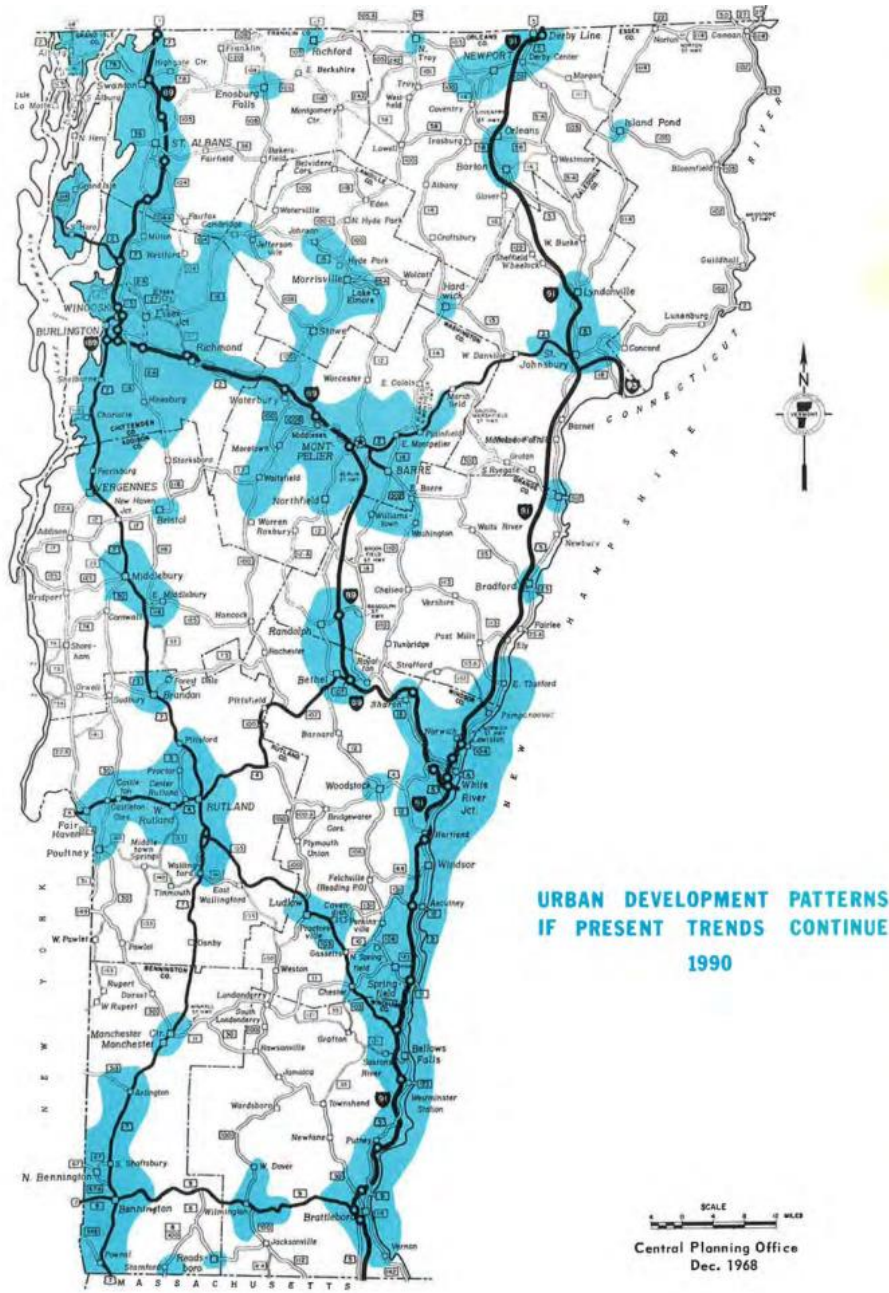


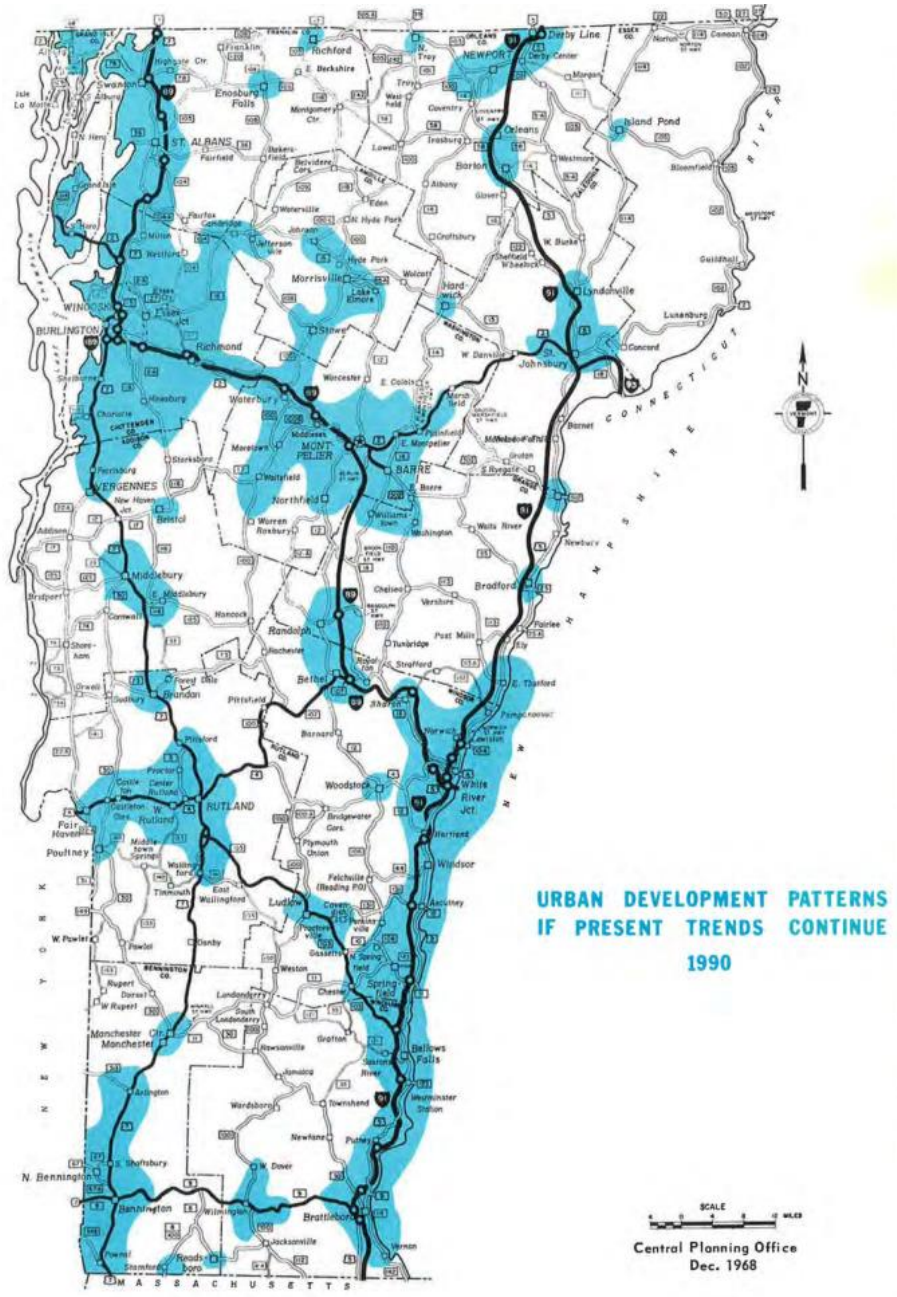
Presentation to the Commission on Act 250: the Next 50 Years

Settlement Patterns in Vermont

John E. Adams
October 26th 2018



“The traditional rural scene in Vermont, characterized by concentrated settlement in villages and open countryside dotted with farms, is disappearing.”



2010 Census Urban Areas

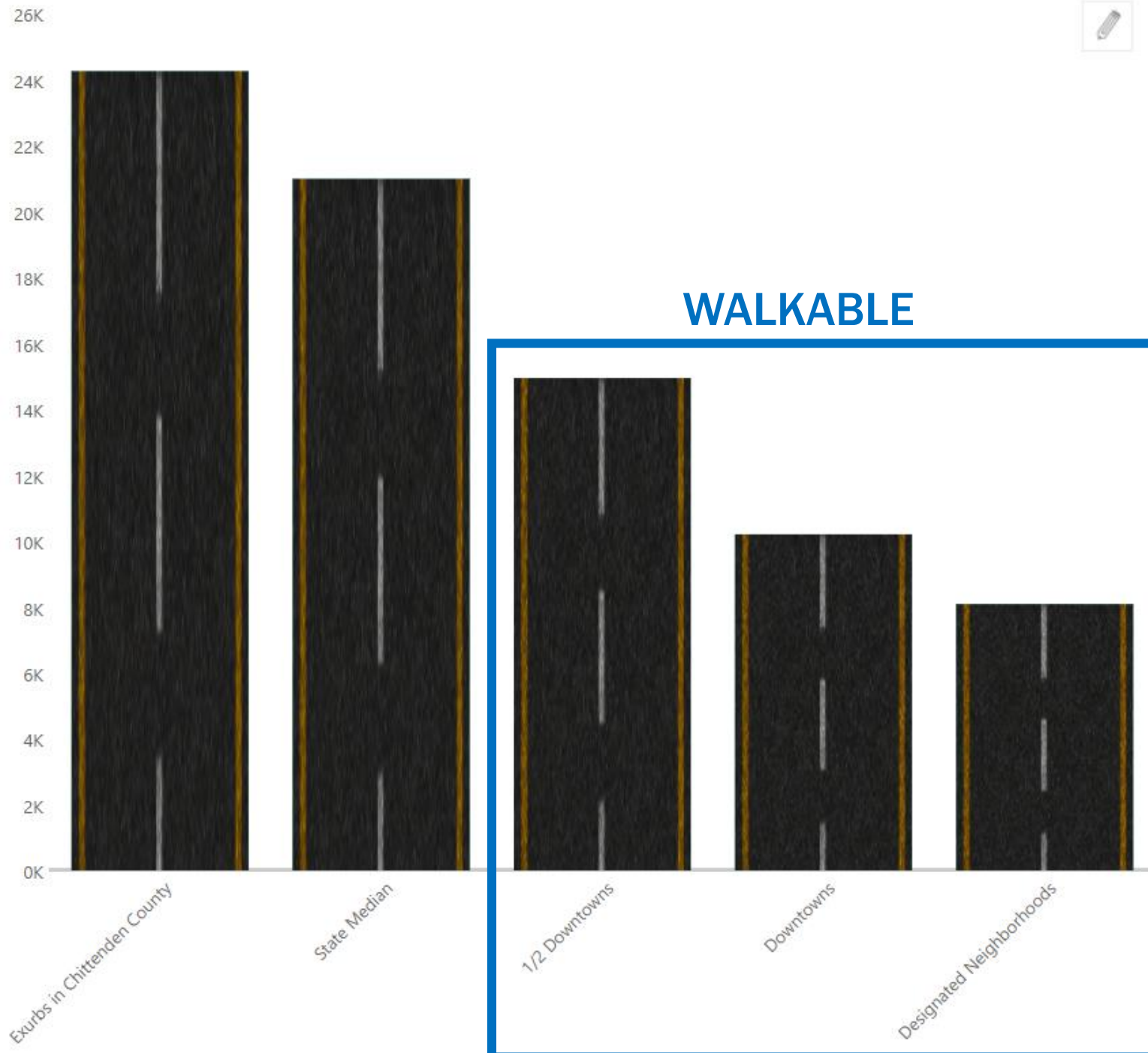
A large, white, two-story house with a prominent porch and an American flag flying in front. The house is surrounded by trees and greenery, suggesting a rural or countryside setting. The text is overlaid on the image.

Goal: ‘Maintaining historic settlement pattern of compact village and urban centers separated by rural countryside’

24 V.S.A. § 4302

Does this goal still make sense for the next 50 years?

What have we learned since 1968?

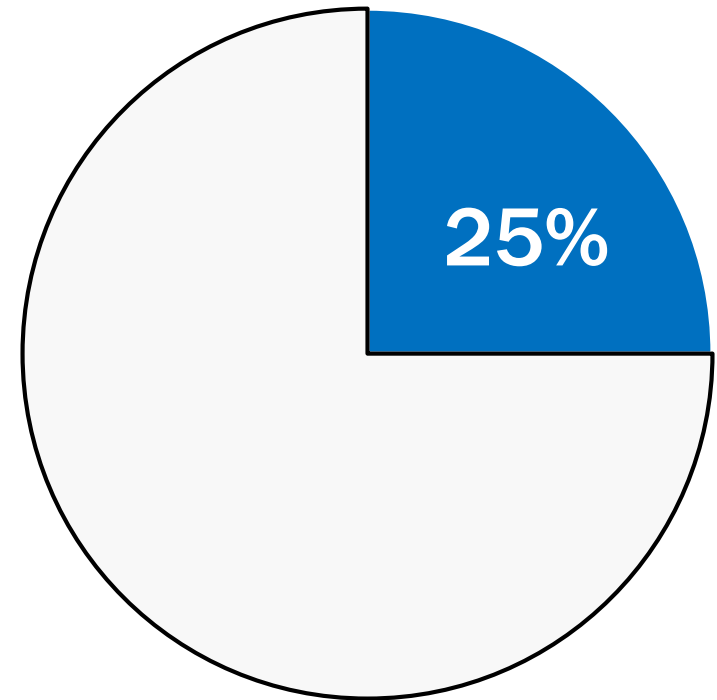


Median Household Annual Vehicle Miles Traveled in Vermont

Affordability

“the average annual cost to own and operate a vehicle in the United States is \$9,576”

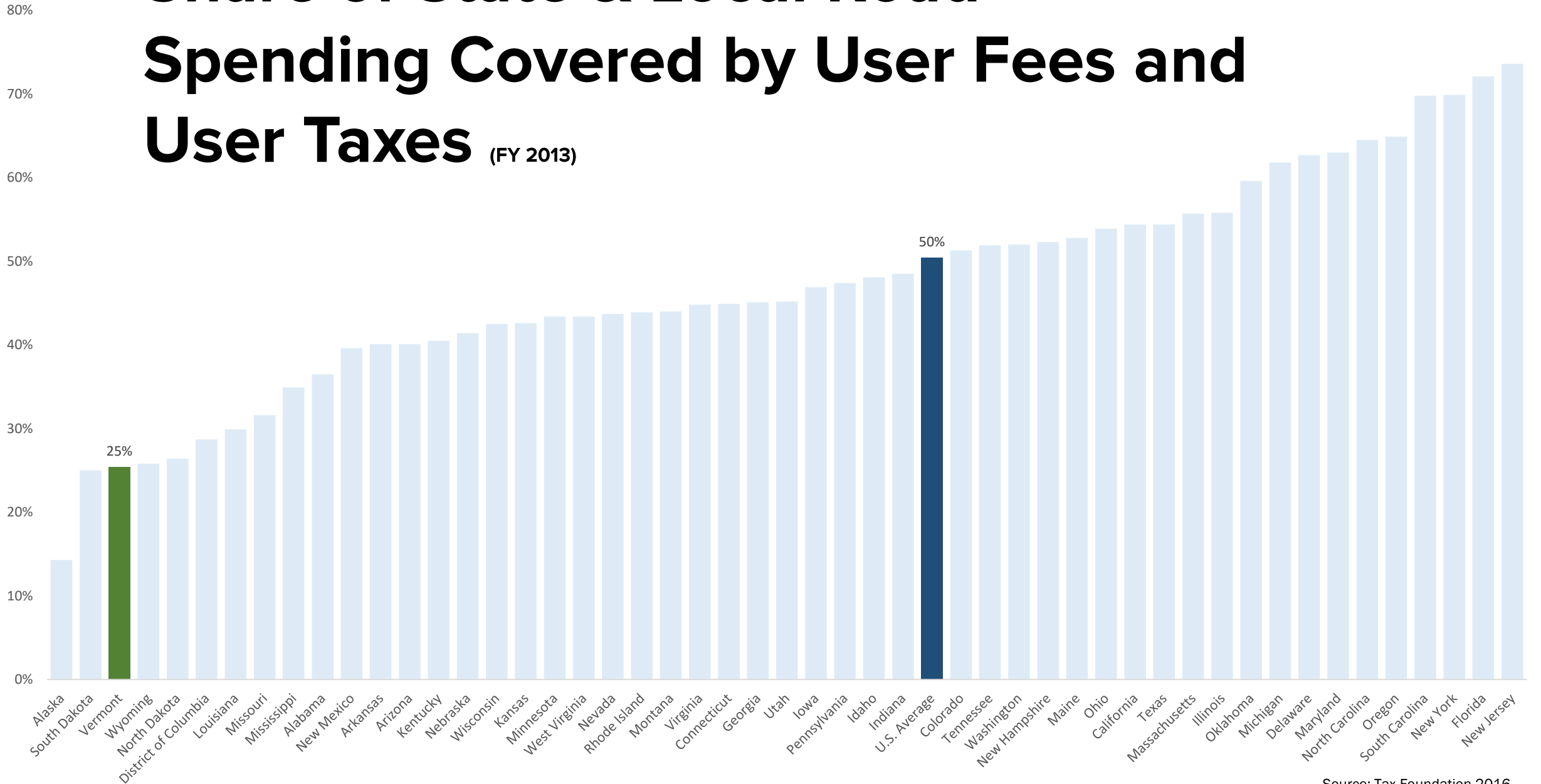
US Bureau of Labor Statistics (2018)



Average Transportation Costs for Vermont Household (% of income.)

