Development in Your Community:

Are we asking the right questions?

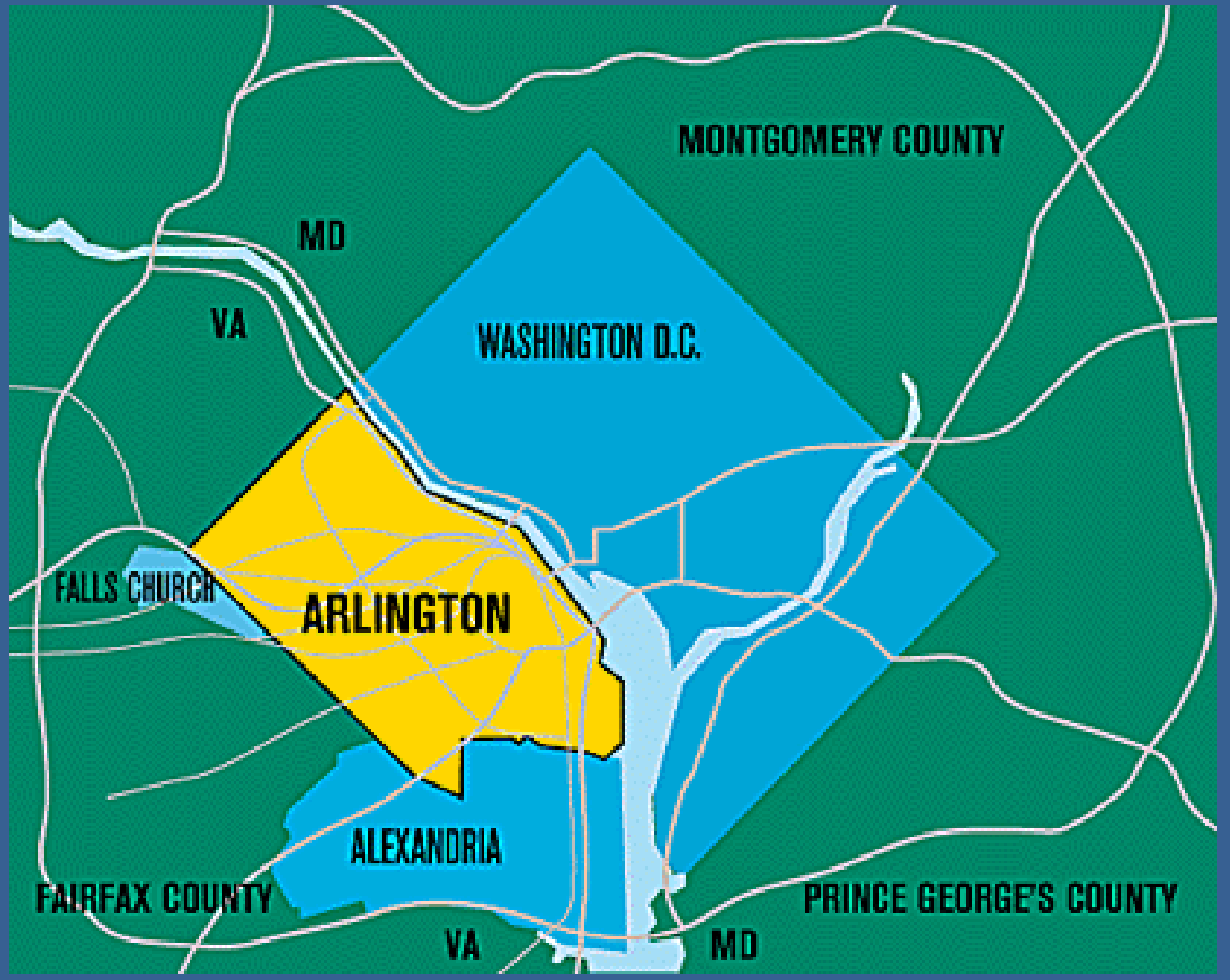
The Fiscal Impact of Development Patterns

Christopher Zimmerman
Vice President for Economic Development

Massachusetts Smart Growth Conference
DCU Center, Worcester Massachusetts
May 18, 2017

Smart Growth America
Making Neighborhoods Great Together

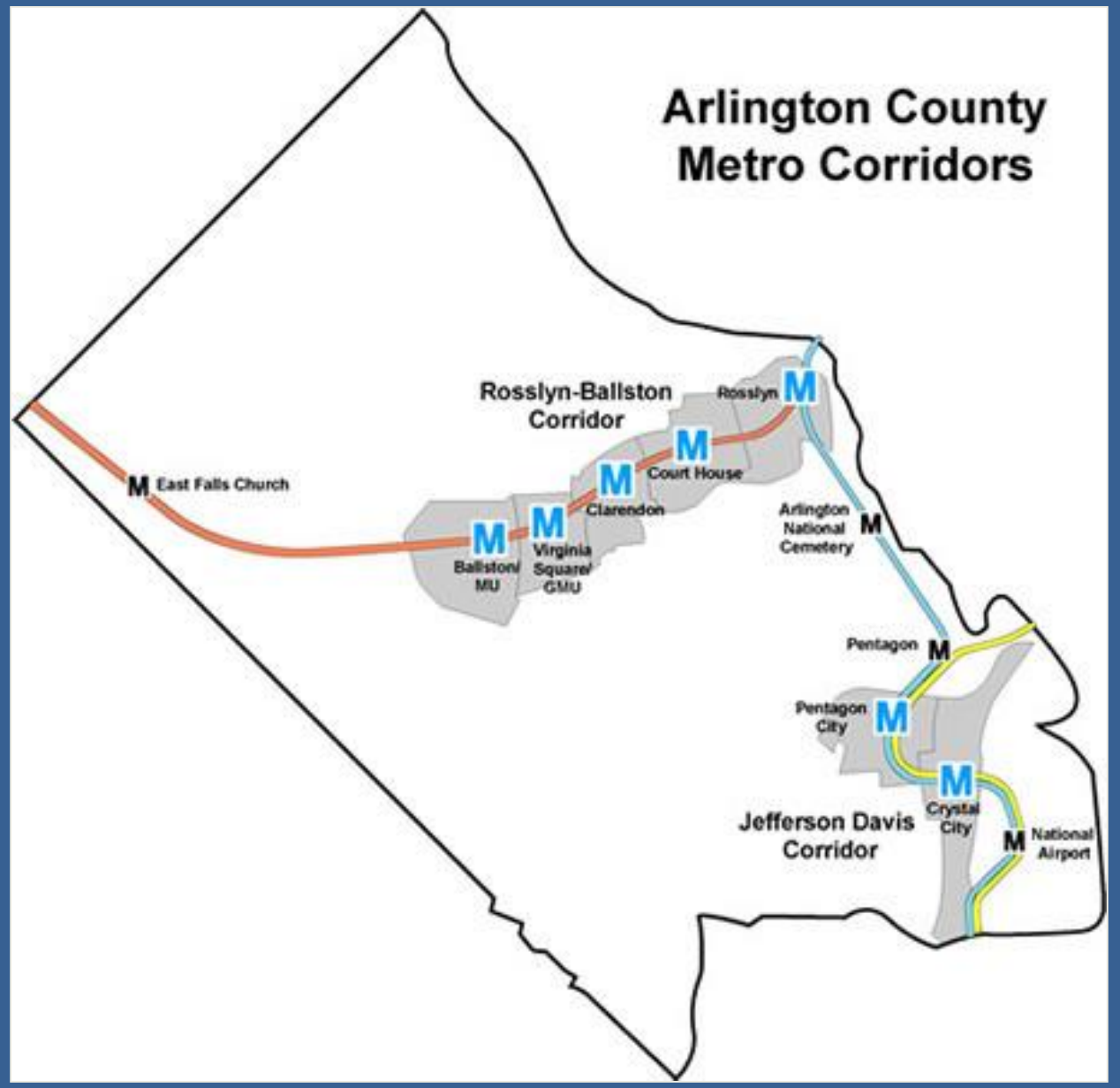
Arlington, Virginia



Area: ~ 26 sq. miles

Population: ~ 212,000

Arlington, Virginia

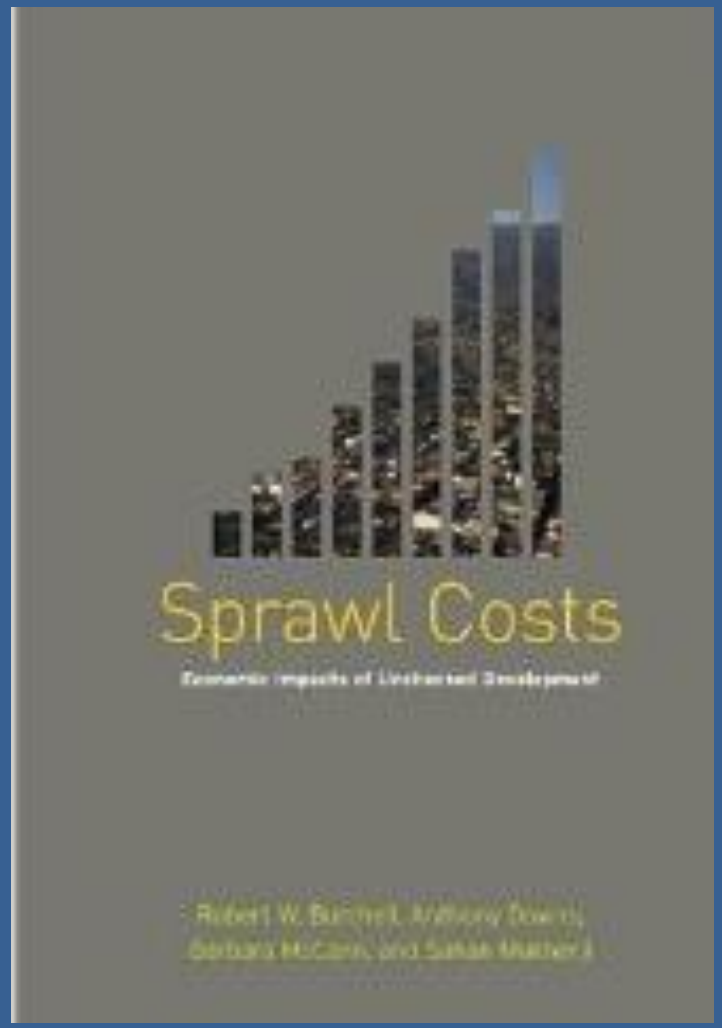


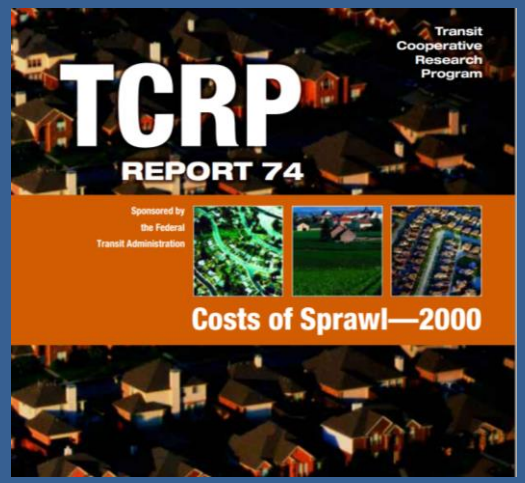
- Density confined largely to Metrorail corridors (~ 11 % of land area)
  - 92 % of total office
  - 40 % of total housing units
- The 7 station sectors in the 2 corridors - constituting one-tenth or less of the County's land area – produce more than half of County tax revenue

Development patterns & budgets:

How communities develop affects government expenditures and revenues.

