

Case Study: Economic MRI®

2020

New Hampshire



FOR

DUMMIES

A Reference for North Carolinians!



DUNNIES

Market Value

Taxable Value %

X = Taxable Value

Tax Rate %

X = Tax Bill

works.



DUNNIES

(Needed Budget - Non-property tax revenue) / City Assessed Value

Exemptions

Local Tax Rate

Assessed Value

Taxable Value

= Tax Bill

This is how NH's system works.



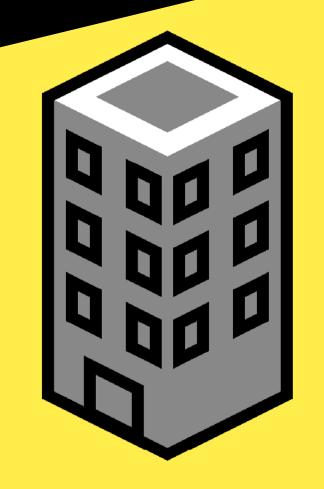
*The city tax rate is established by the State

DUNNIES

Assessed Value = \$600k



2.332%



Commercial



Residential



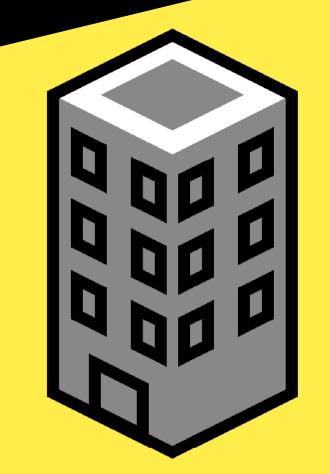
2.332%

DUNNIES

Assessed Value = \$600k

Dover Tax Rate

\$13,992



Commercial



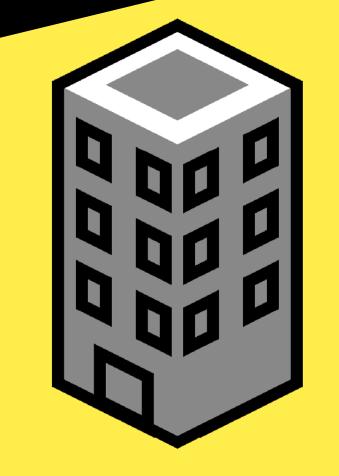
Residential



DUNNIES

Assessed Value = \$600k





Commercial

0.13%

0.13%

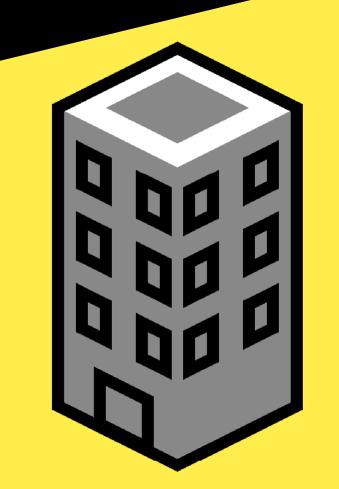


Residential



DUNNIES

Assessed Value = \$600k



Commercial

Strafford County Tax Rate

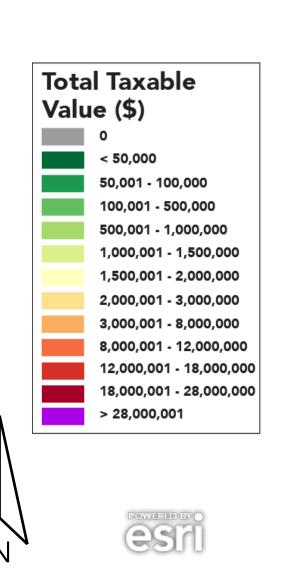
\$780

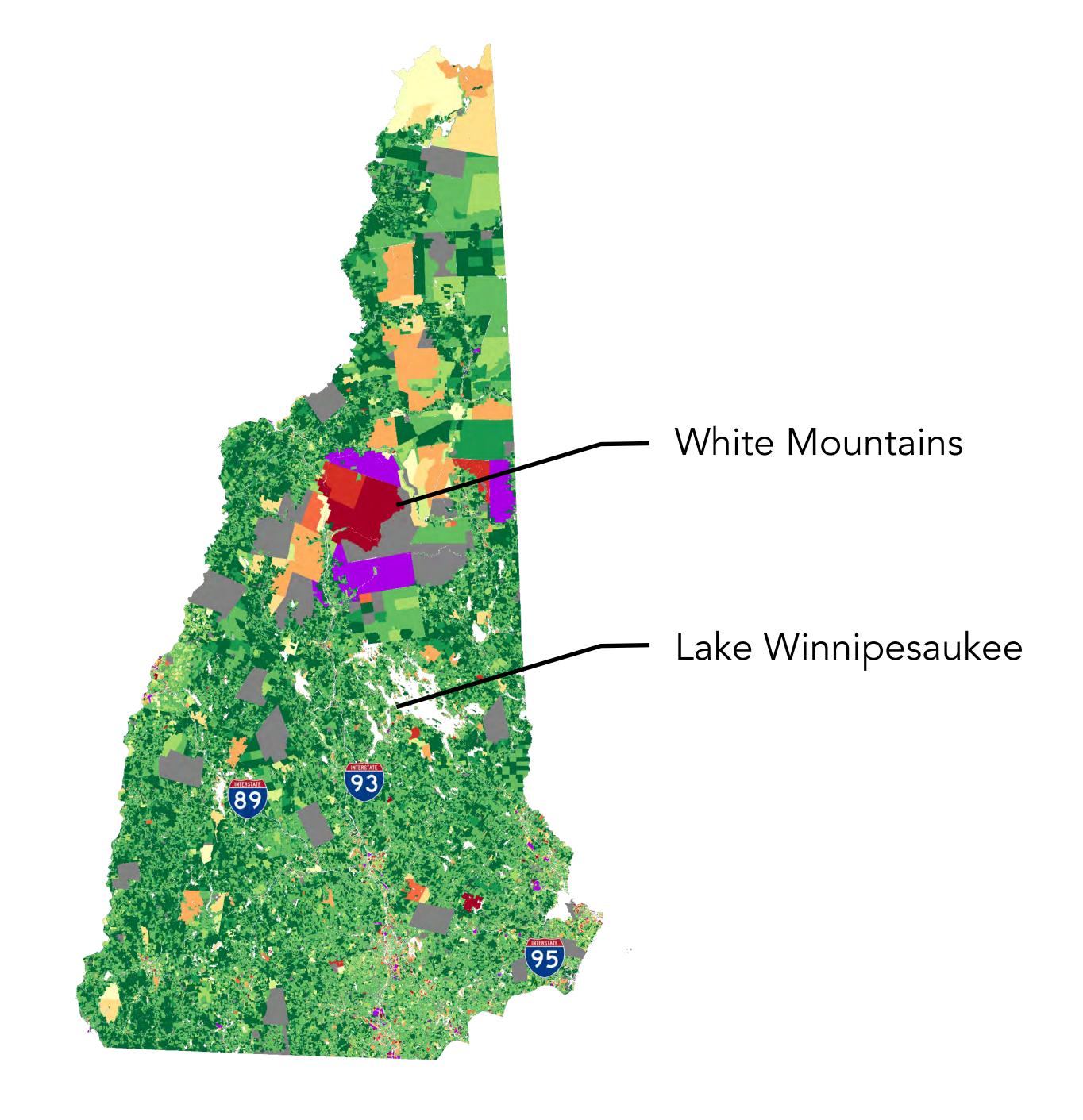


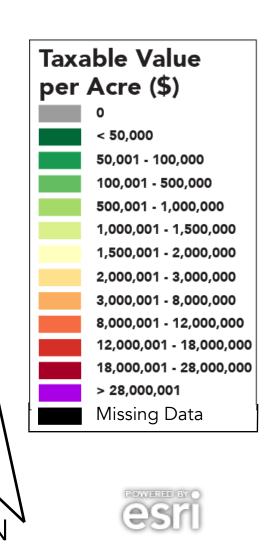
Residential

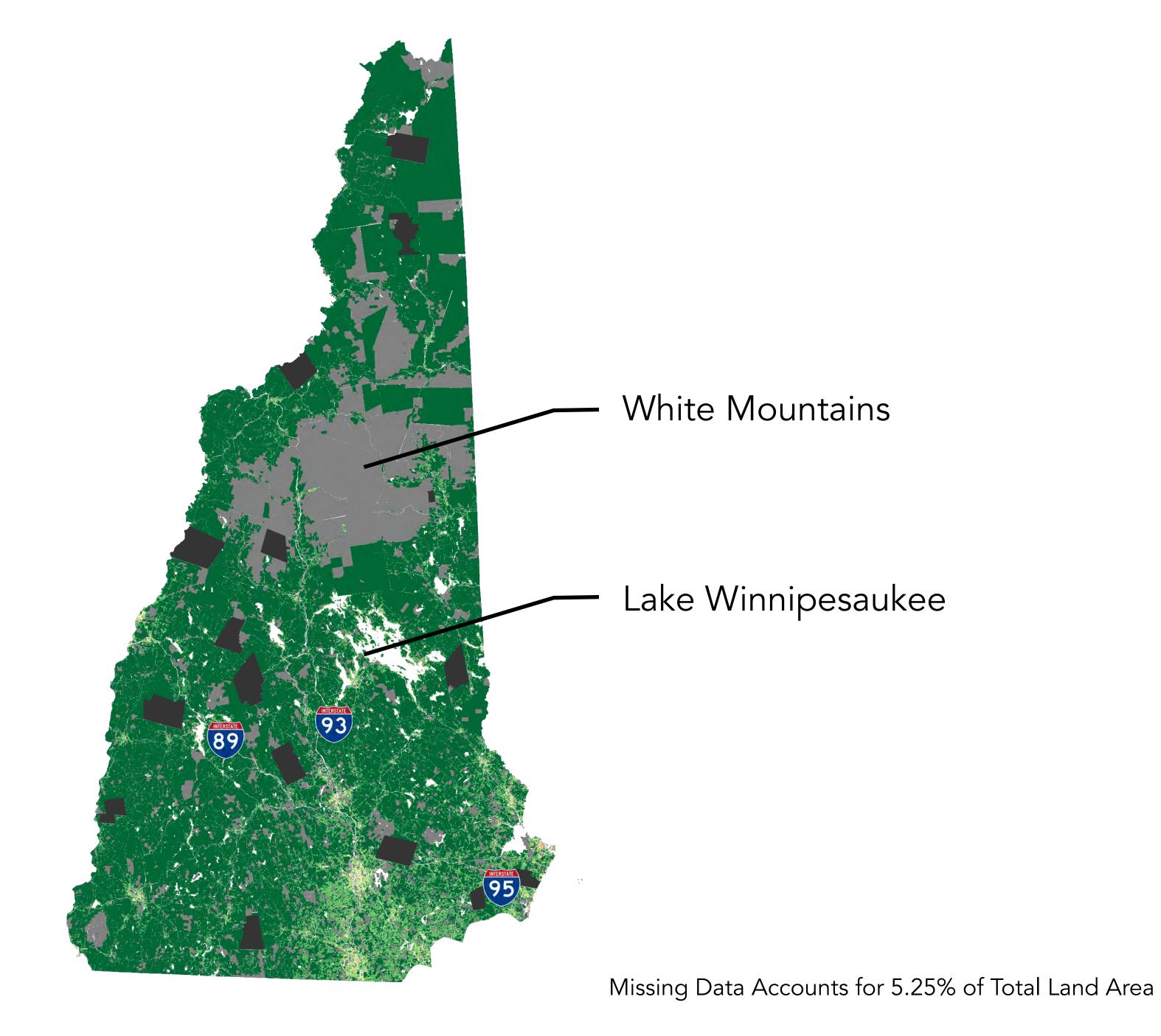


Total ValueNew Hampshire

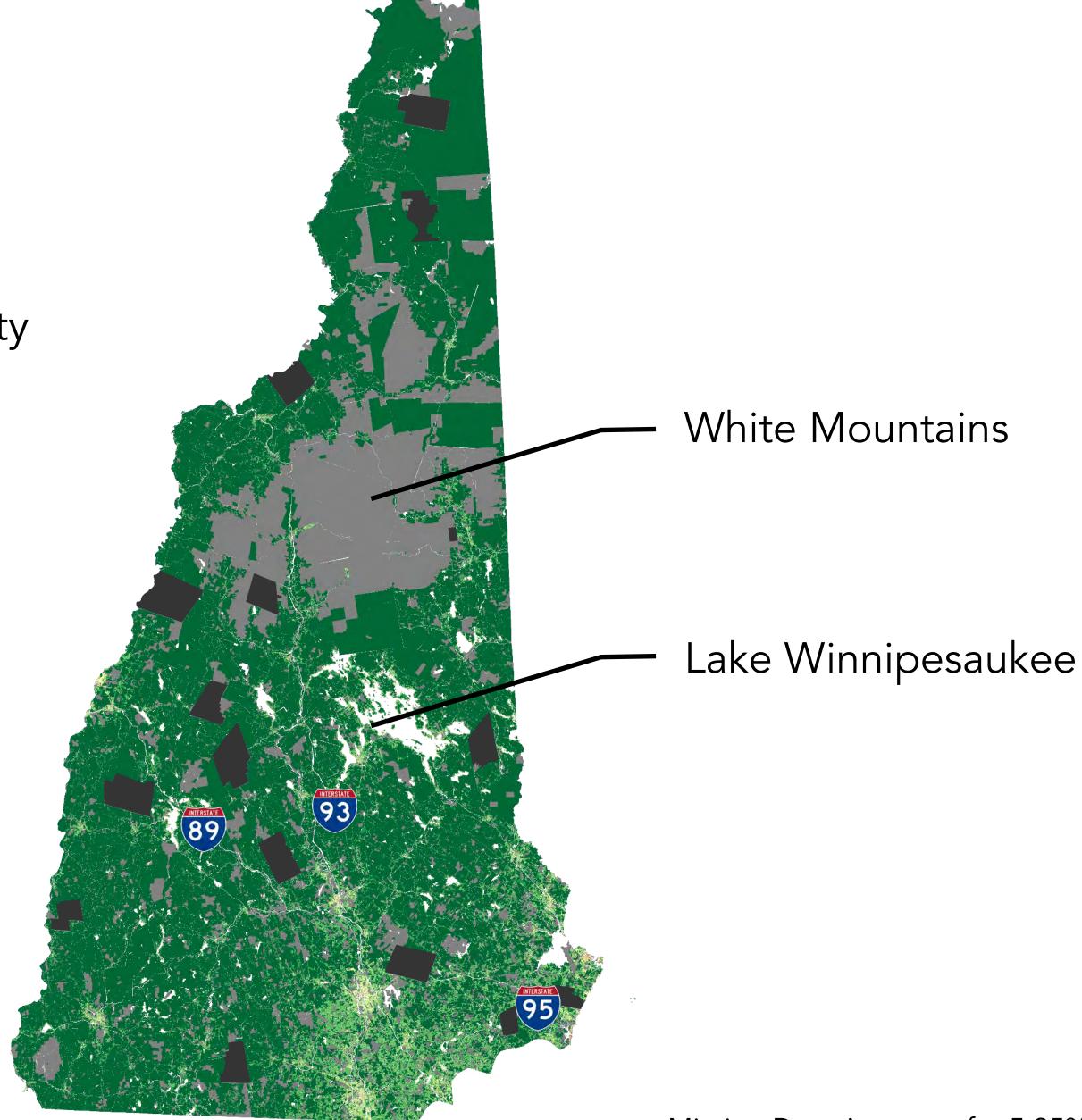








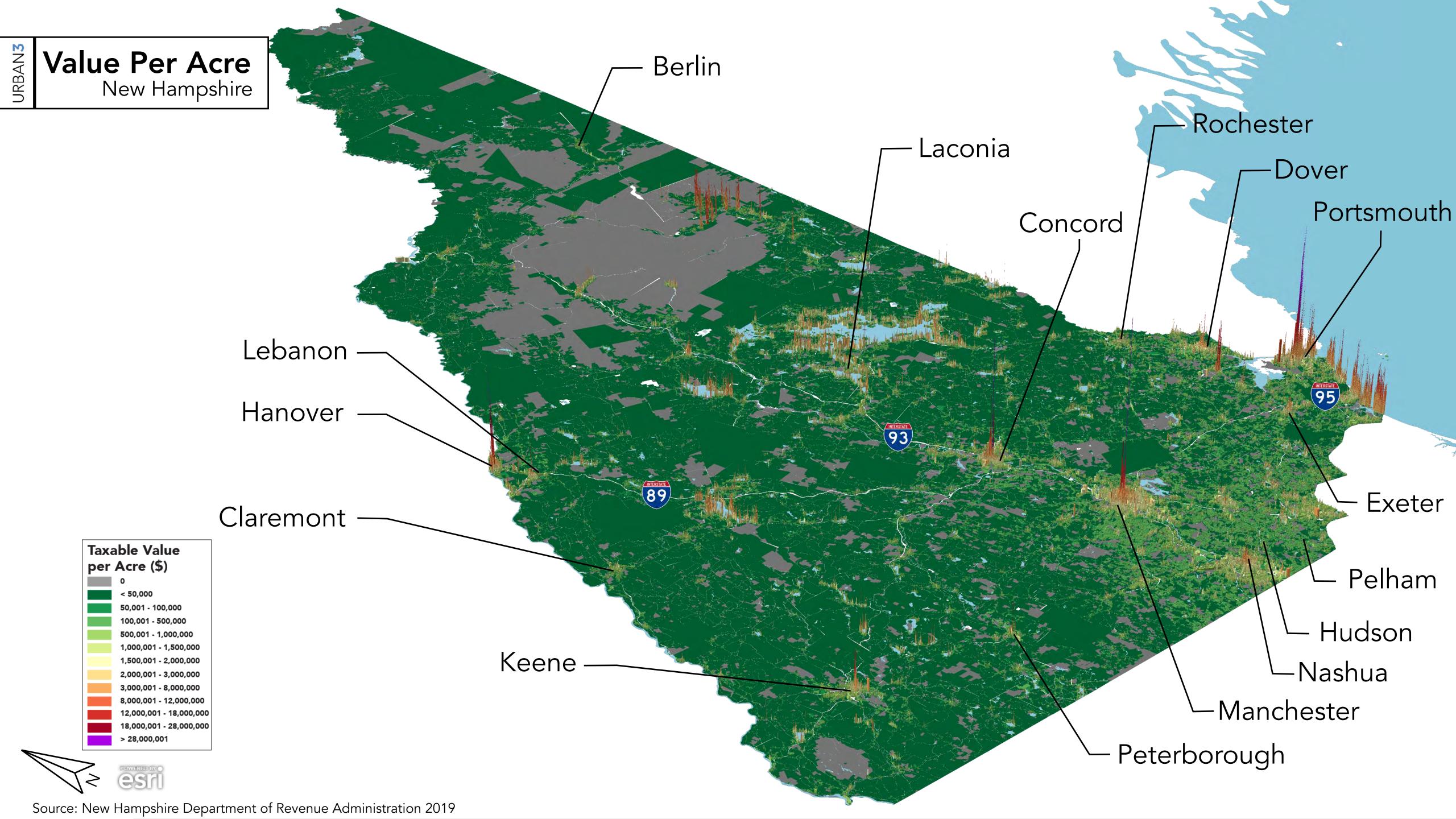
Missing Data: the property is there and paying taxes but isn't mapped.
Significantly rural and undeveloped.

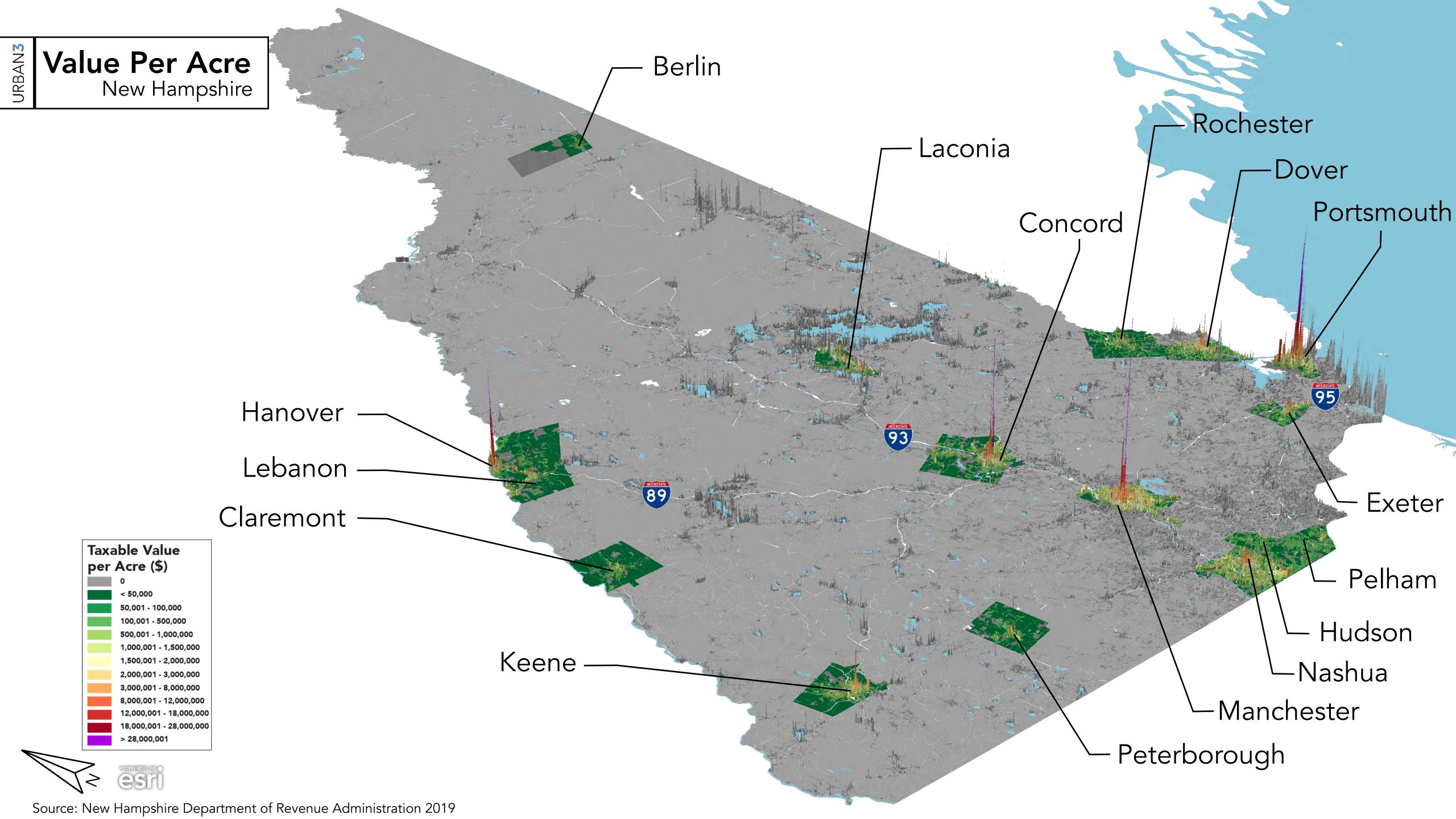


Taxable Value
per Acre (\$)

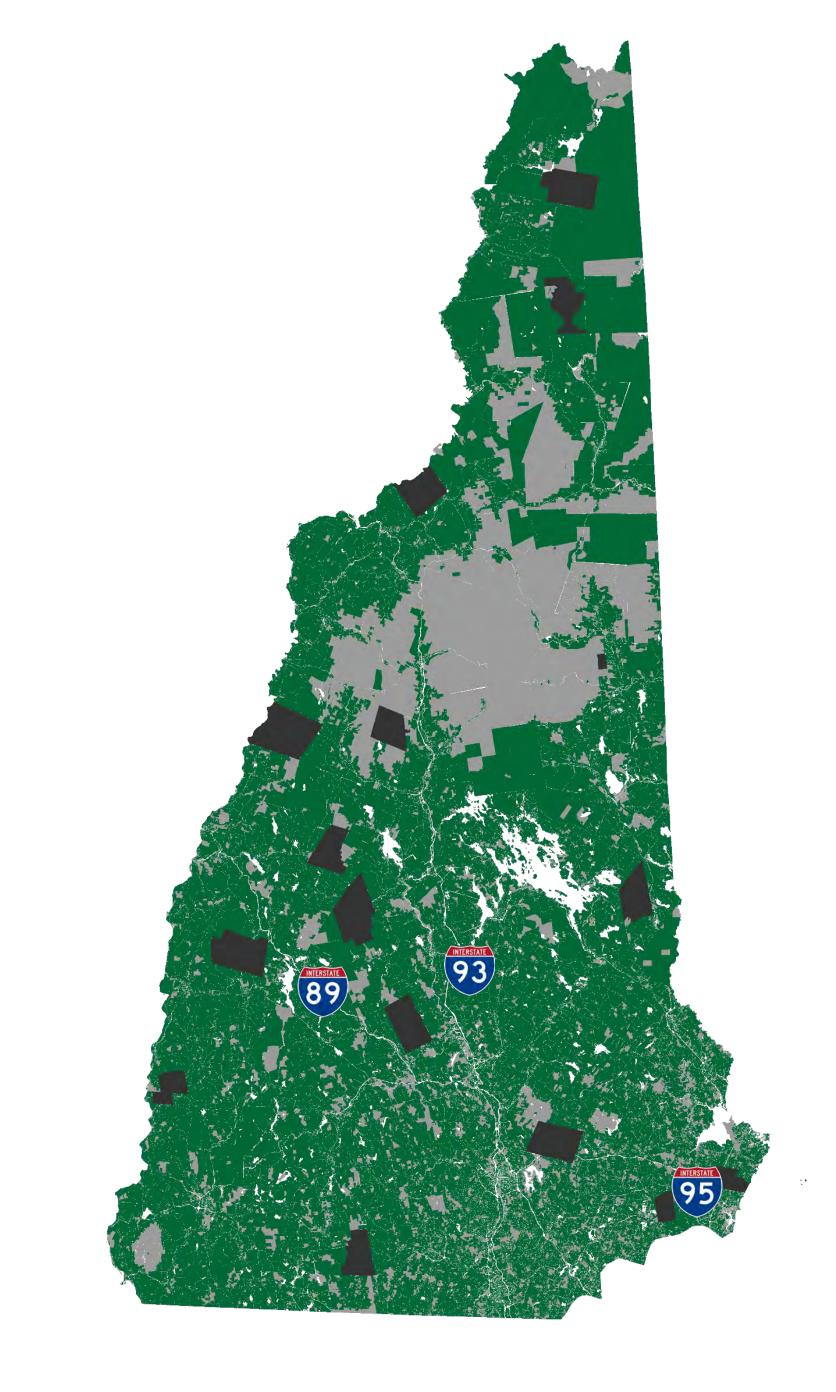
0
<50,000
50,001 - 100,000
100,001 - 500,000
500,001 - 1,000,000
1,000,001 - 1,500,000
1,500,001 - 2,000,000
2,000,001 - 3,000,000
3,000,001 - 12,000,000
12,000,001 - 18,000,000
18,000,001 - 28,000,000
>28,000,001
Missing Data

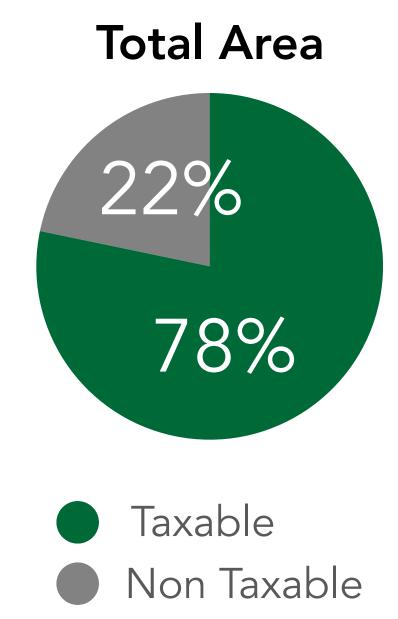
Missing Data Accounts for 5.25% of Total Land Area





Taxable Area New Hampshire

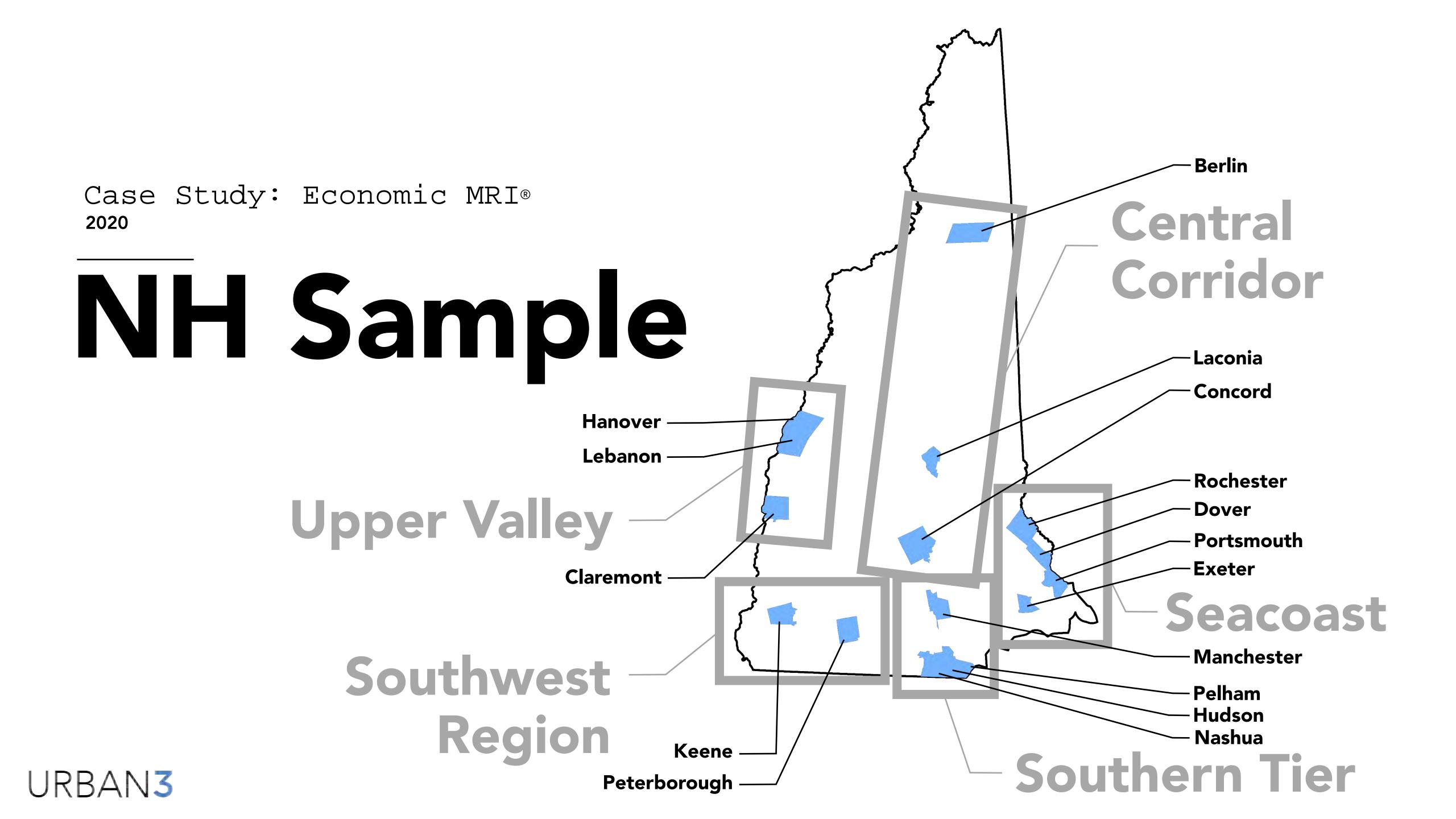






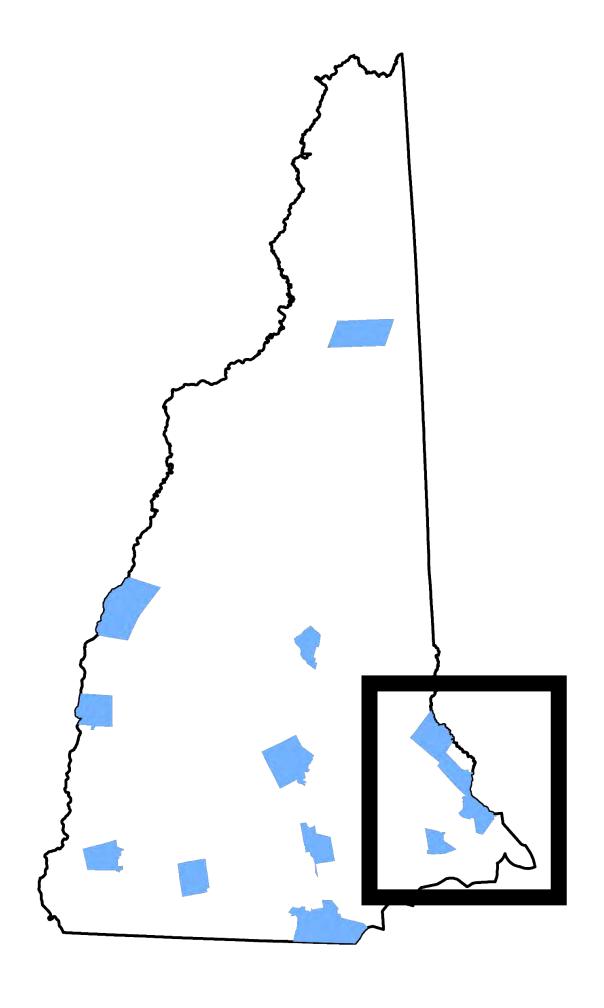


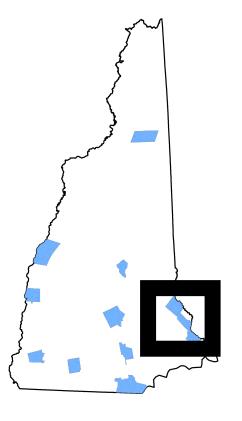
Case Study: Economic MRI® Central 2020 Corridor NH Sample **Upper Valley** Seacoast Southwest Region Southern Tier URBAN3



Case Study: Economic MRI® 2020

Seacoast





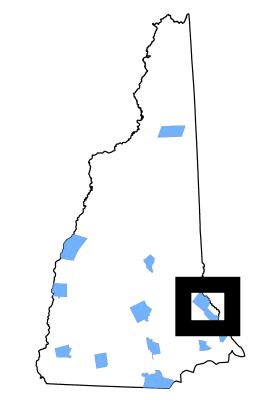
Case Study: Economic MRI® 2020

Dover Er

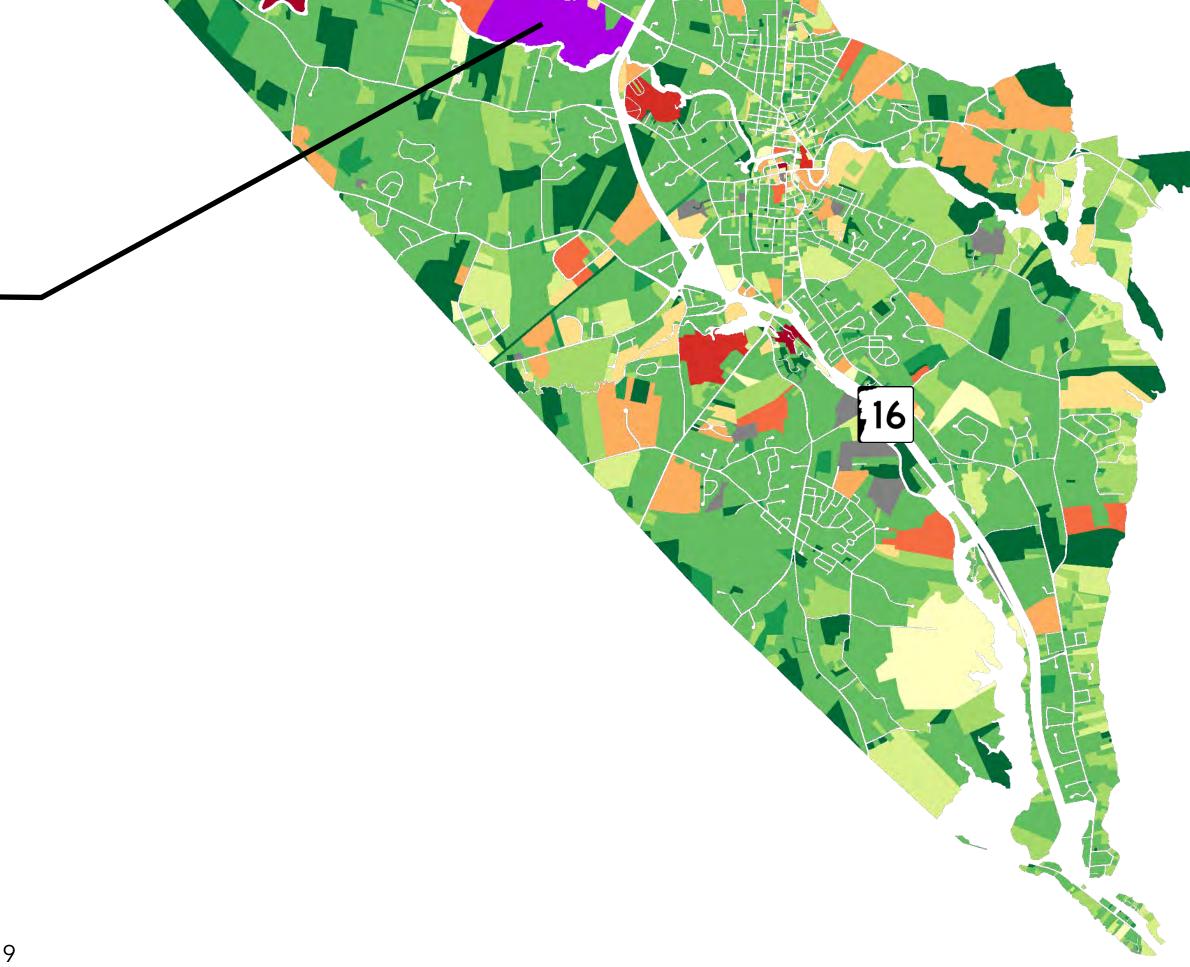




Total Value Dover



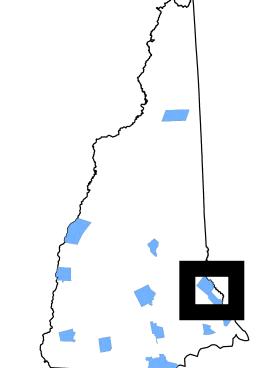




Total Taxable
Value (\$)

0
< 50,000
50,001 - 100,000
100,001 - 500,000
500,001 - 1,000,000
1,000,001 - 1,500,000
1,500,001 - 2,000,000
2,000,001 - 3,000,000
3,000,001 - 3,000,000
8,000,001 - 12,000,000
12,000,001 - 18,000,000
18,000,001 - 28,000,000
> 28,000,001

Value Per Acre Dover

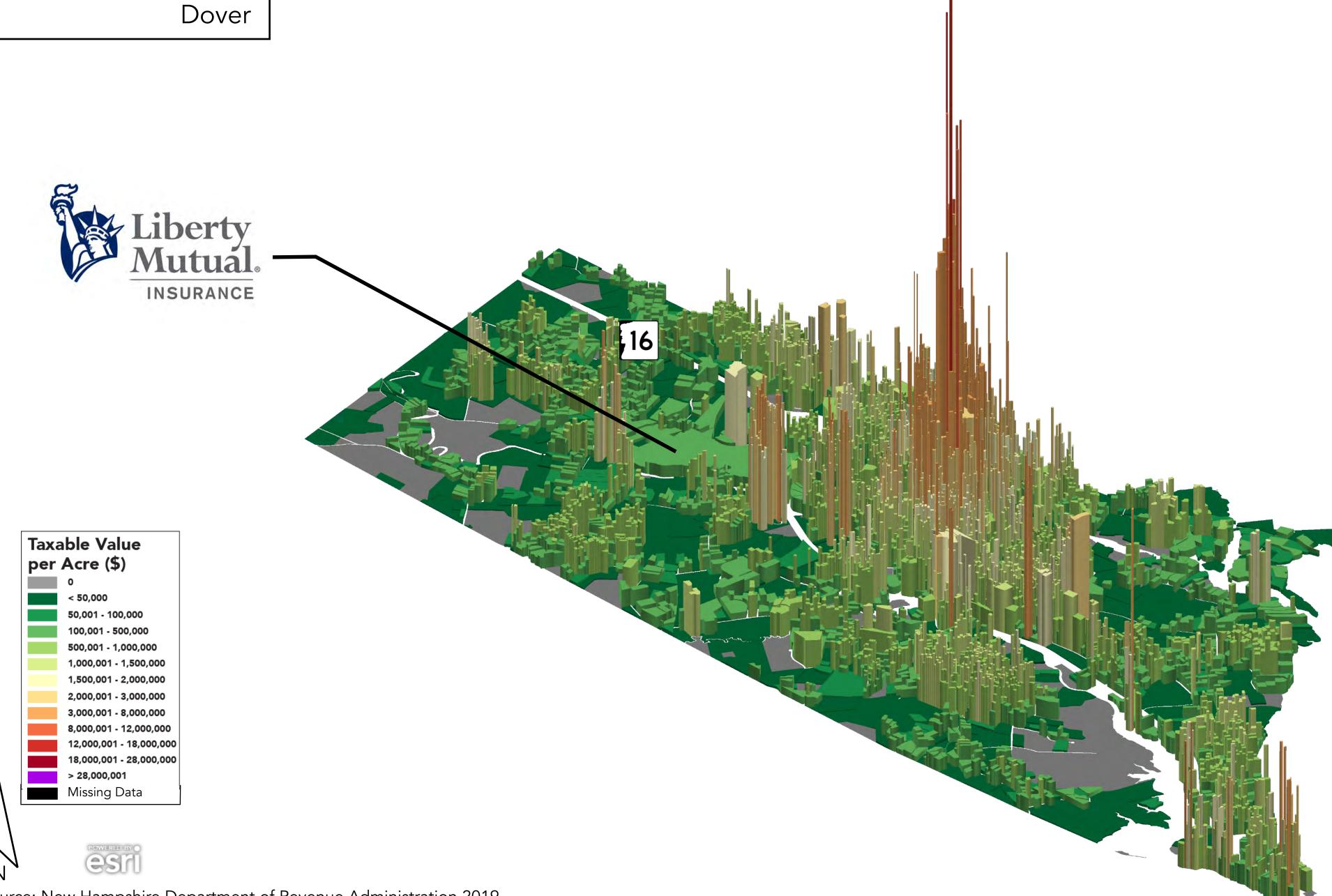


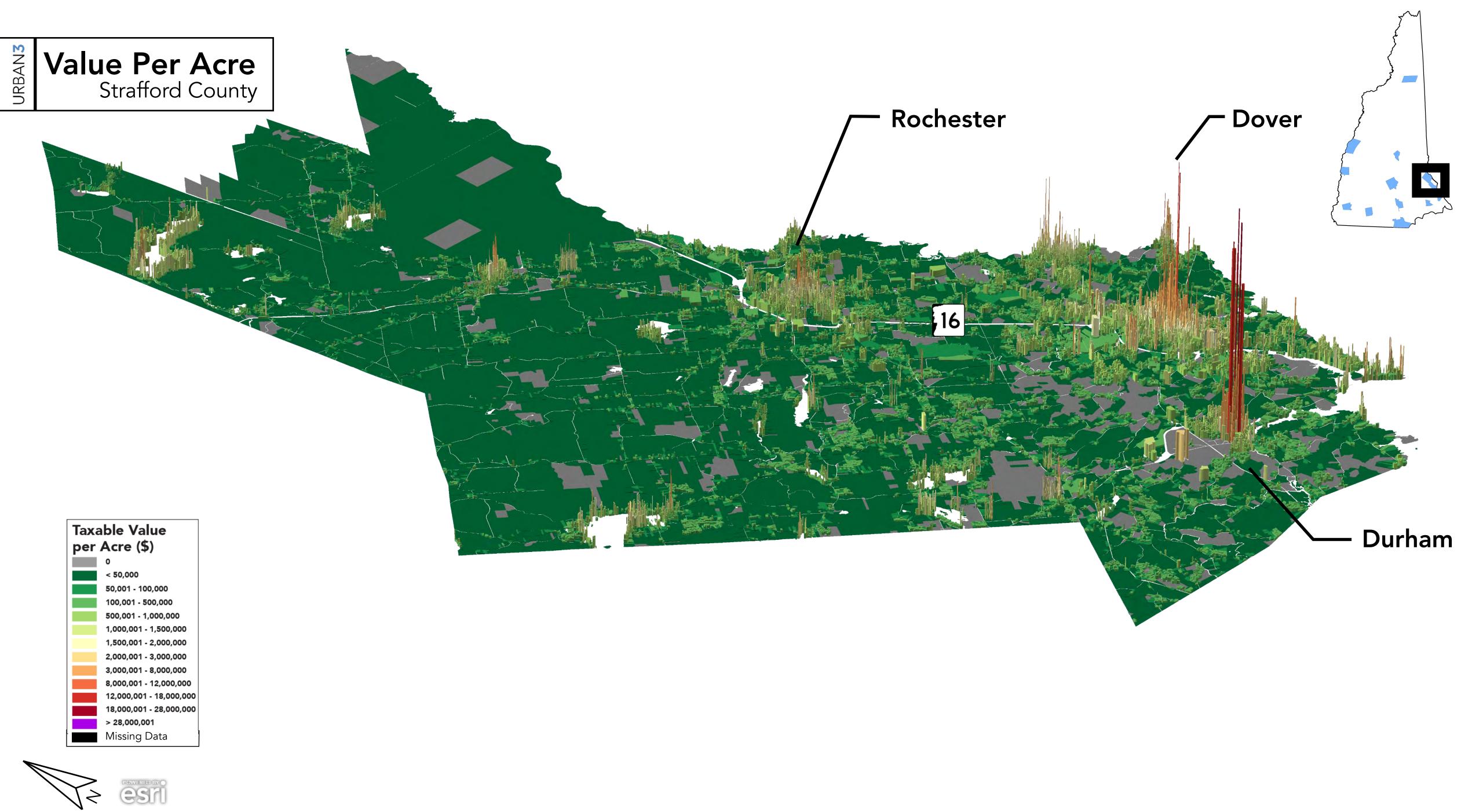


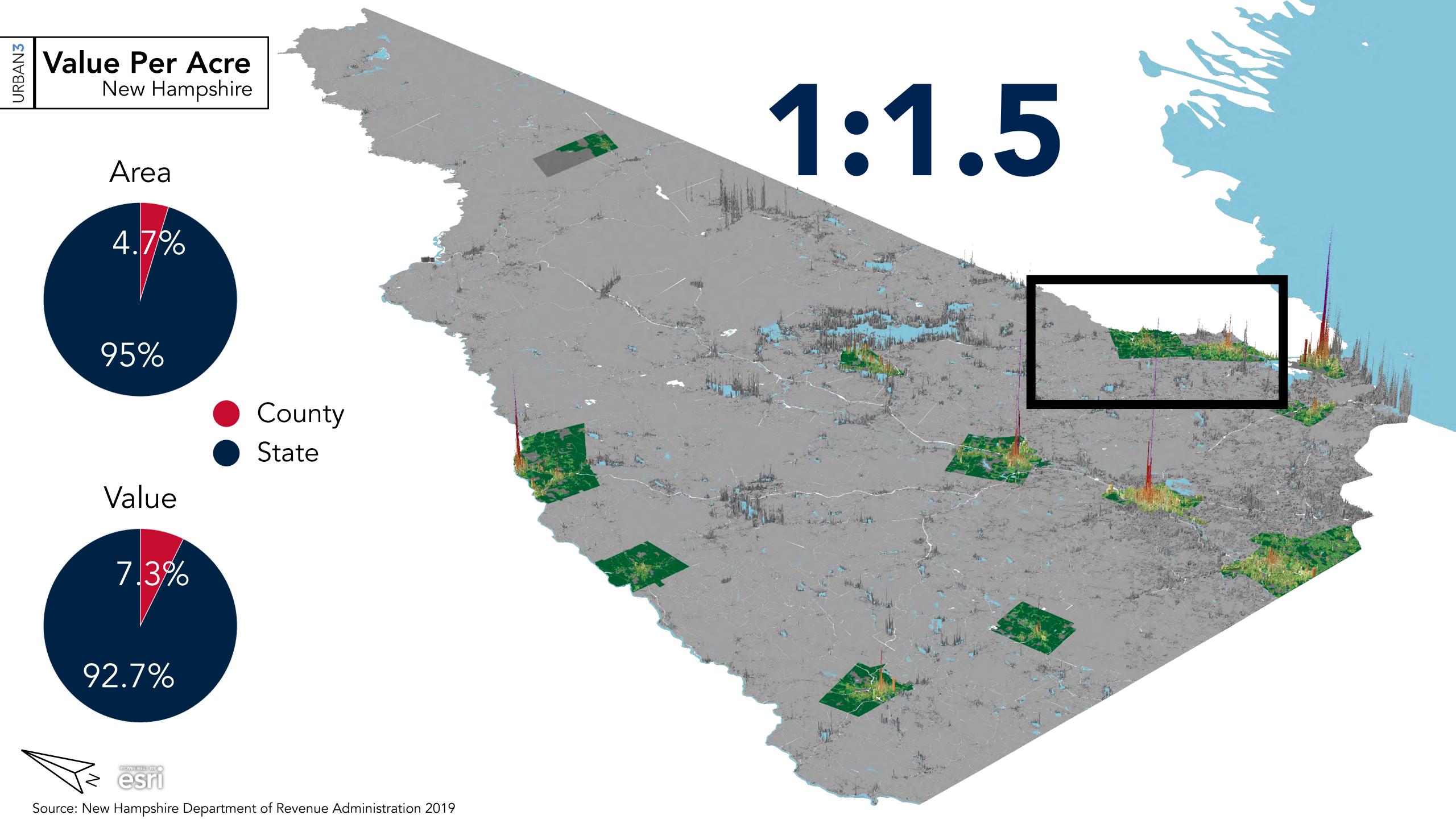


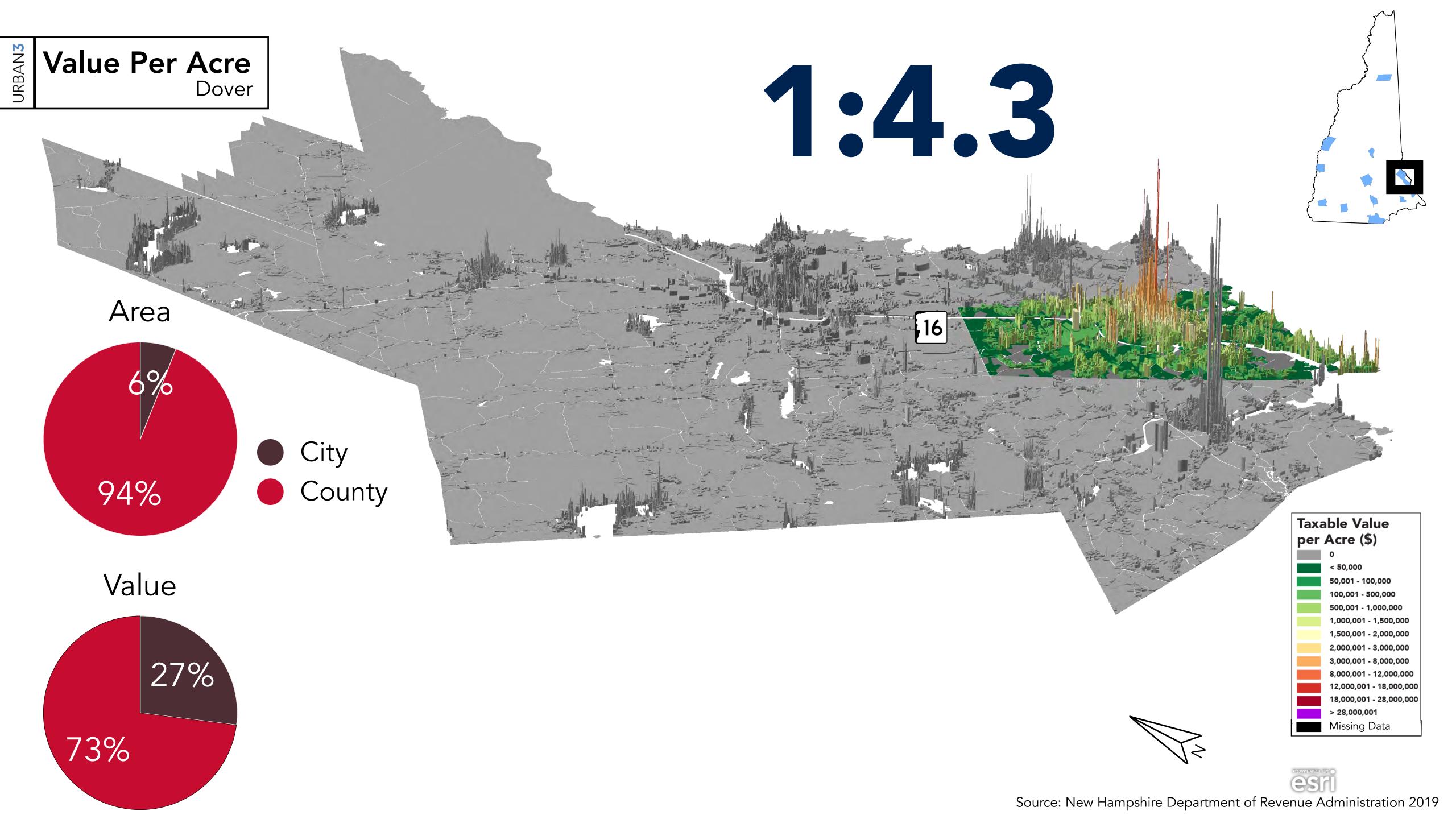
Taxable Value per Acre (\$)