Source: Housing and Transp. Affordability index
Income: \$50,939
Commuters: 1.16 workers
Household Size: 2.39 people

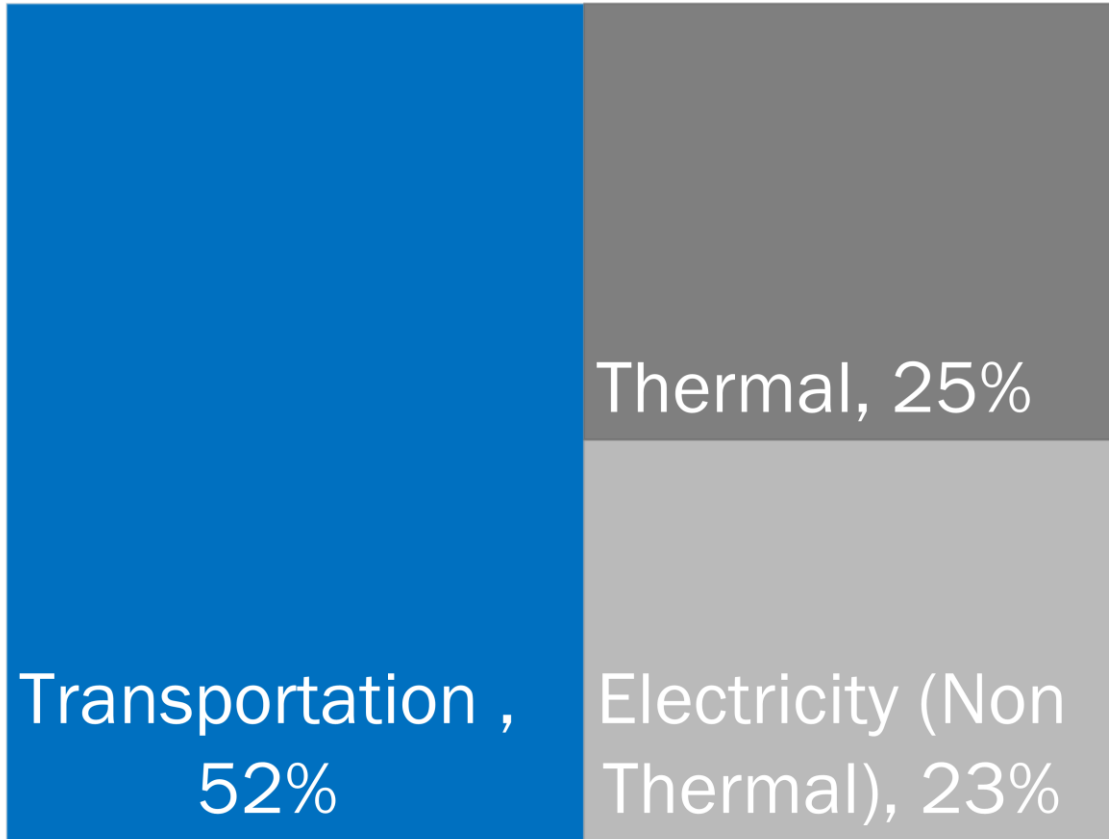
Share of State & Local Road Spending Covered by User Fees and User Taxes (FY 2013)



Energy

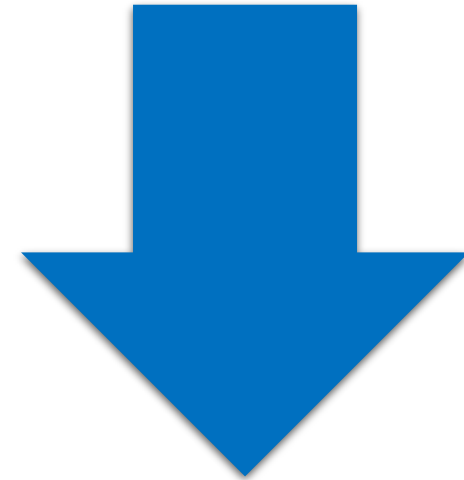
Components of Total Energy Cost for Vermont Households

VEIC 2016



**16% to 31%
Reduction in Total
Energy Cost for
Vermont Households**

(Households living within ½ mile of Designated Downtown.)



Health



**We can change it by
city planners,
transportation
professionals and
local government
leaders working
together to improve
the walkability of
neighborhoods for
people with all
abilities.**

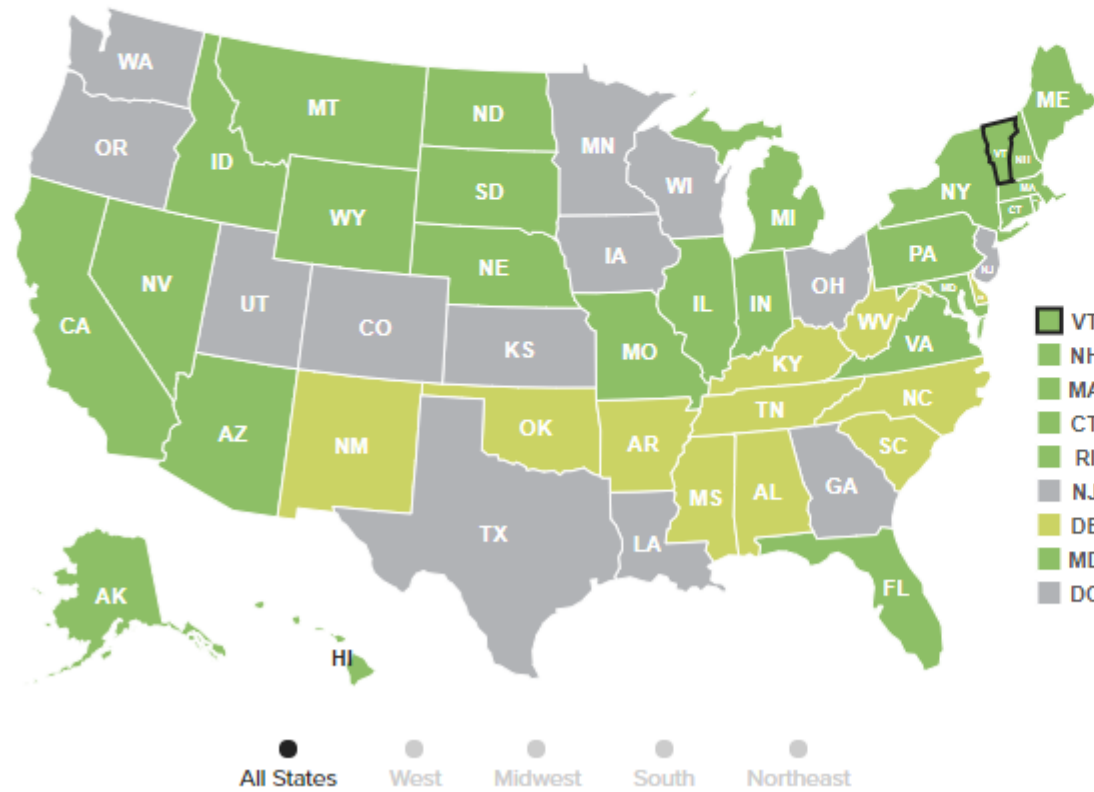
Surgeon General Dr. Vivek Murthy
September 2015

High School Obesity by State, 2015

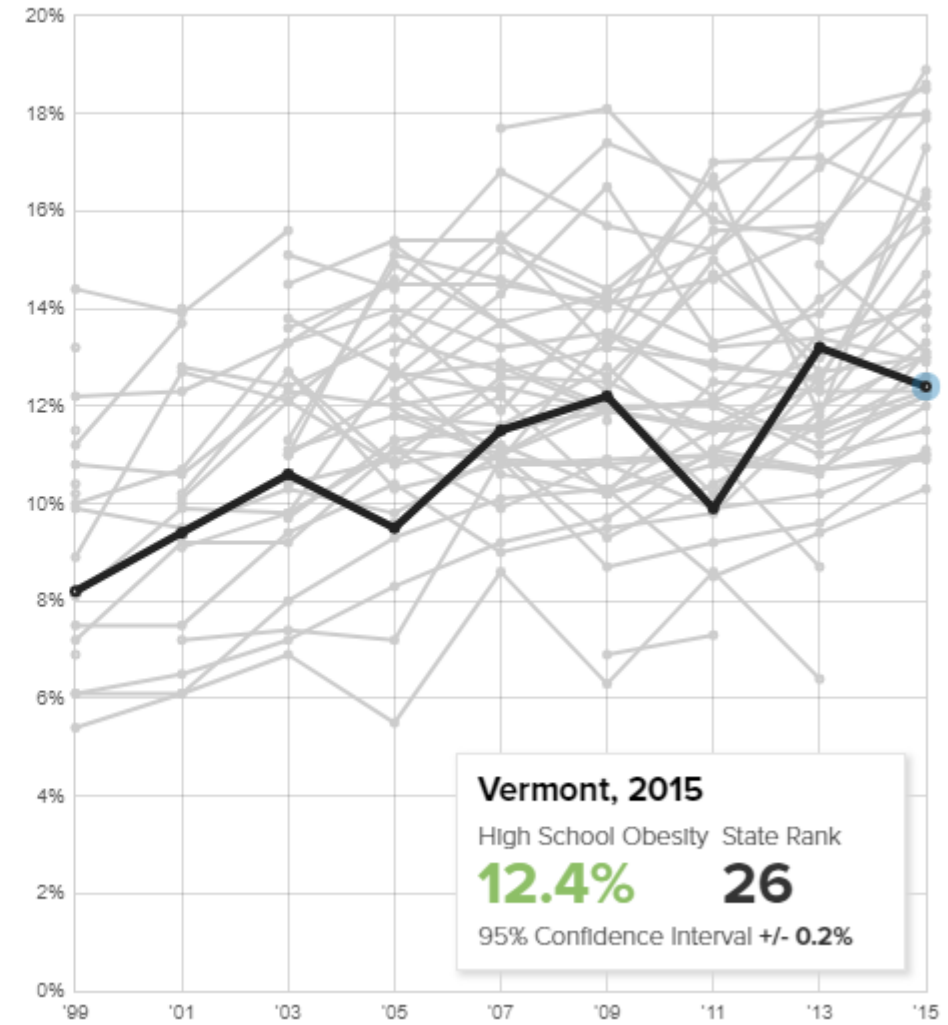
Select years with the slider to see historical data. Hover over states for more information. Click a state to lock the selection. Click again to unlock.

Percent of obese high school students

0 - 9.9% 10 - 14.9% 15 - 19.9% 20 - 24.9% 25 - 29.9% 30 - 34.9% 35%+



High School Obesity, 1999 to 2015



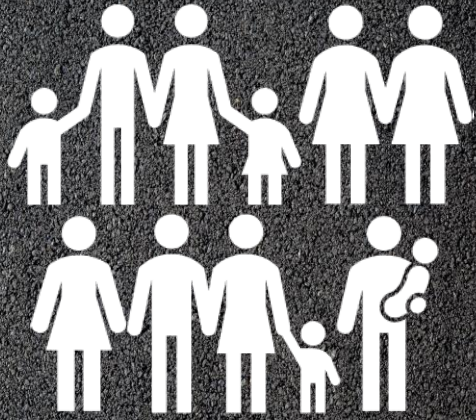
Water Quality



**1 Acre of Impervious
Surface Inside Centers**

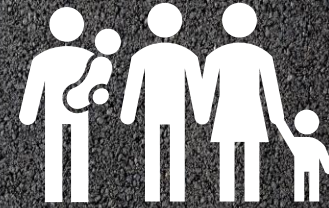


**1 Acre of Impervious
Outside Centers**



& 10.67 Jobs

**1 Acre of Impervious
Surface Inside Centers**



& 2.23 Jobs

**1 Acre of Impervious
Outside Centers**



Fiscal Health & Land Productivity

(See work of Joe Minicozzi.)