Since the ‘70s, studies have confirmed:
Low-density sprawl costs municipalities more than compact development





9:51 am ET
Mar 19, 2015 PLANNING

The Cost of Sprawl: More Than $1 Trillion Per Year, New Report Says

ARTICLE COMMENTS (3)

Email Print 202 297

By LAURA KUSISTO CONNECT

The sprawling suburbs of cities like Atlanta and Houston have hidden costs to the United States economy that come to more than $1 trillion a year, according to a new report.

Development affects costs

Expenditures for infrastructure and services are more efficient in denser, better connected areas.

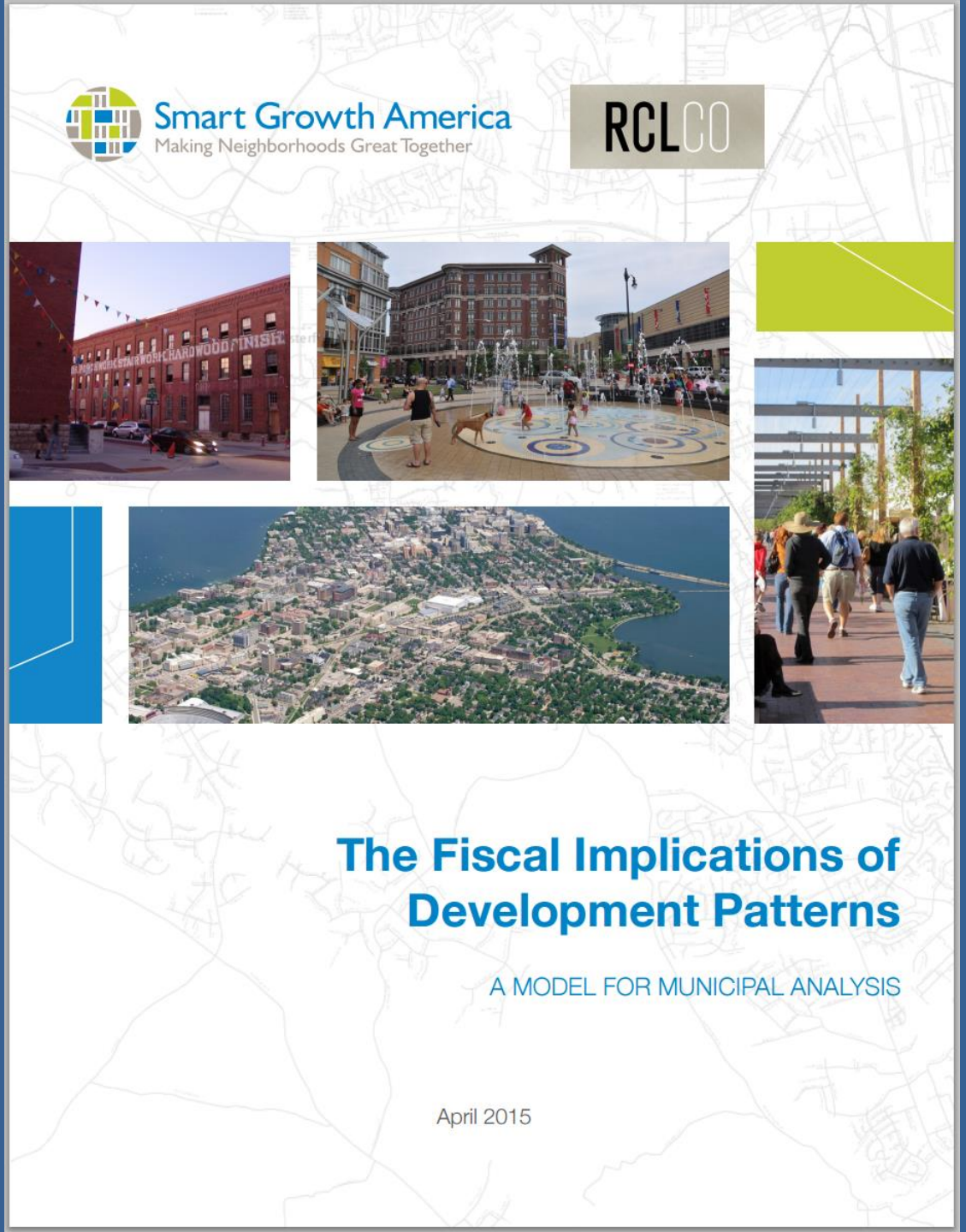
Development affects costs

Compact development offers efficiencies in delivering services.

– Police and fire departments have less area to cover.

– Fewer miles of road to cover for trash pickup, school buses.

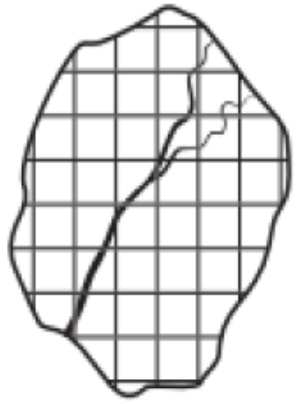
– Fewer miles of water and sewer pipes to maintain.



A scenario analysis tool

A fiscal impact model focused on the relative effects of sprawl versus compact development

Comparative development patterns for the same population

Scenario A	Scenario B	Scenario C
		

Source: US EPA, OSC. *Protecting Water Resources with Higher Density Development.* 2006.

Communities for which the model has been applied

- Madison, Wisconsin
- West Des Moines, Iowa
- Doña Ana County, New Mexico
- Macon, Georgia
- Indianapolis, Indiana
- Battle Creek, Michigan
- Kalamazoo, Michigan
- Rifle, Colorado
- Brookings, South Dakota
- Pittsburg, Kansas
- Chattanooga, Tennessee
- St. James Parish, Louisiana
- Pagosa Springs, Colorado
- Tulsa, Oklahoma (pending)
- Collier Co., Florida (pending)