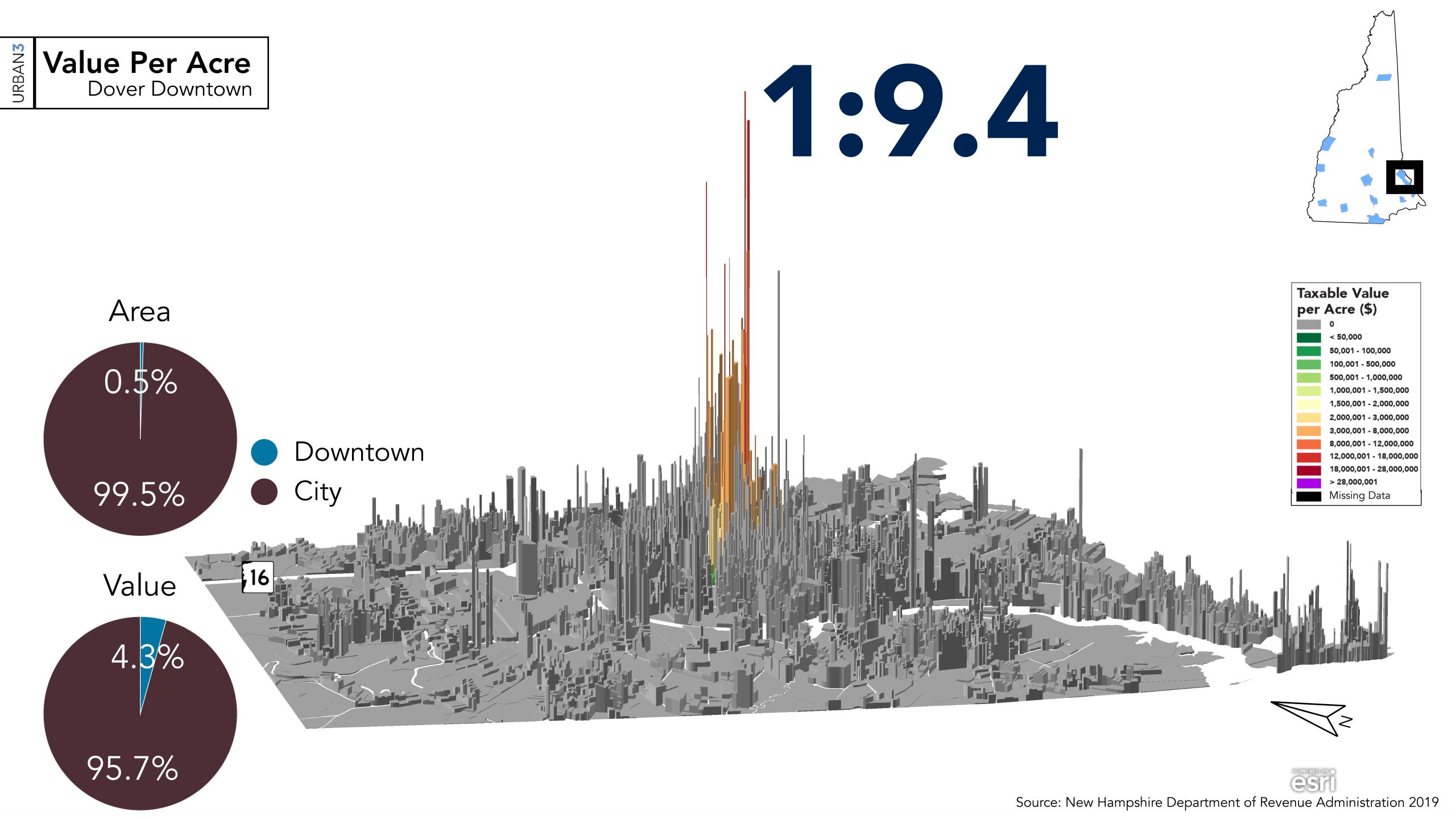
Value Per Acre













Taxable Area Strafford County



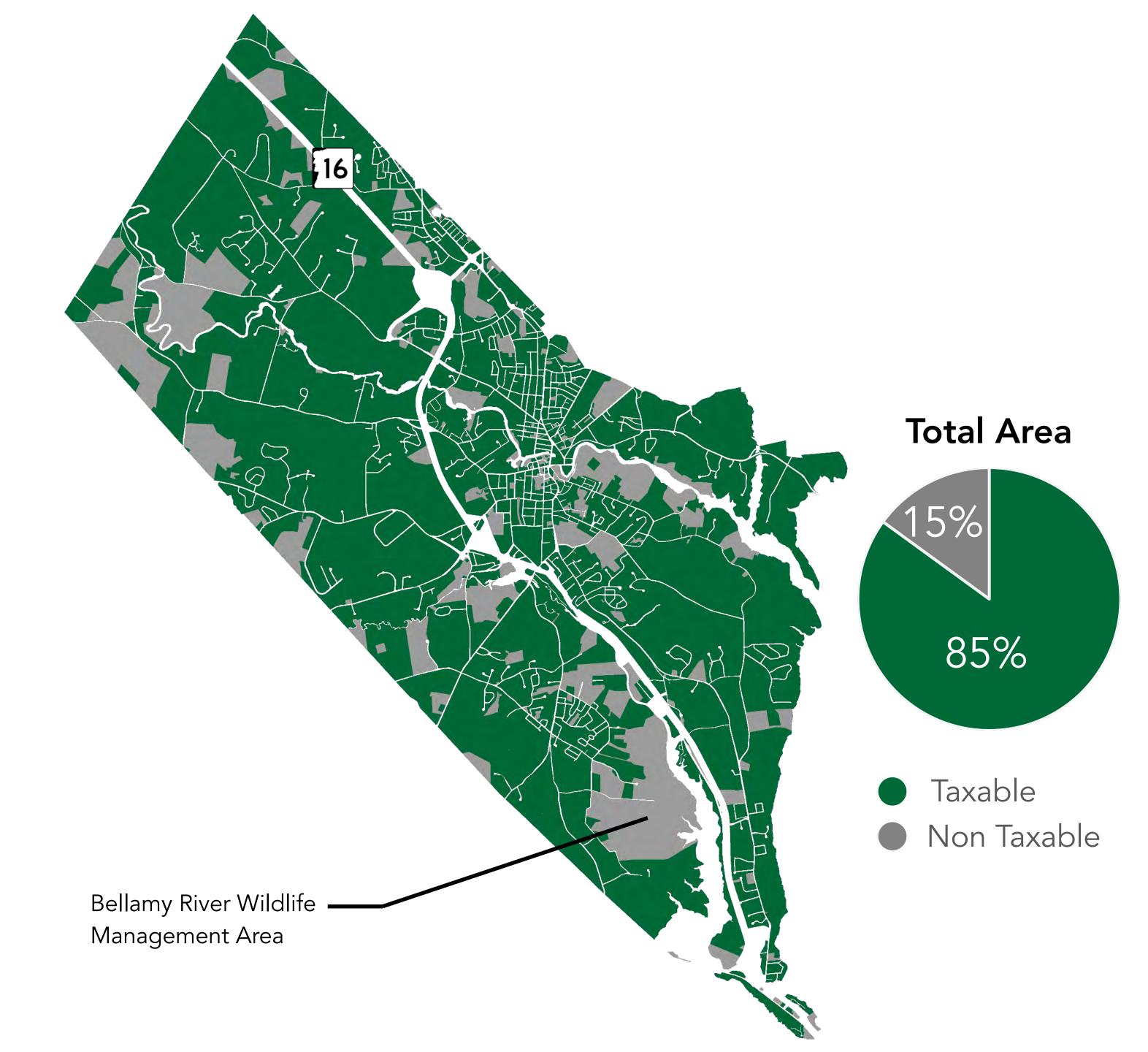


esi

Taxable Area

Dover



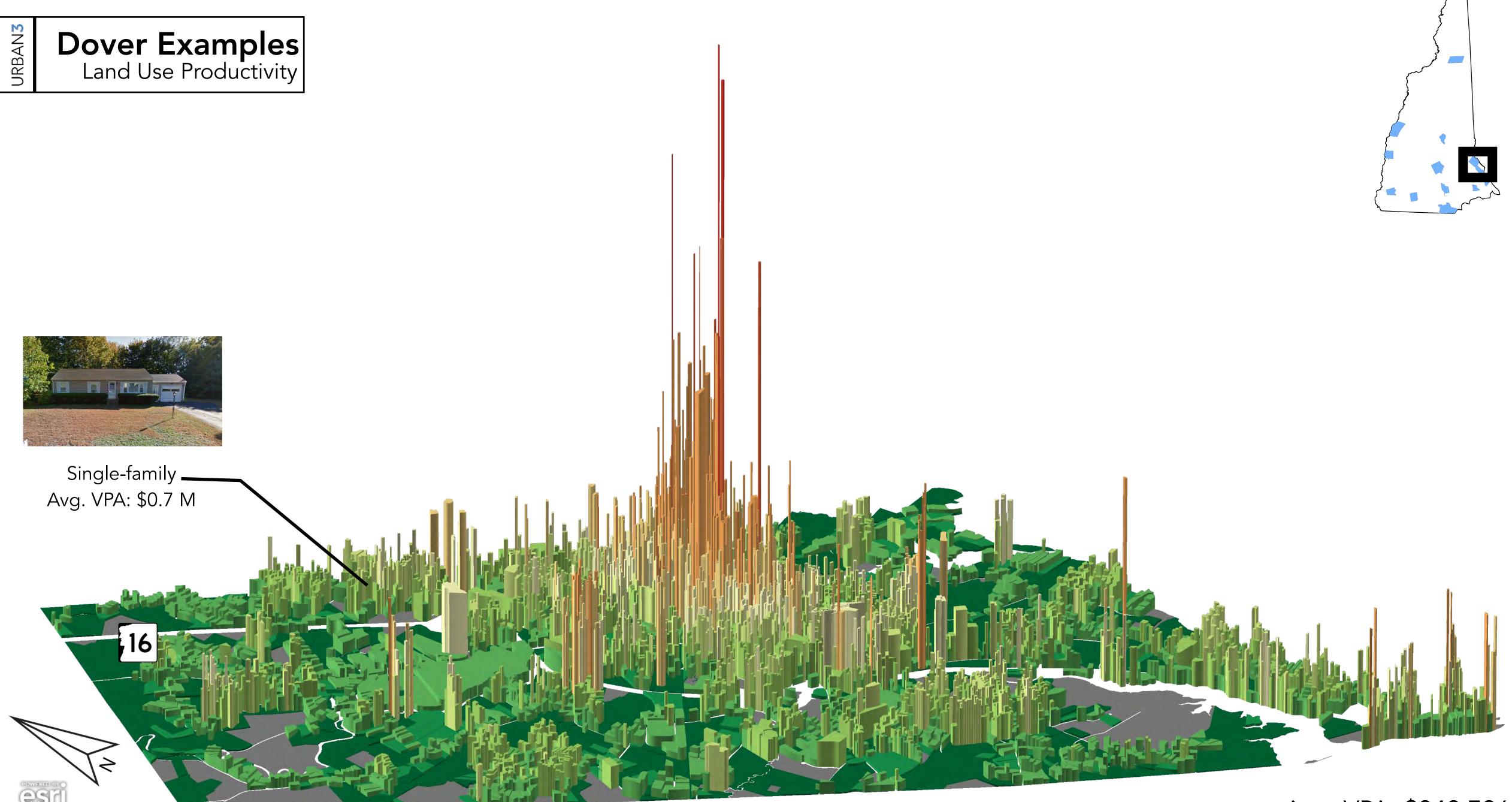


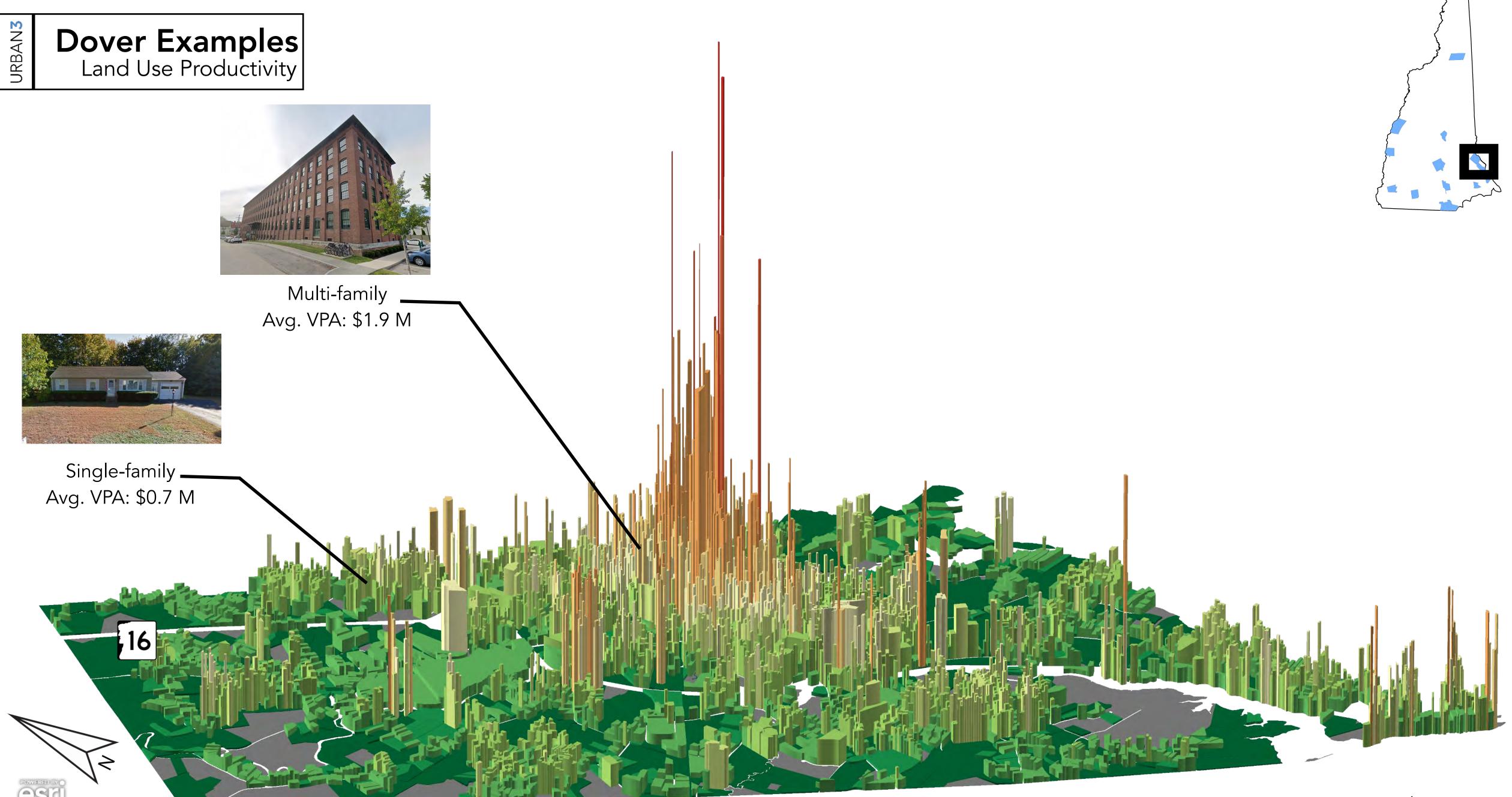


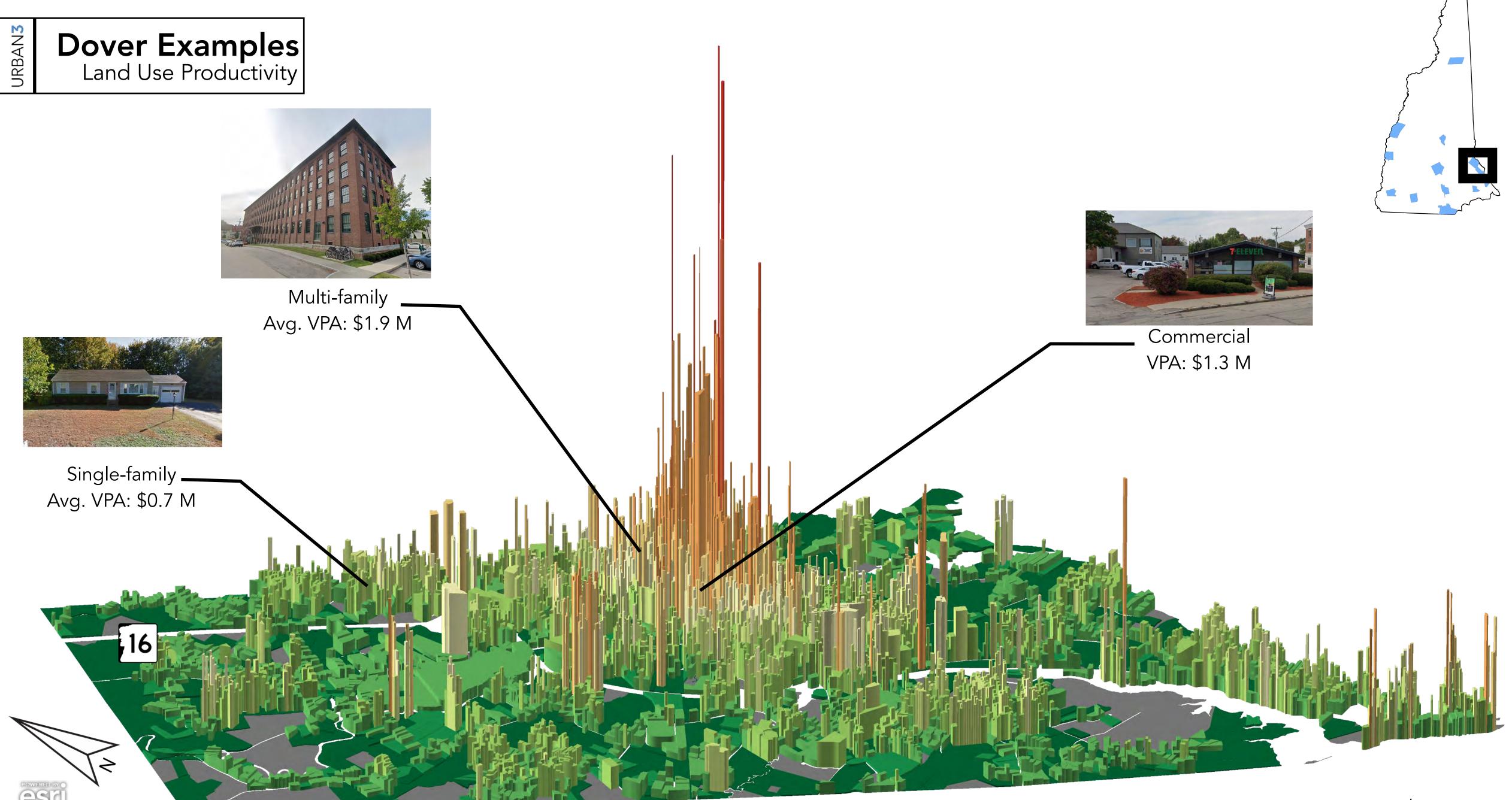


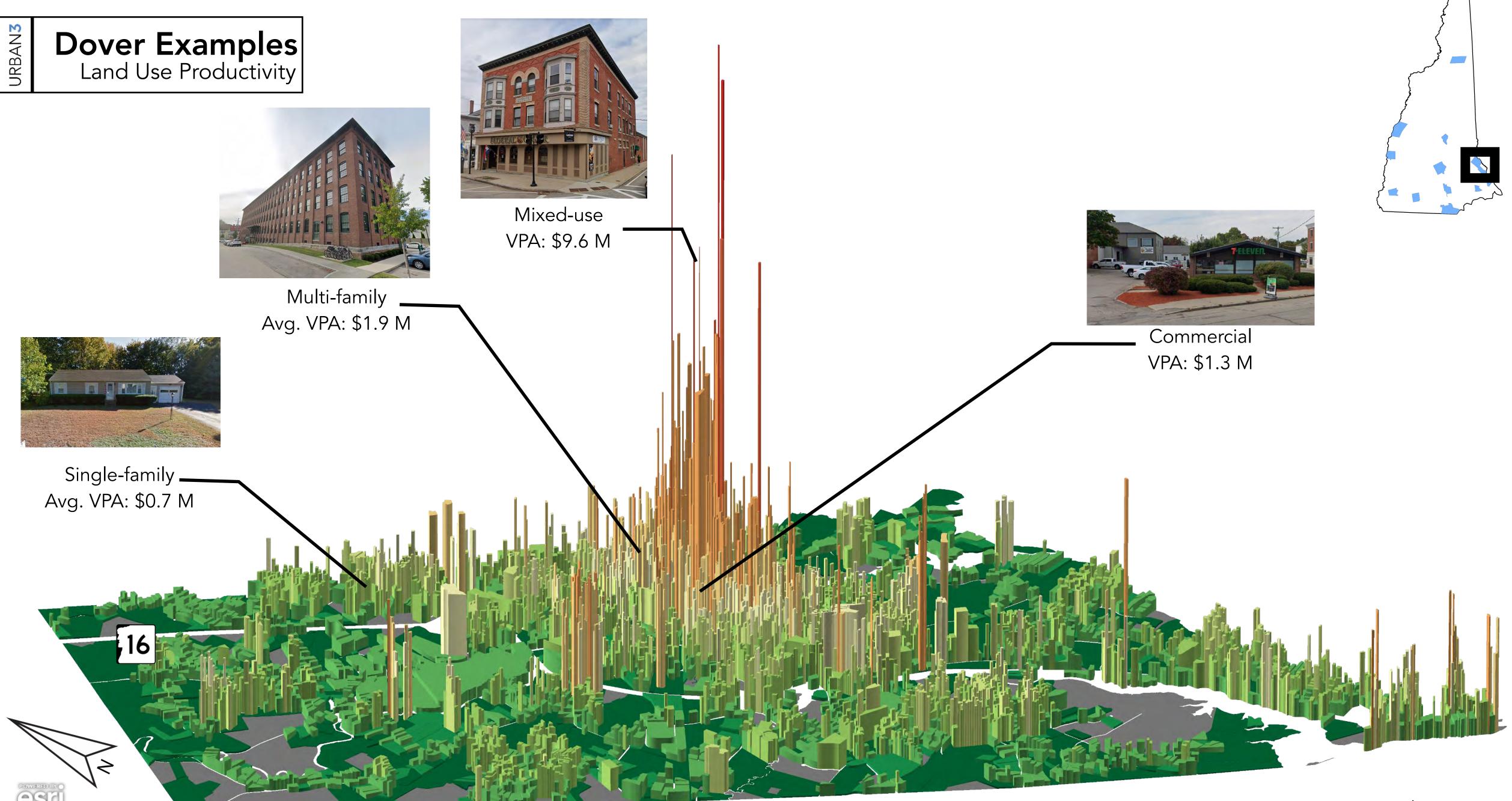
Land Use Types

Local samples of buildings and development types



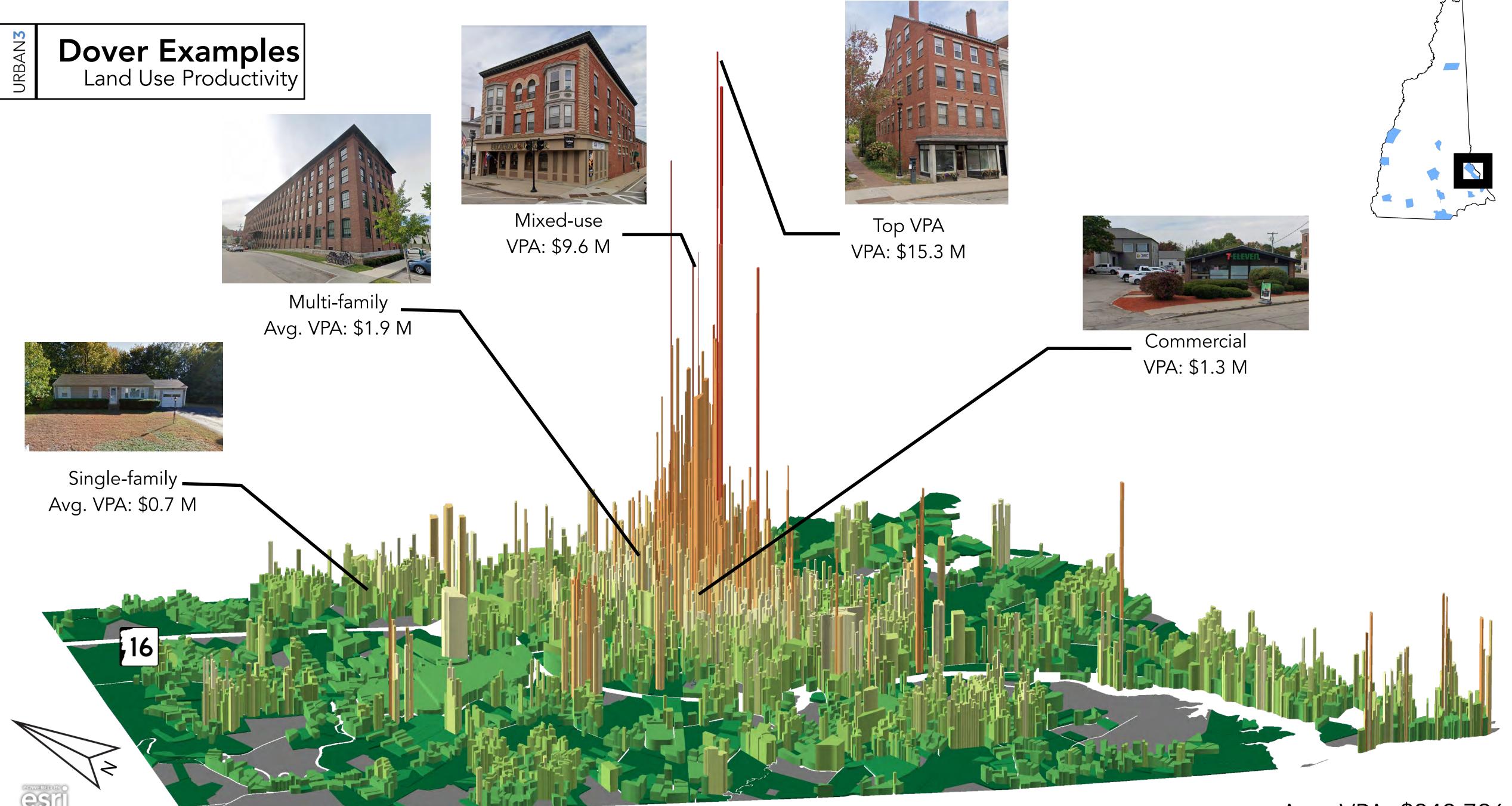




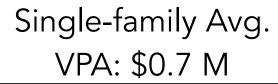


Source: New Hampshire Department of Revenue Administration 2019

Avg. VPA: \$242,796



Dover Examples
Land Use Productivity





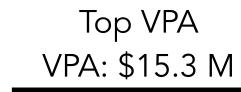


Multi-family Avg.