Highgate Springs, VT
Source: Bill Morris using VCGI Imagery

Mixed Use



My House



Box Stores



Mixed Use



.12 acres
16 apartments+
\$749,200 Tax
Value

My House



.09 acres
1 house
\$170,000 Tax
Value

Box Stores



65.8 acres
Box Stores
\$13,665,400 Tax
Value

Mixed Use



.12 acres
16 apartments+
\$749,200 Tax
Value

\$154,820
Property tax/acre

My House



.09 acres
1 house
\$170,000 Tax
Value

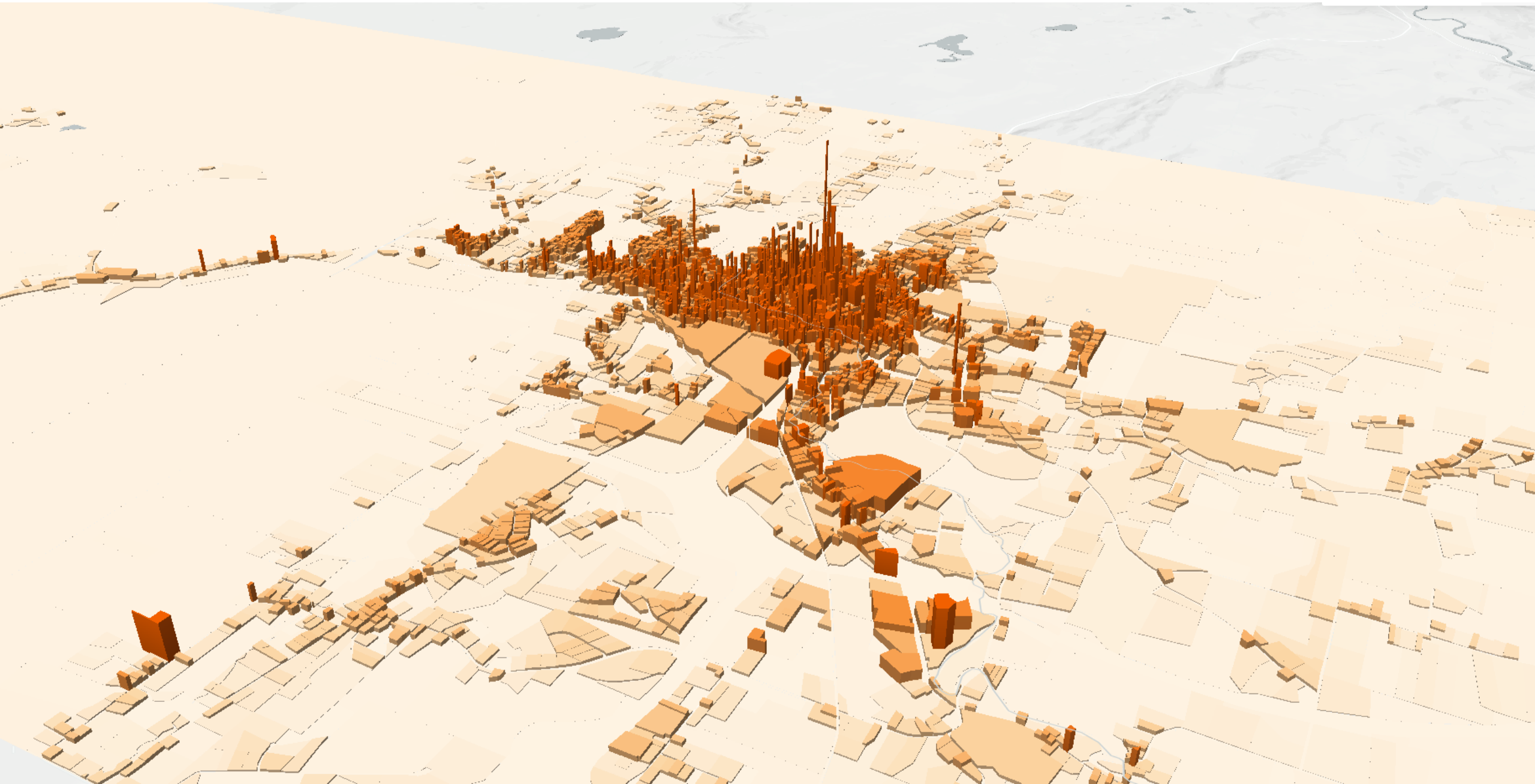
\$46,684
Property tax/acre

Box Stores

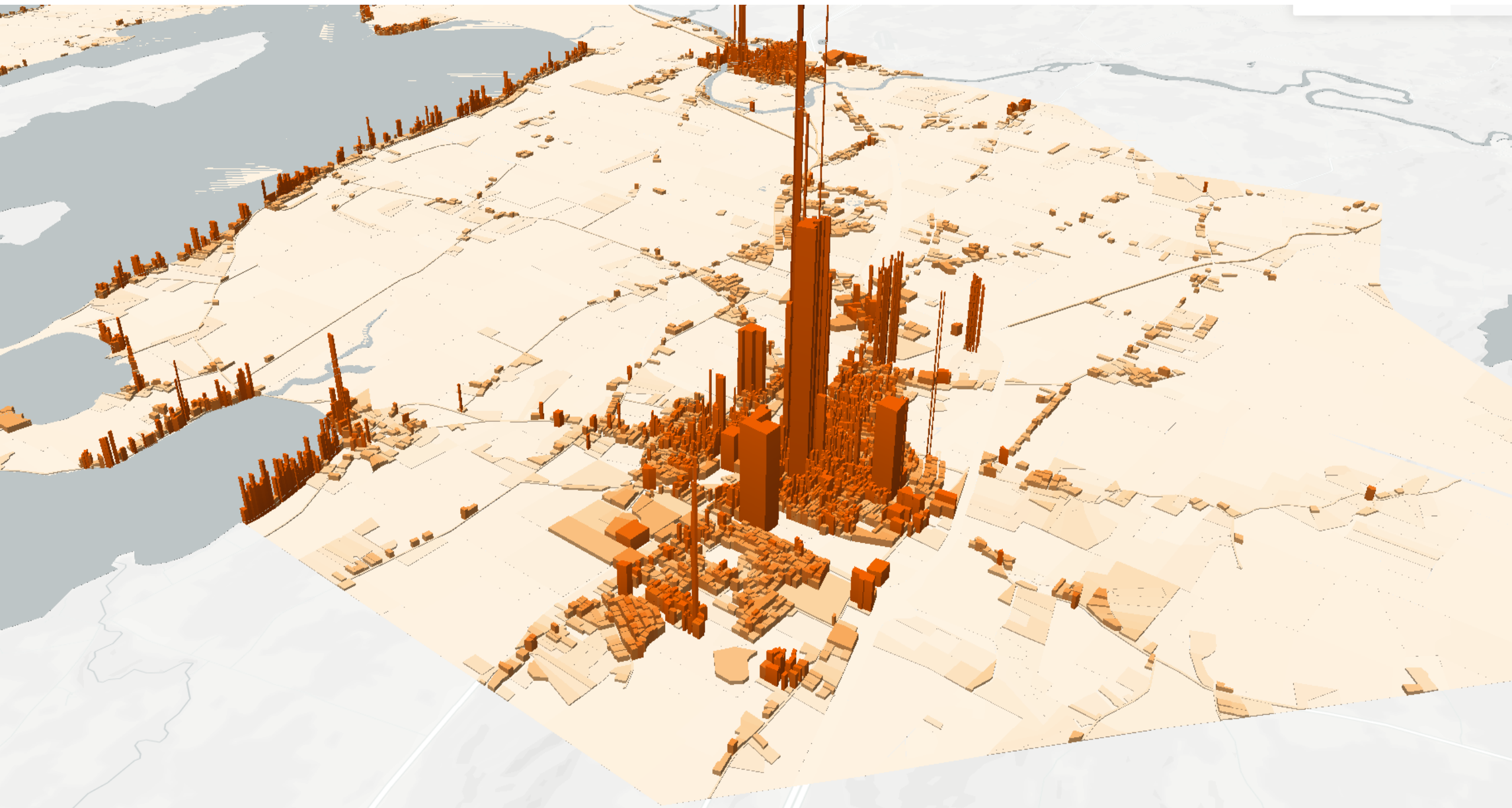


65.8 acres
Box Stores
\$13,665,400 Tax
Value

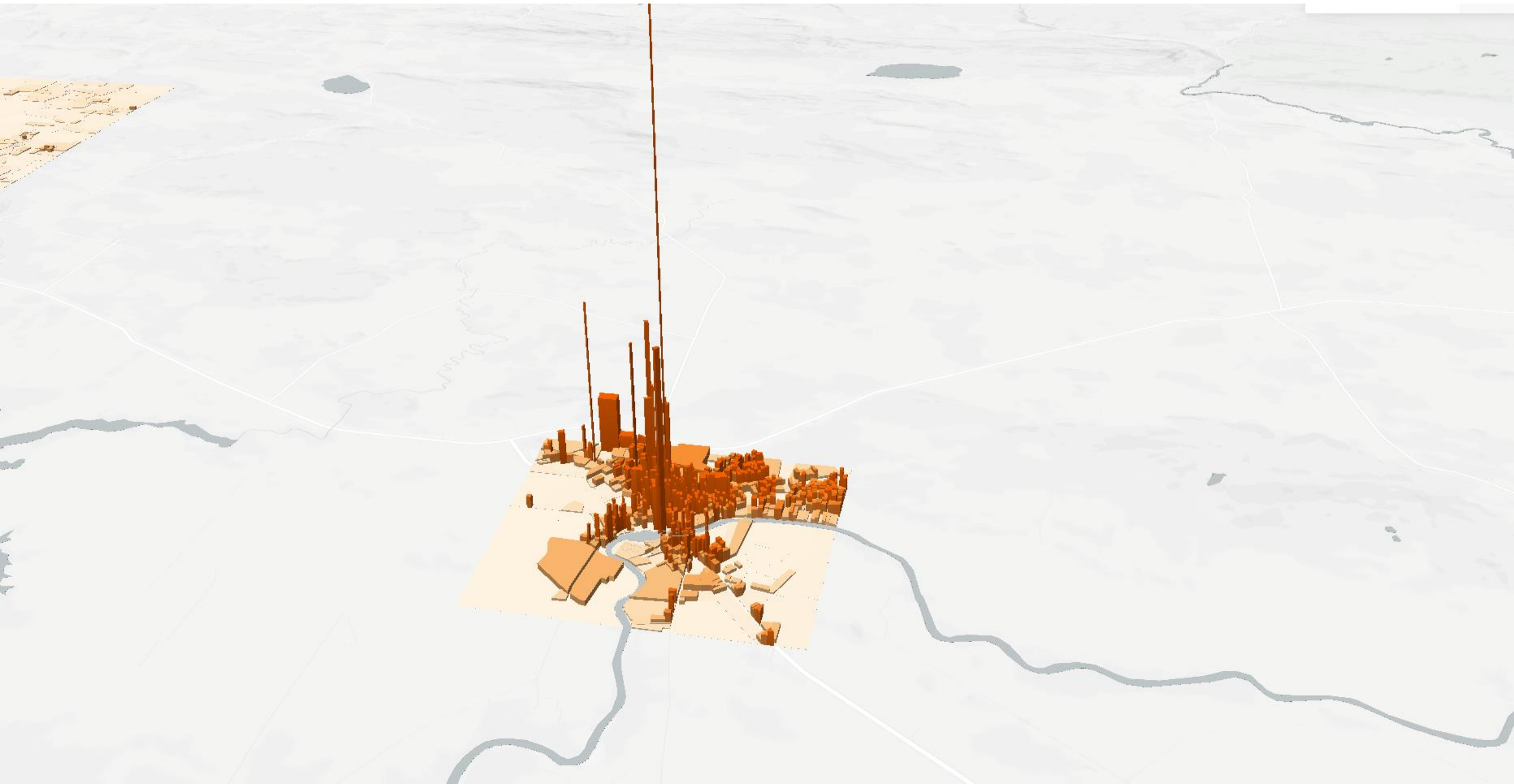
\$4,310
Property tax/acre



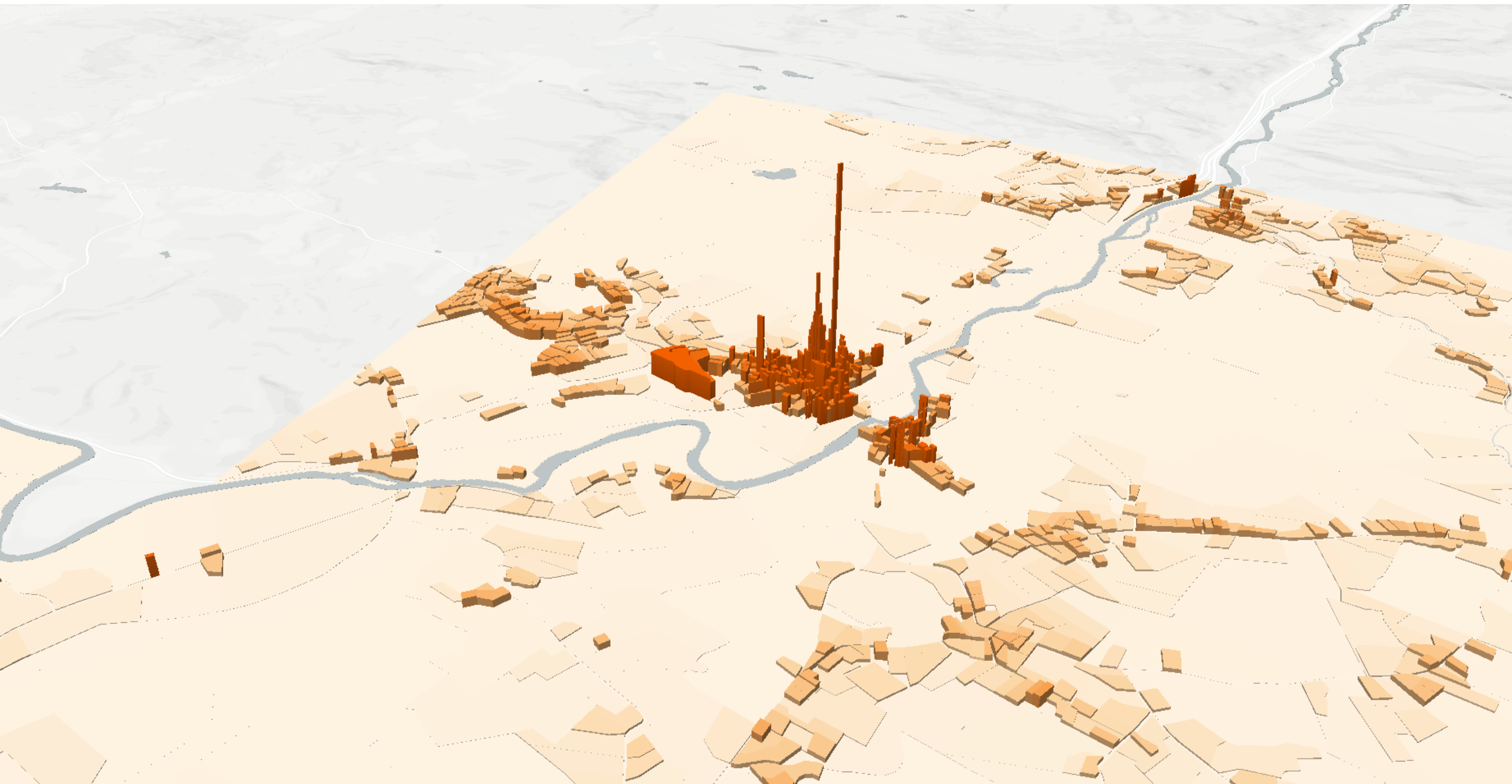
Bennington



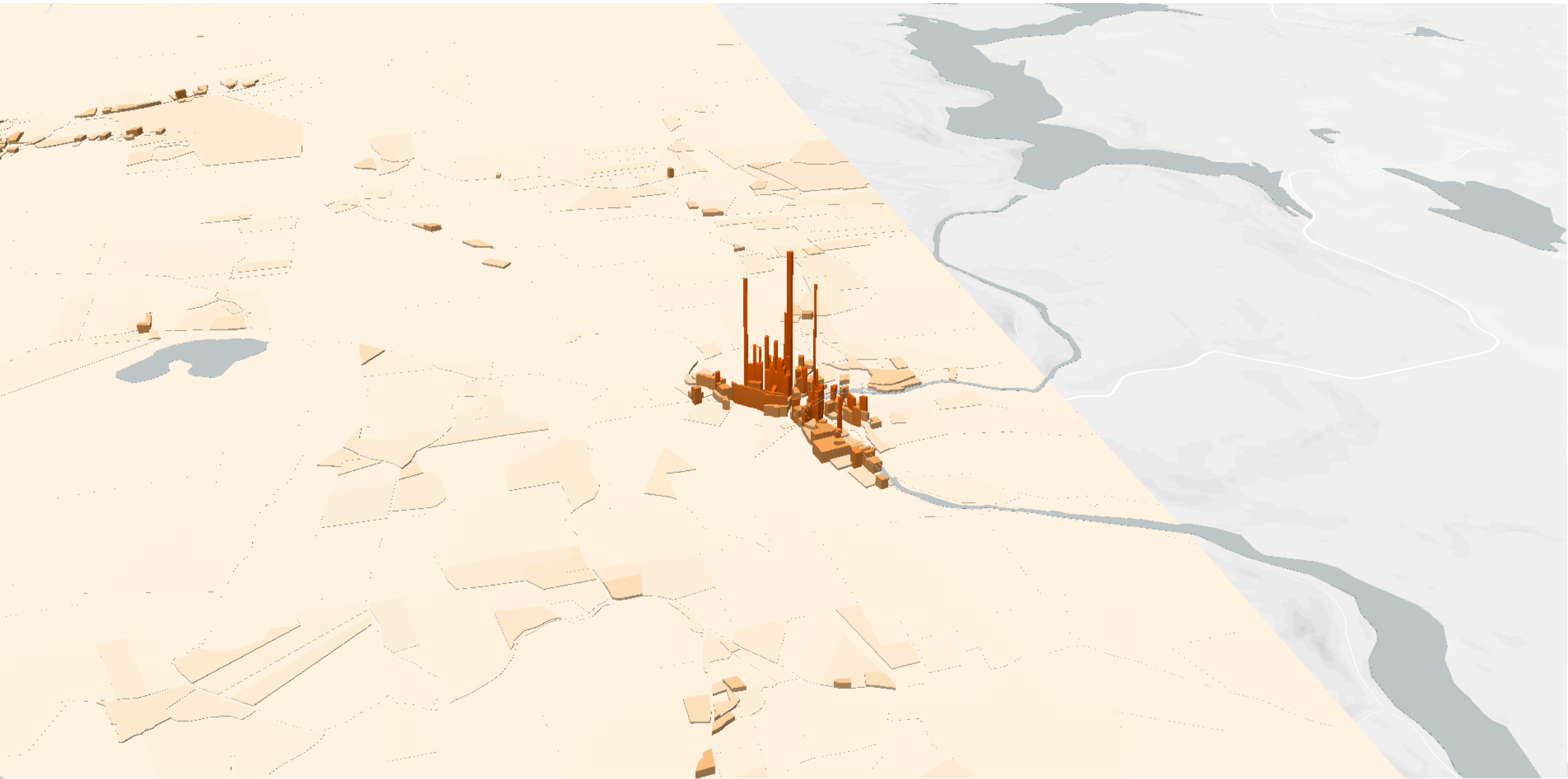
St. Albans



Vergennes

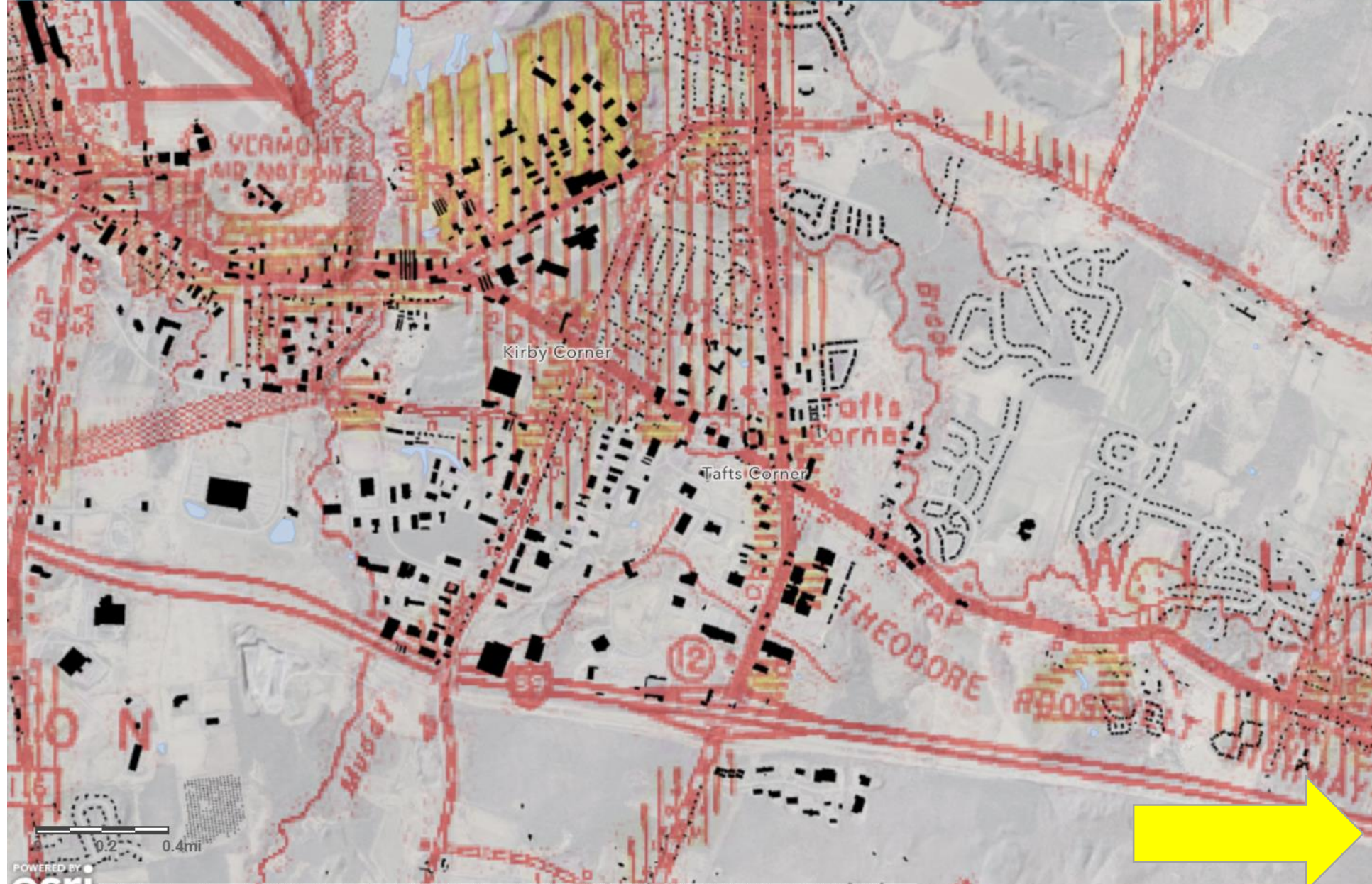


Richmond



Readsboro

**Where is
development
happening in
Vermont?**



RESIDENTIAL [Symbol]

COMMERCIAL [Symbol]

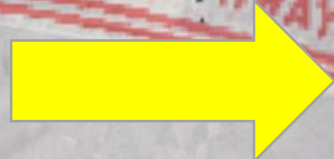
LOW INTENSITY USES [Symbol]

INDUSTRIAL [Symbol]

PUBLIC & QUASI-PUBLIC [Symbol]

This map overlays the generalized land use maps created for the 1971 Land Capability plan by the State of Vermont Planning Office over present-day hillshade and aerial imagery. Present-day **building footprints** are **symbolized in black** and are [provided by Microsoft](#).

The original maps were scanned by the [Vermont State Archives & Records Administration \(VSARA\)](#) and reprocessed by VCGI.



<https://arcg.is/aLC8T>

Before 1970
After 1970

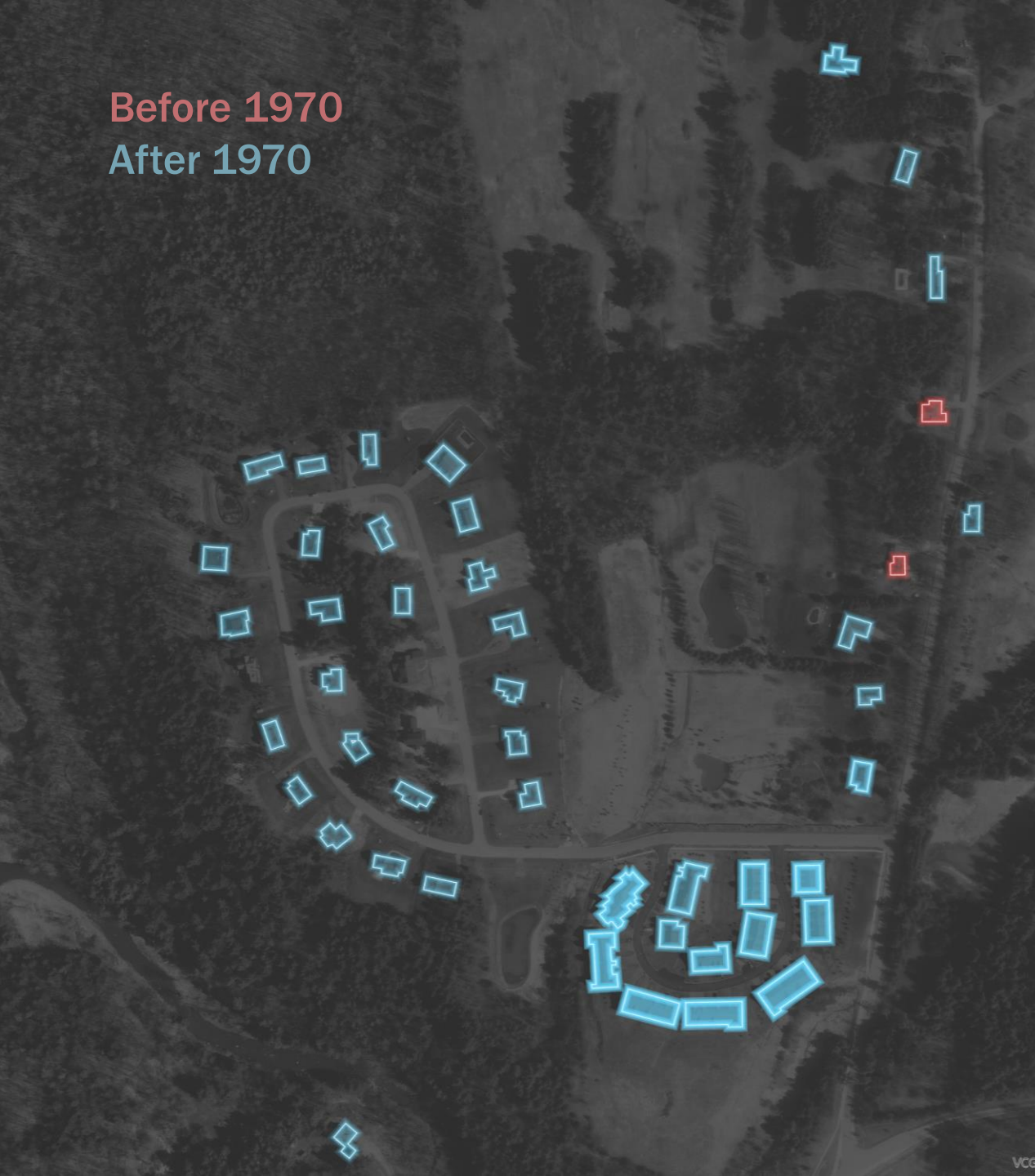


Large lot single family homes

(No Review.)