Fiscal Impact Model: Data Inputs

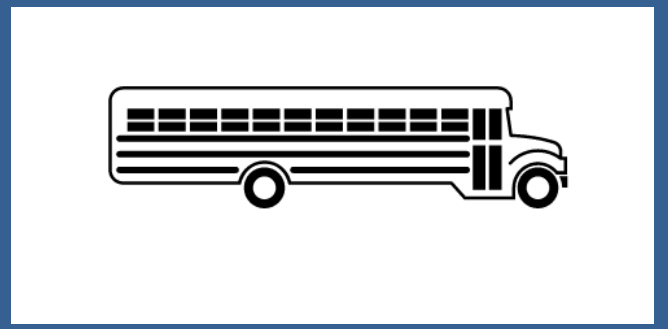
Roads +_ Maintenance

Water/ Sewer

Stormwater

Fire/EMS

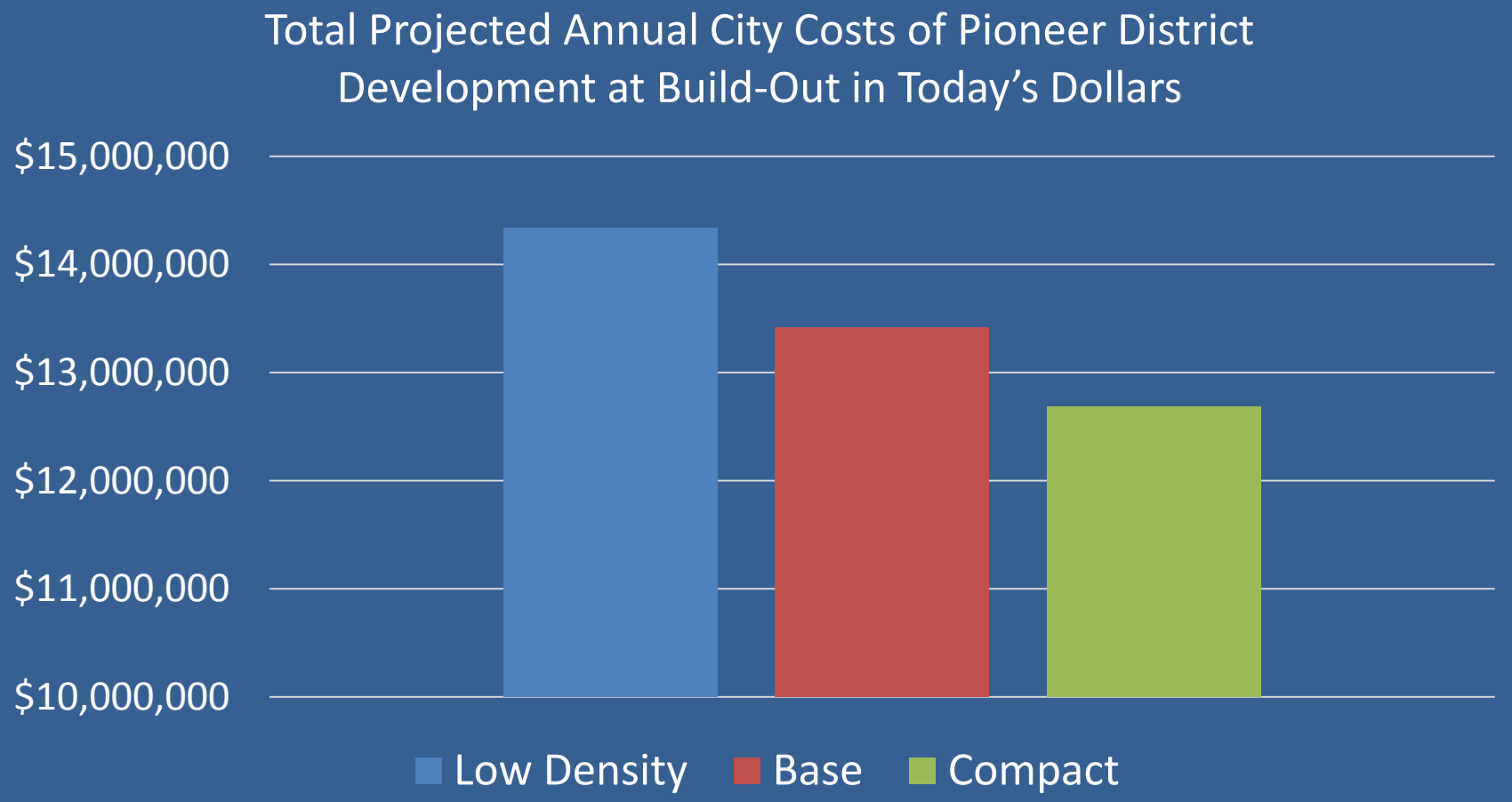
Solid Waste



Schools

THE COMPACT DEVELOPMENT SCENARIO REDUCES CITY EXPENDITURES

From Madison analysis

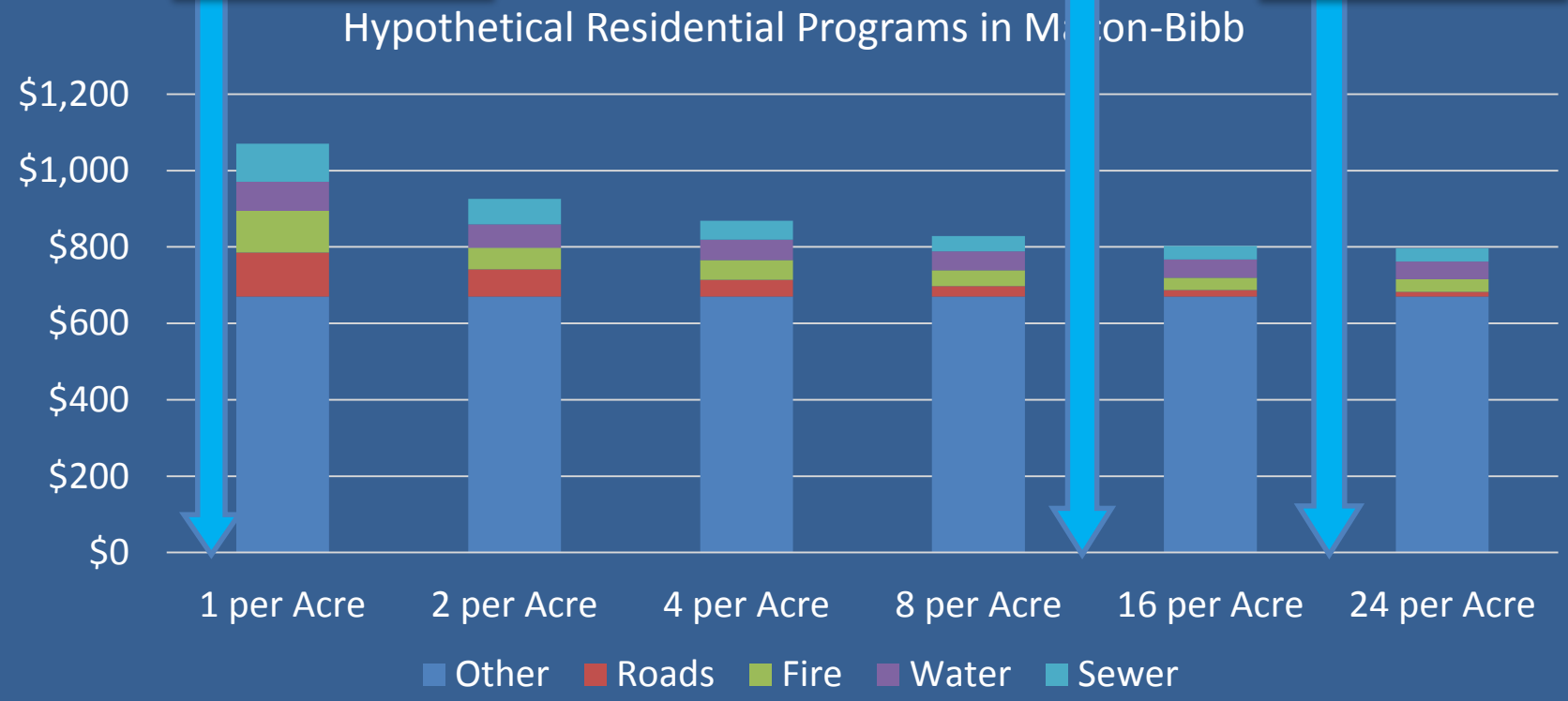


MACON MODEL PROJECTS THAT MOVING FROM 1 UNIT PER ACRE (NET) TO 16 REDUCES PER CAPITA COUNTY COSTS BY 25%

0.9 units per acre

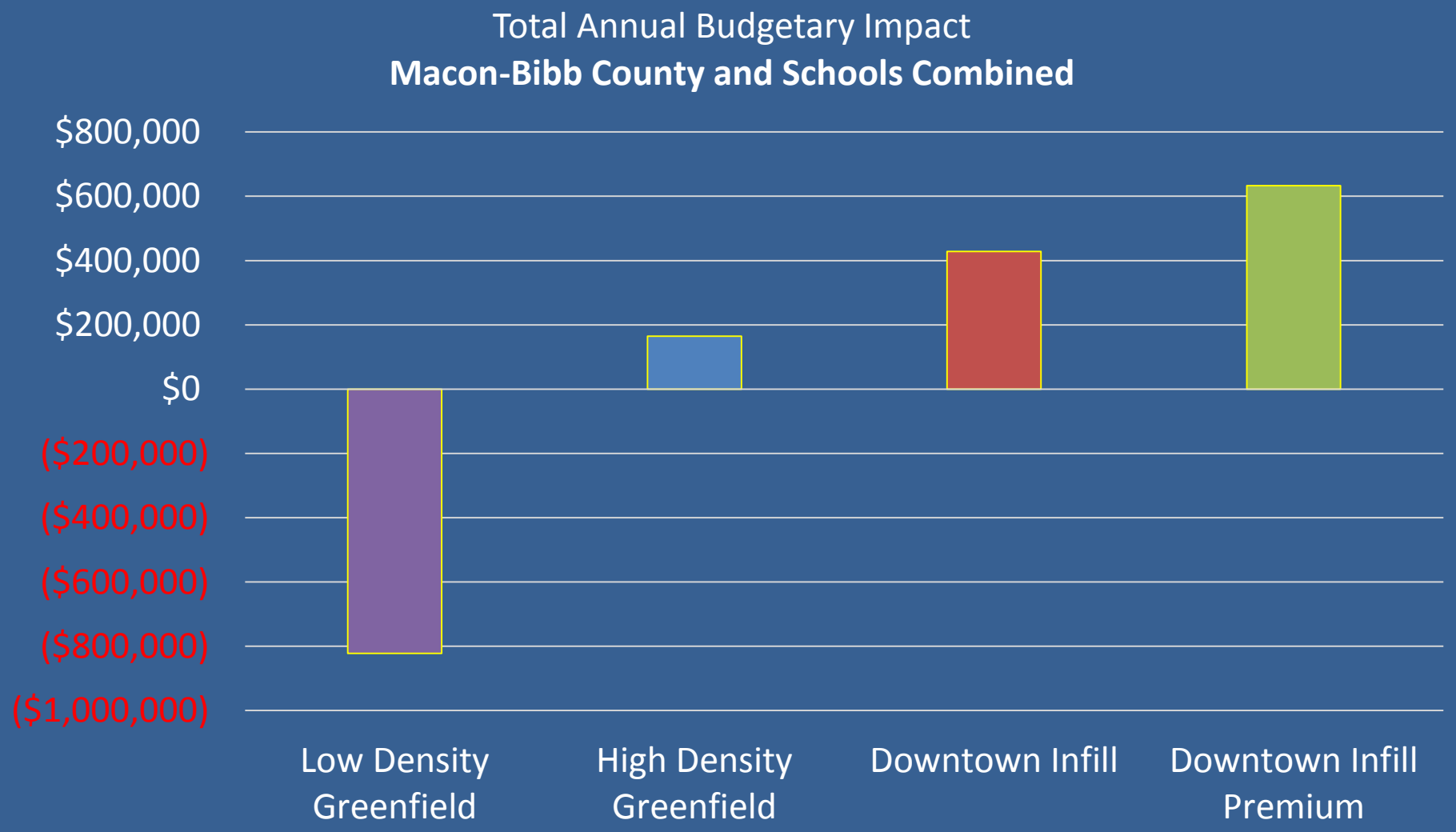
11.7 units per acre

21.8 units per acre

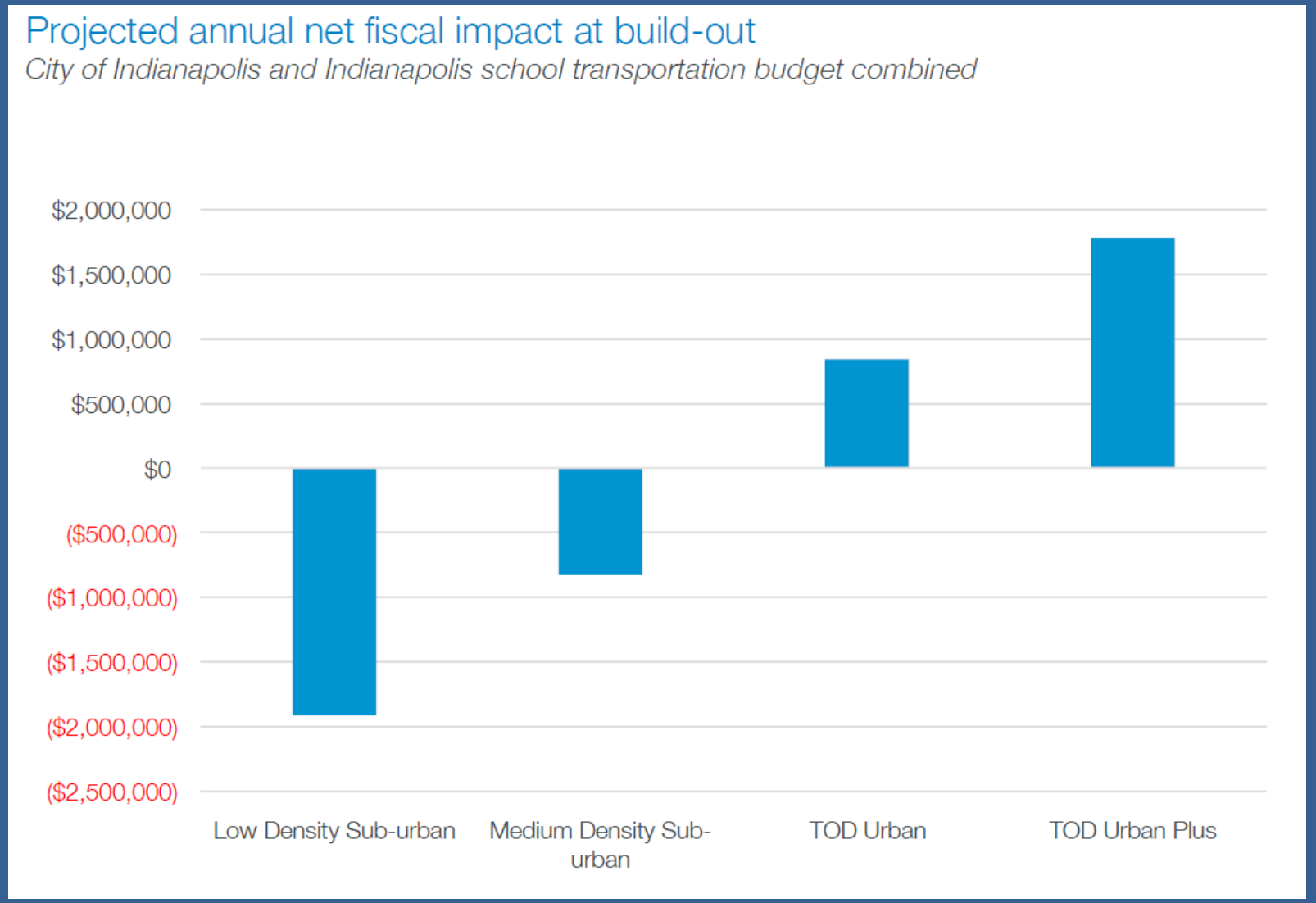


NOTE: Does not include potential density-related savings associated with solid waste or use of existing infrastructure