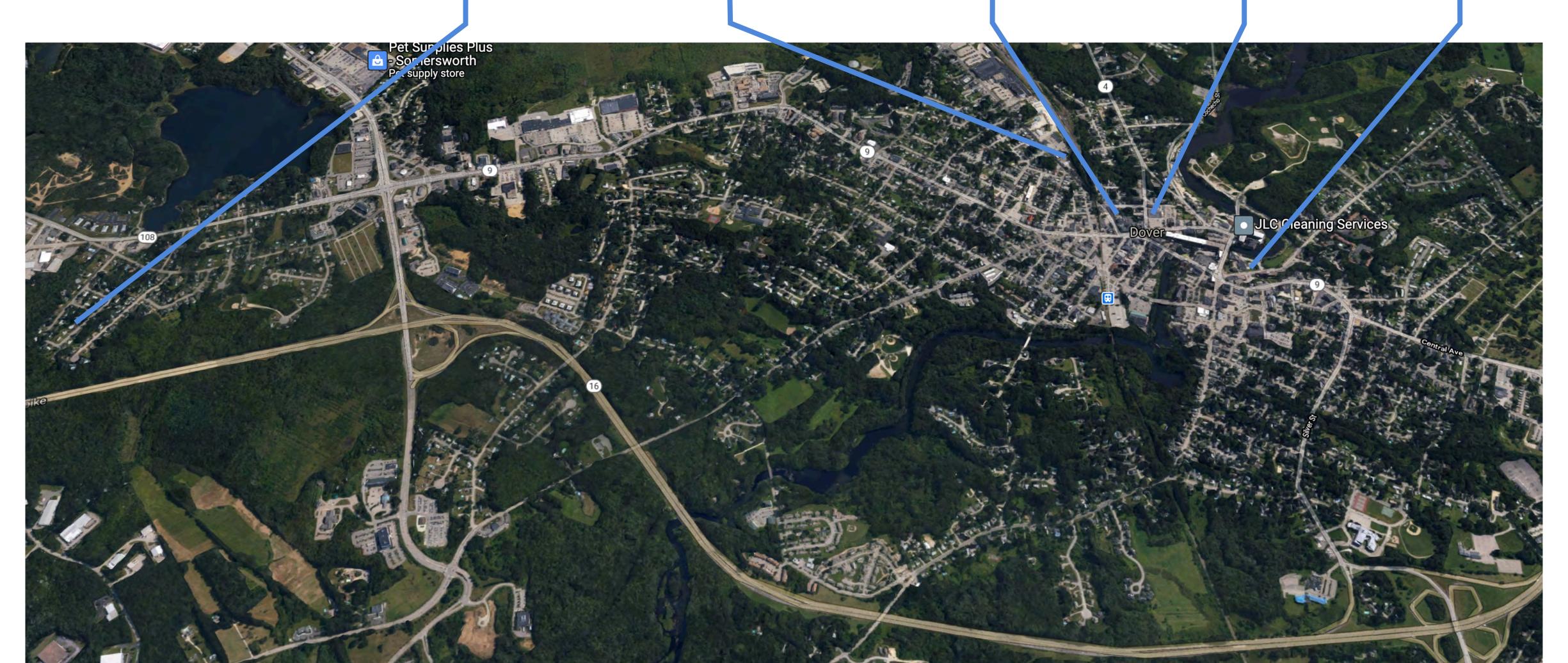




Mixed-use VPA: \$9.6 M





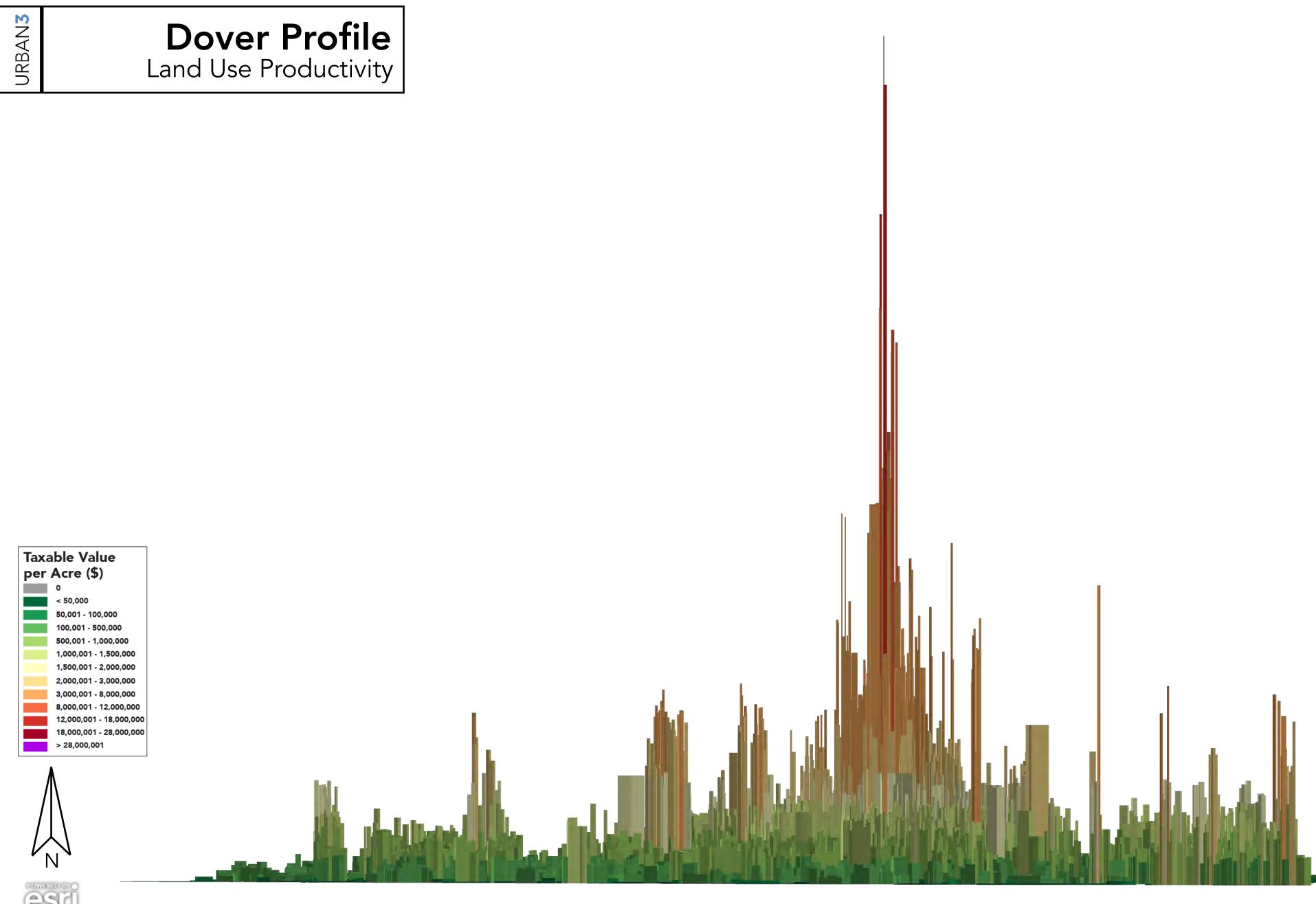


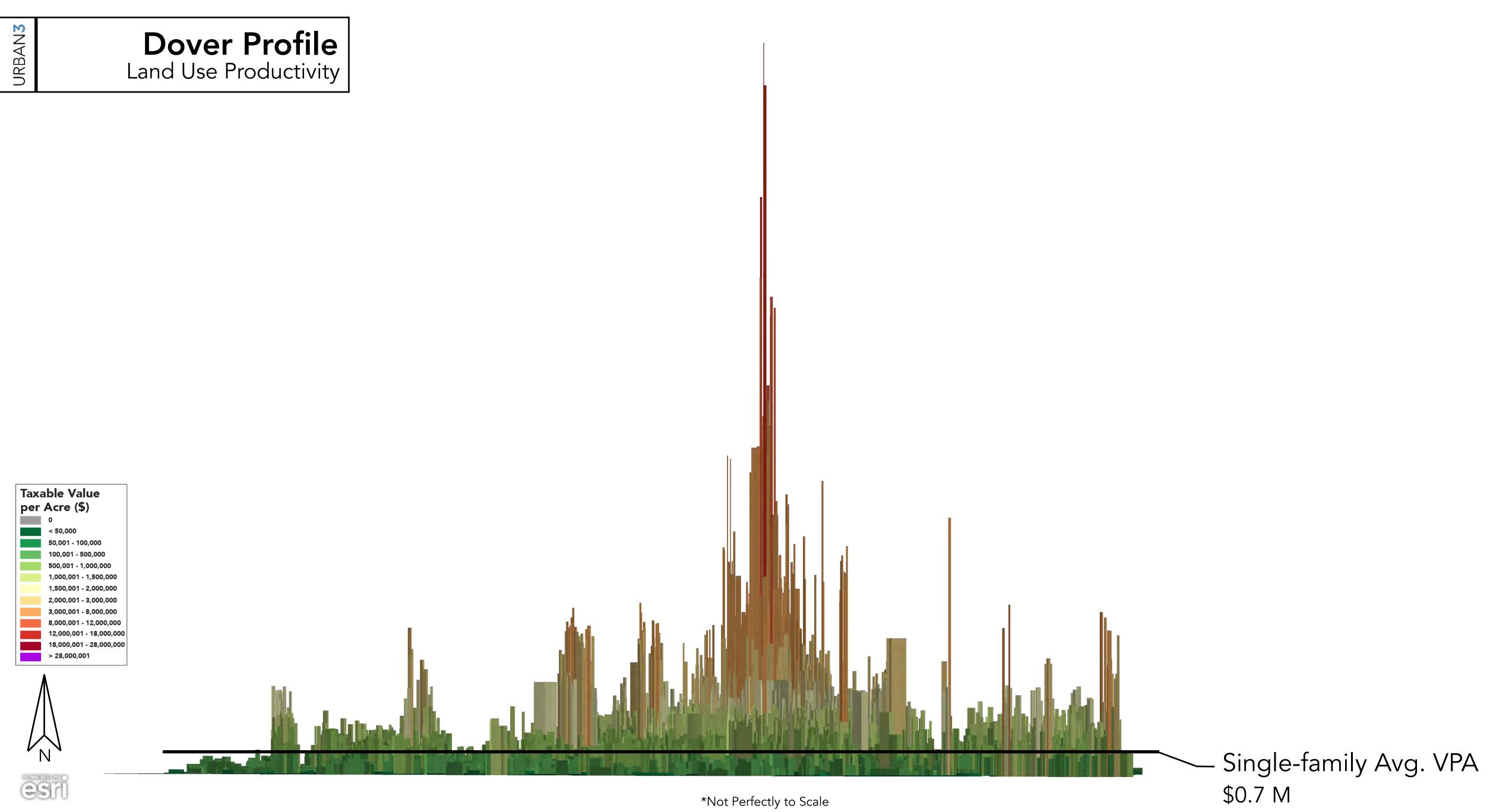


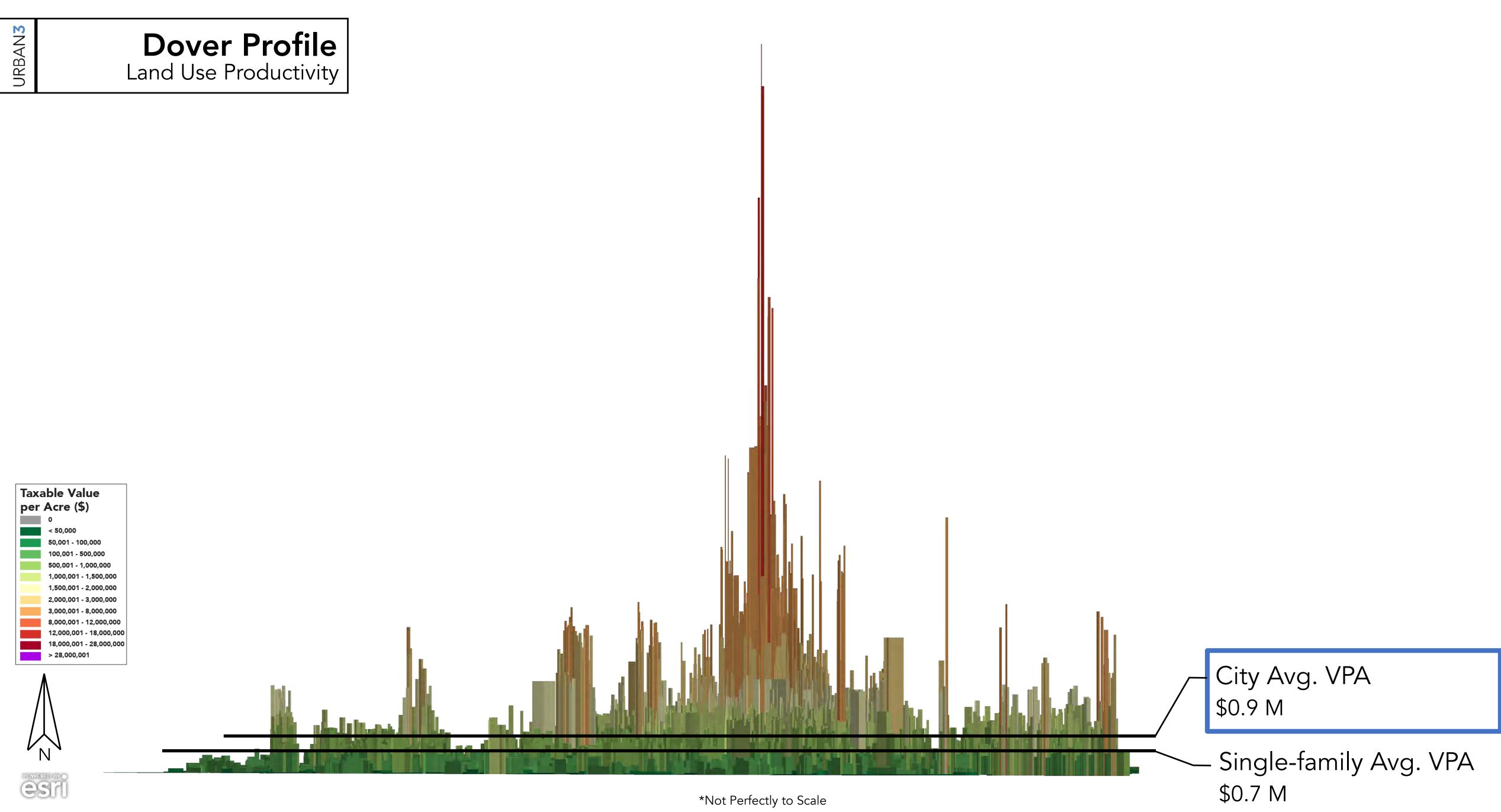


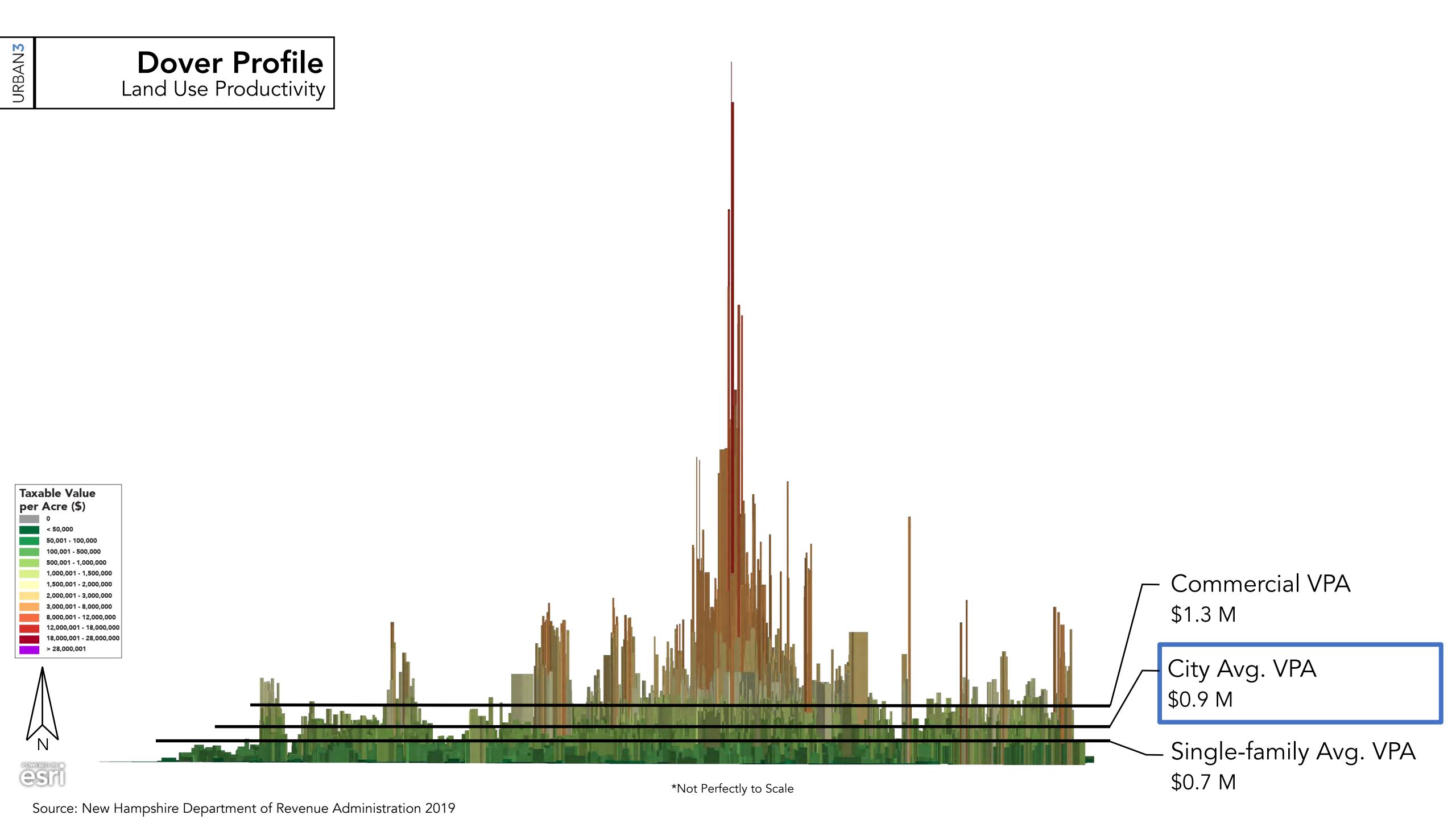
Productivity

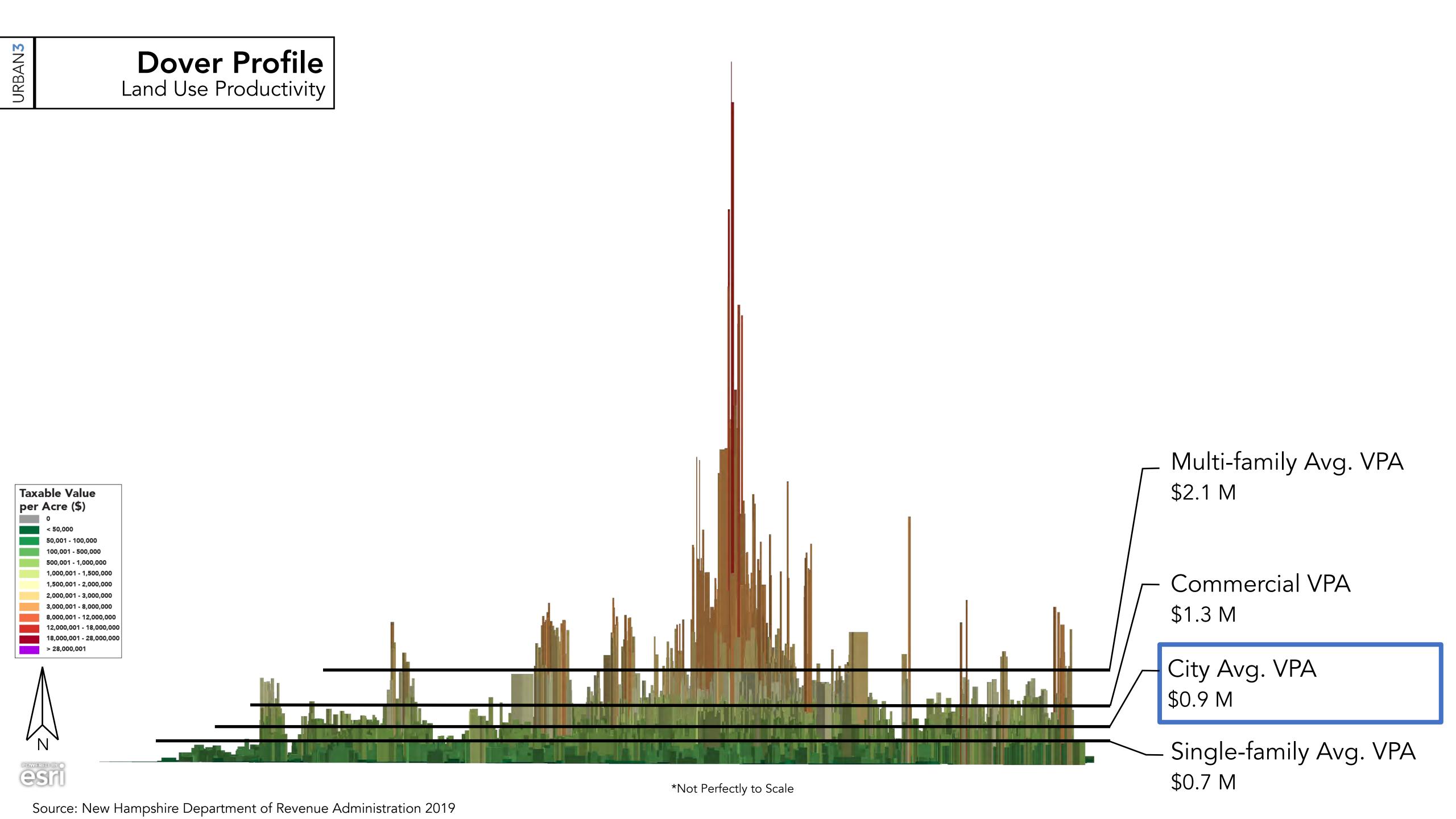
Geospatial Analysis

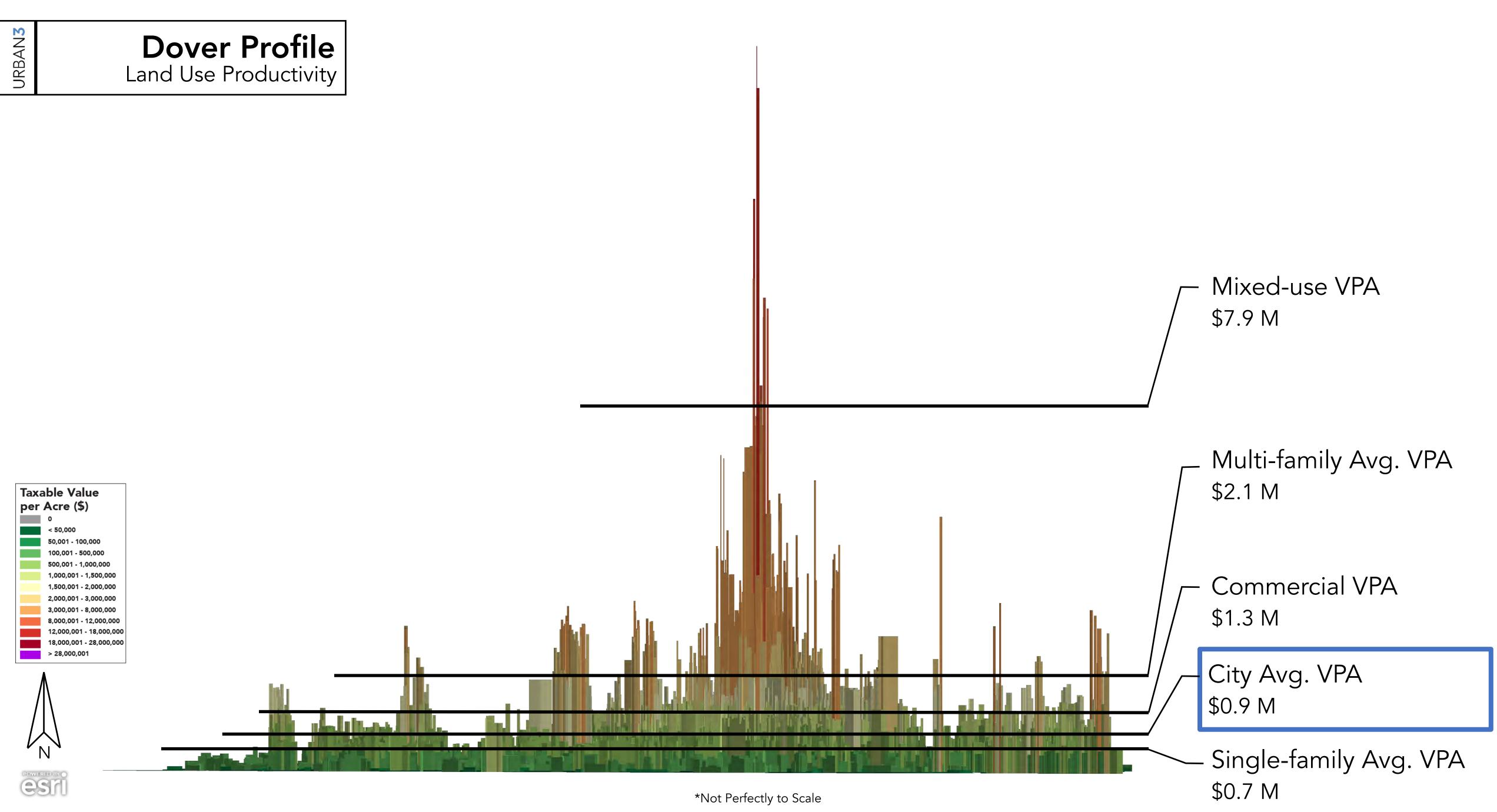


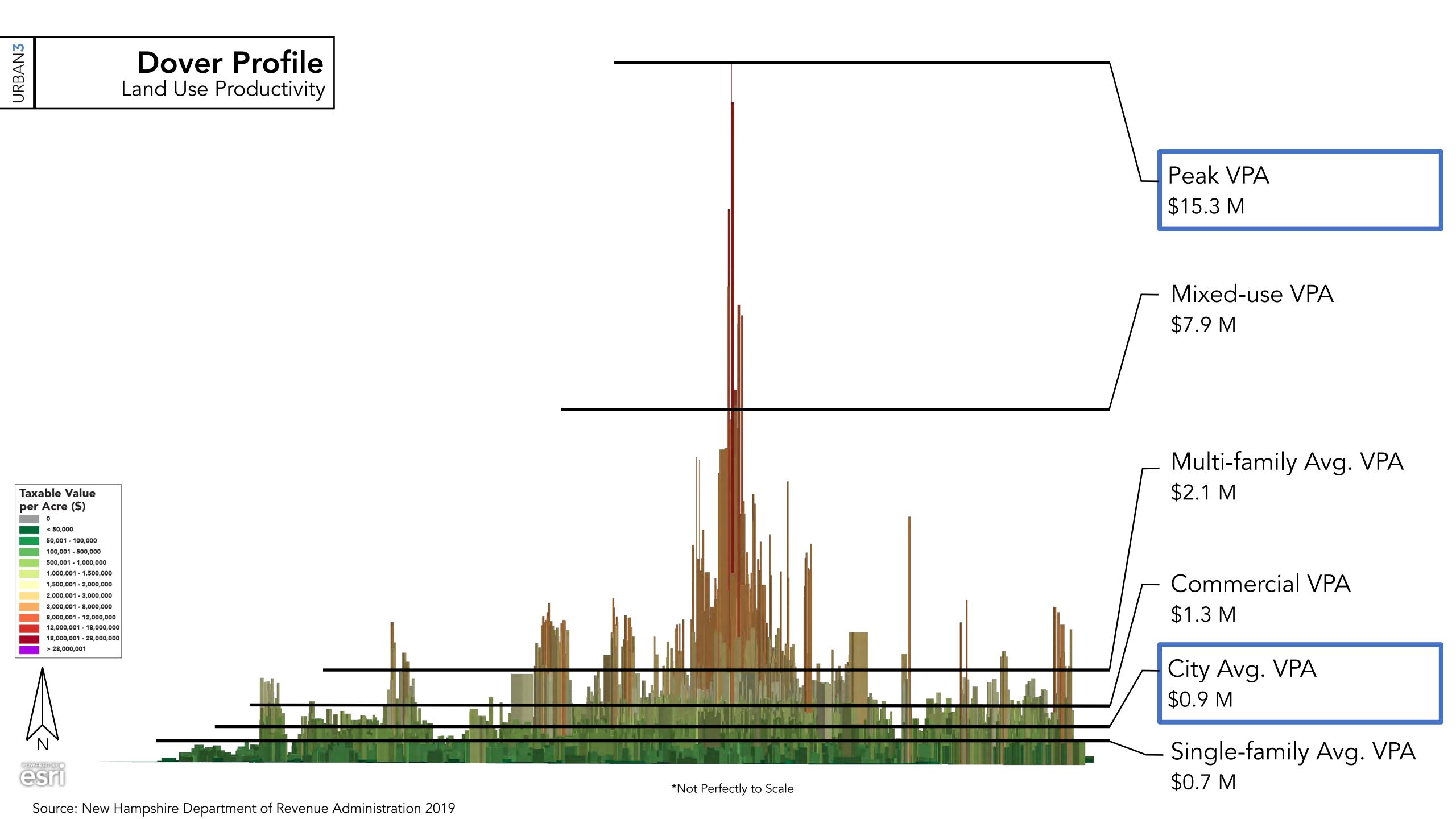
















Land Use Types

Local samples of buildings and development types

Peterborough Land Use Productivity



Commercial VPA: \$0.94 M



Peak VPA VPA: \$12.2 M



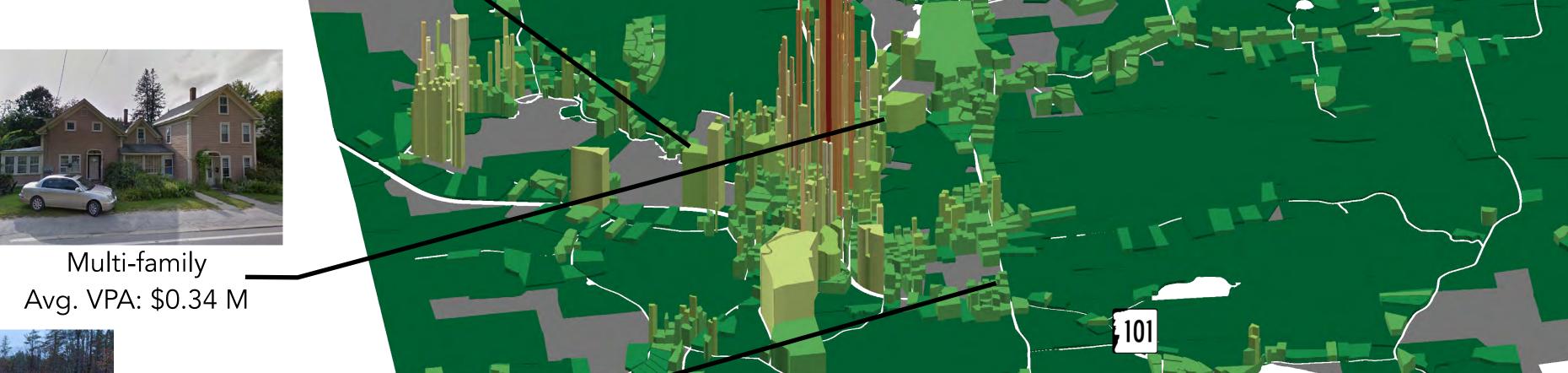
Mixed-use



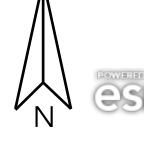




Single-family Avg. VPA: \$0.17 M

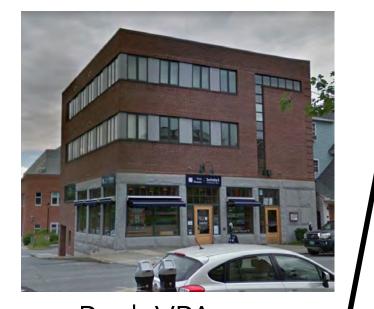


Source: New Hampshire Department of Revenue Administration 2019



Avg. VPA: \$38,904

Hanover Land Use Productivity



Peak VPA VPA: \$37.8 M



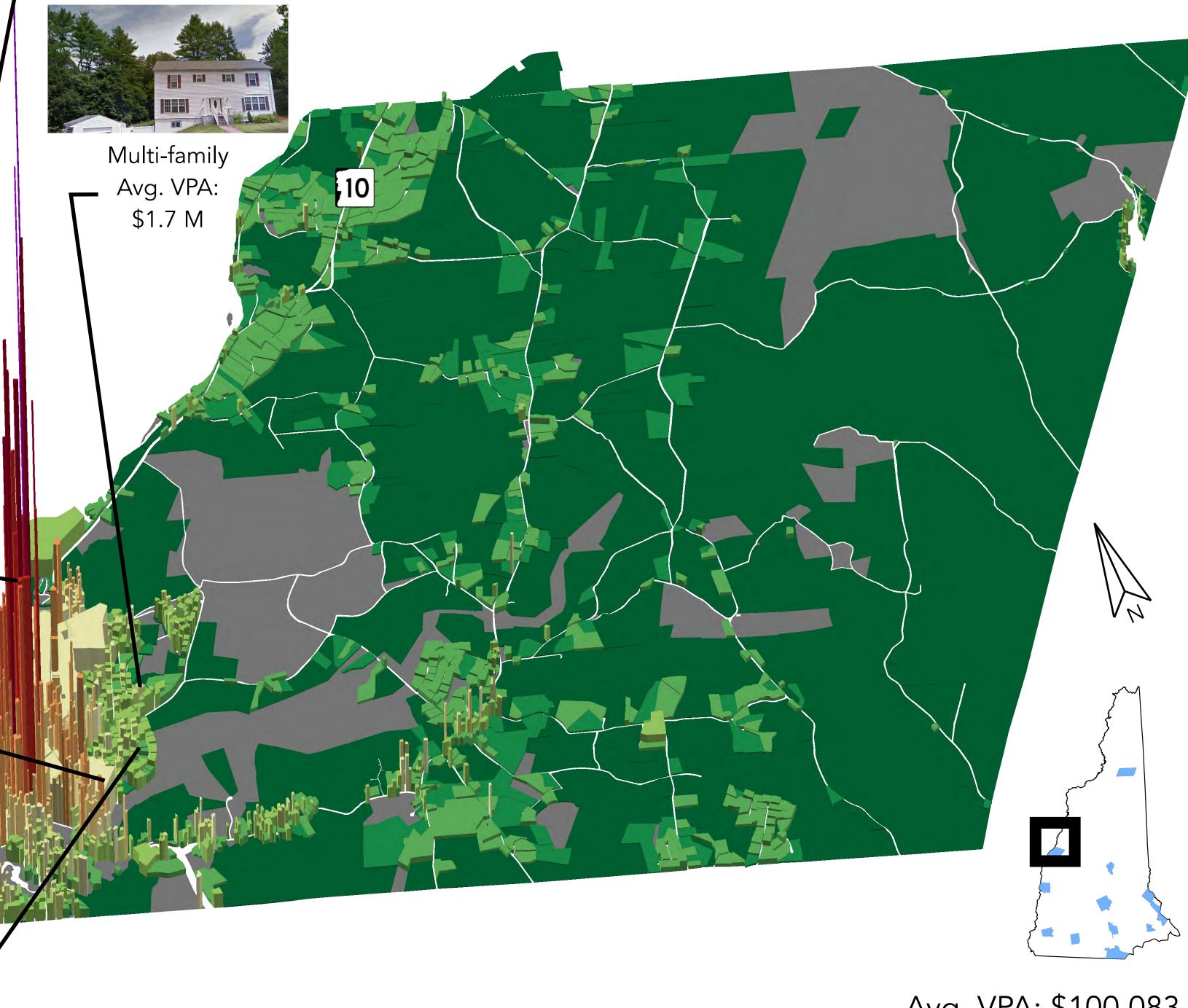
Mixed-use VPA: \$12 M

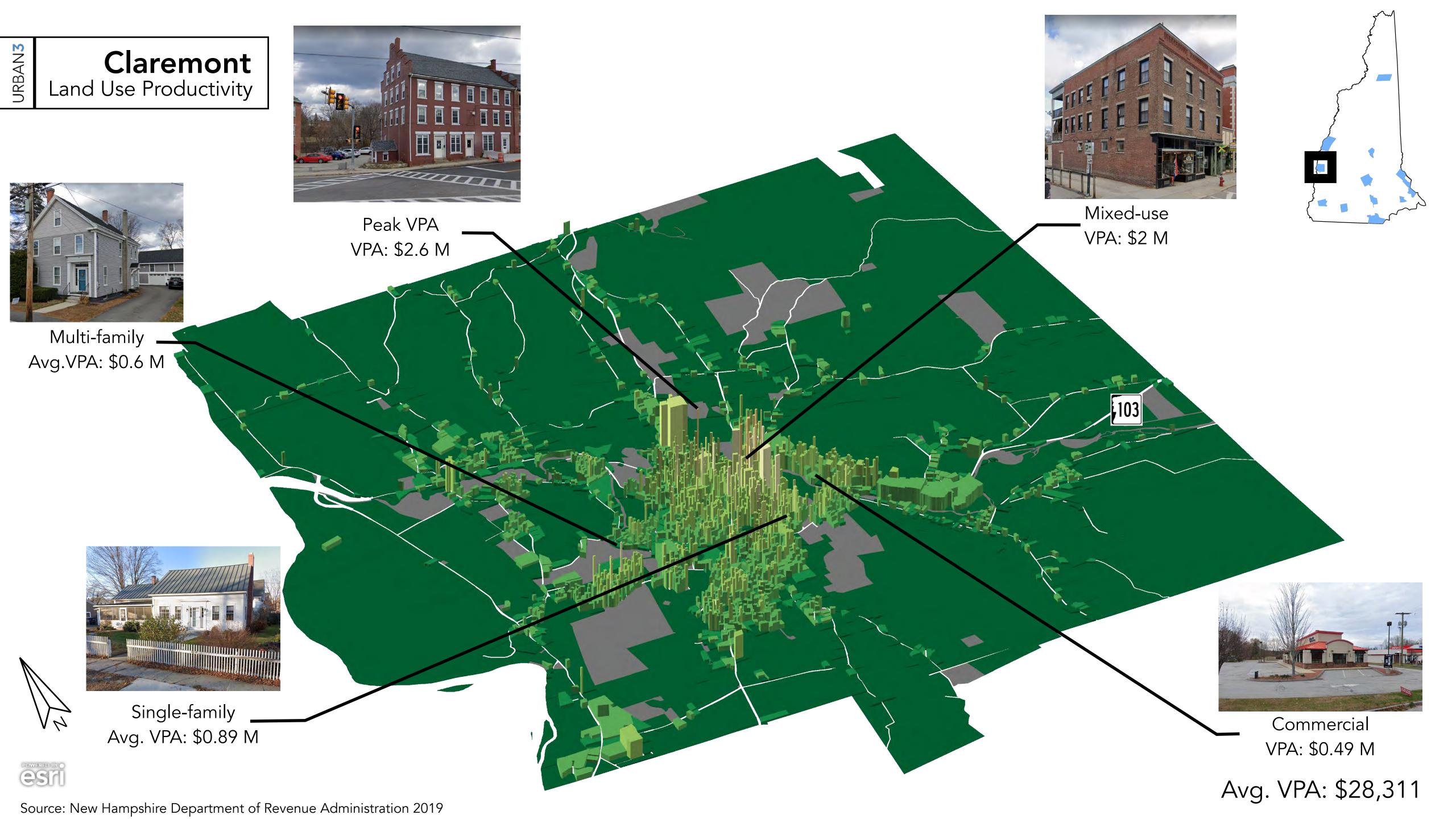


Commercial VPA: \$3.4 M



Single-family Avg. VPA: \$0.81 M





Lebanon

Land Use Productivity



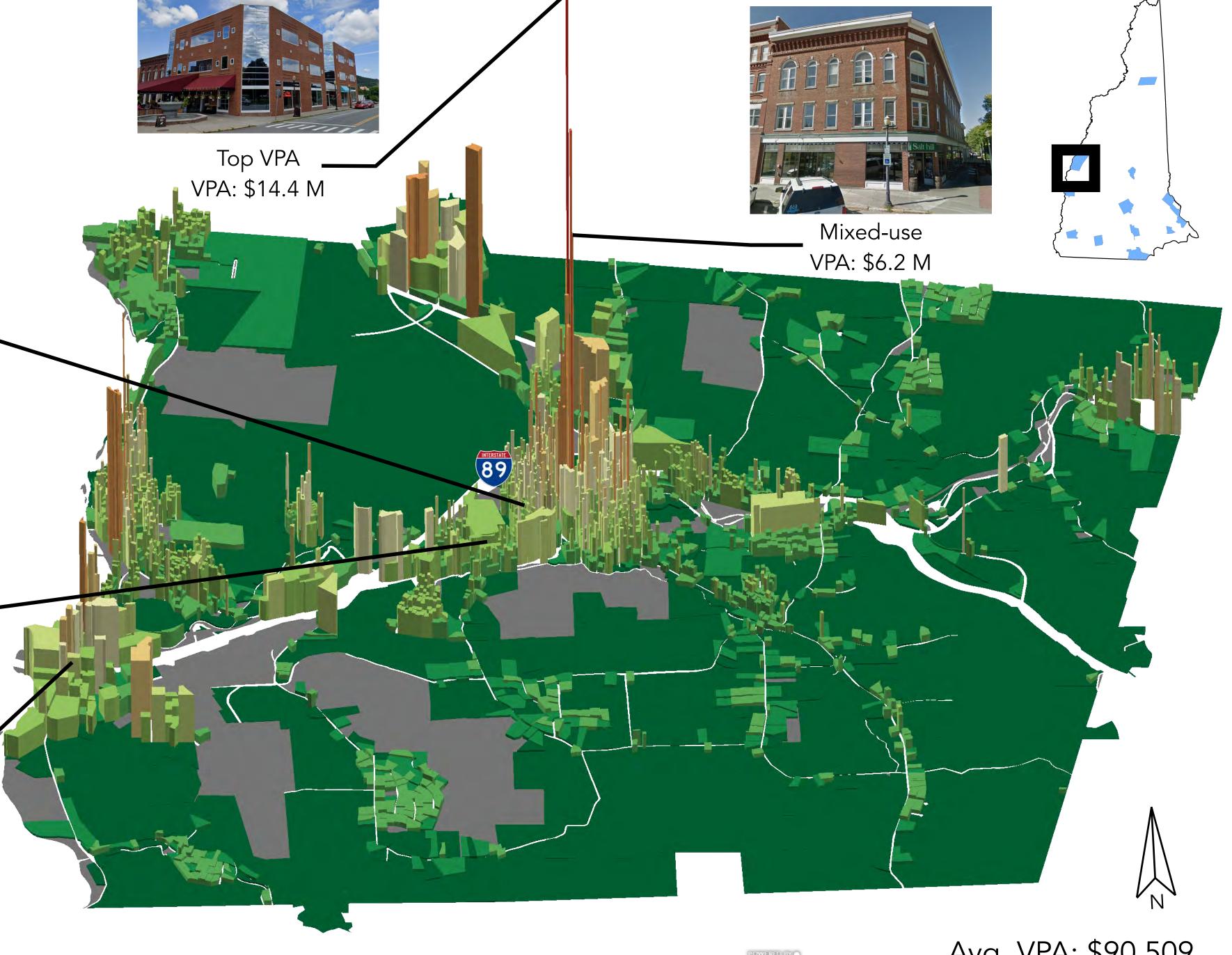
Multi-family Avg. VPA: \$1.2 M

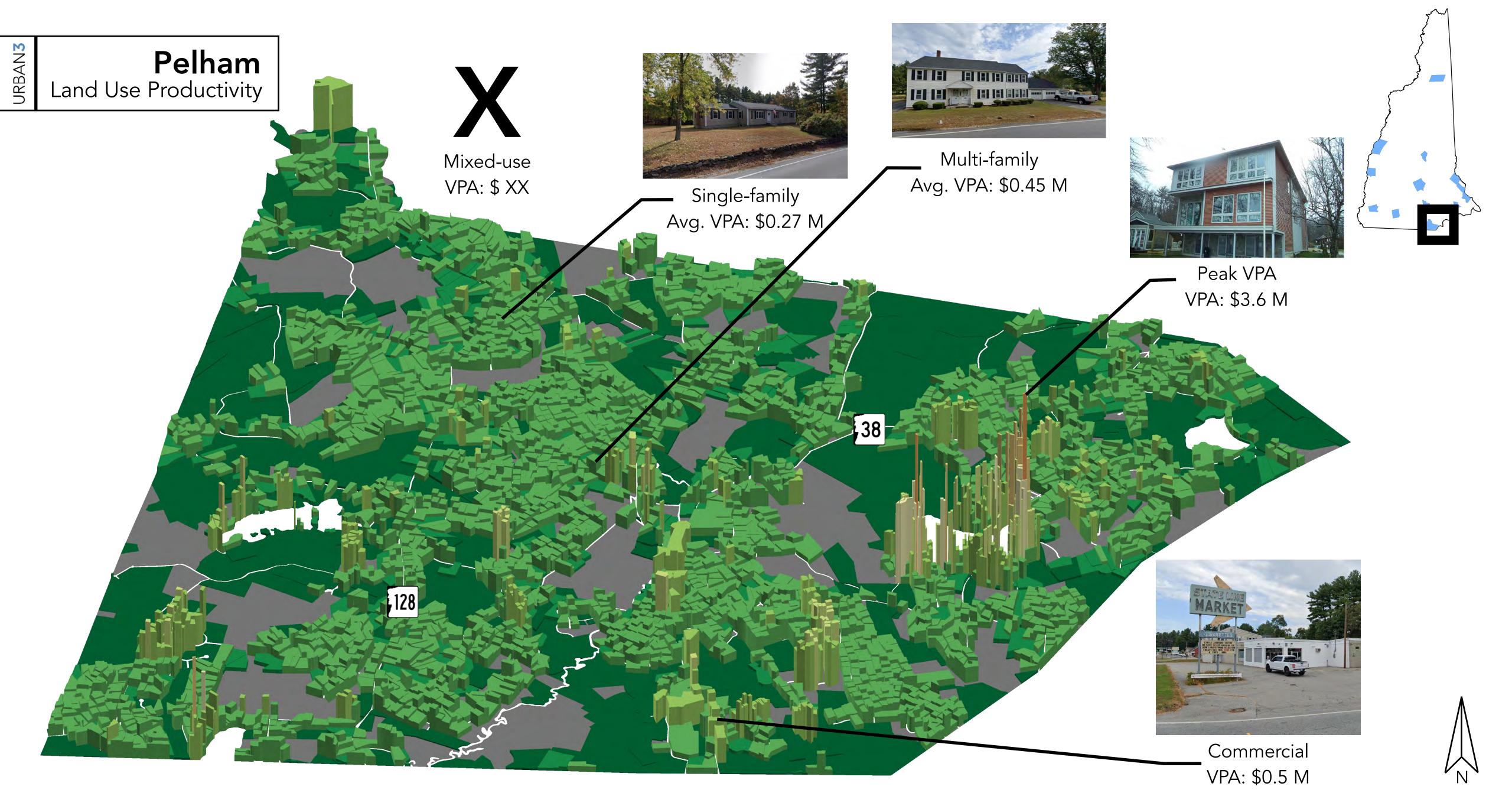


Single-family _ Avg. VPA: \$0.51 M



Commercial VPA: \$1.1 M



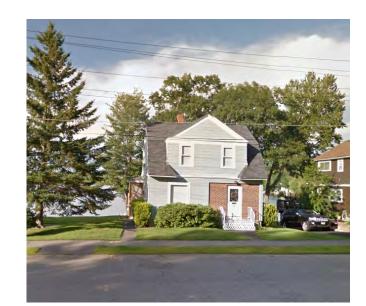




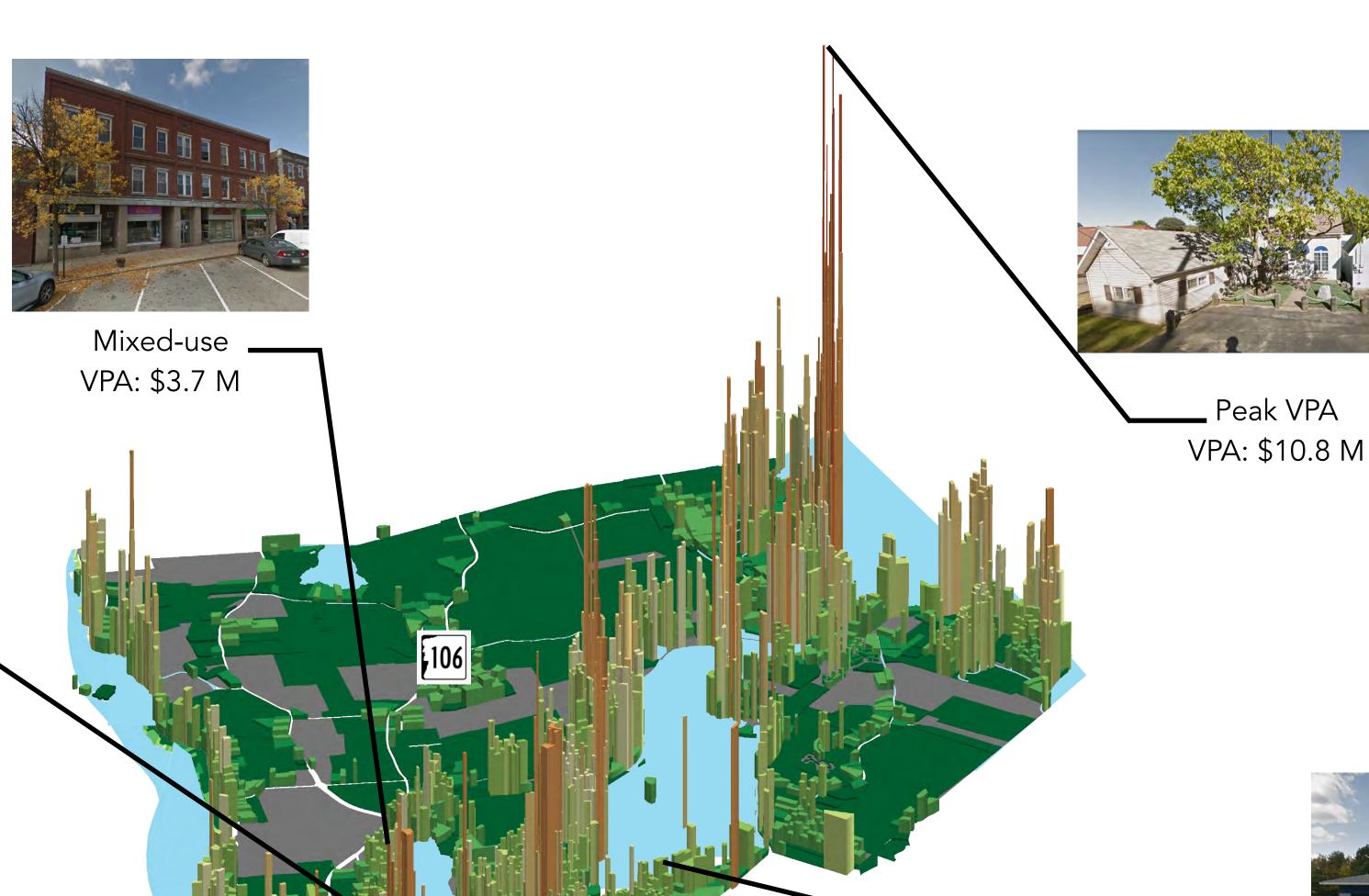
Laconia Land Use Productivity



Multi-family Avg. VPA: \$1.2 M



Single-family Avg. VPA: \$0.91 M



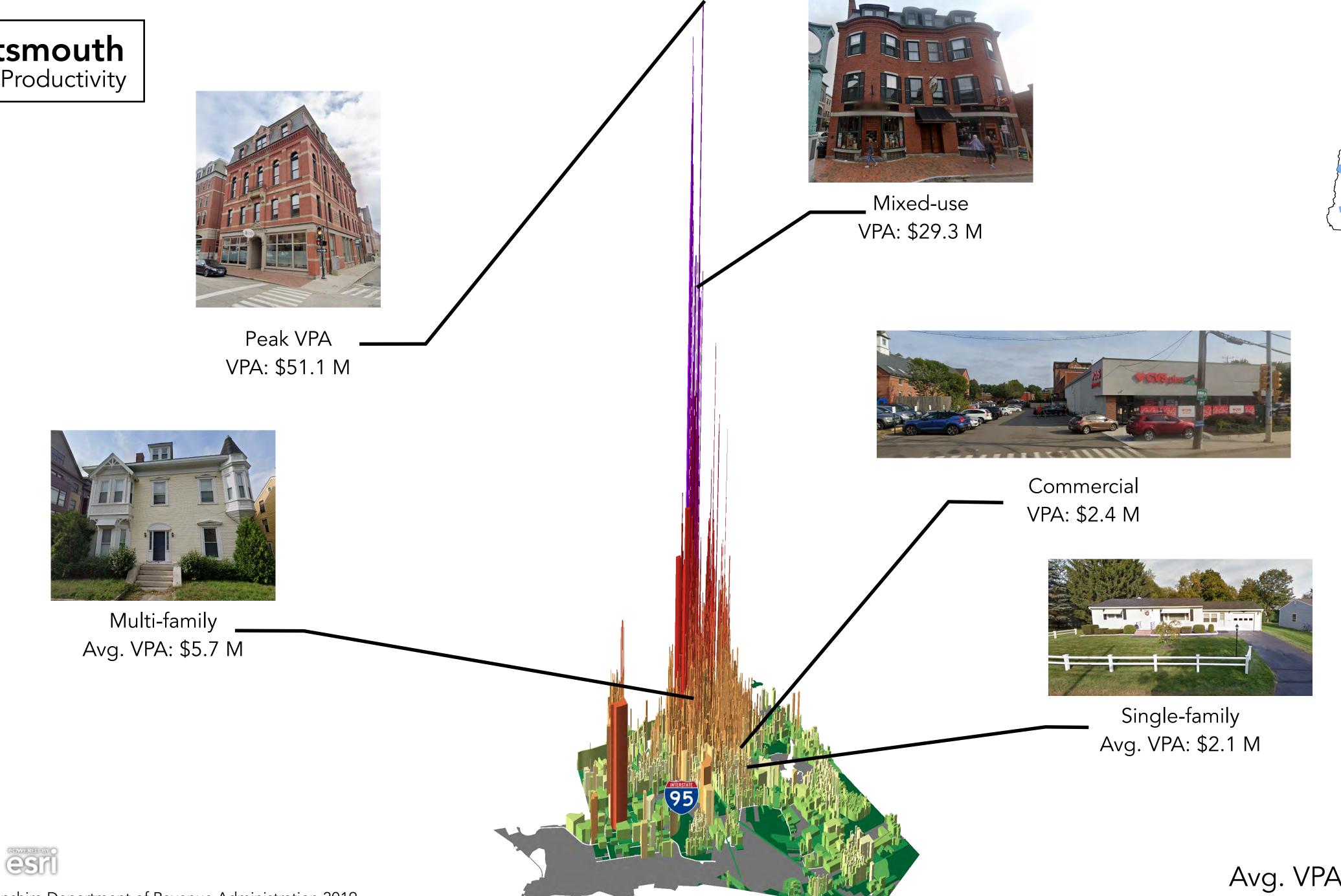


Commercial VPA: \$0.9 M



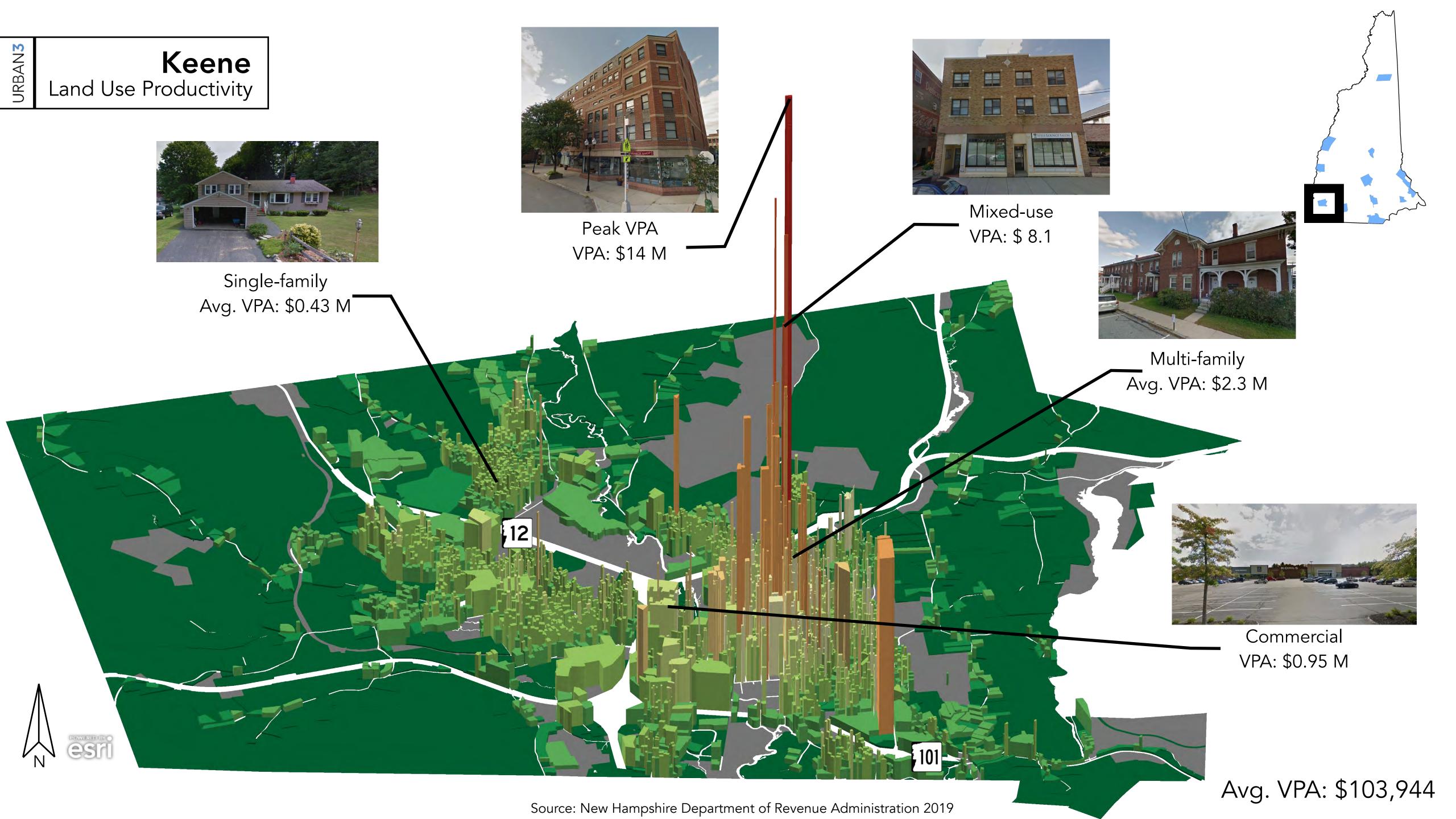
Avg. VPA: \$173,092

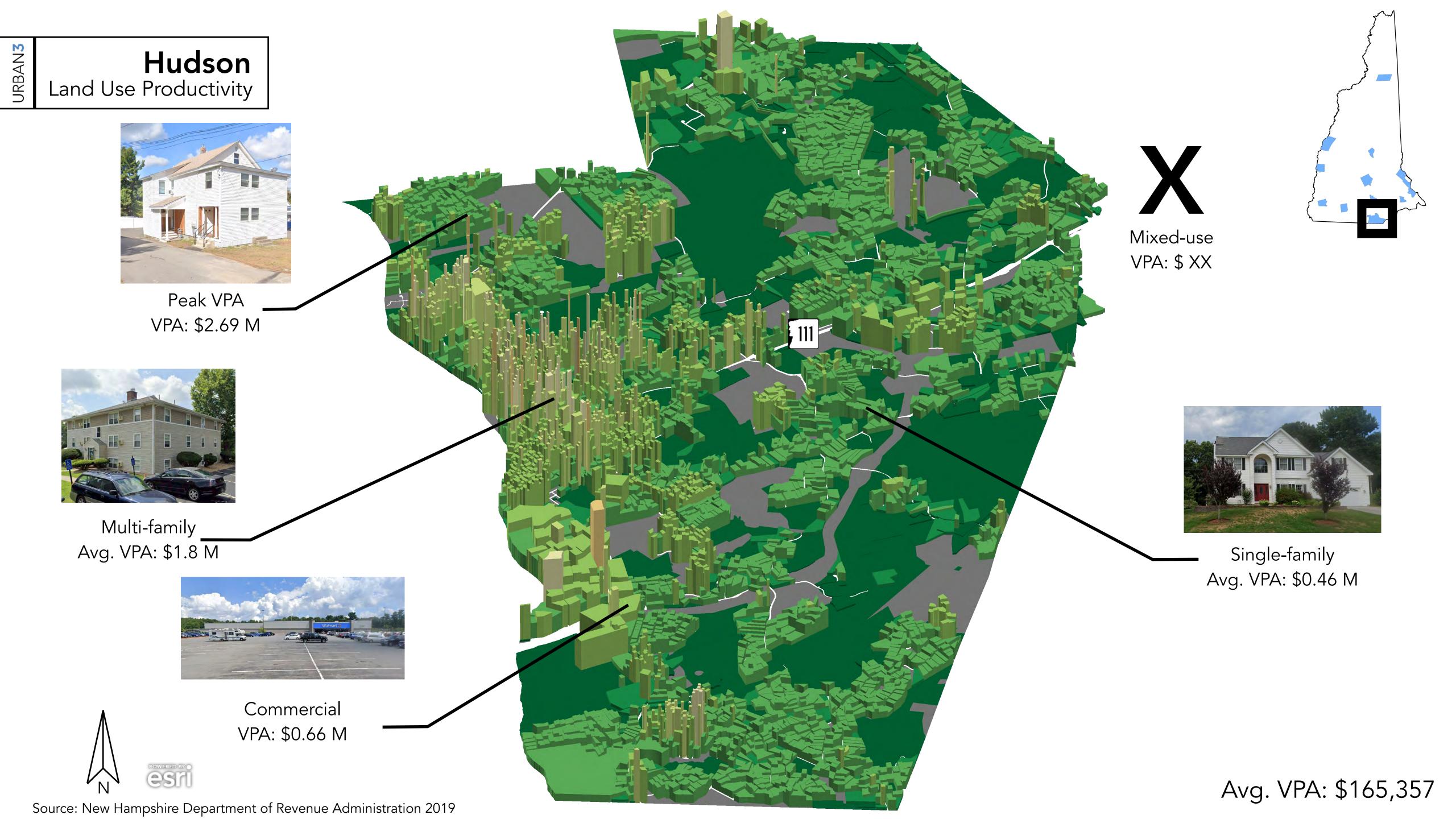
Portsmouth Land Use Productivity



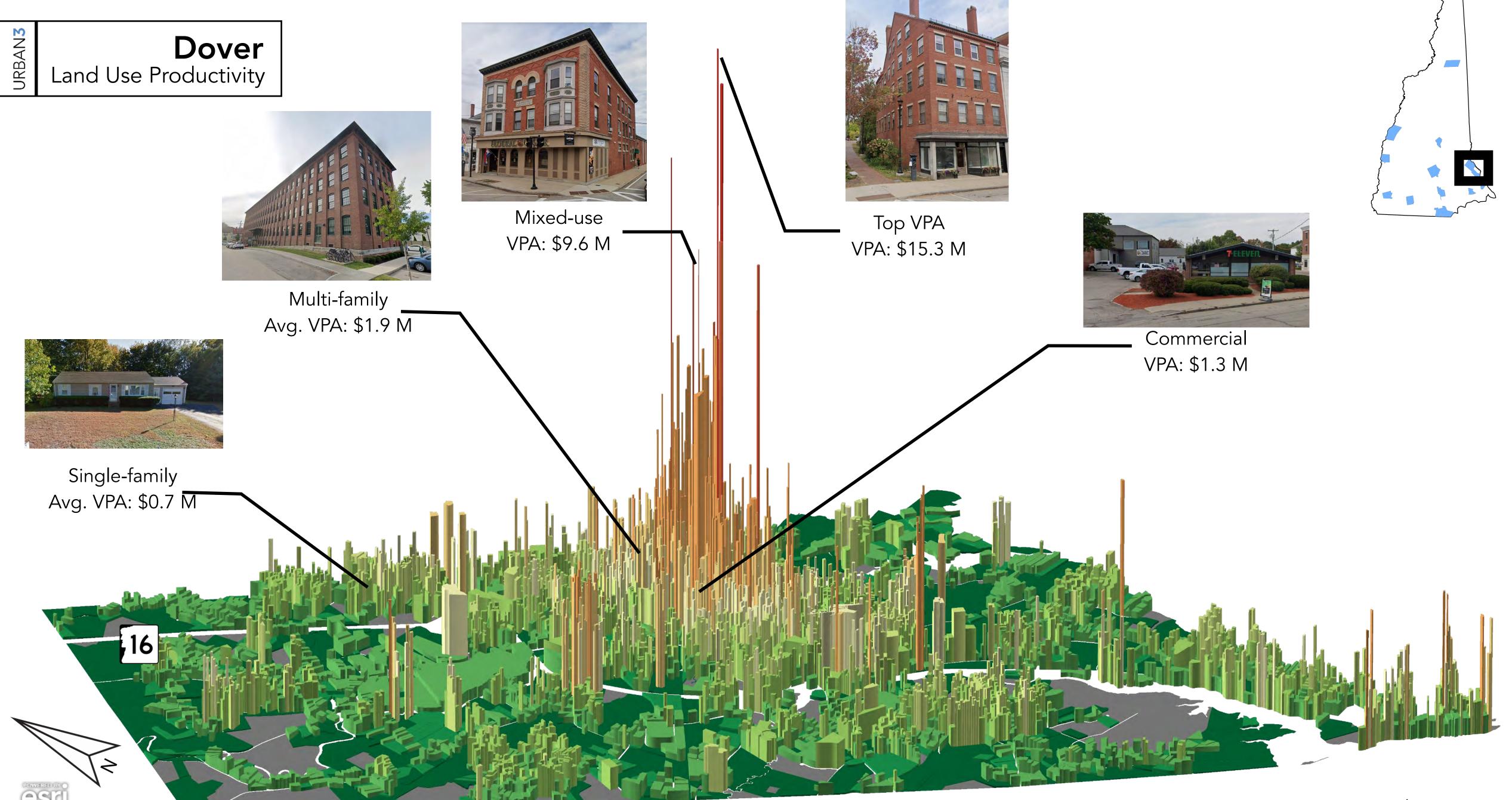
Source: New Hampshire Department of Revenue Administration 2019