Before 1970
After 1970



Suburban mix of housing.

(Act 250 Reviewed)



ore 1970 (Res)
er 1970 (Res)
mmercial

Retail

(Act 250 Reviewed)



Office

(Act 250 Reviewed)





Mixed-use in & around centers

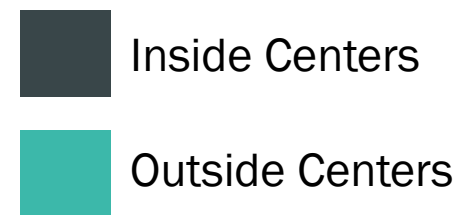
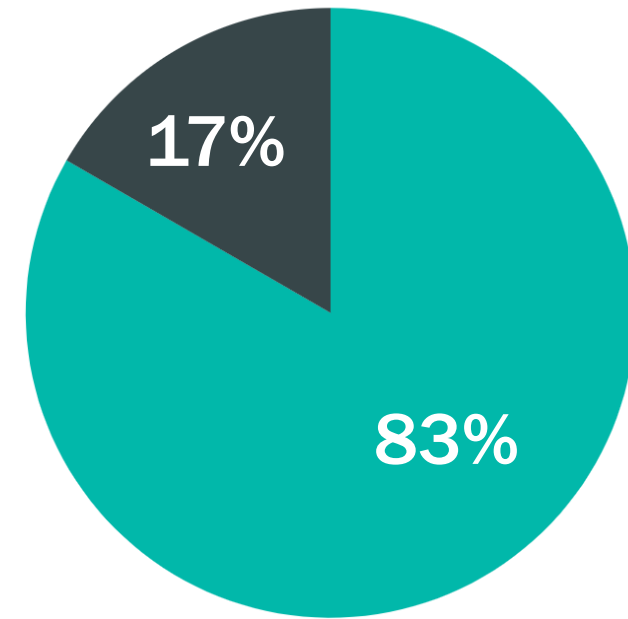
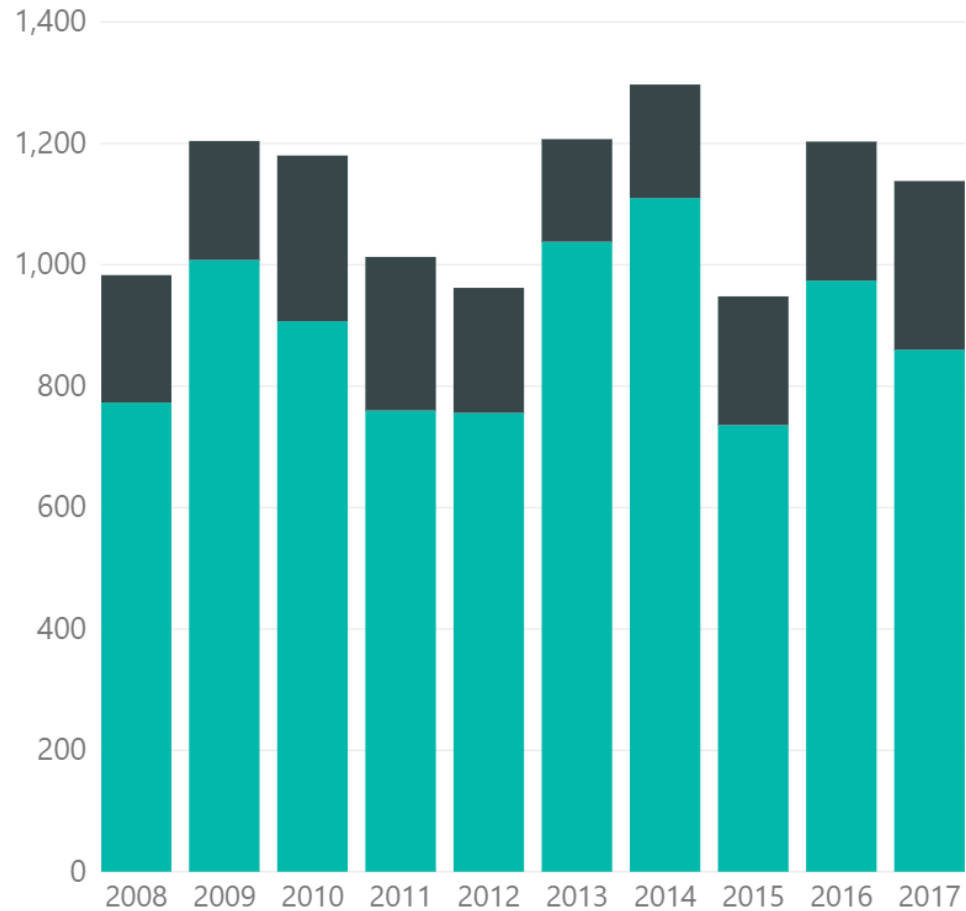
Before 1970 (Red)
After 1970 (Yellow)
Commercial



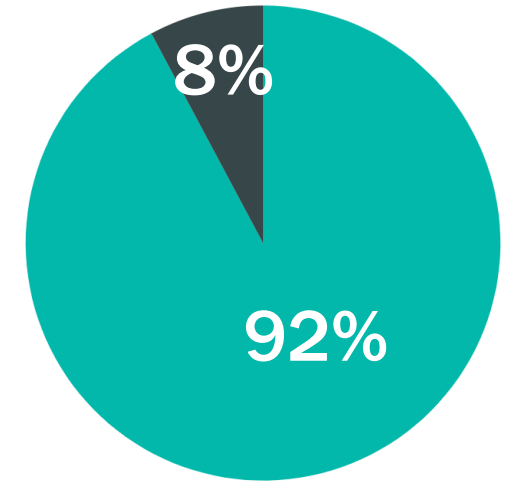
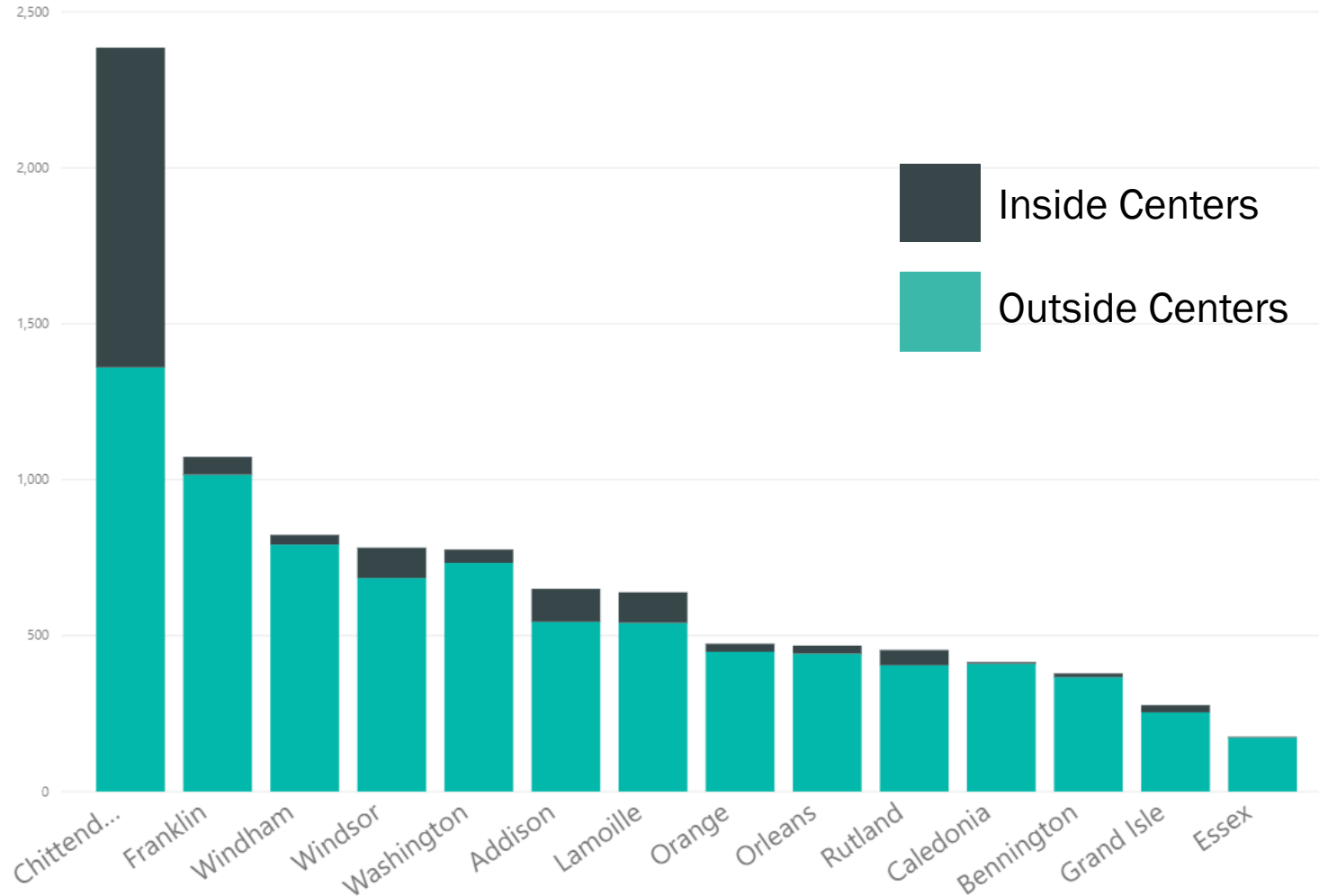