SUMMARY OF RESULTS BY SCENARIO



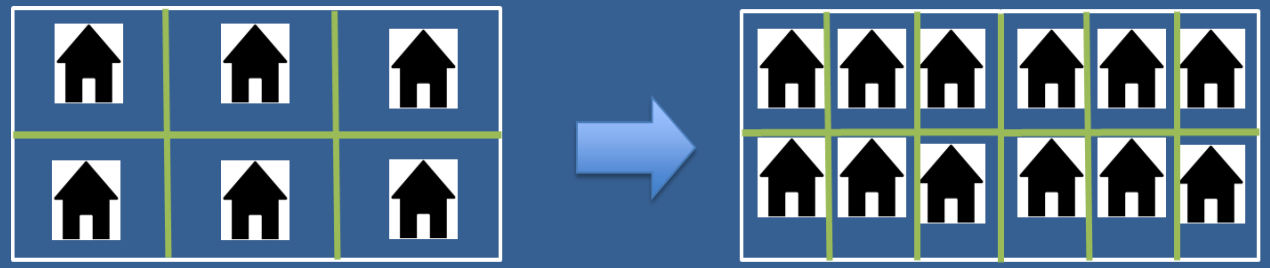
Indianapolis



Development affects revenues

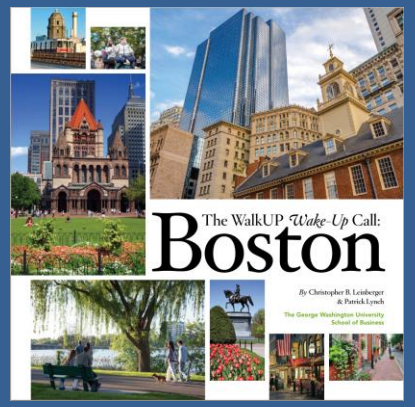
Density can affect property value and property tax revenue per acre in 2 ways:

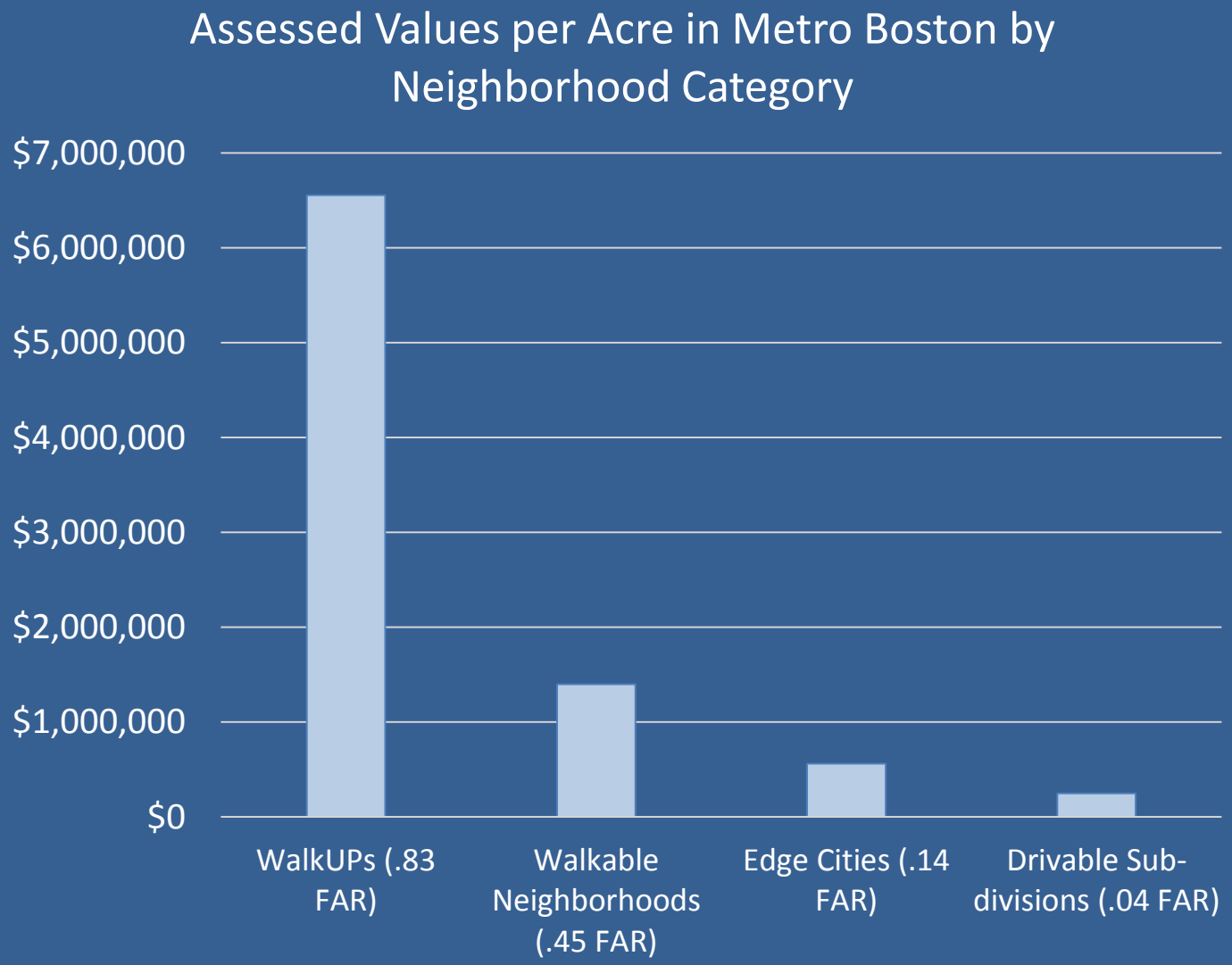
↓ By simply allowing for more occupiable space – 2 houses are worth more than 1, all else equal



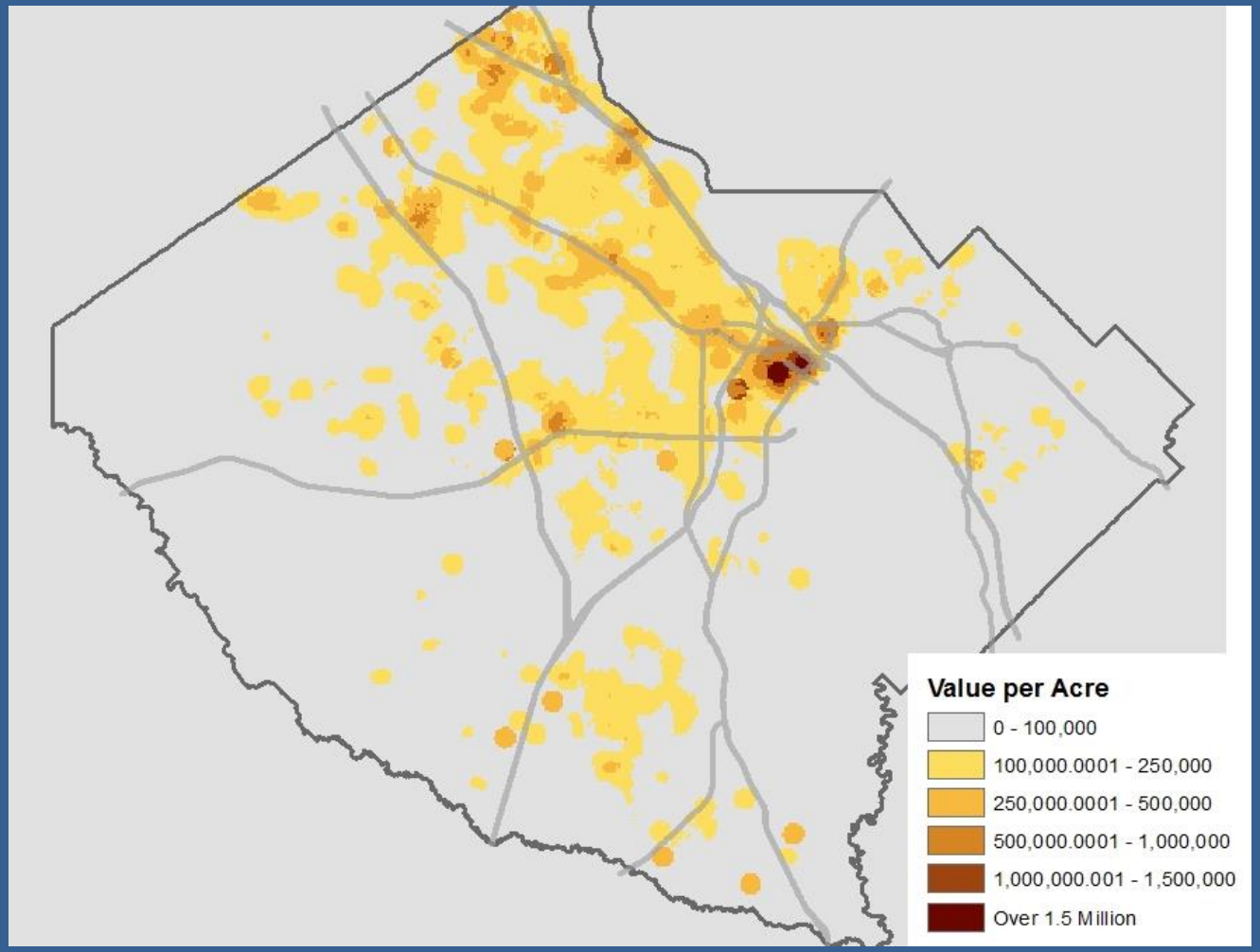
← By creating economies of agglomeration, and enabling conditions for the “walkable” urban premium to emerge making each square foot more valuable

Density, combined with appropriate urban design, can sharply increase property value and property tax revenue per acre





Downtown Macon has highest average property values per acre in Bibb County



- Downtown Avg. Assessed Value per Acre: $1.3 million
- Shoppes at River Crossing: $967,000 per Acre
- County Avg: $77,000

