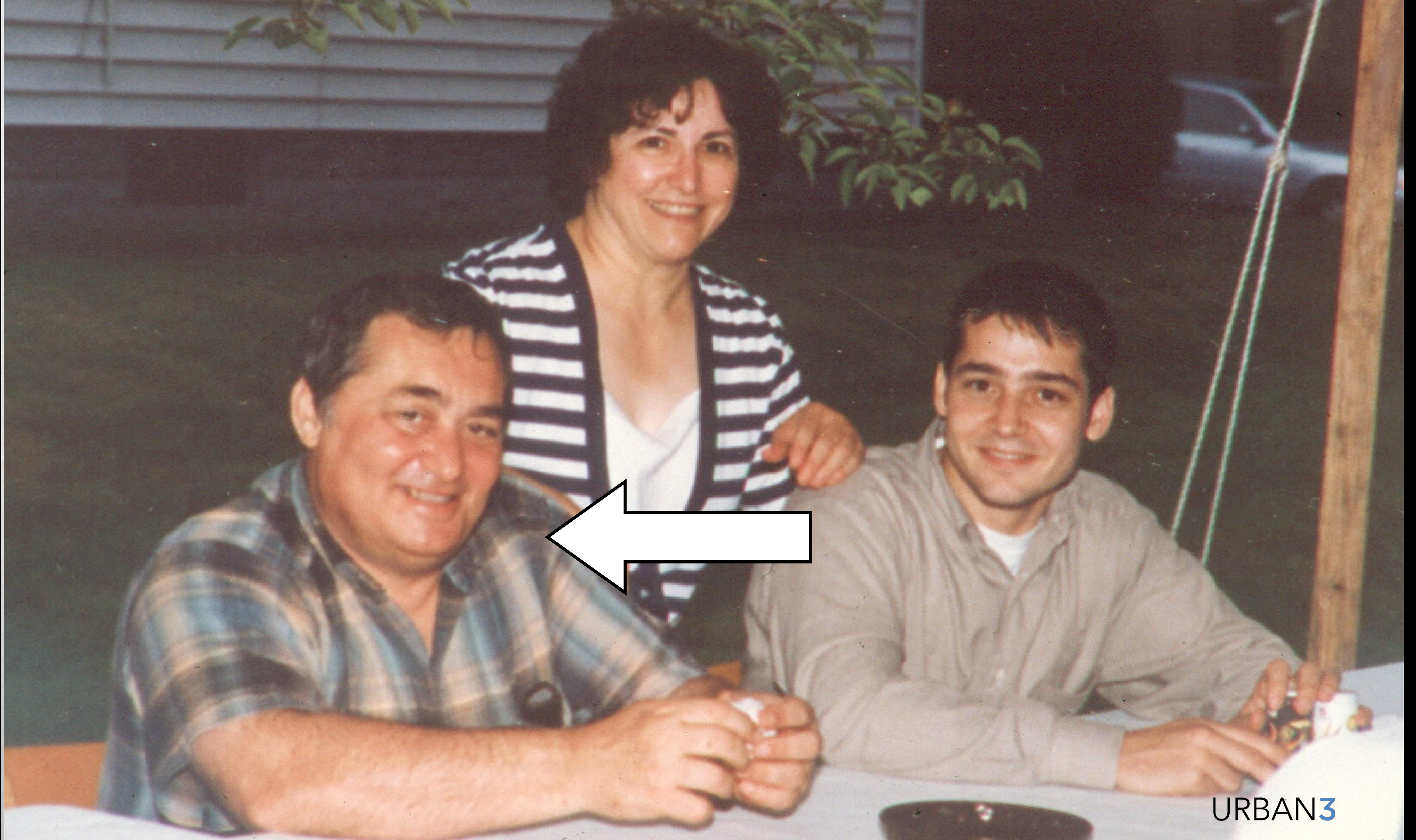




Value per acre map of
Auckland, New Zealand

URBAN3

Data Leverage



GREETINGS

from





New York City

Kansas City

Asheville

Memphis

Charlotte

Atlanta

Houston

Miami

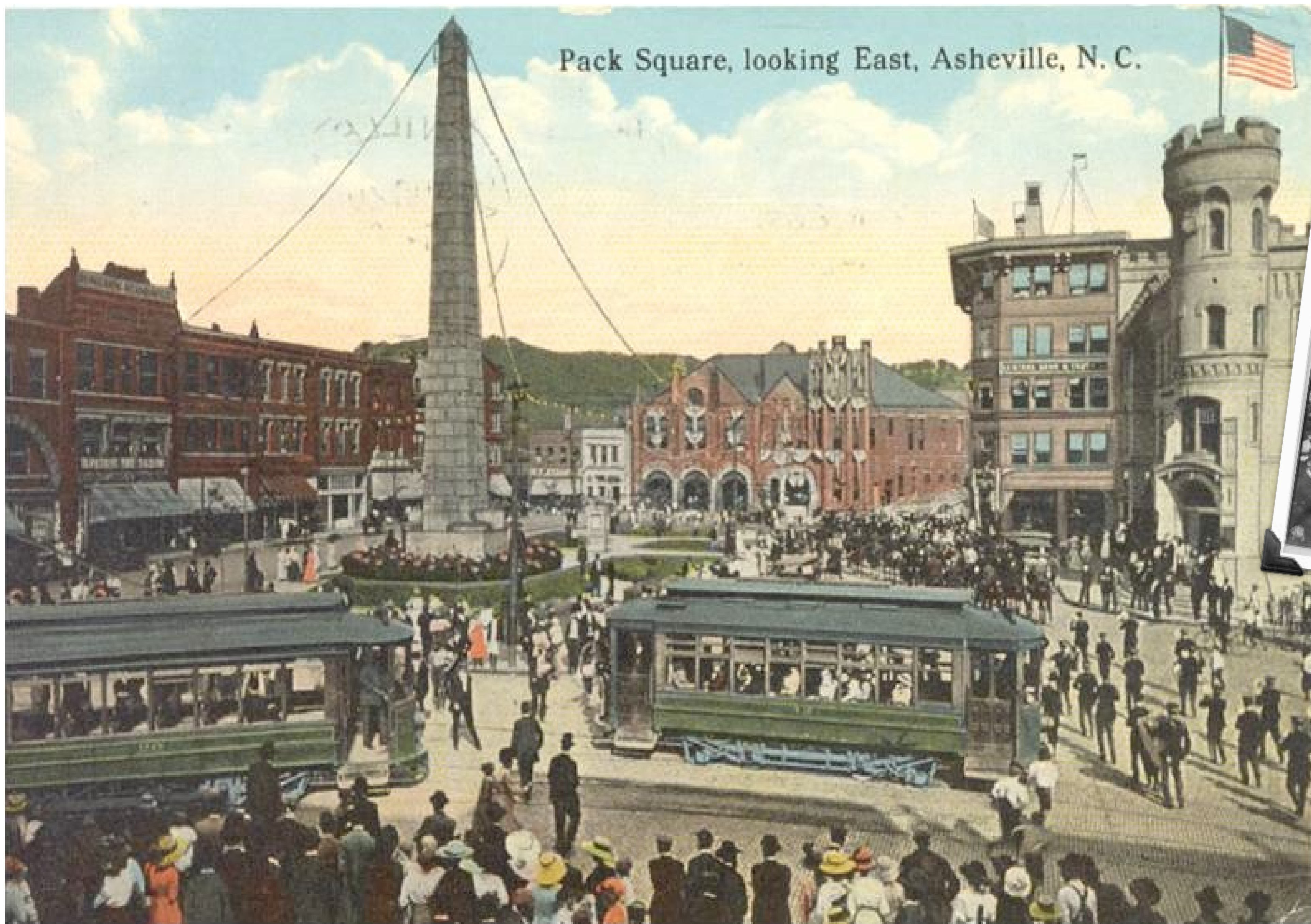
Things Change...





The 3 T's – Trains, Tourism, & Tuberculosis

Pack Square, looking East, Asheville, N. C.





During the 1920's

- Asheville grew by 20% population/year
- Second largest city in NC,
(larger than Charlotte!)
- Achieved the highest debt per capita in the entire United States !!!
- City thought it had **\$5M in bank**, but when the audit on the bank happened, it was discovered to only be **\$18,000**
- 3 days after the elected officials were indicted, the Mayor committed suicide



Asheville has squandered fabulous sums.
They've flung away the earnings of a lifetime.
They've mortgaged those of a generation to come.
They have ruined a city,
and in doing so,
have ruined themselves, their children, and their children's children.

Thomas Wolfe

Author (1900-1938)
You Can't Go Home Again

Fifth Victim Of McDowell County Prison Unit Fire Dies

By BARBARA BLAKE
Citizen Staff Writer

Wednesday night's fire at the McDowell County prison unit claimed its fifth victim Thursday afternoon with the death of Gary Lowe of Hildebrand, who died of massive burns at about 1 p.m. in Memorial Mission Hospital.

Four other inmates who died in the fire Wednesday night were identified as David Rice,

15, and Clyde Brant, 26, both of Asheville; Robert Denton, 18, of Hendersonville; and Lonnie Potter, 18, of Todd.

The fire, which sent 34 prisoners to Asheville hospitals for emergency treatment, apparently began with a protest by inmates over the confiscation of a radio by prison guards.

W. L. Kautsky, assistant director of prisons, said Thursday the incident started about

1:20 p.m. Wednesday when a guard tried to confiscate two radios because the inmates had been playing them without surphones on top.

The guard took one radio, Kautsky said, and the other was smashed by the inmate. The guard threatened disciplinary action.

After dinner, Kautsky said, the 33 inmates in dormitory "B" met and began protesting.

At about 8:15 p.m., he said, they started a fire on a picnic table inside the dormitory with paper, then stacked four mattresses on top.

Lt. Mack Wilson, shift officer on duty at the time, said the fire was first noticed when Sgt. Elmer Macgovern went to the dormitory and saw the mattresses smoldering on the table.

Kautsky said Thursday he

understood that three of the mattresses were removed from the fire, but one inmate pushed a mattress into the smoldering fire, then other inmates added their mattresses.

"These mattresses have all the elements of a Molotov Cocktail," Kautsky said. "I don't think the inmates know the seriousness of what they were doing."

The inmates at the McDowell

unit are those with misdemeanors who had previously escaped or who were considered management problems.

The seriousness of the situation, Kautsky said, was partly because of a shortage of personnel (five staff members were on duty Wednesday night) and the volatility of the mattresses.

"We know these types of

mattresses could be a problem if heated sufficiently," he said, adding that requests for new mattresses have been made since 1973.

The mattresses are made of polyethylene, Kautsky said, and once their flame retardants wear out, they are highly flammable.

The second problem, that of understaffing, has also grown worse because of insufficient

funding, Kautsky said.

"The requests have gone unheeded, for whatever reason, legitimate or not," he said. "I'm afraid we're paying the price of years of neglect in our prison system."

Kautsky said the McDowell facility is not overcrowded. The prison can hold 75 inmates but more staff is needed to handle

—Turn To Page Three

Open Cut Answers Avoided

(Included Story On Page 17)

By JODY MEACHAM
Citizen Staff Writer

Asheville City Council declined Thursday to clarify its June 17 resolution opposing the Deane/Cher Mountain open cut at the request of a local civic group.

"I think it's clarified as we know it," said Mayor Eugene C. Ochsenschlager Jr. "If the Department of Transportation needs any more interpretations, they can call us."

The clarification was requested by Manly E. Wright, president of the Greater Asheville Council, because he said the DOT may delay highway construction as a result of Council's action.

"There apparently was a great deal of confusion as to the resolution on Deane/Cher Mountain," Wright said. "We are asking you to clarify the confusion in the minds of the citizens of Asheville."

Councilman Otis Michael, who introduced the resolution, said it represents the opinion of a four-member majority of Council but is not an official Council action.

In Dr. Michael's words, as recorded in Council's official minutes, the resolution states: "that City Council adopt a policy that they are opposed to the open cut and would like to have twin tunnels."

Saying Thursday that "I've been misquoted by the media many times," Dr. Michael said his resolution is the same as previous ones passed by Council on the tunnel/road cut issue except that it stated a tunnel preference.

"I prefer twin tunnels and I object to the open cut," he said. "What I said in City Council was nothing more than what has been stated previously. I still prefer tunnels to an open cut."

He said last week's meeting with DOT administrator Billy Rose would not have been necessary if his resolution had

—Turn To Page Two



After 40 Years, The Bonds Are Burned

Prominent participants at the Thursday night Bond Burning Ceremony at the Civic Center were (L-R) Jerry Thomas, Under Secretary of State who was speaker, and Julian A. Woodcock, chairman of the Buncombe County Sinking Fund Commission; R. Car-

tis Ratcliff, chairman of the Buncombe County Commission; Eugene C. Ochsenschlager, mayor of Asheville, and Cindi Drake, Miss Asheville. (Staff Photos by Gary Fields)

\$56 Million Debt Is Officially Paid

By JODY MEACHAM
Citizen Staff Writer

"I now declare the refunding bonds are burned and the debt repaid."

So went the pronouncement of Julian A. Woodcock Jr., chairman of the Buncombe County Sinking Fund Commission, at Thursday night's bond burning at Thomas Wolfe Auditorium.

The burning of a \$1,000 bond marked the repayment, after 40 years, of a \$6 million debt accumulated in the 1930s and '40s by Buncombe County and the city of Asheville.

Actually, the burning of the bond was almost as difficult as paying off the debt.

Possibly it was due to the

poor, Depression-era paper, but the bond held by Cindi Drake, Miss Asheville, went out as soon as Woodcock drew the lighter away.

A second ignition started the paper to smolder, an occasional flame here and there.

But the task was accomplished and Woodcock didn't wait for the paper to be consumed before he announced that the city and county had paid back what they owed.

Hardly any of the speakers, beginning with the Rev. Billy Graham who appeared on film, could resist the temptation to compare the financial situation of local government here to that of New York City.

Under Secretary of the Treasury Jerry Thomas announced at the ceremony that the federal government extended another half billion dollars in aid to New York earlier in the day.

Thomas, who was keynote speaker at the event, criticized federal deficit spending and the increasing role of government in the national economy.

"The biggest competitor we have in America today is government itself," he told the crowd.

Of Congress, he said: "We don't know what they're doing for us or to us. Thank heaven we don't get all the government we pay for."

The national debt, he said, increases at the rate of \$1 billion a week and the interest on that debt accrues at the rate of \$1 billion every nine days.

"What we need is a restoration of independence

Congress Under Budget

WASHINGTON (AP) — Congress spent \$372.4 billion on the federal budget in the fiscal year that just ended — \$1.4 billion less than it had set as a target.

Leaders in the new congressional budget-making process hailed the record as a quiet revolution that could lead to a balanced federal budget by 1980.

They told reporters Thursday that the congressional budget-making policies must be given credit for bringing the nation out of recession.

Midnight Wednesday closed out fiscal 1976, the first year for the new budget procedures aimed at:

—Giving Congress more control over federal spending by requiring lawmakers to look at the budget as a key factor influencing the economy, rather than just a series of unrelated appropriation bills.

—Requiring Congress to

Court Strikes Consent Rule In Abortions

By W. DALE NELSON

WASHINGTON (AP) — The Supreme Court ruled Thursday that neither husband nor parent can be given veto power over a woman's decision to have an abortion.

The court struck down provisions of a Missouri law which require the consent of the husband of a married woman and the consent of at least one parent of a single woman under 18.

The vote was 6 to 3 on the issue, with Chief Justice Warren E. Burger and Justices Byron R. White and William H. Rehnquist dissenting.

Justice John Paul Stevens joined Burger, White and Rehnquist in maintaining that the parental consent requirement should have been upheld.

The decision appeared to leave the way open for states to impose some provisions for parental consent, at least at some ages, as long as they did not amount to "parental veto."

"Our holding ... does not suggest that every minor, regardless of age or maturity, may give effective consent for termination of her pregnancy," Justice Harry A. Blackmun said for the court.

Today's Chuckle

Summer is the time of year when you should study the travel folders to find a place you can't afford to go.

It was the court's first major abortion decision since the justices ruled in 1973 that states may not regulate abortion in the first three months of pregnancy.

That decision, which was also written by Blackmun, held that the state could not prohibit abortions until after the stage at which the fetus would be able to live on its own.

The Darling, national director of the Religious Coalition for Abortion Rights, predicted that Thursday's decision would "de-escalate the abortion controversy."

The National Abortion Rights Action League said 12 states re-

quire the consent of husbands and 14 states impose parental consent requirements of some kind.

In a separate decision the court suggested that a parental consent law adopted by Massachusetts might be unconstitutional.

That law calls for consent of both parents but permits a judge to override their decision.

A three-judge federal court ruled the law unconstitutional. Massachusetts officials appealed, arguing that the law would permit a pregnant teenager to get a court order for an abortion even without consulting her parents.

American Faces For The Fourth

The Community Life section celebrates the Fourth of July with a brotherhood message and a page full of American faces in the Sunday Citizen-Times.

Other Highlights

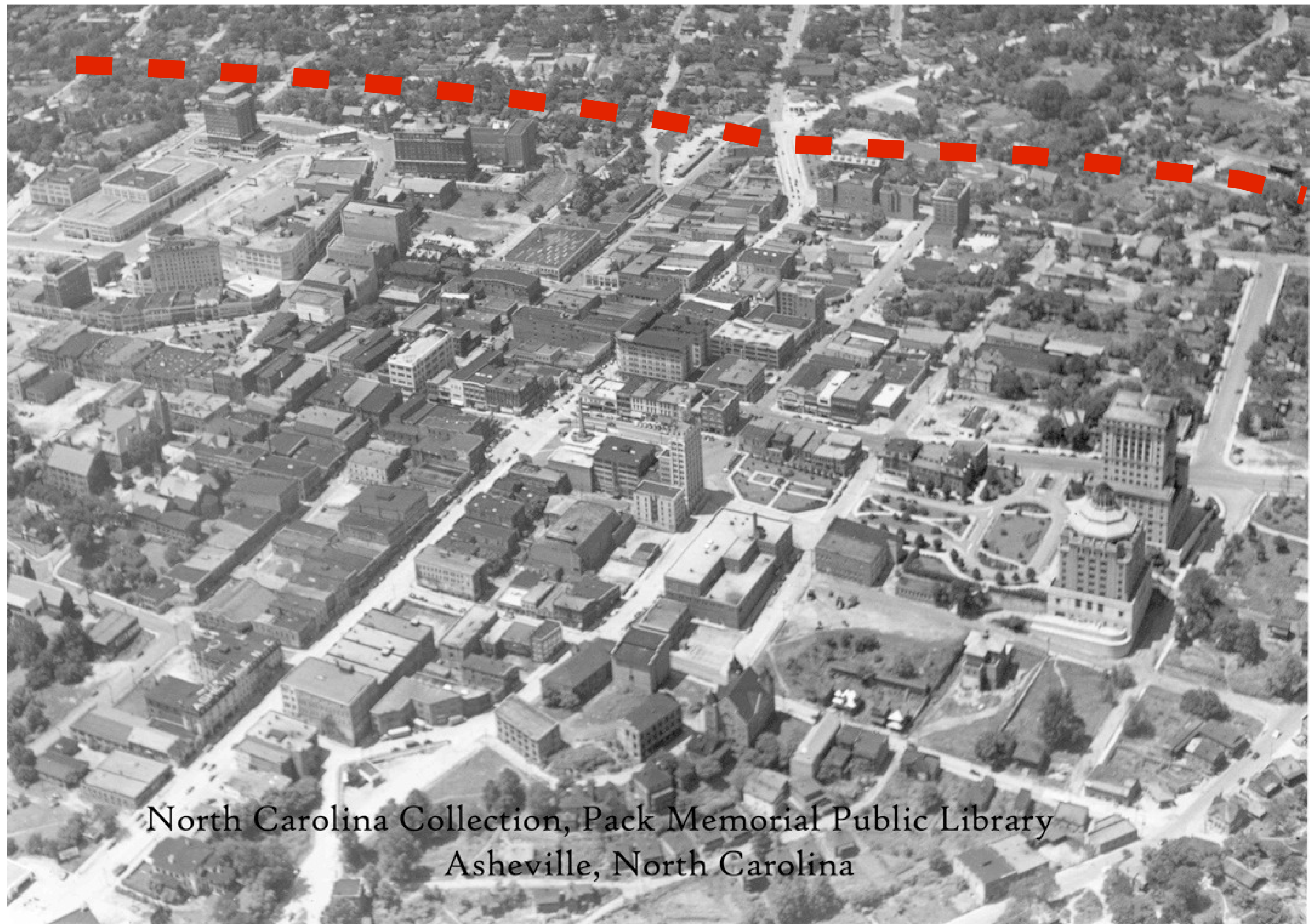
How do the original Americans — the American Indians — feel about Independence Day and the Bicentennial? John Crowe, chief of the Eastern Band of Cherokee Indians, answers these questions in an exclusive interview with Bob Terrell, the first formal interview Crowe has granted a reporter since the 1950s.

Plus ... Walter Scott's Personality Parade, color comics, jumbo crossword puzzle, Letter From The Farm and dozens of other regular features.



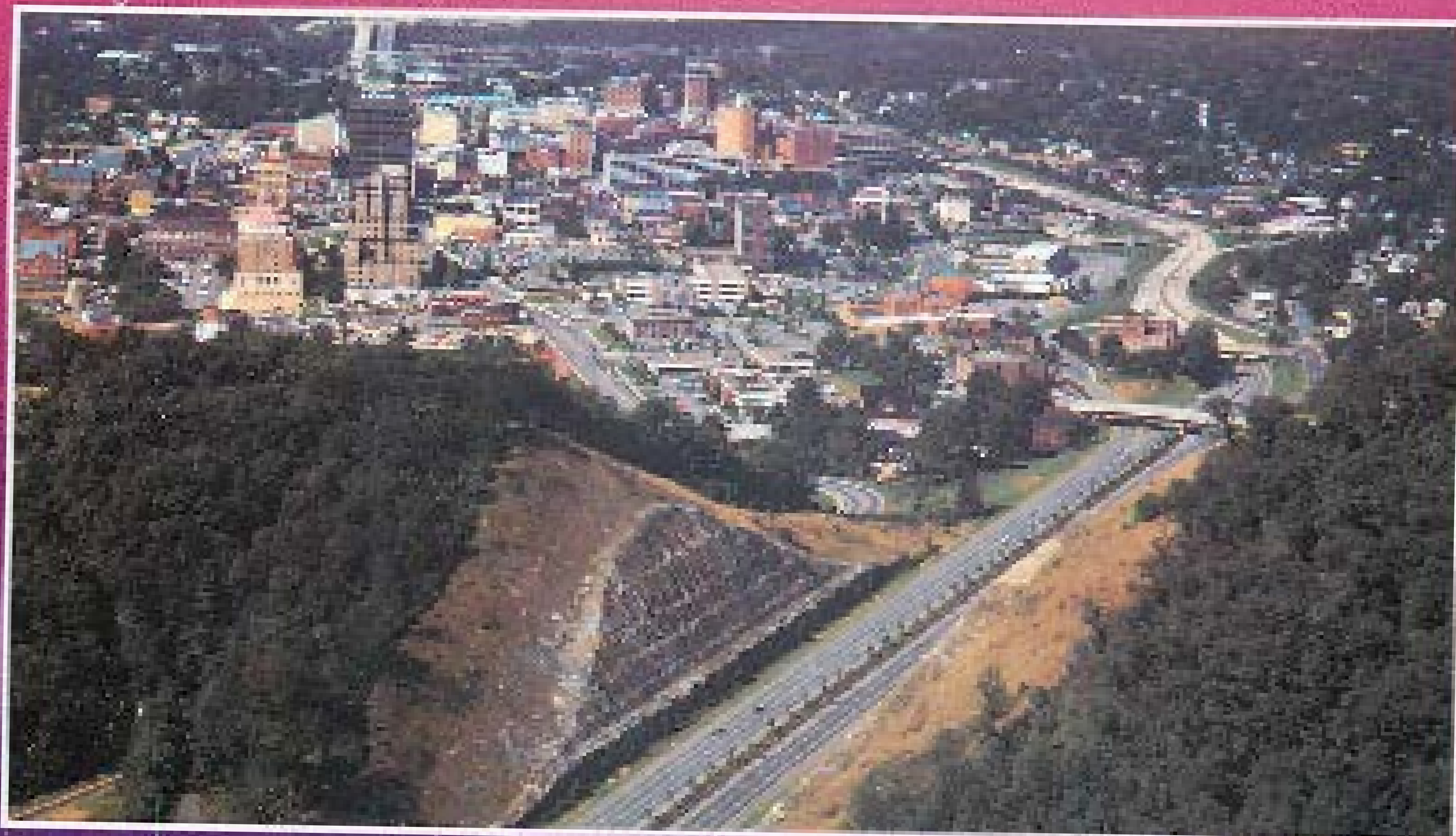
More Pretty Weather Due

The beautiful weather which mostly sunny and warm, with expected to be only slightly less



North Carolina Collection, Pack Memorial Public Library
Asheville, North Carolina





Asheville, N.C.

Land of the Sky

The
73
acre
Asheville
Mall



In the 70's and 80's our downtown died











Asheville's de facto motto was:

“That will never work here - don't even try.”



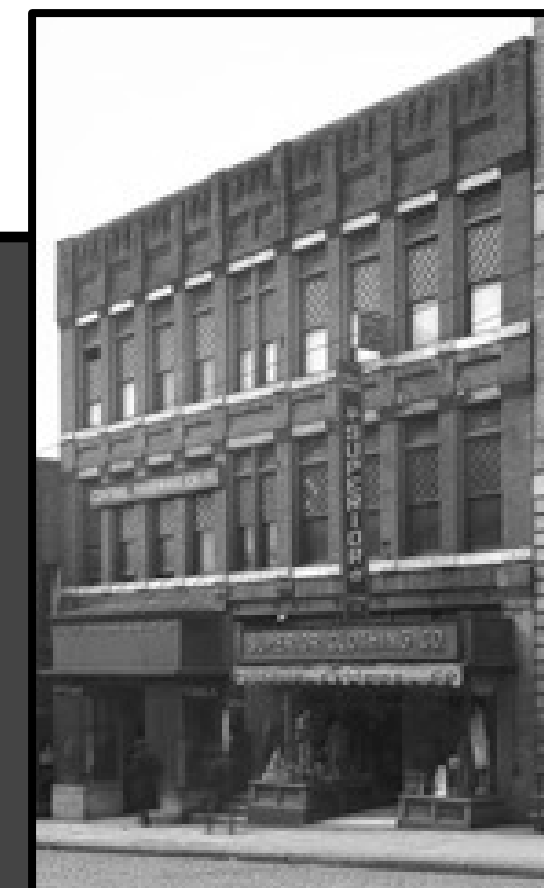
Salsa's
& Zambras

City
Seeds

Public Interest Projects



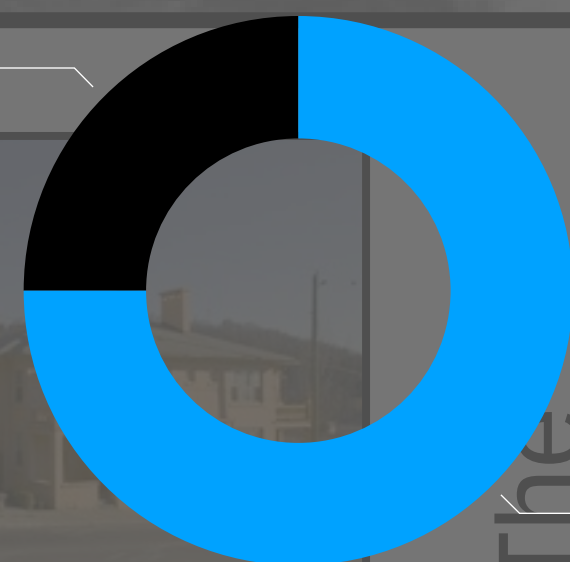
URBAN³



51 Biltmore



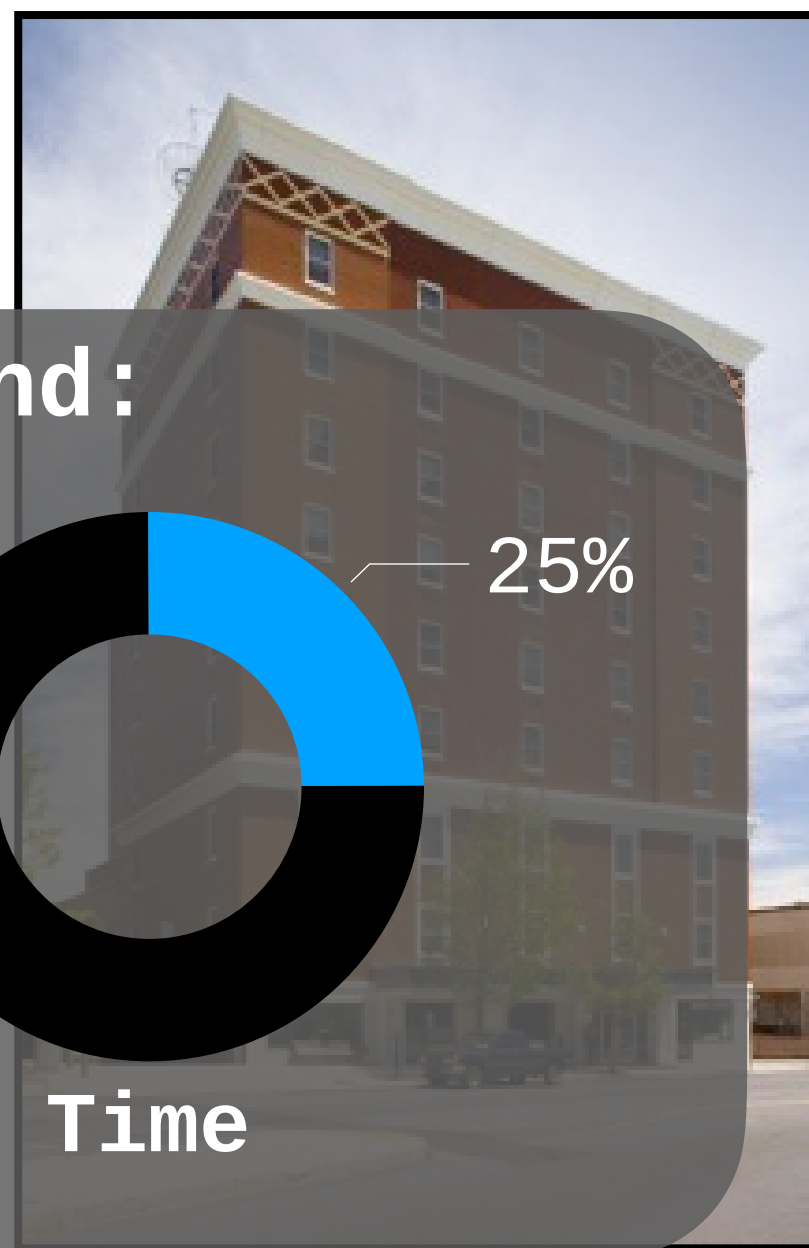
\$15M Revolving Fund:



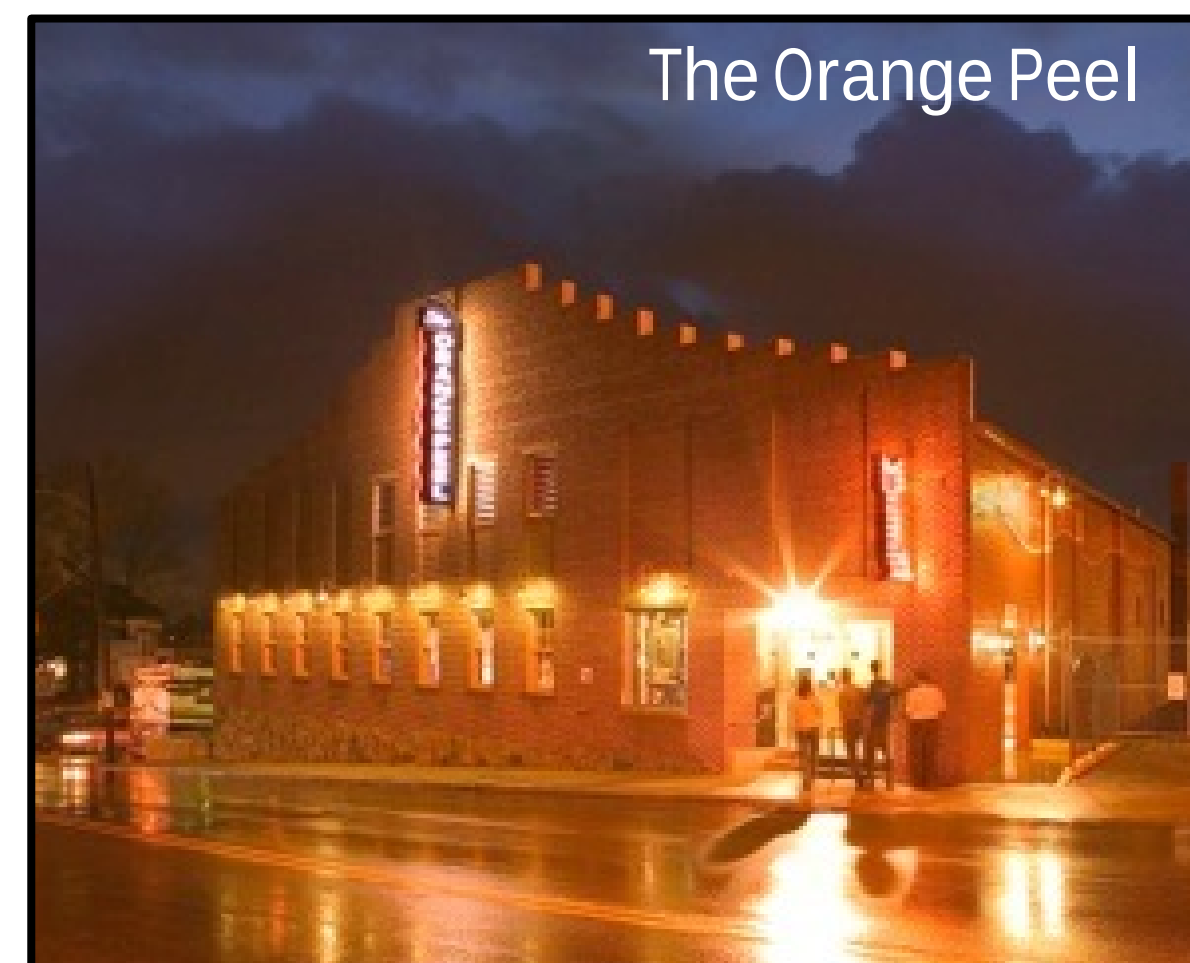
Capital



Time



The Orange Peel



Downtown benches



YWCA

The Public Service Building

The Laughing Seed

the Dogwood Fund

Julian Price

1941 - 11/19 25%

Business
start-up

Buildings

the Alternative Reading Room



In God we trust;
everyone else,
bring data.

Mayor Michael Bloomberg





Incorporate (in'kôrpə,rāt)

VERB

Constitute (a company, city, or other organization) as a legal corporation.

Source: Oxford Dictionary

A photograph of Joe Biden and Stephen Colbert on the set of the Late Show. Joe Biden is seated on the left, wearing a dark suit and a blue and white striped tie. Stephen Colbert is seated on the right, wearing a dark suit and glasses. They are both looking at each other. The background is a cityscape at night. A blue mug with the 'Late Show' logo is on the table between them.

“The United States is the
largest **corporation**
in the world.”

Joe Biden

United States Vice President

Late Show: 12/6/2016

URBAN3

Source: U.S. Code Title 28: Part VI, Chapter 176, Subchapter A: §302(15)A

Asheville Is 7x >

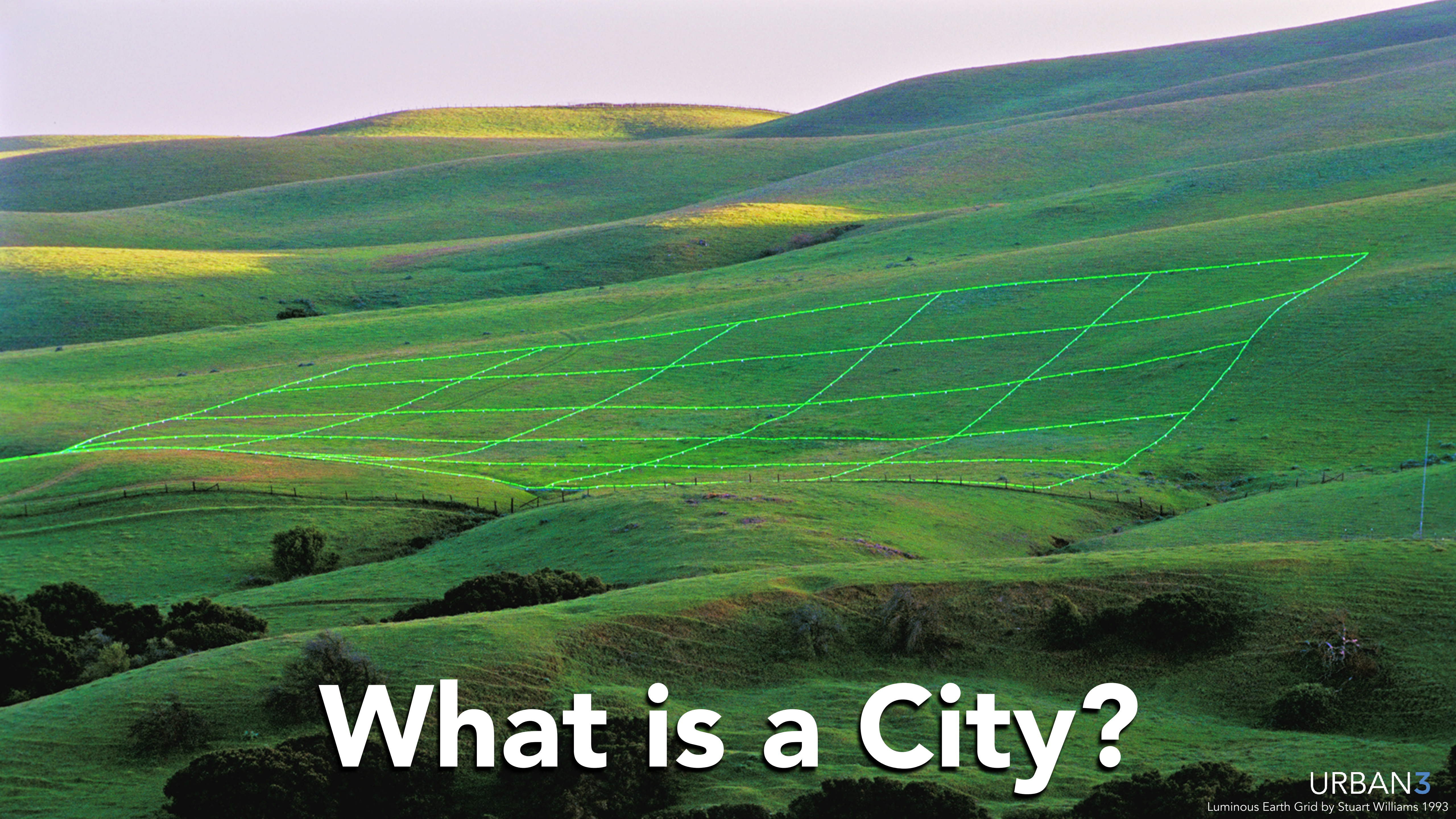
*Life is a game.
Money is how we keep score.*
- Ted Turner



What is a City?

URBAN³

Photo Source: James Harrison



What is a City?

URBAN³

Luminous Earth Grid by Stuart Williams 1993

Land Production





For 40 years this
building remained
vacant..... its tax value
in 1991 was just over
\$300,000



Today the building is valued at over
\$11,000,000

An increase > **3500%**

in **15 years**

The lot is less than **1/5 acre**

Asheville Walmart

Total Tax Value:
\$20M



Downtown Building

Total Tax Value:
\$11M

Land Consumed (Acres)



Total Property Taxes Per Acre



City Sales Taxes Per Acre

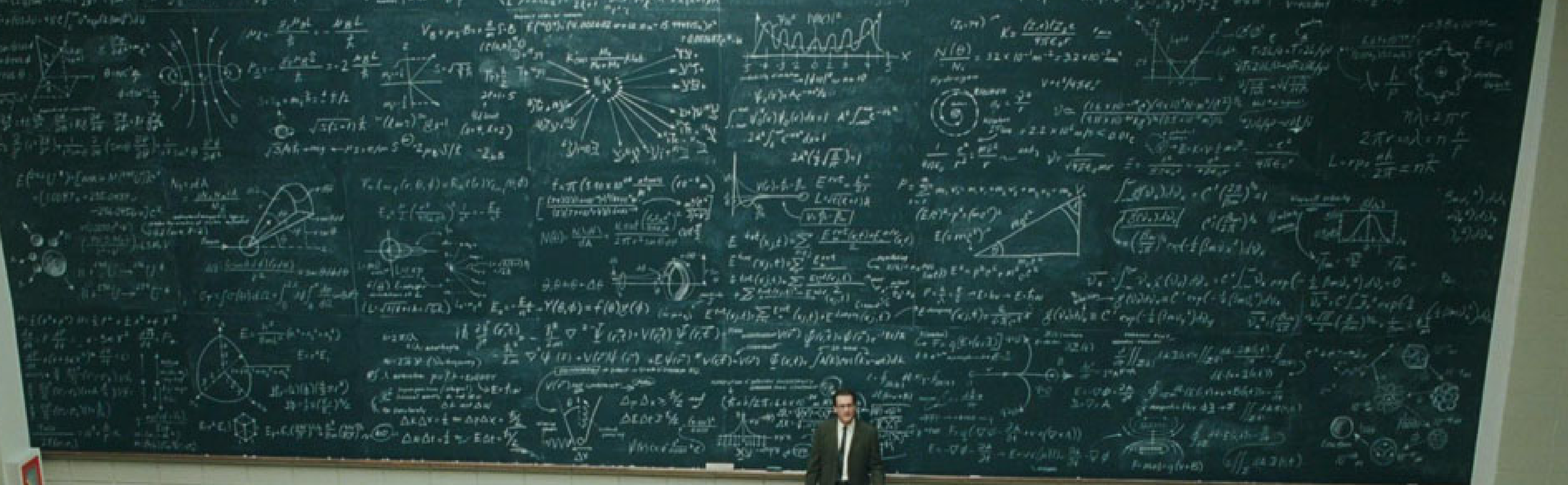


Residents Per Acre



Jobs Per Acre





SCARY MATH

How do we compare cars?

Miles per tank



1955 BMW Isetta

Rolls-Royce Phantom
Drophead

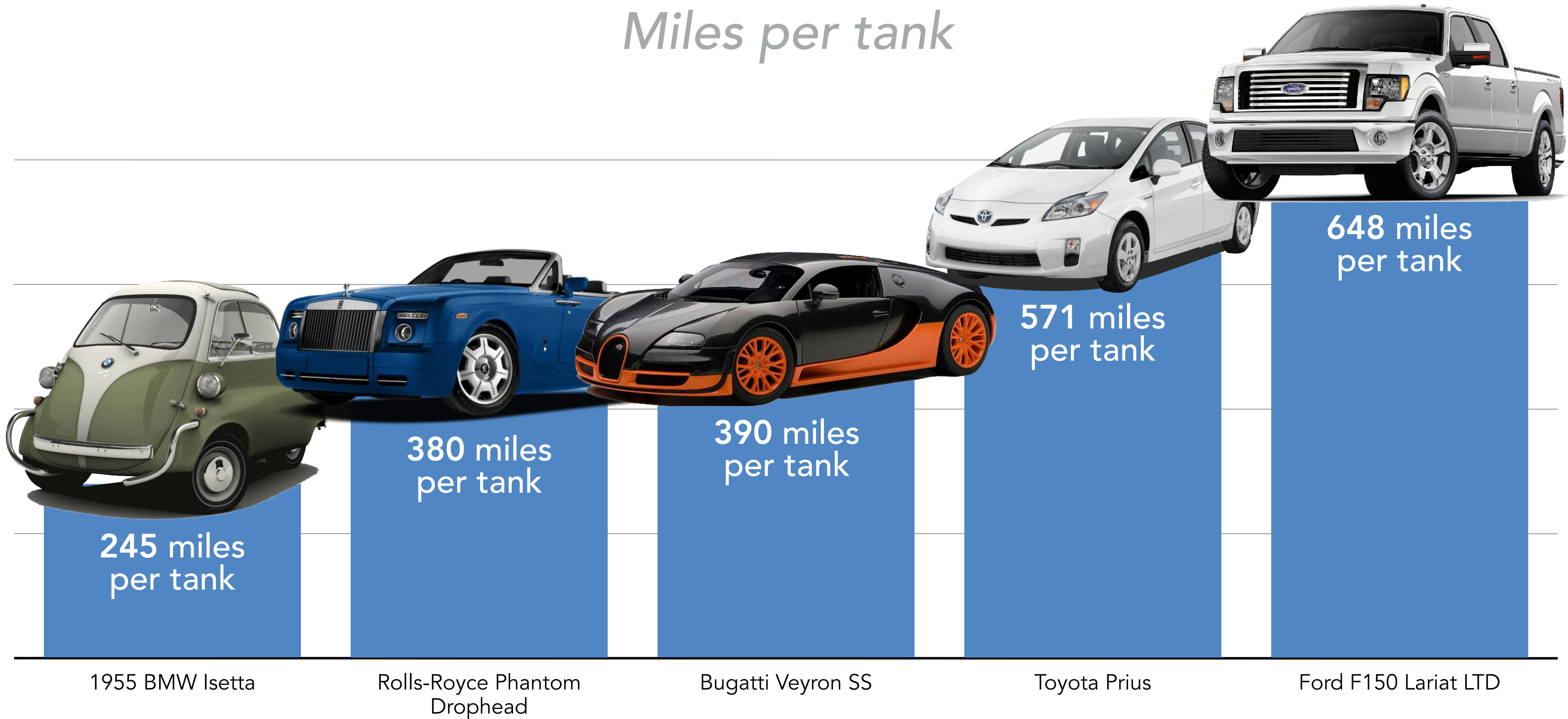
Bugatti Veyron SS

Toyota Prius

Ford F150 Lariat LTD

How do we compare cars?

Miles per tank



How do we compare cars?

Miles per gallon



50/70 mpg



11/18 mpg



8/14 mpg



51/48 mpg



13/18 mpg

1955 BMW Isetta

Rolls-Royce Phantom
Drophead

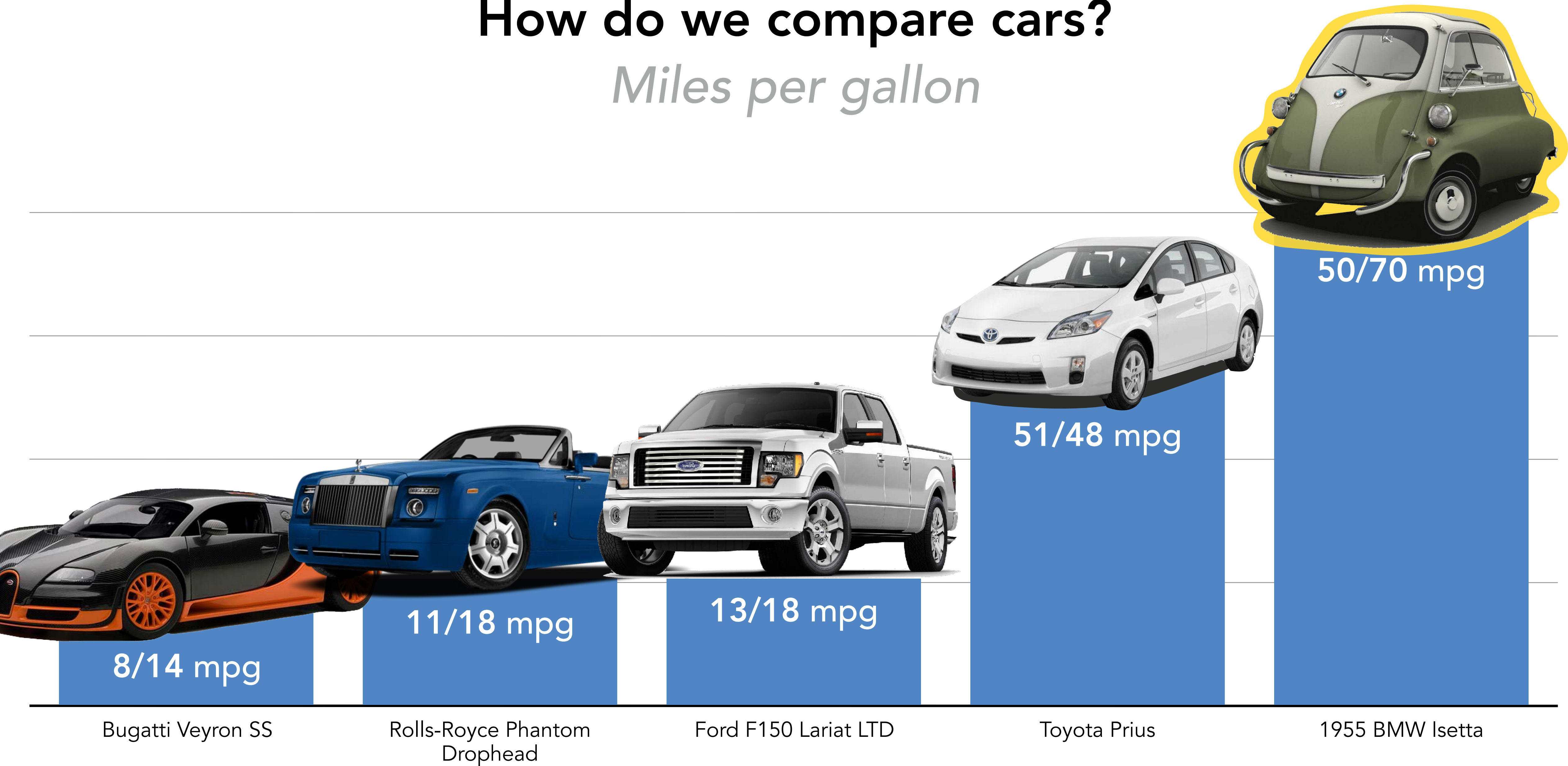
Bugatti Veyron SS

Toyota Prius

Ford F150 Lariat LTD

How do we compare cars?

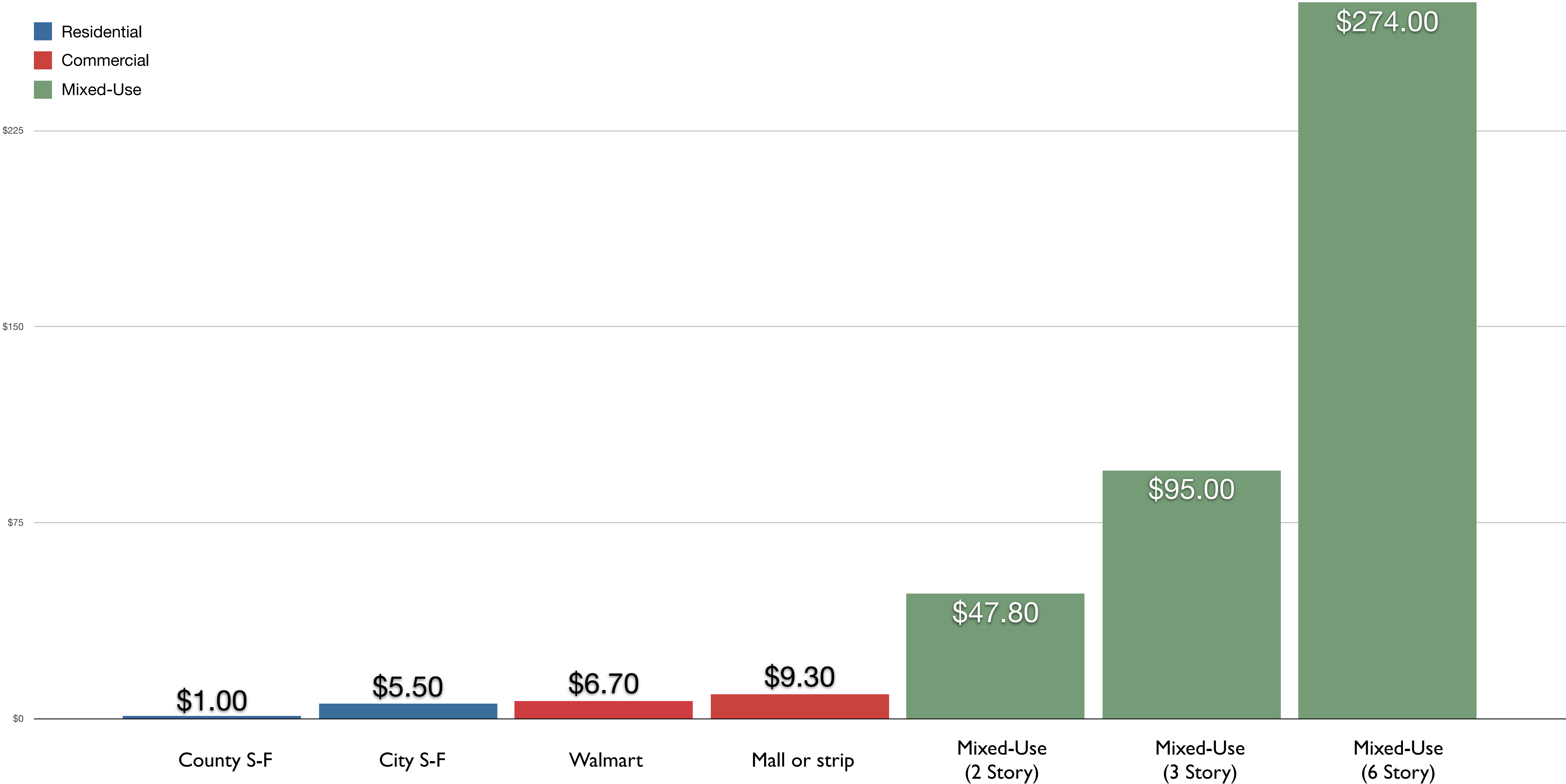
Miles per gallon



County Property Taxes/Acre

Ratio Difference of 60 City Set, in 21 States (+ a Province)

- Residential
- Commercial
- Mixed-Use



International Association of Assessing Officers

80th International Conference

Sacramento, CA

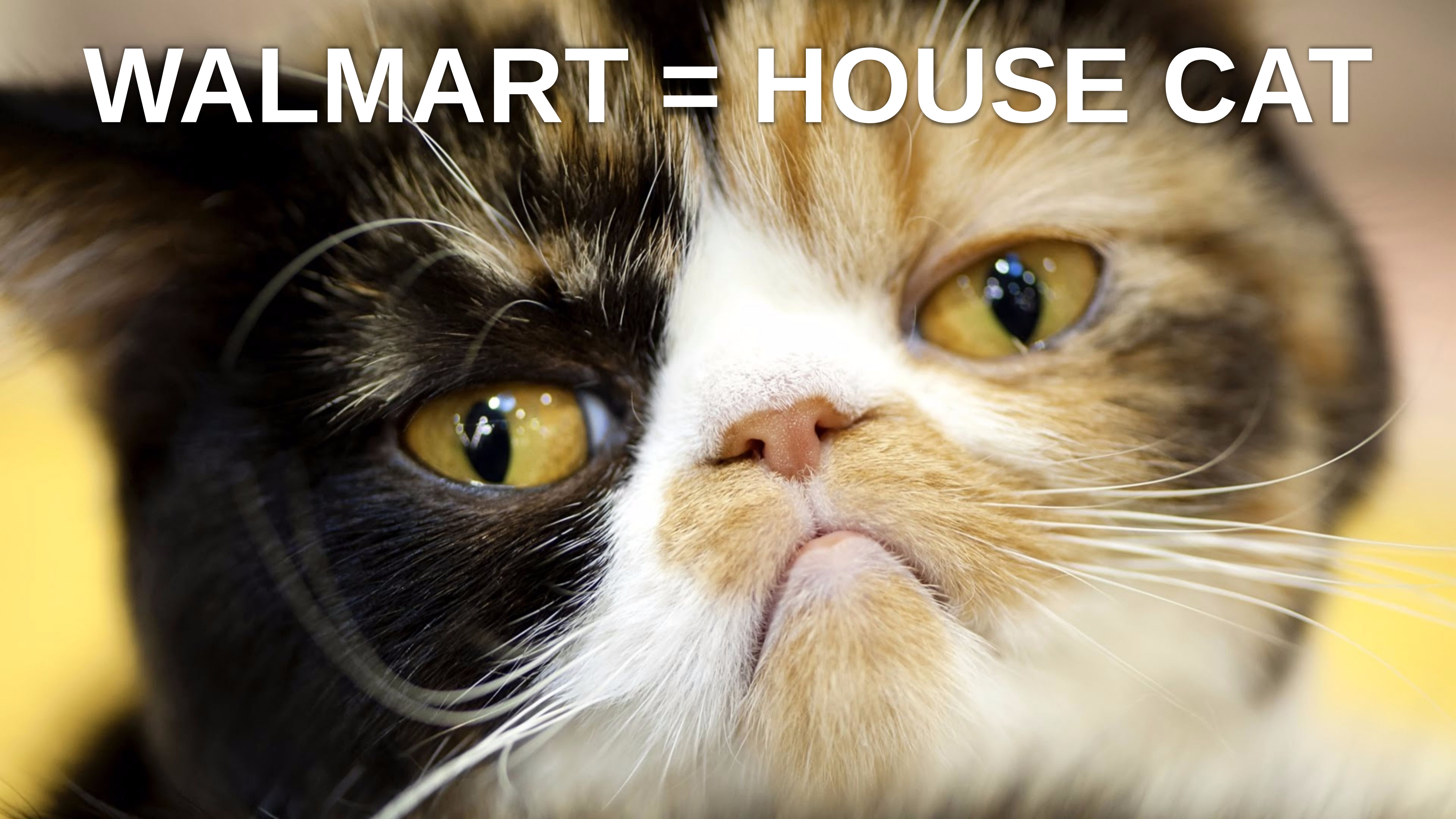
August 26, 2014



Charles Terrell, CMI
Director of Property Tax



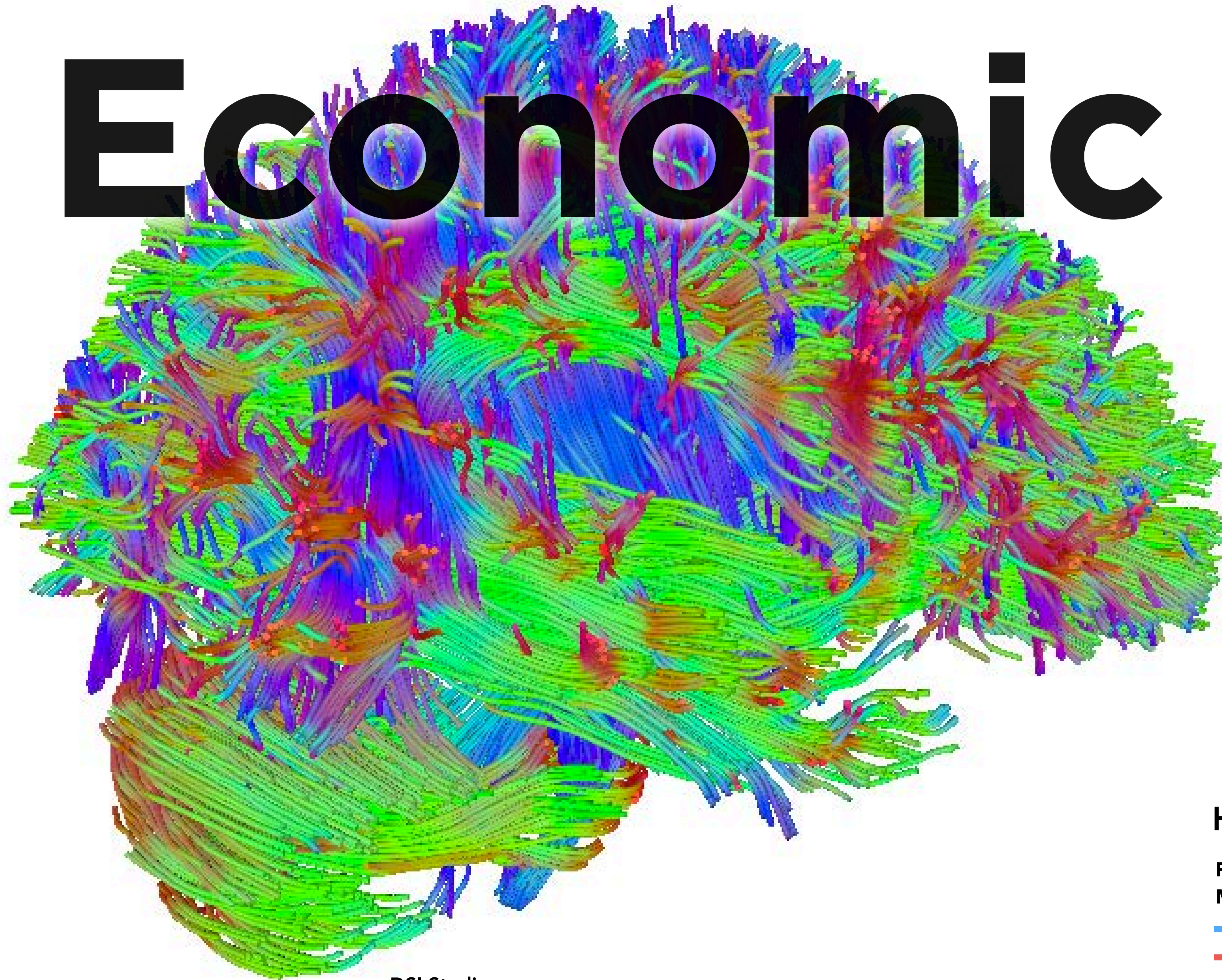
WALMART = HOUSE CAT



Action Steps:

Know the economic flow.

Economic MRI™



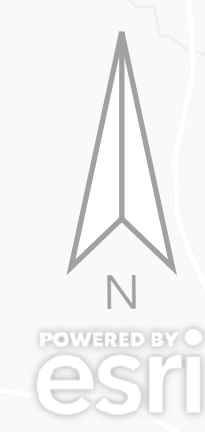
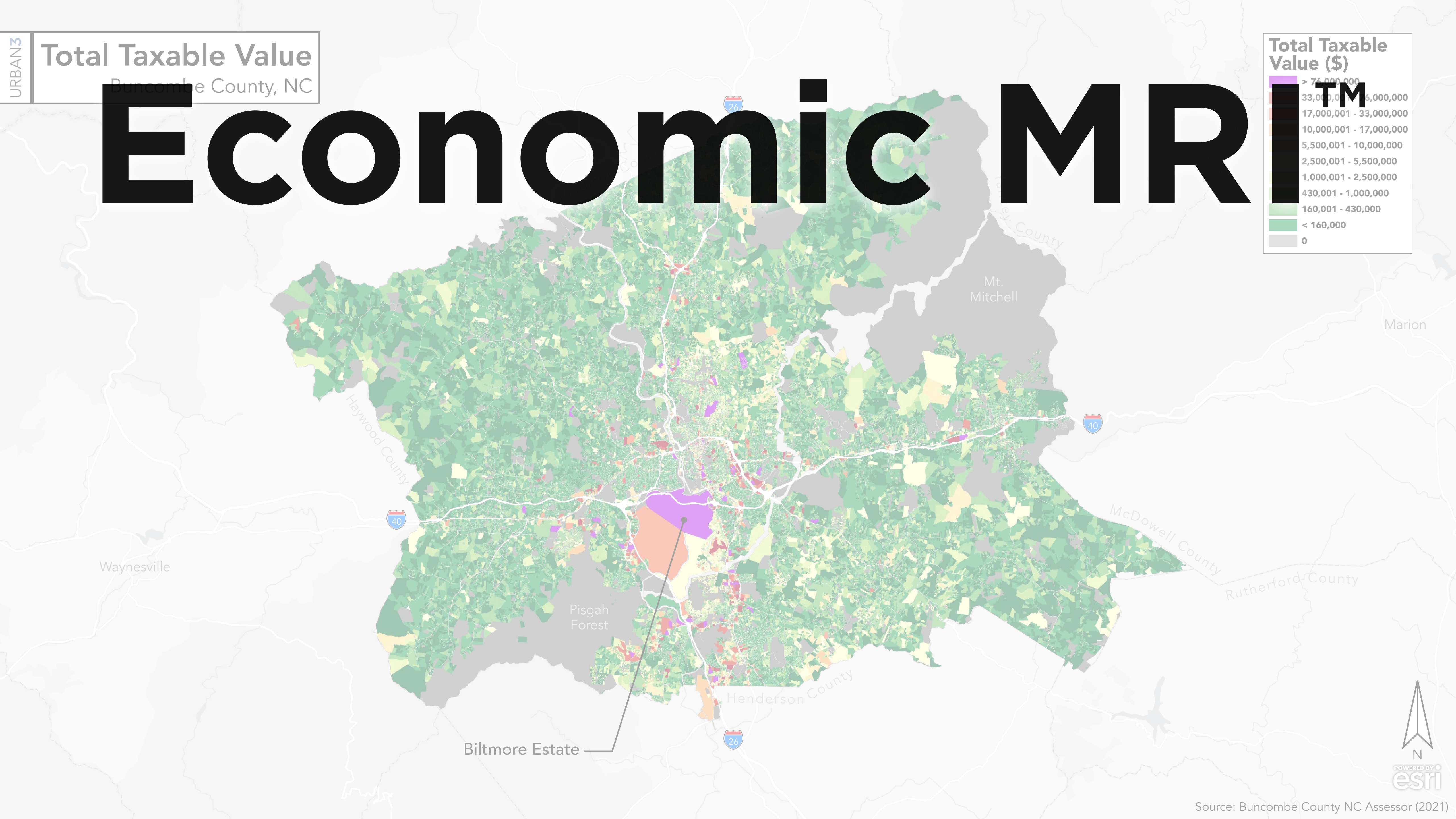
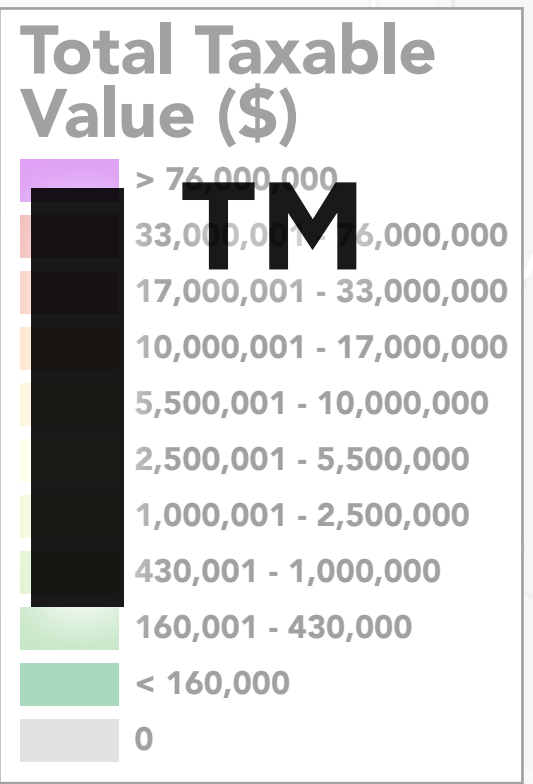
DSI Studio

Human Connectome Project

Fiber architecture of the brain.
Measured from diffusion spectral imaging (DSI).

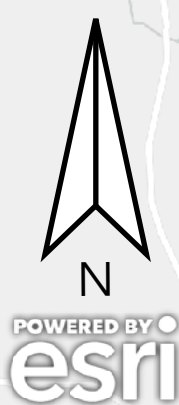
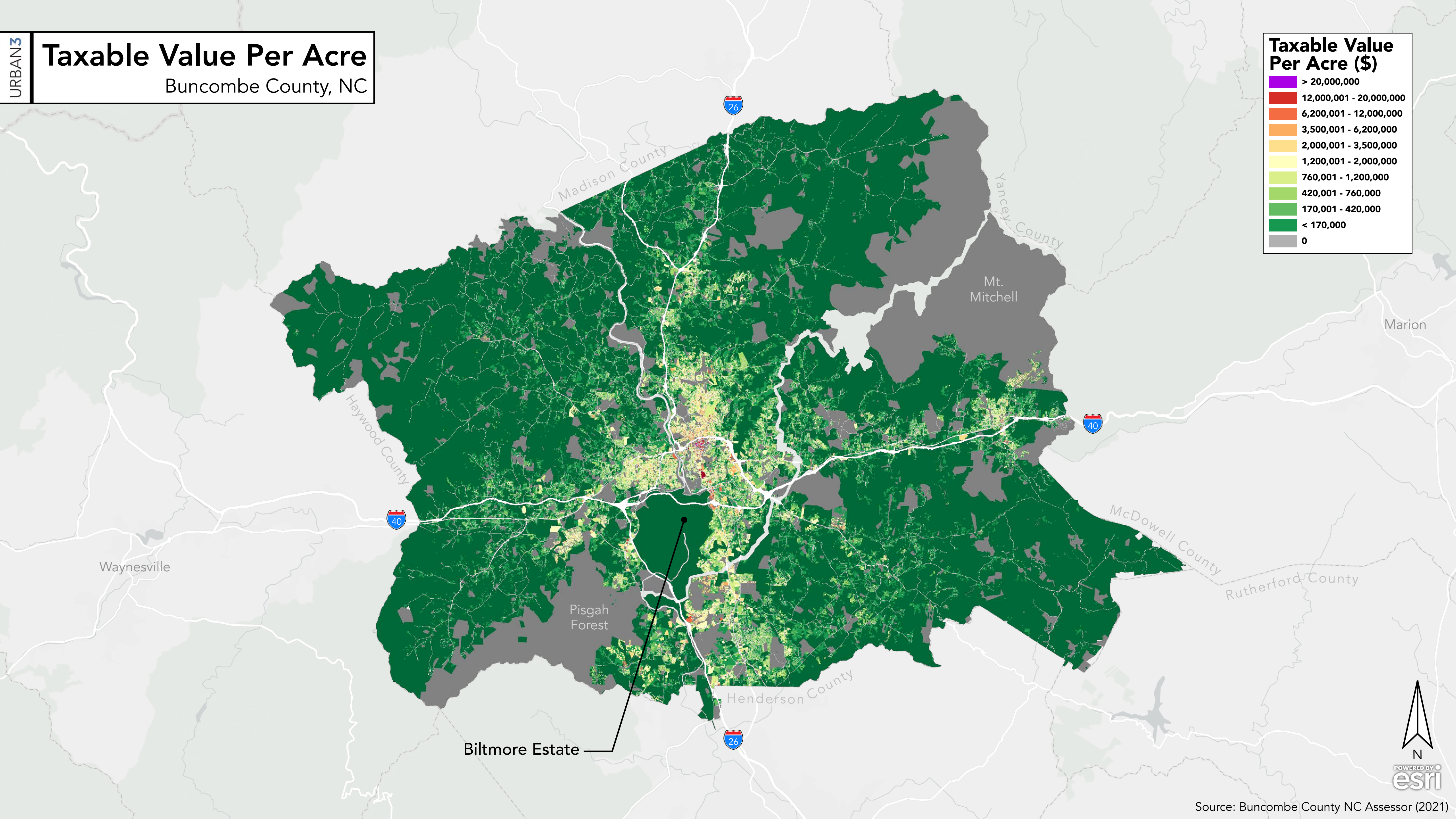
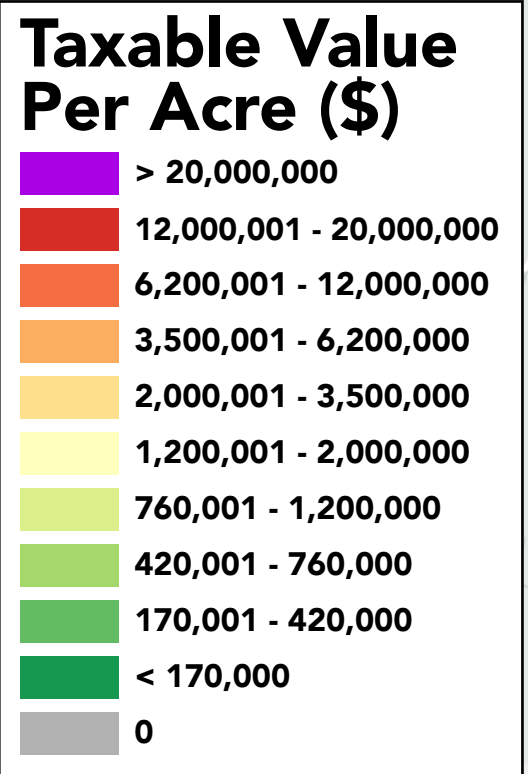
— up-down
— left-right
— anterior-posterior

Economic MRI™



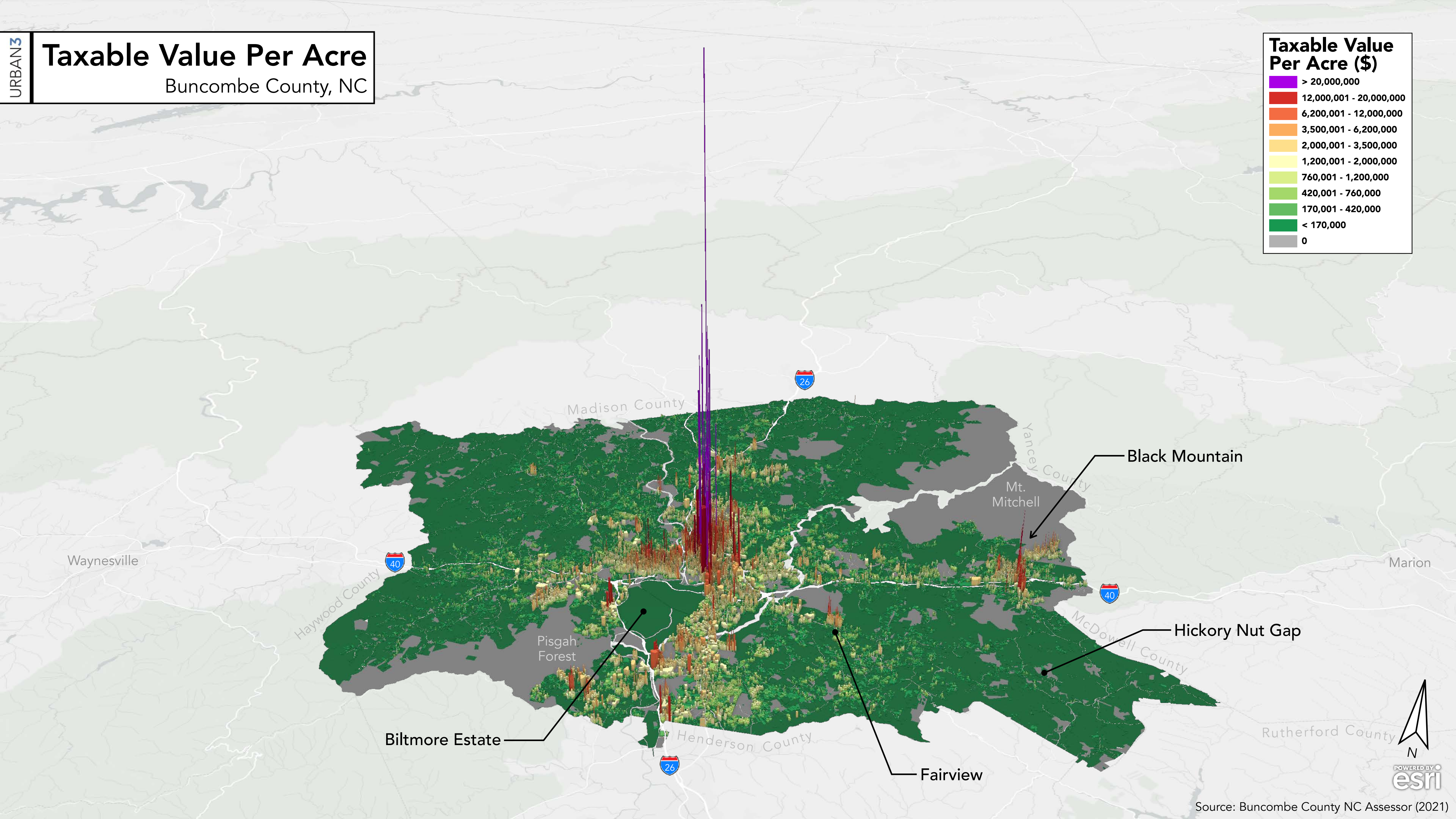
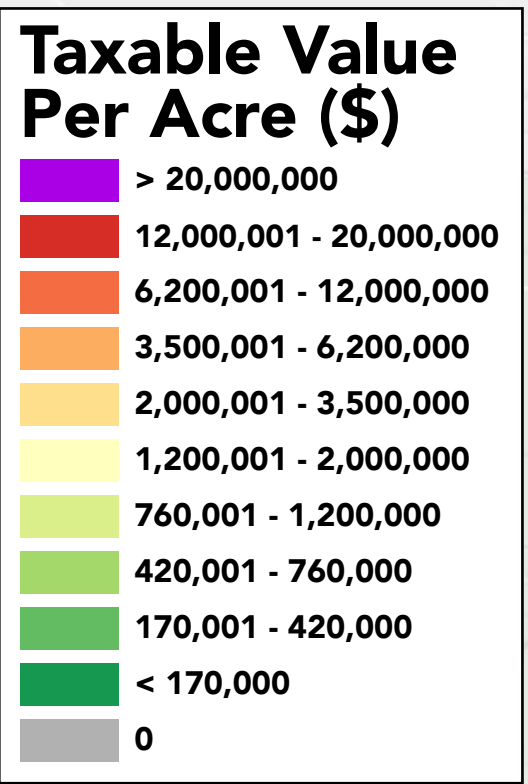
Taxable Value Per Acre

Buncombe County, NC



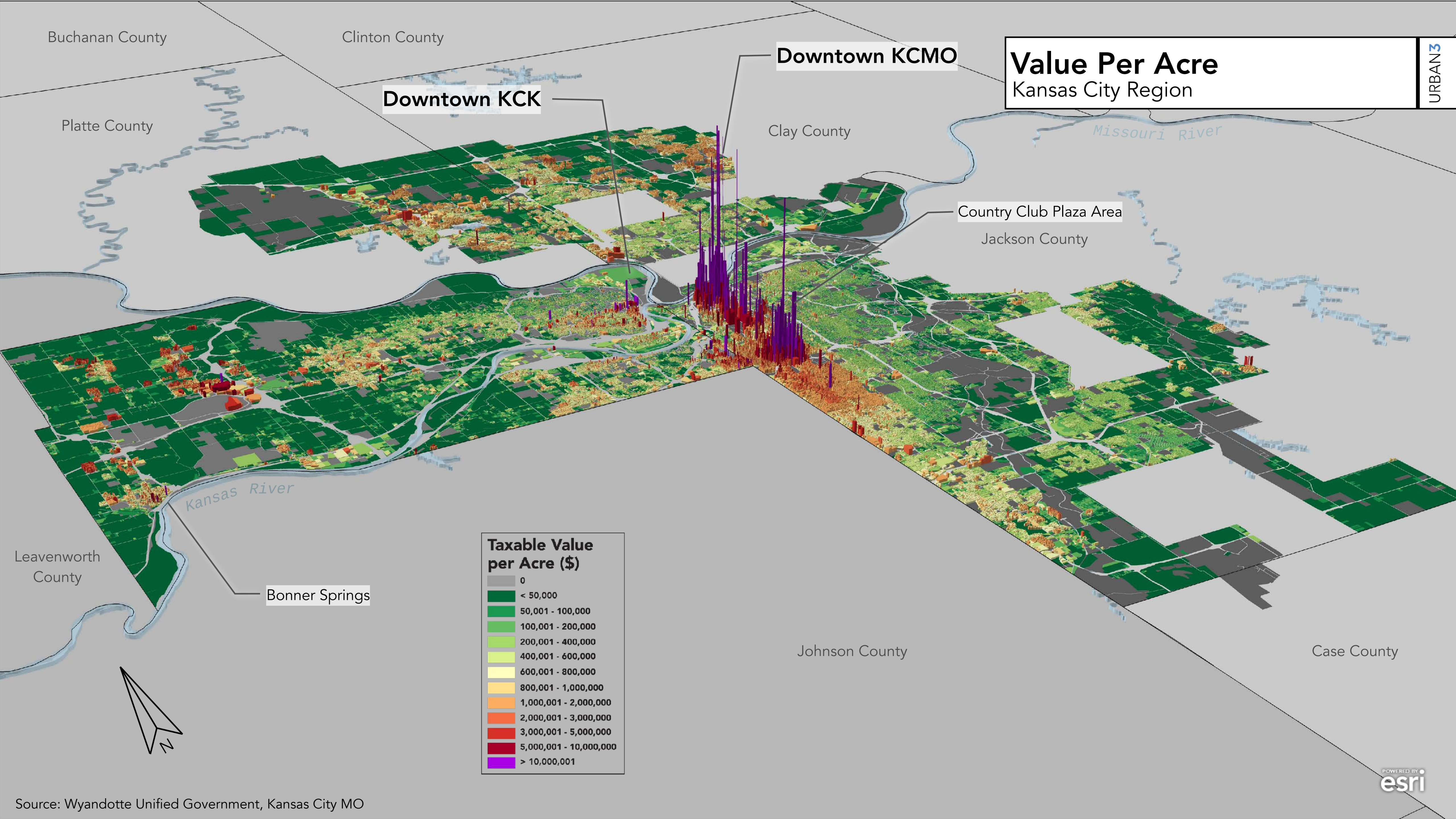
Taxable Value Per Acre

Buncombe County, NC



Response:

**But that's Asheville,
_____ (insert your state name) is different!**



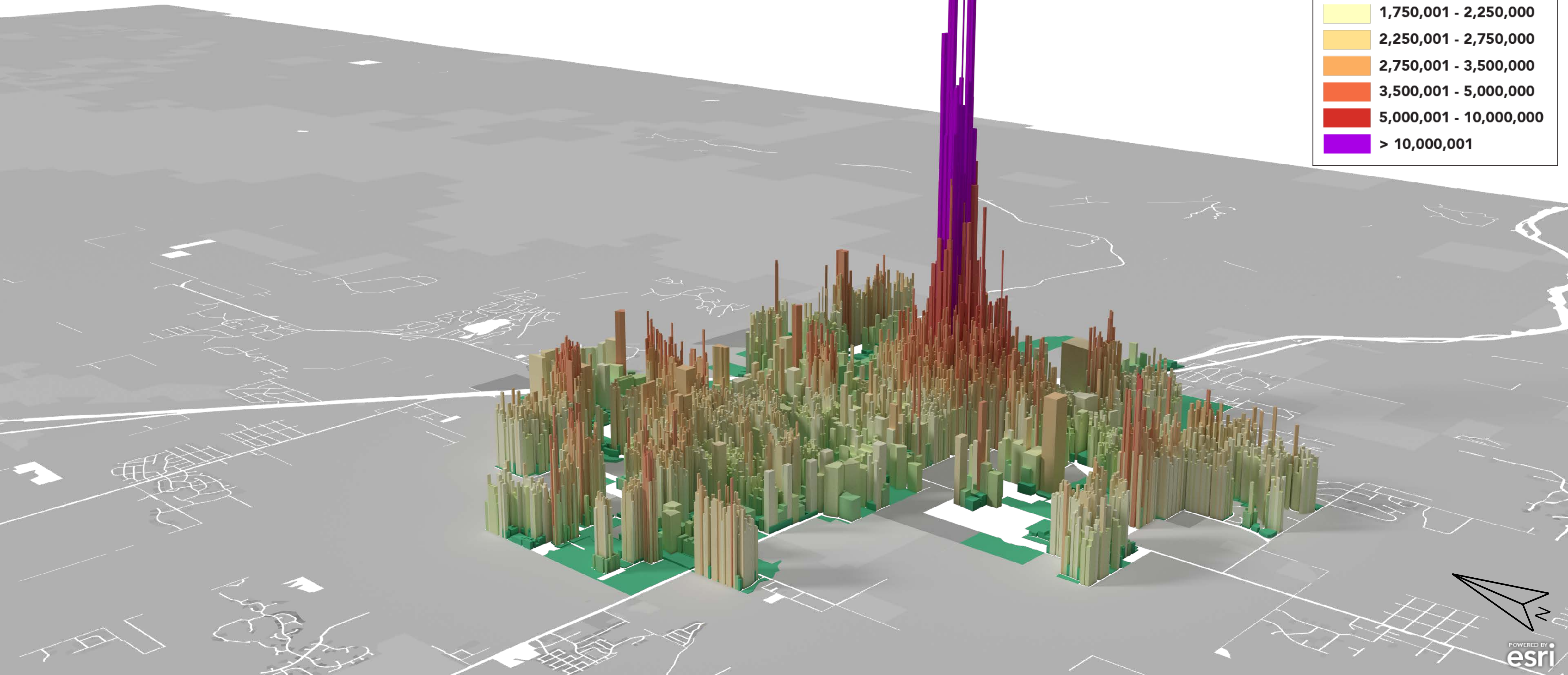
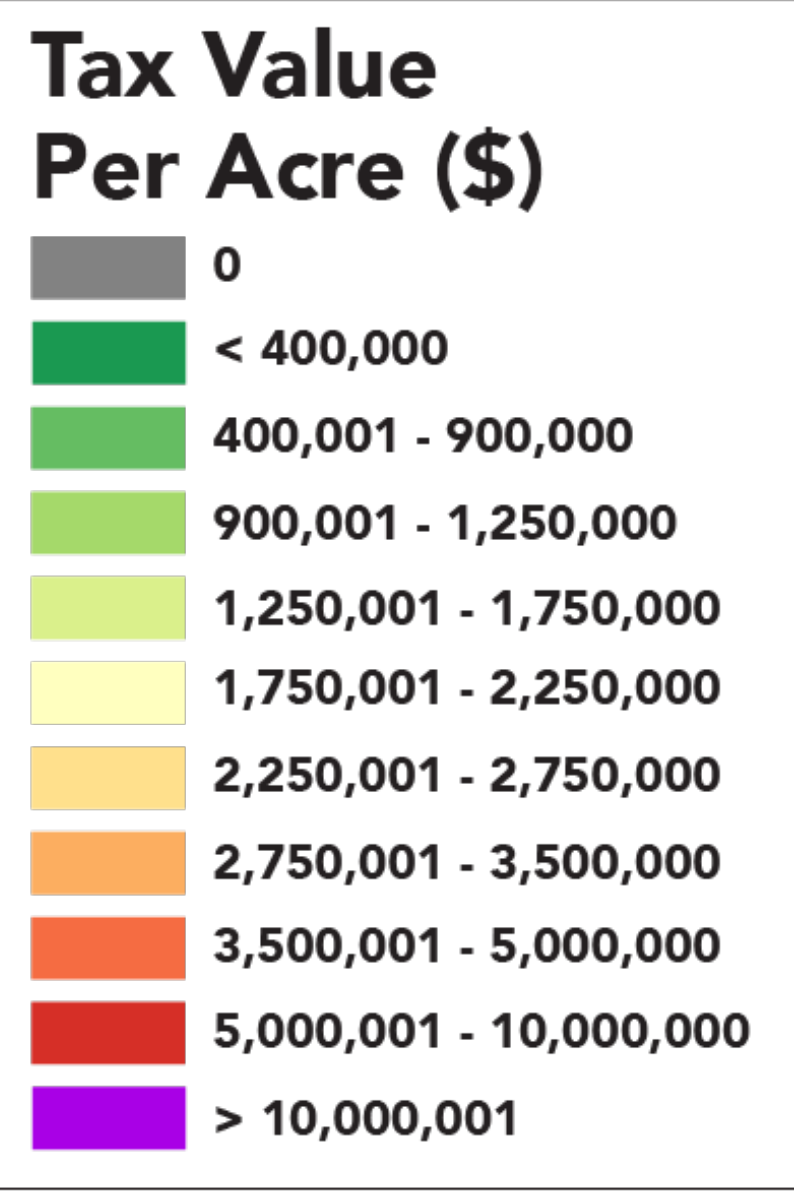
Value Per Acre

Kansas City Region

URBAN3

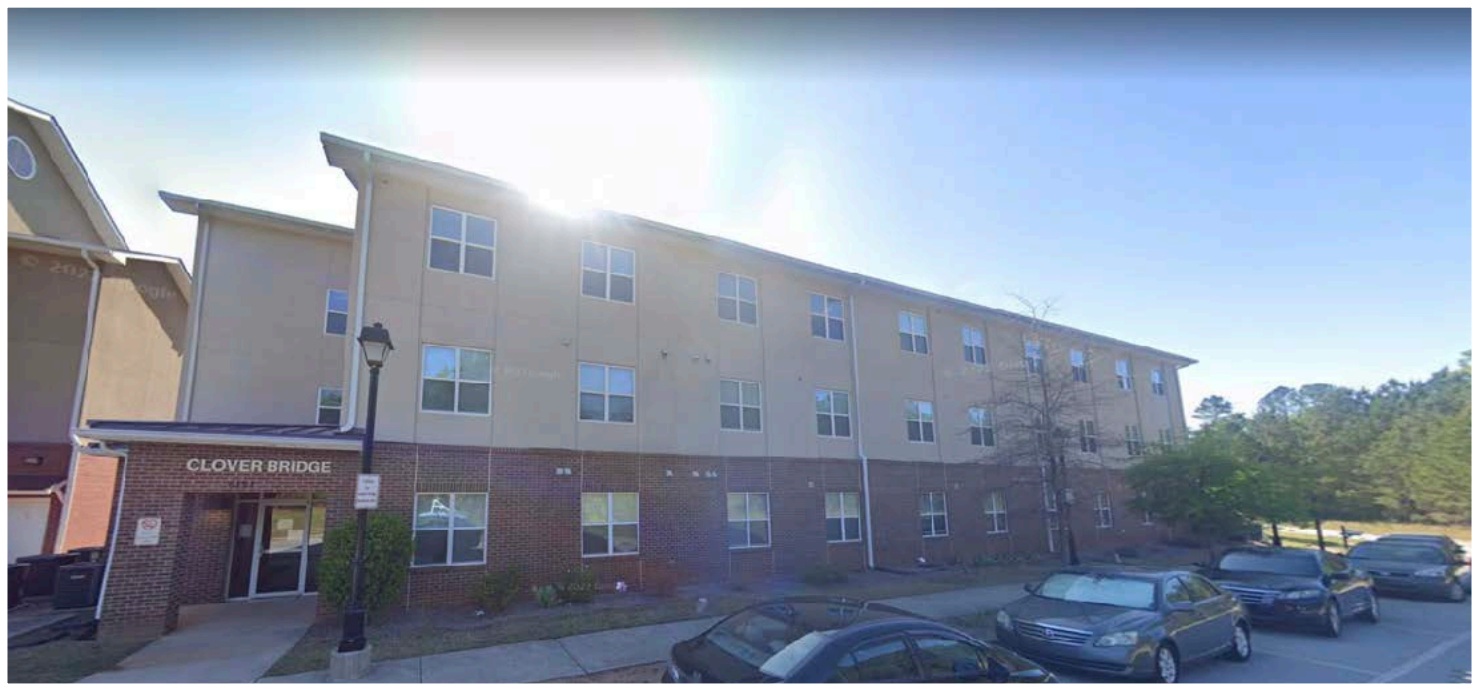
Taxable Value per Acre (\$)	
0	
< 50,000	
50,001 - 100,000	
100,001 - 200,000	
200,001 - 400,000	
400,001 - 600,000	
600,001 - 800,000	
800,001 - 1,000,000	
1,000,001 - 2,000,000	
2,000,001 - 3,000,000	
3,000,001 - 5,000,000	
5,000,001 - 10,000,000	
> 10,000,001	

2018



Value per Acre

Covington, GA



Clover Bridge
\$8.9M per acre



Clark's Grove Mixed Use
\$11M per acre

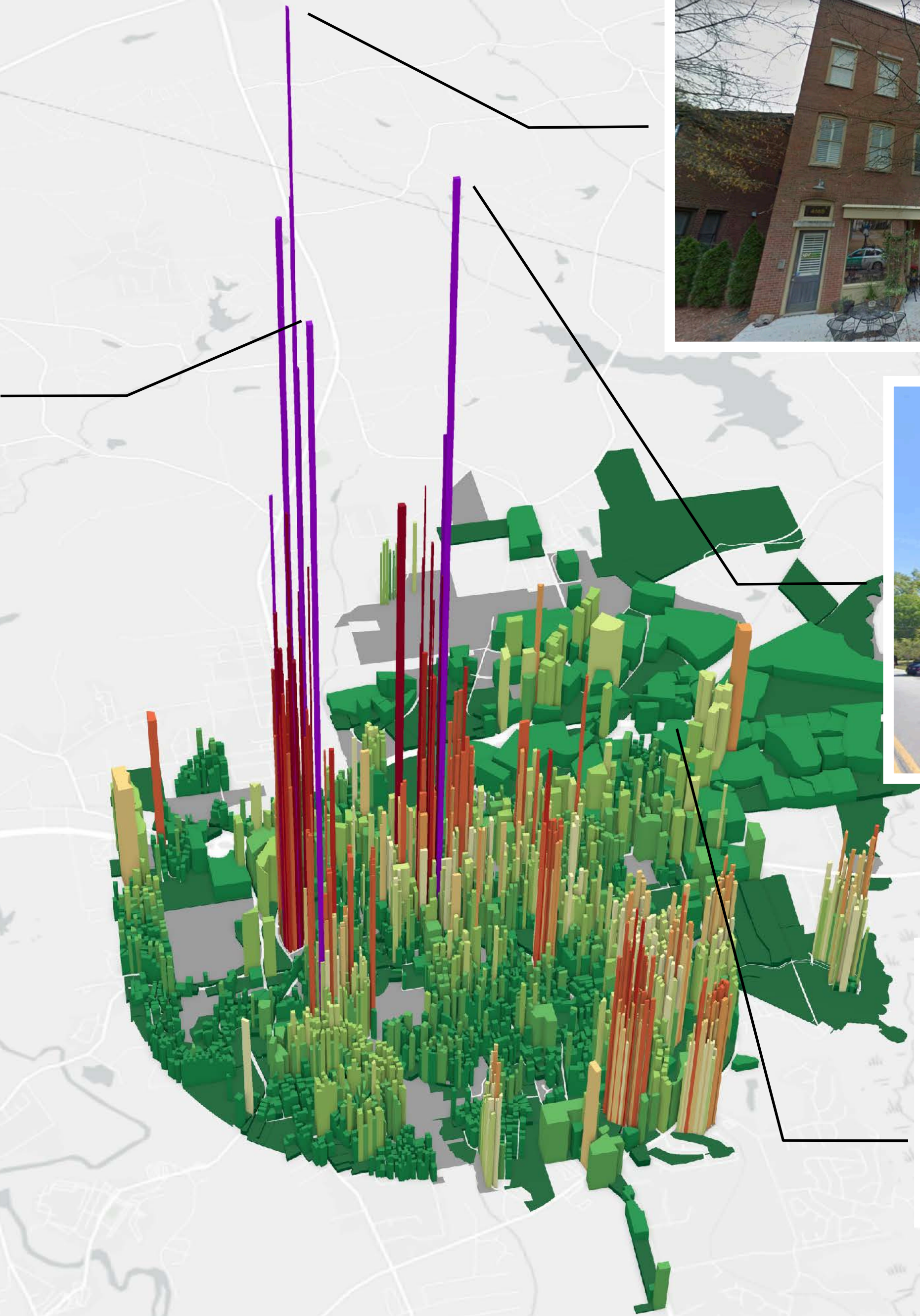
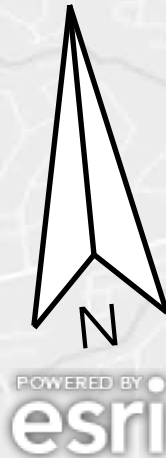
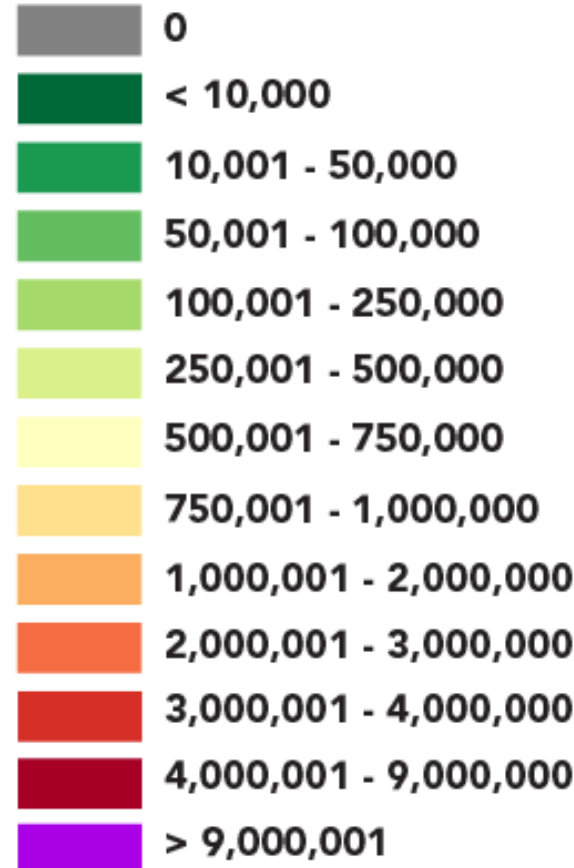


SE Corner College & Church
\$5.2M per acre



Walmart
\$0.2M per acre

Taxable Value Per Acre (\$)



URBAN3

Portsmouth Examples

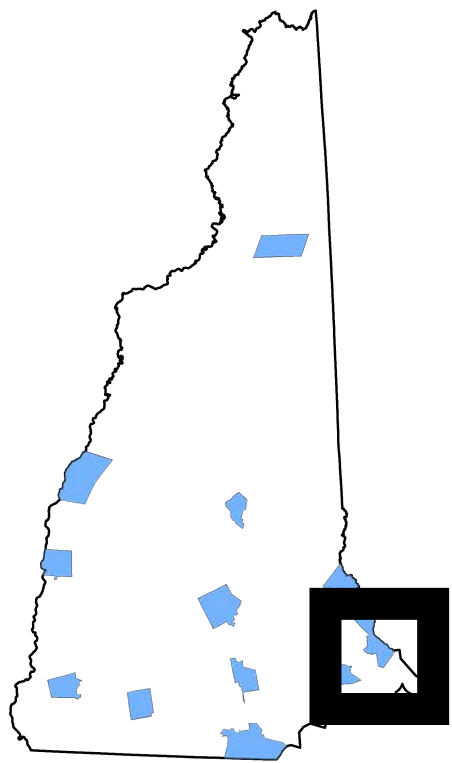
Land Use Productivity



Peak VPA
VPA: \$51.1 M



Mixed-use
VPA: \$29.3 M



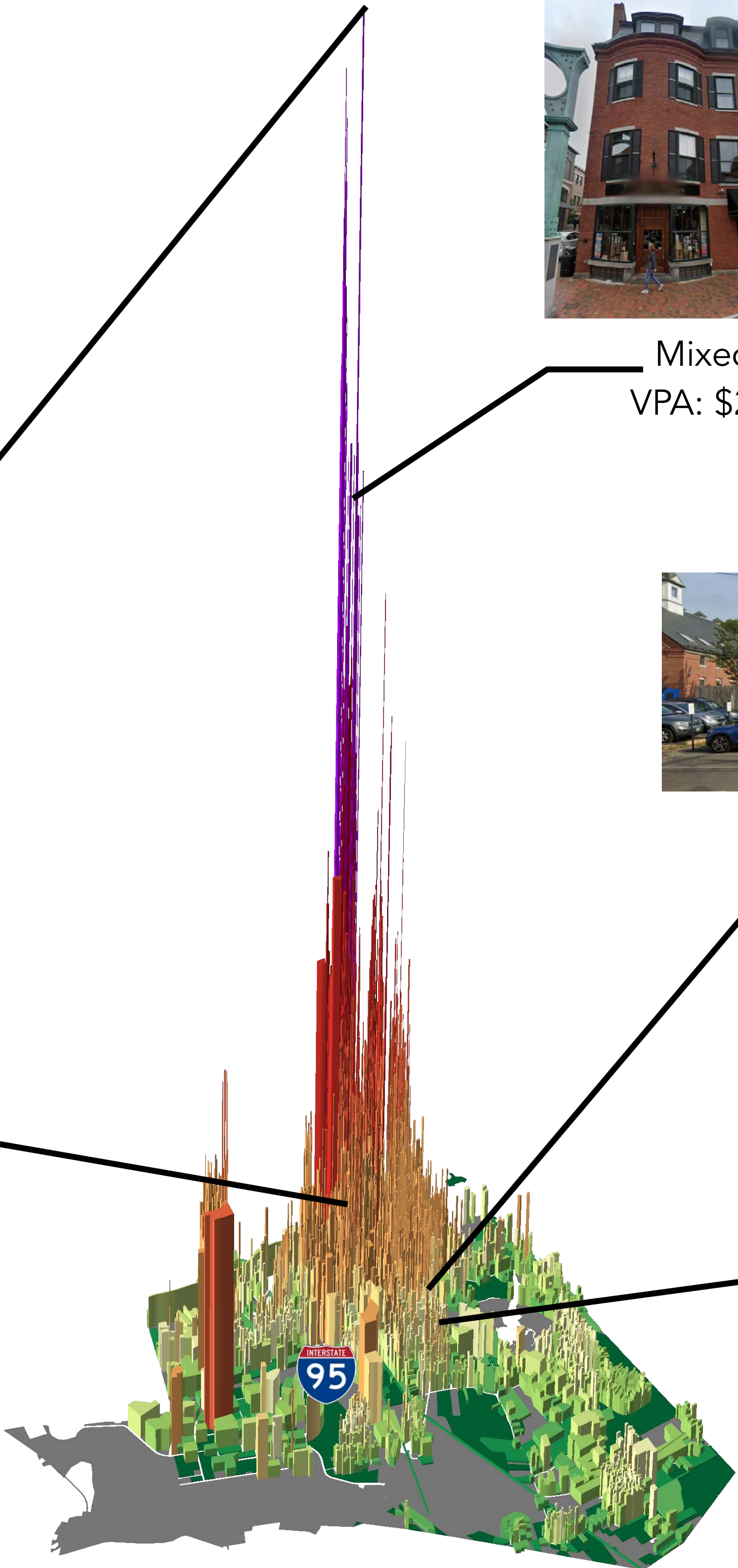
Commercial
VPA: \$2.4 M



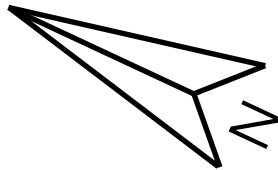
Multi-family
Avg. VPA: \$5.7 M



Single-family
Avg. VPA: \$2.1 M



Avg. VPA: \$557,179

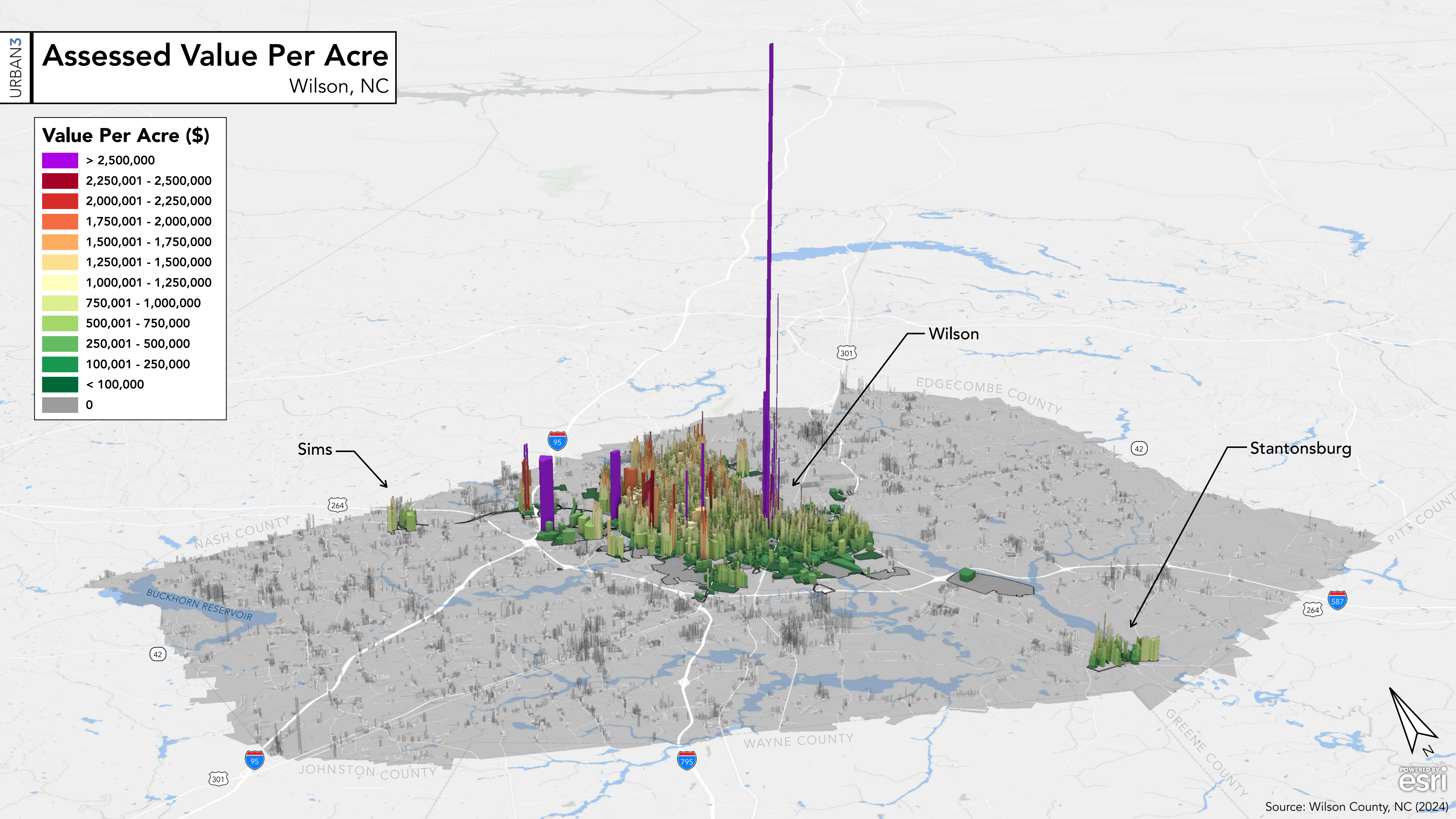
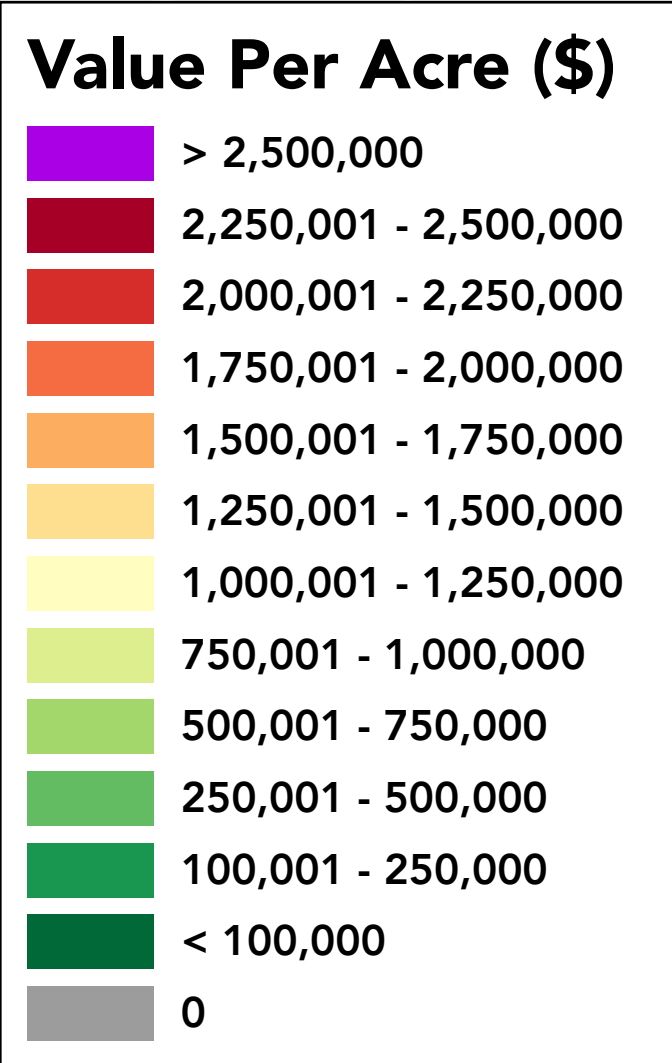


Response:

But that's not North Carolina!
We are different!

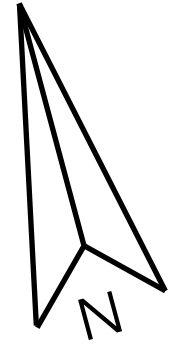
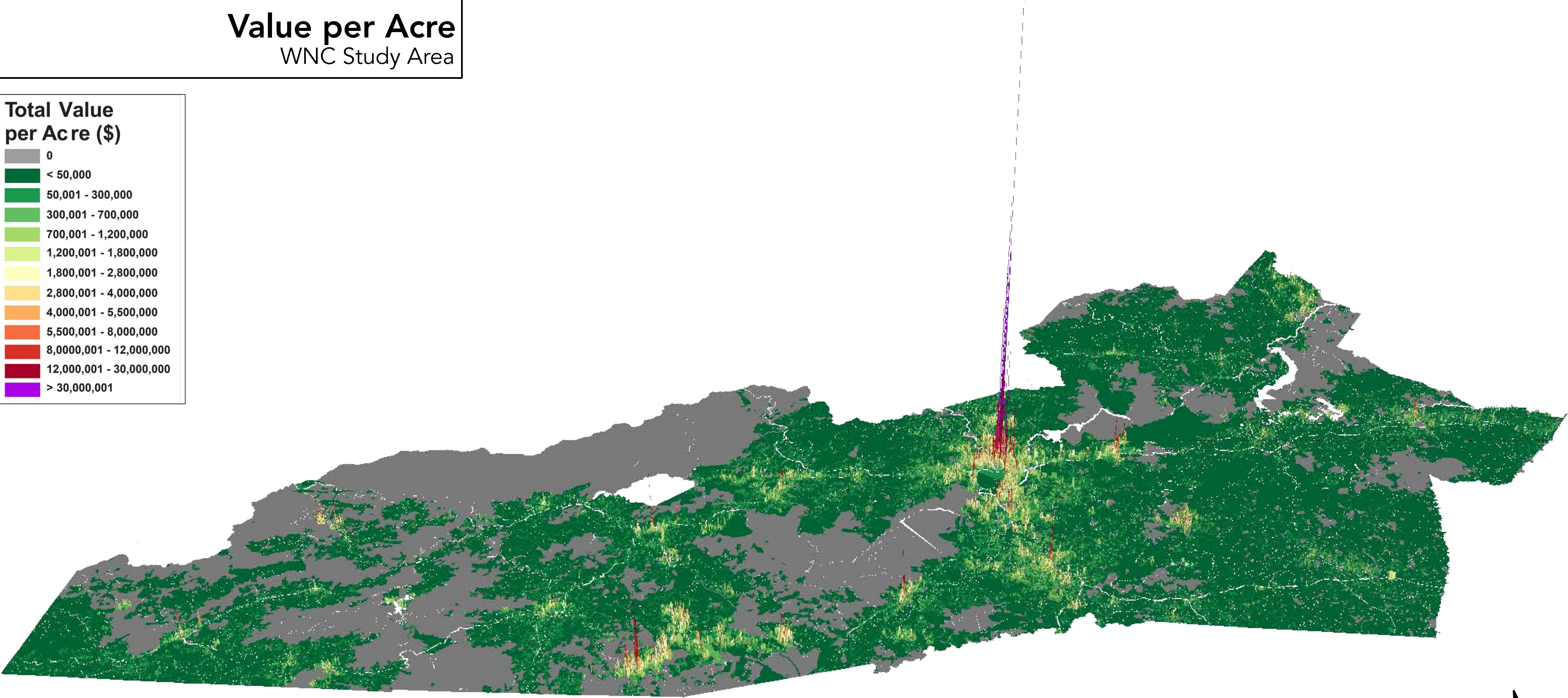
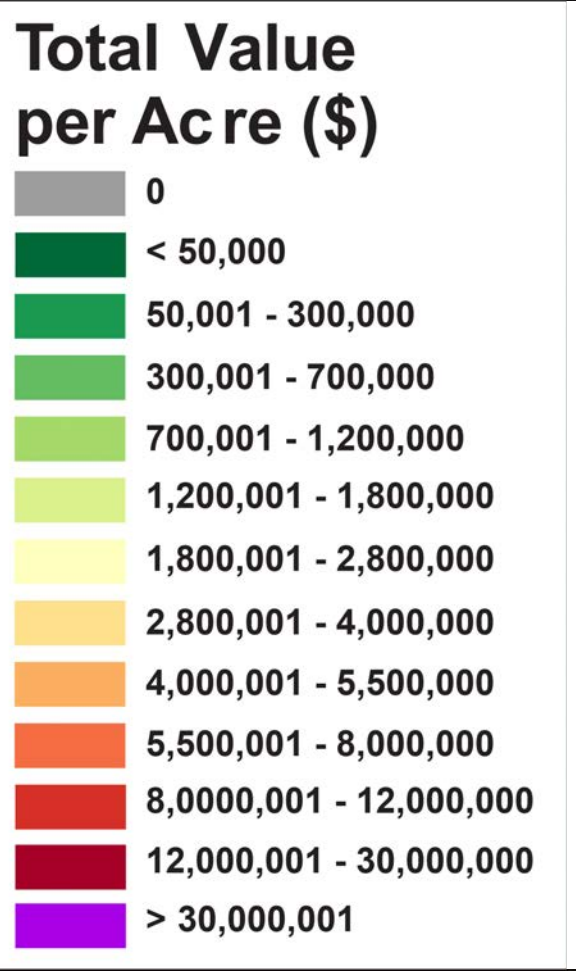
Assessed Value Per Acre

Wilson, NC



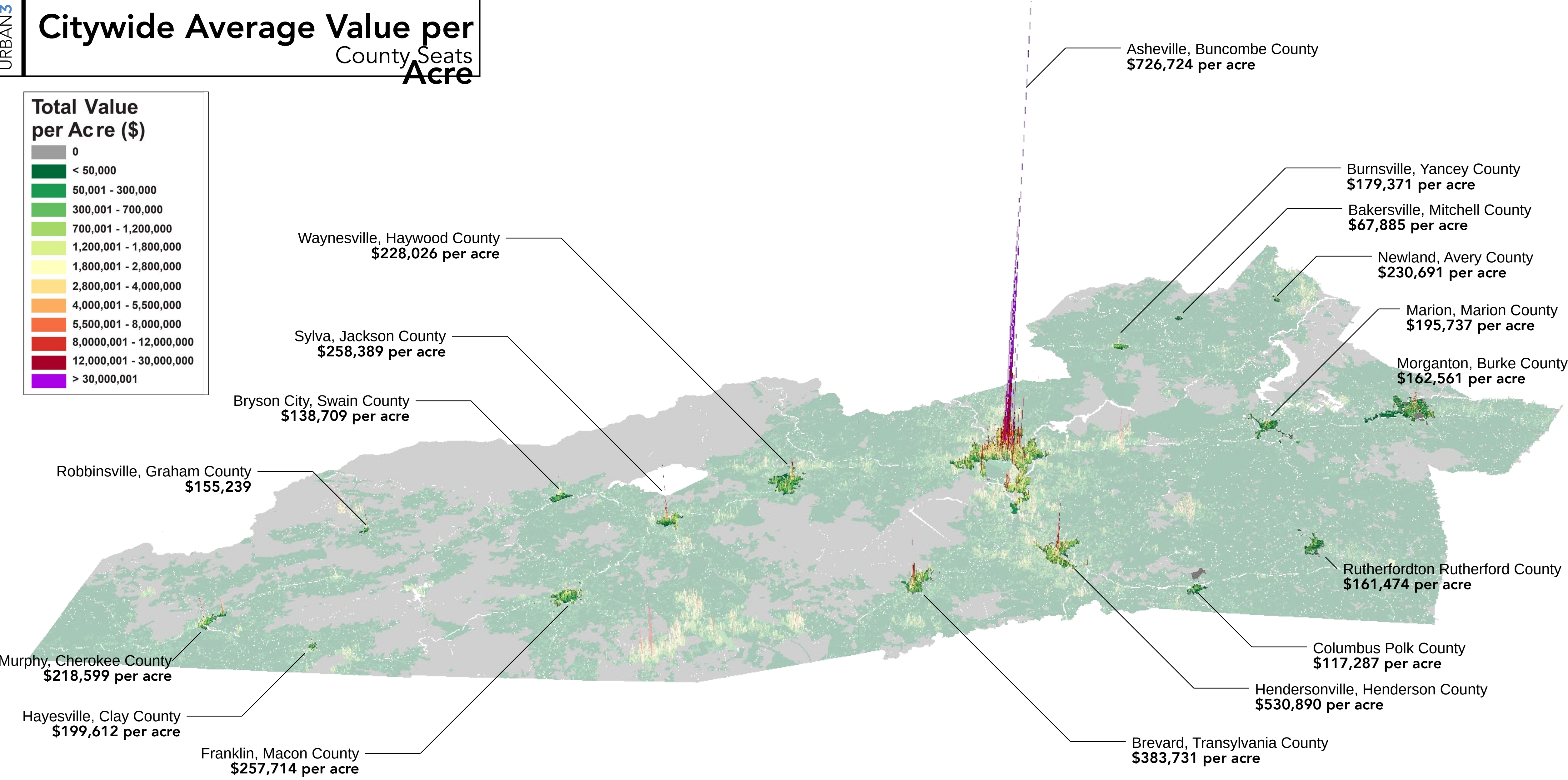
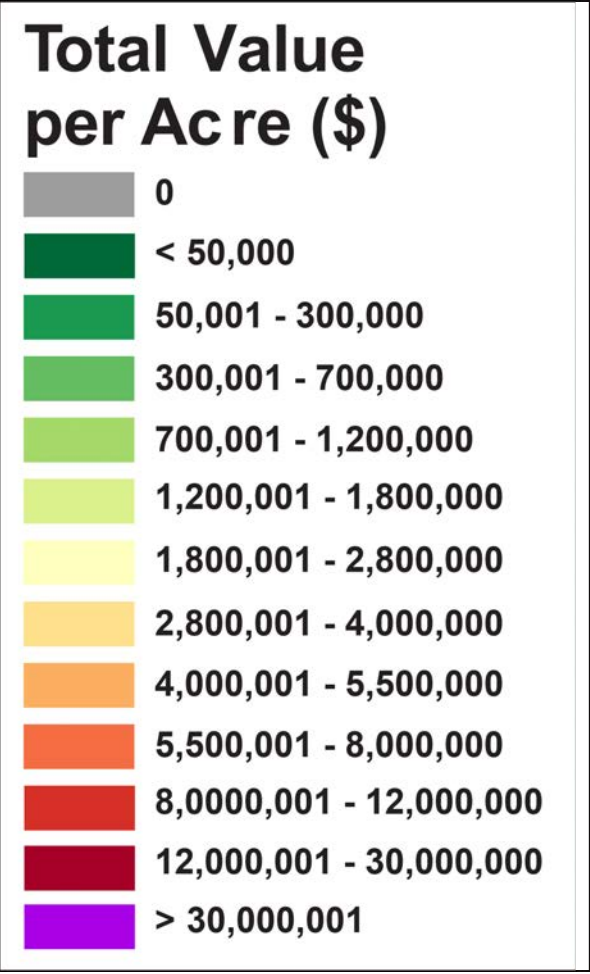
Value per Acre

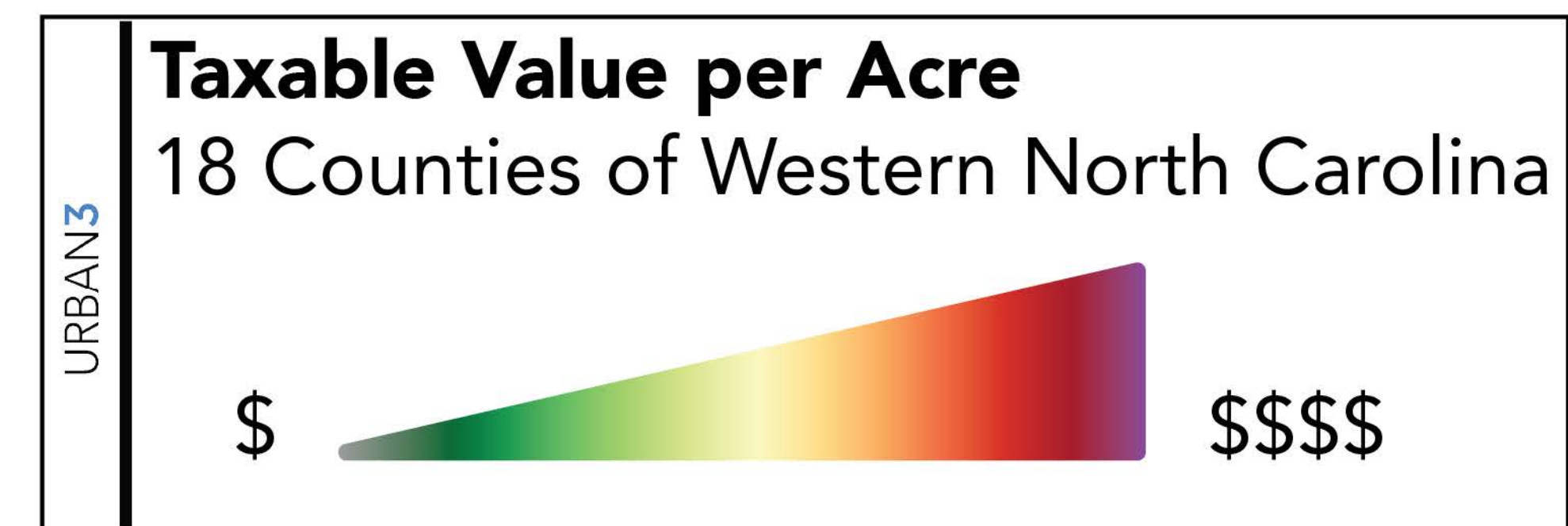
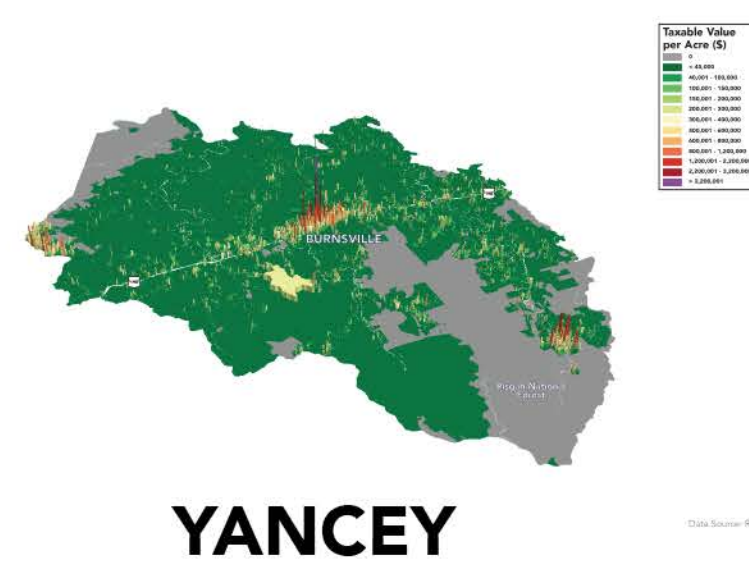
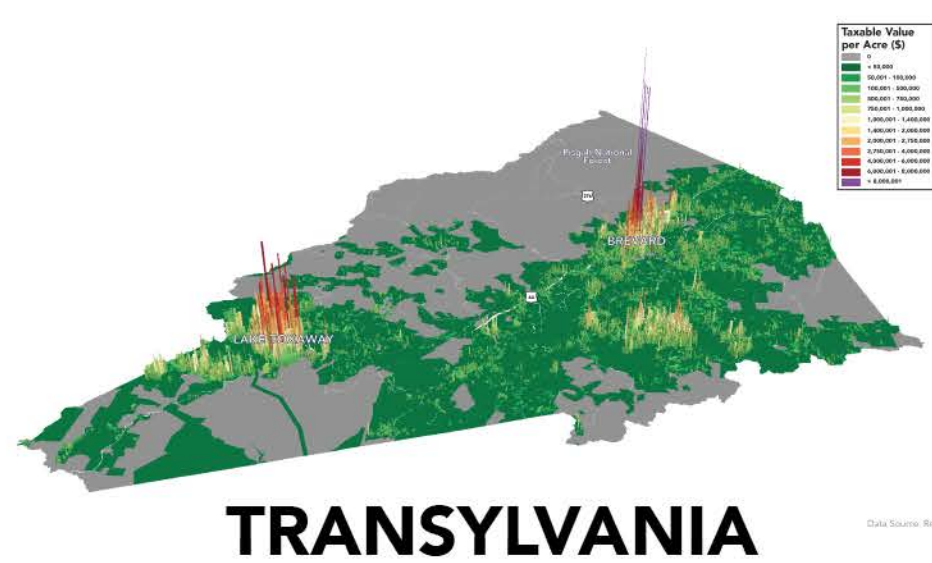
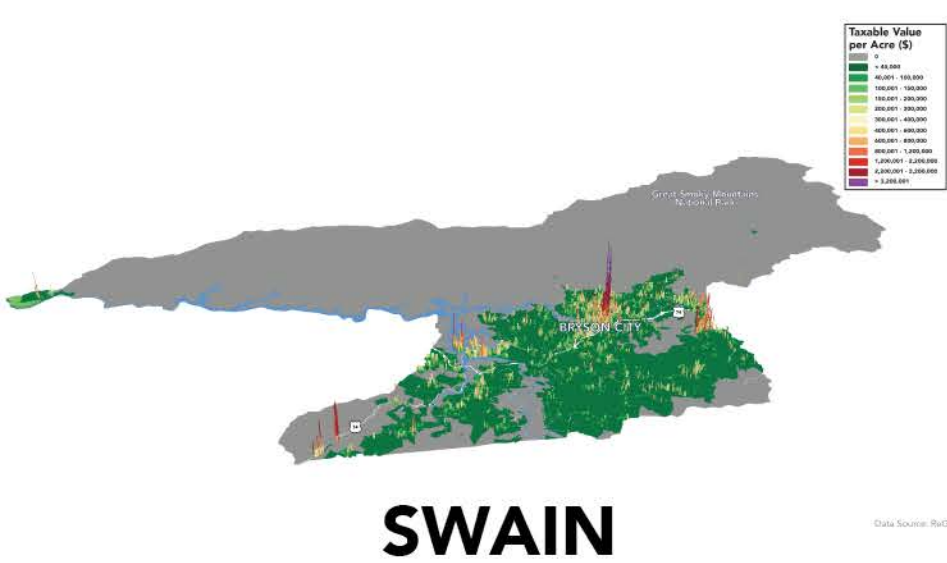
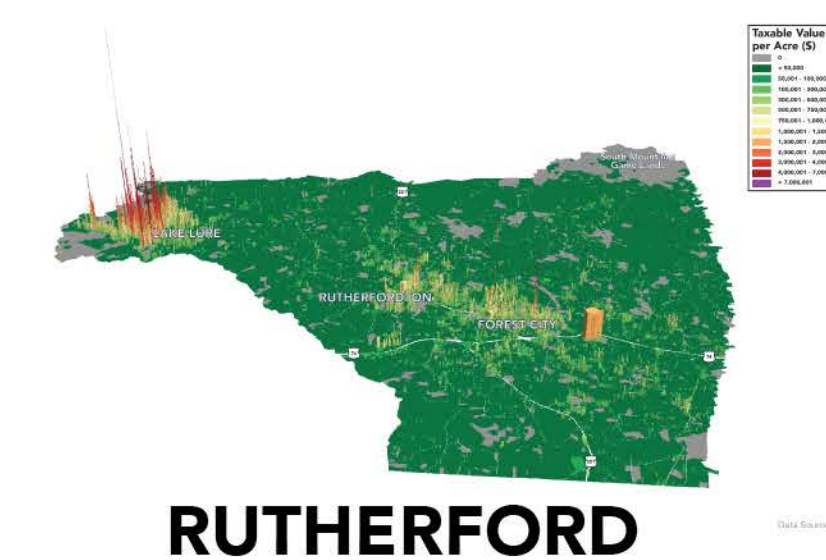
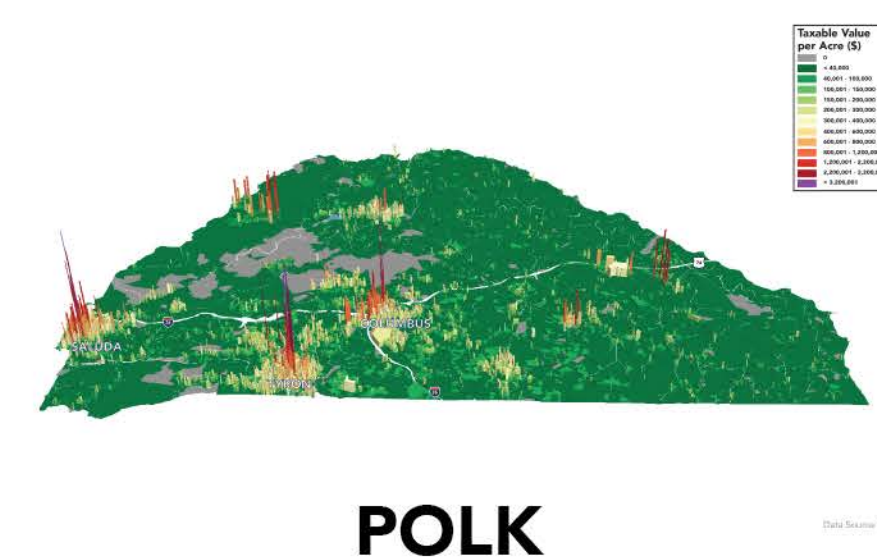
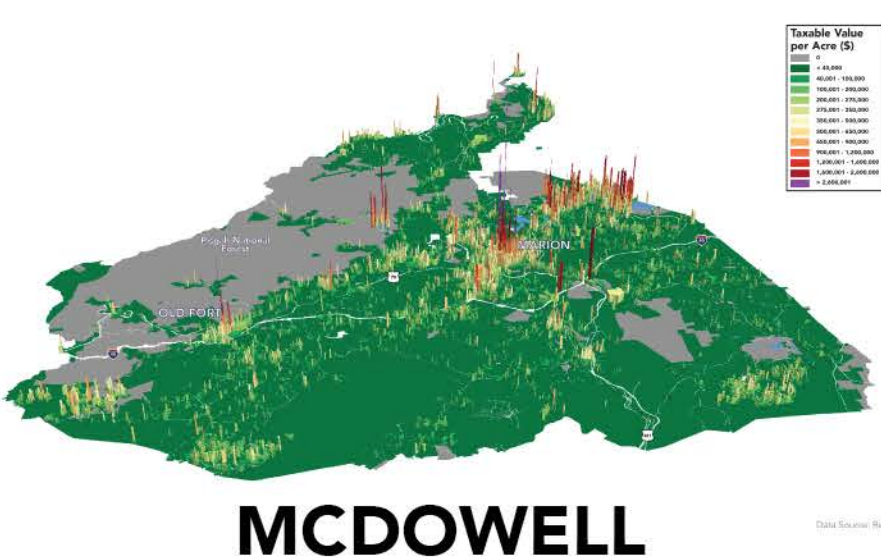
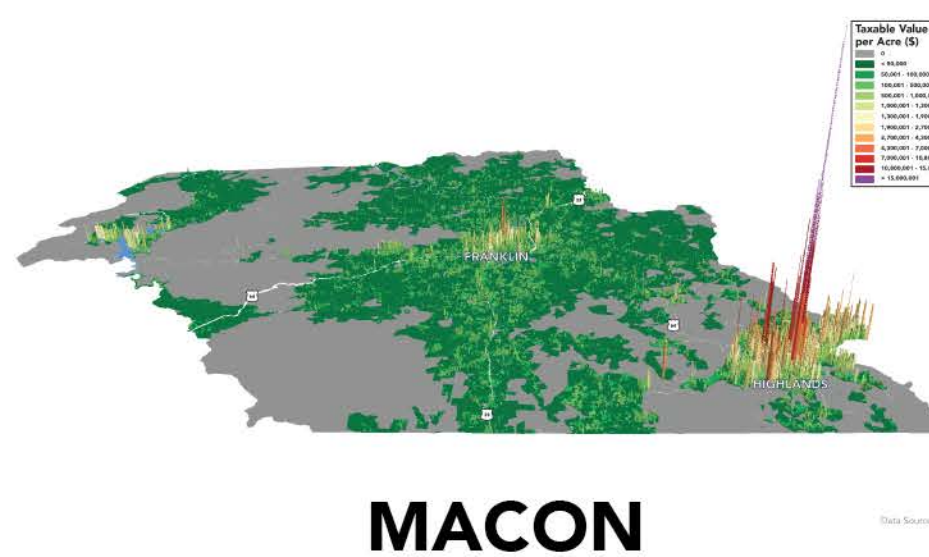
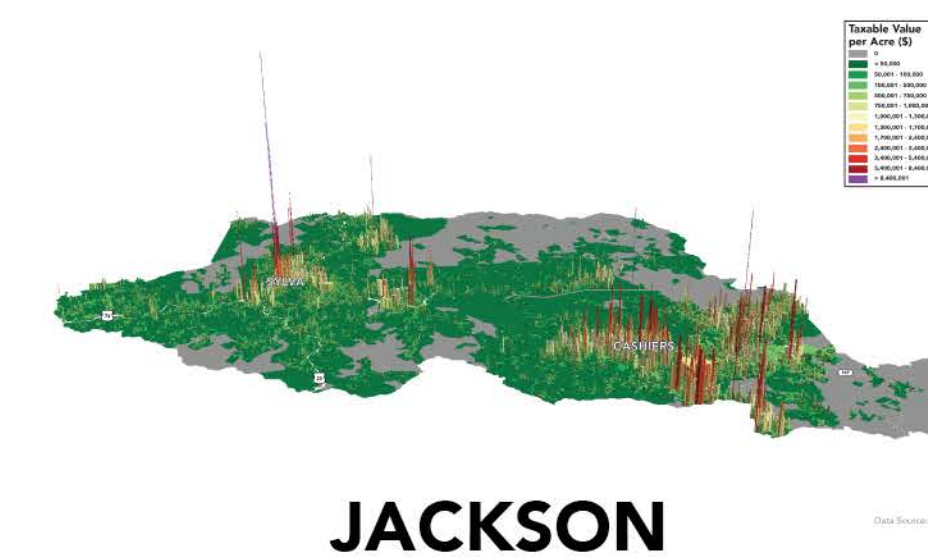
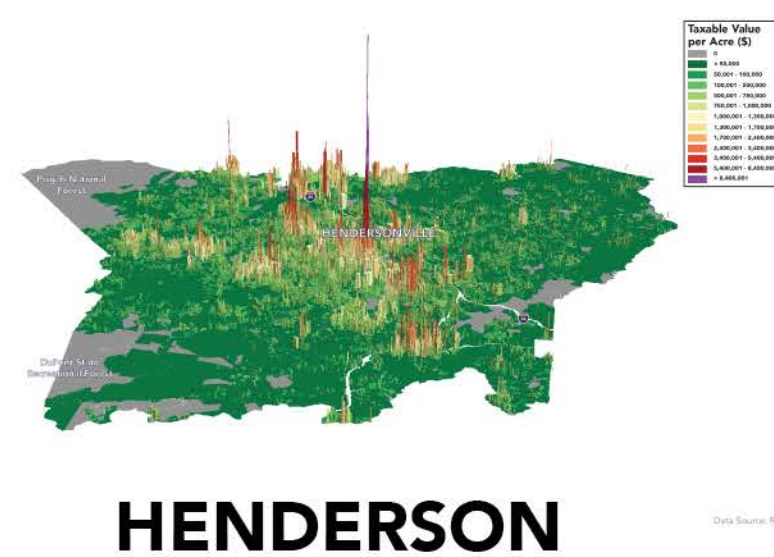
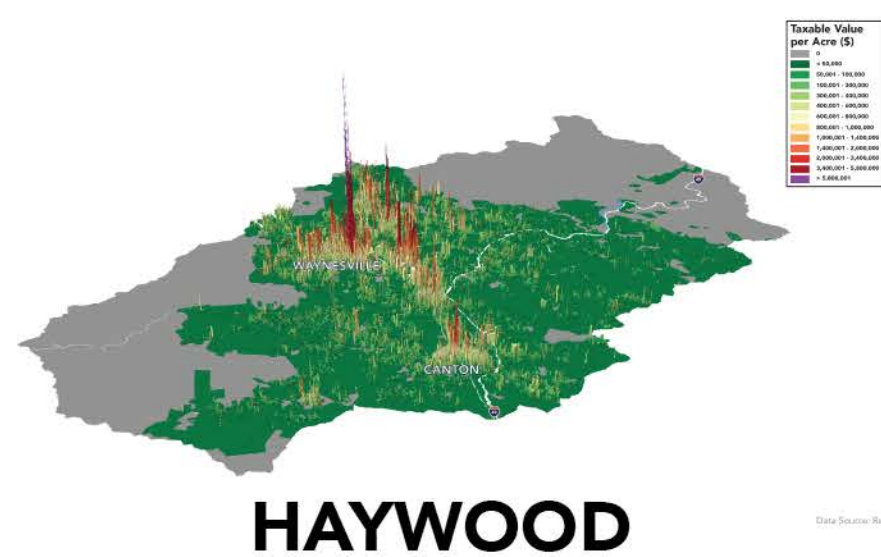
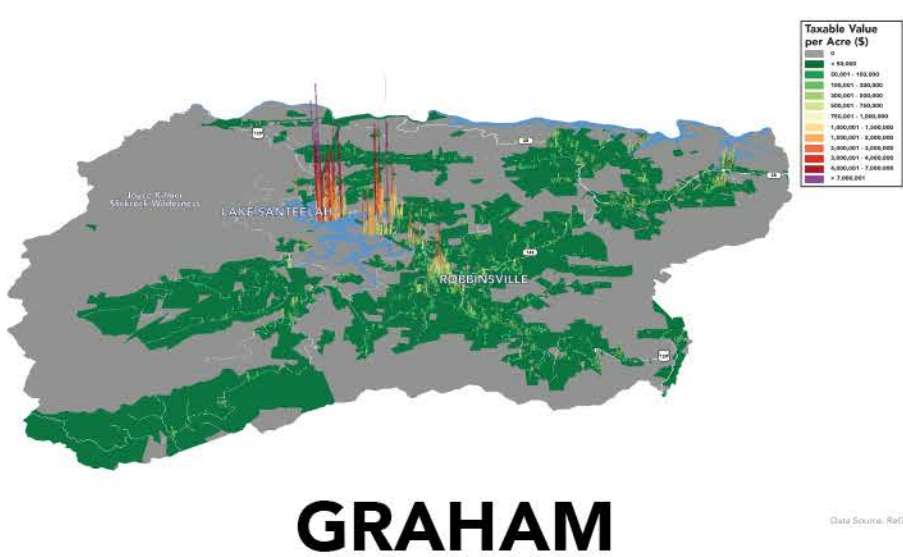
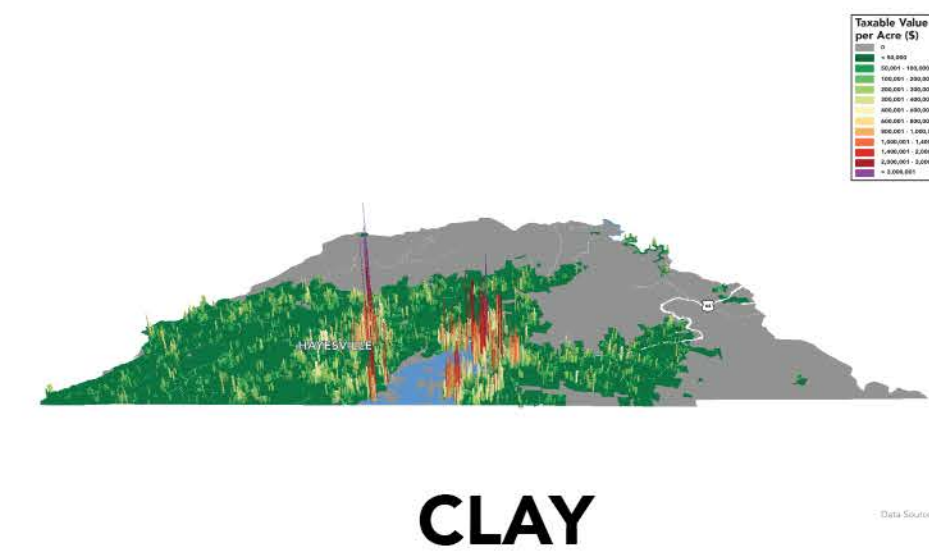
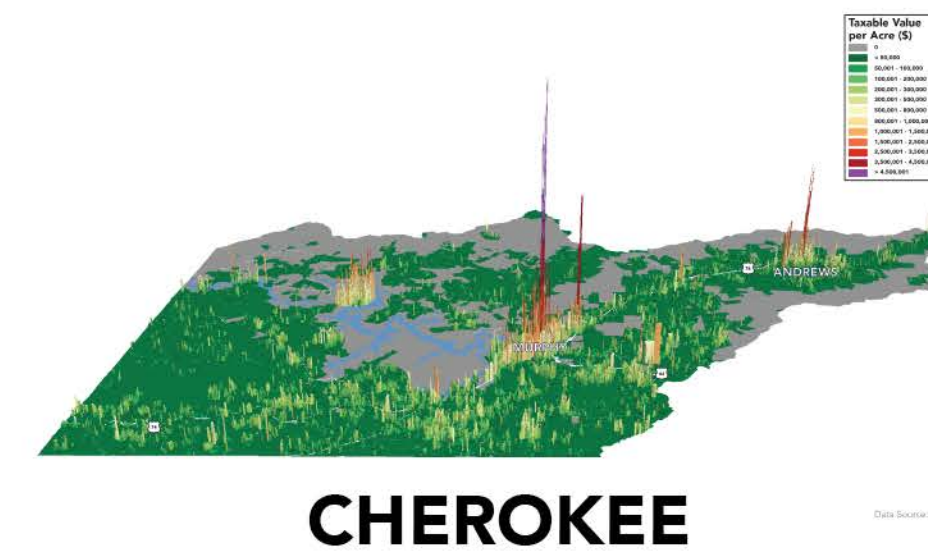
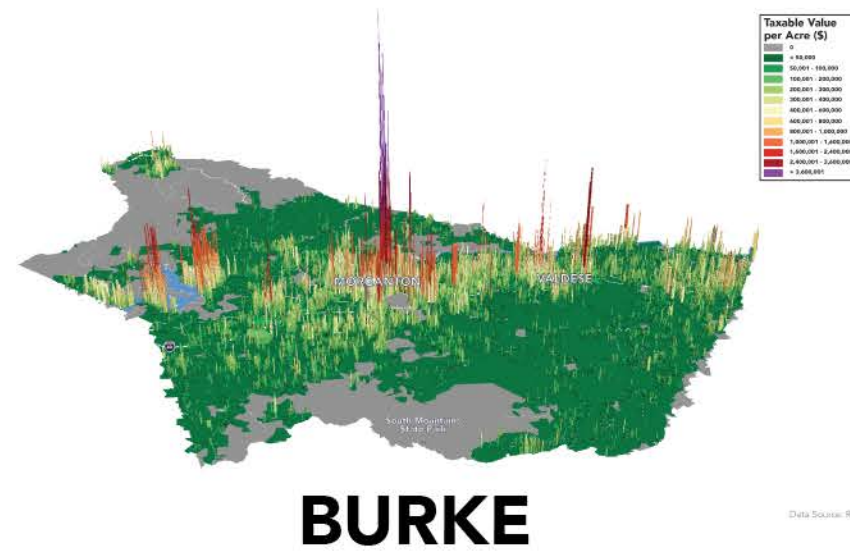
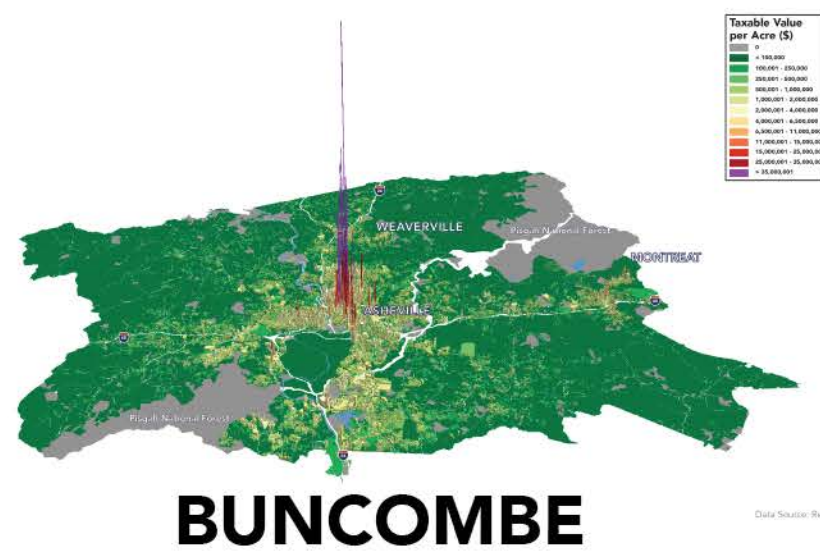
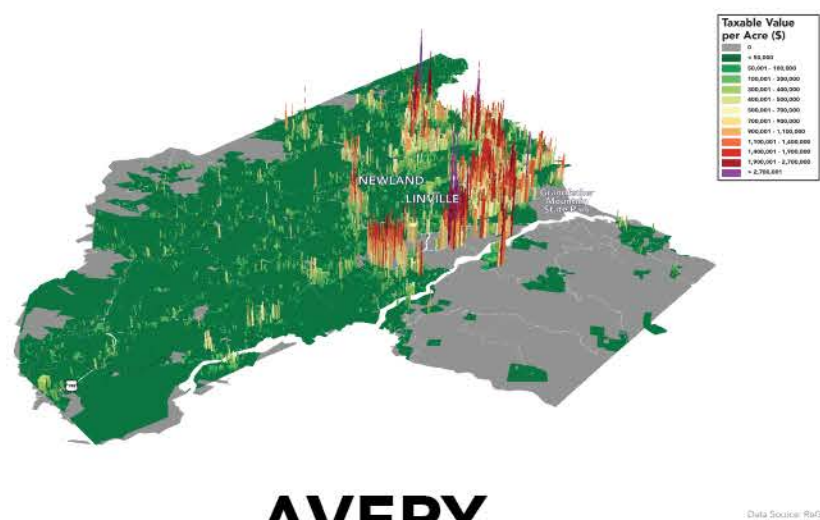
WNC Study Area

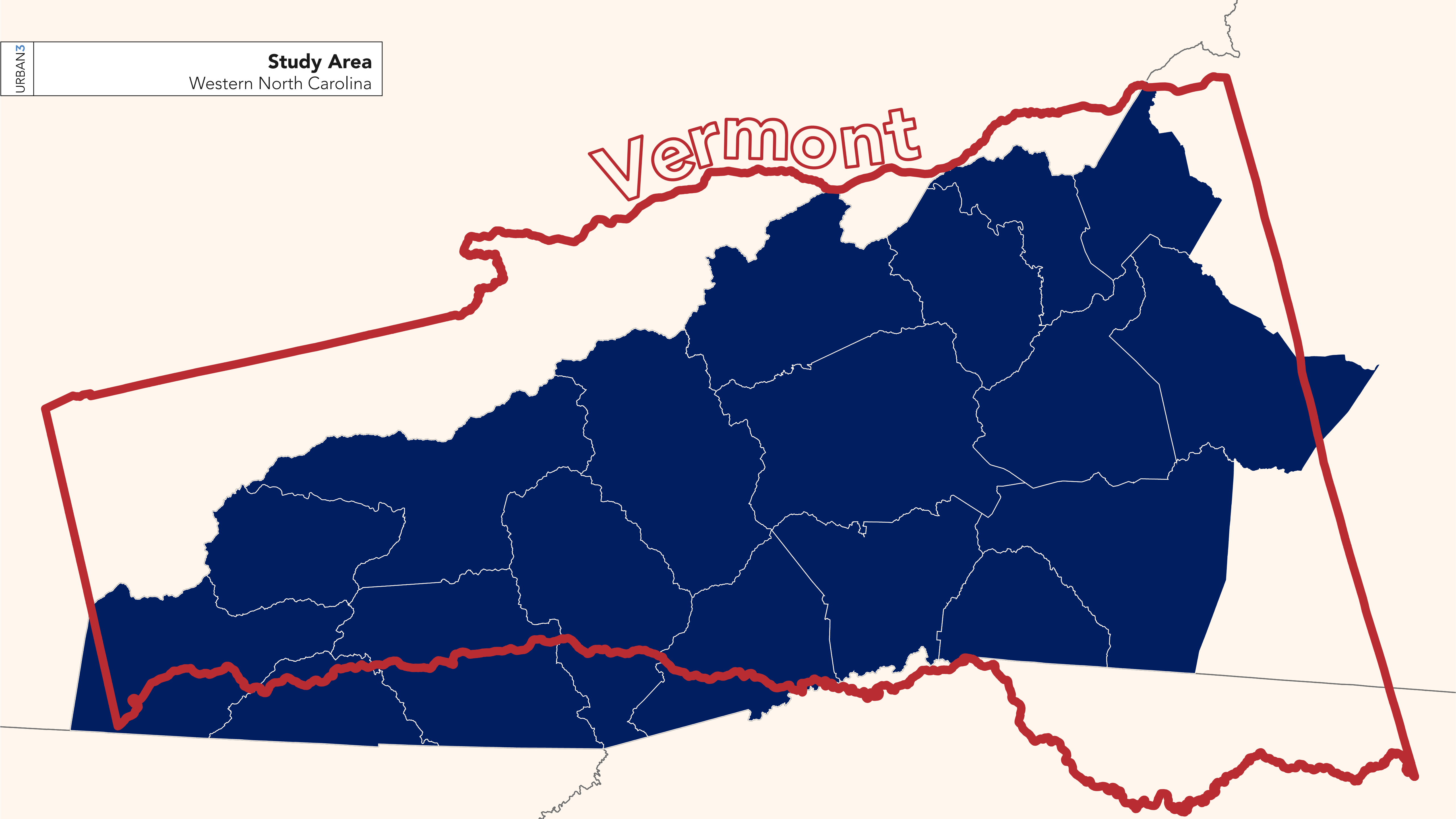


Citywide Average Value per Acre

County Seats

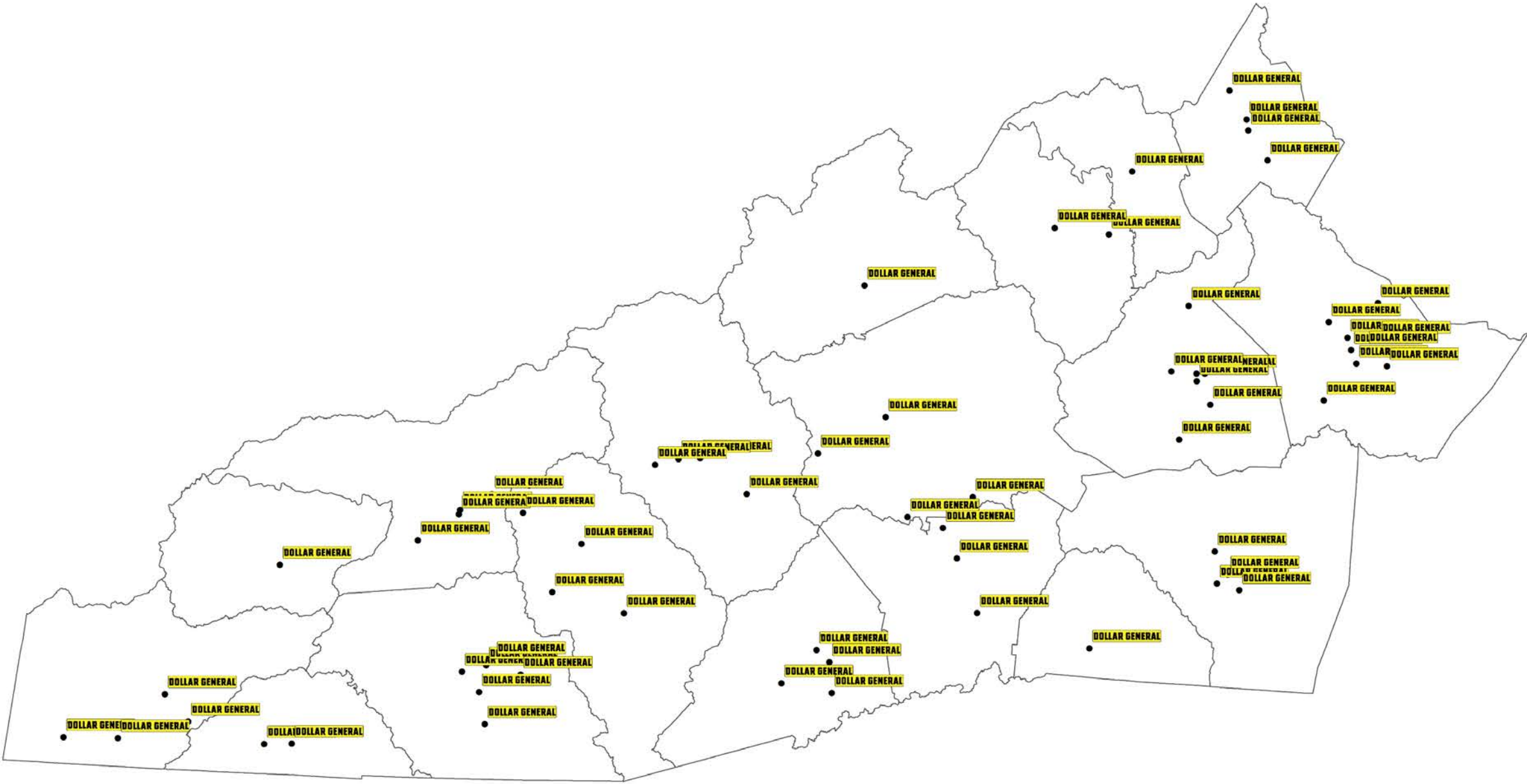
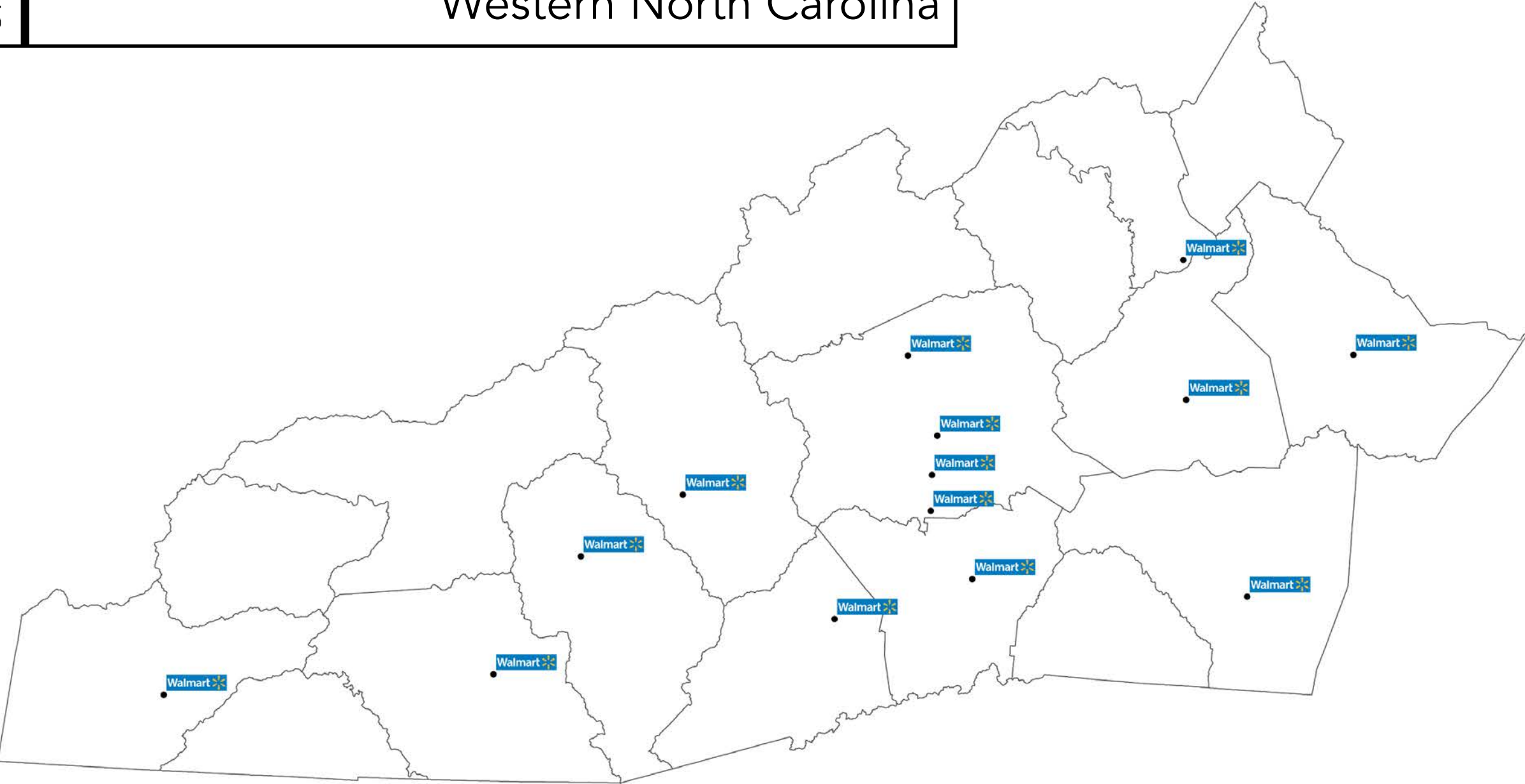






Land Use Comparisons

Western North Carolina



\$592,649
Average Value per Acre



\$603,647
Average Value per Acre



Value per Acre Comparisons

Downtown Sylva, Jackson County NC

\$13.7M

\$5.3M

\$5.2M

\$7.3M

\$18.9M

Average Walmart: \$592,649



\$2.9M

\$3.9M

\$2.9M

\$2.6M

\$3.9M

Average Walmart: \$592,649



Value per Acre Comparisons

Downtown Murphy, Cherokee County
NC

\$4.5M

\$7.6M

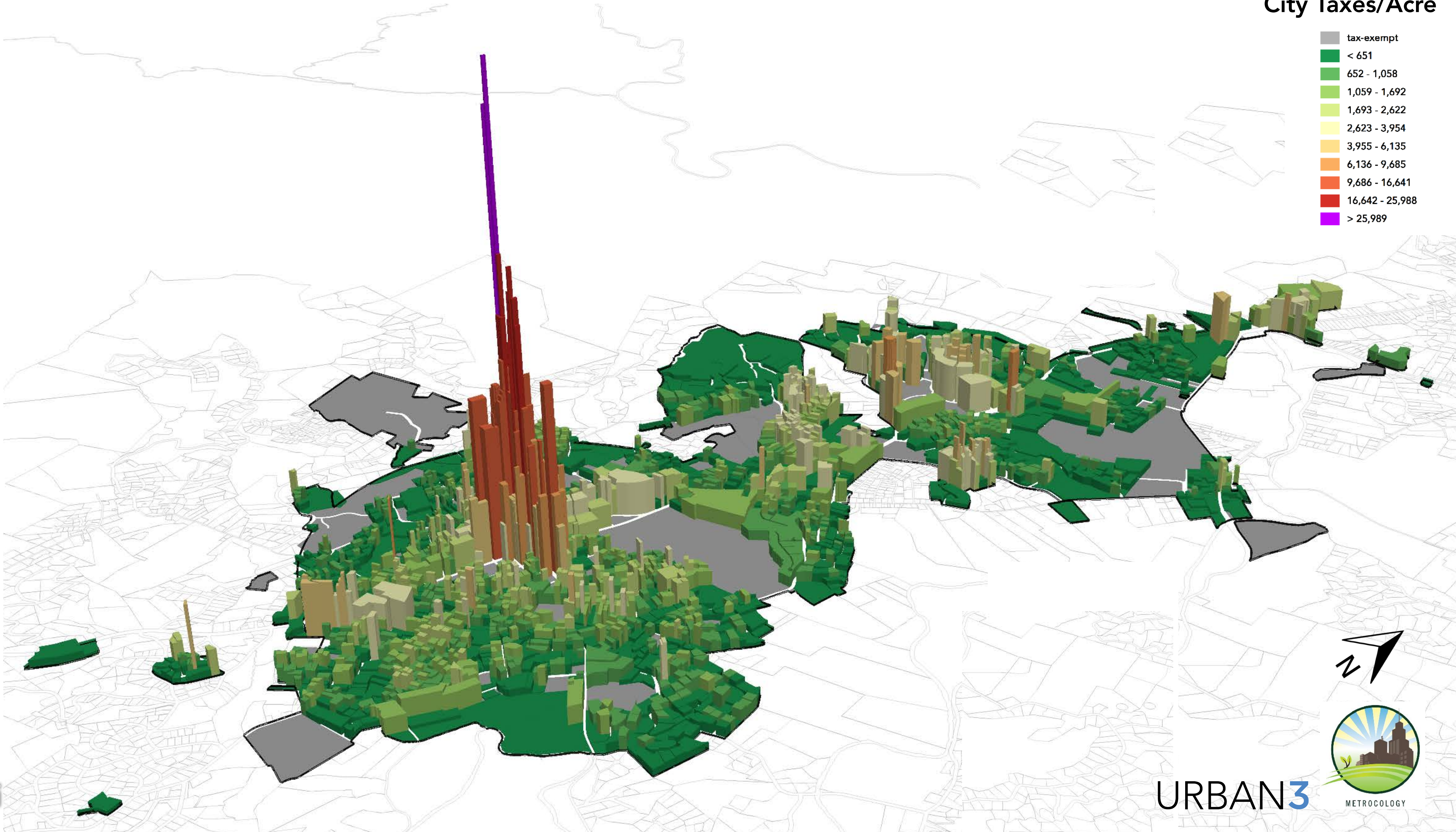
\$4.6M

\$3.6M

Average Walmart: \$592,649

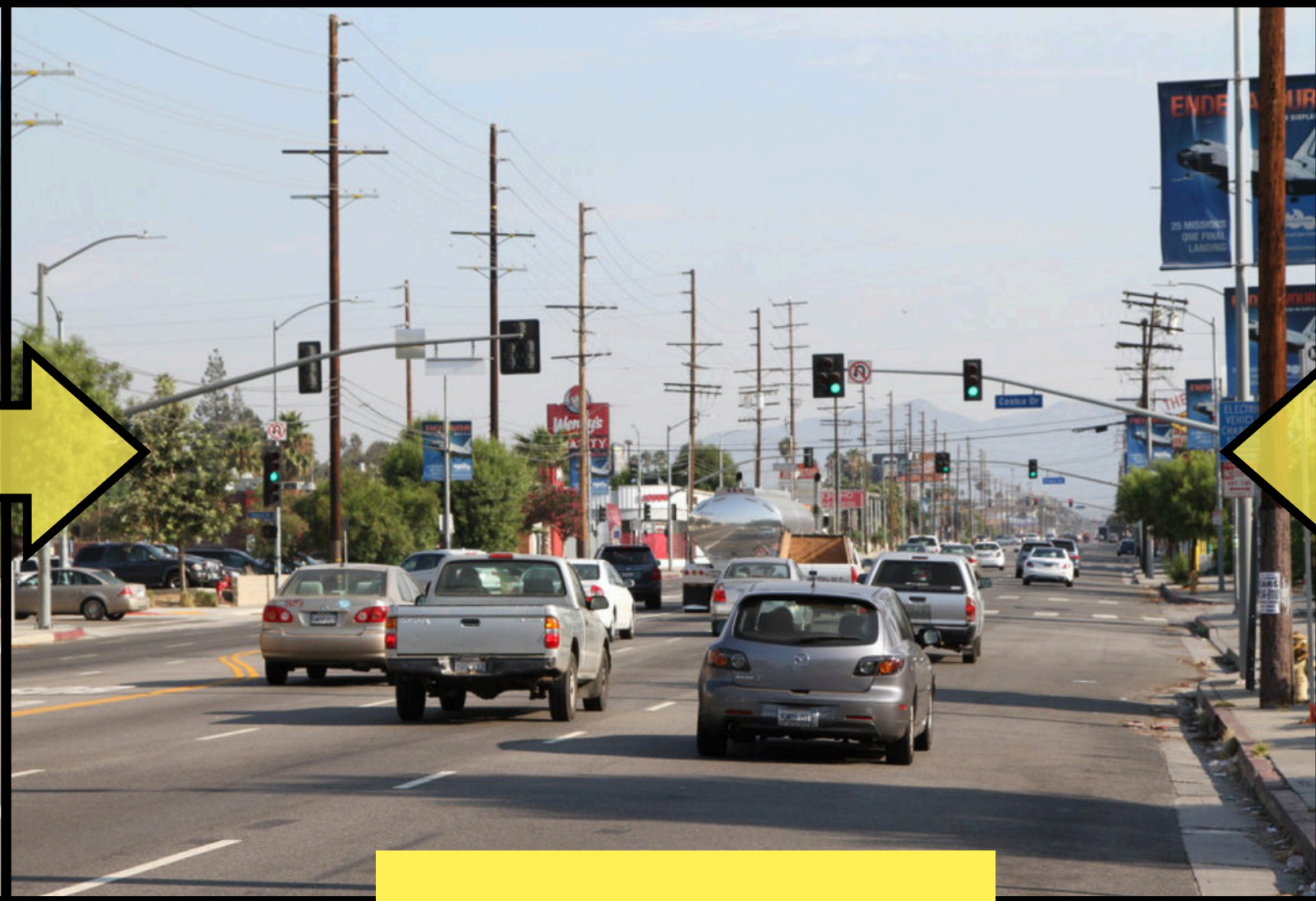
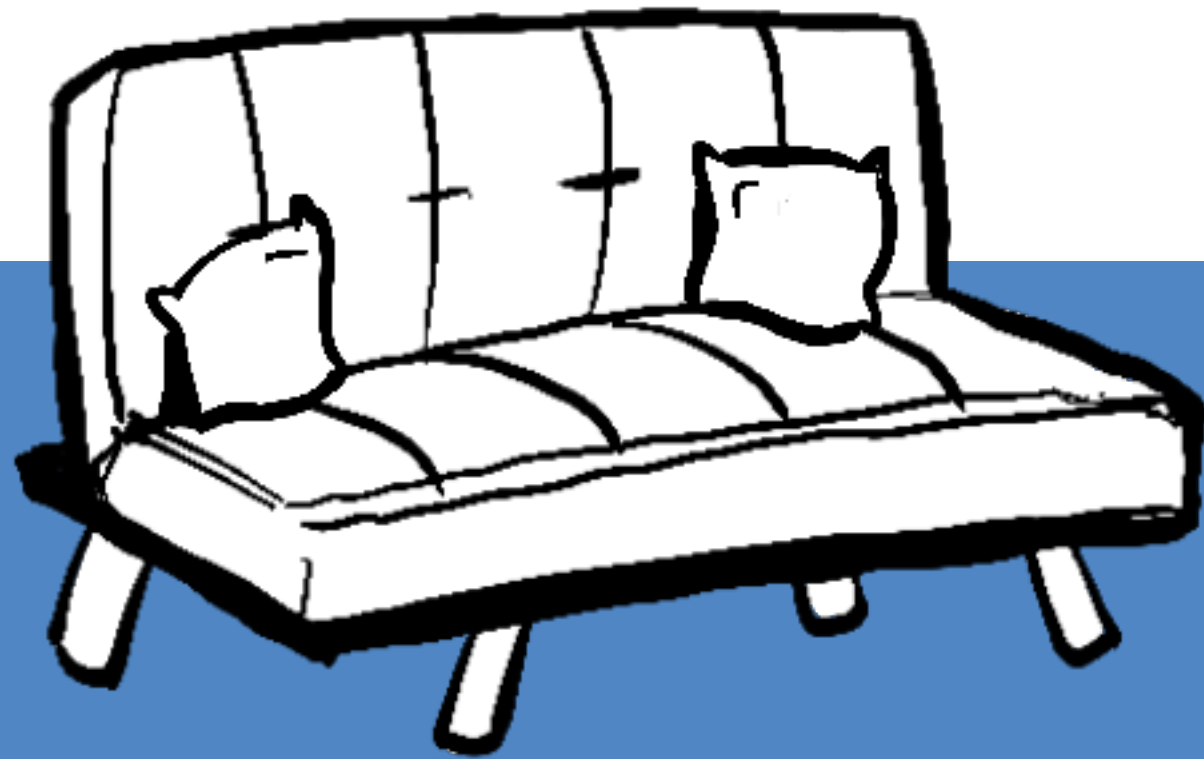
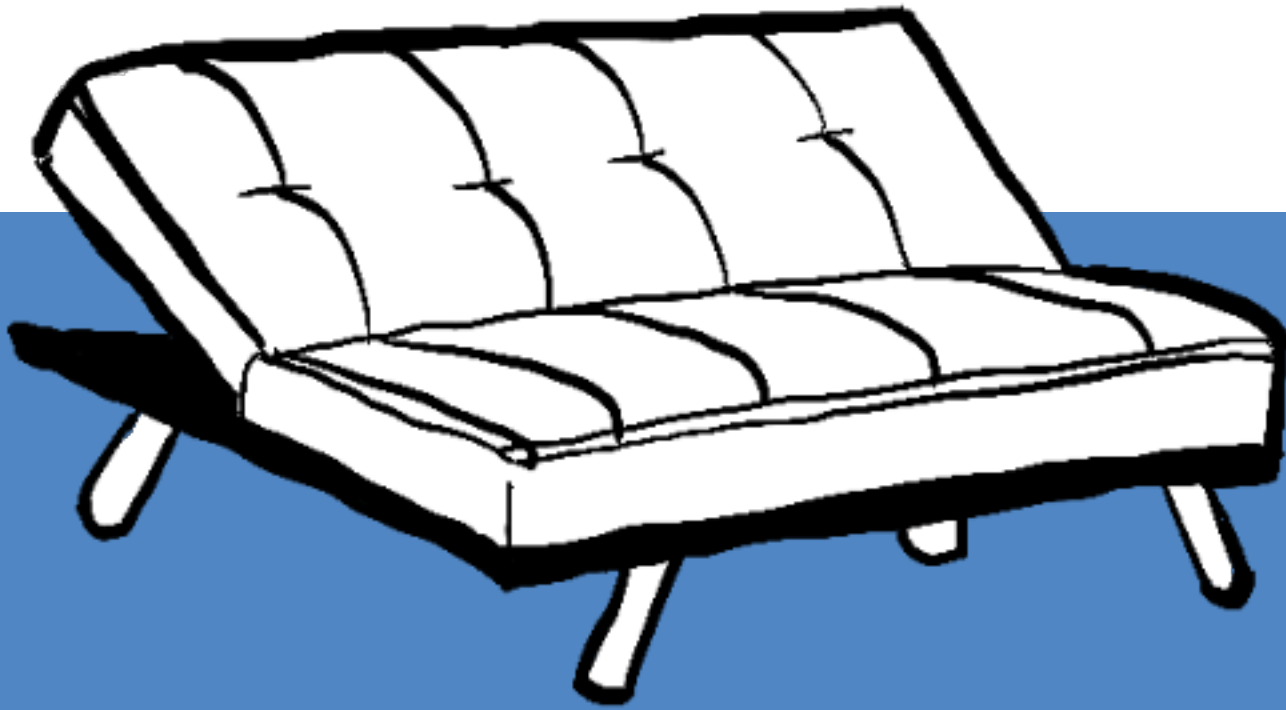
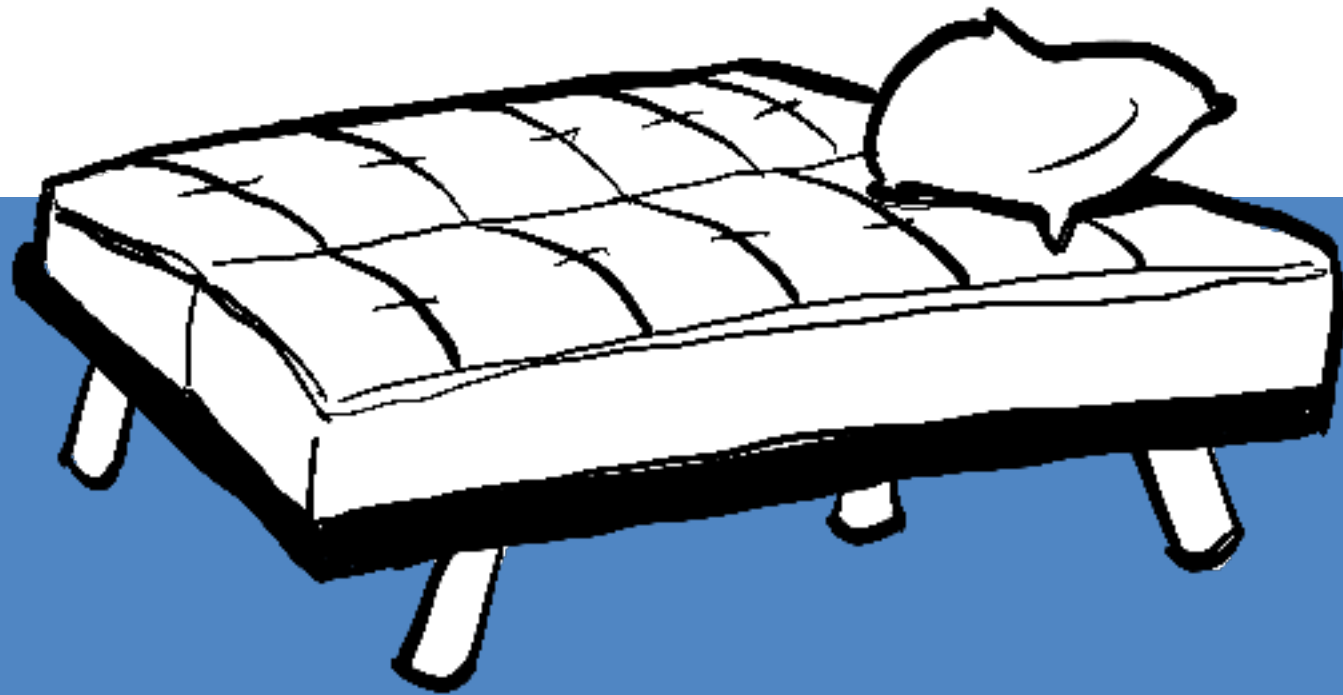
City Taxes/Acre

- tax-exempt
- < 651
- 652 - 1,058
- 1,059 - 1,692
- 1,693 - 2,622
- 2,623 - 3,954
- 3,955 - 6,135
- 6,136 - 9,685
- 9,686 - 16,641
- 16,642 - 25,988
- > 25,989



Question:

Can we talk about Stroads?