**Resort and
Second
Home
Development**

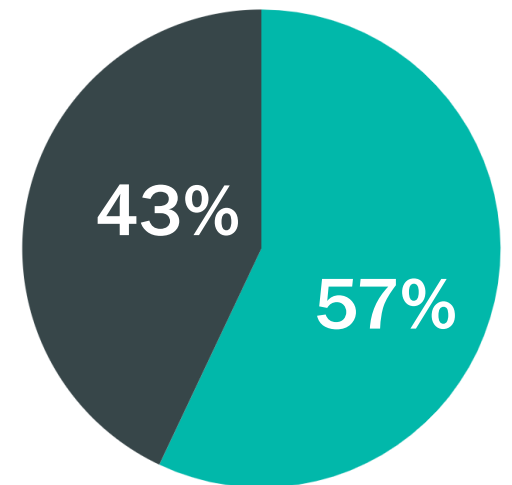
New Residential Structures 2008-2018



County Differences 2008-2018

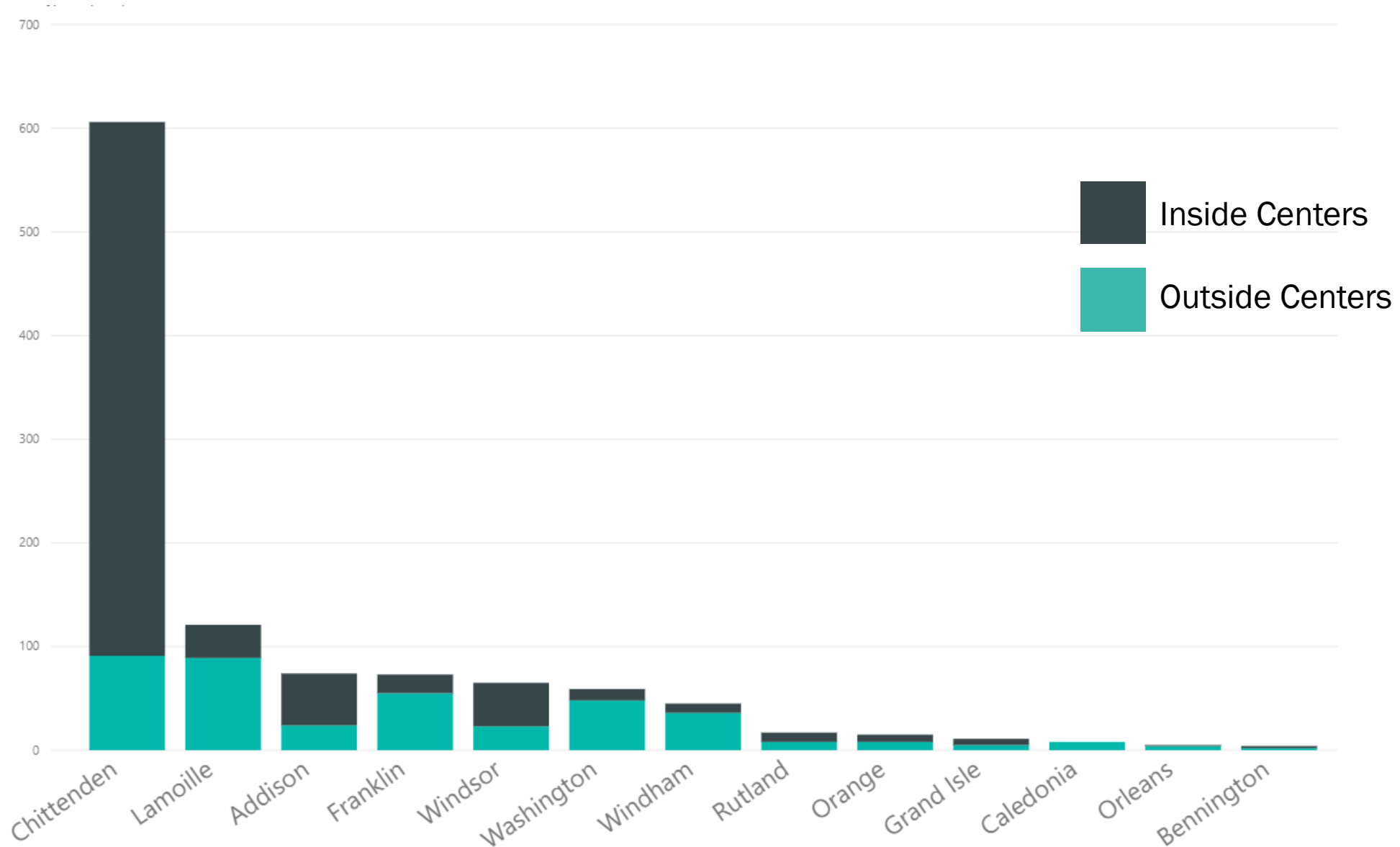


Outside Chittenden County

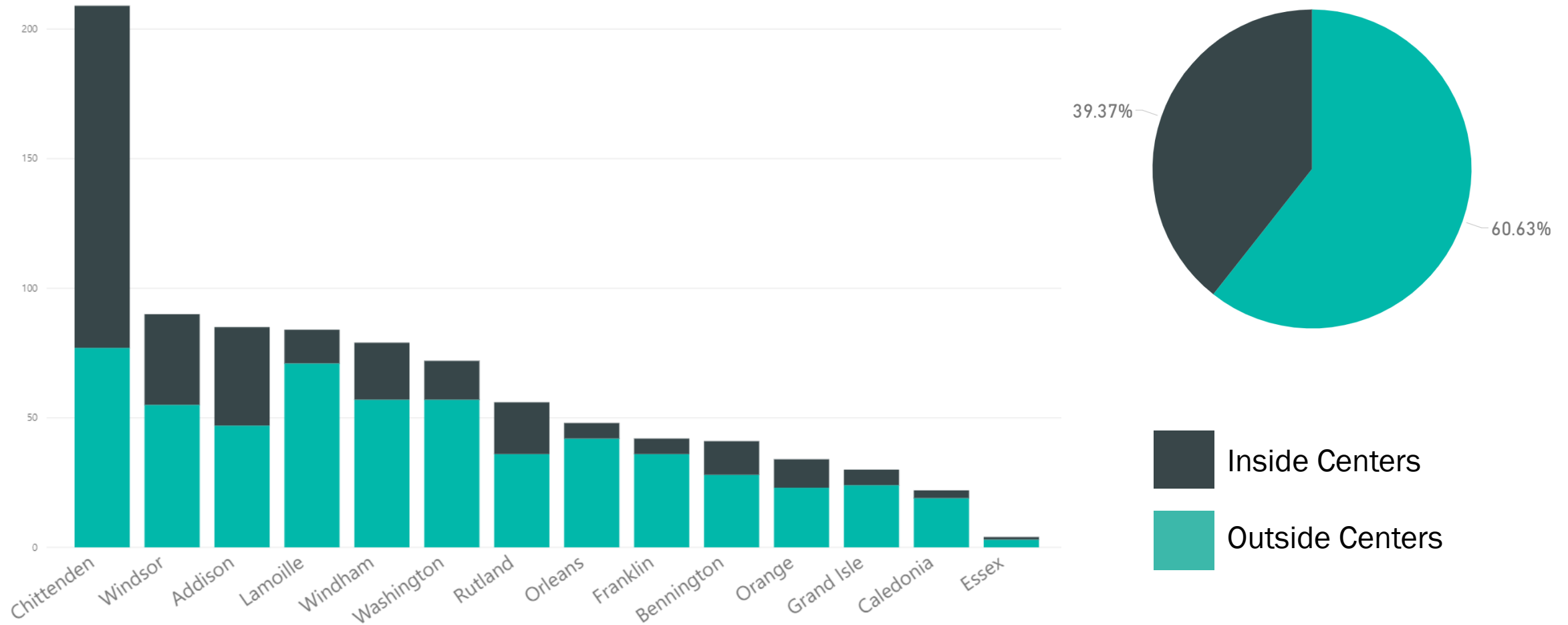


Chittenden County

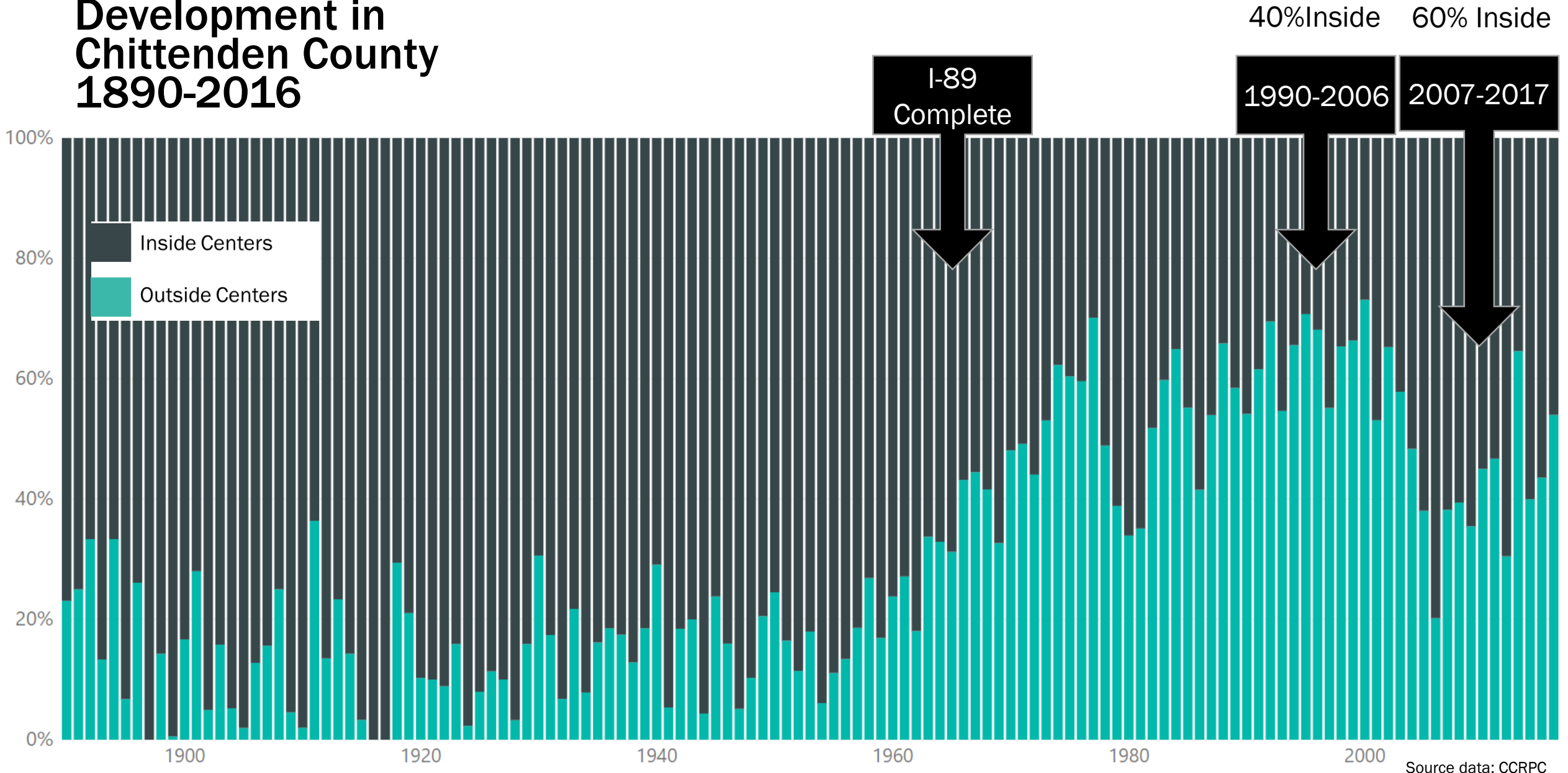
New Multifamily Structures 2008-2018



Commercial Structures 2008-2018



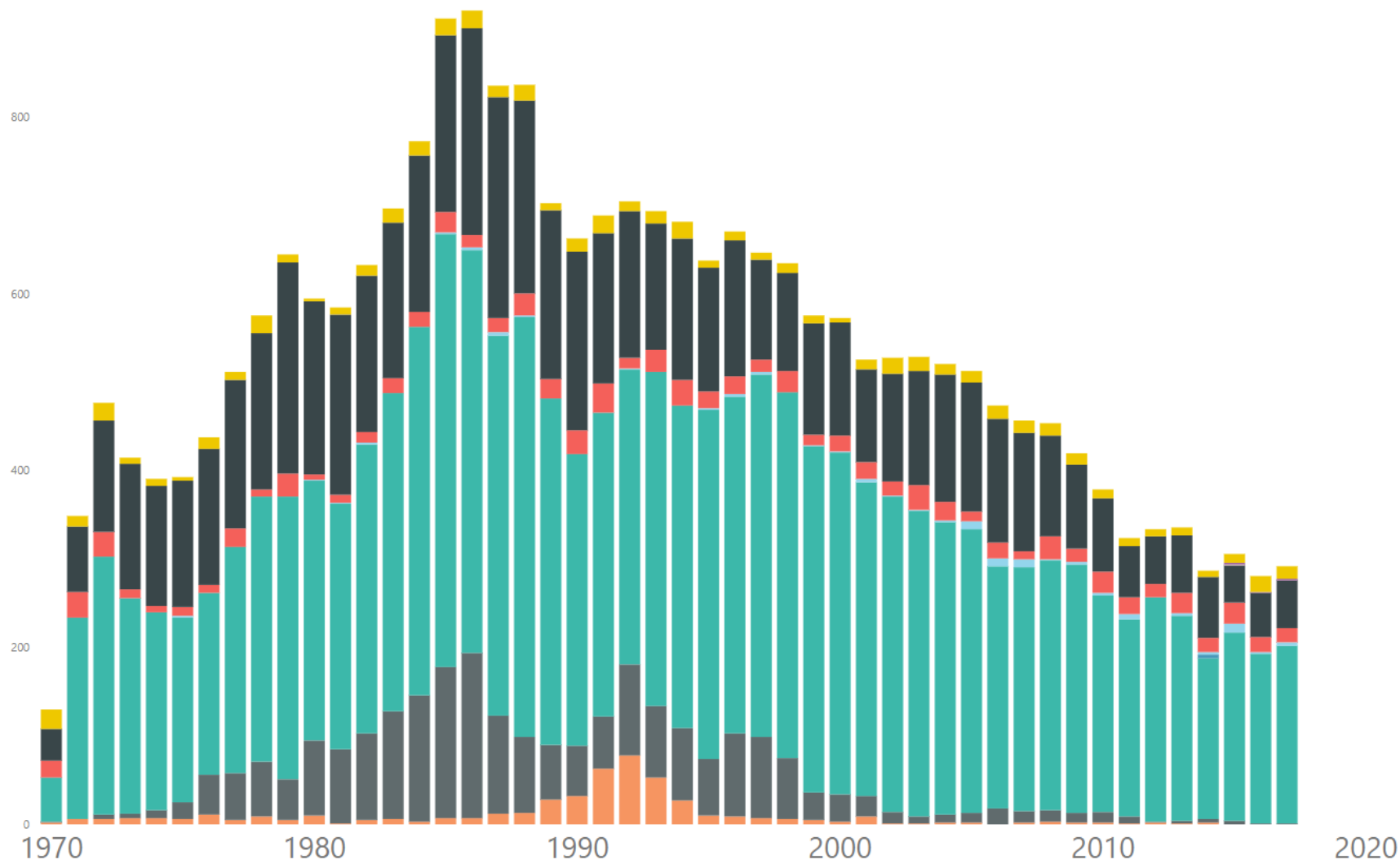
Residential Development in Chittenden County 1890-2016



Act 250 Decisions 1970-2017

(excluding admin. amendments) ^{1,000}

- (Blank)
- Any Ownership
- Commercial
- Commerical
- Mixed Use
- Municipal
- Residential
- Ski Resort
- Ski Resorts
- State



Source data: NRB Act 250 Database

**What's driving
these
development
trends?**

1850: Pop. 314,120

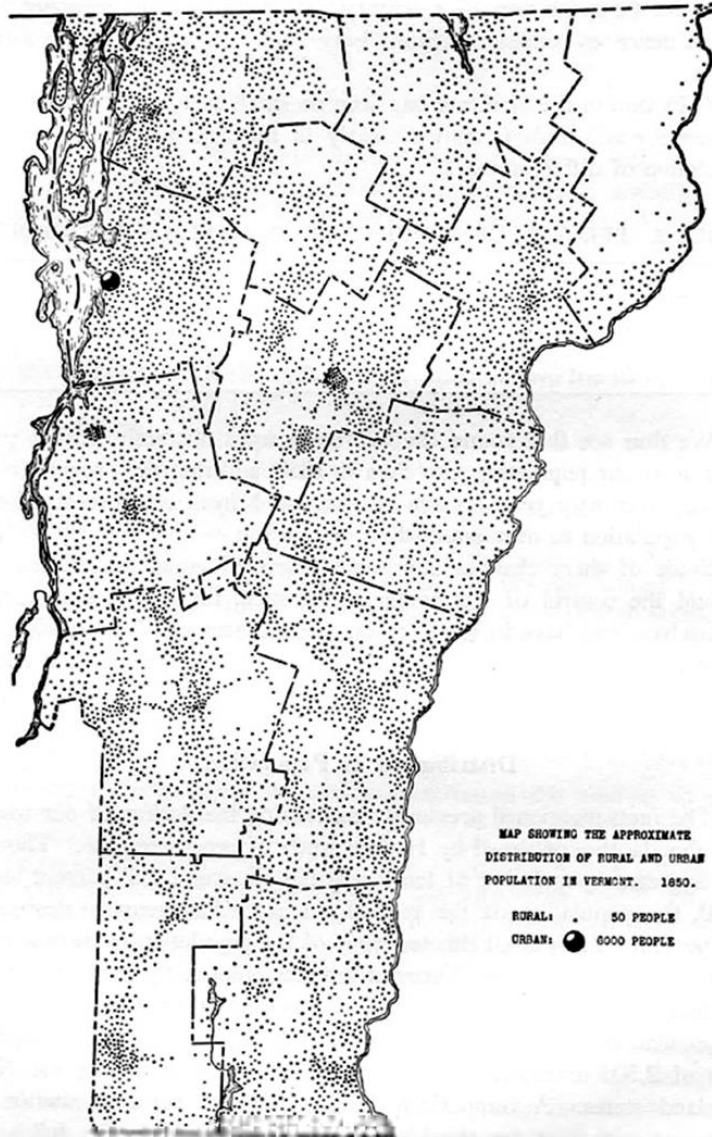


FIG. 1. This map shows the approximate distribution of the 314,120 people who lived in Vermont in 1850. Compared with Fig. 2 it shows the thinning of population in rural areas and its concentration in the cities and larger villages.

1930: Pop. 359,611

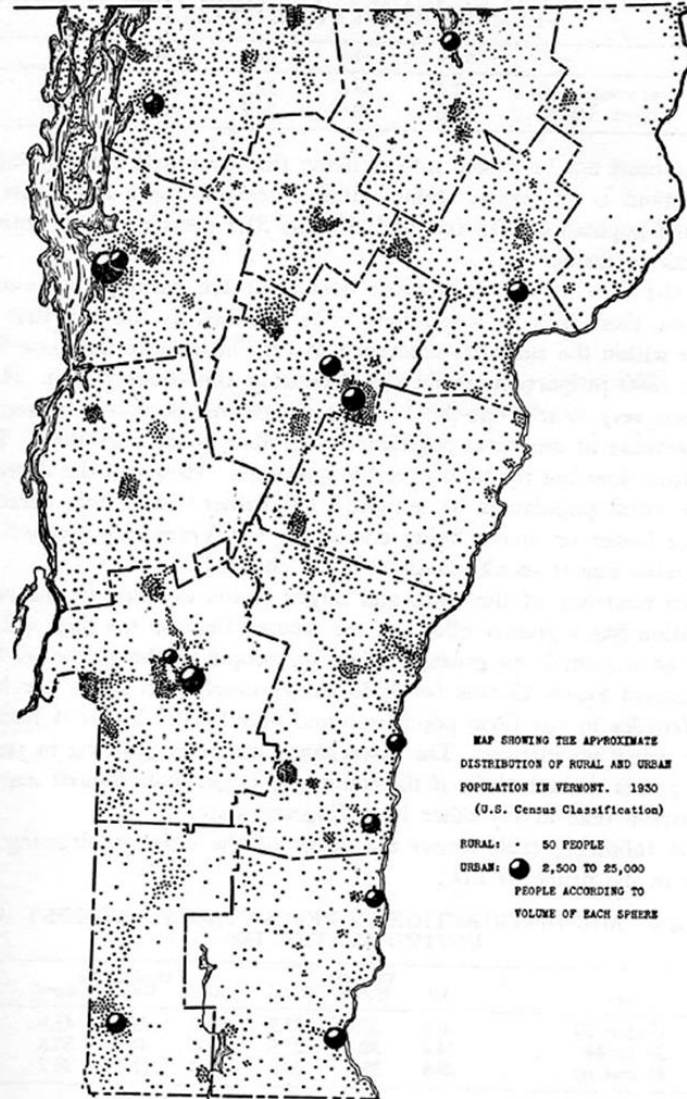


FIG. 2. This map shows the approximate distribution of the 359,611 people who lived in Vermont in 1930. Though rural population has decreased materially since 1850, the population of the state as a whole has increased more than 14 percent.

1850: Pop. 314,120

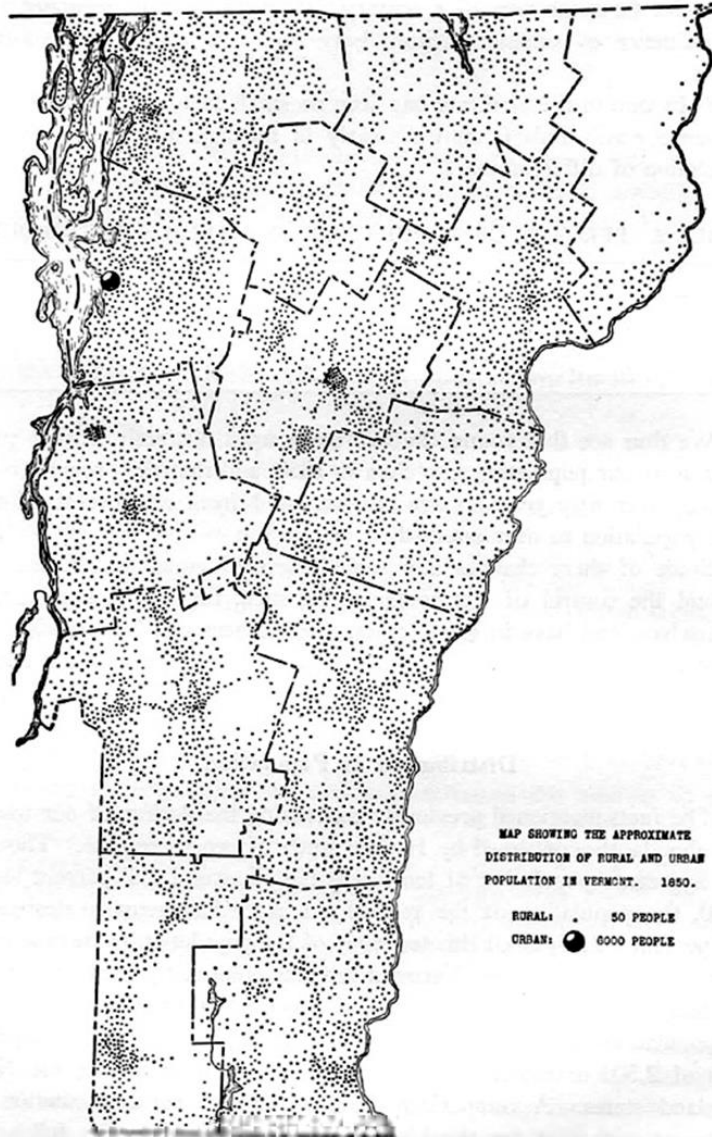


FIG. 1. This map shows the approximate distribution of the 314,120 people who lived Vermont in 1850. Comparison with Fig. 2 shows the shifting of population to rural areas and its concentration in the cities and larger villages.

1930: Pop. 359,611

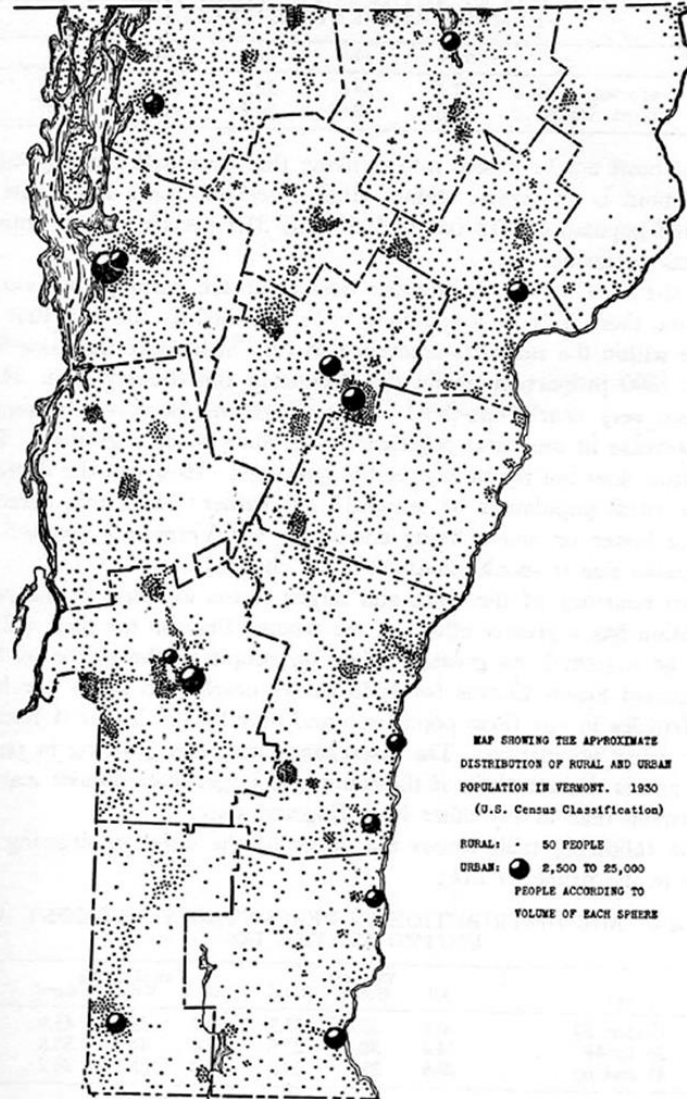
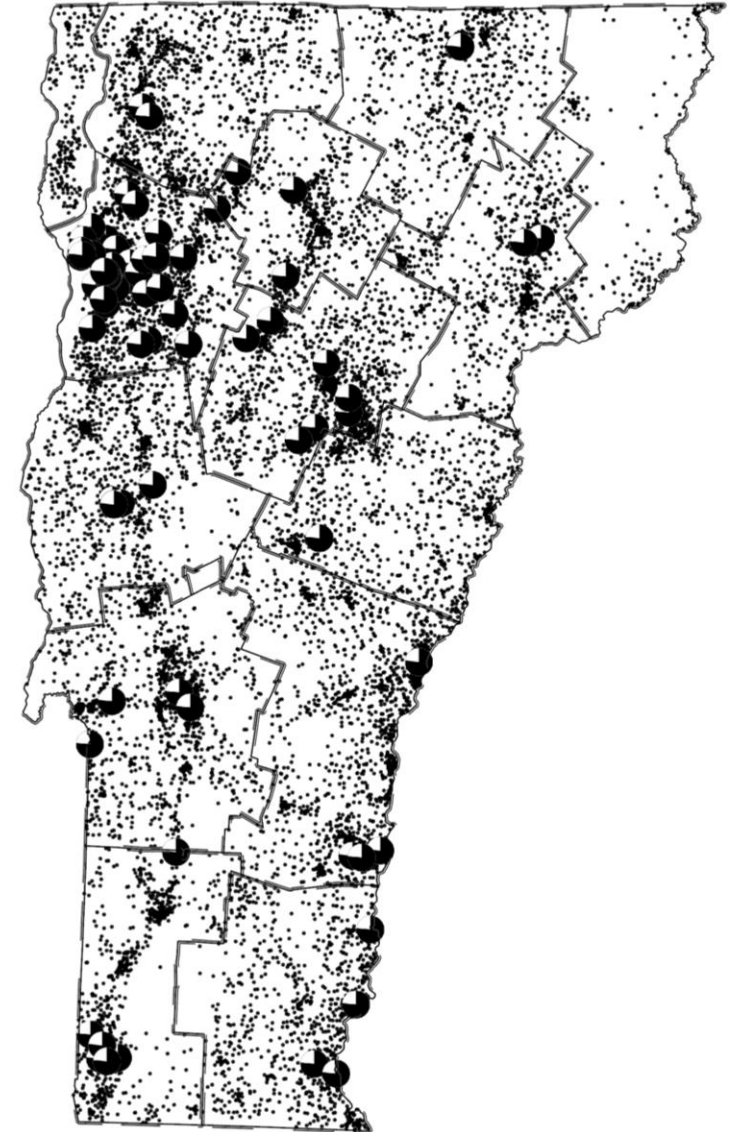


FIG. 2. This map shows the approximate distribution of the 359,611 people who lived Vermont in 1930. Though rural population has decreased materially since 1850, the population of the state as a whole has increased more than 14 percent.