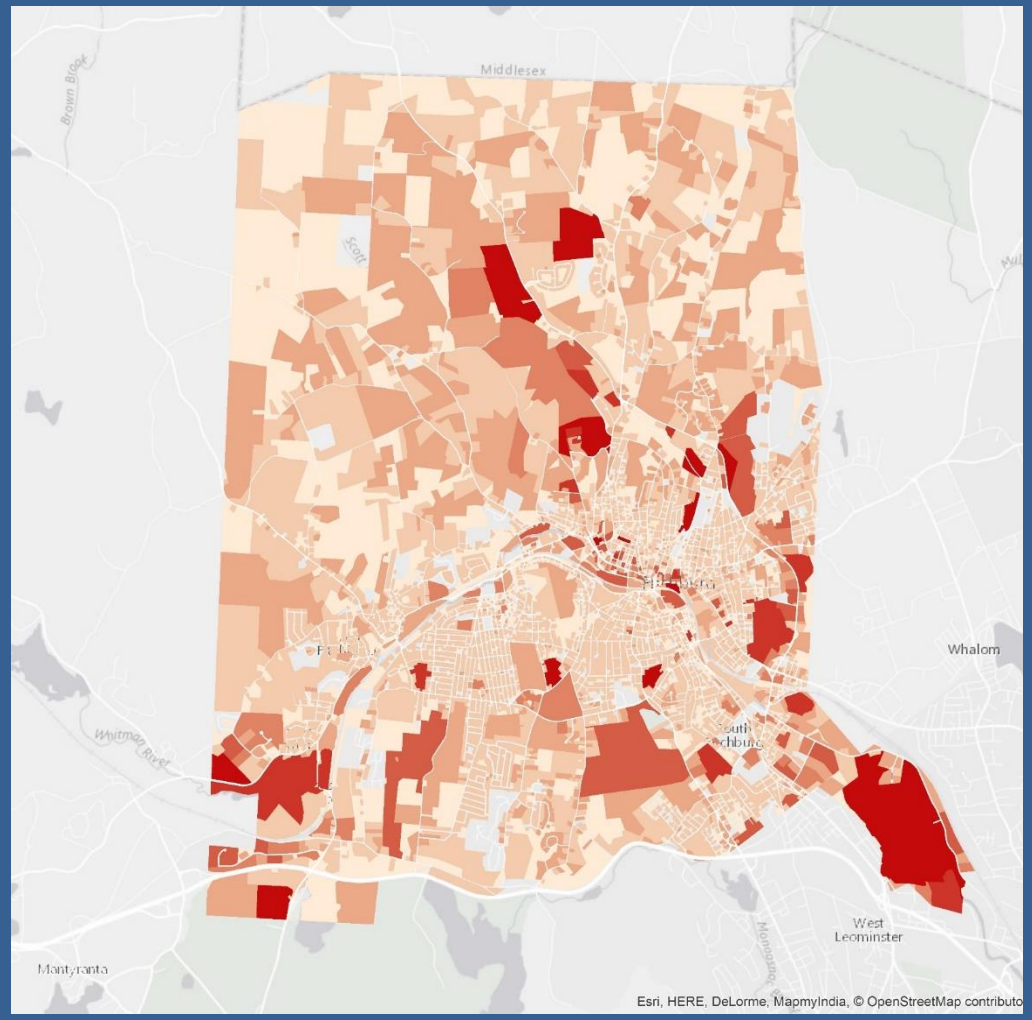
Hot Spot Analysis

Definition - A hot spot analysis visualizes geographically where a higher density or cluster of activity occurs. When looking at the value of a parcel of land in a community, a hot spot analysis is a way of describing the relationship a development pattern has upon the land value around it.

Hot/Cold: Indicates a statistical significance between the various development areas. (i.e. - If one area is higher in value (hot) those around it are likely to be higher as well.)

Not Significant: Indicates there is not a statistical relationship between the value of a parcel, and the value of its neighbors.

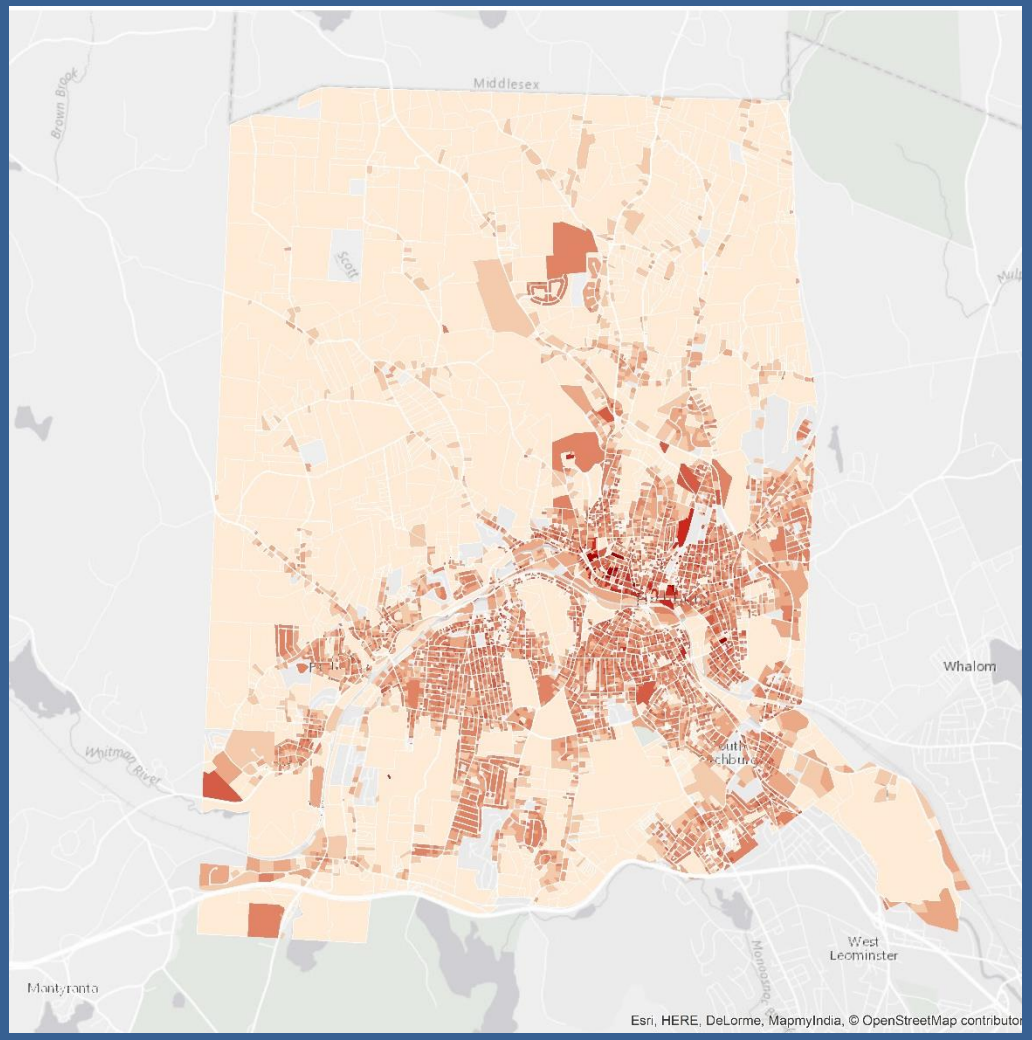
Value by Total Parcel – Fitchburg, MA



Total Value of Each Parcel

- $0 - $100,000
- $100,001 - $250,000
- $250,001 - $1,000,000
- $1,000,001 - $2,000,000
- $2,000,001 - $5,000,000
- $5,000,001 - $10,000,000
- $10,000,001 - $40,000,000

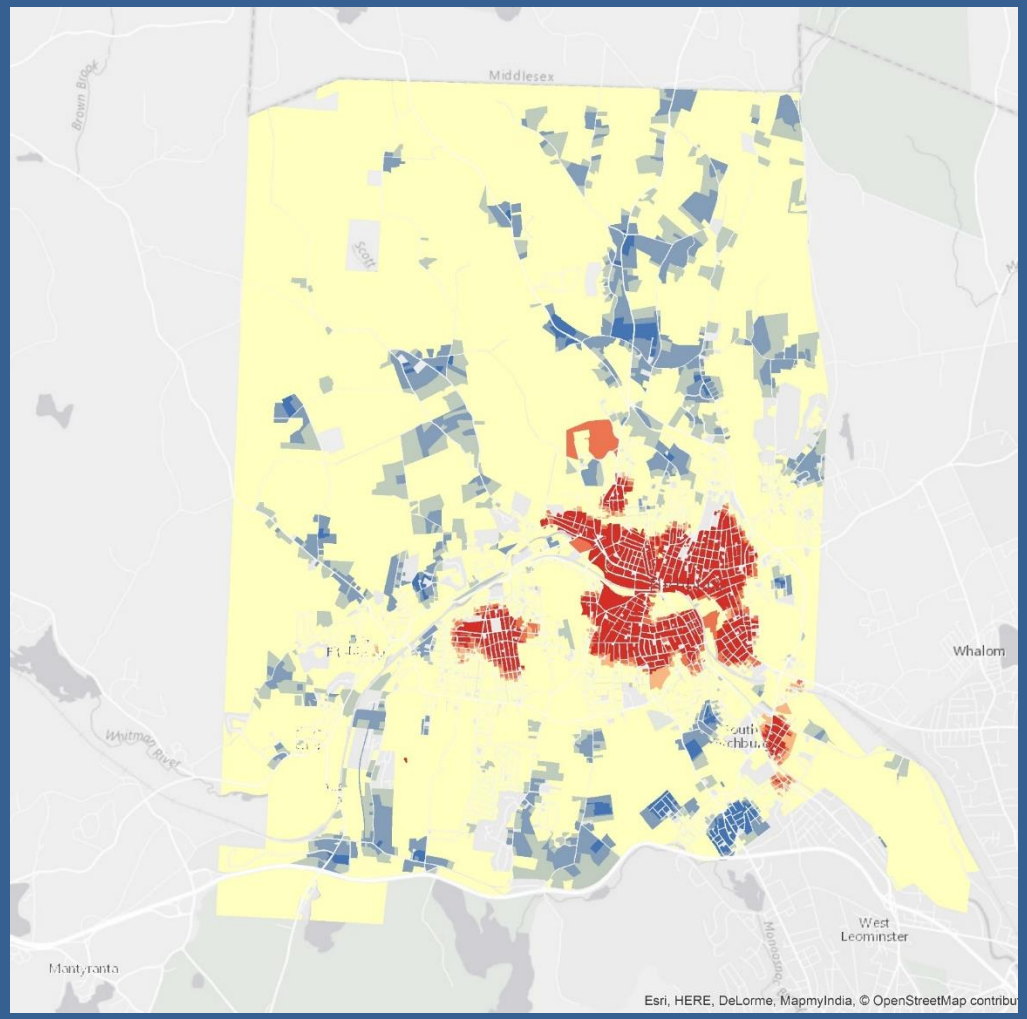
Parcel Value by Acre – Fitchburg, MA



Parcel Value by $ per Acre

- $0 - $100,000
- $100,001 - $250,000
- $250,001 - $500,000
- $500,001 - $1,000,000
- $1,000,001 - $1,000,000
- $2,000,001 - $16,000,000
- $10,000,001 - $40,000,000

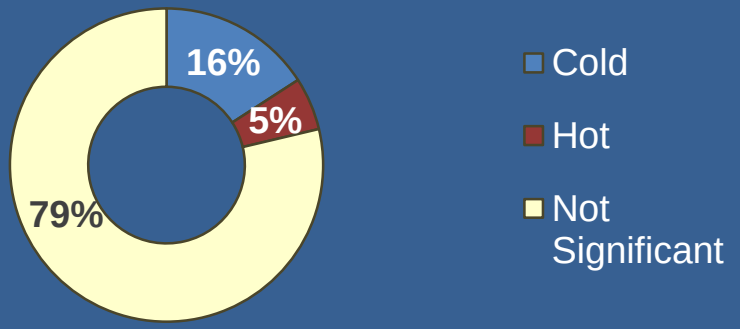
Hot Spot Analysis – Fitchburg, MA



(Property Values Normalized by Using Value per Acre)