Avg. VPA: \$557,179

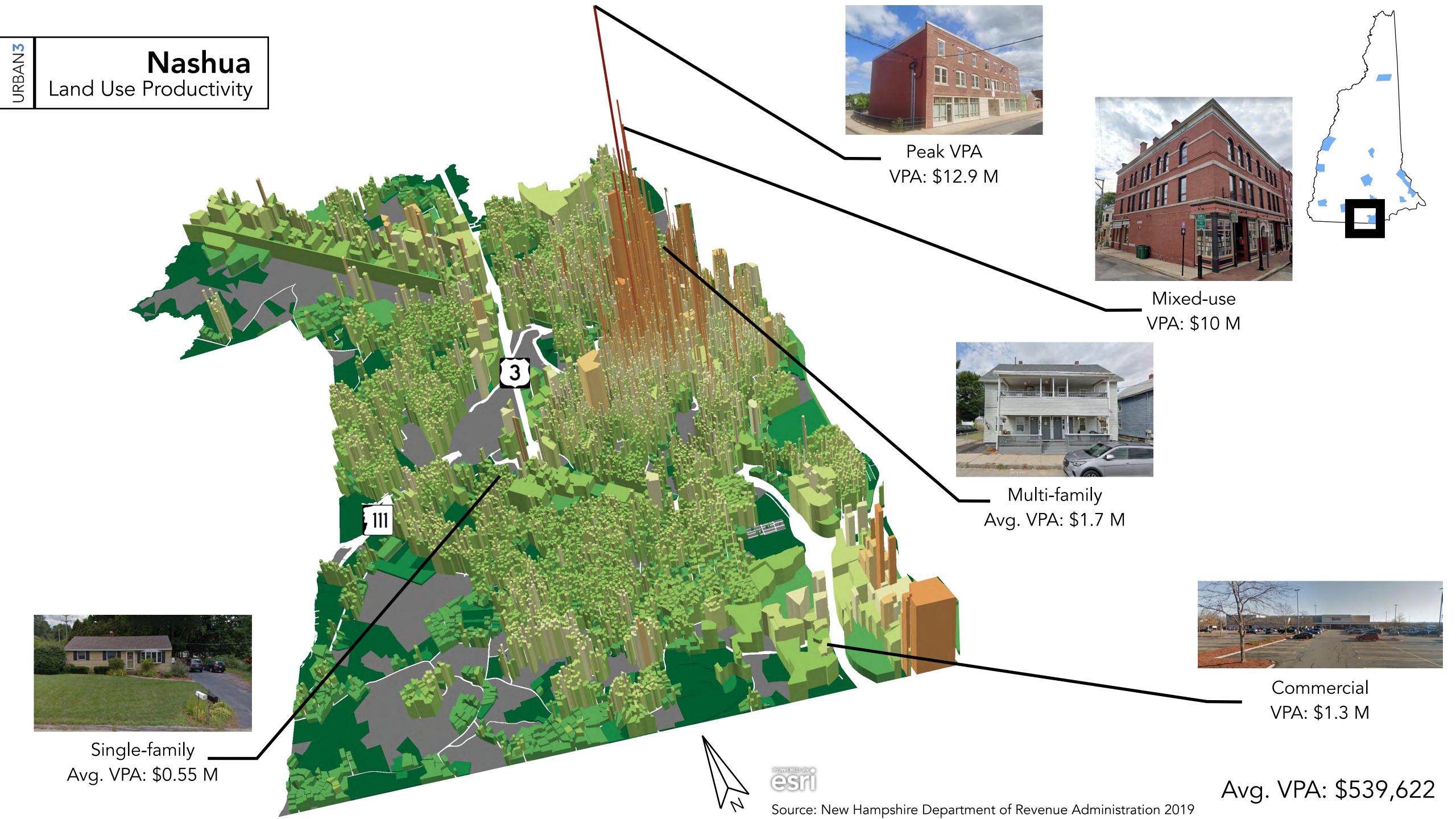




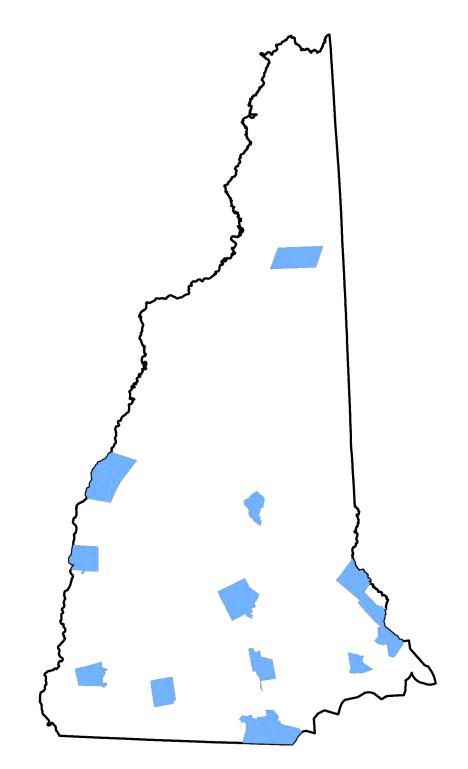
Source: New Hampshire Department of Revenue Administration 2019