ROAD

STROAD

STREET

Asset Management

+\$
+\$
+\$

+\$
+\$
+\$

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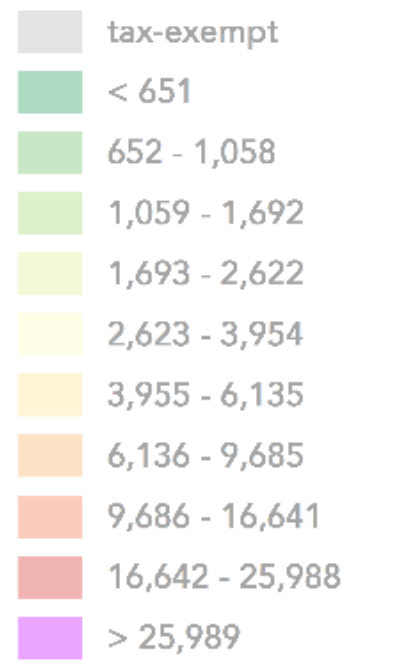
Asset Management



STREET

STROAD

City Taxes/Acre

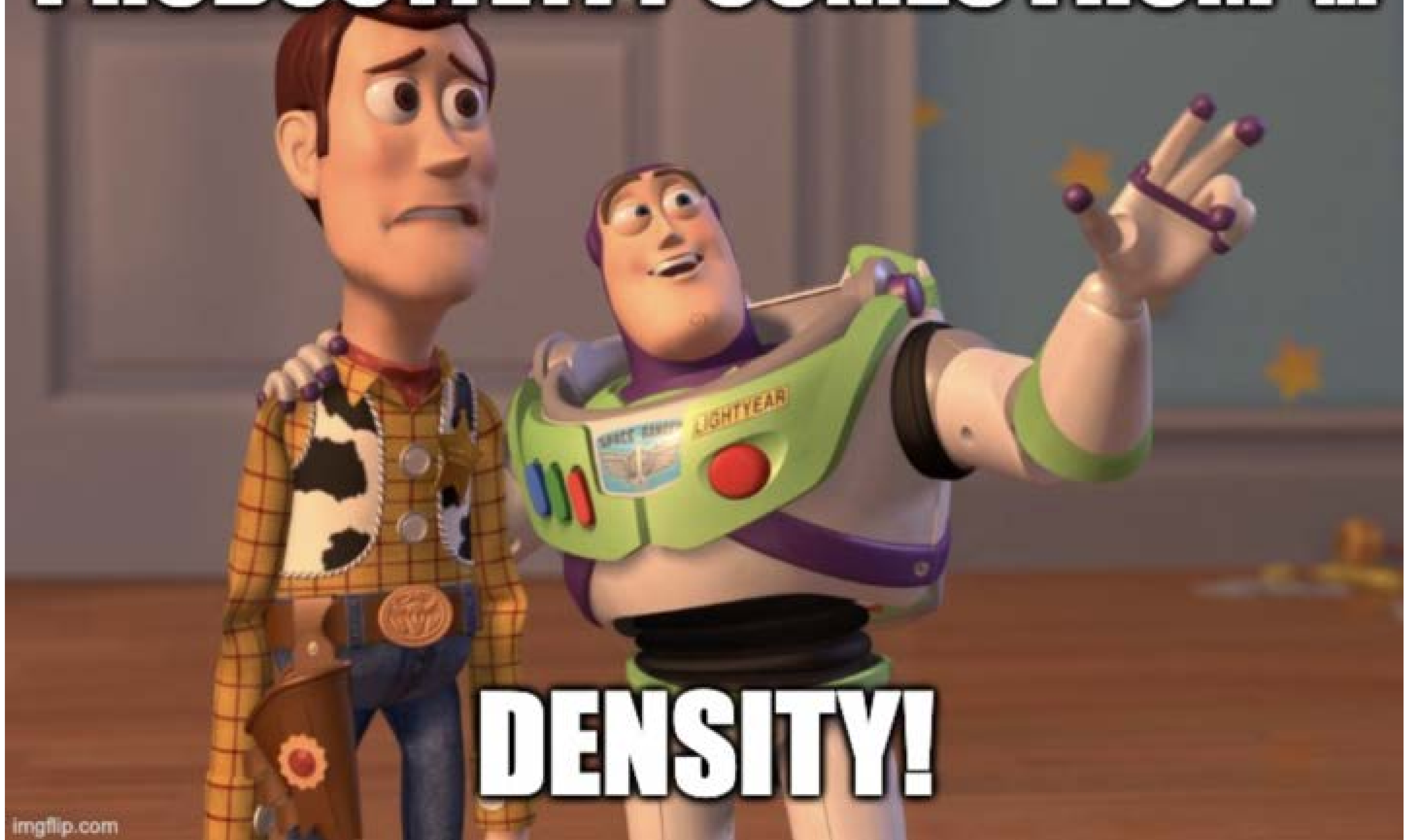


URBAN3

METROCOLOGY

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PRODUCTIVITY COMES FROM ...



DENSITY!

Observation:

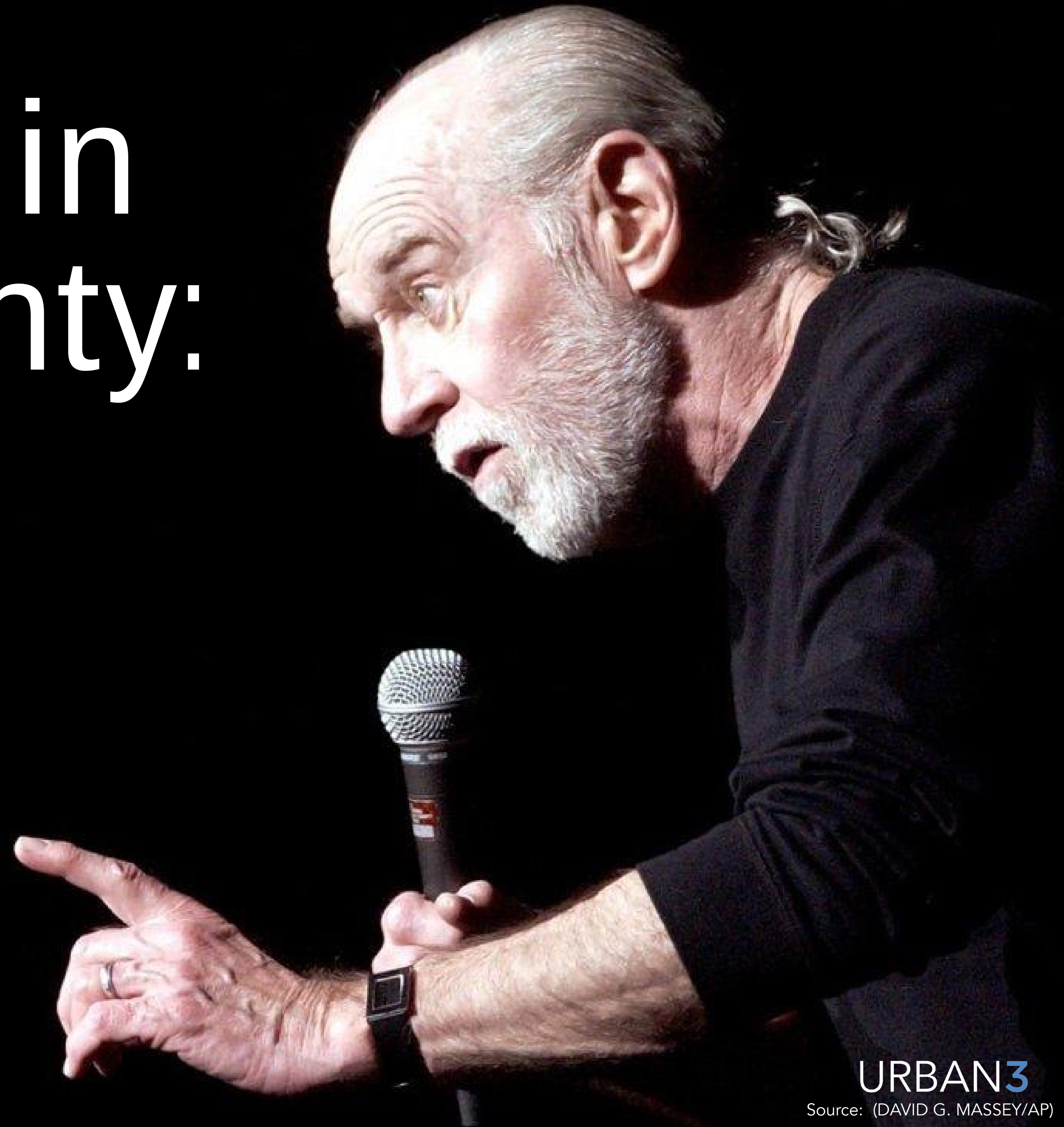
But people don't want density!

What are the numbers for Gwinnett County?

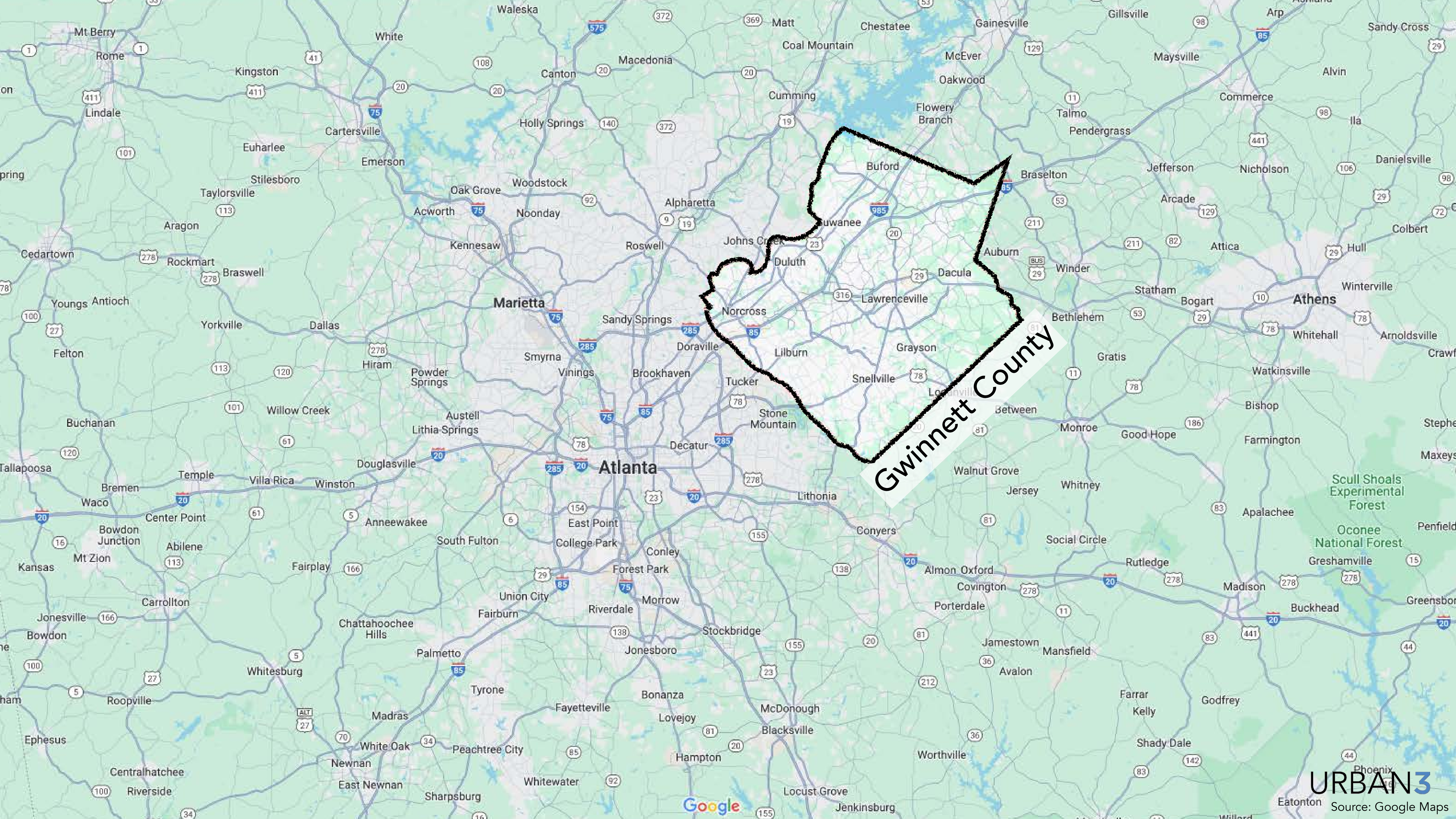


4 Dirty Words in Gwinnett County:

1. Urban
2. City
3. Town
4. Municipal

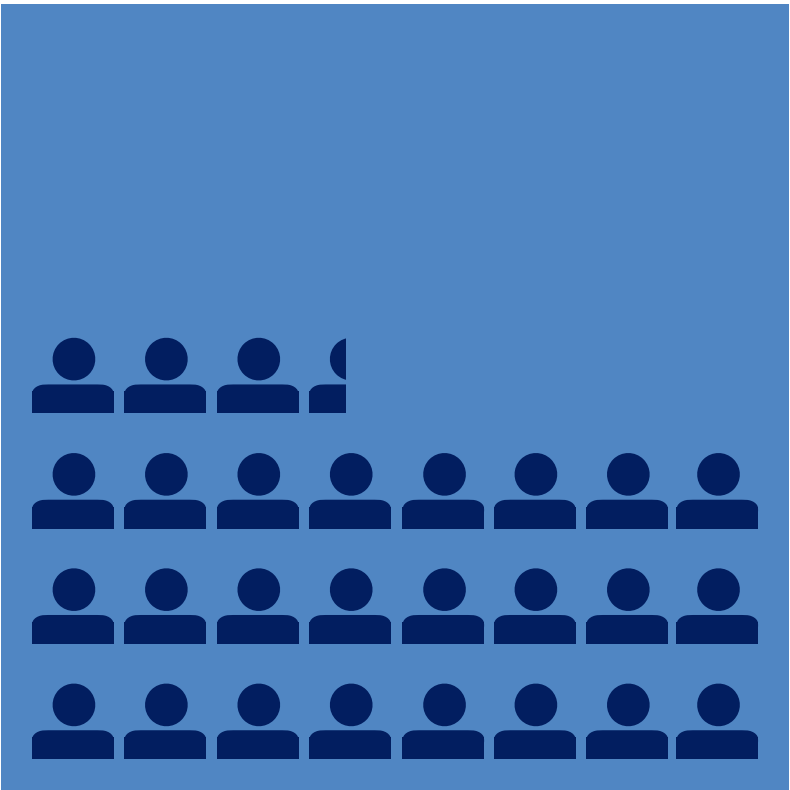


URBAN3

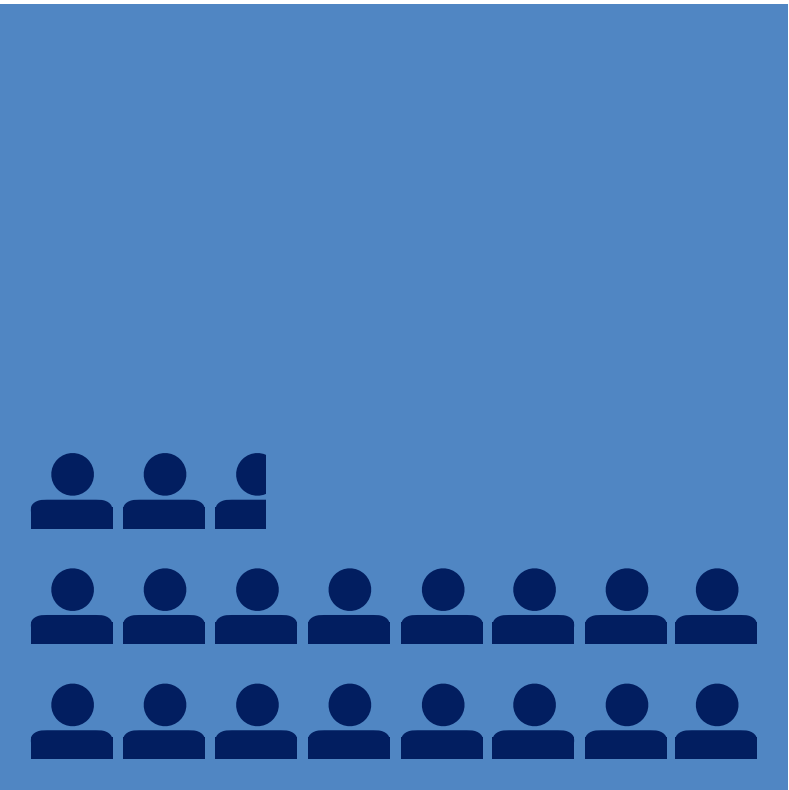


Gwinnett County

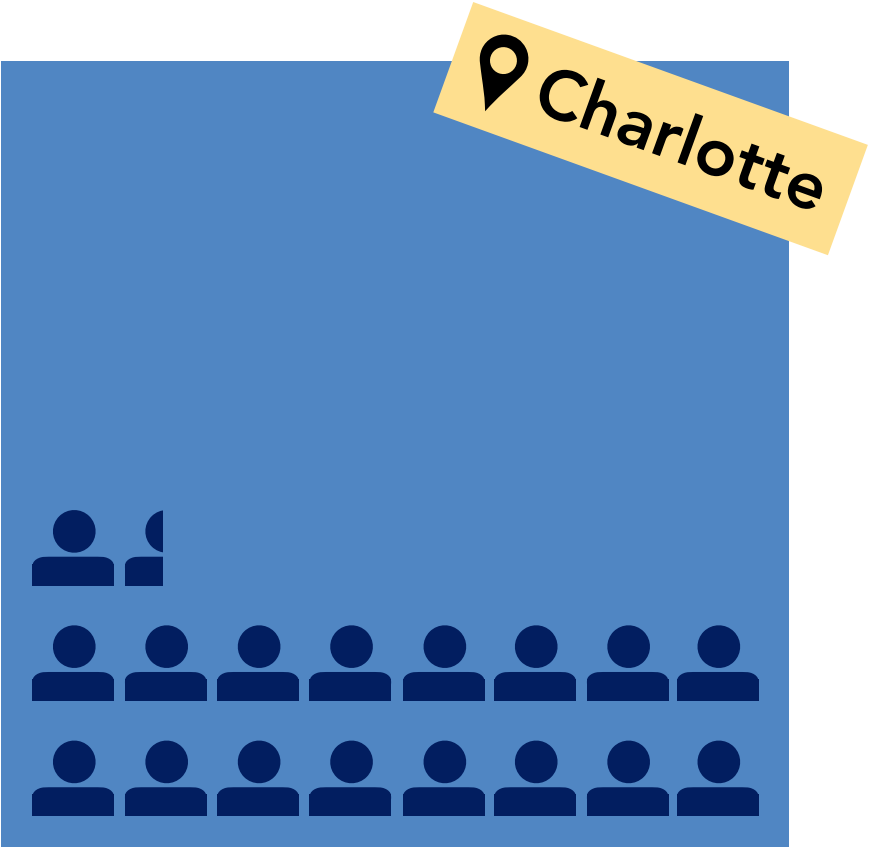
 = 100 people



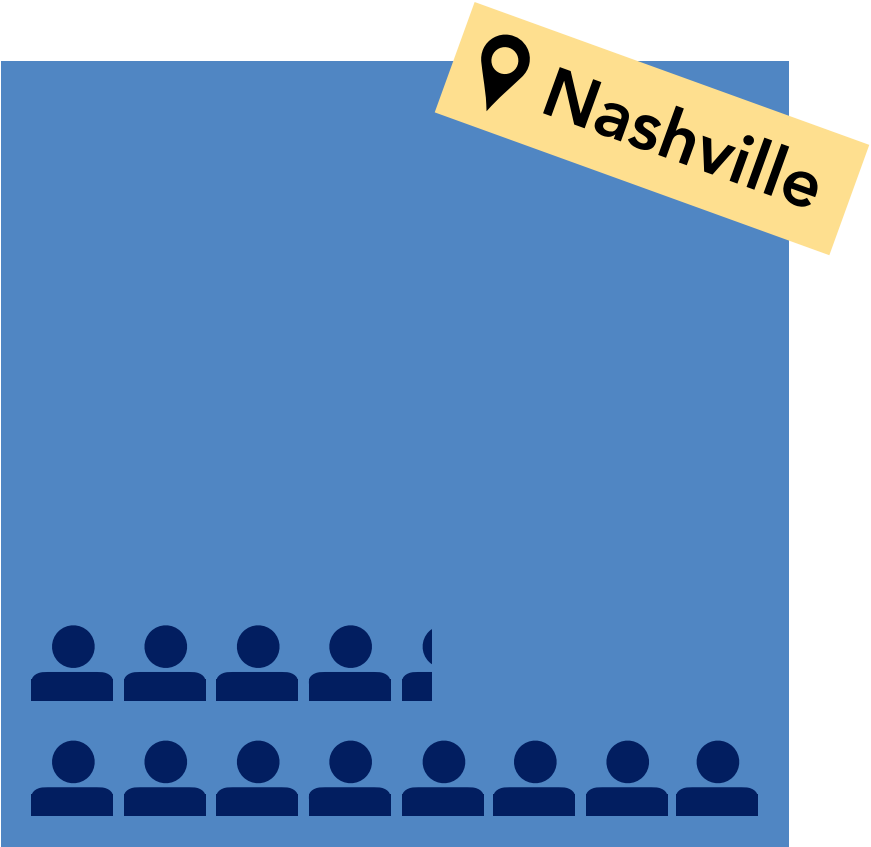
DeKalb County, GA
2,740 people per sq. mi



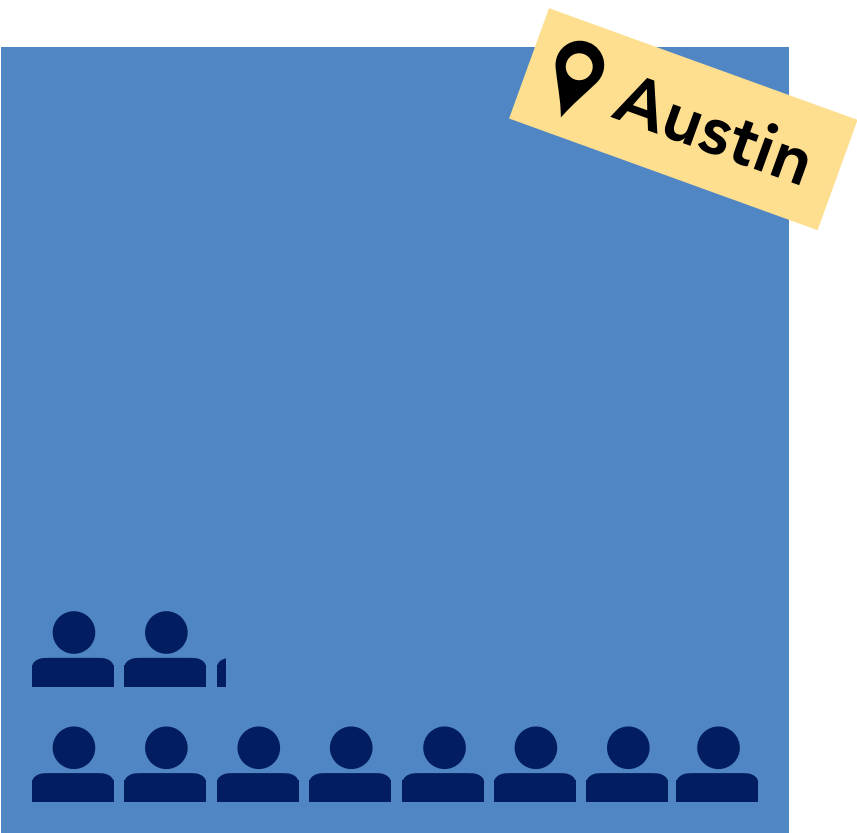
Gwinnett County, GA
1,871 people per sq. mi



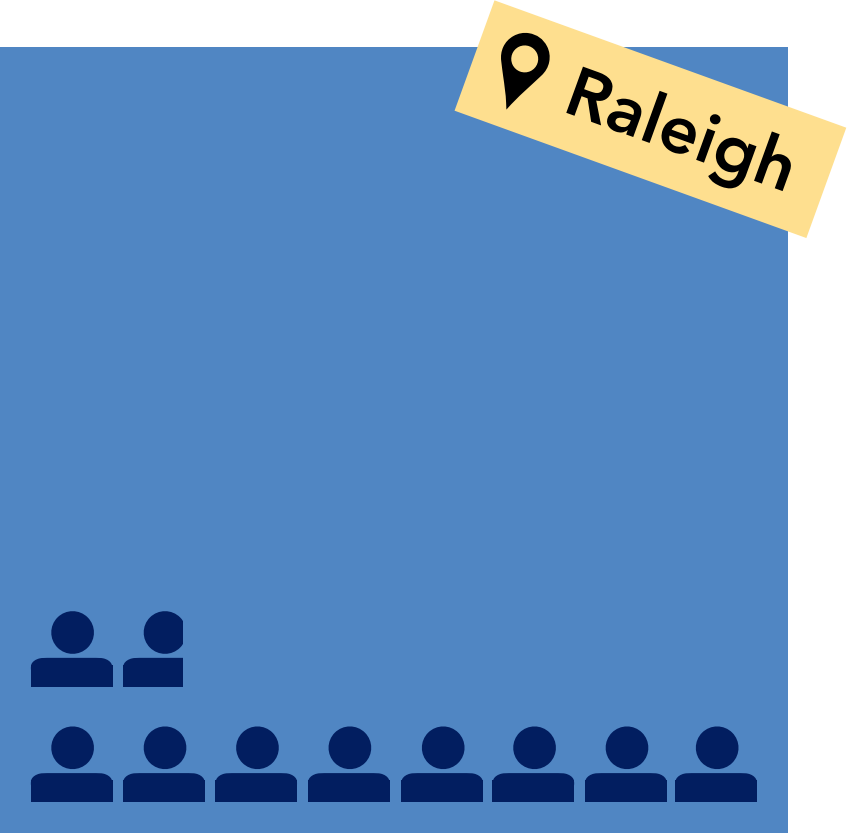
Mecklenburg County, NC
1,756 people per sq. mi



Davidson County, TN
1,243 people per sq. mi



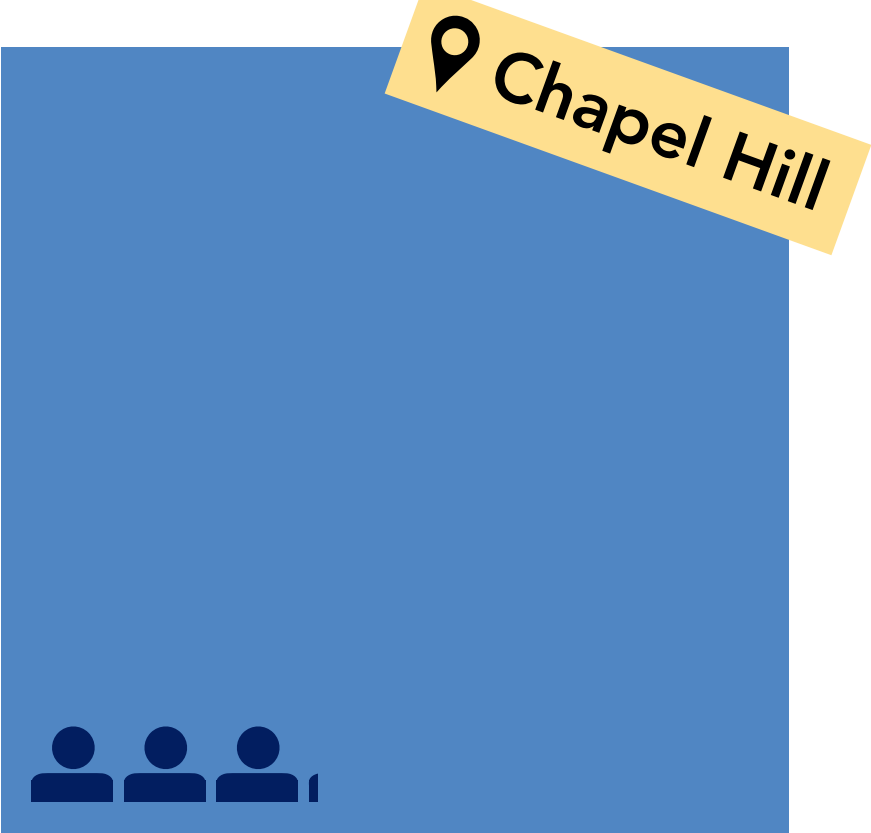
Travis County, TX
1,034 people per sq. mi



Wake County, NC
992 people per sq. mi

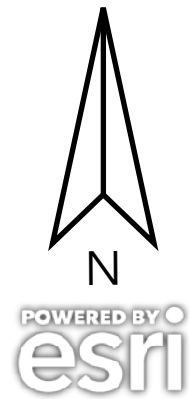
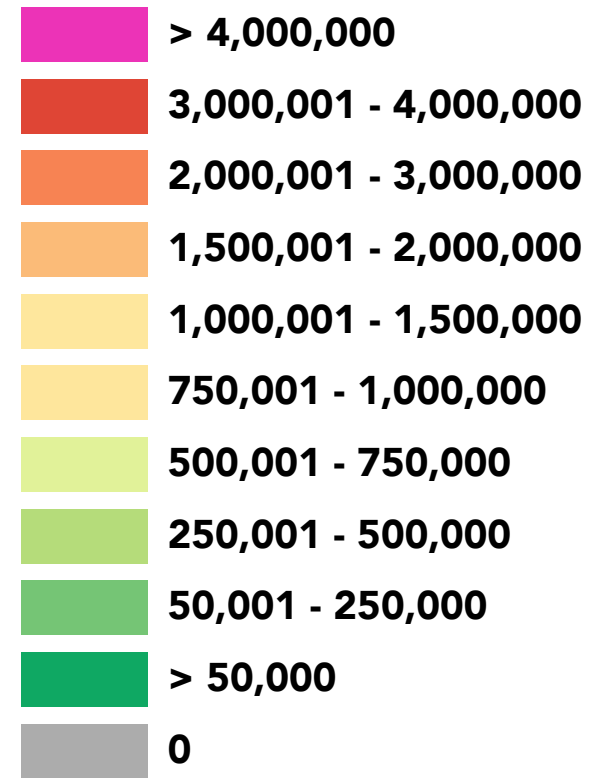


Buncombe County, NC
344 people per sq. mi



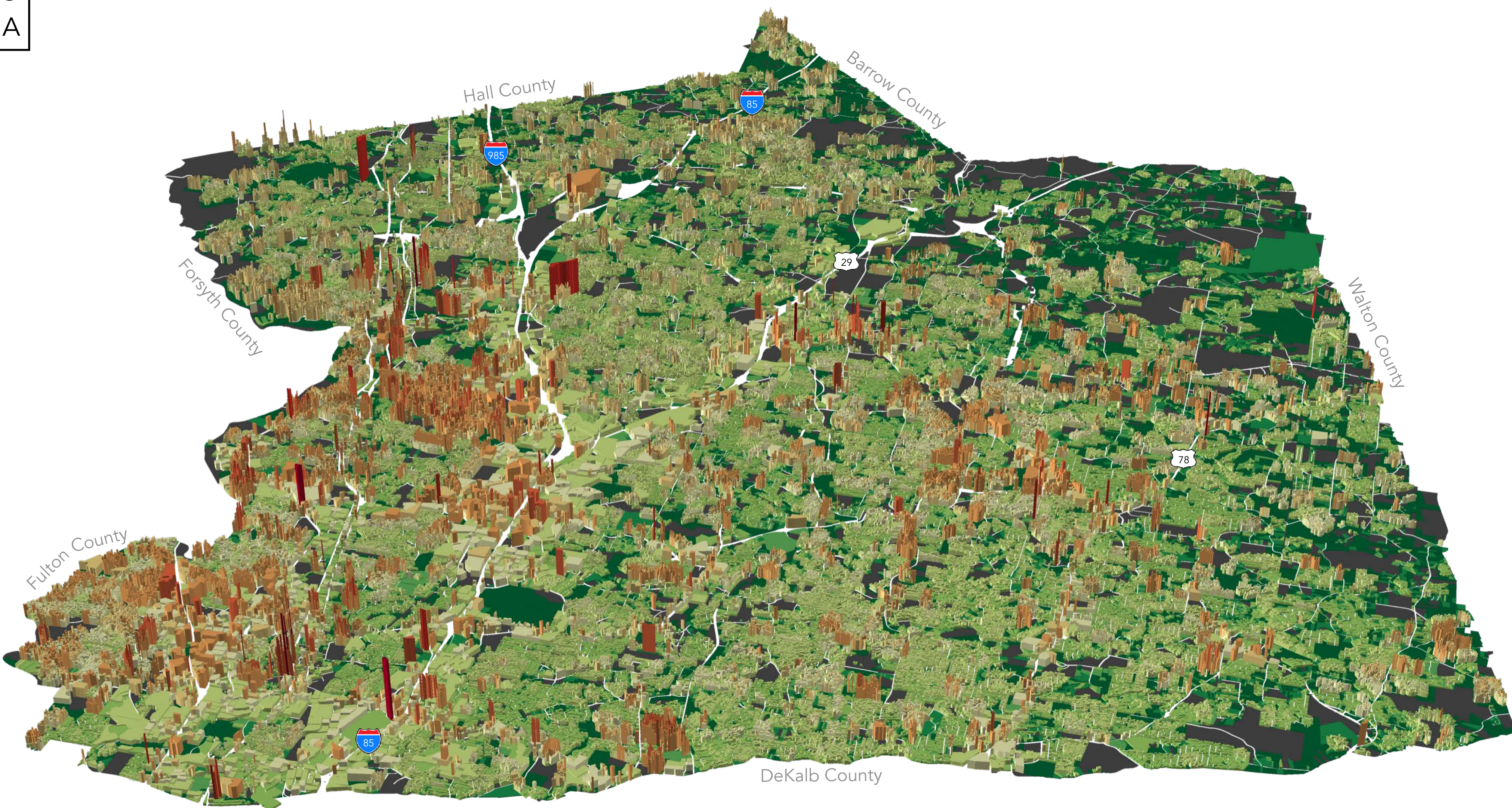
Orange County, NC
313 people per sq. mi

**Tax Value
Per Acre (\$)**



Tax Value Per Acre

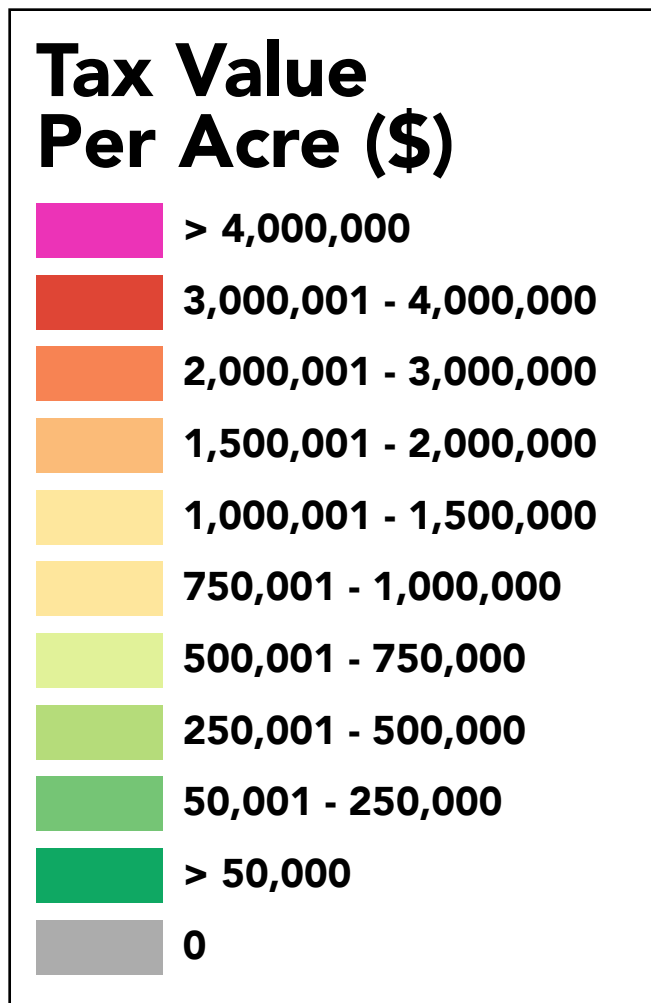
Gwinnett County, GA

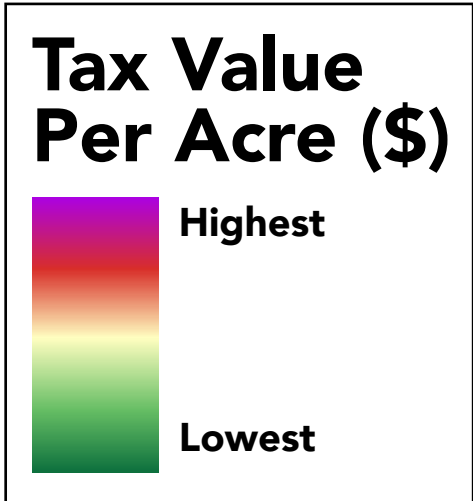
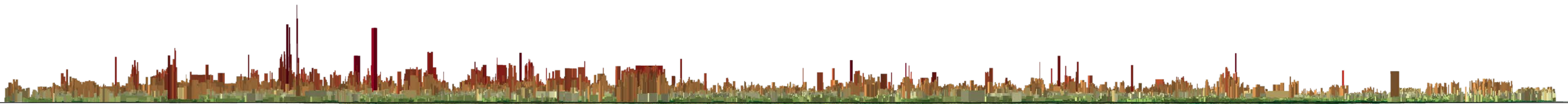


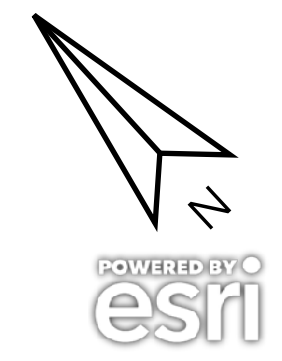
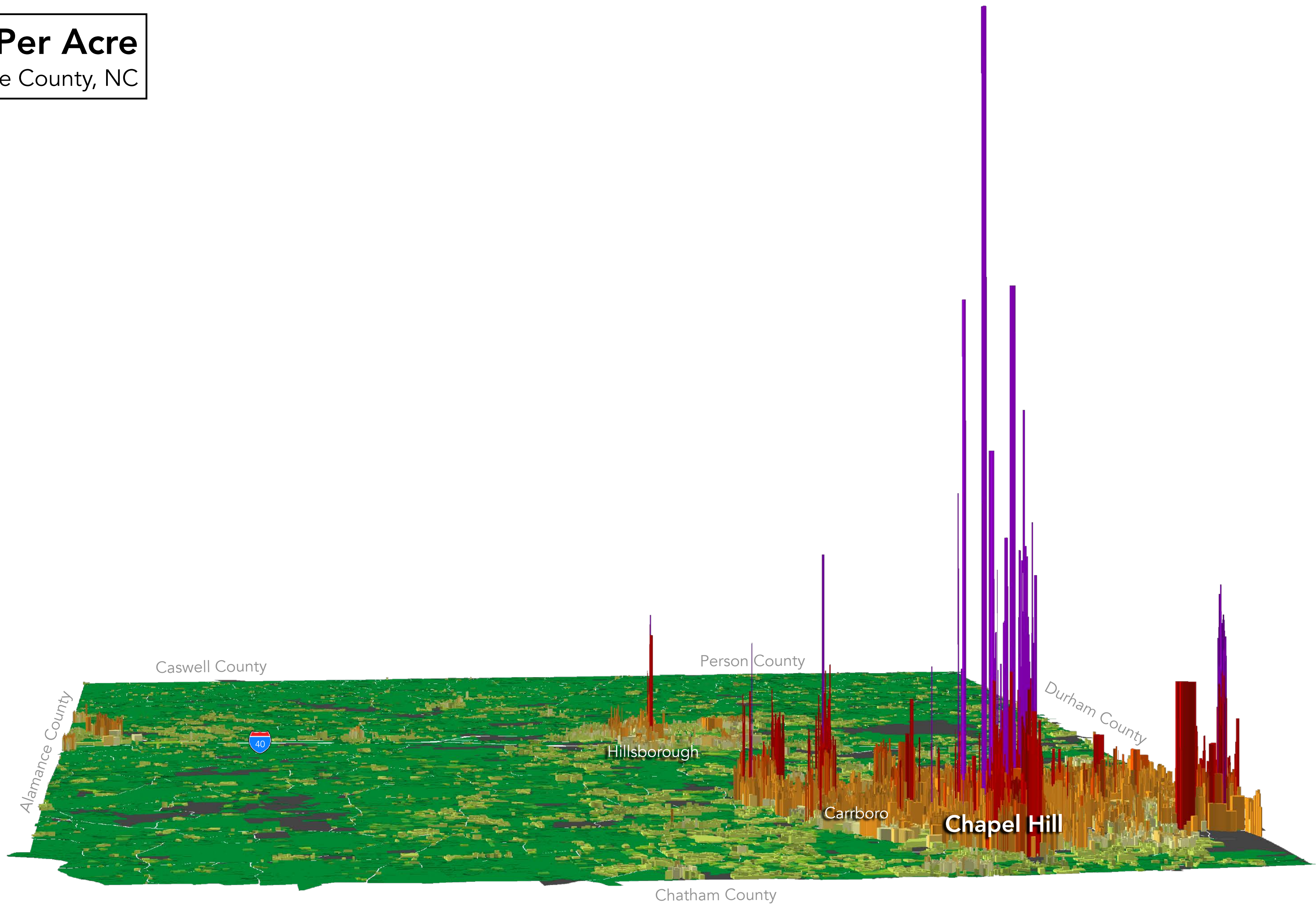
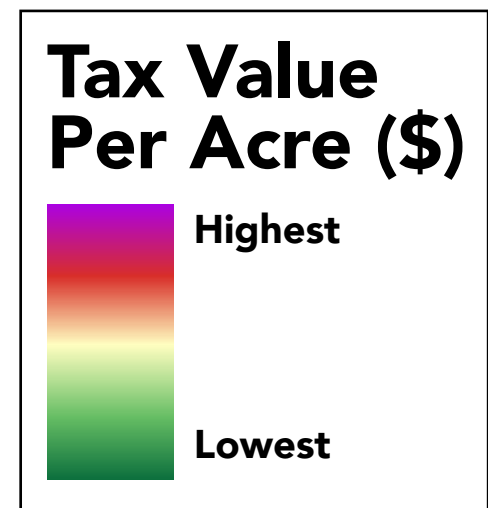
Tax Value Per Acre (\$)

- > 4,000,000
- 3,000,001 - 4,000,000
- 2,000,001 - 3,000,000
- 1,500,001 - 2,000,000
- 1,000,001 - 1,500,000
- 750,001 - 1,000,000
- 500,001 - 750,000
- 250,001 - 500,000
- 50,001 - 250,000
- > 50,000
- 0







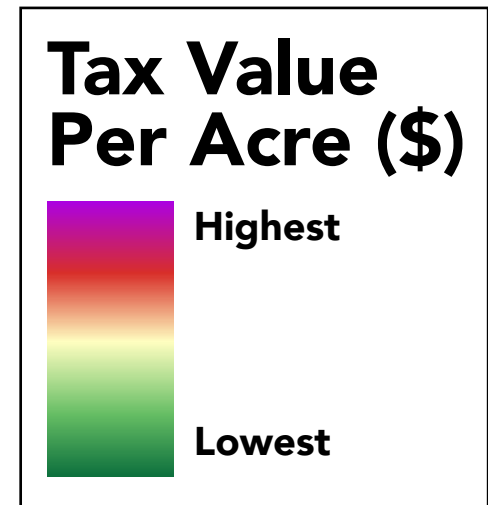
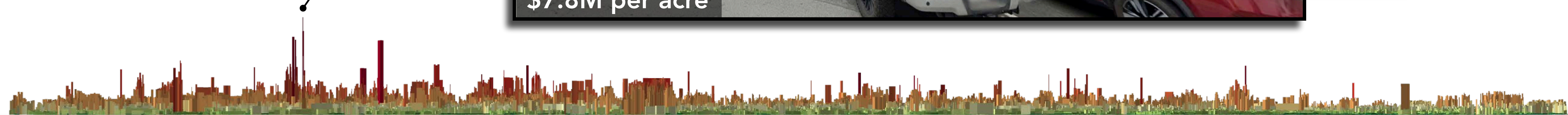


Tax Value Per Acre

Gwinnett County, GA

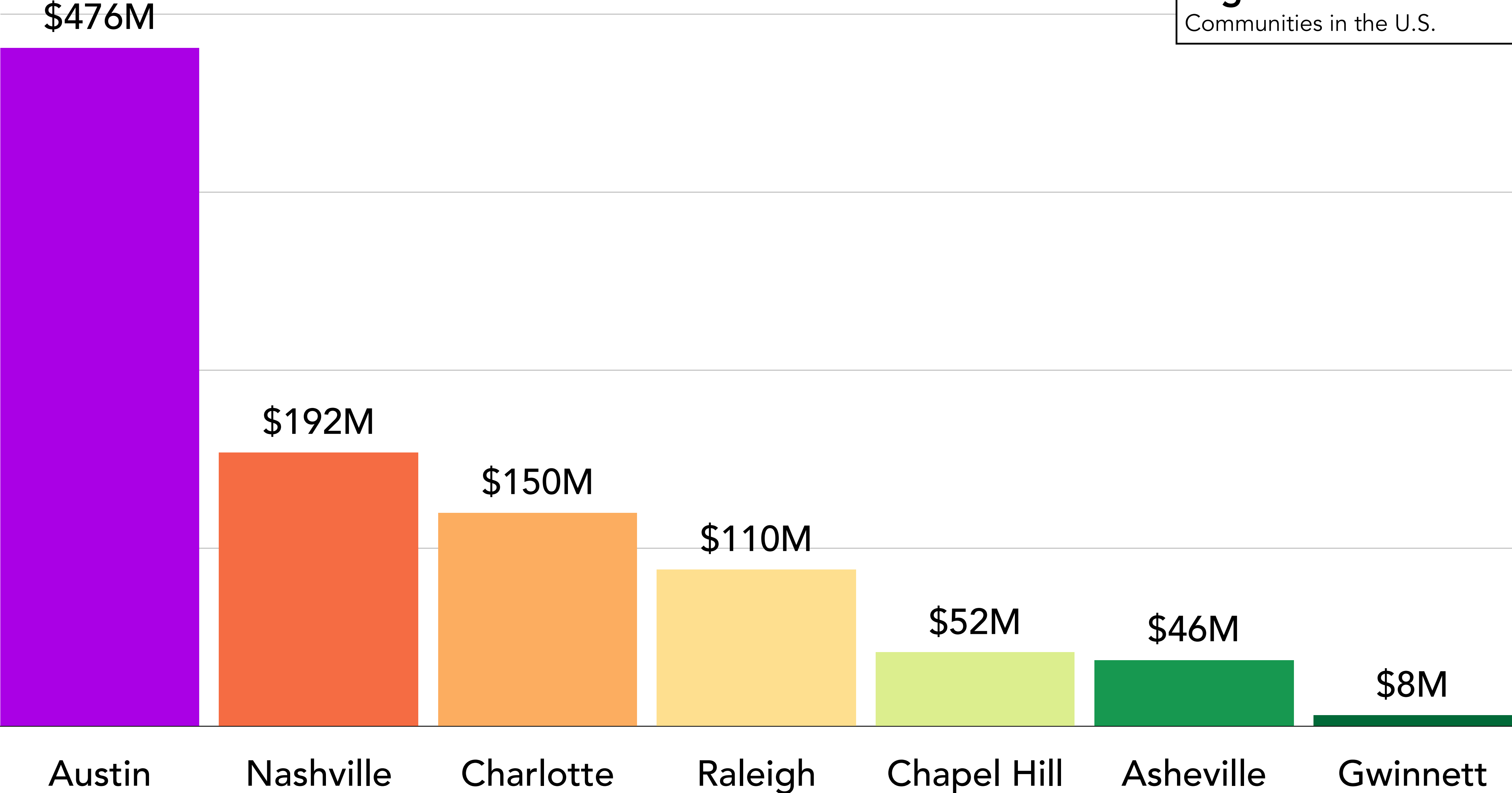


Bank of Buford
\$7.8M per acre



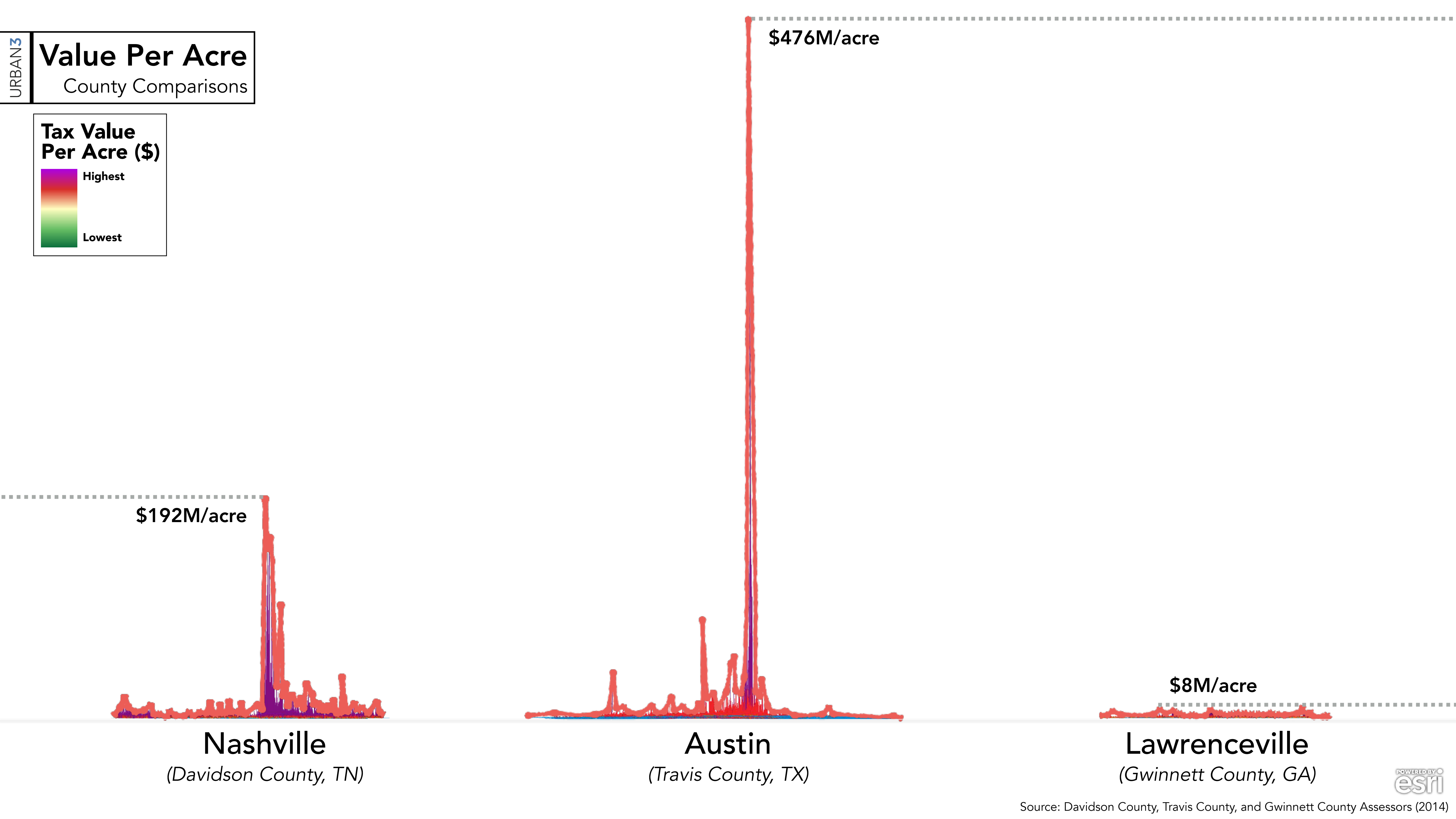
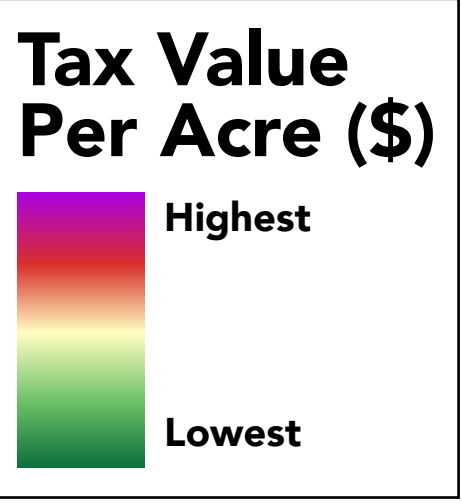
Highest Value Per Acre

Communities in the U.S.

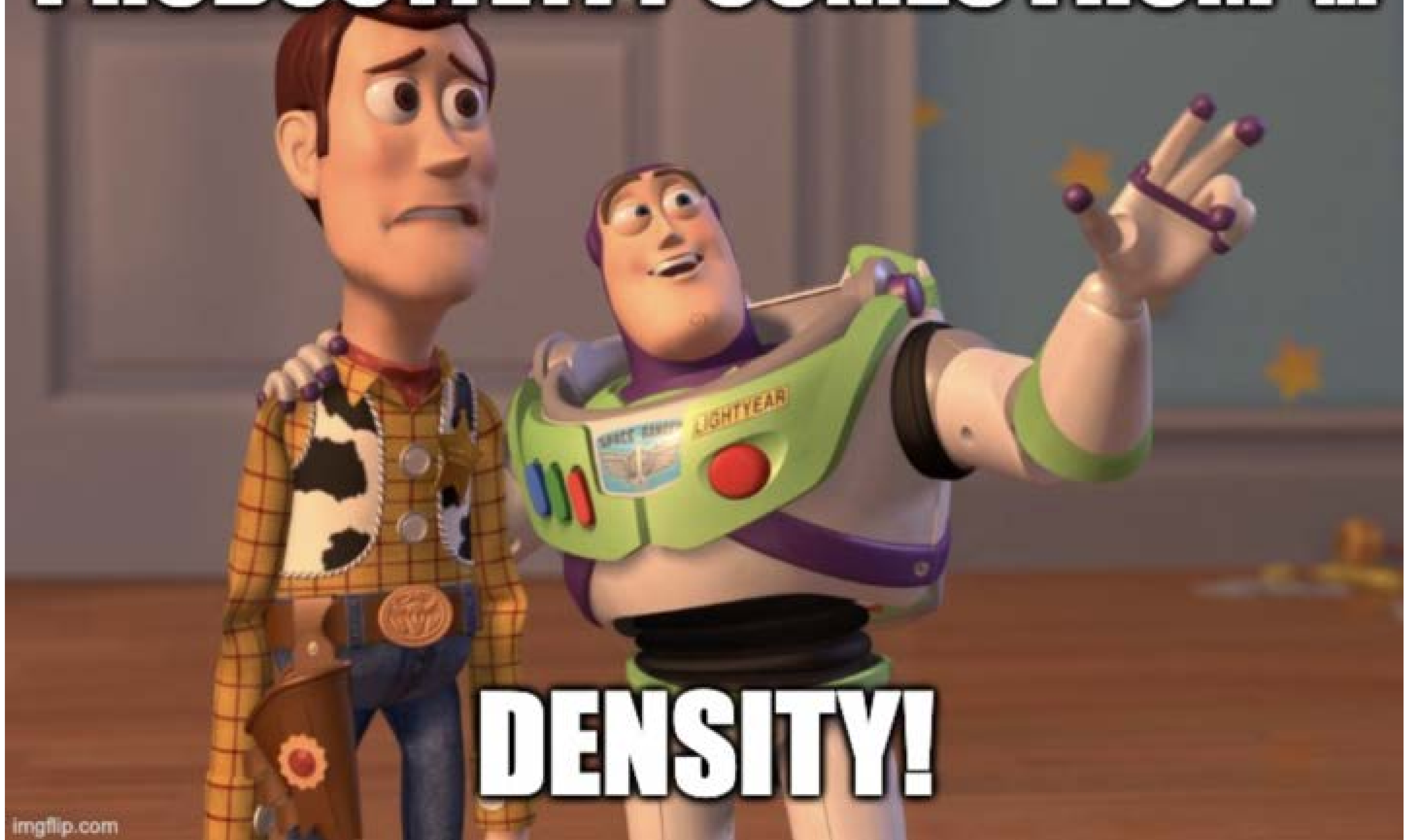


Value Per Acre

County Comparisons



PRODUCTIVITY COMES FROM ...



NOT ALL DENSITY...

... IS PRODUCTIVE.



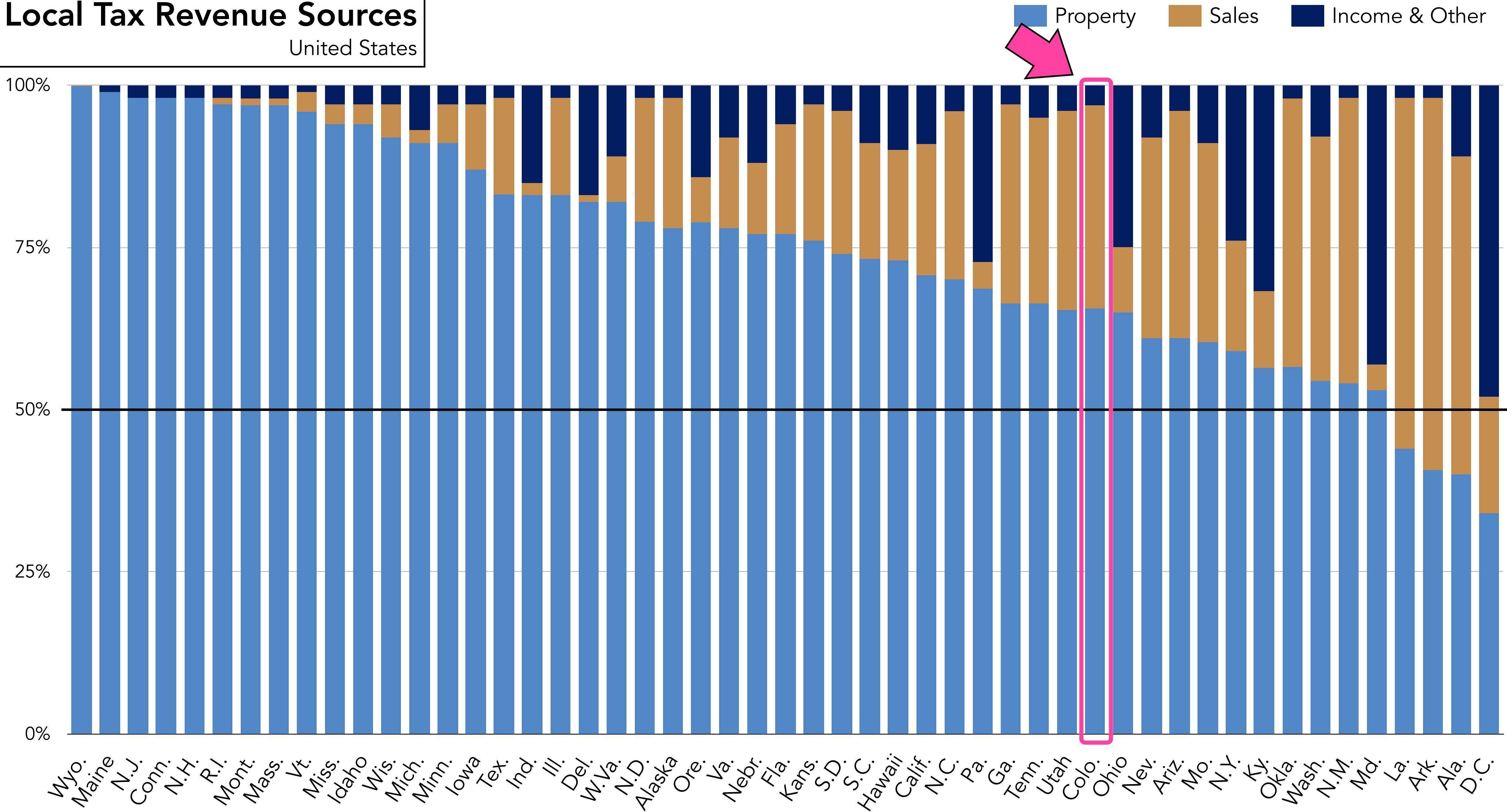
Question:

What about sales tax?

URBAN3

Local Tax Revenue Sources

United States





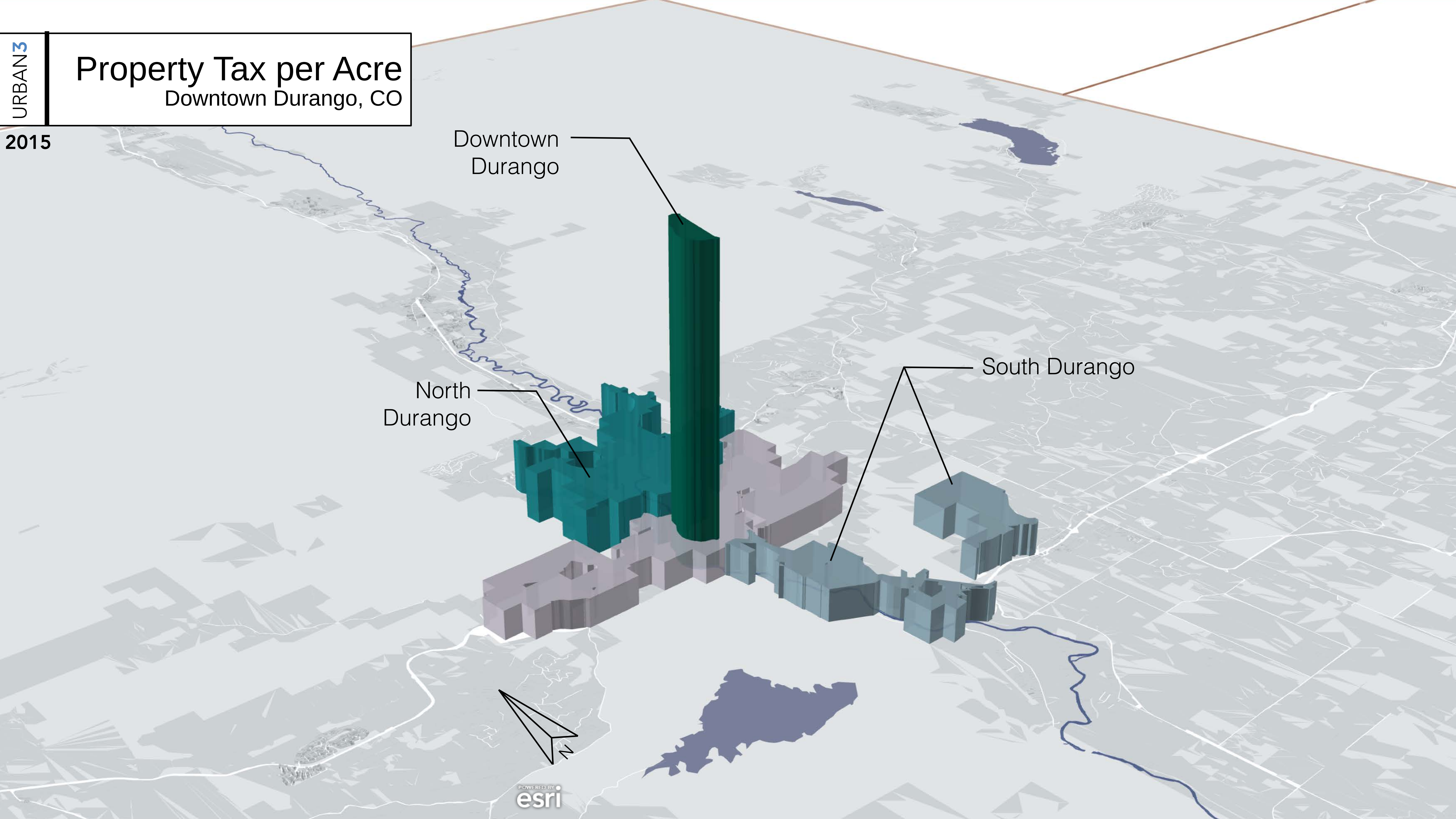
Case Study: Economic MRI®

Durango, Colorado

Property Tax per Acre

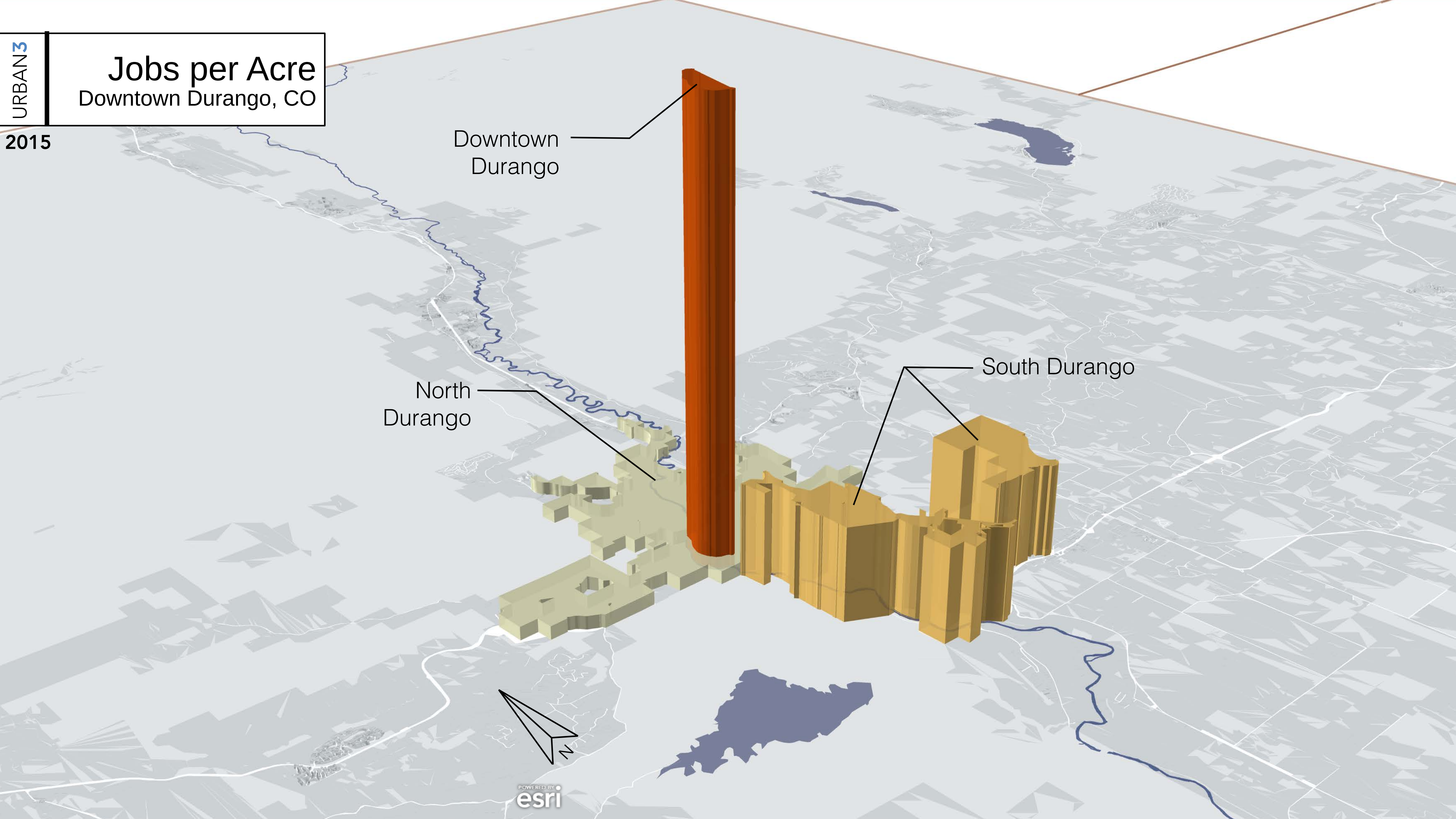
Downtown Durango, CO

2015



Jobs per Acre

Downtown Durango, CO



Downtown
Durango

North
Durango

South Durango

Retail Taxes Per Acre

Durango, CO

San Juan County

Hinsdale County

Archuleta County

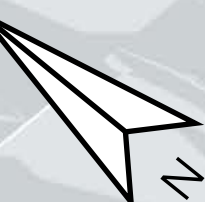
Downtown Durango

South Durango



LAKE NIGHTHORSE

ANIMAS RIVER



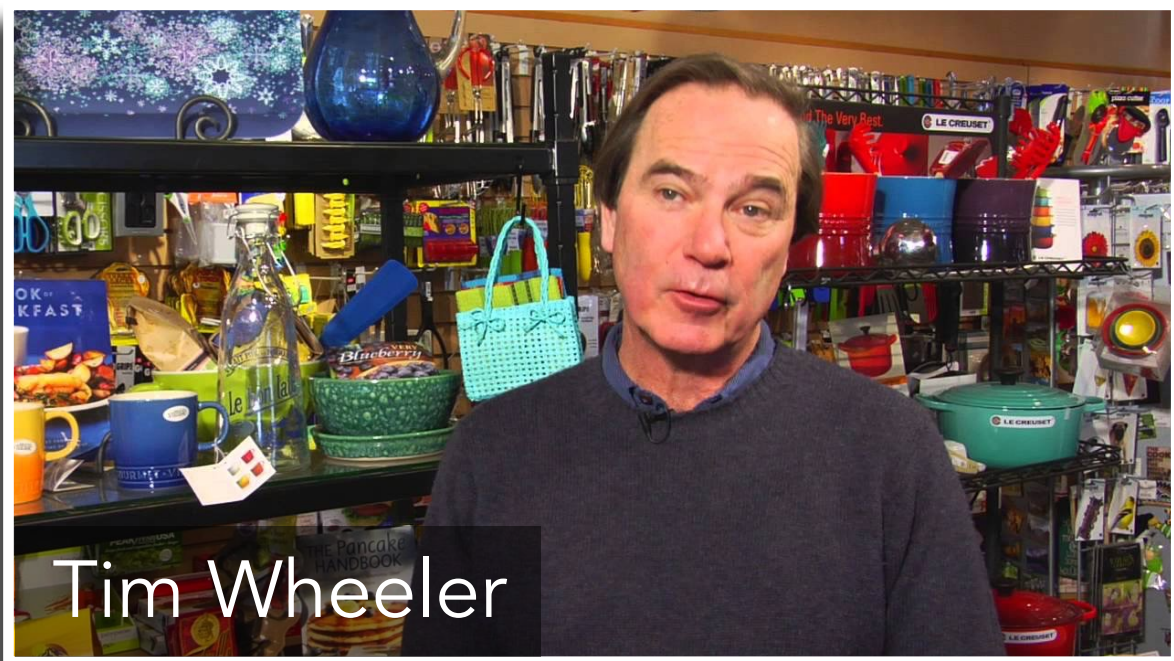
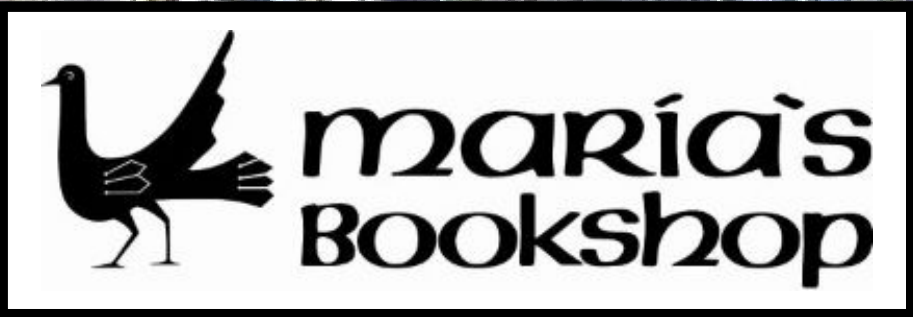
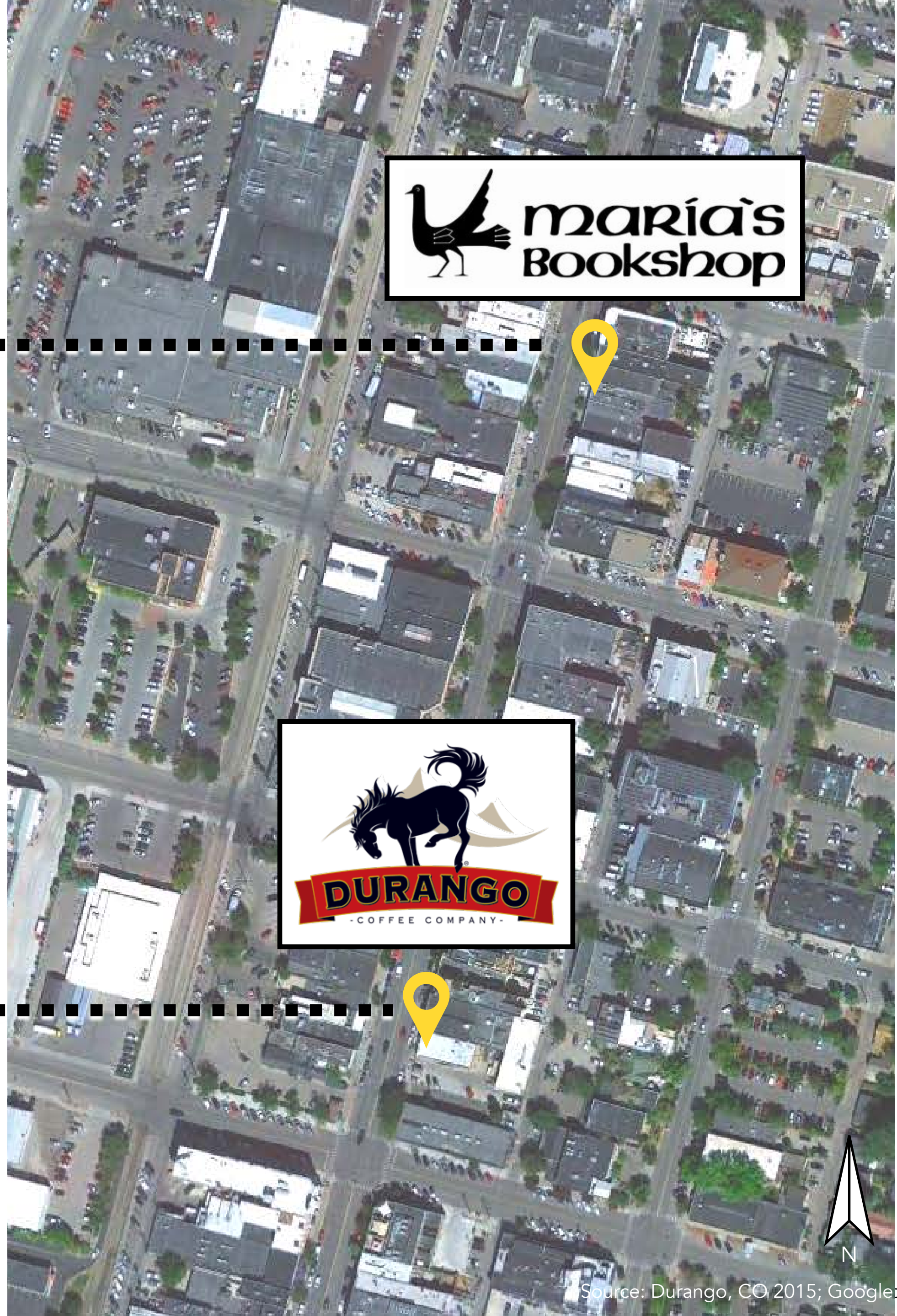
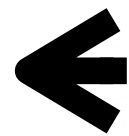
URBAN3