Cold — Hot

Share of Total Land Area Per Hotspot Category



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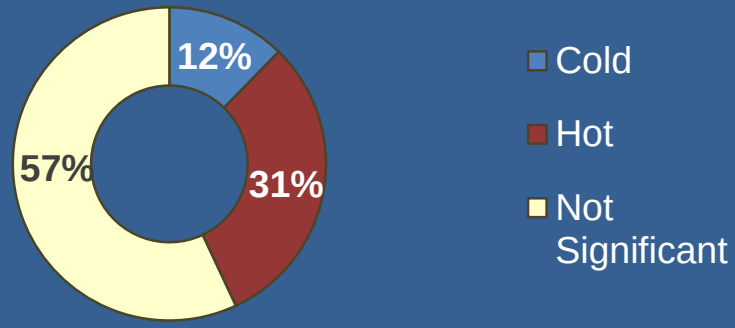
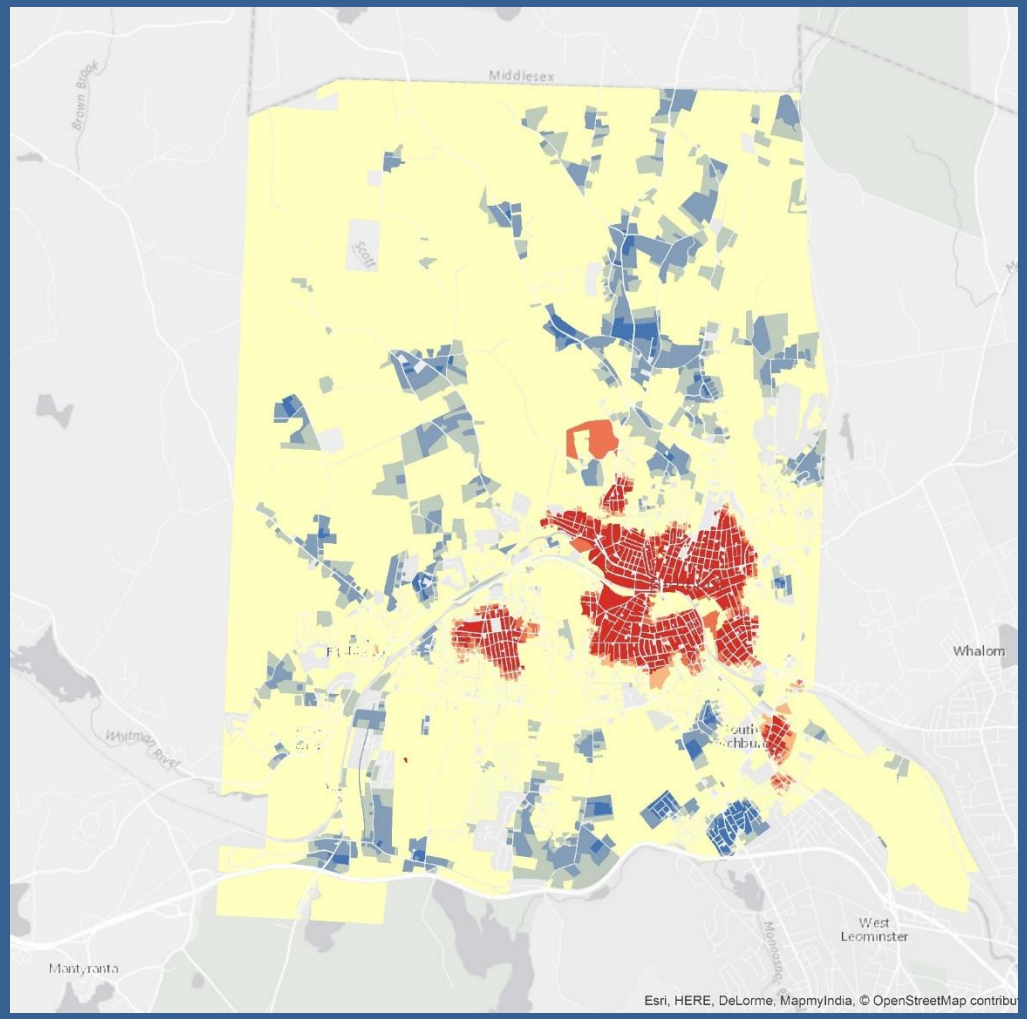


Hot Spot Analysis – Fitchburg, MA



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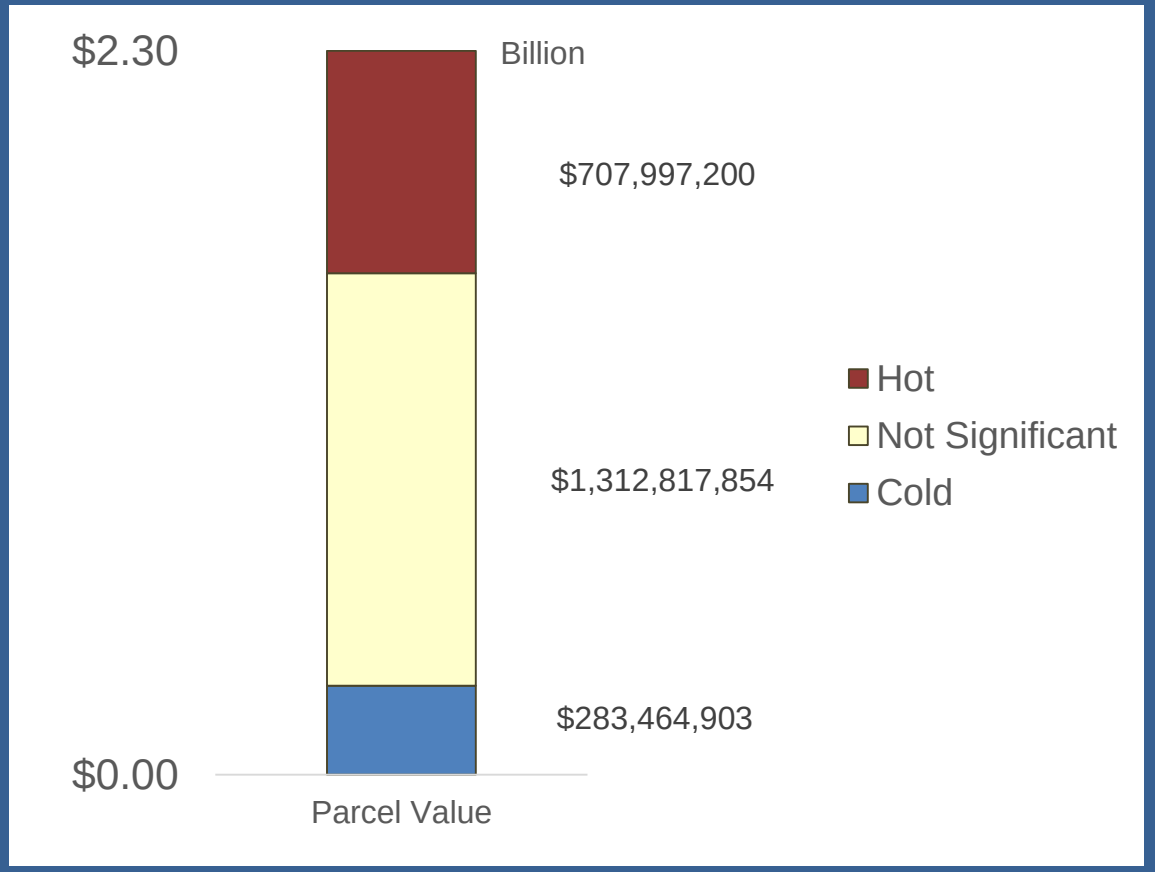
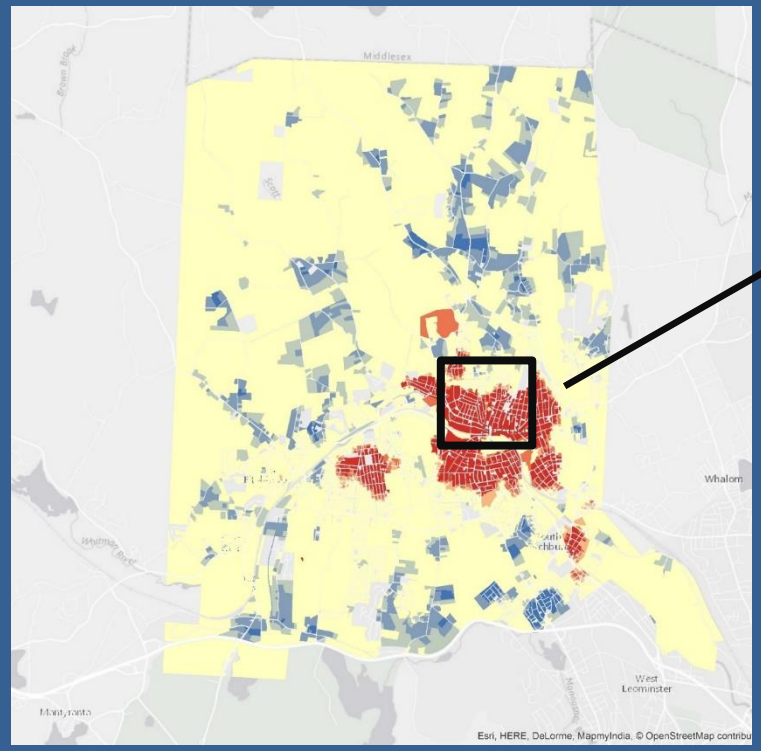
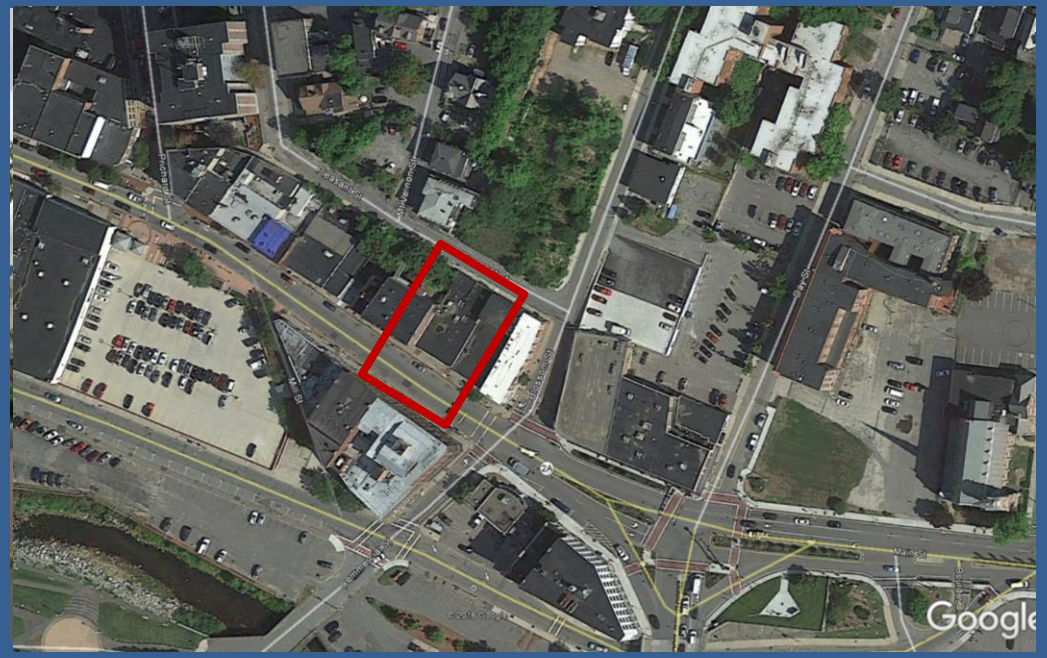
Cold — Hot