Source: New Hampshire Department of Revenue Administration 2019

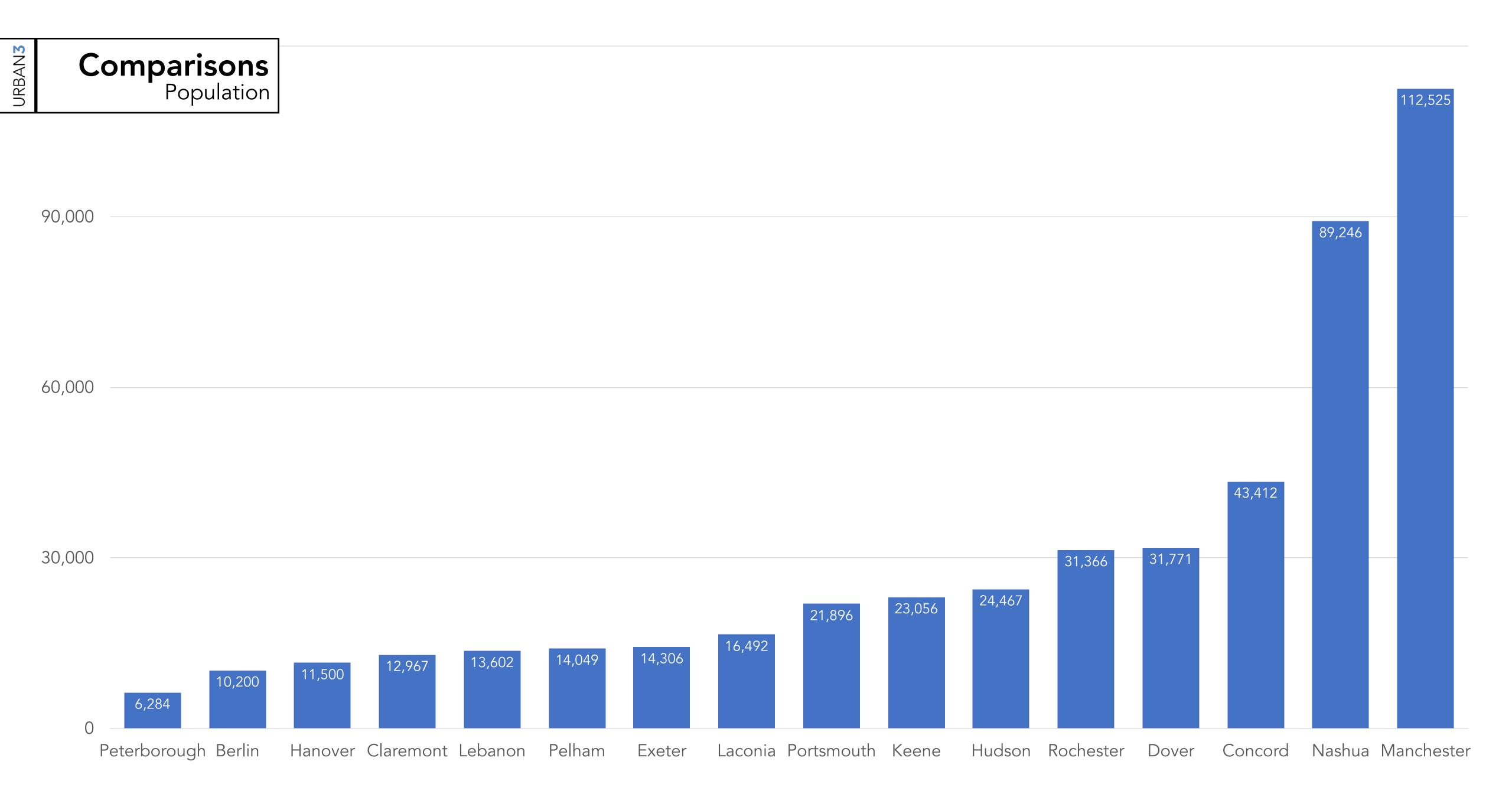




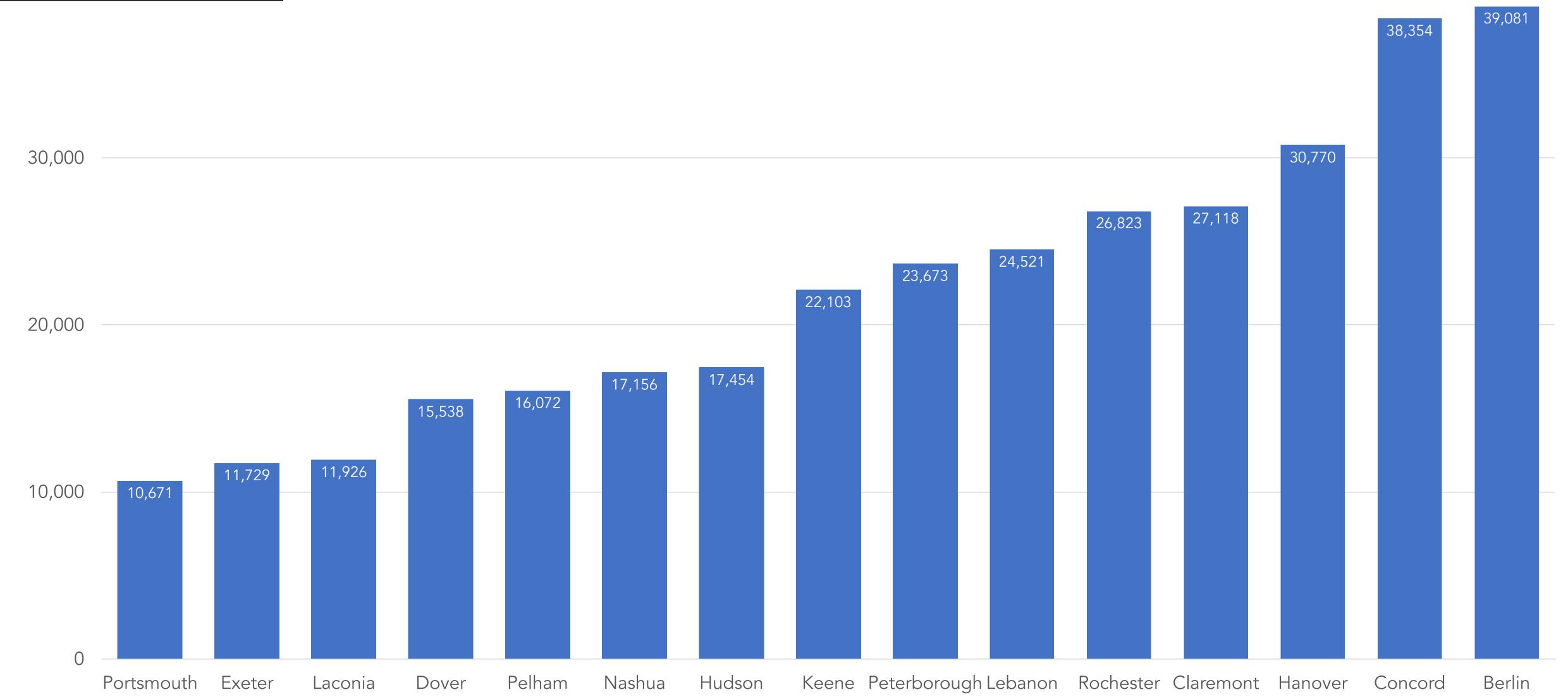


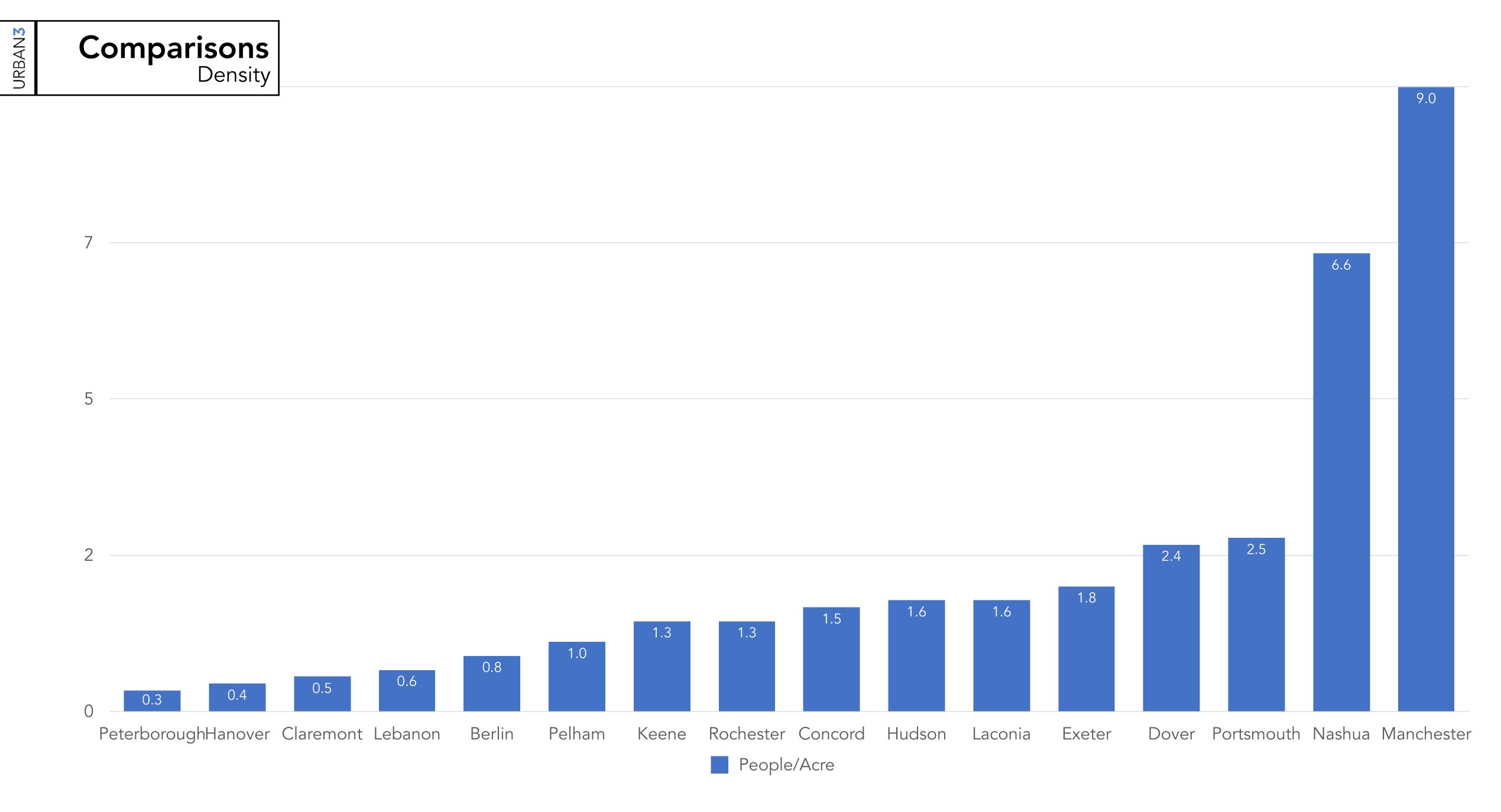
Comparing Communities

15 municipalities from across New Hampshire



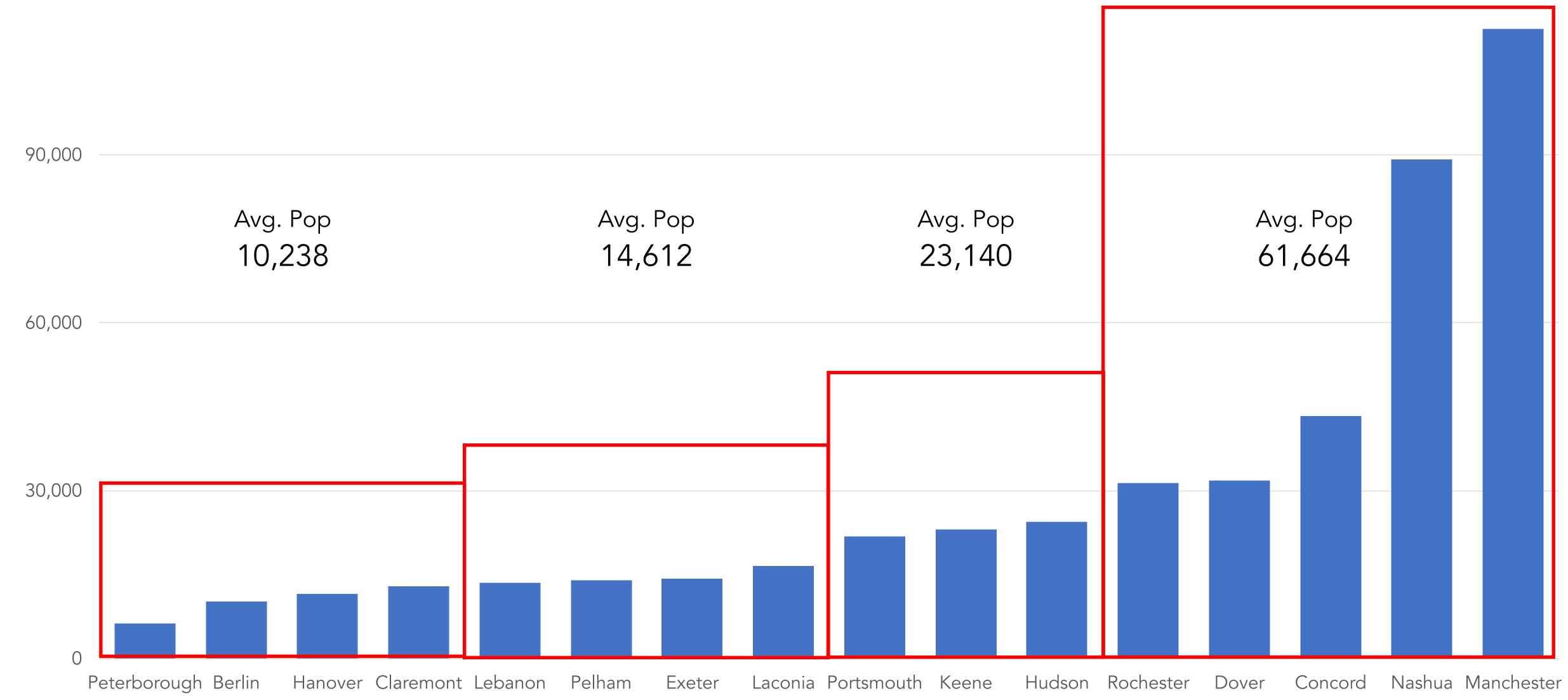
Comparisons Total Area

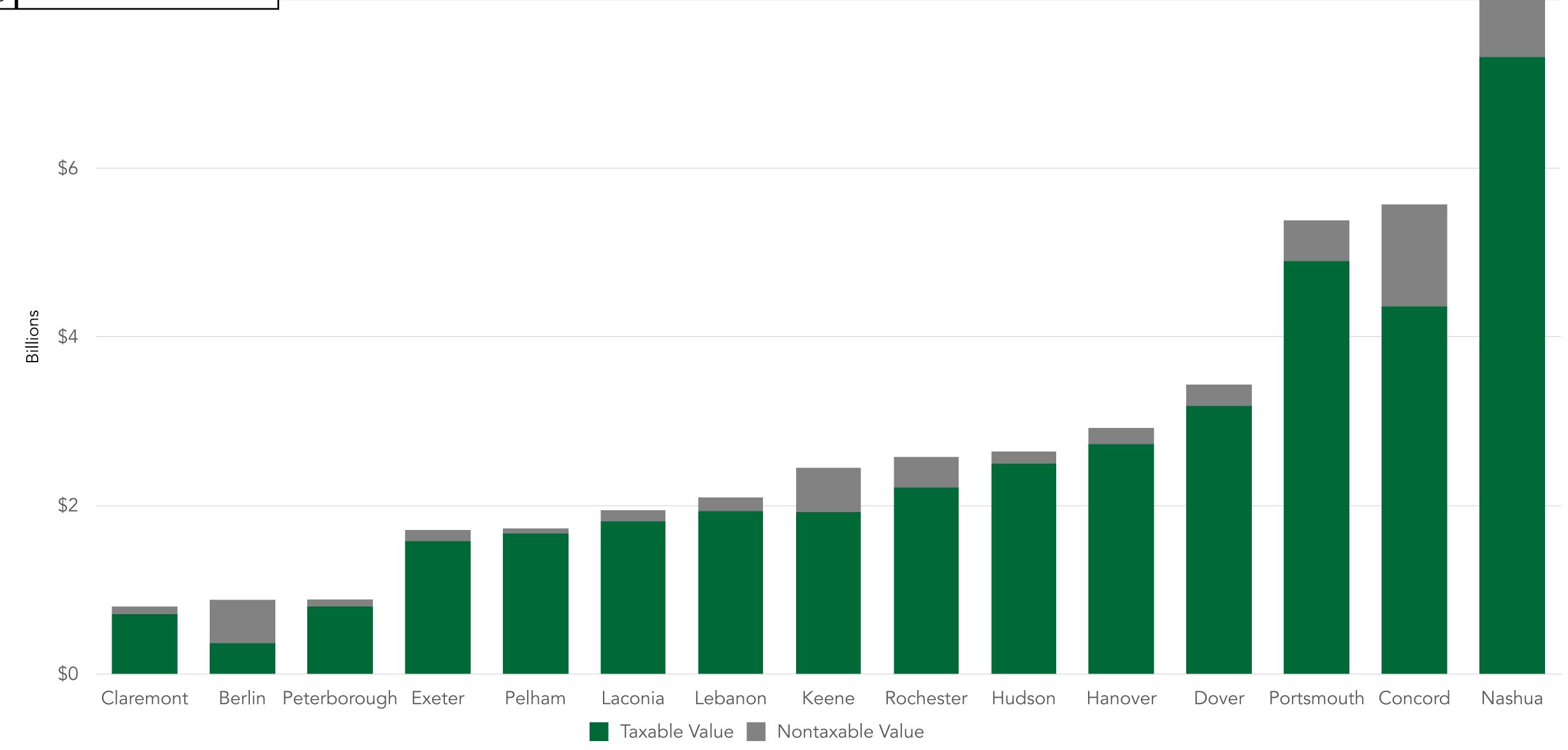


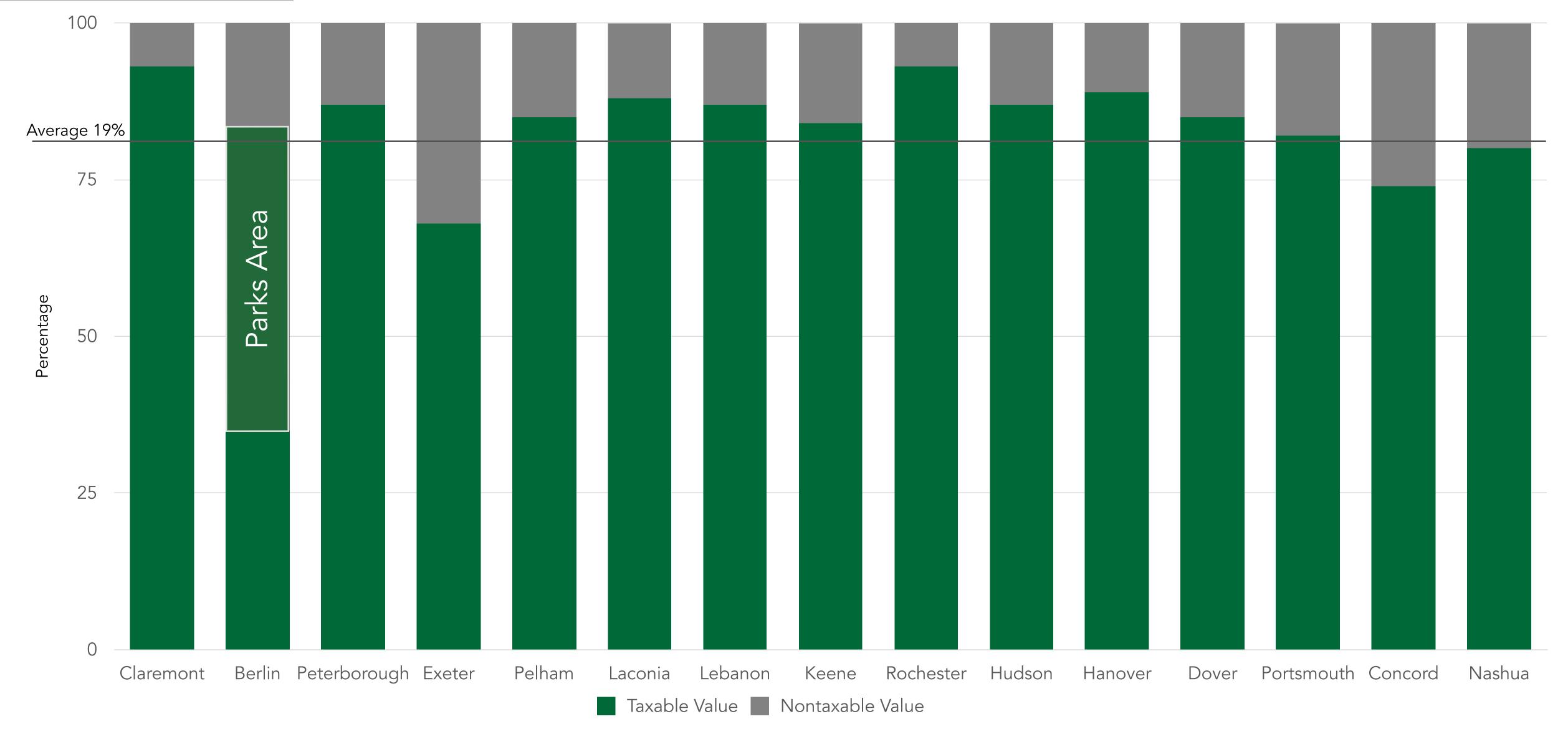


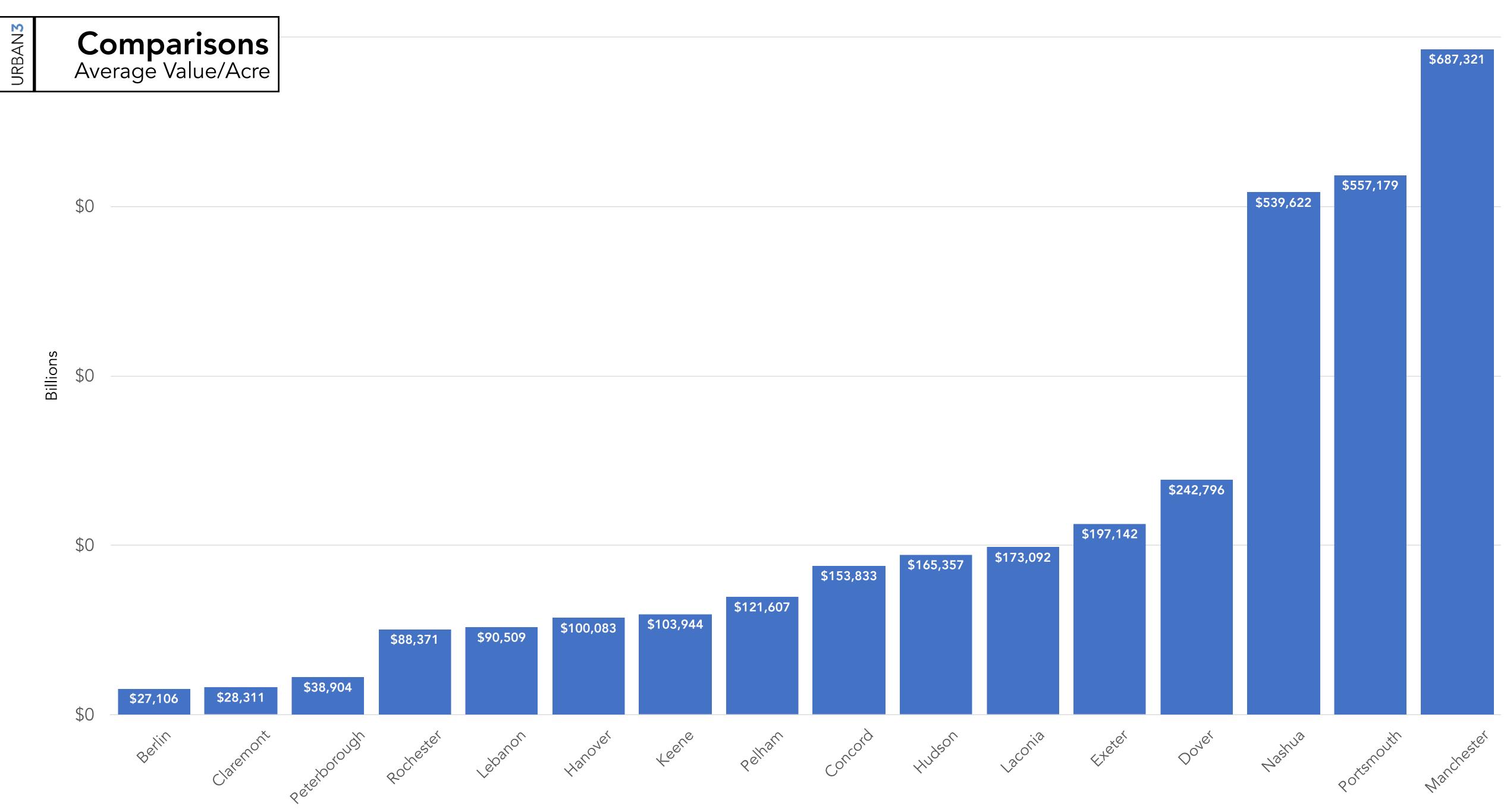


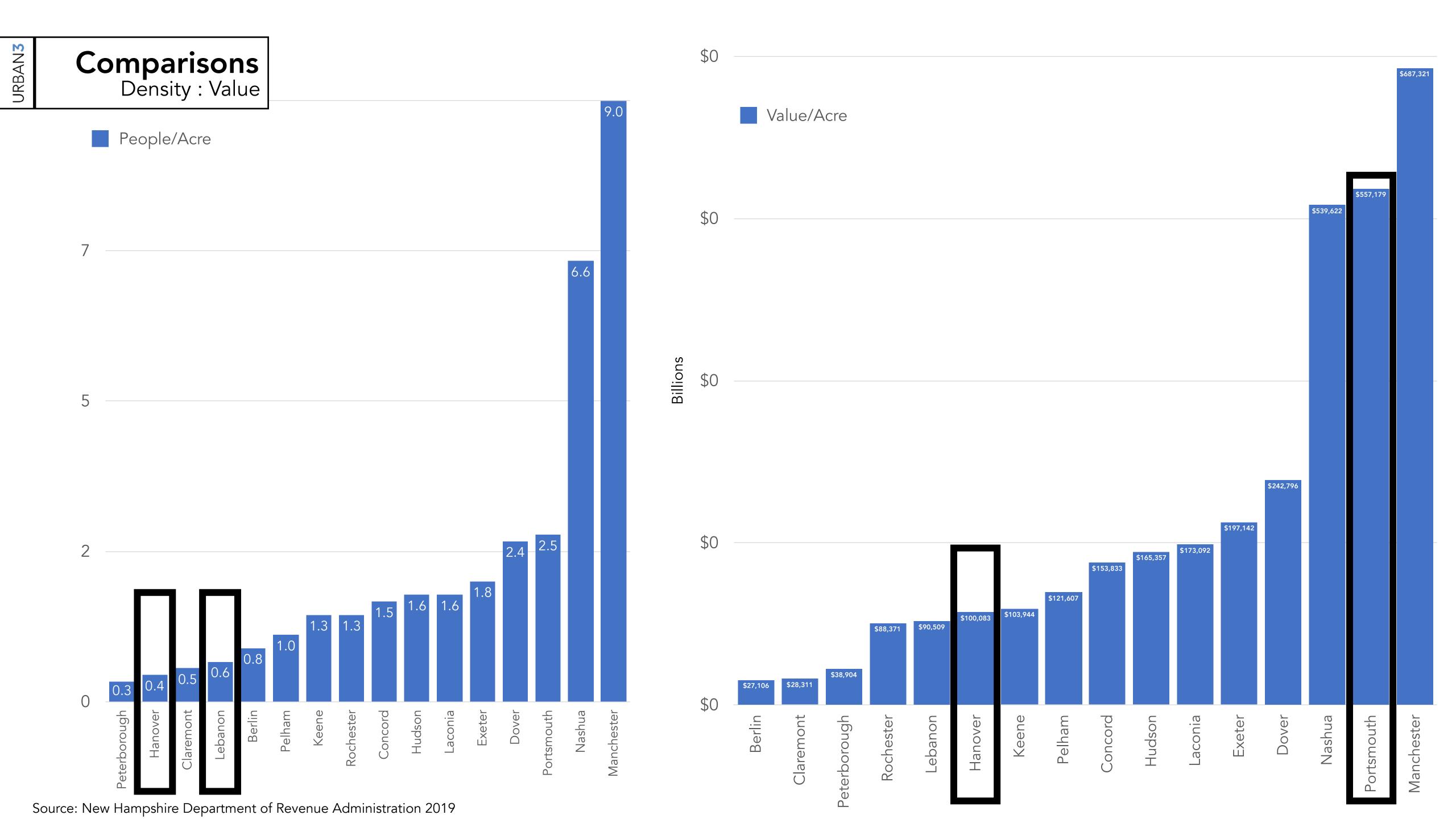
Peer Groups Population







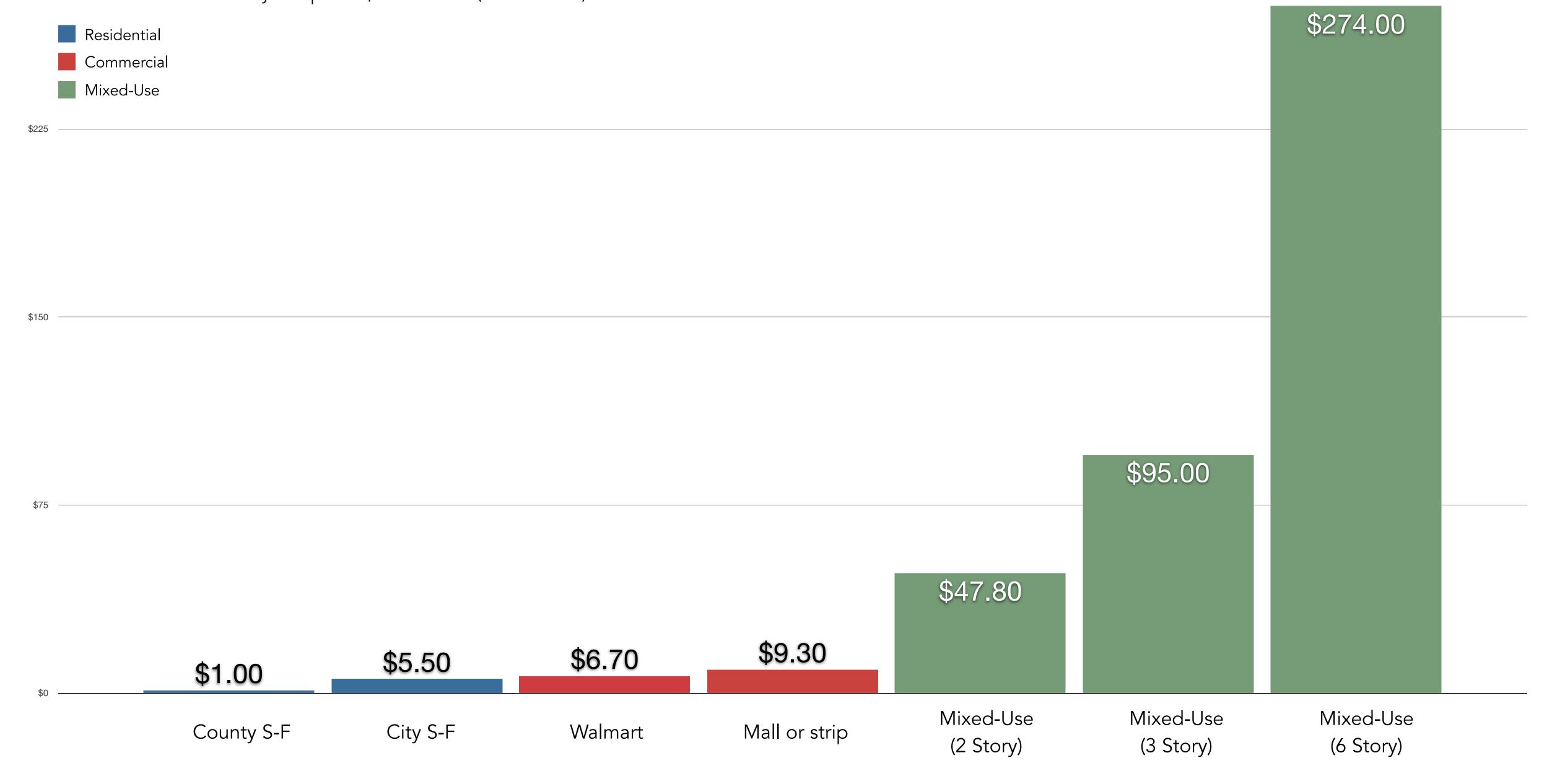




County Property Taxes/Acre



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

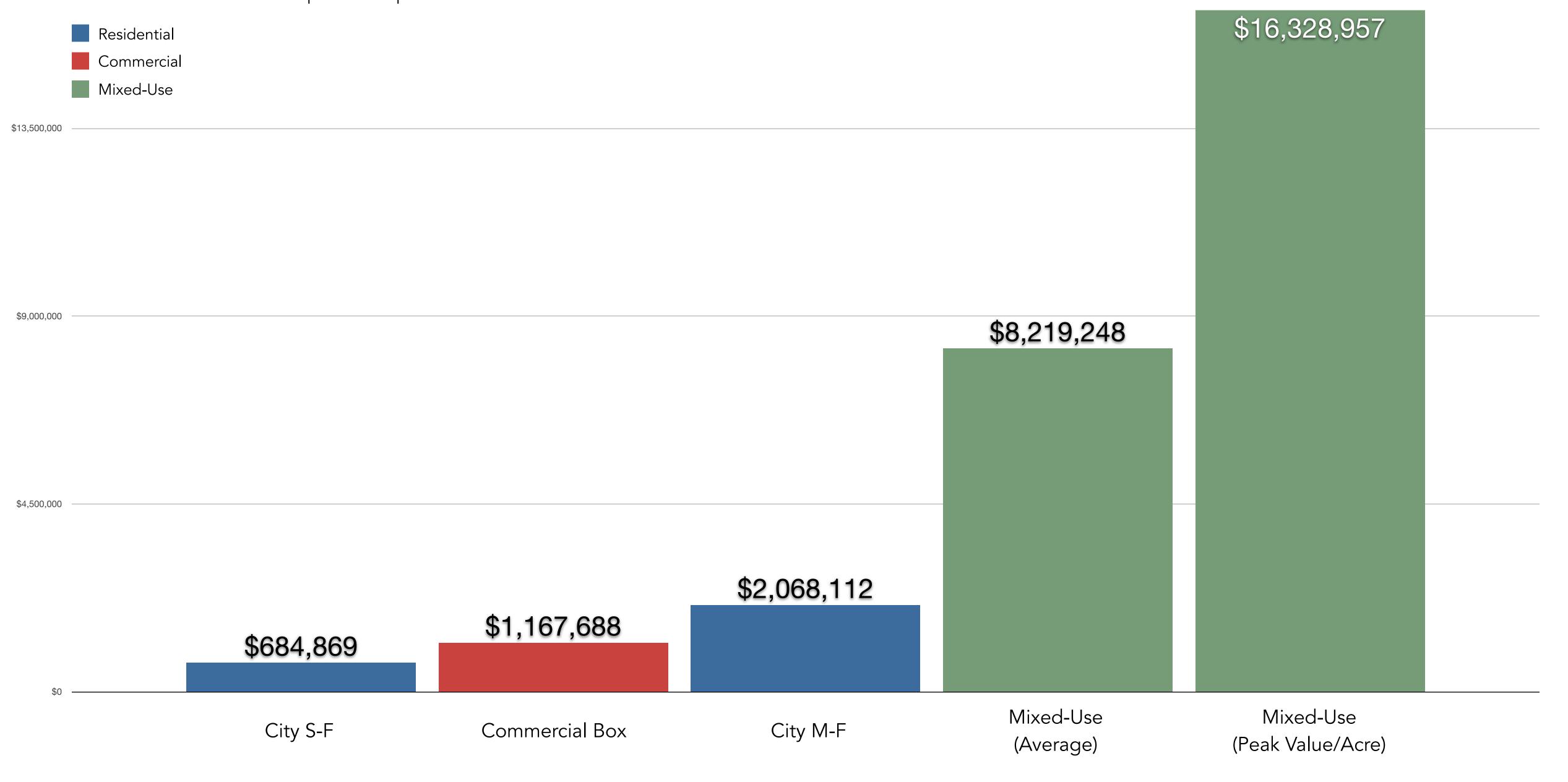


Property Value/Acre

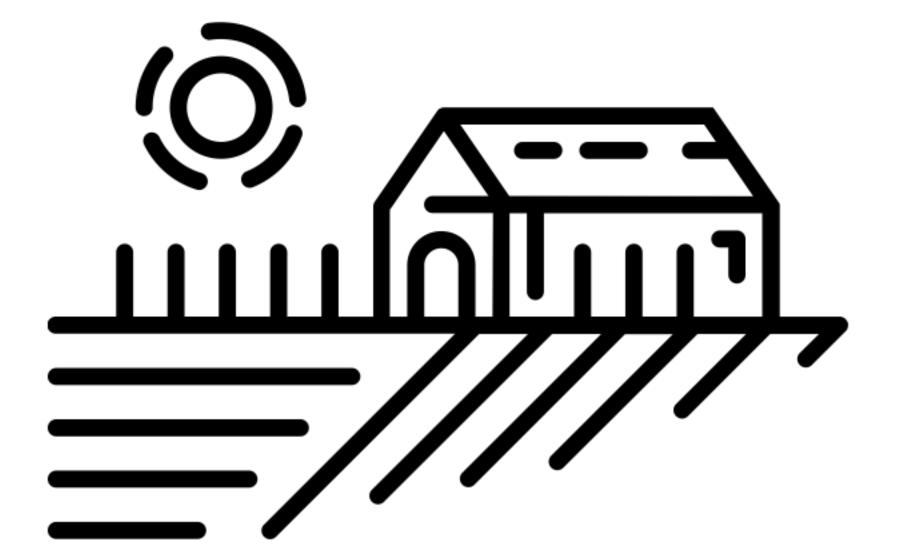
URBAN3

Joseph Minicozzi, AICP

Ratio Difference of New Hampshire Sample Set

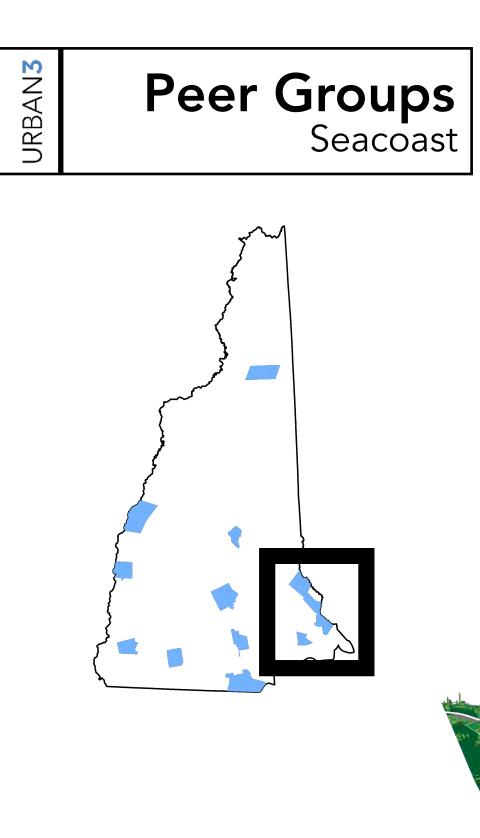


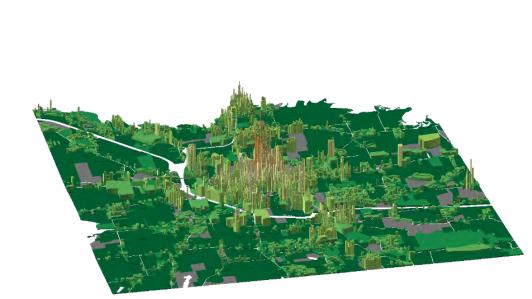


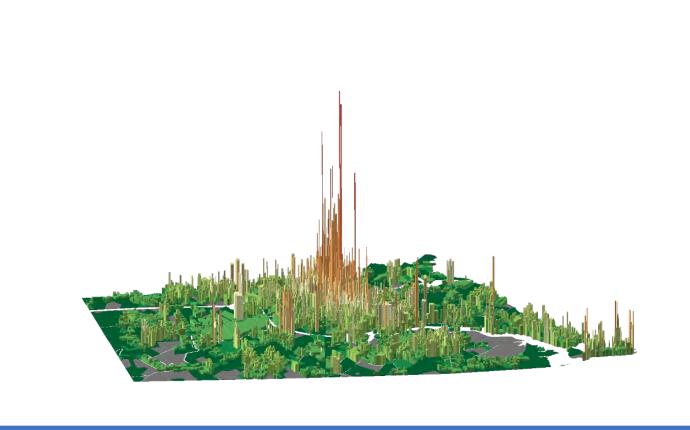


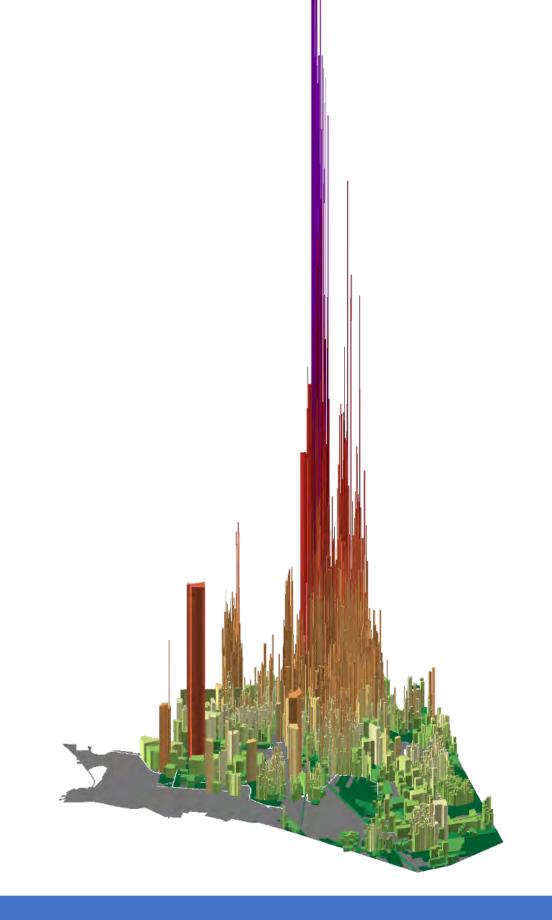
Peer Clusters

Similar characteristics of places & learning from each other.

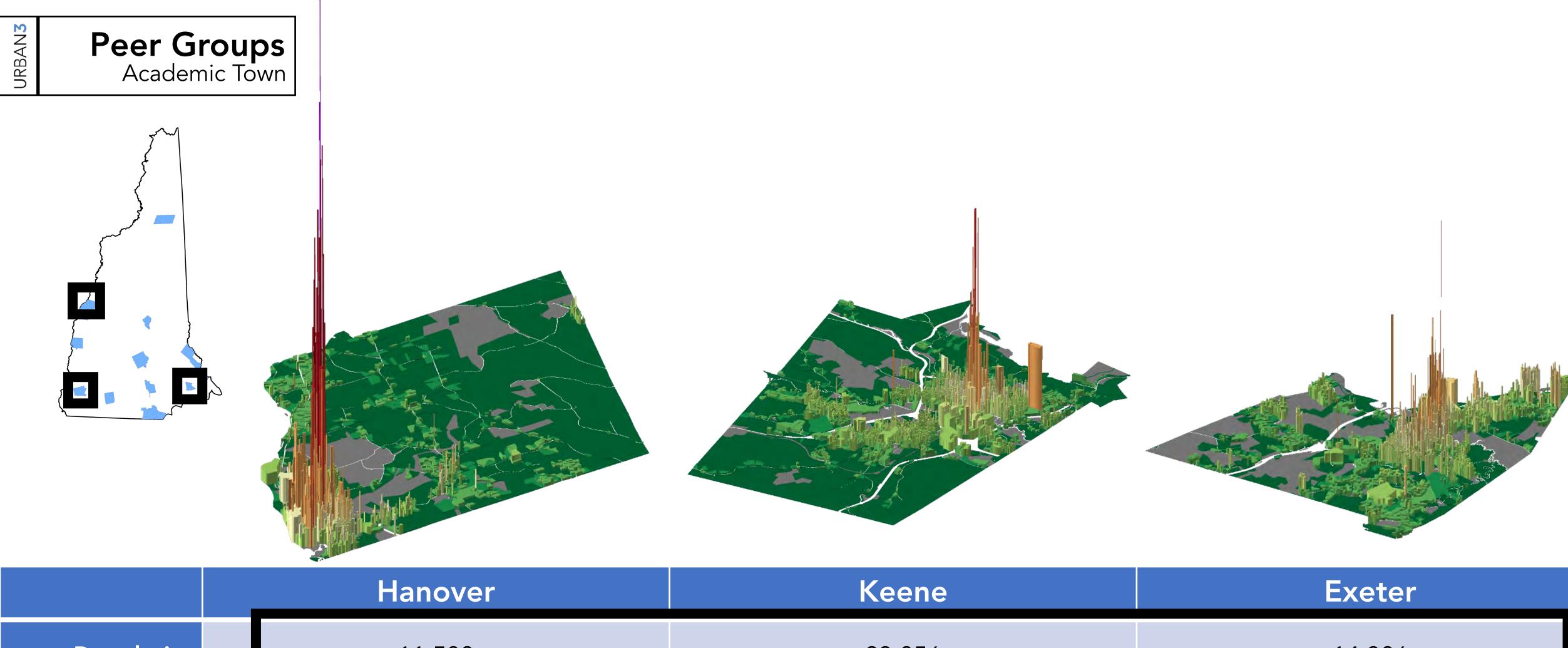




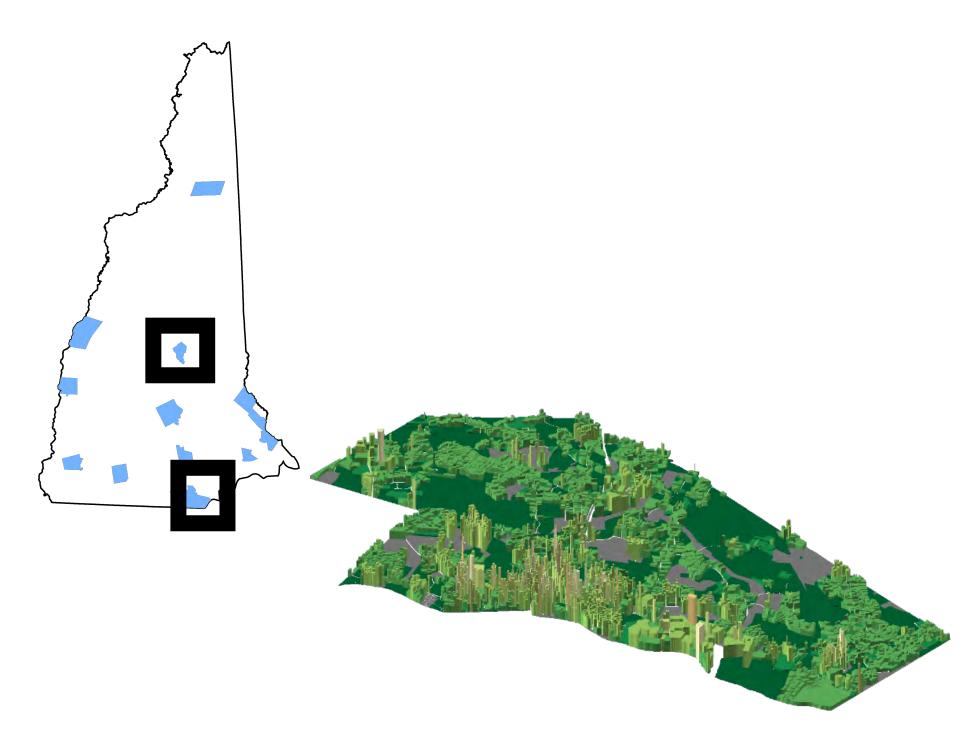




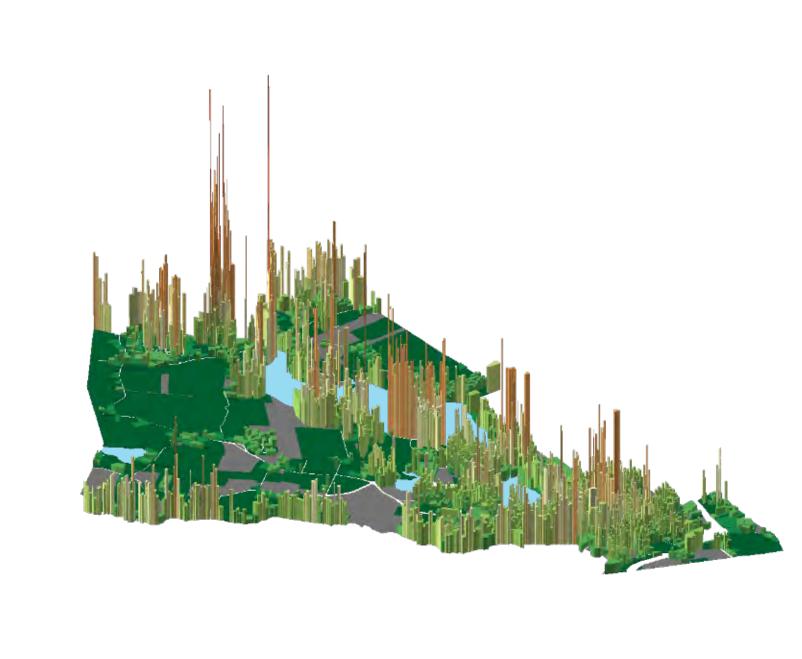
	Rochester	Dover	Portsmouth
Population	31,366	37,771	21,896
Avg. VPA	\$88,371	\$242,796	\$557,719
Peak VPA	\$5,203,925	\$15,316,240	\$51,157,466



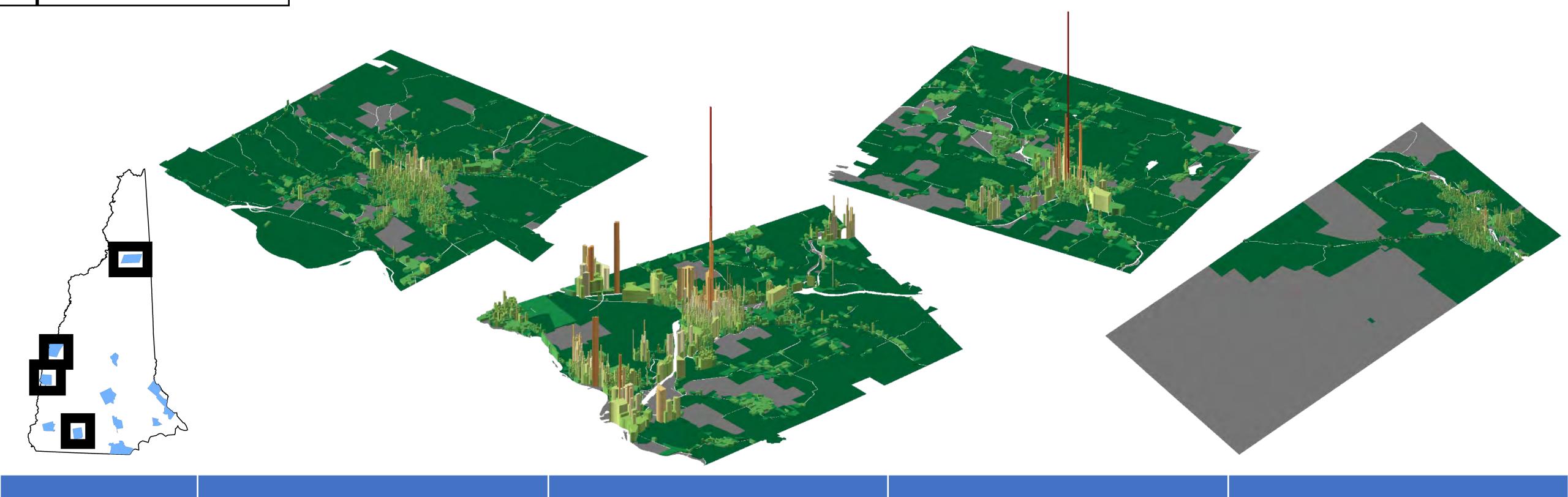
Population	11,500	23,056	14,306
Non Tax %	11%	16%	32%
Avg. VPA	\$100,083	\$103,944	\$197,142
Peak VPA	\$37,827,184	\$14,050,950	\$13,578,189



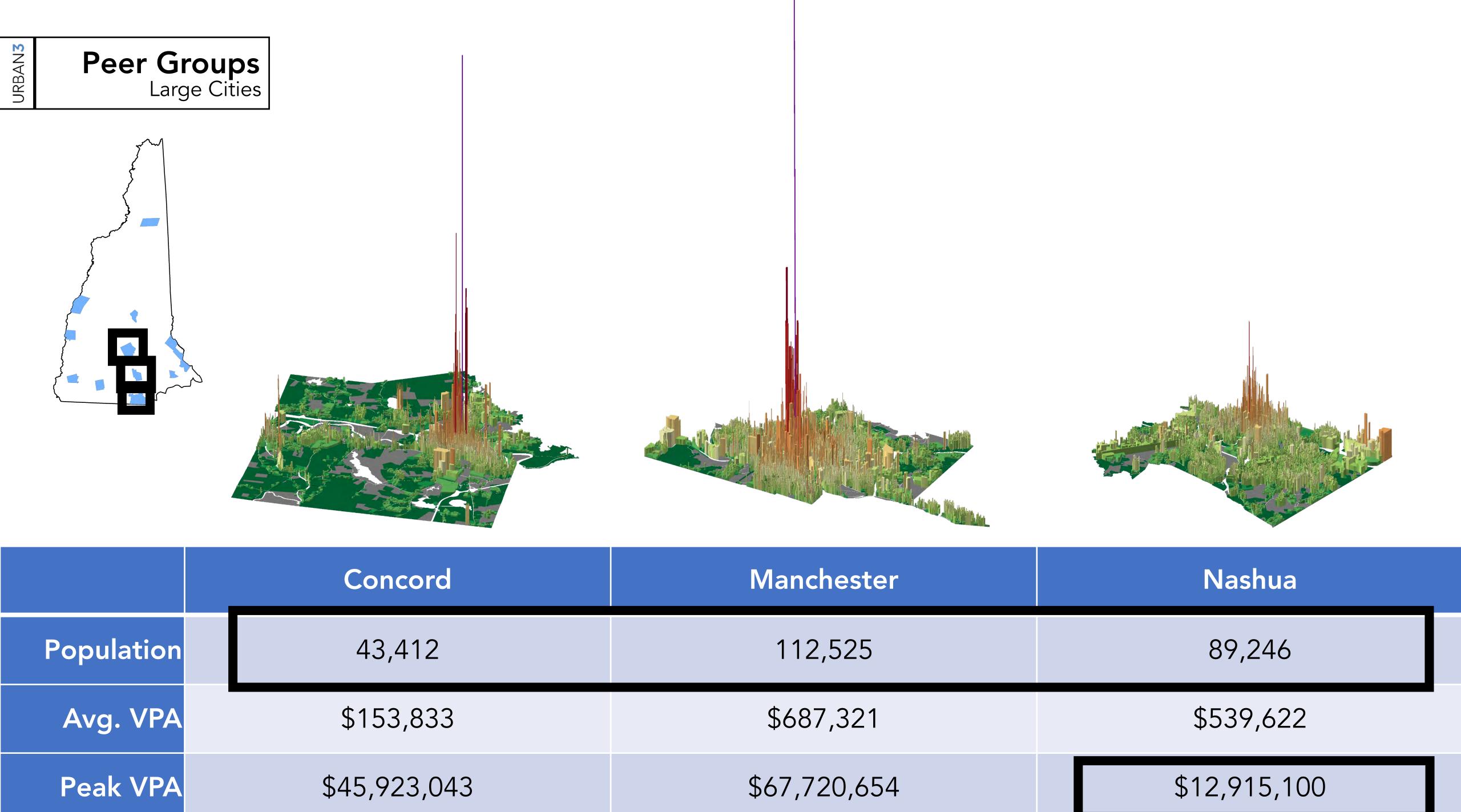




	Hudson	Pelham	Laconia
Population	24,467	14,049	16,492
Avg. VPA	\$165,357	\$121,607	\$173,092
Peak VPA	\$2,690,571	\$3,610,967	\$10,897,320



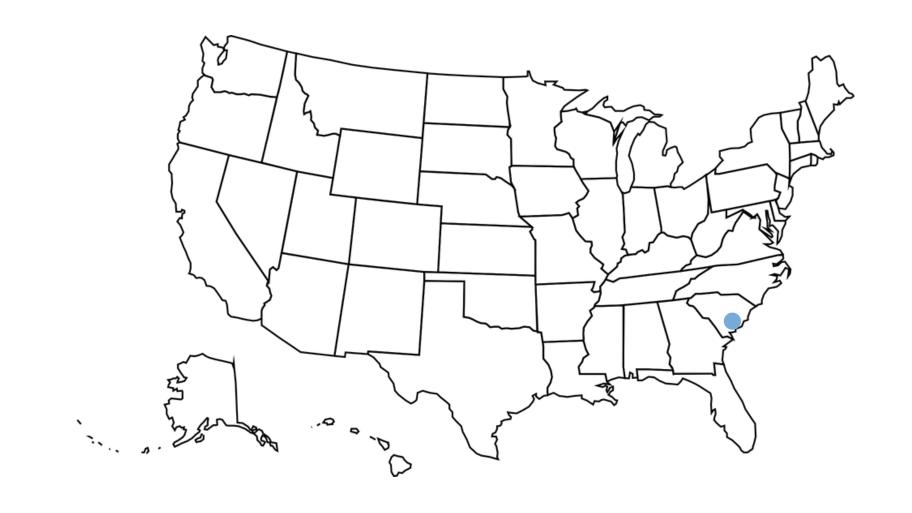
	Claremont	Lebanon	Peterborough	Berlin
Population	12,967	13,602	6,284	10,200
Avg. VPA	\$28,311	\$90,500	\$38,904	\$27,106
Peak VPA	\$2,6006,428	\$14,427,351	\$12,205,874	\$2,537,768



Lesson:

Historic Value

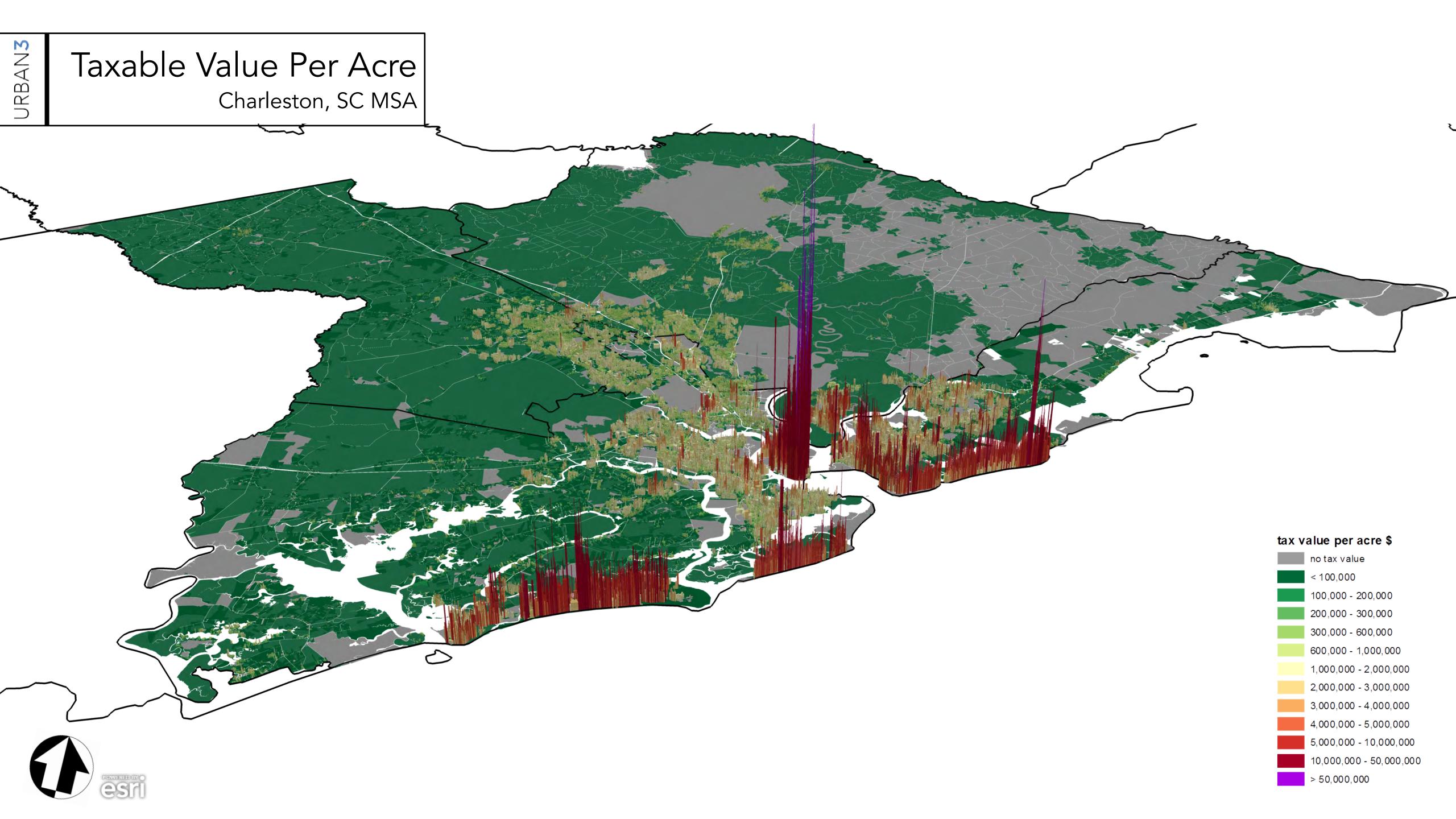


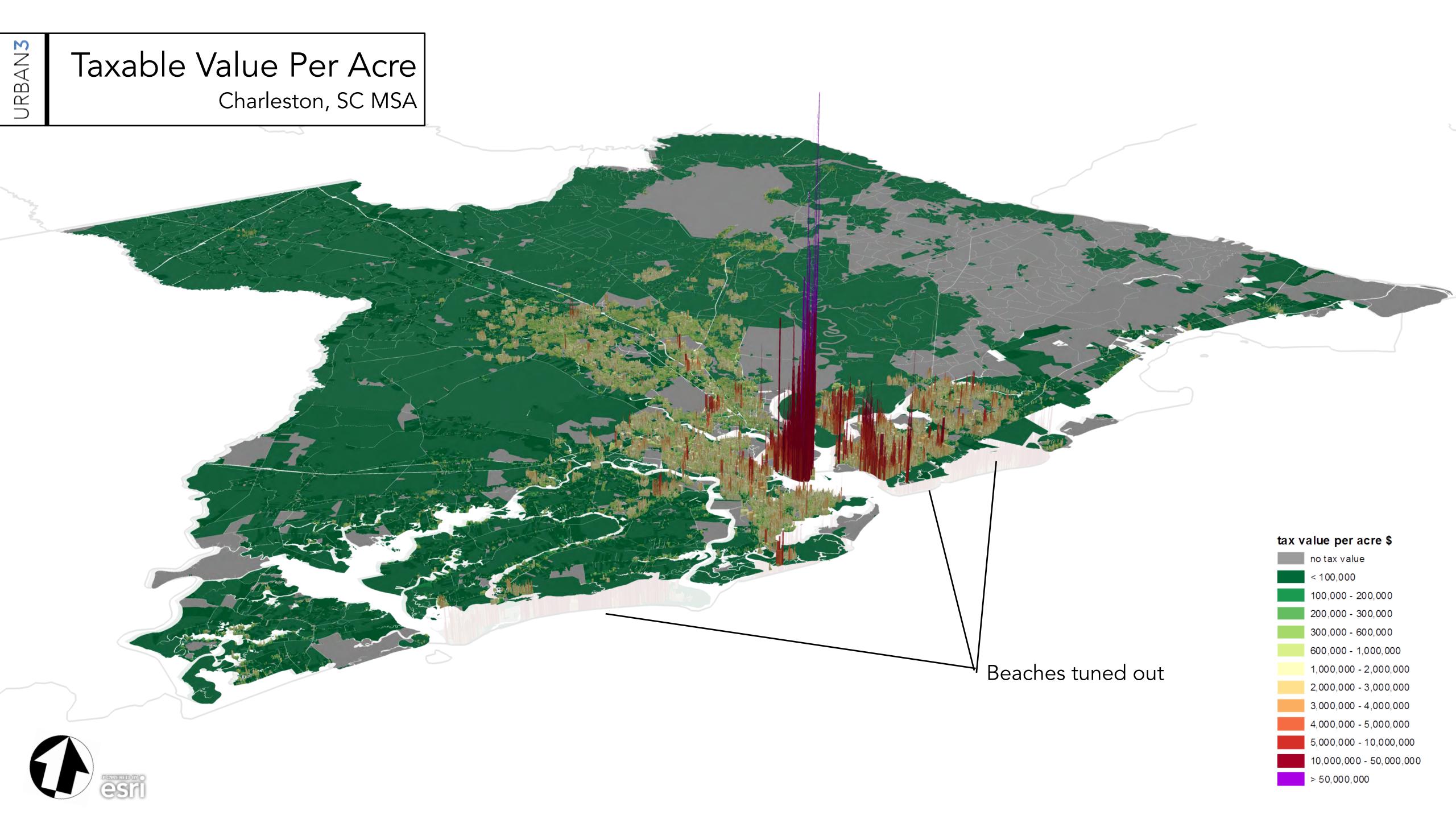


Case Study: Economic MRI®, Value Capture Analysis 2015

Charleston,
South Carolina

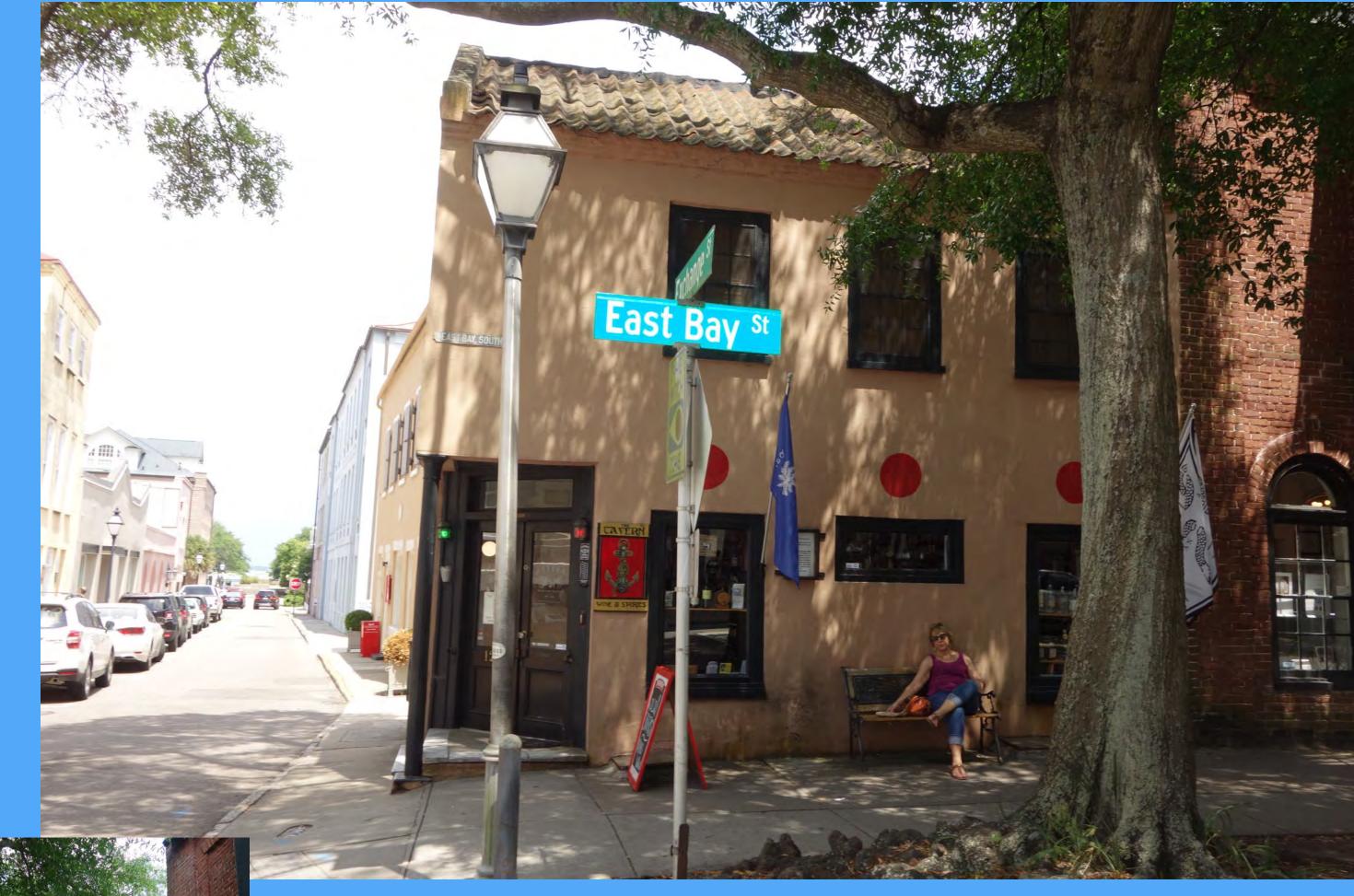






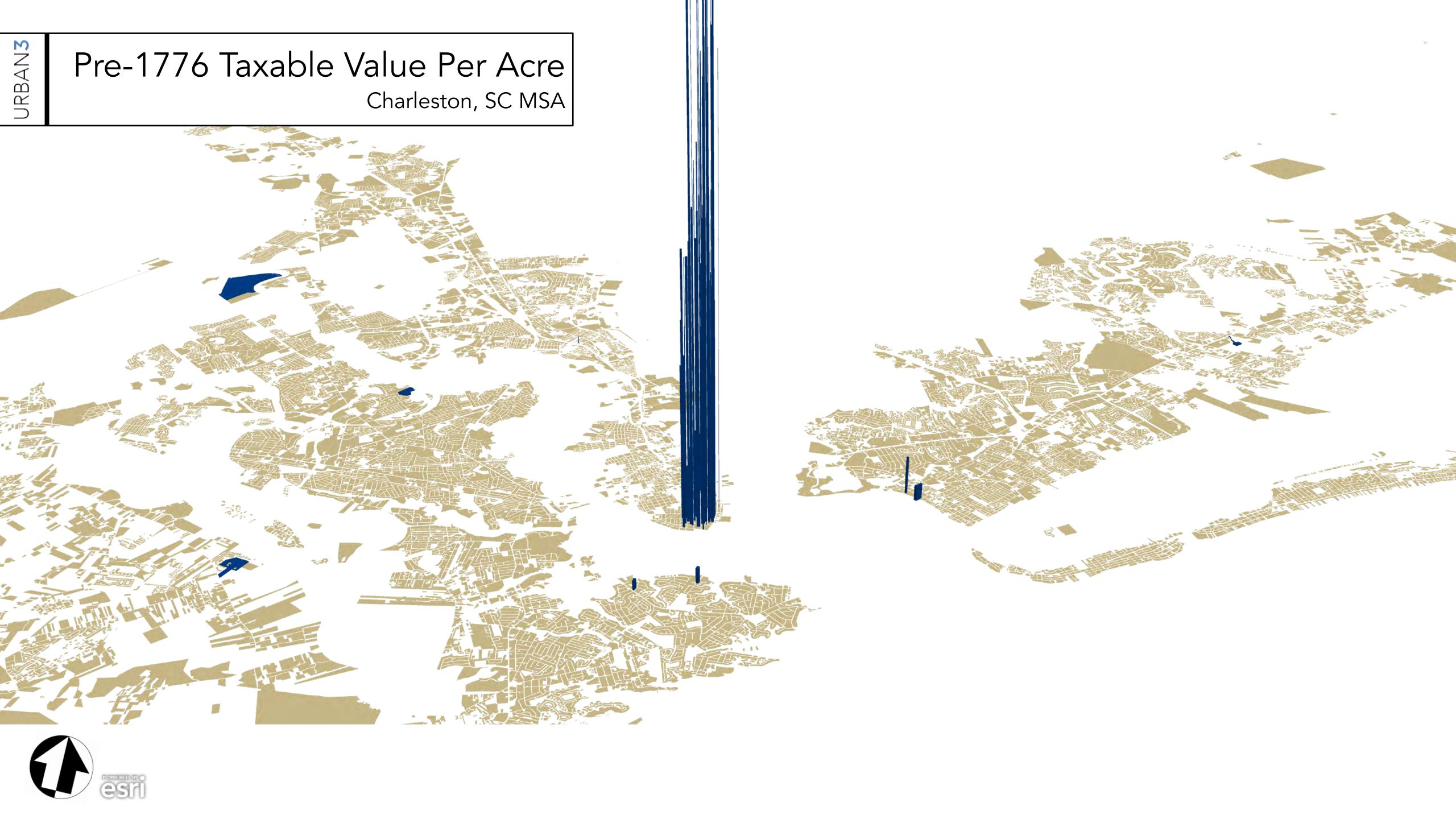


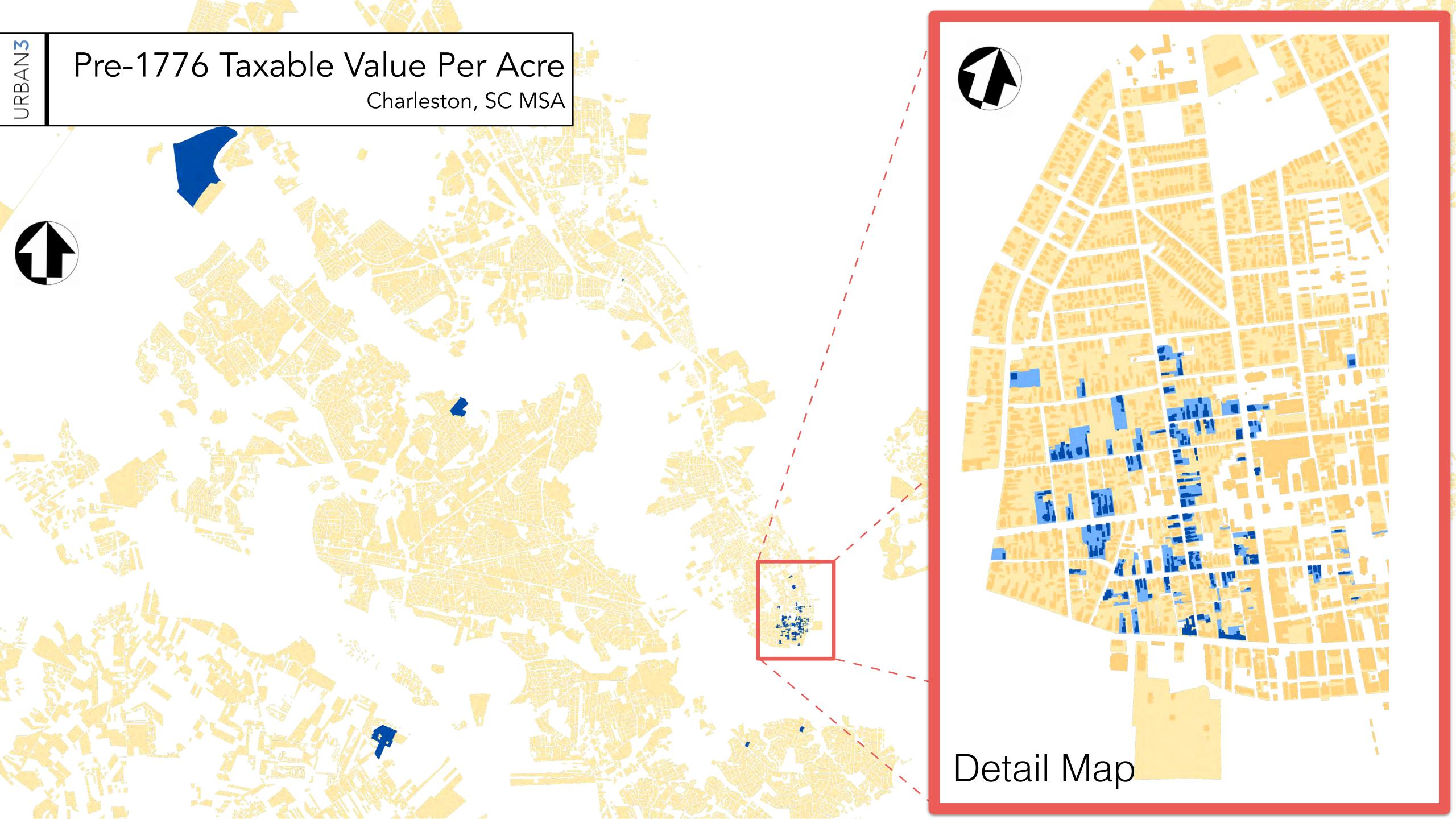




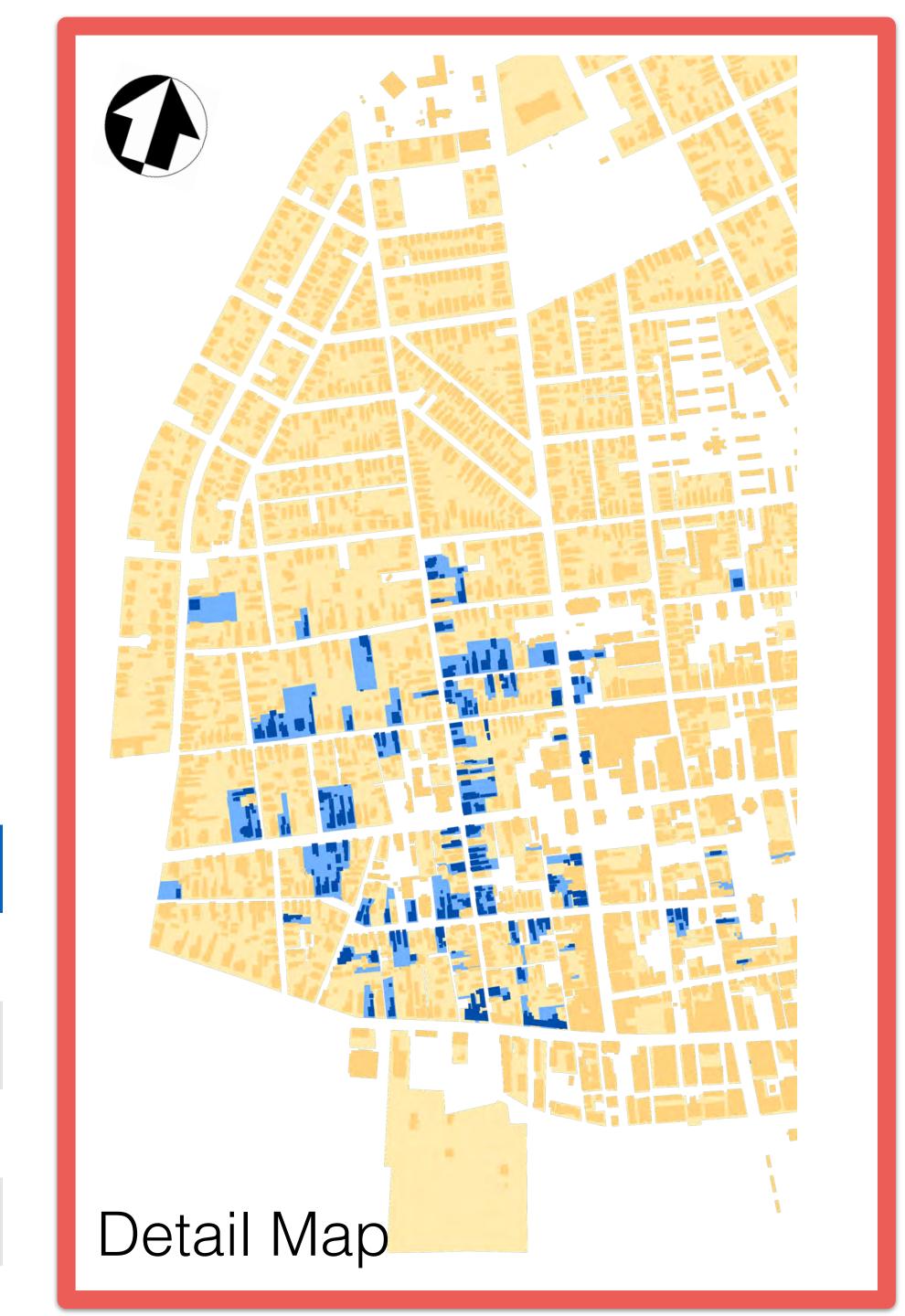
Walmart \$866,760 value per acre

Tavern Wine and Spirits \$13,394,415 Value per Acre



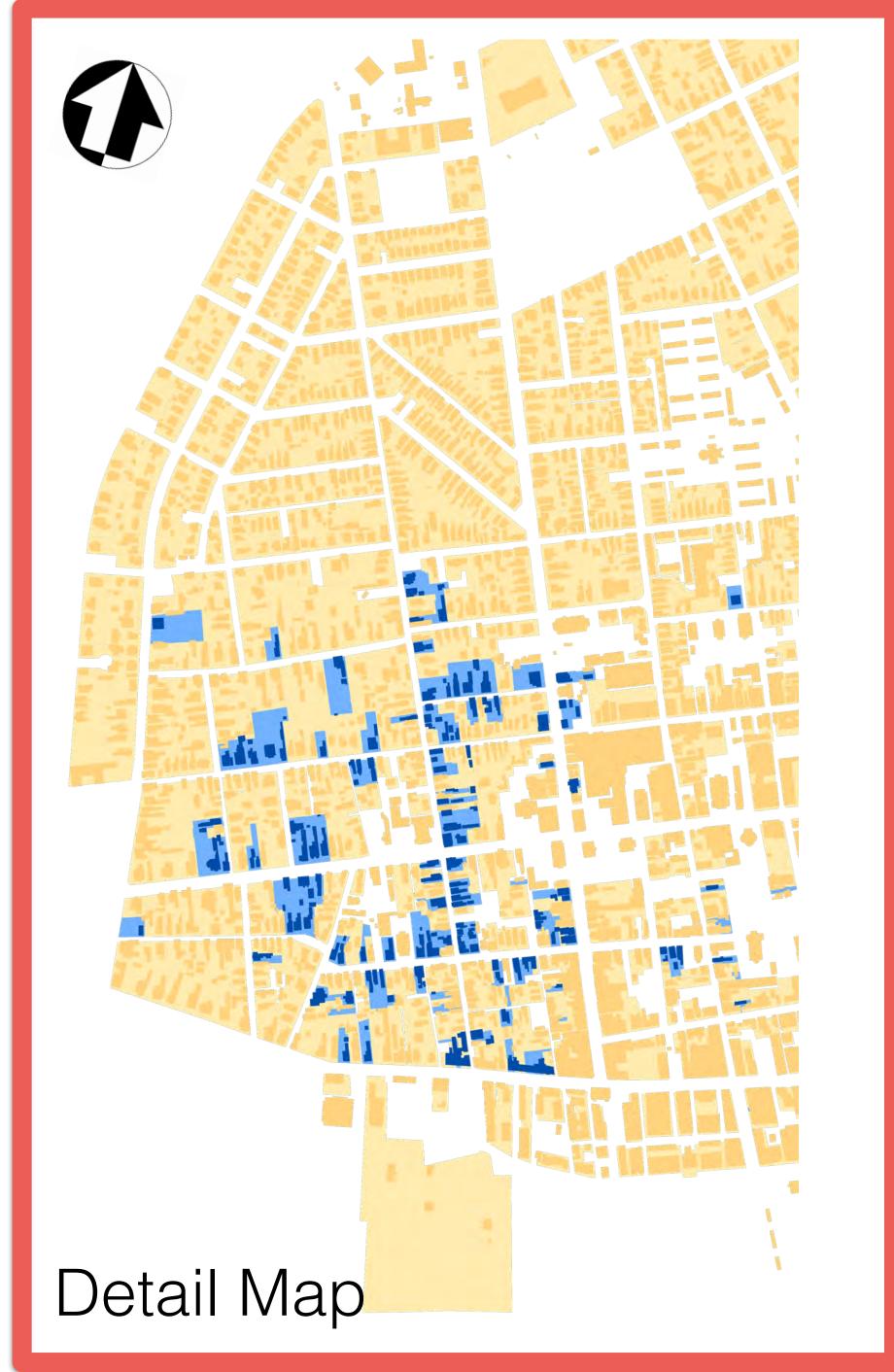


	> 1776
Acres	20.95
Value	\$344M
Value/Acre	\$16,440,700
County Taxes 2015	\$631,000