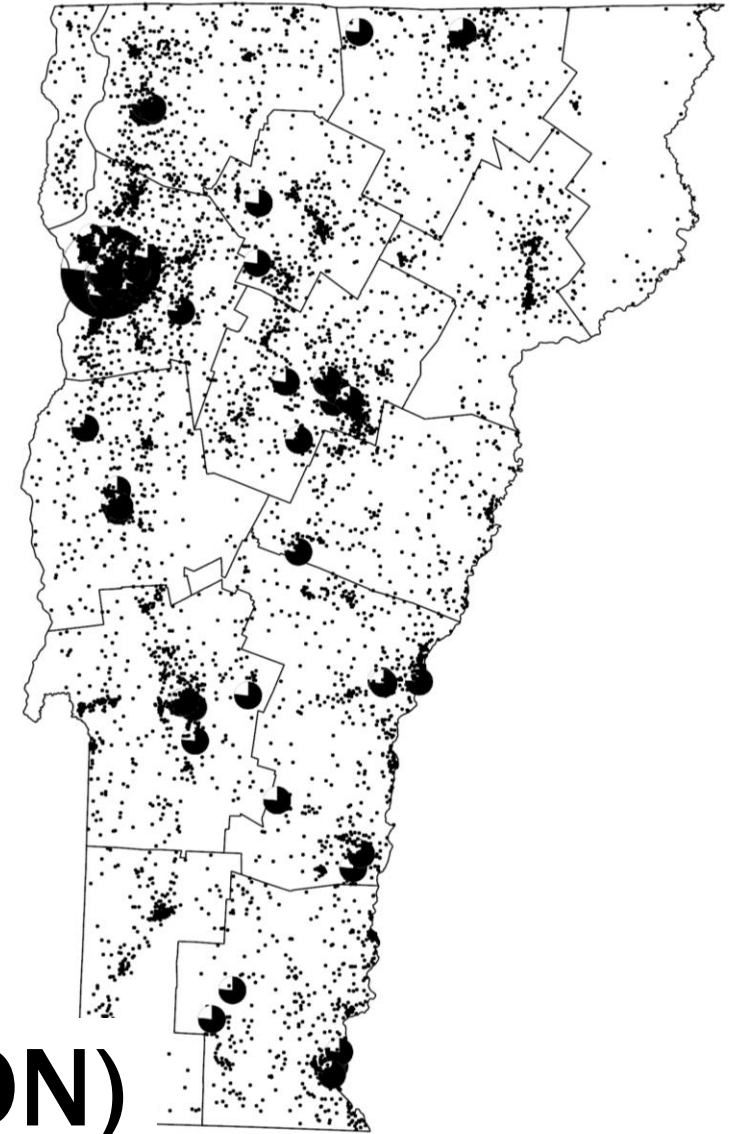
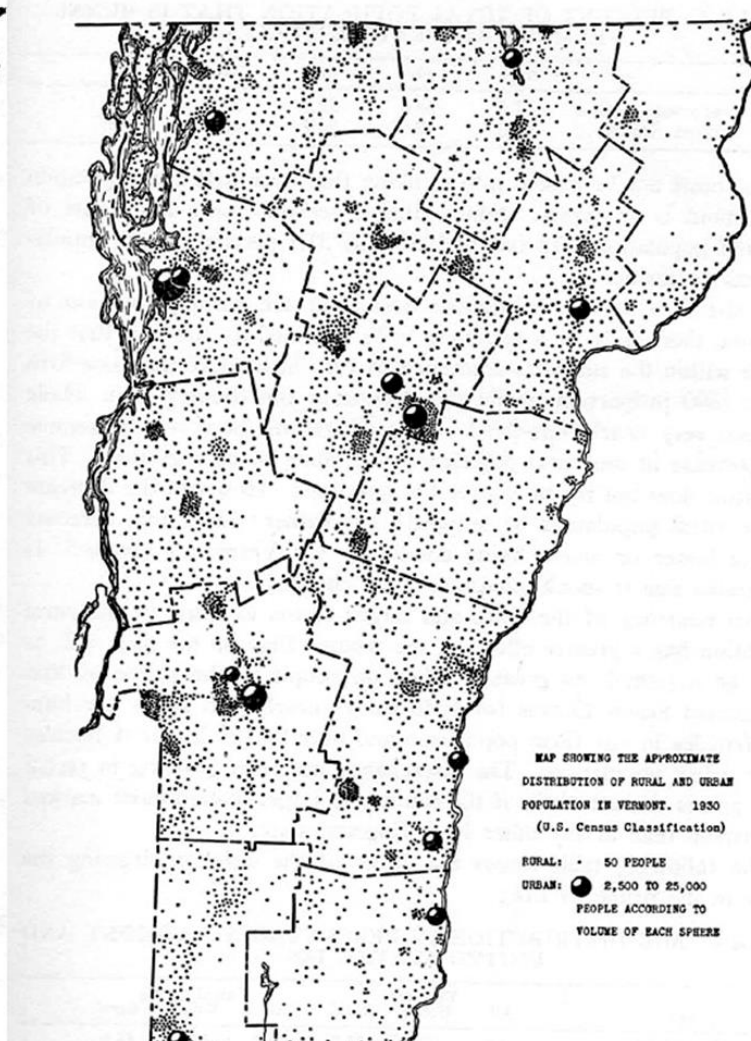
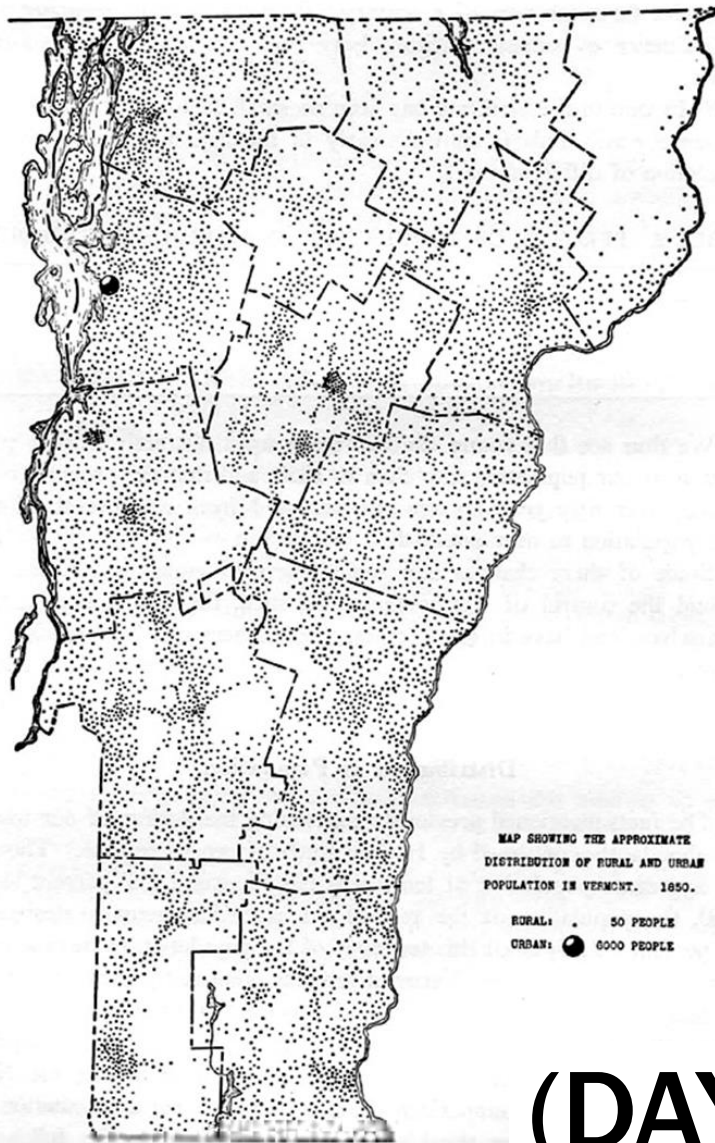
2010: Pop. 625,741



1850: Pop. 314,120

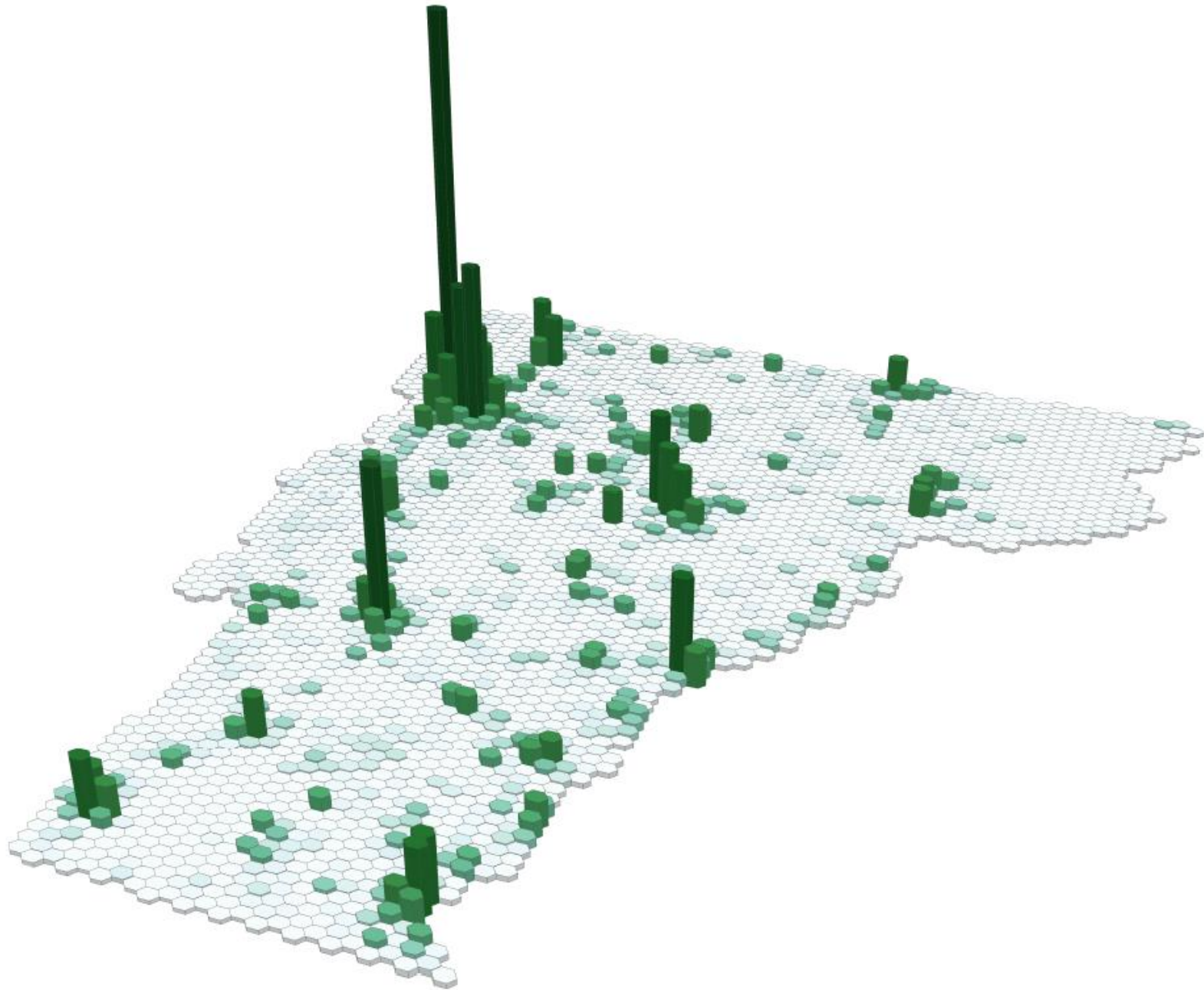
1930: Pop. 359,611

2010: Pop. 625,741



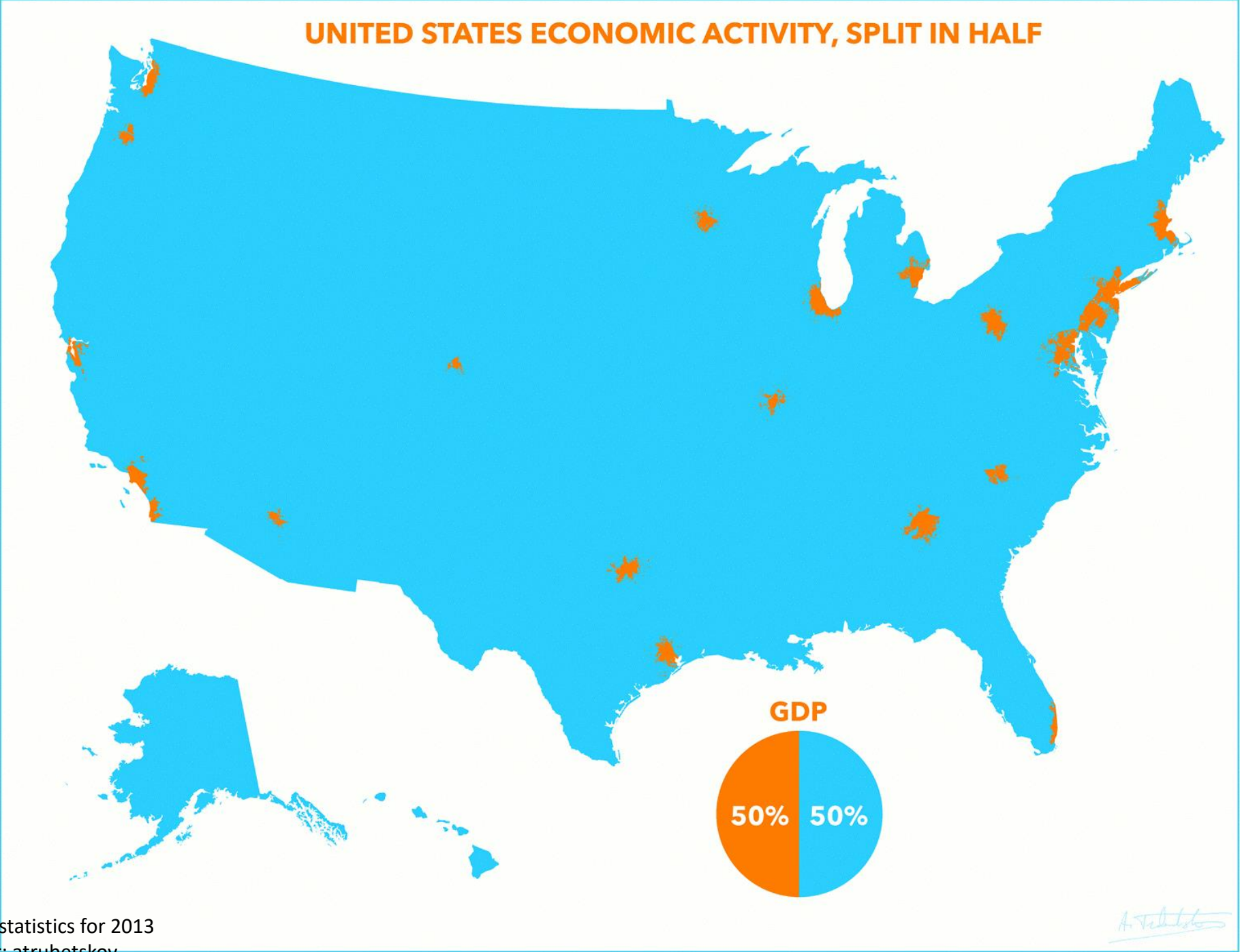
(DAYTIME POPULATION)

FIG. 1. This map shows the approximate distribution of the population in VERMONT. Comparison with FIG. 2 shows the total area and its concentration in the cities and larger villages. ... of the state as a whole has increased more than 14 percent.



