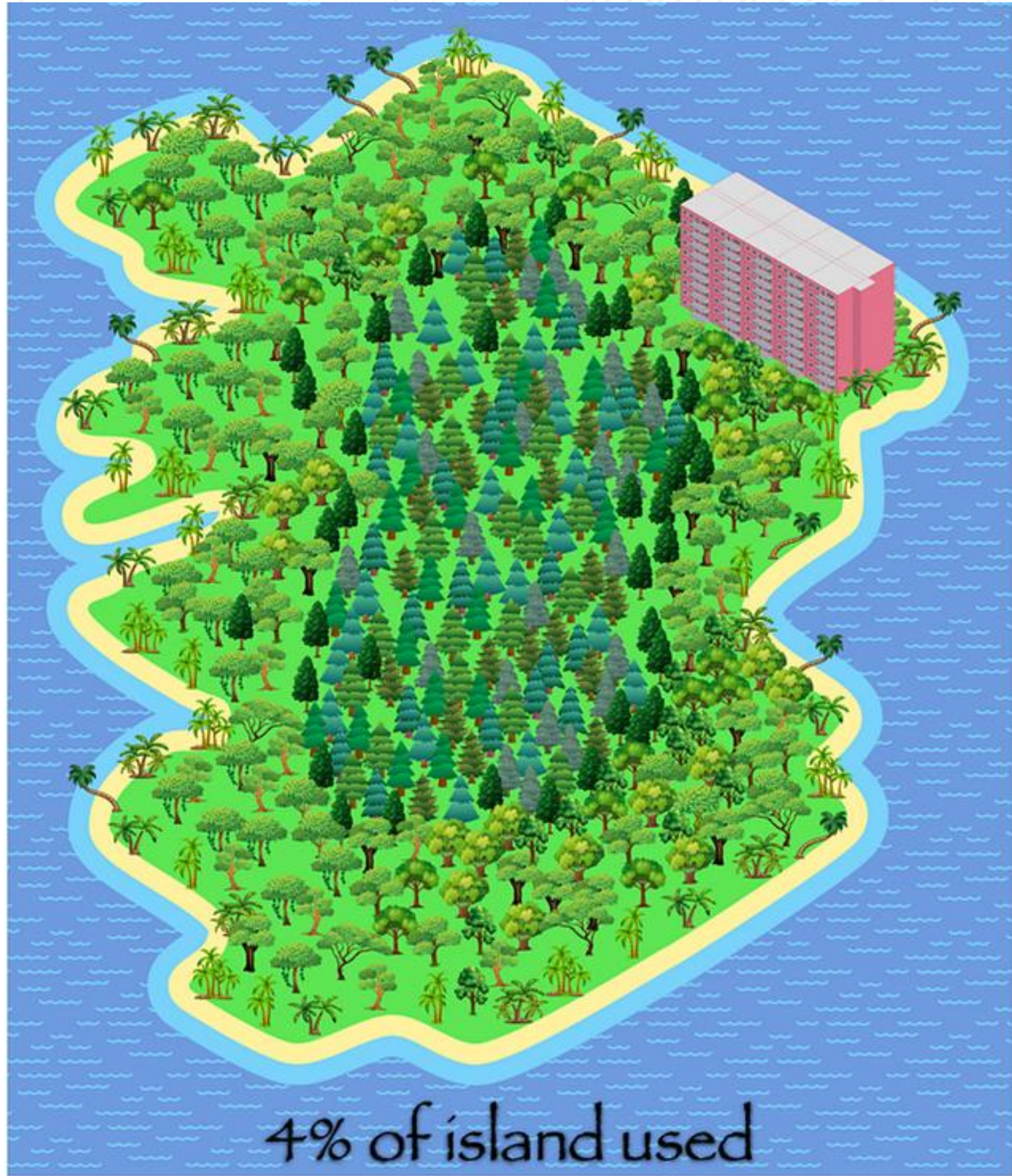
Source: <https://web.archive.org/web/20210901120718/https://www.whitehouse.gov/cea/blog/2021/09/01/alleviating-supply-constraints-in-the-housing-market/>

**MORE
HOUSING
IN TOWN**

**PRESERVING
AG LANDS
AND
NATURAL RESOURCES**

Why don't we have both?







Source: <https://vnrc.org/act-250/>



LET OUR POWERS COMBINE!

The logo for the United States Climate Alliance. It features a vertical red bar on the left side. To the right of the bar, the words "UNITED STATES" are written in a smaller, dark blue, serif font. Below that, the words "CLIMATE" and "ALLIANCE" are written in a much larger, dark blue, serif font, stacked vertically.

UNITED STATES
**CLIMATE
ALLIANCE**

Thank You!



Climate and Land Use
Planning Guide