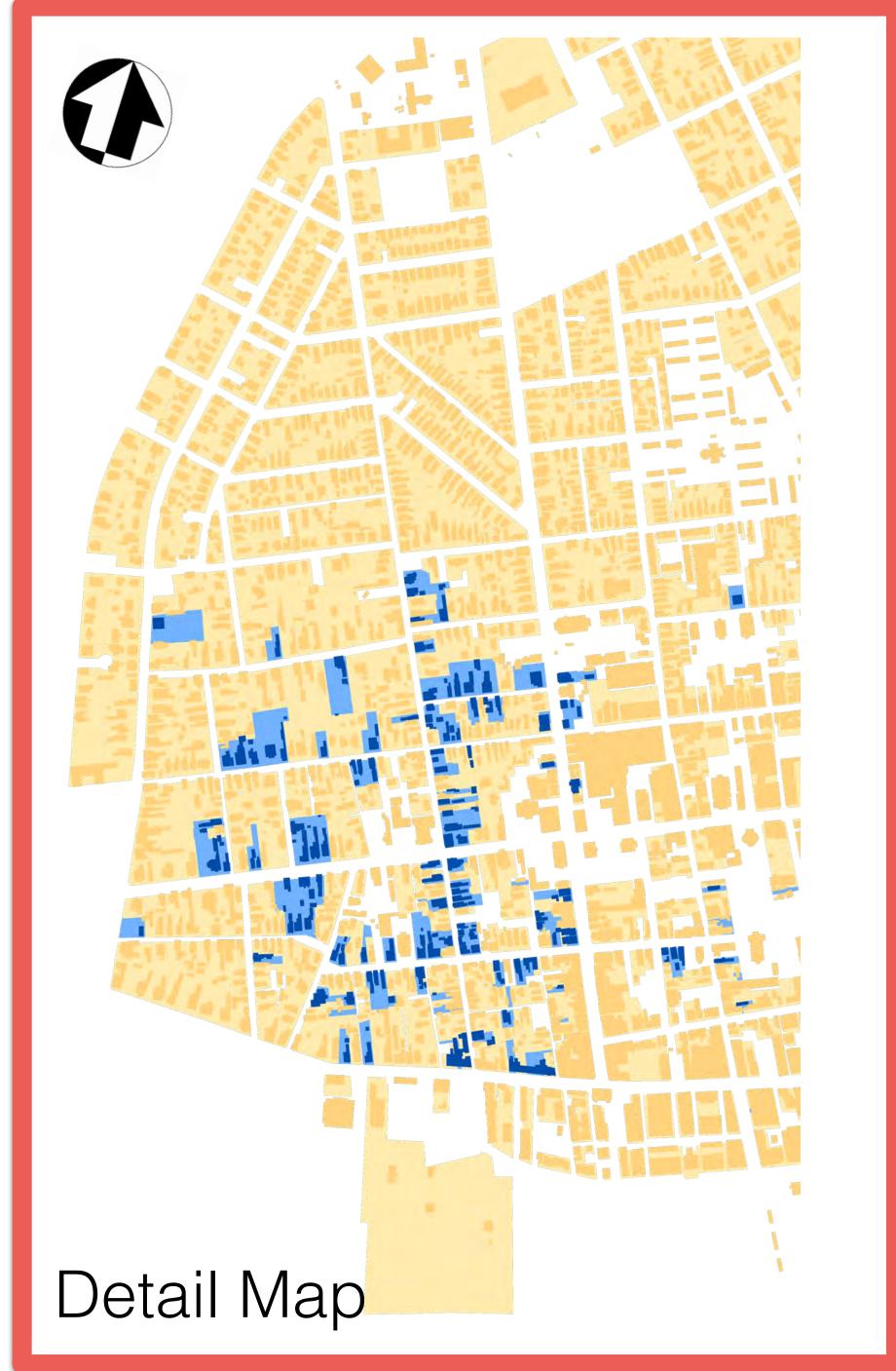


	> 1776
Acres	20.95
Value	\$344M
Value/Acre	\$16,440,700
County Taxes 2015	\$631,000



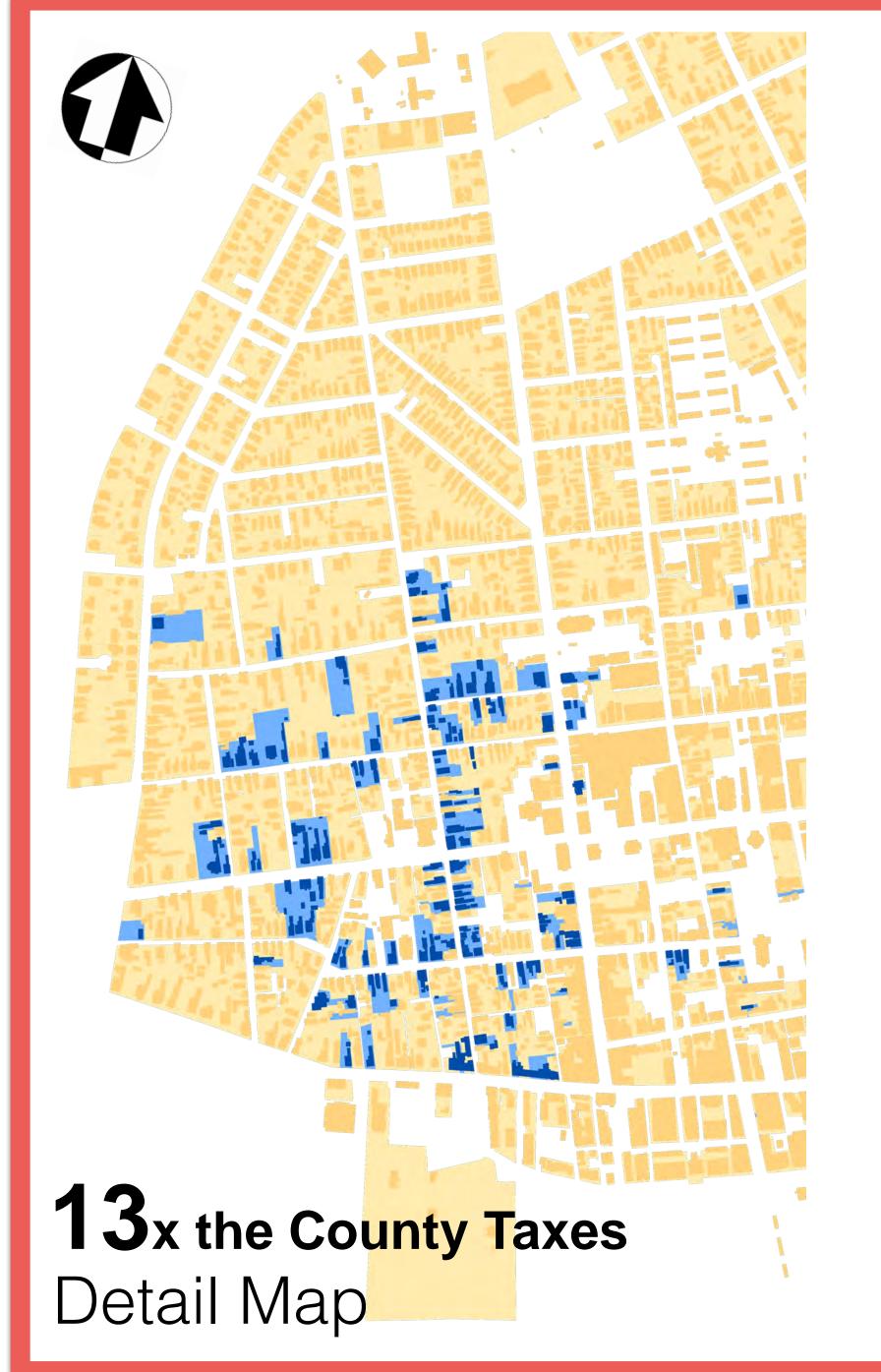


	Walmart	> 1776
Acres	20.58	20.95
Value	\$18M	\$344M
Value/Acre	\$866,760	\$16,440,700
County Taxes 2015	\$47,000	\$631,000





	Walmart	> 1776
Acres	20.58	20.95
Value	\$18M	\$344M
Value/Acre	\$866,760	\$16,440,700
County Taxes 2015	\$47,000	\$631,000



Value Per Acre

Traditional Commercial



Keene Peak VPA VPA: \$14 M



Lebanon Mixed-use VPA: \$6.2 M



Laconia Mixed-use VPA: \$3.7 M



Hanover Mixed-use VPA: \$12 M



Concord Mixed-use VPA: \$7.6 M



Nashua Mixed-use VPA: \$10 M



Exeter
Peak VPA
VPA: \$13.5 M



Dover Mixed-use VPA: \$9.6 M



Berlin Peak VPA VPA: \$2.5 M



Peterborough Peak VPA VPA: \$12.2 M



Rochester Mixed-use VPA: \$3.9 M



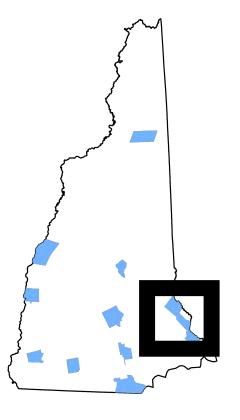
Portsmouth Mixed-use VPA: \$29.3 M

Sample average: \$8,300,000 value/acre

Lesson:

The Value of Urban Design



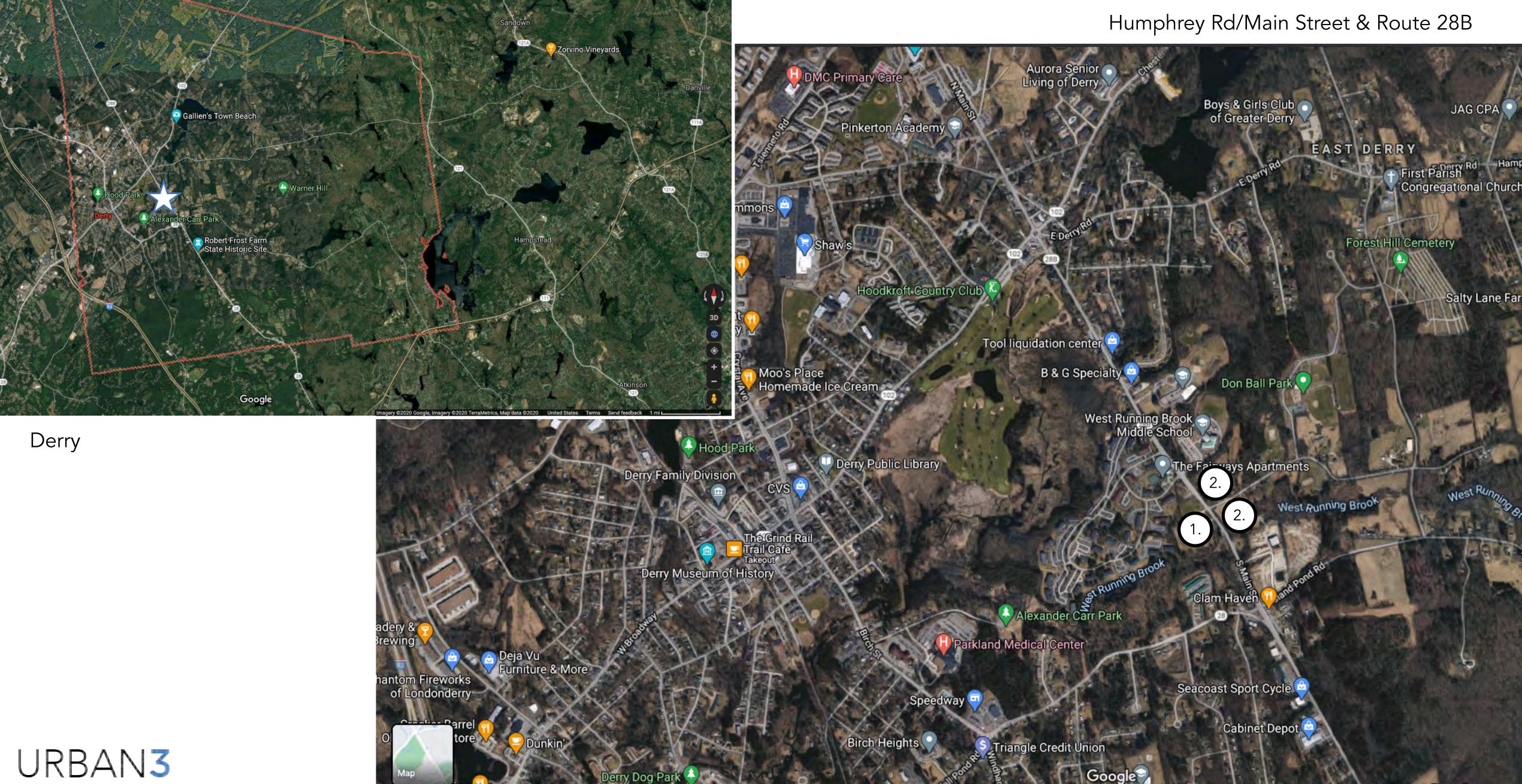


Case Study: Economic MRI® 2020

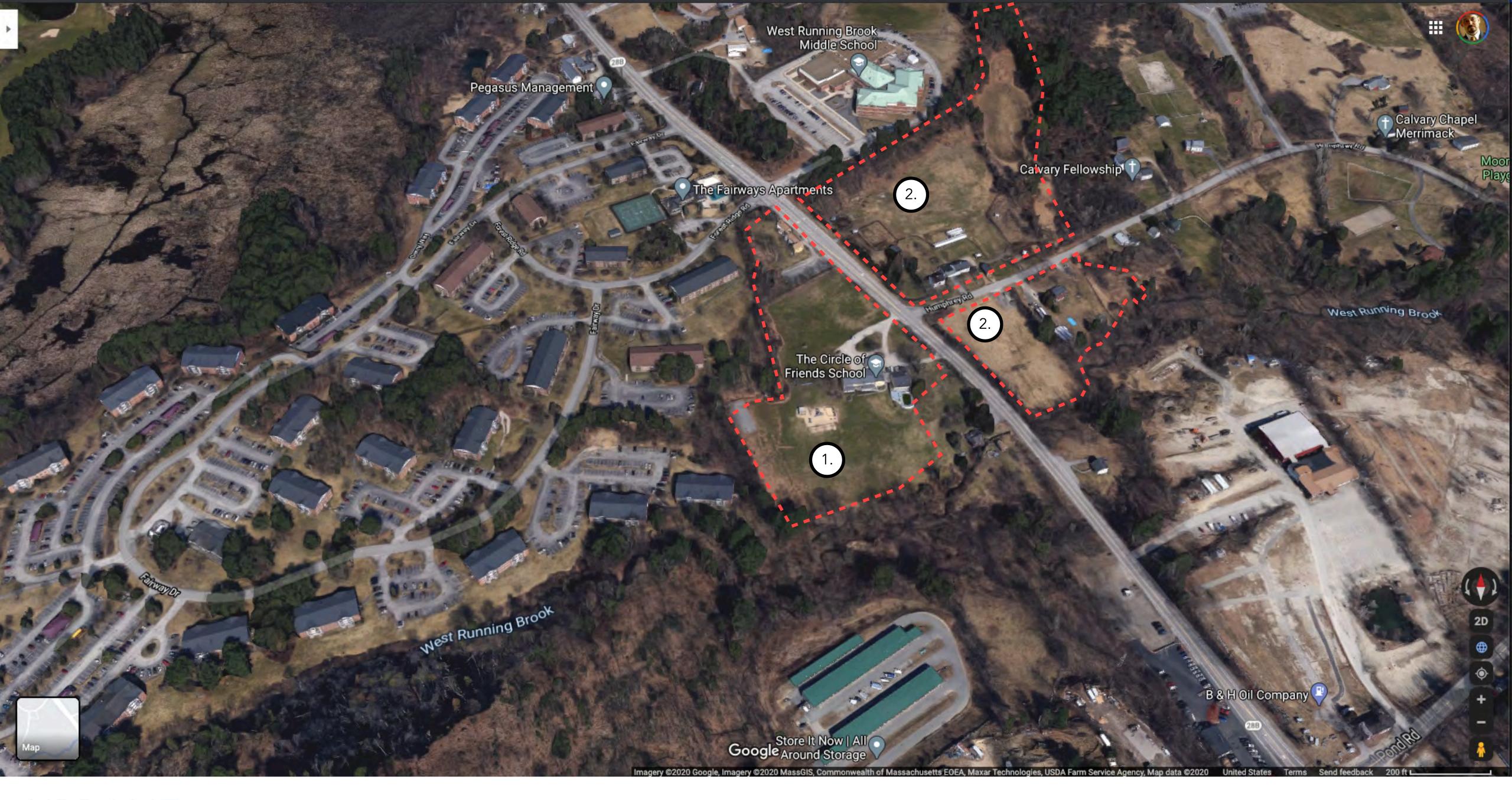
Derry



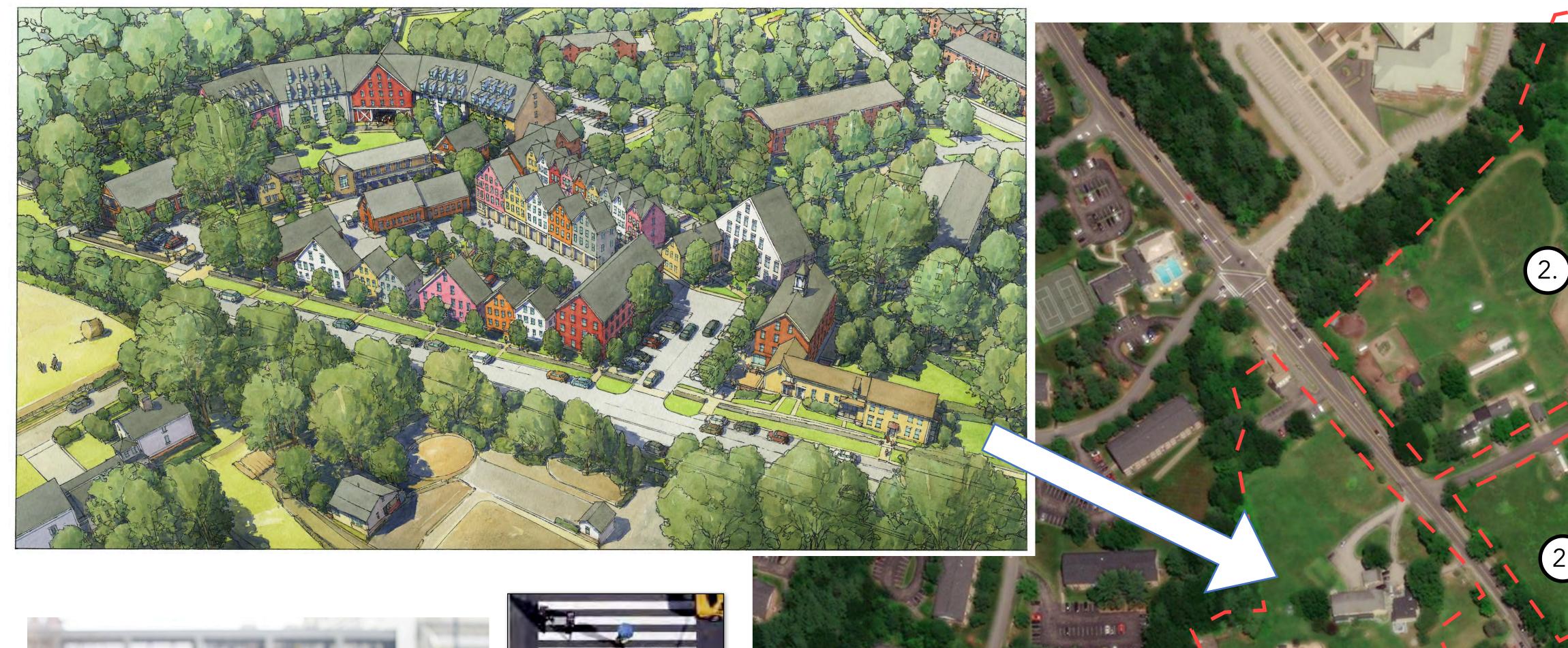




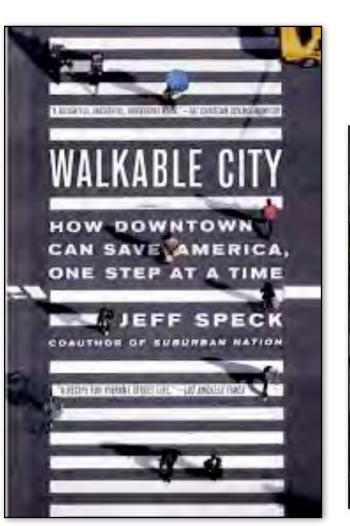


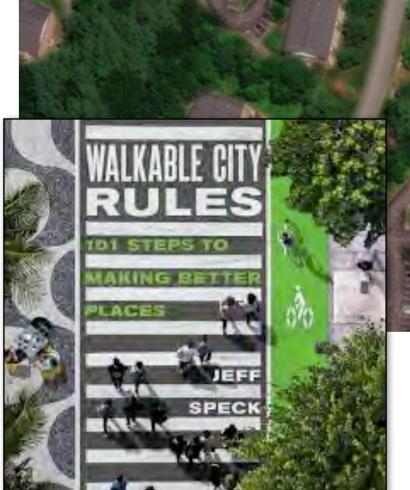








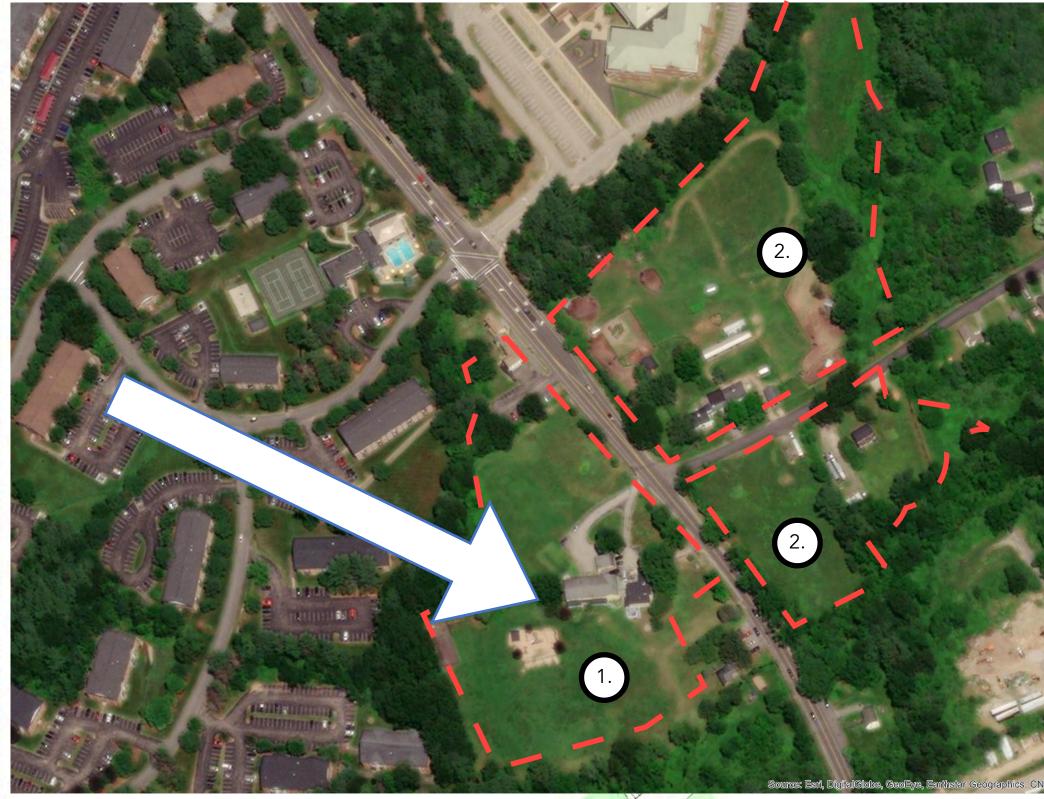


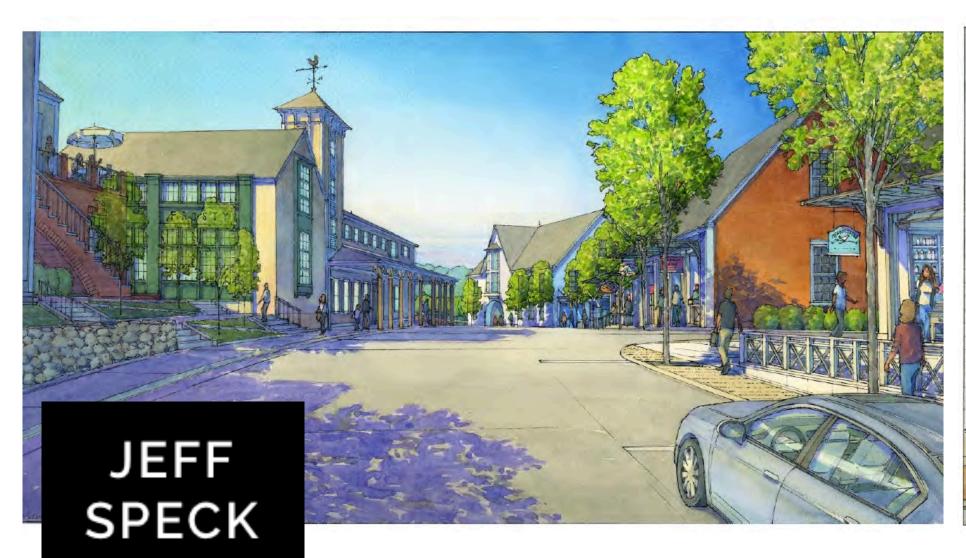


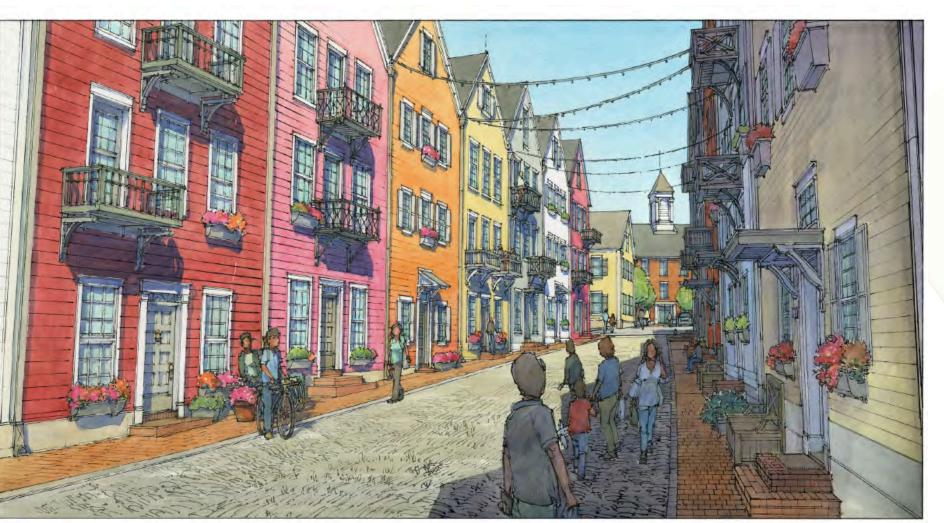


Source: Esri, DigitalGlobe, GeoEye, Earthstar G

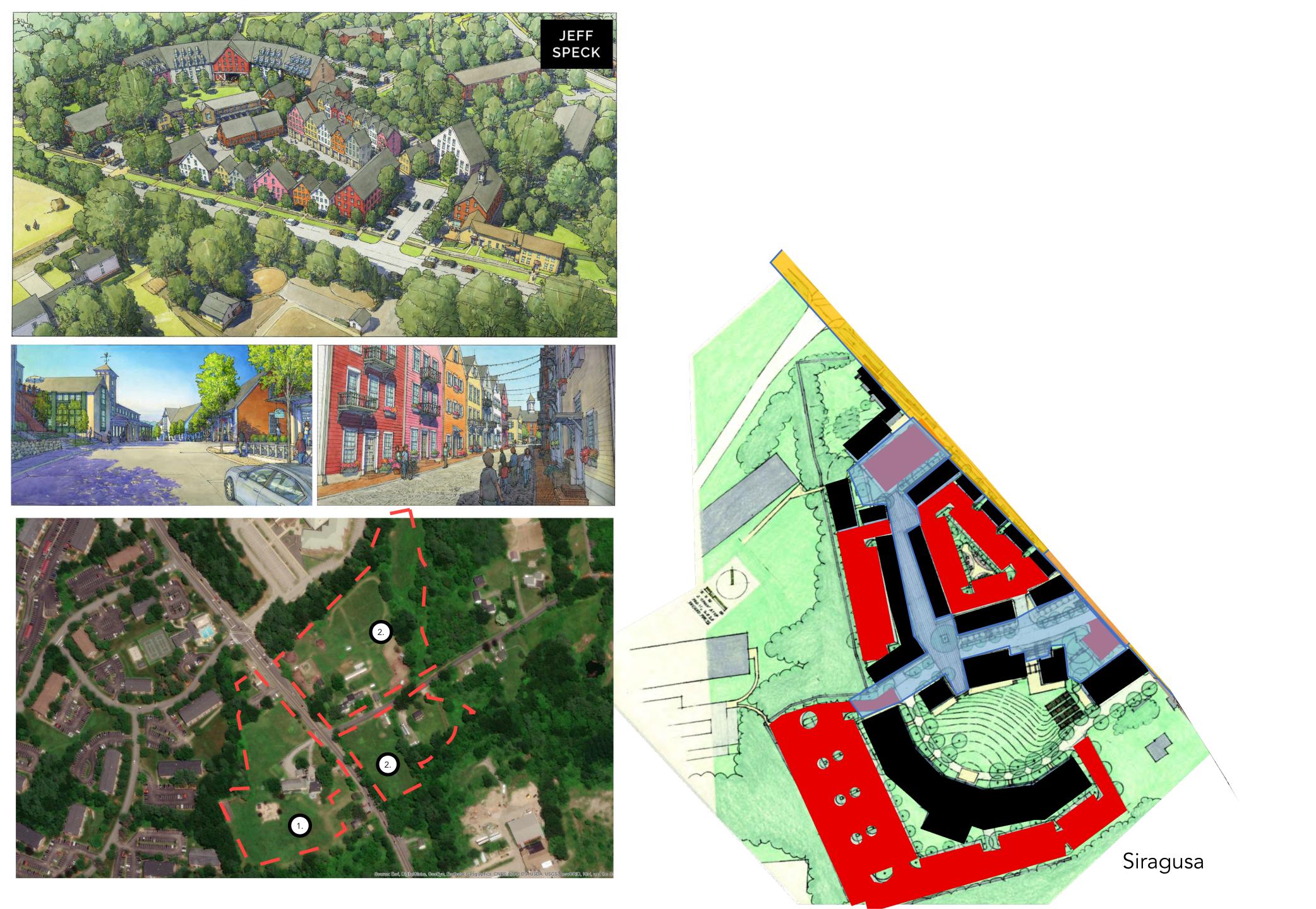


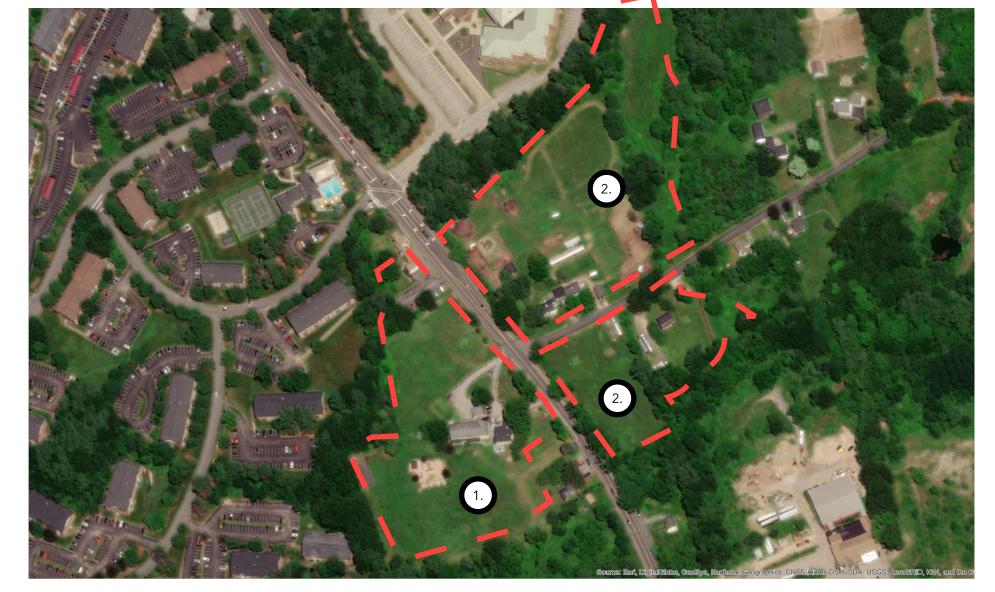


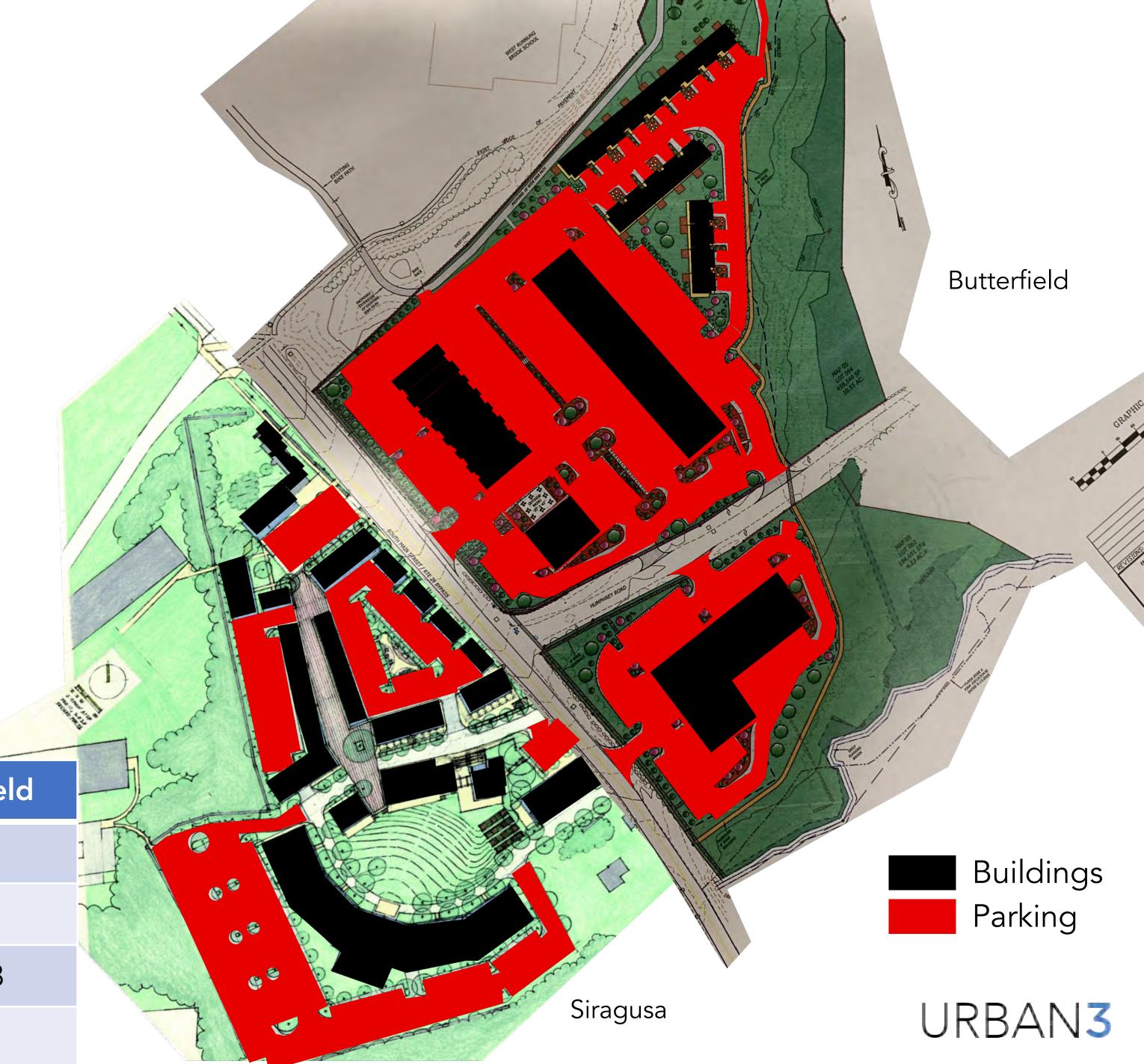












	Siragusa	Butterfield
Building Footprint (Acres)	1.92	2.13
Parking Acres	2.65	5.95
Building:Parking Ratio	1:1.4	1:2.8