Jobs

UNITED STATES ECONOMIC ACTIVITY, SPLIT IN HALF



Department of Commerce statistics for 2013
Map created by reddit user: atrubetsky

A. Trubetsky

GOOGLE BUYS GIANT NEW YORK BUILDING FOR \$1.9 BILLION



Google bought Manhattan's Chelsea Market building for \$2.4 billion

Brian Heater @bheater / Mar 20, 2018

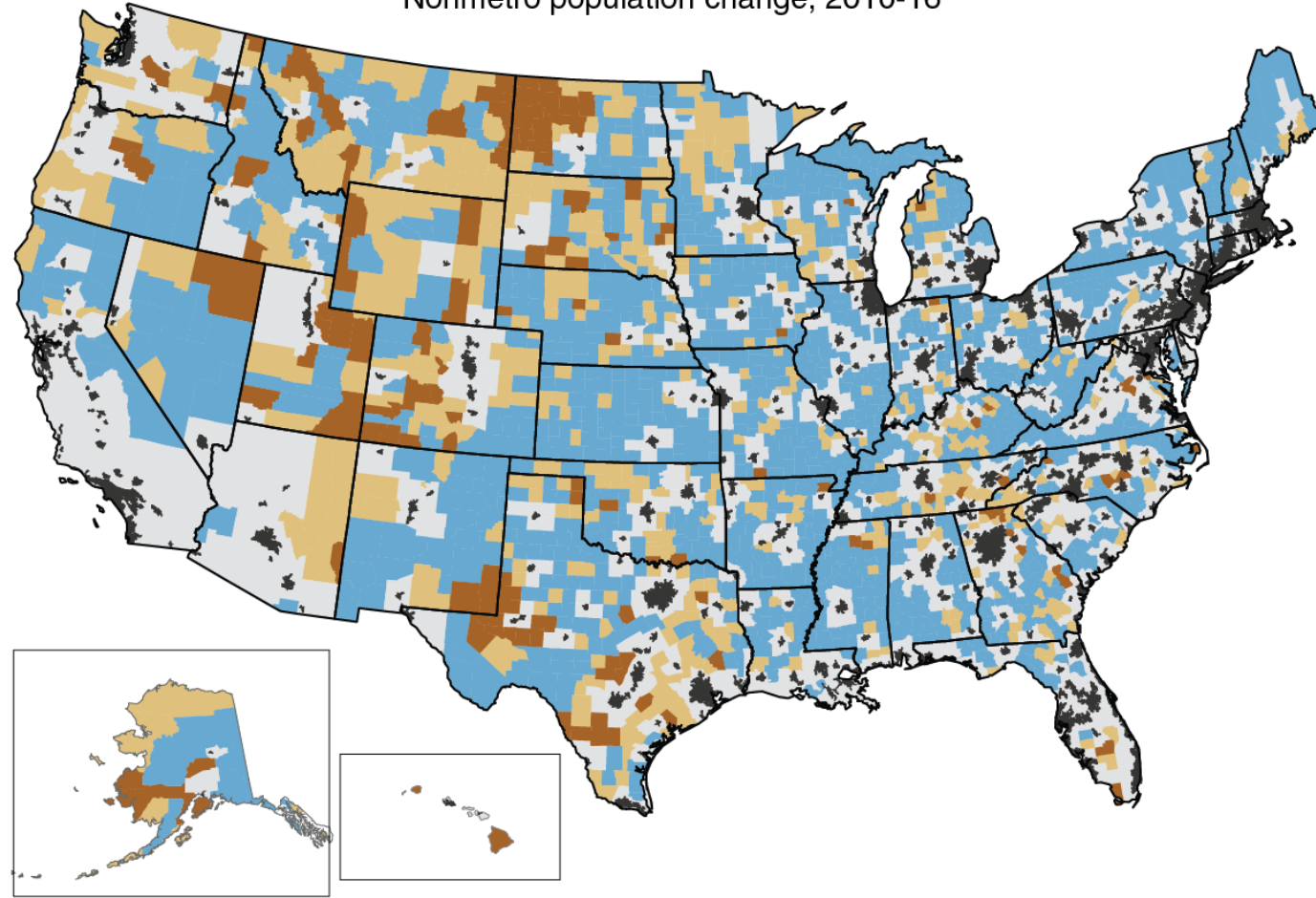
[Comment](#)



“Small firms, Smart People and Density”

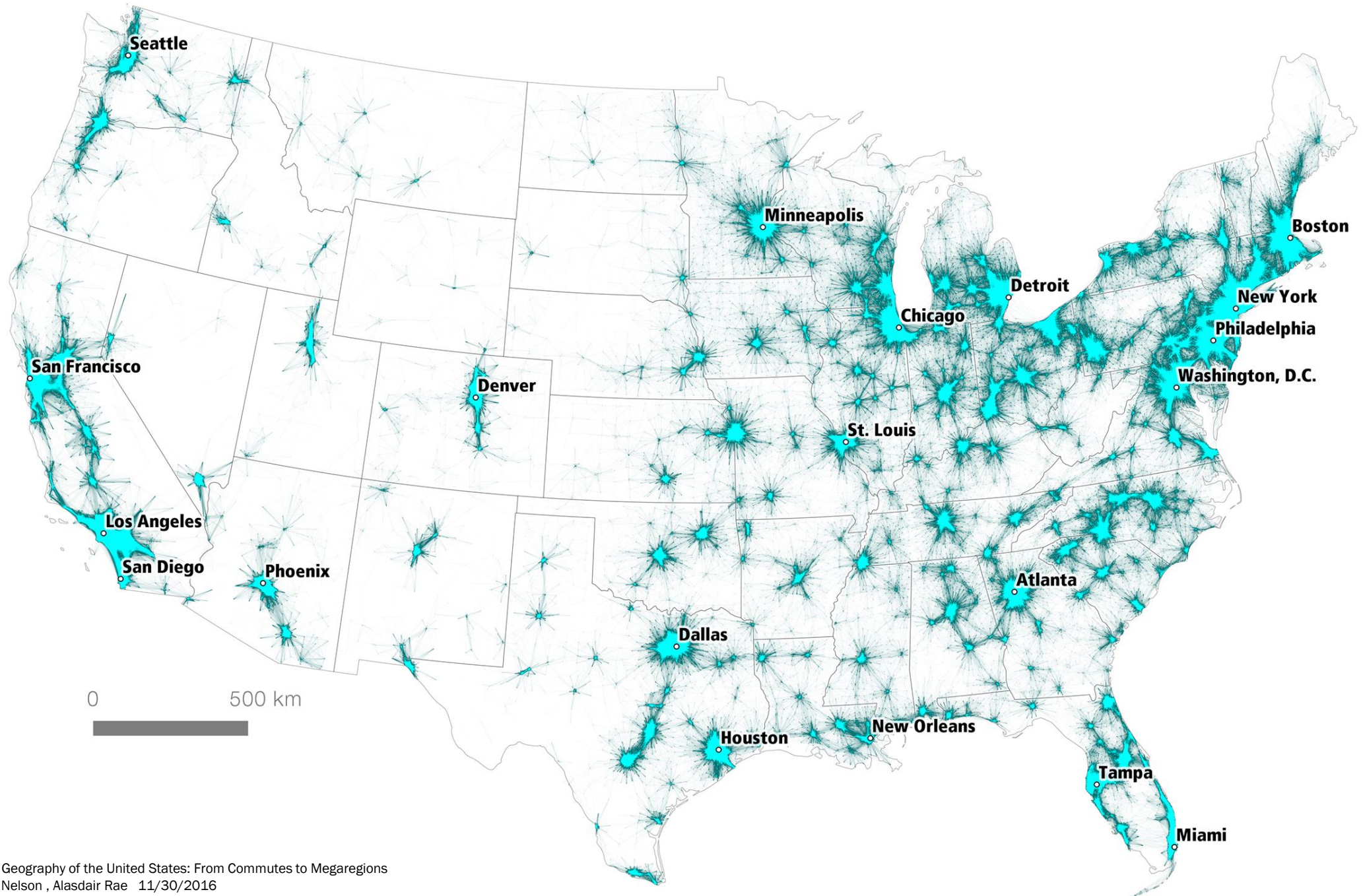
Population loss now widespread in the Eastern United States

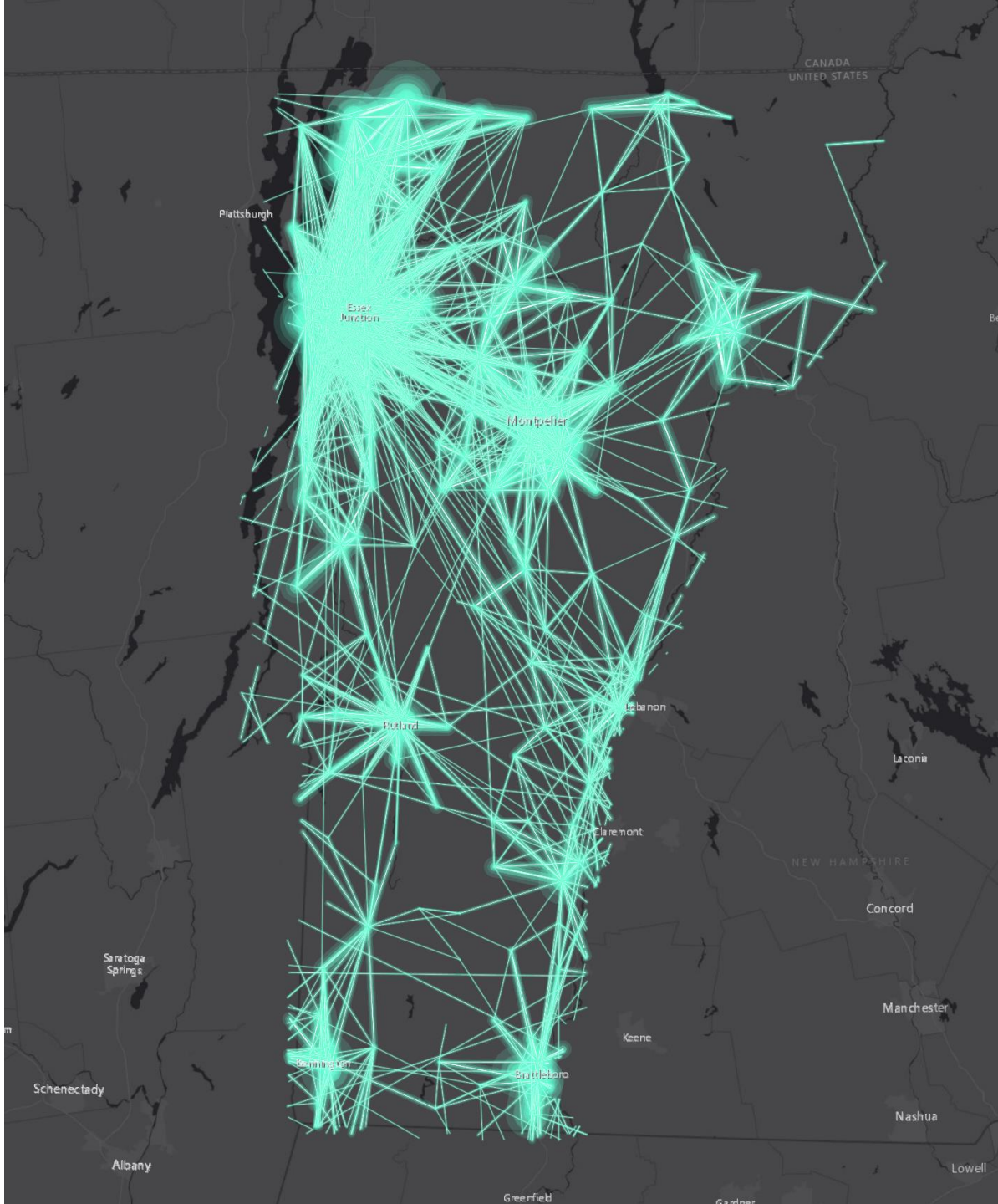
Nonmetro population change, 2010-16



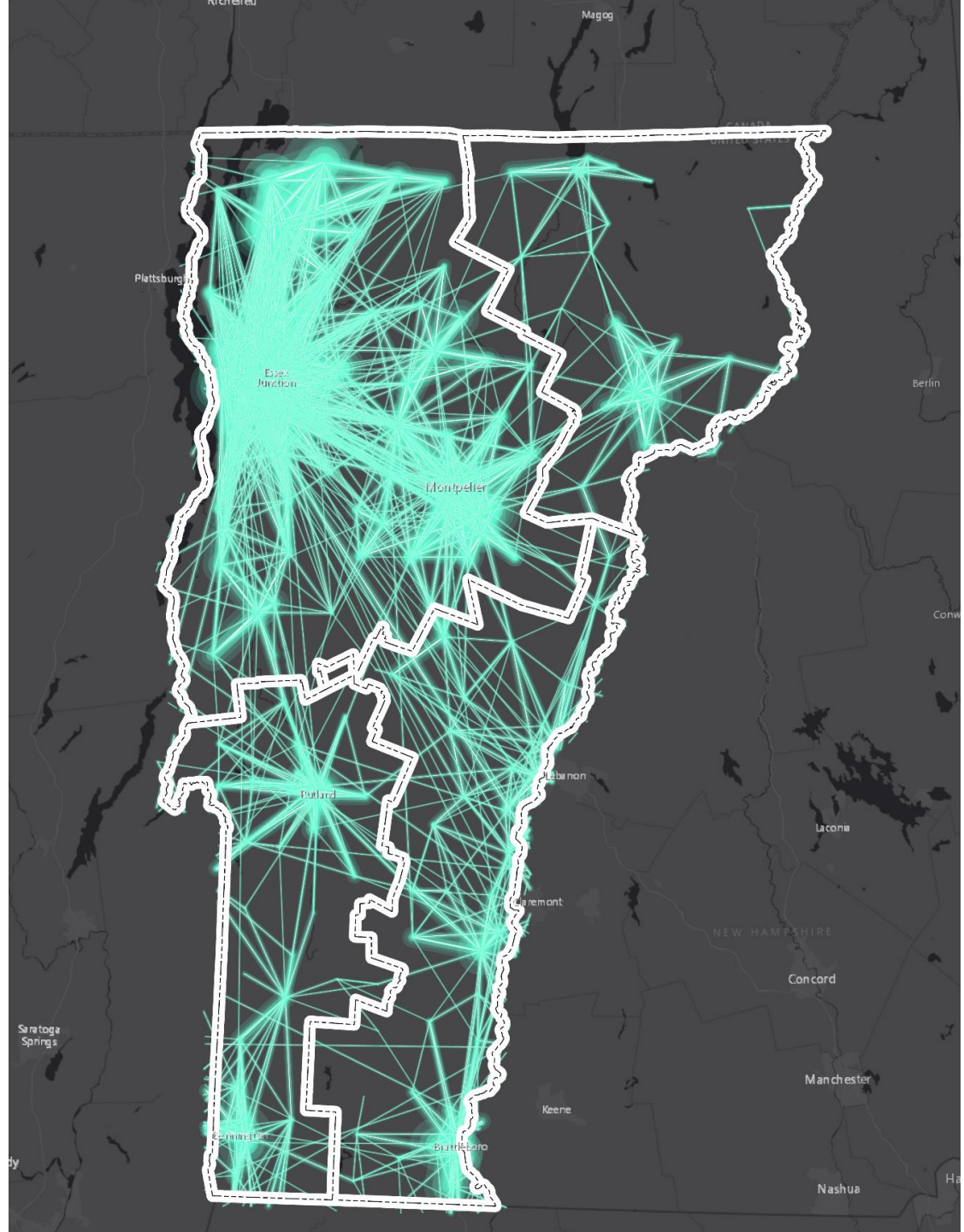
- Population loss (1,351 counties)
- Population growth below 5 percent (487 counties)
- Population growth, 5 percent or higher (138 counties)
- Metro areas (1,166 counties)
- Urbanized areas

Source: USDA, Economic Research Service using data from the U.S. Census Bureau.