Local Businesses

Downtown Durango, CO



Peter Schertz



Tim Wheeler



Comparing Financial Productivity

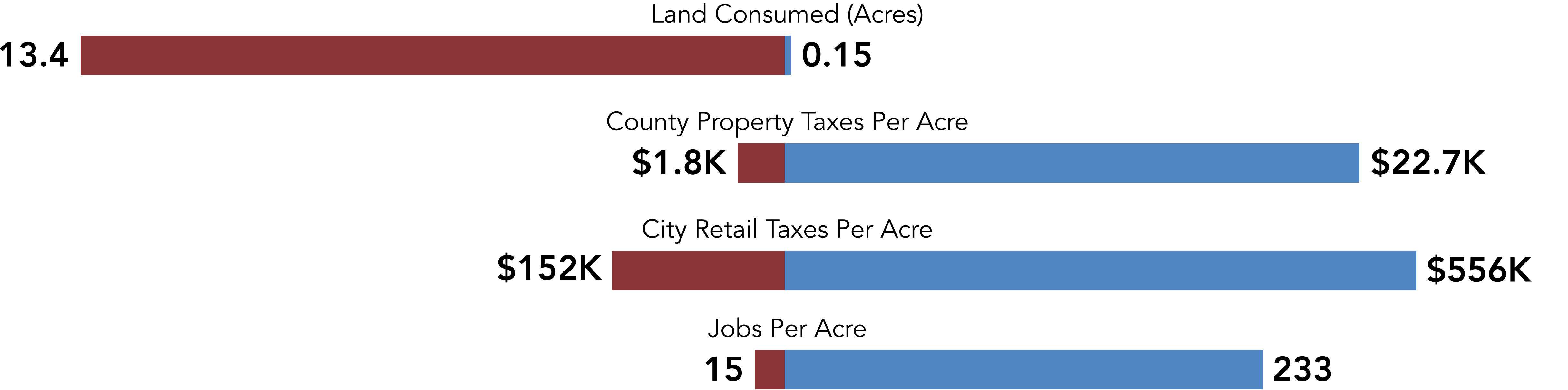
Durango, CO



Walmart



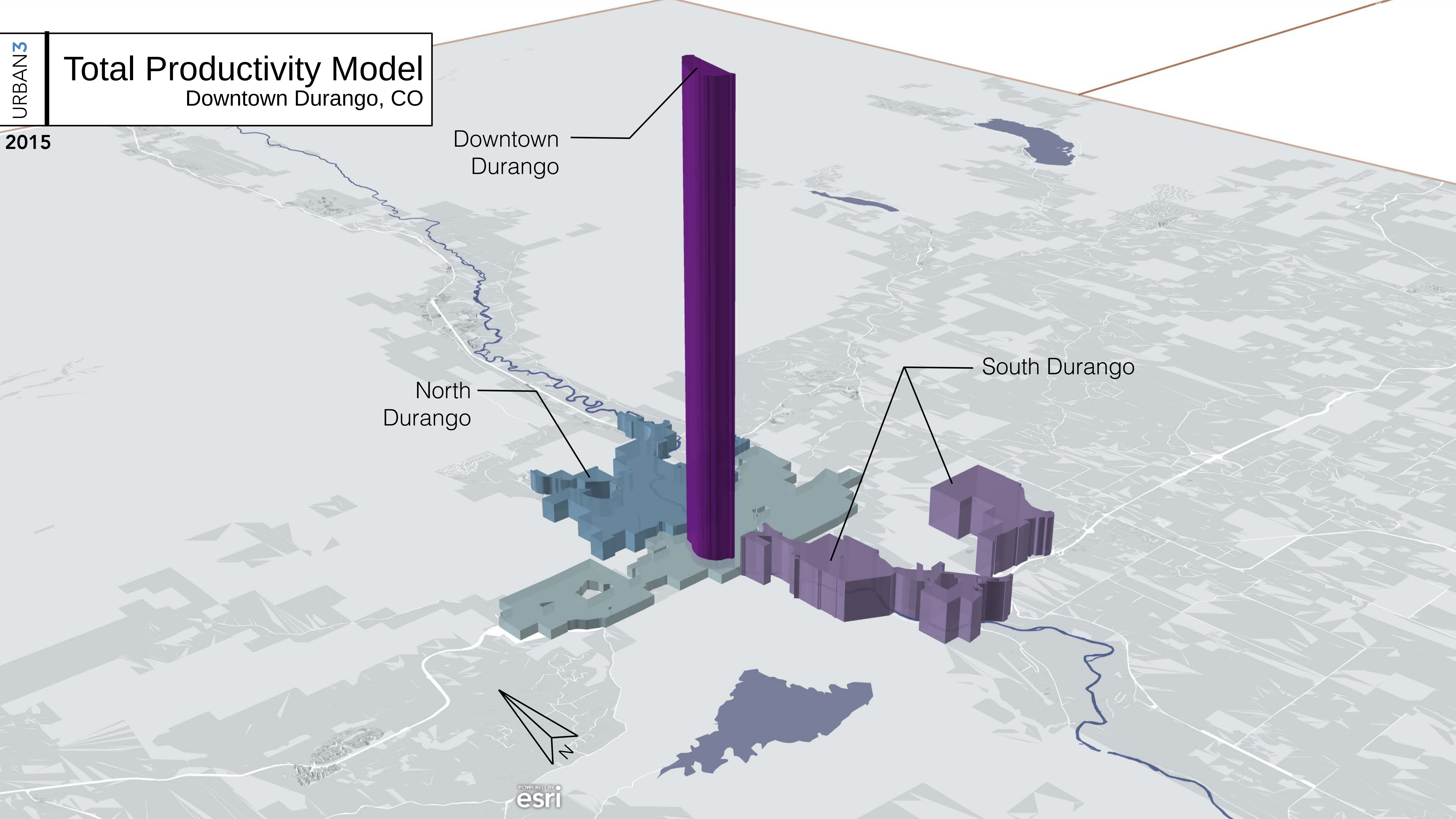
Durango Coffee + Maria's Bookshop



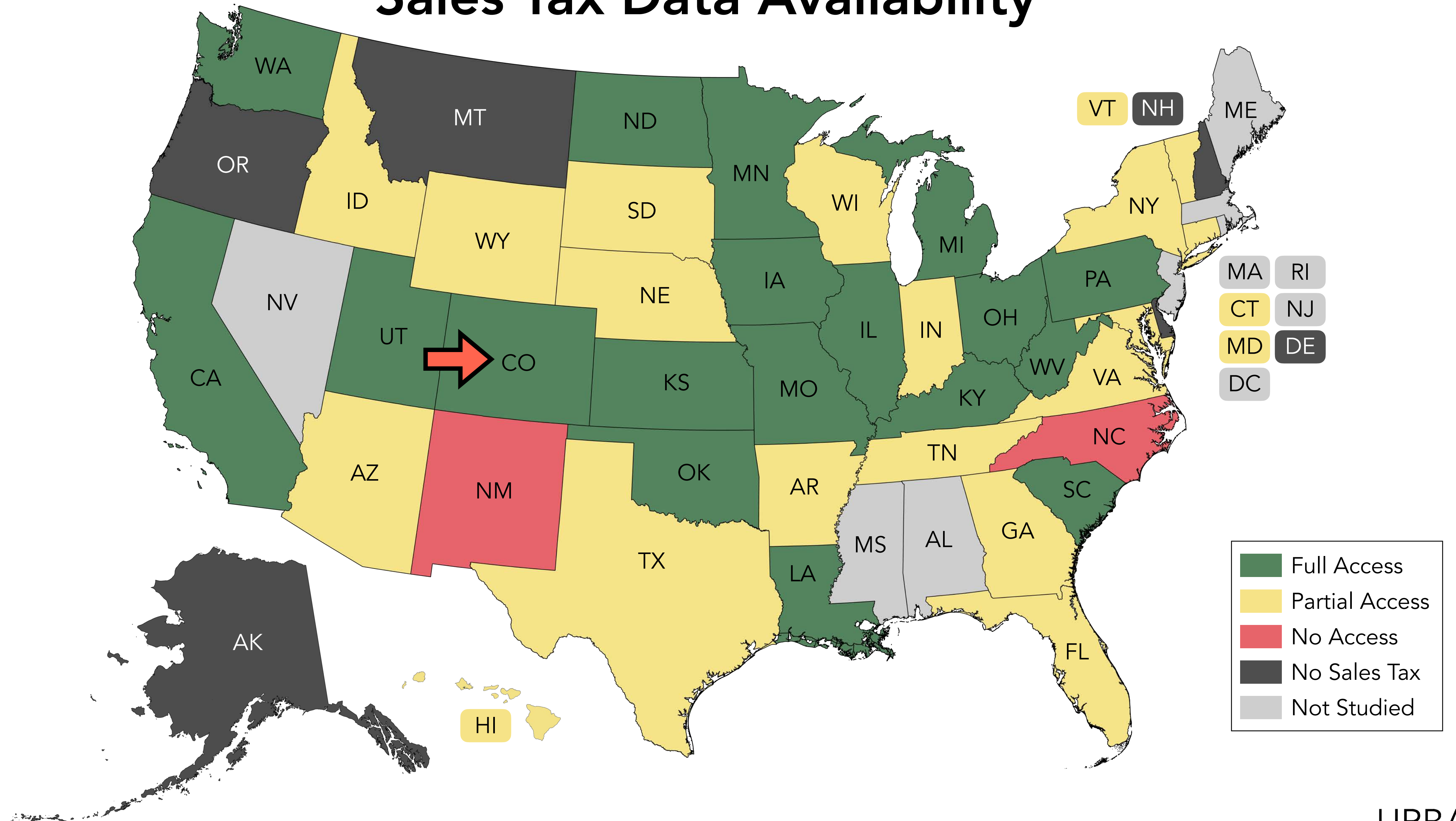
Total Productivity Model

Downtown Durango, CO

2015

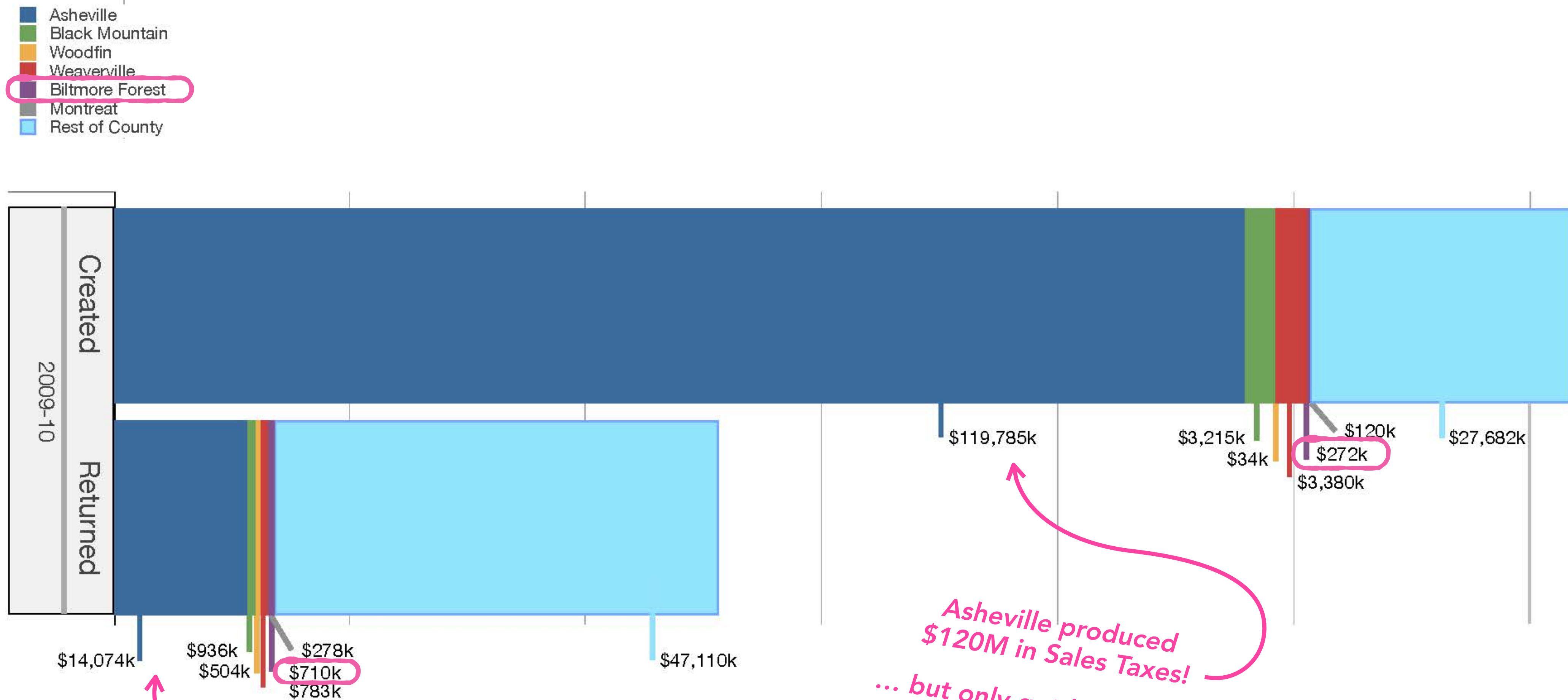


Sales Tax Data Availability



Retail Tax Breakdown for Buncombe County, NC

Tax Creation* and Distribution for one Fiscal Year

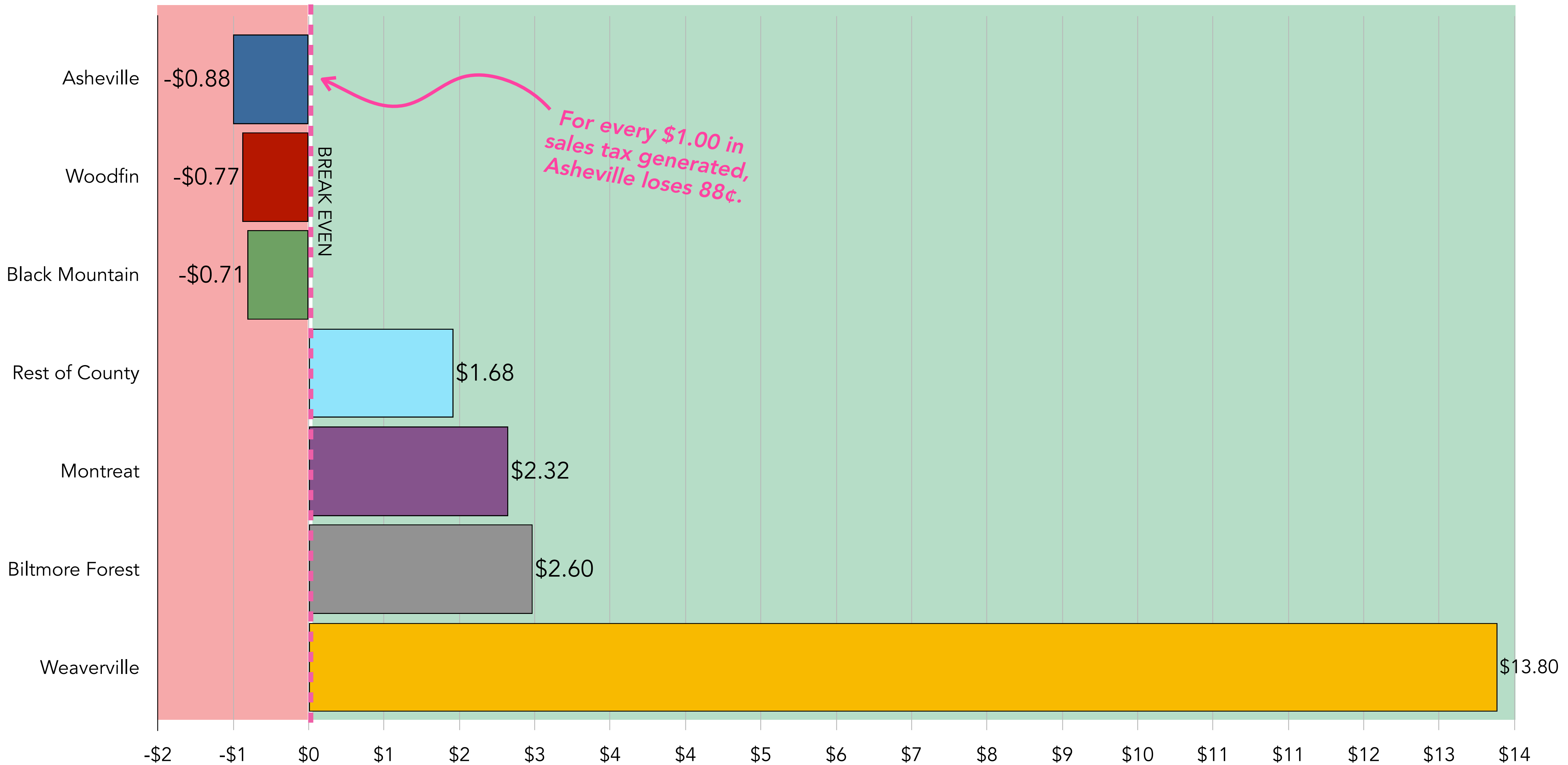


Asheville produced \$120M in Sales Taxes!
... but only got back \$14M.
A 0.12X return!

*Tax generation numbers for municipalities generated by average proportion of municipal generation of previous 10 year period. In 2009, the state stopped collecting municipal generation and only collects at 'county' level.

Sales Tax Returned per \$1 Generated

Buncombe County, NC



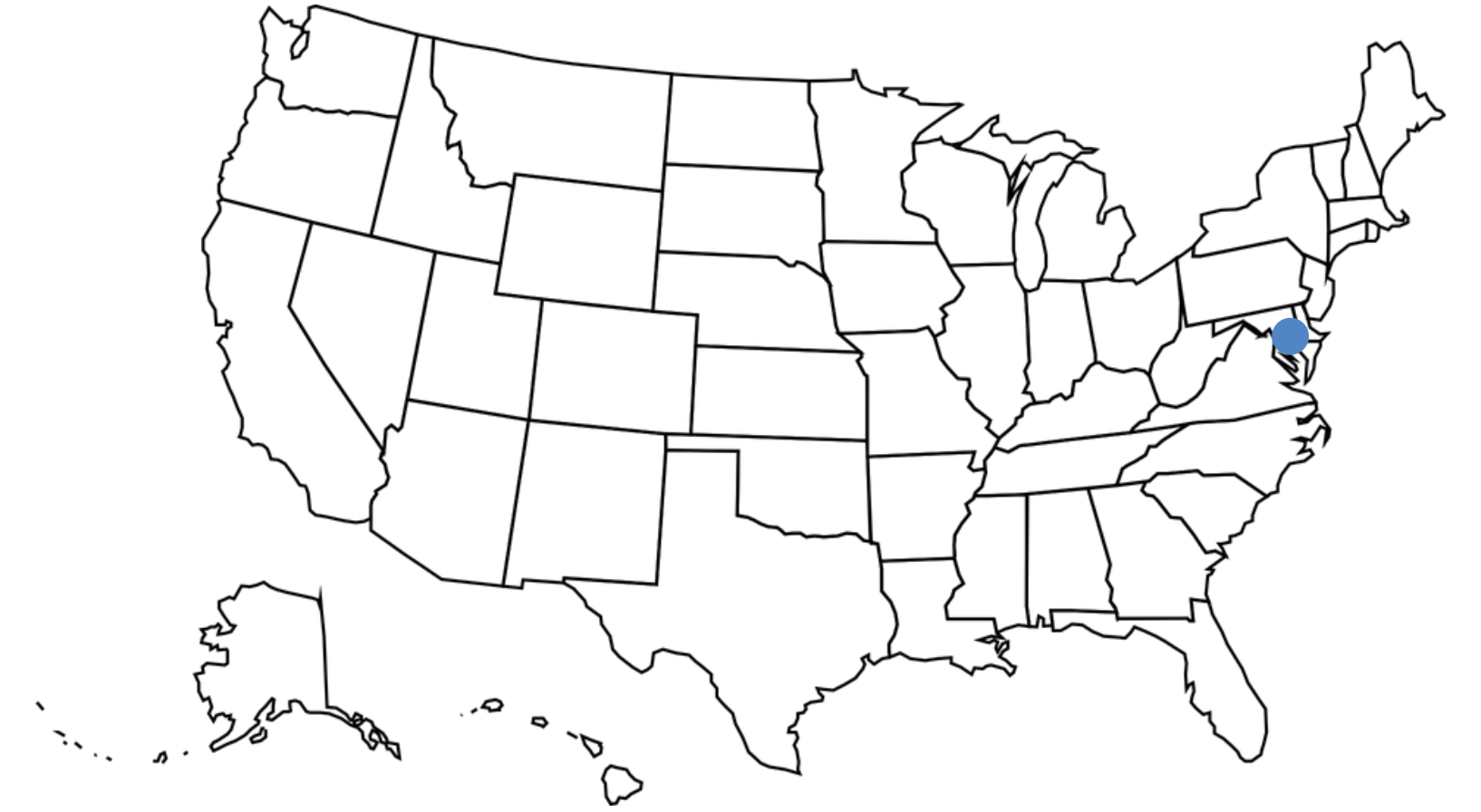
If you can't measure it,
you can't
manage it.

Mayor Michael Bloomberg



Question:

**Do we know the cost of
development patterns?**



Case Study: Economic MRI®

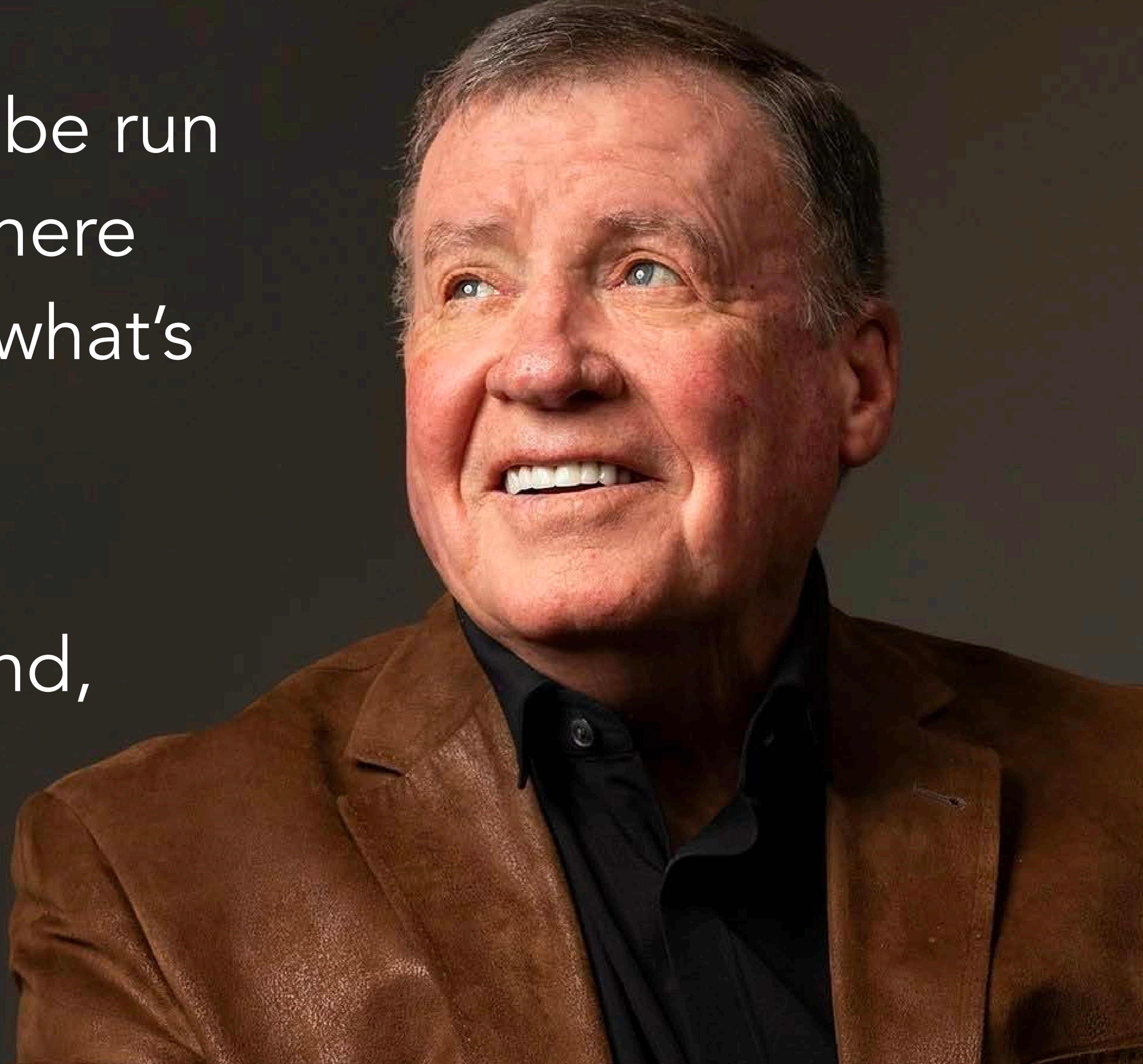
Annapolis, Maryland

“A business should be run like an aquarium, where everybody can see what’s going on — what’s going in, what’s moving around, what’s coming out.”

Jack Stack

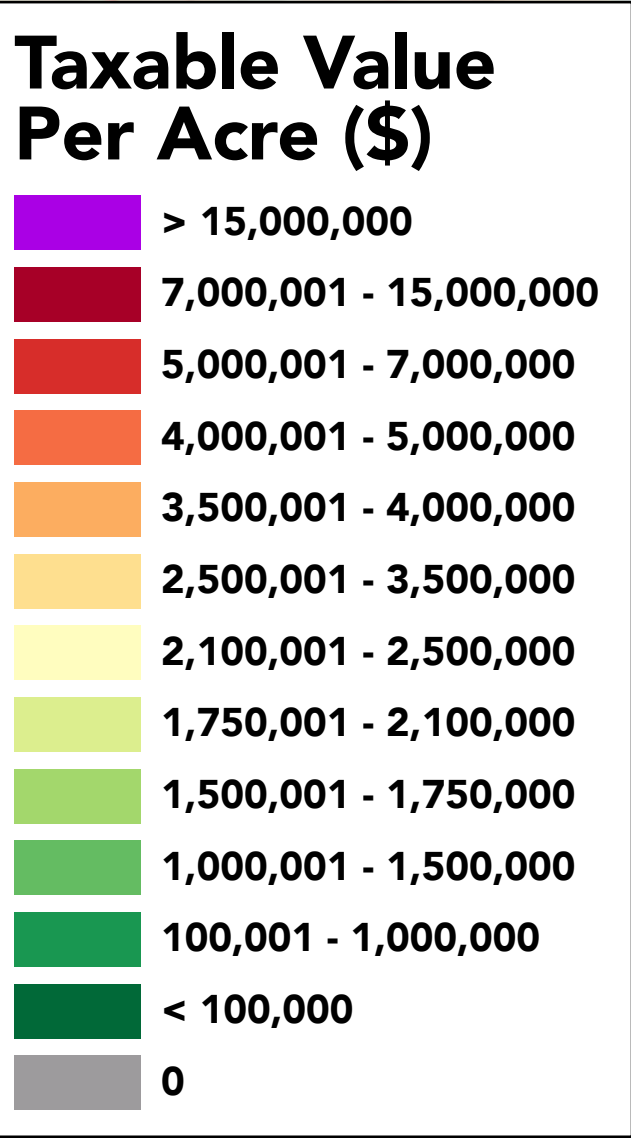
SRC Holdings

Author, [The Great Game of Business](#).



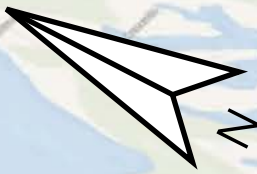
Taxable Value Per Acre

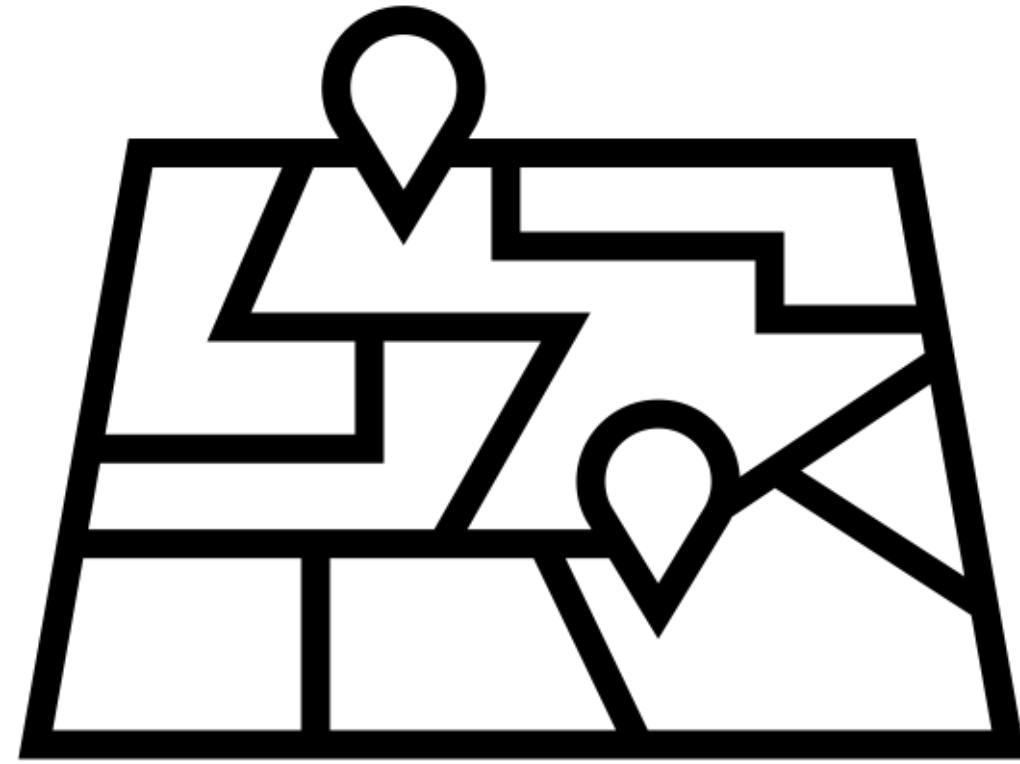
Annapolis, MD



Park Place Condos

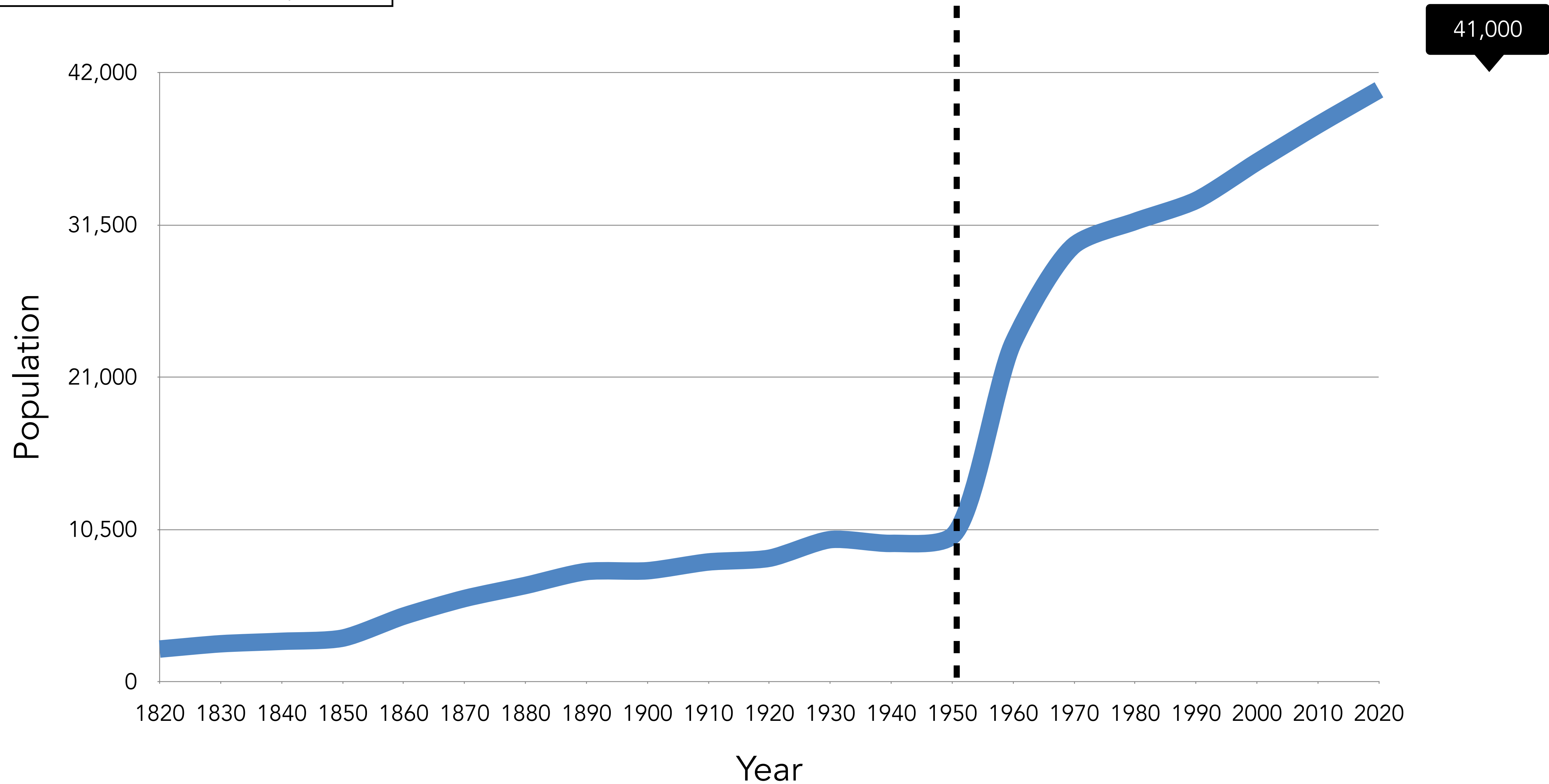
CHESAPEAKE BAY

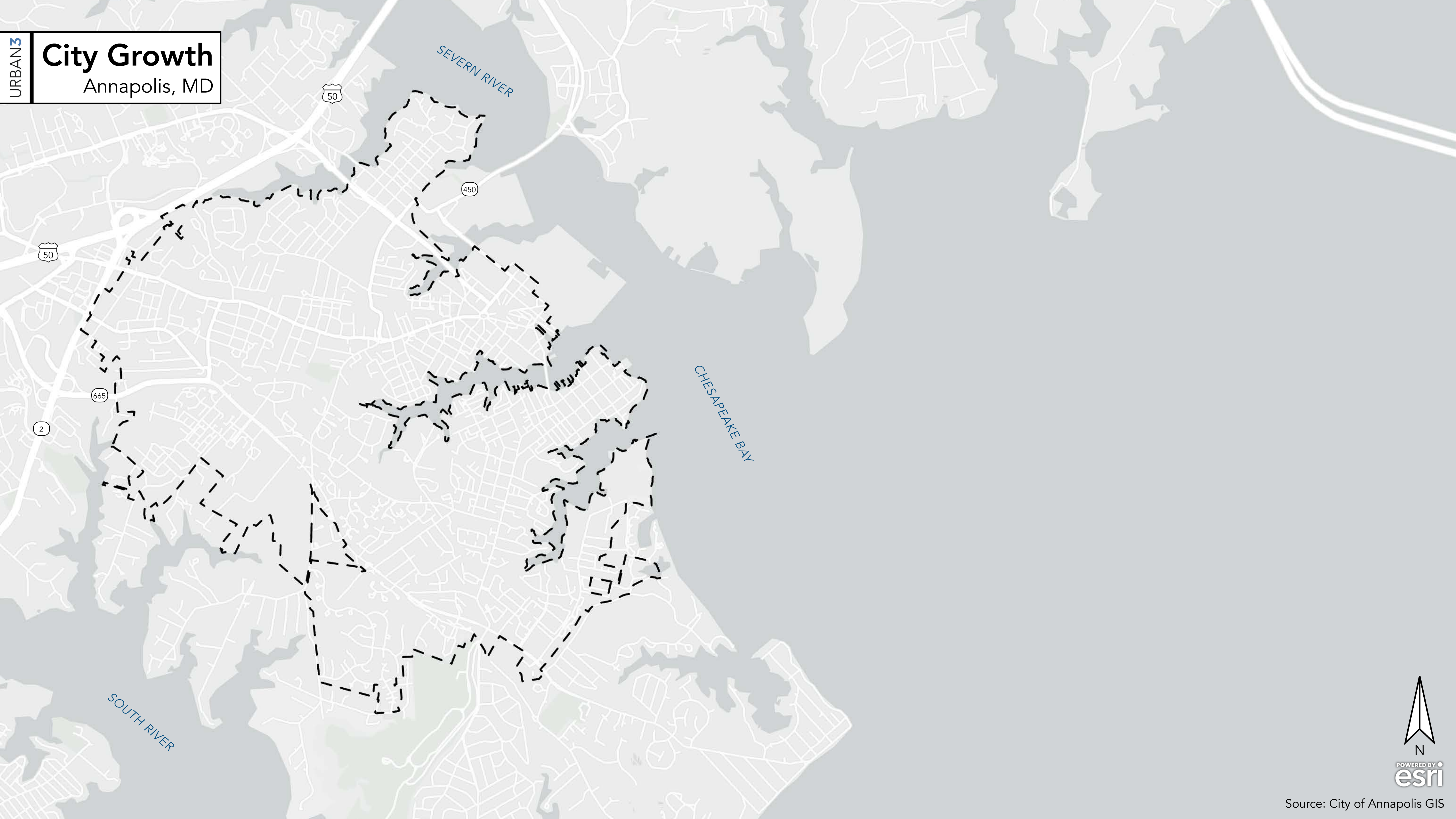




Annexation History

Comparative Spatial Modeling of Economic Change





URBAN3

City Growth

Annapolis, MD

50

50

450

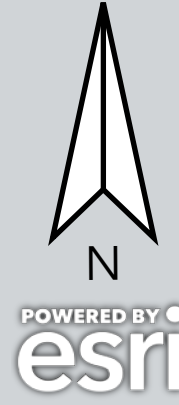
665

2

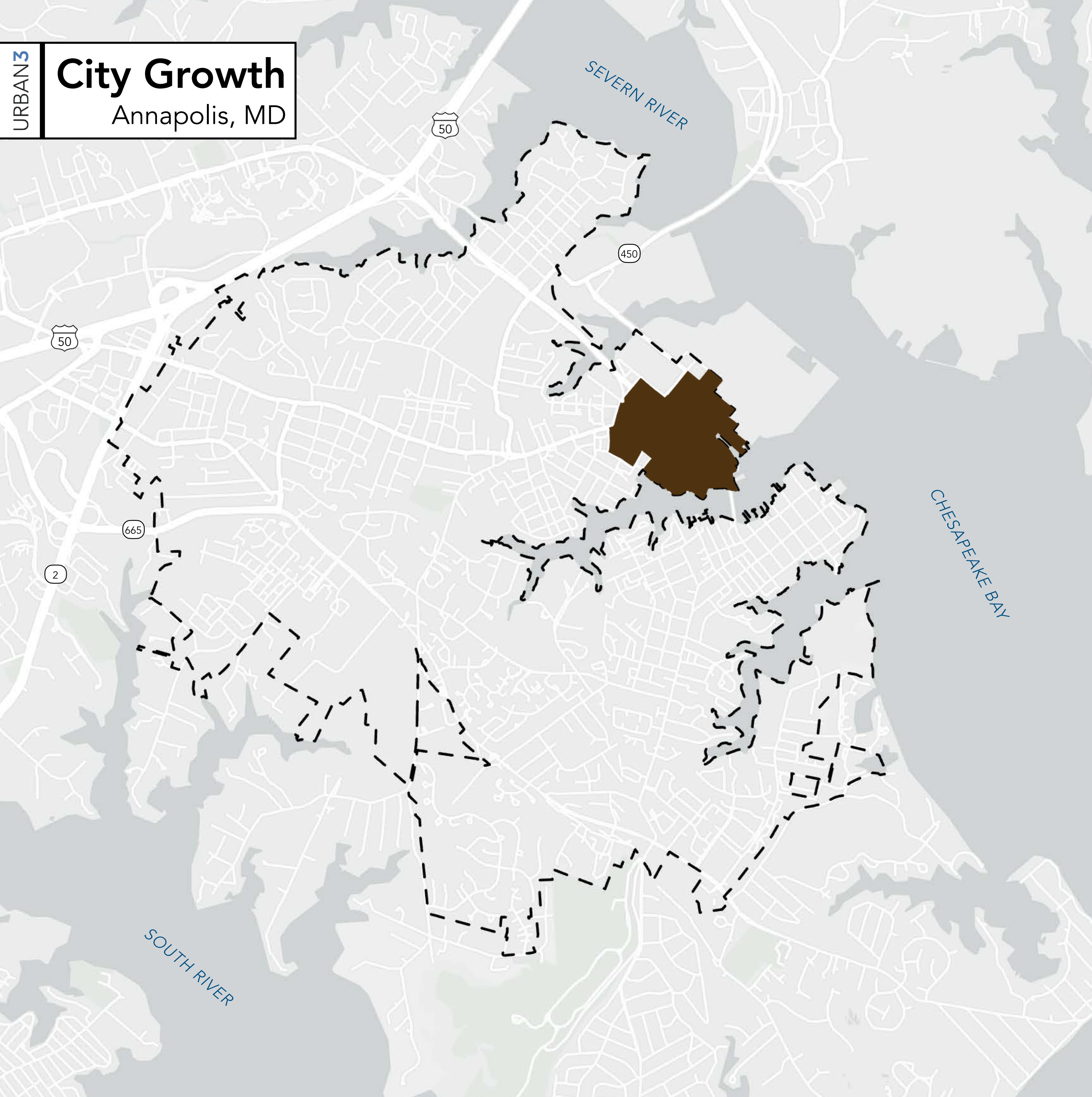
SEVERN RIVER

SOUTH RIVER

CHESAPEAKE BAY



Source: City of Annapolis GIS



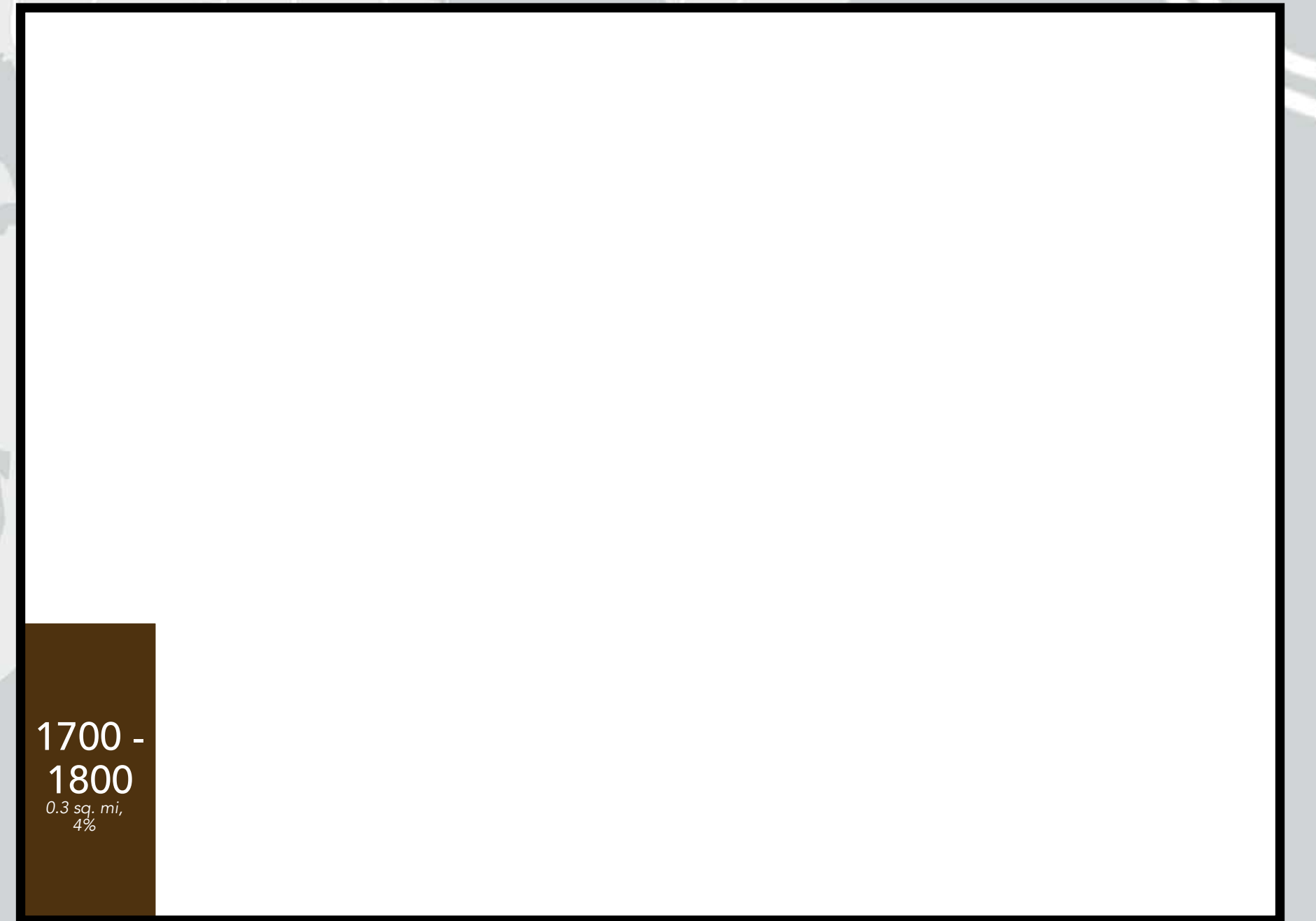
URBAN3

City Growth

Annapolis, MD

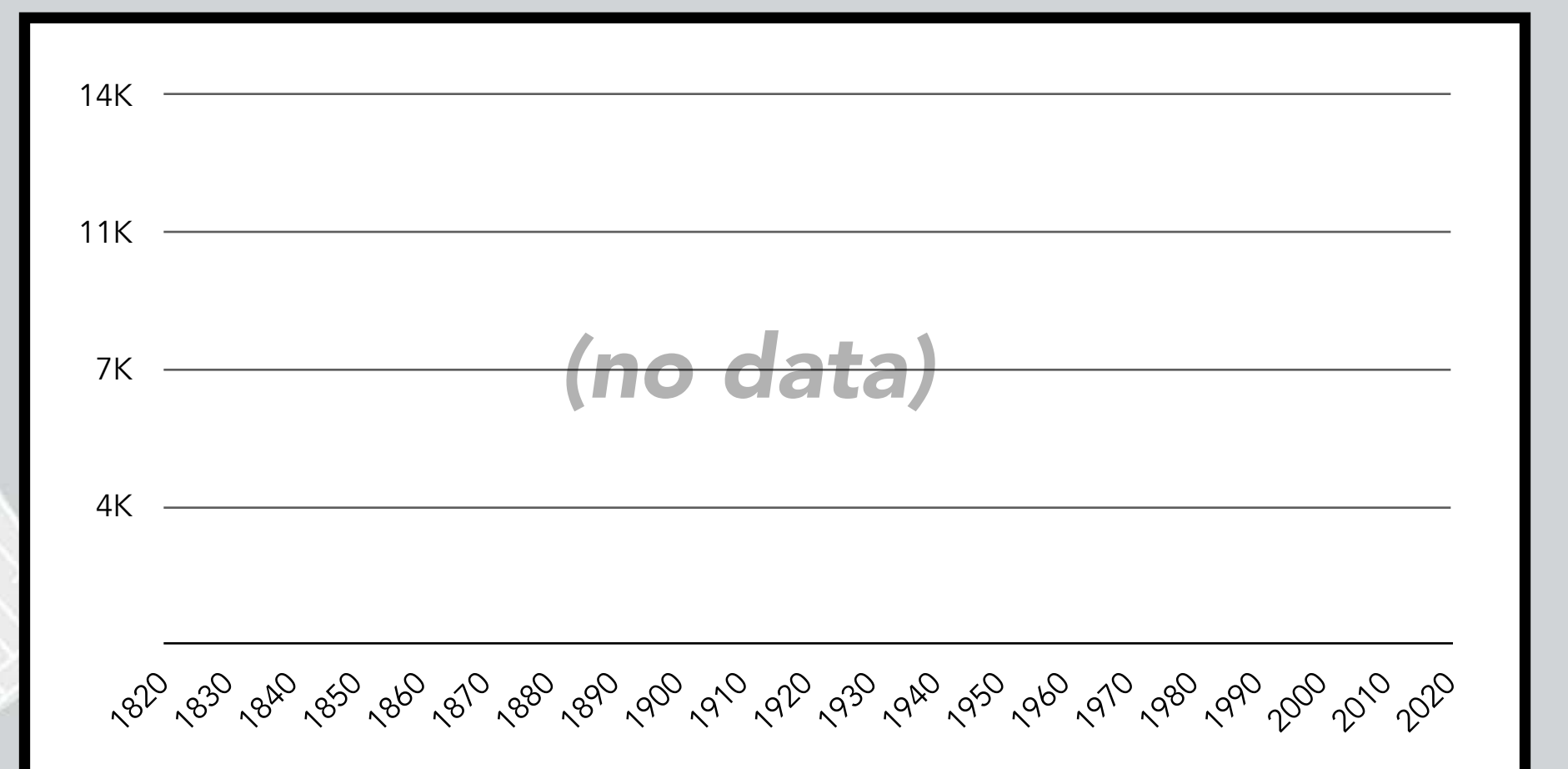
Area

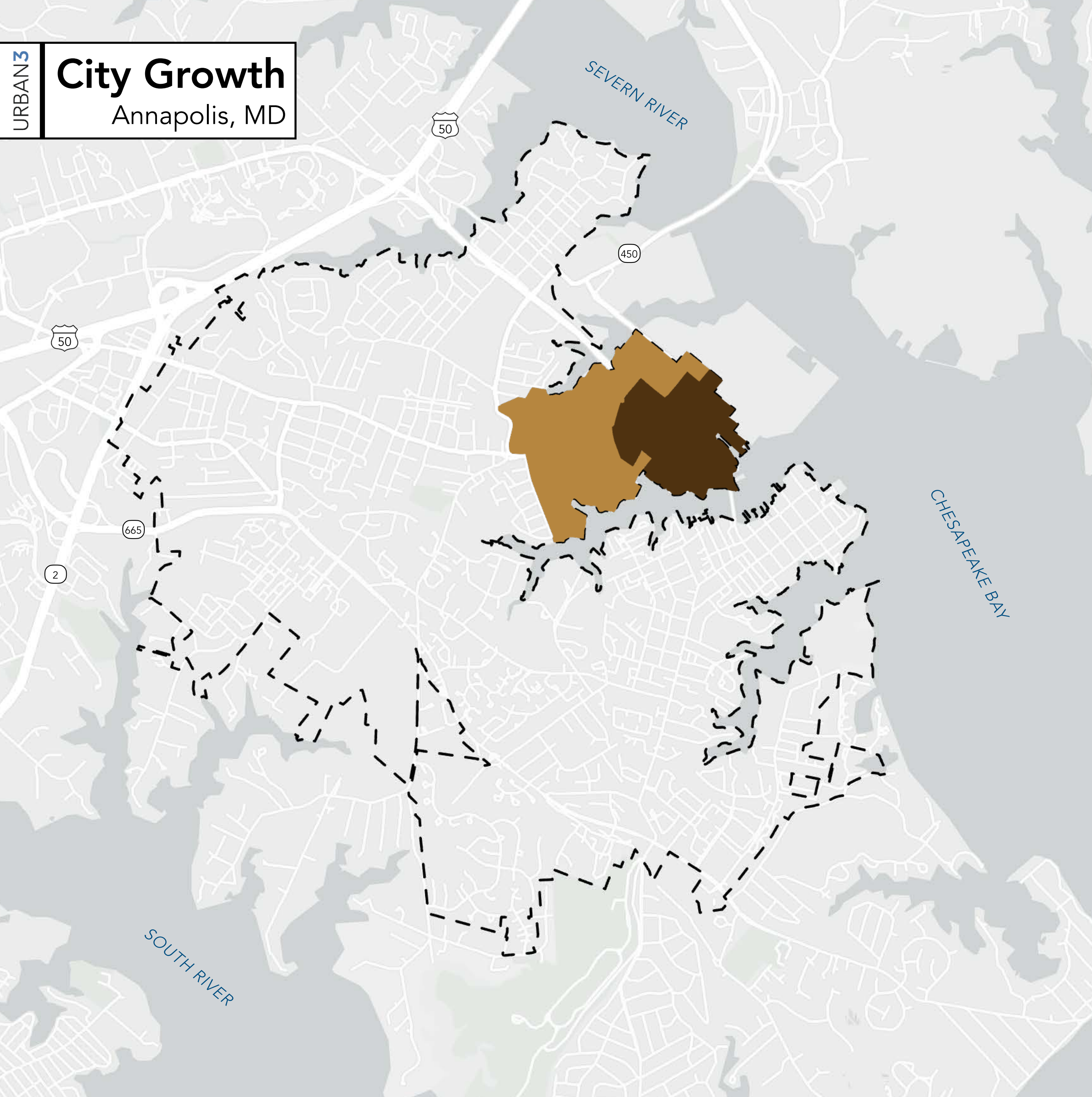
0.3 sq. mi



Population Density

(people per sq. mi)





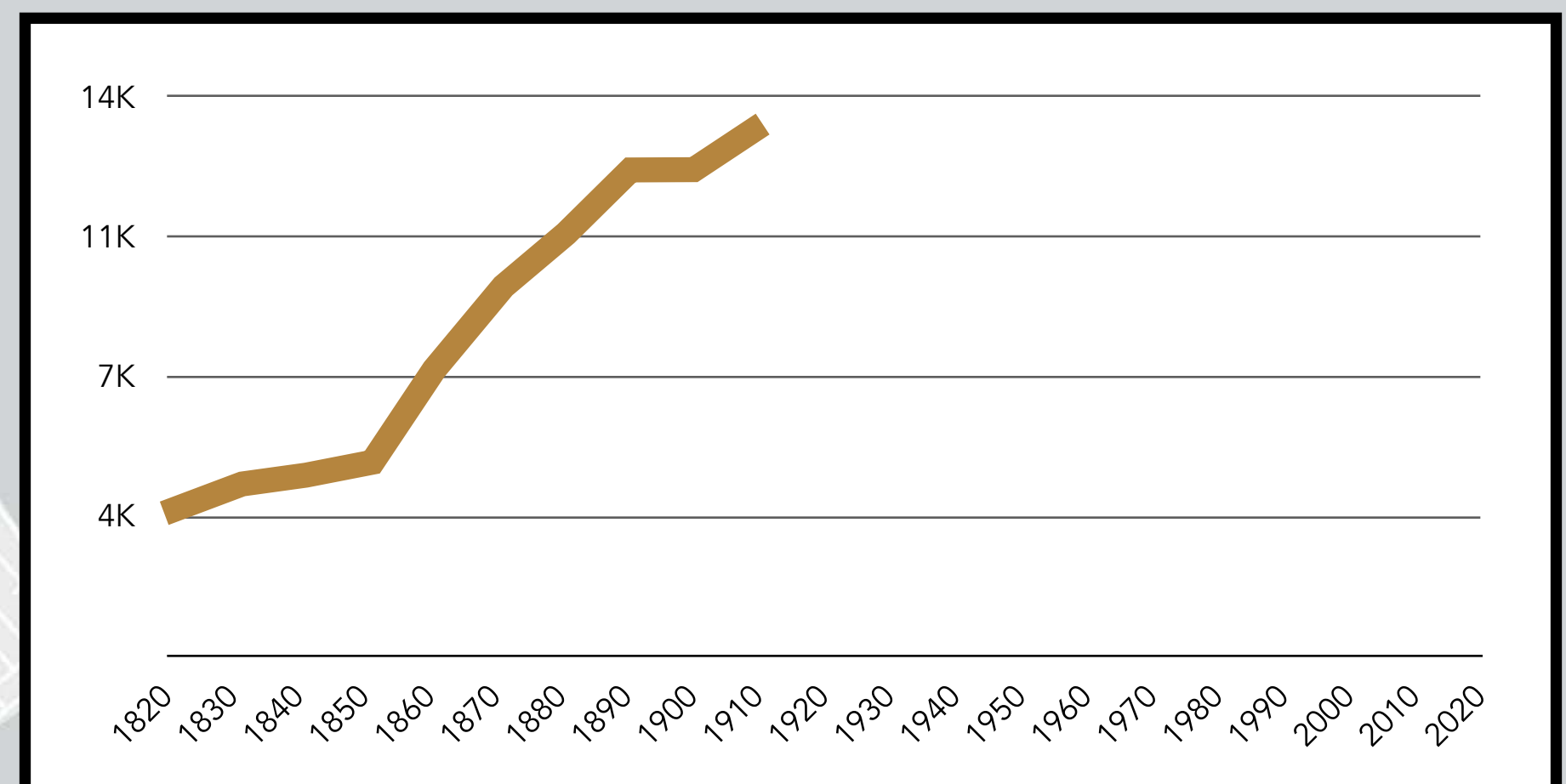
Area

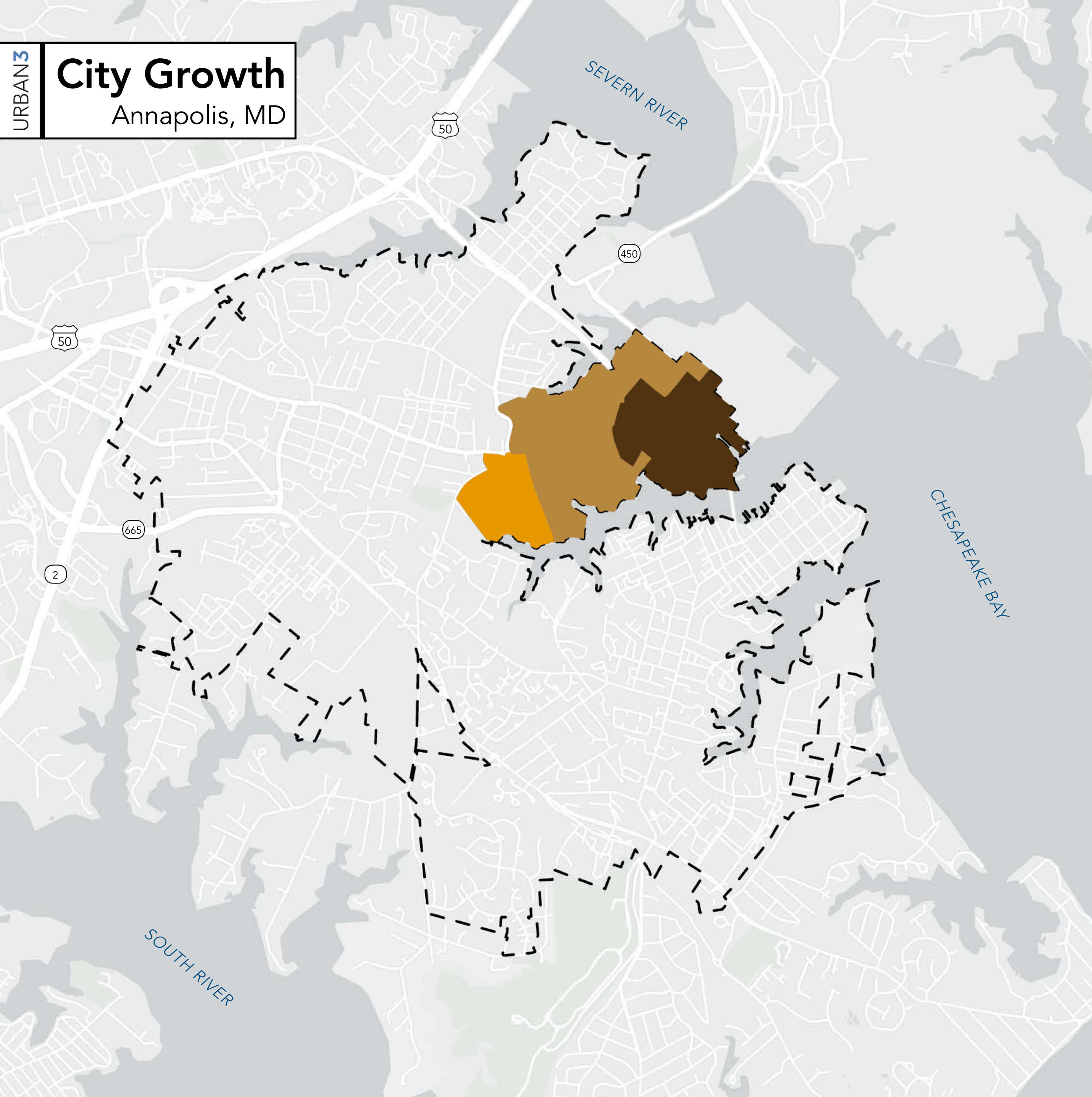
0.6 sq. mi



Population Density

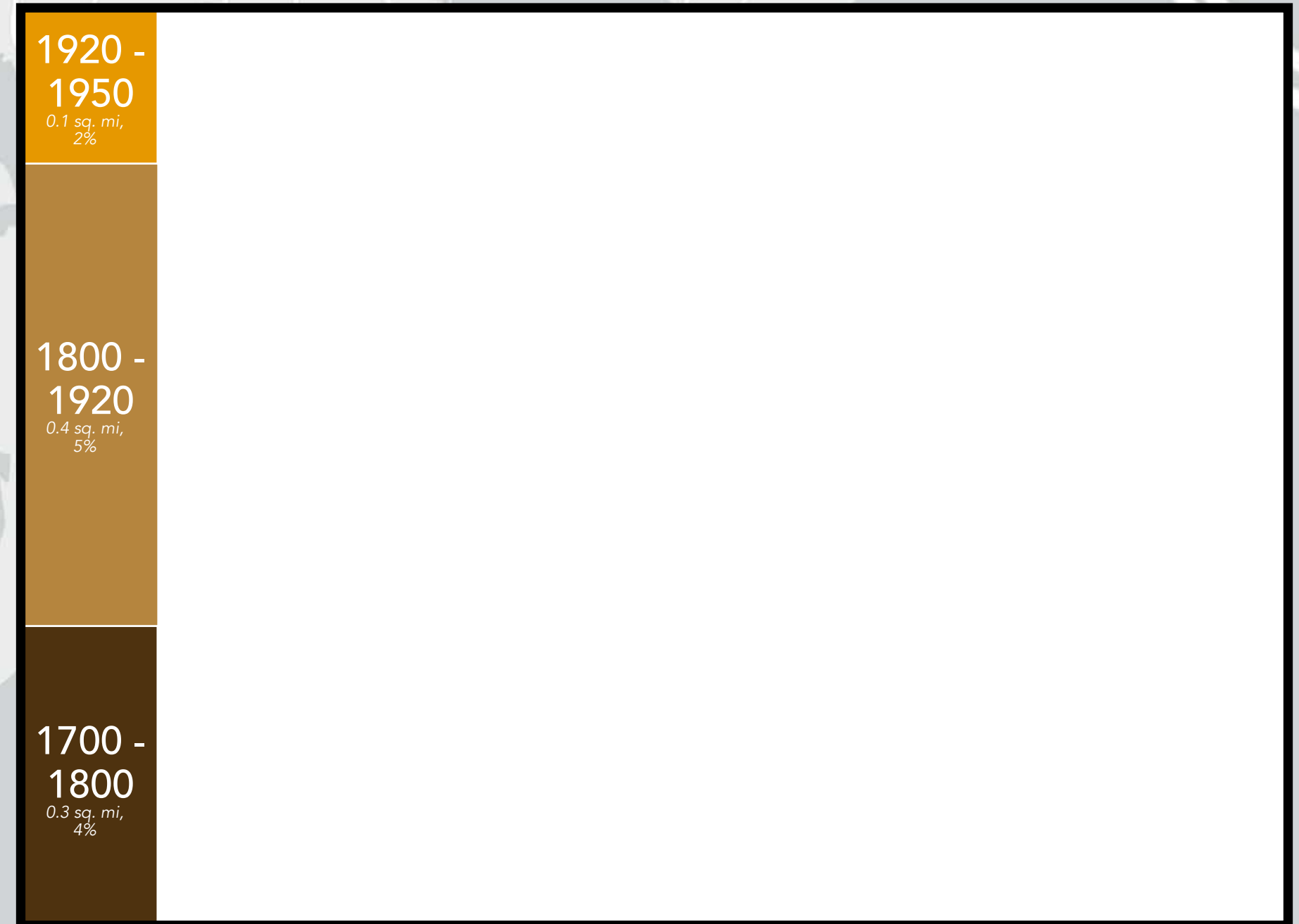
(people per sq. mi)





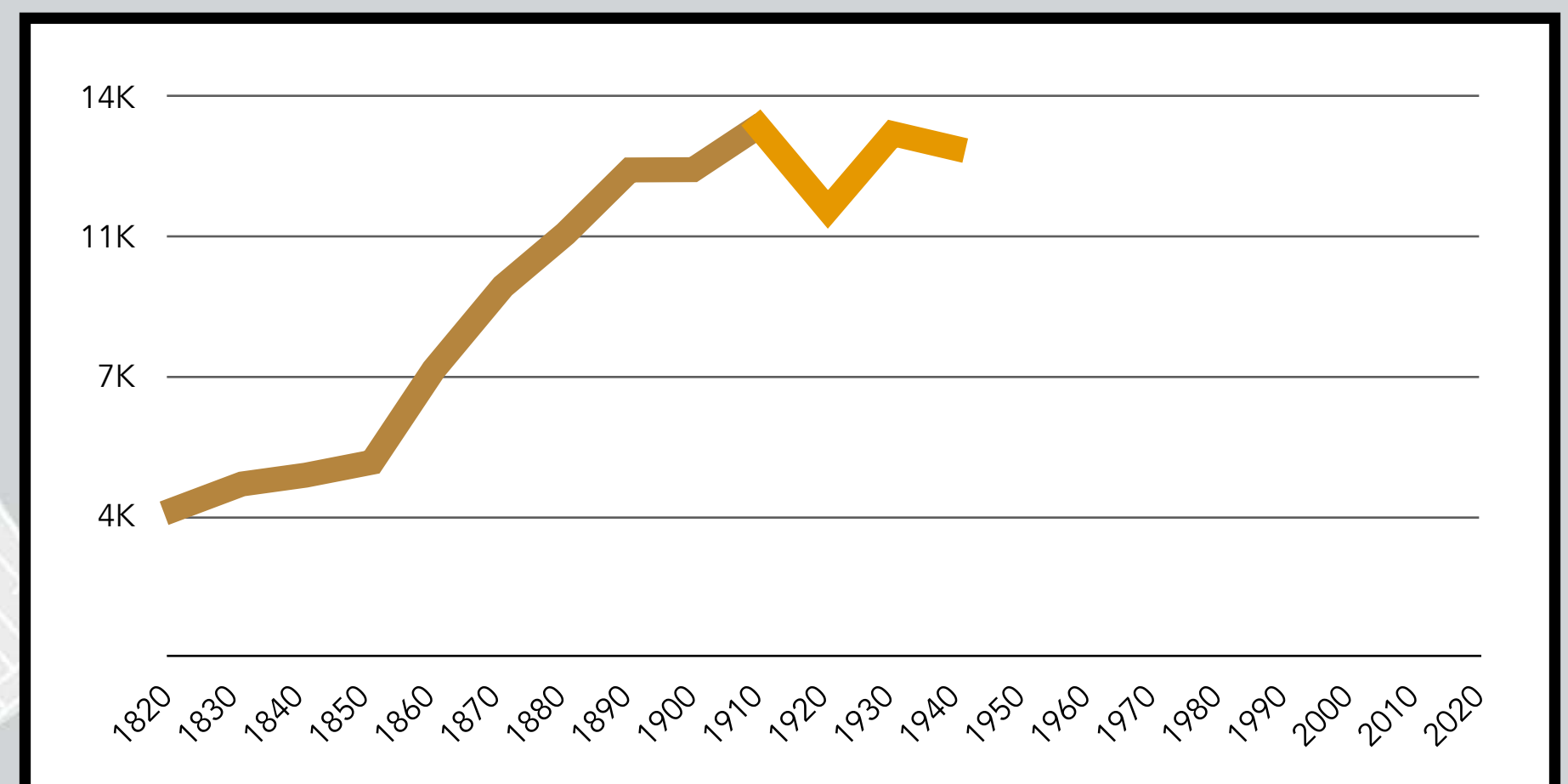
Area

0.8 sq. mi

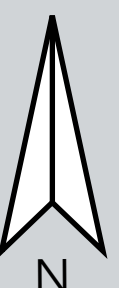


Population Density

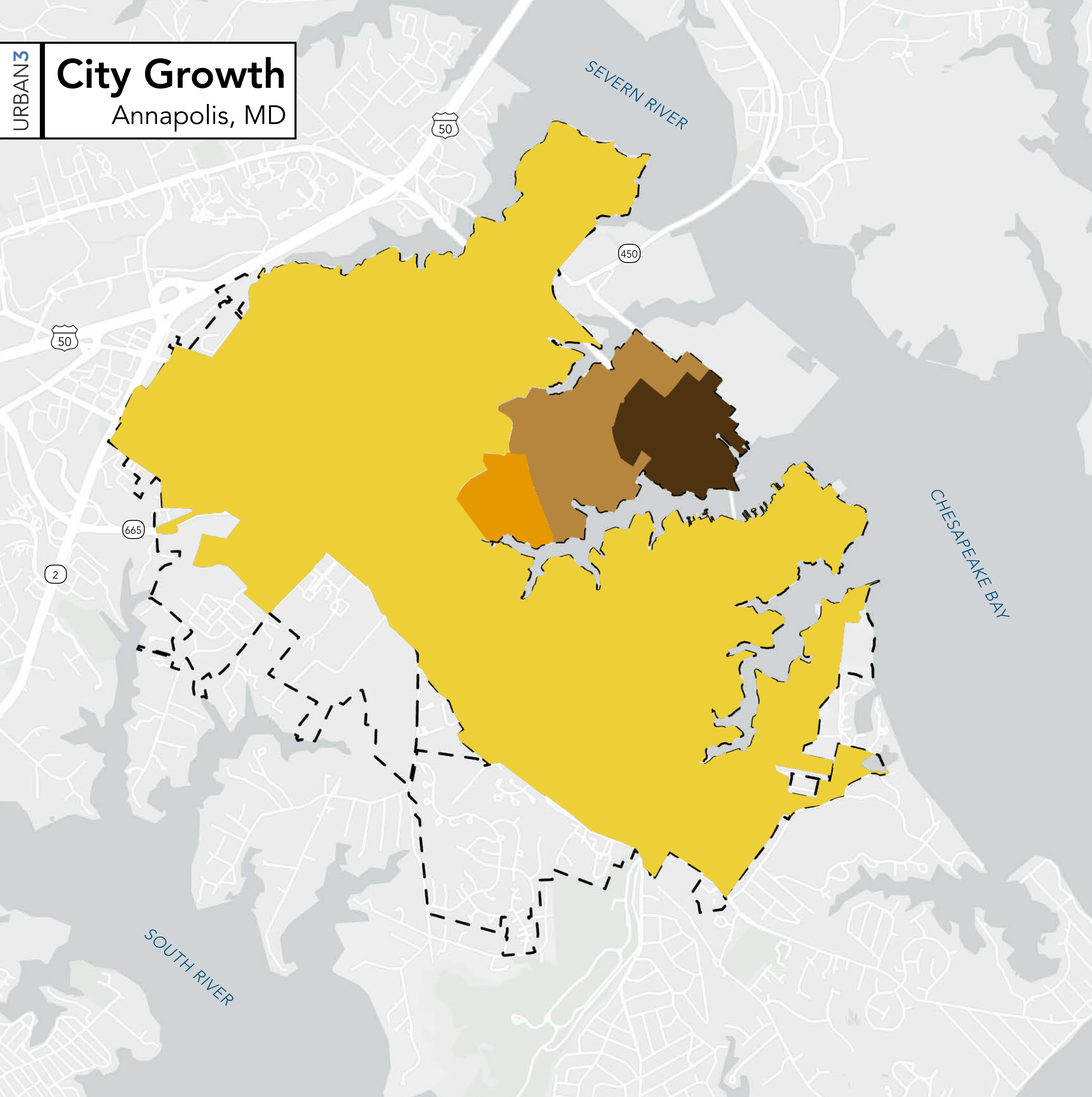
(people per sq. mi)



Source: City of Annapolis GIS, Wikipedia

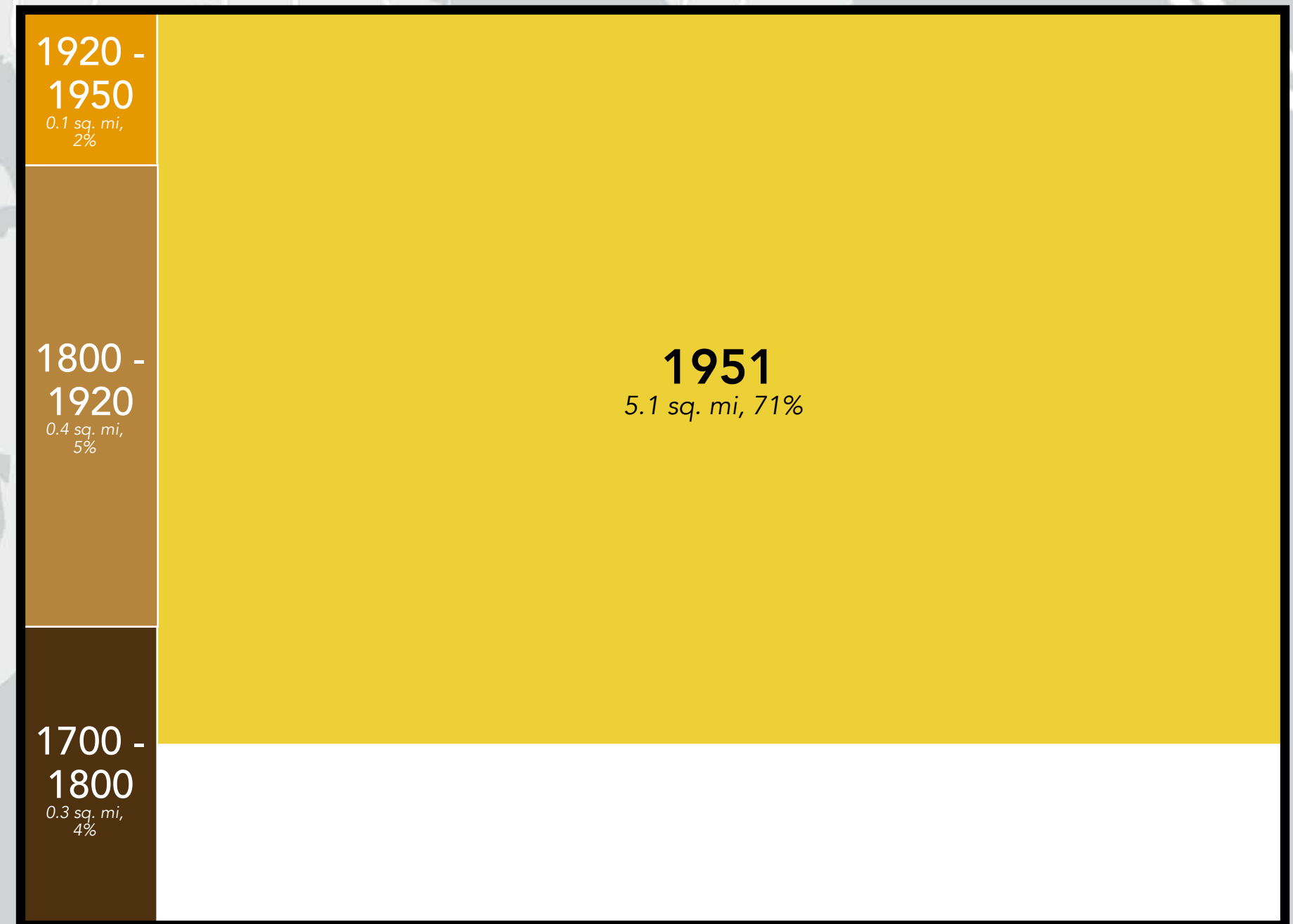


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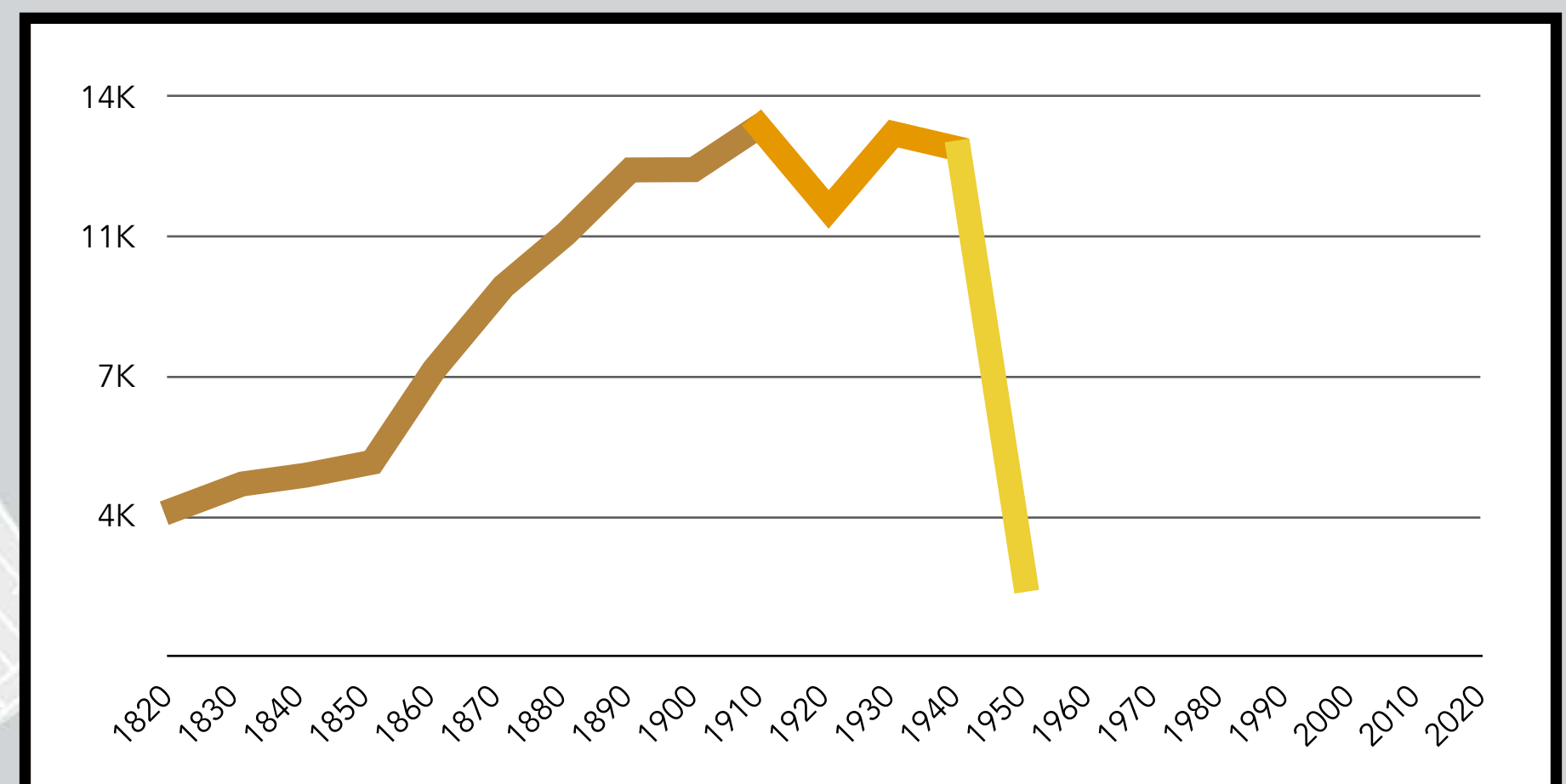
Area

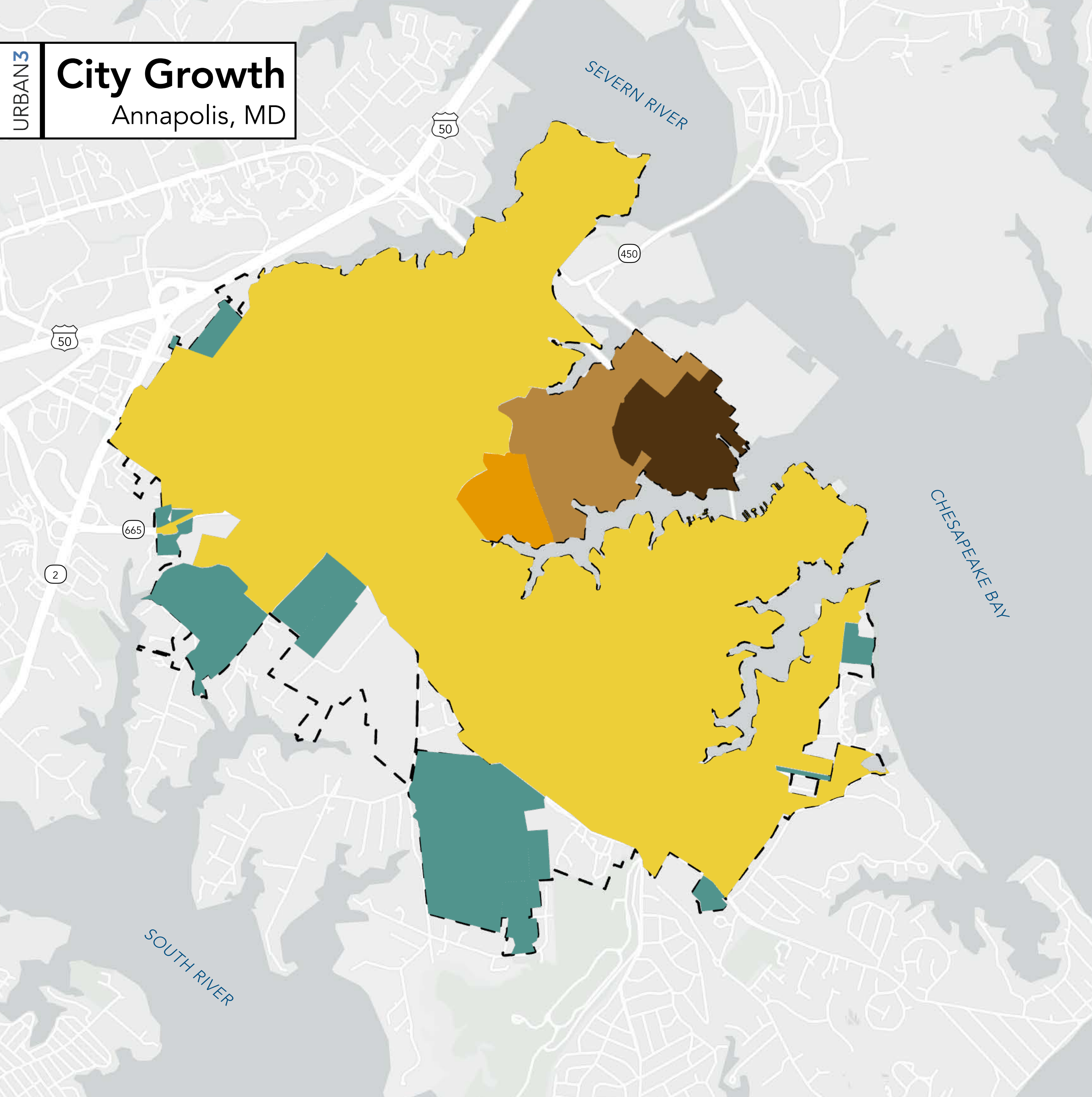
5.8 sq. mi



Population Density

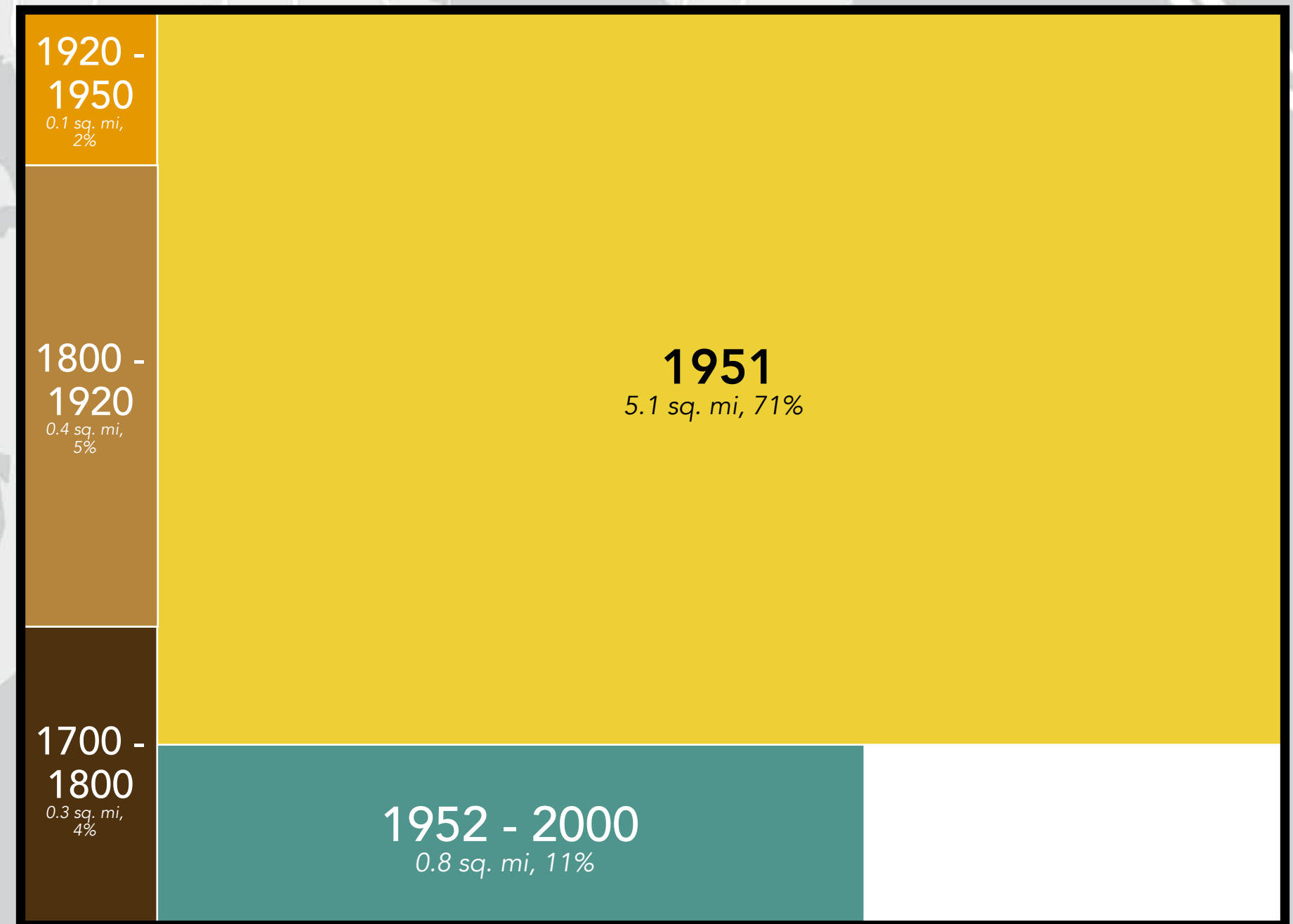
(people per sq. mi)