Case Study: Economic MRI® 2018

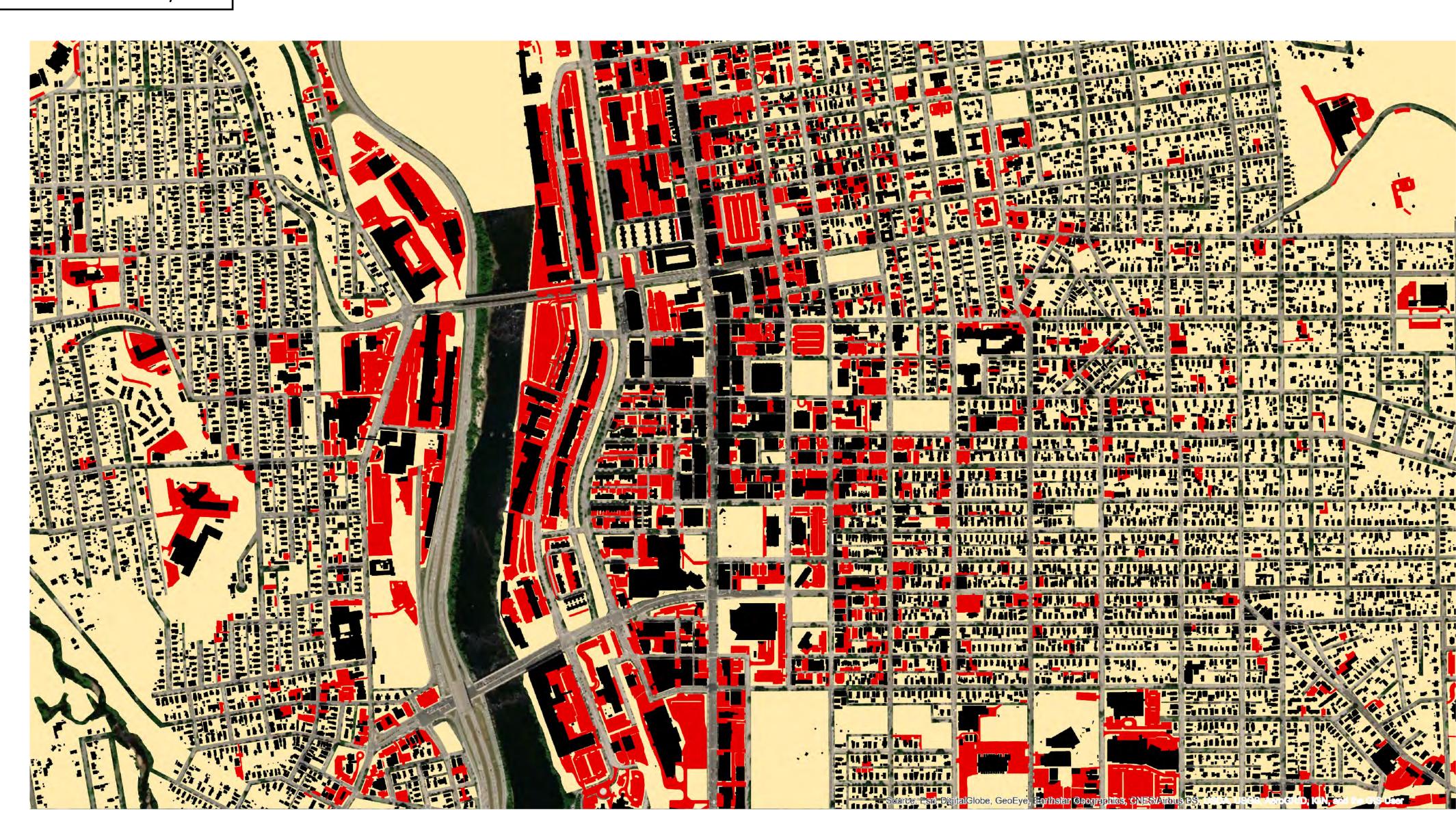
Manchester, New Hampshire



Land Use Analysis Manchester, NH

City of Mancheste





Land Use Analysis Manchester, NH

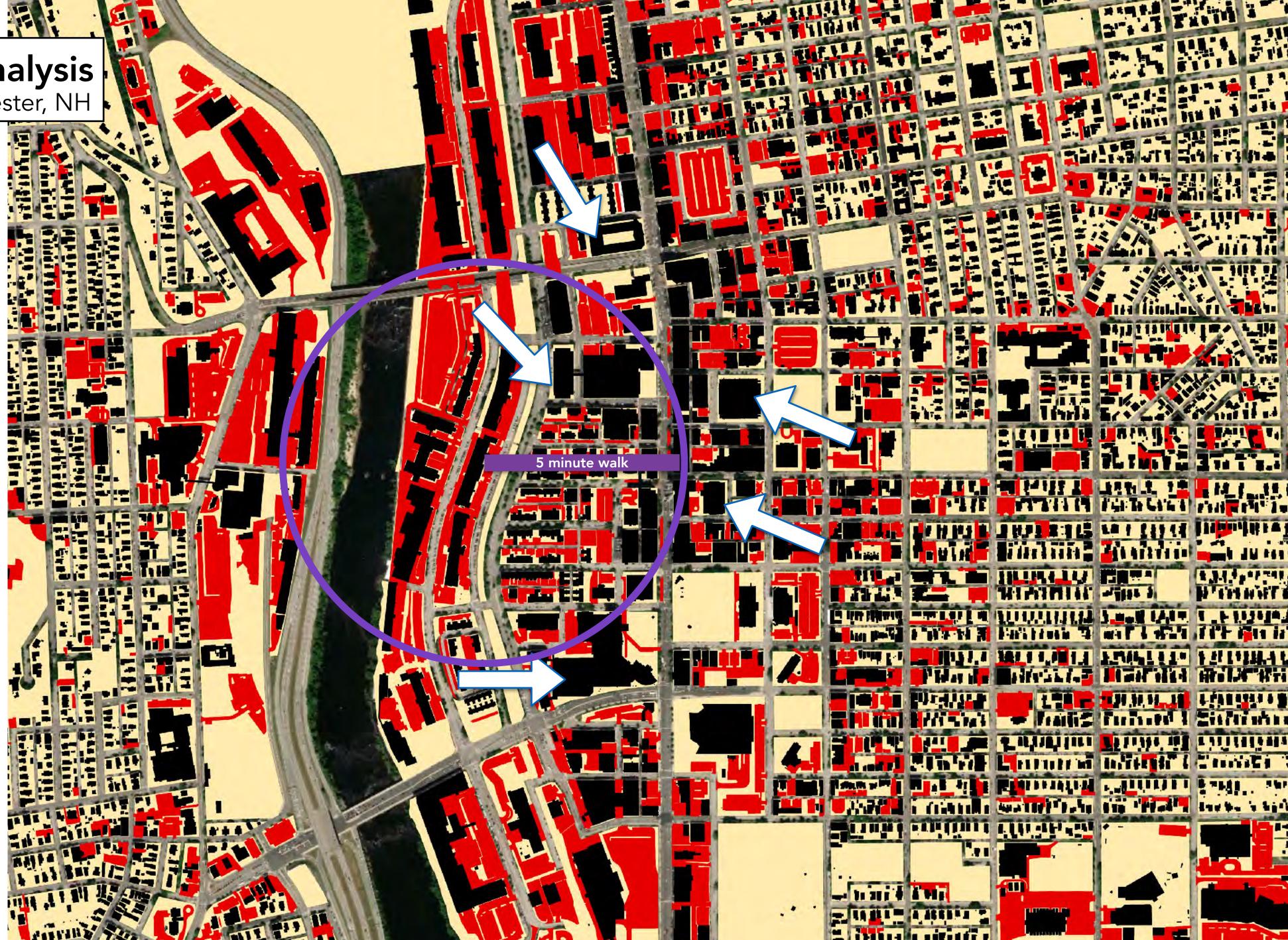
of Mancheste

Parking

Buildings

Other

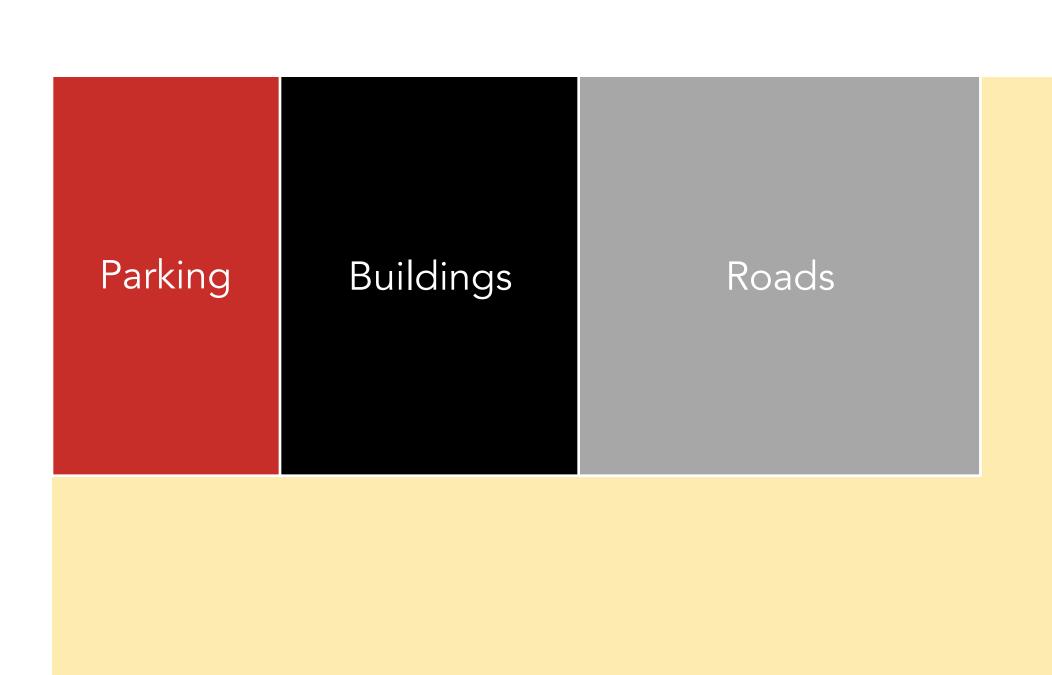
Roads



URBAN3

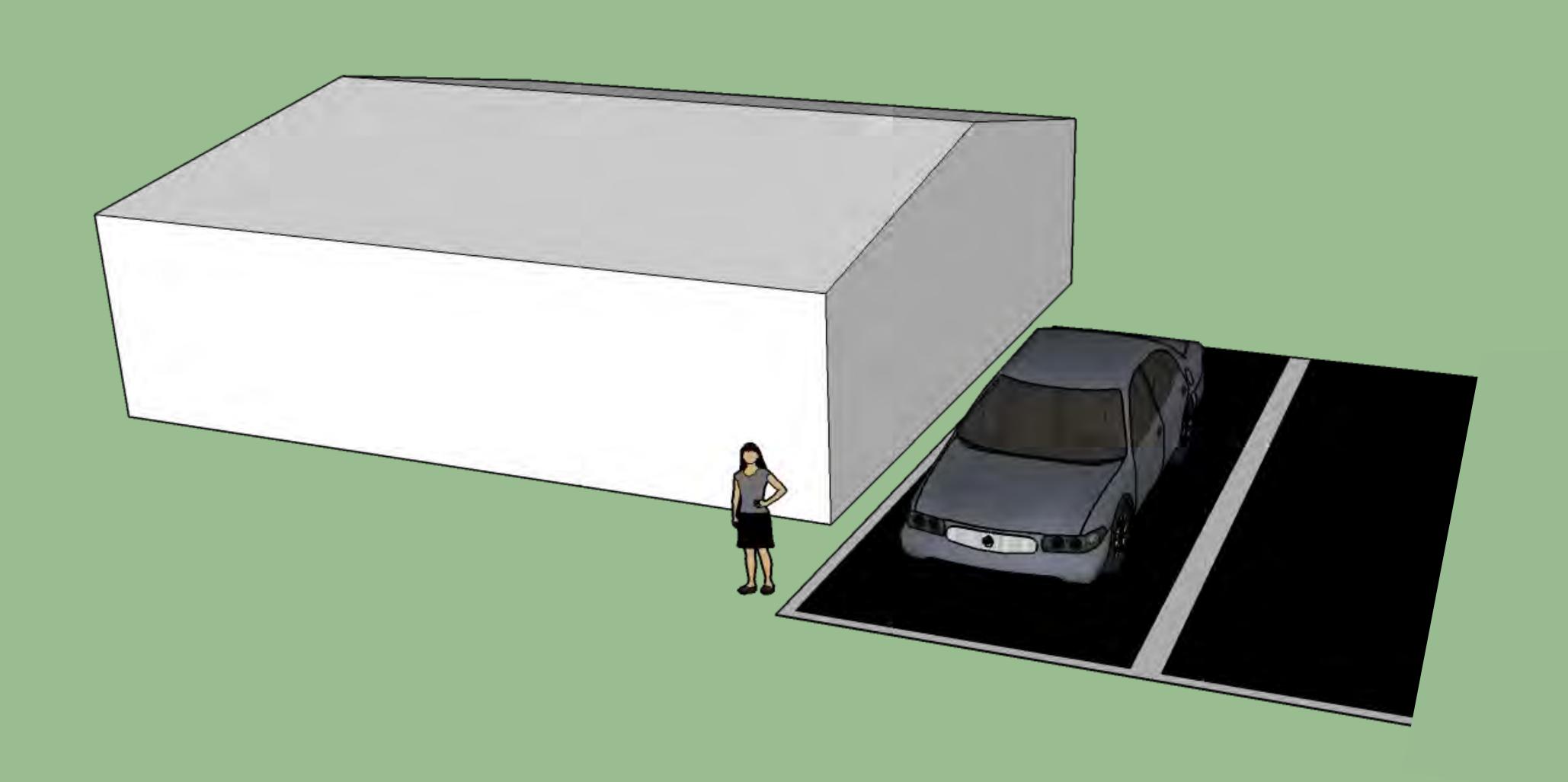
Land Use Analysis Manchester, NH

City of Manchester

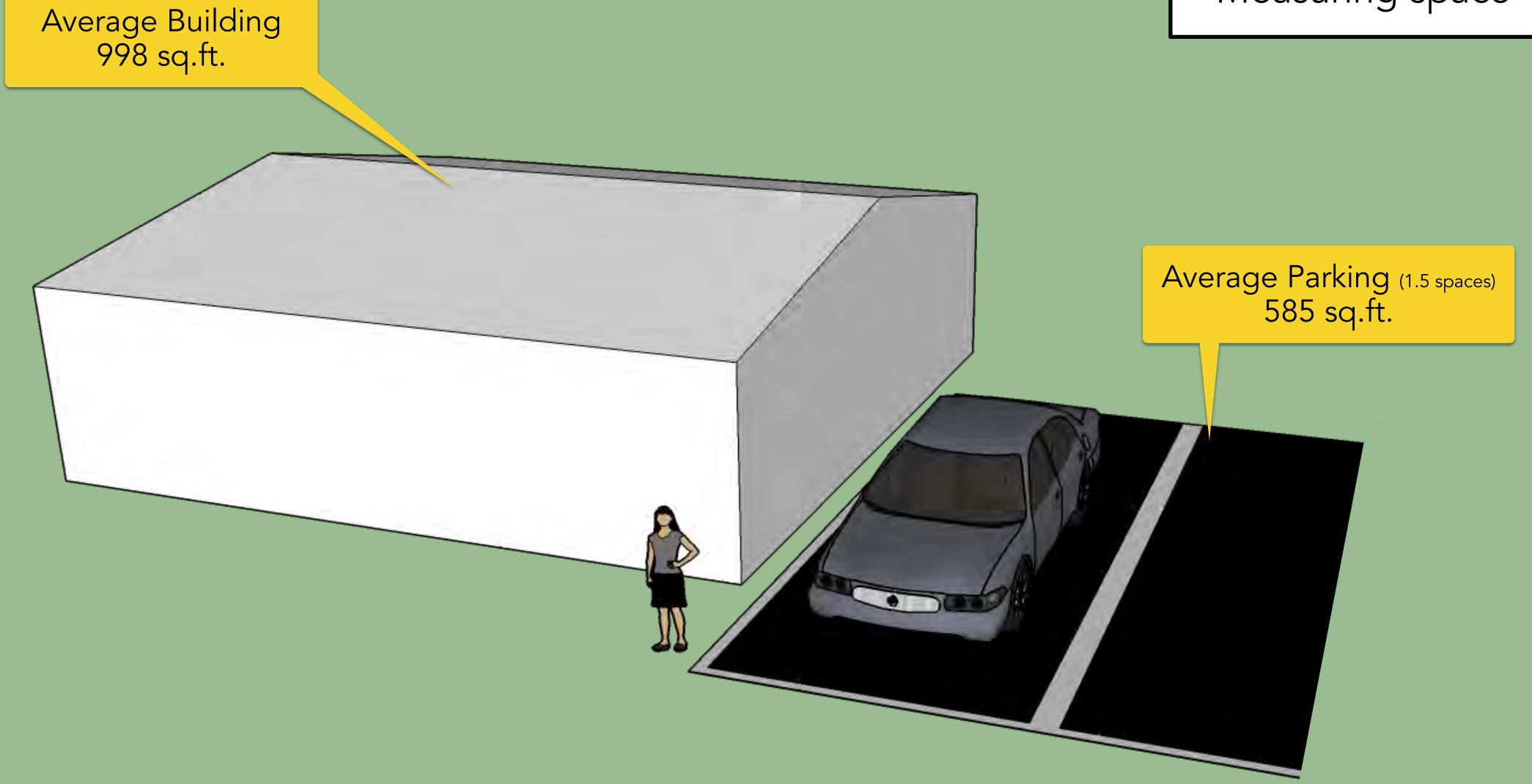


Other land

What is Parking? Measuring space

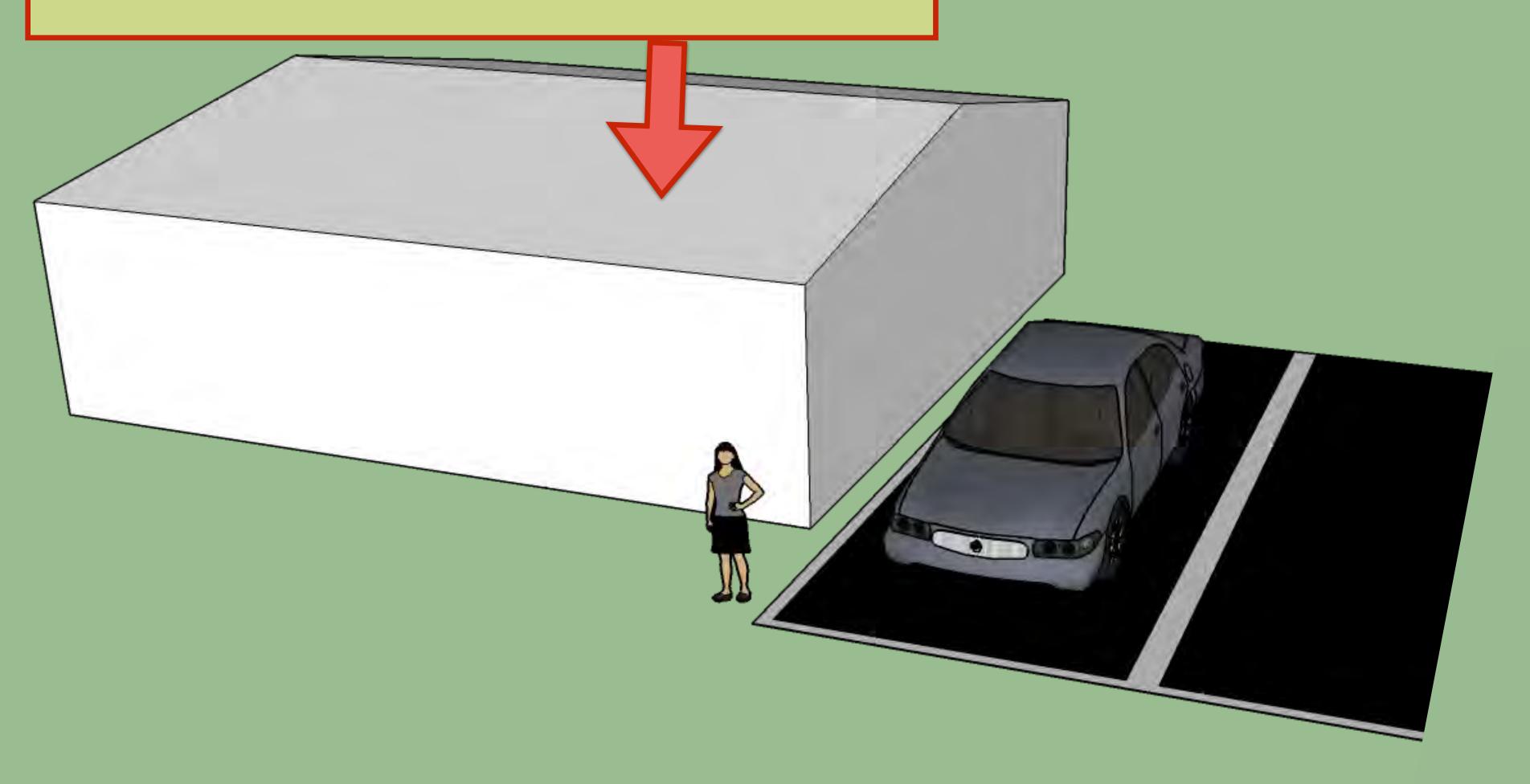


What is Parking? Measuring space



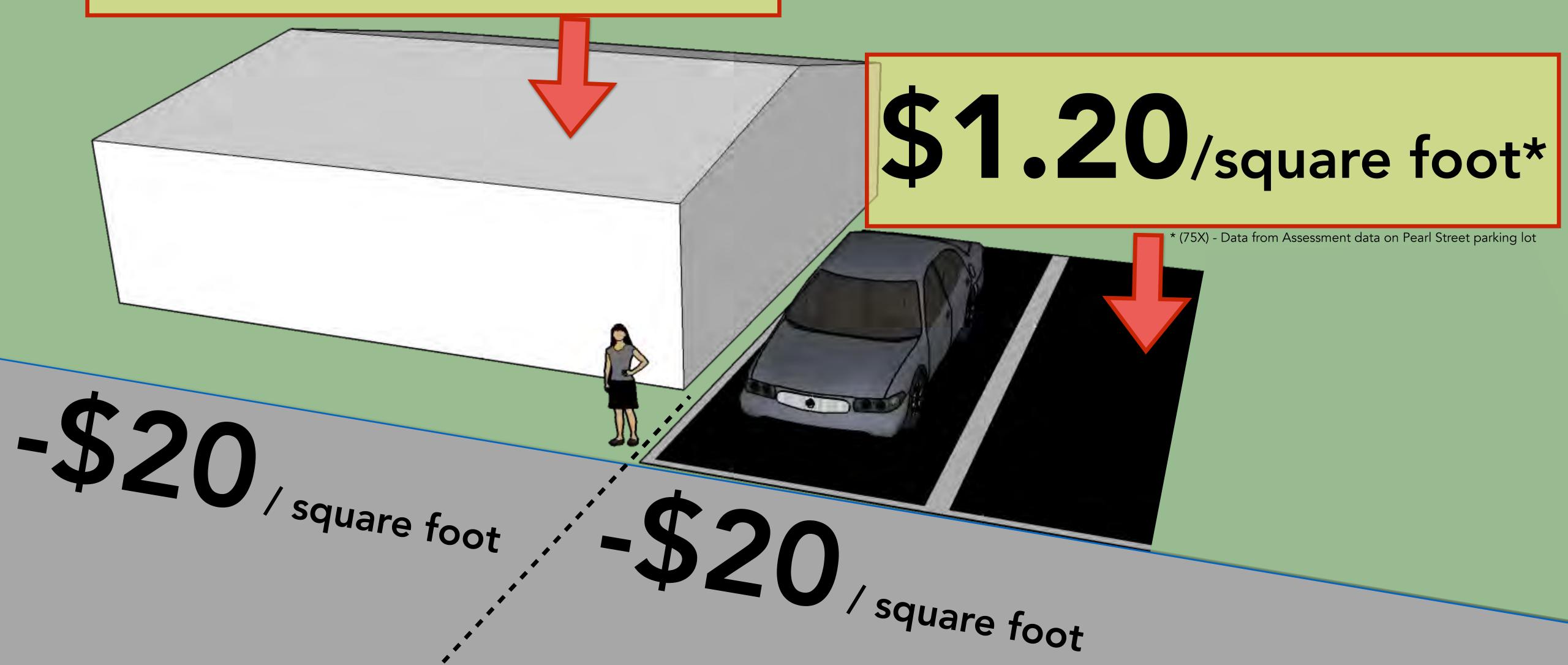
\$90/square foot

What is Parking? Measuring Manchester space

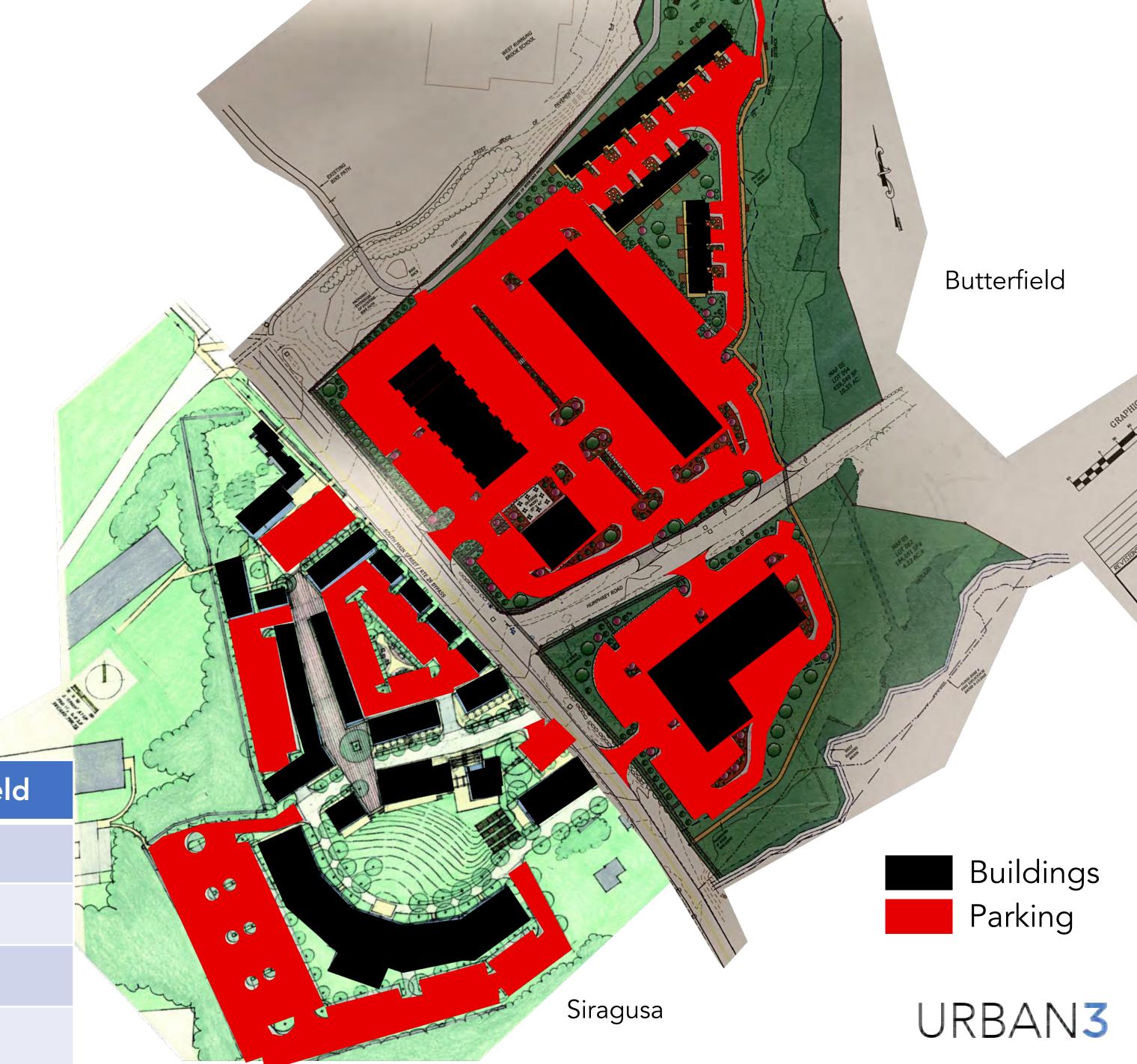


\$90/square foot

What is Parking?
Measuring Manchester space







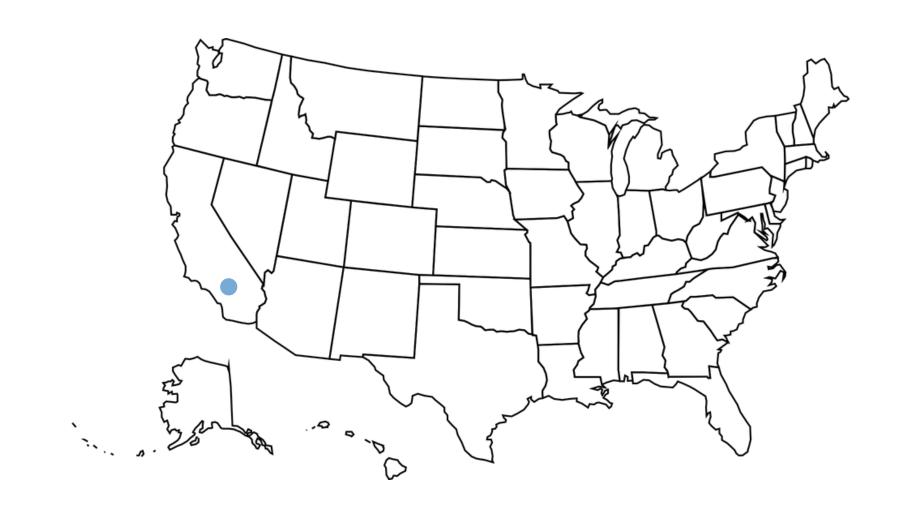
	Siragusa	Butterfield
Building Footprint (Acres)	1.92	2.13
Parking Acres	2.65	5.95
Building:Parking Ratio	1:1.4	1:2.8
Value Per Acre	\$4.6M	\$2.5M



Lesson:

What are you carrying?





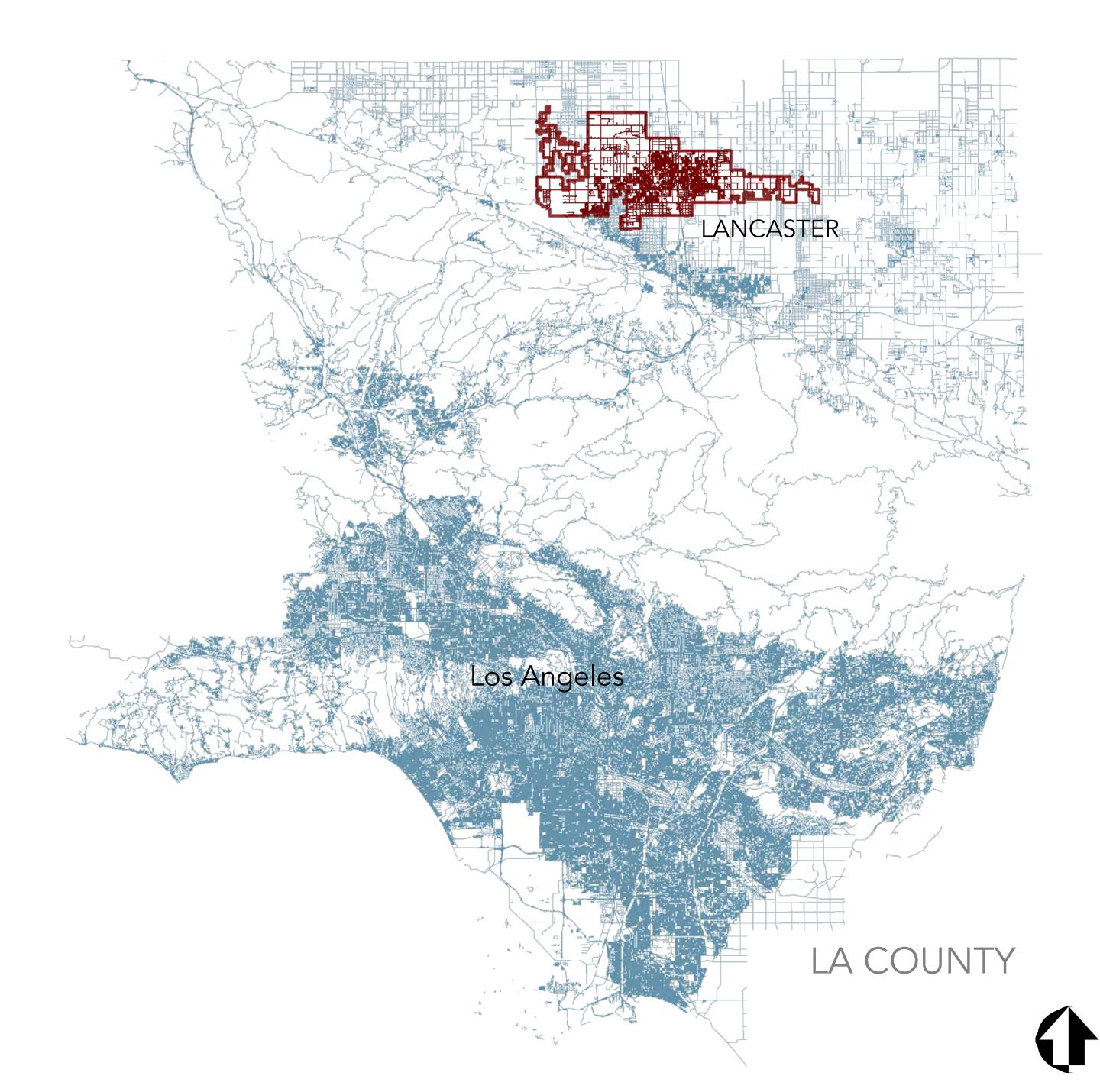
Case Study: Economic MRI®, Fiscal MRI®, Policy Analytics 2014-2019

Lancaster, California

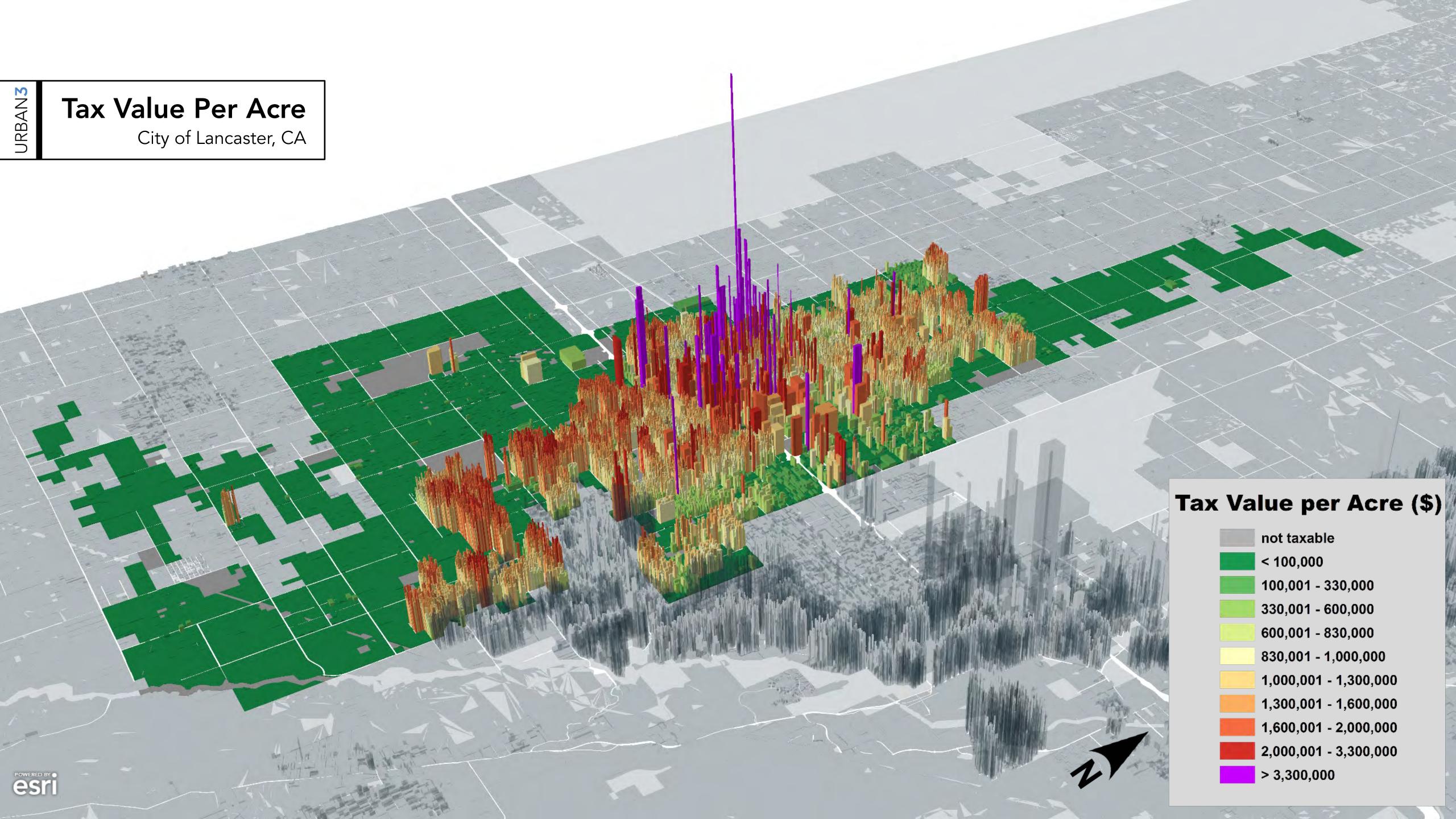


Paved Roads

City of Lancaster, CA

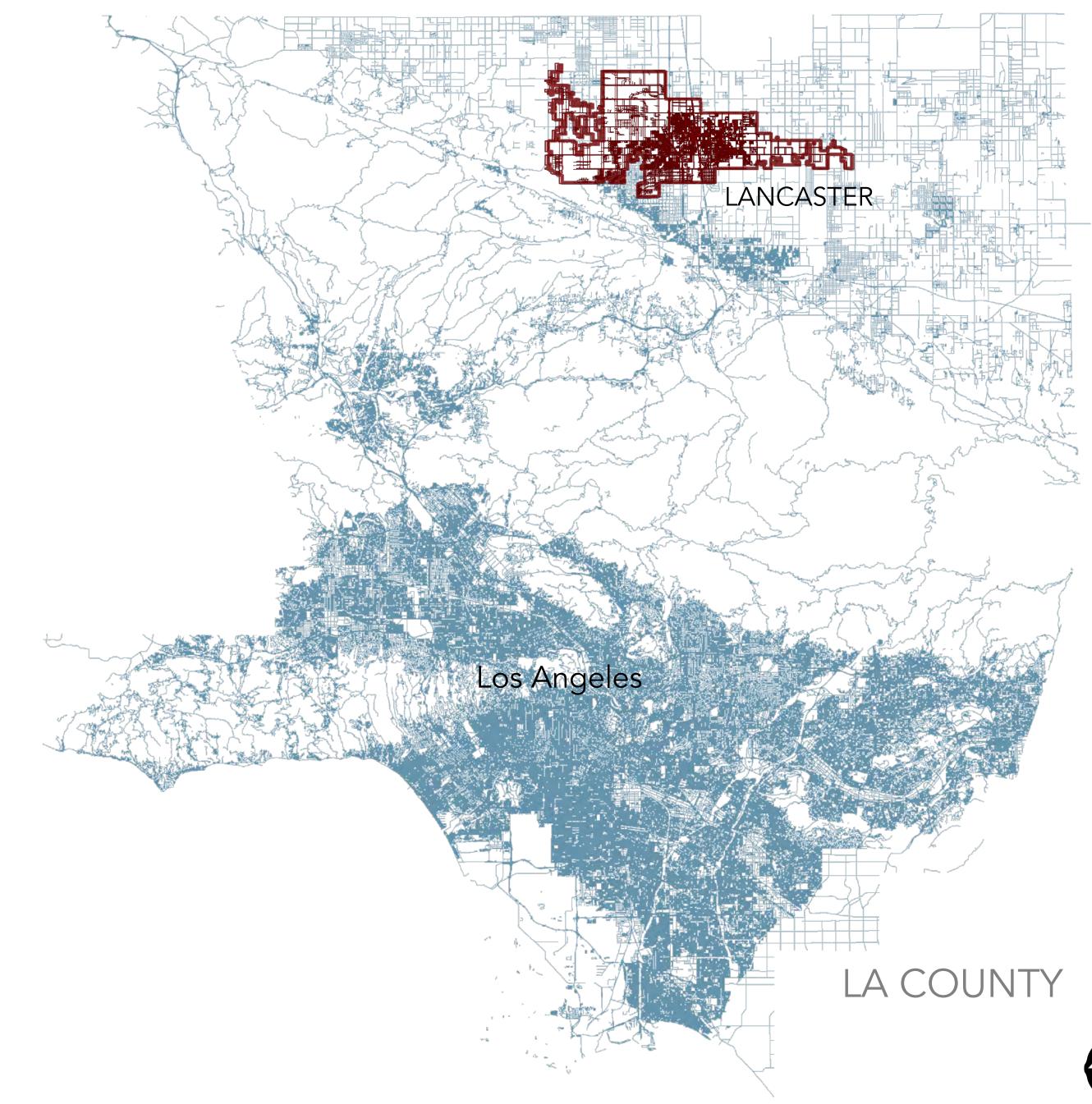


LANCASTER:



Paved Roads

City of Lancaster, CA





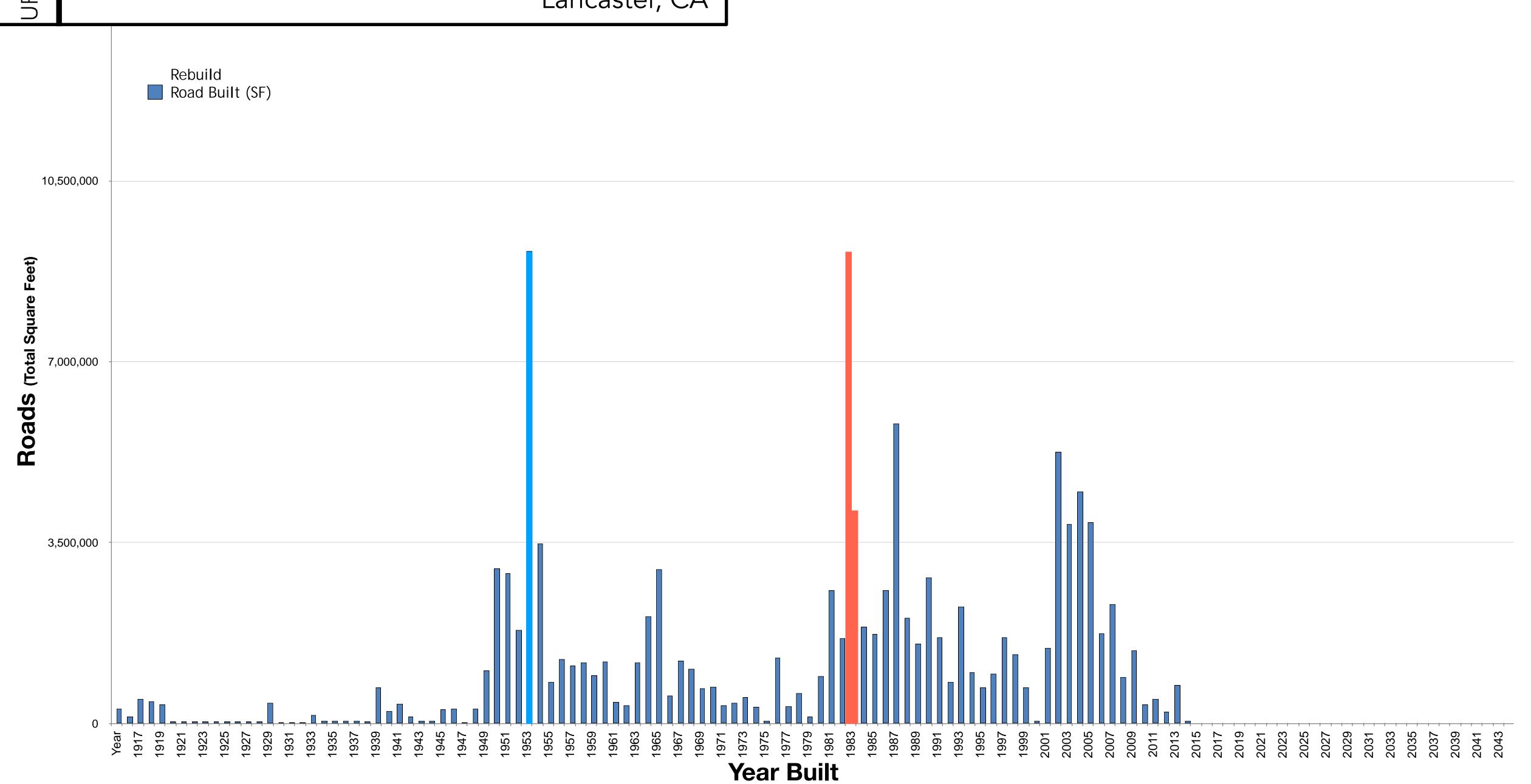
LANCASTER: 953 MILES

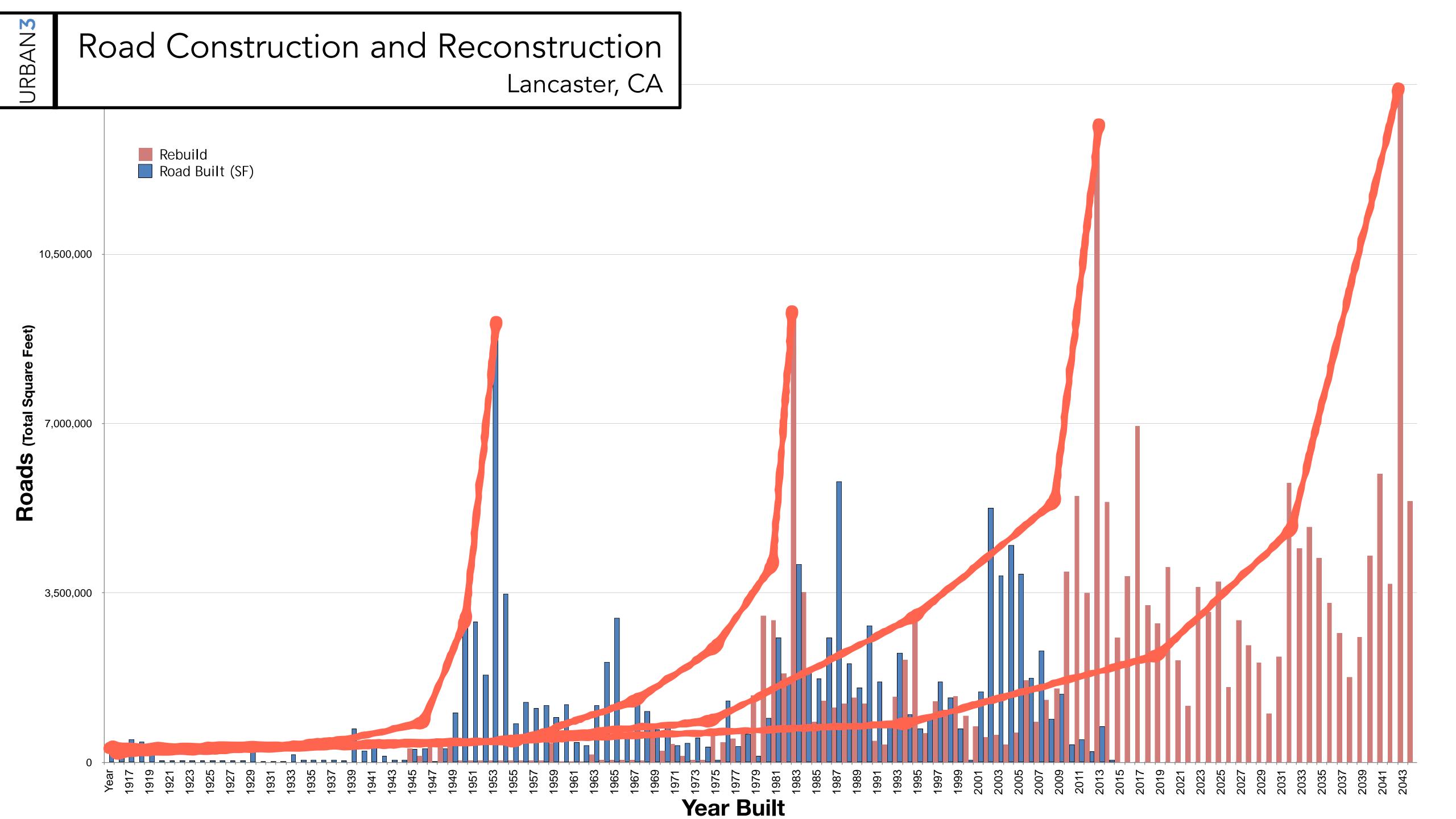




Road Construction and Reconstruction

Lancaster, CA





What Roads Can You Sustain?

Based on revenue flow, what can we afford? About half the network.