Development Example – Fitchburg, MA



Main Street, Fitchburg, MA



Development Example – Fitchburg, MA

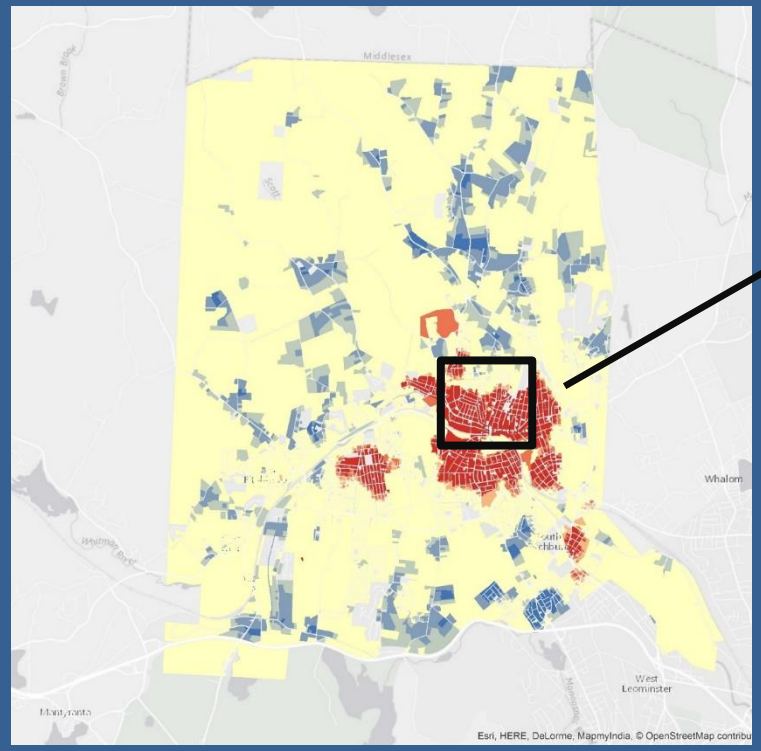
Total Value: $194,000

Acres: ~ 0.11

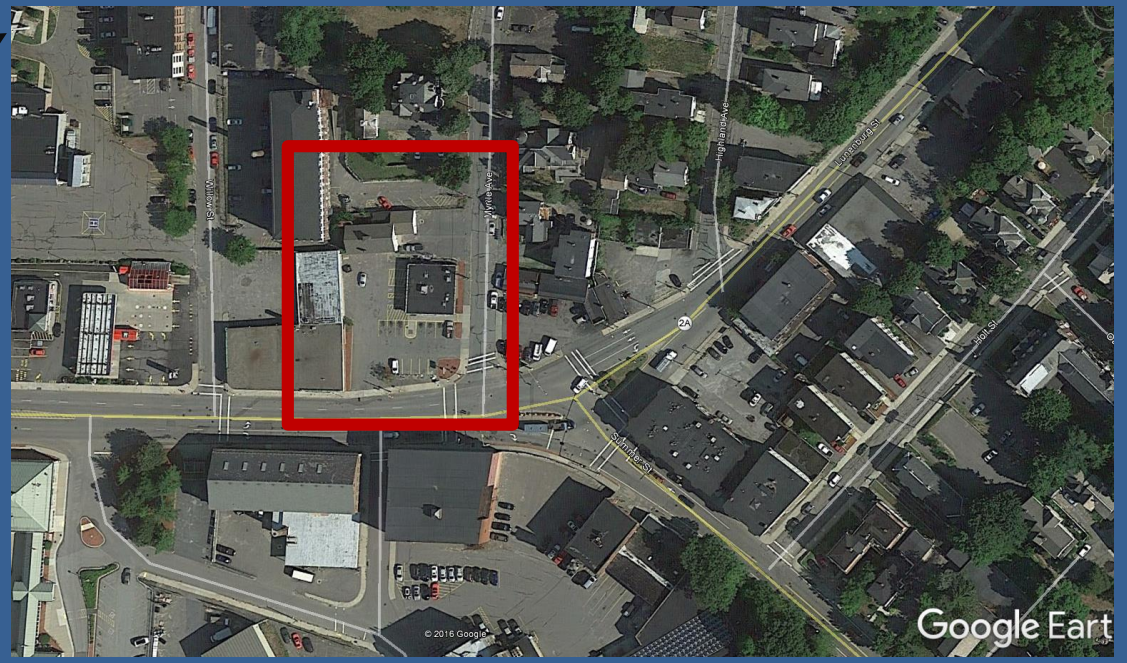
Value Per Acre:
$1,700,000

Main Street, Fitchburg, MA

Development Example – Fitchburg, MA



Main Street, Fitchburg, MA



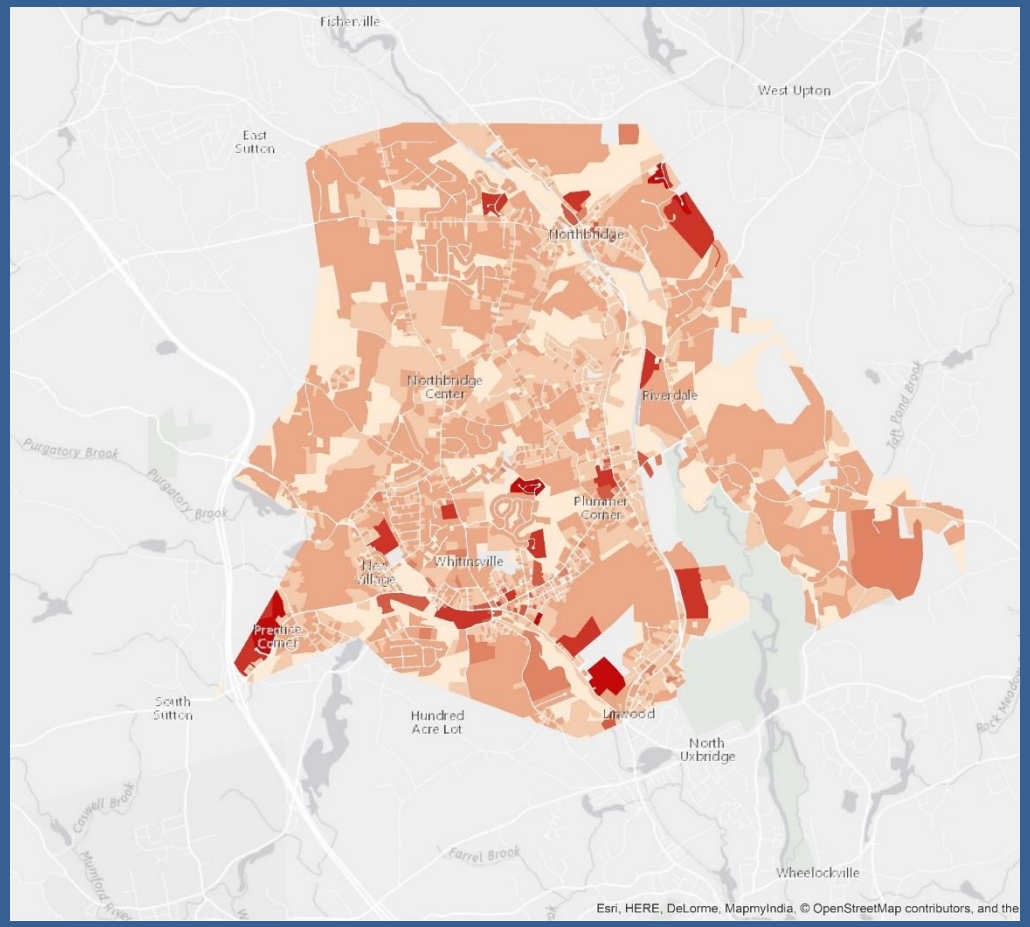
Development Example – Fitchburg, MA

Total Value: $325,000

Acres: ~ 0.41

Value Per Acre:
$784,000

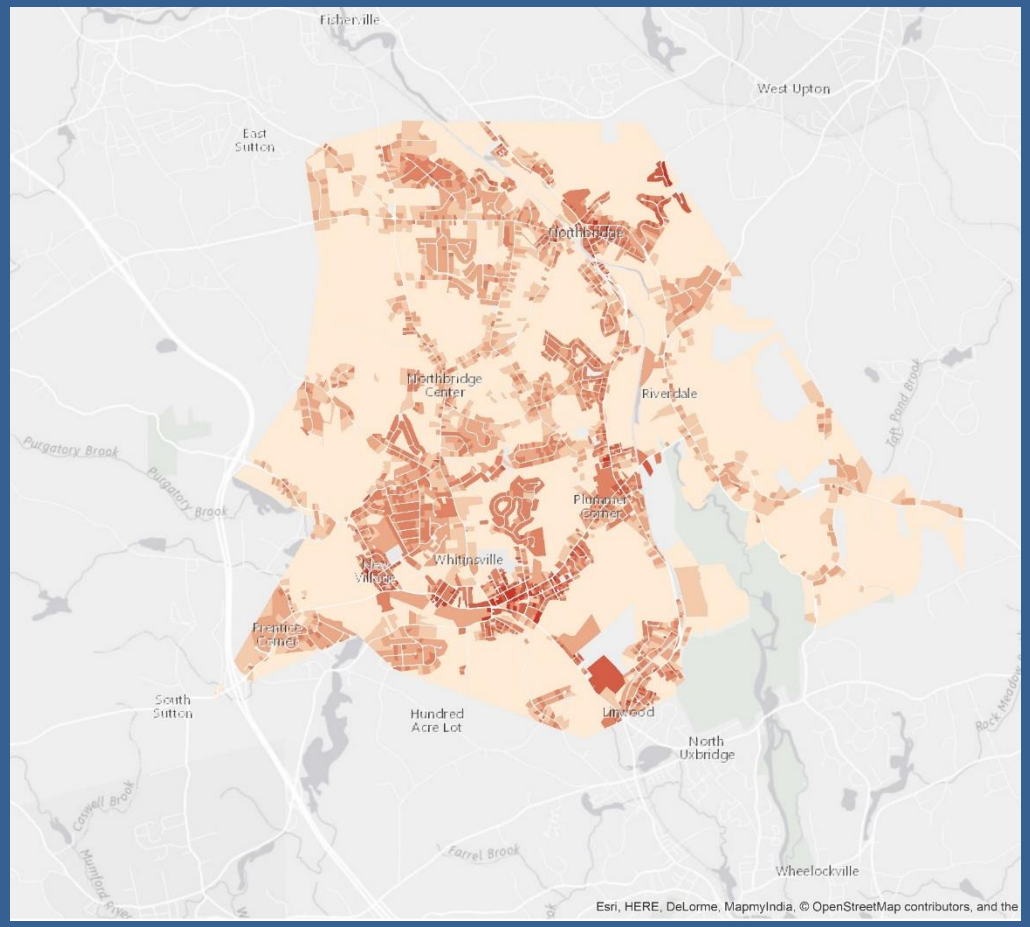
Value by Total Parcel – Northbridge, MA



Total Value of Each Parcel

- $1 - $100,000
- $100,001 - $250,000
- $250,001 - $1,000,000
- $1,000,001 - $2,000,000
- $2,000,001 - $5,000,000
- $5,000,001 - $10,000,000
- $10,000,001 - $61,393,900