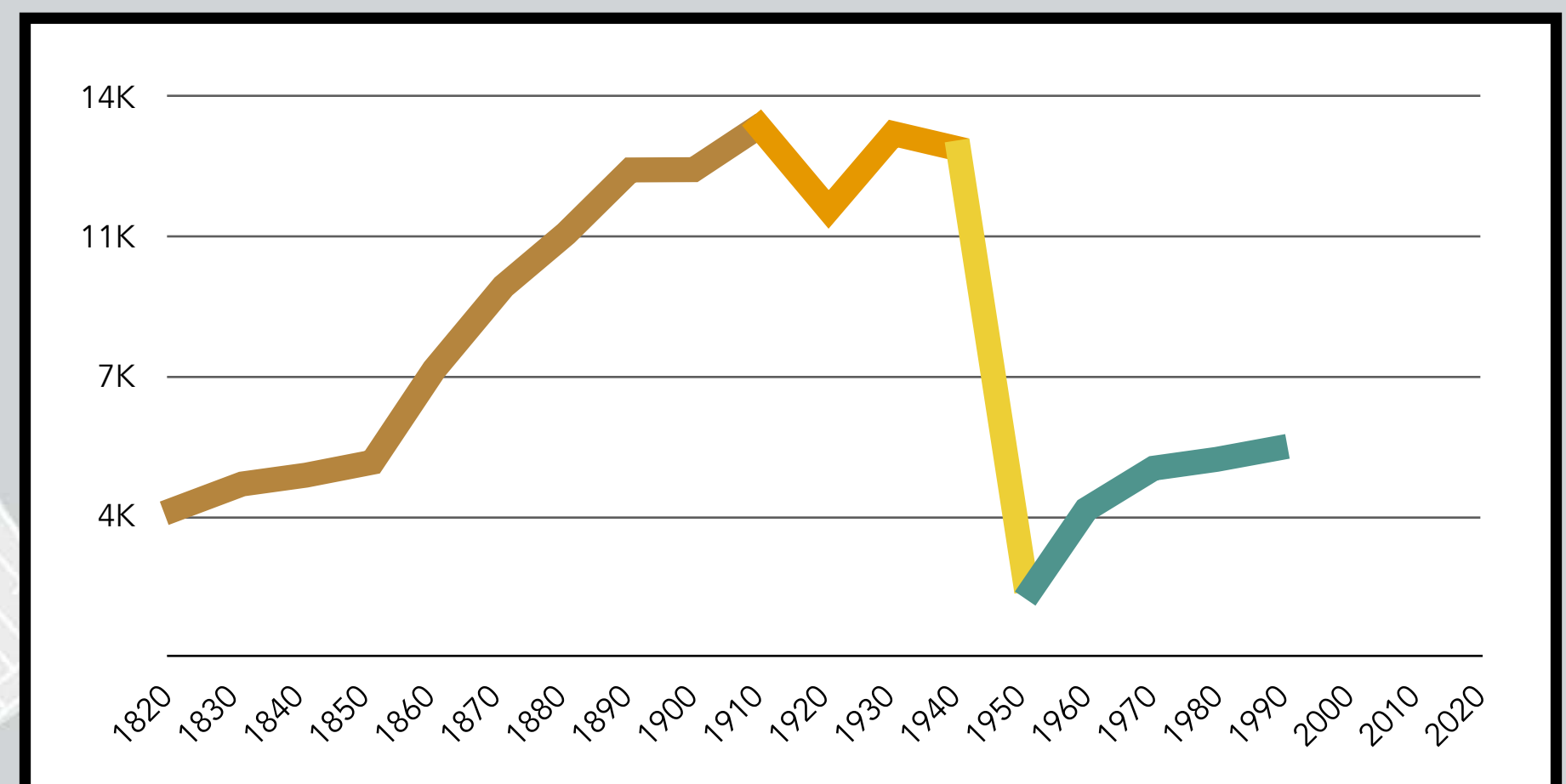
Area

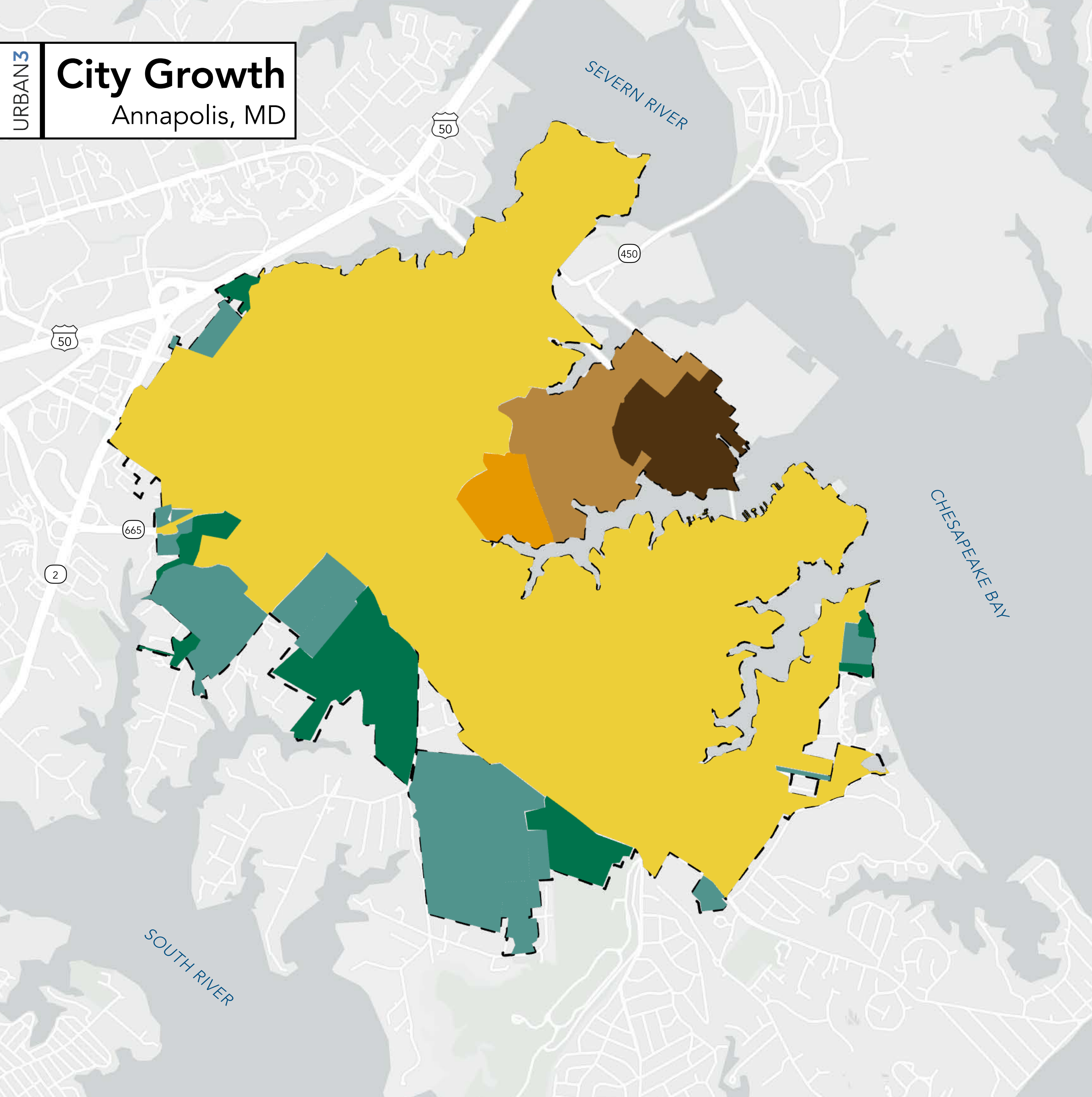
6.6 sq. mi



Population Density

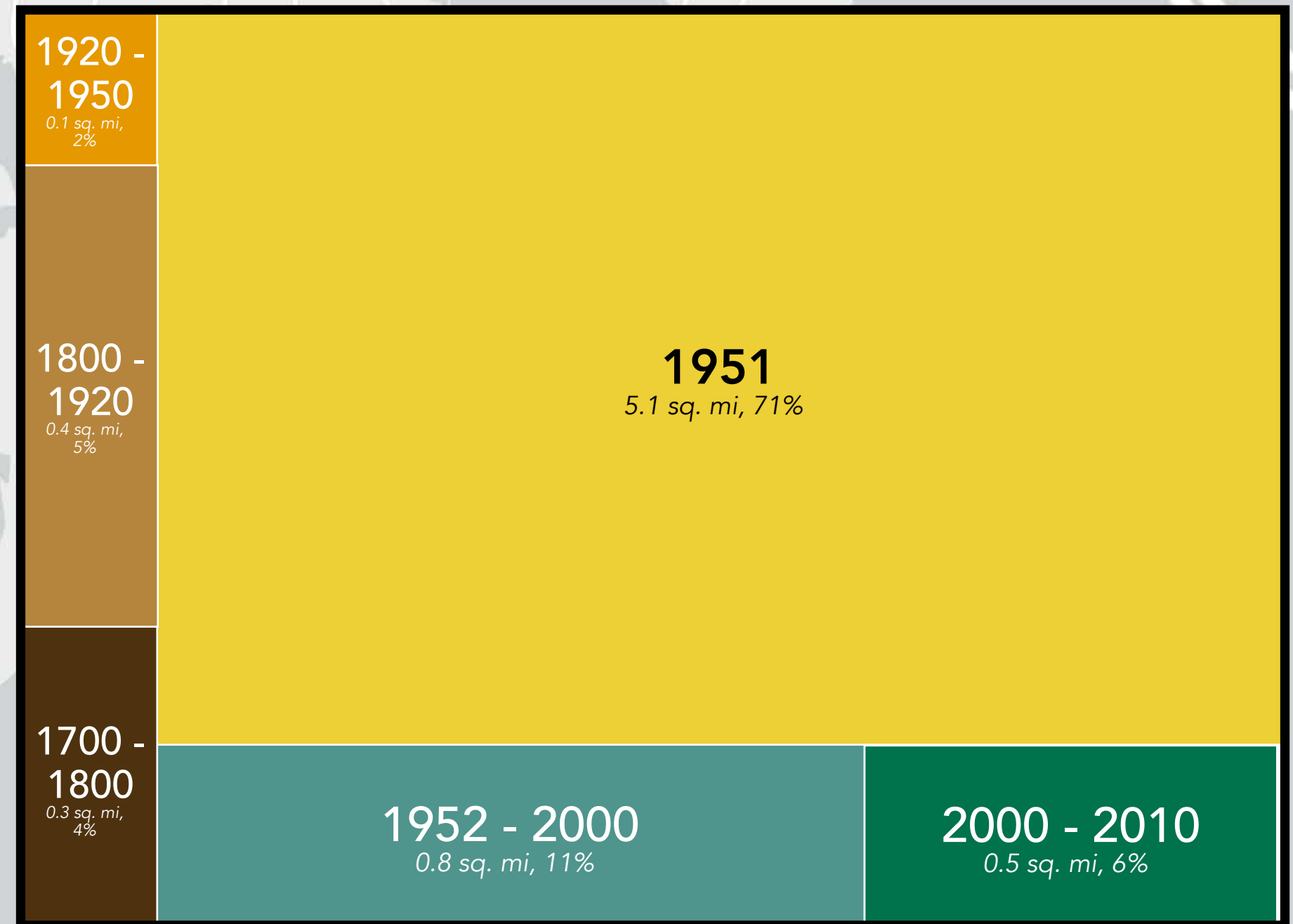
(people per sq. mi)





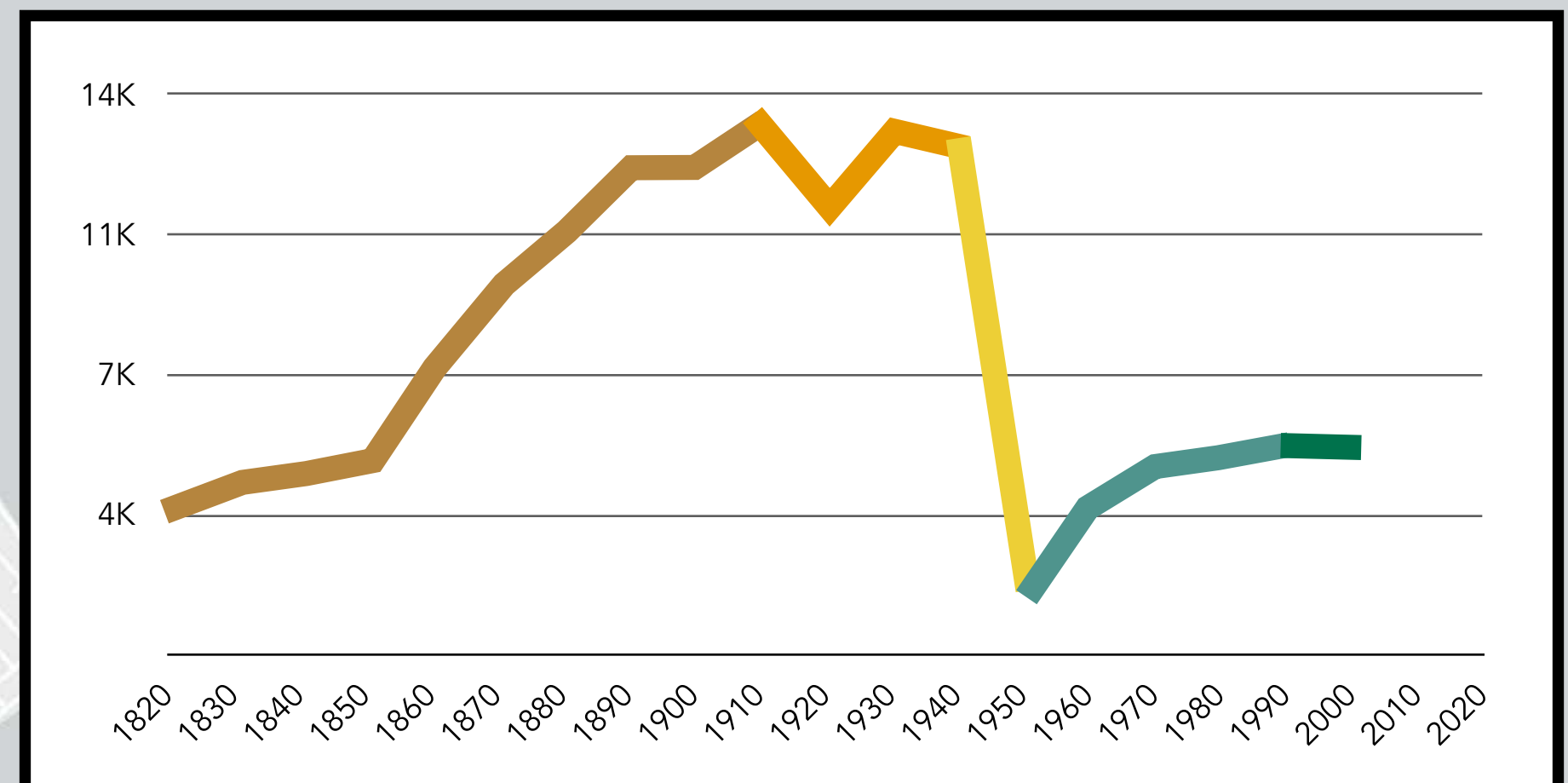
Area

7.1 sq. mi



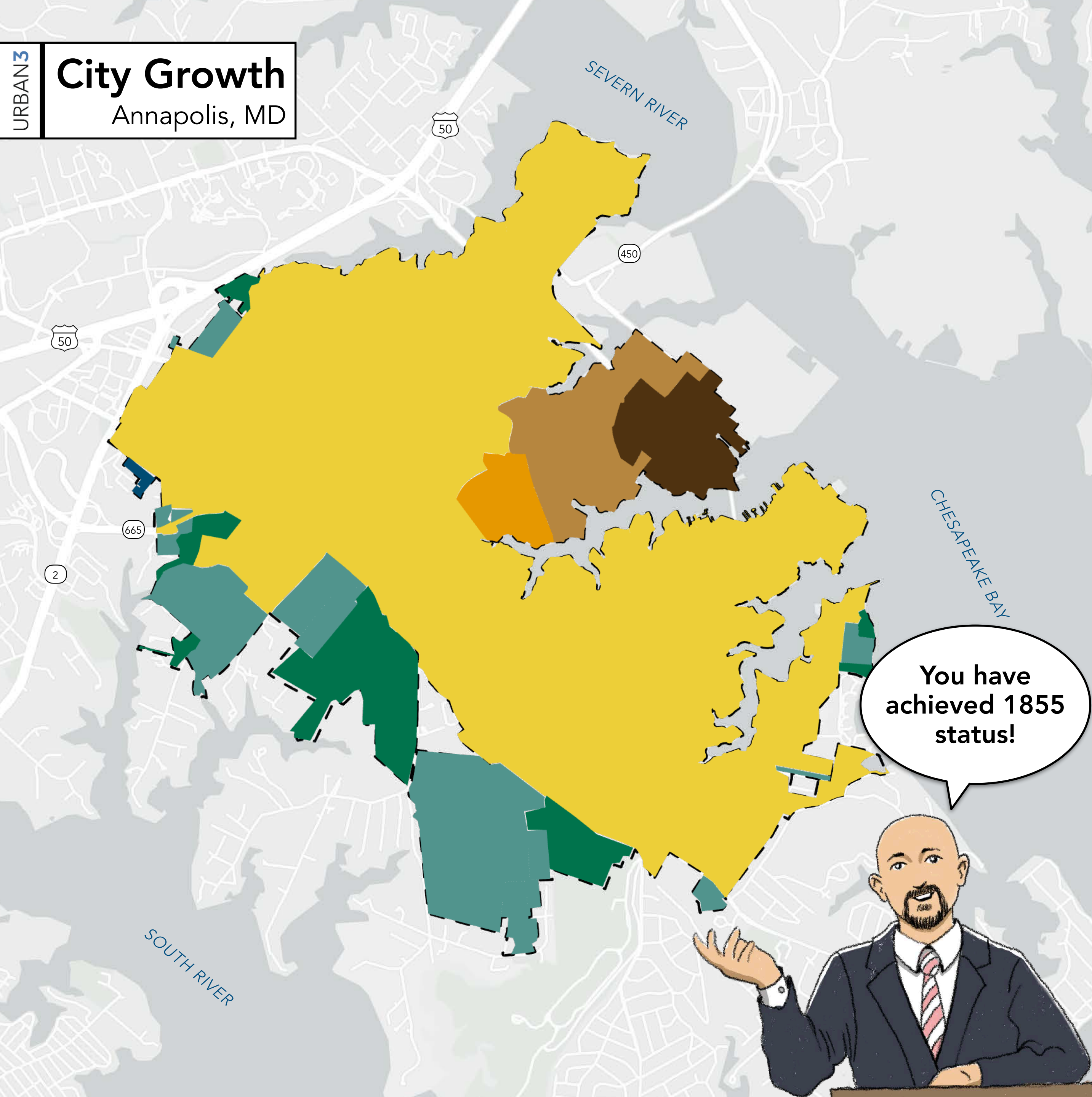
Population Density

(people per sq. mi)



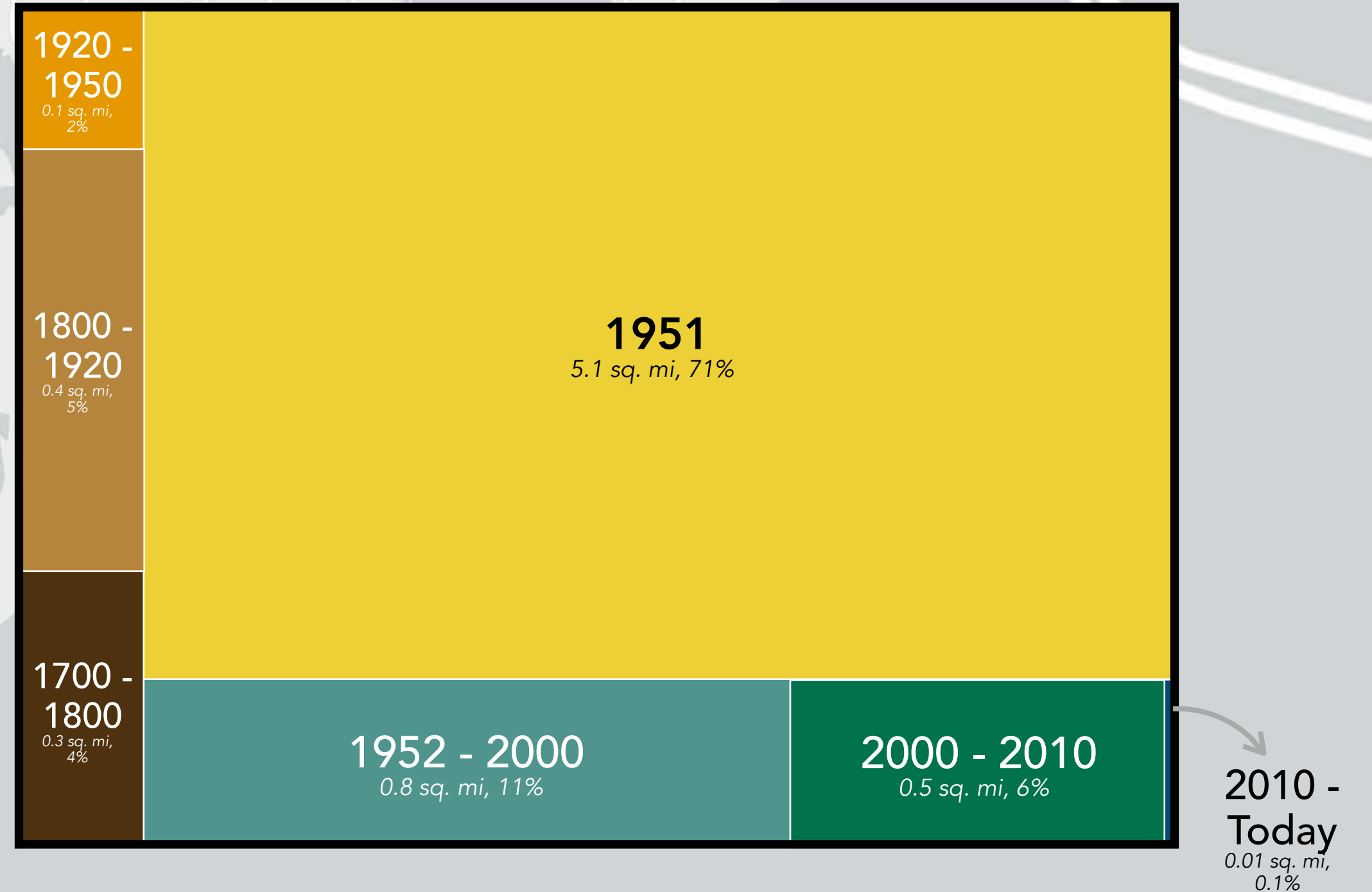
City Growth

Annapolis, MD



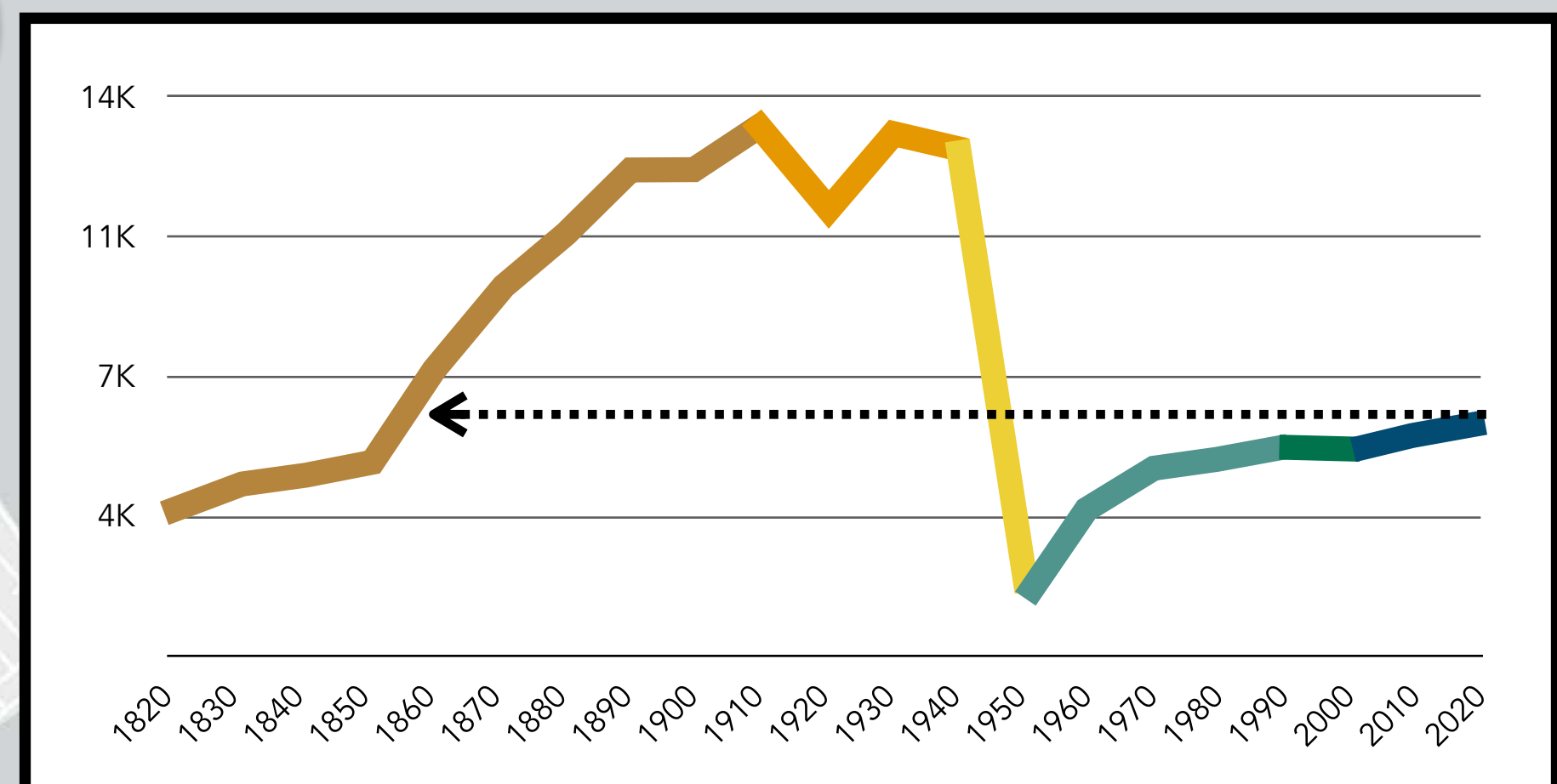
Area

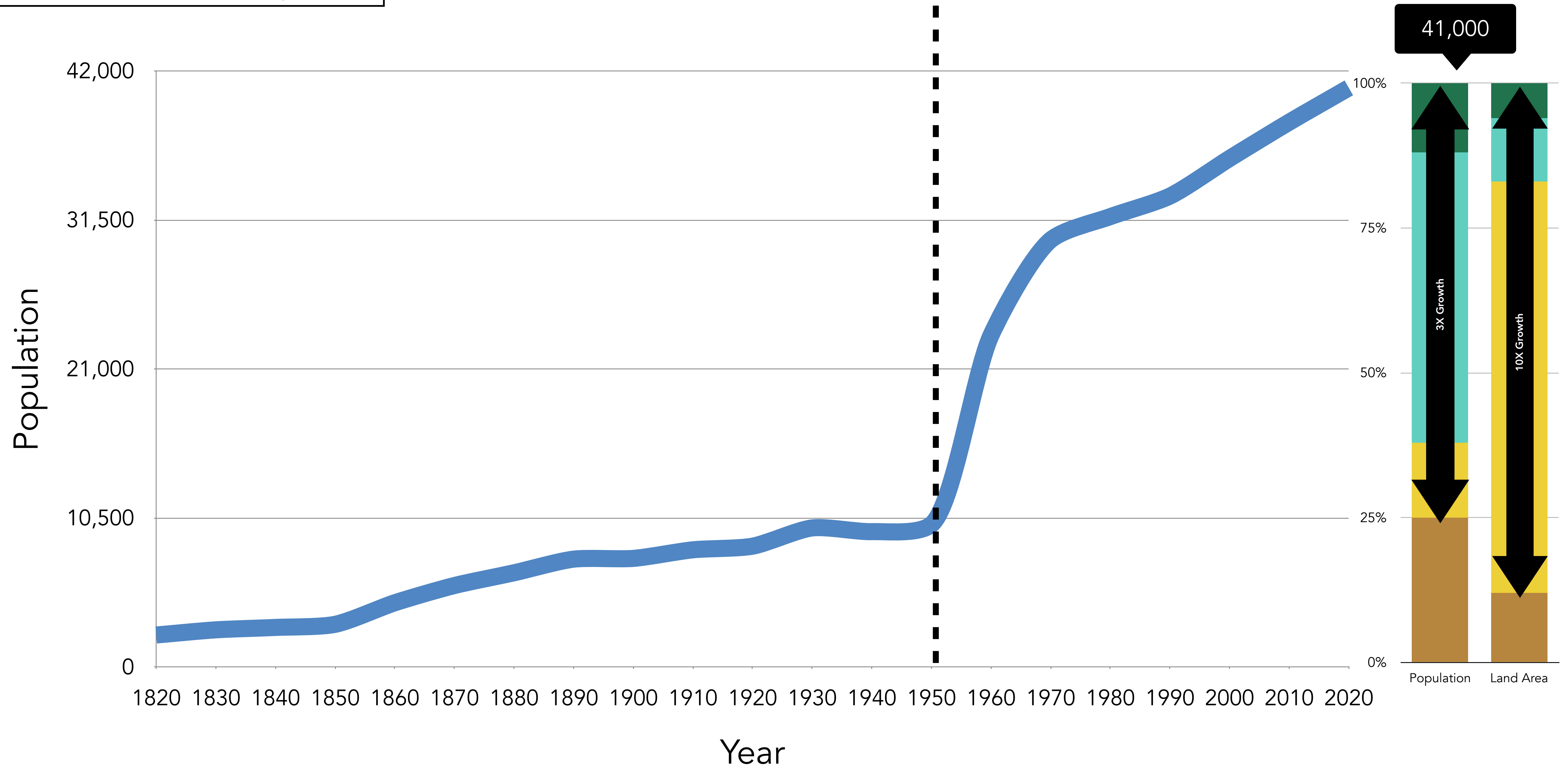
7.1 sq. mi

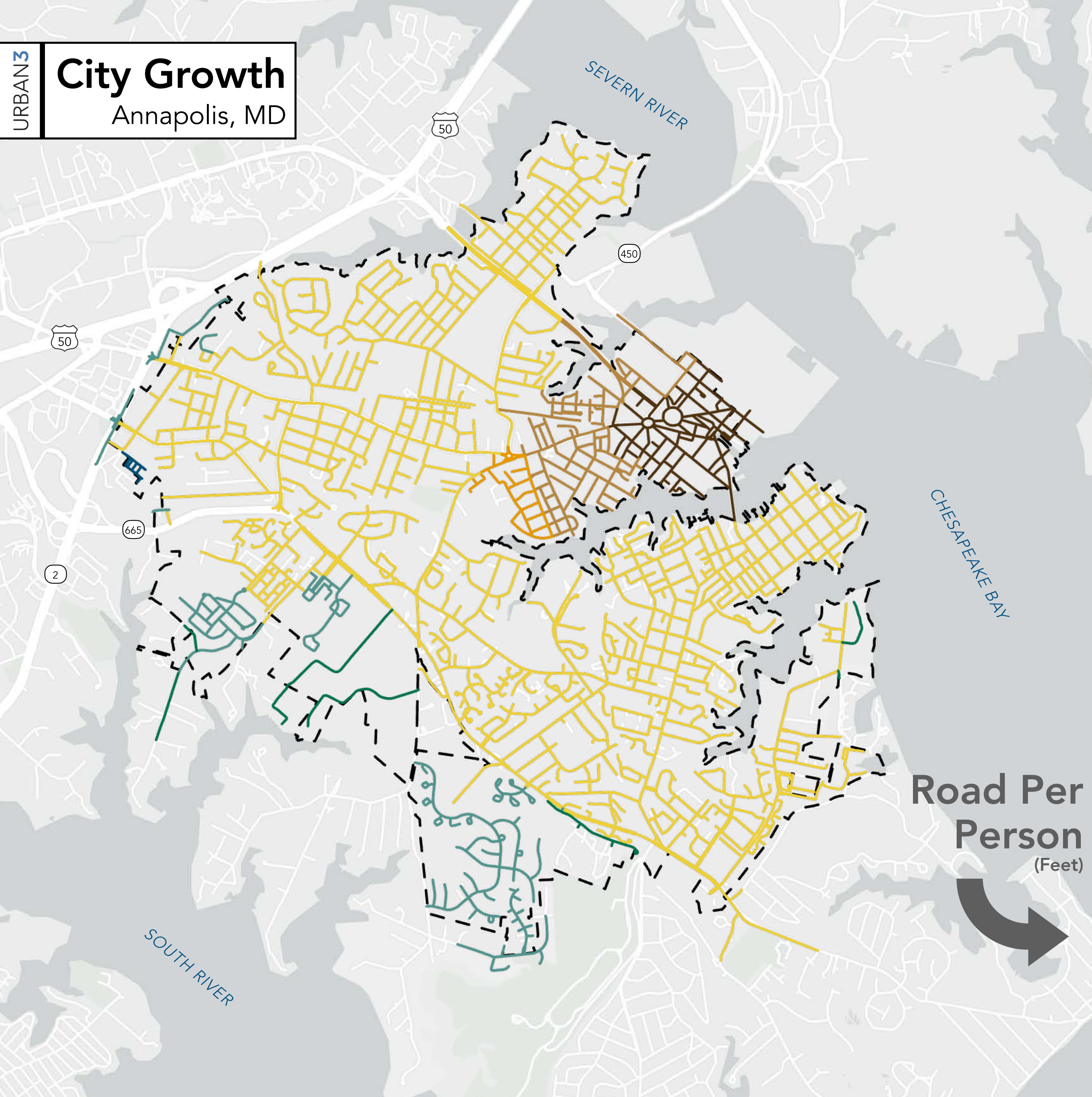


Population Density

(people per sq. mi)





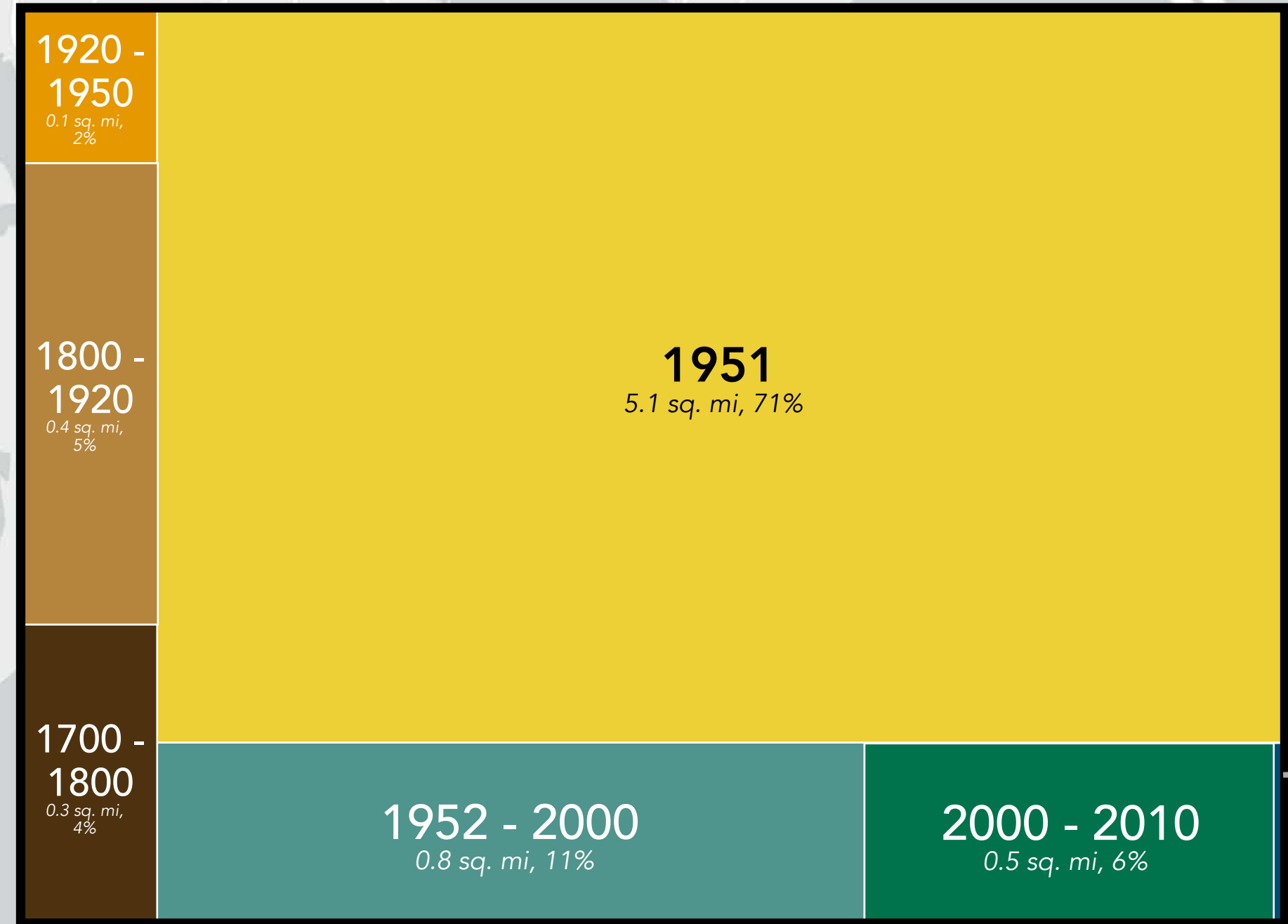


City Growth

Annapolis, MD

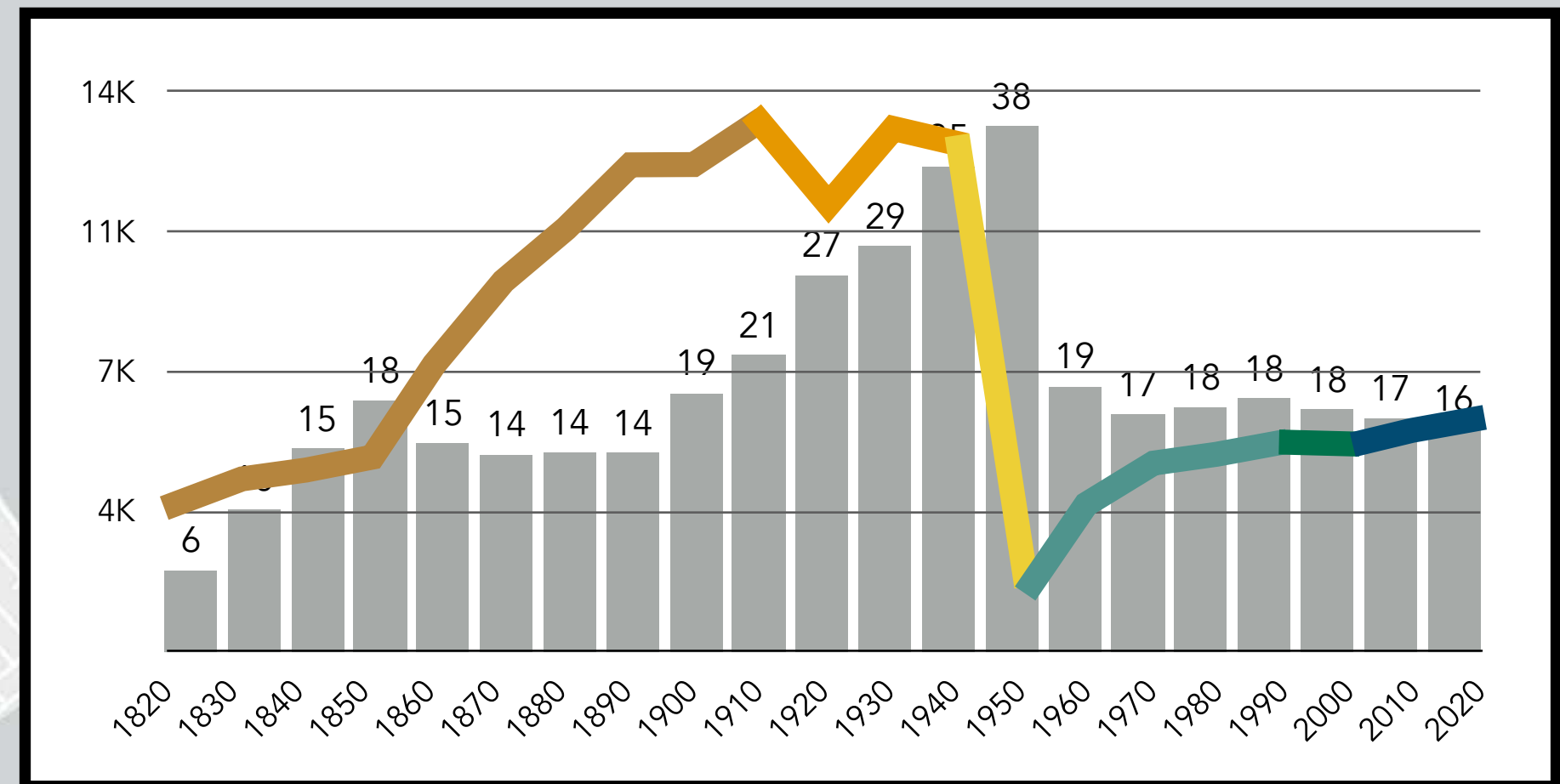
Area

7.1 sq. mi



Population Density

(people per sq. mi)



Road Per Person

(Feet)



WELL

ISN'T THAT SPATIAL

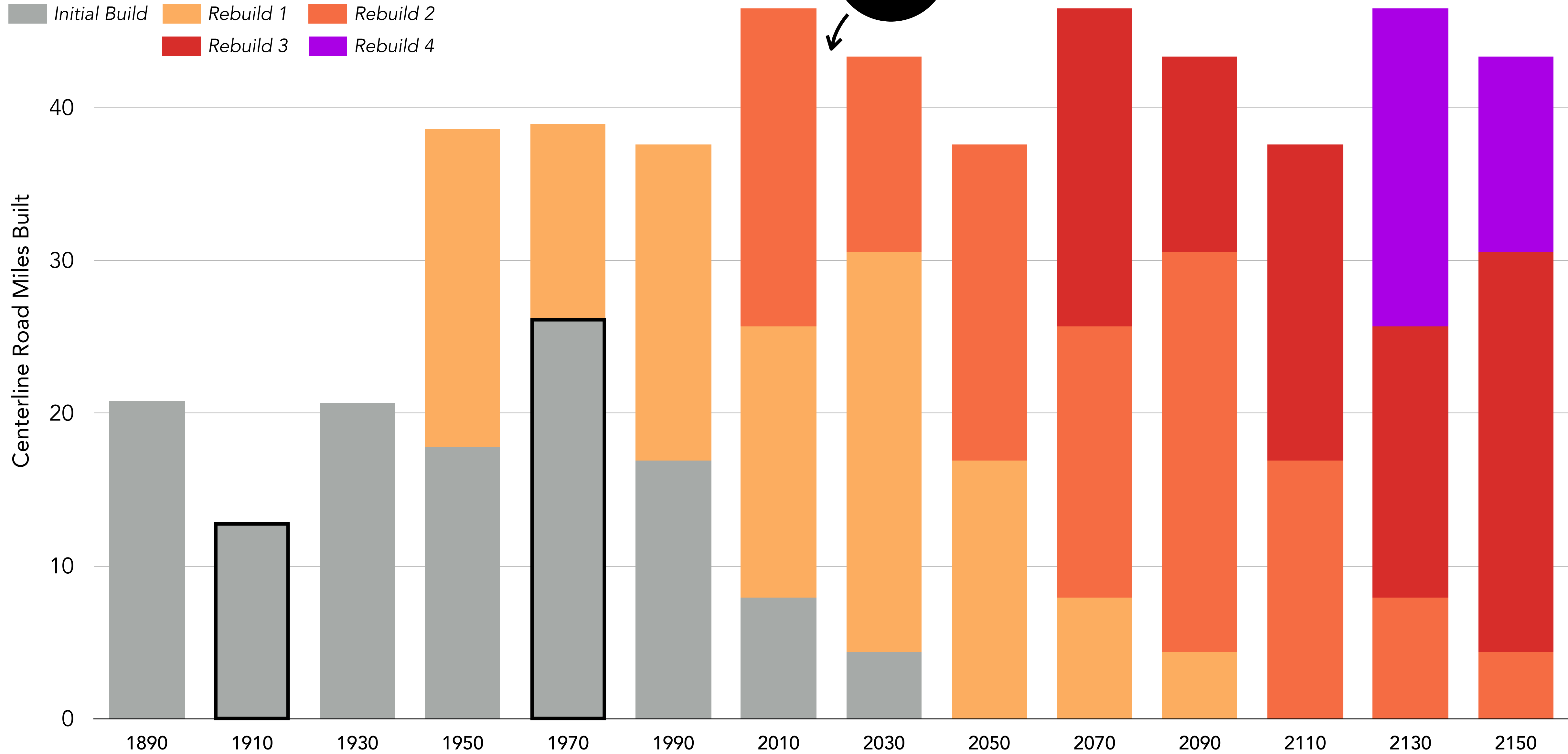
Assets*



* According to the Municipal Finance Standards

Road Maintenance Load and Rebuild Schedule*

Annapolis, MD



*Conceptualized chart



A ROAD IS FOREVER

Infrastructure Length

Annapolis, MD

260 lane miles of road to ● Bridgeport, CT

156 miles of sewer pipe to ● Trenton, NJ

128 miles of water pipe to ● Philadelphia, PA

101 miles of stormwater drainage to ● Wilmington, DE

Annapolis, MD

- Road
- Water Pipe
- Sewer Pipe
- Stormwater Pipe

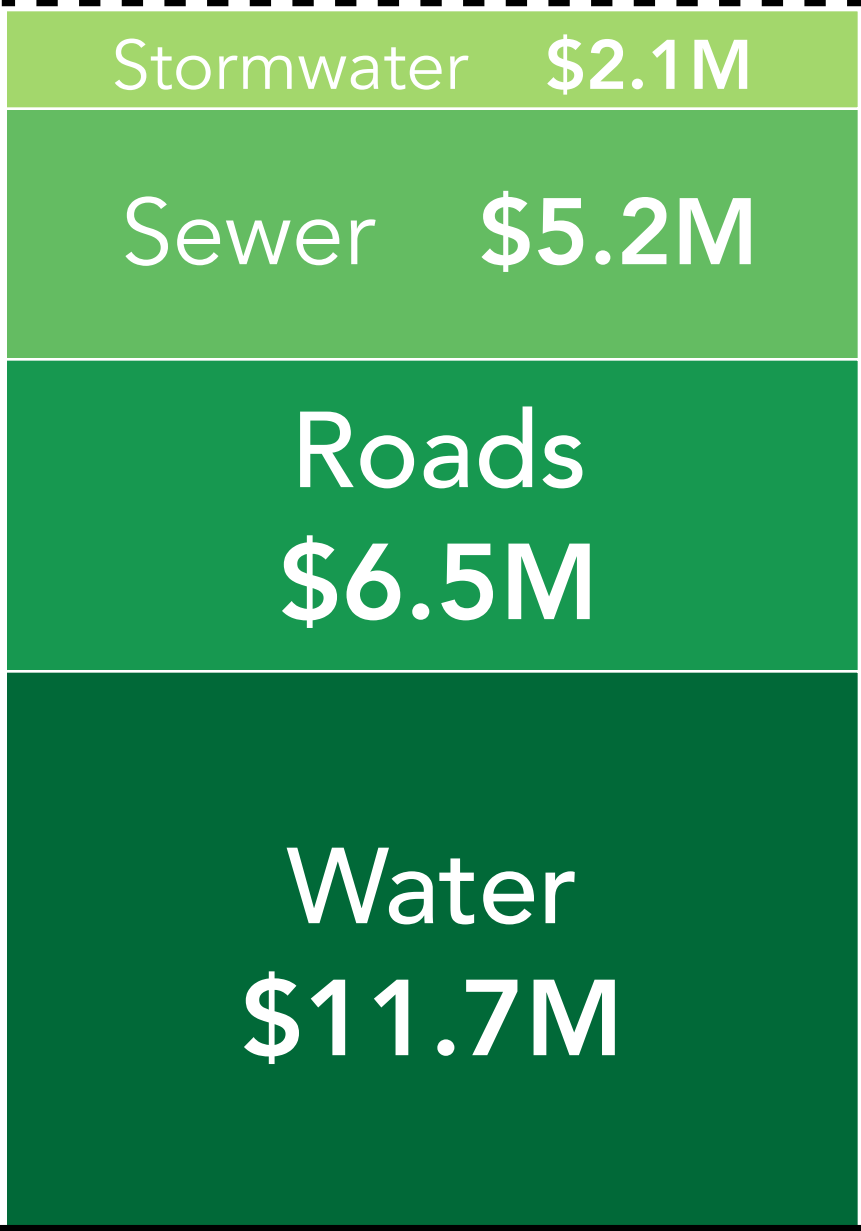


Infrastructure System Costs

Annapolis, MD

\$25M
annually

Deficit:
\$24M



Current Spending

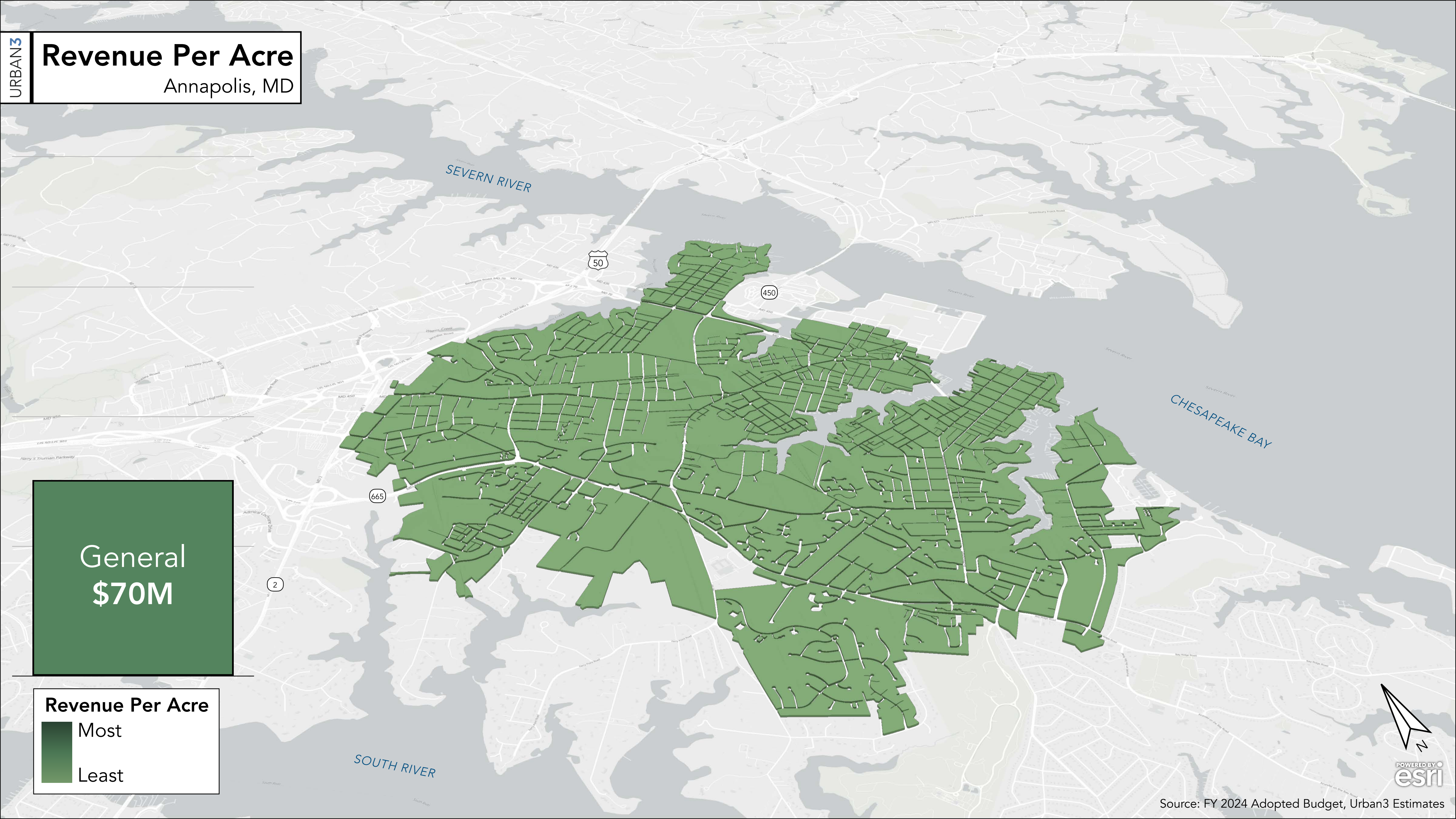


Needed Spending*

\$49M
annually

*Also known as Lifecycle Cost

Source: FY 2024 Adopted Budget, Urban3 Estimates



Revenue Per Acre

Annapolis, MD

General
\$70M

Revenue Per Acre

Most

Least

Revenue Per Acre

Annapolis, MD

\$144M

Charges for Services
\$15M

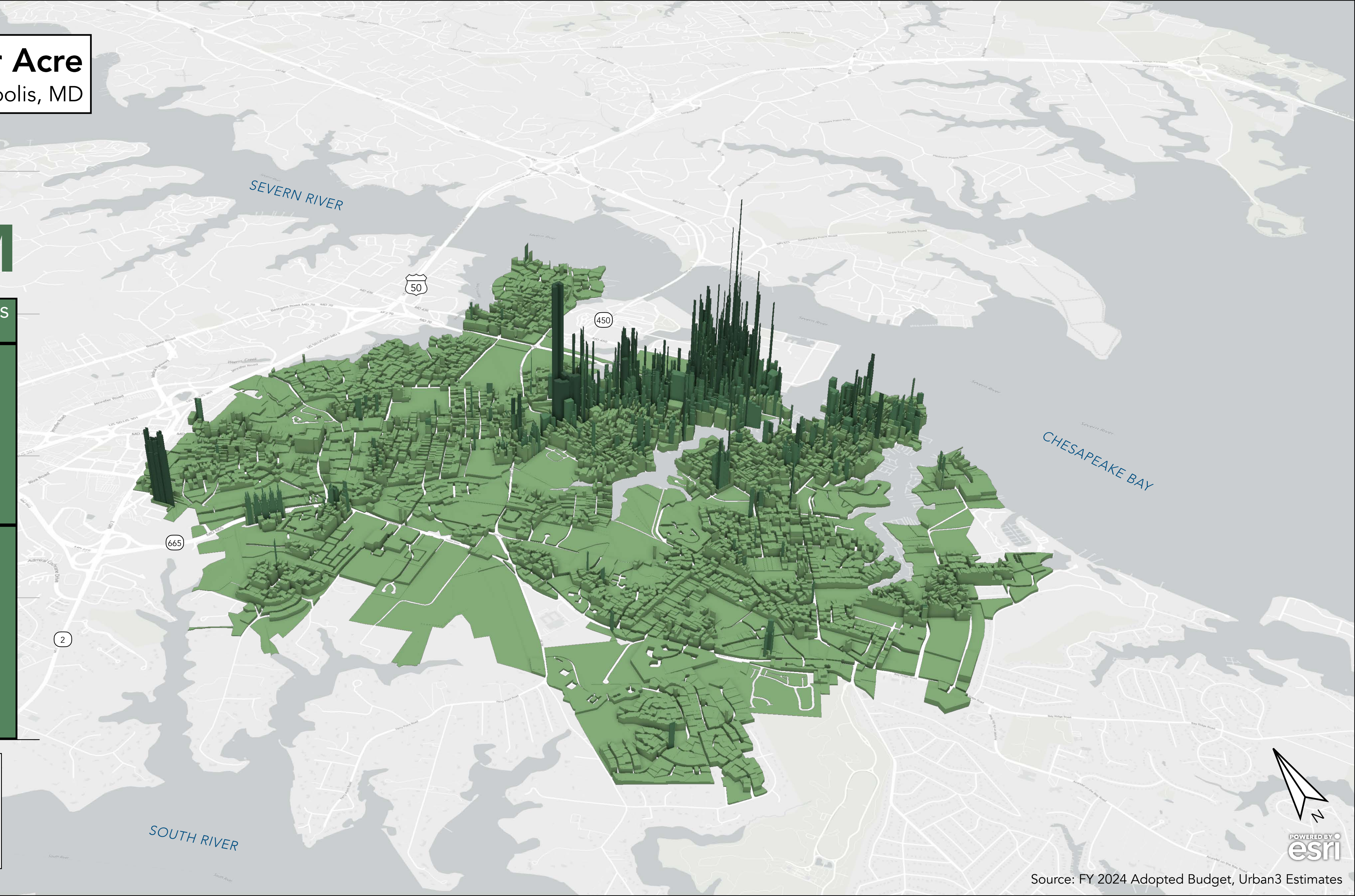
Property Tax
\$59M

General
\$70M

Revenue Per Acre

Most

Least



Costs Per Acre

Annapolis, MD

Operations & Maintenance
\$49M

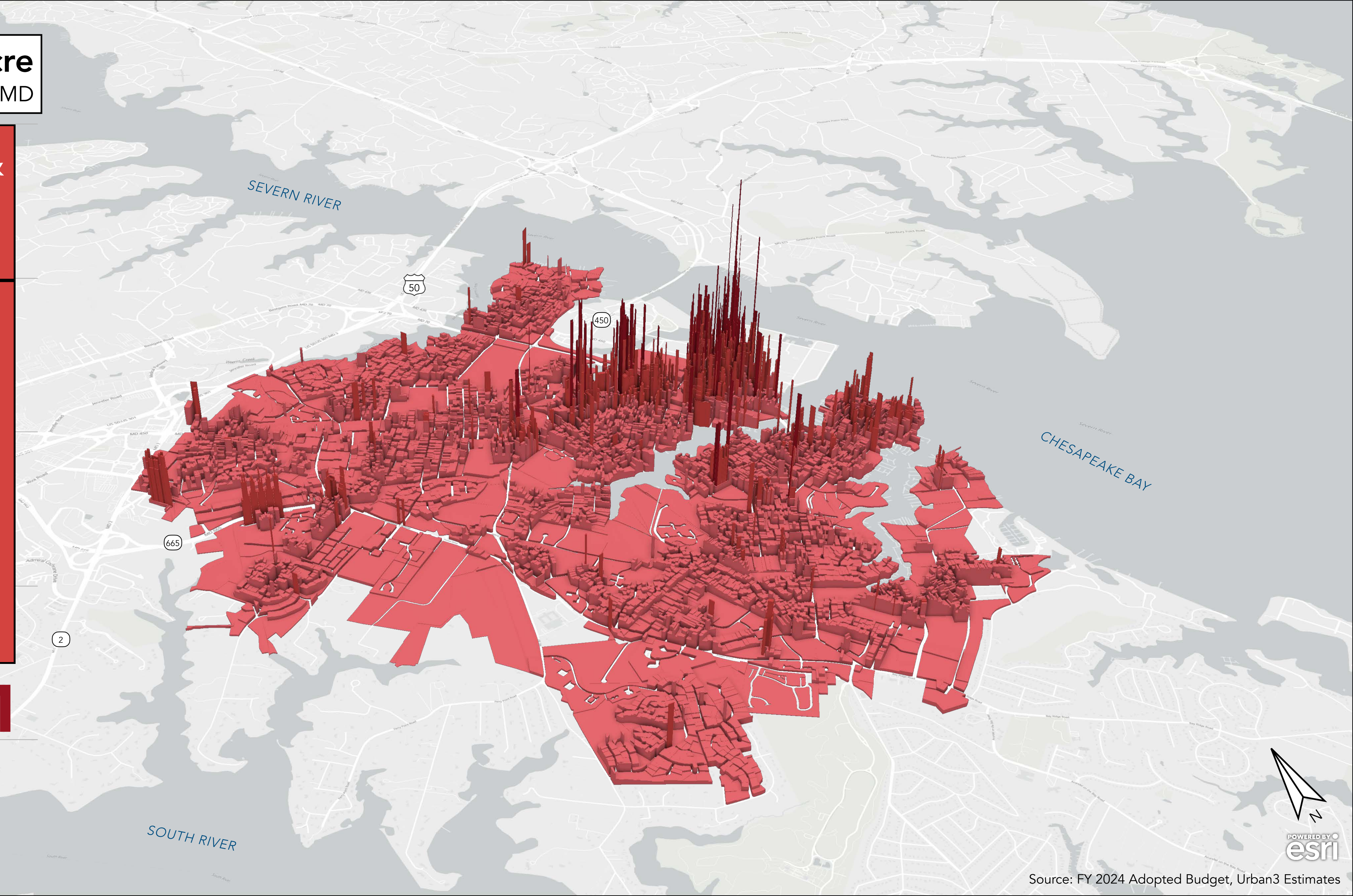
Government Expenses
\$115M

\$164M

Cost Per Acre

Most

Least



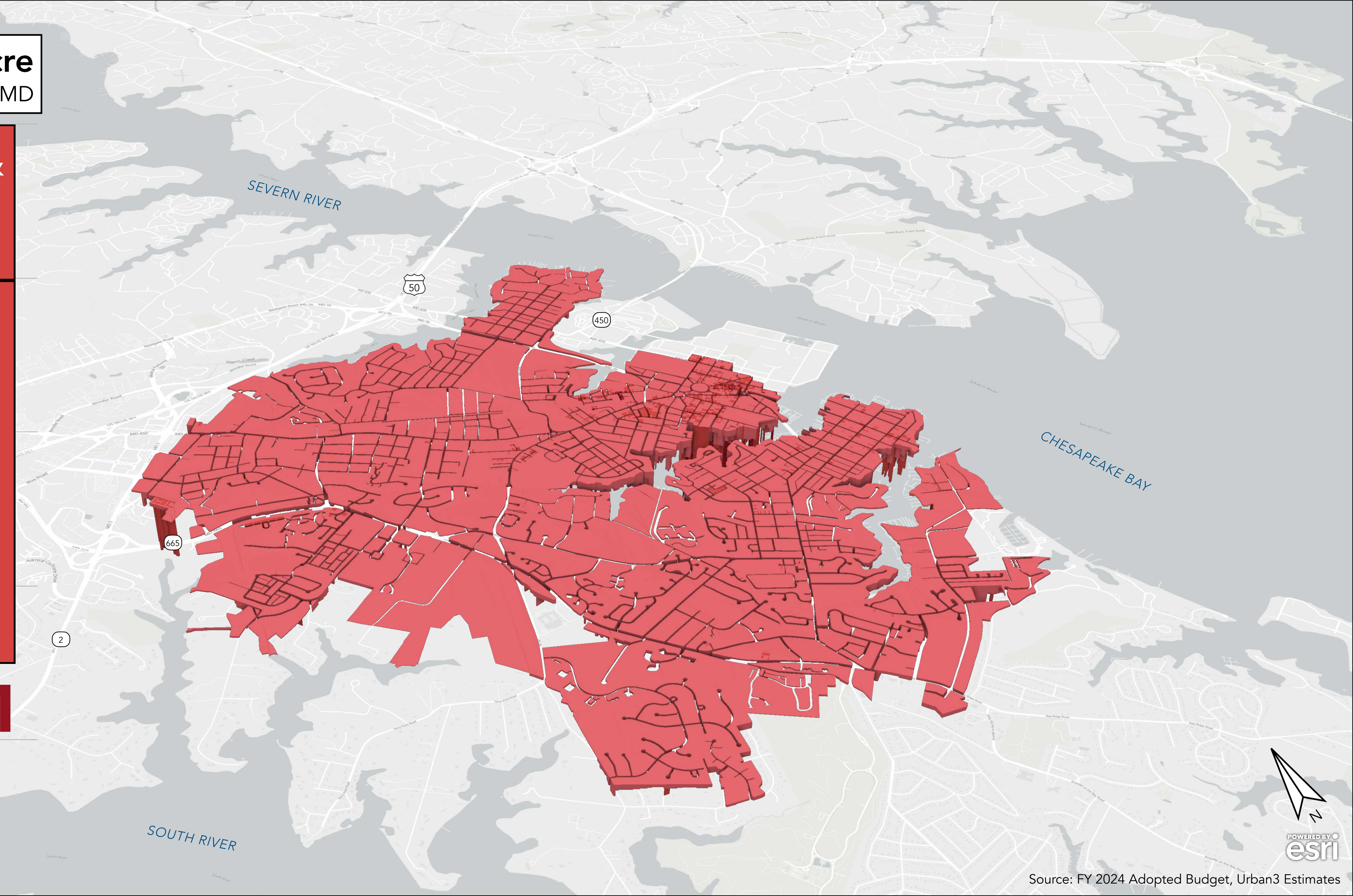
Costs Per Acre

Annapolis, MD

Operations & Maintenance
\$49M

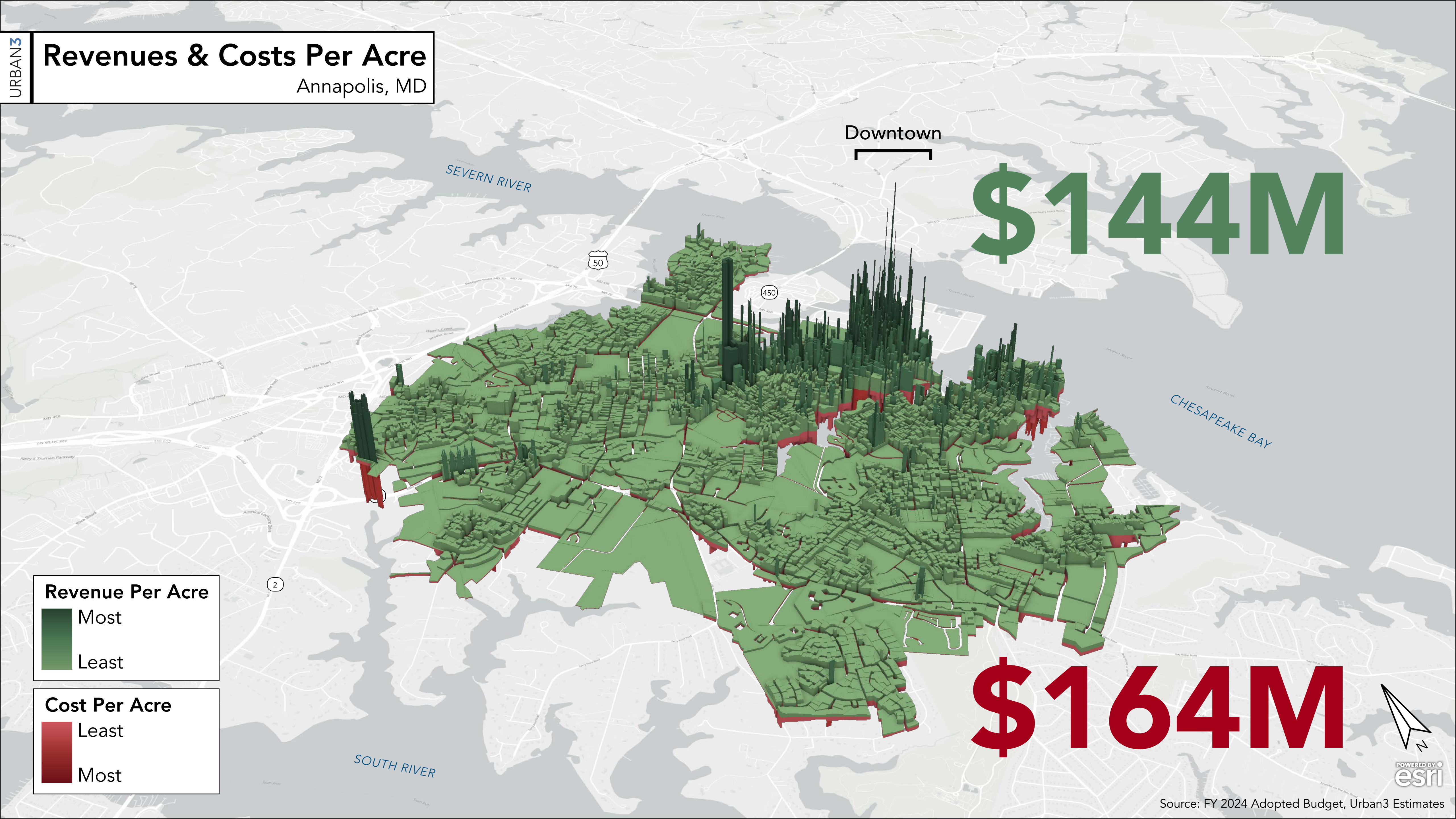
Government Expenses
\$115M

\$164M



Revenues & Costs Per Acre

Annapolis, MD



\$144M

\$164M

Revenue Per Acre

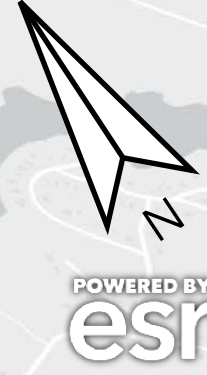
 Most

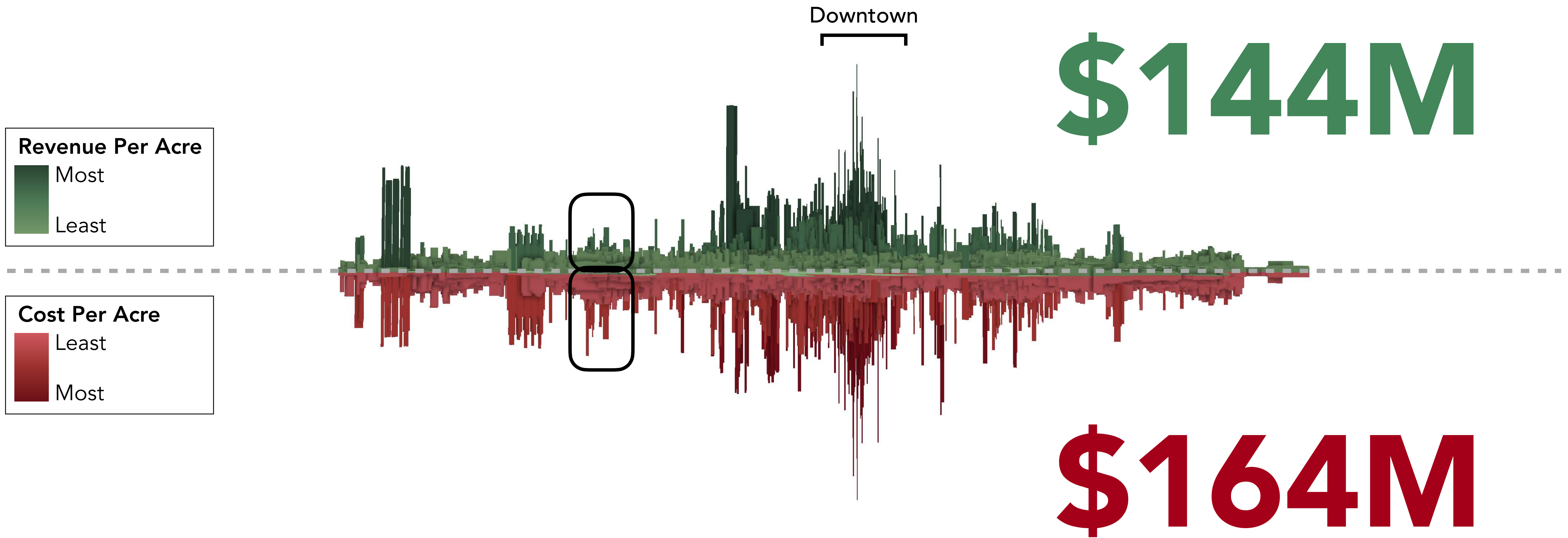
 Least

Cost Per Acre

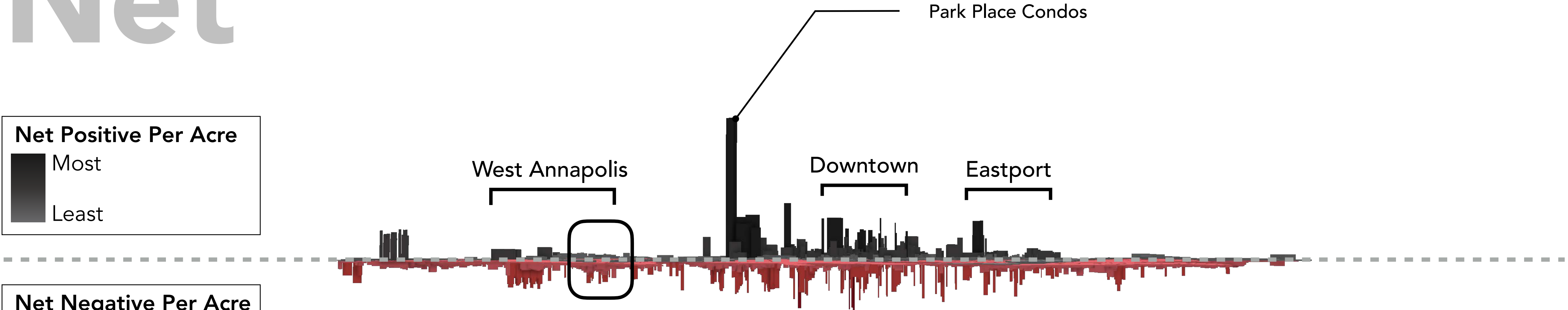
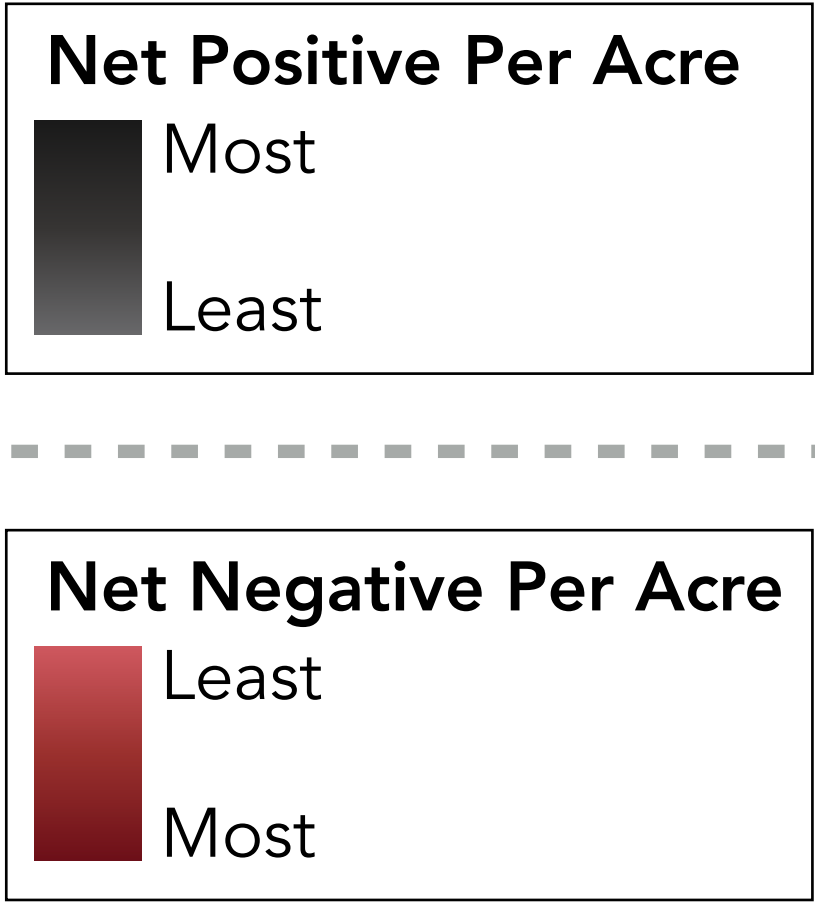
 Least

 Most



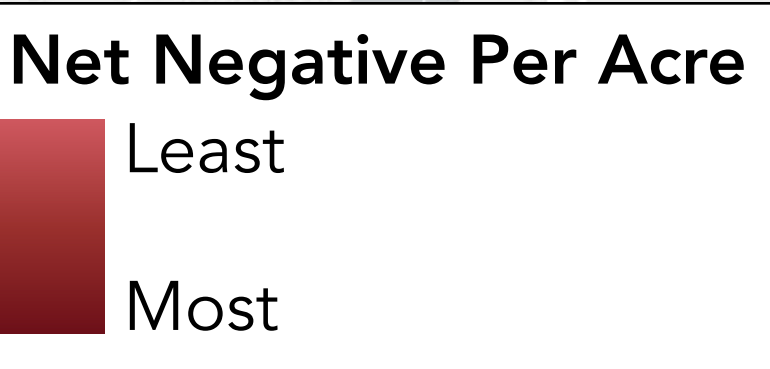
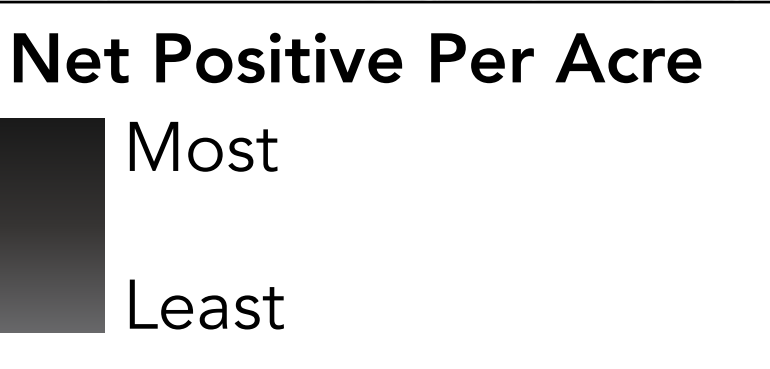
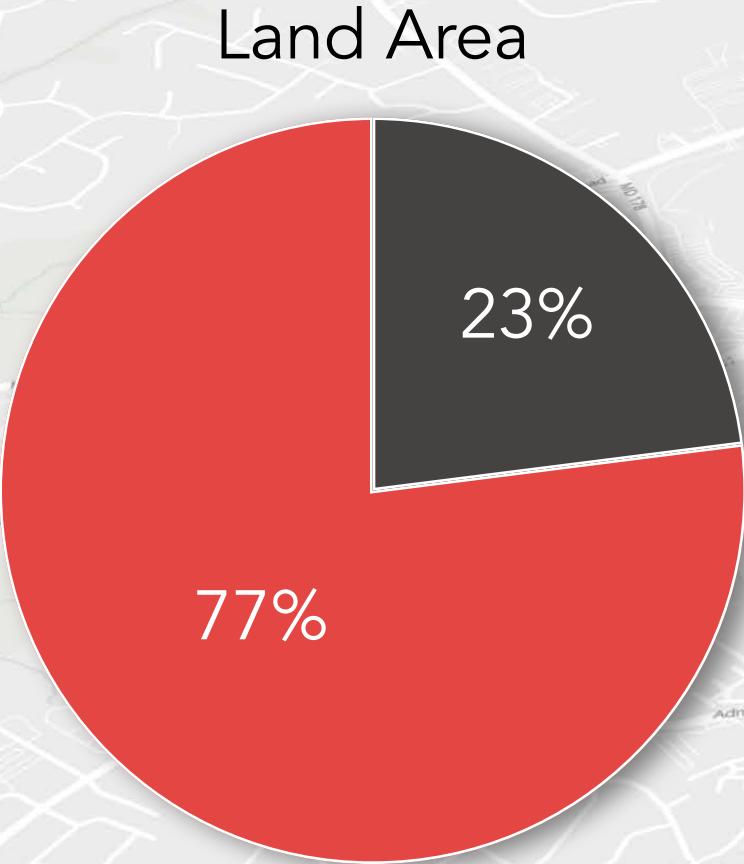