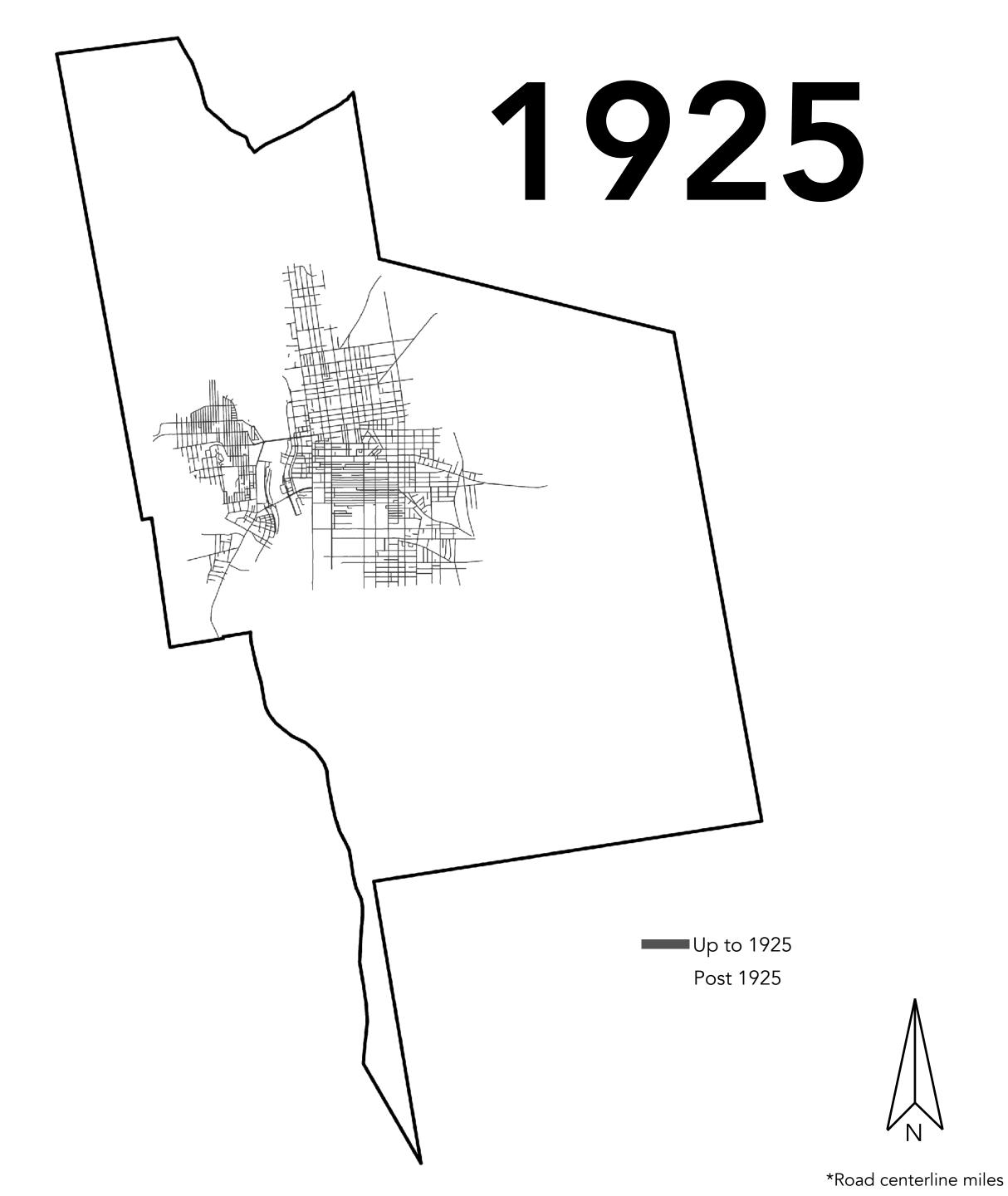
Roads over Time

Manchester, NH

77,000 people

140 miles* of road

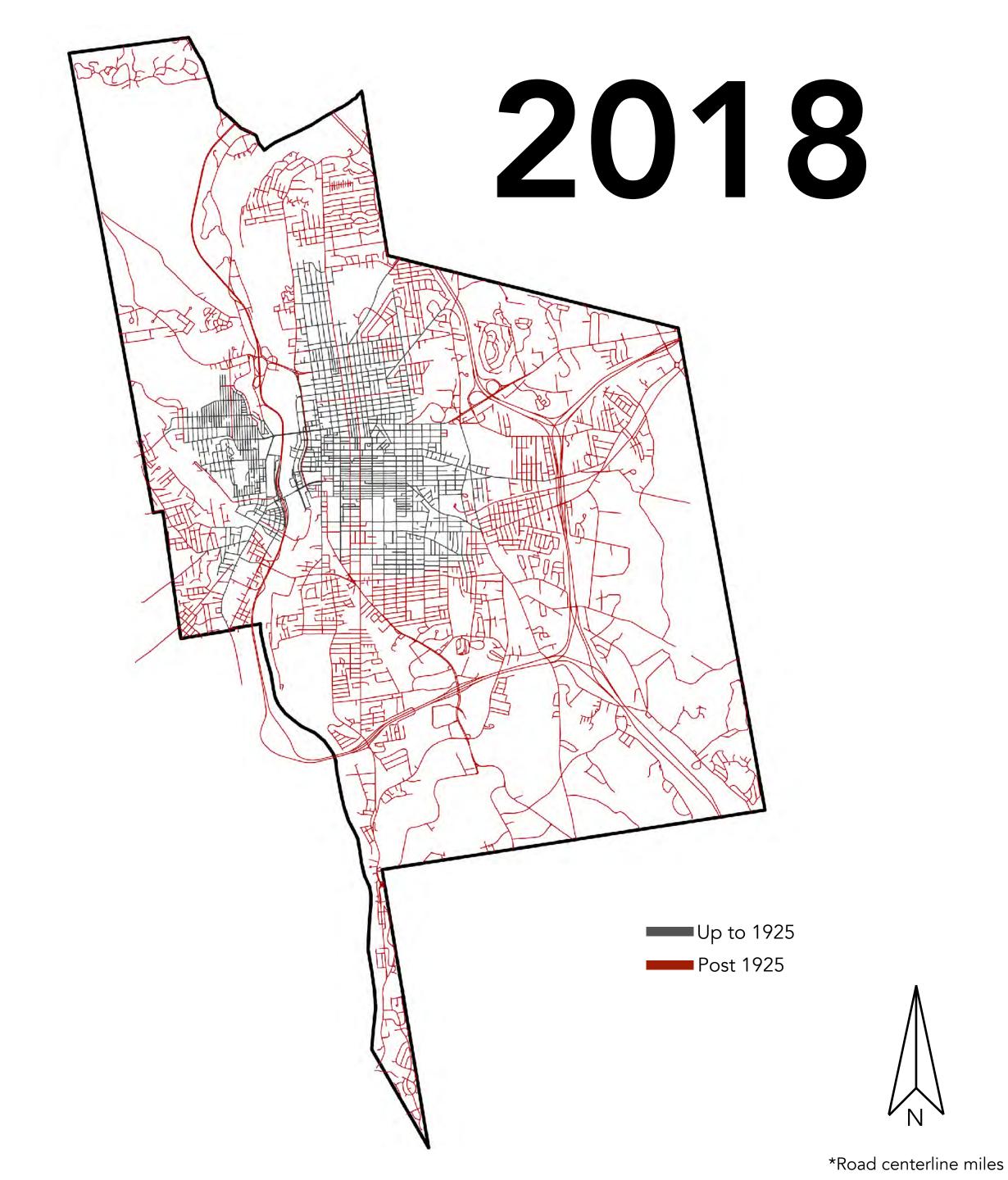
9.6 feet of road per person



111,000 people

535 miles* of road

25.4 feet of road per person



Question:

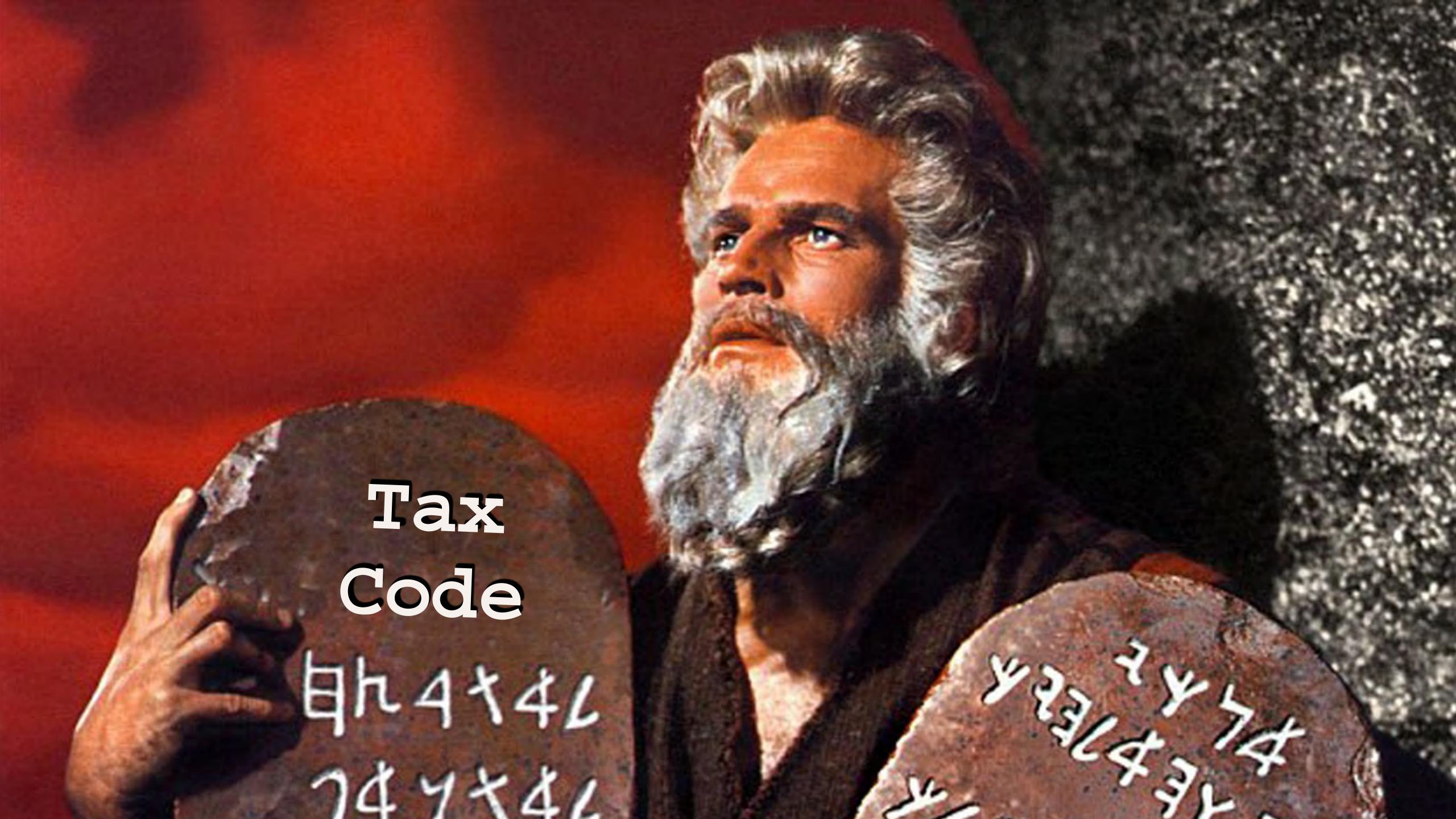
OK. So now what?



1. Do more analytics.





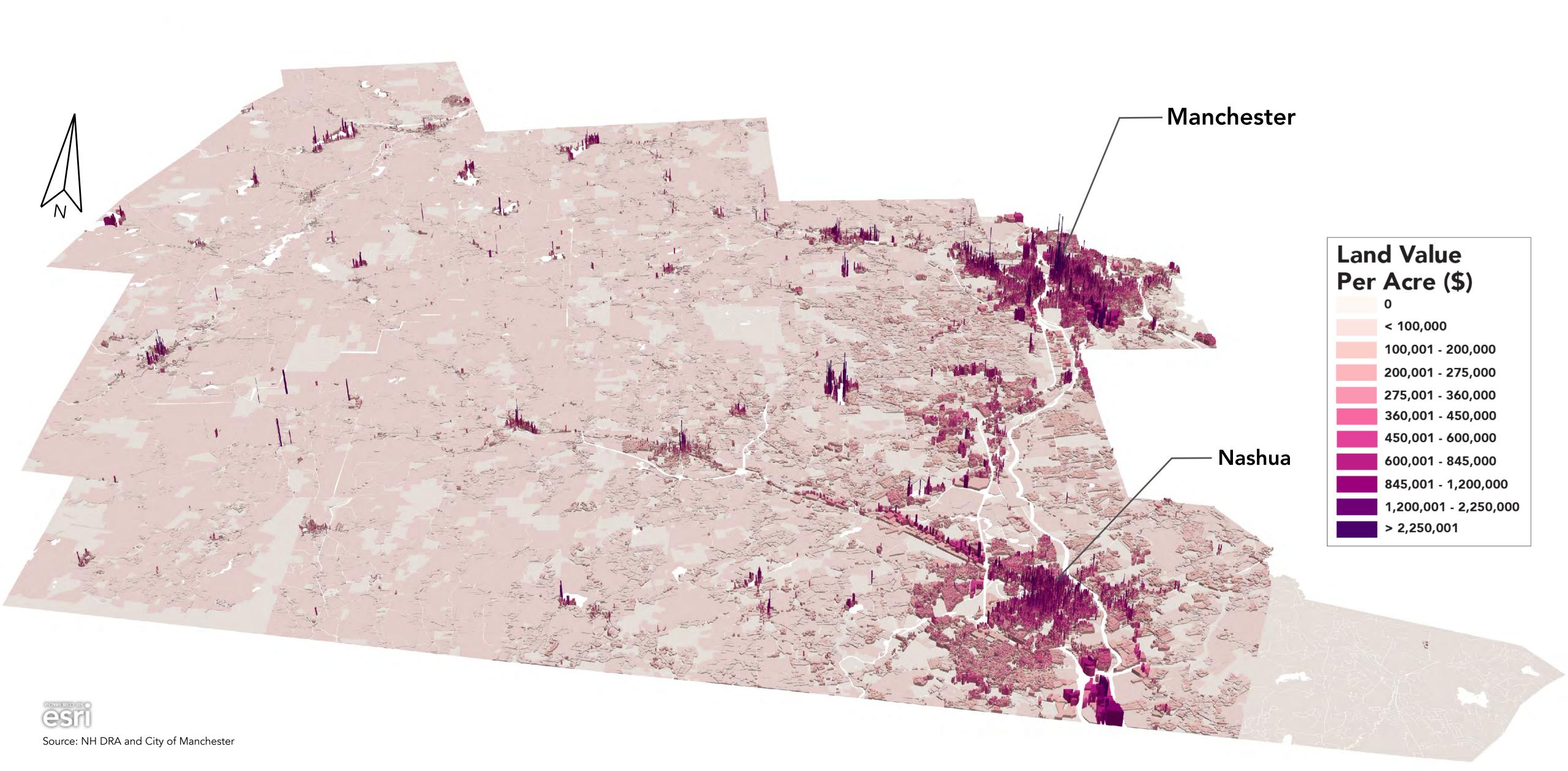


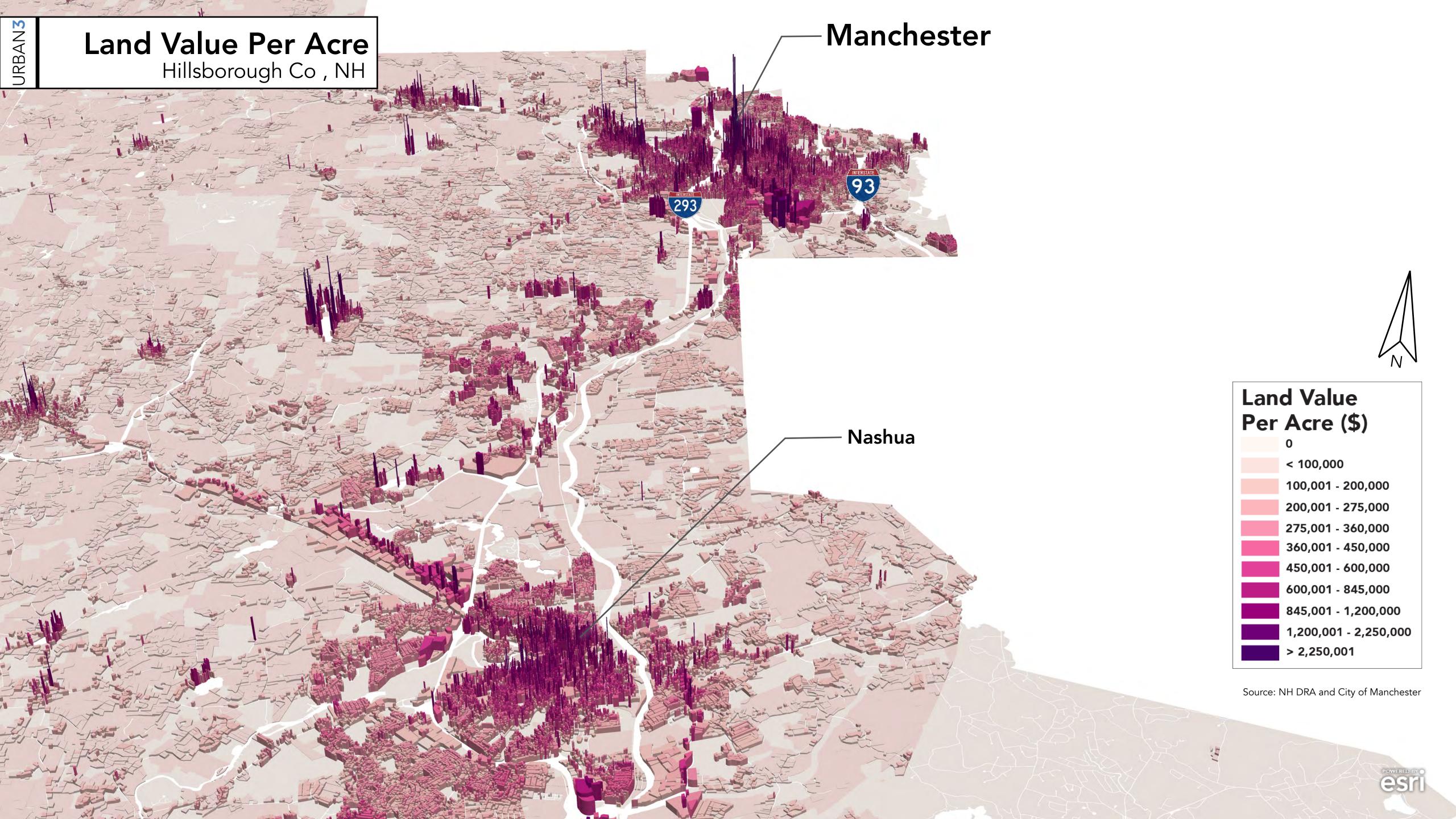


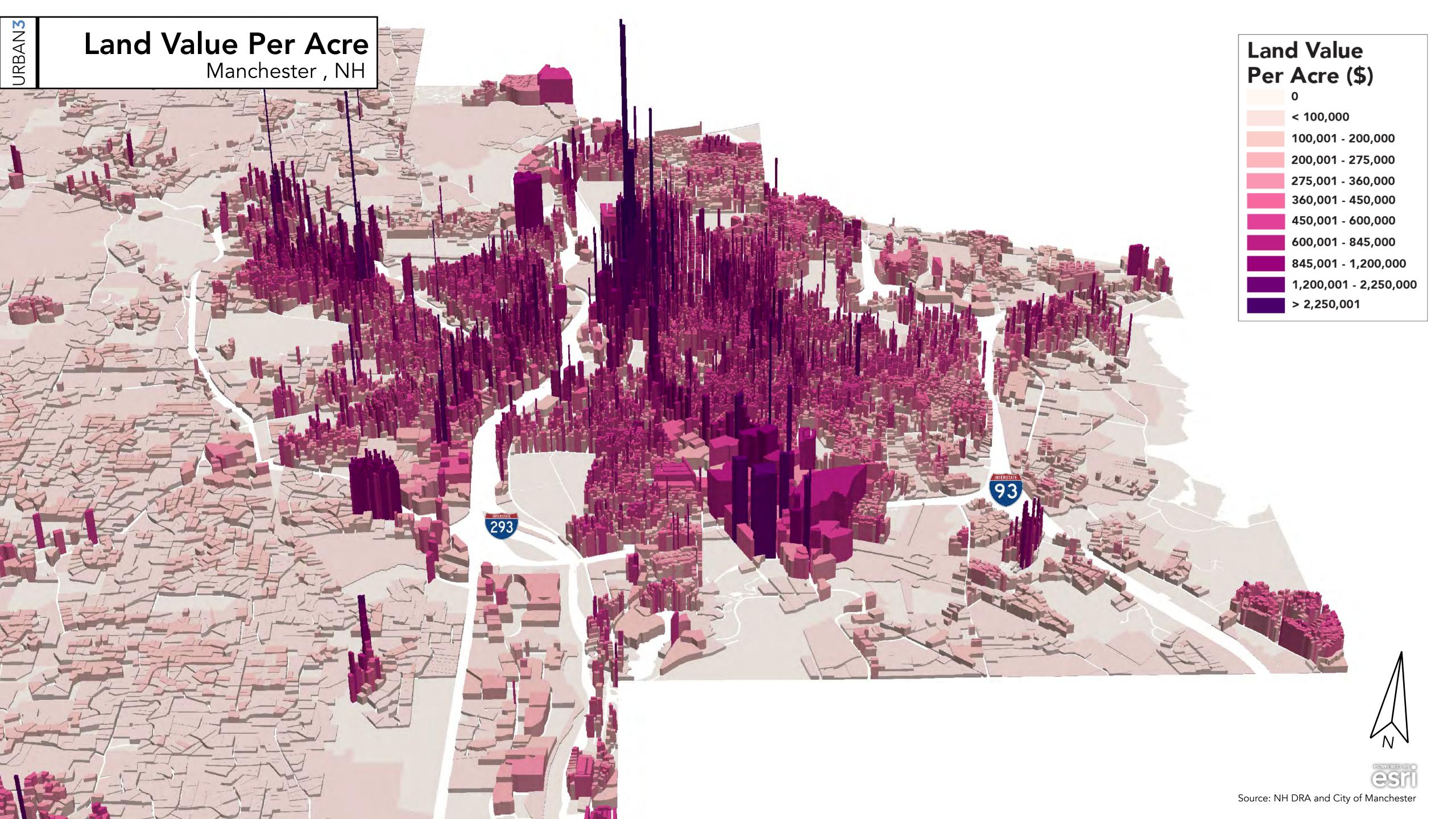


Land Value Per Acre

Hillsborough Co, NH

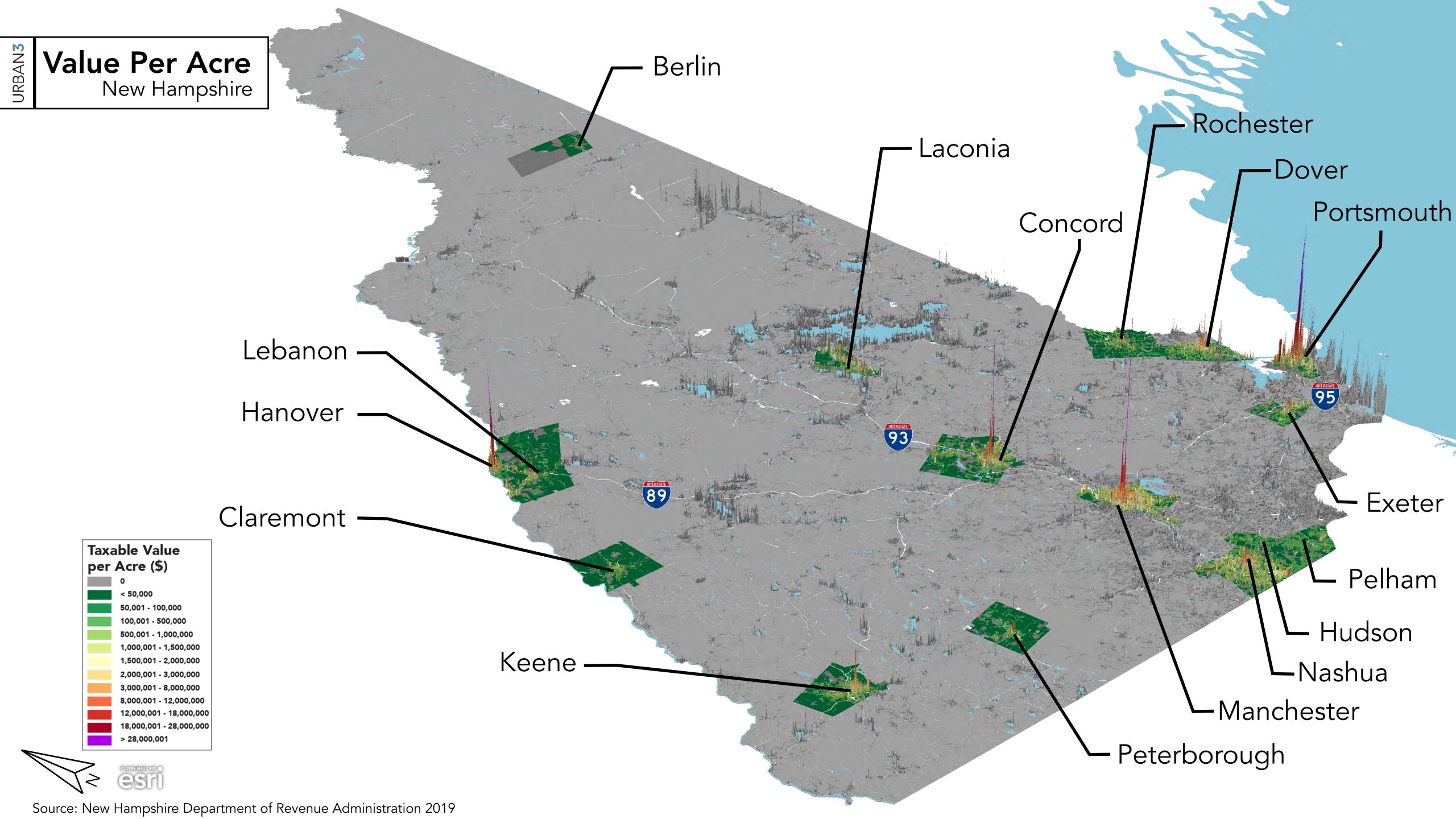


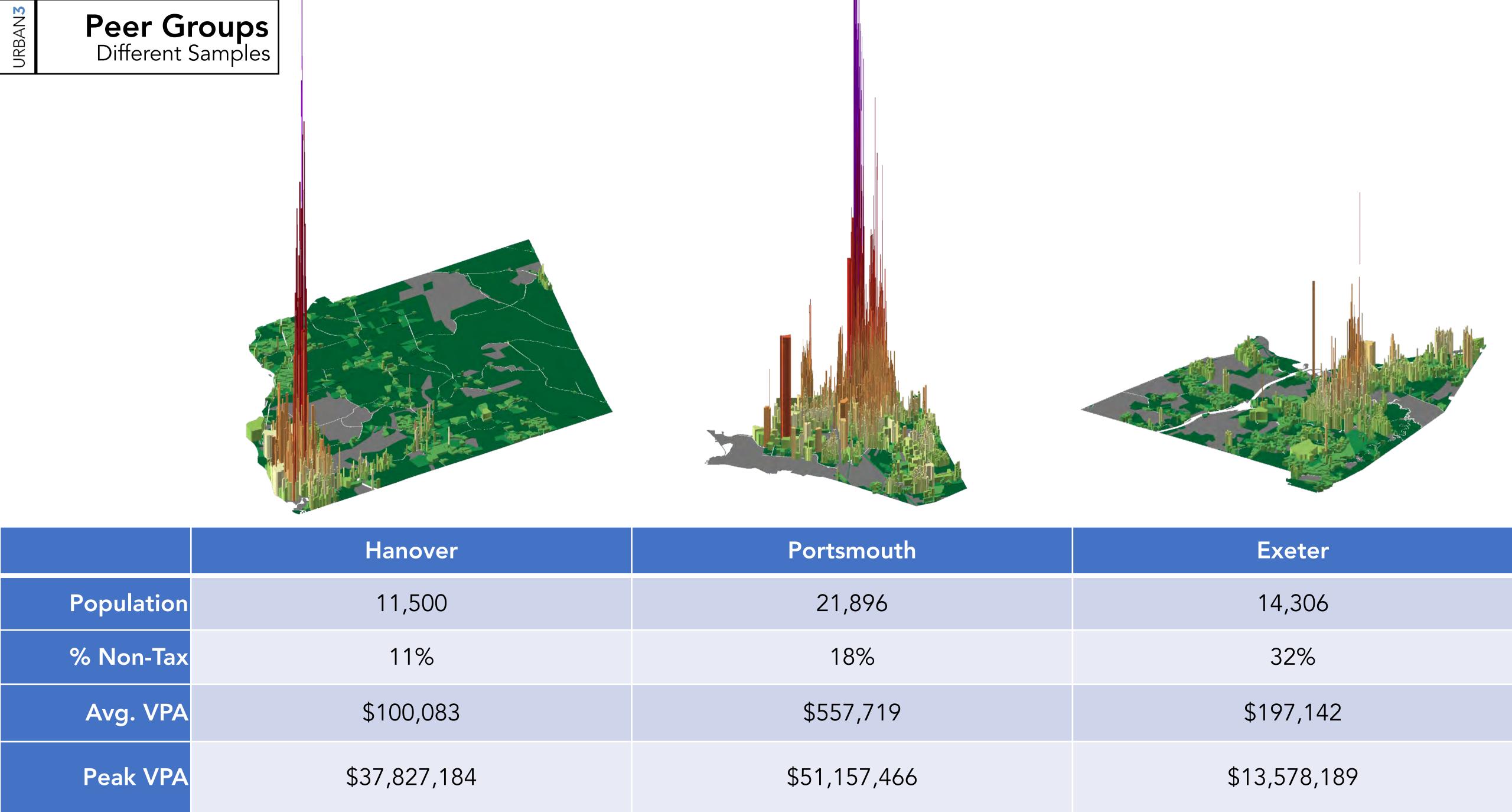




2. Learn from your neighbors







3. Maintain/Recreate Historic Value





Multi-family VPA: \$1.9 M



Mixed-use VPA: \$9.6 M



Peak VPA VPA: \$15.3 M

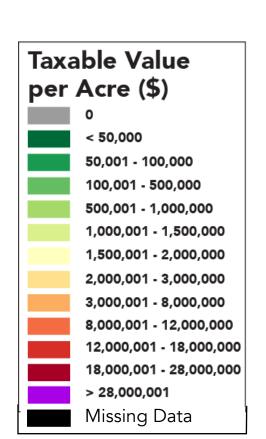
4. Adapt

















Portsmouth
Mixed-use
VPA: \$29.3 M

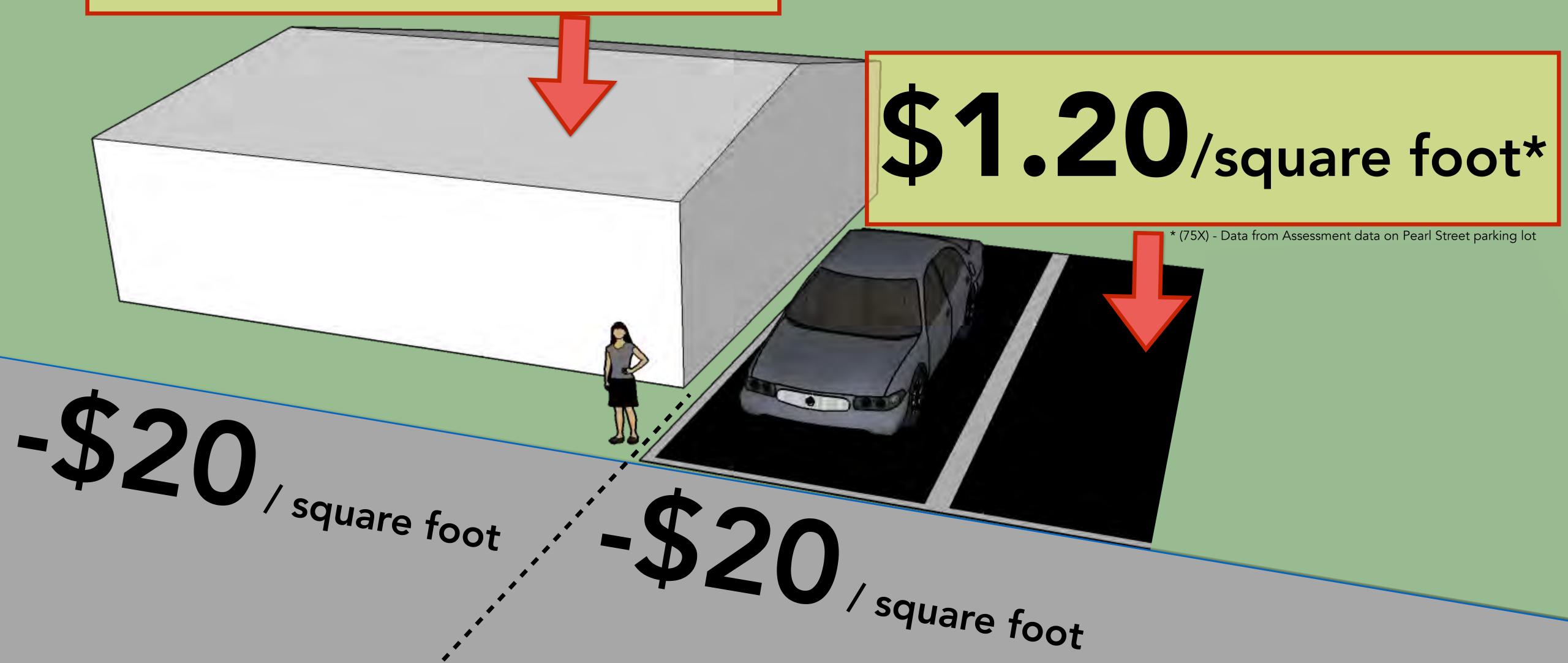
Portsmouth, long term success.

5. Realize that Parking is Subsidized.



\$90/square foot

What is Parking?
Measuring Manchester space



6. Build for Productivity



Value Per Acre Commercial



Peterborough Commercial VPA: \$0.94 M



Exeter Commercial VPA: \$0.97 M



Concord Commercial VPA: \$0.84 M



Berlin Commercial VPA: \$0.31 M



Dover Commercial VPA: \$1.3 M



Portsmouth Commercial VPA: \$2.4 M



Hanover Commercial VPA: \$3.4 M



Hudson Commercial VPA: \$0.66 M



Kenne Commercial VPA: \$0.95 M



Rochester Commercial VPA: \$1.2 M



Pelham Commercial VPA: \$0.5 M



Claremont Commercial VPA: \$0.49 M



Lebanon Commercial VPA: \$1.1 M



Laconia Commercial VPA: \$0.9 M

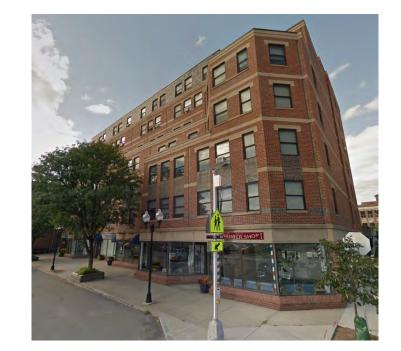


Nashua Commercial VPA: \$1.3 M

Sample average: \$970,000 value/acre

Value Per Acre

Traditional Commercial



Keene Peak VPA VPA: \$14 M



Lebanon Mixed-use VPA: \$6.2 M



Laconia Mixed-use VPA: \$3.7 M



Hanover Mixed-use VPA: \$12 M



Concord Mixed-use VPA: \$7.6 M



Nashua Mixed-use VPA: \$10 M



Exeter
Peak VPA
VPA: \$13.5 M



Dover Mixed-use VPA: \$9.6 M



Berlin Peak VPA VPA: \$2.5 M



Peterborough Peak VPA VPA: \$12.2 M



Rochester Mixed-use VPA: \$3.9 M



Portsmouth Mixed-use VPA: \$29.3 M

Sample average: \$8,300,000 value/acre

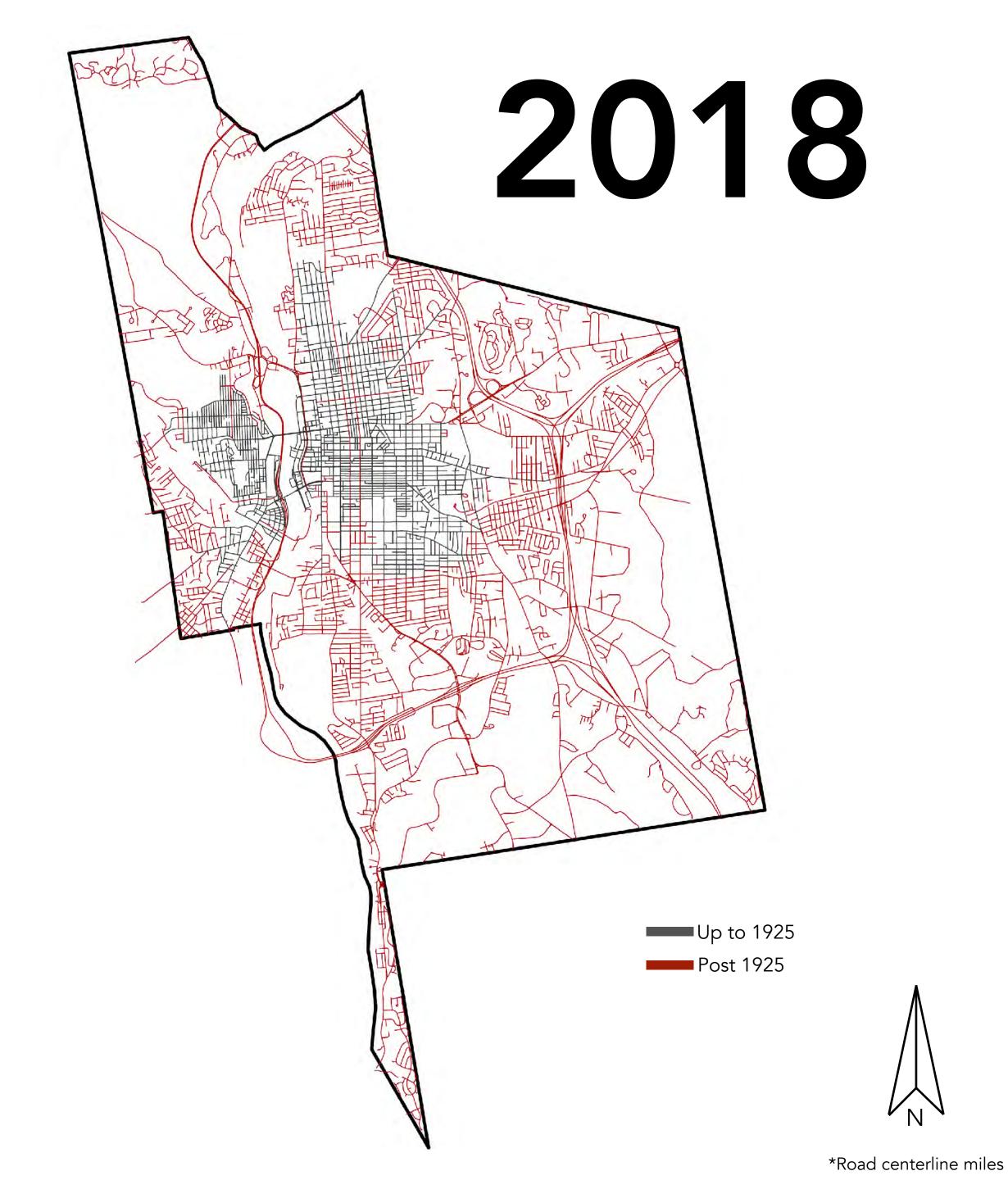
7. Measure What You Own



111,000 people

535 miles* of road

25.4 feet of road per person



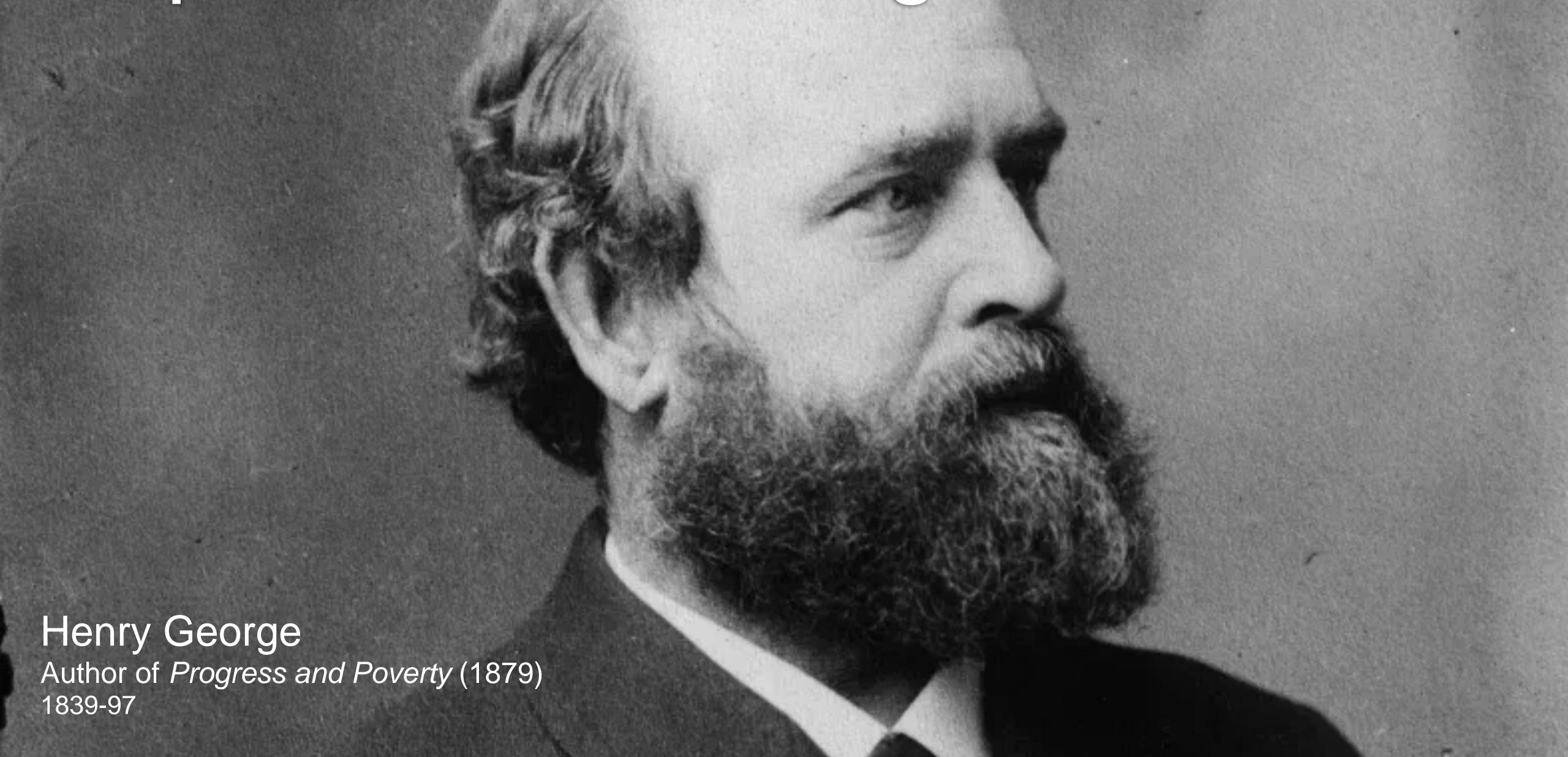
8. Consider the Tax System

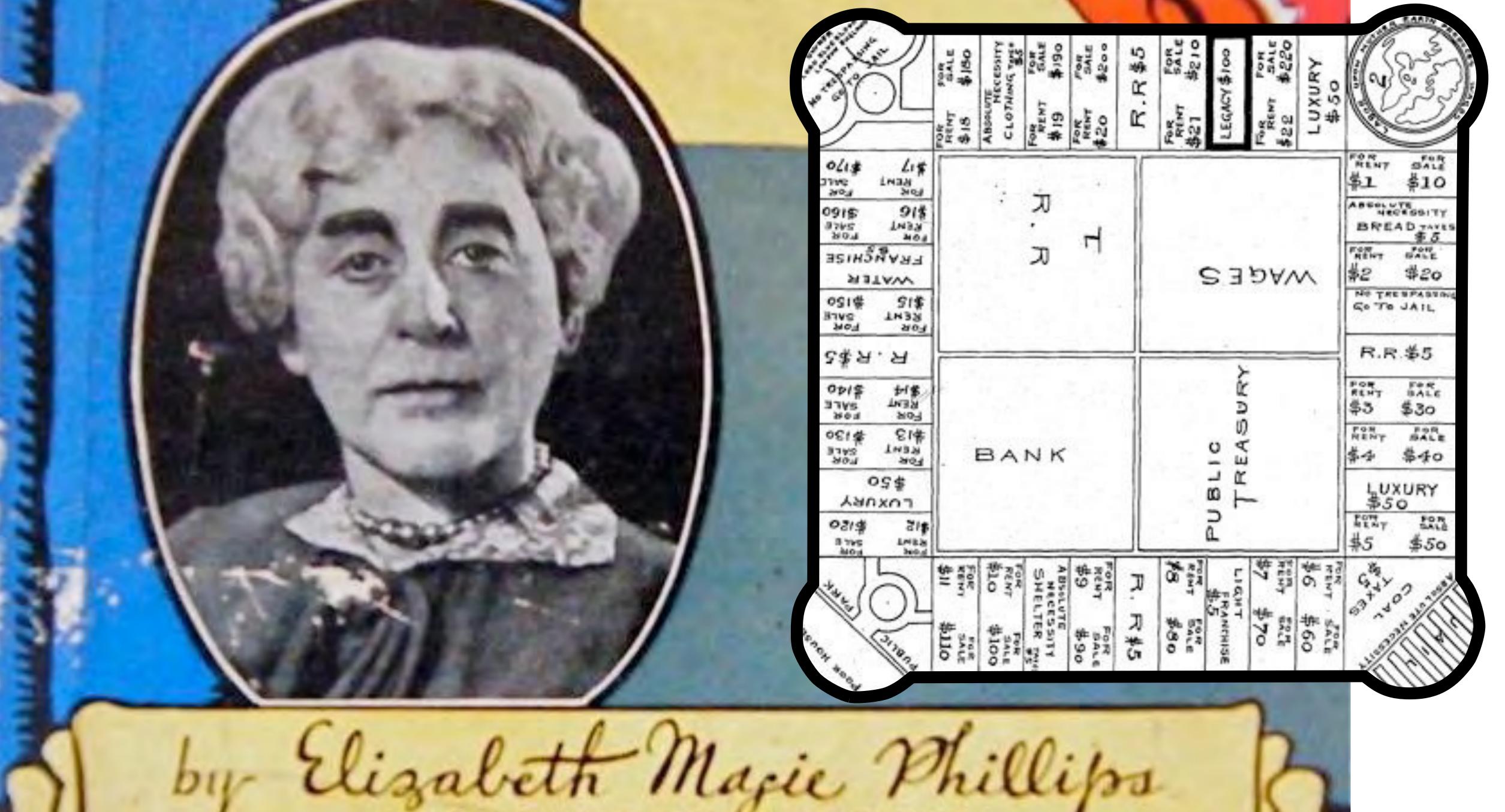


Question:

What is an appropriate tax?

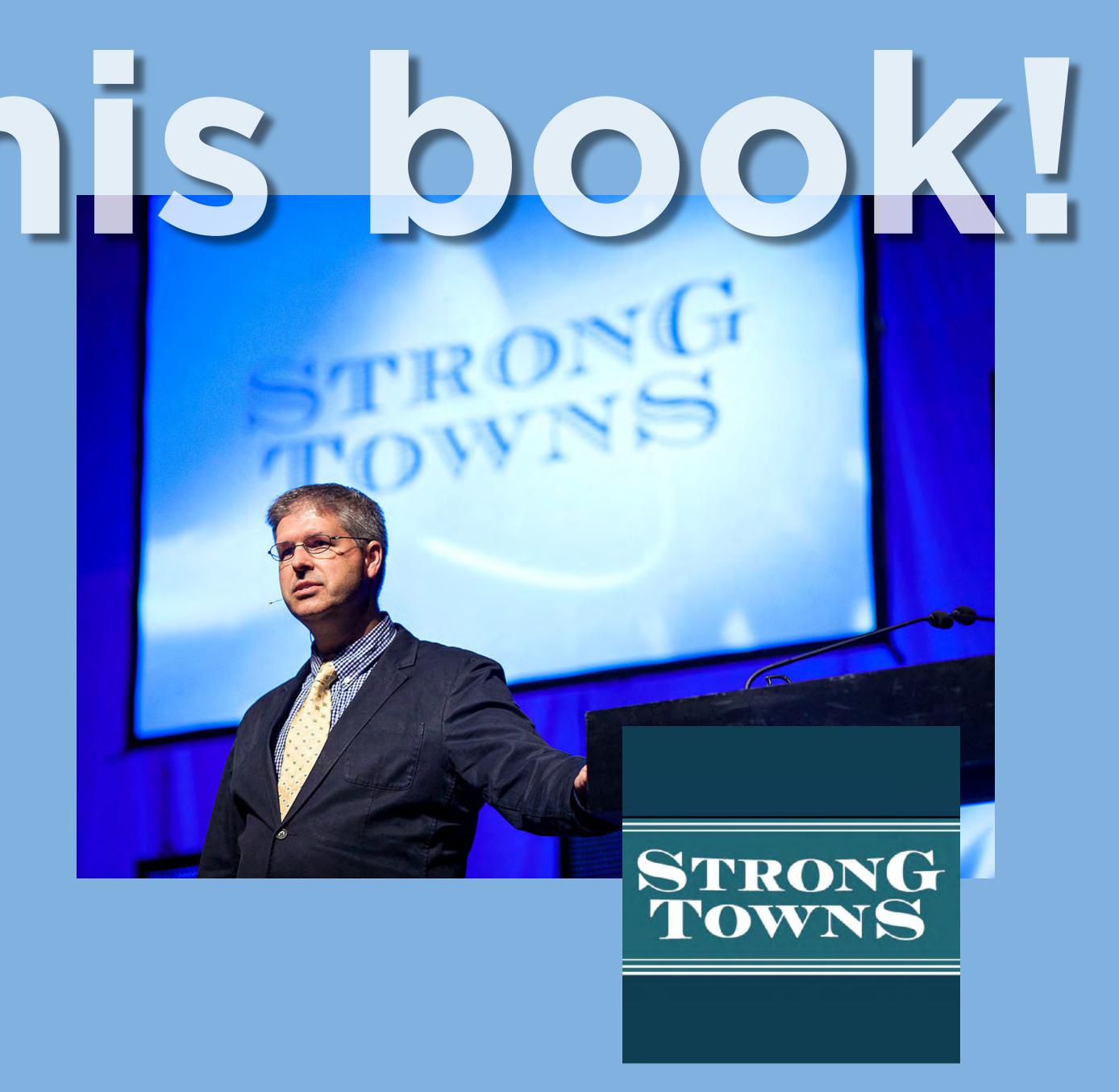
Proponent of the "single tax" on land.





by Elizabeth Magie Phillips







Next:

Questions?