Parcel Value by Acre – Northbridge, MA



Parcel Value by $ per Acre

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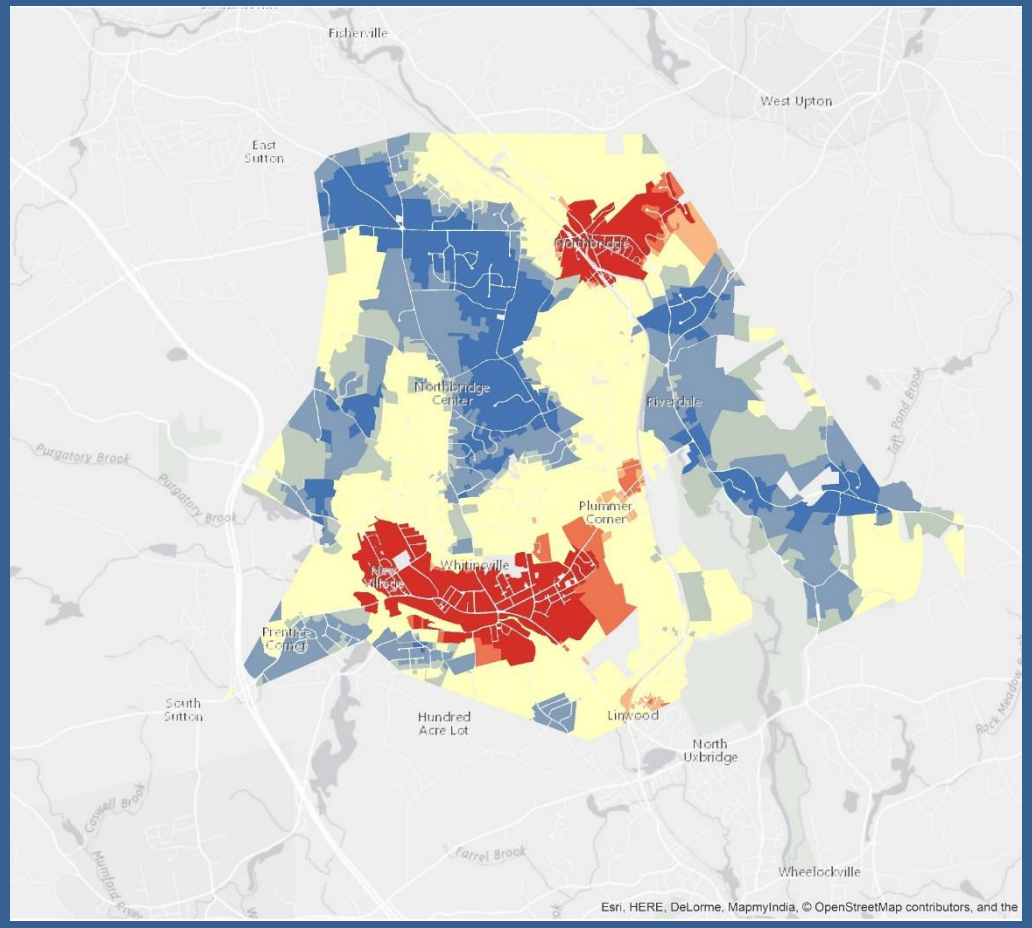
- $500,001 - $1,000,000
- $1,000,001 - $2,000,000
- $2,000,001 - $10,000,000
- $10,000,001 - $47,479,000

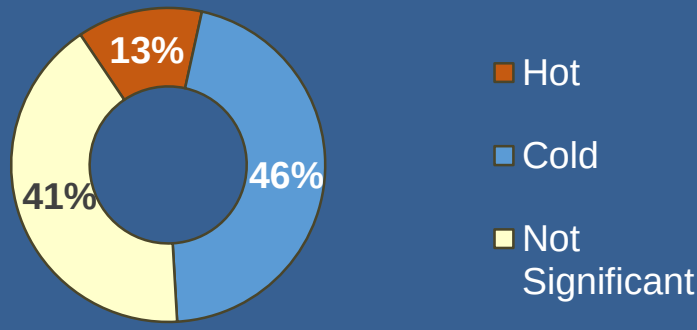
Hot Spot Analysis – Northbridge, MA



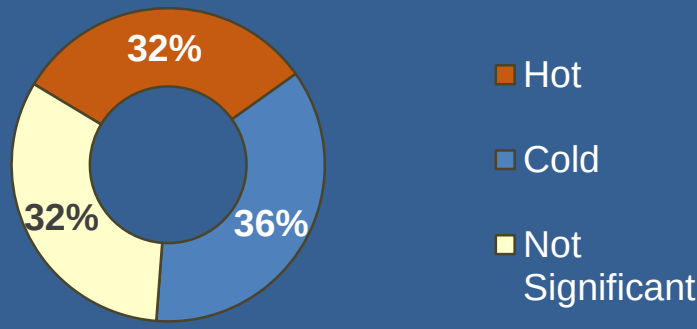
(Property Values Normalized by Using Value per Acre)

Cold — Hot

Share of Total Land Area Per Hotspot Category



Share of Total Value Per Hotspot Category



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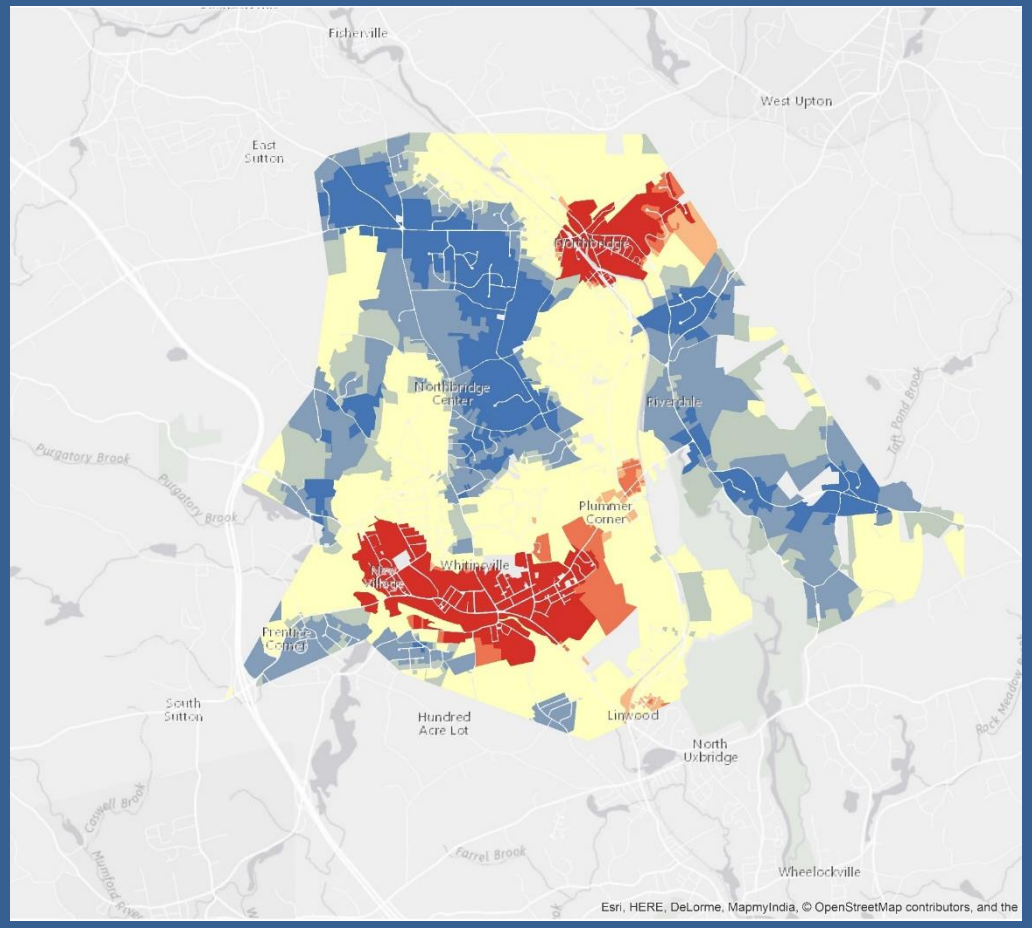

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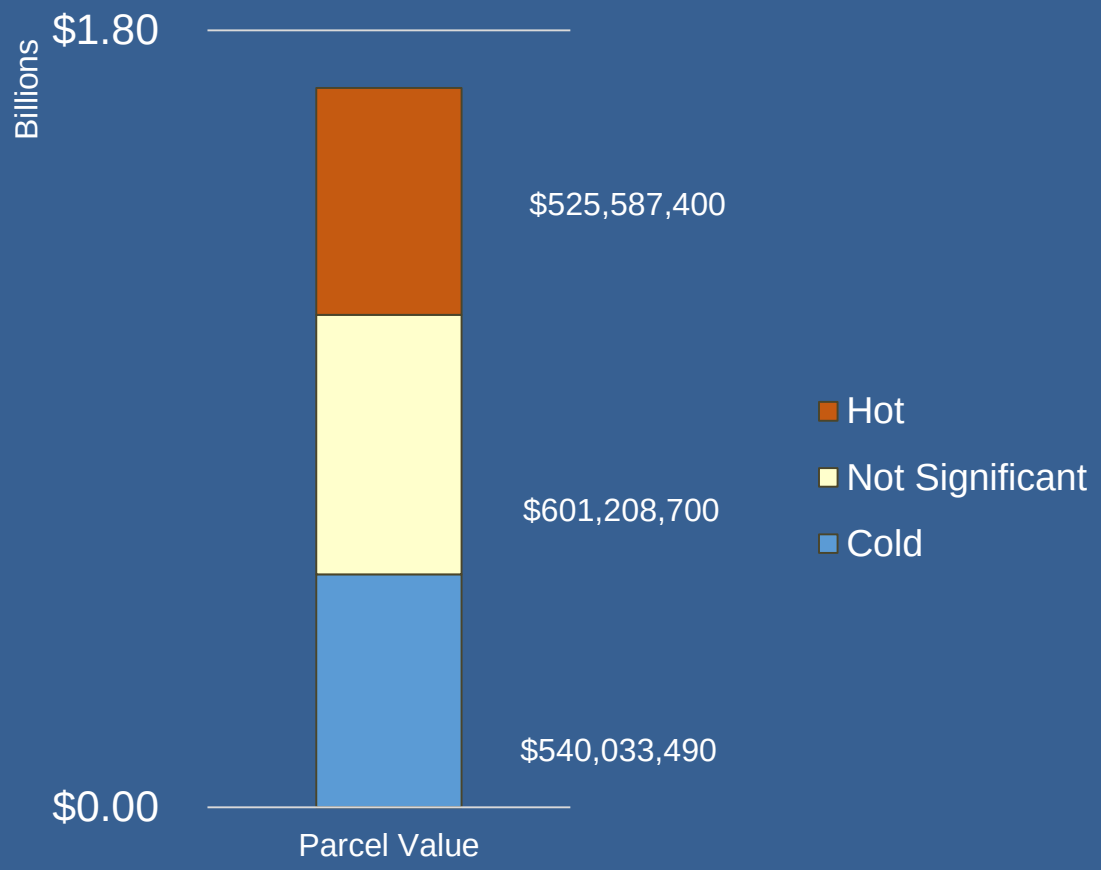

Why does this matter?

Return on investment

- Locating government facilities
- Incentivizing development
- Infrastructure investments

Smart Growth America

Improving lives by improving communities

For more information about our fiscal analysis, or other services, please contact me:

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Vice-president for Economic Development
czimmerman@smartgrowthamerica.org
(202) 971-3939

Thank you