Net



Revenues & Costs Per Acre

Annapolis, MD



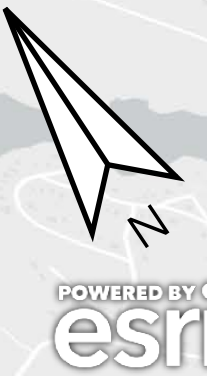
Heritage Single Family

Bell Annapolis West

Heritage Townhomes

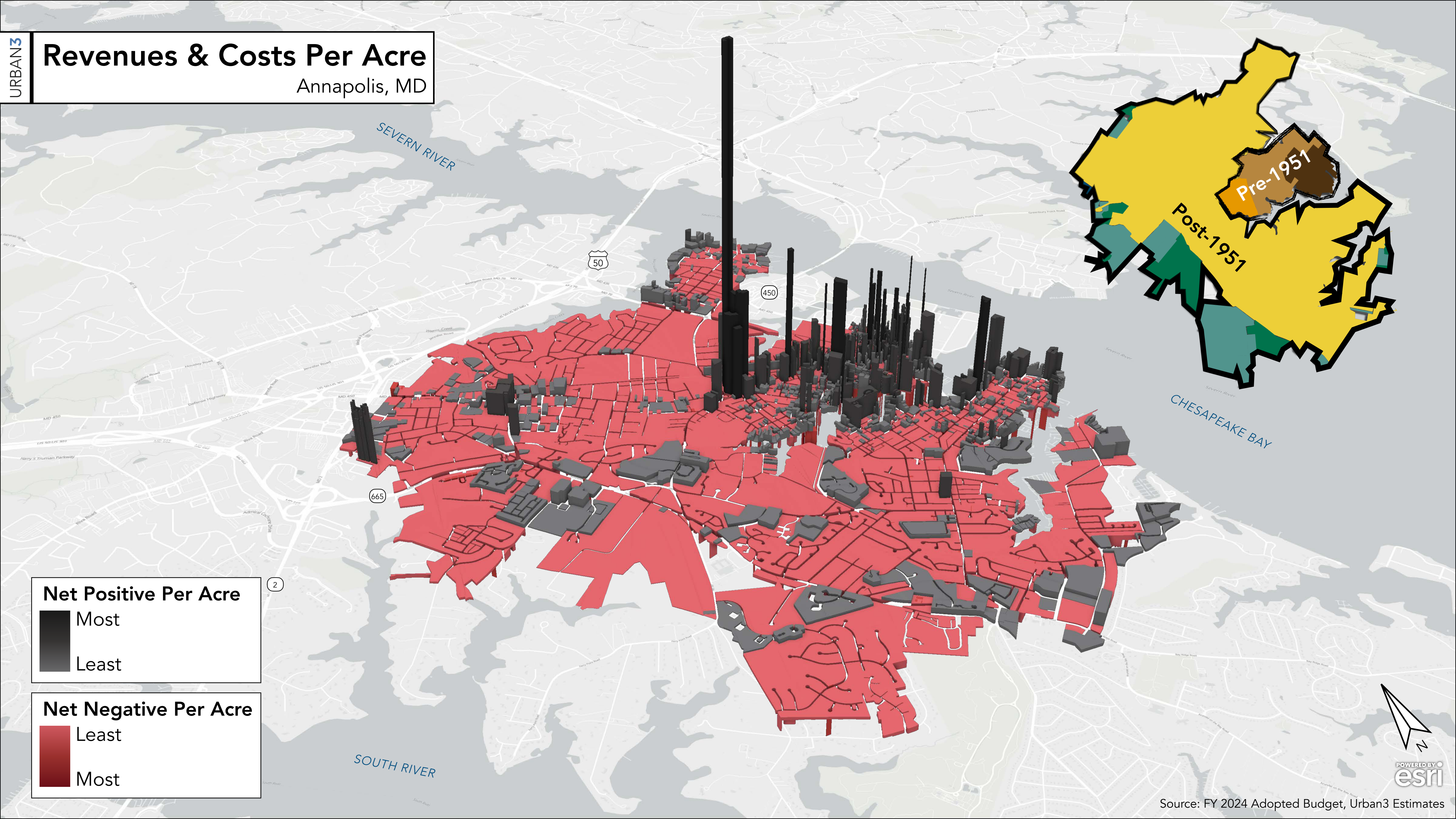
Park Place Condos

West St Mixed Use



Revenues & Costs Per Acre

Annapolis, MD



Net Positive Per Acre

Most

Least

Net Negative Per Acre

Least

Most

Revenues & Costs Per Acre

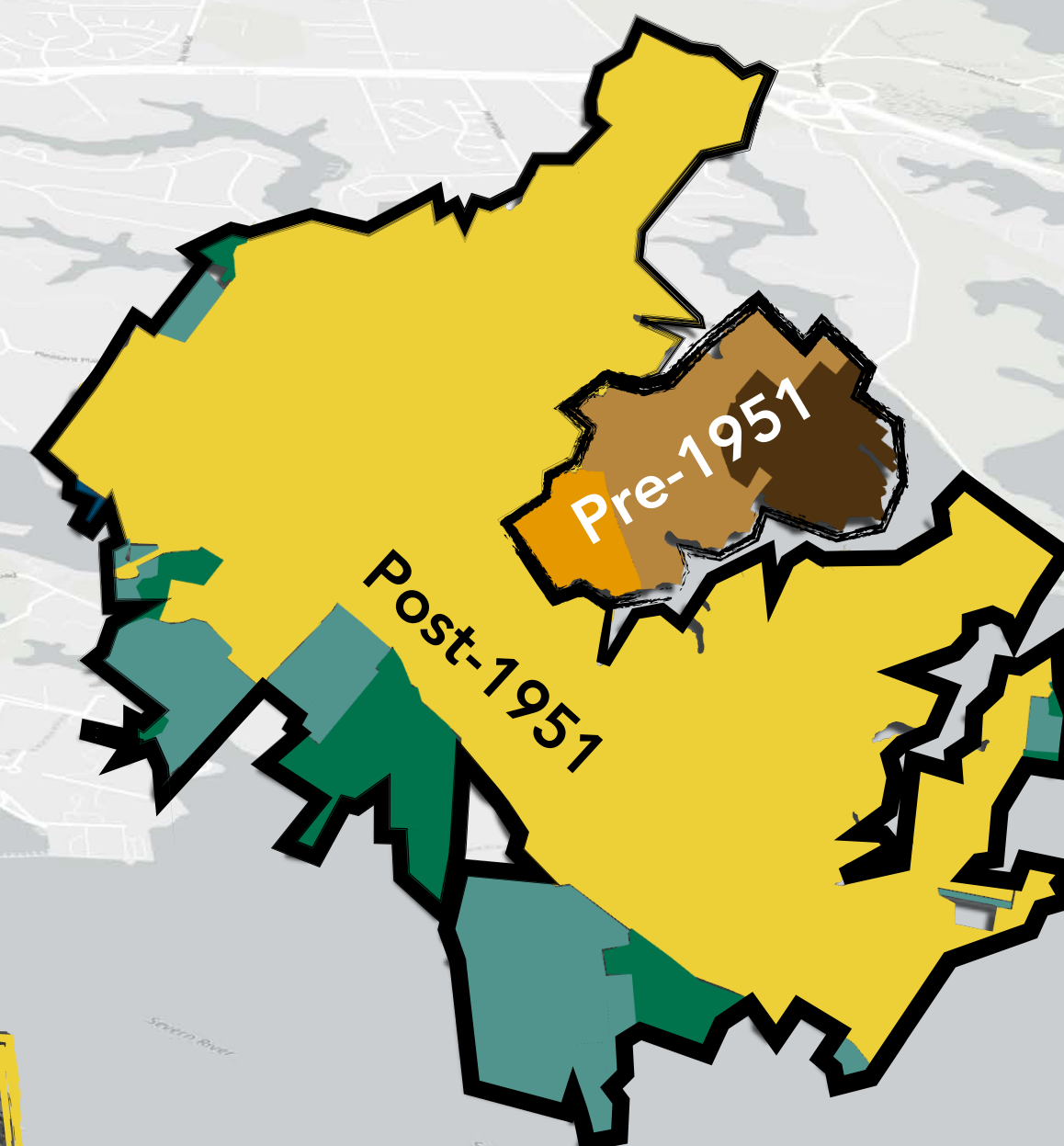
Annapolis, MD

Pre-1951 net:

\$1.4M

Post-1951 net:

-\$20.8M



Net Positive Per Acre

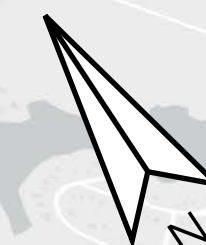
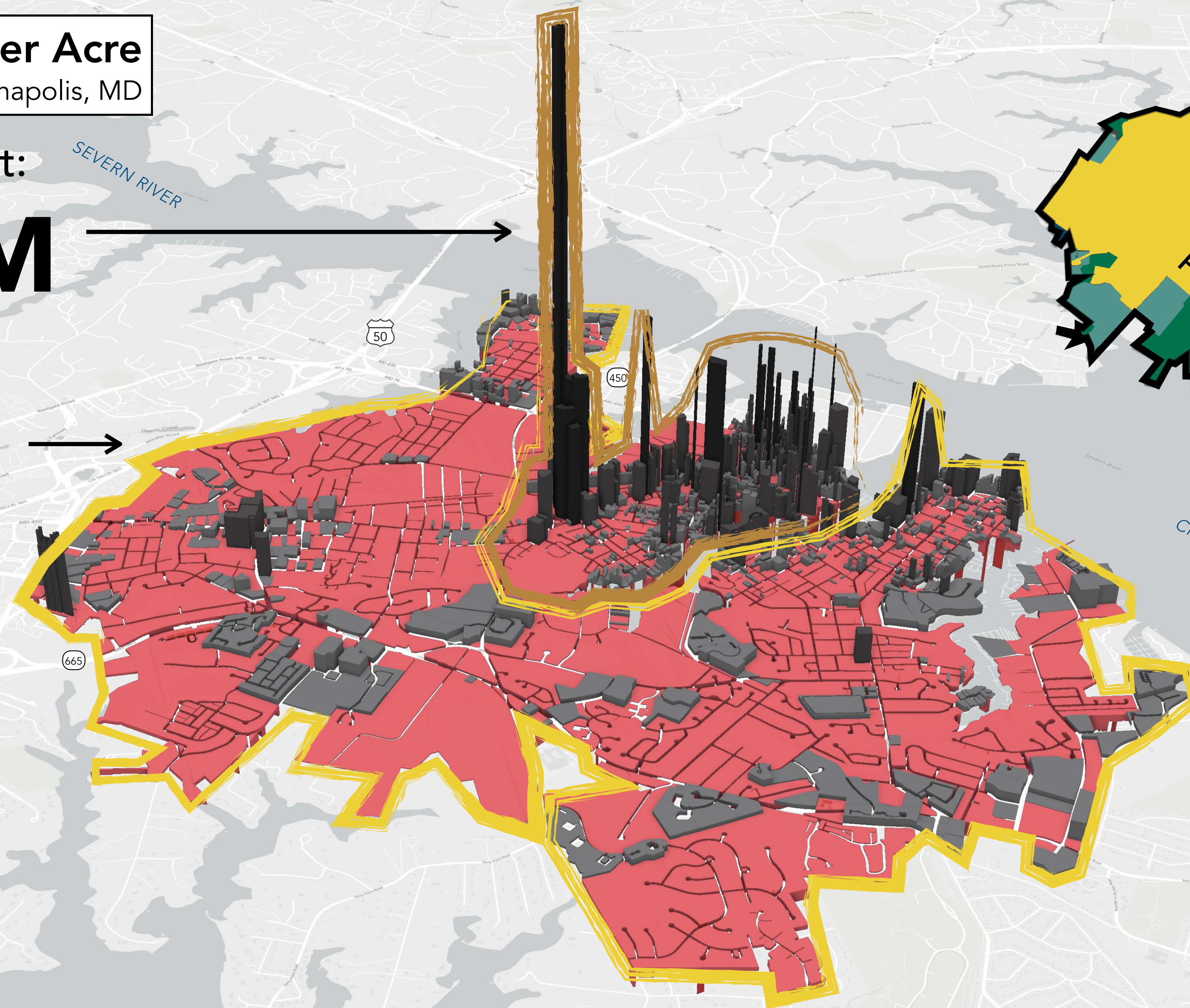
Most

Least

Net Negative Per Acre

Least

Most



Revenues & Costs Per Acre

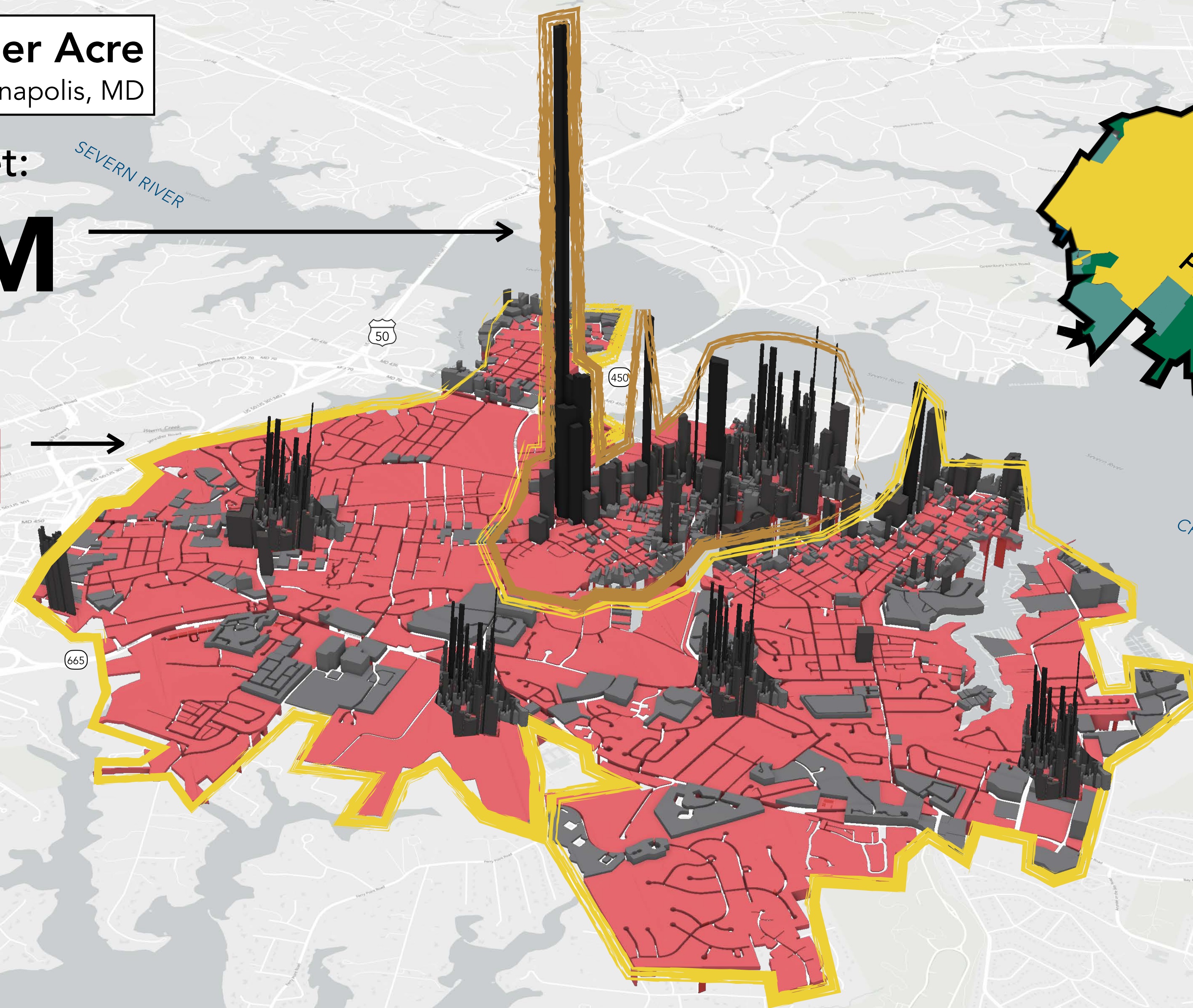
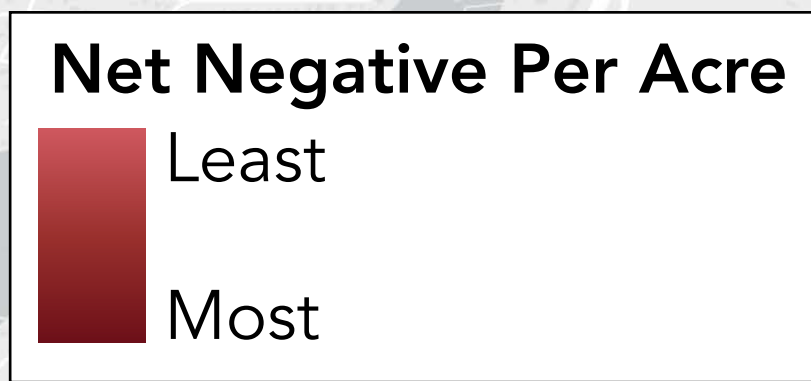
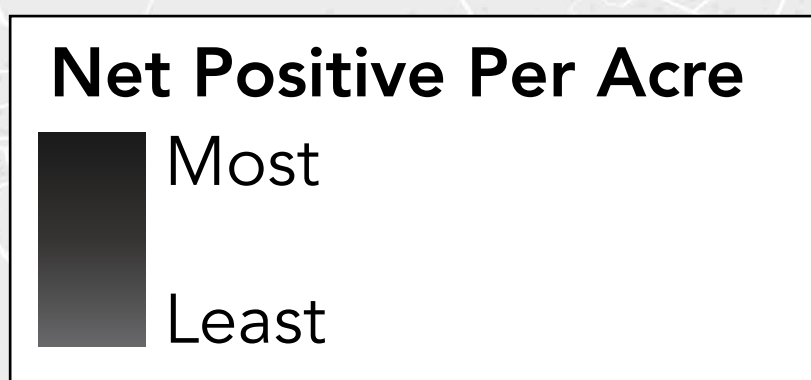
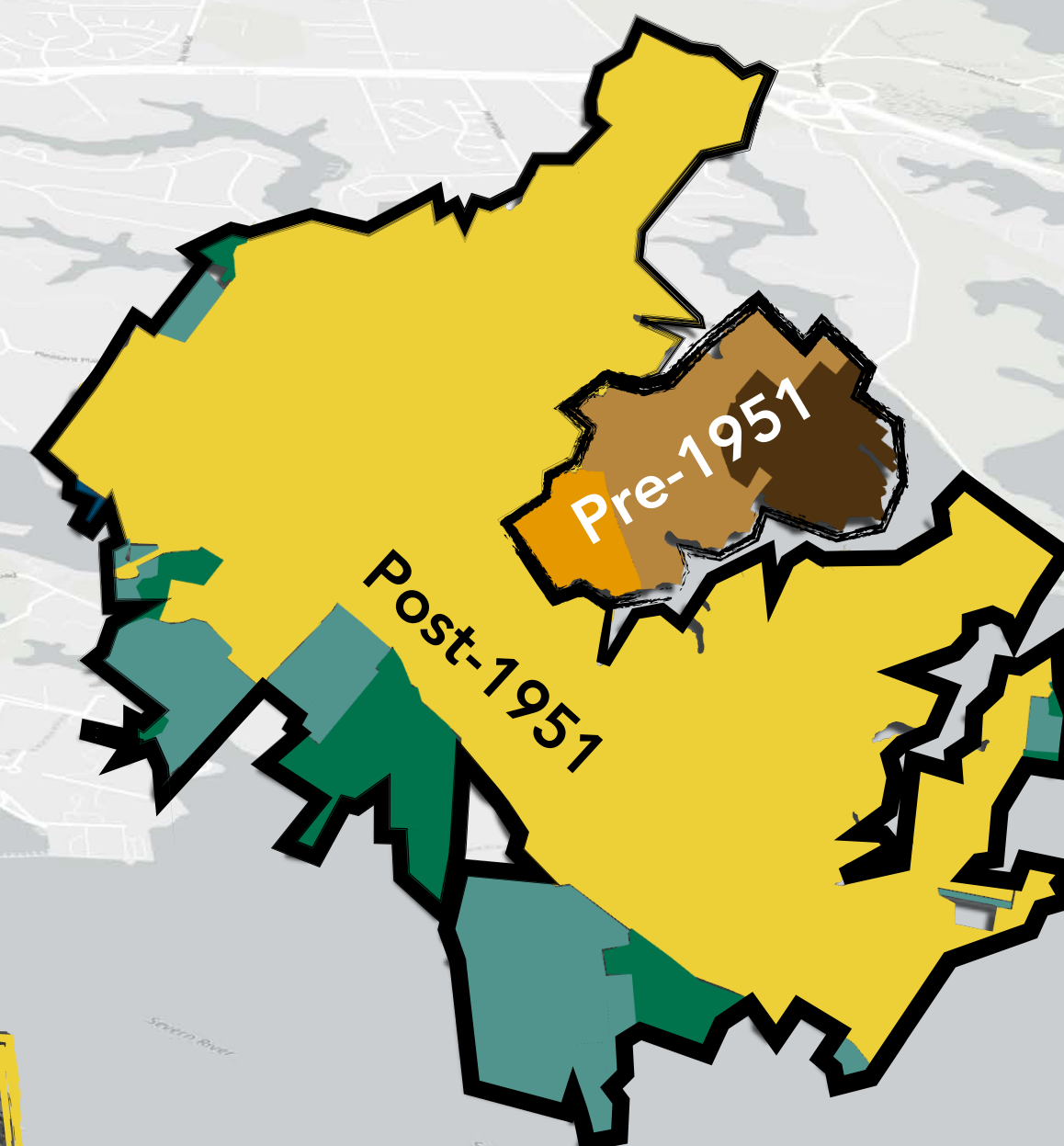
Annapolis, MD

Pre-1951 net:

\$1.4M

Post-1951 net:

-\$20.8M





How government is set up.

URBAN3



How we operate in cities.

Lesson:

**If you can't see it,
you can't fix it.**



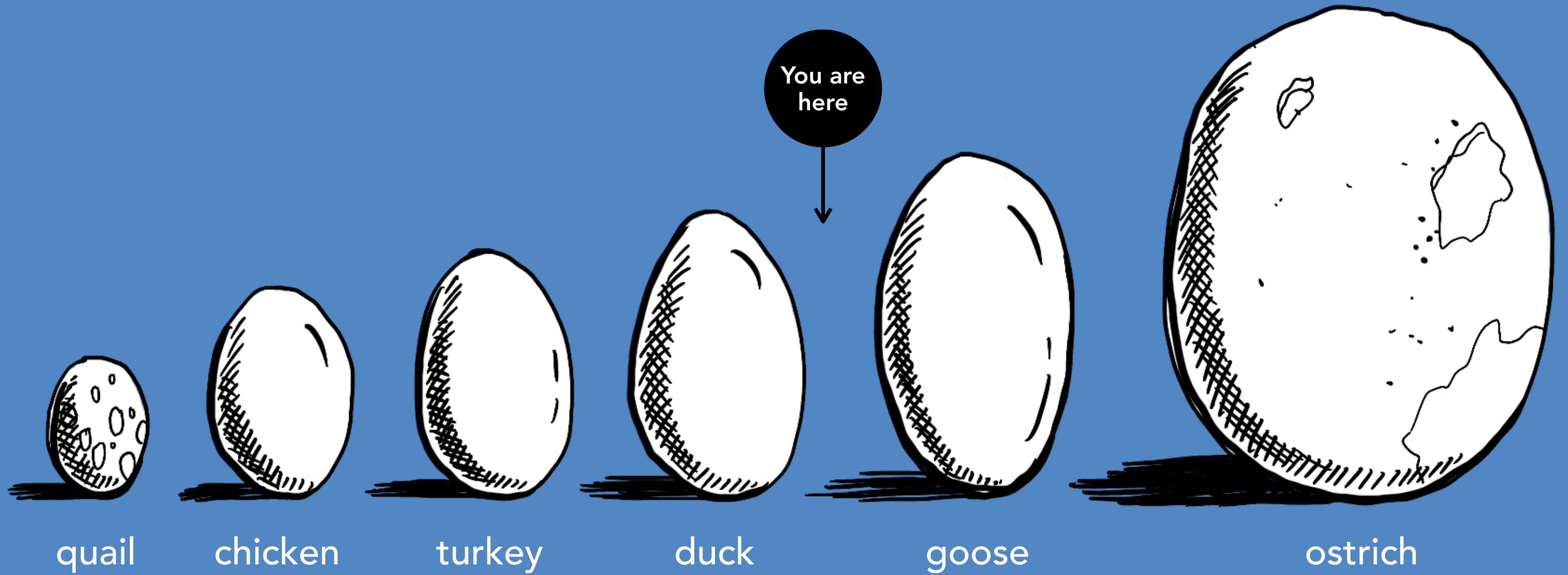
Question:

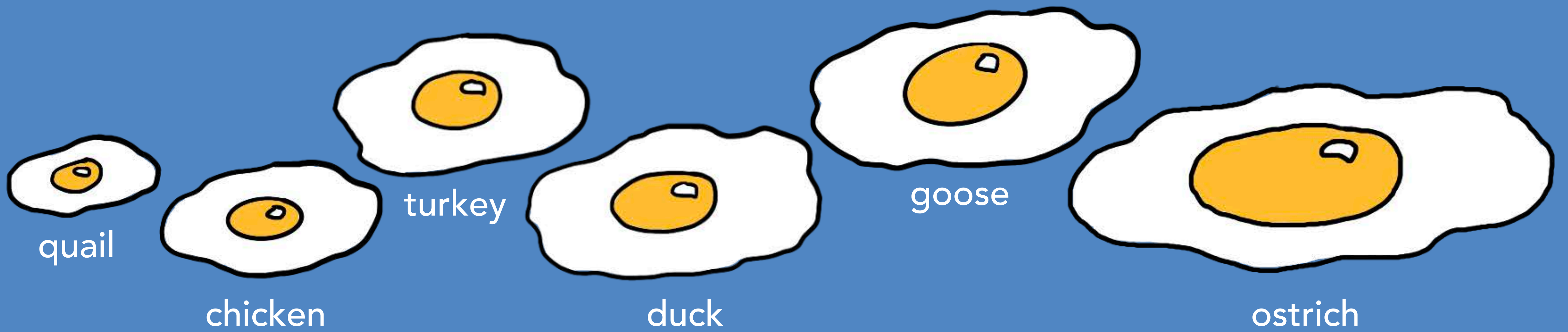
**Are you balanced in your
development?**

DOWNTOWN



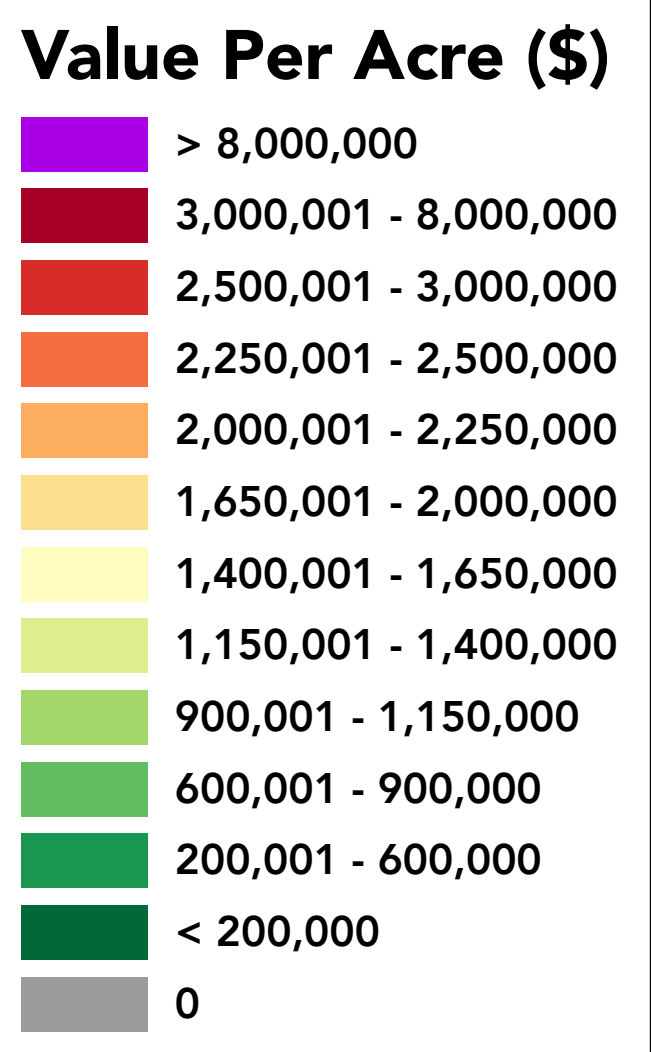
**REST OF
CITY**





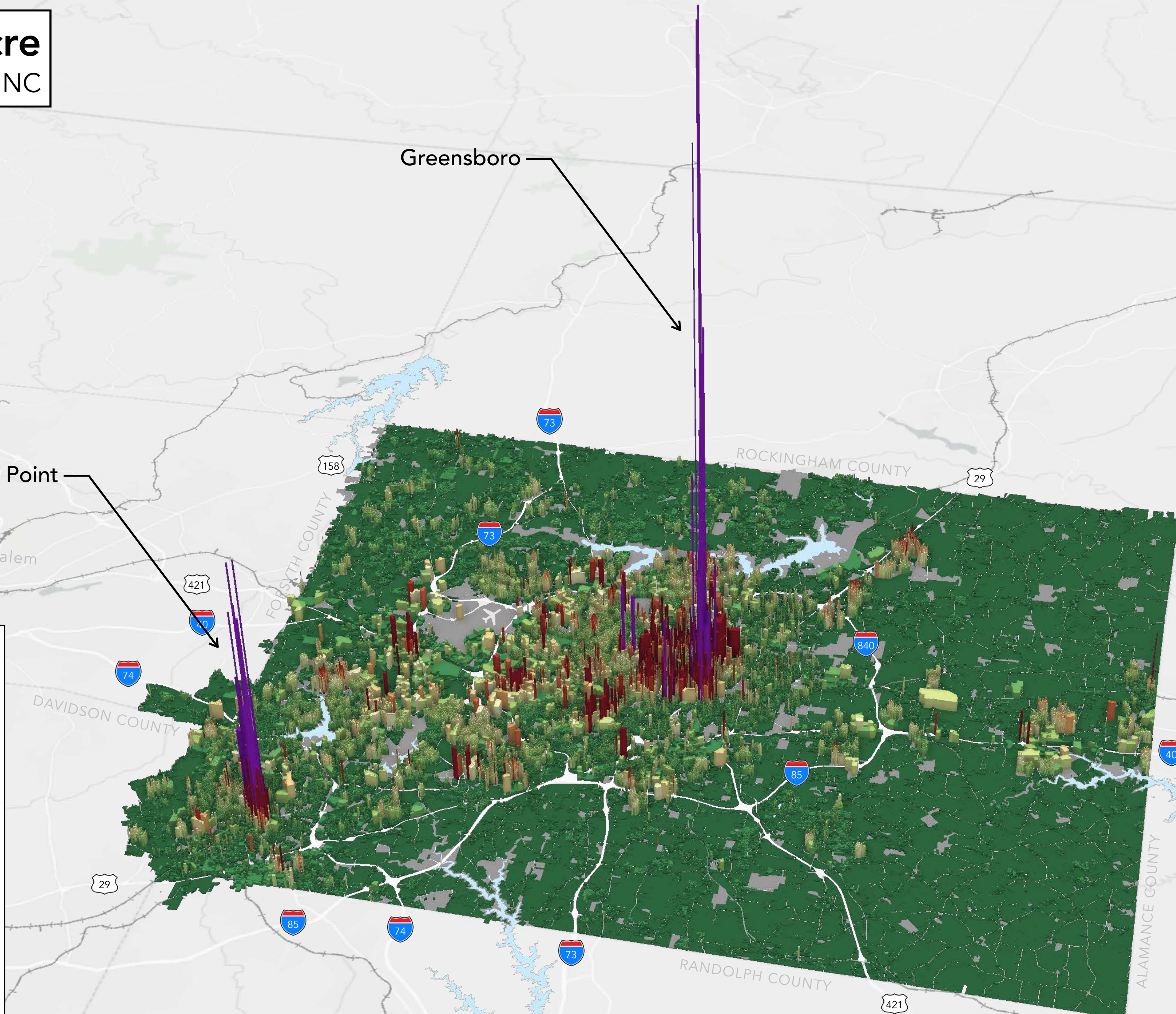
Value Per Acre

Guilford County, NC



High Point

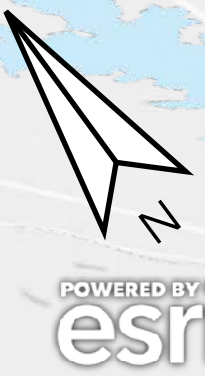
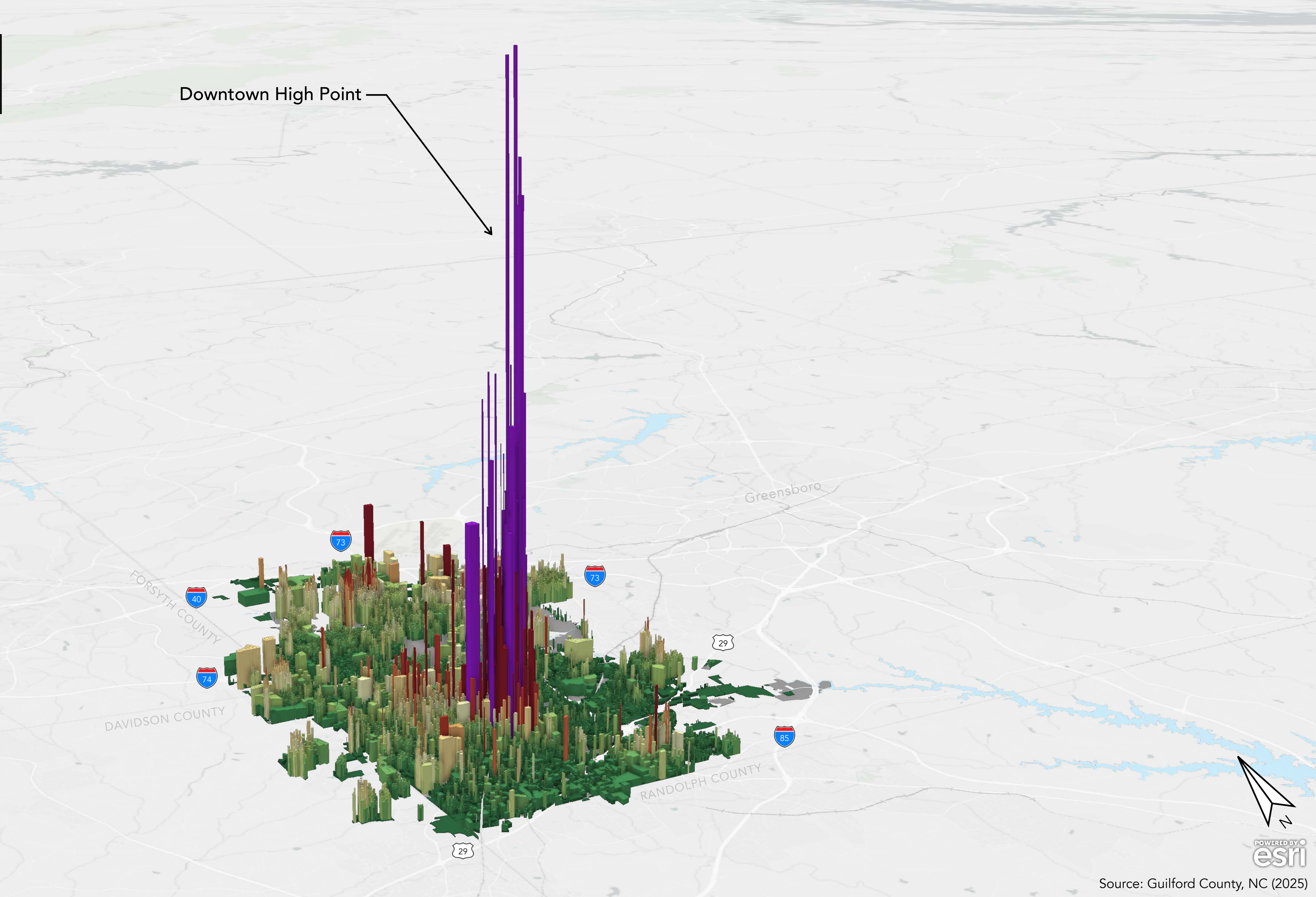
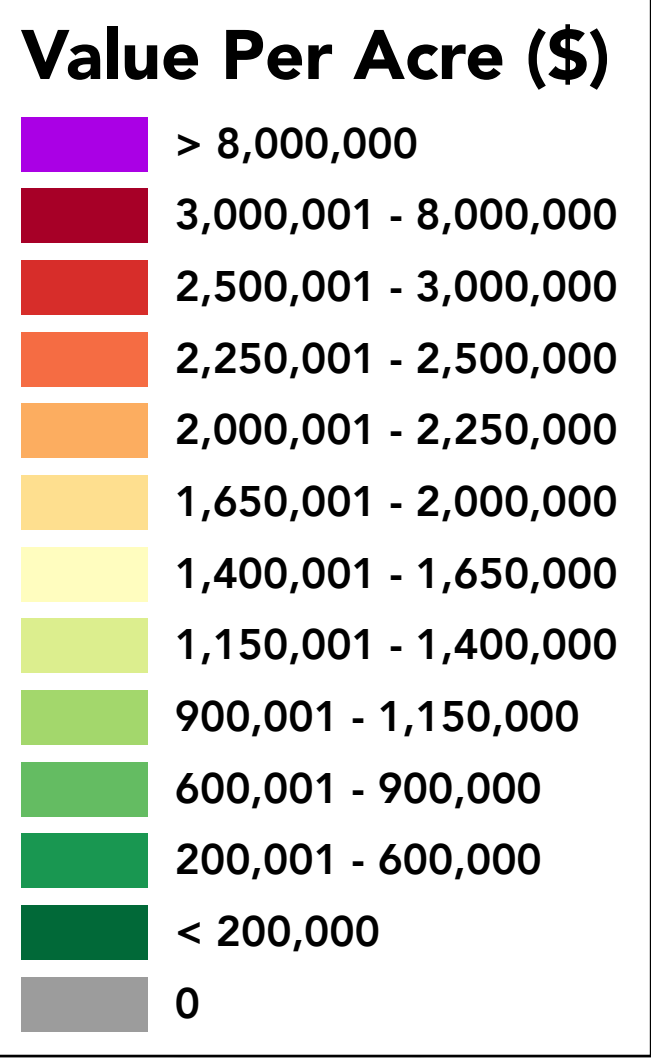
Greensboro



Value Per Acre

High Point, NC

Downtown High Point



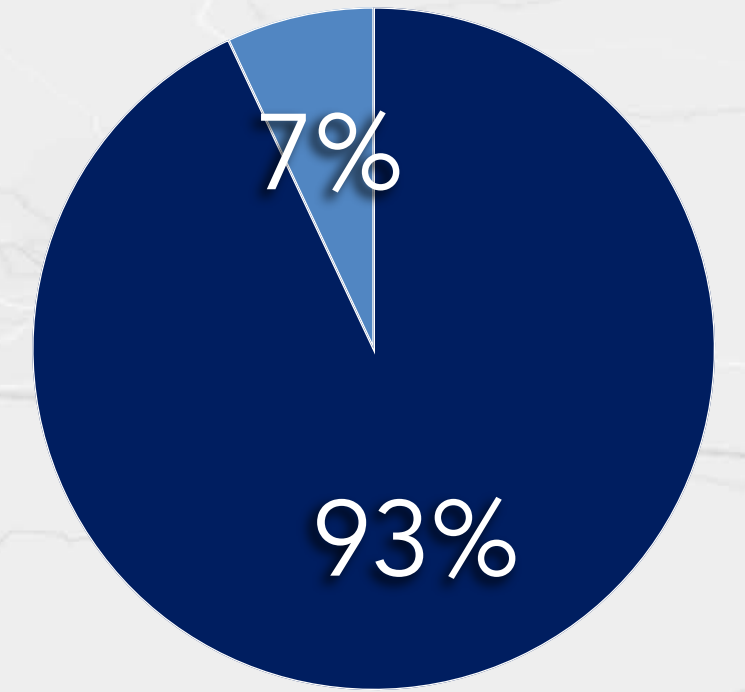
Productivity

City of High Point vs Guilford County, NC

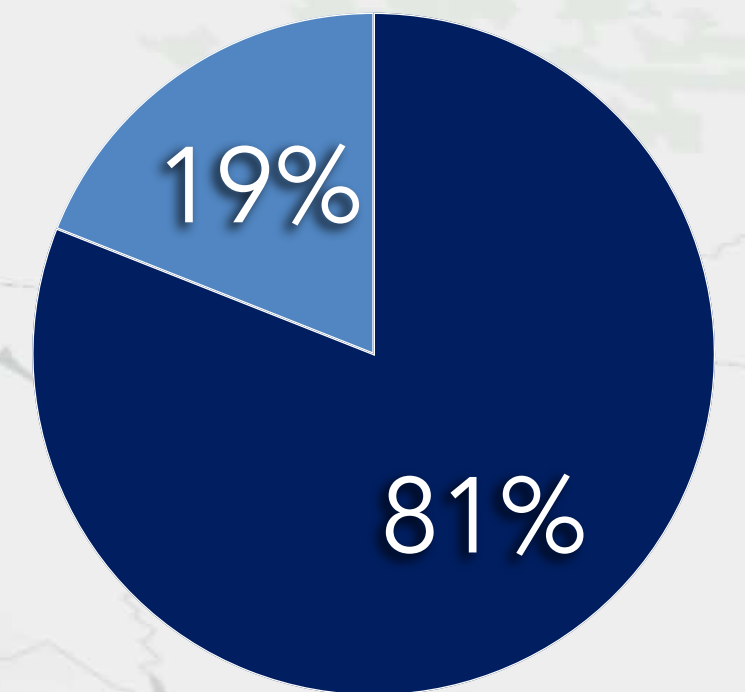
2.6x

High Point's taxable value is **2.6 times greater** than the amount of County area it takes up.

Taxable Acres

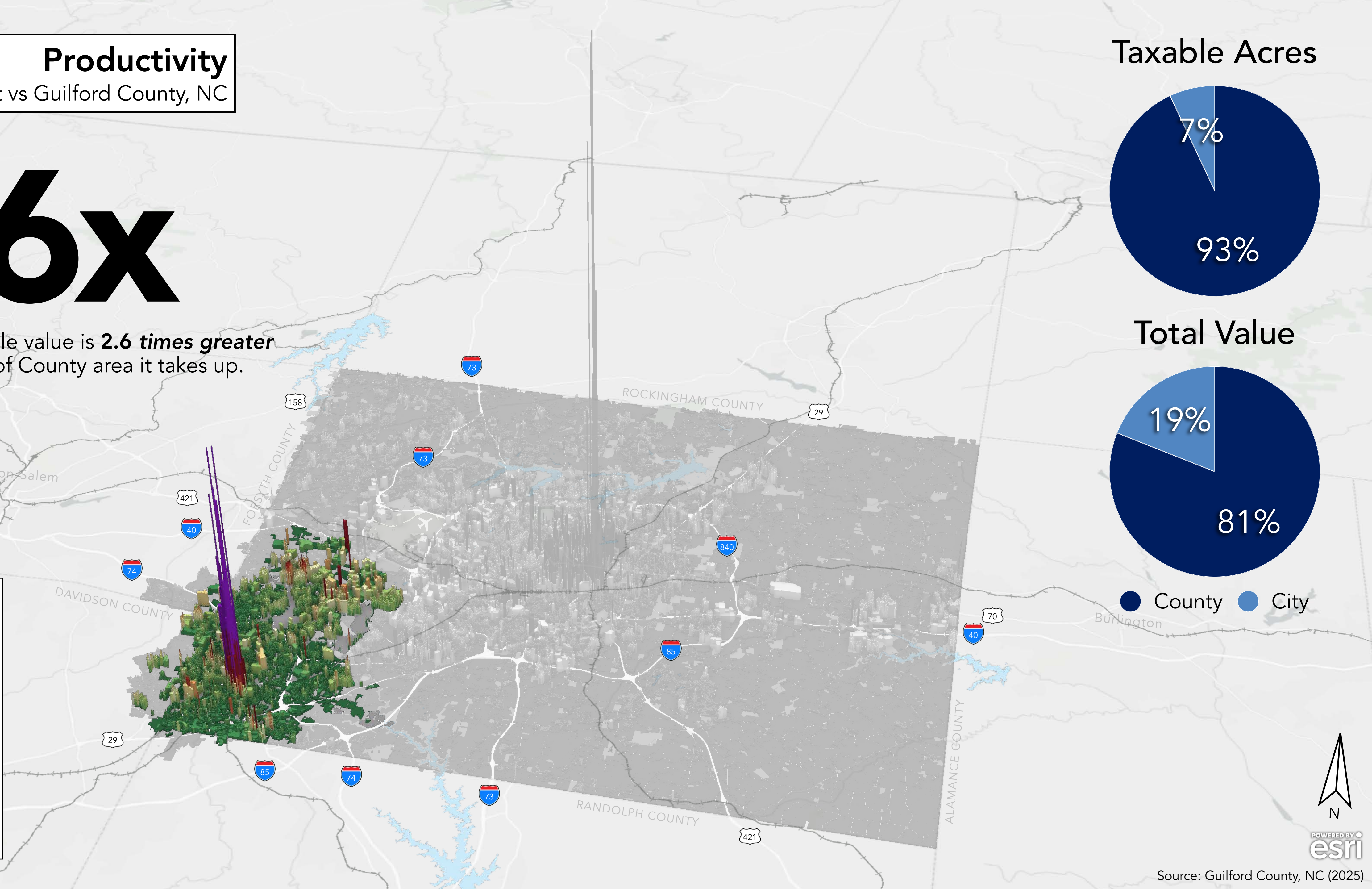
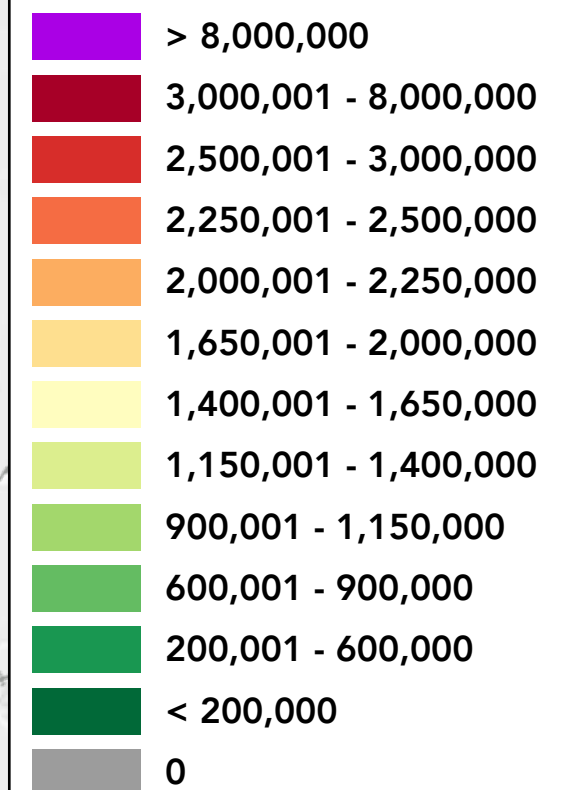


Total Value



● County ● City

Value Per Acre (\$)



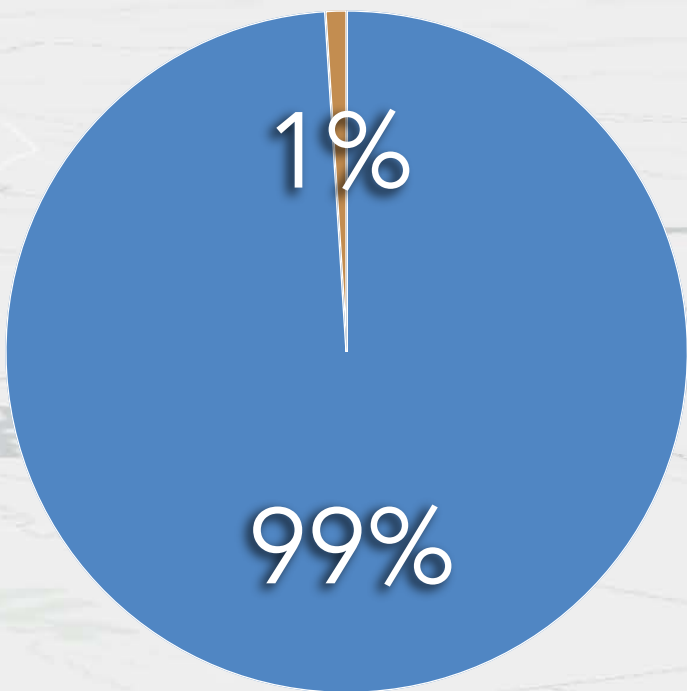
Productivity

Downtown High Point vs City of High Point, NC

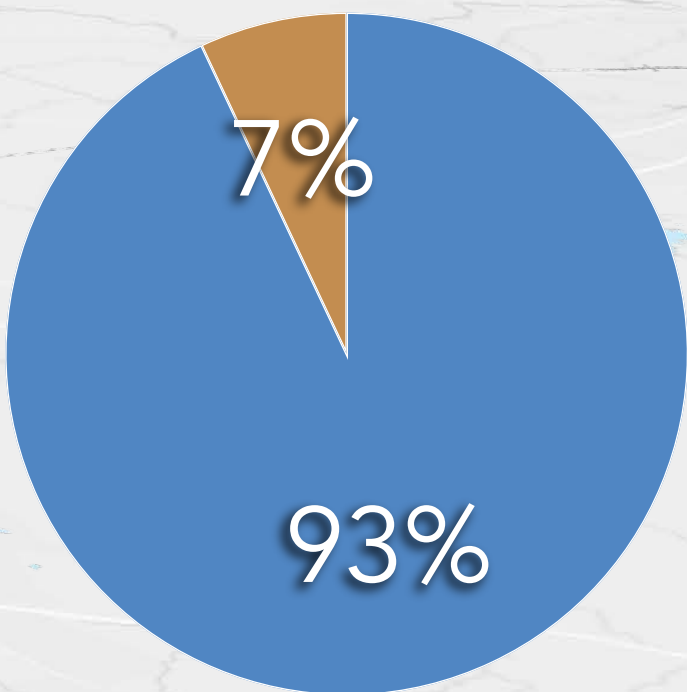
7.4x

Downtown High Point's taxable value is **7.4 times greater** than the amount of City area it takes up.

Taxable Acres

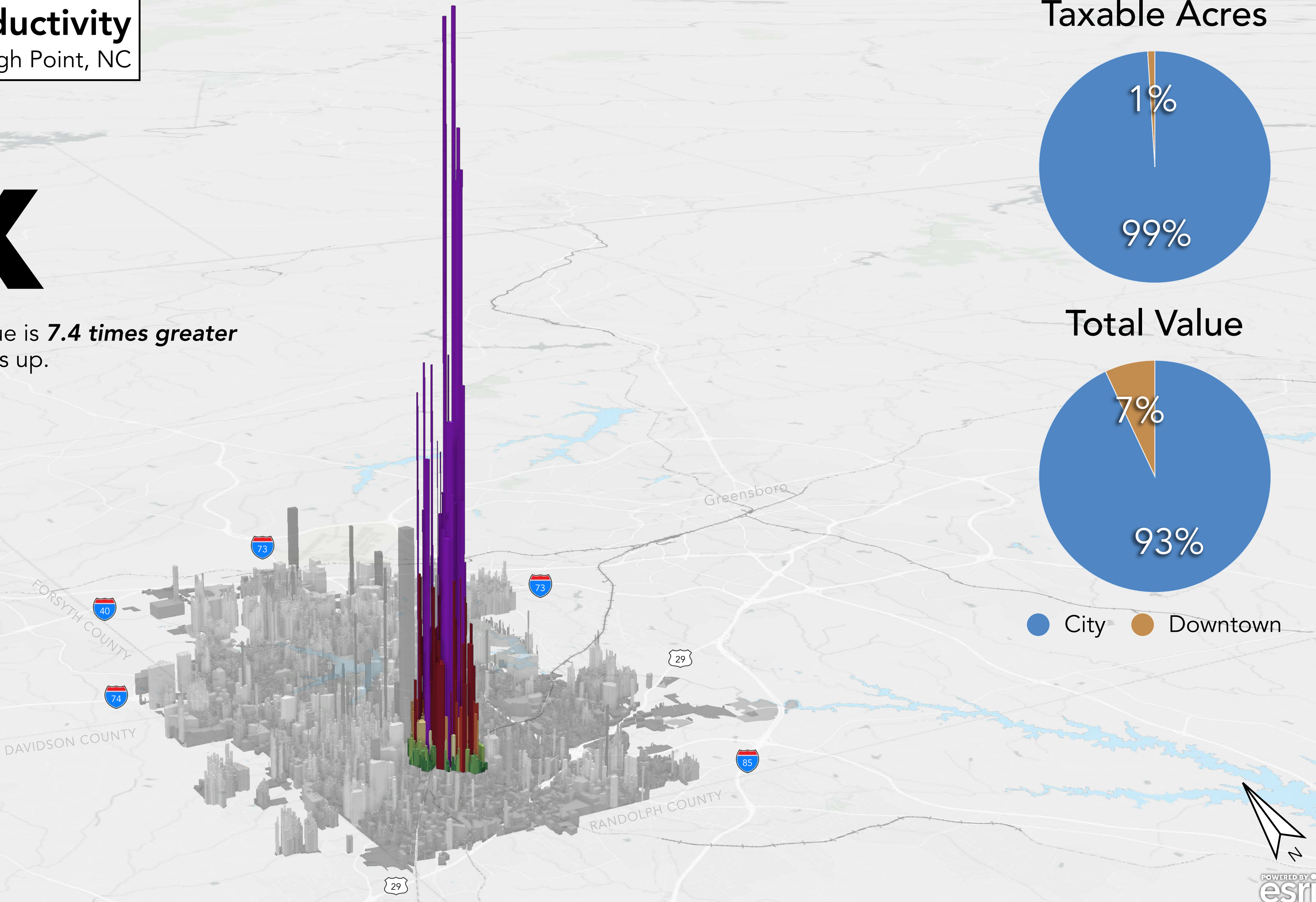
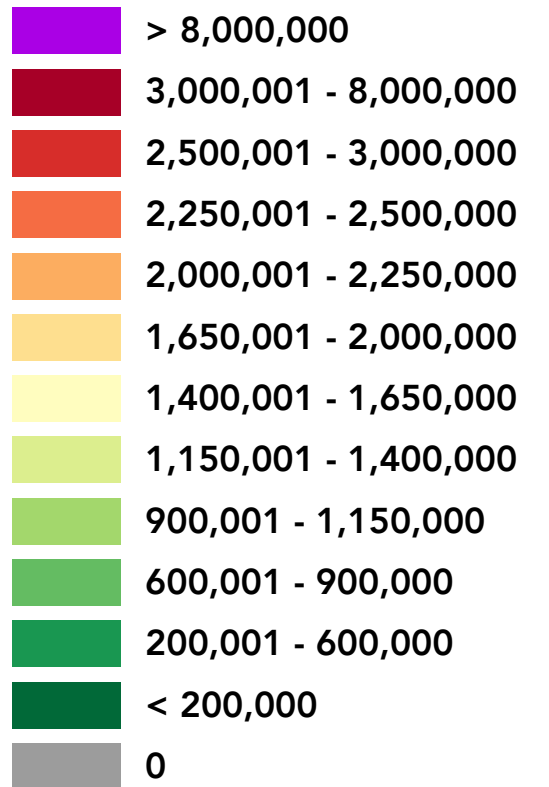


Total Value



● City ● Downtown

Value Per Acre (\$)

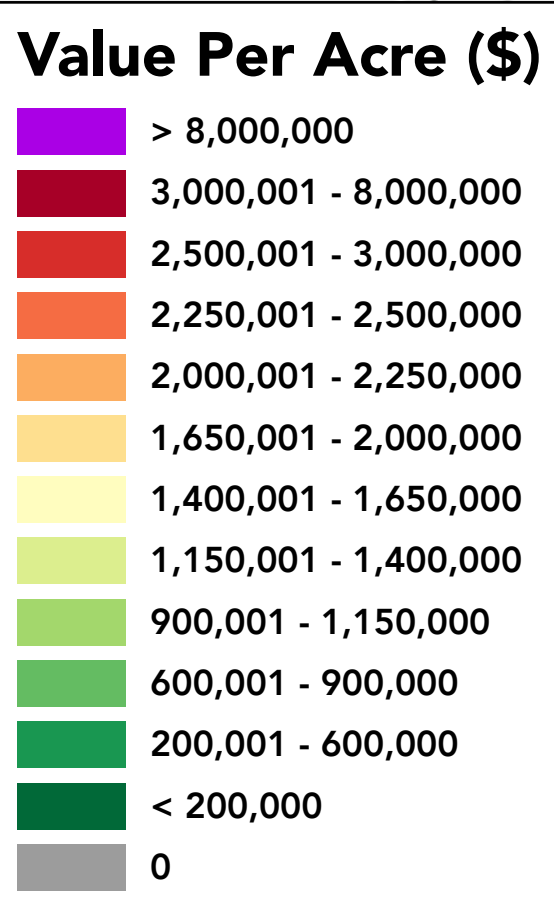


Productivity

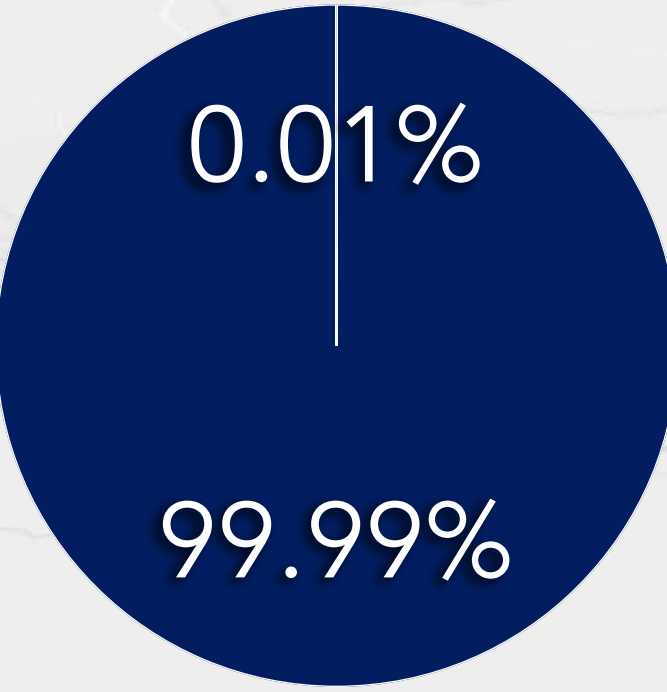
Downtown High Point vs Guilford County, NC

19.6x

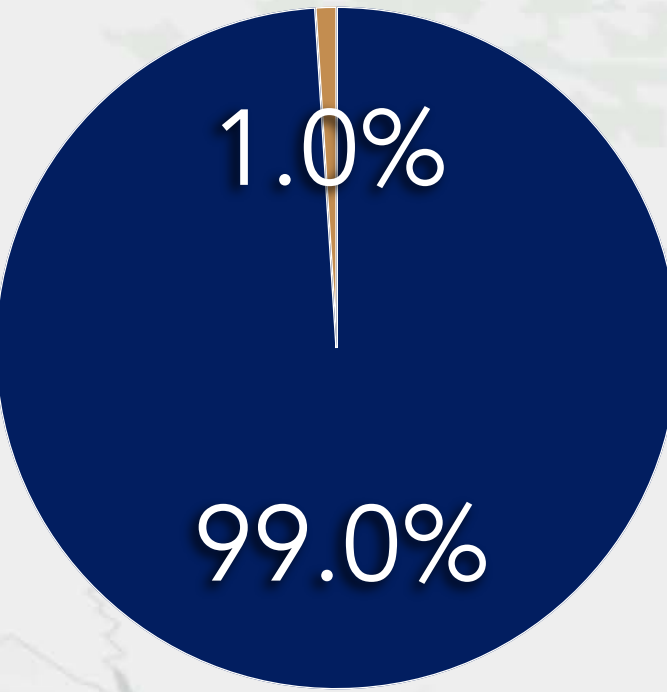
Downtown High Point's taxable value is **19.6 times greater** than the amount of County area it takes up.



Taxable Acres



Total Value



County Downtown

Franklin Stats

	Acres	Value	Value/Acre
Downtown	70	\$97,411,780	\$1,391,597
Franklin	3,136	\$1,043,596,364	\$332,779
Highlands	3,648	\$2,885,212,440	\$790,903
Macon County	332,551	\$12,980,627,678	\$39,033



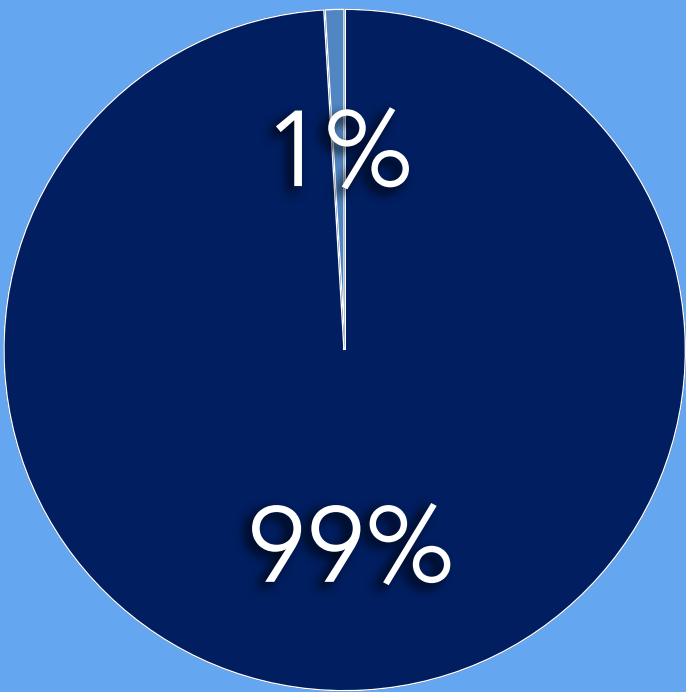
quail



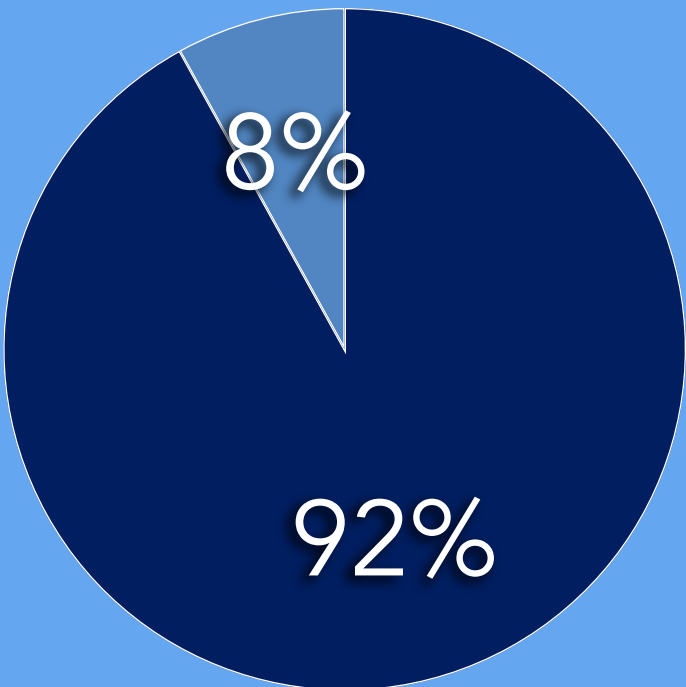
chicken

URBAN3

Taxable Acres

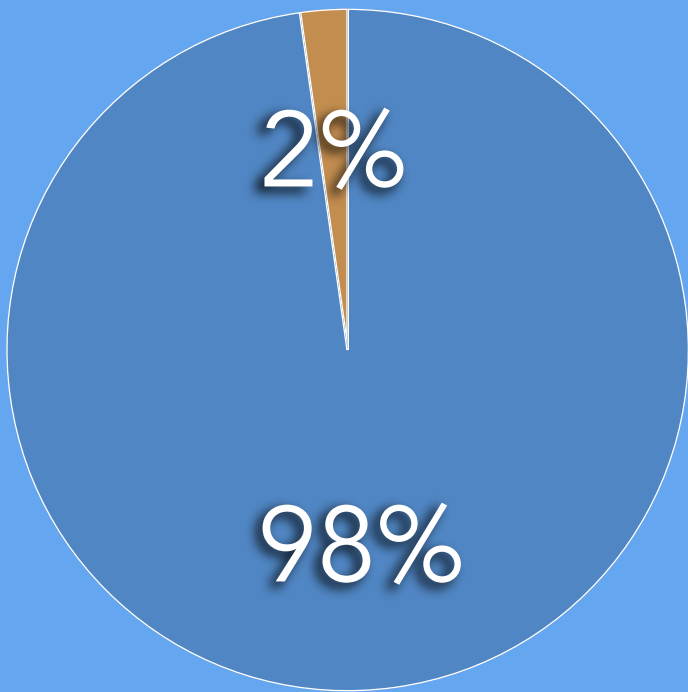


Total Value

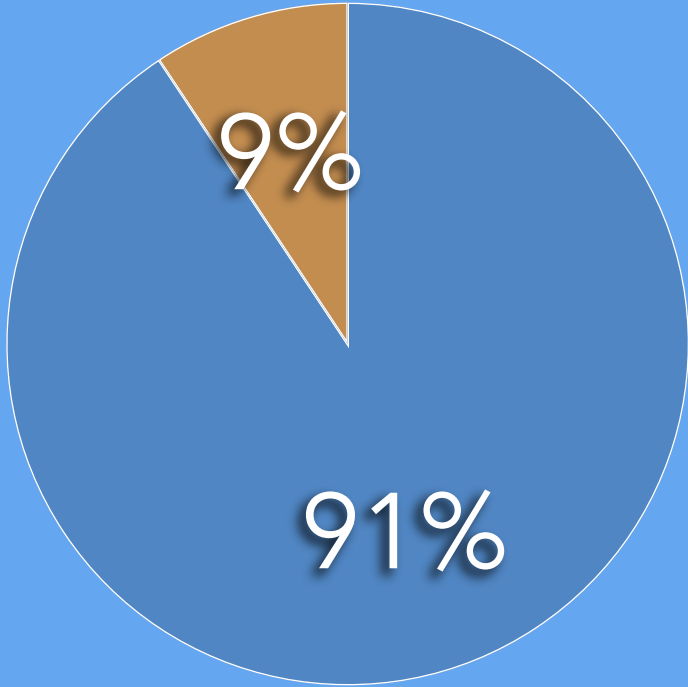


County
City

Taxable Acres

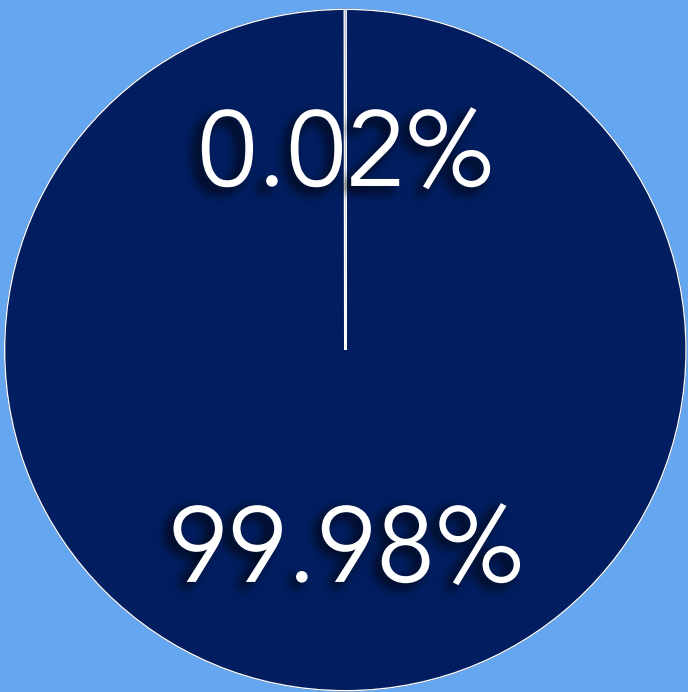


Total Value

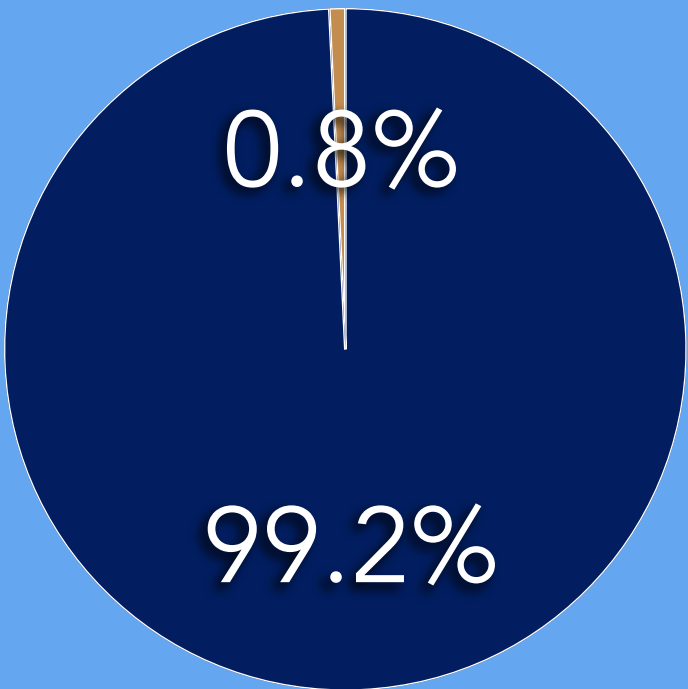


City
Downtown

Taxable Acres



Total Value

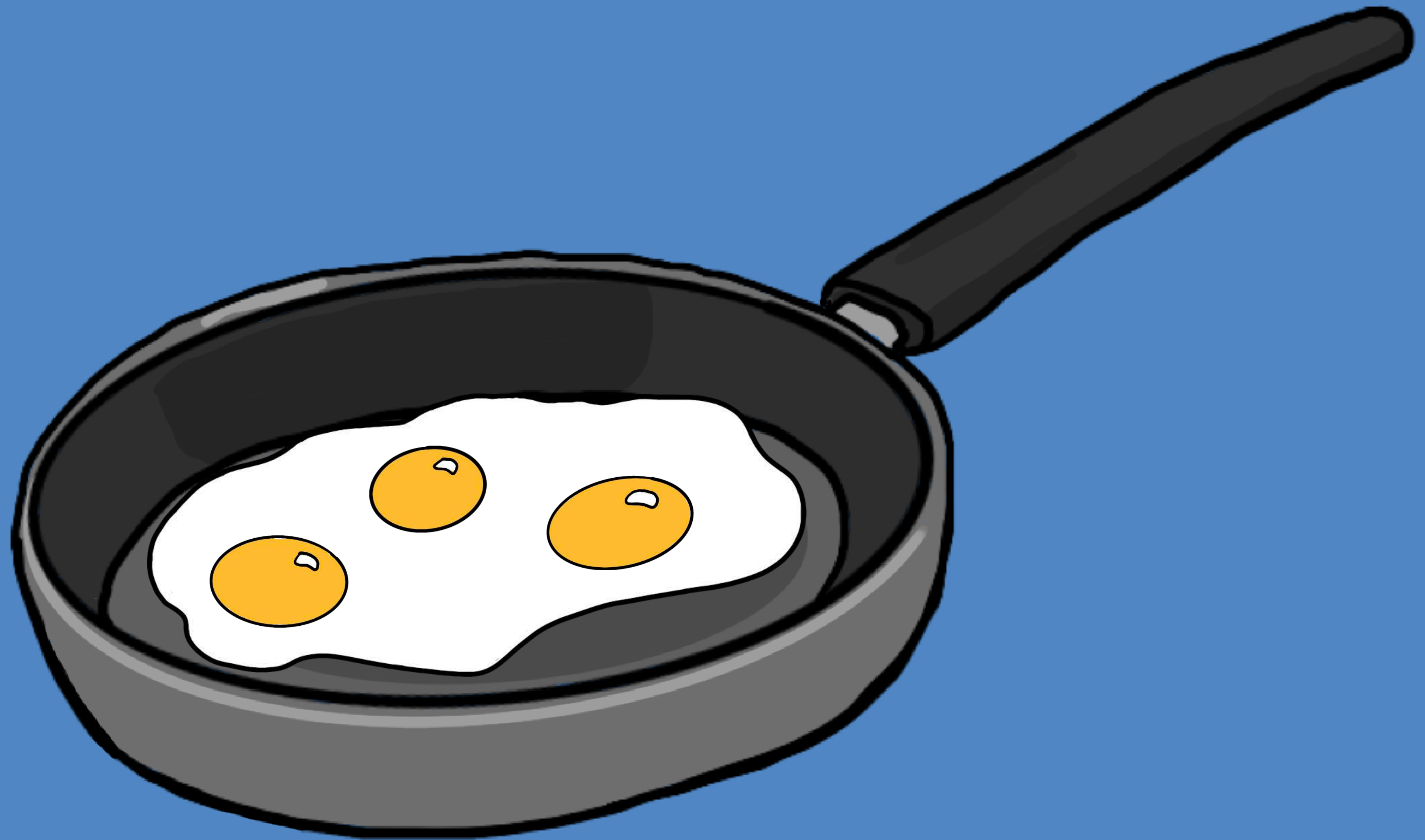


County
Downtown

8x

4.5x

40x



DOWNTOWN



**REST OF
CITY**

SHOOT FOR 6X

URBAN3

Image source: tasteofhome.com

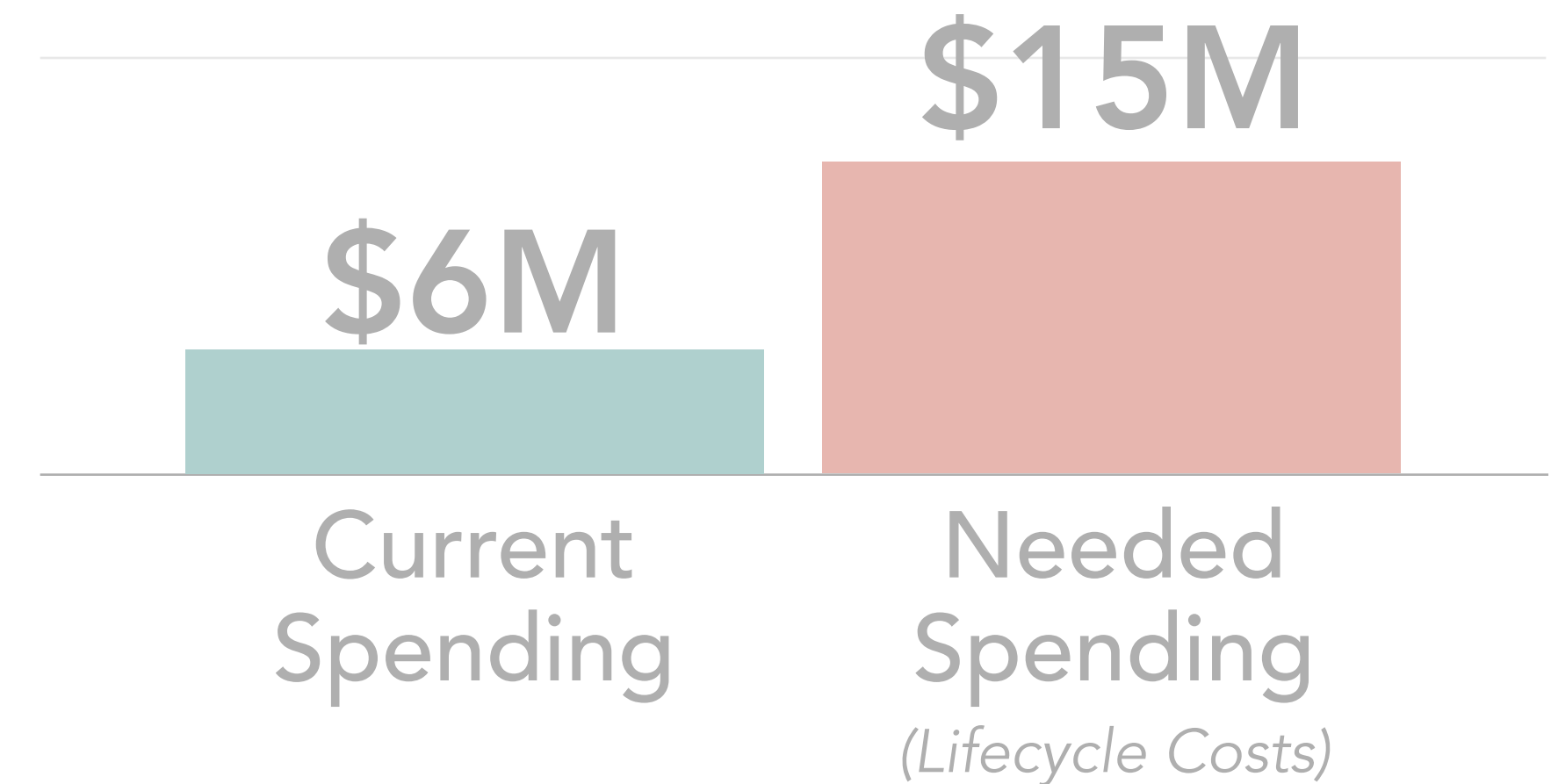
Question:

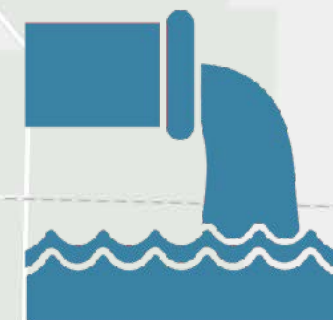
**Why is your city designed
this way?**



A NIGHTMARE ON ELM STREET

Full System Cost: ~\$661M



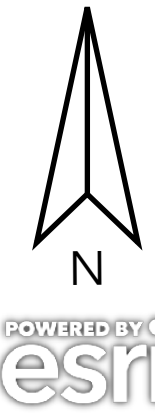
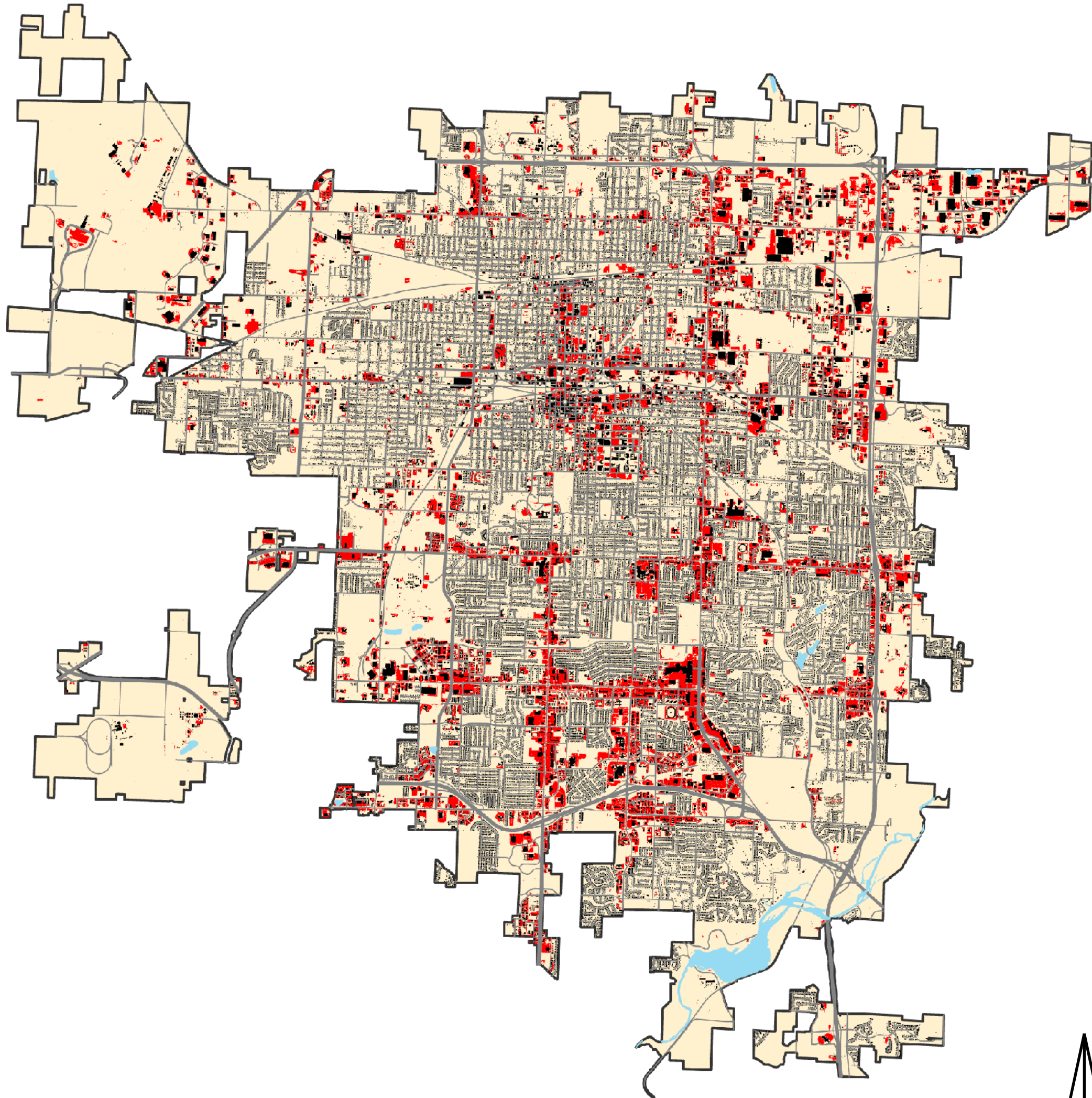
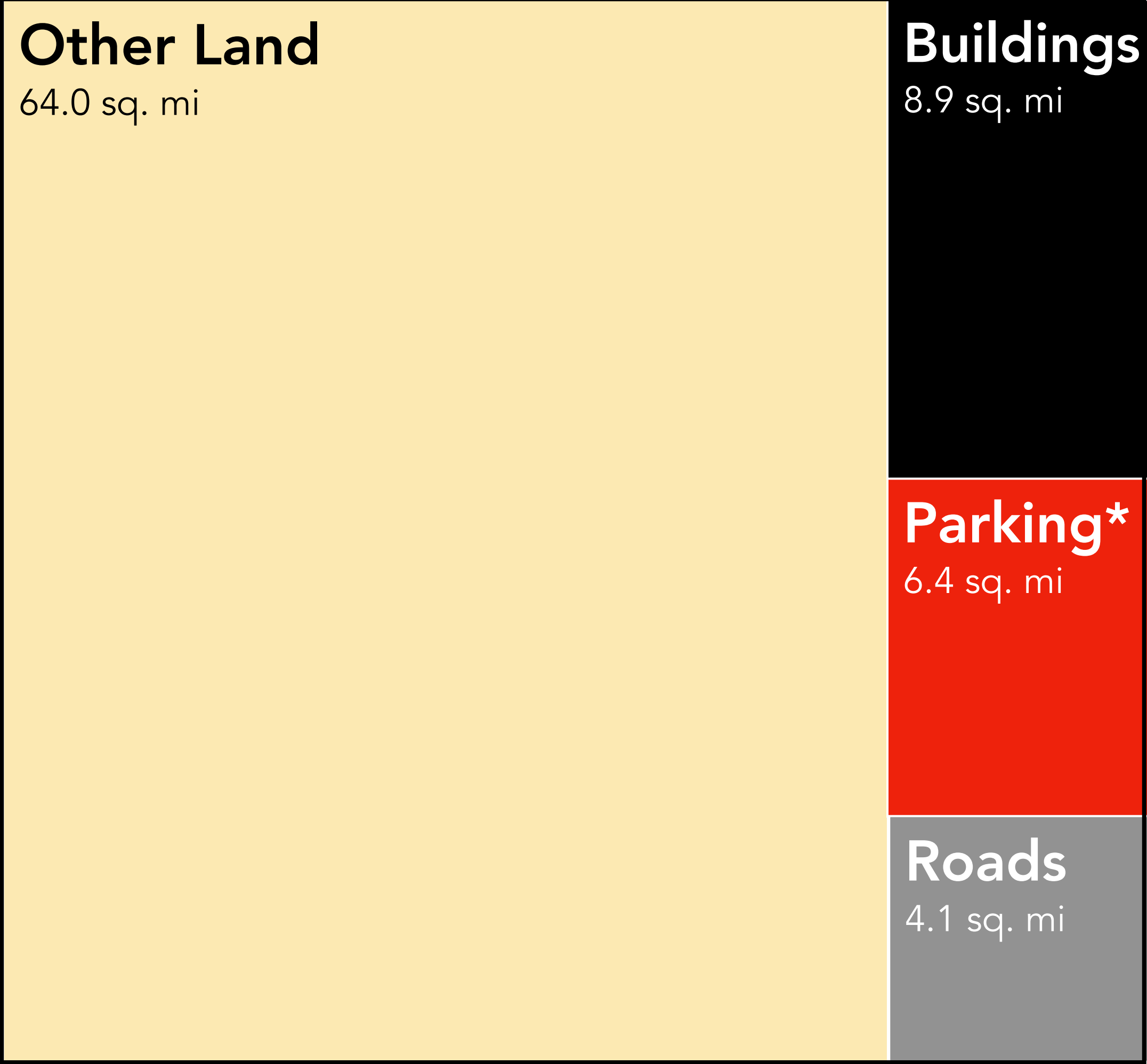
 300 mi