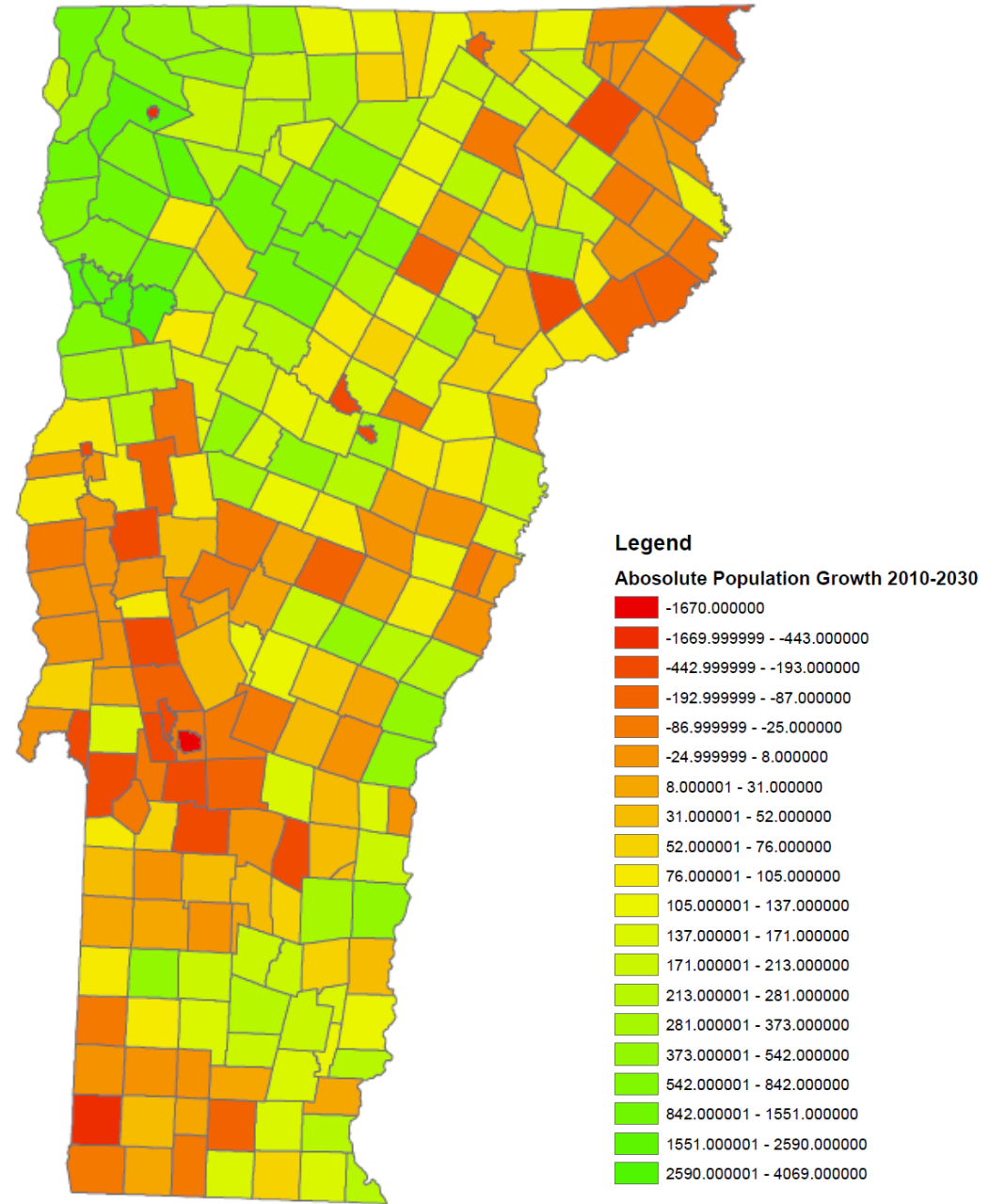


Based on work of Garrett Dash Nelson



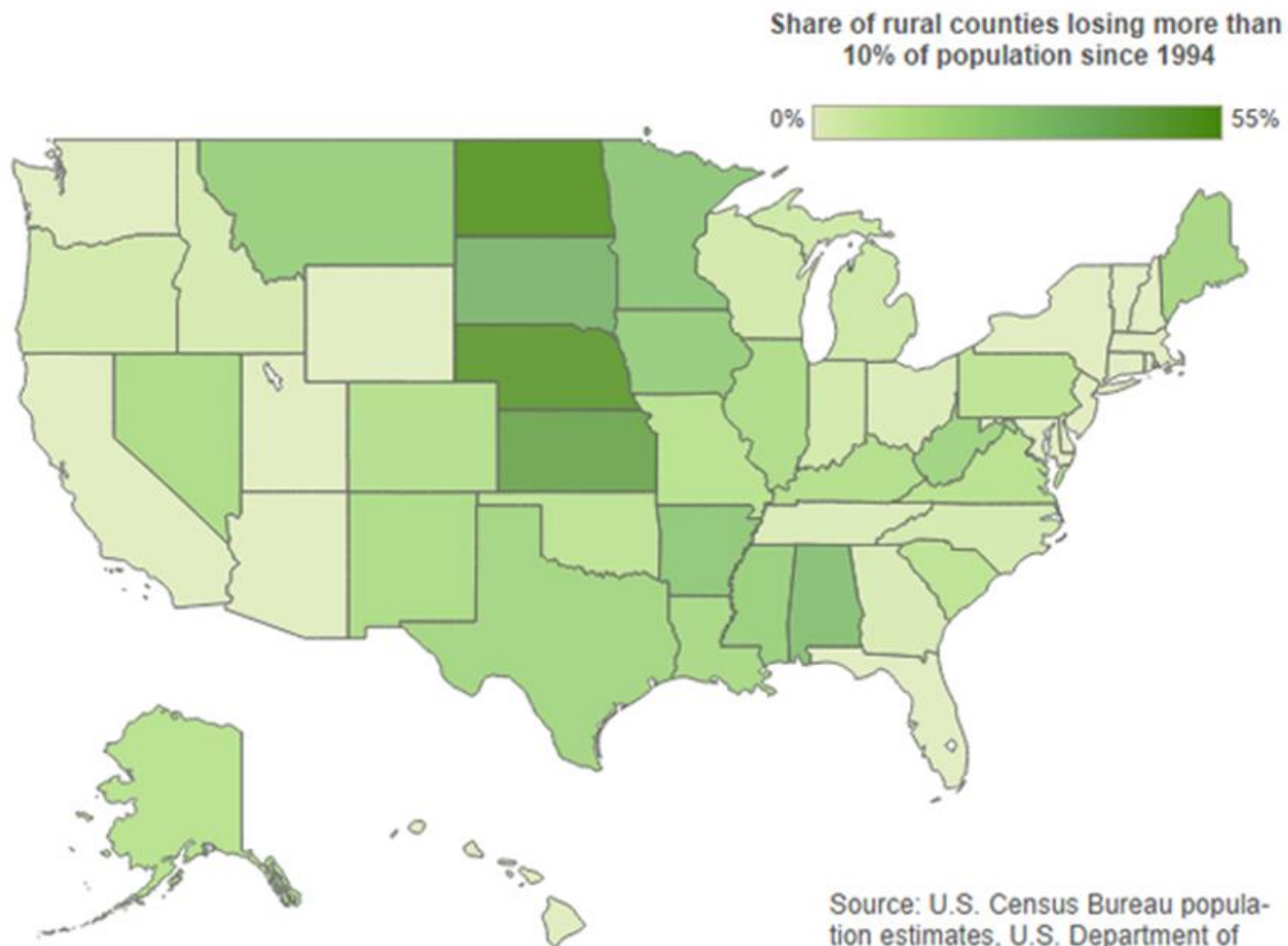
Based on work of Garrett Dash Nelson

Projected Population Changes 2010-2030



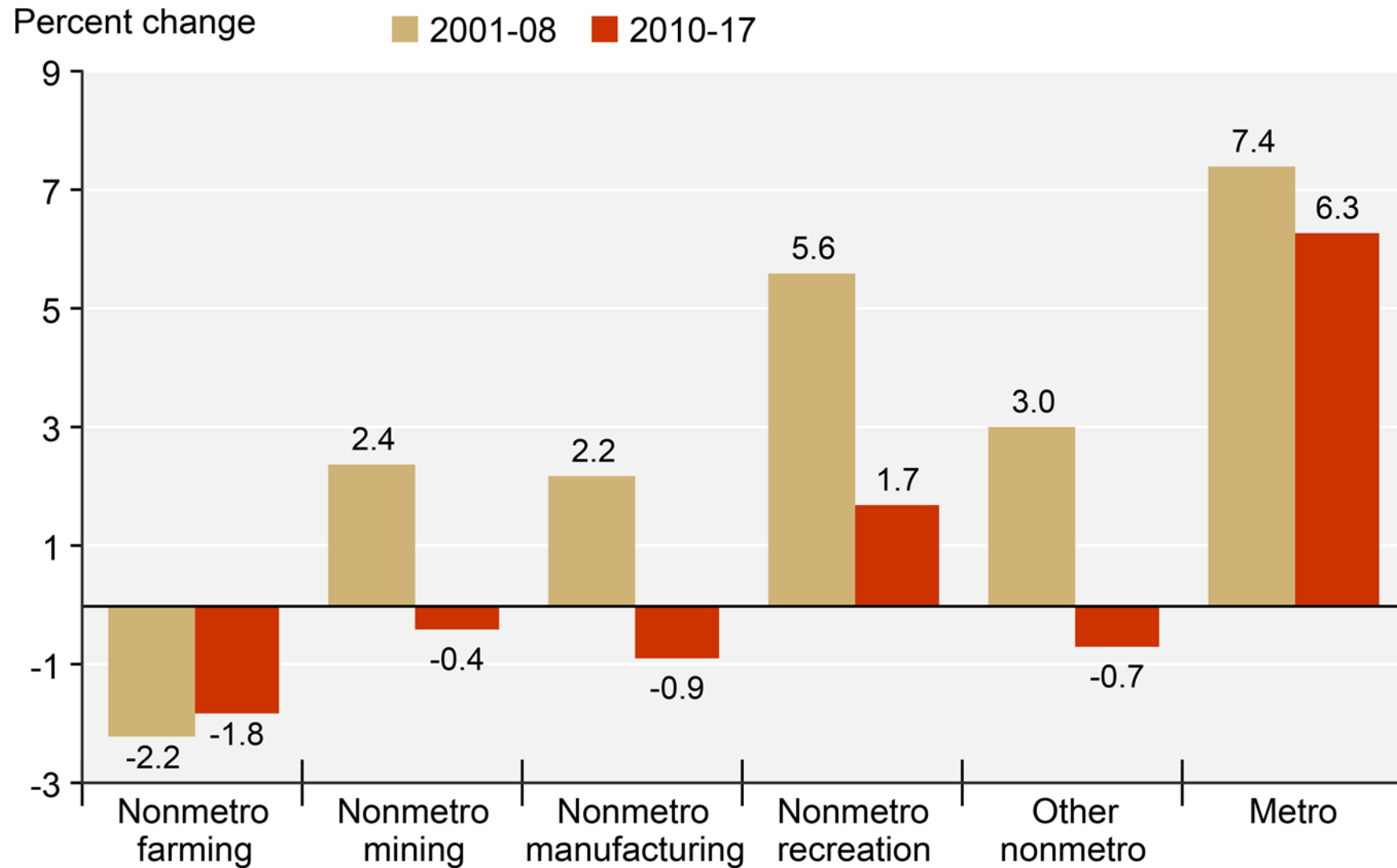
Rural Population Loss

Population loss has accelerated in recent years for much of rural America. Twenty-nine states saw a drop in population in their rural counties this decade. About half the rural counties in Kansas, Nebraska and North Dakota lost more than 1 in 10 of their residents since 1994. Delaware, New Jersey and Rhode Island have no counties classified as rural by the U.S. Department of Agriculture. Hover over states for details. ...



Source: U.S. Census Bureau population estimates, U.S. Department of Agriculture rural county classifications, *Stateline* analysis.

Population change by county type, 2001-08 and 2010-17



Note: County types are described in the ERS County Typology Codes data product:
<http://www.ers.usda.gov/data-products/county-typology-codes.aspx>

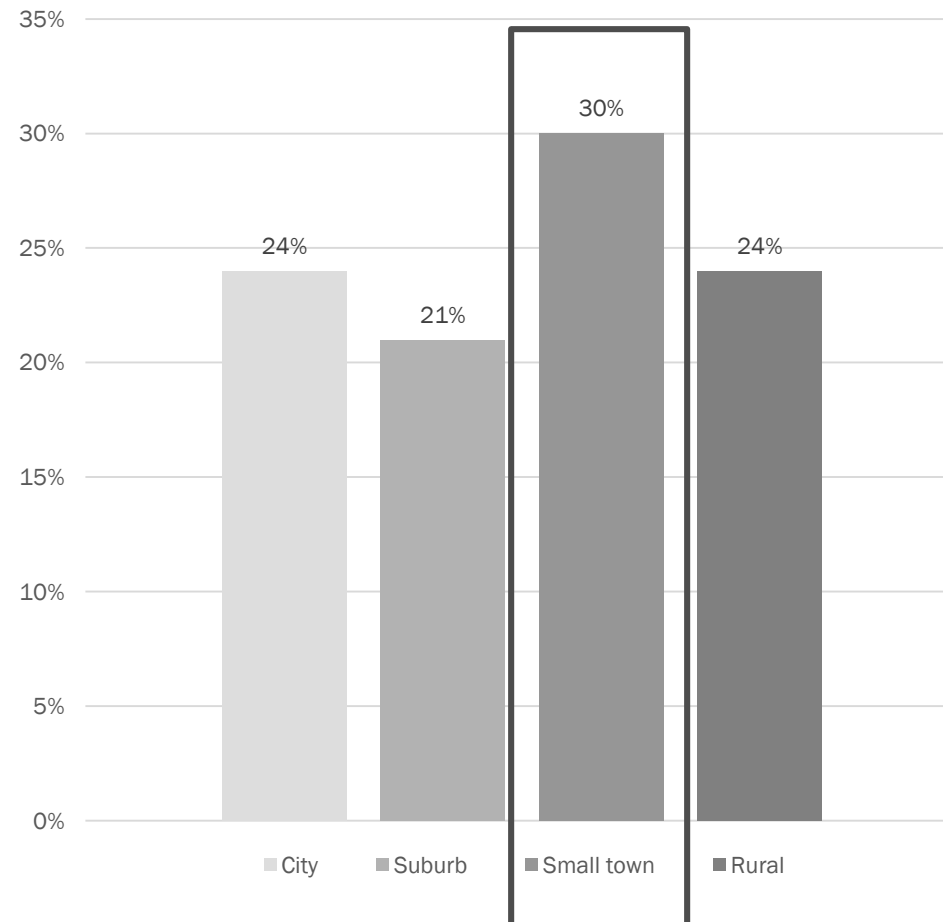
Source: USDA, Economic Research Service using data from the U.S. Census Bureau.

Opportunities

People want to live in small towns

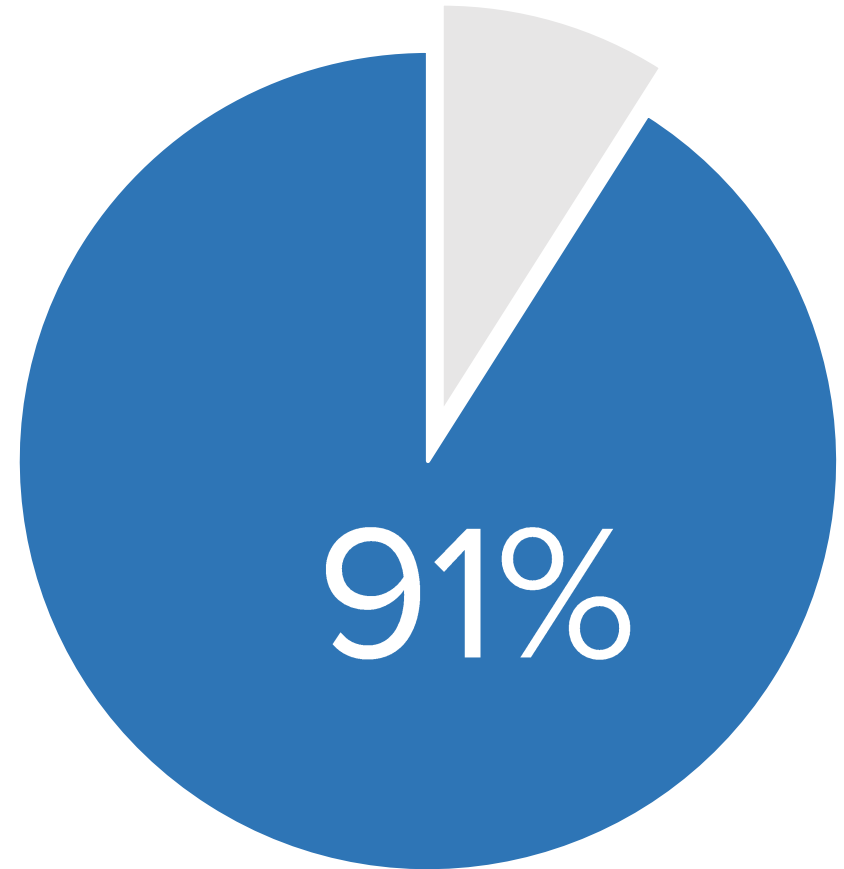
If you could live anywhere in the United States that you wanted to, would you prefer a city, a suburban area, a small town or a rural area?

n: 3,341



Source: Pew Research Center 2014

**I would walk to
work, school,
shopping or
other
activities if they
were close
enough...**



Source: RSG 2012 n=519



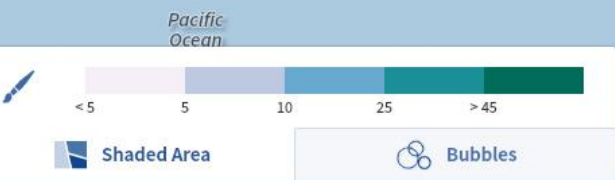
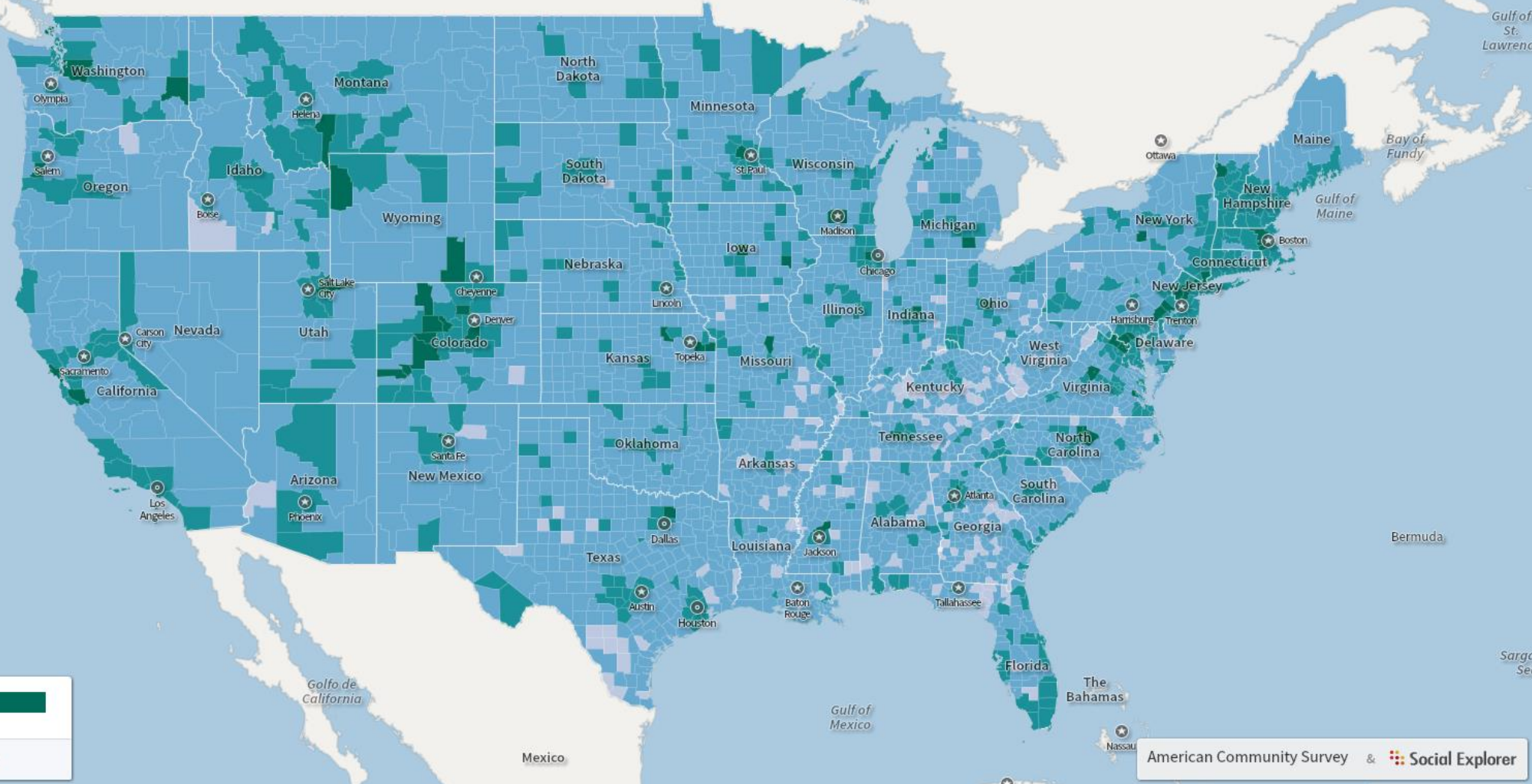
Enter address or geography



Vermont has smart people.

Select a Measure
Bachelor's degree or more

Show by
County





Safety
Good Schools
Employment
Outdoor Recreation
Good Beer

Thank You

John.E.Adams@Vermont.gov