Impact of Trees on Stormwater System

Springfield, MO

Area



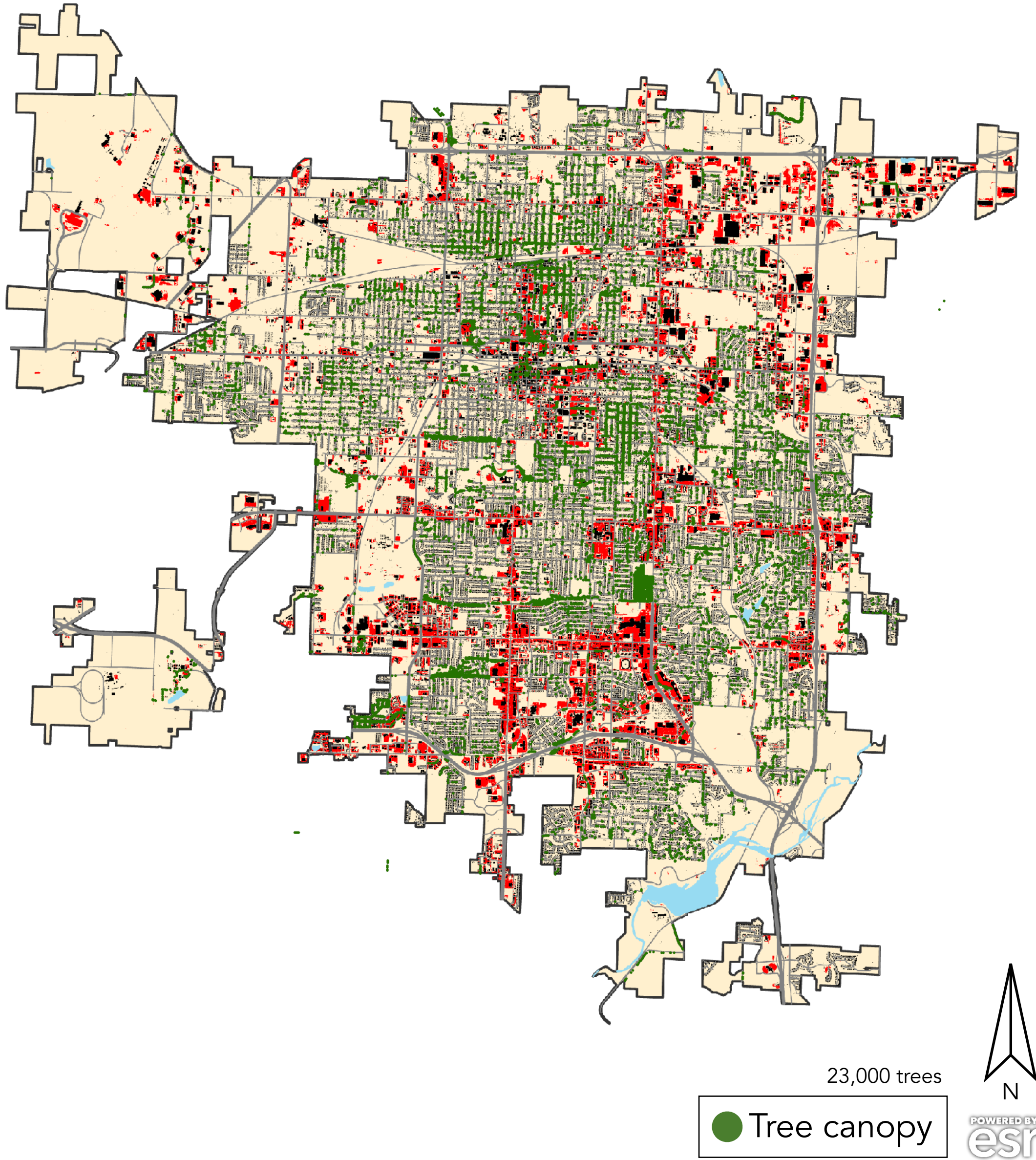
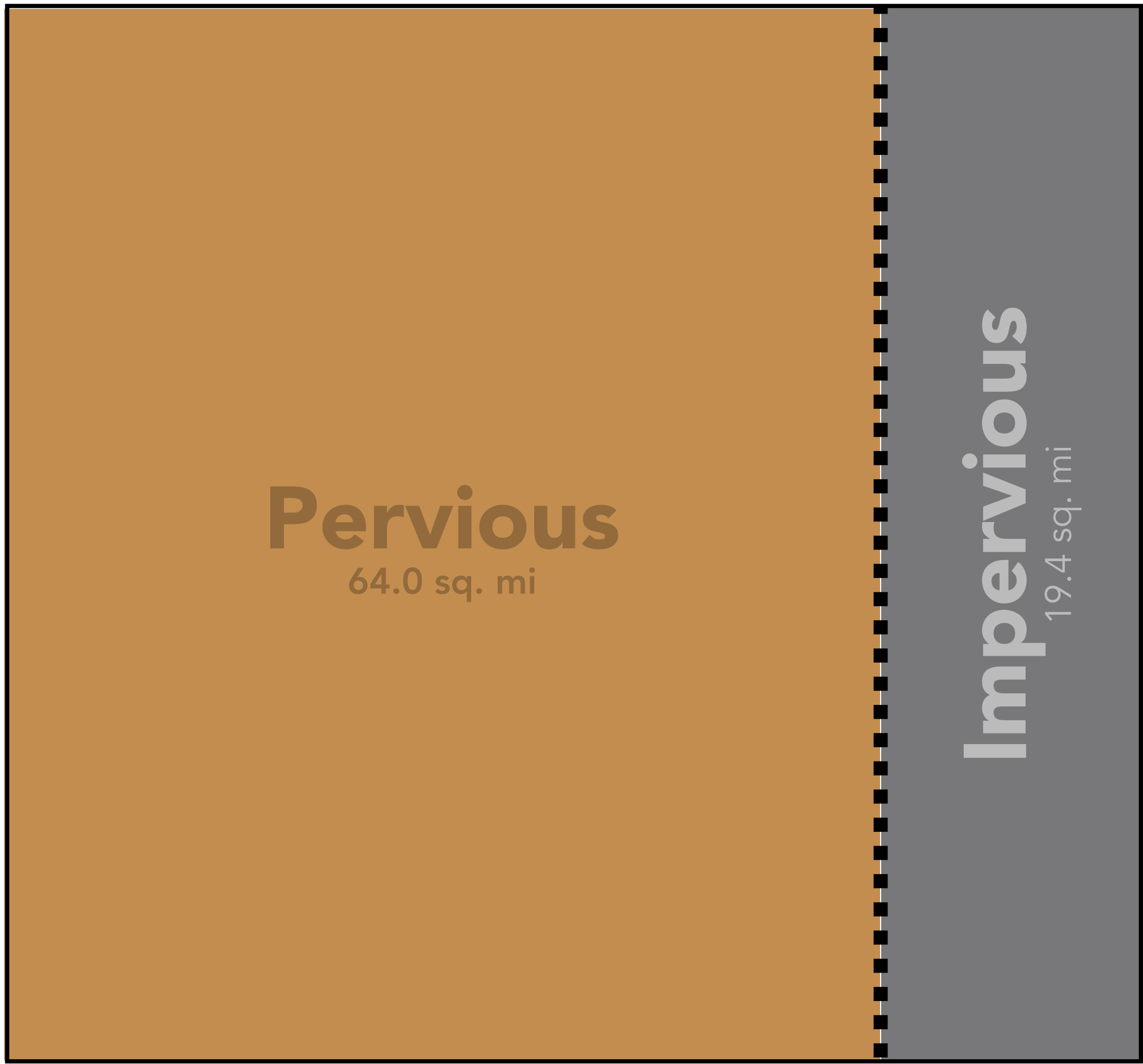
*Estimate from satellite imagery

Source: City of Springfield MO (2022)

Impact of Trees on Stormwater System

Springfield, MO

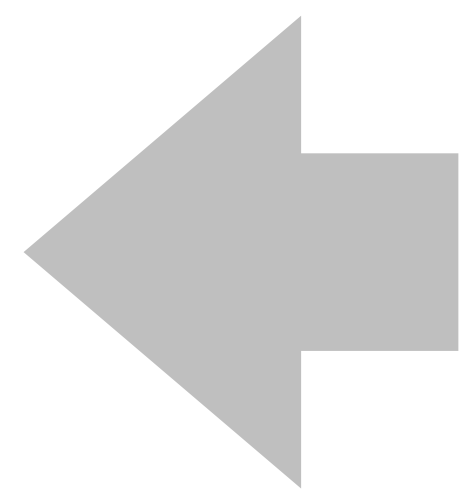
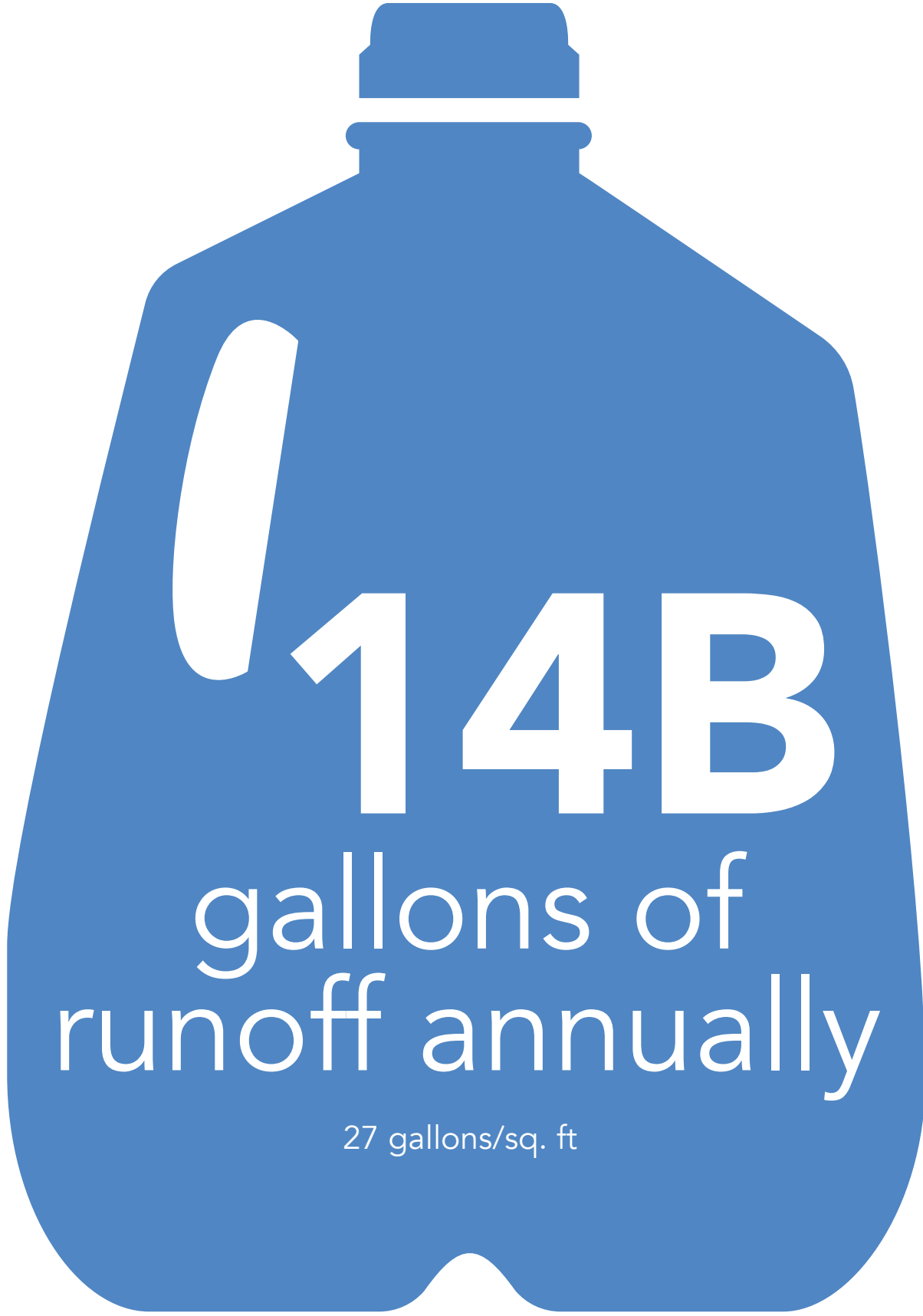
Area



*Estimate from satellite imagery

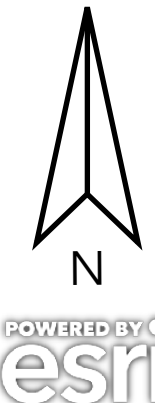
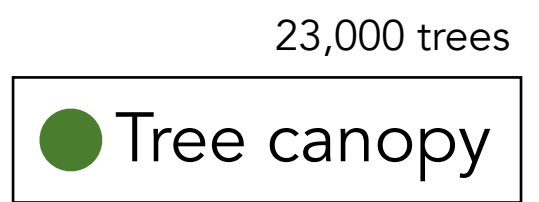
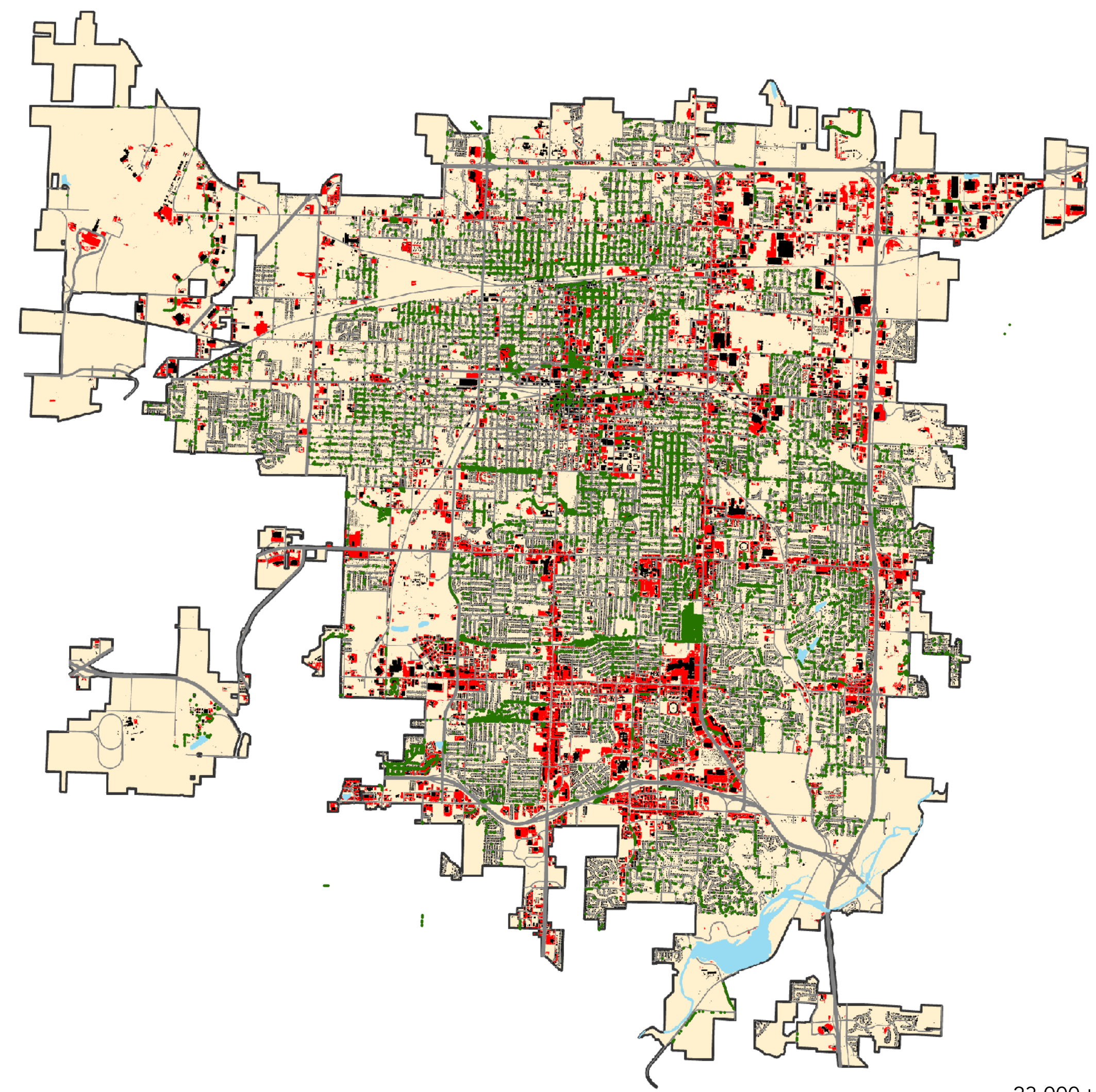
Impact of Trees on Stormwater System

Springfield, MO



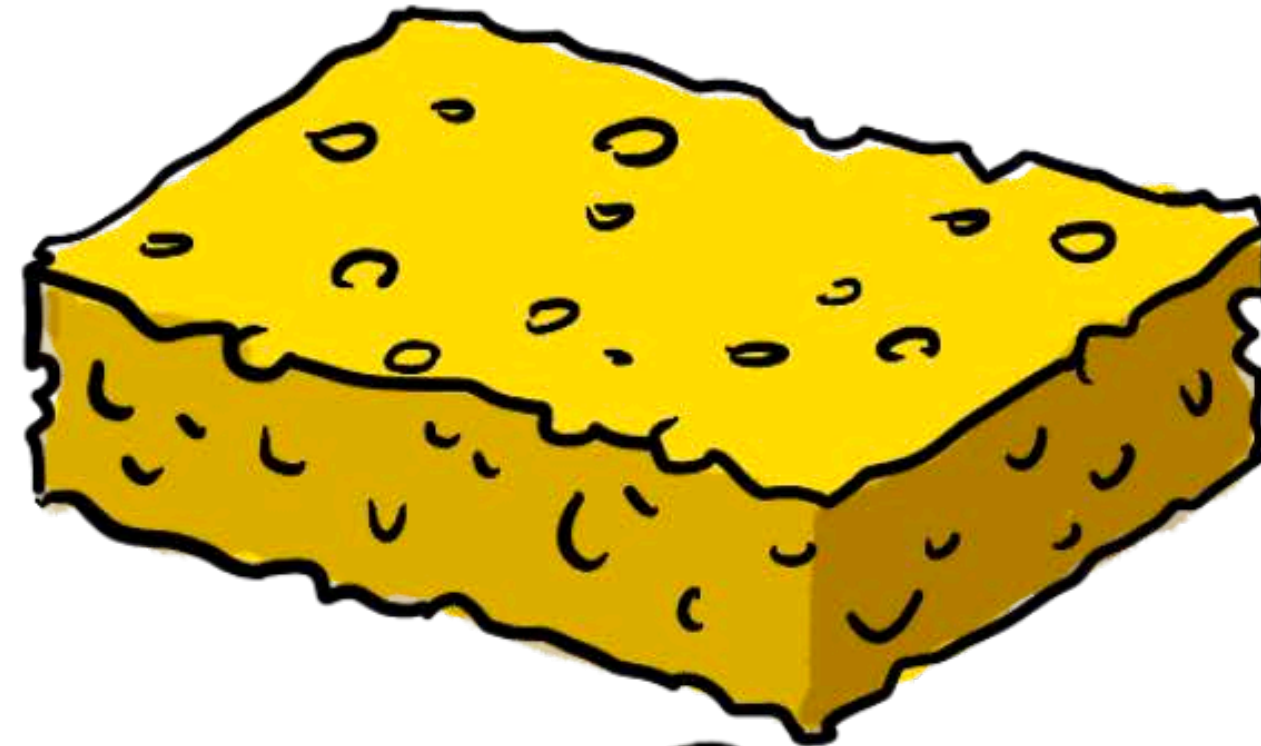
Impervious
19.4 sq. mi

To scale!

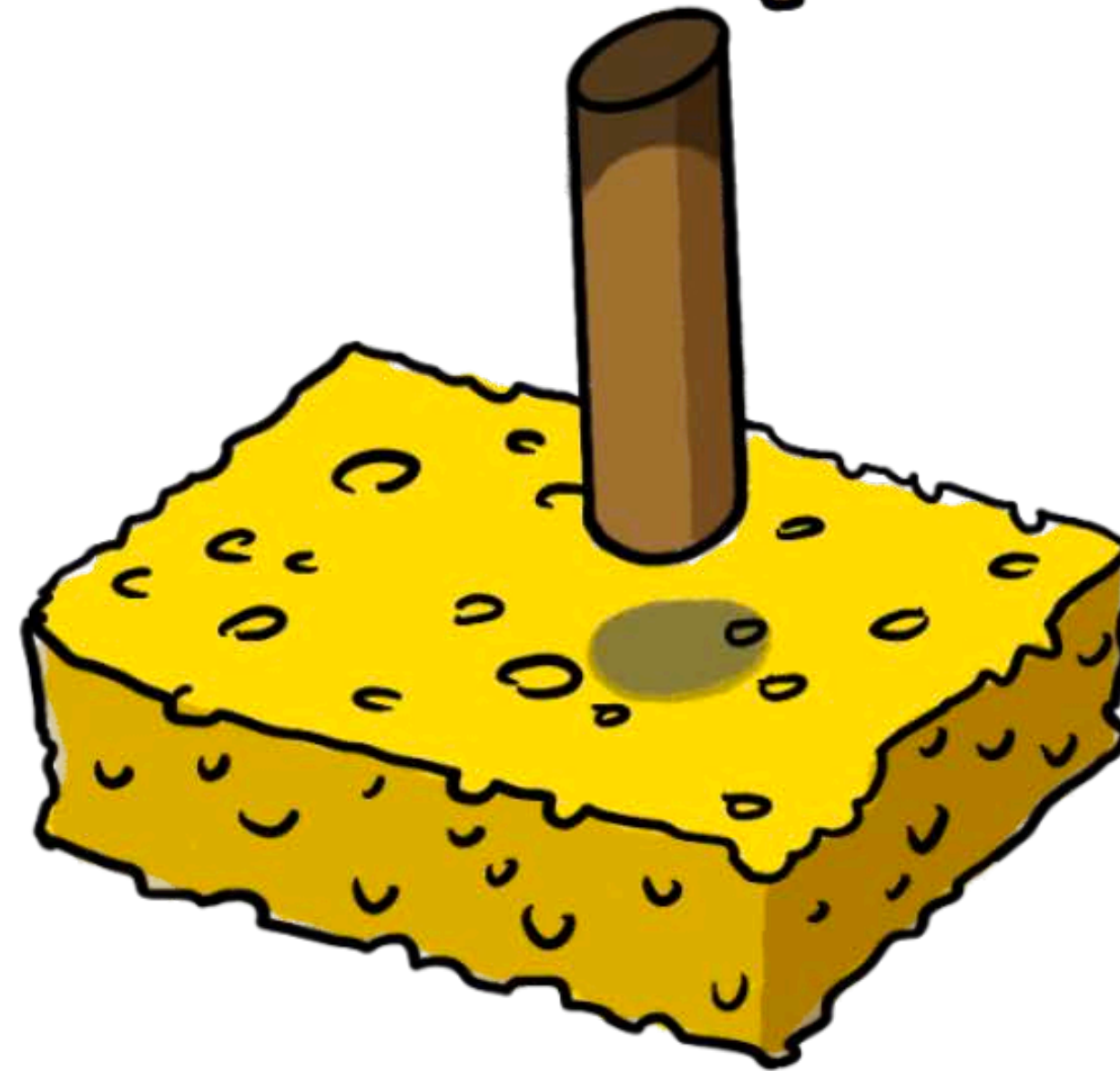


Impact of Trees on Stormwater System

Springfield, MO



Water
interception



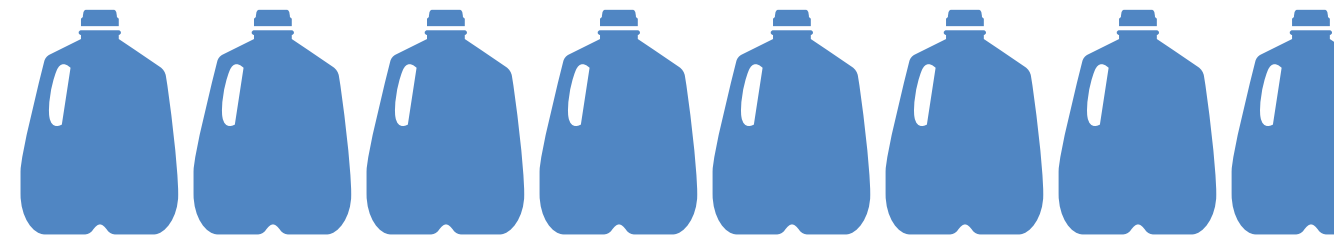
Water
absorption

Annual Impacts of a Single Tree

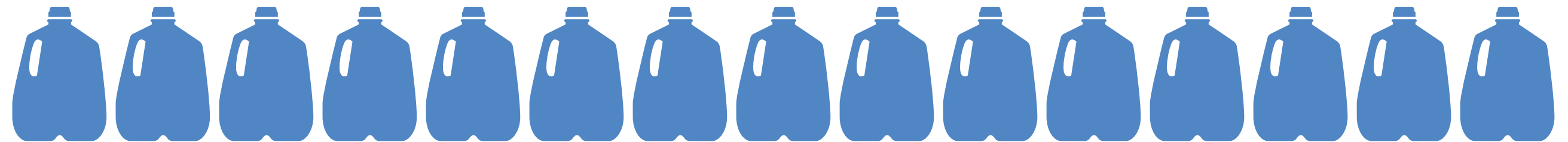
Springfield, MO



Intercepts 770 gallons rainfall



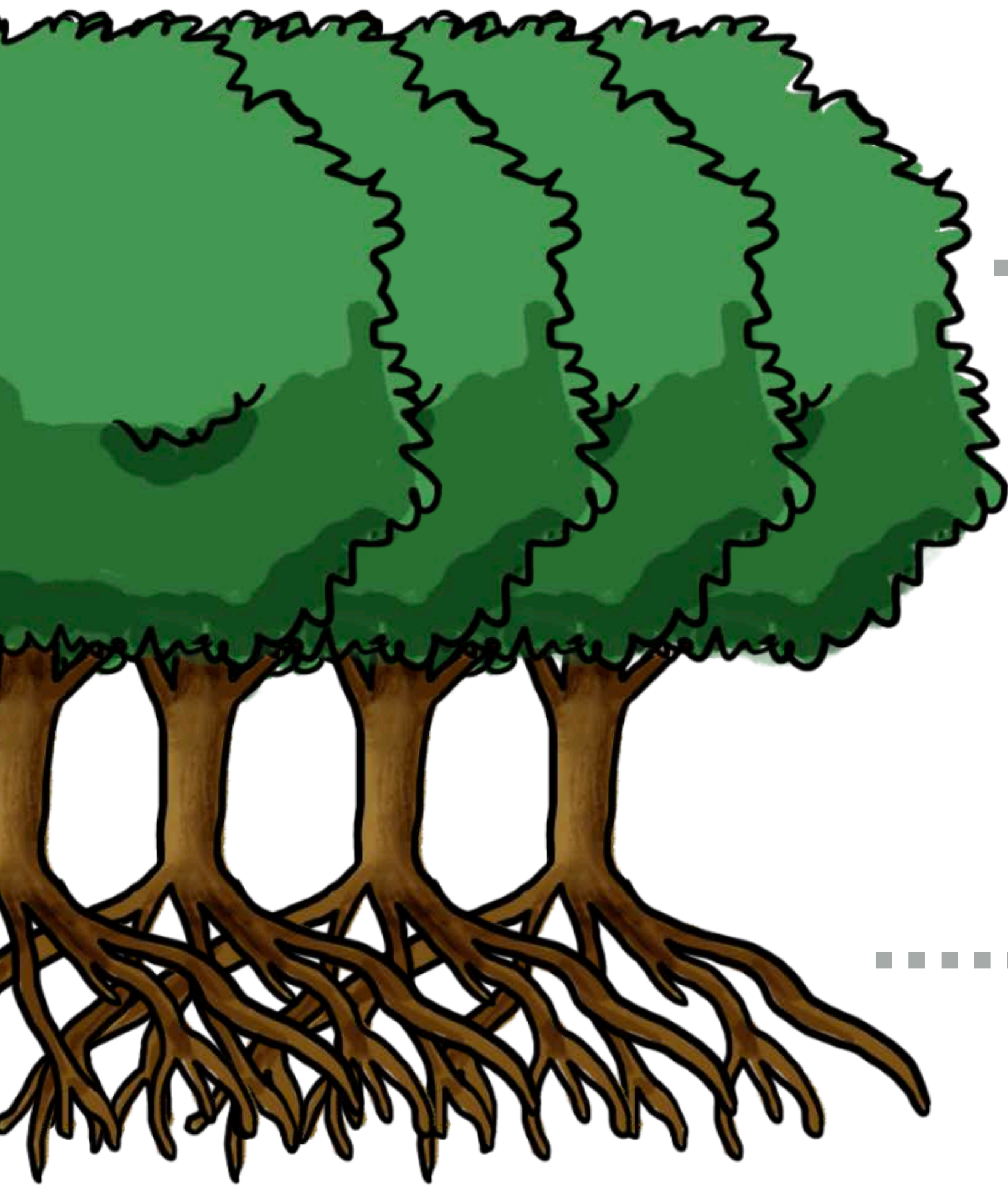
Absorbs 1,500 gallons stormwater



100 gallons

Annual Impacts of Total Tree Canopy

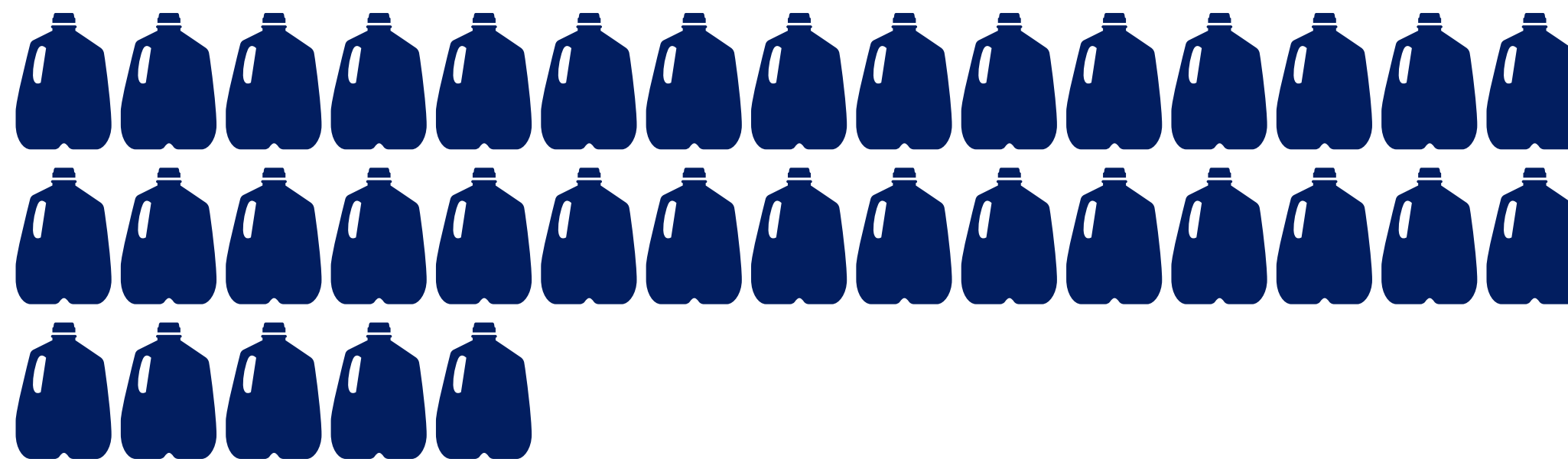
Springfield, MO



Intercepts 13M gallons rainfall



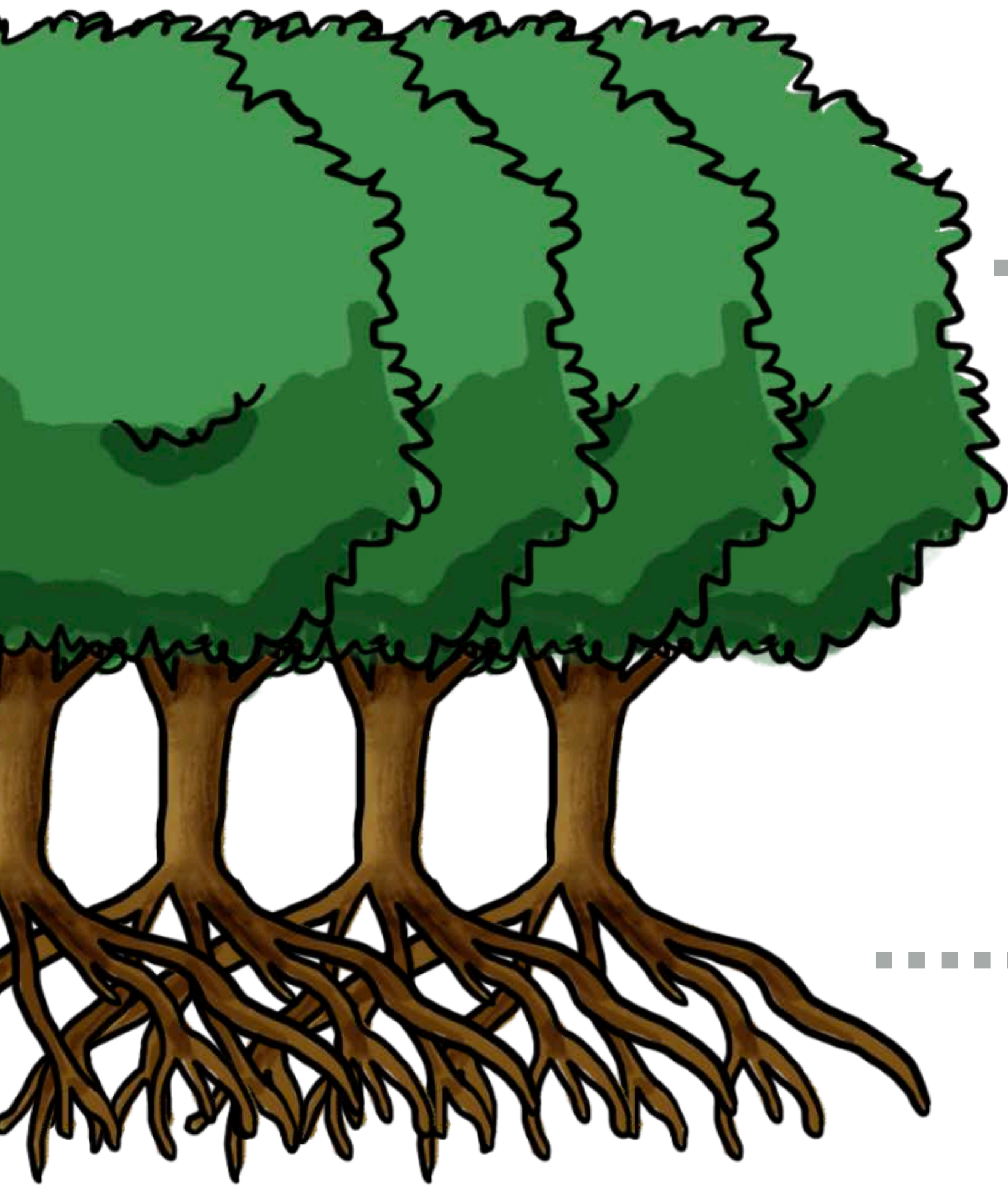
Absorbs 35M gallons stormwater



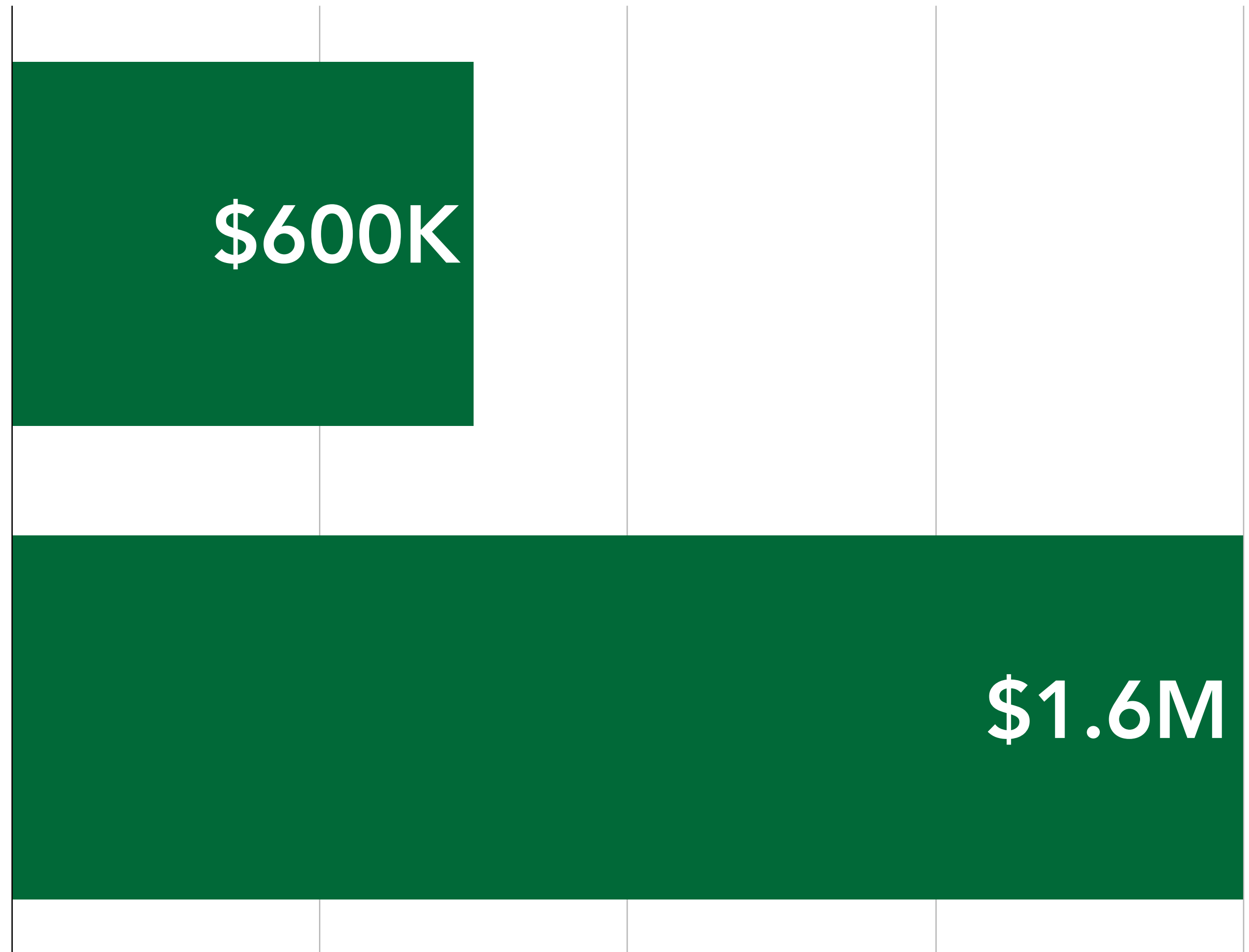
1,000,000 gallons

Annual Impacts of Total Tree Canopy

Springfield, MO



Reduces stormwater system cost by

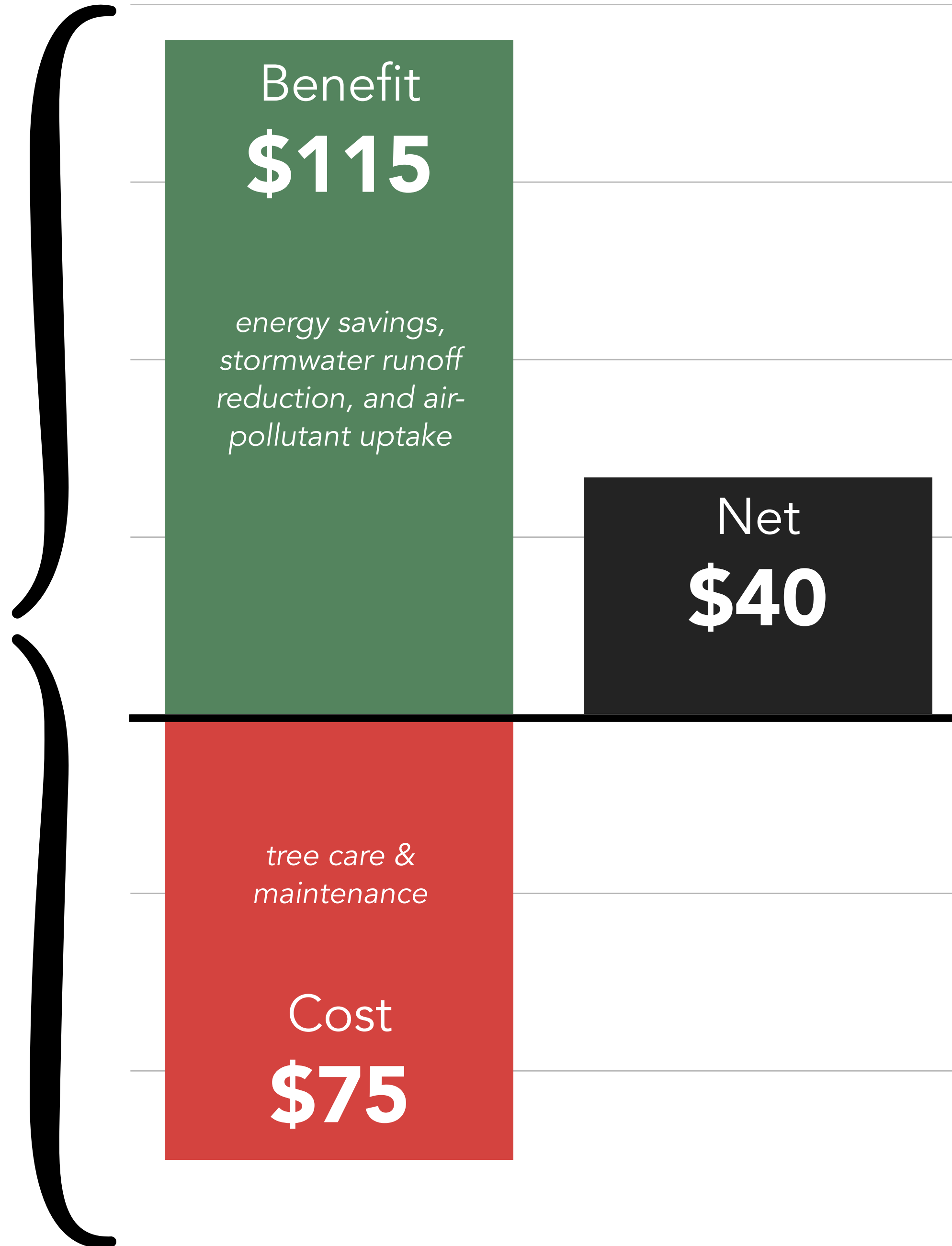
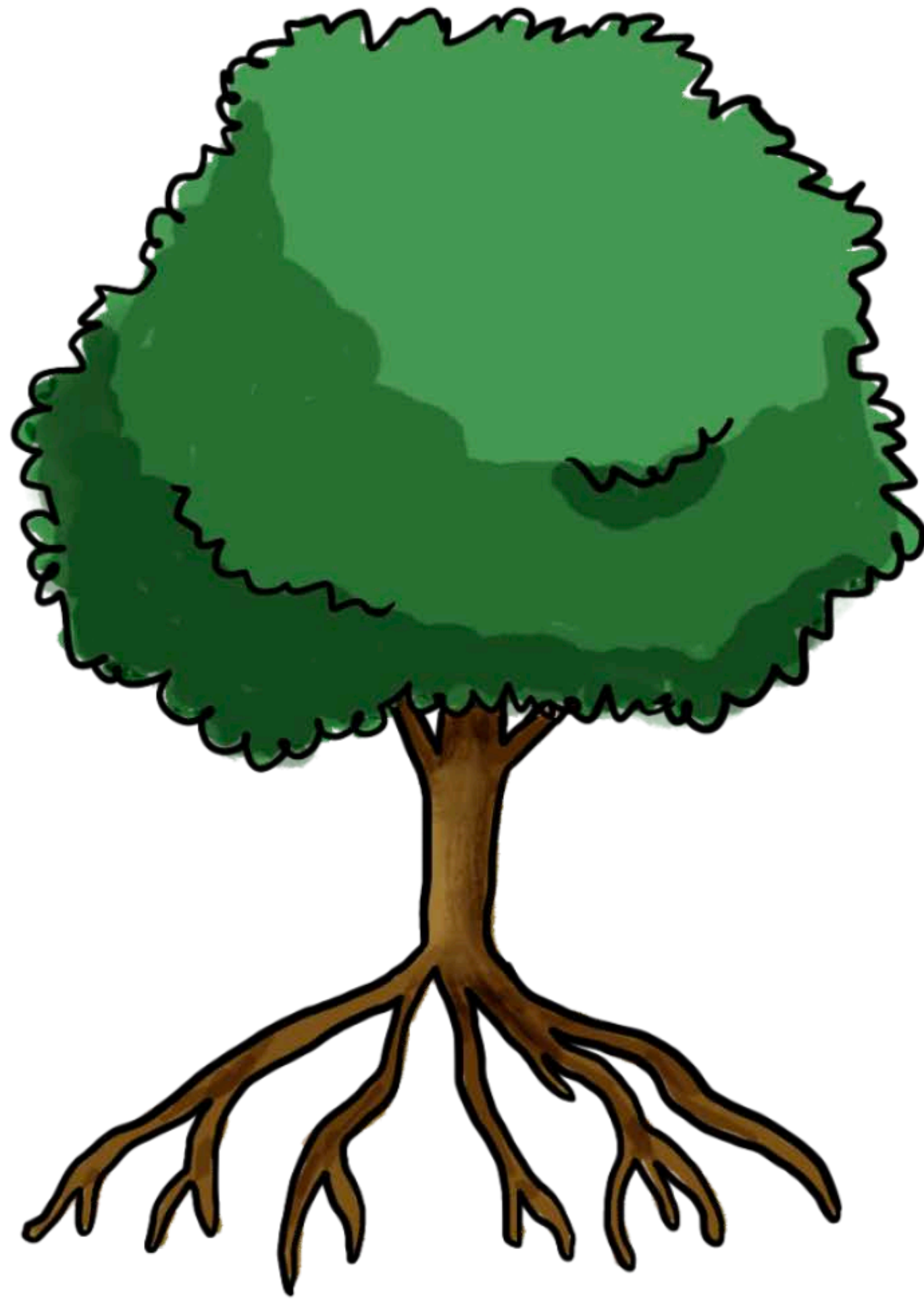




But Joe, trees cost money!!

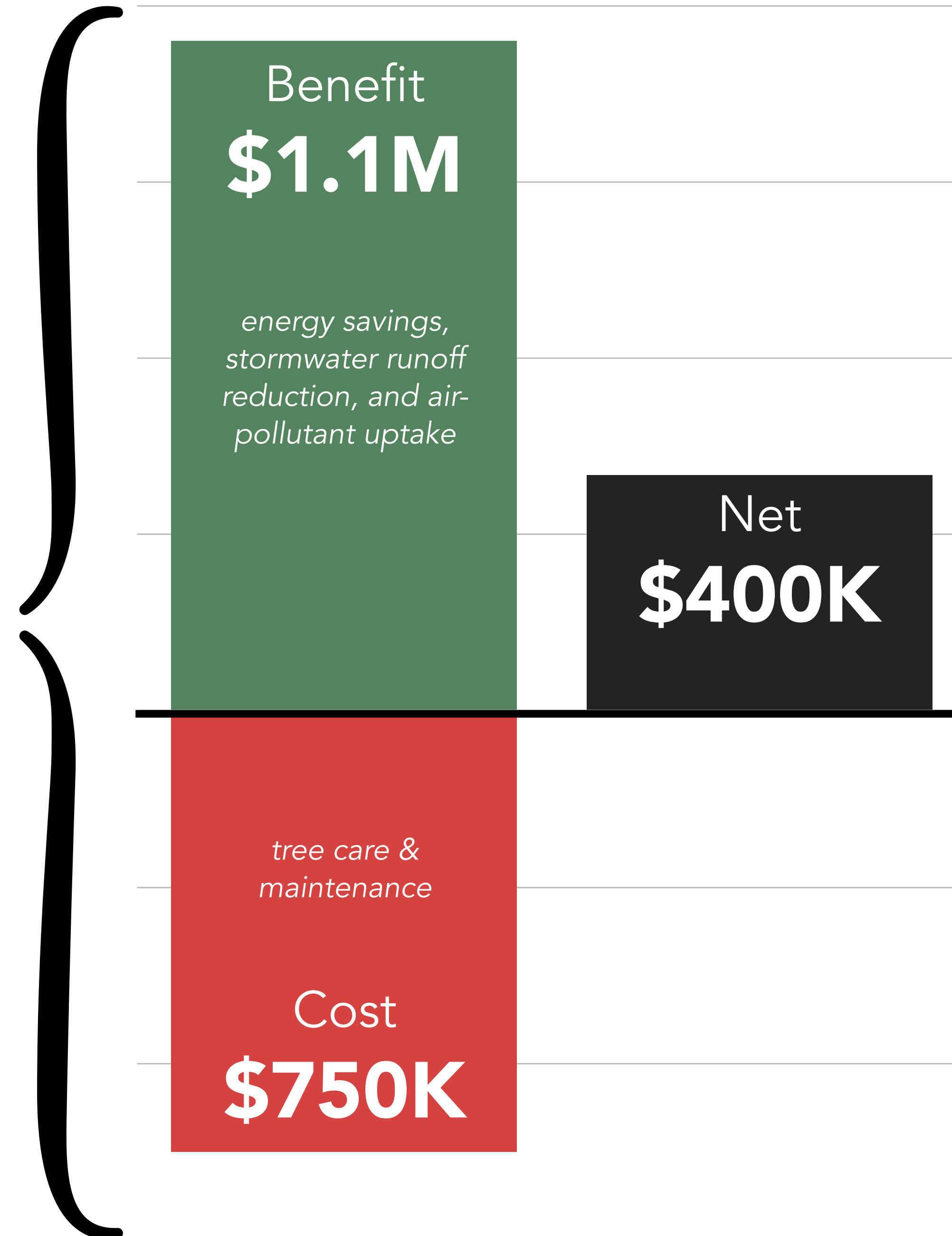
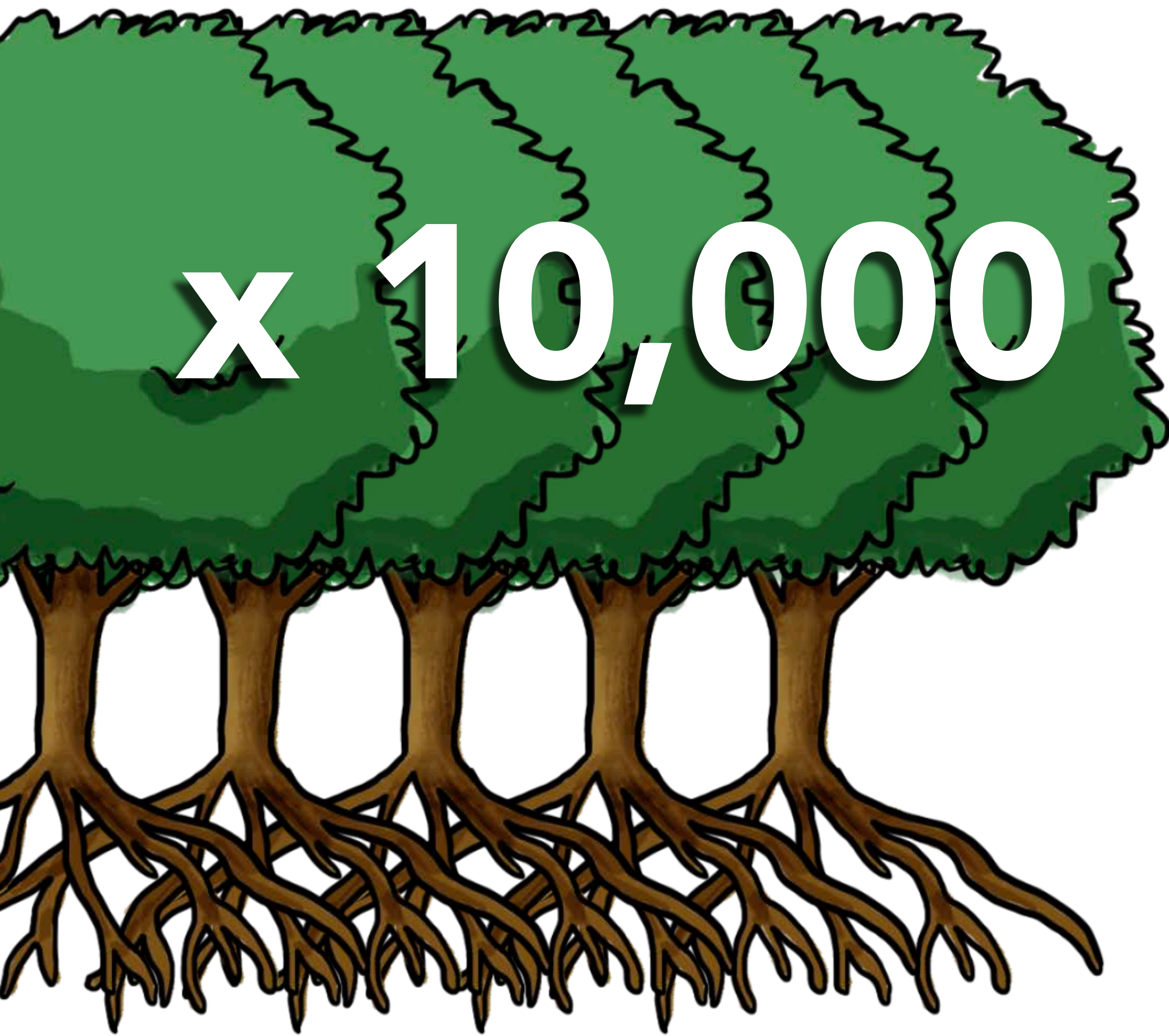
Annual Impacts of a Single Tree

Springfield, MO



Annual Impacts of 10,000 Trees

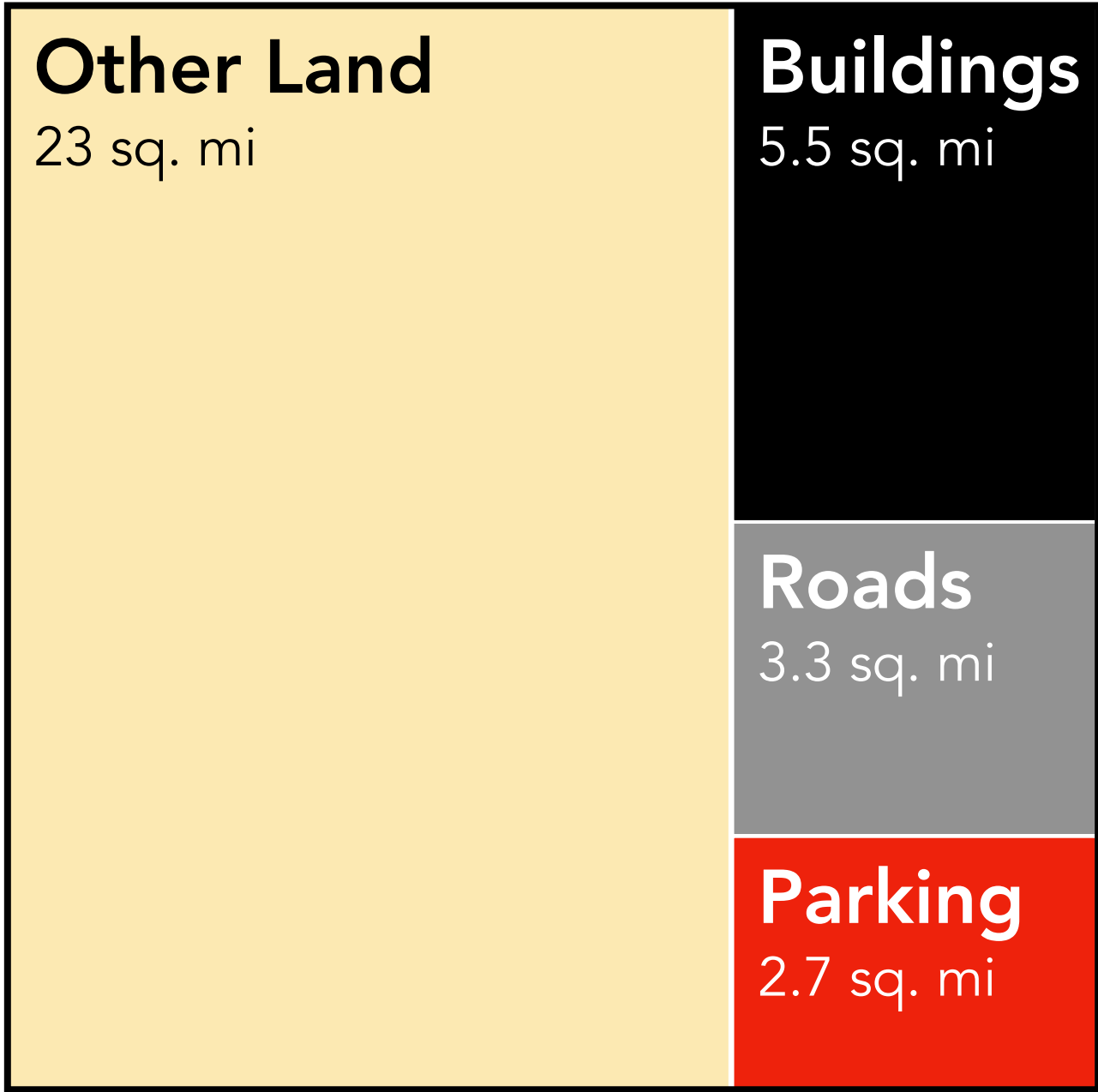
Springfield, MO



Eugene, OR

175K

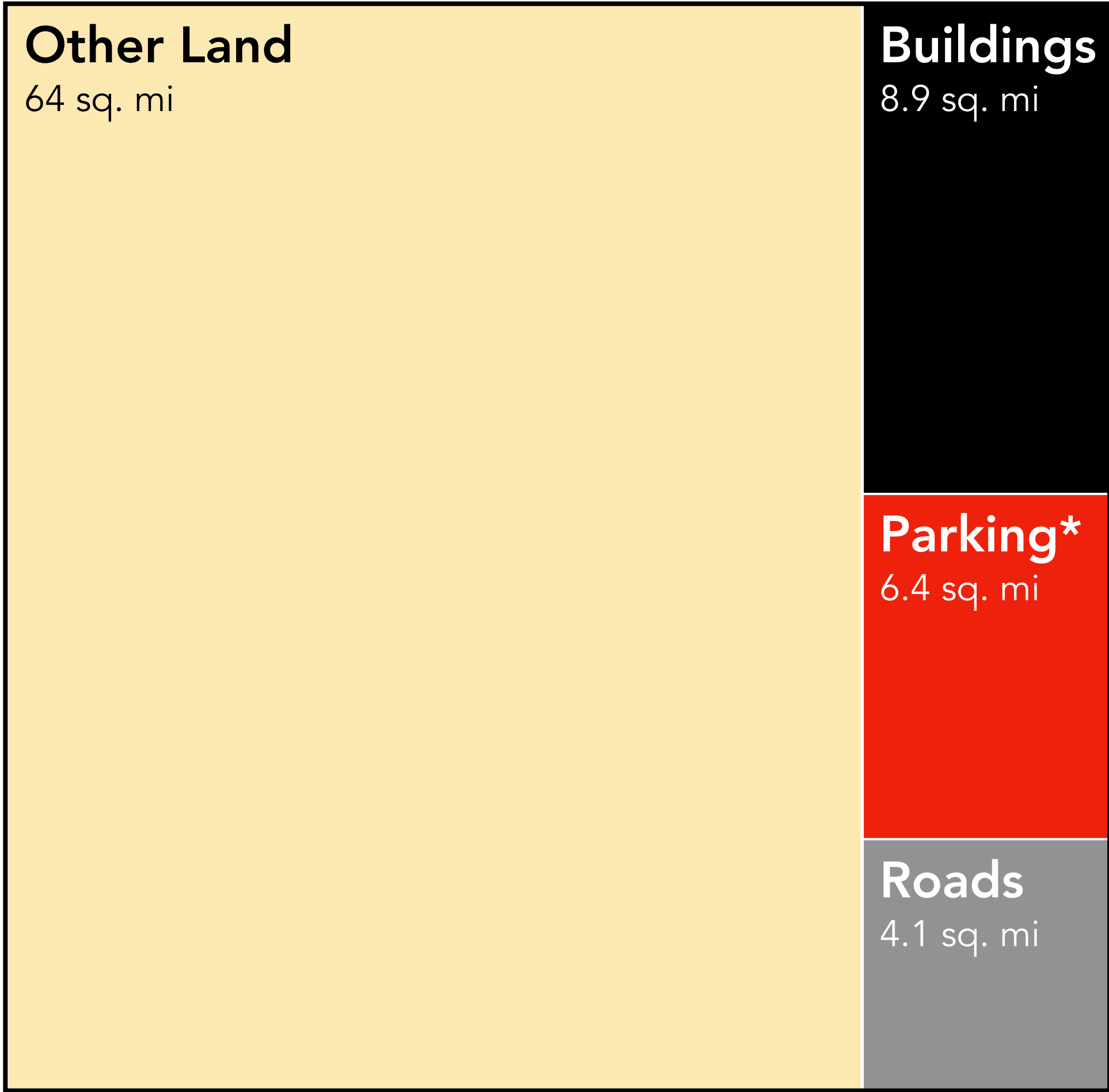
35 sq. mi



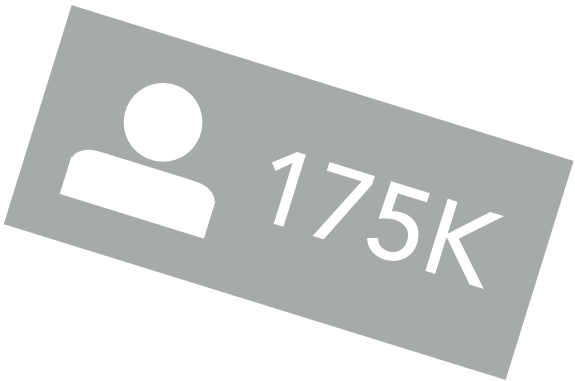
Springfield, MO

170K

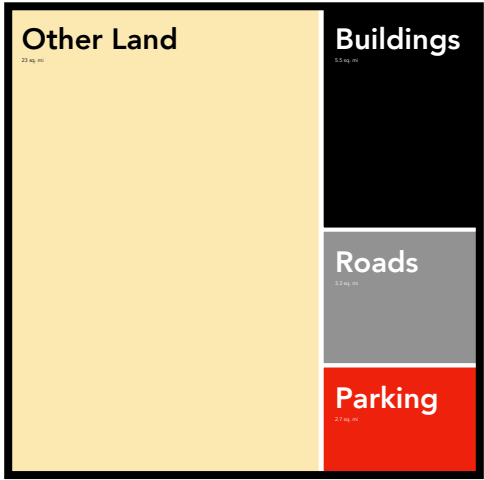
83 sq. mi



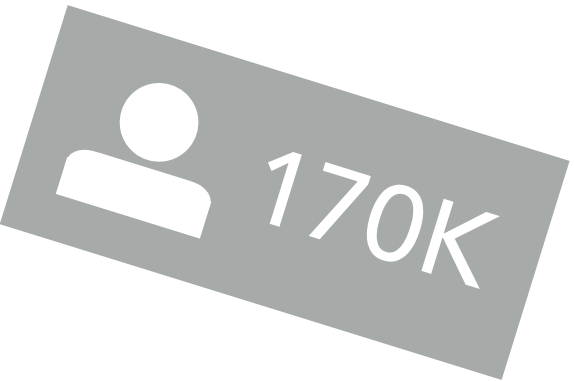
Eugene, OR



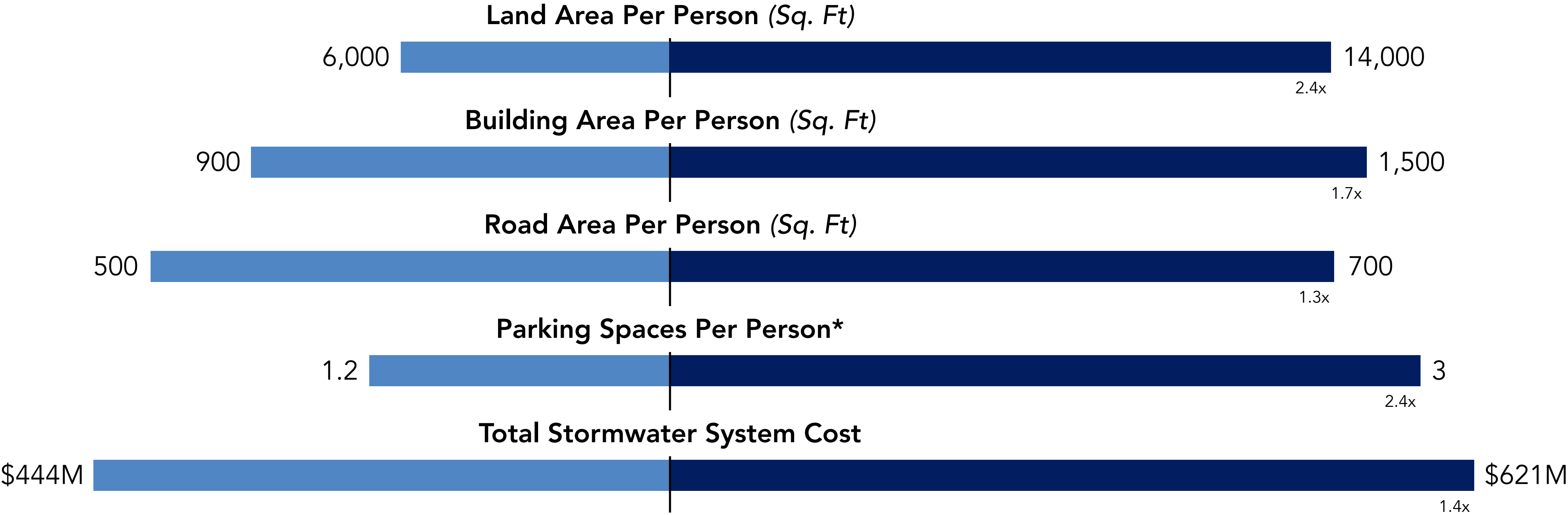
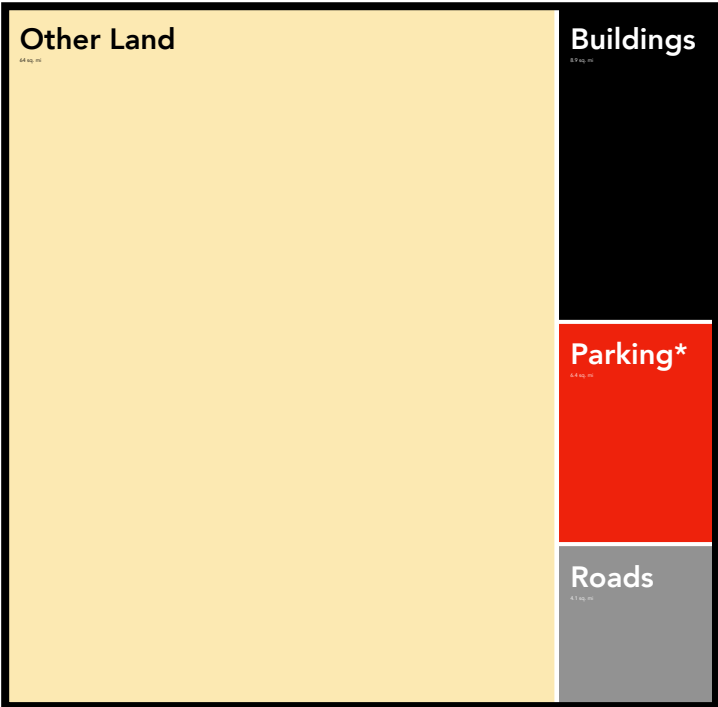
35 sq. mi



Springfield, MO



83 sq. mi



*1 parking space = 350 sq. ft

Source: City of Eugene OR (2018), City of Springfield MO (2022)

Annual Impacts of 10,000 Trees

Springfield, MO

x 2.4M

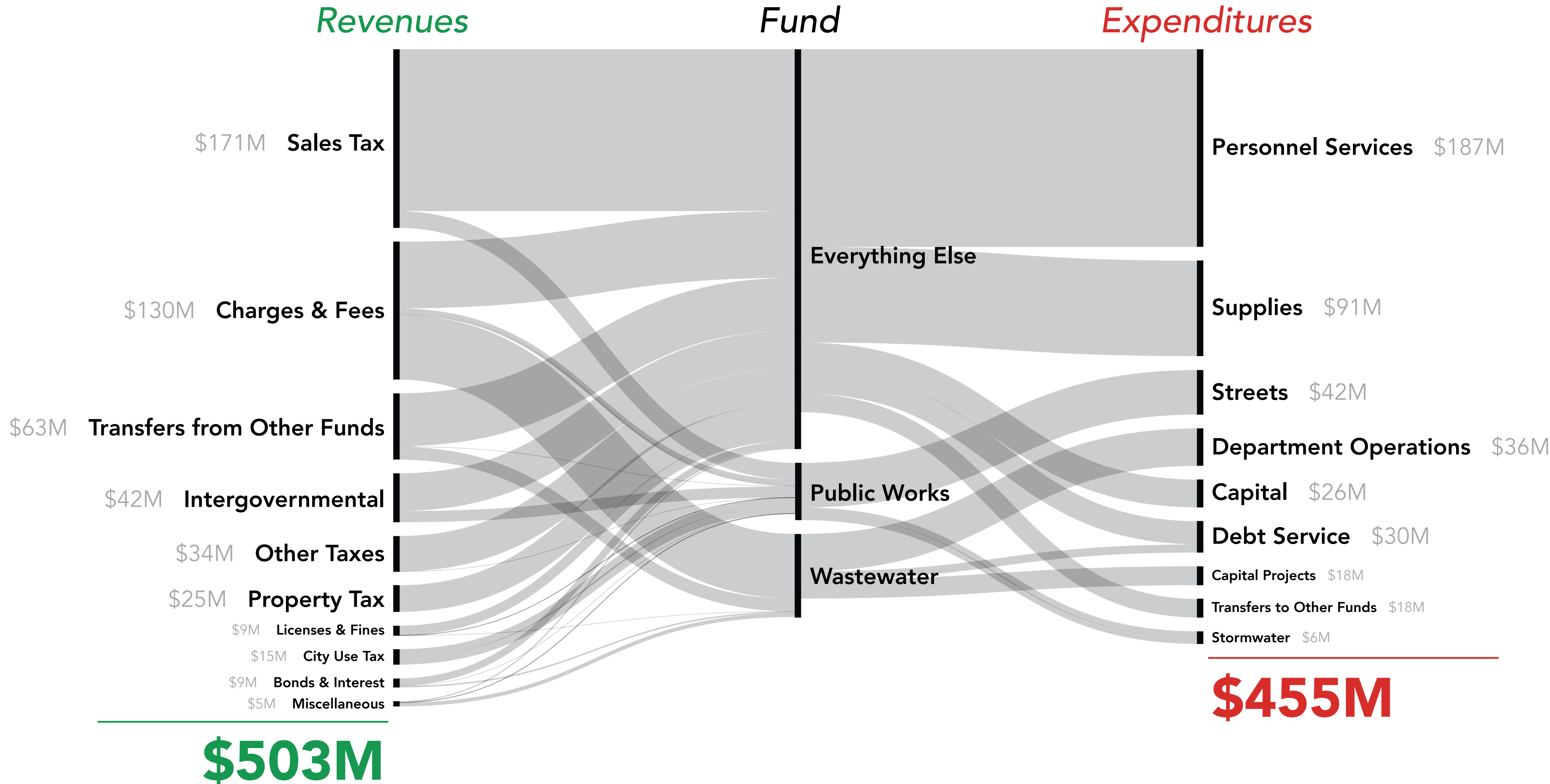
Benefit
\$276M

*energy savings,
stormwater runoff
reduction, and air-
pollutant uptake*

Net
\$96M

*tree care &
maintenance*

Cost
\$180M



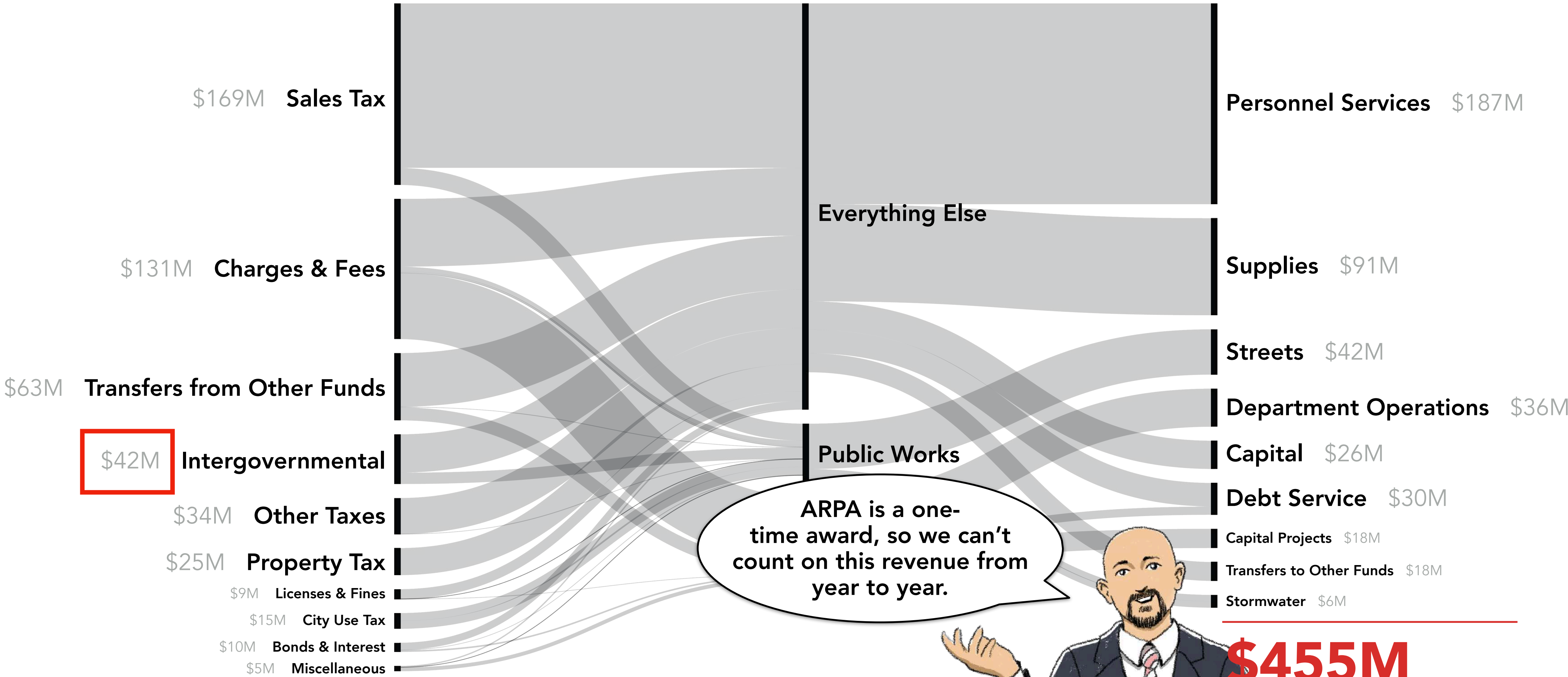
Financial Flow Diagram: Capital Spending

Springfield, MO

Revenues

Fund

Expenditures



ARPA is a one-time award, so we can't count on this revenue from year to year.



\$455M

\$503M - \$40M = \$463M

Question:

**Do you see the power
of math yet?**

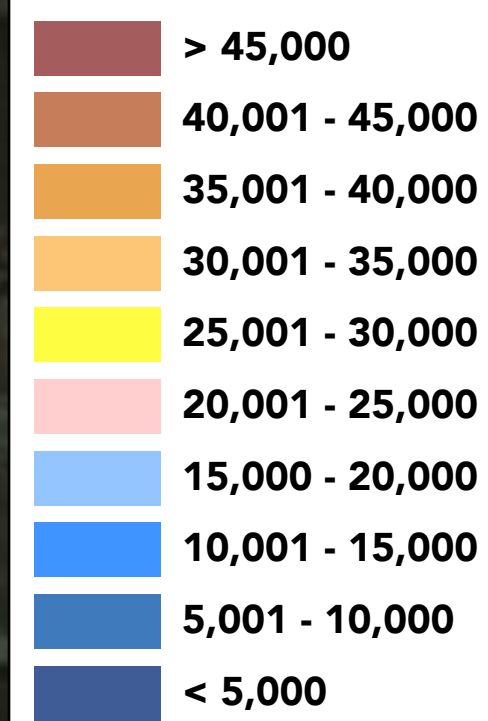
Observation:

**Math can reveal some
strange things.**

Land Value Per Acre

Cheyenne, WY

Land Value Per Acre (\$)



FAIR+EQUITABLE

AUGUST 2019 | VOLUME 17 | NUMBER 7

A publication of IAAO on appraisal and appraisal management, within the property assessment industry.

DON'T CUT ME OFF!

USING POST-VALUATION DATE EVIDENCE IN APPRAISALS | 8

INSIDE

IAAO CONFERENCE SESSION HIGHLIGHTS
Available session topics are vast and wide for 2019. | 17

HIGHEST AND BEST USE
TEGoVA extends Highest and Best Use value to encompass Hope Value | 28

Tax Code

4444444444
4444444444

4444444444
4444444444

International Association of Assessing Officers

Curriculum Training



Question:

**Do you want to see
weird?**

What about Asheville?



Photo Source: 2020 The Asheville Citizen Times

Reparations for slavery: Is Asheville a national model?

ABC News Live takes a closer look at Asheville's historic reparations plan.

By Devin Dwyer

July 30, 2020, 5:12 AM • 11 min read




North Carolina county becomes latest to back reparations

A board of commissioners in a North Carolina county has voted to support reparations and apologized for the county's role in slavery, segregation and systemic discrimination against Black residents

By The Associated Press

December 9, 2020, 2:29 PM • 3 min read




North Carolina City Approves Reparations for Black Residents

The measure passed by the City Council of Asheville, N.C., would provide funding to promote homeownership and business initiatives, but stopped short of stipulating direct payments.




CityLab Daily: Two Divergent Models for Local 'Reparations'

Also today: Can U.S. road builders break the highway habit, and how a plan to stabilize rents sent prices skyrocketing.

2021 Question:

**Does the property
assessment system
perpetuate inequity?**

Redlining

Asheville, NC

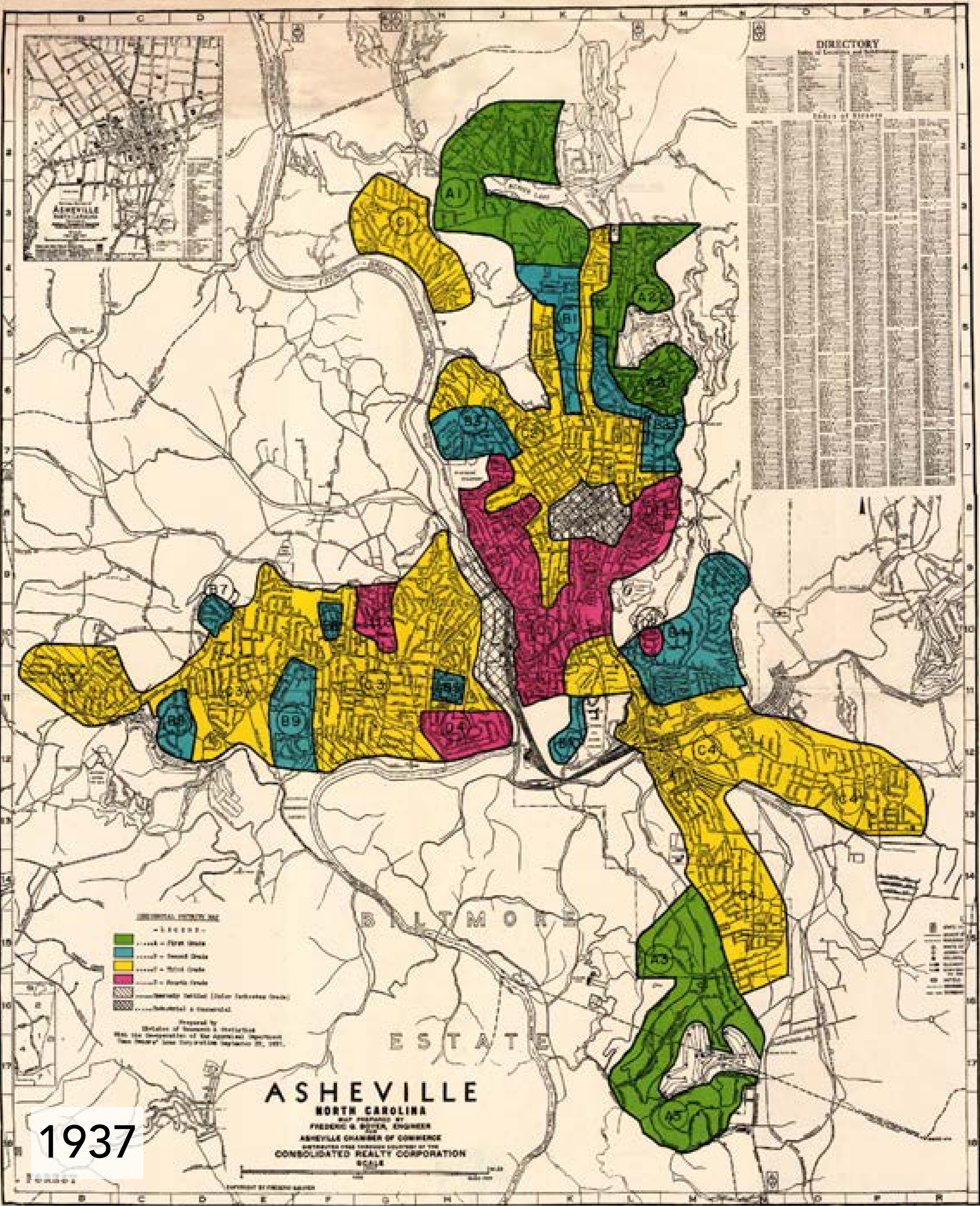
Area Rating

A "Best"

B "Still Desirable"

C "Definitely Declining"

D "Hazardous"



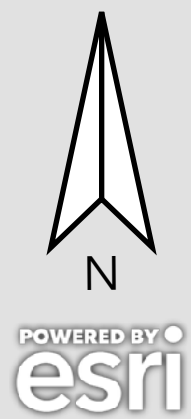
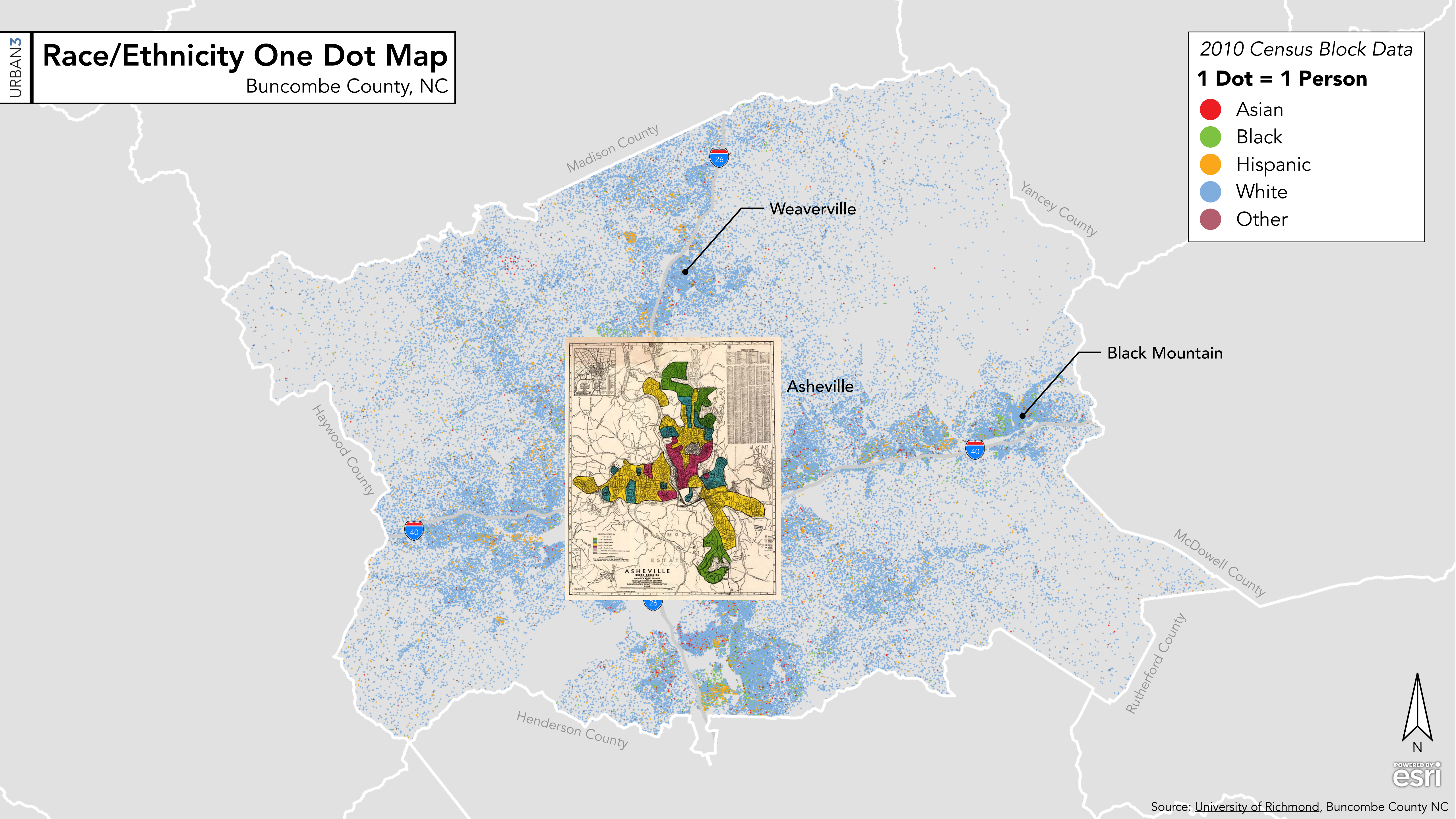
Race/Ethnicity One Dot Map

Buncombe County, NC

2010 Census Block Data

1 Dot = 1 Person

- Asian
- Black
- Hispanic
- White
- Other



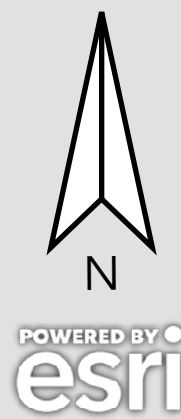
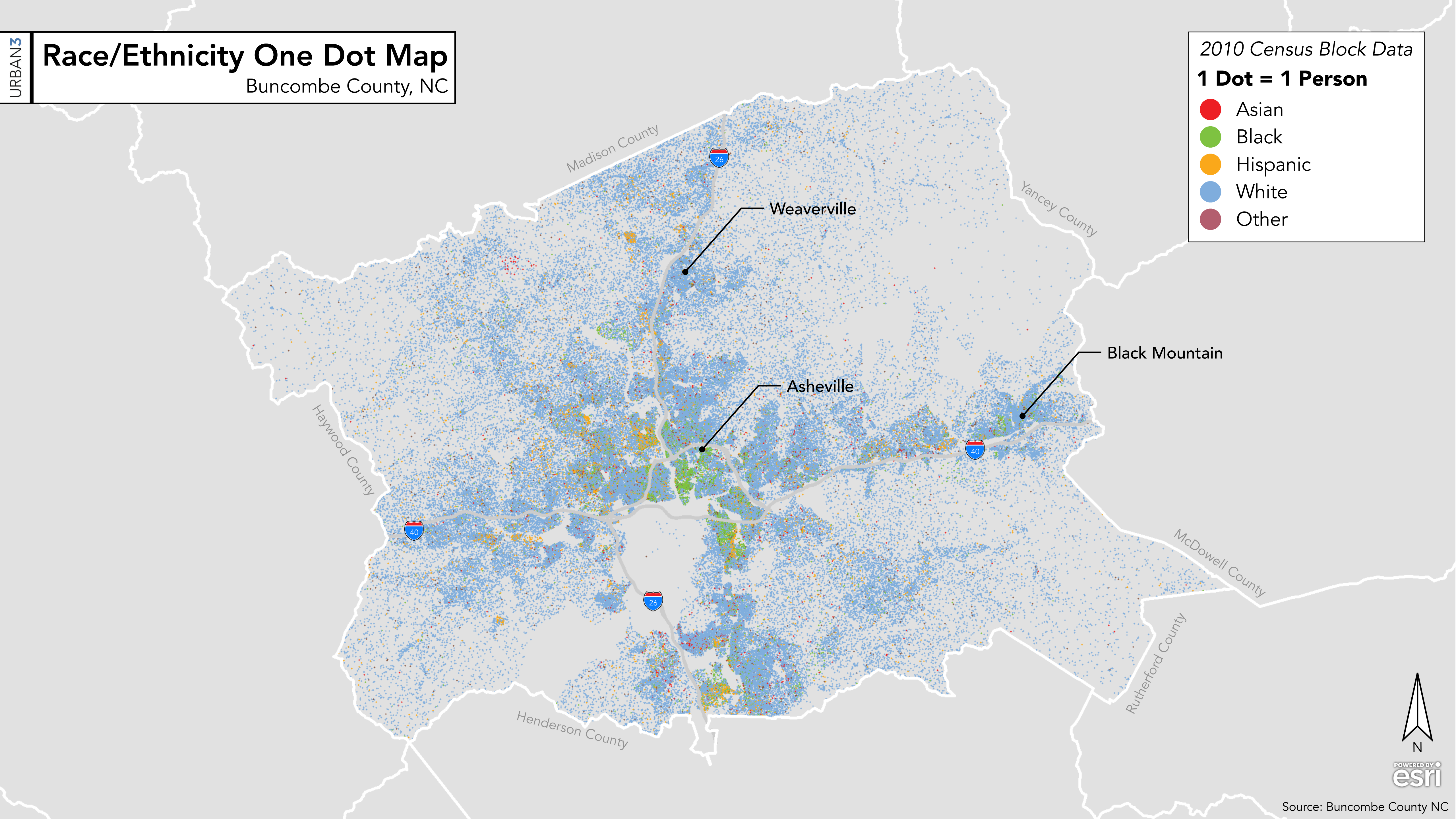
Race/Ethnicity One Dot Map

Buncombe County, NC

2010 Census Block Data

1 Dot = 1 Person

- Asian
- Black
- Hispanic
- White
- Other



Population Density by Race Asheville, NC

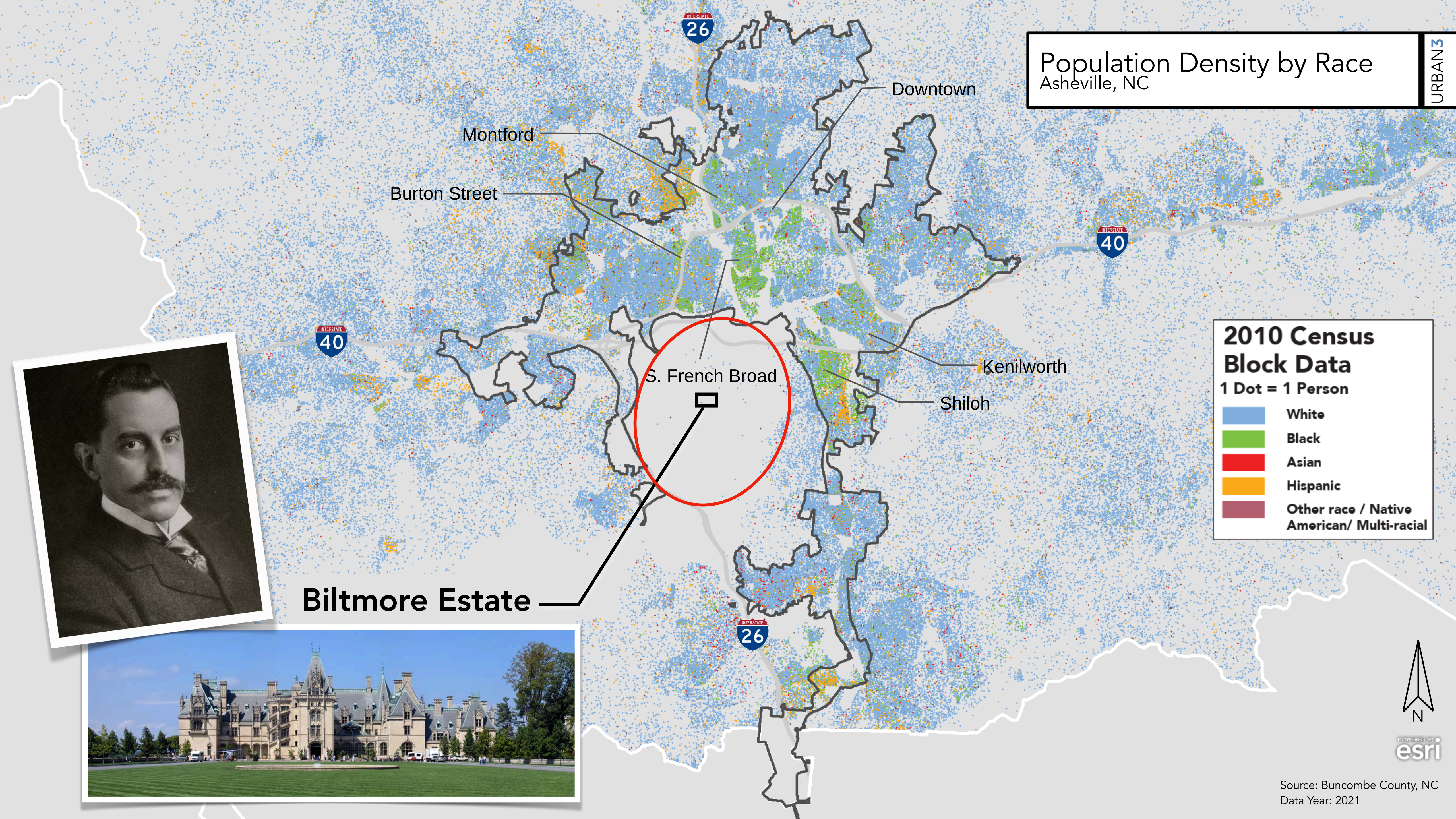
URBAN3

2010 Census Block Data

1 Dot = 1 Person



Biltmore Estate



POWERED BY
esri

Race/Ethnicity One Dot Map

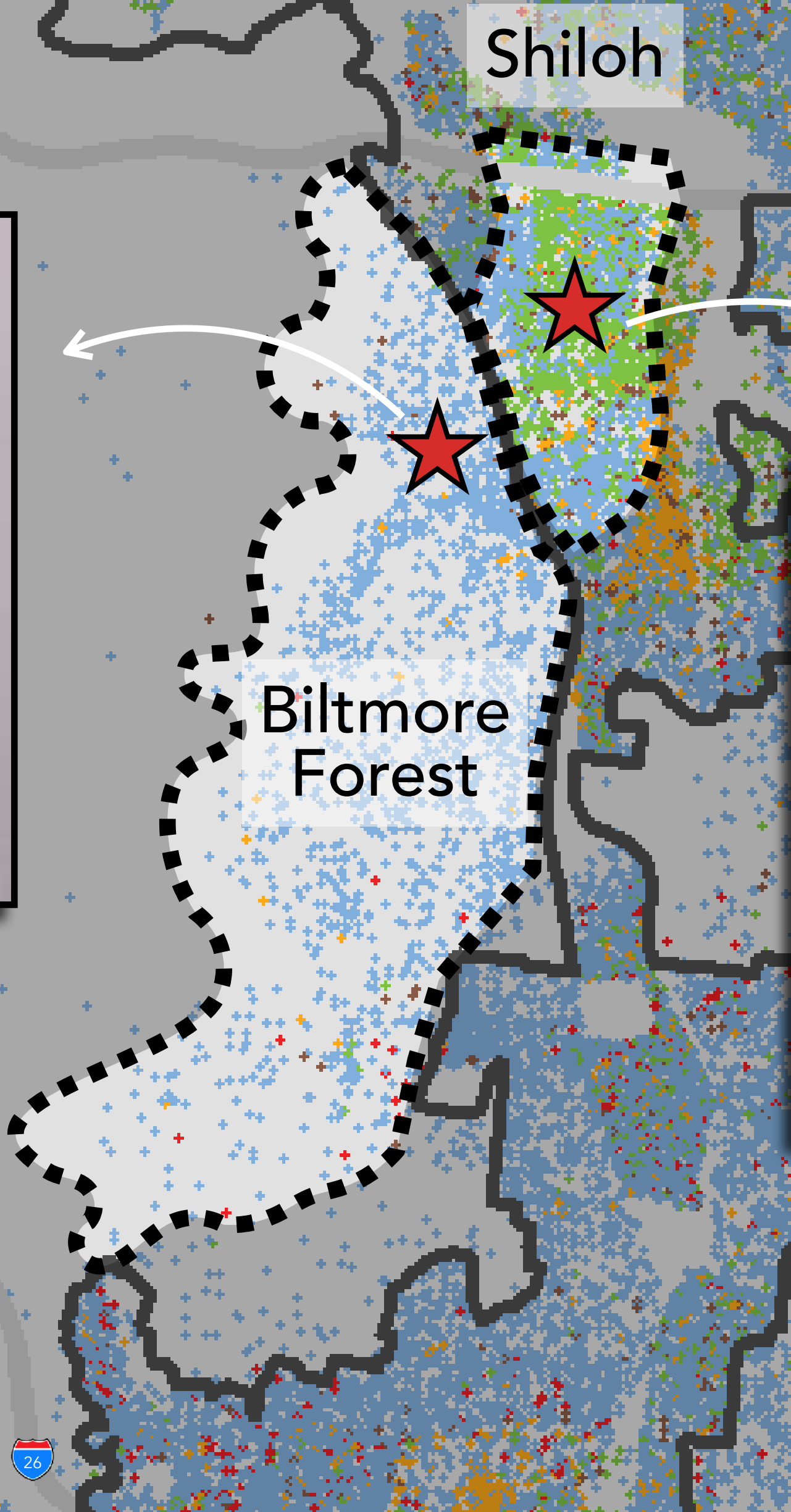
Asheville, NC

2010 Census Block Data
1 Dot = 1 Person

- Asian
- Black
- Hispanic
- White
- Other



Sidney Powell



Reggie Harrell



Land Value (Per Acre)



Building Value (Per Sq. Ft)



County Taxes (Per Acre)



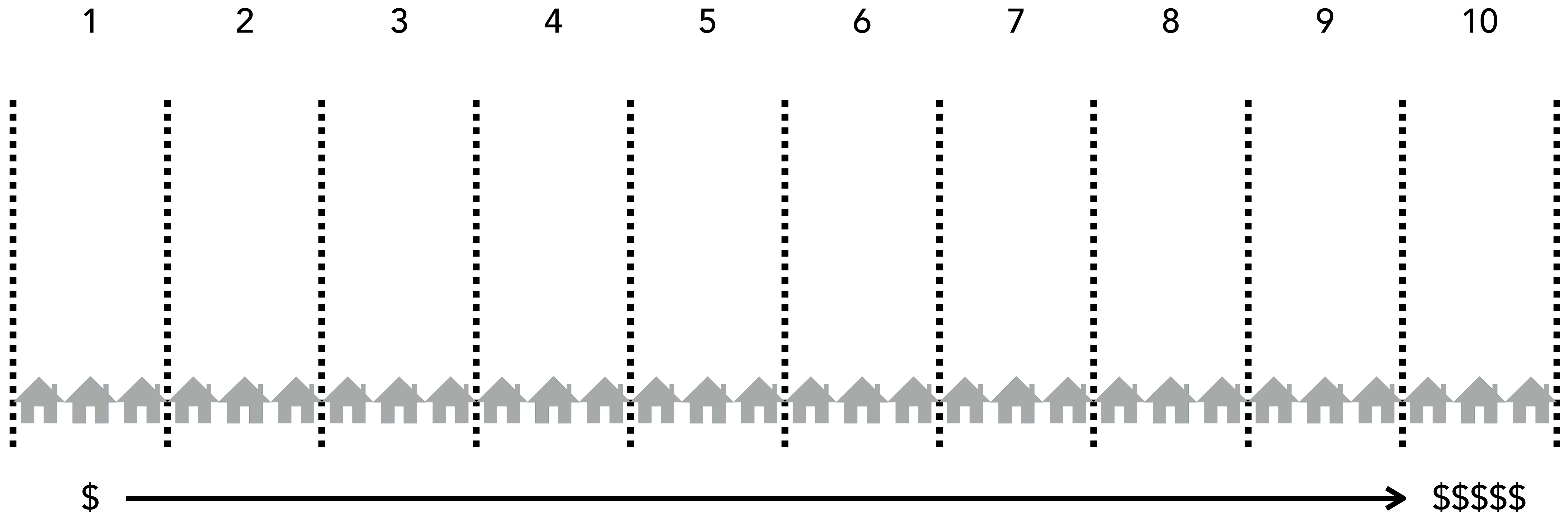
Value Increase (2017 - 2021)



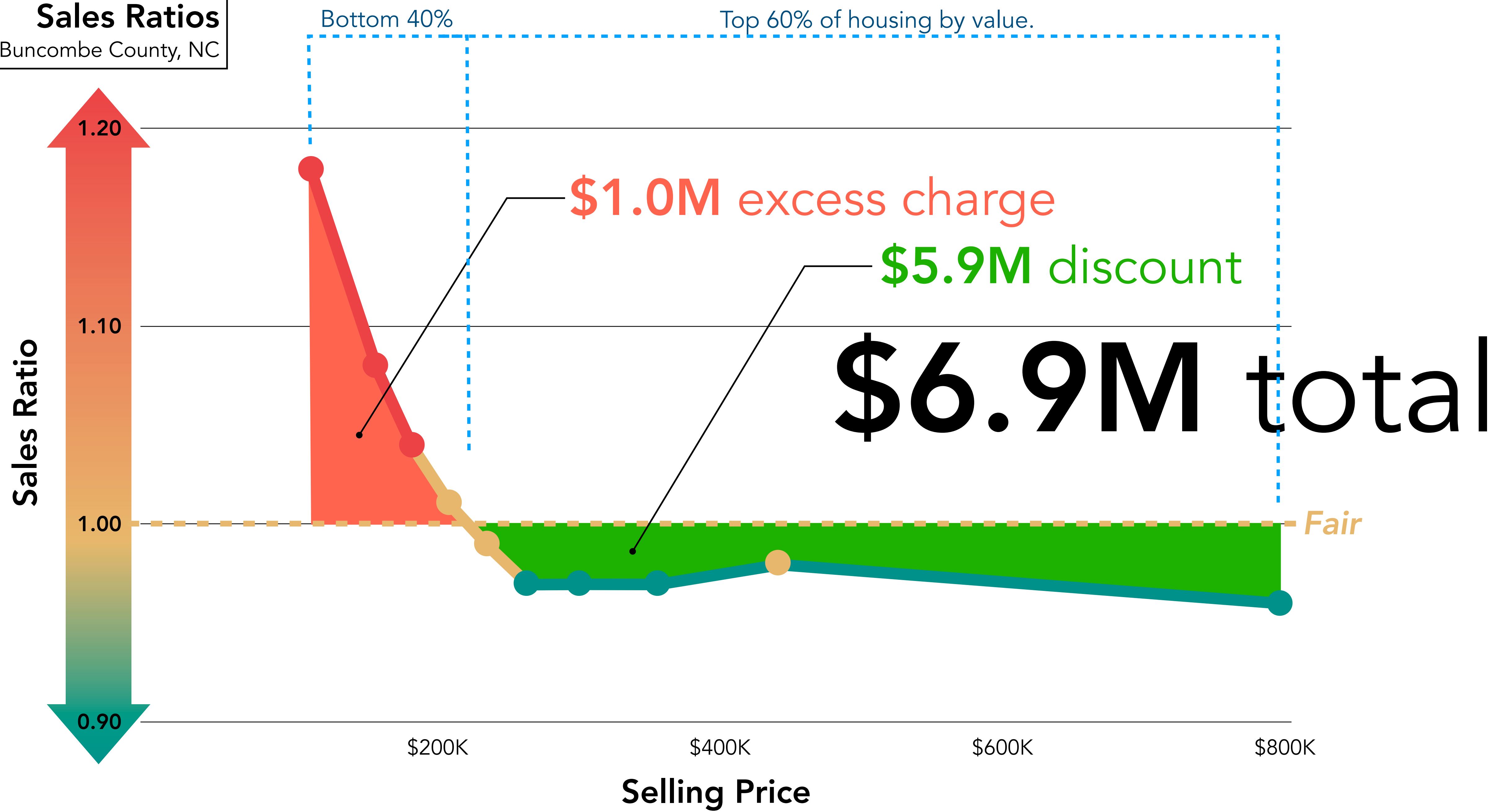
Sales Ratio

Definition



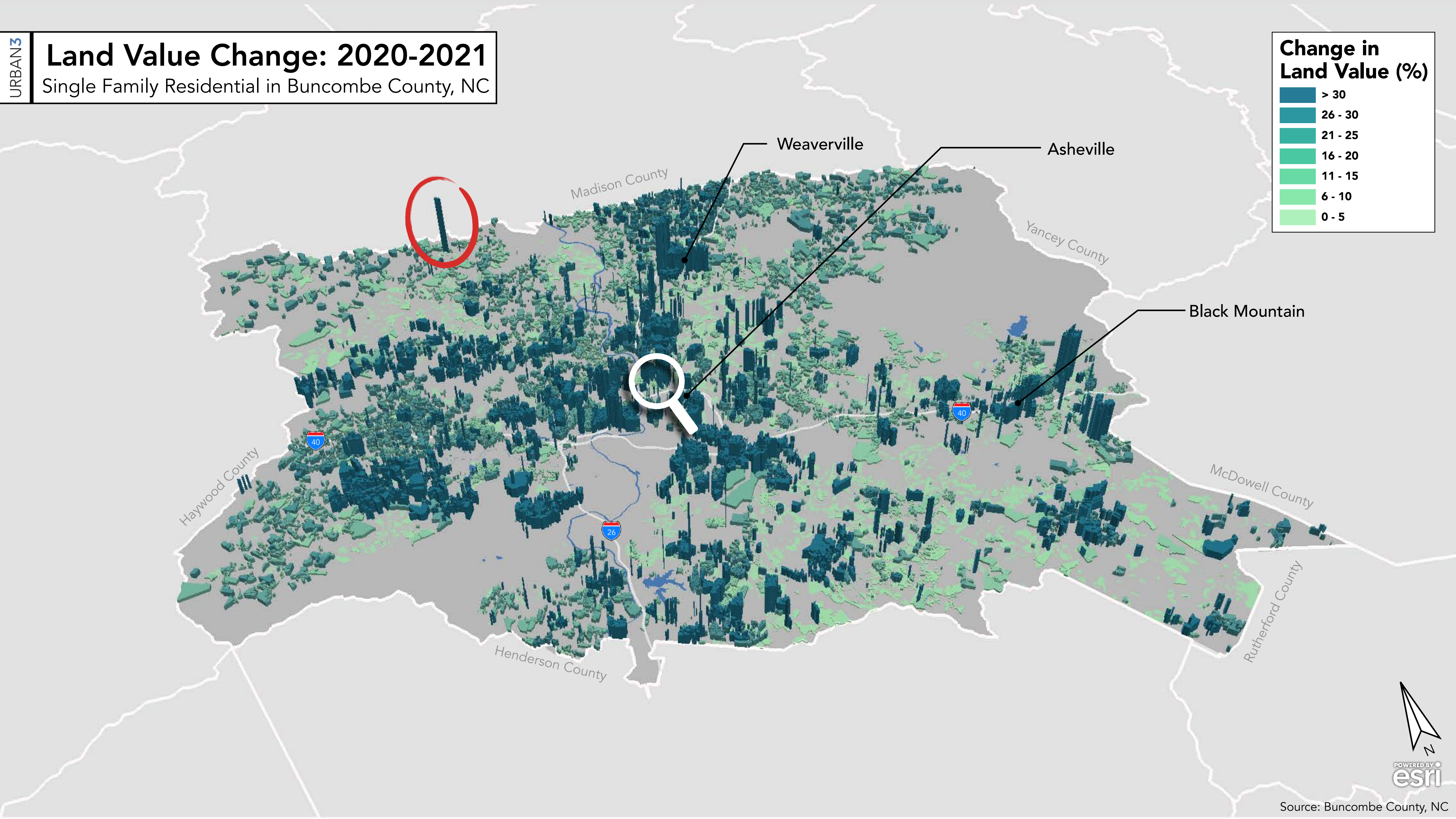
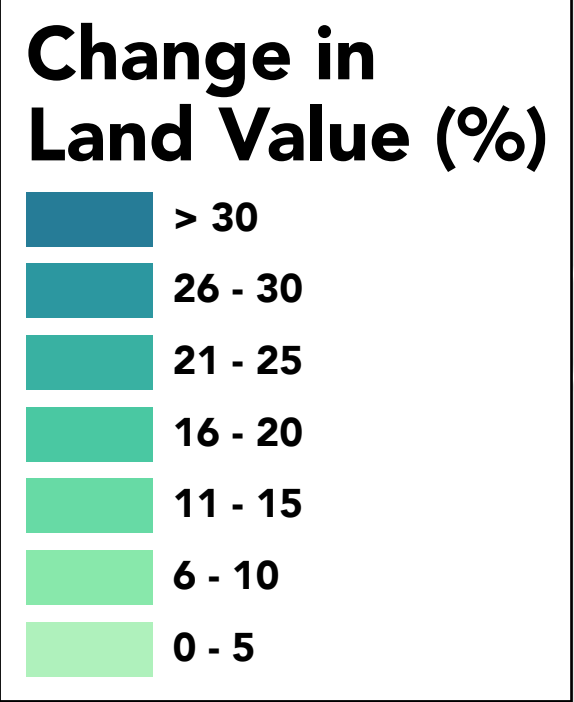


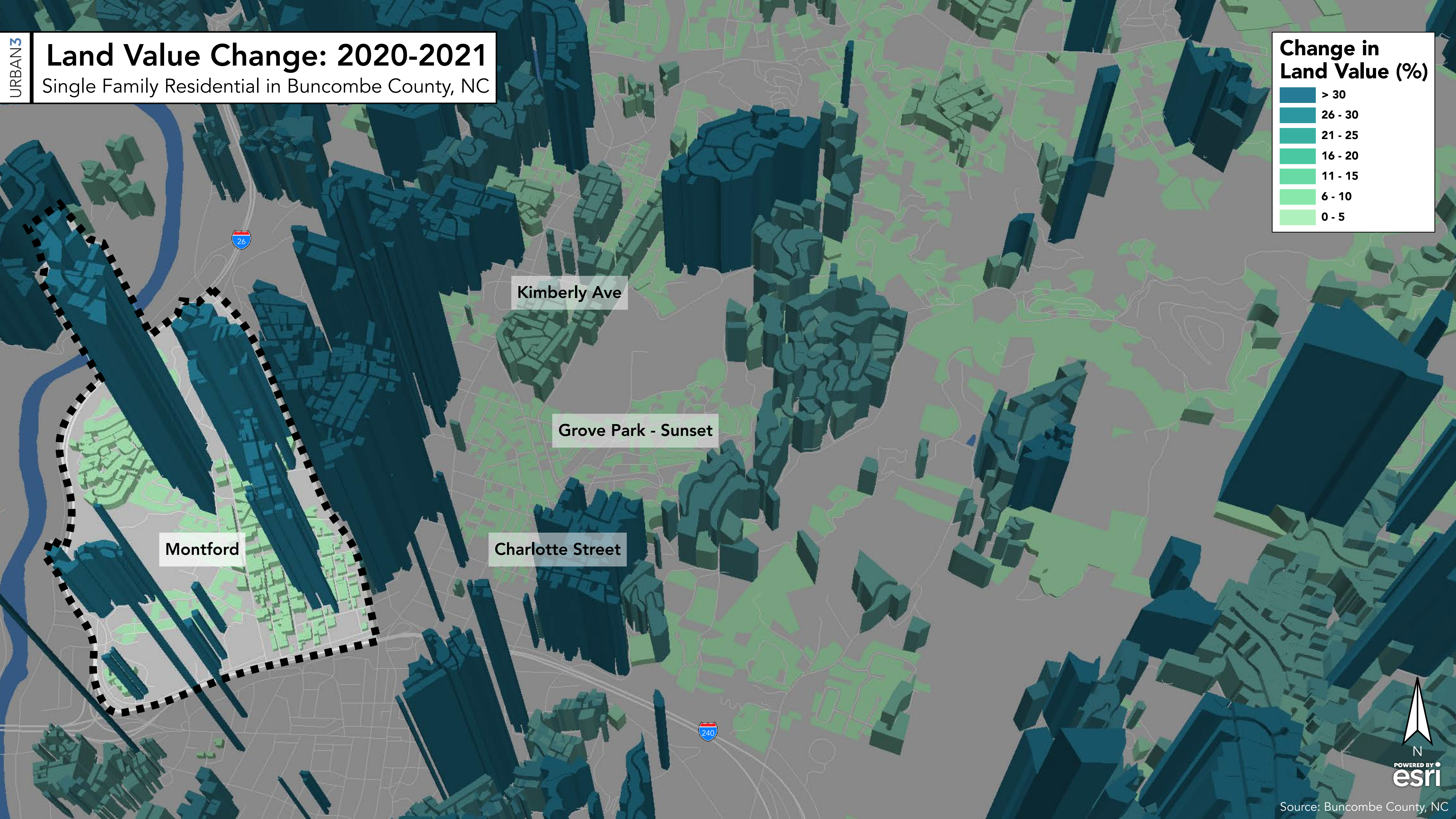




Land Value Change: 2020-2021

Single Family Residential in Buncombe County, NC





Land Value Change: 2020-2021

Single Family Residential in Buncombe County, NC

Change in Land Value (%)

- > 30
- 26 - 30
- 21 - 25
- 16 - 20
- 11 - 15
- 6 - 10
- 0 - 5

Kimberly Ave

Grove Park - Sunset

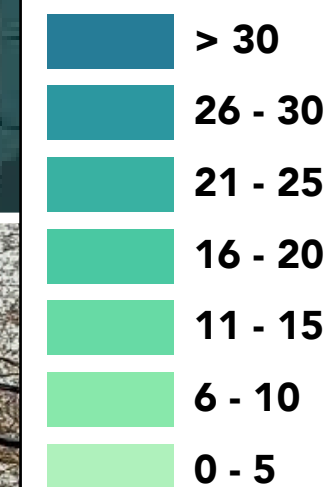
Charlotte Street

Montford

Land Value Change: 2020-2021

Single Family Residential in Buncombe County, NC

Change in Land Value (%)



Montford

Montford Ave.



96 Flint St

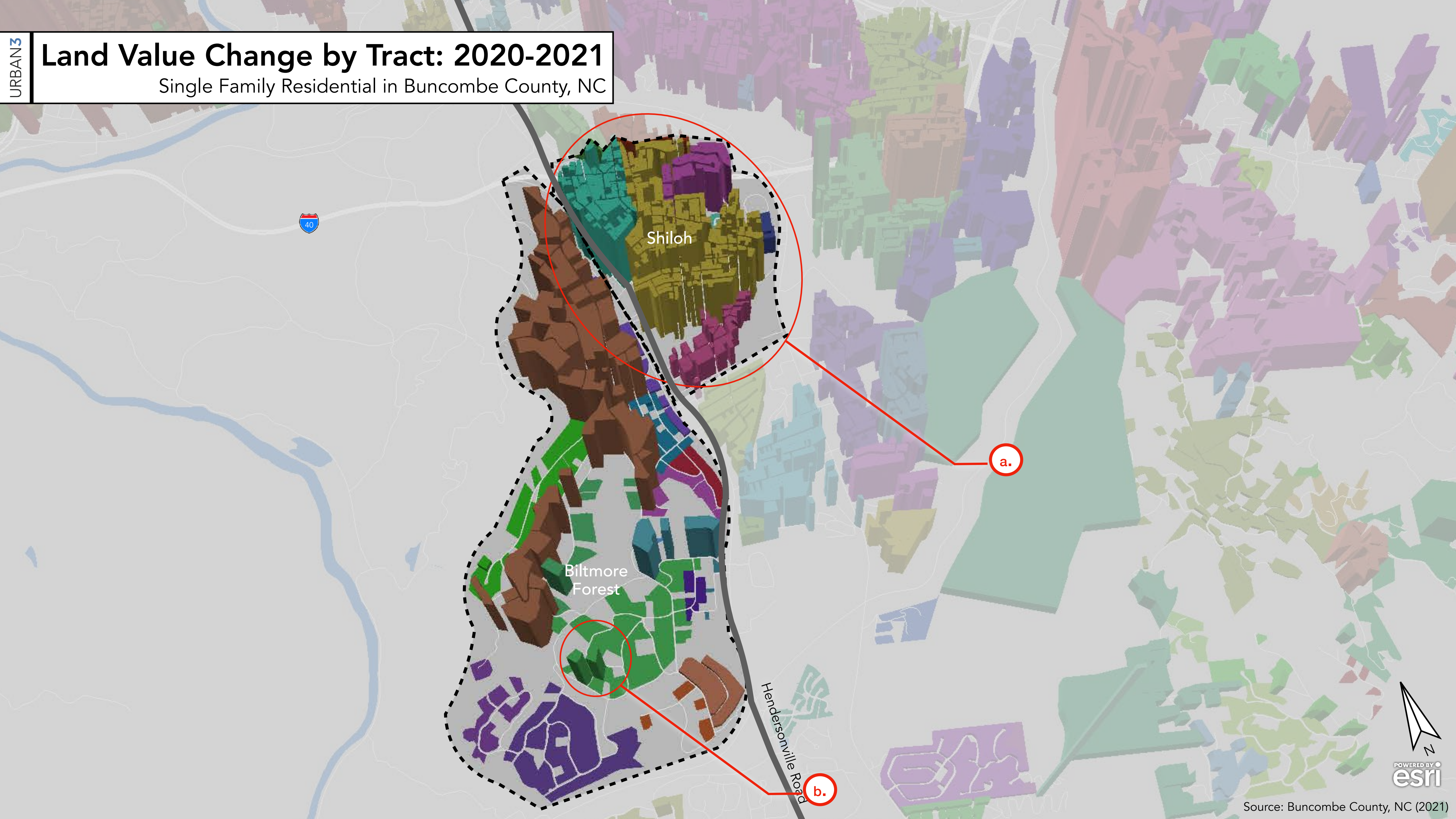
102% increase

98 Flint St

316% increase

Land Value Change by Tract: 2020-2021

Single Family Residential in Buncombe County, NC

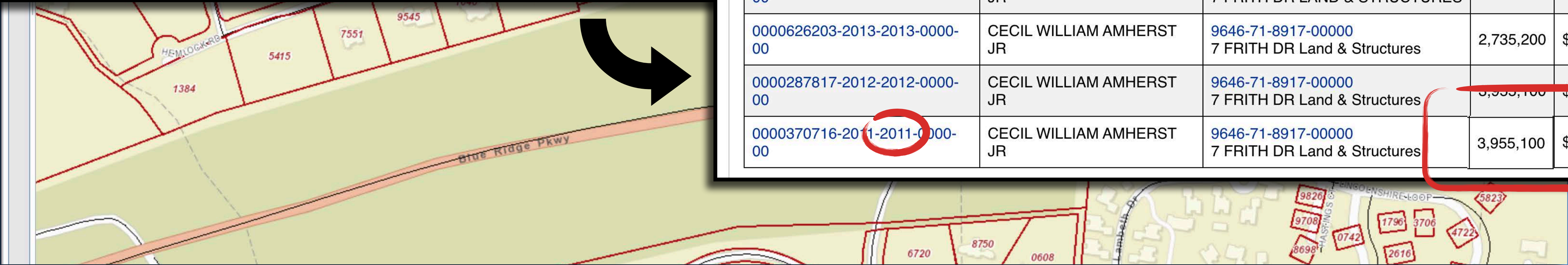


Mansions Losing Value

Buncombe County, NC



Spanish Mediterranean 1926 Mansion
16,000 sq. ft



Parcel Id Search

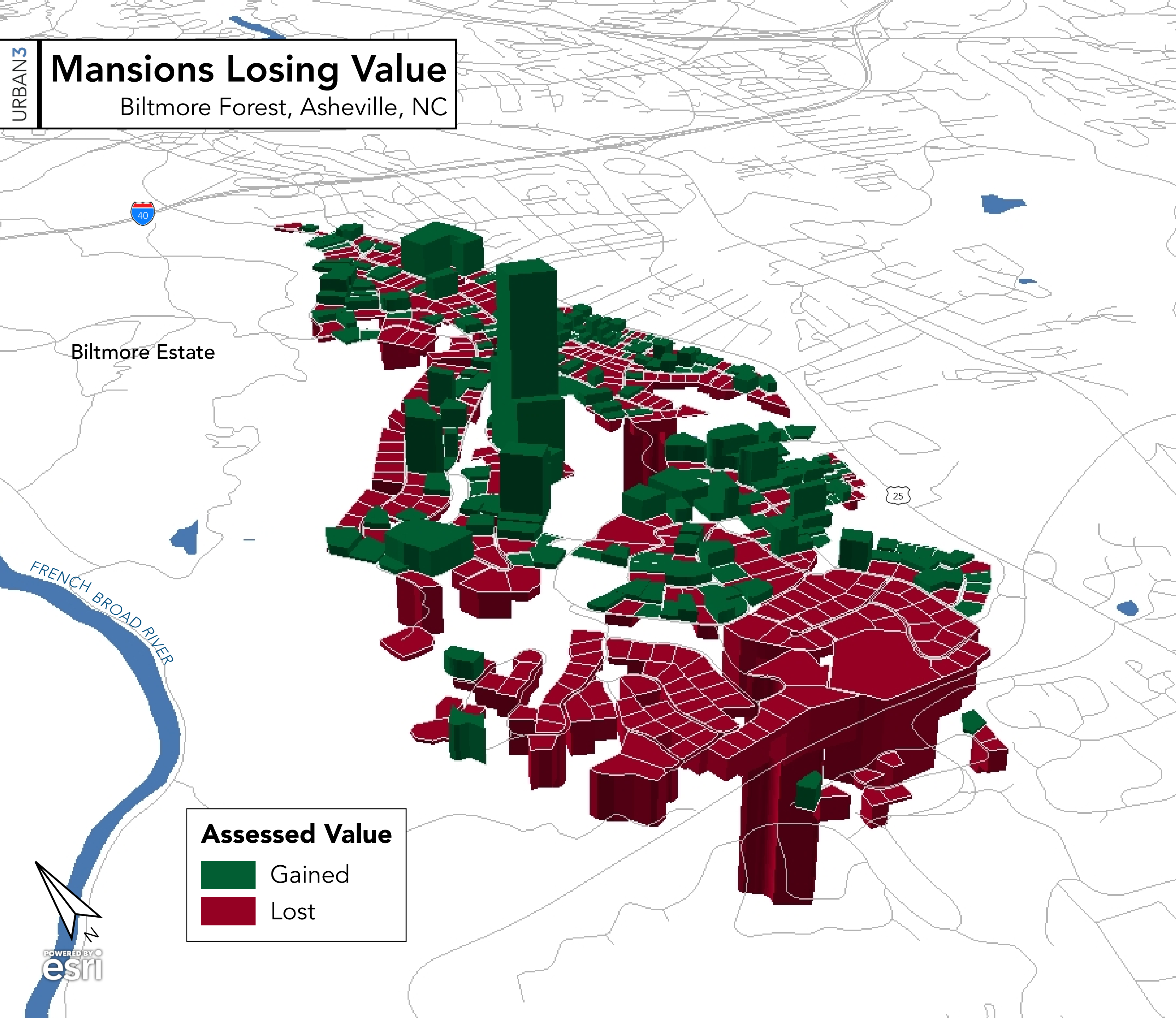
Search Bills - Parcel Id: 964671891700000

Displaying 01 to 11 of 11 records

Bill	Owner Names	PIN/VIN	Value	Due
0000749490-2021-2021-0000-00	7 FRITH DRIVE LLC	9646-71-8917-00000 7 FRITH DR LAND & STRUCTURES	3,057,200	\$0.00
0000749490-2020-2020-0000-00	7 FRITH DRIVE LLC	9646-71-8917-00000 7 FRITH DR LAND & STRUCTURES	3,057,200	\$0.00
0000749490-2019-2019-0000-00	CECIL WILLIAM AMHERST JR	9646-71-8917-00000 7 FRITH DR LAND & STRUCTURES	3,094,300	\$0.00
0000749490-2018-2018-0000-00	CECIL WILLIAM AMHERST JR	9646-71-8917-00000 7 FRITH DR LAND & STRUCTURES	3,094,300	\$0.00
0000749490-2017-2017-0000-00	CECIL WILLIAM AMHERST JR	9646-71-8917-00000 7 FRITH DR LAND & STRUCTURES	3,094,300	\$0.00
0000749490-2016-2016-0000-00	CECIL WILLIAM AMHERST JR	9646-71-8917-00000 7 FRITH DR LAND & STRUCTURES	2,735,200	\$0.00
0000749490-2015-2015-0000-00	CECIL WILLIAM AMHERST JR	9646-71-8917-00000 7 FRITH DR LAND & STRUCTURES	2,735,200	\$0.00
0000749490-2014-2014-0000-00	CECIL WILLIAM AMHERST JR	9646-71-8917-00000 7 FRITH DR LAND & STRUCTURES	2,735,200	\$0.00
0000626203-2013-2013-0000-00	CECIL WILLIAM AMHERST JR	9646-71-8917-00000 7 FRITH DR Land & Structures	2,735,200	\$0.00
0000287817-2012-2012-0000-00	CECIL WILLIAM AMHERST JR	9646-71-8917-00000 7 FRITH DR Land & Structures	3,955,100	\$0.00
0000370716-2011-2011-0000-00	CECIL WILLIAM AMHERST JR	9646-71-8917-00000 7 FRITH DR Land & Structures	3,955,100	\$0.00

Mansions Losing Value

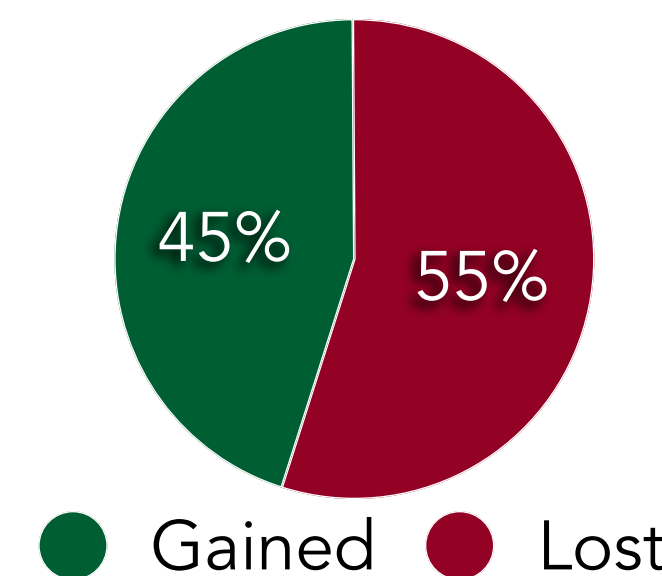
Biltmore Forest, Asheville, NC



Assessed Value



Assessed Value (2011 - 2021)



+\$50M
278 houses

-\$40M

Net Position

-\$90M
337 houses



**WE NEED AN URBAN
RENEWAL PROGRAM**

FOR CHAD AND BRAD

Land Value Change by Tract: 2020-2021

Single Family Residential in Buncombe County, NC

Tax effect due to
faulty assessments:

2002-2022

Over-collected taxes in Shiloh:

+\$1.5M

Under-collected taxes in
Biltmore Forest:

-\$4.4M

Shiloh

Biltmore
Forest

Hendersonville Road

b.

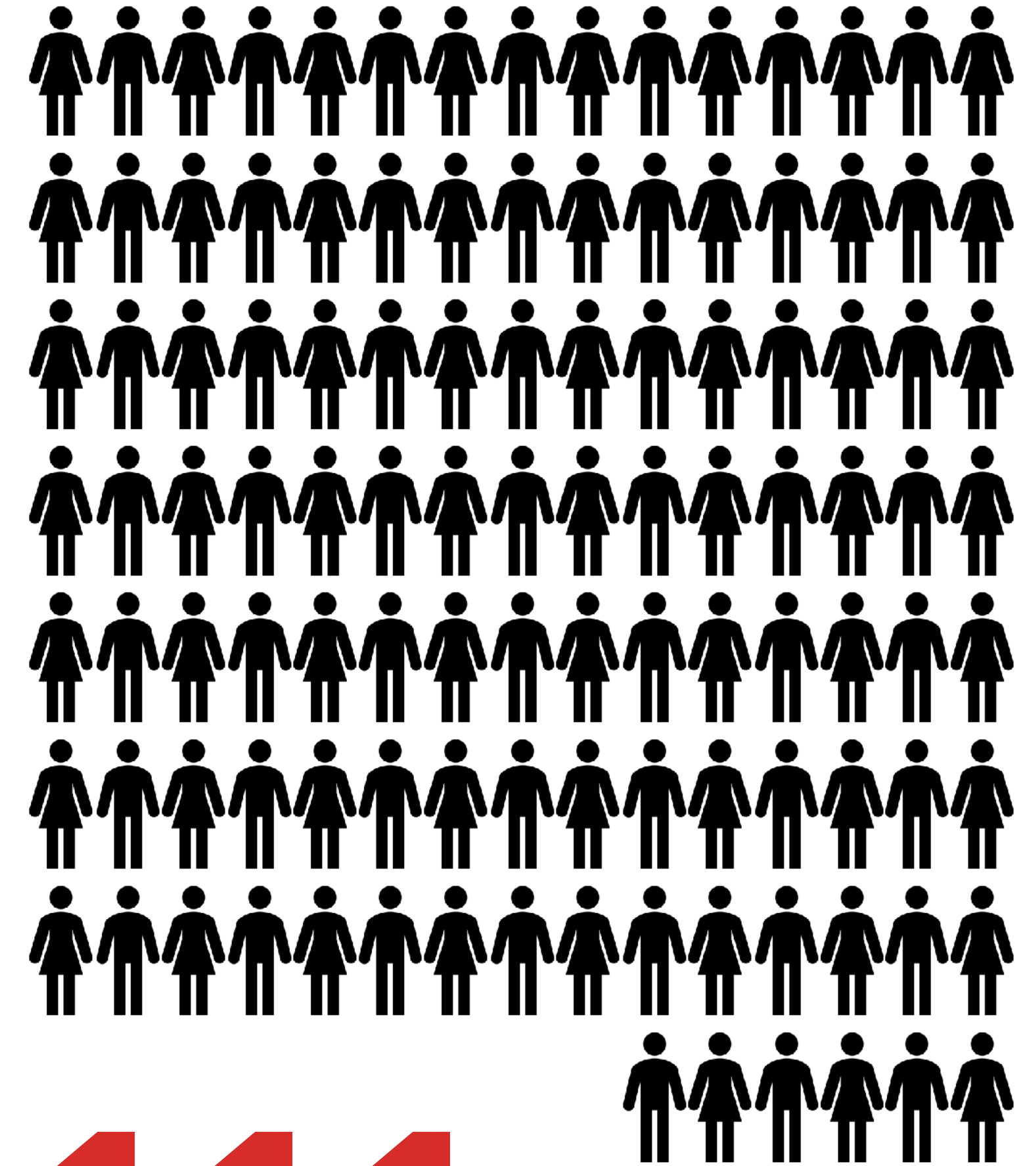
Taxable Value Lost

Buncombe County, NC

The uncollected taxes in Biltmore Forest:*

\$4.4M

=



111

School teachers' annual salaries

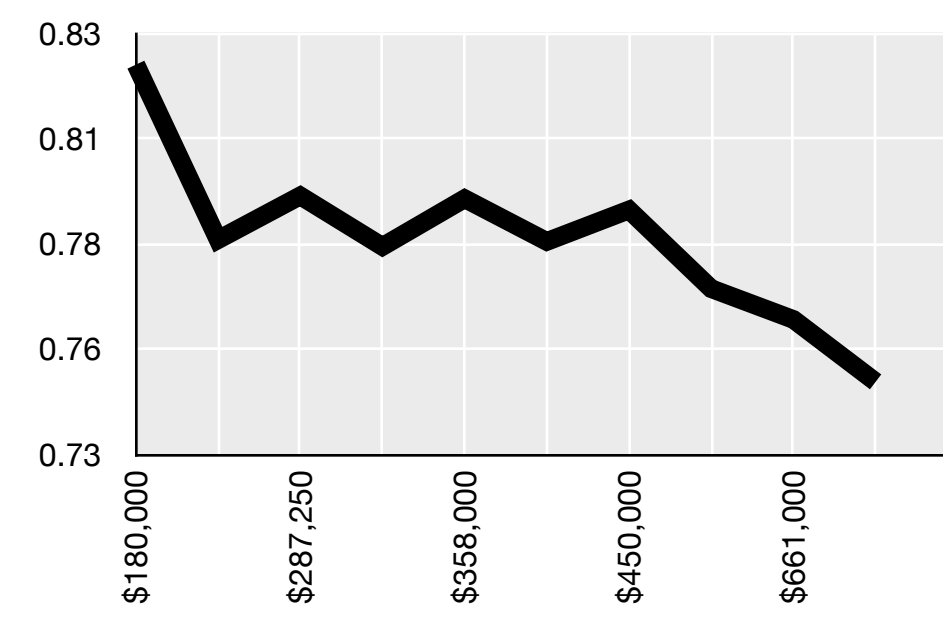
**calculated against inflation adjusted values.*

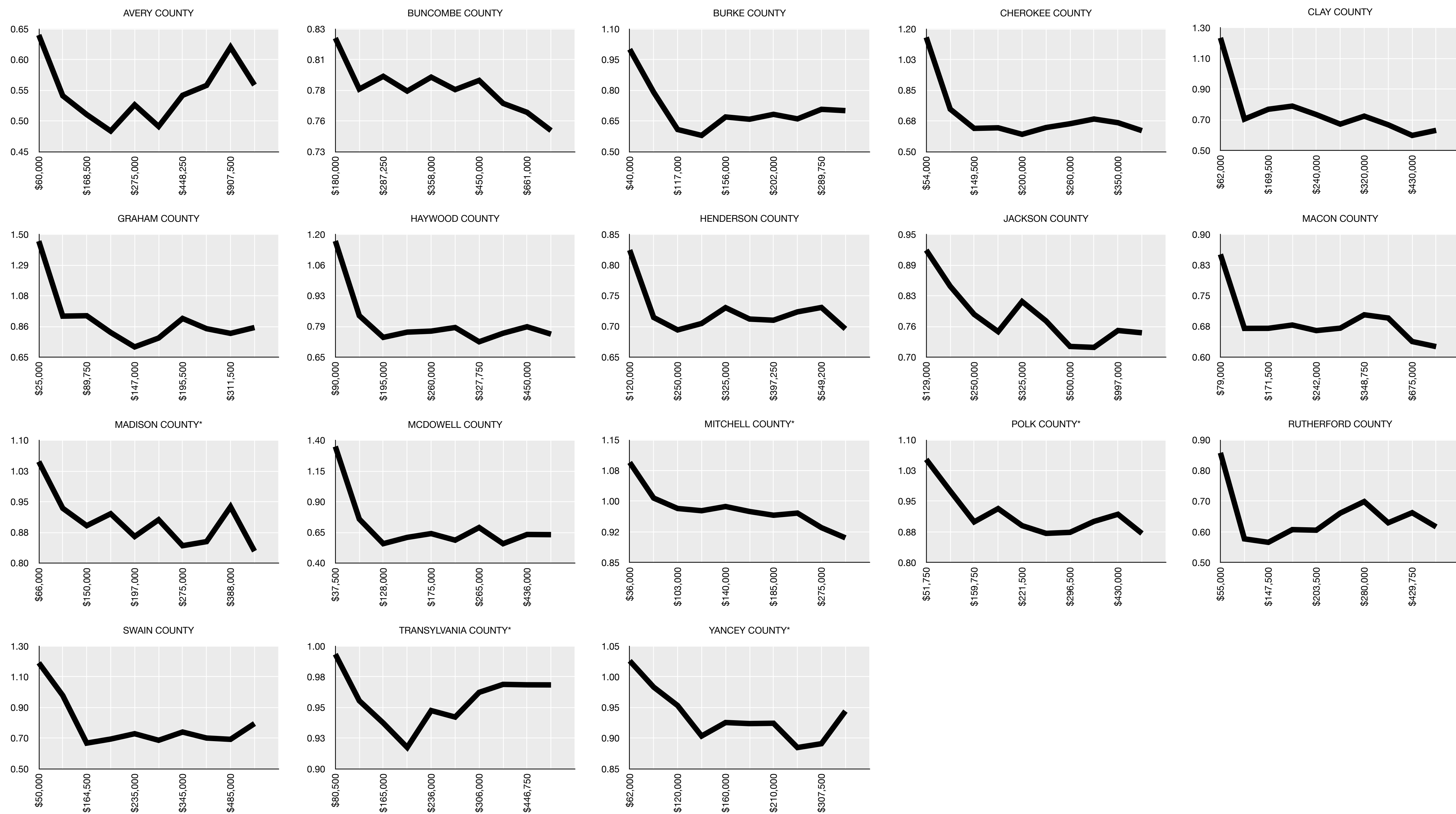


The adventures of

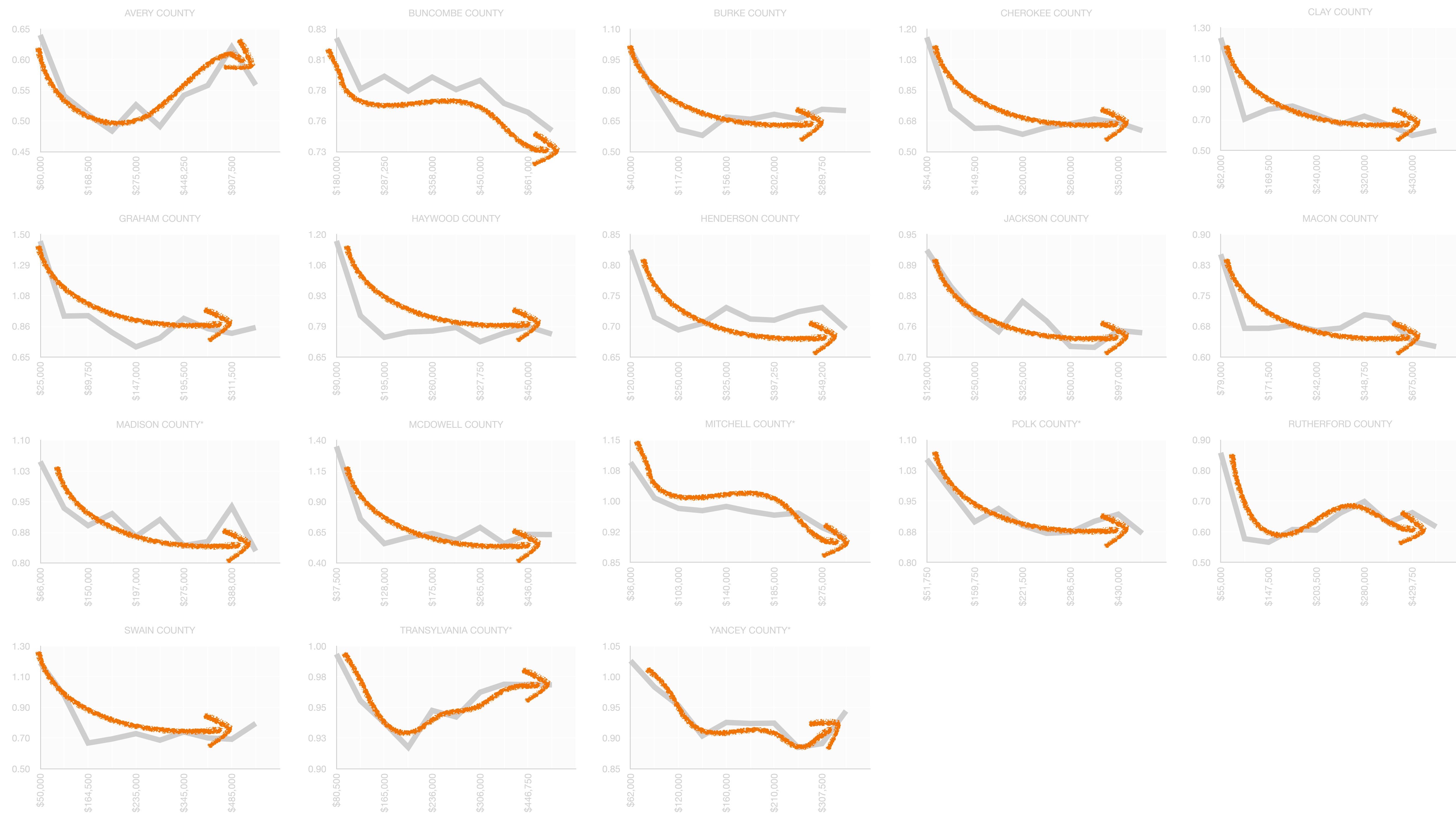
REVERSE ROBIN HOOD

BUNCOMBE COUNTY





*County Reported to NCDOR (2022)



Ratio Gap of Sales Prices to Assessed Value

Macon County, NC

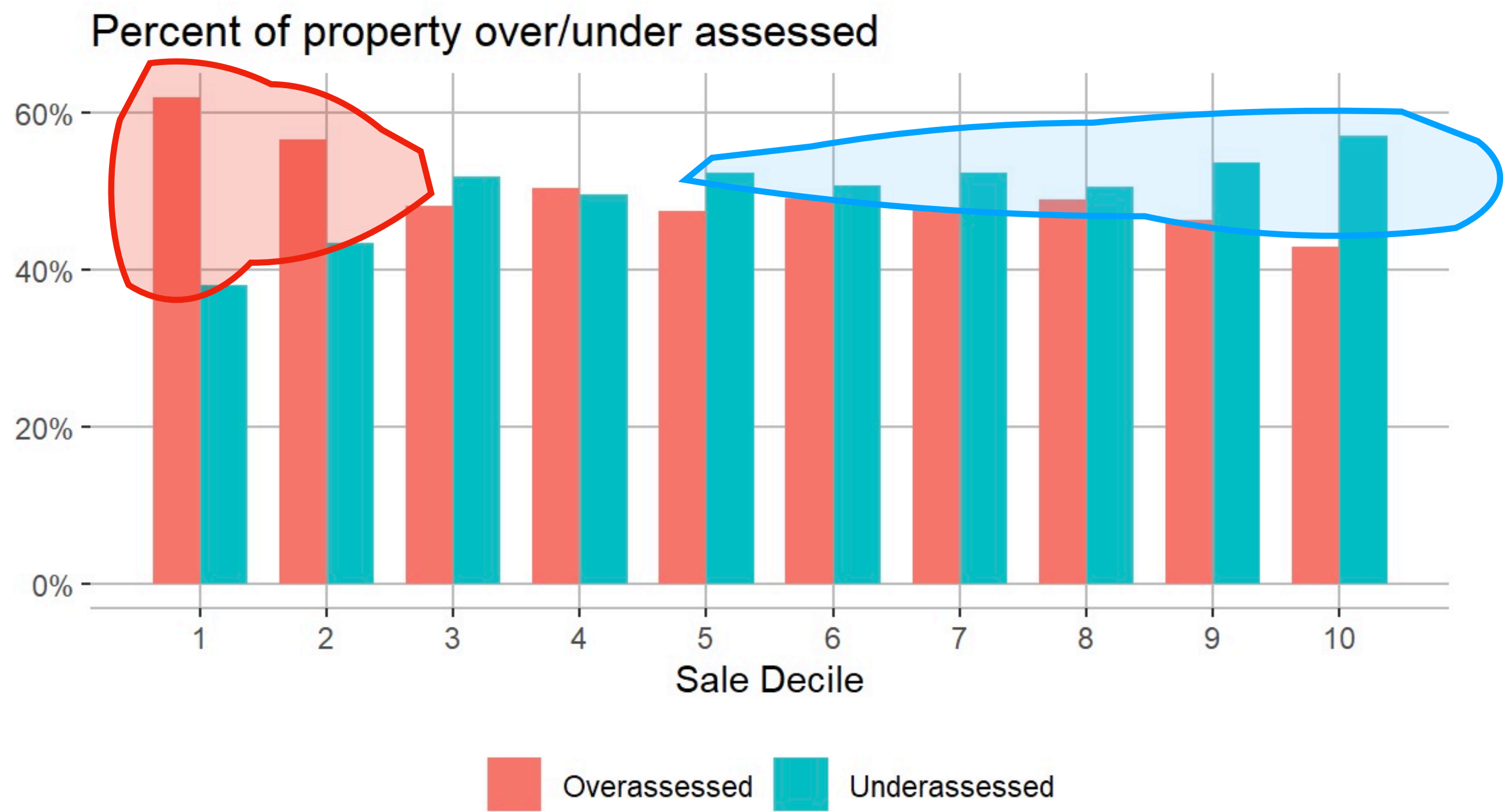
Table 3.1

Table 3.1 presents a simple analysis of effective tax rate by sale decile (where sale decile 1 consists of the most inexpensive homes in this jurisdiction and 10 the most expensive). A property’s “fair” tax bill is the bill that would have been charged if the property was taxed at the average rate, and the “shift” is the difference between the fair bill and the actual bill. In 2023, the average effective tax rate in Macon County, North Carolina was 0.28%.

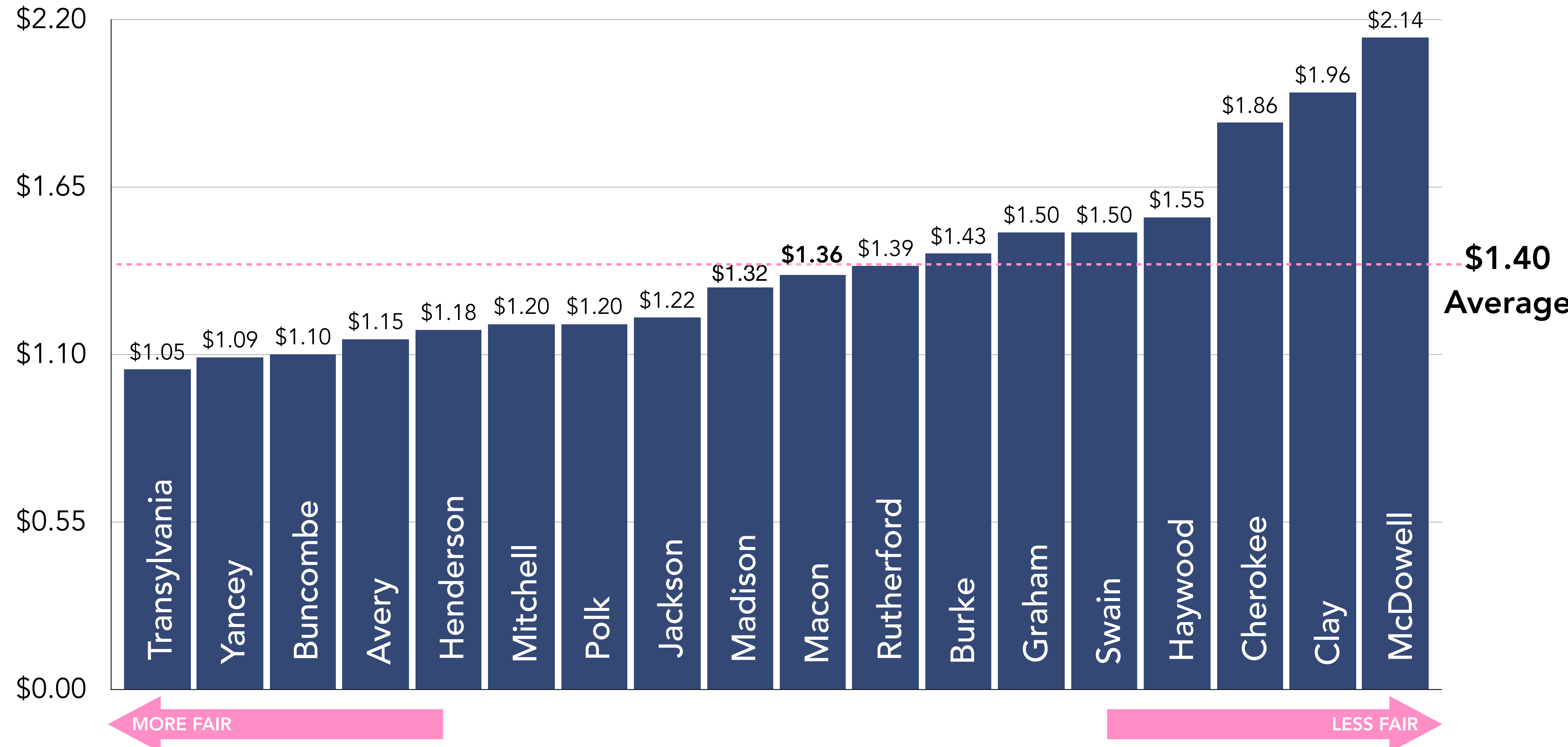
Tax Rate by Sale Decile						
Tax Year	Sale Decile	Effective Tax Rate	Average Sale	Average Tax Bill	Fair Tax Bill	Average Shift
2023	1	0.42%	\$96,838.36	\$388.55	\$313.81	\$74.74
2023	2	0.37%	\$160,568	\$590.42	\$520.33	\$70.09
2023	3	0.33%	\$212,911	\$697.62	\$689.95	\$7.68
2023	4	0.31%	\$247,671	\$780.06	\$802.59	-\$22.53
2023	5	0.32%	\$292,924	\$928.47	\$949.23	-\$20.76
2023	6	0.31%	\$346,278	\$1,075.13	\$1,122.13	-\$47.00
2023	7	0.30%	\$419,938	\$1,251.45	\$1,360.82	-\$109.37
2023	8	0.30%	\$530,840	\$1,571.70	\$1,720.21	-\$148.50
2023	9	0.30%	\$772,278	\$2,293.01	\$2,502.59	-\$209.58
2023	10	0.29%	\$1,787,632	\$5,171.99	\$5,792.88	-\$620.89

For example, in 2023, the average property in the bottom decile sold for a price of \$96,838.36 and had a tax bill of \$388.55. If this property was taxed at the average rate of all other properties, its fair bill would be \$313.81, meaning that the homeowner **overpaid by \$74.74, or 23.8% above** the fair tax. Correspondingly, the average property in the top decile sold for \$1,787,632 and had a tax bill of \$5,171.99. If this property was taxed at the average rate of all other property, its fair bill would be \$5,792.88, meaning that the homeowner **underpaid by \$620.89, or 10.7% below** the fair tax.

Figure 2.2



For every \$1.00 that the highest value homes are assessed in taxable value, lowest value homes are assessed....



*County Reported to NCDOR (2022)

Question:

**Why does the system
need to change?**



Which Knob is Causing Distortion?



Lawsuit Over New York City’s Property Tax System Can Proceed, Court Says

The lawsuit seeks to overturn a system that has been under fire because it favors wealthier homeowners. The housing groups that sued hope to distribute the tax burden more equitably.

 Share full article





 35



A lawsuit challenging New York’s property tax system had been considered a long shot but could bring major changes for New York City residents. Janice Chung for The New York Times



By [Mihir Zaveri](#)

March 19, 2024

A lawsuit that could upend New York City’s property tax system was cleared to move forward by the state’s highest court on Tuesday. The decision is a victory for housing groups that complain that the system favors owners of wealthy Brooklyn brownstones and high-end Manhattan condos over renters and owners in lower-income neighborhoods.

The 4-to-3 decision by the State Court of Appeals strikes at one of the most intractable elements of New York’s housing crisis: Nearly everyone agrees that the property tax system is inequitable and opaque and puts a burden on lower-income people. But while [many politicians have proposed](#) overhauls over the years, none have succeeded at making

The lawsuit takes aim at forcing change through a group of property owners called Tax Equity Now.

TENNY’s lawsuit says that homes with equivalent values are currently assessed and taxed at different rates depending on where they are, and one of its claims is that the system disproportionately affects racial minorities and may even perpetuate segregation.

“ Nearly everyone agrees that the property tax system is inequitable, and opaque and puts a burden on lower-income people.”

His Brownstone Is Worth \$5.4 Million. Why Is His Tax Bill So Low?

Housing advocates and even some homeowners in wealthier neighborhoods say New York’s property tax system is unfair. A court case could force the city to make changes.

📄

Share full article

➦

🔖

💬

792



By Mihir Zaveri and Camille Baker

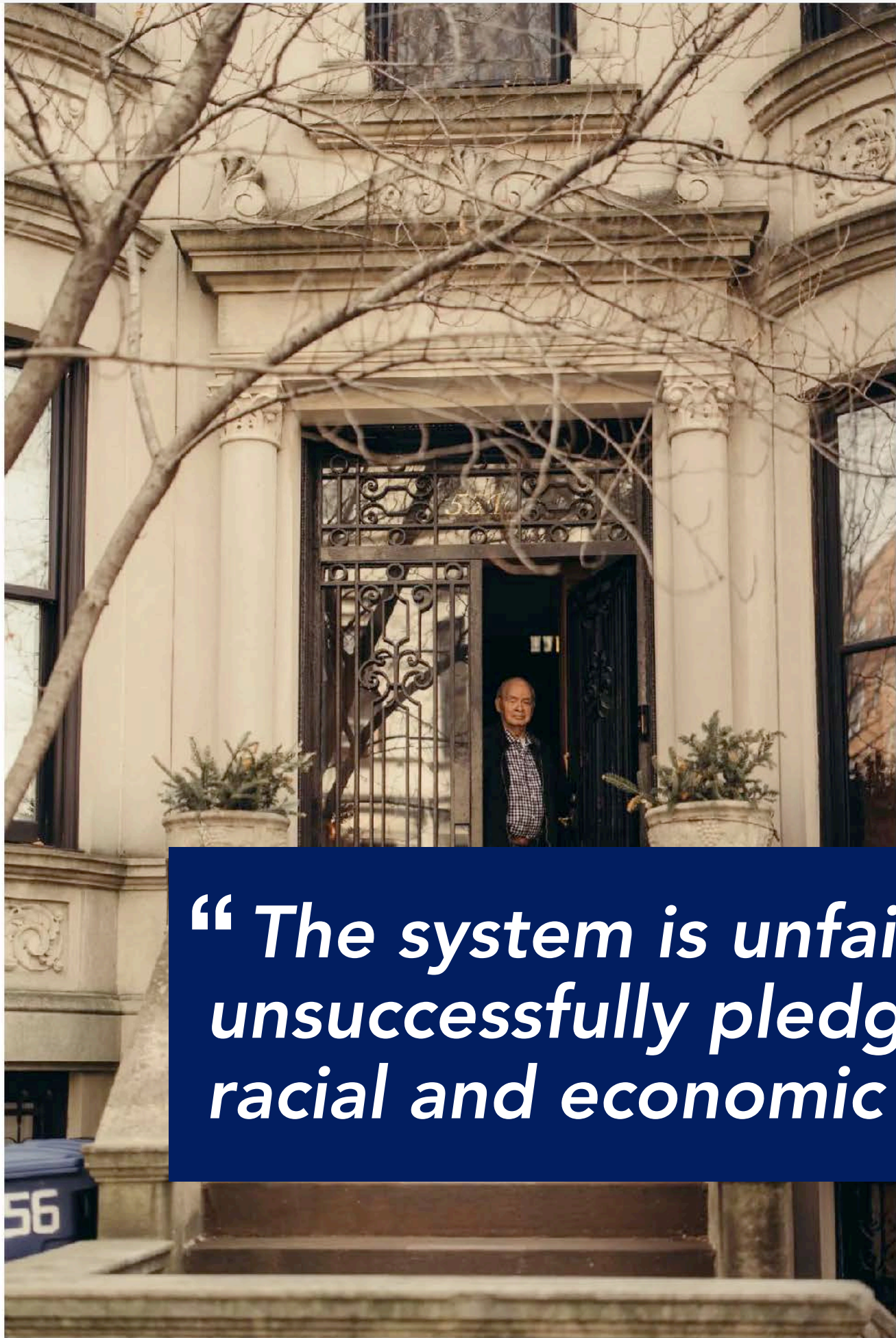
April 2, 2024

New York City is known for its pricey real estate, but some homeowners get an unexpected bargain: Property taxes on some of the fanciest, most coveted properties are often very low — at least relatively.

The flip side? Renters and homeowners in lower-income neighborhoods end up carrying a lot of the burden.

Take, for example, a \$5.4 million brownstone in Brooklyn’s Park Slope. Its annual property tax bill is around \$12,000 — about 0.2 percent of the home’s overall worth. Now compare that with the \$7,500 tax bill for a \$780,000 home in the Bronx. The cheaper home has an effective property tax rate almost four times higher.

Both bills are lower than in much of the suburbs, where property taxes for less valuable homes routinely top \$25,000.

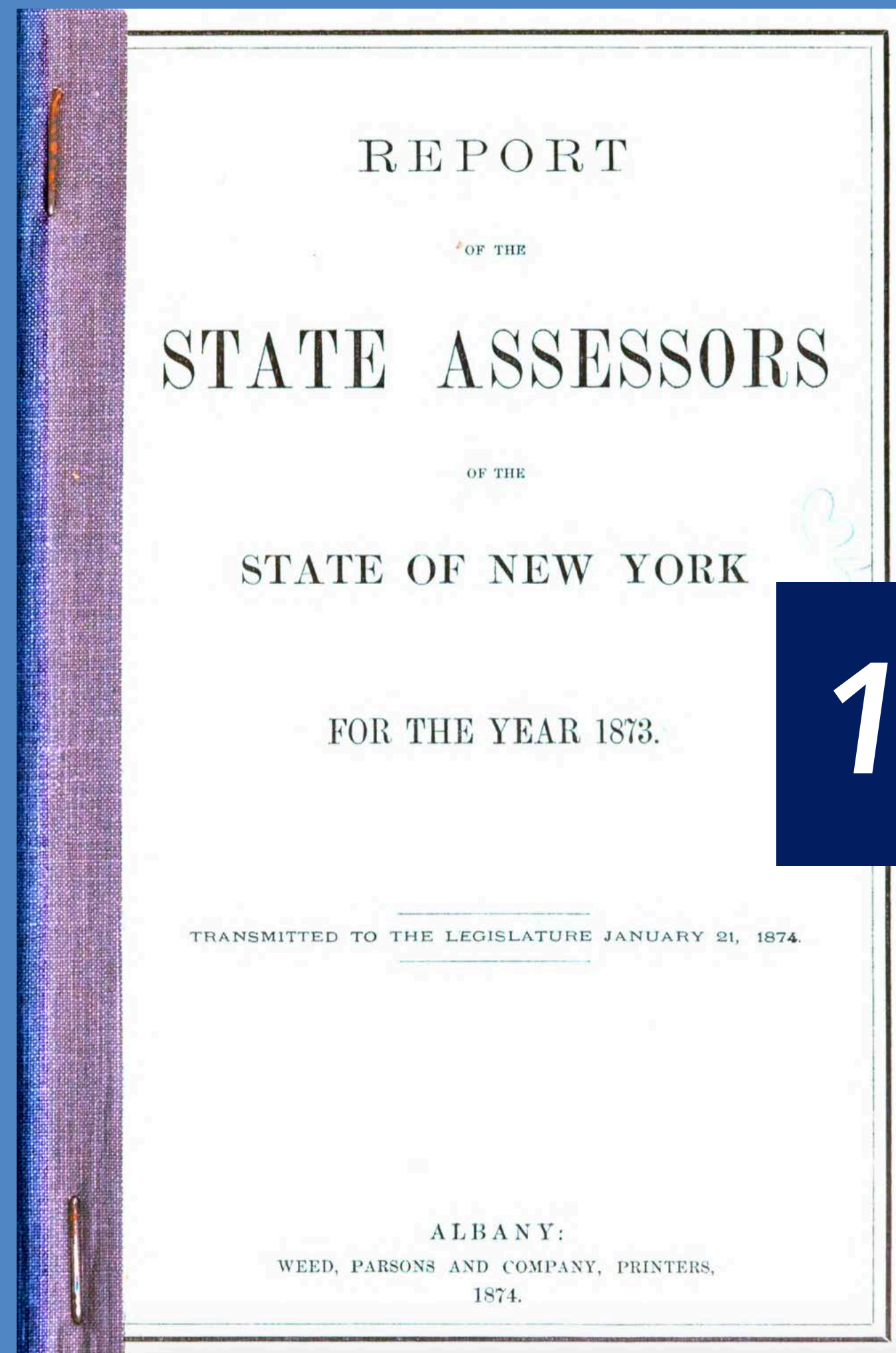


“The system is unfair. ... Several mayors have unsuccessfully pledged to mend the resulting racial and economic disparities.”

Richard Erde, 83, bought his home in Park Slope in 1980 for about \$140,000. Home values have taken off since then, even as property taxes stayed relatively low. Ahmed Gaber for The New York Times

History of The Assessment Gap

New York State



1873

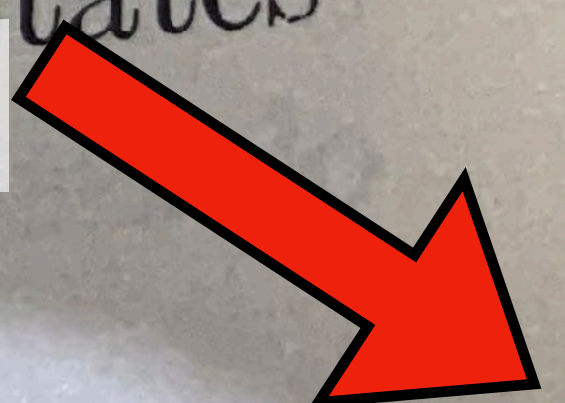
“In every portion of the state we find the most unproductive property, and that of the lowest real value, assessed at the highest ratio.”

“If [the law] was enforced the burden of taxation would fall equally upon all having property liable to assessment; but, as it is now everywhere disregarded, taxation is unequal, unjust, and oppressive.”

theory have disappeared.

Practically, the general property tax as actually administered is beyond all doubt one of the worst taxes known in the civilized world. Because of its attempt to tax intangible as well as tangible things, it sins against the cardinal rules of uniformity, of equality and of universality of taxation. It puts a premium on dishonesty and debauches the public conscience; it reduces deception to a system, and makes a science of knavery; it presses hardest on those least able to pay; it imposes double taxation on one man and grants entire immunity to the next. In short, the general property tax is so flagrantly inequitable, that its retention can be explained only through ignorance or inertia. It is the cause of such crying injustice that its alteration or its abolition must become the battle cry of every statesman and reformer.

1895!!!



International Association of Assessing Officers

Curriculum Training

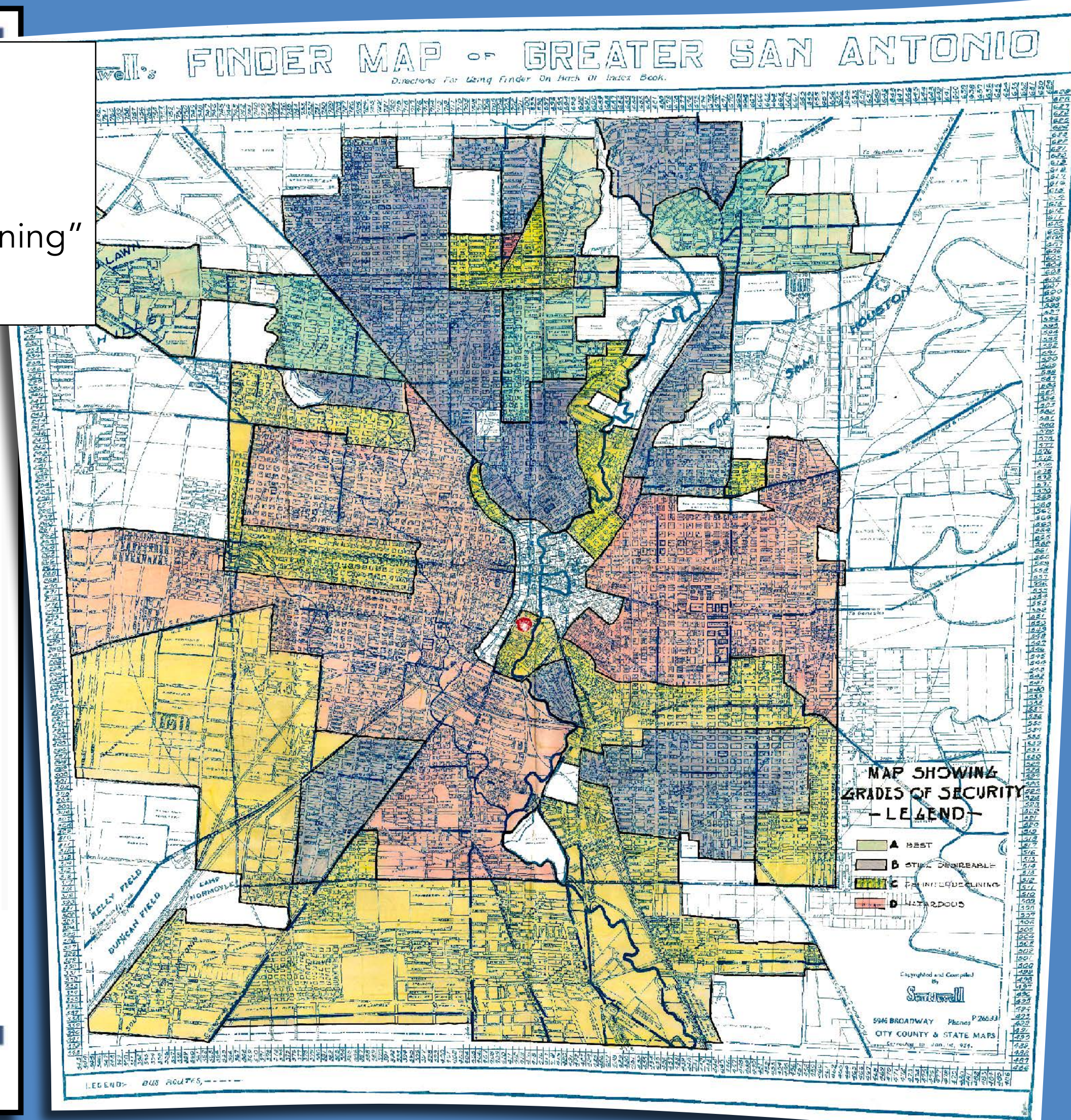
Instructor Presentation

Area Rating

- A "Best"
- B "Still Desirable"
- C "Definitely Declining"
- D "Hazardous"



IAAO 101 Online: Fundamentals of Real Property Appraisal



International Association of Assessing Officers

Curriculum Training





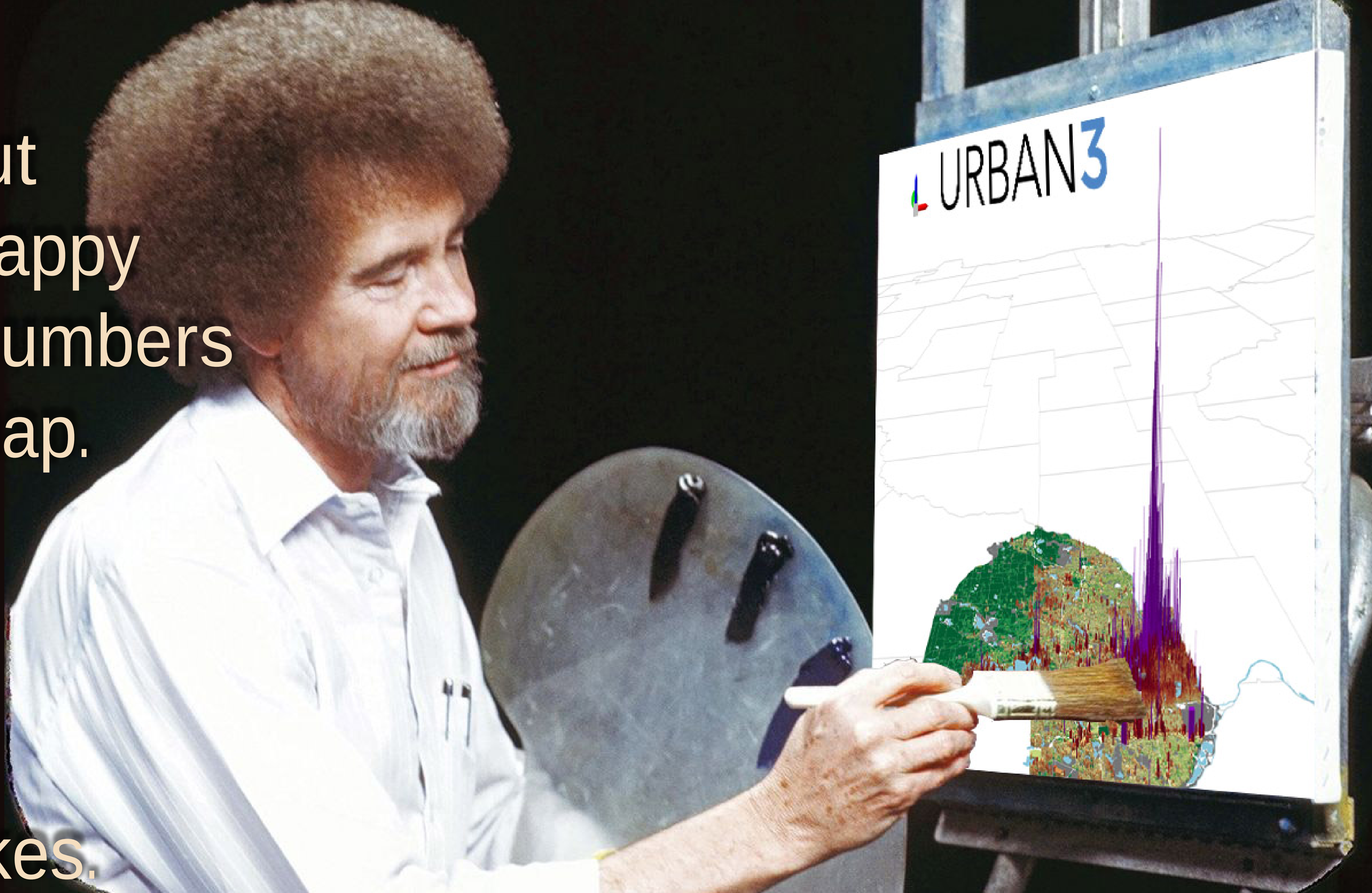
GeoaccountingTM

I bought a boat



Just put
your happy
little numbers
on a map.

Don't
worry
about
mistakes.



Bird's Eye View

Crescent Village
Downtown

You cannot change what you cannot see.

- Net Positive
- Net Negative

NOTE: Model demonstrates physical infrastructures such as bridges, roads, etc.; and does not calculate for police, fire, library, etc.



Operating Expense Ratio (Per Acre)
Eugene, OR

Source: City of Eugene

2018

URBAN3





DO THE
MATH

